FORMER G & C SERVICES

255 EAST 138th STREET

BRONX, NEW YORK

Remedial Action Work Plan

NYSDEC BCP Number: C203057

Prepared for:

East 138th Street LLC 334-336 East 110th Street
New York, NY 10029

Prepared by:

Ira N. Pierce, P.E.
3400 Ft. Independence Street, Suite 4F
Bronx, NY 10463
212-760-2922

OCTOBER 2013

CERTIFICATION

I, Ira N. Pierce certify that I am currently a NYS registered professional engineer and that this Remedial Action Work Plan 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).

I certify that all information and statements in this certification are true. I understand that a false statement made herein is punishable as Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

42745	10/8/2013	
NYS Professional Engineer #	Date	Signature

Note: include PE stamp

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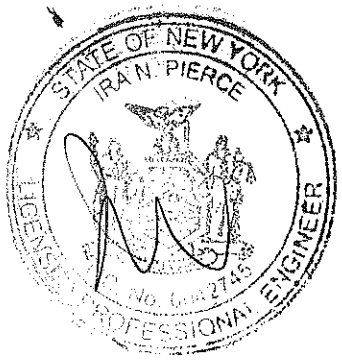

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LIST OF ACRONYMS

Acronym	Definition
AOCs	Areas of Concern
BCA	Brownfield Cleanup Agreement
BOA	Brownfield Opportunity Area
CAMP	Community Air Monitoring Plan
COCs	Contaminants of Concern
CQAP	Construction Quality Assurance Plan
C/D	Construction and Demolition
DER	Division of Environmental Remediation
DSHM	Division of Solid & Hazardous Materials
DUSR	Data Usability Summary Report
ECL	Environmental Conservation Law
ECs	Engineering Controls
ELAP	Environmental Laboratory Approval Program
ESA	Environmental Site Assessment
fbg	Feet below grade
FER	Final Engineering Report
GQS	Groundwater Quality Standards
HASP	Health and Safety Plan
ICs	Institutional Controls
KFC	Kentucky Fried Chicken
N.Y.C.R.R.	New York Codes, Rules and Regulations
NYC OER	New York City Office of Environmental Remediation
NYS BCP	New York State Brownfield Cleanup Program
NYS DOH	New York State Department of Health
NYSDEC	New York State Department of Environmental Conservation
ORC	Oxygen Releasing Compound
OSHA	United States Occupational Health and Safety Administration

Acronym	Definition
PAHs	Polynuclear aromatic hydrocarbons
PCBs	Polychlorinated Biphenyls
PCE	Tetrachloroethene
PID	Photoionization Detector
ppb	Parts per billion
ppm	Parts per million
PVC	Polyvinyl chloride
QAPP	Quality Assurance Project Plan
QA/QC	Quality Assurance/Quality Control
RAO	Remedial Action Objective
RAWP	Remedial Action Work Plan or Plan
RI	Remedial Investigation
RIR	Remedial Investigation Report
RIWP	Remedial Investigation Work Plan
RSCOs	Recommended Soil Cleanup Objectives
SCO	Soil Cleanup Objective
SCG	Standards, Criteria and Guidance
SI	Site Investigation
SMP	Site Management Plan
SMMP	Soil/Material Management Plan
SPDES	State Pollutant Discharge Elimination System
SVOCs	Semi-Volatile Organic Compounds
TAL	Target Analyte List
TCE	Trichloroethene
TCL	Target Compound List
TOGS	Technical and Operational Guidance Series
ug/m3	Micrograms per cubic meter of air
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank
VOCs	Volatile Organic Compounds

EXECUTIVE SUMMARY

East 138th Street LLC has enrolled in the New York State Brownfield Cleanup Program (NYS BCP) to investigate and remediate a 0.46-acre site located at 255 East 138th Street, Bronx, New York. A Remedial Investigation (RI) was performed to compile and evaluate data and information necessary to develop this Remedial Action Work Plan (RAWP). The proposed 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 (SCG), and conforms to applicable laws and regulations.

Site Description, Physical Setting and Site History

The Site is located at 255 East 138th Street, Bronx, New York, and is identified as Block 2333, Lot 1, on the New York City Tax Map. Refer to Figure 1 - Site Location Map and Figure 2 - Tax Map. The size of this Site is 20,386 square feet (0.468 acres). The property is currently vacant land.

The Site formerly consisted of two parcels (Lots 1 and 6) developed with two different gas stations. The Site was consolidated into one lot (Lot 1) for purposes of Site development. The gas station on the western portion had four 550-gallon underground storage tanks (USTs), a 4000-gallon UST, and a dispenser island on the south side. The gas station on the eastern portion had 11 550-gallon USTs. Prior to 1978, the gas stations were demolished and a one-story structure labeled as a filling station was developed on the west border and a one-story commercial structure was developed in the center. The structure on the west border was labeled Auto Repair in 2005, and the structure in the center was identified as Kentucky Fried Chicken (KFC) from 1976 to 2005.

Summary of the Remedial Investigation

The following work has been performed at the Site:

1. Conducted a Remedial Site Investigation to identify environmental areas of concern (AOCs) and physical obstructions (i.e., structures, buildings, etc.);

2. Collected soil samples from seventeen (17) soil borings located in the vicinity of potentially impacted AOCs or near AOCs where impacts were previously detected;

3. Installed four (4) monitoring wells and six (6) temporary wells to evaluate groundwater contaminants; and,

4. Installed eight (8) soil vapor sample probes at potentially impacted AOCs and at up-gradient and down-gradient Site boundary locations.

The Site contains historic fill material, which has various amounts of gravel, concrete, sand, etc. The historic fill is Site-wide and extends to approximately 9 feet below grade (fbg), with a distribution that appears to be random horizontally and vertically. A gray medium to fine sand is present between approximately 9 feet below grade to an average depth of 14 feet below grade. Below approximately 14 feet, sediments consist of interbedded gray and brown silt with some fine sand present to approximately 25 feet, the maximum depth of the borings. Depth to bedrock is unknown, as it was not encountered in the soil borings which extended to 25 fbg. Groundwater is present at depths ranging from 4.75 to 10 fbg and flows in a southwest direction. Petroleum related volatile organic compounds (VOCs) were detected in soil in the area of the former dispenser islands, and in groundwater beneath the western portion of the Site. The groundwater contaminants of concern (COCs) include VOCs, semi-volatile organic compounds (SVOCs), and metals. Elevated concentrations of VOCs, including chlorinated VOCs, were detected in soil vapor samples collected at the Site. While petroleum related VOCs were detected in soil and groundwater, chlorinated VOCs were not detected in either soil or groundwater samples collected from the Site.

The Site is approximately 20 feet above mean sea level and is generally level. The Site is not located within a groundwater use area. All drinking water in New York City is obtained from upstate reservoirs. The groundwater contour map is presented on Figure 3.

Qualitative Human Health Exposure Assessment

A qualitative human health exposure assessment was performed during the Remedial Investigation of the Site. The assessment concluded that complete on-Site exposure pathways may exist during construction and remediation activities. The pathways include direct contact (dermal absorption), ingestion, and/or inhalation of soil during excavation and inhalation when

encountering groundwater and soil vapor. Potential further exposures include soil vapor concentrations which may remain in the soil following excavation. During construction and remediation activities, precautions will be required to protect construction workers and the general public. Contaminated groundwater may be migrating off-site. Groundwater is greater than five (5) feet below grade. Since the site is located in an urban setting and groundwater is not used for potable, irrigation or industrial use, potential pathways do not exist.

Once the cleanup remedy is implemented, including construction of a new building and underground parking garage with a vapor barrier and ventilation system, groundwater dewatering and treatment, there will be no on-Site or off-Site existing or future exposure pathways following completion of the remedial action.

Summary of the Remedy

The goal of the remedial action is to achieve Track 2, Residential Use cleanup. If during the remedial action, it is determined that a Track 1 Unrestricted Use cleanup can be achieved, the additional remedial action to complete the Track 1 cleanup may be implemented. The proposed remedial action for this Site will include the following components:

Soil Removal

Soil will be excavated to a depth of 15 fbg throughout the entire parcel and disposed of off Site at a proper disposal facility. Excavation of this soil is expected to remove the vast majority of contaminants identified to be in the subsurface soil. The soil will be classified for disposal at the proper type of disposal facility based on the levels of contaminants in the excavated material. Once approval from the disposal facility is obtained, the soil will be transported and disposed in accordance with state and federal regulations. The goal of this soil removal effort with be to achieve a Track 2 Residential Soil Cleanup Objective (SCO) cleanup standards in all end-point samples at the bottom of the 15' excavation pursuant to 6 N.Y.C.R.R. (New York Codes, Rules and Regulations)§375-6.8(a). It is projected that this excavation will generate10,000 cubic yards of material.. To achieve a Track 1 cleanup, all soil above bedrock must meet the Unrestricted Use SCOs. Therefore, for a Track 1 cleanup, contaminated soil identified during the RI in specific locations at 25 fbg must also be addressed, and end-point samples would have to

document that Track 1 cleanup standards were met across the site. If end-point samples indicate that a Track 1 cleanup is not feasible, the Track 2 cleanup will be achieved pursuant to 6 N.Y.C.R.R.§375-6.8(b). End-point samples will be taken as per Division of Environmental Remediation Technical Guidance for Site Investigation and Remediation (DER-10) section 5.4(b) to confirm the cleanup standard levels achieved.

Groundwater Dewatering and Treatment

In order to achieve the excavation depth required to remediate the Site, dewatering will be completed. The appropriate permits will be obtained to allow discharge to the sanitary sewer system. The groundwater will be treated prior to discharge in accordance with the requirements of the permit. Subsequent to this work, a below grade parking garage will be constructed for the proposed project. Removal of contaminated soil via excavation and the extensive dewatering required is expected to address contaminated groundwater.

To address residual contaminants that may remain in the groundwater after the soil remediation and dewatering is complete, Oxygen Releasing Compound (ORC) will be applied in the open excavation. The presence of ORC will enhance natural attenuation and expedite the degradation of any remaining volatile and semi-volatile organic compounds which may be present in the groundwater.

Vapor Mitigation

A vapor barrier/water proof system will be implemented. The vapor barrier will incorporate Preprufe 300R waterproofing membrane. The membrane with be placed beneath the cellar floor and along the walls to above surface grade.

Since the finished cellar floor will be below groundwater level, a sub-slab depressurization system cannot be utilized. The below grade parking garage will incorporate a ventilating system. If a Track 1 cleanup is not achieved, these measures will act as an additional layer of protection to prevent exposure to any potentially contaminated soil vapor remaining at the site, or from migrating onto the site from an off-site source.

Post-Remedial Groundwater Sampling

To evaluate the effectiveness of the remedial action once completed, an off-Site groundwater monitoring well will be installed down-gradient of the parcel, toward the southwest. Prior to beginning the remedial action, sampling will be completed to establish baseline conditions. Following the remedial action, sampling will again be completed. The pre- and post-remedial sampling results will be compared, and the effectiveness will be evaluated.

Institutional Control

In the event that a Track 1 Unrestricted Use Cleanup is not achieved, an institutional control in the form of an environmental easement may[1] be required for the property that:

- Requires the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
- Allows the use and development of the controlled property for residential, restricted residential, commercial and industrial uses only, as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- Restricts the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the New York State Department of Health (NYSDOH) or County DOH; and,
- Requires compliance with the Department-approved Site Management Plan (SMP).

Site Management Plan

In the event that a Track 1 Unrestricted Use cleanup is not achieved, [1]a SMP may be required for the long-term management of residual contamination and compliance with the environmental easement. The SMP would include:

- An Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and the steps required to ensure the institutional and/or engineering controls remain in-place and effective

[1] If Track 2 cleanup standards are achieved and no further soil vapor or groundwater monitoring is required, an environmental easement and SMP are typically not required by the Department.

- A Soil Management Plan which details the provisions for management of future excavations in areas of remaining contamination;
- Evaluation of the potential for soil vapor intrusion, if any remains after the implementation of the remedy; and,
- Provisions for the periodic management and inspection of the identified engineering controls by an engineer of record.

REMEDIAL ACTION WORK PLAN

1.0 INTRODUCTION

The Volunteer, East 138th Street LLC, entered into a Brownfield Cleanup Agreement (BCA) with the New York State Department of Environmental Conservation (NYSDEC) on May 5, 2011, to investigate and remediate a 0.46-acre property located at 255 East 138th Street in Bronx, New York. Residential use is proposed for the Site. When completed, the Site will contain a multi-story residential building with first floor retail space and a below grade parking garage. This Remedial Action Work Plan (RAWP) summarizes the nature and extent of contamination as determined from data gathered during the Remedial Investigation Work Plan (RIWP), performed between April and May 2012. It provides an alternatives analysis comparing a Track 1 cleanup remedy with other applicable Remedial Action alternatives, their associated costs, and selects the recommended and preferred remedy. The remedy described in this document is consistent with the procedures defined in Division of Environmental Remediation Technical Guidance for Site Investigation and Remediation (DER-10) and complies with all applicable standards, criteria, and guidance (SCG). The remedy described in this document also complies with all applicable Federal, State and local laws, regulations and requirements. The NYSDEC and New York State Department of Health (NYSDOH) have determined that this Site does not pose a significant threat to human health and the environment. The Remedial Investigation (RI) for this Site did not identify any potential impacts on fish and wildlife resources; therefore, a fish and wildlife assessment was not required.

1.1 SITE LOCATION AND DESCRIPTION

The Site is located in the Borough of Bronx, New York, and is identified as Block 2333, Lot 1, on the Bronx Tax Map. A United States Geological Survey topographical quadrangle map (Figure 1) shows the Site location. The Site is situated on an approximately 0.46-acre parcel bounded by commercial buildings to the north, East 138th Street and commercial storefronts with residential apartments above to the south, Morris Avenue and a senior residential building to the east, and a tire repair facility to the west. The 0.46-acre property is fully described in Appendix I – Metes and Bounds.

1.2 CONTEMPLATED REDEVELOPMENT PLAN

The Remedial Action to be performed under the RAWP is intended to make the Site protective of human health and the environment consistent with the contemplated residential end use. The proposed redevelopment plan and end use are described here to provide the basis for this assessment.

The proposed residential development includes an eight-story building containing retail space on the first floor and residential space on the upper floors. The building will contain a below grade parking garage to a finished depth of 13 feet below grade (fbg). The excavation will extend to a depth of 15 fbg to allow foundation construction and installation of the waterproofing and vapor barrier and the cellar floor. Also below grade will be storage areas and mechanical rooms. Site plan drawings are provided in Appendix II.

1.3 DESCRIPTION OF SURROUNDING PROPERTY

Current uses, zonings and general character of adjoining properties are as follows:

North: Commercial buildings are located to the north of the subject property, with zoning designation M1-4/R7A.

South: East 138th Street and commercial storefronts with residential apartments above are located to the south of the subject property, with zoning designation M1-4/R7X.

East: Morris Avenue and a senior residential building are located to the east of the subject property, with zoning designation R6.

West: A tire repair facility is located to the west of the subject property, with zoning designation M1-4/R7X.

In accordance with the approved Citizen Participation Plan (see Appendix III), all of the adjacent property owners have been receiving, and will continue to receive, Fact Sheets describing the phase of the Brownfield Cleanup Program being implemented and the next steps through implementation of the final selected remedy. Sensitive environmental receptors within an approximate 500-foot radius of the subject property include the residential buildings to the northeast, east, and southeast.

2.0 DESCRIPTION OF REMEDIAL INVESTIGATION FINDINGS

The Site was investigated in accordance with the scope of work presented in the NYSDEC-approved RIWP, dated October 27, 2011. The RIWP was submitted to the NYSDEC on October 27, 2011, and was approved by the NYSDEC on December 7, 2011. The investigation was conducted between April and May 2012.

2.1 SUMMARY OF REMEDIAL INVESTIGATIONS PERFORMED

2.1.1 Borings and Wells

Soil Borings

A total of seventeen (17) soil borings were advanced at the approximate locations shown on Figure 4 - Soil Boring Location Map. Borings were installed to a maximum depth of 25 fbg; bedrock was not encountered. Eight soil borings (G-1 to G-8) were installed in the areas of the former gasoline underground storage tanks (USTs) and former pump islands; two soil borings (GAR-1 and GAR-2) were installed in the former garage building on 245 East 138th Street; two soil borings (KFC-1 and KFC-2) were installed in the former Kentucky Fried Chicken (KFC) building on 2551 3rd Avenue; and, six soil borings (HF-1 to HF-6) were installed to investigate the presence of contaminated historic fill. The sample locations and contaminants exceeding both Track 1 and Track 2 Standards between 3.0 and 5.0 fbg are provided on Figure 5. The sample locations and contaminants exceeding both Track 1 and Track 2 Standards between 5.5 and 7.5 fbg are provided on Figure 6. The sample locations and contaminants exceeding Track 1 and Track 2 Standards between 24.5 and 25.0 fbg are provided on Figure 7. Only three (3) samples exceeded the Track 1 and Track 2 standards at this depth. The depth of 25.0 fbg was the deepest horizon sampled.

Monitoring Wells

Four (4) groundwater monitoring wells were installed on April 11, 2012. The groundwater monitoring wells were designated MW-1 to MW-4. The locations of the wells are shown on Figure 8 - Exceedances of Groundwater Quality Standards. The wells were installed by a licensed Well Driller and consisted of 2-inch polyvinyl chloride (PVC) with locking flush-mount casings. The wells were installed using hollow stem auger-drilling techniques to an estimated total depth of 15 feet and contained 13 feet of 0.020 slotted screen.

Temporary Well Points

Following soil boring completion, six temporary well points were installed in soil borings HF-6, G-6, G-1, KFC-1, HF-3 and G-3. Groundwater was at depths ranging from 6 to 10 feet below surface grade in the soil borings. The temporary well points were installed via Geoprobe® direct-push drill rig and consisted of 2-inch diameter 0.010 slotted PVC screen and 2-inch diameter solid PVC riser to the surface. The temporary well point locations are shown on Figure 8.

Soil Vapor

A total of eight soil vapor samples were collected at potentially impacted areas and at up-gradient and down-gradient Site boundary locations for laboratory analysis. The soil vapor locations are provided on Figure 9 – Soil Vapor Result Data.

2.1.2 Sample Collection

Soil Samples

A total of 50 soil samples were collected from 17 soil borings. Soil samples were collected in the vicinity of potentially impacted areas or near areas where impacts were previously detected. Soil borings were advanced to 25 feet below ground level. Soil samples were collected from discrete 6-inch soil intervals. Samples were collected from within the historic fill from between 3.0 and 5.0 fbg and from between 5.5 and 7.5 fbg, at the six inch interval with the highest evidence of possible contamination, identified by either photo ionization detector (PID) readings, visual evidence and or olfactory evidence of possible contamination. Below an average depth of 8 fbg, native soil was encountered. Soil samples were thus collected from the deepest interval drilled. Sampling at the top of bedrock could not be achieved, since bedrock was determined to be at a depth greater than 25 fbg.

Groundwater Samples

Monitoring wells were installed to depths ranging from 13.19 to 15.32 fbg at potentially impacted areas and at up-gradient and down-gradient Site boundary locations to further delineate the extent of the contamination and to evaluate the potential for off-Site contamination. Moreover, six temporary well points were installed in six of the completed soil borings. Temporary well points were installed in the vicinity of the former USTs, the dispenser island, and potentially impacted areas. A total of 10 groundwater samples were collected to investigate the subsurface groundwater quality at the property.

Soil Vapor Samples

A total of eight soil vapor samples were collected for laboratory analysis.

2.1.3 Chemical Analytical Work Performed

Soil samples were submitted to Accredited Analytical Resources, LLC, for analyses of Target Analyte List (TAL)/Target Compound List (TCL) compounds by the following United States Environmental Protection Agency (USEPA) methods:

Compounds Analyzed	Method
SOIL INVESTIGATION	
Historical Site Use – Gasoline Stations [G-1 through G-8]	
TCL Volatile Organic Compounds	USEPA Method 8260
TCL Semivolatile Organic Compounds	USEPA Method 8270
Lead	USEPA Method 6010
Former Garage Building [GAR-1 and GAR-2] and Former KFC Building [KFC-1 and KFC-2]	
TCL Volatile Organic Compounds	USEPA Method 8260
TCL Semivolatile Organic Compounds	USEPA Method 8270
TAL Metals	USEPA Method 6010
TCL PCB-9	USEPA Method 8082
TCL Pesticides	USEPA Method 8081
Urban Fill [HF-1 through HF-6]	
TCL Volatile Organic Compounds	USEPA Method 8260
TCL Semivolatile Organic Compounds	USEPA Method 8270
TAL Metals	USEPA Method 6010
TCL PCB-9	USEPA Method 8082
TCL Pesticides	USEPA Method 8081
GROUNDWATER INVESTIGATION	
Monitoring Well [MW-1 through MW-4]	
TCL Volatile Organic Compounds	USEPA Method 8260
TCL Semivolatile Organic Compounds	USEPA Method 8270
TAL Metals	USEPA Method 6010
TCL PCB-9	USEPA Method 8082
TCL Pesticides	USEPA Method 8081
Temporary Well Point [TWP-1 through TWP-6]	
TCL Volatile Organic Compounds	USEPA Method 8260
TCL Semivolatile Organic Compounds	USEPA Method 8270
Lead	USEPA Method 6010
Soil Vapor Investigation	
Volatile Organic Compounds	USEPA TO-15

2.2 SITE HISTORY

Historical documents, including previous Phase I and Phase II reports and Sanborn® Fire Insurance Maps, were reviewed, to evaluate the historical uses on the Site and to plan the locations of the boring and well explorations. The Site history is as follows:

2.2.1 Past Uses and Ownership

The subject property was developed between 1891 and 1908 with several structures with industrial operations, including a boiler works, machine shop, and NY Slate Works. The Site also was developed with a hotel and several unidentified structures. Prior to 1935, the structures on the Site were demolished and replaced with two gas stations. The gas station on the western portion had four 550-gallon USTs, a 4000-gallon UST, and a dispenser island on the south side. The gas station on the eastern portion had 11 550-gallon USTs. Prior to 1978, the gas stations were demolished and a one-story structure labeled as a filling station was developed on the west border and a one-story commercial structure was developed in the center. The structure on the west border was labeled Auto Repair in 2005, and the structure in the center was identified as Kentucky Fried Chicken (KFC) from 1976 to 2005 in the Environmental Data Resources, Inc. City Directory Abstract.

Two former NYSDEC Spill Incidents were reported at the property. Spill No. 07-03567 was associated with the address identified as 2551 3rd Avenue, which was the gas station on the eastern side of the property where the eleven 550-gallon USTs were removed. Spill No. 9804000 was associated with the address identified as 245 East 138th Street, which was the gas station on the western side of the property where the four 550-gallon USTs and the 4,000-gallon UST were removed.

2.2.2 Phase I and Phase II Reports

The following represents a summary, in chronological order, of the reports provided for the subject property.

Phase I Environmental Site Assessment (ESA), Middleton Environmental, Inc., October 1, 2001 **(245 East 138th Street)**

According to the Phase I ESA prepared by Middleton, the subject property was developed with a garage building in 1952 and was formerly operated as a Getty gas station. Middleton reviewed a UST Closure Report prepared by Tyree Environmental and determined that the spill number had not been closed and that an appropriate number of post-excavation soil samples had not been collected. According to the NYSDEC's Petroleum Bulk Storage database, a second 4,000-gallon gasoline UST, a 240-gallon fuel oil UST, and a 240-gallon waste oil UST were identified as being installed in 1998; however, Getty personnel stated that the tanks were not installed and Middleton did not observe evidence of the tanks on Site. Middleton did observe two monitoring wells on Site, but groundwater data were not provided by Tyree. Based upon the information provided in the Phase I ESA, Middleton recommended additional investigation of the former tank excavations.

Phase II Site Investigation (SI), P.W. Grosser Consulting, December 4, 2001 **(245 East 138th Street)**

P.W. Grosser was contracted to conduct a Phase II SI in response to the above-referenced Middleton Phase I ESA. Since Tyree did not collect soil samples from the base of the UST excavations or from the south sidewall of the 4,000-gallon UST excavation, P.W. Grosser installed soil borings in these locations to collect soil samples. One soil sample was collected from each boring. P.W. Grosser also collected groundwater samples from temporary well points installed within each boring. The soil and groundwater samples were analyzed for volatile organic compounds (VOCs). The soil samples were compared to the NYSDEC's Recommended Soil Cleanup Objectives (RSCOs) which replaced the STARS Guidance. Laboratory analytical results indicated that several petroleum-related VOCs were detected in each sample at concentrations exceeding the applicable RSCO. Groundwater analytical results were compared to NYSDEC's Class GA Groundwater Quality Standards (GQS). Laboratory analytical results indicated that VOCs were detected in the samples collected at concentrations exceeding the applicable standards. P.W. Grosser also collected groundwater samples from the two monitoring wells on the subject property. Laboratory analytical results indicated that petroleum-related VOCs were detected in the samples collected at concentrations less than the applicable standards.

The Phase II SI concluded that significant soil contamination remained on Site in the vicinity of the former USTs and former dispenser island, serving as a source of petroleum-related VOCs to the groundwater. P.W. Grosser recommended vertical and horizontal delineation of the soil and installation of additional monitoring wells to calculate groundwater flow direction and to fully delineate groundwater contamination.

Phase I ESA, AKRF, Inc., February 2007* (2551 3rd Avenue*)

According to the Phase I ESA, the subject property was developed with one building that operated as a KFC fast food restaurant from the 1960s until December 2006. The Site contained a suspected stormwater detention vault and a suspected grease trap related to the restaurant. The Phase I ESA indicated that while no evidence of USTs was observed during the Site inspection, the 1935 and 1946 Sanborn® Fire Insurance Maps showed that a gasoline station containing 10 550-gallon gasoline USTs was also present on this portion of the Site. No information was provided during report preparation showing that the tanks had been removed or properly closed. The Phase I ESA concluded that soil and groundwater may have been affected by historic on-Site and off-Site uses, as well as urban fill and the potential USTs. AKRF recommended a Phase II SI.

***Phase I ESA, Brinkerhoff Environmental Services, Inc., November 2, 2010* (245 East 138th Street and 2551 3rd Avenue)**

The Site was identified in the New York City Office of Environmental Remediation NYC OER) E-Designation database under No. E-227, hazardous materials, Phase I and Phase II testing protocol, and air quality associated with No. 2 fuel oil, No. 4 fuel oil, or natural gas for HVAC (heating, ventilating, and air conditioning), and exhaust stack location limitations. Based upon the information provided in the report, including the former use of the Site as two gasoline stations and the former confirmed presence of contamination on Site, Brinkerhoff recommended further investigation.

Brinkerhoff recommended a geophysical investigation, soil investigation, and groundwater investigation. Brinkerhoff also recommended an investigation for the E-Designation according to the Phase II SI sampling protocol.

Phase II SI, Brinkerhoff Environmental Services, Inc., January 20, 2011 **(245 East 138th Street and 2551 3rd Avenue)**

Brinkerhoff completed a Phase II SI, which included a geophysical investigation, soil boring and sample analyses, and a groundwater investigation. The geophysical investigation did not identify anomalies indicative of remaining USTs.

Laboratory analytical results related to the soil investigation reported petroleum-related VOCs below the NYSDEC's RSCO for Restricted Residential Use, but in exceedance of the CP-51 Soil Cleanup Levels for Gasoline Contaminated Soil. The petroleum-related VOCs benzene, ethylbenzene, xylenes, and isopropylbenzene exceeded this soil cleanup level; chlorinated VOCs were not detected in the soil samples. The laboratory also reported elevated concentrations of semi-volatile organic compounds (SVOCs), specifically polynuclear aromatic hydrocarbons (PAHs), and various metals, including lead, chromium, copper, and mercury, at concentrations exceeding the cleanup standards for Track 2 Restricted Residential Use.

A groundwater investigation was conducted and the laboratory analytical results indicated that the petroleum-related compounds benzene, toluene, ethylbenzene, xylenes, 1,4,5-trimethylbenzene, and 1,2,4-trimethylbenzene exceeded applicable GQS.

The presence of the PAHs, metals and petroleum-related VOCs in the soil and in the groundwater suggests that contamination related to former petroleum Site operations and contaminated fill still exists at the Site.

2.3 GEOLOGICAL CONDITIONS

2.3.1 Site Geology

The Site contains contaminated historic fill material, which contains various amounts of gravel, concrete, sand, etc. The fill is Site-wide and extends to approximately 9 fbg, with a distribution that appears to be random horizontally and vertically. A gray medium to fine sand is present between approximately 9 feet below grade to an average depth of 14 feet below grade. Below 14 feet, sediments consist of interbedded gray and brown silt with some fine sand present to 25 feet, the maximum depth of the borings. Thus, depth to bedrock is unknown, and is greater than 25 fbg.

2.3.2 Site Topography

The Site is approximately 20 feet above mean sea level and is generally level. Rainfall is expected to run off impervious surfaces to city storm drains.

2.3.3 Site Hydrogeologic Conditions

Groundwater is encountered between 4.75 to 6.32 fbg beneath the Site. Groundwater flows under water table conditions and flows toward the west to southwest. A groundwater contour map showing flow direction is provided as Figure 3.

2.4 CONTAMINATION CONDITIONS

2.4.1 Conceptual Model of Site Contamination

A conceptual Site model in the form of cross sections has been developed based on the findings of the subsurface investigations. The purpose of the conceptual Site model is to develop a simplified framework for understanding the distribution of impacted materials, potential migration pathways, and potentially complete exposure pathways, as discussed below. The locations of the cross sections are shown on Figure 4, and the cross sections are provided as Figures 10 and 11.

2.4.2 Description of Areas of Concern

The Site originally consisted of two tax parcels which were occupied by two different gas stations:

2551 3rd Avenue

This parcel was known to be formerly developed as a gasoline service station with 10 550-gallon gas tanks. However, a Tank and Spill Closure Report stated that 11 550-gallon USTs were removed from the subject Site. Five (5) of the USTs were discovered to be leaking and a spill case with the NYSDEC was opened. Contaminated soil was removed from the Site during the tank removal effort and soil samples were collected. The soil samples did not show elevated levels of VOCs at that time; however, SVOCs were present.

245 East 138th Street

This parcel was formerly developed with a gasoline service station with four (4) 550-gallon gasoline tanks. The subject property was a former Getty gas station and four (4) 550-gallon USTs and one (1) 4,000-gallon UST were removed from the subject property.

Historic Fill

Soil boring and sampling and analysis have identified the presence of historic fill throughout the property. This historic fill averages seven (7) to nine (9) feet in thickness across the Site. Contaminants found in the historic fill include various SVOCs, specifically PAHs and heavy metals.

2.4.3 Identification of Standards, Criteria and Guidance (SCG)

Soil sample results were compared to the NYSDEC cleanup standard or Soil Cleanup Objectives (SCOs) in the 6 N.Y.C.R.R. Subpart 375-6 Remedial Program Soil Cleanup Objectives. Results were compared to both Track 1 "Unrestricted Use" and Track 2 "Restricted-Residential" SCOs. Groundwater sample results were compared to the NYSDEC Technical and Operational Guidance Series (TOGS) 1.1.1 GQS.

2.4.4. Summary of Soil Data

Samples collected from soil borings in the areas of former gasoline USTs and pump islands (G-1 to G-8) showed ethylbenzene and 1,2,4-trimethylbenzene at 45.8 and 206 parts per million (ppm) in a sample from soil boring G-6. Less than 2 ppm of SVOCs, specifically PAHs, were detected in the shallow and deep samples from G-8. Arsenic, copper and lead were detected in shallow samples from G-6, G-7 and G-8.

Samples collected from soil borings in the former garage building (GAR-1 and GAR-2) indicated that VOCs, SVOCs and pesticides were not detected or were at trace concentrations. No polychlorinated biphenyls (PCBs) were detected. Concentrations of 16.8 to 23.7 ppm of arsenic were detected in shallow samples from GAR-1 and GAR-2, and a high concentration of copper (682 ppm) was detected in a shallow sample from GAR-2. Refer to Figures 5, 6 and 7 for soil sampling results.

Samples collected from soil borings installed in the former KFC building footprint (KFC-1 and KFC-2) indicated that VOCs, pesticides, and PCBs were not detected. Benzo(a)pyrene and indeno(1,2,3-cd)pyrene were detected at low concentrations (less than 3 ppm) in a shallow sample from KFC-2. Mercury was detected at 0.829 ppm in a deep sample from KFC-2, and arsenic and copper were detected at relatively high concentrations in a shallow sample from KFC-1. Soil samples collected along the property line to delineate the extent of historic fill parameters on the Site (HF-1 to HF-6) indicated that VOCs, pesticides, and PCBs were not detected or were at trace concentrations. SVOCs, particularly PAHs, were detected at low concentrations (less than 13 ppm) in shallow samples HF-1, HF-2, HF-4, and HF-6. Mercury was detected at low concentrations (less than 1.5 ppm) in samples HF-1A, HF-1B, HF-2A, and HF-3B. Arsenic, copper and lead were detected at relatively high concentrations (up to 2290 ppm) in samples HF-1A, HF-2B, HF-3A, HF-4A, HF-4B, and HF-6A.

As previously mentioned in Section 2.4.1, Figures 10 and 11 provide geologic cross sections through the Site. These cross sections illustrate the extent of historic fill, former tank excavations, and location of native sediments. The cross sections also illustrate that the excavation proposed for the Site to construct the building foundations and below grade parking will adequately remediate soil contamination at the Site.

2.4.5 Summary of Groundwater Data

Groundwater samples collected from the four on-Site monitoring wells indicated that several gasoline-related VOCs, including benzene, ethylbenzene, and naphthalene, were detected at concentrations ranging from 1.36 to 344 parts per billion (ppb) in MW-1 and MW-2. Metals, including iron, manganese and sodium, were detected at high concentrations (from 370 to 63,300 ppb) in all of the groundwater samples collected. Groundwater samples collected from six temporary well points identified high concentrations of VOCs, SVOCs, and lead in all temporary well points except TWP-5. The VOCs detected included gasoline-related compounds such as benzene, toluene, and ethylbenzene. Benzene concentrations ranged from non detectable levels to a high of 388 ppb, toluene from non detectable levels to 26 ppb, ethylbenzene from non detectable levels to 122 ppb, and xylenes from non detectable levels to 28 ppb. The SVOCs detected include naphthalene and PAHs. High concentrations of lead (51 to 854 ppb) were detected in samples TWP-2 and TWP-6. These lead levels may be due to turbidity since the high

concentrations were identified in samples from temporary well points but not from the permanent monitoring wells. Samples from the monitoring wells analyzed for VOCs and SVOCs were not filtered, but may have been less turbid samples due to the well construction, including the gravel pack. Groundwater sampling results are presented on Figure 8.

Based on the groundwater sampling results and the groundwater flow direction, contaminants in the groundwater may extend off the property toward the west to west-northwest. An off-Site groundwater monitoring well is proposed during the remedial phase of the project. It should be noted that the Site in not located in a groundwater use area.

2.4.6 Summary of Soil Vapor Data

VOCs were detected in the soil vapor samples collected. The results are summarized on Figure 9. Petroleum-related VOCs were detected in various vapor points, which are likely related to the former USTs once present at the Site. Chlorinated VOCs, including tetrachloroethene (PCE) and trichloroethene (TCE) were detected in vapor points. TCE was detected at levels ranging from 3.4 micrograms per cubic meter of air (ug/m3) to non-detectable. TCE is considered an Air Matrix 1 compound and, at levels below 5 ug/m3, no further action would be required regarding indoor vapor mitigation if indoor levels did not exceed 0.25 ug/m3. Since no buildings are present on the site, no indoor air sampling was completed.

PCE was detected at concentrations ranging from 353 ug/m3 to non-detectable. PCE is considered an Air Matrix 2 compound and, at levels exceeding 100 ug/m3 but less than 1,000 ug/m3, indoor monitoring would be required if PCE levels were detected at 3 ug/m3 or less. No buildings are present on the site; thus, no indoor air sampling was performed. The proposed remedial action including soil excavation, a ventilated underground parking garage and a vapor barrier will sufficiently address and eliminate potential exposures associated with soil vapor intrusion.

The source of the chlorinated VOCs could not be determined. No chlorinated VOCs were detected in either the soil or groundwater samples analyzed from this Site. Therefore, there is likely to be an off-site source of chlorinated VOCs.

2.5 ENVIRONMENTAL AND PUBLIC HEALTH ASSESSMENTS

2.5.1 Qualitative Human Health Exposure Assessment

Potential sources of contamination at the Site have been identified in the RIWP and Remedial Investigation Report (RIR). The potential sources of contamination appear to originate from the heterogeneous, Site-wide contaminated historic fill, comprised of various amounts of brown sand, gravel, asphalt, road stone, and brick, etc. The SVOCs (PAHs) and metals that exceed the Track 2 Restricted Residential and Commercial SCOs are associated with the composition of the fill materials. The historic use of the Site as gas stations also has impacted all three media on Site through releases of petroleum to the site soils and groundwater. An apparent off-site source of chlorinated VOCs is also impacting soil vapor on the Site, even though no on-site source of chlorinated VOC contamination has been identified.

Contaminated groundwater may be migrating off-site. Groundwater is greater than five (5) feet below grade. Since the site is located in an urban setting and groundwater is not used for potable, irrigation or industrial use, potential pathways do not exist.

The contaminated historic fill soil media, which contains various concentrations of metals and SVOCs, posed a potential exposure through ingestion and physical touching. The contaminated groundwater, impacted with elevated concentrations of VOCs, posed a potential exposure through inhalation of contaminated vapors. The SVOCs and metals in the groundwater present less potential for inhalation since these substances typically do not create contamination vapors but could expose workers who come into physical contact with groundwater during excavation projects. There is no potential for ingestion of groundwater since groundwater is not used for drinking water purposes in New York City. Chlorinated VOCs were detected in the soil vapor samples but not in the soil and groundwater samples; therefore, while the source of the chlorinated VOCs was not determined to be present on this Site, such contaminants pose a vapor inhalation exposure.

Receptor Populations

Human receptors under current conditions are limited to Site security workers or guests visiting the Site. During construction and remediation activities, receptors will include construction and remediation workers and the local population. Under future conditions, receptors will include the new building tenants, workers, and visitors.

Potential Exposure Pathways - On-Site Current Conditions

The composition of the historic fill at the Site contains various SVOCs and metals, and the soil vapor at the Site contains PCE. The Site is exposed soil. Where human physical contact exposure to the soil is possible (i.e., ground surface that is not paved or capped), the potential migration pathway is likely complete for dermal absorption and ingestion. However, Site activity is limited under current conditions as the Site is vacant and surrounded by a locked chain-link fence.

Groundwater beneath the Site contains various SVOCs, VOCs, and metals. Based on groundwater elevations obtained during the remedial investigation, groundwater appears to flow from west to west-northwest. Depth to groundwater is approximately 6 fbg with no apparent completion of a receptor pathway since there is no physical access to the Site and no occupancy, and the Site is not in a groundwater use area. However, it is possible that any utility workers excavating in the vicinity of the area could be exposed to groundwater contaminants through inhalation during excavation work.

Potential Exposure Pathways - Off-Site

Because of the overall westerly groundwater flow direction on the Site (shown on Figure 3), it is possible that groundwater contaminants are migrating off Site. The off-Site migration of contaminants is not expected to result in a complete exposure pathway for current construction/remediation or future conditions for the following reasons:

- The surrounding areas obtain their drinking water supply from municipal supply.
- Groundwater that is impacted will not discharge to a human receptor.

Therefore, the contaminants of concern (COCs) are not expected to reach a surface water body that is used as a drinking water source to potentially complete an exposure pathway.

Evaluation of Human Health Exposure

Based upon the conceptual Site model and the review of environmental data, complete on-Site exposure pathways appear to be present based on current and future conditions and during the construction and remediation phase. The complete exposure pathways indicate that there is a limited risk of exposure to humans from Site contaminants.

Complete exposure pathways have the following five elements:

1. A contaminant source;
2. A contaminant release and transport mechanism;
3. A point of exposure;
4. A route of exposure; and,
5. A receptor population.

A discussion of the five elements comprising a complete pathway as they pertain to the Site is provided below.

Current Conditions

Contaminant sources include the shallow-depth soils, groundwater, and soil vapor contamination. Contaminant release and transport mechanisms include the chemical composition of the historic fill, which has been impacted by petroleum contaminants. The historic fill soil source containing petroleum contaminants has affected the groundwater quality as a result of direct contact between the historic fill and the groundwater. Points of exposure include those areas on Site where contaminated soil is present with no surface cover. Routes of exposure may include ingestion and dermal absorption of contaminated soil and inhalation of vapors entering the future building. However, these routes can be mitigated if the soil source is removed, as proposed in this remedy, adequate surface cover is present over any remaining contaminated soil if still present, and if vapors are ventilated in a manner so that they do not enter the building.

Construction/Remediation Activities Pathways

Points of exposure can occur during construction and remediation work, and may include contact by workers with the disturbed and exposed historic fill and groundwater during excavation, and dewatering from dust and organic vapors emanating from the soil and contaminated groundwater. Routes of exposure include ingestion and dermal absorption of dust from the historic fill and physical contact with groundwater, inhalation of organic vapors arising from soil and groundwater, and inhalation of dust arising from the disturbance of the historic fill. The receptor population includes the construction and remediation workers and, to a lesser extent, the local population. All five elements exist; therefore, completed exposure pathways are present. However, the risk to workers will be minimized by applying appropriate health and safety measures, such as using vapor and dust suppression measures, maintaining Site security, and wearing the appropriate personal protective equipment. A Health and Safety Plan (HASP)

will be implemented during this remediation by the construction and remediation workers on the Site. (See Appendix IV.)

Future Exposure Pathways

The remedial action proposed for this Site will eliminate the exposure pathways since the soil source and some contaminated groundwater will be physically removed across the Site to a depth of 15 feet, which will extend into native soil. The future receptor population may include security personnel, residents and visitors to the Site. If any vapor contamination remains present, it will be ventilated out of the subsurface parking lot.

There will be no exposure pathways for physical contact, dermal ingestion or absorption since the proposed building will eliminate these pathways. With respect to the remaining exposure pathway for vapor, since soil will be excavated to below the groundwater table and a waterproofing/vapor barrier system will be installed, the building's ventilation system below the subsurface parking garage will mitigate any remaining vapor exposure pathway since vapors will be vented out of the parking garage and will not enter the proposed residential building.

Human Health Exposure Assessment Conclusions

The following conclusions were developed from this human health exposure assessment analysis:

1. The potential for complete exposure pathways for Site contaminants to Site human receptors for current conditions exists; however, eliminating access to the Site by a fence prevents this pathway from being completed. There is a moderate risk of exposure during the construction and remediation activities; however, this risk can be managed and mitigated by following the appropriate health and safety measures, vapor and dust suppression, and Site security measures described in the Health and Safety Plan in Appendix IV.

2. The existence of a complete exposure pathway for Site contaminants to human receptors during future conditions is mitigated by the proposed remedy since the exposure from contaminated soils may be reduced once these soils have been removed. Some contaminated groundwater is expected to be removed during remediation activities since the excavation to remove the contaminated soils will be greater than seven feet. A vapor

barrier and ventilated below grade parking will be utilized to eliminate the potential impact from vapor intrusion.

3. Complete exposure pathways will not exist from the migration of Site contaminants to off-Site human receptors for future conditions since the sources of such pathways will be eliminated as a result of the remedy implementation.

4. There are no risks to the ecological environment based on current or future conditions since the Site is in an urban environment and is not in close proximity to an ecological resource

2.6 REMEDIAL ACTION OBJECTIVES

Based on the results of the RI, the following Remedial Action Objectives (RAOs) have been identified for this Site.

2.6.1 Groundwater

RAO for Public Health Protection:

- Prevent contact with, or inhalation of, volatiles emanating from contaminated groundwater.

RAOs for Environmental Protection:

- Restore groundwater aquifer, to the extent practicable, to pre-disposal/pre-release conditions.
- Remove the source for the groundwater contamination identified at the site.

2.6.2 Soil

RAOs for Public Health Protection:

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of, or exposure to, contaminants volatilizing from contaminated soil.

RAO for Environmental Protection:

- Prevent migration of contaminants that would result in groundwater or surface water contamination.

2.6.3 Soil Vapor

- Remove exposure pathways for the contaminants in soil vapor.

3.0 DESCRIPTION OF REMEDIAL ACTION PLAN

3.1 EVALUATION OF REMEDIAL ALTERNATIVES

Protection of Human Health and the Environment

This criterion is an evaluation of the remedy's ability to protect public health and the environment and an assessment of how risks posed through each existing or potential pathway of exposure are eliminated, reduced, or controlled through removal, treatment, and implementation of Engineering Controls (ECs) or Institutional Controls (ICs). Protection of public health and the environment must be achieved for all approved remedial actions.

Track 1 Unrestricted Use Remedial Alternative: The Track 1 alternative would result in removal of all soil/fill with contaminant concentrations above Track 1 Unrestricted Use Soil Cleanup Objectives (UUSCOs). This would involve excavating soil to 15 fbg over most of the site. In a specific area of the site, contaminants in the soil over the Track 1 cleanup level were detected at 25 fbg. In this area, soil would have to be excavated to that depth. End-point sampling would have to confirm that UUSCOs have been met across the entire Site. As such, this alternative would be consistent with the RAOs and provide overall protection of public health and the environment in consideration of current and potential future land use by:

- Eliminating the potential for direct contact with contaminated on-Site soils by removing soil/fill with contaminant concentrations above Track 1 SCOs;
- Dewatering the Site to remove some of the contaminated groundwater;
- Eliminating potential sources of on-Site production of soil vapors;
- Minimizing the potential for migration of off-site soil vapor into occupied structures and associated inhalation exposures by installation of a vapor barrier and operation of a ventilated parking garage beneath the building.

Track 2 Residential Use Remedial Alternative: Alternative 2 would achieve comparable protections of human health and the environment and would be consistent with the RAOs. A Track 2 cleanup level would involve excavating to 15 fbg and conducting end-point sampling. This would provide overall protection of public health and the environment in consideration of current and potential future land use by:

- Removing soil/fill with contaminant concentrations above Track 2 Residential Use SCOs in the top 15 feet;
- Dewatering the Site to remove some of the contaminated groundwater;
- Eliminating the potential for direct contact with any remaining contaminated soil;
- Minimizing potential sources of on-Site production of soil vapors; and,
- Minimizing the potential for migration of off-site soil vapor into occupied structures and associated inhalation exposures by installation of a vapor barrier and operation of a ventilated parking garage beneath the building;

The Track 1 preferred remedial alternative would comply with the most stringent applicable SCOs, as all soil/fill in excess of Track 1 SCOs would be removed. All soil/fill excavated from the Site would be managed and disposed of in accordance with all applicable regulations leaving no source area that can contribute to on-site or off-site groundwater or vapor contamination.

The Track 2 alternative would address the chemical-specific SCOs and still make the Site safe for the intended residential use. Contaminants in the groundwater would be addressed through the dewatering, treatment and discharge to the city sewer under a permit and the placement of Oxygen Releasing Compound (ORC) in the excavation following soil removal to address any residual contaminants present in the groundwater after the remediation. Contaminants in the groundwater would be addressed in a similar manner for a Track 1 alternative. Focused attention on means and methods employed during the remedial action would ensure that handling and management of contaminated material would be in compliance with applicable regulations. An environmental easement may be required to manage residual contaminated groundwater remaining at the Site.

Short-Term Effectiveness and Impacts

This evaluation criterion assesses the effects of the alternatives during the construction and implementation phase until remedial action objectives are met. Under this criterion, alternatives are evaluated with respect to their effects on public health and the environment during implementation of the remedial action, including protection of the community, environmental impacts, time until remedial response objectives are achieved, and protection of workers during remedial actions.

The Track 1 alternative would provide short-term effectiveness with the removal of all soil/fill above Track 1 SCOs. All potential exposure pathways for Site-derived contaminants would be incomplete following construction. Implementation of this RAWP would prevent unacceptable exposure during remediation and construction activities.

The Track 2 alternative would result in fewer short-term impacts associated with excavation, handling, load out of materials, and truck traffic than a Track 1 remediation. However, focused attention to means and methods during the remedial action during a Track 1 removal action, including community air monitoring and appropriate truck routing, would minimize or negate the overall impact of these activities.

The Track 1 and Track 2 Alternatives are both considered to be effective in protecting human health and the environment in the short term. These alternatives would involve the removal of on-Site contaminated soils and would eliminate (in the case of a Track 1 cleanup) or reduce (in the case of a Track 2 cleanup) exposure to contaminant sources. The implementation of appropriate measures, including a Community Air Monitoring Plan (CAMP) and a Soil/Materials Management Plan (SMMP) attached hereto in Appendices V and VI, during all on-Site soil disturbance activities will effectively prevent the release of significant contaminants into the environment. Construction workers operating under appropriate management procedures and a HASP (see Appendix IV) will be protected from on-Site contaminants (personal protective equipment would be worn consistent with the documented risks within the respective work zones). Both alternatives provide short term effectiveness in protecting the surrounding community by decreasing the risk of contact with on-Site contaminants. The implementation of a HASP (incorporating a Community Health and Safety Plan) and a CAMP will serve to minimize potential short term impacts to the surrounding community from increased vehicle traffic, dust, vapors, and noise.

Long-Term Effectiveness and Permanence

This evaluation criterion addresses the results of a remedial action in terms of its permanence and quantity/nature of waste or residual contamination remaining at the Site after response objectives have been met, such as permanence of the remedial alternative, magnitude of remaining contamination, adequacy of controls including the adequacy and suitability of ECs/ICs that may be used to manage contaminant residuals that remain at the Site, and assessment of containment systems and ICs that are designed to eliminate exposures to contaminants, and long-term reliability of ECs.

As with the short-term effectiveness, the Track 1 alternative would provide the highest level of long-term effectiveness with the removal of all soil/fill above the most stringent unrestricted Track 1 SCOs. The treatment of groundwater through the dewatering and placement of ORC in the excavation will be effective in addressing the long term conditions of the groundwater. The removal of soil and treatment of groundwater will also be a long term solution to addressing previous soil vapor issues at the site.

The Track 2 alternative would also be effective over the long-term by removing all soil/fill in the top 15 feet that exceed the Track 2 Residential SCOs. The treatment of groundwater through the dewatering and placement of ORC in the excavation will be effective in addressing the long term conditions of the groundwater. The removal of soil and treatment of groundwater will also be a long term solution to addressing previous soil vapor issues at the site. Under a Track 2 alternative, the SMP (if necessary) will ensure proper management of residual contamination and long-term effectiveness of all ECs and ICs by requiring periodic inspection and certification that these controls and use restrictions continue to be in place and functioning as they were intended. This would assure that protections designed into the remedy will provide continued high levels of protection in perpetuity. Operation of a ventilated parking garage will minimize the potential for accumulation of vapors within the occupied structure and eliminate associated inhalation exposures.

Reduction of Toxicity, Mobility, or Volume of Contaminated Material

This evaluation criterion assesses the remedial alternative's use of remedial technologies that permanently and significantly reduce toxicity, mobility, or volume of contaminants as their principal element. The following is the hierarchy of source removal and control measures that

are to be used to remediate a Site, ranked from most preferable to least preferable: removal and/or treatment, containment, elimination of exposure, and treatment of source at the point of exposure. It is preferred to use treatment or removal to eliminate contaminants at a Site, reduce the total mass of toxic contaminants, cause irreversible reduction in contaminants mobility, or reduce the total volume of contaminated media.

The Track 1 Alternative would permanently eliminate the toxicity, mobility, and volume of contaminants from on-Site soil by removing all soil in excess of unrestricted use SCOs through the removal of soil to a depth of approximately 15 feet across the Site. A specific area where contaminants were detected above the Track 1 cleanup levels below 15 feet would require additional excavation. This area is shown on Figure 12. This area would require additional excavation to a depth of at least an additional 10 feet to remediate soil to Track 1 levels. End-point sampling at both 15 feet and at 25 feet in the deeper excavated area would be required to confirm that Track 1 cleanup levels have been achieved. The Track 2 Alternative would greatly reduce the toxicity, mobility, and volume of contaminants from on-Site soil because it would include removal of as much as 15 feet of soil/fill for development purposes and will achieve the Track 2 Residential Use SCOs. End-point sampling at 15 feet would be required to confirm that a Track 2 cleanup level has been achieved. The same volume of contaminated groundwater would be dewatered under each alternative, which should significantly reduce contaminants in groundwater that will be present above the slab and isolated from the remaining contaminated soils under the slab. Vapors will still be mitigated with the same garage ventilation system under either alternative.

Implementability

This evaluation criterion addresses the technical and administrative feasibility of implementing an alternative and the availability of various services and materials required during its implementation, including technical feasibility of construction and operation, reliability of the selected technology, ease of undertaking remedial action, monitoring considerations, administrative feasibility (e.g., obtaining permits for remedial activities), and availability of services and materials.

The Track 1 alternative is implementable. The remedial methods used are easily implemented using standard construction technologies. The Track 1 remedy will involve a deeper excavation than the Track 2 remedy; however, it is still implementable.

Similarly, the Track 2 alternative is also both feasible and implementable. It uses standard materials and services and well established technology. The reliability of the remedy is also high. There are no special difficulties associated with any of the activities proposed, which utilize standard industry methods. As noted above, the Track 2 remedy is less difficult to implement than Track 1 since excavation work will likely not extend below 15 feet.

Cost Effectiveness

This evaluation criterion addresses the cost of alternatives, including capital costs (such as construction costs, equipment costs, disposal costs, and engineering expenses) and Site management costs (costs incurred after remedial construction is complete) necessary to ensure the continued effectiveness of a remedial action.

The capital costs associated with the Track 1 alternative are higher than the Track 2 alternative in that a higher volume of soil/fill will be excavated for off-Site disposal to achieve the Track 1 cleanup standards for the entire Site. In both cases, appropriate public health and environmental protections are achieved. Potential added costs for Track 2 would include preparation of an environmental easement, a SMP, and implementation of the SMP.

Both alternatives satisfy the threshold balancing criterion and other criteria listed here and each is fully protective of public health and the environment, will control migration of contaminants, will comply with Track 1 or Track 2 cleanup levels, are effective for the short-term and long-term, are implementable, and reduce both mobility and toxicity.

Community Acceptance

This evaluation criterion addresses community opinion and support for the remedial action. Observations here will be supplemented by public comment received on the RAWP. However, both remedies should be fully supported by the community since the remedies will achieve cleanup levels appropriate for the proposed low income residential use, which is supported by the community at this location.

Therefore, based on the overall goals of the remedial program and initial observations by the project team, both of the alternatives should be acceptable to the community. This RAWP will be subject to, and undergo public review under, the New York State Brownfield Cleanup Program (NYS BCP) and will provide the opportunity for detailed public input on the remedial alternatives and the selected remedial action. This public comment will be considered by the NYSDEC prior to approval of this plan.

Land Use

This evaluation criterion addresses the proposed use of the property. This evaluation has considered reasonably anticipated future uses of the Site and takes into account: current use and historical and/or recent development patterns; applicable zoning laws and maps; the NYS Department of State's Brownfield Opportunity Areas (BOA) plan pursuant to section 970-r of the general municipal law; applicable land use plans; proximity to real property currently used for residential use, and to commercial, industrial, agricultural, and/or recreational areas; environmental justice impacts; Federal or State land use designations; population growth patterns and projections; accessibility to existing infrastructure; proximity of the Site to important cultural resources and natural resources; potential vulnerability of groundwater to contamination that might emanate from the Site; proximity to flood plains, geography and geology; and, current ICs applicable to the Site.

Because of the complete soil removal, the Track 1 alternative provides protection of public health and the environment for both the proposed use of the Site and any future use. The Track 1 alternative provides a remedial action that is beneficial to the surrounding community and is consistent with the goals of the City for remediating and redeveloping brownfield sites.

The Track 2 alternative also provides protection for the intended use.

Both alternatives for remedial action at the Site are comparable with respect to the proposed use and to land uses in the vicinity of the Site. The proposed use is consistent with the existing zoning designation for the property and is consistent with recent development patterns. The Site is surrounded by commercial and residential properties and both alternatives provide comprehensive protection of public health and the environment for these uses.

3.2 SUMMARY OF SELECTED REMEDIAL ACTIONS

The proposed RAWP achieves all of the remedial action goals established for the project. The proposed remedial action is for a Track 2 cleanup level, which is effective in both the short term and long term and reduces mobility, toxicity, and volume of contaminants and uses standard methods well established in the industry. Depending on the results of end-point sampling at 15 fbg and construction feasibility, a Track 1 Unrestricted Use Cleanup may be pursued. If a Track 1 cleanup level can be achieved, the short and long term effectiveness goals will also be met. The

remedial action goals will be achieved through the following:

1. Implementing a CAMP for particulates and volatile organic carbon compounds during the excavation of material;
2. Performance of all activities required for the remedial action, including permitting requirements and pretreatment requirements, in compliance with applicable laws and regulations; and excavation and off-site removal of soil/fill exceeding the Track 1 or Track 2 SCOs ;
3. Site mobilization involving Site security setup, equipment mobilization, utility mark outs, and marking and staking of excavation areas;
4. Demonstrating Achievement of the Track 1 or Track 2 SCOs through end-point sample results;
5. Transportation and off-Site disposal of all soil/fill material excavated during the installation of the material to allow construction of the mechanical room floor and below grade parking garage in accordance with applicable laws and regulations for handling, transport, and disposal, and this plan, and sampling and analysis of excavated media as required by disposal facilities;
6. As part of standard construction practices, a Preprufe 300R waterproofing membrane (which is also a vapor barrier) beneath the structure and along the foundation sidewalls will be installed;
7. The ventilation of the below grade parking area is consistent with NYC Building Code. Ventilation will prevent accumulation of vapors within the building;
8. Submission of a Final Engineering Report (FER) that describes remedial activities, certifies that the remedial requirements have been achieved, describes all ECs and ICs to be implemented at the Site, if any, and lists any changes from this RAWP that may have been required in the field; and,
9. If a Track 2 cleanup is implemented and the RAOs for soil vapor and/or groundwater have not been achieved, submission of an approved SMP and environmental easement for long-term management of residual contamination is required. The SMP would include plans for operation, maintenance, monitoring, inspection and certification of ECs and reporting at a specified frequency and the easement will include requirements to implement the SMP and any required ICs and ECs at the Site.

4.0 REMEDIAL ACTION PROGRAM

4.1 GOVERNING DOCUMENTS

Key highlights of all governing documents are introduced and discussed below. Greater detail is provided later in the body of this document.

4.1.1 Site-Specific HASP

All remedial work performed under this plan will be in full compliance with governmental requirements, including Site and worker safety requirements mandated by the Federal Occupational Safety and Health Administration (OSHA).

The Volunteer 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 HASP and for the appropriate performance of work according to that plan and applicable laws.

The HASP and requirements defined in this RAWP pertain to all remedial and invasive work performed at the Site until the issuance of a Certificate of Completion.

The Site Safety Coordinator will be determined prior to the start of construction. A resume will be provided to the NYSDEC prior to the start of remedial construction.

Confined space entry will comply with all OSHA requirements to address the potential risk posed by combustible and toxic gasses.

The detailed HASP is provided in Appendix IV.

4.1.2 Soil/Materials Management Plan (SMMP)

This document includes detailed plans for managing all soils/materials that are disturbed at the Site, including excavation, handling, storage, transport, and disposal. The detailed SMMP is provided in Appendix VI.

4.1.3 Quality Assurance Project Plan (QAPP)

4.1.3.1 Sampling Protocol

The soil and groundwater samples will be collected and analyzed in accordance with DER-10 and the BCP *Technical Guidance*, Section 2. The samples will be analyzed for TCL/TAL parameters as listed in NYCRR Part 375, the Commissioner Policy on Soil Cleanup Guidance (CP-Soil) and by an analytical method included in the NYSDEC Analytical Services Protocol (ASP). The sampling methods, sample preservation requirements, holding times, decontamination procedures, and collection of field blanks, trip blanks, and duplicates will conform to the ASP.

The samples will be analyzed by an accredited laboratory pursuant to the New York State Department of Health (NYSDOH) Environmental Laboratory Accreditation Program (ELAP). The samples will be transported under proper chain of custody. The samples will be collected and properly preserved, if necessary, by an Environmental Scientist/Geologist from Brinkerhoff under the oversight of the Project Manager.

4.1.3.2 Soil Sampling Protocol

A projected 38 soil samples will be collected. The samples will be collected at a rate of one (1) per 30 linear feet of sidewall and 900 square feet of excavation base. The samples will be collected using decontaminated stainless steel hand trowels. Sample collected and preservation will strictly follow the procedures outlined in 3.6.1.

The samples collected will be put into designated sample jars and allotted a specific sample number to be included on the chain of custody. One duplicate sample will be collected from each soil sampling event. Analytical results will be reported with matrix spikes and will be provided in electronic and paper format. Sampling methods, sample preservation requirements, sample holding times, decontamination procedure for field equipment and frequency for field blanks, field duplicates and trip blanks for aqueous samples will conform to the ASP.

Once the samples are collected and placed in laboratory-prepared glassware, the sample bottles will be placed in a cooler on ice, transported to Brinkerhoff's office, and placed in a designated refrigerator until picked up by Accredited, an NYSDOH-certified laboratory, which is the laboratory chosen for this project.

4.1.3.3 Sampling Groundwater

When sampling groundwater, approximately two weeks after well installation, representative groundwater samples will be collected from the downgradient monitoring well to be installed. The well will be installed in accordance with DER-10. Prior to purging, an interface probe, capable of detecting free-phase product thickness of 0.01 feet, will be used to gauge each well.

The wells will be sampled in accordance with the USEPA Low Stress/Low Flow Groundwater Sampling Protocol via submersible pumps with dedicated Teflon® tubing. Purged water will be placed in 55-gallon drums for future off-site disposal. The low stress/low flow sampling procedure will be used to reduce turbidity of the groundwater samples.

The following will be completed before purging:

1. Note date, time and weather conditions.
2. Identify well identification number.
3. Take PID readings from well immediately after removal of cap.
4. Take depth to groundwater/free product and depth of well.
5. Estimate water volume in well.

The following will be completed after purging:

1. Note start and end time for purging.
2. Note purge method and pumping rate.
3. Note depth from top of casing to groundwater.
4. Take pH, dissolved oxygen, temperature, turbidity, and specific conductance.

The following will be completed after sample collection

1. Note start and end time for sampling.
2. Note sampling method.
3. Take pH, dissolved oxygen, temperature, turbidity, and specific conductance.

Monitoring Well Data Forms will be prepared for each monitoring well sampled and will include all the data collected above.

Samples will be collected using disposable dedicated bailers and transferred directly into laboratory-supplied glassware. The sample bottles will be placed in a cooler on ice, transported to Brinkerhoff's office, and placed in a designated refrigerator until picked up by Accredited.

Field blanks, consisting of laboratory-supplied water, will be poured over the decontaminated sampling equipment prior to sampling. Trip blanks consisting of laboratory-supplied vials of water will accompany the samples to the laboratory. These samples will be analyzed for VOCs.

4.1.3.4 Principal Personnel Contact Information

Following are the principal personnel who will be assigned to the management, oversight, and completion of this project:

Brinkerhoff Environmental Services, Inc.

1805 Atlantic Avenue

Manasquan, New Jersey 08736

Office: 732-223-2225

Personnel

Principal/Project Coordinator - Doug Harm

Will be responsible for the overall coordination and management of the project.

Project Engineer – Ira N. Pierce, PE

Will be responsible for data review, evaluation, oversight, and final sign-off where applicable.

Project Manager – Isabel Su

Will be responsible for day-to-day coordination, scheduling, data review, and evaluation and will be the principal contact for matters relating to the environmental assessment and remediation.

Quality Assurance Officer – Gary DiMartinis

Will review sampling procedures and certify that the data was collected and analyzed using the appropriate procedures.

Geologist – Duane Shinton

Will conduct the various field investigations associated with this project and prepare report data.

Subcontractors

Laboratory

Accredited Analytical Resources, LLC (Accredited)
20 Pershing Avenue
Carteret, New Jersey 07008
NYSDOH Certification No. 11109
Office: 732-969-6112

Driller
PAL Environmental Services, Inc.
1102 Queens Plaza South
Long Island City, New York 11101
Office: 718-349-0900

Remedial Party Contact
Roger Pine
Development Associates
334-336 East 110th Street
New York, New York 10029
Office: 212-996-6640

4.1.4 Construction Quality Assurance Plan (CQAP)

The Construction Quality Assurance Plan (CQAP) must be part of the RAWP. This plan must describe how the successful performance of the Remedial Action tasks will be assured through designed and documented Quality Assurance/Quality Control (QA/QC) methodologies applied in the field and in the lab. The CQAP will provide a detailed description of the observation and testing activities that will be used to monitor construction quality and confirm that remedy construction is in conformance with the remediation objectives and specifications. The CQAP should include:

- Responsibilities and authorities of the organizations and key personnel involved in the design and construction of the remedy.
- Qualifications of the quality assurance personnel that demonstrate that they possess the proper training and experience necessary to fulfill project-specific responsibilities.
- The observations and tests that will be used to monitor construction and the frequency of performance of such activities.
- The sampling activities, sample size, sample locations, frequency of testing, acceptance and rejection criteria, and plans for implementing corrective measures as addressed in the plans and specifications.
- Requirements for project coordination meetings between the Applicant and its representatives, the Construction Manager, the Excavation Contractor, remedial or environmental subcontractors, and other involved parties.
- Description of the reporting requirements for QA activities including such items as daily summary reports, schedule of data submissions, inspection data sheets, problem identification and corrective measures reports, evaluation reports, acceptance reports, and final documentation.
- Description of the final documentation retention provisions.

4.1.5 Community Air Monitoring Plan (CAMP)

This document includes plans for community air monitoring and is detailed in Appendix V.

4.1.6 Citizen Participation Plan

A certification of mailing will be sent by the Volunteer to the NYSDEC Project Manager following the distribution of all Fact Sheets and notices that include: (1) certification that the Fact Sheets were mailed; (2) the date they were mailed; (3) a copy of the Fact Sheet; (4) a list of recipients (contact list); and, (5) a statement that the repository was inspected and that it contained all the applicable project documents.

No changes will be made to approved Fact Sheets authorized for release by the NYSDEC without written consent of the NYSDEC. No other information, such as brochures and flyers, will be included with the Fact Sheet mailing.

A document repository has been established at the following location and contains all applicable project documents:

New York City Public Library
Mott Haven Library
321 East 140th Street
Bronx, NY 10454
718-665-4878

Hours of Operations: 10:00 AM to 6:00 PM, closed Sundays

The Citizen Participation Plan is included in Appendix III.

4.1.7 Contractors Site Operations Plan

The Remediation Engineer will review all plans and submittals for this remedial project (including those listed above and contractor and sub-contractor document submittals) and confirm that they are in compliance with this RAWP. The Remediation 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 RAWP. All remedial documents will be submitted to NYSDEC and NYSDOH in a timely manner and prior to the start of work.

4.2 GENERAL REMEDIAL CONSTRUCTION INFORMATION

4.2.1 Project Organization

Following are the principal personnel who will be assigned to the management, oversight, and completion of this project:

Brinkerhoff Environmental Services, Inc.
1805 Atlantic Avenue, Manasquan, New Jersey 08736
Office: 732-223-2225

Personnel:

Principal/Project Coordinator: Doug Harm - Will be responsible for the overall coordination and management of the project.

Remedial Engineer: Ira N. Pierce, PE - Will be responsible for data review, evaluation, oversight, and final sign-off where applicable.

Geologist: Duane Shinton - Will be responsible for day-to-day field monitoring activities, including soil excavation and load out, dust monitoring, and PID monitoring. Post-remedial sampling activities and report preparation will be the function of a Geologist from Brinkerhoff.

Quality Assurance Officer: Gary DiMartinis - Will be responsible for quality assurance of sampling procedures, laboratory data, and reporting.

Subcontractors

Laboratory:

Accredited Analytical Resources, LLC
20 Pershing Avenue, Carteret, New Jersey 07008
Office: 732-969-6112
NYSDOH Environmental Laboratory Approval Program (ELAP) Certification No. 11109

Driller:

PAL Environmental Services, Inc.
1102 Queens Plaza South, Long Island City, New York 11101
Office: 718-349-0900

Remedial Party Contact:

Roger Pine, East 138th Street LLC
334-336 East 110th Street, New York, New York 10029
Office: 212-996-6640

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

4.2.2 Remedial Engineer

The Remedial Engineer for this project will be Ira Pierce. 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 FER that the remedial activities were observed by qualified environmental professionals under his supervision and that the remediation requirements set

forth in the RAWP and any other relevant provisions of NYS Environmental Conservation Law (ECL) 27-1419 have been achieved in full conformance with that Plan. Other Remedial Engineer certification requirements are listed later in this RAWP.

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 the NYSDEC and the NYSDOH.

The Remedial Engineer will review all pre-remedial plans submitted by contractors for compliance with this RAWP and will certify compliance in the FER.

The Remedial Engineer will provide the certifications listed in Section 10.1 in the Final Engineering Report.

4.2.3 Remedial Action Construction 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. Currently, a nine (9)-month remediation period is anticipated.

Schedule Milestone	Weeks from Remedial Action Start	Duration (weeks)
Approval of RAWP	0	0
Fact Sheet 2 announcing start of remedy	0	5
Mobilization	6	1
Remedial Excavation	18	12
Submit Remedial Action Report	54	36

4.2.4 Work Hours

The hours for operation of remedial construction will be from 7:00 AM to 4:00 PM. The hours for operation of remedial construction will conform to the New York City Department of Buildings construction code requirements or according to specific variances issued by that agency. The NYSDEC will be notified by the Applicant of any variances issued by the

Department of Buildings. NYSDEC will be notified when work is being performed on site 10 days in advance of work commencement.

4.2.5 Site Security

Site access will be controlled by a guarded gated entrance and an entirely fenced property.

4.2.6 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 to head west on East 138th Street, turn left on Willis Avenue, then right onto E. 135st Street, and merge onto I-87. Merge onto I-95 and travel I-95 to the New Jersey Turnpike.

4.2.7 Contingency Plan

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 the NYSDEC's Project Manager. An unknown petroleum spill 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 the NYSDEC. Chemical analytical testing will be performed for Target Analyte List (TAL) metals, TCL volatiles and semi-volatiles, and TCL pesticides and PCBs, as appropriate.

4.2.8 Worker Training and Monitoring

Workers participating in cleanup of contaminated material on this project are required to be trained in a 40-hour hazardous waste operators training course and to take annual refresher training. This pertains to workers performing specific tasks, including removing contaminated material and installing cleanup systems in contaminated areas.

4.2.9 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 NYS BCP. The sign will meet the detailed specifications provided by the NYSDEC Project Manager.

4.2.10 Pre-Construction Meeting with the NYSDEC

The NYSDEC will hold a preconstruction meeting at the Site with all parties involved in the remedial process prior to the start of remedial construction activities.

4.2.11 Remedial Action Costs

The total estimated cost of the Remedial Action for Track 1 is $4,386,250 and for Track 2 is $4,196,250. An itemized and detailed summary of estimated costs for all remedial activity is attached as Appendix VIII. This estimate will be revised based on actual costs and submitted as an appendix to the Final Remediation Report.

4.3 SITE PREPARATION

4.3.1 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 markouts. 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.

4.3.2 Stabilized Construction Entrance(s)

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 roads 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.

4.3.3 Utility Marker and Easements Layout

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 to assure safety. Utility companies and other responsible authorities will be contacted to locate and mark the locations,

and a copy of the Markout 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 RAWP. The integrity and safety of on-Site and off-Site structures will be maintained during all invasive excavation or other remedial activities performed under the RAWP.

The Applicant and its contractors are solely responsible for the identification of utilities that might be affected by work under the RAWP and implementation of all required, appropriate, or necessary health and safety measures during performance of work under this RAWP. The Applicant and its contractors are solely responsible for safe execution of all invasive and other work performed under this RAWP. The Applicant and its contractors must obtain any local, State or Federal permits or approvals pertinent to such work that may be required to perform work under this RAWP. Approval of this RAWP by NYSDEC does not constitute satisfaction of these requirements.

4.3.4 Sheeting and Shoring

Appropriate management of structural stability of on-Site or off-Site structures during on-Site activities, including excavation, is the sole responsibility of the Applicant and its contractors. The Applicant and its contractors are solely responsible for safe execution of all invasive and other work performed under this Plan. The Applicant 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 Applicant 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.

4.3.5 Equipment and Material Staging

Equipment and materials will be stored and staged in a manner that complies with applicable laws and regulations. The location of proposed equipment and material staging areas, truck inspection station, stockpile areas, and other pertinent remedial management features will be in the center of the property, with access from East 138th Street.

4.3.6 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.

4.4 REPORTING

Reports will be submitted daily to the NYSDEC Project Manager while remedial activity is ongoing. The Daily Reports will also be included in the FER.

4.4.1 Weekly Reports

Weekly reports will be submitted to the NYSDEC Project Manager by the end of each week during the remedy implementation and will include:

- An update of progress made during the reporting week;
- Locations of work and quantities of material imported and exported from the Site;
- References to alpha-numeric map for Site activities;
- A summary of any and all complaints with relevant details (names, phone numbers);
- A summary of CAMP findings; and,
- An explanation of notable Site conditions.

Weekly reports are not intended to be the mode of communication for notification to the NYSDEC of emergencies (accident, spill), requests for changes to the RAWP, or other sensitive or time critical information. However, such conditions must also be included in the weekly reports. Emergency conditions and changes to the RAWP will be addressed directly to the NYSDEC Project Manager via personal communication.

Weekly Reports will include a description of daily activities keyed to an alpha-numeric map for the Site that identifies work areas. These reports will include a summary of air sampling results, odor and dust problems and corrective actions, and all complaints received from the public.

The NYSDEC assigned project number will appear on all reports.

4.4.2 Monthly Reports

Monthly reports will be submitted to the NYSDEC Project Manager within one week following the end of the month of the reporting period and will include:

- Activities relative to the Site during the previous reporting period and those anticipated for the next reporting period, including a quantitative presentation of work performed (i.e., tons of material exported and imported, etc.);

- Description of approved activity modifications, including changes of work scope and/or schedule;
- Sampling results received following internal data review and validation, as applicable; and,
- An update of the remedial schedule including the percentage of project completion, unresolved delays encountered or anticipated that may affect the future schedule, and efforts made to mitigate such delays.

4.4.3 Other Reporting

Photographs will be taken of all remedial activities and submitted to the NYSDEC in digital (JPEG) format. Photos will illustrate all remedial program elements and will be of acceptable quality. Representative photos of the Site prior to any Remedial Actions will be provided. Representative photos will be provided of each contaminant source, source area, and Site structures before, during, and after remediation. Photos will be submitted to the NYSDEC on CD or other acceptable electronic media and will be sent to the NYSDEC Project Manager (2 copies) and to the NYSDOH Project Manager (1 copy). Each CD will have a label and a general file inventory structure that separates photos into directories and sub-directories according to logical Remedial Action components. A photolog keyed to photo file ID numbers will be prepared to provide explanation for all representative photos. For larger and longer projects, photos should be submitted on a monthly basis or another agreed upon time interval.

Job Site record keeping for all remedial work will be appropriately documented. These records will be maintained on Site at all times during the project and be available for inspection by NYSDEC and NYSDOH staff.

4.4.4 Complaint Management Plan

All complaints from citizens will be promptly reported to the NYSDEC. Notices to NYSDEC will include the nature of the complaint, the party providing the complaint, and the actions taken to resolve any problems.

4.4.5 Deviations from the Remedial Action Work Plan

All changes to the RAWP will be reported to the NYSDEC Project Manager and will be documented in daily reports and reported in the FER. The process to be followed if there are any deviations from the RAWP will include a request for approval for the change from the NYSDEC noting the following:

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

5.0 REMEDIAL ACTION – MATERIAL REMOVAL FROM SITE

The remedial plan calls for the excavation of contaminated soil to the property boundaries to a depth of 15 fbg as shown on Figure 12. A projected 10,000 cubic yards of material will be excavated and properly disposed.

5.1 SOIL CLEANUP OBJECTIVES

The proposed remedial action for this project is Alternative 2, the Track 2 remedial action for Residential Use. Based on the development plan, soil/fill at the Site will be excavated to a depth of 15 feet below present grade. Therefore, SCOs proposed for this project are Track 2 Residential SCOs.

It is anticipated that Track 1 SCOs may be achievable during the remedial action. End-point samples collected at 15 fbg will be used to determine if a Track 1 cleanup is achievable. If end-point samples at 15 fbg are below the Unrestricted Use SCOs, additional excavation may be performed in the area identified on Figure 12 to target contaminants above the Unrestricted Use SCOs at 25 fbg. Any soil/fill exceeding the Unrestricted Use SCOs remaining on Site will be documented in the FER.

If it is determined to be economically and technically feasible, an additional 1,300 tons of soil would be excavated as previously outlined to achieve Track 1 Standards. End-point sampling would again be completed to document that Track 1 Standards have been achieved.

Soil and materials management on Site and off Site, including excavation, handling, and disposal, will be conducted in accordance with the SMMP in Appendix VI.

The soil cleanup objectives for this site are the Residential Use SCOs. For a Track 2 cleanup, SCOs must be achieved in the top 15 feet only. Since the excavation will extend to 15 fbg, endpoint samples must confirm that there is no soil remaining at that depth which presents a source of groundwater contamination. The concentrations of contaminants detected in the soil beneath the site are shown in Tables 1A, 1B, 2, 3 and 4. Contaminants are shown in comparison to Restricted Residential Use SCOs. In the event that the excavation does not extend to 15 fbg, these are the maximum concentrations allowable for the proposed use of the site.

Soil and materials management on-Site and off-Site will be conducted in accordance with the SMMP as described in Appendix VI. Spider maps showing soil samples exceeding the SCOs are presented on Figures 5, 6 and 7.

UST closures will, at a minimum, conform to criteria defined in DER-10.

5.2 REMEDIAL PERFORMANCE EVALUATION (POST-EXCAVATION END-POINT SAMPLING)

To assure that remedial objectives are achieved following the proposed remedial action, post-remedial end-point sampling will be completed. Soil samples will be collected from discrete six-inch intervals following soil removal at the frequency described in DER-10 Section 5.4(b). Once collected, samples will be transported in a cooler on ice, noted on a chain of custody to a New York State ELAP-certified lab for analysis. The proposed sampling locations and projected analysis are presented on Figure 12.

5.2.1 End-Point Sampling Frequency

Samples will be collected at every 30 feet of sidewall and one (1) sample for every 900 feet of base excavation. A total of 38 samples will be collected and analyzed for TAL/TCL, as shown on Figure 12.

5.2.2 Methodology

Soil samples will be collected using stainless steel trowels, placed in laboratory prepared glassware and documented on a chain of custody form. The samples will then be placed in a cooler on ice until delivery to the laboratory. Samples will be collected from discrete 6-inch intervals. Samples collected for volatile organic analysis will be collected in encore sampling devises.

5.2.3 Reporting of Results

Laboratory data packages will be provided for each set of data. Excel spreadsheets will also be provided presenting a summary of the results obtained.

5.2.4 Quality Assurance/Quality Control

The appropriate QA/QC procedures will be followed as outlined in Section 4.1.3. The laboratory conformance/nonconformance summaries will be evaluated for each set of data to assure laboratory accuracy.

5.2.5 Data Usability Summary Reports (DUSRs)

Data validation will be performed in general accordance with NYSDEC DUSR requirements for organic and inorganic data review.

5.2.6 Reporting of End-Point Data in FER

The FER will include a table of end-point data with highlights or a summary of exceedances of SCOs. A spider map showing all SCO exceedances will also be presented in the FER. Chemical labs used for all end-point sample results and contingency sampling will be NYSDOH ELAP certified.

5.3 ESTIMATED MATERIAL REMOVAL QUANTITIES

The remedial plan calls for the excavation of contaminated soil to the property boundaries (as shown on Figure 12) to a depth of 15 fbg. A projected 10,000 cubic yards of material will be excavated and properly disposed. The truck route for disposal is shown on Figure 13.

Disposal Facility	Waste Type	Estimated Quantities
Clean Earth of Carteret	Contaminated Non-Hazardous	10,000 cubic yards

5.4 SOIL/MATERIALS MANAGEMENT PLAN

Elements of the SMMP are provided in Appendix VI.

5.4.1 Soil Screening Methods

Soil screening methodology and sub-slab screening methods are provided in the SMMP and summarized below.

Visual, olfactory and PID soil screening and assessment will be performed by a qualified environmental professional during all remedial and development excavations into known or potentially contaminated material (Residual Contamination Zone). Soil screening will be performed regardless of when the invasive work is done and will include all excavation and invasive work performed during the remedy and during the development phase, such as excavations for foundations and utility work.

All primary contaminant sources (including but not limited to tanks and hotspots) identified during Site Characterization, Remedial Investigation, and Remedial Action will be surveyed by a surveyor licensed to practice in the State of New York. This information will be provided on maps in the FER.

Screening will be performed by qualified environmental professionals. Resumes will be provided for all personnel responsible for field screening (i.e., those representing the Remedial Engineer) of invasive work for unknown contaminant sources during remediation and development work

5.4.2 Stockpile Methods

Stockpile methods are described in the SMMP and summarized below.

Stockpiles will be inspected at a minimum once each week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the Site and available for inspection by the NYSDEC.

Stockpiles will be kept covered at all times with appropriately anchored tarps. Stockpiles will be routinely inspected and damaged tarp covers will be promptly replaced.

Soil stockpiles will be continuously encircled with silt fences. Hay bales will be used as needed near catch basins, surface waters, and other discharge points.

A dedicated water truck equipped with a water cannon will be available on Site for dust control.

5.4.3 Materials Excavation and Load Out

Materials excavation and load out procedures are outlined in the SMMP and summarized below.

The Remediation Engineer or a qualified environmental professional under his/her supervision will oversee all invasive work and the excavation and load-out of all excavated material.

The Applicant and its contractors are solely responsible for safe execution of all invasive and other work performed under this Plan.

The presence of utilities and easements on the Site has been investigated by the Remedial Engineer. It has been determined that no risk or impediment to the planned work under this RAWP is posed by utilities or easements on the Site.

Loaded vehicles leaving the Site will be appropriately lined, tarped, securely covered, manifested, and placarded in accordance with appropriate Federal, State, local, and New York State Department of Transportation requirements (and all other applicable transportation requirements).

A truck wash will be operated on Site. The Remediation Engineer will be responsible for ensuring that all outbound trucks will be washed at the truck wash before leaving the Site until the remedial construction is complete.

Locations where vehicles enter or exit the Site shall be inspected daily for evidence of off-Site sediment tracking.

The Remediation Engineer will be responsible for ensuring that all egress points for truck and equipment transport from the Site will be clean of dirt and other materials derived from the Site during Site remediation and development. Cleaning of the adjacent streets will be performed as needed to maintain a clean condition with respect to Site-derived materials.

The Applicant and associated parties preparing the remedial documents submitted to the State, and parties performing this work, are completely responsible for the safe performance of all invasive work, the structural integrity of excavations, and for structures that may be affected by excavations (such as building foundations and bridge footings).

The Remedial Engineer will ensure that Site development activities will not interfere with, or otherwise impair or compromise, remedial activities proposed in this RAWP.

Each hotspot and structure to be remediated (USTs, vaults and associated piping, transformers, etc.) will be removed and end-point remedial performance sampling completed before excavations related to Site development commence proximal to the hotspot or structure.

Development-related grading cuts and fills will not be performed without NYSDEC approval and will not interfere with, or otherwise impair or compromise, the performance of remediation required by this plan.

Mechanical processing of historical fill and contaminated soil on Site is prohibited.

All primary contaminant sources (including but not limited to tanks and hotspots) identified during Site Characterization, Remedial Investigation, and Remedial Action will be surveyed by a surveyor licensed to practice in the State of New York. The survey information will be shown on maps to be reported in the FER.

5.4.4 Materials Transport Off Site

Materials transport off-site procedures are outlined in the SMMP and summarized below.

All transport of materials will be performed by licensed haulers in accordance with appropriate local, State, and Federal regulations, including 6 NYCRR Part 364. Haulers will be appropriately licensed and trucks properly placarded.

Truck transport routes are depicted on Figure 13. All trucks loaded with Site materials will exit the vicinity of the Site using only these approved truck routes.

Proposed in-bound and out-bound truck routes to the Site are shown on Figure 13. This is the most appropriate route and takes into account: (a) limiting transport through residential areas and past sensitive sites; (b) use of city mapped truck routes; (c) prohibiting 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; and, (g) community input.

Trucks will be prohibited from stopping and idling in the neighborhood outside the project Site.

Egress points for truck and equipment transport from the Site will be kept clean of dirt and other materials during Site remediation and development.

Queuing of trucks will be performed on-Site in order to minimize off-Site disturbance. Off-Site queuing will be prohibited.

Material transported by trucks exiting the Site will be secured with tight-fitting covers. Loose-fitting canvas-type truck covers will be prohibited. If loads contain wet material capable of producing free liquid, truck liners will be used.

All trucks will be washed prior to leaving the Site. Truck wash waters will be collected and disposed of off Site in an appropriate manner

5.4.5 Materials Disposal Off Site

Off-site disposal procedures are outlined in the SMMP and summarized below.

The disposal location will be Clean Earth of Carteret, in Carteret, New Jersey. Disposal location established at a later date will be reported to the NYSDEC Project Manager.

The total quantity of material expected to be disposed off-Site is 10,000 cubic yards of contaminated non-hazardous soil.

All soil/fill/solid waste excavated and removed from the Site will be treated as contaminated and regulated material and will be disposed in accordance with all local, State (including 6NYCRR Part 360) and Federal regulations. If disposal of soil/fill from this Site is proposed for unregulated disposal (i.e., clean soil removed for development purposes), a formal request with an associated plan will be made to NYSDEC's Project Manager. Unregulated off-Site management of materials from this Site is prohibited without formal NYSDEC approval.

Material that does not meet Track 1 unrestricted SCOs is prohibited from being taken to a New York State recycling facility (6NYCRR Part 360-16 Registration Facility).

The following documentation will be obtained and reported by the Remedial Engineer for each disposal location used in this project to fully demonstrate and document that the disposal of material derived from the Site conforms with all applicable laws: (1) a letter from the Remedial Engineer or BCP Applicant to the receiving facility describing the material to be disposed and requesting formal written acceptance of the material. This letter will state that material to be

disposed is contaminated material generated at an environmental remediation Site in New York State. The letter will provide the project identity and the name and phone number of the Remedial Engineer. The letter will include as an attachment a summary of all chemical data for the material being transported (including Site Characterization data); and (2) a letter from all receiving facilities stating it is in receipt of the correspondence (above) and is approved to accept the material. These documents will be included in the FER.

Non-hazardous historic fill and contaminated soils taken off Site will be handled, at minimum, as a Municipal Solid Waste per 6NYCRR Part 360-1.2

Historical fill and contaminated soils from the Site are prohibited from being disposed at Part 360-16 Registration Facilities (also known as Soil Recycling Facilities).

Soils that are contaminated but non-hazardous and are being removed from the Site are considered by the Division of Materials Management (DMM) in NYSDEC to be Construction and Demolition (C/D) materials with contamination not typical of virgin soils. These soils may be sent to a permitted Part 360 landfill. They may be sent to a permitted C/D processing facility without permit modifications only upon prior notification of NYSDEC Region 2 DMM. This material is prohibited from being sent or redirected to a Part 360-16 Registration Facility. In this case, as dictated by DMM, special procedures will include, at a minimum, a letter to the C/D facility that provides a detailed explanation that the material is derived from a DER remediation Site, that the soil material is contaminated, and that it must not be redirected to on-Site or off-Site Soil Recycling Facilities. The letter will provide the project identity and the name and phone number of the Remedial Engineer. The letter will include as an attachment a summary of all chemical data for the material being transported.

The FER will include an accounting of the destination of all material removed from the Site during this Remedial Action, including excavated soil, contaminated soil, historic fill, solid waste, and hazardous waste, non-regulated material, and fluids. Documentation associated with disposal of all material must also include records and approvals for receipt of the material. This information will also be presented in a tabular form in the FER.

Bill of Lading system or equivalent will be used for off-Site movement of non-hazardous wastes and contaminated soils. This information will be reported in the FER.

Hazardous wastes derived from on-Site will be stored, transported, and disposed of in full compliance with applicable local, State, and Federal regulations.

Appropriately licensed haulers will be used for material removed from this Site and will be in full compliance with all applicable local, State and Federal regulations.

Waste characterization will be performed for off-Site disposal in a manner suitable to the receiving facility and in conformance with applicable permits. Sampling and analytical methods, sampling frequency, analytical results and QA/QC will be reported in the FER. All data available for soil/material to be disposed at a given facility must be submitted to the disposal facility.

5.4.6 Materials Reuse On-Site

Reuse of materials in not anticipated for this project. Should that change, the following will be implemented.

Chemical criteria for on-Site reuse of material have been approved by the NYSDEC. The Remedial Engineer will ensure that procedures defined for materials reuse in this RAWP are followed and that unacceptable material will not remain on Site.

Acceptable demolition material proposed for reuse on Site, if any, will be sampled for asbestos.

Concrete crushing or processing on Site is prohibited.

Note: DEC will consider the use of specially designed devices that are self-contained and capable of providing misting for dust control. DEC approval must be obtained. If dust-free operations are not achieved with such devices, this exception will be revoked.

Organic matter (wood, roots, stumps, etc.) or other solid waste derived from clearing and grubbing of the Site is prohibited for reuse on Site.

Contaminated on-Site material, including historic fill and contaminated soil, removed for grading or other purposes will not be reused within a cover soil layer, within landscaping berms, or as backfill for subsurface utility lines. This will be expressed in the final SMP.

5.4.7 Fluids Management

Fluid management procedures are outlined in the SMMP and summarized below.

All liquids to be removed from the Site, including dewatering fluids, will be handled, transported and disposed in accordance with applicable local, State, and Federal regulations. Liquids discharged into the New York City sewer system will be addressed through approval by the NYCDEP.

Dewatered fluids will not be recharged back to the land surface or subsurface of the Site. Dewatering fluids will be managed off Site.

Discharge of water generated during remedial construction to surface waters (i.e., a local pond, stream or river) is prohibited without a State Pollutant Discharge Elimination System (SPDES) permit.

5.4.8 Demarcation

Although a demarcation barrier is not anticipated to be used for this site, the procedures to follow are outlined in the SMMP and summarized below.

After the completion of soil removal and any other invasive remedial activities and prior to backfilling, a land survey will be performed by a New York State licensed surveyor. The survey will define the top elevation of residual contaminated soils. A physical demarcation layer, consisting of orange snow fencing material or equivalent material will be placed on this surface to provide a visual reference. This demarcation layer will constitute the top of the 'Residuals Management Zone', the zone that requires adherence to special conditions for disturbance of contaminated residual soils defined in the SMP. The survey will measure the grade covered by the demarcation layer before the placement of cover soils, pavement and sub-soils, structures, or other materials. This survey and the demarcation layer placed on this grade surface will constitute the physical and written record of the upper surface of the 'Residuals Management Zone' in the SMP. A map showing the survey results will be included in the Final Remediation Report and the SMP.

5.4.9 Backfill from Off-Site Sources

All materials proposed for import onto the Site will be approved by the Remedial Engineer and will be in compliance with provisions in this RAWP prior to receipt at the Site. Backfill from off-site sources will be sampled at the frequency stated in DER-10 Section 5.4(e)10, unless otherwise approved by NYSDEC.

Material from industrial sites, spill sites, other environmental remediation sites or other potentially contaminated sites will not be imported to the Site.

The FER will include the following certification by the Remedial Engineer: "I certify that all import of soils from off-Site, including source evaluation, approval and sampling, has been performed in a manner that is consistent with the methodology defined in the Remedial Action Work Plan".

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 the lower of the protection of groundwater or the protection of public health soil cleanup objectives as set forth in Table 375-6.8(b) of 6 NYCRR Part 375. Non-compliant soils will not be imported onto the Site without prior approval by the NYSDEC. Nothing in the approved RAWP or its approval by the 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 the NYSDEC. Nothing in this RAWP should be construed as an approval for this purpose.

Solid waste will not be imported onto the Site.

Trucks entering the Site with imported soils will be securely covered with tight fitting covers.

5.4.10 Stormwater Pollution Prevention

A summary of the Stormwater Pollution Prevention procedures are presented in the SMMP and summarized below.

Barriers and hay bale checks will be installed and inspected once a week 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. All necessary repairs shall be made immediately.

Accumulated sediments will be removed as required to keep the barrier and hay bale check functional.

All undercutting or erosion of the silt fence toe anchor shall be repaired immediately with appropriate backfill materials.

Manufacturer's recommendations will be followed for replacing silt fencing damaged due to weathering.

Erosion and sediment control measures identified in the RAWP shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters

Silt fencing or hay bales will be installed around the entire perimeter of the remedial construction area.

5.4.11 Contingency Plan

Contingency planning procedures are outlined in the SMMP and summarized below.

If 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 STARS parameters where tanks are identified without prior approval by the NYSDEC. Analyses will not be otherwise limited without NYSDEC approval.

Identification of unknown or unexpected contaminated media identified by screening during invasive Site work will be promptly communicated by phone to NYSDEC's Project Manager. These findings will be also included in daily and periodic electronic media reports.

5.4.12 Community Air Monitoring Plan

The CAMP procedures are presented in Appendix V. A map showing the location of fixed air monitoring stations is provided as Figure 12.

Exceedances observed in the CAMP will be reported to NYSDEC and NYSDOH Project Managers and included in the Daily Report.

5.4.13 Odor, Dust and Nuisance Control Plan

Odor, dust and nuisance control plan procedures are outlined in the SMMP and summarized below.

The Final Engineering Report will include the following certification by the Remedial Engineer: "I certify that all invasive work during the remediation and all invasive development work were conducted in accordance with dust and odor suppression methodology defined in the Remedial Action Work Plan."

Odor Control Plan

Odor control plan procedures are outlined in the SMMP and summarized below.

This odor control plan is capable of controlling emissions of nuisance odors off-Site and on-Site. 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. The NYSDEC and the NYSDOH will be notified of all odor events and of all other complaints about the project. Implementation of all odor controls, including the halt of work, will be the responsibility of the Applicant's Remediation Engineer, who is responsible for certifying the FER.

All necessary means will be employed to prevent on- and off-Site 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) using foams to cover exposed odorous soils. If

odors develop and cannot be otherwise controlled, additional means to eliminate odor nuisances will include: (d) direct load-out of soils to trucks for off-Site disposal; (e) use of chemical odorants in spray or misting systems; and, (f) use of staff to monitor odors in surrounding neighborhoods.

Where odor nuisances have developed during remedial work and cannot be corrected, or where the release of nuisance odors cannot otherwise be avoided due to on-Site conditions or close proximity to sensitive receptors, odor control will be achieved by sheltering excavation and handling areas under tented containment structures equipped with appropriate air venting/filtering systems.

Dust Control Plan

Dust suppression management during invasive on-Site work, will include, at a minimum, the items listed below:

- Dust suppression will be achieved through the use of a dedicated on-Site water truck for road wetting. The truck will be equipped with a water cannon capable of spraying water directly onto off-road areas including excavations and stockpiles.
- Clearing and grubbing of larger sites will be done in stages to limit the area of exposed, unvegetated soils vulnerable to dust production.
- Gravel will be used on roadways to provide a clean and dust-free road surface.
- On-Site roads will be limited in total area to minimize the area required for water truck sprinkling.

Other Nuisances

A plan for rodent control will be developed and utilized by the contractor prior to and during Site clearing and Site grubbing, and during all remedial work.

6.0 RESIDUAL CONTAMINATION TO REMAIN ON SITE

In the event that residual contaminated groundwater exists beneath the Site after the remedy is complete, ECs and ICs may be required to protect human health and the environment. These ECs and ICs are described hereafter. Long-term management of EC/ICs and of residual contamination will be executed under a Site-specific SMP that will be developed and included in the FER. It is not anticipated that residual contamination will remain in soil because the site will be excavated to 15 fbg.

If necessary, ECs will be implemented to protect public health and the environment by appropriately managing residual contamination. The Controlled Property (the Site) will have 1 primary EC system. This will be the groundwater treatment and monitoring program discussed below.

The FER will report residual contamination on the Site in tabular and map form. This will include presentation of exceedances of both Track 1 and Track 2 sites.

7.0 GROUNDWATER REMEDIATION

Since excavation will extend below the groundwater table, dewatering will be conducted. Dewatering will allow for the excavation of contaminated groundwater below the water table, thus allowing the removal of source material that would otherwise continue to impact groundwater. Dewatering will also remove and treat thousands of gallons of impacted groundwater. ORC will also be utilized to help remediate residual contaminants which may remain in the groundwater following the remedial action. ORC will be placed in the open excavation following soil removal. **Volume and density application rates will be based on the manufacturer's recommendations. A letter from the manufacturer stating recommended dosage rates will be provided to NYSDEC and will be included in the Final Remediation Report.**

Prior to dewatering, the appropriate permits will be obtained for discharge to the sanitary sewer system. During dewatering, if contaminant levels exceed those acceptable by the sewage authority, the appropriate treatment will be completed. This may involve pre-treatment through sediment filters followed by treatment via carbon filtration. The projected quantity of water to be removed from the Site cannot be determined.

Prior to beginning the excavation, a downgradient off-Site monitoring well will be installed provided access can be obtained. The monitoring well will be a two (2)-inch-diameter well extending to a projected depth of 20 fbg. The well will be placed in the sidewalk past the western end of the property. The location of the well is shown on Figure 12. Sampling of the well will be conducted prior to and after remediation. The results will be compared and used to evaluate the effectiveness of the remedial action. The samples will be analyzed for TAL/TCL.

8.0 VAPOR MITIGATION

A vapor barrier/water proof system will be implemented. The vapor barrier will incorporate a Preprufe 300R waterproofing membrane. The membrane with be placed beneath the cellar floor and along the walls to above surface grade. Specifications of the Preprufe 300R product are provided in Appendix IX. The product will be installed in accordance with the manufacturer's specifications.

The finished elevation of the building slab will be below the groundwater table, mitigating concerns of soil vapor intrusion. Furthermore, a below-grade ventilated parking garage will be installed beneath the building. In the event that a Track 1 cleanup is not achieved, the vapor barrier and ventilation required for the parking garage will mitigate any potential vapor issues associated with the Site or migration of VOCs from off-site onto the Site.

9.0 CRITERIA FOR COMPLETION OF REMEDIATION/TERMINATION OF REMEDIAL SYSTEMS

9.1 MONITORED NATURAL ATTENUATION

Groundwater monitoring activities to assess natural attenuation may be necessary as determined by the NYSDOH and the NYSDEC, until residual groundwater concentrations are found to be below NYSDEC standards or have become asymptotic over an extended period. Monitoring will continue until permission to discontinue is granted in writing by the NYSDEC and the NYSDOH. Monitoring activities are outlined in the Monitoring Plan of the SMP.

10.0 INSTITUTIONAL CONTROLS

After the remedy is complete, the Site may have residual groundwater contamination remaining beneath the site. ECs for the residual contamination have been incorporated into the remedy to render the overall Site remedy protective of public health and the environment. Two elements have been designed to ensure continual and proper management of residual contamination in perpetuity: an Environmental Easement and a Site Management Plan. These elements are described in this Section. If required, a Site -specific Environmental Easement will be recorded with Bronx County to provide an enforceable means of ensuring the continual and proper management of residual contamination and protection of public health and the environment in perpetuity or until released in writing by NYSDEC. It requires that the grantor of the Environmental Easement and the grantor's successors and assigns adhere to all ECs and ICs placed on this Site by this NYSDEC-approved remedy. ICs provide restrictions on Site usage and mandate operation, maintenance, monitoring and reporting measures for all ECs and ICs. The SMP describes appropriate methods and procedures to ensure compliance with all ECs and ICs that are required by the Environmental Easement. Once the SMP has been approved by the NYSDEC, compliance with the SMP is required by the grantor of the Environmental Easement and grantor's successors and assigns.

10.1 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. If the Site will have residual contamination after completion of all Remedial Actions, then an Environmental Easement is required. As part of this remedy, an Environmental Easement approved by NYSDEC may be required. If so, it will be filed and recorded with the Bronx County Clerk and submitted as part of the Final Remediation Report.

The Environmental Easement renders the Site a Controlled Property. The Environmental Easement must be recorded with the Bronx County Clerk before the Certificate of Completion can be issued by NYSDEC. A series of ICs are required under this remedy to implement, maintain and monitor these EC systems, 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 ICs are requirements or restrictions placed on the Site that are listed in, and required by, the Environmental Easement. ICs can, generally, be subdivided between

controls that support ECs, and those that place general restrictions on Site usage or other requirements. ICs in both of these groups are closely integrated with the SMP, which provides all of the methods and procedures to be followed to comply with this remedy.

The ICs that support ECs are:

- Compliance with the Environmental Easement by the Grantee and the Grantee's successors and adherence of all elements of the SMP is required;
- All Engineering Controls must be operated and maintained as specified in this SMP;
- All Engineering Controls on the Controlled Property must be inspected and certified at a frequency and in a manner defined in the SMP;
- Groundwater monitoring must be performed as defined in the SMP;
- Data and information pertinent to Site Management for the Controlled Property must be reported at the frequency and in a manner defined in the SMP.

Adherence to these Institutional Controls for the Site is mandated by the Environmental Easement and will be implemented under the Site Management Plan (discussed in the next section). 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:

- 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 Site Management Plan;
- The Controlled Property may be used for restricted residential use only, provided the long-term Engineering and Institutional Controls included in the Site Management Plan 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. This annual statement must be certified by an expert that the NYSDEC finds acceptable.

11.0 FINAL ENGINEERING REPORT

An FER will be submitted to the NYSDEC following implementation of the Remedial Action defined in this RAWP. The FER will provide the documentation that the remedial work required under this RAWP has been completed and has been performed in compliance with this plan. The FER will provide a comprehensive account of the locations and characteristics of all material removed from the Site including the surveyed map(s) of all sources. The FER will include as-built drawings for all constructed elements, certifications, manifests, bills of lading, as well as the complete SMP, if required. The FER will provide a description of the changes in the Remedial Action from the elements provided in the RAWP and associated design documents. The FER will provide a tabular summary of all performance evaluation sampling results and all material characterization results and other sampling and chemical analysis performed as part of the Remedial Action. The FER will provide test results demonstrating that all mitigation and remedial systems are functioning properly. The FER will be prepared in conformance with DER-10.

The Final FER will include written and photographic documentation of all remedial work performed under this remedy.

The FER will include an itemized tabular description of actual costs incurred during all aspects of the Remedial Action.

The FER will provide a thorough summary of all residual contamination left on the Site after the remedy is complete, if any. Residual contamination includes all contamination that exceeds the Track 1 Unrestricted Use SCOs in 6NYCRR Part 375-6.8(a). A table that shows exceedances from Track 1 Unrestricted SCOs for all soil/fill remaining at the Site after the Remedial Action and a map that shows the location and summarizes exceedances from Track 1 Unrestricted SCOs for all soil/fill remaining at the Site after the Remedial Action will be included in the FER if applicable.

The FER will provide a thorough summary of all residual contamination that exceeds the applicable SCOs defined for the Site in the RAWP and must provide an explanation for why the material was not removed as part of the Remedial Action. A table that shows residual contamination in excess of Site SCOs and a map that shows residual contamination in excess of Site SCOs will be included in the FER.

The FER will include an accounting of the destination of all material removed from the Site, including excavated contaminated soil, historic fill, solid waste, hazardous waste, non-regulated material, and fluids. Documentation associated with disposal of all material will also include records and approvals for receipt of the material. It will provide an accounting of the origin and chemical quality of all material imported onto the Site.

Table 1A
Soil Sampling Results - Former Gasoline Stations
255 East 138th Street, Bronx, New York

	Laboratory ID:	1200214-01			1200214-02			1200214-03			1200214-04			1200214-05			1200214-06			1200214-07			1200214-08			1200214-09			1200214-10			1200214-11			1200214-12			1200214-13			1200214-14			1200214-15			1200214-16			Residential Restricted Use Soil Cleanup Objective	Track 1 Cleanup Numbers
	Brinkerhoff Sample ID:	G-1A			G-1B			G-2A			G-2B			G-2C			G-3A			G-3B			G-4A			G-4B			G-4C			G-4C.1			G-5A			G-5B			G-5C			G-6A			G-6B				
	Depth (feet):	6.5-7.0			24.5-25.0			4.5-5.0			6.5-7.0			24.5-25.0			6.0-6.5			24.5-25			3.5-4.0			6.5-7.0			24.0-24.5			24.0-24.5			4.5-5.0			6.5-7.0			28-29			5.5-6.0			24.5-25.0				
	Matrix:	SOIL			SOIL			SOIL			SOIL			SOIL			SOIL			SOIL			SOIL			SOIL			SOIL			SOIL			SOIL			SOIL			SOIL			SOIL			SOIL				
CAS #	Sampled Date	04/10/12			04/10/12			04/10/12			04/10/12			04/10/12			04/10/12			04/10/12			04/10/12			04/10/12			04/10/12			04/10/12			04/10/12			04/10/12			04/10/12			04/10/12			04/10/12				
	Parameter	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL		
Volatile Organic Compounds																																																			
78-93-3	Acrolein	ND	R	0.147	ND	R	0.00673	ND	R	0.361	ND	R	0.007	ND	R	0.00683	ND	R	0.007	ND	R	0.0067	ND	R	0.00718	ND	R	0.00715	ND	R	0.00655	ND	R	0.00655	ND	R	0.00708	ND	R	0.136	ND	R	0.00748	ND	R	1.43	ND	R	0.00672	NA	NA
107-13-1	Acrylonitrile	ND	U	0.0488	ND	U	0.00224	ND	U	0.12	ND	U	0.00233	ND	U	0.00228	ND	U	0.00233	ND	U	0.00223	ND	U	0.00239	ND	U	0.00238	ND	U	0.00218	ND	U	0.00218	ND	U	0.00236	ND	U	0.0453	ND	U	0.00249	ND	U	0.476	ND	U	0.00224	NA	NA
67-64-1	Acetone	0.454	D	0.0244	ND	U	0.00112	ND	U	0.0602	ND	U	0.00117	ND	U	0.00114	0.00781		0.00117	ND	U	0.00112	0.00531		0.0012	0.00471		0.00119	0.00469		0.00109	0.00481		0.00109	0.0105		0.00118	**0.323**	D	0.0227	0.00666		0.00125	ND	U	0.238	0.0137		0.00112	100	0.05
124-48-1	Dibromochloromethane	ND	U	0.0244	ND	U	0.00112	ND	U	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	ND	U	0.00119	ND	U	0.00109	ND	U	0.00109	ND	U	0.00118	ND	U	0.0227	ND	U	0.00125	ND	U	0.238	ND	U	0.00112	NA	NA
74-87-3	Chloromethane	ND	U	0.0244	ND	U	0.00112	ND	U	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	ND	U	0.00119	ND	U	0.00109	ND	U	0.00109	ND	U	0.00118	ND	U	0.0227	ND	U	0.00125	ND	U	0.238	ND	U	0.00112	NA	NA
75-01-4	Vinyl Chloride	ND	U	0.0244	ND	U	0.00112	ND	U	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	ND	U	0.00119	ND	U	0.00109	ND	U	0.00109	ND	U	0.00118	ND	U	0.0227	ND	U	0.00125	ND	U	0.238	ND	U	0.00112	0.9	0.02
74-83-9	Bromomethane	ND	U	0.0244	ND	U	0.00112	ND	U	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	ND	U	0.00119	ND	U	0.00109	ND	U	0.00109	ND	U	0.00118	ND	U	0.0227	ND	U	0.00125	ND	U	0.238	ND	U	0.00112	NA	NA
75-00-3	Chloroethane	ND	U	0.0244	ND	U	0.00112	ND	U	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	ND	U	0.00119	ND	U	0.00109	ND	U	0.00109	ND	U	0.00118	ND	U	0.0227	ND	U	0.00125	ND	U	0.238	ND	U	0.00112	NA	NA
75-69-4	Trichlorofluoromethane	ND	U	0.0244	ND	U	0.00112	ND	U	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	ND	U	0.00119	ND	U	0.00109	ND	U	0.00109	ND	U	0.00118	ND	U	0.0227	ND	U	0.00125	ND	U	0.238	ND	U	0.00112	NA	NA
75-35-4	1,1-Dichloroethene	ND	U	0.0244	ND	U	0.00112	ND	U	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	ND	U	0.00119	ND	U	0.00109	ND	U	0.00109	ND	U	0.00118	ND	U	0.0227	ND	U	0.00125	ND	U	0.238	ND	U	0.00112	100	0.33
75-15-0	Carbon disulfide	ND	U	0.0244	ND	U	0.00112	ND	U	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	ND	U	0.00119	ND	U	0.00109	ND	U	0.00109	ND	U	0.00118	ND	U	0.0227	ND	U	0.00125	ND	U	0.238	ND	U	0.00112	NA	NA
75-09-2	Methylene Chloride	ND	U	0.0244	ND	U	0.00112	ND	U	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	0.00619		0.00119	ND	U	0.00109	ND	U	0.00109	ND	U	0.00118	ND	U	0.0227	ND	U	0.00125	ND	U	0.238	ND	U	0.00112	100	0.05
156-60-5	trans-1,2-Dichloroethene	ND	U	0.0244	ND	U	0.00112	ND	U	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	ND	U	0.00119	ND	U	0.00109	ND	U	0.00109	ND	U	0.00118	ND	U	0.0227	ND	U	0.00125	ND	U	0.238	ND	U	0.00112	100	0.19
75-34-3	1,1-Dichloroethane	ND	U	0.0244	ND	U	0.00112	ND	U	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	ND	U	0.00119	ND	U	0.00109	ND	U	0.00109	ND	U	0.00118	ND	U	0.0227	ND	U	0.00125	ND	U	0.238	ND	U	0.00112	26	0.27
108-05-4	Vinyl acetate	ND	U	0.0244	ND	U	0.00112	ND	U	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	ND	U	0.00119	ND	U	0.00109	ND	U	0.00109	ND	U	0.00118	ND	U	0.0227	ND	U	0.00125	ND	U	0.238	ND	U	0.00112	NA	NA
590-20-7	2,2-Dichloropropane	ND	U	0.0244	ND	U	0.00112	ND	U	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	ND	U	0.00119	ND	U	0.00109	ND	U	0.00109	ND	U	0.00118	ND	U	0.0227	ND	U	0.00125	ND	U	0.238	ND	U	0.00112	NA	NA
78-93-3	2-Butanone	ND	U	0.0244	ND	U	0.00112	ND	U	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	ND	U	0.00119	ND	U	0.00109	ND	U	0.00109	ND	U	0.00118	ND	U	0.0227	ND	U	0.00125	ND	U	0.238	ND	U	0.00112	100	0.12
156-59-4	cis-1,2-Dichloroethene	ND	U	0.0244	ND	U	0.00112	ND	U	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	ND	U	0.00119	ND	U	0.00109	ND	U	0.00109	ND	U	0.00118	ND	U	0.0227	ND	U	0.00125	ND	U	0.238	ND	U	0.00112	100	0.25
67-66-3	Chloroform	ND	U	0.0244	ND	U	0.00112	ND	U	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	ND	U	0.00119	ND	U	0.00109	ND	U	0.00109	ND	U	0.00118	ND	U	0.0227	ND	U	0.00125	ND	U	0.238	ND	U	0.00112	49	0.37
74-97-5	Bromochloromethane	ND	U	0.0244	ND	U	0.00112	ND	U	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	ND	U	0.00119	ND	U	0.00109	ND	U	0.00109	ND	U	0.00118	ND	U	0.0227	ND	U	0.00125	ND	U	0.238	ND	U	0.00112	NA	NA
71-55-6	1,1,1-Trichloroethane	ND	U	0.0244	ND	U	0.00112	ND	U	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	ND	U	0.00119	ND	U	0.00109	ND	U	0.00109	ND	U	0.00118	ND	U	0.0227	ND	U	0.00125	ND	U	0.238	ND	U	0.00112	100	0.68
563-58-6	1,1-Dichloropropene	ND	U	0.0244	ND	U	0.00112	ND	U	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	ND	U	0.00119	ND	U	0.00109	ND	U	0.00109	ND	U	0.00118	ND	U	0.0227	ND	U	0.00125	ND	U	0.238	ND	U	0.00112	NA	NA
56-23-5	Carbon Tetrachloride	ND	U	0.0244	ND	U	0.00112	ND	U	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	ND	U	0.00119	ND	U	0.00109	ND	U	0.00109	ND	U	0.00118	ND	U	0.0227	ND	U	0.00125	ND	U	0.238	ND	U	0.00112	2.4	0.76
107-06-2	1,2-Dichloroethane	ND	U	0.0244	ND	U	0.00112	ND	U	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	ND	U	0.00119	ND	U	0.00109	ND	U	0.00109	ND	U	0.00118	ND	U	0.0227	ND	U	0.00125	ND	U	0.238	ND	U	0.00112	3.1	0.02
71-43-2	Benzene	ND	U	0.0244	ND	U	0.00112	0.0735	JD	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	ND	U	0.00119	ND	U	0.00109	ND	U	0.00109	ND	U	0.00118	ND	U	0.0227	ND	U	0.00125	ND	U	0.238	ND	U	0.00112	4.8	0.06
79-01-6	Trichloroethene	ND	U	0.0244	ND	U	0.00112	ND	U	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	ND	U	0.00119	ND	U	0.00109	ND	U	0.00109	ND	U	0.00118	ND	U	0.0227	ND	U	0.00125	ND	U	0.238	ND	U	0.00112	21	0.47
78-87-5	1,2-Dichloropropane	ND	U	0.0244	ND	U	0.00112	ND	U	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	ND	U	0.00119	ND	U	0.00109	ND	U	0.00109	ND	U	0.00118	ND	U	0.0227	ND	U	0.00125	ND	U	0.238	ND	U	0.00112	NA	NA
75-27-4	Bromodichloromethane	ND	U	0.0244	ND	U	0.00112	ND	U	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	ND	U	0.00119	ND	U	0.00109	ND	U	0.00109	ND	U	0.00118	ND	U	0.0227	ND	U	0.00125	ND	U	0.238	ND	U	0.00112	NA	NA
74-95-3	Dibromomethane	ND	U	0.0244	ND	U	0.00112	ND	U	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	ND	U	0.00119	ND	U	0.00109	ND	U	0.00109	ND	U	0.00118	ND	U	0.0227	ND	U	0.00125	ND	U	0.238	ND	U	0.00112	NA	NA
110-75-8	2-Chloroethyl vinyl ether	ND	U	0.0244	ND	U	0.00112	ND	U	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	ND	U	0.00119	ND	U	0.00109	ND	U	0.00109	ND	U	0.00118	ND	U	0.0227	ND	U	0.00125	ND	U	0.238	ND	U	0.00112	NA	NA
10061-01-5	cis-1,3-Dichloropropene	ND	U	0.0244	ND	U	0.00112	ND	U	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	ND	U	0.00119	ND	U	0.00109	ND	U	0.00109	ND	U	0.00118	ND	U	0.0227	ND	U	0.00125	ND	U	0.238	ND	U	0.00112	NA	NA
108-88-3	Toluene	ND	U	0.0244	ND	U	0.00112	0.0861	JD	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	ND	U	0.00119	ND	U	0.00109	ND	U	0.00109	ND	U	0.00118	ND	U	0.0227	ND	U	0.00125	0.321	JD	0.238	ND	U	0.00112	100	0.7
10061-02-6	trans-1,3-Dichloropropene	ND	U	0.0244	ND	U	0.00112	ND	U	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	ND	U	0.00119	ND	U	0.00109	ND	U	0.00109	ND	U	0.00118	ND	U	0.0227	ND	U	0.00125	ND	U	0.238	ND	U	0.00112	NA	NA
79-00-5	1,1,2-Trichloroethane	ND	U	0.0244	ND	U	0.00112	ND	U	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	ND	U	0.00119	ND	U	0.00109	ND	U	0.00109	ND	U	0.00118	ND	U	0.0227	ND	U	0.00125	ND	U	0.238	ND	U	0.00112	NA	NA
108-10-1	4-Methyl-2-Pentanone	ND	U	0.0244	ND	U	0.00112	ND	U	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	ND	U	0.00119	ND	U	0.00109	ND	U	0.00109	ND	U	0.00118	ND	U	0.0227	ND	U	0.00125	ND	U	0.238	ND	U	0.00112	NA	NA
106-93-4	1,2-Dibromoethane	ND	U	0.0244	ND	U	0.00112	ND	U	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	ND	U	0.00119	ND	U	0.00109	ND	U	0.00109	ND	U	0.00118	ND	U	0.0227	ND	U	0.00125	ND	U	0.238	ND	U	0.00112	NA	NA
591-78-6	2-Hexanone	ND	U	0.0244	ND	U	0.00112	ND	U	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	ND	U	0.00119	ND	U	0.00109	ND	U	0.00109	ND	U	0.00118	ND	U	0.0227	ND	U	0.00125	ND	U	0.238	ND	U	0.00112	NA	NA
142-28-9	1,3-Dichloropropane	ND	U	0.0244	ND	U	0.00112	ND	U	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	ND	U	0.00119	ND	U	0.00109	ND	U	0.00109	ND	U	0.00118	ND	U	0.0227	ND	U	0.00125	ND	U	0.238	ND	U	0.00112	NA	NA
127-18-4	Tetrachloroethene	ND	U	0.0244	ND	U	0.00112	ND	U	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	ND	U	0.00119	ND	U	0.00109	ND	U	0.00109	ND	U	0.00118	ND	U	0.0227	ND	U	0.00125	ND	U	0.238	ND	U	0.00112	19	1.3
75-71-8	Dichlorodifluoromethane	ND	U	0.0244	ND	U	0.00112	ND	U	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	ND	U	0.00119	ND	U	0.00109	ND	U	0.00109	ND	U	0.00118	ND	U	0.0227	ND	U	0.00125	ND	U	0.238	ND	U	0.00112	NA	NA
100-41-4	Ethylbenzene	0.0303	JD	0.0244	ND	U	0.00112	0.0723	JD	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	0.00179	J	0.00119	ND	U	0.00109	ND	U	0.00109	0.00177	J	0.00118	0.0757	D	0.0227	ND	U	0.00125	45.8	D	0.238	ND	U	0.00112	41	1
108-90-7	Chlorobenzene	ND	U	0.0244	ND	U	0.00112	ND	U	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	ND	U	0.00119	ND	U	0.00109	ND	U	0.00109	ND	U	0.00118	ND	U	0.0227	ND	U	0.00125	ND	U	0.238	ND	U	0.00112	100	1.1
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	0.0244	ND	U	0.00112	ND	U	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	ND	U	0.00119	ND	U	0.00109	ND	U	0.00109	ND	U	0.00118	ND	U	0.0227	ND	U	0.00125	ND	U	0.238	ND	U	0.00112	NA	NA
126777-61-2	m/p-Xylenes	0.0818	JD	0.0488	ND	U	0.00224	**0.537**	D	0.12	ND	U	0.00233	ND	U	0.00228	ND	U	0.00233	ND	U	0.00223	ND	U	0.00239	0.00547		0.00238	ND	U	0.00218	ND	U	0.00218	ND	U	0.00236	0.0766	JD	0.0453	ND	U	0.00249	**71.9**	D	0.476	ND	U	0.00224	NA	0.26
95-47-6	o-Xylene	ND	U	0.0488	ND	U	0.00224	0.159	JD	0.12	ND	U	0.00233	ND	U	0.00228	ND	U	0.00233	ND	U	0.00223	ND	U	0.00239	ND	U	0.00238	ND	U	0.00218	ND	U	0.00218	0.00266	J	0.00236	0.0498	JD	0.0453	ND	U	0.00249	ND	U	0.476	ND	U	0.00224	NA	
100-42-5	Styrene	ND	U	0.0244	ND	U	0.00112	ND	U	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	ND	U	0.00119	ND	U	0.00109	ND	U	0.00109	ND	U	0.00118	ND	U	0.0227	ND	U	0.00125	ND	U	0.238	ND	U	0.00112	NA	NA
75-25-2	Bromoform	ND	U	0.0244	ND	U	0.00112	ND	U	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	ND	U	0.00119	ND	U	0.00109	ND	U	0.00109	ND	U	0.00118	ND	U	0.0227	ND	U	0.00125	ND	U	0.238	ND	U	0.00112	NA	NA
98-82-8	Isopropylbenzene	0.415	D	0.0244	ND	U	0.00112	0.277	D	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	0.00421		0.00119	ND	U	0.00109	ND	U	0.00109	0.00322		0.00118	1.15	D	0.0227	ND	U	0.00125	19.7	D	0.238	ND	U	0.00112	NA	NA
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	0.0244	ND	U	0.00112	ND	U	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	ND	U	0.00119	ND	U	0.00109	ND	U	0.00109	ND	U	0.00118	ND	U	0.0227	ND	U	0.00125	ND	U	0.238	ND	U	0.00112	NA	NA
96-18-4	1,2,3-Trichloropropane	ND	U	0.0244	ND	U	0.00112	ND	U	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	ND	U	0.00119	ND	U	0.00109	ND	U	0.00109	ND	U	0.00118	ND	U	0.0227	ND	U	0.00125	ND	U	0.238	ND	U	0.00112	NA	NA
103-65-1	n-Propyl Benzene	1.92	D	0.0244	ND	U	0.00112	0.398	D	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	0.112		0.00119	ND	U	0.00109	ND	U	0.00109	0.00537		0.00118	**4.32**	D	0.0227	ND	U	0.00125	**49.8**	D	0.238	ND	U	0.00112	100	3.9
108-86-1	Bromobenzene	ND	U	0.0244	ND	U	0.00112	ND	U	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	ND	U	0.00119	ND	U	0.00109	ND	U	0.00109	ND	U	0.00118	ND	U	0.0227	ND	U	0.00125	ND	U	0.238	ND	U	0.00112	NA	NA
108-67-8	1,3,5-Trimethylbenzene	0.109	D	0.0244	ND	U	0.00112	0.0813	JD	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	ND	U	0.00119	ND	U	0.00109	ND	U	0.00109	0.00506		0.00118	0.0824	D	0.0227	ND	U	0.00125	**51.7**	D	0.238	ND	U	0.00112	52	8.4
95-49-8	2-Chlorotoluene	ND	U	0.0244	ND	U	0.00112	ND	U	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	ND	U	0.00119	ND	U	0.00109	ND	U	0.00109	ND	U	0.00118	ND	U	0.0227	ND	U	0.00125	ND	U	0.238	ND	U	0.00112	NA	NA
106-43-4	4-Chlorotoluene	ND	U	0.0244	ND	U	0.00112	ND	U	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	ND	U	0.00119	ND	U	0.00109	ND	U	0.00109	ND	U	0.00118	ND	U	0.0227	ND	U	0.00125	ND	U	0.238	ND	U	0.00112	NA	NA
98-06-6	tert-Butylbenzene	ND	U	0.0244	ND	U	0.00112	0.231	D	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	0.00389		0.00119	ND	U	0.00109	ND	U	0.00109	0.00266		0.00118	0.0709	D	0.0227	ND	U	0.00125	ND	U	0.238	ND	U	0.00112	100	5.9
95-63-6	1,2,4-Trimethylbenzene	0.215	D	0.0244	ND	U	0.00112	0.27	D	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	0.00521		0.00119	ND	U	0.00109	ND	U	0.00109	0.00667		0.00118	0.28	D	0.0227	ND	U	0.00125	**206**	D	0.238	0.00122	J	0.00112	52	3.6
135-98-8	sec-Butylbenzene	0.849	D	0.0244	ND	U	0.00112	1.16	D	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	0.0524		0.00119	ND	U	0.00109	ND	U	0.00109	0.0128		0.00118	1.64	D	0.0227	ND	U	0.00125	**11.3**	D	0.238	ND	U	0.00112	100	11
99-87-6	p-Isopropyltoluene	0.166	D	0.0244	ND	U	0.00112	0.236	D	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	0.00288		0.00119	ND	U	0.00109	ND	U	0.00109	0.0127		0.00118	0.136	D	0.0227	ND	U	0.00125	6.28	D	0.238	ND	U	0.00112	NA	NA
541-73-1	1,3-Dichlorobenzene	ND	U	0.0244	ND	U	0.00112	ND	U	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	ND	U	0.00119	ND	U	0.00109	ND	U	0.00109	ND	U	0.00118	ND	U	0.0227	ND	U	0.00125	ND	U	0.238	ND	U	0.00112	49	2.4
106-46-7	1,4-Dichlorobenzene	ND	U	0.0244	ND	U	0.00112	ND	U	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	ND	U	0.00119	ND	U	0.00109	ND	U	0.00109	ND	U	0.00118	ND	U	0.0227	ND	U	0.00125	ND	U	0.238	ND	U	0.00112	13	1.8
104-51-8	n-Butyl Benzene	2.47	D	0.0244	ND	U	0.00112	2.32	D	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	0.0592		0.00119	ND	U	0.00109	ND	U	0.00109	0.01		0.00118	4.39	D	0.0227	ND	U	0.00125	**38.7**	D	0.238	ND	U	0.00112	NA	12
95-50-1	1,2-Dichlorobenzene	ND	U	0.0244	ND	U	0.00112	ND	U	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	ND	U	0.00119	ND	U	0.00109	ND	U	0.00109	ND	U	0.00118	ND	U	0.0227	ND	U	0.00125	ND	U	0.238	ND	U	0.00112	100	1.1
96-12-8	1,2-Dibromo-3-Chloropropane	ND	U	0.0244	ND	U	0.00112	ND	U	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	ND	U	0.00119	ND	U	0.00109	ND	U	0.00109	ND	U	0.00118	ND	U	0.0227	ND	U	0.00125	ND	U	0.238	ND	U	0.00112	NA	NA
120-82-1	1,2,4-Trichlorobenzene	ND	U	0.0244	ND	U	0.00112	ND	U	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	ND	U	0.00119	ND	U	0.00109	ND	U	0.00109	ND	U	0.00118	ND	U	0.0227	ND	U	0.00125	ND	U	0.238	ND	U	0.00112	NA	NA
87-68-3	Hexachlorobutadiene	ND	U	0.0244	ND	U	0.00112	ND	U	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	ND	U	0.00119	ND	U	0.00109	ND	U	0.00109	ND	U	0.00118	ND	U	0.0227	ND	U	0.00125	ND	U	0.238	ND	U	0.00112	NA	NA
91-20-3	Naphthalene	2.34	D	0.0244	ND	U	0.00112	0.951	D	0.0602	ND	U	0.00117	ND	U	0.00114	0.0117		0.00117	ND	U	0.00112	ND	U	0.0012	0.00571		0.00119	ND	U	0.00109	ND	U	0.00109	0.0161		0.00118	3.91	D	0.0227	ND	U	0.00125	46.2	D	0.238	ND	U	0.00112	100	NA
87-61-6	1,2,3-Trichlorobenzene	ND	U	0.0244	ND	U	0.00112	ND	U	0.0602	ND	U	0.00117	ND	U	0.00114	ND	U	0.00117	ND	U	0.00112	ND	U	0.0012	ND	U	0.00119	ND	U	0.00109	ND	U	0.00109	ND	U	0.00118	ND	U	0.0227	ND	U	0.00125	ND	U	0.238	ND	U	0.00112	NA	NA
Semivolatile Organic Compounds																																																			
62-75-9	N-Nitrosodimethylamine	ND	U	0.0407	ND	U	0.0374	ND	U	0.0401	ND	U	0.0389	ND	U	0.0397	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	U	0.0397	ND	U	0.0364	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	ND	U	0.0396	ND	U	0.0373	NA	NA
108-95-2	Phenol	ND	U	0.0407	ND	U	0.0374	ND	U	0.0401	ND	U	0.0389	ND	U	0.0397	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	U	0.0397	ND	U	0.0364	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	ND	U	0.0396	ND	U	0.0373	100	0.33
111-44-4	bis(2-Chloroethyl)ether	ND	U	0.0407	ND	U	0.0374	ND	U	0.0401	ND	U	0.0389	ND	U	0.0397	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	U	0.0397	ND	U	0.0364	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	ND	R	0.0396	ND	U	0.0373	NA	NA
95-57-8	2-Chlorophenol	ND	U	0.0407	ND	U	0.0374	ND	U	0.0401	ND	U	0.0389	ND	U	0.0397	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	U	0.0397	ND	U	0.0364	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	ND	U	0.0396	ND	U	0.0373	NA	NA
541-73-1	1,3-Dichlorobenzene	ND	U	0.0407	ND	U	0.0374	ND	U	0.0401	ND	U	0.0389	ND	U	0.0397	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	U	0.0397	ND	U	0.0364	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	ND	R	0.0396	ND	U	0.0373	49	NA
106-46-7	1,4-Dichlorobenzene	ND	U	0.0407	ND	U	0.0374	ND	U	0.0401	ND	U	0.0389	ND	U	0.0397	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	U	0.0397	ND	U	0.0364	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	ND	R	0.0396	ND	U	0.0373	13	NA
100-51-6	Benzyl alcohol	ND	U	0.0407	ND	U	0.0374	ND	U	0.0401	ND	U	0.0389	ND	U	0.0397	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	U	0.0397	ND	U	0.0364	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	ND	R	0.0396	ND	U	0.0373	NA	NA
95-50-1	1,2-Dichlorobenzene	ND	U	0.0407	ND	U	0.0374	ND	U	0.0401	ND	U	0.0389	ND	U	0.0397	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	U	0.0397	ND	U	0.0364	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	ND	R	0.0396	ND	U	0.0373	100	NA
95-48-7	2-Methylphenol	ND	U	0.0407	ND	U	0.0374	ND	U	0.0401	ND	U	0.0389	ND	U	0.0397	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	U	0.0397	ND	U	0.0364	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	ND	U	0.0396	ND	U	0.0373	100	NA
108-60-1	Bis(2-chloroisopropyl)ether	ND	U	0.0407	ND	U	0.0374	ND	U	0.0401	ND	U	0.0389	ND	U	0.0397	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	U	0.0397	ND	U	0.0364	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	ND	R	0.0396	ND	U	0.0373	NA	NA
106-44-5	3&4 Methylphenol	ND	J	0.0407	ND	U	0.0374	ND	U	0.0401	ND	U	0.0389	ND	U	0.0397	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	U	0.0397	ND	U	0.0364	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	ND	U	0.0396	ND	U	0.0373	100	NA
621-64-7	N-Nitroso-di-n-propylamine	ND	U	0.0407	ND	U	0.0374	ND	U	0.0401	ND	U	0.0389	ND	U	0.0397	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	U	0.0397	ND	U	0.0364	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	ND	R	0.0396	ND	U	0.0373	NA	NA
67-72-1	Hexachloroethane	ND	U	0.0407	ND	U	0.0374	ND	U	0.0401	ND	U	0.0389	ND	U	0.0397	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	U	0.0397	ND	U	0.0364	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	ND	R	0.0396	ND	U	0.0373	NA	NA
98-95-3	Nitrobenzene	ND	U	0.0407	ND	U	0.0374	ND	U	0.0401	ND	U	0.0389	ND	U	0.0397	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	U	0.0397	ND	U	0.0364	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	ND	R	0.0396	ND	U	0.0373	NA	NA
78-59-1	Isophorone	ND	U	0.0407	ND	U	0.0374	ND	U	0.0401	ND	U	0.0389	ND	U	0.0397	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	U	0.0397	ND	U	0.0364	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	ND	R	0.0396	ND	U	0.0373	NA	NA

Table 1A
Soil Sampling Results - Former Gasoline Stations
255 East 138th Street, Bronx, New York

	Laboratory ID:	1200214-01			1200214-02			1200214-03			1200214-04			1200214-05		
	Brinkerhoff Sample ID:	G-1A			G-1B			G-2A			G-2B			G-2C		
	Depth (feet):	6.5-7.0			24.5-25.0			4.5-5.0			6.5-7.0			24.5-25.0		
	Matrix:	SOIL			SOIL			SOIL			SOIL			SOIL		
CAS #	Sampled Date	04/10/12			04/10/12			04/10/12			04/10/12			04/10/12		
	Parameter	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL
88-75-5	2-Nitrophenol	ND	U	0.0407	ND	U	0.0374	ND	U	0.0401	ND	U	0.0389	ND	U	0.0397
105-67-9	2,4-Dimethylphenol	ND	U	0.0407	ND	U	0.0374	ND	U	0.0401	ND	U	0.0389	ND	U	0.0397
65-85-0	Benzoic acid	ND	J	0.101	ND	U	0.0932	ND	U	0.1	ND	U	0.0968	ND	U	0.0945
111-91-1	bis(2-Chloroethoxy)methane	ND	U	0.0407	ND	U	0.0374	ND	U	0.0401	ND	U	0.0389	ND	U	0.0397
120-83-2	2,4-Dichlorophenol	ND	U	0.0407	ND	U	0.0374	ND	U	0.0401	ND	U	0.0389	ND	U	0.0397
120-82-1	1,2,4-Trichlorobenzene	ND	U	0.0407	ND	U	0.0374	ND	U	0.0401	ND	U	0.0389	ND	U	0.0397
91-20-3	Naphthalene	2.03		0.0407	0.0905	J	0.0374	ND	U	0.0401	ND	U	0.0389	ND	U	0.0397
106-47-8	4-Chloroaniline	ND	U	0.0407	ND	U	0.0374	ND	U	0.0401	ND	U	0.0389	ND	U	0.0397
87-68-3	Hexachlorobutadiene	ND	U	0.0407	ND	U	0.0374	ND	U	0.0401	ND	U	0.0389	ND	U	0.0397
59-50-7	4-Chloro-3-methylphenol	ND	U	0.0407	ND	U	0.0374	ND	U	0.0401	ND	U	0.0389	ND	U	0.0397
91-57-6	2-Methylnaphthalene	3.26		0.0407	0.0737	J	0.0374	24.2	E	0.0401	ND	U	0.0389	ND	U	0.0397
77-47-4	Hexachlorocyclopentadiene	ND	U	0.0407	ND	U	0.0374	ND	U	0.0401	ND	U	0.0389	ND	U	0.0397
88-06-2	2,4,6-Trichlorophenol	ND	U	0.0407	ND	U	0.0374	ND	U	0.0401	ND	U	0.0389	ND	U	0.0397
95-95-4	2,4,5-Trichlorophenol	ND	U	0.0407	ND	U	0.0374	ND	U	0.0401	ND	U	0.0389	ND	U	0.0397
91-58-7	2-Chloronaphthalene	ND	U	0.0407	ND	U	0.0374	ND	U	0.0401	ND	U	0.0389	ND	U	0.0379
88-74-4	2-Nitroaniline	ND	U	0.0407	ND	U	0.0374	ND	U	0.0401	ND	U	0.0389	ND	U	0.0379
131-11-3	Dimethylphthalate	ND	U	0.0407	ND	U	0.0374	ND	U	0.0401	ND	U	0.0389	ND	U	0.0379
208-96-8	Acenaphthylene	ND	U	0.0407	0.0797	J	0.0374	ND	U	0.0401	ND	U	0.0389	ND	U	0.0379
99-09-2	3-Nitroaniline	ND	U	0.0407	ND	U	0.0374	ND	U	0.0401	ND	U	0.0389	ND	U	0.0379
83-32-9	Acenaphthene	ND	U	0.0407	0.142	J	0.0374	0.368		0.0401	ND	U	0.0389	ND	U	0.0379
51-28-5	2,4-Dinitrophenol	ND	U	0.0407	ND	U	0.0374	ND	U	0.0401	ND	U	0.0389	ND	U	0.0379
100-02-7	4-Nitrophenol	ND	U	0.0407	ND	U	0.0374	ND	U	0.0401	ND	U	0.0389	ND	U	0.0379
132-64-9	Dibenzofuran	ND	U	0.0407	0.0748	J	0.0374	0.262		0.0401	ND	U	0.0389	ND	U	0.0379
606-20-2	2,6-Dinitrotoluene	ND	U	0.0407	ND	U	0.0374	ND	U	0.0401	ND	U	0.0389	ND	U	0.0379
121-14-2	2,4-Dinitrotoluene	ND	U	0.0407	ND	U	0.0374	ND	U	0.0401	ND	U	0.0389	ND	U	0.0379
84-66-2	Diethylphthalate	ND	U	0.0407	ND	U	0.0374	ND	U	0.0401	ND	U	0.0389	ND	U	0.0379
7005-72-3	4-Chlorophenyl-phenylether	ND	U	0.0407	ND	U	0.0374	ND	U	0.0401	ND	U	0.0389	ND	U	0.0379
86-73-7	Fluorene	ND	U	0.0407	0.101	J	0.0374	0.512		0.0401	ND	U	0.0389	ND	U	0.0379
100-01-6	4-Nitroaniline	ND	U	0.0407	ND	U	0.0374	ND	U	0.0401	ND	U	0.0389	ND	U	0.0379
534-52-1	4,6-Dinitro-2-methylphenol	ND	U	0.0407	ND	U	0.0374	ND	U	0.0401	ND	U	0.0389	ND	U	0.0379
86-30-6	N-Nitrosodiphenylamine	ND	U	0.0407	ND	U	0.0374	ND	U	0.0401	ND	U	0.0389	ND	U	0.0379
101-55-3	4-Bromophenyl-phenylether	ND	U	0.0407	ND	U	0.0374	ND	U	0.0401	ND	U	0.0389	ND	U	0.0379
118-74-1	Hexachlorobenzene	ND	U	0.0407	ND	U	0.0374	ND	U	0.0401	ND	U	0.0389	ND	U	0.0379
87-86-5	Pentachlorophenol	ND	U	0.0407	ND	U	0.0374	ND	U	0.0401	ND	U	0.0389	ND	U	0.0379
85-01-8	Phenanthrene	0.083	J	0.0407	1.53		0.0374	1.92		0.0401	ND	U	0.0389	ND	U	0.0379
120-12-7	Anthracene	ND	U	0.0407	0.371	J	0.0374	0.488	J	0.0401	ND	U	0.0389	ND	U	0.0379
84-74-2	Di-n-butylphthalate	ND	U	0.0407	ND	UJ	0.0374	ND	UJ	0.0401	ND	U	0.0389	ND	U	0.0379
206-44-0	Fluoranthene	0.0464	J	0.0407	1.58	J	0.0374	1.57	J	0.0401	ND	U	0.0389	ND	U	0.0379
129-00-0	Pyrene	0.0566	J	0.0407	2.52	J	0.0374	1.77	J	0.0401	ND	U	0.0389	ND	U	0.0379
85-68-7	Butylbenzylphthalate	ND	U	0.0407	ND	UJ	0.0374	ND	UJ	0.0401	ND	U	0.0389	ND	U	0.0379
91-94-1	3,3-Dichlorobenzidine	ND	U	0.101	ND	UJ	0.0932	ND	UJ	0.1	ND	U	0.0968	ND	U	0.0945
56-55-3	Benzo(a)anthracene	ND	U	0.0407	0.78	J	0.0374	0.471	J	0.0401	ND	U	0.0389	ND	U	0.0379
117-81-7	bis(2-Ethylhexyl)phthalate	ND	U	0.0407	ND	UJ	0.0374	ND	UJ	0.0401	ND	U	0.0389	ND	U	0.0379
218-01-9	Chrysene	ND	U	0.0407	1.06	J	0.0374	0.67	J	0.0401	ND	U	0.0389	ND	U	0.0379
117-84-0	Di-n-octyl phthalate	ND	U	0.0407	ND	R	0.0374	ND	R	0.0401	ND	U	0.0389	ND	U	0.0379
205-99-2	Benzo(b)fluoranthene	ND	U	0.0407	0.935	R	0.0374	0.508	R	0.0401	ND	U	0.0389	ND	U	0.0379
207-08-9	Benzo(k)fluoranthene	ND	U	0.0407	1.17	R	0.0374	0.424	R	0.0401	ND	U	0.0389	ND	U	0.0379
50-32-8	Benzo(a)pyrene	ND	U	0.0407	0.951	R	0.0374	0.335	R	0.0401	ND	U	0.0389	ND	U	0.0379
193-39-5	Indeno(1,2,3-cd)pyrene	ND	U	0.0407	0.154	R	0.0374	ND	R	0.0401	ND	U	0.0389	ND	U	0.0379
53-70-3	Dibenz(a,h)anthracene	ND	U	0.0407	0.0382	R	0.0374	ND	R	0.0401	ND	U	0.0389	ND	U	0.0379
191-24-2	Benzo(g,h,i)perylene	ND	U	0.0407	0.17	R	0.0374	ND	R	0.0401	ND	U	0.0389	ND	U	0.0379
Lead																
7440-09-7	Lead	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA
xxxx-xx-02	Solids, Percent	NA			NA			NA			NA			NA		

	Laboratory ID:	1200214-06			1200214-07			1200214-08			1200214-09			1200214-10		
	Brinkerhoff Sample ID:	G-3A			G-3B			G-4A			G-4B			G-4C		
	Depth (feet):	6.0-6.5			24.5-25			3.5-4.0			6.5-7.0			24.0-24.5		
	Matrix:	SOIL			SOIL			SOIL			SOIL			SOIL		
CAS #	Sampled Date	04/10/12			04/10/12			04/10/12			04/10/12			04/10/12		
	Parameter	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL
88-75-5	2-Nitrophenol	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	U	0.0397	ND	U	0.0364
105-67-9	2,4-Dimethylphenol	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	U	0.0397	ND	U	0.0364
65-85-0	Benzoic acid	ND	U	0.0968	ND	U	0.0927	ND	U	0.0993	ND	U	0.0989	ND	U	0.0906
111-91-1	bis(2-Chloroethoxy)methane	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	U	0.0397	ND	U	0.0364
120-83-2	2,4-Dichlorophenol	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	U	0.0397	ND	U	0.0364
120-82-1	1,2,4-Trichlorobenzene	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	U	0.0397	ND	U	0.0364
91-20-3	Naphthalene	0.125	J	0.0389	ND	U	0.0372	ND	U	0.0398	ND	U	0.0397	ND	U	0.0364
106-47-8	4-Chloroaniline	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	U	0.0397	ND	U	0.0364
87-68-3	Hexachlorobutadiene	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	U	0.0397	ND	U	0.0364
59-50-7	4-Chloro-3-methylphenol	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	U	0.0397	ND	U	0.0364
91-57-6	2-Methylnaphthalene	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	U	0.0397	ND	U	0.0364
77-47-4	Hexachlorocyclopentadiene	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	U	0.0397	ND	U	0.0364
88-06-2	2,4,6-Trichlorophenol	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	U	0.0397	ND	U	0.0364
95-95-4	2,4,5-Trichlorophenol	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	U	0.0397	ND	U	0.0364
91-58-7	2-Chloronaphthalene	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	U	0.0397	ND	U	0.0364
88-74-4	2-Nitroaniline	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	U	0.0397	ND	U	0.0364
131-11-3	Dimethylphthalate	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	U	0.0397	ND	U	0.0364
208-96-8	Acenaphthylene	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	U	0.0397	ND	U	0.0364
99-09-2	3-Nitroaniline	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	U	0.0397	ND	U	0.0364
83-32-9	Acenaphthene	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	0.0616	J	0.0397	ND	U	0.0364
51-28-5	2,4-Dinitrophenol	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	U	0.0397	ND	U	0.0364
100-02-7	4-Nitrophenol	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	U	0.0397	ND	U	0.0364
132-64-9	Dibenzofuran	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	U	0.0397	ND	U	0.0364
606-20-2	2,6-Dinitrotoluene	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	U	0.0397	ND	U	0.0364
121-14-2	2,4-Dinitrotoluene	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	U	0.0397	ND	U	0.0364
84-66-2	Diethylphthalate	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	U	0.0397	ND	U	0.0364
7005-72-3	4-Chlorophenyl-phenylether	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	U	0.0397	ND	U	0.0364
86-73-7	Fluorene	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	U	0.0397	ND	U	0.0364
100-01-6	4-Nitroaniline	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	U	0.0397	ND	U	0.0364
534-52-1	4,6-Dinitro-2-methylphenol	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	U	0.0397	ND	U	0.0364
86-30-6	N-Nitrosodiphenylamine	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	U	0.0397	ND	U	0.0364
101-55-3	4-Bromophenyl-phenylether	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	U	0.0397	ND	U	0.0364
118-74-1	Hexachlorobenzene	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	U	0.0397	ND	U	0.0364
87-86-5	Pentachlorophenol	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	U	0.0397	ND	U	0.0364
85-01-8	Phenanthrene	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	0.0465	J	0.0397	ND	U	0.0364
120-12-7	Anthracene	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	0.0509	J	0.0397	ND	U	0.0364
84-74-2	Di-n-butylphthalate	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	UJ	0.0397	ND	U	0.0364
206-44-0	Fluoranthene	ND	U	0.0389	ND	U	0.0372	0.0746	J	0.0398	0.177	J	0.0397	ND	U	0.0364
129-00-0	Pyrene	ND	U	0.0389	ND	U	0.0372	0.0829	J	0.0398	0.329	J	0.0397	ND	U	0.0364
85-68-7	Butylbenzylphthalate	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	UJ	0.0397	ND	U	0.0364
91-94-1	3,3-Dichlorobenzidine	ND	U	0.0968	ND	U	0.0927	ND	U	0.0993	ND	UJ	0.0989	ND	U	0.0906
56-55-3	Benzo(a)anthracene	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	0.0679	J	0.0397	ND	U	0.0364
117-81-7	bis(2-Ethylhexyl)phthalate	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	UJ	0.0397	ND	U	0.0364
218-01-9	Chrysene	ND	U	0.0389	ND	U	0.0372	0.0447	J	0.0398	0.0791	J	0.0397	ND	U	0.0364
117-84-0	Di-n-octyl phthalate	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	R	0.0397	ND	U	0.0364
205-99-2	Benzo(b)fluoranthene	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	R	0.0397	ND	U	0.0364
207-08-9	Benzo(k)fluoranthene	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	R	0.0397	ND	U	0.0364
50-32-8	Benzo(a)pyrene	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	R	0.0397	ND	U	0.0364
193-39-5	Indeno(1,2,3-cd)pyrene	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	R	0.0397	ND	U	0.0364
53-70-3	Dibenz(a,h)anthracene	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	R	0.0397	ND	U	0.0364
191-24-2	Benzo(g,h,i)perylene	ND	U	0.0389	ND	U	0.0372	ND	U	0.0398	ND	R	0.0397	ND	U	0.0364
Lead																
7440-09-7	Lead	5.76		0.78	5.98		0.7	96.5		0.79	46.8		0.72	5.96		0.71
xxxx-xx-02	Solids, Percent	90			90			86			86			94		

	Laboratory ID:	1200214-11			1200214-12			1200214-13			1200214-14			1200214-15			1200214-16			Residential Restricted Use Soil Cleanup Objective	Track 1 Cleanup Numbers
	Brinkerhoff Sample ID:	G-4C.1			G-5A			G-5B			G-5C			G-6A			G-6B				
	Depth (feet):	24.0-24.5			4.5-5.0			6.5-7.0			28-29			5.5-6.0			24.5-25.0				
	Matrix:	SOIL			SOIL			SOIL			SOIL			SOIL			SOIL				
CAS #	Sampled Date	04/10/12			04/10/12			04/10/12			04/10/12			04/10/12			04/10/12				
	Parameter	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL		
88-75-5	2-Nitrophenol	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	ND	U	0.0396	ND	U	0.0373	NA	NA
105-67-9	2,4-Dimethylphenol	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	ND	U	0.0396	ND	U	0.0373	NA	NA
65-85-0	Benzoic acid	ND	U	0.0906	ND	U	0.098	ND	U	0.094	ND	U	0.103	ND	R	0.0988	ND	U	0.0929	NA	NA
111-91-1	bis(2-Chloroethoxy)methane	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	ND	R	0.0396	ND	U	0.0373	NA	NA
120-83-2	2,4-Dichlorophenol	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	ND	U	0.0396	ND	U	0.0373	NA	NA
120-82-1	1,2,4-Trichlorobenzene	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	ND	R	0.0396	ND	U	0.0373	NA	NA
91-20-3	Naphthalene	ND	U	0.0364	ND	U	0.0393	1.87		0.0377	ND	U	0.0415	22.6	D	0.0396	ND	U	0.0373	100	12
106-47-8	4-Chloroaniline	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	ND	R	0.0396	ND	U	0.0373	NA	NA
87-68-3	Hexachlorobutadiene	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	ND	R	0.0396	ND	U	0.0373	NA	NA
59-50-7	4-Chloro-3-methylphenol	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	ND	U	0.0396	ND	U	0.0373	NA	NA
91-57-6	2-Methylnaphthalene	ND	U	0.0364	ND	U	0.0393	3.8		0.0377	ND	U	0.0415	23.1	R	0.0396	ND	U	0.0373	NA	NA
77-47-4	Hexachlorocyclopentadiene	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	ND	U	0.0396	ND	U	0.0373	NA	NA
88-06-2	2,4,6-Trichlorophenol	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	ND	U	0.0396	ND	U	0.0373	NA	NA
95-95-4	2,4,5-Trichlorophenol	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	ND	U	0.0396	ND	U	0.0373	NA	NA
91-58-7	2-Chloronaphthalene	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	ND	R	0.0396	ND	U	0.0373	NA	NA
88-74-4	2-Nitroaniline	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	ND	R	0.0396	ND	U	0.0373	NA	NA
131-11-3	Dimethylphthalate	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	ND	R	0.0396	ND	U	0.0373	NA	NA
208-96-8	Acenaphthylene	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	ND	R	0.0396	ND	U	0.0373	100	100
99-09-2	3-Nitroaniline	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	ND	R	0.0396	ND	U	0.0373	NA	NA
83-32-9	Acenaphthene	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	0.0996	J	0.0396	ND	U	0.0373	100	20
51-28-5	2,4-Dinitrophenol	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	ND	U	0.0396	ND	U	0.0373	NA	NA
100-02-7	4-Nitrophenol	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	ND	U	0.0396	ND	U	0.0373	NA	NA
132-64-9	Dibenzofuran	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	ND	R	0.0396	ND	U	0.0373	59	NA
606-20-2	2,6-Dinitrotoluene	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	ND	R	0.0396	ND	U	0.0373	NA	NA
121-14-2	2,4-Dinitrotoluene	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	ND	R	0.0396	ND	U	0.0373	NA	NA
84-66-2	Diethylphthalate	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	ND	R	0.0396	ND	U	0.0373	NA	NA
7005-72-3	4-Chlorophenyl-phenylether	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	ND	R	0.0396	ND	U	0.0373	NA	NA
86-73-7	Fluorene	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	0.219		0.0396	ND	U	0.0373	100	30
100-01-6	4-Nitroaniline	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	ND	R	0.0396	ND	U	0.0373	NA	NA
534-52-1	4,6-Dinitro-2-methylphenol	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	ND	U	0.0396	ND	U	0.0373	NA	NA
86-30-6	N-Nitrosodiphenylamine	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	ND	R	0.0396	ND	U	0.0373	NA	NA
101-55-3	4-Bromophenyl-phenylether	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	ND	R	0.0396	ND	U	0.0373	NA	NA
118-74-1	Hexachlorobenzene	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	ND	R	0.0396	ND	U	0.0373	1.2	NA
87-86-5	Pentachlorophenol	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	ND	R	0.0396	ND	U	0.0373	6.7	0.8
85-01-8	Phenanthrene	ND	U	0.0364	ND	U	0.0393	0.117	J	0.0377	ND	U	0.0415	0.354		0.0396	ND	U	0.0373	100	100
120-12-7	Anthracene	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	0.0675	J	0.0396	ND	U	0.0373	100	100
84-74-2	Di-n-butylphthalate	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	ND	R	0.0396	ND	U	0.0373	NA	NA
206-44-0	Fluoranthene	ND	U	0.0364	ND	U	0.0393	0.0849	J	0.0377	ND	U	0.0415	0.187	J	0.0396	ND	U	0.0373	100	100
129-00-0	Pyrene	ND	U	0.0364	ND	U	0.0393	0.104	J	0.0377	ND	U	0.0415	0.236		0.0396	ND	U	0.0373	100	100
85-68-7	Butylbenzylphthalate	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	ND	R	0.0396	ND	U	0.0373	NA	NA
91-94-1	3,3-Dichlorobenzidine	ND	U	0.0906	ND	U	0.098	ND	U	0.094	ND	U	0.103	ND	R	0.0988	ND	U	0.0929	NA	NA
56-55-3	Benzo(a)anthracene	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	0.069	J	0.0396	ND	U	0.0373	1	1
117-81-7	bis(2-Ethylhexyl)phthalate	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	0.0744	J	0.0415	ND	R	0.0396	ND	U	0.0373	NA	NA
218-01-9	Chrysene	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	0.0948	J	0.0396	ND	U	0.0373	3.9	1
117-84-0	Di-n-octyl phthalate	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	ND	R	0.0396	ND	U	0.0373	NA	NA
205-99-2	Benzo(b)fluoranthene	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	0.052	J	0.0396	ND	U	0.0373	1	1
207-08-9	Benzo(k)fluoranthene	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	0.0437	J	0.0396	ND	U	0.0373	3.9	0.8
50-32-8	Benzo(a)pyrene	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	0.0464	J	0.0396	ND	U	0.0373	1	1
193-39-5	Indeno(1,2,3-cd)pyrene	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	ND	R	0.0396	ND	U	0.0373	0.5	0.5
53-70-3	Dibenz(a,h)anthracene	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	ND	R	0.0396	ND	U	0.0373	0.33	0.33
191-24-2	Benzo(g,h,i)perylene	ND	U	0.0364	ND	U	0.0393	ND	U	0.0377	ND	U	0.0415	R	U	0.0396	ND	U	0.0373	100	100
Lead																					
7440-09-7	Lead	5.77		0.7	NA		NA	NA		NA	NA		NA	939		7.2	6.75		0.75	400	63
xxxx-xx-02	Solids, Percent	92			NA			NA			NA			83			92			NA	NA

Notes:
BOLD-concentration exceeds Track 2- Restricted Residential Use Soil Cleanup Objective
[yellow highlight] - concentration exceeds both Track 1 and Track 2 (Restricted Residential) Use Soil Cleanup Objective
Conc = Concentration
MDL = Laboratory method detection limit
All values are expressed in milligrams per Kilograms (mg/Kg)
Q = Qualifier
ND = Analyzed for but Not Detected at the MDL
J = The concentration was detected a value below Reporting Limit and above MDL
D = Sample was diluted.
R = Data rejected by validator
B = Indicates compound found in associated blank

Table 1B
Soil Sampling Results - Former Gasoline Station
255 East 138th Street, Bronx, New York

	Laboratory ID:	1200234-01			1200234-02			1200234-03			1200234-04			1200214-05			1200214-06			1200214-07			Residential Restricted Use Soil Cleanup Objective	Track 1 Cleanup Numbers
	Brinkerhoff Sample ID:	G-7/HF-5A			G-7/HF-5B			G-7/HF-5C			G-8A			G-8B			G-8C			G-8C.1				
	Depth (feet):	4.5-5.0			6.0-6.5			24.5-25.0			3.0-3.5			6.0-6.5			24.5-25.0			24.5-25.0				
	Matrix:	SOIL			SOIL			SOIL			SOIL			SOIL			SOIL			SOIL				
CAS #	Sampled Date	04/11/12			04/11/12			04/11/12			04/11/12			04/11/12			04/11/12			04/11/12				
	Parameter	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL		
Volatile Organic Compounds																								
78-93-3	Acrolein	ND	R	0.00698	ND	R	0.35	ND	R	0.00667	ND	R	0.00637	ND	R	0.00698	ND	R	0.00698	ND	R	0.0066	NA	NA
107-13-1	Acrylonitrile	ND	U	0.00233	ND	U	0.117	ND	U	0.00222	ND	U	0.00225	ND	U	0.00233	ND	U	0.00233	ND	U	0.0022	NA	NA
67-64-1	Acetone	0.0224		0.00116	ND	U	0.0583	0.017		0.00111	0.00404		0.00113	0.0056	U	0.00116	0.0208		0.00116	0.00616	U	0.0011	100	0.05
124-48-1	Dibromochloromethane	ND	U	0.00116	ND	U	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	NA	NA
74-87-3	Chloromethane	ND	U	0.00116	ND	U	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	NA	NA
75-01-4	Vinyl Chloride	ND	U	0.00116	ND	U	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	0.9	0.02
74-83-9	Bromomethane	ND	U	0.00116	ND	U	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	NA	NA
75-00-3	Chloroethane	ND	U	0.00116	ND	U	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	NA	NA
75-69-4	Trichlorofluoromethane	ND	U	0.00116	ND	U	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	NA	NA
75-35-4	1,1-Dichloroethene	ND	U	0.00116	ND	U	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	100	0.33
75-15-0	Carbon disulfide	0.00317		0.00116	ND	U	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	NA	NA
75-09-2	Methylene Chloride	ND	U	0.00116	ND	U	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	100	0.05
156-60-5	trans-1,2-Dichloroethene	ND	U	0.00116	ND	U	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	100	0.19
75-34-3	1,1-Dichloroethane	ND	U	0.00116	ND	U	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	26	0.27
108-05-4	Vinyl acetate	ND	U	0.00116	ND	U	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	NA	NA
590-20-7	2,2-Dichloropropane	ND	U	0.00116	ND	U	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	NA	NA
78-93-3	2-Butanone	ND	U	0.00116	ND	U	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	100	0.12
156-59-4	cis-1,2-Dichloroethene	ND	U	0.00116	ND	U	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	100	0.25
67-66-3	Chloroform	ND	U	0.00116	ND	U	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	49	0.37
74-97-5	Bromochloromethane	ND	U	0.00116	ND	U	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	NA	NA
71-55-6	1,1,1-Trichloroethane	ND	U	0.00116	ND	U	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	100	0.68
563-58-6	1,1-Dichloropropene	ND	U	0.00116	ND	U	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	NA	NA
56-23-5	Carbon Tetrachloride	ND	U	0.00116	ND	U	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	2.4	0.76
107-06-2	1,2-Dichloroethane	ND	U	0.00116	ND	U	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	3.1	0.02
71-43-2	Benzene	0.00388		0.00116	ND	U	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	4.8	0.06
79-01-6	Trichloroethene	ND	U	0.00116	ND	U	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	21	0.47
78-87-5	1,2-Dichloropropane	ND	U	0.00116	ND	U	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	NA	NA
75-27-4	Bromodichloromethane	ND	U	0.00116	ND	U	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	NA	NA
74-95-3	Dibromomethane	ND	U	0.00116	ND	U	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	NA	NA
110-75-8	2-Chloroehyl vinyl ether	ND	U	0.00116	ND	U	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	NA	NA
10061-01-5	cis-1,3-Dichloropropene	ND	U	0.00116	ND	U	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	NA	NA
108-88-3	Toluene	0.00265		0.00116	0.0635	J,D	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	100	0.7
10061-02-6	trans-1,3-Dichloropropene	ND	U	0.00116	ND	U	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	NA	NA
79-00-5	1,1,2-Trichloroethane	ND	U	0.00116	ND	U	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	NA	NA
108-10-1	4-Methyl-2-Pentanone	ND	U	0.00116	ND	U	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	NA	NA
106-93-4	1,2-Dibromoethane	ND	U	0.00116	ND	U	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	NA	NA
591-78-6	2-Hexanone	ND	U	0.00116	ND	U	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	NA	NA
142-28-9	1,3-Dichloropropane	ND	U	0.00116	ND	U	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	NA	NA
127-18-4	Tetrachloroethene	ND	U	0.00116	ND	U	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	19	1.3
75-71-8	Dichlorodifluoromethane	ND	U	0.00116	ND	U	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	NA	NA
100-41-4	Ethylbenzene	ND	U	0.00116	0.214	D	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	41	1
108-90-7	Chlorobenzene	ND	U	0.00116	ND	U	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	100	1.1
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	0.00116	ND	U	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	NA	NA
126777-61-2	m/p-Xylenes	0.00736		0.00233	ND	U	0.117	ND	U	0.00222	ND	U	0.00225	ND	U	0.00233	ND	U	0.00233	ND	U	0.0022	NA	0.26
95-47-6	o-Xylene	0.0078		0.00233	**0.225**	J,D	0.117	ND	U	0.00222	ND	U	0.00225	ND	U	0.00233	ND	U	0.00233	ND	U	0.0022	NA	
100-42-5	Styrene	ND	U	0.00116	ND	U	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	NA	NA
75-25-2	Bromoform	ND	U	0.00116	ND	U	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	NA	NA
98-82-8	Isopropylbenzene	0.00848		0.00116	5	D	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	NA	NA
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	0.00116	ND	U	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	NA	NA
96-18-4	1,2,3-Trichloropropane	ND	U	0.00116	ND	U	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	NA	NA
103-65-1	n-Propyl Benzene	0.0193		0.00116	**18.9**	D,E	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	100	3.9
108-86-1	Bromobenzene	ND	U	0.00116	ND	U	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	NA	NA
108-67-8	1,3,5-Trimethylbenzene	0.0485		0.00116	0.288	D	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	52	8.4
95-49-8	2-Chlorotoluene	ND	U	0.00116	ND	U	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	NA	NA
106-43-4	4-Chlorotoluene	ND	U	0.00116	ND	U	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	NA	NA
98-06-6	tert-Butylbenzene	0.00748		0.00116	0.1	J,D	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	100	5.9

Table 1B
Soil Sampling Results - Former Gasoline Station
255 East 138th Street, Bronx, New York

	Laboratory ID:	1200234-01			1200234-02			1200234-03			1200234-04			1200214-05			1200214-06			1200214-07			Residential Restricted Use Soil Cleanup Objective	Track 1 Cleanup Numbers
	Brinkerhoff Sample ID:	G-7/HF-5A			G-7/HF-5B			G-7/HF-5C			G-8A			G-8B			G-8C			G-8C.1				
	Depth (feet):	4.5-5.0			6.0-6.5			24.5-25.0			3.0-3.5			6.0-6.5			24.5-25.0			24.5-25.0				
	Matrix:	SOIL			SOIL			SOIL			SOIL			SOIL			SOIL			SOIL				
CAS #	Sampled Date	04/11/12			04/11/12			04/11/12			04/11/12			04/11/12			04/11/12			04/11/12				
	Parameter	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL		
95-63-6	1,2,4-Trimethylbenzene	0.0602		0.00116	1.31	D	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	52	3.6
135-98-8	sec-Butylbenzene	0.0802		0.00116	5.22	D	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	100	11
99-87-6	p-Isopropyltoluene	0.00243		0.00116	ND	U	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	NA	NA
541-73-1	1,3-Dichlorobenzene	ND	U	0.00116	ND	U	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	49	2.4
106-46-7	1,4-Dichlorobenzene	ND	U	0.00116	ND	U	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	13	1.8
104-51-8	n-Butyl Benzene	0.0248		0.00116	7.56	D	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	NA	12
95-50-1	1,2-Dichlorobenzene	ND	U	0.00116	ND	U	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	100	1.1
96-12-8	1,2-Dibromo-3-Chloropropane	ND	U	0.00116	ND	U	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	NA	NA
120-82-1	1,2,4-Trichlorobenzene	ND	U	0.00116	ND	U	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	NA	NA
87-68-3	Hexachlorobutadiene	ND	U	0.00116	ND	U	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	NA	NA
91-20-3	Naphthalene	ND	U	0.00116	ND	U	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	0.00145	J	0.00116	0.00141	J	0.0011	100	12
87-61-6	1,2,3-Trichlorobenzene	ND	U	0.00116	ND	U	0.0583	ND	U	0.00111	ND	U	0.00113	ND	U	0.00116	ND	U	0.00116	ND	U	0.0011	NA	NA
Semivolatile Organic Compounds																								
62-75-9	N-Nitrosodimethylamine	ND	U	0.0387	ND	U	0.0388	ND	U	0.037	ND	U	0.0375	ND	U	0.0388	ND	U	0.0387	ND	U	0.0366	NA	NA
108-95-2	Phenol	ND	U	0.0387	ND	U	0.0388	ND	U	0.037	ND	U	0.0375	ND	U	0.0388	ND	U	0.0387	ND	U	0.0366	100	0.33
111-44-4	bis(2-Chloroethyl)ether	ND	U	0.0387	ND	U	0.0388	ND	U	0.037	ND	U	0.0375	ND	U	0.0388	ND	U	0.0387	ND	U	0.0366	NA	NA
95-57-8	2-Chlorophenol	ND	U	0.0387	ND	U	0.0388	ND	U	0.037	ND	U	0.0375	ND	U	0.0388	ND	U	0.0387	ND	U	0.0366	NA	NA
541-73-1	1,3-Dichlorobenzene	ND	U	0.0387	ND	U	0.0388	ND	U	0.037	ND	U	0.0375	ND	U	0.0388	ND	U	0.0387	ND	U	0.0366	49	NA
106-46-7	1,4-Dichlorobenzene	ND	U	0.0387	ND	U	0.0388	ND	U	0.037	ND	U	0.0375	ND	U	0.0388	ND	U	0.0387	ND	U	0.0366	13	NA
100-51-6	Benzyl alcohol	ND	U	0.0387	ND	U	0.0388	ND	U	0.037	ND	U	0.0375	ND	U	0.0388	ND	U	0.0387	ND	U	0.0366	NA	NA
95-50-1	1,2-Dichlorobenzene	ND	U	0.0387	ND	U	0.0388	ND	U	0.037	ND	U	0.0375	ND	U	0.0388	ND	U	0.0387	ND	U	0.0366	100	NA
95-48-7	2-Methylphenol	ND	U	0.0387	ND	U	0.0388	ND	U	0.037	ND	U	0.0375	ND	U	0.0388	ND	U	0.0387	ND	U	0.0366	100	NA
108-60-1	Bis(2-chloroisopropyl)ether	ND	U	0.0387	ND	U	0.0388	ND	U	0.037	ND	U	0.0375	ND	U	0.0388	ND	U	0.0387	ND	U	0.0366	NA	NA
106-44-5	3&4 Methylphenol	ND	U	0.0387	ND	U	0.0388	ND	U	0.037	ND	U	0.0375	ND	U	0.0388	ND	U	0.0387	ND	U	0.0366	100	NA
621-64-7	N-Nitroso-di-n-propylamine	ND	U	0.0387	ND	U	0.0388	ND	U	0.037	ND	U	0.0375	ND	U	0.0388	ND	U	0.0387	ND	U	0.0366	NA	NA
67-72-1	Hexachloroethane	ND	U	0.0387	ND	U	0.0388	ND	U	0.037	ND	U	0.0375	ND	U	0.0388	ND	U	0.0387	ND	U	0.0366	NA	NA
98-95-3	Nitrobenzene	ND	U	0.0387	ND	U	0.0388	ND	U	0.037	ND	U	0.0375	ND	U	0.0388	ND	U	0.0387	ND	U	0.0366	NA	NA
78-59-1	Isophorone	ND	U	0.0387	ND	U	0.0388	ND	U	0.037	ND	U	0.0375	ND	U	0.0388	ND	U	0.0387	ND	U	0.0366	NA	NA
88-75-5	2-Nitrophenol	ND	U	0.0387	ND	U	0.0388	ND	U	0.037	ND	U	0.0375	ND	U	0.0388	ND	U	0.0387	ND	U	0.0366	NA	NA
105-67-9	2,4-Dimethylphenol	ND	U	0.0387	ND	U	0.0388	ND	U	0.037	ND	U	0.0375	ND	U	0.0388	ND	U	0.0387	ND	U	0.0366	NA	NA
65-85-0	Benzoic acid	ND	U	0.0965	ND	U	0.0967	ND	U	0.0922	ND	U	0.0936	ND	U	0.0966	ND	U	0.0965	ND	U	0.0913	NA	NA
111-91-1	bis(2-Chloroethoxy)methane	ND	U	0.0387	ND	U	0.0388	ND	U	0.037	ND	U	0.0375	ND	U	0.0388	ND	U	0.0387	ND	U	0.0366	NA	NA
120-83-2	2,4-Dichlorophenol	ND	U	0.0387	ND	U	0.0388	ND	U	0.037	ND	U	0.0375	ND	U	0.0388	ND	U	0.0387	ND	U	0.0366	NA	NA
120-82-1	1,2,4-Trichlorobenzene	ND	U	0.0387	ND	U	0.0388	ND	U	0.037	ND	U	0.0375	ND	U	0.0388	ND	U	0.0387	ND	U	0.0366	NA	NA
91-20-3	Naphthalene	ND	U	0.0387	0.274		0.0388	ND	U	0.037	0.0556	J	0.0375	ND	U	0.0388	ND	U	0.0387	0.0572	J	0.0366	100	12
106-47-8	4-Chloroaniline	ND	U	0.0387	ND	U	0.0388	ND	U	0.037	ND	U	0.0375	ND	U	0.0388	ND	U	0.0387	ND	U	0.0366	NA	NA
87-68-3	Hexachlorobutadiene	ND	U	0.0387	ND	U	0.0388	ND	U	0.037	ND	U	0.0375	ND	U	0.0388	ND	U	0.0387	ND	U	0.0366	NA	NA
59-50-7	4-Chloro-3-methylphenol	ND	U	0.0387	ND	U	0.0388	ND	U	0.037	ND	U	0.0375	ND	U	0.0388	ND	U	0.0387	ND	U	0.0366	NA	NA
91-57-6	2-Methylnaphthalene	ND	U	0.0387	2.1		0.0388	ND	U	0.037	ND	U	0.0375	ND	U	0.0388	ND	U	0.0387	ND	U	0.0366	NA	NA
77-47-4	Hexachlorocyclopentadiene	ND	U	0.0387	ND	U	0.0388	ND	U	0.037	ND	U	0.0375	ND	U	0.0388	ND	U	0.0387	ND	U	0.0366	NA	NA
88-06-2	2,4,6-Trichlorophenol	ND	U	0.0387	ND	U	0.0388	ND	U	0.037	ND	U	0.0375	ND	U	0.0388	ND	U	0.0387	ND	U	0.0366	NA	NA
95-95-4	2,4,5-Trichlorophenol	ND	U	0.0387	ND	U	0.0388	ND	U	0.037	ND	U	0.0375	ND	U	0.0388	ND	U	0.0387	ND	U	0.0366	NA	NA
91-58-7	2-Chloronaphthalene	ND	U	0.0387	ND	U	0.0388	ND	U	0.037	ND	U	0.0375	ND	U	0.0388	ND	U	0.0387	ND	U	0.0366	NA	NA
88-74-4	2-Nitroaniline	ND	U	0.0387	ND	U	0.0388	ND	U	0.037	ND	U	0.0375	ND	U	0.0388	ND	U	0.0387	ND	U	0.0366	NA	NA
131-11-3	Dimethylphthalate	ND	U	0.0387	ND	U	0.0388	ND	U	0.037	ND	U	0.0375	ND	U	0.0388	ND	U	0.0387	ND	U	0.0366	NA	NA
208-96-8	Acenaphthylene	ND	U	0.0387	0.0412	J	0.0388	ND	U	0.037	0.139	J	0.0375	ND	U	0.0388	ND	U	0.0387	0.422		0.0366	100	100
99-09-2	3-Nitroaniline	ND	U	0.0387	ND	U	0.0388	ND	U	0.037	ND	U	0.0375	ND	U	0.0388	ND	U	0.0387	ND	U	0.0366	NA	NA
83-32-9	Acenaphthene	ND	U	0.0387	ND	U	0.0388	ND	U	0.037	0.124	J	0.0375	ND	U	0.0388	ND	U	0.0387	0.0697	J	0.0366	100	20
51-28-5	2,4-Dinitrophenol	ND	U	0.0387	ND	U	0.0388	ND	U	0.037	ND	U	0.0375	ND	U	0.0388	ND	U	0.0387	ND	U	0.0366	NA	NA
100-02-7	4-Nitrophenol	ND	U	0.0387	ND	U	0.0388	ND	U	0.037	ND	U	0.0375	ND	U	0.0388	ND	U	0.0387	ND	U	0.0366	NA	NA
132-64-9	Dibenzofuran	ND	U	0.0387	ND	U	0.0388	ND	U	0.037	0.08	J	0.0375	ND	U	0.0388	ND	U	0.0387	0.0407	J	0.0366	59	NA
606-20-2	2,6-Dinitrotoluene	ND	U	0.0387	ND	U	0.0388	ND	U	0.037	ND	U	0.0375	ND	U	0.0388	ND	U	0.0387	ND	U	0.0366	NA	NA
121-14-2	2,4-Dinitrotoluene	ND	U	0.0387	ND	U	0.0388	ND	U	0.037	ND	U	0.0375	ND	U	0.0388	ND	U	0.0387	ND	U	0.0366	NA	NA
84-66-2	Diethylphthalate	ND	U	0.0387	ND	U	0.0388	ND	U	0.037	ND	U	0.0375	ND	U	0.0388	ND	U	0.0387	ND	U	0.0366	NA	NA
7005-72-3	4-Chlorophenyl-phenylether	ND	U	0.0387	ND	U	0.0388	ND	U	0.037	ND	U	0.0375	ND	U	0.0388	ND	U	0.0387	ND	U	0.0366	NA	NA
86-73-7	Fluorene	ND	U	0.0387	0.0649	J	0.0388	ND	U	0.037	0.0894	J	0.0375	ND	U	0.0388	ND	U	0.0387	0.0796	J	0.0366	100	30
100-01-6	4-Nitroaniline	ND	U	0.0387	ND	U	0.0388	ND	U	0.037	ND	U	0.0375	ND	U	0.0388	ND	U	0.0387	ND	U	0.0366	NA	NA

Table 1B
Soil Sampling Results - Former Gasoline Station
255 East 138th Street, Bronx, New York

	Laboratory ID:	1200234-01			1200234-02			1200234-03			1200234-04			1200214-05			1200214-06			1200214-07			Residential Restricted Use Soil Cleanup Objective	Track 1 Cleanup Numbers
	Brinkerhoff Sample ID:	G-7/HF-5A			G-7/HF-5B			G-7/HF-5C			G-8A			G-8B			G-8C			G-8C.1				
	Depth (feet):	4.5-5.0			6.0-6.5			24.5-25.0			3.0-3.5			6.0-6.5			24.5-25.0			24.5-25.0				
	Matrix:	SOIL			SOIL			SOIL			SOIL			SOIL			SOIL			SOIL				
CAS #	Sampled Date	04/11/12			04/11/12			04/11/12			04/11/12			04/11/12			04/11/12			04/11/12				
	Parameter	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL		
534-52-1	4,6-Dinitro-2-methylphenol	ND	U	0.0387	ND	U	0.0388	ND	U	0.037	ND	U	0.0375	ND	U	0.0388	ND	U	0.0387	ND	U	0.0366	NA	NA
86-30-6	N-Nitrosodiphenylamine	ND	U	0.0387	ND	U	0.0388	ND	U	0.037	ND	U	0.0375	ND	U	0.0388	ND	U	0.0387	ND	U	0.0366	NA	NA
101-55-3	4-Bromophenyl-phenylether	ND	U	0.0387	ND	U	0.0388	ND	U	0.037	ND	U	0.0375	ND	U	0.0388	ND	U	0.0387	ND	U	0.0366	NA	NA
118-74-1	Hexachlorobenzene	ND	U	0.0387	ND	U	0.0388	ND	U	0.037	ND	U	0.0375	ND	U	0.0388	ND	U	0.0387	ND	U	0.0366	1.2	NA
87-86-5	Pentachlorophenol	ND	U	0.0387	ND	U	0.0388	ND	U	0.037	ND	U	0.0375	ND	U	0.0388	ND	U	0.0387	ND	U	0.0366	6.7	0.8
85-01-8	Phenanthrene	ND	U	0.0387	0.138	J	0.0388	ND	U	0.037	2.04		0.0375	0.201		0.0388	ND	U	0.0387	1.28		0.0366	100	100
120-12-7	Anthracene	ND	U	0.0387	ND	U	0.0388	ND	U	0.037	0.432		0.0375	0.0446	J	0.0388	ND	U	0.0387	0.42		0.0366	100	100
84-74-2	Di-n-butylphthalate	ND	U	0.0387	ND	U	0.0388	ND	U	0.037	0.138	J	0.0375	ND	U	0.0388	ND	U	0.0387	ND	U	0.0366	NA	NA
206-44-0	Fluoranthene	ND	U	0.0387	0.114	U	0.0388	ND	U	0.037	2.69		0.0375	0.255		0.0388	ND	U	0.0387	3.68		0.0366	100	100
129-00-0	Pyrene	ND	U	0.0387	0.125	U	0.0388	ND	U	0.037	3.04		0.0375	0.332		0.0388	ND	U	0.0387	3.86		0.0366	100	100
85-68-7	Butylbenzylphthalate	ND	U	0.0387	ND	U	0.0388	ND	U	0.037	ND	U	0.0375	ND	U	0.0388	ND	U	0.0387	ND	U	0.0366	NA	NA
91-94-1	3,3-Dichlorobenzidine	ND	U	0.0965	ND	U	0.0967	ND	U	0.0922	ND	U	0.0936	ND	U	0.0966	ND	U	0.0965	ND	U	0.0927	NA	NA
56-55-3	Benzo(a)anthracene	ND	U	0.0387	0.0509	J	0.0388	ND	U	0.037	1.4		0.0375	0.142	J	0.0388	ND	U	0.0387	2.66		0.0366	1	1
117-81-7	bis(2-Ethylhexyl)phthalate	ND	U	0.0387	ND	U	0.0388	ND	U	0.037	ND	U	0.0375	0.0881	J	0.0388	ND	U	0.0387	ND	U	0.0366	NA	NA
218-01-9	Chrysene	ND	U	0.0387	0.0614	J	0.0388	ND	U	0.037	1.51		0.0375	0.156	J	0.0388	ND	U	0.0387	2.96		0.0366	3.9	1
117-84-0	Di-n-octyl phthalate	ND	U	0.0387	ND	U	0.0388	ND	U	0.037	ND	U	0.0375	ND	U	0.0388	ND	U	0.0387	ND	U	0.0366	NA	NA
205-99-2	Benzo(b)fluoranthene	ND	U	0.0387	0.042	J	0.0388	ND	U	0.037	1.48	U	0.0375	0.114	J	0.0388	ND	U	0.0387	3.39		0.0366	1	1
207-08-9	Benzo(k)fluoranthene	ND	U	0.0387	ND	U	0.0388	ND	U	0.037	1.05		0.0375	0.123	J	0.0388	ND	U	0.0387	2.08		0.0366	3.9	0.8
50-32-8	Benzo(a)pyrene	ND	U	0.0387	0.0431	J	0.0388	ND	U	0.037	1.45		0.0375	0.133	J	0.0388	ND	U	0.0387	2.75		0.0366	1	1
193-39-5	Indeno(1,2,3-cd)pyrene	ND	U	0.0387	ND	U	0.0388	ND	U	0.037	0.676		0.0375	0.0807	J	0.0388	ND	U	0.0387	0.914		0.0366	0.5	0.5
53-70-3	Dibenz(a,h)anthracene	ND	U	0.0387	ND	U	0.0388	ND	U	0.037	0.324		0.0375	ND	U	0.0388	ND	U	0.0387	0.458		0.0366	0.33	0.33
191-24-2	Benzo(g,h,i)perylene	ND	U	0.0387	ND	U	0.0388	ND	U	0.037	0.661		0.0375	0.0935	J	0.0388	ND	U	0.0387	0.824		0.0366	100	100
Pesticides																								
319-84-6	alpha-BHC	ND	U	0.000767	ND	U	0.000769	ND	U	0.000733	~	~	~	~	~	~	~	~	~	~	~	~	0.48	0.02
319-85-7	beta-BHC	ND	U	0.000767	ND	U	0.000769	ND	U	0.000733	~	~	~	~	~	~	~	~	~	~	~	~	0.36	0.036
319-86-8	delta-BHC	ND	U	0.000767	ND	U	0.000769	ND	U	0.000733	~	~	~	~	~	~	~	~	~	~	~	~	100	0.04
58-89-9	gamma-BHC (Lindane)	ND	U	0.000767	ND	U	0.000769	ND	U	0.000733	~	~	~	~	~	~	~	~	~	~	~	~	1.3	0.1
76-44-8	Heptachlor	ND	U	0.000767	ND	U	0.000769	ND	U	0.000733	~	~	~	~	~	~	~	~	~	~	~	~	2.1	0.042
309-00-2	Aldrin	ND	U	0.000767	ND	U	0.000769	ND	U	0.000733	~	~	~	~	~	~	~	~	~	~	~	~	0.097	0.005
1024-57-3	Heptachlor epoxide	ND	U	0.000767	ND	U	0.000769	ND	U	0.000733	~	~	~	~	~	~	~	~	~	~	~	~	NA	NA
959-98-8	Endosulfan I	ND	U	0.000767	ND	U	0.000769	ND	U	0.000733	~	~	~	~	~	~	~	~	~	~	~	~	24	2.4
60-57-1	Dieldrin	ND	U	0.00155	ND	U	0.00155	ND	U	0.00148	~	~	~	~	~	~	~	~	~	~	~	~	0.2	0.005
72-55-9	4,4-DDE	ND	U	0.00155	ND	U	0.00155	ND	U	0.00148	~	~	~	~	~	~	~	~	~	~	~	~	8.9	0.0033
72-20-8	Endrin	ND	U	0.00155	ND	U	0.00155	ND	U	0.00148	~	~	~	~	~	~	~	~	~	~	~	~	11	0.014
33213-65-9	Endosulfan II	0.00388		0.00155	ND	U	0.00155	ND	U	0.00148	~	~	~	~	~	~	~	~	~	~	~	~	24	2.4
72-54-8	4,4-DDD	ND	U	0.00155	ND	U	0.00155	ND	U	0.00148	~	~	~	~	~	~	~	~	~	~	~	~	13	0.0033
1031-07-8	Endosulfan Sulfate	ND	U	0.00155	ND	U	0.00155	ND	U	0.00148	~	~	~	~	~	~	~	~	~	~	~	~	24	2.4
50-29-3	4,4-DDT	ND	U	0.00155	ND	U	0.00155	ND	U	0.00148	~	~	~	~	~	~	~	~	~	~	~	~	7.9	0.0033
72-43-5	Methoxychlor	ND	U	0.00774	ND	U	0.00776	ND	U	0.0074	~	~	~	~	~	~	~	~	~	~	~	~	NA	NA
53494-70-5	Endrin Ketone	ND	U	0.00155	ND	U	0.00155	ND	U	0.00148	~	~	~	~	~	~	~	~	~	~	~	~	NA	NA
7421-93-4	Endrin aldehyde	ND	U	0.00155	ND	U	0.00155	ND	U	0.00148	~	~	~	~	~	~	~	~	~	~	~	~	NA	NA
5103-71-9	alpha-Chlordane	ND	U	0.000767	ND	U	0.000769	ND	U	0.000733	~	~	~	~	~	~	~	~	~	~	~	~	4.2	0.094
72-55-9	gamma-Chlordane	ND	U	0.000767	ND	U	0.0388	ND	U	0.000733	~	~	~	~	~	~	~	~	~	~	~	~	NA	NA
8001-35-2	Toxaphene	ND	U	0.0193	ND	U	0.0193	ND	U	0.037	~	~	~	~	~	~	~	~	~	~	~	~	NA	NA
Polychlorinated Biphenyls																								
12674-11-2	Aroclor-1016	ND	U	0.0193	ND	U	0.0193	ND	U	0.0184	~	~	~	~	~	~	~	~	~	~	~	~	NA	0.1
11104-28-2	Aroclor-1221	ND	U	0.0193	ND	U	0.0193	ND	U	0.0184	~	~	~	~	~	~	~	~	~	~	~	~	NA	0.1
11141-16-5	Aroclor-1232	ND	U	0.0193	ND	U	0.0193	ND	U	0.0184	~	~	~	~	~	~	~	~	~	~	~	~	NA	0.1
53469-21-9	Aroclor-1242	ND	U	0.0193	ND	U	0.0193	ND	U	0.0184	~	~	~	~	~	~	~	~	~	~	~	~	NA	0.1
12672-29-6	Aroclor-1248	ND	U	0.0193	ND	U	0.0193	ND	U	0.0184	~	~	~	~	~	~	~	~	~	~	~	~	NA	0.1
11097-69-1	Aroclor-1254	ND	U	0.0193	ND	U	0.0193	ND	U	0.0184	~	~	~	~	~	~	~	~	~	~	~	~	NA	0.1
11096-82-5	Aroclor-1260	ND	U	0.0193	ND	U	0.0193	ND	U	0.0184	~	~	~	~	~	~	~	~	~	~	~	~	NA	0.1
37324-23-5	Aroclor-1262	ND	U	0.0193	ND	U	0.0193	ND	U	0.0184	~	~	~	~	~	~	~	~	~	~	~	~	NA	0.1
11100-14-4	Aroclor-1268	ND	U	0.0193	ND	U	0.0193	ND	U	0.0184	~	~	~	~	~	~	~	~	~	~	~	~	NA	0.1
Metals																								
7439-97-6	Mercury	0.239		0.116	0.165		0.117	ND	U	0.111	~	~	~	~	~	~	~	~	~	~	~	~	0.81	0.18
7429-90-5	Silver	ND	U	0.38	ND	U	0.43	ND		0.32	~	~	~	~	~	~	~	~	~	~	~	~	36	2

Table 1B
Soil Sampling Results - Former Gasoline Station
255 East 138th Street, Bronx, New York

	Laboratory ID:	1200234-01			1200234-02			1200234-03			1200234-04			1200214-05			1200214-06			1200214-07			Residential Restricted Use Soil Cleanup Objective	Track 1 Cleanup Numbers
	Brinkerhoff Sample ID:	G-7/HF-5A			G-7/HF-5B			G-7/HF-5C			G-8A			G-8B			G-8C			G-8C.1				
	Depth (feet):	4.5-5.0			6.0-6.5			24.5-25.0			3.0-3.5			6.0-6.5			24.5-25.0			24.5-25.0				
	Matrix:	SOIL			SOIL			SOIL			SOIL			SOIL			SOIL			SOIL				
CAS #	Sampled Date	04/11/12			04/11/12			04/11/12			04/11/12			04/11/12			04/11/12			04/11/12				
	Parameter	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL		
7440-36-0	Alumimum	7020		57	8970		64	5120		48	~	~	~	~	~	~	~	~	~	~	~	~	NA	NA
7440-38-2	Arsenic	**26.8**	J	0.76	2.36	J	0.86	ND		0.65	~	~	~	~	~	~	~	~	~	~	~	~	16	13
7440-39-3	Barium	130		0.38	64.8		0.43	28.2		0.32	~	~	~	~	~	~	~	~	~	~	~	~	400	350
7440-41-7	Beryllium	ND	U	0.31	0.37		0.34	0.29		0.26	~	~	~	~	~	~	~	~	~	~	~	~	72	7.2
7440-43-9	Calcium	2720	J	5.7	4690	J	6.4	13700	J	48	~	~	~	~	~	~	~	~	~	~	~	~	NA	NA
7440-70-2	Cadmium	ND	U	0.38	ND	U	0.43	ND	U	0.32	~	~	~	~	~	~	~	~	~	~	~	~	4.3	2.5
7440-47-3	Cobalt	18.3	J	0.38	13.9	J	0.43	3.97	J	0.32	~	~	~	~	~	~	~	~	~	~	~	~	NA	NA
7440-48-4	Chromium	**35.8**	J	0.38	19.3	J	0.43	8.56	J	0.32	~	~	~	~	~	~	~	~	~	~	~	~	290	30
7440-50-8	Copper	**295**		3.8	40.5		0.43	11.6		0.32	~	~	~	~	~	~	~	~	~	~	~	~	270	50
7439-92-1	Iron	147000		570	56300		64	13400		48	~	~	~	~	~	~	~	~	~	~	~	~	NA	NA
7439-92-1	Potassium	916	R	5.7	2450	R	6.4	1010	R	4.8	~	~	~	~	~	~	~	~	~	~	~	~	NA	NA
7439-95-4	Magnesium	2290		5.7	4620		6.4	6080		48	~	~	~	~	~	~	~	~	~	~	~	~	NA	NA
7439-96-5	Manganese	560	J	3.8	322	J	4.3	265	J	3.2	~	~	~	~	~	~	~	~	~	~	~	~	2000	1600
7439-97-6	Sodium	118	R	57	163	R	64	102	R	42	~	~	~	~	~	~	~	~	~	~	~	~	NA	NA
7440-02-0	Nickel	24.8	J	0.38	19.6	J	0.43	10.1	J	0.32	~	~	~	~	~	~	~	~	~	~	~	~	310	30
7440-09-7	Lead	**386**		3.8	61.1		0.43	5.34		0.32	**544**	NA	3.6	**251**		3.9	6.14	~	0.35	5.29	~	0.34	400	63
7782-49-2	Antimony	ND	U	3.8	ND	U	4.3	ND	U	3.2	~	~	~	~	~	~	~	~	~	~	~	~	NA	NA
7440-22-4	Selenium	ND	U	3	ND	U	2	ND	U	1.3	~	~	~	~	~	~	~	~	~	~	~	~	180	3.9
7440-23-5	Thallium	ND	U	3.4	ND	U	3.9	ND	U	2.9	~	~	~	~	~	~	~	~	~	~	~	~	NA	NA
7440-62-2	Vanadium	40.8		0.38	30		0.43	12.1		0.32	~	~	~	~	~	~	~	~	~	~	~	~	NA	NA
7440-66-6	Zinc	**389**		3.8	101		0.43	27.5		0.32	~	~	~	~	~	~	~	~	~	~	~	~	10000	109
xxxx-xx-02	Solids, Percent	84			80			91			89			86			92			92			NA	NA

Notes:
BOLD-concentration exceeds Track 2 - Restricted Residential Use Soil Cleanup Objective
-concentration exceeds both Track 1 and Track 2 - Restricted Residential Use Soil Cleanup Objectives
Conc = Concentration
Q = Qualifier
MDL = Laboratory method detection limit
All values are expressed in milligrams per Kilograms (mg/Kg)
ND = Analyzed for but Not Detected at the MDL
J = The concentration was detected a value below Reporting Limit and above MDL
D = Sample was diluted
B = Indicates compound found in associated blank
R = Data rejected by validator
* Values outside of QC limits
~ = Not analyzed
NA = Not Applicable

Table 2
Soil Sampling Results - Garage
255 East 138th Street, Bronx, New York

	Laboratory ID:	1200213-01			1200213-02			1200213-03			1200213-04			1200213-05			1200213-06			Residential Restricted Use Soil Cleanup Objective	Track 1 Cleanup Numbers
	Brinkerhoff Sample ID:	GAR-1A			GAR-1B			GAR-1C			GAR-2A			GAR-2B			GAR-2C				
	Depth (feet):	4.5-5.0			5.5-6.0			24.5-25.0			4.5-5.0			6.5-7.0			24.5-25.0				
	Matrix:	SOIL			SOIL			SOIL			SOIL			SOIL			SOIL				
CAS #	Sampled Date	04/09/12			04/09/12			04/09/12			04/09/12			04/09/12			04/09/12				
	Parameter	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL		
Volatile Organic Compounds																					
78-93-3	Acrolein	ND	U	0.0063	ND	U	0.0071	ND	U	0.00697	ND	U	0.00715	ND	U	0.00722	ND	U	0.00702	NA	NA
107-13-1	Acrylonitrile	ND	U	0.0021	ND	U	0.00237	ND	U	0.00232	ND	U	0.00238	ND	U	0.00241	ND	U	0.00234	NA	NA
67-64-1	Acetone	**0.0933**		0.0011	0.0342		0.00118	0.00613		0.0016	0.00784		0.00119	0.00735		0.0012	ND	U	0.00117	100	0.05
124-48-1	Dibromochloromethane	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	NA	NA
74-87-3	Chloromethane	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	NA	NA
75-01-4	Vinyl Chloride	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	0.9	0.02
74-83-9	Bromomethane	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	NA	NA
75-00-3	Chloroethane	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	NA	NA
75-69-4	Trichlorofluoromethane	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	NA	NA
75-35-4	1,1-Dichloroethene	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	100	0.33
75-15-0	Carbon disulfide	0.00478		0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	NA	NA
75-09-2	Methylene Chloride	ND	U	0.0011	0.00998	B	0.00118	0.0169	B	0.0016	**0.0589**	B	0.00119	0.00606	B	0.0012	ND	U	0.00117	100	0.05
156-60-5	trans-1,2-Dichloroethene	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	100	0.19
75-34-3	1,1-Dichloroethane	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	26	0.27
108-05-4	Vinyl acetate	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	NA	NA
590-20-7	2,2-Dichloropropane	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	NA	NA
78-93-3	2-Butanone	0.0101		0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	100	0.12
156-59-4	cis-1,2-Dichloroethene	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	100	0.25
67-66-3	Chloroform	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	49	0.37
74-97-5	Bromochloromethane	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	NA	NA
71-55-6	1,1,1-Trichloroethane	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	100	0.68
563-58-6	1,1-Dichloropropene	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	NA	NA
56-23-5	Carbon Tetrachloride	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	2.4	0.76
107-06-2	1,2-Dichloroethane	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	3.1	0.02
71-43-2	Benzene	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	4.8	0.06
79-01-6	Trichloroethene	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	21	0.47
78-87-5	1,2-Dichloropropane	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	NA	NA
75-27-4	Bromodichloromethane	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	NA	NA
74-95-3	Dibromomethane	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	NA	NA
110-75-8	2-Chloroehyl vinyl ether	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	NA	NA
10061-01-5	cis-1,3-Dichloropropene	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	NA	NA
108-88-3	Toluene	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	100	0.7
10061-02-6	trans-1,3-Dichloropropene	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	NA	NA
79-00-5	1,1,2-Trichloroethane	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	NA	NA
108-10-1	4-Methyl-2-Pentanone	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	NA	NA
106-93-4	1,2-Dibromoethane	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	NA	NA
591-78-6	2-Hexanone	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	NA	NA
142-28-9	1,3-Dichloropropane	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	NA	NA
127-18-4	Tetrachloroethene	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	19	1.3
75-71-8	Dichlorodifluoromethane	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	NA	NA
100-41-4	Ethylbenzene	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	41	1
108-90-7	Chlorobenzene	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	100	1.1
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	NA	NA
126777-61-2	m/p-Xylenes	ND	U	0.0021	ND	U	0.00237	ND	U	0.00232	ND	U	0.00238	ND	U	0.00241	ND	U	0.00234	NA	0.26
95-47-6	o-Xylene	ND	U	0.0021	ND	U	0.00237	ND	U	0.00232	ND	U	0.00238	ND	U	0.00241	ND	U	0.00234	NA	
100-42-5	Styrene	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	NA	NA
75-25-2	Bromoform	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	NA	NA
98-82-8	Isopropylbenzene	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	NA	NA
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	NA	NA
96-18-4	1,2,3-Trichloropropane	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	NA	NA
103-65-1	n-Propyl Benzene	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	100	3.9
108-86-1	Bromobenzene	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	NA	NA
108-67-8	1,3,5-Trimethylbenzene	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	52	8.4
95-49-8	2-Chlorotoluene	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	NA	NA

Table 2
Soil Sampling Results - Garage
255 East 138th Street, Bronx, New York

	Laboratory ID:	1200213-01			1200213-02			1200213-03			1200213-04			1200213-05			1200213-06			Residential Restricted Use Soil Cleanup Objective	Track 1 Cleanup Numbers
	Brinkerhoff Sample ID:	GAR-1A			GAR-1B			GAR-1C			GAR-2A			GAR-2B			GAR-2C				
	Depth (feet):	4.5-5.0			5.5-6.0			24.5-25.0			4.5-5.0			6.5-7.0			24.5-25.0				
	Matrix:	SOIL			SOIL			SOIL			SOIL			SOIL			SOIL				
CAS #	Sampled Date	04/09/12			04/09/12			04/09/12			04/09/12			04/09/12			04/09/12				
	Parameter	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL		
106-43-4	4-Chlorotoluene	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	NA	NA
98-06-6	tert-Butylbenzene	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	100	5.9
95-63-6	1,2,4-Trimethylbenzene	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	52	3.6
135-98-8	sec-Butylbenzene	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	100	11
99-87-6	p-Isopropyltoluene	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	NA	NA
541-73-1	1,3-Dichlorobenzene	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	49	2.4
106-46-7	1,4-Dichlorobenzene	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	13	1.8
104-51-8	n-Butyl Benzene	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	NA	12
95-50-1	1,2-Dichlorobenzene	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	100	1.1
96-12-8	1,2-Dibromo-3-Chloropropane	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	NA	NA
120-82-1	1,2,4-Trichlorobenzene	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	NA	NA
87-68-3	Hexachlorobutadiene	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	NA	NA
91-20-3	Naphthalene	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	100	12
87-61-6	1,2,3-Trichlorobenzene	ND	U	0.0011	ND	U	0.00118	ND	U	0.0016	ND	U	0.00119	ND	U	0.0012	ND	U	0.00117	NA	NA
Semivolatile Organic Compounds																					
62-75-9	N-Nitrosodimethylamine	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	ND	U	0.0397	ND	U	0.0401	ND	U	0.0389	NA	NA
108-95-2	Phenol	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	ND	U	0.0397	ND	U	0.0401	ND	U	0.0389	100	0.33
111-44-4	bis(2-Chloroethyl)ether	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	ND	U	0.0397	ND	U	0.0401	ND	U	0.0389	NA	NA
95-57-8	2-Chlorophenol	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	ND	U	0.0397	ND	U	0.0401	ND	U	0.0389	NA	NA
541-73-1	1,3-Dichlorobenzene	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	ND	U	0.0397	ND	U	0.0401	ND	U	0.0389	49	NA
106-46-7	1,4-Dichlorobenzene	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	ND	U	0.0397	ND	U	0.0401	ND	U	0.0389	13	NA
100-51-6	Benzyl alcohol	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	ND	U	0.0397	ND	U	0.0401	ND	U	0.0389	NA	NA
95-50-1	1,2-Dichlorobenzene	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	ND	U	0.0397	ND	U	0.0401	ND	U	0.0389	100	NA
95-48-7	2-Methylphenol	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	ND	U	0.0397	ND	U	0.0401	ND	U	0.0389	100	NA
108-60-1	Bis(2-chloroisopropyl)ether	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	ND	U	0.0397	ND	U	0.0401	ND	U	0.0389	NA	NA
106-44-5	3&4 Methylphenol	0.0538	J	0.0368	1.06		0.0394	ND	U	0.0387	ND	U	0.0397	ND	U	0.0401	ND	U	0.0389	100	NA
621-64-7	N-Nitroso-di-n-propylamine	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	ND	U	0.0397	ND	U	0.0401	ND	U	0.0389	NA	NA
67-72-1	Hexachloroethane	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	ND	U	0.0397	ND	U	0.0401	ND	U	0.0389	NA	NA
98-95-3	Nitrobenzene	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	ND	U	0.0397	ND	U	0.0401	ND	U	0.0389	NA	NA
78-59-1	Isophorone	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	ND	U	0.0397	ND	U	0.0401	ND	U	0.0389	NA	NA
88-75-5	2-Nitrophenol	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	ND	U	0.0397	ND	U	0.0401	ND	U	0.0389	NA	NA
105-67-9	2,4-Dimethylphenol	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	ND	U	0.0397	ND	U	0.0401	ND	U	0.0389	NA	NA
65-85-0	Benzoic acid	0.362	J	0.0917	0.404		0.0982	ND	U	0.0964	ND	U	0.0989	ND	U	0.0999	ND	U	0.0971	NA	NA
111-91-1	bis(2-Chloroethoxy)methane	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	ND	U	0.0397	ND	U	0.0401	ND	U	0.0389	NA	NA
120-83-2	2,4-Dichlorophenol	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	ND	U	0.0397	ND	U	0.0401	ND	U	0.0389	NA	NA
120-82-1	1,2,4-Trichlorobenzene	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	ND	U	0.0397	ND	U	0.0401	ND	U	0.0389	NA	NA
91-20-3	Naphthalene	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	ND	U	0.0397	ND	U	0.0401	ND	U	0.0389	100	12
106-47-8	4-Chloroaniline	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	ND	U	0.0397	ND	U	0.0401	ND	U	0.0389	NA	NA
87-68-3	Hexachlorobutadiene	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	ND	U	0.0397	ND	U	0.0401	ND	U	0.0389	NA	NA
59-50-7	4-Chloro-3-methylphenol	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	ND	U	0.0397	ND	U	0.0401	ND	U	0.0389	NA	NA
91-57-6	2-Methylnaphthalene	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	ND	U	0.0397	ND	U	0.0401	ND	U	0.0389	NA	NA
77-47-4	Hexachlorocyclopentadiene	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	ND	U	0.0397	ND	U	0.0401	ND	U	0.0389	NA	NA
88-06-2	2,4,6-Trichlorophenol	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	ND	U	0.0397	ND	U	0.0401	ND	U	0.0389	NA	NA
95-95-4	2,4,5-Trichlorophenol	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	ND	U	0.0397	ND	U	0.0401	ND	U	0.0389	NA	NA
91-58-7	2-Chloronaphthalene	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	ND	U	0.0397	ND	U	0.0401	ND	U	0.0389	NA	NA
88-74-4	2-Nitroaniline	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	ND	U	0.0397	ND	U	0.0401	ND	U	0.0389	NA	NA
131-11-3	Dimethylphthalate	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	ND	U	0.0397	ND	U	0.0401	ND	U	0.0389	NA	NA
208-96-8	Acenaphthylene	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	ND	U	0.0397	ND	U	0.0401	ND	U	0.0389	100	100
99-09-2	3-Nitroaniline	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	ND	U	0.0397	ND	U	0.0401	ND	U	0.0389	NA	NA
83-32-9	Acenaphthene	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	ND	U	0.0397	ND	U	0.0401	ND	U	0.0389	100	20
51-28-5	2,4-Dinitrophenol	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	ND	U	0.0397	ND	U	0.0401	ND	U	0.0389	NA	NA
100-02-7	4-Nitrophenol	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	ND	U	0.0397	ND	U	0.0401	ND	U	0.0389	NA	NA
132-64-9	Dibenzofuran	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	ND	U	0.0397	ND	U	0.0401	ND	U	0.0389	59	NA
606-20-2	2,6-Dinitrotoluene	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	ND	U	0.0397	ND	U	0.0401	ND	U	0.0389	NA	NA
121-14-2	2,4-Dinitrotoluene	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	ND	U	0.0397	ND	U	0.0401	ND	U	0.0389	NA	NA

Table 2
Soil Sampling Results - Garage
255 East 138th Street, Bronx, New York

	Laboratory ID:	1200213-01			1200213-02			1200213-03			1200213-04			1200213-05			1200213-06			Residential Restricted Use Soil Cleanup Objective	Track 1 Cleanup Numbers
	Brinkerhoff Sample ID:	GAR-1A			GAR-1B			GAR-1C			GAR-2A			GAR-2B			GAR-2C				
	Depth (feet):	4.5-5.0			5.5-6.0			24.5-25.0			4.5-5.0			6.5-7.0			24.5-25.0				
	Matrix:	SOIL			SOIL			SOIL			SOIL			SOIL			SOIL				
CAS #	Sampled Date	04/09/12			04/09/12			04/09/12			04/09/12			04/09/12			04/09/12				
	Parameter	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL		
84-66-2	Diethylphthalate	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	ND	U	0.0397	ND	U	0.0401	ND	U	0.0389	NA	NA
7005-72-3	4-Chlorophenyl-phenylether	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	ND	U	0.0397	ND	U	0.0401	ND	U	0.0389	NA	NA
86-73-7	Fluorene	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	ND	U	0.0397	ND	U	0.0401	ND	U	0.0389	100	30
100-01-6	4-Nitroaniline	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	ND	U	0.0397	ND	U	0.0401	ND	U	0.0389	NA	NA
534-52-1	4,6-Dinitro-2-methylphenol	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	ND	U	0.0397	ND	U	0.0401	ND	U	0.0389	NA	NA
86-30-6	N-Nitrosodiphenylamine	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	ND	U	0.0397	ND	U	0.0401	ND	U	0.0389	NA	NA
101-55-3	4-Bromophenyl-phenylether	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	ND	U	0.0397	ND	U	0.0401	ND	U	0.0389	NA	NA
118-74-1	Hexachlorobenzene	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	ND	U	0.0397	ND	U	0.0401	ND	U	0.0389	1.2	NA
87-86-5	Pentachlorophenol	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	ND	U	0.0397	ND	U	0.0401	ND	U	0.0389	6.7	0.8
85-01-8	Phenanthrene	ND	U	0.0368	0.131	J	0.0394	ND	U	0.0387	0.282		0.0397	ND	U	0.0401	ND	U	0.0389	100	100
120-12-7	Anthracene	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	0.0715	J	0.0397	ND	U	0.0401	ND	U	0.0389	100	100
84-74-2	Di-n-butylphthalate	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	ND	U	0.0397	ND	U	0.0401	ND	U	0.0389	NA	NA
206-44-0	Fluoranthene	ND	U	0.0368	0.115	J	0.0394	ND	U	0.0387	0.271		0.0397	ND	U	0.0401	ND	U	0.0389	100	100
129-00-0	Pyrene	ND	U	0.0368	0.199		0.0394	ND	U	0.0387	0.315		0.0397	ND	U	0.0401	ND	U	0.0389	100	100
85-68-7	Butylbenzylphthalate	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	ND	U	0.0397	ND	U	0.0401	ND	U	0.0389	NA	NA
91-94-1	3,3-Dichlorobenzidine	ND	U	0.0917	ND	U	0.0982	ND	U	0.0964	ND	U	0.0989	ND	U	0.0999	ND	U	0.0971	NA	NA
56-55-3	Benzo(a)anthracene	ND	U	0.0368	0.0473	J	0.0394	ND	U	0.0387	0.164	J	0.0397	ND	U	0.0401	ND	U	0.0389	1	1
117-81-7	bis(2-Ethylhexyl)phthalate	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	0.0401	J	0.0397	ND	U	0.0401	ND	U	0.0389	NA	NA
218-01-9	Chrysene	ND	U	0.0368	0.0529	J	0.0394	ND	U	0.0387	0.17	J	0.0397	ND	U	0.0401	ND	U	0.0389	3.9	1
117-84-0	Di-n-octyl phthalate	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	ND	U	0.0397	ND	U	0.0401	ND	U	0.0389	NA	NA
205-99-2	Benzo(b)fluoranthene	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	0.117	J	0.0397	ND	U	0.0401	ND	U	0.0389	1	1
207-08-9	Benzo(k)fluoranthene	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	0.104	J	0.0397	ND	U	0.0401	ND	U	0.0389	3.9	0.8
50-32-8	Benzo(a)pyrene	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	0.135	J	0.0397	ND	U	0.0401	ND	U	0.0389	1	1
193-39-5	Indeno(1,2,3-cd)pyrene	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	0.0743	J	0.0397	ND	U	0.0401	ND	U	0.0389	0.5	0.5
53-70-3	Dibenz(a,h)anthracene	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	0.0421	J	0.0397	ND	U	0.0401	ND	U	0.0389	0.33	0.33
191-24-2	Benzo(g,h,i)perylene	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	0.0822	J	0.0397	ND	U	0.0401	ND	U	0.0389	100	100
Pesticides																					
319-84-6	alpha-BHC	ND	U	0.000729	ND	U	0.000781	ND	U	0.000767	ND	U	0.000787	ND	U	0.000787	ND	U	0.000772	0.48	0.02
319-85-7	beta-BHC	ND	U	0.000729	ND	U	0.000781	ND	U	0.000767	ND	U	0.000787	ND	U	0.000787	ND	U	0.000772	0.36	0.036
319-86-8	delta-BHC	ND	U	0.000729	ND	U	0.000781	ND	U	0.000767	ND	U	0.000787	ND	U	0.000787	ND	U	0.000772	100	0.04
58-89-9	gamma-BHC (Lindane)	ND	U	0.000729	ND	U	0.000781	ND	U	0.000767	ND	U	0.000787	ND	U	0.000787	ND	U	0.000772	1.3	0.1
76-44-8	Heptachlor	ND	U	0.000729	ND	U	0.000781	ND	U	0.000767	ND	U	0.000787	ND	U	0.000787	ND	U	0.000772	2.1	0.042
309-00-2	Aldrin	ND	U	0.000729	ND	U	0.000781	ND	U	0.000767	ND	U	0.000787	ND	U	0.000787	ND	U	0.000772	0.097	0.005
1024-57-3	Heptachlor epoxide	ND	U	0.000729	ND	U	0.000781	ND	U	0.000767	ND	U	0.000787	ND	U	0.000787	ND	U	0.000772	NA	NA
959-98-8	Endosulfan I	ND	U	0.000729	ND	U	0.000781	ND	U	0.000767	ND	U	0.000787	ND	U	0.000787	ND	U	0.000772	24	2.4
60-57-1	Dieldrin	ND	U	0.00147	ND	U	0.00157	ND	U	0.00154	ND	U	0.00159	ND	U	0.00159	ND	U	0.00156	0.2	0.005
72-55-9	4,4-DDE	ND	U	0.00147	ND	U	0.00157	ND	U	0.00154	ND	U	0.00159	ND	U	0.00159	ND	U	0.00156	8.9	0.0033
72-20-8	Endrin	ND	U	0.00147	ND	U	0.00157	ND	U	0.00154	ND	U	0.00159	ND	U	0.00159	ND	U	0.00156	11	0.014
33213-65-9	Endosulfan II	ND	U	0.00147	ND	U	0.00157	ND	U	0.00154	ND	U	0.00159	ND	U	0.00159	ND	U	0.00156	24	2.4
72-54-8	4,4-DDD	ND	U	0.00147	ND	U	0.00157	ND	U	0.00154	ND	U	0.00159	ND	U	0.00159	ND	U	0.00156	13	0.0033
1031-07-8	Endosulfan Sulfate	ND	U	0.00147	ND	U	0.00157	ND	U	0.00154	ND	U	0.00159	ND	U	0.00159	ND	U	0.00156	24	2.4
50-29-3	4,4-DDT	ND	U	0.00147	ND	U	0.00157	ND	U	0.00154	ND	U	0.00159	ND	U	0.00159	ND	U	0.00156	7.9	0.0033
72-43-5	Methoxychlor	ND	U	0.00736	ND	U	0.00788	ND	U	0.00774	ND	U	0.00794	ND	U	0.00794	ND	U	0.00779	NA	NA
53494-70-5	Endrin Ketone	ND	U	0.00147	ND	U	0.00157	ND	U	0.00154	ND	U	0.00159	ND	U	0.00159	ND	U	0.00156	NA	NA
7421-93-4	Endrin aldehyde	ND	U	0.00147	ND	U	0.00157	ND	U	0.00154	ND	U	0.00159	ND	U	0.00159	ND	U	0.00156	NA	NA
5103-71-9	alpha-Chlordane	ND	U	0.000729	ND	U	0.000781	ND	U	0.000767	ND	U	0.000787	ND	U	0.000787	ND	U	0.000772	4.2	0.094
72-55-9	gamma-Chlordane	ND	U	0.000729	ND	U	0.000781	ND	U	0.000767	ND	U	0.000787	ND	U	0.000787	ND	U	0.000772	NA	NA
8001-35-2	Toxaphene	ND	U	0.0368	ND	U	0.0394	ND	U	0.0387	ND	U	0.0397	ND	U	0.0397	ND	U	0.0389	NA	NA
Polychlorinated Biphenyls																					
12674-11-2	Aroclor-1016	ND	U	0.0183	ND	U	0.0196	ND	U	0.0193	ND	U	0.0198	ND	U	0.0198	ND	U	0.0194	NA	0.1
11104-28-2	Aroclor-1221	ND	U	0.0183	ND	U	0.0196	ND	U	0.0193	ND	U	0.0198	ND	U	0.0198	ND	U	0.0194	NA	0.1
11141-16-5	Aroclor-1232	ND	U	0.0183	ND	U	0.0196	ND	U	0.0193	ND	U	0.0198	ND	U	0.0198	ND	U	0.0194	NA	0.1
53469-21-9	Aroclor-1242	ND	U	0.0183	ND	U	0.0196	ND	U	0.0193	ND	U	0.0198	ND	U	0.0198	ND	U	0.0194	NA	0.1
12672-29-6	Aroclor-1248	ND	U	0.0183	ND	U	0.0196	ND	U	0.0193	ND	U	0.0198	ND	U	0.0198	ND	U	0.0194	NA	0.1
11097-69-1	Aroclor-1254	ND	U	0.0183	ND	U	0.0196	ND	U	0.0193	ND	U	0.0198	ND	U	0.0198	ND	U	0.0194	NA	0.1

Table 2
Soil Sampling Results - Garage
255 East 138th Street, Bronx, New York

	Laboratory ID:	1200213-01			1200213-02			1200213-03			1200213-04			1200213-05			1200213-06			Residential Restricted Use Soil Cleanup Objective	Track 1 Cleanup Numbers
	Brinkerhoff Sample ID:	GAR-1A			GAR-1B			GAR-1C			GAR-2A			GAR-2B			GAR-2C				
	Depth (feet):	4.5-5.0			5.5-6.0			24.5-25.0			4.5-5.0			6.5-7.0			24.5-25.0				
	Matrix:	SOIL			SOIL			SOIL			SOIL			SOIL			SOIL				
CAS #	Sampled Date	04/09/12			04/09/12			04/09/12			04/09/12			04/09/12			04/09/12				
	Parameter	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL		
11096-82-5	Aroclor-1260	ND	U	0.0183	ND	U	0.0196	ND	U	0.0193	ND	U	0.0198	ND	U	0.0198	ND	U	0.0194	NA	0.1
37324-23-5	Aroclor-1262	ND	U	0.0183	ND	U	0.0196	ND	U	0.0193	ND	U	0.0198	ND	U	0.0198	ND	U	0.0194	NA	0.1
11100-14-4	Aroclor-1268	ND	U	0.0183	ND	U	0.0196	ND	U	0.0193	ND	U	0.0198	ND	U	0.0198	ND	U	0.0194	NA	0.1
Metals																					
7439-97-6	Mercury	ND	U	0.11	**1.53**		0.118	ND	U	0.12	ND	U	0.119	ND	U	0.12	ND		0.117	0.81	0.18
7429-90-5	Silver	ND	U	0.38	ND	U	0.4	ND	U	0.37	ND	U	0.38	ND	U	0.39	ND	U	0.37	36	2
7440-36-0	Aluminum	3190		38	6910		40	7700		37	5360		38	8320		39	7780		37	NA	NA
7440-38-2	Arsenic	**23.7**	*	0.75	4.4	*	0.8	2.77	*	0.74	**16.8**	*	0.77	6.71	*	0.77	1.72	*	0.74	16	13
7440-39-3	Barium	15		0.75	51.1		0.8	64.9		0.74	37.9		0.77	31.6		0.77	58.4		0.74	400	350
7440-41-7	Beryllium	0.3	U	0.3	0.33		0.32	0.49		0.29	0.207	B	0.31	0.307	B	0.31	0.48		0.3	72	7.2
7440-43-9	Calcium	1740	*	3.8	15000	*	40	18200	*	37	1680	*	3.8	1890	*	3.9	20100	*	37	NA	NA
7440-70-2	Cadmium	0.77		0.38	ND	U	0.4	ND	U	0.37	**2.69**		0.38	ND	U	0.39	ND	U	0.37	4.3	2.5
7440-47-3	Cobalt	26.2	*	0.38	7.16	*	0.4	5.52	*	0.37	13.9	*	0.38	10.9	*	0.39	6.09	*	0.37	NA	NA
7440-48-4	Chromium	21.1		0.38	17.9		0.4	15.4		0.37	17.5		0.38	18		0.39	15.7		0.37	290	30-Jan
7440-50-8	Copper	**269**		3.8	40.1		0.4	16.9		0.37	**682**		3.8	**59.5**		0.39	17.2		0.37	270	50
7439-92-1	Iron	169000		380	29800		40	29100		37	76900		38	54100		39	16700		37	NA	NA
7439-92-1	Potassium	274		8	1630		8	1770		7	568		8	789		8	2100		7	NA	NA
7439-95-4	Magnesium	629		3.8	8350		40	7590		37	914		3.8	1320		3.9	8720		37	NA	NA
7439-96-5	Manganese	589	R	3.8	382	R	4	979	R	3.7	425	R	3.8	477	R	3.9	424	R	3.7	2000	1600
7439-97-6	Sodium	68		8	309		8	205		7	97		8	112		8	249		7	NA	NA
7440-02-0	Nickel	**32.3**	*	0.38	15.4	*	0.4	14.2	*	0.37	17.1	*	0.38	15.1	*	0.39	14.7	*	0.37	310	30
7440-09-7	Lead	16.2		0.75	**129**		0.8	8.31		0.74	**83.4**		0.77	14.4		0.88	8.9		0.74	400	63
7782-49-2	Antimony	ND	U	1.9	ND	U	2	ND	U	1.8	ND	U	1.9	ND	U	1.9	ND	U	1.9	NA	NA
7440-22-4	Selenium	ND	U	5	ND	U	1.6	ND	U	1.5	ND	U	2	ND	U	2	ND	U	1.5	180	3.9
7440-23-5	Thallium	ND	U	1.5	ND	U	1.6	ND	U	1.5	ND	U	1.5	ND	U	1.5	ND	U	1.5	NA	NA
7440-62-2	Vanadium	61.3		0.38	28.1		0.4	19.2		0.37	48.5		0.38	49.2		0.39	19.2		0.37	NA	NA
7440-66-6	Zinc	**183**		7.5	53.2		0.8	36.8		0.74	**966**		7.7	79.6		0.77	34.2		0.74	10000	109
xxxx-xx-02	Solids, Percent	92			75			86			87			84			90			NA	NA

Notes:
BOLD indicates concentration exceeds Track 2 Restricted Residential Use Soil Cleanup Objective
Exceeds both Track 1 and Track 2 Restricted Residential Use Soil Cleanup Objective
Conc = Concentration
Q = Qualifier
MDL = Laboratory method detection limit
All values are expressed in milligrams per Kilograms (mg/Kg)
ND = Analyzed for but Not Detected at the MDL
U = Not detected above instrument detection levels
J = The concentration was detected a value below Reporting Limit and above MDL
D = Sample was diluted.
B = Indicates compound found in associated blank
R = Data rejected by validator
#The Track 1 Cleanup Number for hexavalent chromium is 1 and the standard for trivalent chromium is 30. The samples were analyzed for total chromium; therefore, these standards do not apply.
* Values outside of QC limits

Table 3
Soil Sampling Results - Former Kentucky Fried Chicken
255 East 138th Street, Bronx, New York

	Laboratory ID:	1200215-01			1200215-02			1200215-03			1200215-04			1200215-05			1200215-06			Residential Restricted Use Soil Cleanup Objective	Track 1 Cleanup Numbers
	Brinkerhoff Sample ID:	KFC-1A			KFC-1B			KFC-1C			KFC-2A			KFC-2B			KFC-2C				
	Depth (feet):	4.5-5.0			6.0-6.5			24.5-25.0			4.5-5.0			7.0-7.5			24.5-25.0				
	Matrix:	SOIL			SOIL			SOIL			SOIL			SOIL			SOIL				
CAS #	Sampled Date	04/10/12			04/10/12			04/10/12			04/10/12			04/10/12			04/10/12				
	Parameter	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL		
Volatile Organic Compounds																					
78-93-3	Acrolein	ND	R	0.00673	ND	R	0.00721	ND	R	0.00667	ND	R	0.00676	ND	R	0.00649	ND	R	0.00714	NA	NA
107-13-1	Acrylonitrile	ND	U	0.00224	ND	U	0.0024	ND	U	0.00222	ND	U	0.00225	ND	U	0.00219	ND	U	0.00238	NA	NA
67-64-1	Acetone	ND	U	0.00112	0.0019	J	0.0012	ND	U	0.00111	ND	U	0.00113	0.00615		0.00108	0.0142		0.00119	100	0.05
124-48-1	Dibromochloromethane	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	NA	NA
74-87-3	Chloromethane	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	NA	NA
75-01-4	Vinyl Chloride	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	0.9	0.02
74-83-9	Bromomethane	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	NA	NA
75-00-3	Chloroethane	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	NA	NA
75-69-4	Trichlorofluoromethane	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	NA	NA
75-35-4	1,1-Dichloroethene	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	100	0.33
75-15-0	Carbon disulfide	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	NA	NA
75-09-2	Methylene Chloride	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	100	0.05
156-60-5	trans-1,2-Dichloroethene	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	100	0.19
75-34-3	1,1-Dichloroethane	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	26	0.27
108-05-4	Vinyl acetate	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	NA	NA
590-20-7	2,2-Dichloropropane	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	NA	NA
78-93-3	2-Butanone	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	100	0.12
156-59-4	cis-1,2-Dichloroethene	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	100	0.25
67-66-3	Chloroform	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	49	0.37
74-97-5	Bromochloromethane	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	NA	NA
71-55-6	1,1,1-Trichloroethane	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	100	0.68
563-58-6	1,1-Dichloropropene	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	NA	NA
56-23-5	Carbon Tetrachloride	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	2.4	0.76
107-06-2	1,2-Dichloroethane	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	3.1	0.02
71-43-2	Benzene	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	4.8	0.06
79-01-6	Trichloroethene	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	21	0.47
78-87-5	1,2-Dichloropropane	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	NA	NA
75-27-4	Bromodichloromethane	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	NA	NA
74-95-3	Dibromomethane	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	NA	NA
110-75-8	2-Chloroehyl vinyl ether	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	NA	NA
10061-01-5	cis-1,3-Dichloropropene	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	NA	NA
108-88-3	Toluene	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	100	0.7
10061-02-6	trans-1,3-Dichloropropene	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	NA	NA
79-00-5	1,1,2-Trichloroethane	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	NA	NA
108-10-1	4-Methyl-2-Pentanone	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	NA	NA
106-93-4	1,2-Dibromoethane	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	NA	NA
591-78-6	2-Hexanone	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	NA	NA
142-28-9	1,3-Dichloropropane	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	NA	NA
127-18-4	Tetrachloroethene	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	19	1.3
75-71-8	Dichlorodifluoromethane	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	NA	NA
100-41-4	Ethylbenzene	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	41	1
108-90-7	Chlorobenzene	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	100	1.1
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	NA	NA
126777-61-2	m/p-Xylenes	ND	U	0.00224	ND	U	0.0024	ND	U	0.00222	ND	U	0.00225	ND	U	0.00108	ND	U	0.00238	NA	0.26
95-47-6	o-Xylene	ND	U	0.00224	ND	U	0.0024	ND	U	0.00222	ND	U	0.00225	ND	U	0.00108	ND	U	0.00238	NA	
100-42-5	Styrene	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	NA	NA
75-25-2	Bromoform	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	NA	NA
98-82-8	Isopropylbenzene	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	NA	NA
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	NA	NA
96-18-4	1,2,3-Trichloropropane	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	NA	NA
103-65-1	n-Propyl Benzene	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	100	3.9

Table 3
Soil Sampling Results - Former Kentucky Fried Chicken
255 East 138th Street, Bronx, New York

	Laboratory ID:	1200215-01			1200215-02			1200215-03			1200215-04			1200215-05			1200215-06			Residential Restricted Use Soil Cleanup Objective	Track 1 Cleanup Numbers
	Brinkerhoff Sample ID:	KFC-1A			KFC-1B			KFC-1C			KFC-2A			KFC-2B			KFC-2C				
	Depth (feet):	4.5-5.0			6.0-6.5			24.5-25.0			4.5-5.0			7.0-7.5			24.5-25.0				
	Matrix:	SOIL			SOIL			SOIL			SOIL			SOIL			SOIL				
CAS #	Sampled Date	04/10/12			04/10/12			04/10/12			04/10/12			04/10/12			04/10/12				
	Parameter	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL		
108-86-1	Bromobenzene	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	NA	NA
108-67-8	1,3,5-Trimethylbenzene	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	52	8.4
95-49-8	2-Chlorotoluene	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	NA	NA
106-43-4	4-Chlorotoluene	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	NA	NA
98-06-6	tert-Butylbenzene	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	100	5.9
95-63-6	1,2,4-Trimethylbenzene	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	52	3.6
135-98-8	sec-Butylbenzene	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	100	11
99-87-6	p-Isopropyltoluene	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	NA	NA
541-73-1	1,3-Dichlorobenzene	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	49	2.4
106-46-7	1,4-Dichlorobenzene	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	13	1.8
104-51-8	n-Butyl Benzene	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	NA	12
95-50-1	1,2-Dichlorobenzene	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	100	1.1
96-12-8	1,2-Dibromo-3-Chloropropane	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	NA	NA
120-82-1	1,2,4-Trichlorobenzene	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	NA	NA
87-68-3	Hexachlorobutadiene	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	NA	NA
91-20-3	Naphthalene	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	100	12
87-61-6	1,2,3-Trichlorobenzene	ND	U	0.00112	ND	U	0.0012	ND	U	0.00111	ND	U	0.00113	ND	U	0.00108	ND	U	0.00119	NA	NA
Semivolatile Organic Compounds																					
62-75-9	N-Nitrosodimethylamine	ND	U	0.0374	ND	U	0.04	ND	U	0.037	ND	U	0.0375	ND	U	0.036	ND	U	0.0396	NA	NA
108-95-2	Phenol	ND	U	0.0374	ND	U	0.04	ND	U	0.037	ND	U	0.0375	ND	U	0.036	ND	U	0.0396	100	0.33
111-44-4	bis(2-Chloroethyl)ether	ND	U	0.0374	ND	U	0.04	ND	U	0.037	ND	U	0.0375	ND	U	0.036	ND	U	0.0396	NA	NA
95-57-8	2-Chlorophenol	ND	U	0.0374	ND	U	0.04	ND	U	0.037	ND	U	0.0375	ND	U	0.036	ND	U	0.0396	NA	NA
541-73-1	1,3-Dichlorobenzene	ND	U	0.0374	ND	U	0.04	ND	U	0.037	ND	U	0.0375	ND	U	0.036	ND	U	0.0396	49	NA
106-46-7	1,4-Dichlorobenzene	ND	U	0.0374	ND	U	0.04	ND	U	0.037	ND	U	0.0375	ND	U	0.036	ND	U	0.0396	13	NA
100-51-6	Benzyl alcohol	ND	U	0.0374	ND	U	0.04	ND	U	0.037	ND	U	0.0375	ND	U	0.036	ND	U	0.0396	NA	NA
95-50-1	1,2-Dichlorobenzene	ND	U	0.0374	ND	U	0.04	ND	U	0.037	ND	U	0.0375	ND	U	0.036	ND	U	0.0396	100	NA
95-48-7	2-Methylphenol	ND	U	0.0374	ND	U	0.04	ND	U	0.037	ND	U	0.0375	ND	U	0.036	ND	U	0.0396	100	NA
108-60-1	Bis(2-chloroisopropyl)ether	ND	U	0.0374	ND	U	0.04	ND	U	0.037	ND	U	0.0375	ND	U	0.036	ND	U	0.0396	NA	NA
106-44-5	3&4 Methylphenol	ND	U	0.0374	ND	U	0.04	ND	U	0.037	ND	U	0.0375	ND	U	0.036	ND	U	0.0396	100	NA
621-64-7	N-Nitroso-di-n-propylamine	ND	U	0.0374	ND	U	0.04	ND	U	0.037	ND	U	0.0375	ND	U	0.036	ND	U	0.0396	NA	NA
67-72-1	Hexachloroethane	ND	U	0.0374	ND	U	0.04	ND	U	0.037	ND	U	0.0375	ND	U	0.036	ND	U	0.0396	NA	NA
98-95-3	Nitrobenzene	ND	U	0.0374	ND	U	0.04	ND	U	0.037	ND	U	0.0375	ND	U	0.036	ND	U	0.0396	NA	NA
78-59-1	Isophorone	ND	U	0.0374	ND	U	0.04	ND	U	0.037	ND	U	0.0375	ND	U	0.036	ND	U	0.0396	NA	NA
88-75-5	2-Nitrophenol	ND	U	0.0374	ND	U	0.04	ND	U	0.037	ND	U	0.0375	ND	U	0.036	ND	U	0.0396	NA	NA
105-67-9	2,4-Dimethylphenol	ND	U	0.0374	ND	U	0.04	ND	U	0.037	ND	U	0.0375	ND	U	0.036	ND	U	0.0396	NA	NA
65-85-0	Benzoic acid	ND	U	0.0932	ND	U	0.0998	ND	U	0.0923	ND	U	0.0936	ND	U	0.0898	ND	U	0.0988	NA	NA
111-91-1	bis(2-Chloroethoxy)methane	ND	U	0.0374	ND	U	0.04	ND	U	0.037	ND	U	0.0375	ND	U	0.036	ND	U	0.0396	NA	NA
120-83-2	2,4-Dichlorophenol	ND	U	0.0374	ND	U	0.04	ND	U	0.037	ND	U	0.0375	ND	U	0.036	ND	U	0.0396	NA	NA
120-82-1	1,2,4-Trichlorobenzene	ND	U	0.0374	ND	U	0.04	ND	U	0.037	ND	U	0.0375	ND	U	0.036	ND	U	0.0396	NA	NA
91-20-3	Naphthalene	ND	U	0.0374	ND	U	0.04	ND	U	0.037	0.228		0.0375	ND	U	0.036	ND	U	0.0396	100	12
106-47-8	4-Chloroaniline	ND	U	0.0374	ND	U	0.04	ND	U	0.037	ND	U	0.0375	ND	U	0.036	ND	U	0.0396	NA	NA
87-68-3	Hexachlorobutadiene	ND	U	0.0374	ND	U	0.04	ND	U	0.037	ND	U	0.0375	ND	U	0.036	ND	U	0.0396	NA	NA
59-50-7	4-Chloro-3-methylphenol	ND	U	0.0374	ND	U	0.04	ND	U	0.037	ND	U	0.0375	ND	U	0.036	ND	U	0.0396	NA	NA
91-57-6	2-Methylnaphthalene	ND	U	0.0374	ND	U	0.04	ND	U	0.037	0.121	J	0.0375	ND	U	0.036	ND	U	0.0396	NA	NA
77-47-4	Hexachlorocyclopentadiene	ND	U	0.0374	ND	U	0.04	ND	U	0.037	ND	U	0.0375	ND	U	0.036	ND	U	0.0396	NA	NA
88-06-2	2,4,6-Trichlorophenol	ND	U	0.0374	ND	U	0.04	ND	U	0.037	ND	U	0.0375	ND	U	0.036	ND	U	0.0396	NA	NA
95-95-4	2,4,5-Trichlorophenol	ND	U	0.0374	ND	U	0.04	ND	U	0.037	ND	U	0.0375	ND	U	0.036	ND	U	0.0396	NA	NA
91-58-7	2-Chloronaphthalene	ND	U	0.0374	ND	U	0.04	ND	U	0.037	ND	U	0.0375	ND	U	0.036	ND	U	0.0396	NA	NA
88-74-4	2-Nitroaniline	ND	U	0.0374	ND	U	0.04	ND	U	0.037	ND	U	0.0375	ND	U	0.036	ND	U	0.0396	NA	NA
131-11-3	Dimethylphthalate	ND	U	0.0374	ND	U	0.04	ND	U	0.037	ND	U	0.0375	ND	U	0.036	ND	U	0.0396	NA	NA
208-96-8	Acenaphthylene	ND	U	0.0374	ND	U	0.04	ND	U	0.037	0.0797	J	0.0375	ND	U	0.036	ND	U	0.0396	100	100
99-09-2	3-Nitroaniline	ND	U	0.0374	ND	U	0.04	ND	U	0.037	ND	U	0.0375	ND	U	0.036	ND	U	0.0396	NA	NA

Table 3
Soil Sampling Results - Former Kentucky Fried Chicken
255 East 138th Street, Bronx, New York

	Laboratory ID:	1200215-01			1200215-02			1200215-03			1200215-04			1200215-05			1200215-06			Residential Restricted Use Soil Cleanup Objective	Track 1 Cleanup Numbers
	Brinkerhoff Sample ID:	KFC-1A			KFC-1B			KFC-1C			KFC-2A			KFC-2B			KFC-2C				
	Depth (feet):	4.5-5.0			6.0-6.5			24.5-25.0			4.5-5.0			7.0-7.5			24.5-25.0				
	Matrix:	SOIL			SOIL			SOIL			SOIL			SOIL			SOIL				
CAS #	Sampled Date	04/10/12			04/10/12			04/10/12			04/10/12			04/10/12			04/10/12				
	Parameter	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL		
83-32-9	Acenaphthene	ND	U	0.0374	ND	U	0.04	ND	U	0.037	0.311		0.0375	ND	U	0.036	ND	U	0.0396	100	20
51-28-5	2,4-Dinitrophenol	ND	U	0.0374	ND	U	0.04	ND	U	0.037	ND	U	0.0375	ND	U	0.036	ND	U	0.0396	NA	NA
100-02-7	4-Nitrophenol	ND	U	0.0374	ND	U	0.04	ND	U	0.037	ND	U	0.0375	ND	U	0.036	ND	U	0.0396	NA	NA
132-64-9	Dibenzofuran	ND	U	0.0374	ND	U	0.04	ND	U	0.037	0.204		0.0375	ND	U	0.036	ND	U	0.0396	59	NA
606-20-2	2,6-Dinitrotoluene	ND	U	0.0374	ND	U	0.04	ND	U	0.037	ND	U	0.0375	ND	U	0.036	ND	U	0.0396	NA	NA
121-14-2	2,4-Dinitrotoluene	ND	U	0.0374	ND	U	0.04	ND	U	0.037	ND	U	0.0375	ND	U	0.036	ND	U	0.0396	NA	NA
84-66-2	Diethylphthalate	ND	U	0.0374	ND	U	0.04	ND	U	0.037	ND	U	0.0375	ND	U	0.036	ND	U	0.0396	NA	NA
7005-72-3	4-Chlorophenyl-phenylether	ND	U	0.0374	ND	U	0.04	ND	U	0.037	ND	U	0.0375	ND	U	0.036	ND	U	0.0396	NA	NA
86-73-7	Fluorene	ND	U	0.0374	ND	U	0.04	ND	U	0.037	0.329		0.0375	ND	U	0.036	ND	U	0.0396	100	30
100-01-6	4-Nitroaniline	ND	U	0.0374	ND	U	0.04	ND	U	0.037	ND	U	0.0375	ND	U	0.036	ND	U	0.0396	NA	NA
534-52-1	4,6-Dinitro-2-methylphenol	ND	U	0.0374	ND	U	0.04	ND	U	0.037	ND	U	0.0375	ND	U	0.036	ND	U	0.0396	NA	NA
86-30-6	N-Nitrosodiphenylamine	ND	U	0.0374	ND	U	0.04	ND	U	0.037	ND	U	0.0375	ND	U	0.036	ND	U	0.0396	NA	NA
101-55-3	4-Bromophenyl-phenylether	ND	U	0.0374	ND	U	0.04	ND	U	0.037	ND	U	0.0375	ND	U	0.036	ND	U	0.0396	NA	NA
118-74-1	Hexachlorobenzene	ND	U	0.0374	ND	U	0.04	ND	U	0.037	ND	U	0.0375	ND	U	0.036	ND	U	0.0396	1.2	NA
87-86-5	Pentachlorophenol	ND	U	0.0374	ND	U	0.04	ND	U	0.037	ND	U	0.0375	ND	U	0.036	ND	U	0.0396	6.7	0.8
85-01-8	Phenanthrene	0.223		0.0374	ND	U	0.04	ND	U	0.037	3.74		0.0375	0.0426	J	0.036	ND	U	0.0396	100	100
120-12-7	Anthracene	0.0569	J	0.0374	ND	U	0.04	ND	U	0.037	0.89		0.0375	ND	U	0.036	ND	U	0.0396	100	100
84-74-2	Di-n-butylphthalate	ND	U	0.0374	ND	U	0.04	ND	U	0.037	0.12	J	0.0375	ND	U	0.036	ND	U	0.0396	NA	NA
206-44-0	Fluoranthene	0.291		0.0374	ND	U	0.04	ND	U	0.037	1.46	D	0.188	0.0624	J	0.036	ND	U	0.0396	100	100
129-00-0	Pyrene	0.282		0.0374	0.0437	J	0.04	ND	U	0.037	4.5		0.0375	0.0693	J	0.036	ND	U	0.0396	100	100
85-68-7	Butylbenzylphthalate	ND	U	0.0374	ND	U	0.04	ND	U	0.037	1.7		0.0375	ND	U	0.036	ND	U	0.0396	NA	NA
91-94-1	3,3-Dichlorobenzidine	ND	U	0.0932	ND	U	0.0998	ND	U	0.0923	ND	U	0.0936	ND	U	0.0898	ND	U	0.0988	NA	NA
56-55-3	Benzo(a)anthracene	0.122	J	0.0374	ND	U	0.04	ND	U	0.037	**2.02**		0.0375	ND	U	0.036	ND	U	0.0396	1	1
117-81-7	bis(2-Ethylhexyl)phthalate	ND	U	0.0374	ND	U	0.04	ND	U	0.037	0.558		0.0375	ND	U	0.036	ND	U	0.0396	NA	NA
218-01-9	Chrysene	0.115	J	0.0374	0.0437	J	0.04	ND	U	0.037	**2.12**		0.0375	ND	U	0.036	ND	U	0.0396	3.9	1
117-84-0	Di-n-octyl phthalate	ND	U	0.0374	ND	U	0.04	ND	U	0.037	ND	U	0.0375	ND	U	0.036	ND	U	0.0396	NA	NA
205-99-2	Benzo(b)fluoranthene	0.111	J	0.0374	ND	U	0.04	ND	U	0.037	**2.32**		0.0375	ND	U	0.036	ND	U	0.0396	1	1
207-08-9	Benzo(k)fluoranthene	0.0969	J	0.0374	ND	U	0.04	ND	U	0.037	**1.87**		0.0375	ND	U	0.036	ND	U	0.0396	3.9	0.8
50-32-8	Benzo(a)pyrene	0.119	J	0.0374	ND	U	0.04	ND	U	0.037	**1.91**		0.0375	ND	U	0.036	ND	U	0.0396	1	1
193-39-5	Indeno(1,2,3-cd)pyrene	0.058	J	0.0374	ND	U	0.04	ND	U	0.037	**0.595**		0.0375	ND	U	0.036	ND	U	0.0396	0.5	0.5
53-70-3	Dibenz(a,h)anthracene	ND	U	0.0374	ND	U	0.04	ND	U	0.037	0.324		0.0375	ND	U	0.036	ND	U	0.0396	0.33	0.33
191-24-2	Benzo(g,h,i)perylene	0.058	J	0.0374	ND	U	0.04	ND	U	0.037	0.576		0.0375	ND	U	0.036	ND	U	0.0396	100	100
Pesticides																					
319-84-6	alpha-BHC	ND	U	0.000741	ND	U	0.000793	ND	U	0.000734	ND	U	0.000744	ND	U	0.000714	ND	U	0.000786	0.48	0.02
319-85-7	beta-BHC	ND	U	0.000741	ND	U	0.000793	ND	U	0.000734	ND	U	0.000744	ND	U	0.000714	ND	U	0.000786	0.36	0.036
319-86-8	delta-BHC	ND	U	0.000741	ND	U	0.000793	ND	U	0.000734	ND	U	0.000744	ND	U	0.000714	ND	U	0.000786	100	0.04
58-89-9	gamma-BHC (Lindane)	ND	U	0.000741	ND	U	0.000793	ND	U	0.000734	ND	U	0.000744	ND	U	0.000714	ND	U	0.000786	1.3	0.1
76-44-8	Heptachlor	ND	U	0.000741	ND	U	0.000793	ND	U	0.000734	ND	U	0.000744	ND	U	0.000714	ND	U	0.000786	2.1	0.042
309-00-2	Aldrin	ND	U	0.000741	ND	U	0.000793	ND	U	0.000734	ND	U	0.000744	ND	U	0.000714	ND	U	0.000786	0.097	0.005
1024-57-3	Heptachlor epoxide	ND	U	0.000741	ND	U	0.000793	ND	U	0.000734	ND	U	0.000744	ND	U	0.000714	ND	U	0.000786	NA	NA
959-98-8	Endosulfan I	ND	U	0.000741	ND	U	0.000793	ND	U	0.000734	ND	U	0.000744	ND	U	0.000714	ND	U	0.000786	24	2.4
60-57-1	Dieldrin	ND	U	0.00149	ND	U	0.0016	ND	U	0.00148	ND	U	0.0015	ND	U	0.00144	ND	U	0.00158	0.2	0.005
72-55-9	4,4-DDE	ND	U	0.00149	ND	U	0.0016	ND	U	0.00148	ND	U	0.0015	ND	U	0.00144	ND	U	0.00158	8.9	0.0033
72-20-8	Endrin	ND	U	0.00149	ND	U	0.0016	ND	U	0.00148	ND	U	0.0015	ND	U	0.00144	ND	U	0.00158	11	0.014
33213-65-9	Endosulfan II	ND	U	0.00149	ND	U	0.0016	ND	U	0.00148	ND	U	0.0015	ND	U	0.00144	ND	U	0.00158	24	2.4
72-54-8	4,4-DDD	ND	U	0.00149	ND	U	0.0016	ND	U	0.00148	ND	U	0.0015	ND	U	0.00144	ND	U	0.00158	13	0.0033
1031-07-8	Endosulfan Sulfate	ND	U	0.00149	ND	U	0.0016	ND	U	0.00148	ND	U	0.0015	ND	U	0.00144	ND	U	0.00158	24	2.4
50-29-3	4,4-DDT	ND	U	0.00149	ND	U	0.0016	ND	U	0.00148	ND	U	0.0015	0.00188		0.00144	ND	U	0.00158	7.9	0.0033
72-43-5	Methoxychlor	ND	U	0.00736	ND	U	0.008	ND	U	0.00741	ND	U	0.00751	ND	U	0.00721	ND	U	0.00793	NA	NA
53494-70-5	Endrin Ketone	ND	U	0.00149	ND	U	0.0016	ND	U	0.00148	ND	U	0.0015	ND	U	0.00144	ND	U	0.00158	NA	NA
7421-93-4	Endrin aldehyde	ND	U	0.00149	ND	U	0.0016	ND	U	0.00148	ND	U	0.0015	ND	U	0.00144	ND	U	0.00158	NA	NA
5103-71-9	alpha-Chlordane	ND	U	0.000741	ND	U	0.000793	ND	U	0.000734	0.00282		0.000744	ND	U	0.000714	ND	U	0.000786	4.2	0.094

Table 3
Soil Sampling Results - Former Kentucky Fried Chicken
255 East 138th Street, Bronx, New York

	Laboratory ID:	1200215-01			1200215-02			1200215-03			1200215-04			1200215-05			1200215-06			Residential Restricted Use Soil Cleanup Objective	Track 1 Cleanup Numbers
	Brinkerhoff Sample ID:	KFC-1A			KFC-1B			KFC-1C			KFC-2A			KFC-2B			KFC-2C				
	Depth (feet):	4.5-5.0			6.0-6.5			24.5-25.0			4.5-5.0			7.0-7.5			24.5-25.0				
	Matrix:	SOIL			SOIL			SOIL			SOIL			SOIL			SOIL				
CAS #	Sampled Date	04/10/12			04/10/12			04/10/12			04/10/12			04/10/12			04/10/12				
	Parameter	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL		
72-55-9	gamma-Chlordane	ND	U	0.000741	ND	U	0.000793	ND	U	0.000734	ND	U	0.000744	ND	U	0.000714	ND	U	0.000786	NA	NA
8001-35-2	Toxaphene	ND	U	0.0374	ND	U	0.04	ND	U	0.037	ND	U	0.0375	ND	U	0.036	ND	U	0.0396	NA	NA
Polychlorinated Biphenyls																					
12674-11-2	Aroclor-1016	ND	U	0.0186	ND	U	0.02	ND	U	0.0193	ND	U	0.0187	ND	U	0.018	ND	U	0.0198	NA	0.1
11104-28-2	Aroclor-1221	ND	U	0.0186	ND	U	0.02	ND	U	0.0193	ND	U	0.0187	ND	U	0.018	ND	U	0.0198	NA	0.1
11141-16-5	Aroclor-1232	ND	U	0.0186	ND	U	0.02	ND	U	0.0193	ND	U	0.0187	ND	U	0.018	ND	U	0.0198	NA	0.1
53469-21-9	Aroclor-1242	ND	U	0.0186	ND	U	0.02	ND	U	0.0193	ND	U	0.0187	ND	U	0.018	ND	U	0.0198	NA	0.1
12672-29-6	Aroclor-1248	ND	U	0.0186	ND	U	0.02	ND	U	0.0193	ND	U	0.0187	ND	U	0.018	ND	U	0.0198	NA	0.1
11097-69-1	Aroclor-1254	ND	U	0.0186	ND	U	0.02	ND	U	0.0193	ND	U	0.0187	ND	U	0.018	ND	U	0.0198	NA	0.1
11096-82-5	Aroclor-1260	ND	U	0.0186	ND	U	0.02	ND	U	0.0193	ND	U	0.0187	ND	U	0.018	ND	U	0.0198	NA	0.1
37324-23-5	Aroclor-1262	ND	U	0.0186	ND	U	0.02	ND	U	0.0193	ND	U	0.0187	ND	U	0.018	ND	U	0.0198	NA	0.1
11100-14-4	Aroclor-1268	ND	U	0.0186	ND	U	0.02	ND	U	0.0193	ND	U	0.0187	ND	U	0.018	ND	U	0.0198	NA	0.1
Metals																					
7439-97-6	Mercury	0.131		0.112	0.503		0.12	ND	U	0.111	**0.507**		0.113	**0.829**		0.108	ND	U	0.119	0.81	0.18
7429-90-5	Silver	ND	U	0.35	ND	U	0.42	ND	U	0.39	0.277	B	0.38	ND	U	0.38	ND	U	0.43	36	2
7440-36-0	Aluminum	5130		35	11800		42	6980		39	5100		38	5190		38	9730		43	NA	NA
7440-38-2	Arsenic	**35.5**		0.69	3.68		0.85	0.99		0.77	7.57		0.76	1.03		0.76	4.26		0.86	16	13
7440-39-3	Barium	64.7		0.69	91.4		0.85	37.6		0.77	91.6		0.76	35.6	B	0.76	49.7		0.86	400	350
7440-41-7	Beryllium	0.225	B	0.28	0.58		0.34	0.38		0.31	0.4		0.3	0.295		0.3	0.45		0.34	72	7.2
7440-43-9	Calcium	9970		3.5	14300		42	30700		39	44600		38	57800		38	19200		43	NA	NA
7440-70-2	Cadmium	1.58		0.35	ND	U	0.42	ND	U	0.39	1.6		0.38	ND	U	0.38	ND	U	0.43	4.3	2.5
7440-47-3	Cobalt	15.7		0.35	8.51		0.42	5.83		0.39	5.49		0.38	4.33		0.38	20.4		0.43	NA	NA
7440-48-4	Chromium	23		0.35	27.1		0.42	12.8		0.39	20.4		0.38	11.2		0.38	16.1		0.43	290	30-Jan
7440-50-8	Copper	**520**		3.5	33.9		0.42	16.4		0.39	**55.2**		0.38	13.3		0.38	23.5		0.43	270	50
7439-92-1	Iron	126000		350	23800		42	15800		39	11400		38	9780		38	18700		43	NA	NA
7439-92-1	Potassium	1070		7	3030		8	1320		8	1080		8	1470		8	1530		9	NA	NA
7439-95-4	Magnesium	1260	R	3.5	11200	R	42	14300	R	39	7090	R	38	30800	R	38	8480	R	43	NA	NA
7439-96-5	Manganese	1160	R	3.5	255	R	4.2	515	R	3.9	189	R	3.8	281	R	3.8	529	R	4.3	2000	1600
7439-97-6	Sodium	159		7	144		8	125		8	252		8	219		8	150		9	NA	NA
7440-02-0	Nickel	27.2		0.35	19.5		0.42	13.7		0.39	21		0.38	9.89		0.38	**39.6**		0.43	310	30
7440-09-7	Lead	**173**		6.9	**137**		0.85	9.35		0.77	**185**		7.6	7.57		0.76	11.4		0.86	400	63
7782-49-2	Antimony	ND	U	1.7	ND	U	2.1	ND	U	1.9	ND	U	1.9	ND	U	1.9	ND	U	2.1	NA	NA
7440-22-4	Selenium	ND	U	3	ND	U	3	ND	U	3	ND	U	3	ND	U	3	ND	U	3	180	3.9
7440-23-5	Thallium	ND	U	1.4	ND	U	1.7	ND	U	1.5	ND	U	1.5	ND	U	1.5	ND	U	1.7	NA	NA
7440-62-2	Vanadium	91.1		0.35	34.7		0.42	15.8		0.39	21.3		0.38	17.7		0.38	22.1		0.43	NA	NA
7440-66-6	Zinc	592		6.9	114		0.85	35.4		0.77	**222**		7.6	29.2		0.76	57.7		0.86	10000	109
xxxx-xx-02	Solids, Percent	90			81			90			89			93			82			NA	NA

Notes:

BOLD indicates concentration exceeds the Track 2- Restricted Residential Use Soil Cleanup Objective

highlight indicates concentration exceeds the Track 1 Soil Cleanup Objective

Conc = Concentration

Q = Qualifier

MDL = Laboratory method detection limit

ND = Analyzed for but Not Detected at the MDL

U = Not detected above instrument detection levels

J = The concentration was detected at a value below Reporting Limit and above MDL

D = Sample was diluted.

B = Indicates compound found in associated blank

R = Data rejected by validator

All values are expressed in milligrams per Kilograms (mg/Kg)

* Values outside of QC limits

~ = Not analyzed

NA = Not Applicable

Table 4
Soil Sampling Results - Historic Fill
255 East 138th Street, Bronx, New York

	Laboratory ID:	1200217-01			1200217-02			1200217-03			1200233-01			1200233-02			1200233-03		
	Brinkerhoff Sample ID:	HF-1A			HF-1B			HF-1C			HF-2A			HF-2B			HF-2C		
	Depth (feet):	4.5-5.0			7.5-8.0			24.5-25.0			4.5-5.0			5.5-6.0			24.5-25.0		
	Matrix:	SOIL			SOIL			SOIL			SOIL			SOIL			SOIL		
CAS #	Sampled Date	04/09/12			04/09/12			04/09/12			04/11/12			04/11/12			04/11/12		
	Parameter	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL
Volatile Organic Compounds																			
78-93-3	Acrolein	ND	U	0.00713	ND	U	0.00668	ND	U	0.00663	ND	U	0.00726	ND	U	0.00676	ND	U	0.0066
107-13-1	Acrylonitrile	ND	U	0.00238	ND	U	0.00223	ND	U	0.00221	ND	U	0.00242	ND	U	0.00225	ND	U	0.0022
67-64-1	Acetone	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	0.0124		0.00121	ND	U	0.00113	0.00833		0.0011
124-48-1	Dibromochloromethane	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
74-87-3	Chloromethane	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
75-01-4	Vinyl Chloride	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
74-83-9	Bromomethane	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
75-00-3	Chloroethane	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
75-69-4	Trichlorofluoromethane	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
75-35-4	1,1-Dichloroethene	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
75-15-0	Carbon disulfide	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
75-09-2	Methylene Chloride	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
156-60-5	trans-1,2-Dichloroethene	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
75-34-3	1,1-Dichloroethane	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
108-05-4	Vinyl acetate	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
590-20-7	2,2-Dichloropropane	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
78-93-3	2-Butanone	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
156-59-4	cis-1,2-Dichloroethene	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
67-66-3	Chloroform	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
74-97-5	Bromochloromethane	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
71-55-6	1,1,1-Trichloroethane	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
563-58-6	1,1-Dichloropropene	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
56-23-5	Carbon Tetrachloride	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
107-06-2	1,2-Dichloroethane	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
71-43-2	Benzene	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
79-01-6	Trichloroethene	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
78-87-5	1,2-Dichloropropane	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
75-27-4	Bromodichloromethane	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
74-95-3	Dibromomethane	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
110-75-8	2-Chloroethyl vinyl ether	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
10061-01-5	cis-1,3-Dichloropropene	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
108-88-3	Toluene	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
10061-02-6	trans-1,3-Dichloropropene	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
79-00-5	1,1,2-Trichloroethane	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
108-10-1	4-Methyl-2-Pentanone	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
106-93-4	1,2-Dibromoethane	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
591-78-6	2-Hexanone	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
142-28-9	1,3-Dichloropropane	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
127-18-4	Tetrachloroethene	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
75-71-8	Dichlorodifluoromethane	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
100-41-4	Ethylbenzene	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	0.0018	U	0.00121	ND	U	0.00113	ND	U	0.0011
108-90-7	Chlorobenzene	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
126777-61-2	m/p-Xylenes	ND	U	0.00238	ND	U	0.00223	ND	U	0.00221	ND	U	0.00242	ND	U	0.00225	ND	U	0.0022
95-47-6	o-Xylene	ND	U	0.00238	ND	U	0.00223	ND	U	0.00221	ND	U	0.00242	ND	U	0.00225	ND	U	0.0022
100-42-5	Styrene	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
75-25-2	Bromoform	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
98-82-8	Isopropylbenzene	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
96-18-4	1,2,3-Trichloropropane	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
103-65-1	n-Propyl Benzene	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
108-86-1	Bromobenzene	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
108-67-8	1,3,5-Trimethylbenzene	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
95-49-8	2-Chlorotoluene	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
106-43-4	4-Chlorotoluene	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
98-06-6	tert-Butylbenzene	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
95-63-6	1,2,4-Trimethylbenzene	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
135-98-8	sec-Butylbenzene	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
99-87-6	p-Isopropyltoluene	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
541-73-1	1,3-Dichlorobenzene	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
106-46-7	1,4-Dichlorobenzene	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
104-51-8	n-Butyl Benzene	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
95-50-1	1,2-Dichlorobenzene	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
96-12-8	1,2-Dibromo-3-Chloropropane	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
120-82-1	1,2,4-Trichlorobenzene	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
87-68-3	Hexachlorobutadiene	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
91-20-3	Naphthalene	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
87-61-6	1,2,3-Trichlorobenzene	ND	U	0.00119	ND	U	0.00111	ND	U	0.0011	ND	U	0.00121	ND	U	0.00113	ND	U	0.0011
Semivolatile Organic Compounds																			
62-75-9	N-Nitrosodimethylamine	ND	U	0.0395	ND	U	0.0371	ND	U	0.0368	ND	U	0.0403	ND	U	0.0375	ND	U	0.0366
108-95-2	Phenol	ND	U	0.0395	ND	U	0.0371	ND	U	0.0368	ND	U	0.0403	ND	U	0.0375	ND	U	0.0366
111-44-4	bis(2-Chloroethyl)ether	ND	U	0.0395	ND	U	0.0371	ND	U	0.0368	ND	U	0.0403	ND	U	0.0375	ND	U	0.0366
95-57-8	2-Chlorophenol	ND	U	0.0395	ND	U	0.0371	ND	U	0.0368	ND	U	0.0403	ND	U	0.0375	ND	U	0.0366
541-73-1	1,3-Dichlorobenzene	ND	U	0.0395	ND	U	0.0371	ND	U	0.0368	ND	U	0.0403	ND	U	0.0375	ND	U	0.0366
106-46-7	1,4-Dichlorobenzene	ND	U	0.0395	ND	U	0.0371	ND	U	0.0368	ND	U	0.0403	ND	U	0.0375	ND	U	0.0366
100-51-6	Benzyl alcohol	ND	U	0.0395	ND	U	0.0371	ND	U	0.0368	ND	U	0.0403	ND	U	0.0375	ND	U	0.0366
95-50-1	1,2-Dichlorobenzene	ND	U	0.0395	ND	U	0.0371	ND	U	0.0368	ND	U	0.0403	ND	U	0.0375	ND	U	0.0366
95-48-7	2-Methylphenol	ND	U	0.0395	ND	U	0.0371	ND	U	0.0368	ND	U	0.0403	ND	U	0.0375	ND	U	0.0366
108-60-1	Bis(2-chloroisopropyl)ether	ND	U	0.0395	ND	U	0.0371	ND	U	0.0368	ND	U	0.0403	ND	U	0.0375	ND	U	0.0366
106-44-5	3&4 Methylphenol	0.108	J	0.0395	ND	U	0.0371	ND	U	0.0368	ND	U	0.0403	ND	U	0.0375	ND	U	0.0366
621-64-7	N-Nitroso-di-n-propylamine	ND	U	0.0395	ND	U	0.0371	ND	U	0.0368	ND	U	0.0403	ND	U	0.0375	ND	U	0.0366
67-72-1	Hexachloroethane	ND	U	0.0395	ND	U	0.0371	ND	U	0.0368	ND	U	0.0403	ND	U	0.0375	ND	U	0.0366
98-95-3	Nitrobenzene	ND	U	0.0395	ND	U	0.0371	ND	U	0.0368	ND	U	0.0403	ND	U	0.0375	ND	U	0.0366
78-59-1	Isophorone	ND	U	0.0395	ND	U	0.0371	ND	U	0.0368	ND	U	0.0403	ND	U	0.0375	ND	U	0.0366
88-75-5	2-Nitrophenol	ND	U	0.0395	ND	U	0.0371	ND	U	0.0368	ND	U	0.0403	ND	U	0.0375	ND	U	0.0366
105-67-9	2,4-Dimethylphenol	ND	U	0.0395	ND	U	0.0371	ND	U	0.0368	ND	U	0.0403	ND	U	0.0375	ND	U	0.0366
65-85-0	Benzoic acid	ND	R	0.0986	ND	R	0.0924	ND	R	0.0917	ND	U	0.1	ND	U	0.0936	ND	U	0.0913
111-91-1	bis(2-Chloroethoxy)methane	ND	U	0.0395	ND	U	0.0371	ND	U	0.0368	ND	U	0.0403	ND	U	0.0375	ND	U	0.0366
120-83-2	2,4-Dichlorophenol	ND	U	0.0395	ND	U	0.0371	ND	U	0.0368	ND	U	0.0403	ND	U	0.0375	ND	U	0.0366
120-82-1	1,2,4-Trichlorobenzene	ND	U	0.0395	ND	U	0.0371	ND	U	0.0368	ND	U	0.0403	ND	U	0.0375	ND	U	0.0366
91-20-3	Naphthalene	0.539		0.0395	ND	U	0.0371	ND	U	0.0368	0.0549	J	0.0403	0.121	J	0.0375	ND	U	0.0366
106-47-8	4-Chloroaniline	ND	U	0.0395	ND	U	0.0371	ND	U	0.0368	ND	U	0.0403	ND	U	0.0375	ND	U	0.0366
87-68-3	Hexachlorobutadiene	ND	U	0.0395	ND	U	0.0371	ND	U	0.0368	ND	U	0.0403	ND	U	0.0375	ND	U	0.0366
59-50-7	4-Chloro-3-methylphenol	ND	U	0.0395	ND	U	0.0371	ND	U	0.0368	ND	U	0.0403	ND	U	0.0375	ND	U	0.0366
91-57-6	2-Methylnaphthalene	0.328		0.0395	ND	U	0.0371	ND	U	0.0368	ND	U	0.0403	0.065	J	0.0375	ND	U	0.0366
77-47-4	Hexachlorocyclopentadiene	ND	U	0.0395	ND	U	0.0371	ND	U	0.0368	ND	U	0.0403	ND	U	0.0375	ND	U	0.0366
88-06-2	2,4,6-Trichlorophenol	ND	U	0.0395	ND	U	0.0371	ND	U	0.0368	ND	U	0.0403	ND	U	0.0375	ND	U	0.0366
95-95-4	2,4,5-Trichlorophenol	ND	U	0.0395	ND	U	0.0371	ND	U	0.0368	ND	U	0.0403	ND	U	0.0375	ND	U	0.0366
91-58-7	2-Chloronaphthalene	ND	U	0.0395	ND	U	0.0371	ND	U	0.0368	ND	U	0.0403	ND	U	0.0375	ND	U	0.0366
88-74-4	2-Nitroaniline	ND	U	0.0395	ND	U	0.0371	ND	U	0.0368	ND	U	0.0403	ND	U	0.0375	ND	U	0.0366
131-11-3	Dimethylphthalate	ND	U	0.0395	ND	U	0.0371	ND	U	0.0368	ND	U	0.0403	ND	U	0.0375	ND	U	0.0366
208-96-8	Acenaphthylene	1.52		0.0395	ND	U	0.0371	ND	U	0.0368	0.065	J	0.0403	0.112	J	0.0375	ND	U	0.0366
99-09-2	3-Nitroaniline	ND	U	0.0395	ND	U	0.0371	ND	U	0.0368	ND	U	0.0403	ND	U	0.0375	ND	U	0.0366
83-32-9	Acenaphthene	1.09		0.0395	ND	U	0.0371	ND	U	0.0368	0.0807	J	0.0403	0.217		0.0375	ND	U	0.0366

	Laboratory ID:	1200217-04			1200217-05			1200217-06			1200217-07			1200233-04			1200233-05		
	Brinkerhoff Sample ID:	HF-3A			HF-3B			HF-3C			HF-3C.1			HF-4A			HF-4B		
	Depth (feet):	4.5-5.0			6.5-7.0			24.5-25.0			24.5-25			4.0-4.5			5.0-5.5		
	Matrix:	SOIL			SOIL			SOIL			SOIL			SOIL			SOIL		
CAS #	Sampled Date	04/09/12			04/09/12			04/09/12			04/09/12			04/11/12			04/11/12		
	Parameter	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL
Volatile Organic Compounds																			
78-93-3	Acrolein	ND	U	0.00708	ND	U	0.00789	ND	U	0.00714	ND	U	0.00719	ND	U	0.00637	ND	U	0.0069
107-13-1	Acrylonitrile	ND	U	0.00236	ND	U	0.00263	ND	U	0.00238	ND	U	0.0024	ND	U	0.00212	ND	U	0.0023
67-64-1	Acetone	ND	U	0.00118	0.0105		0.00132	ND	U	0.00119	0.00425		0.0012	0.0293		0.00106	0.00367		0.00115
124-48-1	Dibromochloromethane	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	ND	U	0.00115
74-87-3	Chloromethane	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	ND	U	0.00115
75-01-4	Vinyl Chloride	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	ND	U	0.00115
74-83-9	Bromomethane	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	ND	U	0.00115
75-00-3	Chloroethane	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	ND	U	0.00115
75-69-4	Trichlorofluoromethane	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	ND	U	0.00115
75-35-4	1,1-Dichloroethene	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	ND	U	0.00115
75-15-0	Carbon disulfide	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	0.00122	J	0.00115
75-09-2	Methylene Chloride	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	ND	U	0.00115
156-60-5	trans-1,2-Dichloroethene	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	ND	U	0.00115
75-34-3	1,1-Dichloroethane	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	ND	U	0.00115
108-05-4	Vinyl acetate	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	ND	U	0.00115
590-20-7	2,2-Dichloropropane	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	ND	U	0.00115
78-93-3	2-Butanone	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	0.012		0.00106	ND	U	0.00115
156-59-4	cis-1,2-Dichloroethene	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	ND	U	0.00115
67-66-3	Chloroform	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	ND	U	0.00115
74-97-5	Bromochloromethane	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	ND	U	0.00115
71-55-6	1,1,1-Trichloroethane	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	ND	U	0.00115
563-58-6	1,1-Dichloropropene	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	ND	U	0.00115
56-23-5	Carbon Tetrachloride	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	ND	U	0.00115
107-06-2	1,2-Dichloroethane	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	ND	U	0.00115
71-43-2	Benzene	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	ND	U	0.00115
79-01-6	Trichloroethene	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	ND	U	0.00115
78-87-5	1,2-Dichloropropane	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	ND	U	0.00115
75-27-4	Bromodichloromethane	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	ND	U	0.00115
74-95-3	Dibromomethane	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	ND	U	0.00115
110-75-8	2-Chloroethyl vinyl ether	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	ND	U	0.00115
10061-01-5	cis-1,3-Dichloropropene	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	ND	U	0.00115
108-88-3	Toluene	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	0.00145	J	0.00106	0.0023		0.00115
10061-02-6	trans-1,3-Dichloropropene	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	ND	U	0.00115
79-00-5	1,1,2-Trichloroethane	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	ND	U	0.00115
108-10-1	4-Methyl-2-Pentanone	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	ND	U	0.00115
106-93-4	1,2-Dibromoethane	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	ND	U	0.00115
591-78-6	2-Hexanone	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	0.00435		0.00106	ND	U	0.00115
142-28-9	1,3-Dichloropropane	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	ND	U	0.00115
127-18-4	Tetrachloroethene	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	ND	U	0.00115
75-71-8	Dichlorodifluoromethane	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	ND	U	0.00115
100-41-4	Ethylbenzene	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	0.00206	J	0.00106	0.00278		0.00115
108-90-7	Chlorobenzene	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	ND	U	0.00115
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	ND	U	0.00115
126777-61-2	m/p-Xylenes	ND	U	0.00236	ND	U	0.00263	ND	U	0.00238	ND	U	0.0024	0.00236	J	0.00212	0.00537		0.00233
95-47-6	o-Xylene	ND	U	0.00236	ND	U	0.00263	ND	U	0.00238	ND	U	0.0024	ND	U	0.00212	0.00433	J	0.00233
100-42-5	Styrene	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	ND	U	0.00115
75-25-2	Bromoform	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	ND	U	0.00115
98-82-8	Isopropylbenzene	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	ND	U	0.00115
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	ND	U	0.00115
96-18-4	1,2,3-Trichloropropane	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	ND	U	0.00115
103-65-1	n-Propyl Benzene	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	0.00224		0.00106	0.00125	U	J
108-86-1	Bromobenzene	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	ND	U	0.00115
108-67-8	1,3,5-Trimethylbenzene	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	0.00241		0.00115
95-49-8	2-Chlorotoluene	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	ND	U	0.00115
106-43-4	4-Chlorotoluene	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	ND	U	0.00115
98-06-6	tert-Butylbenzene	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	ND	U	0.00115
95-63-6	1,2,4-Trimethylbenzene	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	0.00173	J	0.00115
135-98-8	sec-Butylbenzene	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	ND	U	0.00115
99-87-6	p-Isopropyltoluene	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	ND	U	0.00115
541-73-1	1,3-Dichlorobenzene	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	ND	U	0.00115
106-46-7	1,4-Dichlorobenzene	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	ND	U	0.00115
104-51-8	n-Butyl Benzene	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	0.00107	J	0.00106	ND	U	0.00115
95-50-1	1,2-Dichlorobenzene	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	ND	U	0.00115
96-12-8	1,2-Dibromo-3-Chloropropane	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	ND	U	0.00115
120-82-1	1,2,4-Trichlorobenzene	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	ND	U	0.00115
87-68-3	Hexachlorobutadiene	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	ND	U	0.00115
91-20-3	Naphthalene	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	ND	U	0.00115
87-61-6	1,2,3-Trichlorobenzene	ND	U	0.00118	ND	U	0.00132	ND	U	0.00119	ND	U	0.0012	ND	U	0.00106	ND	U	0.00115
Semivolatile Organic Compounds																			
62-75-9	N-Nitrosodimethylamine	ND	U	0.0393	ND	U	0.0438	ND	U	0.0396	ND	U	0.0399	ND	U	0.0354	ND	U	0.0383
108-95-2	Phenol	ND	U	0.0393	ND	U	0.0438	ND	U	0.0396	ND	U	0.0399	ND	U	0.0354	ND	U	0.0383
111-44-4	bis(2-Chloroethyl)ether	ND	U	0.0393	ND	U	0.0438	ND	U	0.0396	ND	U	0.0399	ND	U	0.0354	ND	U	0.0383
95-57-8	2-Chlorophenol	ND	U	0.0393	ND	U	0.0438	ND	U	0.0396	ND	U	0.0399	ND	U	0.0354	ND	U	0.0383
541-73-1	1,3-Dichlorobenzene	ND	U	0.0393	ND	U	0.0438	ND	U	0.0396	ND	U	0.0399	ND	U	0.0354	ND	U	0.0383
106-46-7	1,4-Dichlorobenzene	ND	U	0.0393	ND	U	0.0438	ND	U	0.0396	ND	U	0.0399	ND	U	0.0354	ND	U	0.0383
100-51-6	Benzyl alcohol	ND	U	0.0393	ND	U	0.0438	ND	U	0.0396	ND	U	0.0399	ND	U	0.0354	ND	U	0.0383
95-50-1	1,2-Dichlorobenzene	ND	U	0.0393	ND	U	0.0438	ND	U	0.0396	ND	U	0.0399	ND	U	0.0354	ND	U	0.0383
95-48-7	2-Methylphenol	ND	U	0.0393	ND	U	0.0438	ND	U	0.0396	ND	U	0.0399	ND	U	0.0354	ND	U	0.0383
108-60-1	Bis(2-chloroisopropyl)ether	ND	U	0.0393	ND	U	0.0438	ND	U	0.0396	ND	U	0.0399	ND	U	0.0354	ND	U	0.0383
106-44-5	3&4 Methylphenol	ND	U	0.0393	ND	U	0.0438	ND	U	0.0396	ND	U	0.0399	ND	U	0.0354	ND	U	0.0383
621-64-7	N-Nitroso-di-n-propylamine	ND	U	0.0393	ND	U	0.0438	ND	U	0.0396	ND	U	0.0399	ND	U	0.0354	ND	U	0.0383
67-72-1	Hexachloroethane	ND	U	0.0393	ND	U	0.0438	ND	U	0.0396	ND	U	0.0399	ND	U	0.0354	ND	U	0.0383
98-95-3	Nitrobenzene	ND	U	0.0393	ND	U	0.0438	ND	U	0.0396	ND	U	0.0399	ND	U	0.0354	ND	U	0.0383
78-59-1	Isophorone	ND	U	0.0393	ND	U	0.0438	ND	U	0.0396	ND	U	0.0399	ND	U	0.0354	ND	U	0.0383
88-75-5	2-Nitrophenol	ND	U	0.0393	ND	U	0.0438	ND	U	0.0396	ND	U	0.0399	ND	U	0.0354	ND	U	0.0383
105-67-9	2,4-Dimethylphenol	ND	U	0.0393	ND	U	0.0438	ND	U	0.0396	ND	U	0.0399	ND	U	0.0354	ND	U	0.0383
65-85-0	Benzoic acid	ND	R	0.098	ND	R	0.109	ND	R	0.0988	ND	R	0.0994	ND	U	0.0881	ND	U	0.0955
111-91-1	bis(2-Chloroethoxy)methane	ND	U	0.0393	ND	U	0.0438	ND	U	0.0396	ND	U	0.0399	ND	U	0.0354	ND	U	0.0383
120-83-2	2,4-Dichlorophenol	ND	U	0.0393	ND	U	0.0438	ND	U	0.0396	ND	U	0.0399	ND	U	0.0354	ND	U	0.0383
120-82-1	1,2,4-Trichlorobenzene	ND	U	0.0393	ND	U	0.0438	ND	U	0.0396	ND	U	0.0399	ND	U	0.0354	ND	U	0.0383
91-20-3	Naphthalene	0.156	J	0.0393	ND	U	0.0438	ND	U	0.0396	ND	U	0.0399	ND	U	0.0354	ND	U	0.0383
106-47-8	4-Chloroaniline	ND	U	0.0393	ND	U	0.0438	ND	U	0.0396	ND	U	0.0399	ND	U	0.0354	ND	U	0.0383
87-68-3	Hexachlorobutadiene	ND	U	0.0393	ND	U	0.0438	ND	U	0.0396	ND	U	0.0399	ND	U	0.0354	ND	U	0.0383
59-50-7	4-Chloro-3-methylphenol	ND	U	0.0393	ND	U	0.0438	ND	U	0.0396	ND	U	0.0399	ND	U	0.0354	ND	U	0.0383
91-57-6	2-Methylnaphthalene	0.0634	J	0.0393	ND	U	0.0438	ND	U	0.0396	ND	U	0.0399	ND	U	0.0354	ND	U	0.0383
77-47-4	Hexachlorocyclopentadiene	ND	U	0.0393	ND	U	0.0438	ND	U	0.0396	ND	U	0.0399	ND	U	0.0354	ND	U	0.0383
88-06-2	2,4,6-Trichlorophenol	ND	U	0.0393	ND	U	0.0438	ND	U	0.0396	ND	U	0.0399	ND	U	0.0354	ND	U	0.0383
95-95-4	2,4,5-Trichlorophenol	ND	U	0.0393	ND	U	0.0438	ND	U	0.0396	ND	U	0.0399	ND	U	0.0354	ND	U	0.0383
91-58-7	2-Chloronaphthalene	ND	U	0.0393	ND	U	0.0438	ND	U	0.0396	ND	U	0.0399	ND	U	0.0354	ND	U	0.0383
88-74-4	2-Nitroaniline	ND	U	0.0393	ND	U	0.0438	ND	U	0.0396	ND	U	0.0399	ND	U	0.0354	ND	U	0.0383
131-11-3	Dimethylphthalate	ND	U	0.0393	ND	U	0.0438	ND	U	0.0396	ND	U	0.0399	ND	U	0.0354	ND	U	0.0383
208-96-8	Acenaphthylene	ND	U	0.0393	ND	U	0.0438	ND	U	0.0396	ND	U	0.0399	0.322		0.0354	ND	U	0.0383
99-09-2	3-Nitroaniline	ND	U	0.0393	ND	U	0.0438	ND	U	0.0396	ND	U	0.0399	ND	U	0.0354	ND	U	0.0383
83-32-9	Acenaphthene	0.187	J	0.0393	0.127	J	0.0438	ND	U	0.0396	ND	U	0.0399	ND	U	0.0354	ND	U	0.0383

	Laboratory ID:	1200233-06			1200217-08			1200217-09			1200217-10			1200217-11			Residential Restricted Use Soil Cleanup Objective	Track 1 Cleanup Numbers
	Brinkerhoff Sample ID:	HF-4C			HF-6A			HF-6B			HF-6C			FB-SOIL				
	Depth (feet):	24.5-25.0			4.0-4.5			6.5-7.0			23.5-24.0			N/A				
	Matrix:	SOIL			SOIL			SOIL			SOIL			SOIL				
CAS #	Sampled Date	04/11/12			04/10/12			04/10/12			04/10/12			04/10/12				
	Parameter	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL		
Volatile Organic Compounds																		
78-93-3	Acrolein	ND	U	0.00673	ND	U	0.00671	ND	U	0.00735	ND	U	0.00708	ND	U	0.006	NA	NA
107-13-1	Acrylonitrile	ND	U	0.00234	ND	U	0.00224	ND	U	0.00245	ND	U	0.00236	ND	U	0.002	NA	NA
67-64-1	Acetone	0.0268	U	0.00112	ND	U	0.00112	0.00984		0.00123	ND	U	0.00118	ND	U	0.001	100	0.05
124-48-1	Dibromochloromethane	ND	U	0.00112	ND	U	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	NA	NA
74-87-3	Chloromethane	ND	U	0.00112	ND	U	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	NA	NA
75-01-4	Vinyl Chloride	ND	U	0.00112	ND	U	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	0.9	0.02
74-83-9	Bromomethane	ND	U	0.00112	ND	U	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	NA	NA
75-00-3	Chloroethane	ND	U	0.00112	ND	U	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	NA	NA
75-69-4	Trichlorofluoromethane	ND	U	0.00112	ND	U	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	NA	NA
75-35-4	1,1-Dichloroethene	ND	U	0.00112	ND	U	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	100	0.33
75-15-0	Carbon disulfide	ND	U	0.00112	ND	U	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	NA	NA
75-09-2	Methylene Chloride	ND	U	0.00112	0.0056		0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	100	0.05
156-60-5	trans-1,2-Dichloroethene	ND	U	0.00112	ND	U	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	100	0.19
75-34-3	1,1-Dichloroethane	ND	U	0.00112	ND	U	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	26	0.27
108-05-4	Vinyl acetate	ND	U	0.00112	ND	U	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	NA	NA
590-20-7	2,2-Dichloropropane	ND	U	0.00112	ND	U	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	NA	NA
78-93-3	2-Butanone	ND	U	0.00112	ND	U	0.00112	0.00435		0.00123	ND	U	0.00118	ND	U	0.001	100	0.12
156-59-4	cis-1,2-Dichloroethene	ND	U	0.00112	ND	U	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	100	0.25
67-66-3	Chloroform	ND	U	0.00112	ND	U	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	49	0.37
74-97-5	Bromochloromethane	ND	U	0.00112	ND	U	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	NA	NA
71-55-6	1,1,1-Trichloroethane	ND	U	0.00112	ND	U	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	100	0.68
563-58-6	1,1-Dichloropropene	ND	U	0.00112	ND	U	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	NA	NA
56-23-5	Carbon Tetrachloride	ND	U	0.00112	ND	U	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	2.4	0.76
107-06-2	1,2-Dichloroethane	ND	U	0.00112	ND	U	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	3.1	0.02
71-43-2	Benzene	ND	U	0.00112	ND	U	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	4.8	0.06
79-01-6	Trichloroethene	ND	U	0.00112	ND	U	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	21	0.47
78-87-5	1,2-Dichloropropane	ND	U	0.00112	ND	U	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	NA	NA
75-27-4	Bromodichloromethane	ND	U	0.00112	ND	U	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	NA	NA
74-95-3	Dibromomethane	ND	U	0.00112	ND	U	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	NA	NA
110-75-8	2-Chloroethyl vinyl ether	ND	U	0.00112	ND	U	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	NA	NA
10061-01-5	cis-1,3-Dichloropropene	ND	U	0.00112	ND	U	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	NA	NA
108-88-3	Toluene	ND	U	0.00112	ND	U	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	100	0.7
10061-02-6	trans-1,3-Dichloropropene	ND	U	0.00112	ND	U	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	NA	NA
79-00-5	1,1,2-Trichloroethane	ND	U	0.00112	ND	U	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	NA	NA
108-10-1	4-Methyl-2-Pentanone	ND	U	0.00112	ND	U	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	NA	NA
106-93-4	1,2-Dibromoethane	ND	U	0.00112	ND	U	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	NA	NA
591-78-6	2-Hexanone	ND	U	0.00112	ND	U	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	NA	NA
142-28-9	1,3-Dichloropropane	ND	U	0.00112	ND	U	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	NA	NA
127-18-4	Tetrachloroethene	ND	U	0.00112	ND	U	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	19	1.3
75-71-8	Dichlorodifluoromethane	ND	U	0.00112	ND	U	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	NA	NA
100-41-4	Ethylbenzene	ND	U	0.00112	ND	U	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	41	1
108-90-7	Chlorobenzene	ND	U	0.00112	ND	U	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	100	1.1
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	0.00112	ND	U	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	NA	NA
126777-61-2	m/p-Xylenes	ND	U	0.00224	ND	U	0.00224	ND	U	0.00245	ND	U	0.00236	ND	U	0.002	NA	0.26
95-47-6	o-Xylene	ND	U	0.00224	ND	U	0.00224	ND	U	0.00245	ND	U	0.00236	ND	U	0.002	NA	
100-42-5	Styrene	ND	U	0.00112	ND	U	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	NA	NA
75-25-2	Bromoform	ND	U	0.00112	ND	U	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	NA	NA
98-82-8	Isopropylbenzene	ND	U	0.00112	ND	R	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	NA	NA
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	0.00112	ND	R	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	NA	NA
96-18-4	1,2,3-Trichloropropane	ND	U	0.00112	ND	R	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	NA	NA
103-65-1	n-Propyl Benzene	ND	U	0.00112	ND	R	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	100	3.9
108-86-1	Bromobenzene	ND	U	0.00112	ND	R	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	NA	NA
108-67-8	1,3,5-Trimethylbenzene	ND	U	0.00112	ND	R	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	52	8.4
95-49-8	2-Chlorotoluene	ND	U	0.00112	ND	R	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	NA	NA
106-43-4	4-Chlorotoluene	ND	U	0.00112	ND	R	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	NA	NA
98-06-6	tert-Butylbenzene	ND	U	0.00112	ND	R	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	100	5.9
95-63-6	1,2,4-Trimethylbenzene	ND	U	0.00112	ND	R	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	52	3.6
135-98-8	sec-Butylbenzene	ND	U	0.00112	ND	R	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	100	11
99-87-6	p-Isopropyltoluene	ND	U	0.00112	ND	R	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	NA	NA
541-73-1	1,3-Dichlorobenzene	ND	U	0.00112	ND	R	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	49	2.4
106-46-7	1,4-Dichlorobenzene	ND	U	0.00112	ND	R	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	13	1.8
104-51-8	n-Butyl Benzene	ND	U	0.00112	ND	R	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	NA	12
95-50-1	1,2-Dichlorobenzene	ND	U	0.00112	ND	R	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	100	1.1
96-12-8	1,2-Dibromo-3-Chloropropane	ND	U	0.00112	ND	R	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	NA	NA
120-82-1	1,2,4-Trichlorobenzene	ND	U	0.00112	ND	R	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	NA	NA
87-68-3	Hexachlorobutadiene	ND	U	0.00112	ND	R	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	NA	NA
91-20-3	Naphthalene	ND	U	0.00112	ND	R	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	100	12
87-61-6	1,2,3-Trichlorobenzene	ND	U	0.00112	ND	R	0.00112	ND	U	0.00123	ND	U	0.00118	ND	U	0.001	NA	NA
Semivolatile Organic Compounds																		
62-75-9	N-Nitrosodimethylamine	ND	U	0.0374	ND	U	0.0372	ND	U	0.0408	ND	U	0.0393	~	~	~	NA	NA
108-95-2	Phenol	ND	U	0.0374	ND	U	0.0372	ND	U	0.0408	ND	U	0.0393	~	~	~	100	0.33
111-44-4	bis(2-Chloroethyl)ether	ND	U	0.0374	ND	U	0.0372	ND	U	0.0408	ND	U	0.0393	~	~	~	NA	NA
95-57-8	2-Chlorophenol	ND	U	0.0374	ND	U	0.0372	ND	U	0.0408	ND	U	0.0393	~	~	~	NA	NA
541-73-1	1,3-Dichlorobenzene	ND	U	0.0374	ND	U	0.0372	ND	U	0.0408	ND	U	0.0393	~	~	~	49	NA
106-46-7	1,4-Dichlorobenzene	ND	U	0.0374	ND	U	0.0372	ND	U	0.0408	ND	U	0.0393	~	~	~	13	NA
100-51-6	Benzyl alcohol	ND	U	0.0374	ND	U	0.0372	ND	U	0.0408	ND	U	0.0393	~	~	~	NA	NA
95-50-1	1,2-Dichlorobenzene	ND	U	0.0374	ND	U	0.0372	ND	U	0.0408	ND	U	0.0393	~	~	~	100	NA
95-48-7	2-Methylphenol	ND	U	0.0374	ND	U	0.0372	ND	U	0.0408	ND	U	0.0393	~	~	~	100	NA
108-60-1	Bis(2-chloroisopropyl)ether	ND	U	0.0374	ND	U	0.0372	ND	U	0.0408	ND	U	0.0393	~	~	~	NA	NA
106-44-5	3&4 Methylphenol	ND	U	0.0374	0.0981	J	0.0372	ND	U	0.0408	ND	U	0.0393	~	~	~	100	NA
621-64-7	N-Nitroso-di-n-propylamine	ND	U	0.0374	ND	U	0.0372	ND	U	0.0408	ND	U	0.0393	~	~	~	NA	NA
67-72-1	Hexachloroethane	ND	U	0.0374	ND	U	0.0372	ND	U	0.0408	ND	U	0.0393	~	~	~	NA	NA
98-95-3	Nitrobenzene	ND	U	0.0374	ND	U	0.0372	ND	U	0.0408	ND	U	0.0393	~	~	~	NA	NA
78-59-1	Isophorone	ND	U	0.0374	ND	U	0.0372	ND	U	0.0408	ND	U	0.0393	~	~	~	NA	NA
88-75-5	2-Nitrophenol	ND	U	0.0374	ND	U	0.0372	ND	U	0.0408	ND	U	0.0393	~	~	~	NA	NA
105-67-9	2,4-Dimethylphenol	ND	U	0.0374	0.0388	J	0.0372	ND	U	0.0408	ND	U	0.0393	~	~	~	NA	NA
65-85-0	Benzoic acid	ND	U	0.0932	ND	R	0.0372	ND	R	0.102	ND	R	0.098	~	~	~	NA	NA
111-91-1	bis(2-Chloroethoxy)methane	ND	U	0.0374	ND	U	0.0372	ND	U	0.0408	ND	U	0.0393	~	~	~	NA	NA
120-83-2	2,4-Dichlorophenol	ND	U	0.0374	ND	U	0.0372	ND	U	0.0408	ND	U	0.0393	~	~	~	NA	NA
120-82-1	1,2,4-Trichlorobenzene	ND	U	0.0374	ND	U	0.0372	ND	U	0.0408	ND	U	0.0393	~	~	~	NA	NA
91-20-3	Naphthalene	ND	U	0.0374	1.37		0.0372	ND	U	0.0408	ND	U	0.0393	~	~	~	100	12
106-47-8	4-Chloroaniline	ND	U	0.0374	ND	U	0.0372	ND	U	0.0408	ND	U	0.0393	~	~	~	NA	NA
87-68-3	Hexachlorobutadiene	ND	U	0.0374	ND	U	0.0372	ND	U	0.0408	ND	U	0.0393	~	~	~	NA	NA
59-50-7	4-Chloro-3-methylphenol	ND	U	0.0374	ND	U	0.0372	ND	U	0.0408	ND	U	0.0393	~	~	~	NA	NA
91-57-6	2-Methylnaphthalene	ND	U	0.0374	0.598		0.0372	ND	U	0.0408	ND	U	0.0393	~	~	~	NA	NA
77-47-4	Hexachlorocyclopentadiene	ND	U	0.0374	ND	U	0.0372	ND	U	0.0408	ND	U	0.0393	~	~	~	NA	NA
88-06-2	2,4,6-Trichlorophenol	ND	U	0.0374	ND	U	0.0372	ND	U	0.0408	ND	U	0.0393	~	~	~	NA	NA
95-95-4	2,4,5-Trichlorophenol	ND	U	0.0374	ND	U	0.0372	ND	U	0.0408	ND	U	0.0393	~	~	~	NA	NA
91-58-7	2-Chloronaphthalene	ND	U	0.0374	ND	U	0.0372	ND	U	0.0408	ND	U	0.0393	~	~	~	NA	NA
88-74-4	2-Nitroaniline	ND	U	0.0374	ND	U	0.0372	ND	U	0.0408	ND	U	0.0393	~	~	~	NA	NA
131-11-3	Dimethylphthalate	ND	U	0.0374	ND	U	0.0372	ND	U	0.0408	ND	U	0.0393	~	~	~	NA	NA
208-96-8	Acenaphthylene	ND	U	0.0374	0.953		0.0372	ND	U	0.0408	ND	U	0.0393	~	~	~	100	100
99-09-2	3-Nitroaniline	ND	U	0.0374	ND	U	0.0372	ND	U	0.0408	ND	U	0.0393	~	~	~	NA	NA
83-32-9	Acenaphthene	ND	U	0.0374	1.95		0.0372	ND	U	0.0408	ND	U	0.0393	~	~	~	100	20

Table 4
Soil Sampling Results - Historic Fill
255 East 138th Street, Bronx, New York

CAS #	Laboratory ID:	1200217-01			1200217-02			1200217-03			1200233-01			1200233-02		
	Brinkerhoff Sample ID:	HF-1A			HF-1B			HF-1C			HF-2A			HF-2B		
	Depth (feet):	4.5-5.0			7.5-8.0			24.5-25.0			4.5-5.0			5.5-6.0		
	Matrix:	SOIL			SOIL			SOIL			SOIL			SOIL		
	Sampled Date	04/09/12			04/09/12			04/09/12			04/11/12			04/11/12		
	Parameter	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL
51-28-5	2,4-Dinitrophenol	ND	U	0.0395	ND	U	0.0371	ND	U	0.0368	ND	U	0.0403	ND	U	0.0375
100-02-7	4-Nitrophenol	ND	U	0.0395	ND	U	0.0371	ND	U	0.0368	ND	U	0.0403	ND	U	0.0375
132-64-9	Dibenzofuran	0.674		0.0395	ND	U	0.0371	ND	U	0.0368	0.0718	J	0.0403	0.128	J	0.0375
606-20-2	2,6-Dinitrotoluene	ND	U	0.0395	ND	U	0.0371	ND	U	0.0368	ND	U	0.0403	ND	U	0.0375
121-14-2	2,4-Dinitrotoluene	ND	U	0.0395	ND	U	0.0371	ND	U	0.0368	ND	U	0.0403	ND	U	0.0375
84-66-2	Diethylphthalate	ND	U	0.0395	ND	U	0.0371	ND	U	0.0368	ND	U	0.0403	ND	U	0.0375
7005-72-3	4-Chlorophenyl-phenylether	ND	U	0.0395	ND	U	0.0371	ND	U	0.0368	ND	U	0.0403	ND	U	0.0375
86-73-7	Fluorene	0.904		0.0395	ND	U	0.0371	ND	U	0.0368	0.0819	J	0.0403	0.184	J	0.0375
100-01-6	4-Nitroaniline	ND	U	0.0395	ND	U	0.0371	ND	U	0.0368	ND	U	0.0403	ND	U	0.0375
534-52-1	4,6-Dinitro-2-methylphenol	ND	U	0.0395	ND	U	0.0371	ND	U	0.0368	ND	U	0.0403	ND	U	0.0375
86-30-6	N-Nitrosodiphenylamine	ND	U	0.0395	ND	U	0.0371	ND	U	0.0368	ND	U	0.0403	ND	U	0.0375
101-55-3	4-Bromophenyl-phenylether	ND	U	0.0395	ND	U	0.0371	ND	U	0.0368	ND	U	0.0403	ND	U	0.0375
118-74-1	Hexachlorobenzene	ND	U	0.0395	ND	U	0.0371	ND	U	0.0368	ND	U	0.0403	ND	U	0.0375
87-86-5	Pentachlorophenol	ND	U	0.0395	ND	U	0.0371	ND	U	0.0368	ND	U	0.0403	ND	U	0.0375
85-01-8	Phenanthrene	15.6	D	0.0395	ND	U	0.0371	ND	U	0.0368	1.02		0.0403	2.79		0.0375
120-12-7	Anthracene	3.59		0.0395	ND	U	0.0371	ND	U	0.0368	0.236		0.0403	0.518		0.0375
84-74-2	Di-n-butylphthalate	ND	U	0.0395	ND	U	0.0371	ND	U	0.0368	ND	U	0.0403	0.11	J	0.0375
206-44-0	Fluoranthene	18.7	D	0.0395	ND	U	0.0371	ND	U	0.0368	1.07		0.0403	2.57		0.0375
129-00-0	Pyrene	25.3	D	0.0395	ND	U	0.0371	ND	U	0.0368	0.943		0.0403	5.26	E	0.0375
85-68-7	Butylbenzylphthalate	ND	U	0.0395	ND	U	0.0371	ND	U	0.0368	ND	U	0.0403	ND	U	0.0375
91-94-1	3,3-Dichlorobenzidine	ND	U	0.0986	ND	U	0.0924	ND	U	0.0917	ND	U	0.1	ND	U	0.0967
56-55-3	Benzo(a)anthracene	**9.53**	D	0.0395	ND	U	0.0371	ND	U	0.0368	0.481		0.0403	**1.48**		0.0375
117-81-7	bis(2-Ethylhexyl)phthalate	ND	U	0.0395	ND	U	0.0371	ND	U	0.0368	ND	U	0.0403	0.207		0.0375
218-01-9	Chrysene	**12.5**	D	0.0395	ND	U	0.0371	ND	U	0.0368	0.521		0.0403	**2.11**		0.0375
117-84-0	Di-n-octyl phthalate	ND	U	0.0395	ND	U	0.0371	ND	U	0.0368	ND	U	0.0403	ND	U	0.0375
205-99-2	Benzo(b)fluoranthene	**11.1**	D	0.0395	ND	U	0.0371	ND	U	0.0368	0.39		0.0403	**1.88**		0.0375
207-08-9	Benzo(k)fluoranthene	**8**	D	0.0395	ND	U	0.0371	ND	U	0.0368	0.412		0.0403	**1.58**		0.0375
50-32-8	Benzo(a)pyrene	**10.1**	D	0.0395	ND	U	0.0371	ND	U	0.0368	0.397		0.0403	**1.37**		0.0375
193-39-5	Indeno(1,2,3-cd)pyrene	**1.64**		0.0395	ND	U	0.0371	ND	U	0.0368	0.212		0.0403	0.303		0.0375
53-70-3	Dibenz(a,h)anthracene	**0.762**		0.0395	ND	U	0.0371	ND	U	0.0368	0.103	J	0.0403	0.138	J	0.0375
191-24-2	Benzo(g,h,i)perylene	1.73		0.0395	ND	U	0.0371	ND	U	0.0368	0.21		0.0403	0.282		0.0375
Pesticides																
319-84-6	alpha-BHC	ND	U	0.000784	ND	U	0.000735	ND	U	0.000729	ND	U	0.000799	ND	U	0.000744
319-85-7	beta-BHC	ND	U	0.000784	ND	U	0.000735	ND	U	0.000729	ND	U	0.000799	ND	U	0.000744
319-86-8	delta-BHC	0.00285		0.000784	ND	U	0.000735	ND	U	0.000729	ND	U	0.000799	ND	U	0.000744
58-89-9	gamma-BHC (Lindane)	ND	U	0.000784	ND	U	0.000735	ND	U	0.000729	ND	U	0.000799	ND	U	0.000744
76-44-8	Heptachlor	ND	U	0.000784	ND	U	0.000735	ND	U	0.000729	ND	U	0.000799	ND	U	0.000744
309-00-2	Aldrin	ND	U	0.000784	ND	U	0.000735	ND	U	0.000729	ND	U	0.000799	ND	U	0.000744
1024-57-3	Heptachlor epoxide	ND	U	0.000784	ND	U	0.000735	ND	U	0.000729	ND	U	0.000799	ND	U	0.000744
959-98-8	Endosulfan I	ND	U	0.000784	ND	U	0.000735	ND	U	0.000729	ND	U	0.000799	ND	U	0.000744
60-57-1	Dieldrin	ND	U	0.00158	ND	U	0.00148	ND	U	0.00147	ND	U	0.00161	ND	U	0.0015
72-55-9	4,4-DDE	ND	U	0.00158	ND	U	0.00148	ND	U	0.00147	ND	U	0.00161	**0.00643**		0.0015
72-20-8	Endrin	ND	U	0.00158	ND	U	0.00148	ND	U	0.00147	0.00295		0.00161	ND	U	0.0015
33213-65-9	Endosulfan II	ND	U	0.00158	ND	U	0.00148	ND	U	0.00147	ND	U	0.00161	ND	U	0.0015
72-54-8	4,4-DDD	ND	U	0.00158	ND	U	0.00148	ND	U	0.00147	ND	U	0.00161	ND	U	0.0015
1031-07-8	Endosulfan Sulfate	ND	U	0.00158	ND	U	0.00148	ND	U	0.00147	ND	U	0.00161	ND	U	0.0015
50-29-3	4,4-DDT	ND	U	0.00158	ND	U	0.00148	ND	U	0.00147	ND	U	0.00161	ND	U	0.0015
72-43-5	Methoxychlor	ND	U	0.00791	ND	U	0.00742	ND	U	0.00736	ND	U	0.00806	ND	U	0.00751
53494-70-5	Endrin Ketone	ND	U	0.00158	ND	U	0.00148	ND	U	0.00147	ND	U	0.00161	ND	U	0.0015
7421-93-4	Endrin aldehyde	ND	U	0.00158	ND	U	0.00148	ND	U	0.00147	ND	U	0.00161	ND	U	0.0015
5103-71-9	alpha-Chlordane	ND	U	0.000784	ND	U	0.000735	ND	U	0.000729	ND	U	0.000799	ND	U	0.000744
72-55-9	gamma-Chlordane	ND	U	0.000784	ND	U	0.000735	ND	U	0.000729	ND	U	0.000799	ND	U	0.000744
8001-35-2	Toxaphene	ND	U	0.0395	ND	U	0.0371	ND	U	0.0368	ND	U	0.0403	ND	U	0.0375
Polychlorinated Biphenyls																
12674-11-2	Aroclor-1016	ND	U	0.0197	ND	U	0.0185	ND	U	0.0183	ND	U	0.0201	ND	U	0.0187
11104-28-2	Aroclor-1221	ND	U	0.0197	ND	U	0.0185	ND	U	0.0183	ND	U	0.0201	ND	U	0.0187
11141-16-5	Aroclor-1232	ND	U	0.0197	ND	U	0.0185	ND	U	0.0183	ND	U	0.0201	ND	U	0.0187
53469-21-9	Aroclor-1242	ND	U	0.0197	ND	U	0.0185	ND	U	0.0183	ND	U	0.0201	ND	U	0.0187
12672-29-6	Aroclor-1248	ND	U	0.0197	ND	U	0.0185	ND	U	0.0183	ND	U	0.0201	ND	U	0.0187
11097-69-1	Aroclor-1254	ND	U	0.0197	ND	U	0.0185	ND	U	0.0183	ND	U	0.0201	ND	U	0.0187
11096-82-5	Aroclor-1260	ND	U	0.0197	ND	U	0.0185	ND	U	0.0183	ND	U	0.0201	ND	U	0.0187
37324-23-5	Aroclor-1262	ND	U	0.0197	ND	U	0.0185	ND	U	0.0183	ND	U	0.0201	ND	U	0.0187
11100-14-4	Aroclor-1268	ND	U	0.0197	ND	U	0.0185	ND	U	0.0183	ND	U	0.0201	ND	U	0.0187
Metals																
7439-97-6	Mercury	**1.1**		0.119	**1.42**		0.111	ND	U	0.11	**0.857**		0.121	**0.606**		0.113
7429-90-5	Silver	1.07		0.37	ND	U	0.41	ND	U	0.32	~	~	~	~	~	~
7440-36-0	Aluminum	6320		56	7990		61	5550		49	18100		60	8690		60
7440-38-2	Arsenic	**19.8**		0.75	1.29		0.81	0.84		0.65	ND	U	0.8	10.1		0.8
7440-39-3	Barium	**381**		0.37	57.2		0.41	44		0.32	101		0.41	192		0.4
7440-41-7	Beryllium	0.59		0.3	0.51		0.33	0.32		0.26	0.7		0.33	0.35		0.32
7440-43-9	Calcium	19600		56	19500		61	17800		49	6830		6	16500		60
7440-70-2	Cadmium	3.19		0.37	ND	U	0.41	ND	U	0.32	ND	U	0.41	1.25		0.4
7440-47-3	Cobalt	8.18		0.37	7.79		0.41	4.9		0.32	10.5		0.41	11.1		0.4
7440-48-4	Chromium	**31.1**		0.37	19.4		0.41	11.3		0.32	29.2		0.41	22.6		0.4
7440-50-8	Copper	**309**		3.7	23		0.41	12.1		0.32	24.4		0.41	**144**		0.4
7439-92-1	Iron	57300		56	17400		61	13300		49	22700		60	45900		60
7439-92-1	Potassium	1000		5.6	2280		6.1	1330		4.9	2380		6	1510		6
7439-95-4	Magnesium	5470		5.6	13600		61	6870		49	14000		60	8060		60
7439-96-5	Manganese	573	R	3.7	263	R	4.1	396	R	3.2	557	R	4.1	632	R	4
7439-97-6	Sodium	206		5.6	187		6.1	132		4.9	126		6	149		6
7440-02-0	Nickel	23.1		0.37	15.9		0.41	12		0.32	18.7		0.41	28		0.4
7440-09-7	Lead	**2290**		37	41.6		0.41	6.29		0.32	22		0.41	**1310**		4
7782-49-2	Antimony	ND	U	37	ND	U	4.1	ND	U	3.2	ND	U	4.1	ND	U	8
7440-22-4	Selenium	ND	U	15	ND	U	1.6	ND	U	1.3	ND	U	1.6	ND	U	1.6
7440-23-5	Thallium	ND	U	3.4	ND	U	3.7	ND	U	2.9	ND	U	3.6	ND	U	3.6
7440-62-2	Vanadium	26.5		0.37	27.8		0.41	13.7		0.32	36.7		0.41	24.7		0.4
7440-66-6	Zinc	**1080**		3.7	58.8		0.41	25.6		0.32	65.6		0.41	**578**		4
xxxx-xx-02	Solids, Percent	86			83			92			86			88		

CAS #	Laboratory ID:	1200233-03			1200217-04			1200217-05			1200217-06			1200217-07		
	Brinkerhoff Sample ID:	HF-2C			HF-3A			HF-3B			HF-3C			HF-3C.1		
	Depth (feet):	24.5-25.0			4.5-5.0			6.5-7.0			24.5-25.0			24.5-25		
	Matrix:	SOIL			SOIL			SOIL			SOIL			SOIL		
	Sampled Date	04/11/12			04/09/12			04/09/12			04/09/12			04/09/12		
	Parameter	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL
51-28-5	2,4-Dinitrophenol	ND	U	0.0366	ND	U	0.0393	ND	U	0.0438	ND	U	0.0396	ND	U	0.0399
100-02-7	4-Nitrophenol	ND	U	0.0366	ND	U	0.0393	ND	U	0.0438	ND	U	0.0396	ND	U	0.0399
132-64-9	Dibenzofuran	ND	U	0.0366	0.168	J	0.0393	0.0715	J	0.0438	ND	U	0.0396	ND	U	0.0399
606-20-2	2,6-Dinitrotoluene	ND	U	0.0366	ND	U	0.0393	ND	U	0.0438	ND	U	0.0396	ND	U	0.0399
121-14-2	2,4-Dinitrotoluene	ND	U	0.0366	ND	U	0.0393	ND	U	0.0438	ND	U	0.0396	ND	U	0.0399
84-66-2	Diethylphthalate	ND	U	0.0366	ND	U	0.0393	ND	U	0.0438	ND	U	0.0396	ND	U	0.0399
7005-72-3	4-Chlorophenyl-phenylether	ND	U	0.0366	ND	U	0.0393	ND	U	0.0438	ND	U	0.0396	ND	U	0.0399
86-73-7	Fluorene	ND	U	0.0366	0.155	J	0.0393	0.119	J	0.0438	ND	U	0.0396	ND	U	0.0399
100-01-6	4-Nitroaniline	ND	U	0.0366	ND	U	0.0393	ND	U	0.0438	ND	U	0.0396	ND	U	0.0399
534-52-1	4,6-Dinitro-2-methylphenol	ND	U	0.0366	ND	U	0.0393	ND	U	0.0438	ND	U	0.0396	ND	U	0.0399
86-30-6	N-Nitrosodiphenylamine	ND	U	0.0366	ND	U	0.0393	ND	U	0.0438	ND	U	0.0396	ND	U	0.0399
101-55-3	4-Bromophenyl-phenylether	ND	U	0.0366	ND	U	0.0393	ND	U	0.0438	ND	U	0.0396	ND	U	0.0399
118-74-1	Hexachlorobenzene	ND	U	0.0366	ND	U	0.0393	ND	U	0.0438	ND	U	0.0396	ND	U	0.0399
87-86-5	Pentachlorophenol	ND	U	0.0366	ND	U	0.0393	ND	U	0.0438	ND	U	0.0396	ND	U	0.0399
85-01-8	Phenanthrene	ND	U	0.0366	1.77		0.0393	0.856		0.0438	ND	U	0.0396	ND	U	0.0399
120-12-7	Anthracene	ND	U	0.0366	0.467		0.0393	0.257		0.0438	ND	U	0.0396	ND	U	0.0399
84-74-2	Di-n-butylphthalate	ND	U	0.0366	ND	U	0.0393	ND	U	0.0438	ND	U	0.0396	ND	U	0.0399
206-44-0	Fluoranthene	ND	U	0.0366	1.47		0.0393	0.669		0.0438	ND	U	0.0396	ND	U	0.0399
129-00-0	Pyrene	ND	U	0.0366	1.58		0.0393	0.559		0.0438	ND	U	0.0396	ND	U	0.0399
85-68-7	Butylbenzylphthalate	ND	U	0.0366	ND	U	0.0393	ND	U	0.0438	ND	U	0.0396	ND	U	0.0399
91-94-1	3,3-Dichlorobenzidine	ND	U	0.0913	ND	U	0.098	ND	U	0.109	ND	U	0.0988	ND	U	0.0994
56-55-3	Benzo(a)anthracene	ND	U	0.0366	0.682		0.0393	0.25		0.0438	ND	U	0.0396	ND	U	0.0399
117-81-7	bis(2-Ethylhexyl)phthalate	ND	U	0.0366	ND	U	0.0393	ND	U	0.0438	ND	U	0.0396	ND	U	0.0399
218-01-9	Chrysene	ND	U	0.0366	0.778		0.0393	0.283		0.0438	ND	U	0.0396	ND	U	0.0399
117-84-0	Di-n-octyl phthalate	ND	U	0.0366	ND	U	0.0393	ND	U	0.0438	ND	U	0.0396	ND	U	0.0399
205-99-2	Benzo(b)fluoranthene	ND	U	0.0366	0.599		0.0393	0.172	J	0.0438	ND	U	0.0396	ND	U	0.0399
207-08-9	Benzo(k)fluoranthene	ND	U	0.0366	0.519		0.0393	0.216	J	0.0438	ND	U	0.0396	ND	U	0.0399
50-32-8	Benzo(a)pyrene	ND	U	0.0366	0.64		0.0393	0.154	J	0.0438	ND	U	0.0396	ND	U	0.0399
193-39-5	Indeno(1,2,3-cd)pyrene	ND	U	0.0366	0.358		0.0393	0.0754	J	0.0438	ND	U	0.0396	ND	U	0.0399
53-70-3	Dibenz(a,h)anthracene	ND	U	0.0366	0.157	J	0.0393	ND	U	0.0438	ND	U	0.0396	ND	U	0.0399
191-24-2	Benzo(g,h,i)perylene	ND	U	0.0366	0.383		0.0393	0.0645	J	0.0438	ND	U	0.0396	ND	U	0.0399
Pesticides																
319-84-6	alpha-BHC	ND	U	0.000726	ND	U	0.000779	ND	U	0.000868	ND	U	0.000786	ND	U	0.00079
319-85-7	beta-BHC	ND	U	0.000726	ND	U	0.000779	ND	U	0.000868	ND	U	0.000786	ND	U	0.00079
319-86-8	delta-BHC	ND	U	0.000726	ND	U	0.000779	ND	U	0.000868	ND	U	0.000786	ND	U	0.00079
58-89-9	gamma-BHC (Lindane)	ND	U	0.000726	ND	U	0.000779	ND	U	0.000868	ND	U	0.000786	ND	U	0.00079
76-44-8	Heptachlor	ND	U	0.000726	ND	U	0.000779	ND	U	0.000868	ND	U	0.000786	ND	U	0.00079
309-00-2	Aldrin	ND	U	0.000726	ND	U	0.000779	ND	U	0.000868	ND	U	0.000786	ND	U	0.00079
1024-57-3	Heptachlor epoxide	ND	U	0.000726	ND	U	0.000779	ND	U	0.000868	ND	U	0.000786	ND	U	0.00079
959-98-8	Endosulfan I	ND	U	0.000726	ND	U	0.000779	ND	U	0.000868	ND	U	0.000786	ND	U	0.00079
60-57-1	Dieldrin	ND	U	0.00146	ND	U	0.00157	ND	U	0.00175	ND	U	0.00158	ND	U	0.00159
72-55-9	4,4-DDE	ND	U	0.00146	ND	U	0.00157	ND	U	0.00175	ND	U	0.00158	ND	U	0.00159
72-20-8	Endrin	ND	U	0.00146	ND	U	0.00157	ND	U	0.00175	ND	U	0.00158	ND	U	0.00159
33213-65-9	Endosulfan II	ND	U	0.00146	ND	U	0.00157	ND	U	0.00175	ND	U	0.00158	ND	U	0.00159
72-54-8	4,4-DDD	ND	U	0.00146	ND	U	0.00157	ND	U	0.00175	ND	U	0.00158	0.0022		0.00159
1031-07-8	Endosulfan Sulfate	ND	U	0.00146	ND	U	0.00157	ND	U	0.00175	ND	U	0.00158	ND	U	0.00159
50-29-3	4,4-DDT	ND	U	0.00146	ND	U	0.00157	ND	U	0.00175	ND	U	0.00158	ND	U	0.00159
72-43-5	Methoxychlor	ND	U	0.00733	ND	U	0.00786	ND	U	0.00876	ND	U	0.00793	ND	U	0.00798
53494-70-5	Endrin Ketone	ND	U	0.00146	ND	U	0.00157	ND	U	0.00175	ND	U	0.00158	ND	U	0.00159
7421-93-4	Endrin aldehyde	ND	U	0.00146	ND	U	0.00157	ND	U	0.00175	ND	U	0.00158	ND	U	0.00159
5103-71-9	alpha-Chlordane	ND	U	0.000726	ND	U	0.000779	ND	U	0.000868	ND	U	0.000786	ND	U	0.00079
72-55-9	gamma-Chlordane	ND	U	0.000726	ND	U	0.000779	ND	U	0.000868	ND	U	0.000786	ND	U	0.00079
8001-35-2	Toxaphene	ND	U	0.0366	ND	U	0.0393	ND	U	0.0438	ND	U	0.0396	ND	U	0.0399
Polychlorinated Biphenyls																
12674-11-2	Aroclor-1016	ND	U	0.0183	ND	U	0.0196	ND	U	0.0218	ND	U	0.0198	ND	U	0.0199
11104-28-2	Aroclor-1221	ND	U	0.0183	ND	U	0.0196	ND	U	0.0218	ND	U	0.0198	ND	U	0.0199
11141-16-5	Aroclor-1232	ND	U	0.0183	ND	U	0.0196	ND	U	0.0218	ND	U	0.0198	ND	U	0.0199
53469-21-9	Aroclor-1242	ND	U	0.0183	ND	U	0.0196	ND	U	0.0218	ND	U	0.0198	ND	U	0.0199
12672-29-6	Aroclor-1248	ND	U	0.0183	ND	U	0.0196	ND	U	0.0218	ND	U	0.0198	ND	U	0.0199
11097-69-1	Aroclor-1254	ND	U	0.0183	ND	U	0.0196	ND	U	0.0218	ND	U	0.0198	ND	U	0.0199
11096-82-5	Aroclor-1260	ND	U	0.0183	ND	U	0.0196	ND	U	0.0218	ND	U	0.0198	ND	U	0.0199
37324-23-5	Aroclor-1262	ND	U	0.0183	ND	U	0.0196	ND	U	0.0218	ND	U	0.0198	ND	U	0.0199
11100-14-4	Aroclor-1268	ND	U	0.0183	ND	U	0.0196	ND	U	0.0218	ND	U	0.0198	ND	U	0.0199
Metals																
7439-97-6	Mercury	ND	U	0.11	**0.189**		0.118	**1.5**		0.132	ND	U	0.119	ND	U	0.12
7429-90-5	Silver	~	~	~	ND	U	0.38	ND	U	0.37	ND	U	0.38	ND	U	0.35
7440-36-0	Aluminum	6420		58	7720		57	9920		55	4800		56	4280		53
7440-38-2	Arsenic	ND		0.76	**14.8**		0.77	1.63		0.74	ND	U	0.75	ND	U	0.71
7440-39-3	Barium	55.8		0.38	39.7		0.38	64.2		0.37	24		0.38	22		0.35
7440-41-7	Beryllium	0.36		0.3	ND	U	0.31	0.59		0.3	0.31		0.3	ND		0.28
7440-43-9	Calcium	38400		58	3410		5.7	11500		5.5	8150		5.6	10500		5.3
7440-70-2	Cadmium	ND	U	0.38	1.54		0.38	ND	U	0.37	ND	U	0.38	ND		0.35
7440-47-3	Cobalt	6.53		0.38	12.5		0.38	7.04		0.37	4.54		0.38	3.04		0.35
7440-48-4	Chromium	15.4		0.38	15.1		0.38	19.6		0.37	8.89		0.38	17		0.35
7440-50-8	Copper	24.8		0.38	**718**		3.8	28.2		0.37	9.71		0.38	13	R	0.35
7439-92-1	Iron	14000		58	62000		57	20800		55	8310		5.6	7820		5.3
7439-92-1	Potassium	2140		5.8	834		5.7	1880		5.5	907		5.6	729		5.3
7439-95-4	Magnesium	21100		58	1830		5.7	10000		55	6310		5.6	6590		53
7439-96-5	Manganese	558	R	3.8	428	R	3.8	197	R	0.37	167	R	0.38	158	R	0.35
7439-97-6	Sodium	215		5.8	186		5.7	175		5.5	135		5.6	152		5.3
7440-02-0	Nickel	14.5		0.38	**48.6**		0.38	15.3		0.37	10.5		0.38	11.7		0.35
7440-09-7	Lead	12.6		0.38	**164**		0.38	**123**		0.37	4.51		0.38	5.84		0.35
7782-49-2	Antimony	ND	U	3.8	ND	U	6.8	ND	U	3.7	ND	U	3.8	ND	U	3.5
7440-22-4	Selenium	ND	U	1.5	ND	U	1.5	ND	U	1.5	ND	U	1.5	ND	U	1.4
7440-23-5	Thallium	ND	U	3.5	ND	U	3.4	ND	U	3.3	ND	U	3.4	ND	U	3.2
7440-62-2	Vanadium	20.9		0.38	41.5		0.38	27.8		0.37	11.3		0.38	8.32		0.35
7440-66-6	Zinc	36.5		0.38	**976**		3.8	106		0.37	23.1		0.38	28.1	R	0.35
xxxx-xx-02	Solids, Percent	92			87			88			91			85		

CAS #	Laboratory ID:	1200233-04			1200233-05			1200233-06			1200217-08		
	Brinkerhoff Sample ID:	HF-4A			HF-4B			HF-4C			HF-6A		
	Depth (feet):	4.0-4.5			5.0-5.5			24.5-25.0			4.0-4.5		
	Matrix:	SOIL			SOIL			SOIL			SOIL		
	Sampled Date	04/11/12			04/11/12			04/11/12			04/10/12		
	Parameter	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL
51-28-5	2,4-Dinitrophenol	ND	U	0.0354	ND	U	0.0383	ND	U	0.0374	ND	U	0.0372
100-02-7	4-Nitrophenol	ND	U	0.0354	ND	U	0.0383	ND	U	0.0374	ND	U	0.0372
132-64-9	Dibenzofuran	ND	U	0.0354	ND	U	0.0383	ND	U	0.0374	1.19		0.0372
606-20-2	2,6-Dinitrotoluene	ND	U	0.0354	ND	U	0.0383	ND	U	0.0374	ND	U	0.0372
121-14-2	2,4-Dinitrotoluene	ND	U	0.0354	ND	U	0.0383	ND	U	0.0374	ND	U	0.0372
84-66-2	Diethylphthalate	ND	U	0.0354	ND	U	0.0383	ND	U	0.0374	ND	U	0.0372
7005-72-3	4-Chlorophenyl-phenylether	ND	U	0.0354	ND	U	0.0383	ND	U	0.0374	ND	U	0.0372
86-73-7	Fluorene	ND	U	0.0354	ND	U	0.0383	ND	U	0.0374	1.63		0.0372
100-01-6	4-Nitroaniline	ND	U	0.0354	ND	U	0.0383	ND	U	0.0374	ND	U	0.0372
534-52-1	4,6-Dinitro-2-methylphenol	ND	U	0.0354	ND	U	0.0383	ND	U	0.0374	ND	U	0.0372
86-30-6	N-Nitrosodiphenylamine	ND	U	0.0354	ND	U	0.0383	ND	U	0.0374	ND	U	0.0372
101-55-3	4-Bromophenyl-phenylether	ND	U	0.0354	ND	U	0.0383	ND	U	0.0374	ND	U	0.0372
118-74-1	Hexachlorobenzene	ND	U	0.0354	ND	U	0.0383	ND	U	0.0374	ND	U	0.0372
87-86-5	Pentachlorophenol	ND	U	0.0354	ND	U	0.0383	ND	U	0.0374	ND	U	0.0372
85-01-8	Phenanthrene	0.192		0.0354	0.118	J	0.0383	ND	U	0.0374	19.9	D	0.0372
120-12-7	Anthracene	0.0729	J	0.0354	ND	U	0.0383	ND	U	0.0374	3.95		0.0372
84-74-2	Di-n-butylphthalate	ND	U	0.0354	ND	U	0.0383	ND	U	0.0374	ND	U	0.0372
206-44-0	Fluoranthene	0.788		0.0354	0.122	J	0.0383	ND	U	0.0374	21.3	D	0.0372
129-00-0	Pyrene	1.06		0.0354	0.18	J	0.0383	ND	U	0.0374	25	D	0.0372
85-68-7	Butylbenzylphthalate	ND	U	0.0354	ND	U	0.0383	ND	U	0.0374	ND	U	0.0372
91-94-1	3,3-Dichlorobenzidine	ND	U	0.0881	ND	U	0.0955	ND	U	0.0965	ND	U	0.0372
56-55-3	Benzo(a)anthracene	0.473		0.0354	0.0549	J	0.0383	ND	U	0.0374	**10.8**	D	0.0372
117-81-7	bis(2-Ethylhexyl)phthalate	ND	U	0.0354	0.367		0.0383	ND	U	0.0374	ND	U	0.0372
218-01-9	Chrysene	0.605		0.0354	0.0775	J	0.0383	ND	U	0.0374	**12.7**	D	0.0372
117-84-0	Di-n-octyl phthalate	ND		0.0354	ND	U	0.0383	ND	U	0.0374	ND	U	0.0372
205-99-2	Benzo(b)fluoranthene	0.872		0.0354	0.0595	J	0.0383	ND	U	0.0374	**11.9**	D	0.0372
207-08-9	Benzo(k)fluoranthene	0.788		0.0354	0.0637	J	0.0383	ND	U	0.0374	**8.62**	D	0.0372
50-32-8	Benzo(a)pyrene	**1.04**		0.0354	0.0468	J	0.0383	ND	U	0.0374	**9.5**	D	0.0372
193-39-5	Indeno(1,2,3-cd)pyrene	**0.644**		0.0354	ND	U	0.0383	ND	U	0.0374	**1.38**		0.0372
53-70-3	Dibenz(a,h)anthracene	0.205		0.0354	ND	U	0.0383	ND	U	0.0374	**0.684**		0.0372
191-24-2	Benzo(g,h,i)perylene	0.7		0.0354	ND	U	0.0383	ND	U	0.0374	1.33		0.0372
Pesticides													
319-84-6	alpha-BHC	ND	U	0.000701	ND	U	0.000759	ND	U	0.000741	ND	U	0.000738
319-85-7	beta-BHC	ND	U	0.000701	ND	U	0.000759	ND	U	0.000741	ND	U	0.000738
319-86-8	delta-BHC	ND	U	0.000701	ND	U	0.000759	ND	U	0.000741	ND	U	0.000738
58-89-9	gamma-BHC (Lindane)	ND	U	0.000701	ND	U	0.000759	ND	U	0.000741	ND	U	0.000738
76-44-8	Heptachlor	ND	U	0.000701	ND	U	0.000759	ND	U	0.000741	ND	U	0.000738
309-00-2	Aldrin	ND	U	0.000701	ND	U	0.000759	ND	U	0.000741	ND	U	0.000738
1024-57-3	Heptachlor epoxide	ND	U	0.000701	ND	U	0.000759	ND	U	0.000741	ND	U	0.000738
959-98-8	Endosulfan I	ND	U	0.000701	ND	U	0.000759	ND	U	0.000741	ND	U	0.000738
60-57-1	Dieldrin	ND	U	0.00141	ND	U	0.00153	ND	U	0.00149	ND	U	0.00149
72-55-9	4,4-DDE	ND	U	0.00141	ND	U	0.00153	ND	U	0.00149	ND	U	0.00149
72-20-8	Endrin	ND	U	0.00141	ND	U	0.00153	ND	U	0.00149	ND	U	0.00149
33213-65-9	Endosulfan II	0.0023		0.00141	ND	U	0.00153	ND	U	0.00149	ND	U	0.00149
72-54-8	4,4-DDD	ND	U	0.00141	ND	U	0.00153	ND	U	0.00149	ND	U	0.00149
1031-07-8	Endosulfan Sulfate	ND	U	0.00141	ND	U	0.00153	ND	U	0.00149	ND	U	0.00149
50-29-3	4,4-DDT	ND	U	0.00141	ND	U	0.00153	ND	U	0.00149	ND	U	0.00149
72-43-5	Methoxychlor	ND	U	0.00707	ND	U	0.00766	ND	U	0.00747	ND	U	0.00745
53494-70-5	Endrin Ketone	ND	U	0.00141	ND	U	0.00153	ND	U	0.00149	ND	U	0.00149
7421-93-4	Endrin aldehyde	ND	U	0.00141	ND	U	0.00153	ND	U	0.00149	ND	U	0.00149
5103-71-9	alpha-Chlordane	ND	U	0.000701	ND	U	0.000759	ND	U	0.000741	ND	U	0.000738
72-55-9	gamma-Chlordane	ND	U	0.000701	ND	U	0.000759	ND	U	0.000741	ND	U	0.000738
8001-35-2	Toxaphene	ND	U	0.0354	ND	U	0.0383	ND	U	0.0186	ND	U	0.0372
Polychlorinated Biphenyls													
12674-11-2	Aroclor-1016	ND	U	0.0176	ND	U	0.0191	ND	U	0.0186	ND	U	0.0186
11104-28-2	Aroclor-1221	ND	U	0.0176	ND	U	0.0191	ND	U	0.0186	ND	U	0.0186
11141-16-5	Aroclor-1232	ND	U	0.0176	ND	U	0.0191	ND	U	0.0186	ND	U	0.0186
53469-21-9	Aroclor-1242	ND	U	0.0176	ND	U	0.0191	ND	U	0.0186	ND	U	0.0186
12672-29-6	Aroclor-1248	ND	U	0.0176	ND	U	0.0191	ND	U	0.0186	ND	U	0.0186
11097-69-1	Aroclor-1254	ND	U	0.0176	ND	U	0.0191	ND	U	0.0186	ND	U	0.0186
11096-82-5	Aroclor-1260	ND	U	0.0176	ND	U	0.0191	ND	U	0.0186	ND	U	0.0186
37324-23-5	Aroclor-1262	ND	U	0.0176	ND	U	0.0191	ND	U	0.0186	ND	U	0.0186
11100-14-4	Aroclor-1268	ND	U	0.0176	ND	U	0.0191	ND	U	0.0186	ND	U	0.0186
Metals													
7439-97-6	Mercury	ND	U	0.106	**0.241**		0.115	ND	U	0.112	**0.611**		0.112
7429-90-5	Silver	~	~	~	~	~	~	~	~	~	ND	U	0.38
7440-36-0	Aluminum	5040		56	6750		64	6560		58	3210		57
7440-38-2	Arsenic	**49.3**		0.75	**13.2**		0.84	ND	U	0.77	5.54		0.76
7440-39-3	Barium	137		0.37	97.1		0.42	33		0.39	242		0.38
7440-41-7	Beryllium	ND	U	0.3	ND	U	0.34	ND	U	0.31	0.33		0.3
7440-43-9	Calcium	8510		5.6	7200		6.4	13800		5.8	48900		57
7440-70-2	Cadmium	0.54		0.37	ND		0.42	ND	U	0.39	0.6		0.38
7440-47-3	Cobalt	14.4		0.37	13.2		0.42	5.33		0.39	4.48		0.38
7440-48-4	Chromium	23.6		0.37	29.8		0.42	11.4		0.39	9.54		0.38
7440-50-8	Copper	**185**		0.37	**71.2**		0.42	14.4		0.39	193	R	3.8
7439-92-1	Iron	176000		562	66200		64	12600		58	20600		57
7439-92-1	Potassium	640		5.6	1050		6.4	1240		5.8	709		5.7
7439-95-4	Magnesium	3160		5.6	2490		6.4	6600		58	21400		57
7439-96-5	Manganese	472	R	3.7	371	R	4.2	347	R	3.9	175	R	0.38
7439-97-6	Sodium	143		5.6	164		6.4	180		5.8	146		5.7
7440-02-0	Nickel	23.5		0.37	22.4		0.42	13.8		0.39	14.8		0.38
7440-09-7	Lead	**924**		3.7	**853**		4.2	9.34		0.39	**2070**		3.8
7782-49-2	Antimony	ND	U	3.7	ND	U	4.2	ND	U	3.9	16.7		3.8
7440-22-4	Selenium	ND	U	1.5	ND	U	1.6	ND	U	1.6	ND	U	1.5
7440-23-5	Thallium	ND	U	3.4	ND	U	3.8	ND	U	3.4	ND	U	3.4
7440-62-2	Vanadium	52.9		0.37	38.5		0.42	14		0.39	14.8		0.38
7440-66-6	Zinc	**311**		3.7	**544**		4.2	35		0.39	**287**	R	3.8
xxxx-xx-02	Solids, Percent	89			85			90			87		

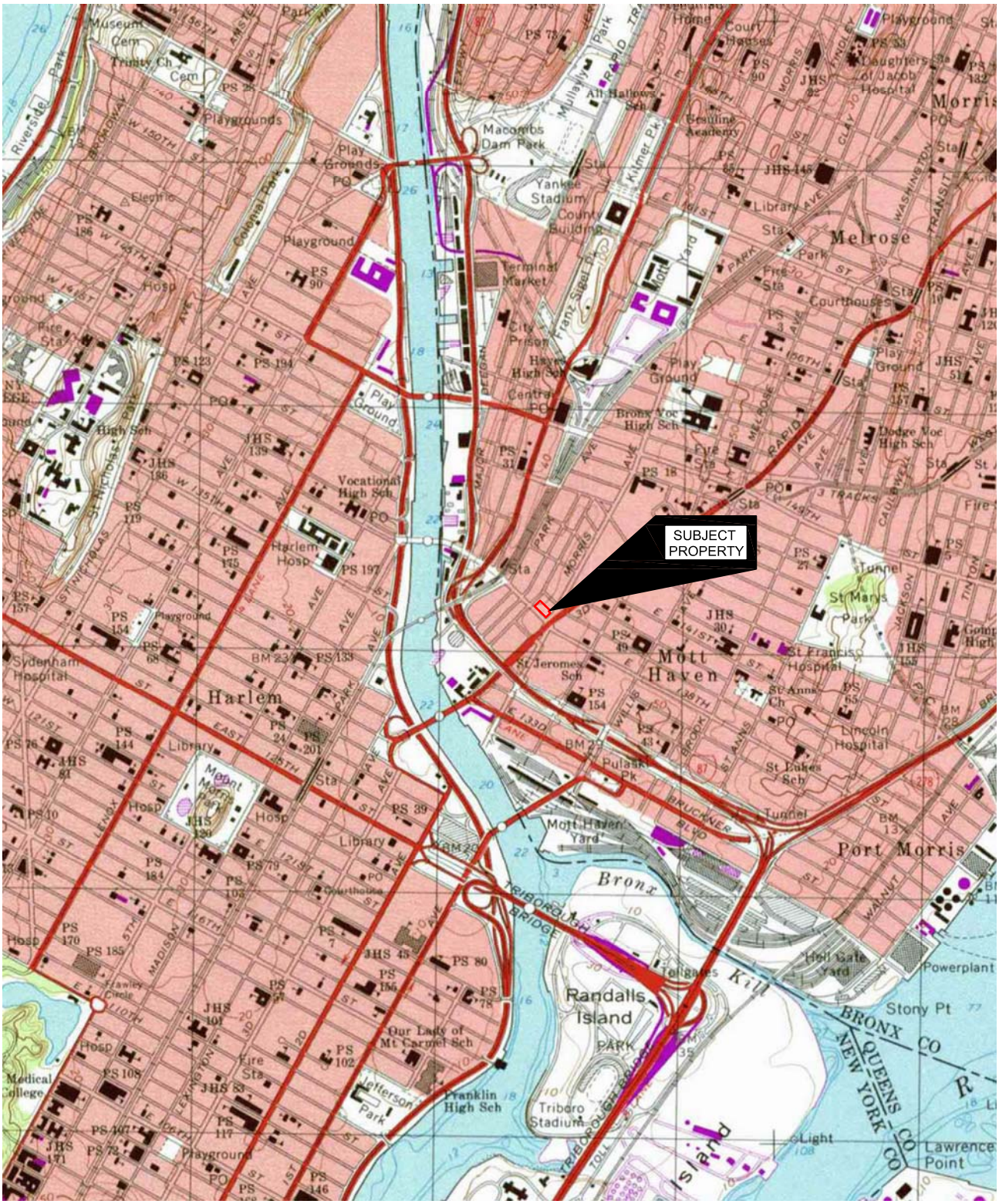
CAS #	Laboratory ID:	1200217-09			1200217-10			1200217-11			Residential Restricted Use Soil Cleanup Objective	Track 1 Cleanup Numbers
	Brinkerhoff Sample ID:	HF-6B			HF-6C			FB-SOIL				
	Depth (feet):	6.5-7.0			23.5-24.0			N/A				
	Matrix:	SOIL			SOIL			SOIL				
	Sampled Date	04/10/12			04/10/12			04/10/12				
	Parameter	Conc.	Q	MDL	Conc.	Q	MDL	Conc.	Q	MDL		
51-28-5	2,4-Dinitrophenol	ND	U	0.0408	ND	U	0.0393	~	~	~	NA	NA
100-02-7	4-Nitrophenol	ND	U	0.0408	ND	U	0.0393	~	~	~	NA	NA
132-64-9	Dibenzofuran	ND	U	0.0408	ND	U	0.0393	~	~	~	59	NA
606-20-2	2,6-Dinitrotoluene	ND	U	0.0408	ND	U	0.0393	~	~	~	NA	NA
121-14-2	2,4-Dinitrotoluene	ND	U	0.0408	ND	U	0.0393	~	~	~	NA	NA
84-66-2	Diethylphthalate	ND	U	0.0408	ND	U	0.0393	~	~	~	NA	NA
7005-72-3	4-Chlorophenyl-phenylether	ND	U	0.0408	ND	U	0.0393	~	~	~	NA	NA
86-73-7	Fluorene	ND	U	0.0408	ND	U	0.0393	~	~	~	100	30
100-01-6	4-Nitroaniline	ND	U	0.0408	ND	U	0.0393	~	~	~	NA	NA
534-52-1	4,6-Dinitro-2-methylphenol	ND	U	0.0408	ND	U	0.0393	~	~	~	NA	NA
86-30-6	N-Nitrosodiphenylamine	ND	U	0.0408	ND	U	0.0393	~	~	~	NA	NA
101-55-3	4-Bromophenyl-phenylether	ND	U	0.0408	ND	U	0.0393	~	~	~	NA	NA
118-74-1	Hexachlorobenzene	ND	U	0.0408	ND	U	0.0393	~	~	~	1.2	NA
87-86-5	Pentachlorophenol	ND	U	0.0408	ND	U	0.0393	~	~	~	6.7	0.8
85-01-8	Phenanthrene	0.0711	J	0.0408	ND	U	0.0393	~	~	~	100	100
120-12-7	Anthracene	ND	U	0.0408	ND	U	0.0393	~	~	~	100	100
84-74-2	Di-n-butylphthalate	ND	U	0.0408	ND	U	0.0393	~	~	~	NA	NA
206-44-0	Fluoranthene	0.0752	J	0.0408	ND	U	0.0393	~	~	~	100	100
129-00-0	Pyrene	0.0743	J	0.0408	ND	U	0.0393	~	~	~	100	100
85-68-7	Butylbenzylphthalate	ND	U	0.0408	ND	U	0.0393	~	~	~	NA	NA
91-94-1	3,3-Dichlorobenzidine	ND	U	0.102	ND	U	0.098	~	~	~	NA	NA
56-55-3	Benzo(a)anthracene	ND	U	0.0408	ND	U	0.0393	~	~	~	1	1
117-81-7	bis(2-Ethylhexyl)phthalate	ND	U	0.0408	ND	U	0.0393	~	~	~	NA	NA
218-01-9	Chrysene	ND	U	0.0408	ND	U	0.0393	~	~	~	3.9	1
117-84-0	Di-n-octyl phthalate	ND	U	0.0408	ND	U	0.0393	~	~	~	NA	NA
205-99-2	Benzo(b)fluoranthene	ND	U	0.0408	ND	U	0.0393	~	~	~	1	1
207-08-9	Benzo(k)fluoranthene	ND	U	0.0408	ND	U	0.0393	~	~	~	3.9	0.8
50-32-8	Benzo(a)pyrene	ND	U	0.0408	ND	U	0.0393	~	~	~	1	1
193-39-5	Indeno(1,2,3-cd)pyrene	ND	U	0.0408	ND	U	0.0393	~	~	~	0.5	0.5
53-70-3	Dibenz(a,h)anthracene	ND	U	0.0408	ND	U	0.0393	~	~	~	0.33	0.33
191-24-2	Benzo(g,h,i)perylene	ND	U	0.0408	ND	U	0.0393	~	~	~	100	100
Pesticides												
319-84-6	alpha-BHC	ND	U	0.000809	ND	U	0.000779	~	~	~	0.48	0.02
319-85-7	beta-BHC	ND	U	0.000809	ND	U	0.000779	~	~	~	0.36	0.036
319-86-8	delta-BHC	ND	U	0.000809	ND	U	0.000779	~	~	~	100	0.04
58-89-9	gamma-BHC (Lindane)	ND	U	0.000809	ND	U	0.000779	~	~	~	1.3	0.1
76-44-8	Heptachlor	ND	U	0.000809	ND	U	0.000779	~	~	~	2.1	0.042
309-00-2	Aldrin	ND	U	0.000809	ND	U	0.000779	~	~	~	0.097	0.005
1024-57-3	Heptachlor epoxide	ND	U	0.000809	ND	U	0.000779	~	~	~	NA	NA
959-98-8	Endosulfan I	ND	U	0.000809	ND	U	0.000779	~	~	~	24	2.4
60-57-1	Dieldrin	ND	U	0.00163	ND	U	0.00157	~	~	~	0.2	0.005
72-55-9	4,4-DDE	ND	U	0.00163	ND	U	0.00157	~	~	~	8.9	0.0033
72-20-8	Endrin	ND	U	0.00163	ND	U	0.00157	~	~	~	11	0.014
33213-65-9	Endosulfan II	ND	U	0.00163	ND	U	0.00157	~	~	~	24	2.4
72-54-8	4,4-DDD	ND	U	0.00163	ND	U	0.00157	~	~	~	13	0.0033
1031-07-8	Endosulfan Sulfate	ND	U	0.00163	ND	U	0.00157	~	~	~	24	2.4
50-29-3	4,4-DDT	ND	U	0.00163	ND	U	0.00157	~	~	~	7.9	0.0033
72-43-5	Methoxychlor	ND	U	0.00816	ND	U	0.00786	~	~	~	NA	NA
53494-70-5	Endrin Ketone	ND	U	0.00163	ND	U	0.00157	~	~	~	NA	NA
7421-93-4	Endrin aldehyde	ND	U	0.00163	ND	U	0.00157	~	~	~	NA	NA
5103-71-9	alpha-Chlordane	ND	U	0.000809	ND	U	0.000779	~	~	~	4.2	0.094
72-55-9	gamma-Chlordane	ND	U	0.000809	ND	U	0.000779	~	~	~	NA	NA
8001-35-2	Toxaphene	ND	U	0.0408	ND	U	0.0393	~	~	~	NA	NA
Polychlorinated Biphenyls												
12674-11-2	Aroclor-1016	ND	U	0.0203	ND	U	0.0194	~	~	~	NA	0.1
11104-28-2	Aroclor-1221	ND	U	0.0203	ND	U	0.0194	~	~	~	NA	0.1
11141-16-5	Aroclor-1232	ND	U	0.0203	ND	U	0.0194	~	~	~	NA	0.1
53469-21-9	Aroclor-1242	ND	U	0.0203	ND	U	0.0194	~	~	~	NA	0.1
12672-29-6	Aroclor-1248	ND	U	0.0203	ND	U	0.0194	~	~	~	NA	0.1
11097-69-1	Aroclor-1254	ND	U	0.0203	ND	U	0.0194	~	~	~	NA	0.1
11096-82-5	Aroclor-1260	ND	U	0.0203	ND	U	0.0194	~	~	~	NA	0.1
37324-23-5	Aroclor-1262	ND	U	0.0203	ND	U	0.0194	~	~	~	NA	0.1
11100-14-4	Aroclor-1268	ND	U	0.0203	ND	U	0.0194	~	~	~	NA	0.1
Metals												
7439-97-6	Mercury	ND	U	0.123	ND	U	0.118	~	~	~	0.81	0.18
7429-90-5	Silver	ND	U	0.41	ND	U	0.36	~	~	~	36	2
7440-36-0	Aluminum	5310		61	4130		54	~	~	~	NA	NA
7440-38-2	Arsenic	4.07		0.82	ND		0.73	~	~	~	16	13
7440-39-3	Barium	37.1		0.41	20.7		0.36	~	~	~	400	350
7440-41-7	Beryllium	0.34		0.33	ND		0.29	~	~	~	72	7.2
7440-43-9	Calcium	6890		6.1	12000		5.4	~	~	~	NA	NA
7440-70-2	Cadmium	ND	U	0.41	ND	U	0.36	~	~	~	4.3	2.5
7440-47-3	Cobalt	7.74		0.41	2.95		0.36	~	~	~	NA	NA
7440-48-4	Chromium	12		0.41	6.05		0.36	~	~	~	290	30
7440-50-8	Copper	26.6	R	0.41	5.96	R	0.36	~	~	~	270	50
7439-92-1	Iron	59300		61	7590		5.4	~	~	~	NA	NA
7439-92-1	Potassium	705		6.1	770		5.4	~	~	~	NA	NA
7439-95-4	Magnesium	3470		6.1	7360		54	~	~	~	NA	NA
7439-96-5	Manganese	461	R	4.1	159	R	0.36	~	~	~	2000	1600
7439-97-6	Sodium	102		6.1	122		5.4	~	~	~	NA	NA
7440-02-0	Nickel	13.3		0.41	7.73		0.36	~	~	~	310	30
7440-09-7	Lead	37.9		0.41	3.61		0.36	~	~	~	400	63
7782-49-2	Antimony	ND	U	6.1	ND	U	3.6	~	~	~	NA	NA
7440-22-4	Selenium	ND	U	1.8	ND	U	1.5	~	~	~	180	3.9
7440-23-5	Thallium	ND	U	3.7	ND	U	3.3	~	~	~	NA	NA
7440-62-2	Vanadium	34		0.41	7.83		0.36	~	~	~	NA	NA
7440-66-6	Zinc	45.6	R	0.41	20.9	R	0.36	~	~	~	10000	109
xxxx-xx-02	Solids, Percent	84			84			~				NA

Notes:

BOLD-concentration exceeds Track 2 - Restricted Residential Use Soil Cleanup Objective

(yellow highlight) indicates concentration exceeds both Track 1 and Track 2 Restricted Residential Use Soil Cleanup Objective

Conc = Concentration
Q = Qualifier
MDL = Laboratory method detection limit
All values are expressed in milligrams per Kilograms (mg/Kg)
ND = Analyzed for but Not Detected at the MDL
U = Not detected above instrument detection limits
J = The concentration was detected a value below Reporting Limit and above MDL
D = Sample was diluted
B = Indicates compound found in associated blank
R = Data rejected by validator
* Values outside of QC limits
~ = Not analyzed
NA = Not Applicable



SCALE: 1 : 24,000
PHOTO REVISED: 1995

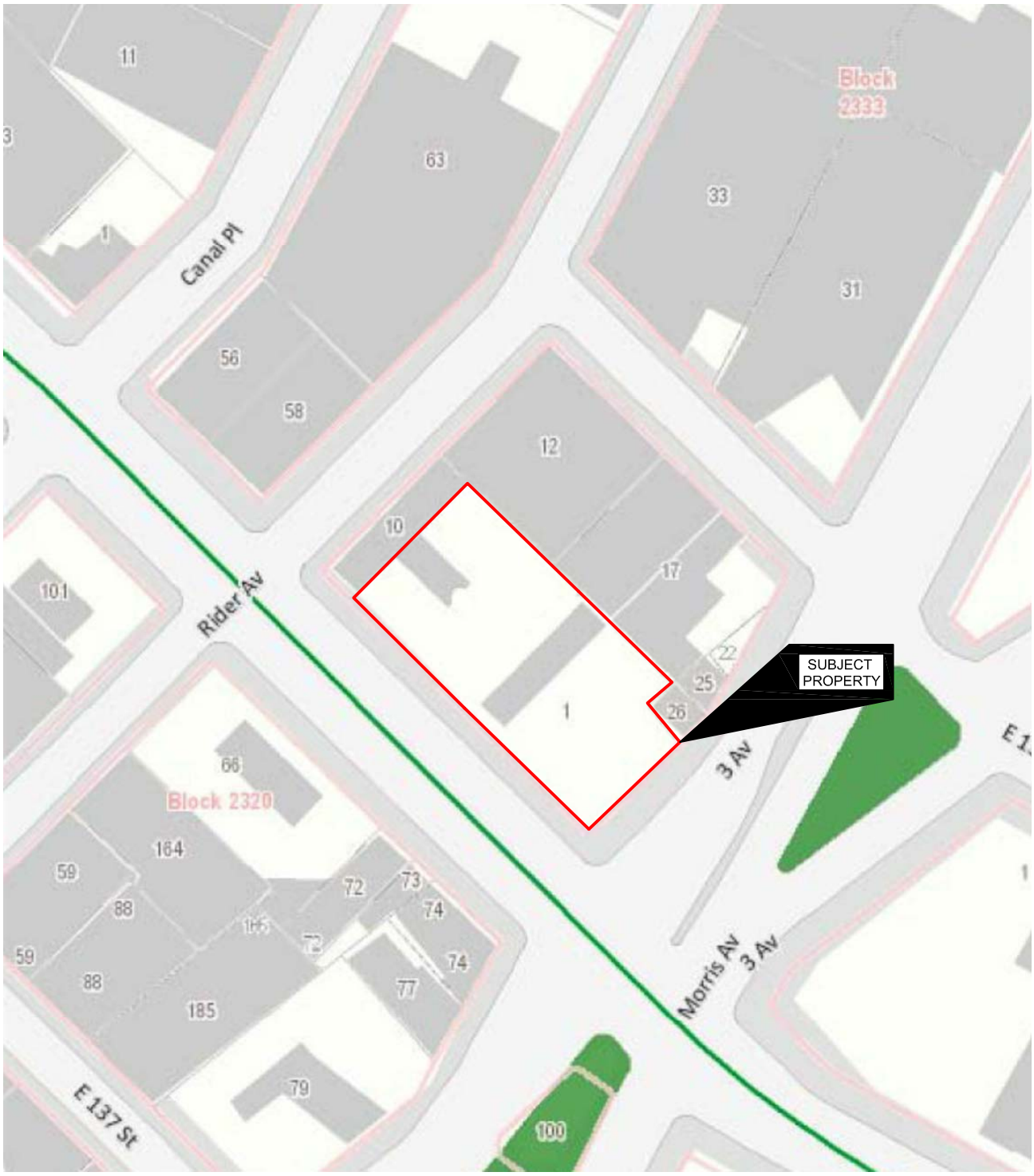
0′ 1000′ 2000′

SCALE: 1"=2000′

IRA N. PIERCE, PE.

FIGURE 1 - SITE LOCATION MAP
U.S.G.S. TOPOGRAPHIC CENTRAL PARK, NY QUAD
255 EAST 138TH STREET
BLOCK 2333, LOT 1
BRONX, NEW YORK

DATE: 3/26/13	JOB NO.: 10BR188	SCALE: 1″ = 2000′



0′ 50′ 100′

SCALE: 1"=100′

IRA N. PIERCE, PE.

FIGURE 2 - TAX MAP

255 EAST 138TH STREET
BLOCK 2333, LOT 1
BRONX, NEW YORK

DATE: 3/26/13	JOB NO.: 10BR188	SCALE: 1″ = 100′

MW-3
6.44

MW-4
8.20

MW-1
7.50

MW-2
4.49

GROUNDWATER FLOW

4.0

5.0

6.0

7.0

8.0

EAST 138TH STREET

LEGEND

⊕ – MONITORING WELL LOCATION

MW-1

→⊢ – GROUNDWATER FLOW DIRECTION

CONTOUR INTERVAL = 1.0 FEET

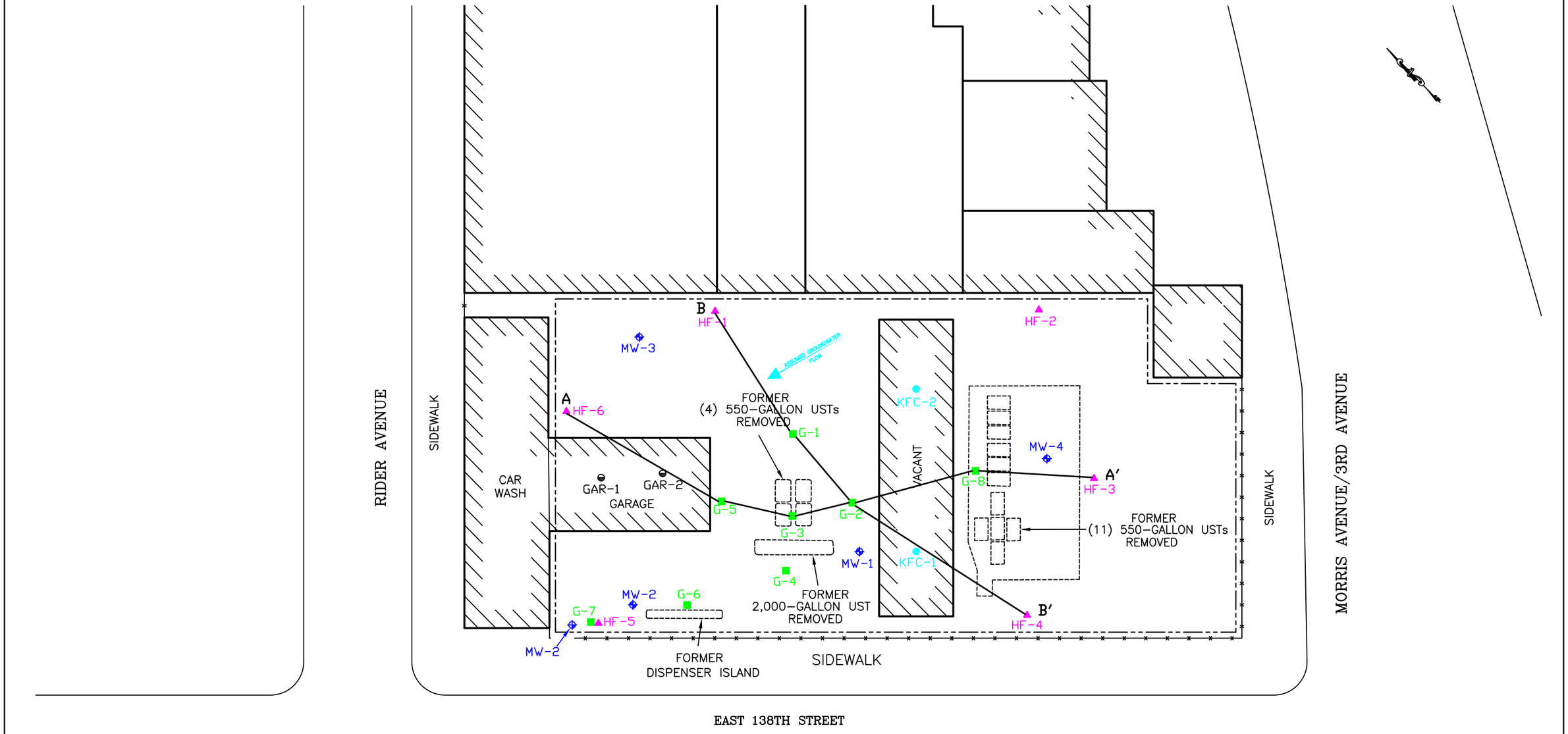
0′ 10′ 20′

SCALE: 1"=20′

IRA N. PIERCE, PE.

FIGURE 3
GROUNDWATER CONTOUR MAP - APRIL 26, 2012
255 EAST 138TH STREET
BLOCK 2333, LOT 1
BRONX, NEW YORK

DATE: 8/14/12	JOB NO.: 10BR188	SCALE: 1" = 20'



LEGEND

---- – PROPERTY BOUNDARY

MW-1 – MONITORING WELL LOCATION

G-1 – SOIL BORING SAMPLE LOCATION

HF-1 – SOIL BORING SAMPLE LOCATION

KFC-1 – SOIL BORING SAMPLE LOCATION

GAR-1 – SOIL BORING SAMPLE LOCATION

A—A' – CROSS SECTIONS (SEE FIGURES 10 & 11)

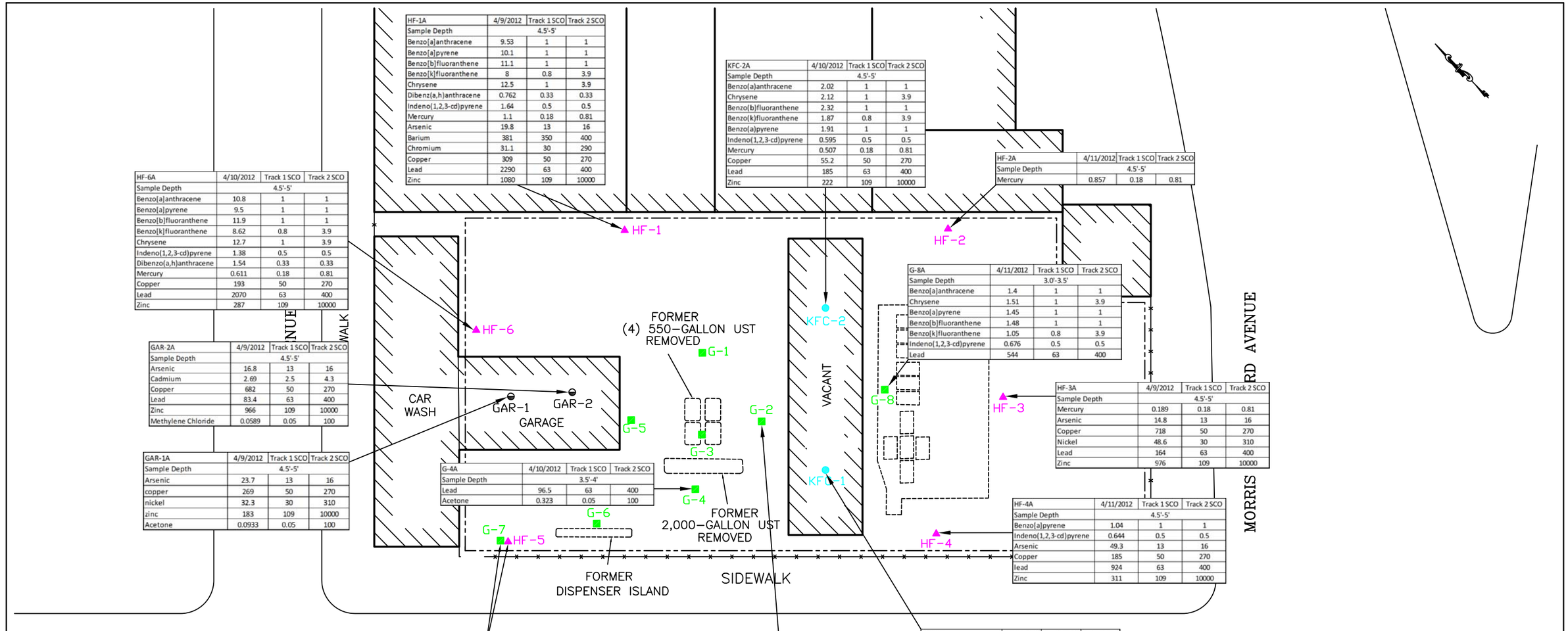
0′ 15′ 30′

SCALE: 1"=30′

IRA N. PIERCE, PE.

FIGURE 4
SOIL BORING LOCATION MAP
255 EAST 138TH STREET
BLOCK 2333, LOT 1
BRONX, NEW YORK

DATE: 5/23/13	JOB NO.: 10BR188	SCALE: 1″ = 30′



LEGEND

---- – PROPERTY BOUNDARY

■ – SOIL BORING SAMPLE LOCATION
G-1

▲ – SOIL BORING SAMPLE LOCATION
HF-1

● – SOIL BORING SAMPLE LOCATION
KFC-1

◒ – SOIL BORING SAMPLE LOCATION
GAR-1

TRACK 1 SCO - UNRESTRICTED USE SOIL CLEANUP OBJECTIVES

TRACK 2 SCO - RESTRICTED RESIDENTIAL USE SOIL CLEANUP OBJECTIVES

NOTE: ALL COMPOUND RESULTS ARE IN PARTS PER MILLION (ppm)

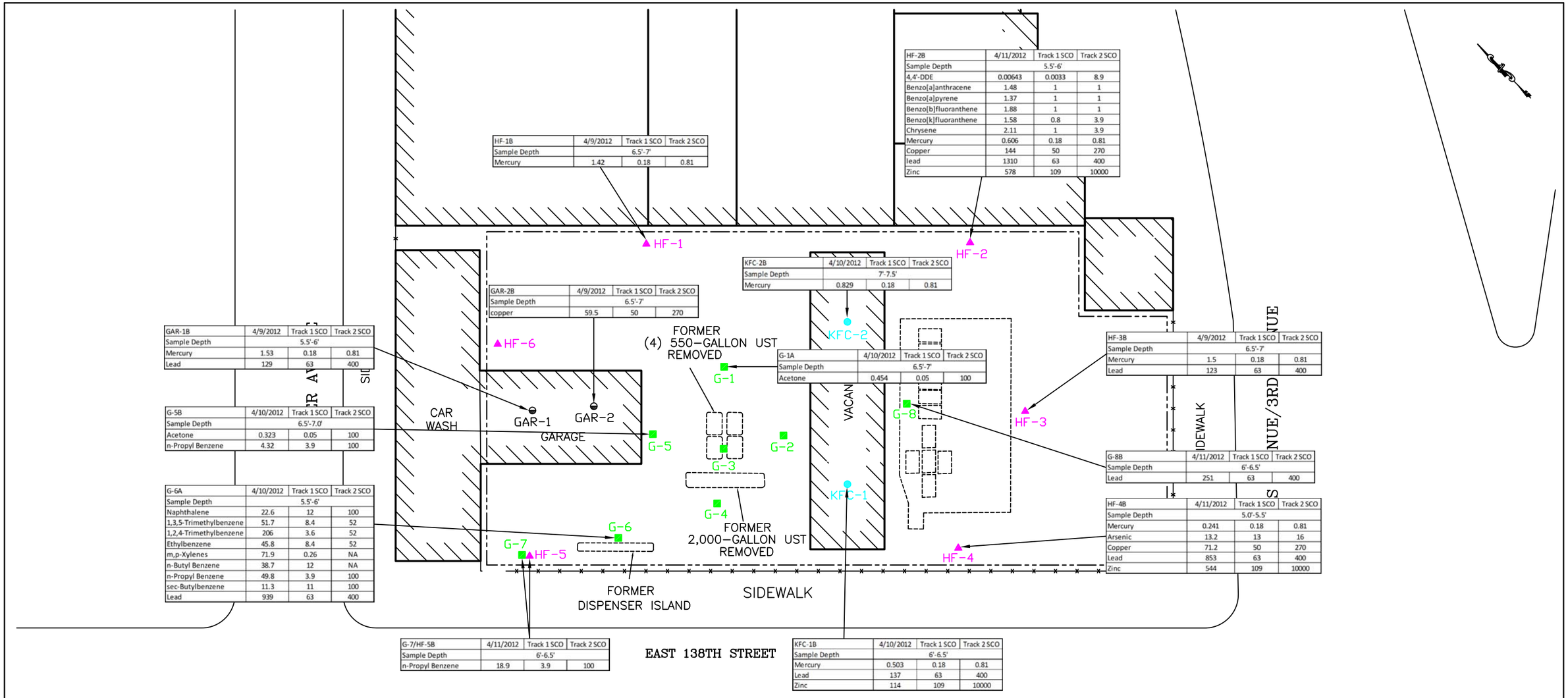
0' 15' 30'

SCALE: 1"=30'

IRA N. PIERCE, PE.

FIGURE 5 - EXCEEDANCES OF TRACK 1 & 2
FOR SOIL/FILL 3.0-5.0 FEET BELOW GRADE MAP
255 EAST 138TH STREET
BLOCK 2333, LOT 1
BRONX, NEW YORK

DATE:	JOB NO.:	SCALE:
5/7/13	10BR188	1" = 30'



LEGEND

---- – PROPERTY BOUNDARY

■ – SOIL BORING SAMPLE LOCATION
G-1

▲ – SOIL BORING SAMPLE LOCATION
HF-1

● – SOIL BORING SAMPLE LOCATION
KFC-1

◒ – SOIL BORING SAMPLE LOCATION
GAR-1

TRACK 1 SCO - UNRESTRICTED USE SOIL CLEANUP OBJECTIVES

TRACK 2 SCO - RESTRICTED RESIDENTIAL USE SOIL CLEANUP OBJECTIVES

NOTE: ALL COMPOUND RESULTS ARE IN PARTS PER MILLION (ppm)

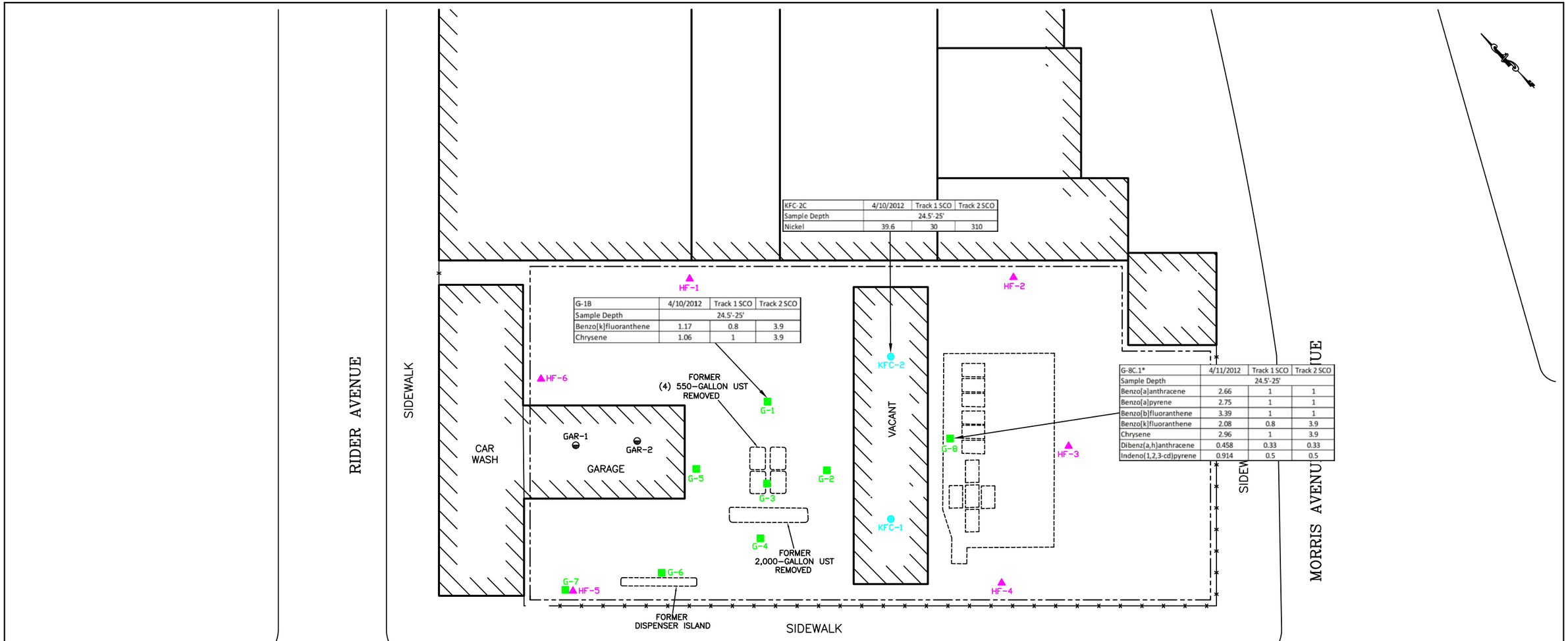
0′ 15′ 30′

SCALE: 1"=30′

IRA N. PIERCE, PE.

FIGURE 6 - EXCEEDANCES OF TRACK 1 & 2
FOR SOIL/FILL 5.5-7.5 FEET BELOW GRADE MAP
255 EAST 138TH STREET
BLOCK 2333, LOT 1
BRONX, NEW YORK

DATE:	JOB NO.:	SCALE:
5/7/13	10BR188	1" = 30'



LEGEND

---- – PROPERTY BOUNDARY

■ – SOIL BORING SAMPLE LOCATION
G-1

▲ – SOIL BORING SAMPLE LOCATION
HF-1

● – SOIL BORING SAMPLE LOCATION
KFC-1

◒ – SOIL BORING SAMPLE LOCATION
GAR-1

TRACK 1 SCO - UNRESTRICTED USE SOIL CLEANUP OBJECTIVES

TRACK 2 SCO - RESTRICTED RESIDENTIAL USE SOIL CLEANUP OBJECTIVES

NOTE: ALL COMPOUND RESULTS ARE IN PARTS PER MILLION (ppm)

*G8C.1 IS A DUPLICATE SAMPLE OF G-8C, WHICH DID NOT HAVE DETECTIONS OF PAHS.

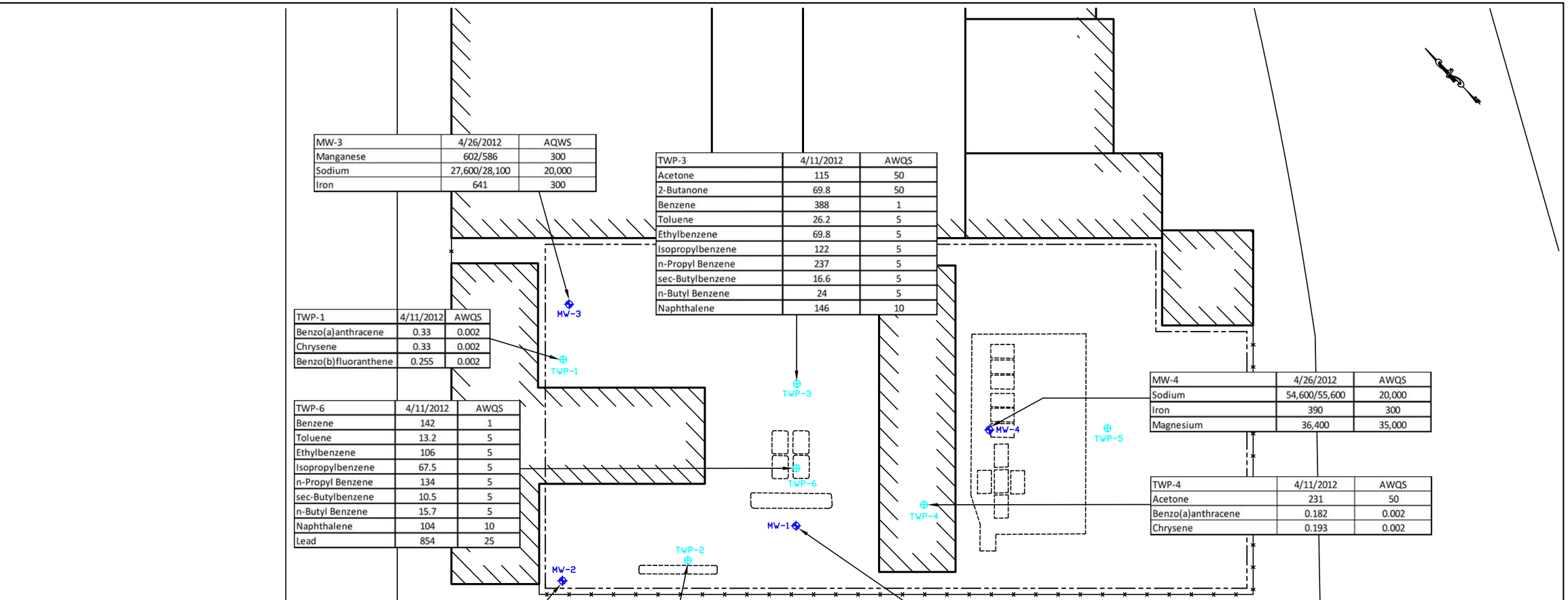
0′ 15′ 30′

SCALE: 1"=30′

IRA N. PIERCE, PE.

FIGURE 7 - EXCEEDANCES OF TRACK 1 & 2
FOR SOIL/FILL 24.5-25.0 FEET BELOW GRADE MAP
255 EAST 138TH STREET
BLOCK 2333, LOT 1
BRONX, NEW YORK

DATE: 5/7/13	JOB NO.: 10BR188	SCALE: 1" = 30'



MW-3	4/26/2012	AQWS
Manganese	602/586	300
Sodium	27,600/28,100	20,000
Iron	641	300

TWP-3	4/11/2012	AWQS
Acetone	115	50
2-Butanone	69.8	50
Benzene	388	1
Toluene	26.2	5
Ethylbenzene	69.8	5
Isopropylbenzene	122	5
n-Propyl Benzene	237	5
sec-Butylbenzene	16.6	5
n-Butyl Benzene	24	5
Naphthalene	146	10

TWP-1	4/11/2012	AWQS
Benzo(a)anthracene	0.33	0.002
Chrysene	0.33	0.002
Benzo(b)fluoranthene	0.255	0.002

TWP-6	4/11/2012	AWQS
Benzene	142	1
Toluene	13.2	5
Ethylbenzene	106	5
Isopropylbenzene	67.5	5
n-Propyl Benzene	134	5
sec-Butylbenzene	10.5	5
n-Butyl Benzene	15.7	5
Naphthalene	104	10
Lead	854	25

MW-4	4/26/2012	AWQS
Sodium	54,600/55,600	20,000
Iron	390	300
Magnesium	36,400	35,000

TWP-4	4/11/2012	AWQS
Acetone	231	50
Benzo(a)anthracene	0.182	0.002
Chrysene	0.193	0.002

MW-2	4/26/2012	AQWS
Methylene Chloride	11.8	5
Benzene	26.7	1
Ethylbenzene	10.3	5
Isopropylbenzene	149	5
n-Propyl Benzene	344	5
1,2,4-Trimethylbenzene	6.1	5
sec-Butylbenzene	23.2	5
n-Butyl Benzene	23.8	5
Naphthalene	17.8	10
Manganese	319/310	300
Sodium	21,700/22,400	20,000
Iron	10,100	300

TWP-2	4/11/2012	AWQS
Benzene	25.6	1
Toluene	10.3	5
Ethylbenzene	122	5
Isopropylbenzene	184	5
n-Propyl Benzene	451	5
1,3,5-Trimethylbenzene	16.8	5
1,2,4-Trimethylbenzene	88	5
sec-Butylbenzene	25	5
n-Butyl Benzene	33.4	5
Naphthalene	219	10
Lead	51	25

MW-1	4/26/2012	AWQS
Benzene	1.36	1
Sodium	63,300/63,700	20,000
Iron	870	300
Manganese	394/387	300

LEGEND

– MONITORING WELL LOCATION
MW–1

– TEMPORARY WELL POINT LOCATION
TWP–1

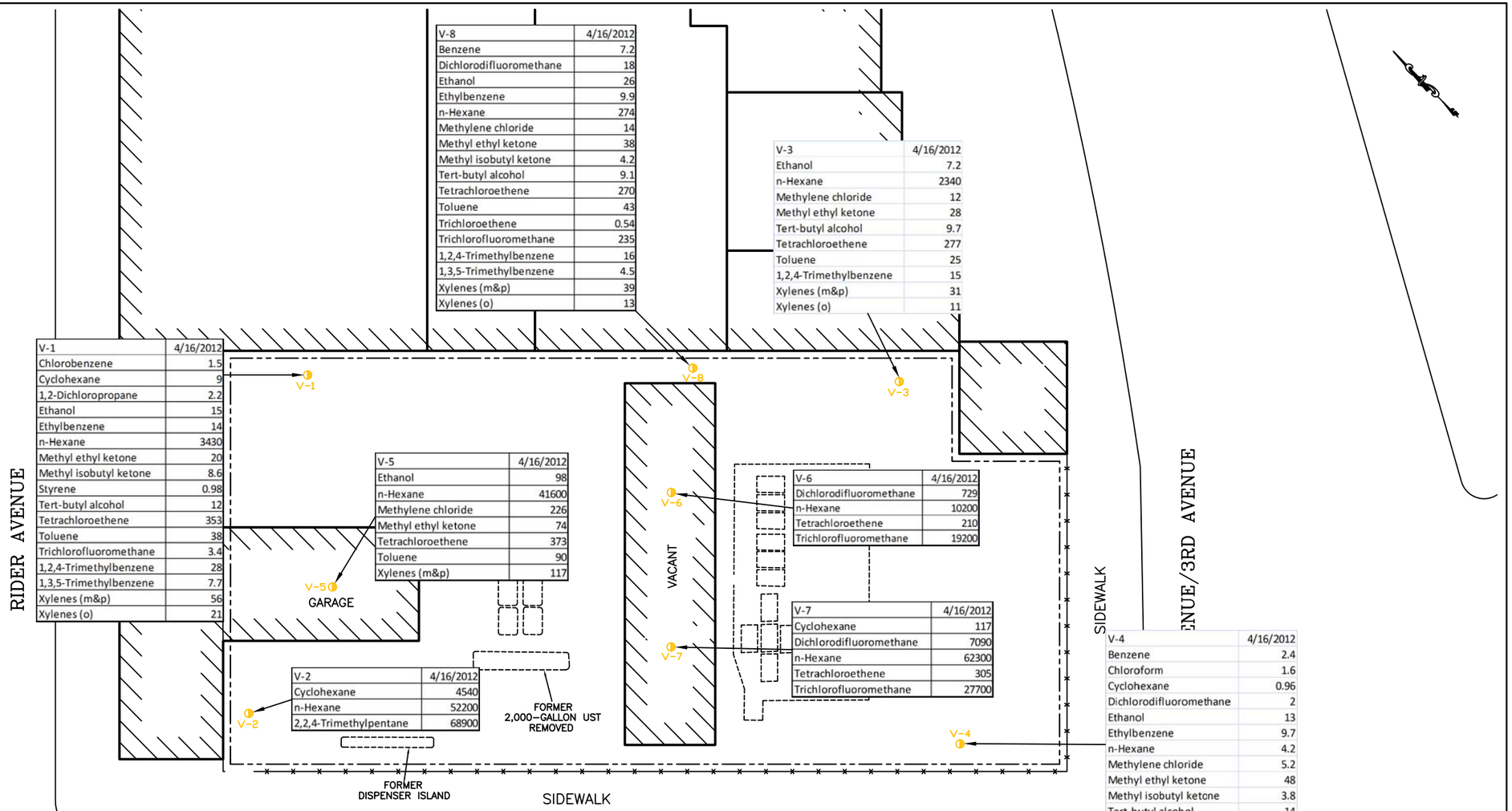
SODIUM 21700/22400 (DISSOLVED)
AWQS – AMBIENT WATER QUALITY STANDARDS
TWP6 – LEAD WAS NOT DETECTED IN THE DISSOLVED PHASE
NOTE: ALL COMPOUND RESULTS ARE IN UG/L.

0′ 20′ 40′
SCALE: 1"=40′

IRA N. PIERCE, PE.

FIGURE 8 – EXCEEDANCES OF GROUNDWATER QUALITY STANDARDS – MONITORING WELLS AND TEMPORARY WELL POINTS
255 EAST 138TH STREET – BLOCK 2333, LOT 1
BRONX, NEW YORK

DATE: 6/10/13 | JOB NO.: 10BR188 | SCALE: 1″ = 30′



V-1	4/16/2012
Chlorobenzene	1.5
Cyclohexane	9
1,2-Dichloropropane	2.2
Ethanol	15
Ethylbenzene	14
n-Hexane	3430
Methyl ethyl ketone	20
Methyl isobutyl ketone	8.6
Styrene	0.98
Tert-butyl alcohol	12
Tetrachloroethene	353
Toluene	38
Trichlorofluoromethane	3.4
1,2,4-Trimethylbenzene	28
1,3,5-Trimethylbenzene	7.7
Xylenes (m&p)	56
Xylenes (o)	21

V-8	4/16/2012
Benzene	7.2
Dichlorodifluoromethane	18
Ethanol	26
Ethylbenzene	9.9
n-Hexane	274
Methylene chloride	14
Methyl ethyl ketone	38
Methyl isobutyl ketone	4.2
Tert-butyl alcohol	9.1
Tetrachloroethene	270
Toluene	43
Trichloroethene	0.54
Trichlorofluoromethane	235
1,2,4-Trimethylbenzene	16
1,3,5-Trimethylbenzene	4.5
Xylenes (m&p)	39
Xylenes (o)	13

V-3	4/16/2012
Ethanol	7.2
n-Hexane	2340
Methylene chloride	12
Methyl ethyl ketone	28
Tert-butyl alcohol	9.7
Tetrachloroethene	277
Toluene	25
1,2,4-Trimethylbenzene	15
Xylenes (m&p)	31
Xylenes (o)	11

V-5	4/16/2012
Ethanol	98
n-Hexane	41600
Methylene chloride	226
Methyl ethyl ketone	74
Tetrachloroethene	373
Toluene	90
Xylenes (m&p)	117

V-6	4/16/2012
Dichlorodifluoromethane	729
n-Hexane	10200
Tetrachloroethene	210
Trichlorofluoromethane	19200

V-7	4/16/2012
Cyclohexane	117
Dichlorodifluoromethane	7090
n-Hexane	62300
Tetrachloroethene	305
Trichlorofluoromethane	27700

V-2	4/16/2012
Cyclohexane	4540
n-Hexane	52200
2,2,4-Trimethylpentane	68900

V-4	4/16/2012
Benzene	2.4
Chloroform	1.6
Cyclohexane	0.96
Dichlorodifluoromethane	2
Ethanol	13
Ethylbenzene	9.7
n-Hexane	4.2
Methylene chloride	5.2
Methyl ethyl ketone	48
Methyl isobutyl ketone	3.8
Tert-butyl alcohol	14
Tetrachloroethene	305
Toluene	27
Trichlorofluoromethane	2.5
1,2,4-Trimethylbenzene	22
1,3,5-Trimethylbenzene	6
2,2,4-Trimethylpentane	2.1
Xylenes (m&p)	41
Xylenes (o)	14

LEGEND

---- – PROPERTY BOUNDARY

– VAPOR SAMPLE LOCATION

V-5

NOTE: ALL COMPOUND RESULTS ARE IN UG/M3.

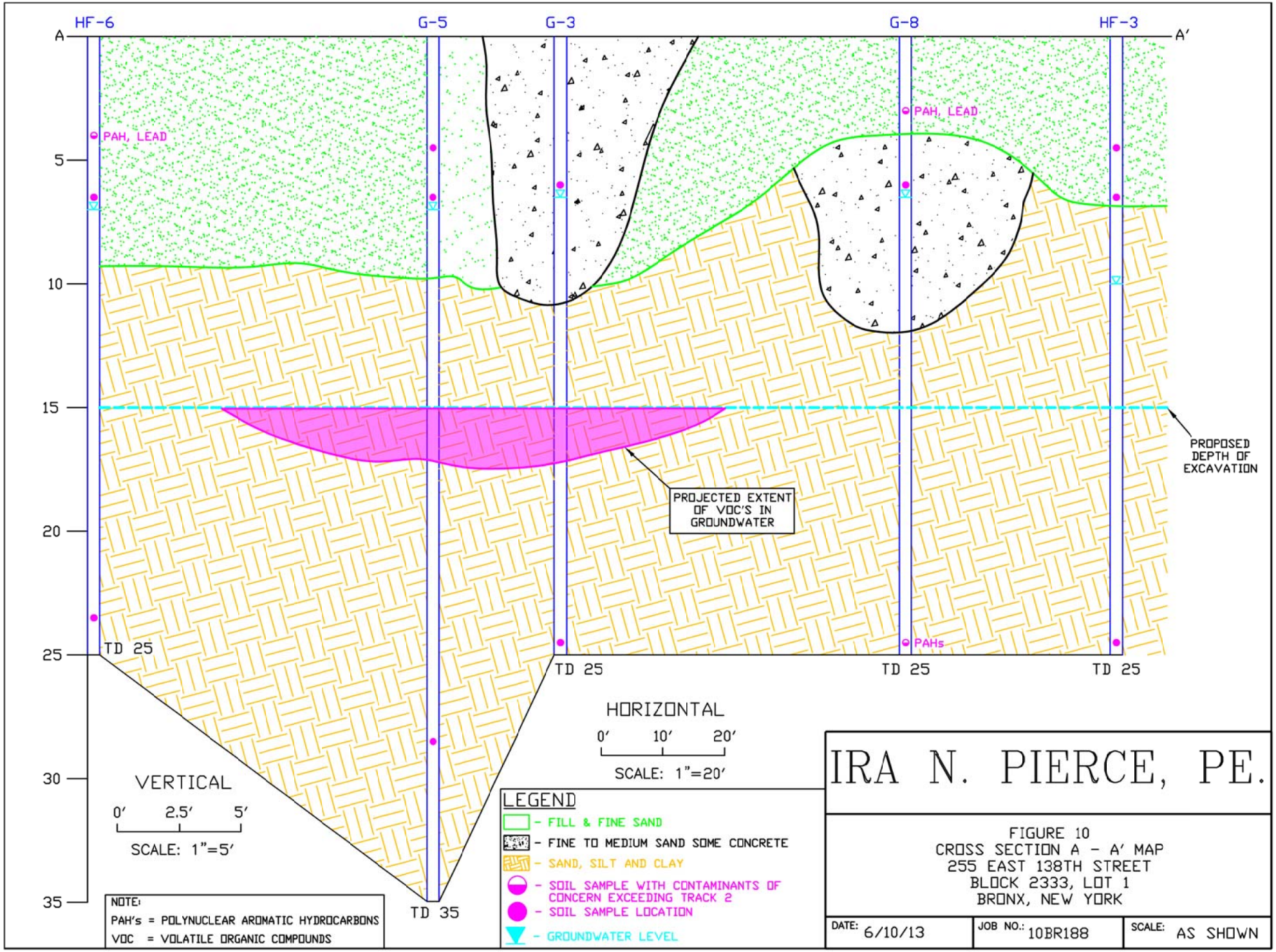
0′ 15′ 30′

SCALE: 1"=30′

IRA N. PIERCE, PE.

FIGURE 9
SOIL VAPOR RESULTS MAP
255 EAST 138TH STREET
BLOCK 2333, LOT 1
BRONX, NEW YORK

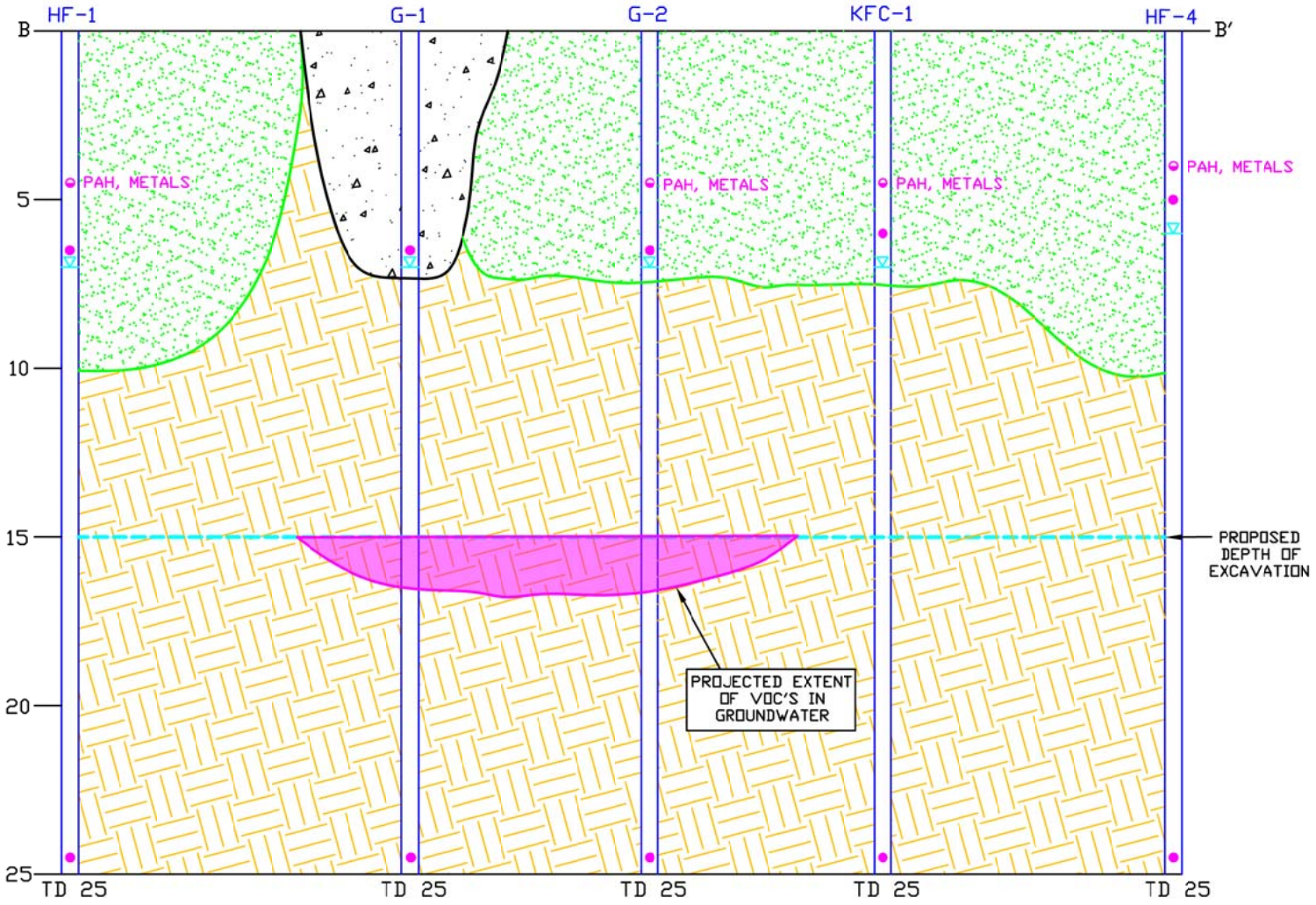
DATE: 5/7/13	JOB NO.: 10BR188	SCALE: 1" = 30′



IRA N. PIERCE, PE.

FIGURE 10
CROSS SECTION A - A' MAP
255 EAST 138TH STREET
BLOCK 2333, LOT 1
BRONX, NEW YORK

DATE:	JOB NO.:	SCALE:
6/10/13	10BR188	AS SHOWN



VERTICAL

0′ 2.5′ 5′

SCALE: 1"=5′

HORIZONTAL

0′ 10′ 20′

SCALE: 1"=20′

NOTE:
PAH's = POLYNUCLEAR AROMATIC HYDROCARBONS
VOC = VOLATILE ORGANIC COMPOUNDS

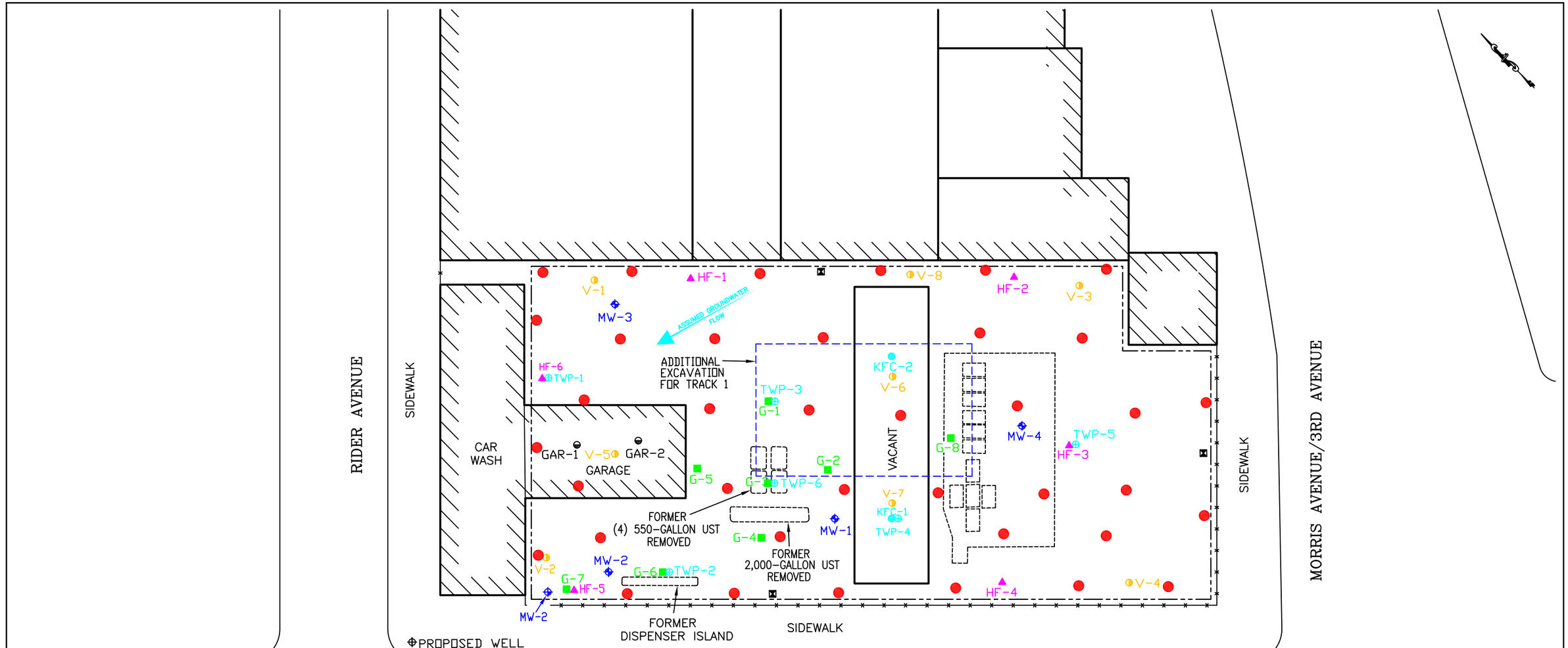
LEGEND

- FILL & FINE SAND
- FINE TO MEDIUM SAND SOME CONCRETE
- SAND, SILT AND CLAY
- SOIL SAMPLE WITH CONTAMINANTS OF CONCERN EXCEEDING TRACK 2
- SOIL SAMPLE LOCATION
- GROUNDWATER LEVEL

IRA N. PIERCE, PE.

FIGURE 11
CROSS SECTION B - B' MAP
255 EAST 138TH STREET
BLOCK 2333, LOT 1
BRONX, NEW YORK

DATE:	JOB NO.:	SCALE:
6/10/13	10BR188	AS SHOWN



LEGEND

- PROPERTY BOUNDARY
- MONITORING WELL LOCATION — MW-1
- SOIL BORING SAMPLE LOCATION — G-1
- SOIL BORING SAMPLE LOCATION — HF-1
- SOIL BORING SAMPLE LOCATION — KFC-1
- SOIL BORING SAMPLE LOCATION — GAR-1
- TEMPORARY WELL POINT LOCATION — TWP-3
- VAPOR SAMPLE LOCATION — V-2
- PROPOSED AIR MONITORING LOCATION
- ADDITIONAL EXCAVATION AREA TO 26 FEET
- PROPOSED END-POINT SAMPLE (TAL/TCL ANALYSIS)
- PROPOSED MONITORING WELL LOCATION

0′ 15′ 30′

SCALE: 1"=30′

IRA N. PIERCE, PE.

FIGURE 12
POST REMEDIAL SAMPLE LOCATION MAP
255 EAST 138TH STREET
BLOCK 2333, LOT 1
BRONX, NEW YORK

DATE:	JOB NO.:	SCALE:
7/8/13	10BR188	1″ = 30′

IRA N. PIERCE, PE.

FIGURE 13
TRUCK ROUTE MAP
255 EAST 138TH STREET
BLOCK 2333, LOT 1
BRONX, NEW YORK

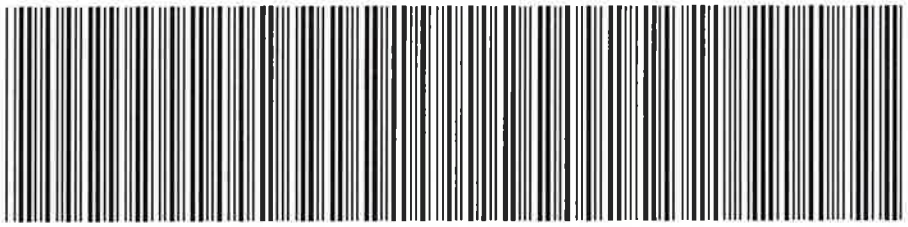
DATE: 6/4/13	JOB NO.: 10BR188	SCALE: 1" = 1000'

LEGEND
——→ – TRUCK ROUTE

0′ 500′ 1000′
SCALE: 1"=1000′

NYC DEPARTMENT OF FINANCE
OFFICE OF THE CITY REGISTER

This page is part of the instrument. The City Register will rely on the information provided by you on this page for purposes of indexing this instrument. The information on this page will control for indexing purposes in the event of any conflict with the rest of the document.



2011020700614002001E7567

RECORDING AND ENDORSEMENT COVER PAGE **PAGE 1 OF 4**

Document ID: 2011020700614002 Document Date: 02-01-2011 Preparation Date: 02-07-2011
Document Type: DEED
Document Page Count: 3

PRESENTER:
ALL AMERICAN ABSTRACT, LLC
31 STEWART STREET
CO - PICK UP USTA
FLORAL PARK, NY 11001
800-693-7617
CALL-299 BX

RETURN TO:
RICHARD SINGER, ESQ
HIRSCHEN, SIONGER & EPSTEIN, LLP
902 BROADWAY, 13TH FLOOR
NEW YORK, NY 10010

PROPERTY DATA

Borough	Block	Lot		Unit	Address
BRONX	2333	6	Entire Lot		245 EAST 138 STREET

Property Type: COMMERCIAL REAL ESTATE

CROSS REFERENCE DATA

CRFN_____ *or* Document ID_____ *or* _____ Year____ Reel ___ Page ____ *or* File Number_____

PARTIES

GRANTOR/SELLER:
THIRD AVENUE/138TH STREET LLC
C/O BRADFORD N. SWETT MANAGEMENT LLC, 1536 THIRD AVENUE, 3RD FLOOR
NEW YORK, NY 10028

GRANTEE/BUYER:
NYC PARTNERSHIP HOUSING DEVELOPMENT FUND COMPANY
C/O HOUSING PARTNERSHIP CORPORATION, 450 SEVENTH AVENUE, SUITE 2401
NEW YORK, NY 10123

FEES AND TAXES

Mortgage		
Mortgage Amount:	$	0.00
Taxable Mortgage Amount:	$	0.00
Exemption:		
TAXES: County (Basic):	$	0.00
City (Additional):	$	0.00
Spec (Additional):	$	0.00
TASF:	$	0.00
MTA:	$	0.00
NYCTA:	$	0.00
Additional MRT:	$	0.00
TOTAL:	$	0.00
Recording Fee:	$	52.00
Affidavit Fee:	$	0.00

Filing Fee:	
$	0.00
NYC Real Property Transfer Tax:	
$	0.00
NYS Real Estate Transfer Tax:	
$	3,000.00

RECORDED OR FILED IN THE OFFICE OF THE CITY REGISTER OF THE CITY OF NEW YORK
Recorded/Filed 02-25-2011 12:31
City Register File No.(CRFN):
2011000069115

City Register Official Signature

CALL299BX

BARGAIN AND SALE DEED WITH COVENANT AGAINST GRANTOR'S ACTS (INDIVIDUAL OR CORPORATION)

FORM 8002 (short version), FORM 8007 (long version)

CAUTION: THIS AGREEMENT SHOULD BE PREPARED BY AN ATTORNEY AND REVIEWED BY ATTORNEYS FOR SELLER AND PURCHASER BEFORE SIGNING

TT
$11,600

THIS INDENTURE, made the 1st day of FEB, 2011,

BETWEEN First Bronx/Brooklyn L.L.C., of c/o Bradford N. Swett Management LLC, 1536 Third Avenue, 3rd Floor, New York, New York 10028,

party of the first part, and

NYC Partnership Housing Development Fund Company, Inc. c/o Housing Partnership Development Corporation, 450 Seventh Avenue, Suite 2401, New York, New York 10123,

JC
$97

party of the second part;

WITNESSETH, that the party of the first part, in consideration of Ten Dollars and No Cents ($10.00), lawful money of the United States, paid by the party of the second part, does hereby grant and release unto the party of the second part, the heirs or successors and assigns of the party of the second part forever; SAID PREMISES KNOWN AS 2331 THIRD AVE, BRONX, NY

B-
2333
L-
1

ALL that certain plot, piece or parcel of land, with the buildings and improvements thereon erected, situate, lying and being in the City and State of New York, County of Bronx, more particularly described in schedule A attached hereto. Intended and being the same premises as transferred to Grantor by deed dated 06/07/2007 and recorded 06/20/2007 in CRFN 20070000317547;

THIS CONVEYANCE IS MADE IN THE ORDINARY COURSE OF BUSINESS

TOGETHER with all right, title and interest, if any, of the party of the first part in and to any streets and roads abutting the above described premises to the center lines thereof,

TOGETHER with the appurtenances and all the estate and rights of the party of the first part in and to said premises,

TO HAVE AND TO HOLD the premises herein granted unto the party of the second part, the heirs or successors and assigns of the party of the second part forever.

AND the party of the first part, covenants that the party of the first part has not done or suffered anything whereby the said premises have been encumbered in any way whatever, except as aforesaid.

AND the party of the first part, in compliance with Section 13 of the Lien Law, covenants that the party of the first part will receive the consideration for this conveyance and will hold the right to receive such consideration as a trust fund to be applied first for the purpose of paying the cost of the improvement and will apply the same first to the payment of the cost of the improvement before using any part of the total of the same for any other purpose.

The word "party" shall be construed as if it read "parties" whenever the sense of this indenture so requires.

IN WITNESS WHEREOF, the party of the first part has duly executed this deed the day and year first above written.

First Bronx/Brooklyn L.L.C.

By: _____

Bradford S. Barr, Authorized Signator

IN PRESENCE OF:

_____

Acknowledgment by a Person Within New York State (RPL § 309-a)

STATE OF NEW YORK)
) ss.:
COUNTY OF NEW YORK)

On the 7 day of FEBRUARY, 2011, before me, the undersigned, personally appeared Bradford S. Barr, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he executed the same in his capacity(ies), and that by his signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

(signature and office of individual taking acknowledgment)

SEAL

DEIRDRE B. LEVY
NOTARY PUBLIC-STATE OF NEW YORK
No. 01LE5045092
Qualified In Nassau County
My Commission Expires June 12, 2011

DEED

Title No. Call-299BX

Block 2333
Lot 6
County or Town Bronx
Street Address 245 East 138th Street
Bronx, New York 10451

Third Avenue/138th Street LLC
To
NYC Partnership Housing
Development Fund Company, Inc.

Return By Mail To:

Richard Singer, Esq.
Hirschen Singer & Epstein LLP
902 Broadway, 13th Floor
New York, New York 10010

Reserve This Space For Use Of Recording Office

CALL299FX

BARGAIN AND SALE DEED WITH COVENANT AGAINST GRANTOR'S ACTS (INDIVIDUAL OR CORPORATION)

FORM 8002 (short version), FORM 8007 (long version)

CAUTION: THIS AGREEMENT SHOULD BE PREPARED BY AN ATTORNEY AND REVIEWED BY ATTORNEYS FOR SELLER AND PURCHASER BEFORE SIGNING.

THIS INDENTURE, made the 1st day of FEBRUARY, 2011,

TT $3000

BETWEEN Third Avenue/138th Street LLC, of c/o Bradford N. Swett Management LLC, 1536 Third Avenue, 3rd Floor, New York, New York 10028,

party of the first part, and

NYC Partnership Housing Development Fund Company, Inc. c/o Housing Partnership Development Corporation, 450 Seventh Avenue, Suite 2401, New York, New York 10123, JCF BSS

party of the second part;

WITNESSETH, that the party of the first part, in consideration of Ten Dollars and No Cents ($10.00), lawful money of the United States, paid by the party of the second part, does hereby grant and release unto the party of the second part, the heirs or successors and assigns of the party of the second part forever; SAID PREMISES KNOWN AS 2935 E. 138TH ST, BRONX, NY

B-2333 L-6

ALL that certain plot, piece or parcel of land, with the buildings and improvements thereon erected, situate, lying and being in the City and State of New York, County of Bronx, more particularly described in schedule A attached hereto. Intended and being the same premises transferred to Grantor by deed dated 07/01/2004 and recorded 02/27/2006 in CRFN #2006000111371;

THIS CONVEYANCE IS MADE IN THE ORDINARY COURSE OF BUSINESS

TOGETHER with all right, title and interest, if any, of the party of the first part in and to any streets and roads abutting the above described premises to the center lines thereof,

TOGETHER with the appurtenances and all the estate and rights of the party of the first part in and to said premises,

TO HAVE AND TO HOLD the premises herein granted unto the party of the second part, the heirs or successors and assigns of the party of the second part forever.

AND the party of the first part, covenants that the party of the first part has not done or suffered anything whereby the said premises have been encumbered in any way whatever, except as aforesaid.

AND the party of the first part, in compliance with Section 13 of the Lien Law, covenants that the party of the first part will receive the consideration for this conveyance and will hold the right to receive such consideration as a trust fund to be applied first for the purpose of paying the cost of the improvement and will apply the same first to the payment of the cost of the improvement before using any part of the total of the same for any other purpose.

The word "party" shall be construed as if it read "parties" whenever the sense of this indenture so requires.

IN WITNESS WHEREOF, the party of the first part has duly executed this deed the day and year first above written.

Third Avenue/138th Street LLC

By: _____

Bradford S. Barr, Authorized Signator

IN PRESENCE OF:

_____

Acknowledgment by a Person Within New York State (RPL § 309-a)

STATE OF NEW YORK)
) ss.:
COUNTY OF NEW YORK)

On the 1 day of FEB, 2011, before me, the undersigned, personally appeared Bradford S. Barr, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he executed the same in his capacity(ies), and that by his signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

(signature and office of individual taking acknowledgment)

DEIRDRE B. LEVY
NOTARY PUBLIC-STATE OF NEW YORK
No. 01LE5045092
Qualified In Nassau County
My Commission Expires June 12, 2011

DEED

Title No. Call-299BX

Block 2333
Lot 1
County or Town Bronx
Street Address 2551 Third Avenue
Bronx, New York 10451

SEAL

First Bronx/Brooklyn L.L.C.
To
NYC Partnership Housing
Development Fund Company, Inc.

Return By Mail To:

Richard Singer, Esq.
Hirschen Singer & Epstein LLP
902 Broadway, 13th Floor
New York, New York 10010

Reserve This Space For Use Of Recording Office

Schedule A Description

PARCEL 1

ALL THAT CERTAIN PLOT, PIECE OR PARCEL OF LAND, SITUATE, LYING AND BEING IN THE BOROUGH AND COUNTY OF BRONX, CITY AND STATE OF NEW YORK, BOUNDED AND DESCRIBED AS FOLLOWS;

BEGINNING AT A POINT ON THE NORTHERLY SIDE OF EAST 138TH STREET DISTANT 25 FEET EASTERLY FROM THE NORTHEASTERLY CORNER OF 138TH AND RIDER AVENUE;

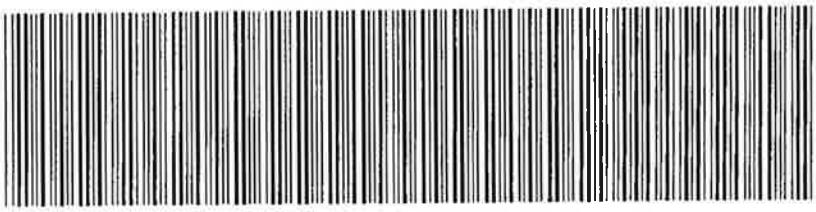
RUNNING THENCE NORTHERLY PARALLEL WITH THE EASTERLY SIDE OF RIDER AVENUE AND 100 FEET TO THE CENTER LINE OF THE BLOCK BETWEEN 138TH AND 139TH STREETS;

THENCE EASTERLY ALONG THE CENTER LINE OF THE BLOCK 100 FEET;

THENCE SOUTHERLY PARALLEL WITH THE EASTERLY SIDE OF RIDER AVENUE, 100 FEET TO THE NORTHERLY SIDE OF 138TH STREET;

THENCE WESTERLY ALONG THE NORTHERLY SIDE OF 138TH STREET 100 FEET TO THE POINT OR PLACE OF BEGINNING.

NYC DEPARTMENT OF FINANCE
OFFICE OF THE CITY REGISTER



2011020700614002001SBBE6

SUPPORTING DOCUMENT COVER PAGE **PAGE 1 OF 1**

Document ID: 2011020700614002 Document Date: 02-01-2011 Preparation Date: 02-07-2011
Document Type: DEED

ASSOCIATED TAX FORM ID: 2011012400173

SUPPORTING DOCUMENTS SUBMITTED:

	Page Count
DEP CUSTOMER REGISTRATION FORM FOR WATER AND SEWER BILLING	1
RP - 5217 REAL PROPERTY TRANSFER REPORT	1

FOR CITY USE ONLY

C1. County Code | | C2. Date Deed Recorded | / / | Month Day Year

C3. Book OR C5. CRFN | | C4. Page | |

REAL PROPERTY TRANSFER REPORT

STATE OF NEW YORK
STATE BOARD OF REAL PROPERTY SERVICES

RP - 5217NYC

(Rev 11/2002)

PROPERTY INFORMATION

1. Property Location: 245 (STREET NUMBER) | EAST 138 STREET (STREET NAME) | BRONX (BOROUGH) | 10451 (ZIP CODE)

2. Buyer Name: NYC PARTNERSHIP HOUSING DEVELOPMENT FUND COMPANY (LAST NAME / COMPANY) | (FIRST NAME)

(LAST NAME / COMPANY) | (FIRST NAME)

3. Tax Billing Address: Indicate where future Tax Bills are to be sent if other than buyer address (at bottom of form)

(LAST NAME / COMPANY) | (FIRST NAME)

(STREET NUMBER AND STREET NAME) | (CITY OR TOWN) | NY (STATE) | (ZIP CODE)

4. Indicate the number of Assessment Roll parcels transferred on the deed: 1 # of Parcels OR ☐ Part of a Parcel

4A. Planning Board Approval - N/A for NYC

4B. Agricultural District Notice - N/A for NYC

5. Deed Property Size: (FRONT FEET) X (DEPTH) OR (ACRES)

Check the boxes below as they apply:

6. Ownership Type is Condominium ☐

7. New Construction on Vacant Land ☐

8. Seller Name: THIRD AVENUE/138TH STREET LLC (LAST NAME / COMPANY) | (FIRST NAME)

(LAST NAME / COMPANY) | (FIRST NAME)

9. Check the box below which most accurately describes the use of the property at the time of sale:

A ☐ One Family Residential
B ☐ 2 or 3 Family Residential
C ☐ Residential Vacant Land
D ☐ Non-Residential Vacant Land
E ☑ Commercial
F ☐ Apartment
G ☐ Entertainment / Amusement
H ☐ Community Service
I ☐ Industrial
J ☐ Public Service

SALE INFORMATION

10. Sale Contract Date: 10 / 15 / 2010 (Month Day Year)

11. Date of Sale / Transfer: 2 / 1 / 2011 (Month Day Year)

12. Full Sale Price: $ 7,500,000

(Full Sale Price is the total amount paid for the property including personal property. This payment may be in the form of cash, other property or goods, or the assumption of mortgages or other obligations.) *Please round to the nearest whole dollar amount.*

13. *Indicate the value of personal property included in the sale*

14. Check one or more of these conditions as applicable to transfer:

A ☐ Sale Between Relatives or Former Relatives
B ☐ Sale Between Related Companies or Partners in Business
C ☐ One of the Buyers is also a Seller
D ☐ Buyer or Seller is Government Agency or Lending Institution
E ☐ Deed Type **not** Warranty or Bargain and Sale (Specify Below)
F ☐ Sale of Fractional or Less than Fee Interest (Specify Below)
G ☐ Significant Change in Property Between Taxable Status and Sale Dates
H ☐ Sale of Business is Included in Sale Price
I ☐ Other Unusual Factors Affecting Sale Price (Specify Below)
J ☑ None

ASSESSMENT INFORMATION - Data should reflect the latest Final Assessment Roll and Tax Bill

15. Building Class: G 9

16. Total Assessed Value (of all parcels in transfer):

17. Borough, Block and Lot / Roll Identifier(s) (If more than three, attach sheet with additional identifier(s))

BRONX 2333 6

CERTIFICATION

I certify that all of the items of information entered on this form are true and correct (to the best of my knowledge and belief) and I understand that the making of any willful false statement of material fact herein will subject me to the provisions of the penal law relative to the making and filing of false instruments.

BUYER

[signature] (BUYER SIGNATURE) | 2-1-2011 (DATE)

450 (STREET NUMBER) Seventh Ave #2401 (STREET NAME (AFTER SALE))

New York (CITY OR TOWN) | NY (STATE) | 10123 (ZIP CODE)

BUYER'S ATTORNEY

FIELDS (LAST NAME) | JOHN (FIRST NAME)

646 (AREA CODE) | 217-3390 (TELEPHONE NUMBER)

SELLER

[signature] (SELLER SIGNATURE) | 2/1/11 (DATE)

2011012400173201

CERTIFICATION

I certify that all of the items of information entered on this form are true and correct (to the best of my knowledge and belief) and understand that the making of any willful false statement of material fact herein will subject me to the provisions of the penal law relative to the making and filing of false instruments.

BUYER

BUYER SIGNATURE	DATE
[signature]	2-1-2011

STREET NUMBER	STREET NAME (AFTER SALE)
450	Seventh Ave #2401

CITY OR TOWN	STATE	ZIP CODE
New York	NY	10123

BUYER'S ATTORNEY

LAST NAME	FIRST NAME
FIELDS	JOHN

AREA CODE	TELEPHONE NUMBER
646	217-3390

SELLER

SELLER SIGNATURE	DATE
[signature]	2/1/11

The City of New York
Department of Environmental Protection
Bureau of Customer Services
59-17 Junction Boulevard
Flushing, NY 11373-5108

Customer Registration Form for Water and Sewer Billing

Property and Owner Information:

(1) Property receiving service: BOROUGH: BRONX BLOCK: 2333 LOT: 6

(2) Property Address: 245 EAST 138 STREET, BRONX, NY 10451

(3) Owner's Name: NYC PARTNERSHIP HOUSING DEVELOPMENT FUND COMPANY

Additional Name:

Affirmation:

☑ You have visited DOF's Mailing Address Update website and indicated that your water & sewer bill should be sent to the mailing address provided on that site. If no information was entered your water & sewer bill be sent to the property address.

Customer Billing Information:

Please Note:

A. Water and sewer charges are the legal responsibility of the owner of a property receiving water and/or sewer service. The owner's responsibility to pay such charges is not affected by any lease, license or other arrangement, or any assignment of responsibility for payment of such charges. Water and sewer charges constitute a lien on the property until paid. In addition to legal action against the owner, a failure to pay such charges when due may result in foreclosure of the lien by the City of New York, the property being placed in a lien sale by the City or Service Termination.

B. Original bills for water and/or sewer service will be mailed to the owner, **at the property address or to an alternate mailing address**. DEP will provide a duplicate copy of bills to one other party (such as a managing agent), however, any failure or delay by DEP in providing duplicate copies of bills shall in no way relieve the owner from his/her liability to pay all outstanding water and sewer charges. Contact DEP at (718) 595-7000 during business hours or visit www.nyc.gov/dep to provide us with the other party's information.

Owner's Approval:

The undersigned certifies that he/she/it is the owner of the property receiving service referenced above; that he/she/it has read and understands Paragraphs A & B under the section captioned "Customer Billing Information"; and that the information supplied by the undersigned on this form is true and complete to the best of his/her/its knowledge.

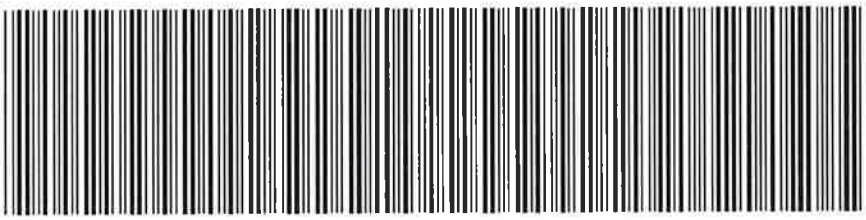
Print Name of Owner: NYC Partnership Housing Development Fund Company, Inc

Signature: _____ Date (mm/dd/yyyy) 02/01/2011

Name and Title of Person Signing for Owner, if applicable:

NYC DEPARTMENT OF FINANCE
OFFICE OF THE CITY REGISTER

This page is part of the instrument. The City Register will rely on the information provided by you on this page for purposes of indexing this instrument. The information on this page will control for indexing purposes in the event of any conflict with the rest of the document.



2011020700614001001E7523

RECORDING AND ENDORSEMENT COVER PAGE **PAGE 1 OF 5**

Document ID: 2011020700614001 Document Date: 02-01-2011 Preparation Date: 02-07-2011
Document Type: DEED
Document Page Count: 4

PRESENTER:
ALL AMERICAN ABSTRACT, LLC
31 STEWART STREET
CO - PICK UP USTA
FLORAL PARK, NY 11001
800-693-7617
CALL-299 BX

RETURN TO:
RICHARD SINGER, ESQ
HIRSCHEN, SIONGER & EPSTEIN, LLP
902 BROADWAY, 13TH FLOOR
NEW YORK, NY 10010

PROPERTY DATA

Borough	Block	Lot		Unit	Address
BRONX	2333	1	Entire Lot		2551 3 AVENUE

Property Type: COMMERCIAL REAL ESTATE

CROSS REFERENCE DATA

CRFN_____ *or* Document ID_____ *or* _____ Year____ Reel ___ Page____ *or* File Number_____

PARTIES

GRANTOR/SELLER:
FIRST BRONX/BROOKLYN L.L.C.
C/O BRADFORD N. SWETT MANAGEMENT LLC, 1536 THIRD AVENUE, 3RD FLOOR
NEW YORK, NY 10028

GRANTEE/BUYER:
NYC PARTNERSHIP DEVELOPMENT FUND COMPANY
C/O HOUSING PARTNERSHIP CORPORATION, 450 SEVENTH AVENUE, SUITE 2401
NEW YORK, NY 10123

FEES AND TAXES

Mortgage		
Mortgage Amount:	$	0.00
Taxable Mortgage Amount:	$	0.00
Exemption:		
TAXES: County (Basic):	$	0.00
City (Additional):	$	0.00
Spec (Additional):	$	0.00
TASF:	$	0.00
MTA:	$	0.00
NYCTA:	$	0.00
Additional MRT:	$	0.00
TOTAL:	$	0.00
Recording Fee:	$	57.00
Affidavit Fee:	$	0.00

Filing Fee:	
$	0.00
NYC Real Property Transfer Tax:	
$	0.00
NYS Real Estate Transfer Tax:	
$	11,600.00

RECORDED OR FILED IN THE OFFICE OF THE CITY REGISTER OF THE CITY OF NEW YORK
Recorded/Filed 02-25-2011 12:31
City Register File No.(CRFN):
2011000069114

City Register Official Signature

PARCEL 2

ALL THAT CERTAIN PLOT, PIECE OR PARCEL OF LAND, SITUATE, LYING AND BEING IN THE BOROUGH AND COUNTY OF BRONX, CITY AND STATE OF NEW YORK, CONSISTING OF THE REMAINDER AFTER THE OPENING AND WIDENING OF THIRD AVENUE OF LOTS 179, 180 AND 181 ON A CERTAIN MAP ENTITLED "MAP OF THE VILLAGE OF MOTT HAVEN, IN THE MANOR OF MORRISANIA, TOWN OF WEST FARMS, WESTCHESTER COUNTY, NEW YORK" MADE JANUARY 1, 1851 BY ANDREW FINDLEY, SURVEYOR;

ALL THOSE CERTAIN LOTS OF LAND SITUATE IN THE BOROUGH AND COUNTY OF BRONX, CITY AND STATE OF NEW YORK AND WHICH ON A CERTAIN MAP ENTITLED "MAP OF THE VILLAGE OF MOTT AVENUE, RE-CONSTRUCTED AND REVISED FROM SURVEYS BY A. FINDLEY DATED JANUARY 1, 1850, JANUARY 1, 1851 AND DECEMBER 20, 1860, COMPLIED BY R. HENWOOD MAY 10, 1864 FILED IN WESTCHESTER COUNTY JUNE 6, 1866 AS MAP NO. 441 AND KNOWN AS THE EASTERLY 1/2 OF LOT NO. 50 AND LOT NO. 51 AND WHICH SAID PREMISES ARE SHOWN ON SAID MAP AS LOTS NOS. 173-176 AND 177 BOUNDED AND DESCRIBED ACCORDING TO SAID MAPS AS FOLLOWS;

BEGINNING AT THE CORNER FORMED BY THE INTERSECTION OF THE WESTERLY SIDE OF THIRD AVENUE WITH THE NORTHERLY SIDE OF 138TH STREET;

RUNNING THENCE WESTERLY ALONG THE SAID NORTHERLY SIDE OF EAST 138TH STREET, 110.65;

THENCE NORTHERLY PARALLEL WITH RIDER AVENUE, 100.00 FEET;

THENCE EASTERLY PARALLEL WITH EAST 138TH STREET, 80.40 FEET;

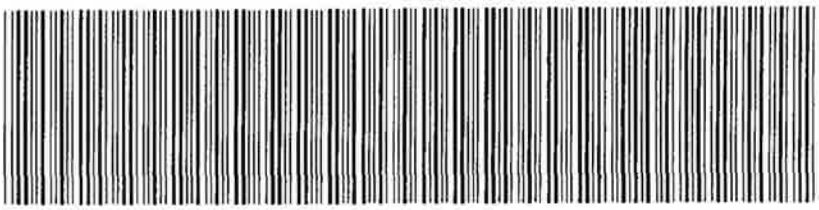
THENCE SOUTHERLY ALONG A LINE FORMING AN INTERIOR ANGLE OF 85 DEGREES 11 MINUTES 55 SECONDS WITH THE LAST MENTIONED COURSE 21.47 FEET;

THENCE EASTERLY ALONG A LINE FORMING AN INTERIOR ANGLE OF 89 DEGREES 46 MINUTES 17 SECONDS WITH THE LAST MENTIONED

COURSE 32.15 FEET TO THE WESTERLY SIDE OF THIRD AVENUE;

THENCE SOUTHERLY ALONG THE WESTERLY SIDE OF THIRD AVENUE 76.04 FEET TO THE POINT OR PLACE OF BEGINNING.

NYC DEPARTMENT OF FINANCE
OFFICE OF THE CITY REGISTER



2011020700614001001SBBA2

SUPPORTING DOCUMENT COVER PAGE **PAGE 1 OF 1**

Document ID: 2011020700614001 Document Date: 02-01-2011 Preparation Date: 02-07-2011
Document Type: DEED

ASSOCIATED TAX FORM ID: 2011012500114

SUPPORTING DOCUMENTS SUBMITTED:

	Page Count
DEP CUSTOMER REGISTRATION FORM FOR WATER AND SEWER BILLING	1
RP - 5217 REAL PROPERTY TRANSFER REPORT	1

FOR CITY USE ONLY

C1. County Code ____ C2. Date Deed Recorded ____ / ____ / ____ (Month / Day / Year)

C3. Book OR C4. Page ____

C5. CRFN ____

REAL PROPERTY TRANSFER REPORT

STATE OF NEW YORK
STATE BOARD OF REAL PROPERTY SERVICES

RP - 5217NYC

(Rev 11/2002)

PROPERTY INFORMATION

1. Property Location: 2551 (STREET NUMBER) | 3 AVENUE (STREET NAME) | BRONX (BOROUGH) | 10451 (ZIP CODE)

2. Buyer Name: NYC PARTNERSHIP DEVELOPMENT FUND COMPANY (LAST NAME / COMPANY) | (FIRST NAME)

(LAST NAME / COMPANY) | (FIRST NAME)

3. Tax Billing Address: Indicate where future Tax Bills are to be sent if other than buyer address (at bottom of form) (LAST NAME / COMPANY) | (FIRST NAME)

(STREET NUMBER AND STREET NAME) | (CITY OR TOWN) | (STATE) | (ZIP CODE)

4. Indicate the number of Assessment Roll parcels transferred on the deed: 1 # of Parcels OR ☐ Part of a Parcel

4A. Planning Board Approval - N/A for NYC

4B. Agricultural District Notice - N/A for NYC

Check the boxes below as they apply:

6. Ownership Type is Condominium ☐

7. New Construction on Vacant Land ☐

5. Deed Property Size: ____ (FRONT FEET) X ____ (DEPTH) OR ____ (ACRES)

8. Seller Name: FIRST BRONX/BROOKLYN L.L.C. (LAST NAME / COMPANY) | (FIRST NAME)

(LAST NAME / COMPANY) | (FIRST NAME)

9. Check the box below which most accurately describes the use of the property at the time of sale:

A ☐ One Family Residential
B ☐ 2 or 3 Family Residential
C ☐ Residential Vacant Land
D ☐ Non-Residential Vacant Land
E ☑ Commercial
F ☐ Apartment
G ☐ Entertainment / Amusement
H ☐ Community Service
I ☐ Industrial
J ☐ Public Service

SALE INFORMATION

10. Sale Contract Date: 10 / 15 / 2010 (Month / Day / Year)

11. Date of Sale / Transfer: 2 / 1 / 2011 (Month / Day / Year)

12. Full Sale Price: $ 29,000,000

(Full Sale Price is the total amount paid for the property including personal property. This payment may be in the form of cash, other property or goods, or the assumption of mortgages or other obligations.) *Please round to the nearest whole dollar amount.*

13. Indicate the value of personal property included in the sale: ____

14. Check one or more of these conditions as applicable to transfer:

A ☐ Sale Between Relatives or Former Relatives
B ☐ Sale Between Related Companies or Partners in Business
C ☐ One of the Buyers is also a Seller
D ☐ Buyer or Seller is Government Agency or Lending Institution
E ☐ Deed Type not Warranty or Bargain and Sale (Specify Below)
F ☐ Sale of Fractional or Less than Fee Interest (Specify Below)
G ☐ Significant Change in Property Between Taxable Status and Sale Dates
H ☐ Sale of Business is Included in Sale Price
I ☐ Other Unusual Factors Affecting Sale Price (Specify Below)
J ☑ None

ASSESSMENT INFORMATION - Data should reflect the latest Final Assessment Roll and Tax Bill

15. Building Class: K 5

16. Total Assessed Value (of all parcels in transfer): ____

17. Borough, Block and Lot / Roll Identifier(s) (If more than three, attach sheet with additional identifier(s))

BRONX 2333 1

CERTIFICATION

I certify that all of the items of information entered on this form are true and correct (to the best of my knowledge and belief) and I understand that the making of any willful false statement of material fact herein will subject me to the provisions of the penal law relative to the making and filing of false instruments.

BUYER

[signature] (BUYER SIGNATURE) | 2-1-2011 (DATE)

450 Seventh Ave #2401 (STREET NUMBER) (STREET NAME (AFTER SALE))

New York (CITY OR TOWN) | NY (STATE) | 10123 (ZIP CODE)

BUYER'S ATTORNEY

FIELDS (LAST NAME) | JOHN (FIRST NAME)

646 (AREA CODE) | 217-3390 (TELEPHONE NUMBER)

SELLER

[signature] (SELLER SIGNATURE) | 2/1/11 (DATE)

2011012500114201

CERTIFICATION

I certify that all of the items of information entered on this form are true and correct (to the best of my knowledge and belief) and understand that the making of any willful false statement of material fact herein will subject me to the provisions of the penal law relative to the making and filing of false instruments.

BUYER

BUYER SIGNATURE	DATE
[signature]	2-1-2011

STREET NUMBER	STREET NAME (AFTER SALE)
450	Seventh Ave #2401

CITY OR TOWN	STATE	ZIP CODE
New York	NY	10123

BUYER'S ATTORNEY

LAST NAME	FIRST NAME
FIELDS	JOHN

AREA CODE	TELEPHONE NUMBER
646	217-3390

SELLER

SELLER SIGNATURE	DATE
[signature]	2/1/11

The City of New York
Department of Environmental Protection
Bureau of Customer Services
59-17 Junction Boulevard
Flushing, NY 11373-5108

Customer Registration Form for Water and Sewer Billing

Property and Owner Information:

(1) Property receiving service: BOROUGH: BRONX BLOCK: 2333 LOT: 1

(2) Property Address: 2551 3 AVENUE, BRONX, NY 10451

(3) Owner's Name: NYC PARTNERSHIP DEVELOPMENT FUND COMPANY

Additional Name:

Affirmation:

☑ You have visited DOF's Mailing Address Update website and indicated that your water & sewer bill should be sent to the mailing address provided on that site. If no information was entered your water & sewer bill be sent to the property address.

Customer Billing Information:

Please Note:

A. Water and sewer charges are the legal responsibility of the owner of a property receiving water and/or sewer service. The owner's responsibility to pay such charges is not affected by any lease, license or other arrangement, or any assignment of responsibility for payment of such charges. Water and sewer charges constitute a lien on the property until paid. In addition to legal action against the owner, a failure to pay such charges when due may result in foreclosure of the lien by the City of New York, the property being placed in a lien sale by the City or Service Termination.

B. Original bills for water and/or sewer service will be mailed to the owner, **at the property address or to an alternate mailing address**. DEP will provide a duplicate copy of bills to one other party (such as a managing agent), however, any failure or delay by DEP in providing duplicate copies of bills shall in no way relieve the owner from his/her liability to pay all outstanding water and sewer charges. Contact DEP at (718) 595-7000 during business hours or visit www.nyc.gov/dep to provide us with the other party's information.

Owner's Approval:

The undersigned certifies that he/she/it is the owner of the property receiving service referenced above; that he/she/it has read and understands Paragraphs A & B under the section captioned "Customer Billing Information"; and that the information supplied by the undersigned on this form is true and complete to the best of his/her/its knowledge.

Print Name of Owner: NYC Partnership Housing Development Fund Company, Inc

Signature: _____ Date (mm/dd/yyyy) 02/01/2011

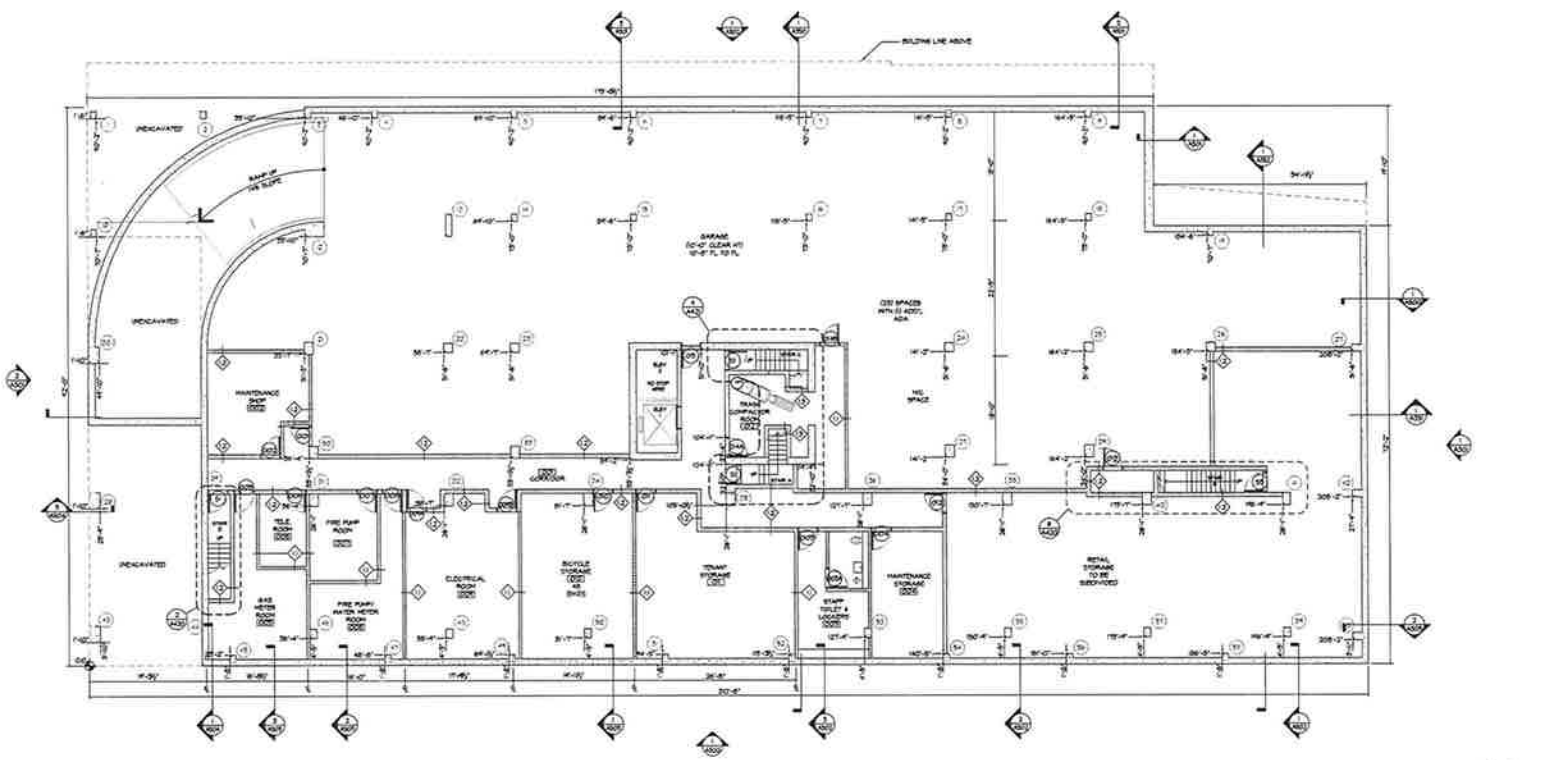
Name and Title of Person Signing for Owner, if applicable: John C. Fields, Asst Secy

II

ɔer/General Contractor - Lettire Construction

138th Street & 3rd Avenue
View Looking North on 138th St

MH



MHG
Architects PC
443 Park Avenue South
New York, NY 10016
T 212 686 1700
F 212 545 1487
info@MHGArch.com
www.MHGArch.com

Client/Developer
East 138th Street LLC
2344/346 East 170th Street
New York, N.Y. 10039

Architect
MHG Architects
443 Park Avenue South
New York, N.Y. 10016

Landscape Architect
Abel Bainnson Butz, LLP
80 8th Avenue, Suite 1103
New York, N.Y. 10011

Structural Engineer
Robert Silman Associates
88 University Place
New York, N.Y. 10003

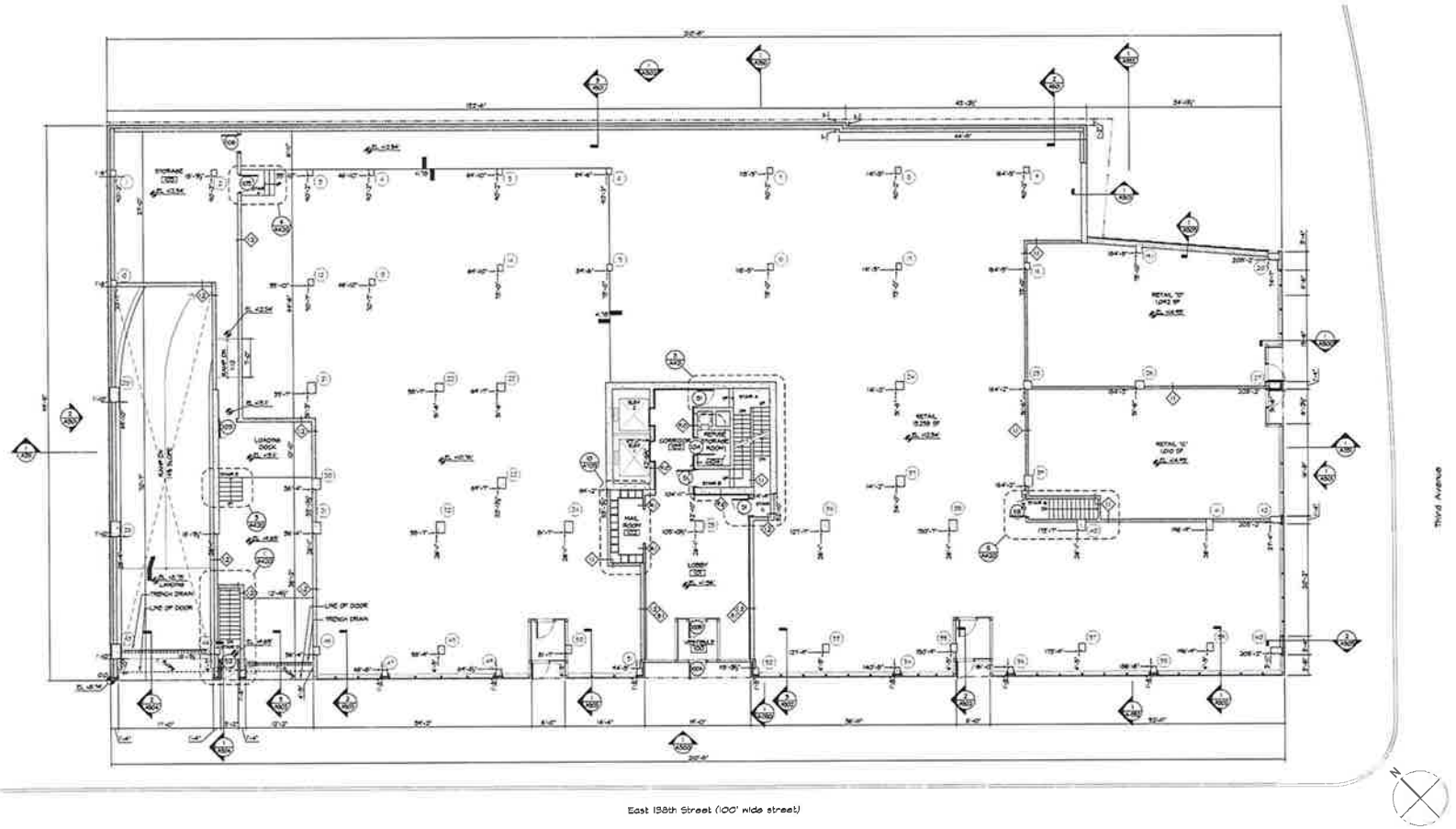
Mechanical/Electrical/Plumbing Engineer
Ettinger Engineering Associates
208 Eighth Avenue
New York, N.Y. 10018

No.	Date	Description
	11/30/11	Buildings Department Submission
	05/24/11	Buildings Department Submission

255 East 138th Street

Drwg Title
Cellar Floor Plan

Date
Scale 1/8"=1'-0"
Job No.
Drwg No. **A-100.00**



MHG
Architects PC
443 Park Avenue South
New York, NY 10016
T 212|689|7070
F 212|545|1687
mail@MHG-Arch.com
www.MHG-Arch.com

Client/Developer
East 138th Street LLC
334|336 East 110th Street
New York, N.Y. 10029

Architect
MHG Architects
443 Park Avenue South
New York, N.Y. 10016

Landscape Architect
Abel Bainnson Butz, LLP
80 8th Avenue, Suite 1105
New York, N.Y. 10011

Structural Engineer
Robert Silman Associates
88 University Place
New York, N.Y. 10003

Mechanical/Electrical/Plumbing Engineer
Ettinger Engineering Associates
508 Eighth Avenue
New York, N.Y. 10018

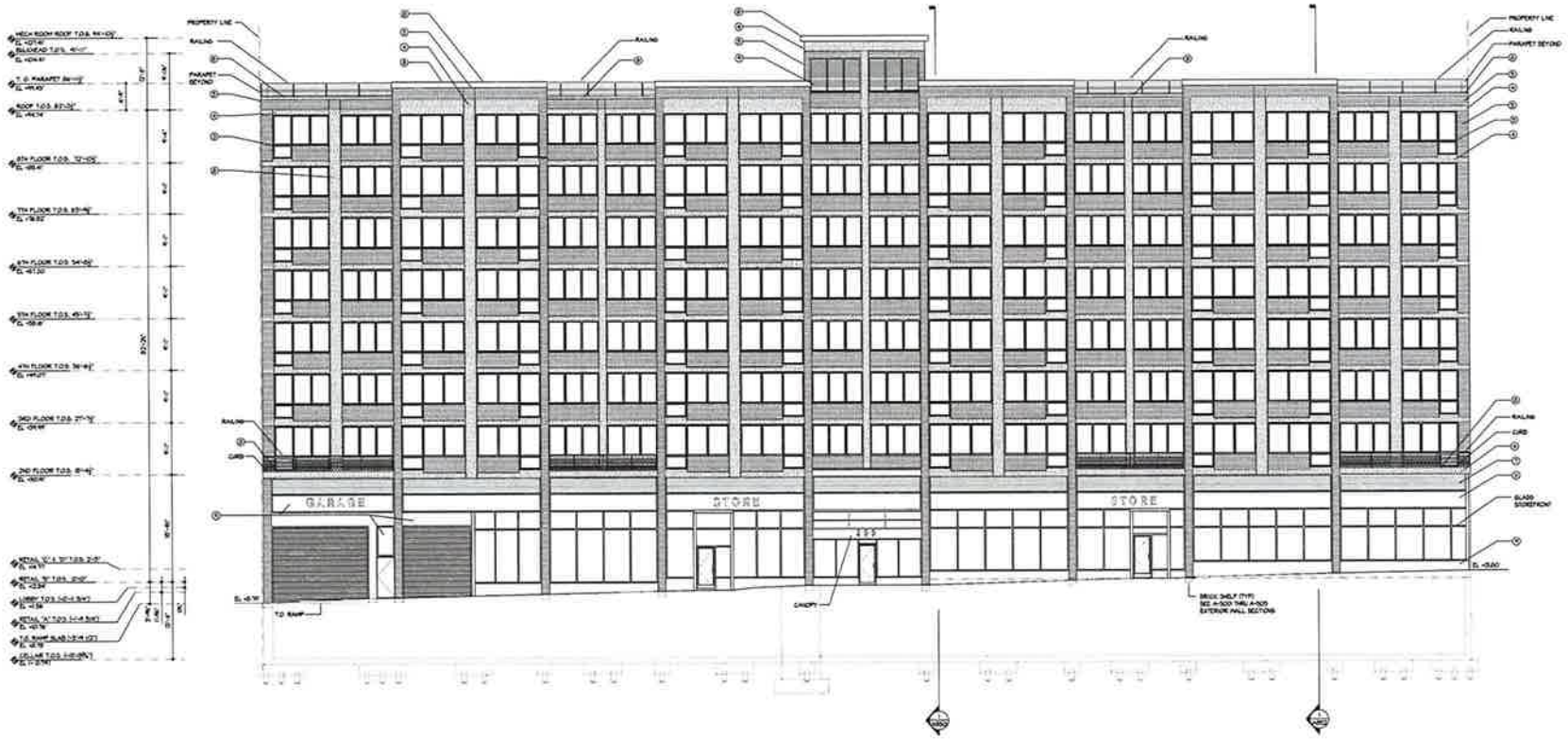
Rev	Date	Description
1	1/30/12	Building Department Submission
2	05/04/12	Building Department Submission

255 East 138th Street

Drawing Title
First Floor Plan

Seal

Date 01/30/12
Scale 1/8" = 1'-0"
Job No. 1512
Drawing No. A-110.00
of
NYC BIM Number



1 BUILDING ELEVATION SOUTH
1/8" = 1'-0"

MATERIALS LEGEND

1. EIFS SYSTEM
2. PRECAST COPING
3. METAL SILL
4. BRICK TYPE 1 (LIGHT)
5. BRICK TYPE 2 (DARK)
6. AREA OF OVERLAP WITH ADJACENT BUILDING
7. LOWER
8. METAL COPING
9. METAL PANEL — STOKE
10. STONE PANEL

KEY

MHG Architects PC
442 Park Avenue South
New York, NY 10016
T 212 683 7272
F 212 545 1867

Client/Developer:
East 138th Street LLC
334-336 East 115th Street
New York, N.Y. 10029

Architect
MHG Architects
442 Park Avenue South
New York, N.Y. 10016

Landscape Architect
Abel Bainnson Butz, LLP
80 8th Avenue, Suite 1105
New York, N.Y. 10011

Structural Engineer
Robert Silman Associates
88 University Place
New York, N.Y. 10003

Mechanical/Electrical/Plumbing Engineer
Ettinger Engineering Associates
508 Eighth Avenue
New York, N.Y. 10018

Rev	Date	Description
	11/30/11	Building Department Submission
	05/24/11	Building Department Submission

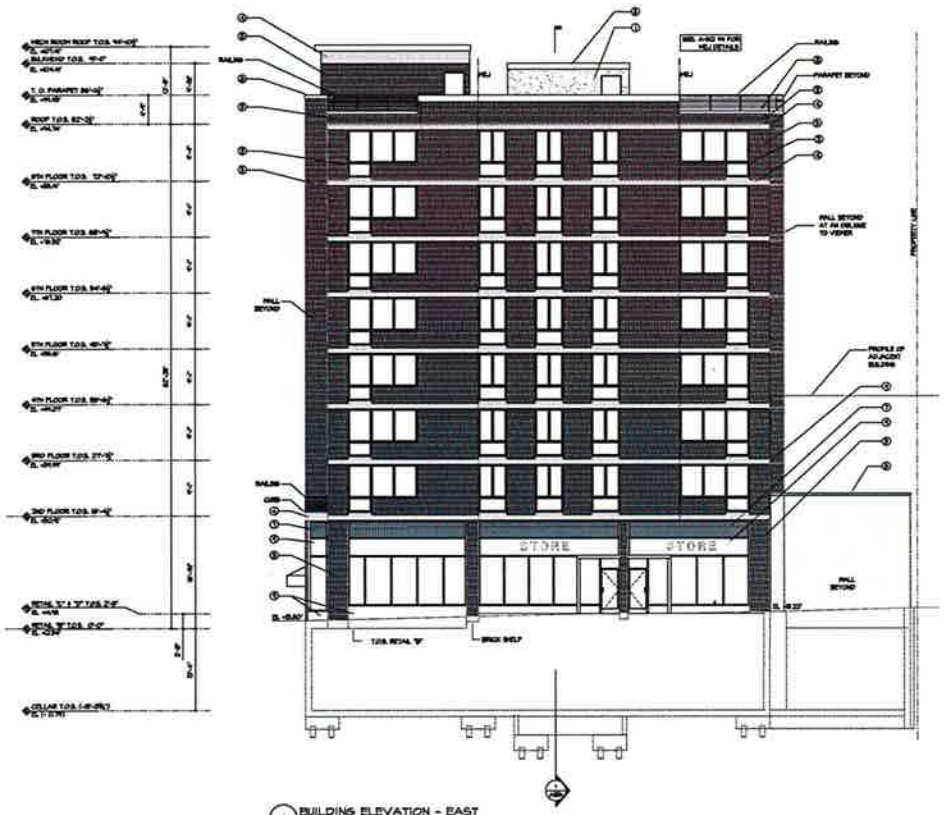
255 East 138th Street

Dwg Title
Building Elevation South

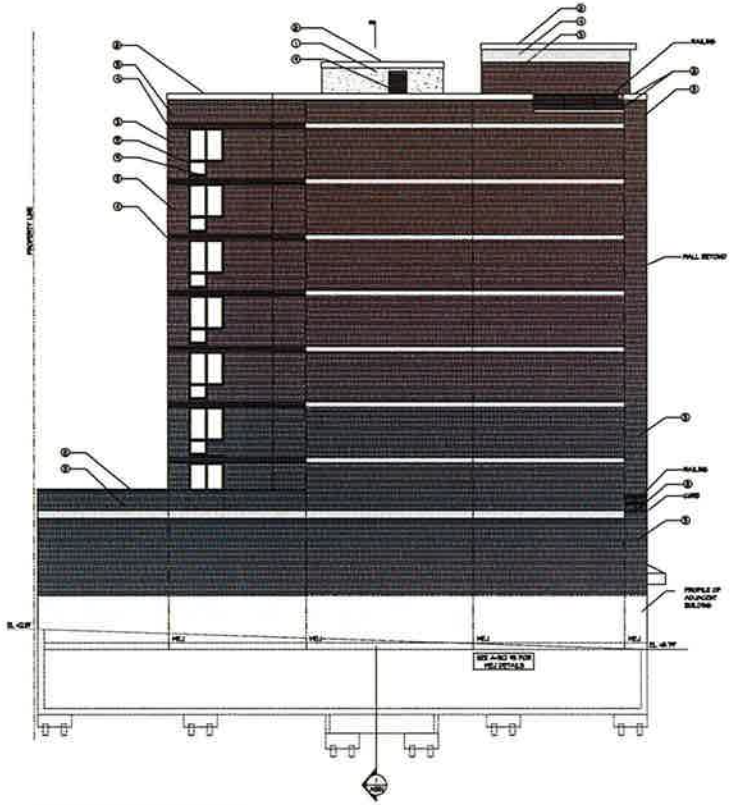
Seal

Date 01/20/11
Scale 1/8" = 1'-0"
Job No. 1022
Dwg No. A-300.00

NYC DOB Number



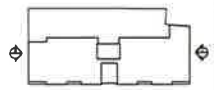
1 BUILDING ELEVATION - EAST
SCALE: 1/8" = 1'-0"



2 BUILDING ELEVATION - WEST
SCALE: 1/8" = 1'-0"

MATERIALS LEGEND

1. EIFS SYSTEM
2. PRECAST COPING
3. METAL SILL
4. BRICK TYPE 1 (LIGHT)
5. BRICK TYPE 2 (DARK)
6. AREA OF OVERLAP WITH ADJACENT BUILDING
7. LOUVER
8. METAL COPING
9. METAL PANEL
10. STONE PANEL



KEY

MHG
Architects PC
443 Park Avenue South
New York, NY 10016
T 212|689|7070
F 212|545|1687
info@MHGArch.com
www.MHGArch.com

Client/Developer
East 138th Street LLC
334-336 East 110th Street
New York, NY 10029

Architect
MHG Architects
443 Park Avenue South
New York, NY 10016

Landscape Architect
Abel Bainnson Butz, LLP
80 8th Avenue, Suite 1105
New York, NY 10011

Structural Engineer
Robert Silman Associates
88 University Place
New York, NY 10003

Mechanical/Electrical/Plumbing Engineer
Ettinger Engineering Associates
508 Eighth Avenue
New York, NY 10018

Rev	Date	Description
	11/30/11	Buildings Department Submission
	05/24/11	Buildings Department Submission

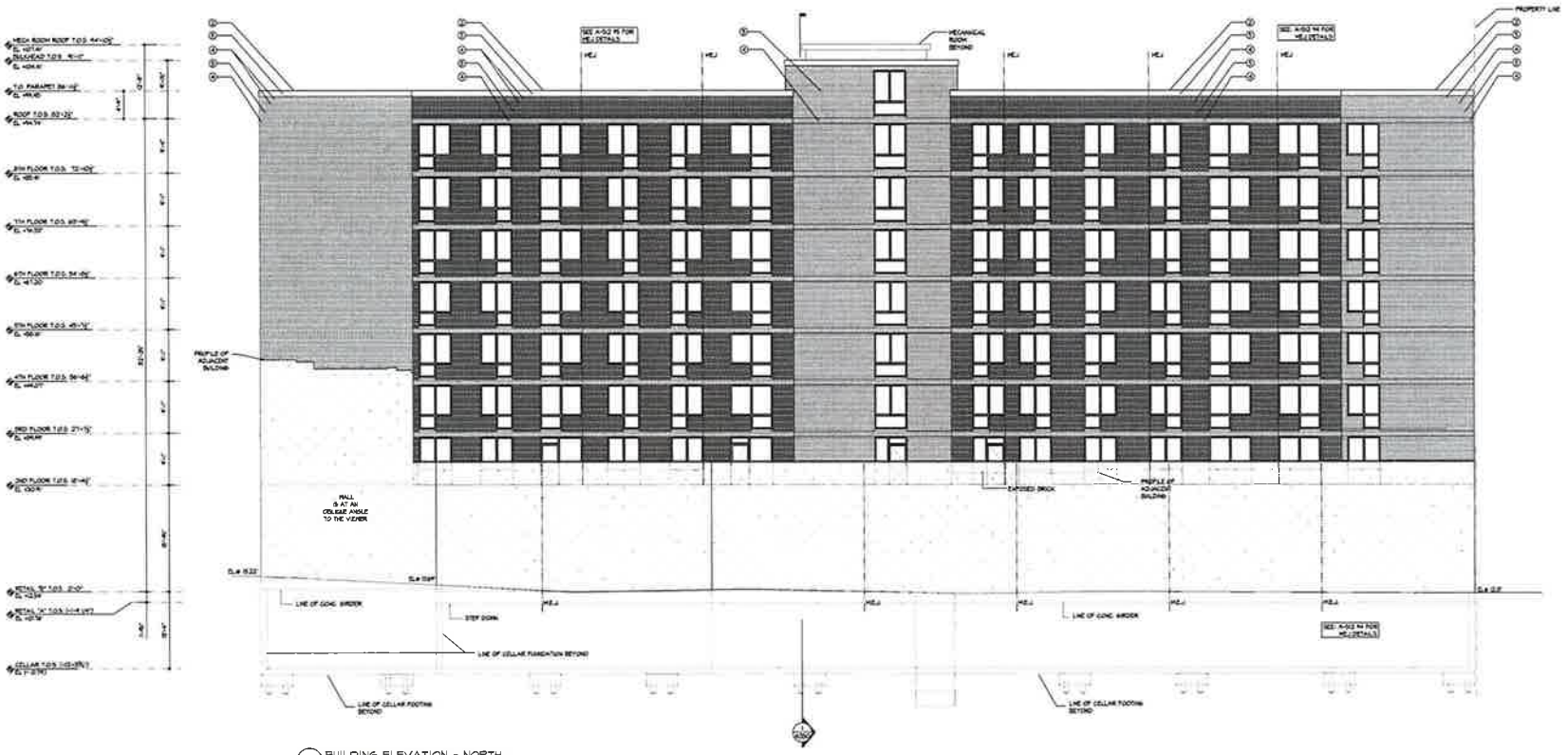
255 East 138th Street

Dwg Title
Building Elevations EAST & WEST

Seal

Date 01/09/13

Dwg No
A-301.00



1 BUILDING ELEVATION - NORTH
SCALE: 1/8" = 1'-0"

MATERIALS LEGEND

1. EIFS SYSTEM
2. PRECAST COPING
3. METAL SILL
4. BRICK TYPE 1 (LIGHT)
5. BRICK TYPE 2 (DARK)
6. AREA OF OVERLAP WITH ADJACENT BUILDING
7. LOUVER
8. METAL COPING
9. METAL PANEL — STONE
10. STONE PANEL

KEY

MHG
Architects PC
443 Park Avenue South
New York, NY 10016
T 212.686.1232
F 212.545.1867
info@MHGarch.com
www.MHGarch.com

Client/Developer:
East 138th Street LLC
504-506 East 138th Street
New York, N.Y. 10029

Architect
MHG Architects
443 Park Avenue South
New York, N.Y. 10016

Landscape Architect
Abel Bainnson Butz, LLP
80 8th Avenue, Suite 1103
New York, N.Y. 10011

Structural Engineer
Robert Silman Associates
88 University Place
New York, N.Y. 10003

Mechanical/Electrical/Plumbing Engineer
Ettinger Engineering Associates
305 Eighth Avenue
New York, N.Y. 10016

Rev	Date	Description
	11/30/11	Buildings Department Comments
	05/14/11	Buildings Department Comments

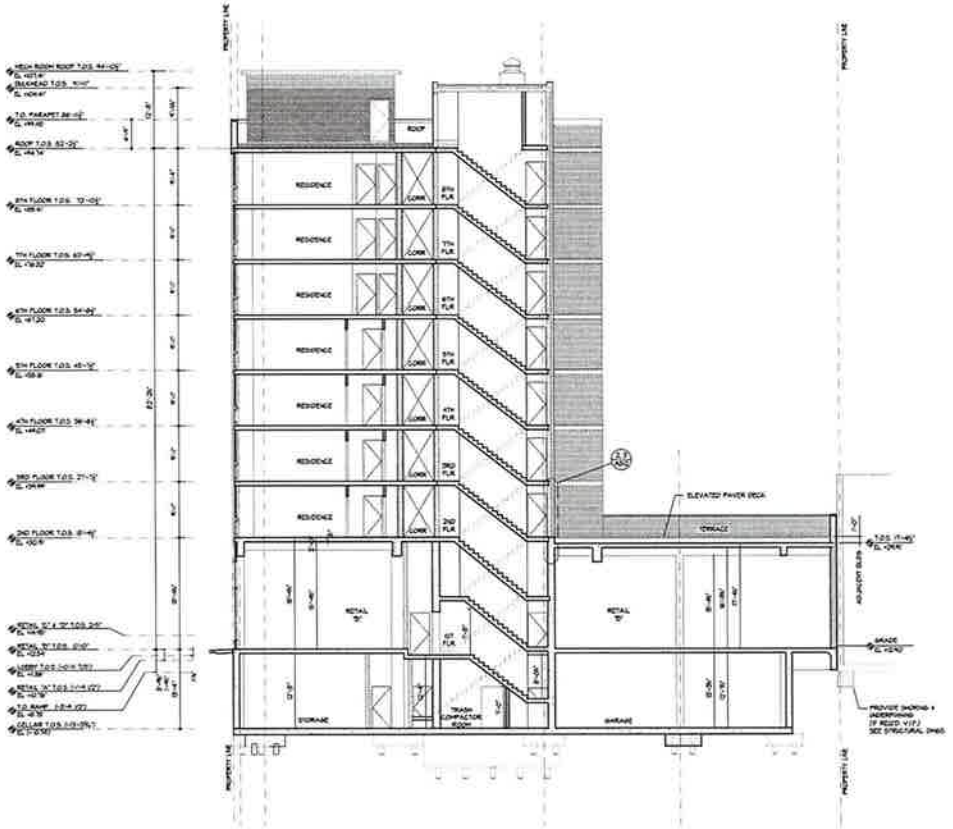
255 East 138th Street

Dwg Title
Building Elevation NORTH

Seal

Date 01/06/12
Scale 1/8" = 1'-0"
Job No 1022
Dwg No A-302.00

NYC DOB Number



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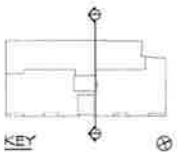

MHG
Architects PC
440 Park Avenue South
New York, NY 10016
T 212.683.1572
F 212.545.1987
info@MHGarch.com
www.MHGarch.com

Owner/Developer:
East 138th Street LLC
304-306 East 140th Street
New York, N.Y. 10454

Architect
MHG Architects
440 Park Avenue South
New York, N.Y. 10016

Landscape Architect
Abel Bainnson Butz, LLP
80 8th Avenue, Suite 1106
New York, N.Y. 10011

Structural Engineer
Robert Silman Associates
88 University Place
New York, N.Y. 10003

Mechanical/Electrical/Plumbing Engineer
Ettinger Engineering Associates
508 Eighth Avenue
New York, N.Y. 10018

Rev	Date	Description
	11/28/11	Buildings Department Filing
	05/24/11	Buildings Department Filing

255 East 138th Street

Drawing Title
Building Section

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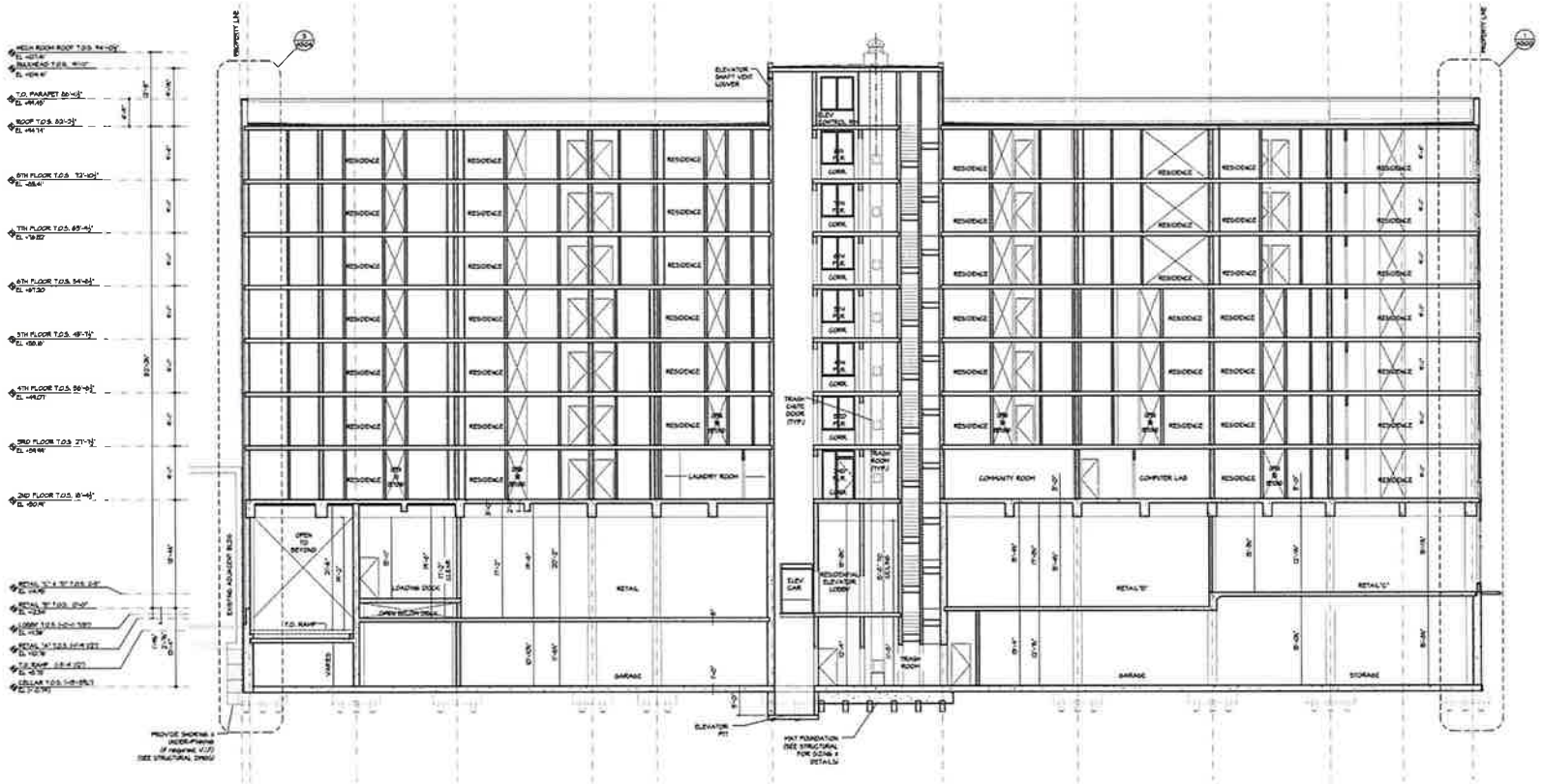
Job No: 1022
Drawing No: A-350.00

NYC DOB No. xxxx



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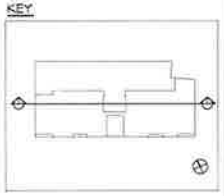


MHG Architects PC
443 Park Avenue South
New York, NY 10016
T 212 889 7272
F 212 545 1867
info@MHGArch.com
www.MHGArch.com

Client/Developer
East 138th Street LLC
334-336 East 110th Street
New York N Y 10029

Architect
MHG Architects
443 Park Avenue South
New York, N Y 10016

Landscape Architect
Abel Bainnson Butz, LLP
80 8th Avenue, Suite 1105
New York, N Y 10011

Structural Engineer
Robert Silman Associates
88 University Place
New York, N Y 10003

Mechanical/Electrical/Plumbing Engineer
Ettinger Engineering Associates
308 Eighth Avenue
New York N Y 10018

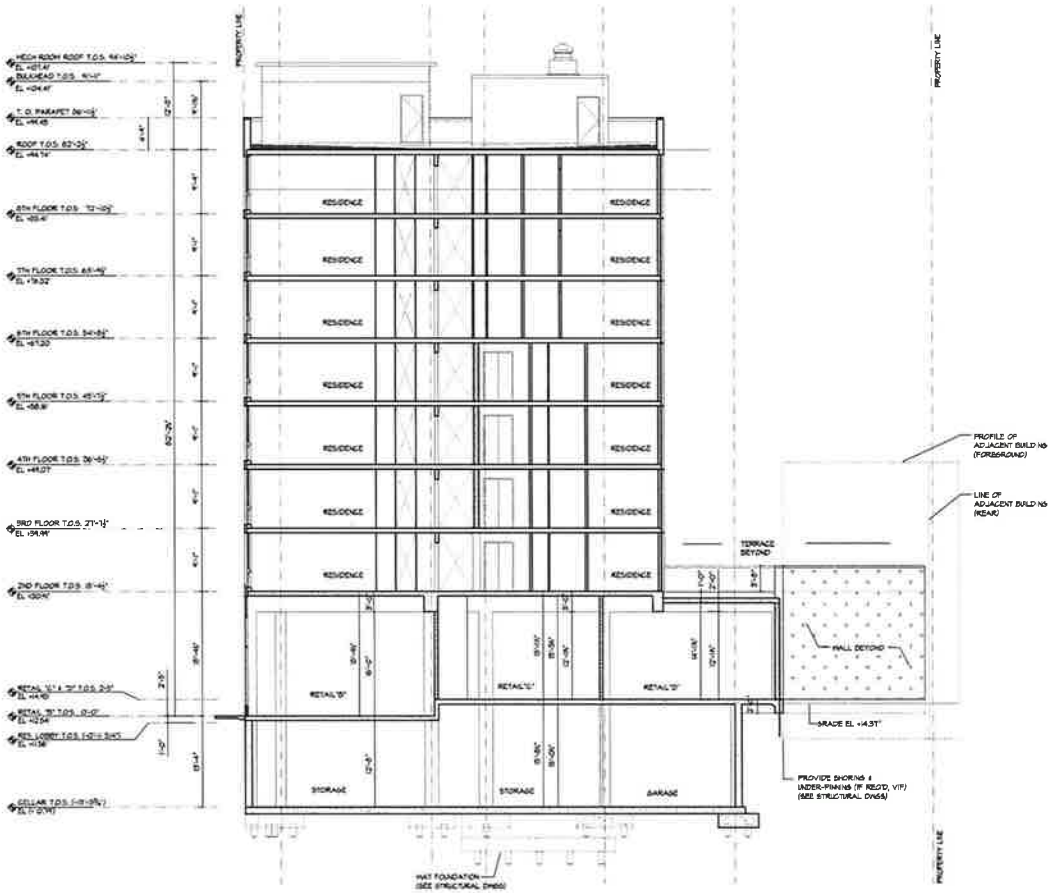
Rev	Date	Description
	11/06/11	Building Department Submission
	03/29/11	Building Department Submission

255 East 138th Street

Drawing Title
Building Section

Scale
Date 01/06/12
Scale 1/8" = 1'-0"
Job No 1022
Drawing No
A-351.00

NYC DOB No Filed



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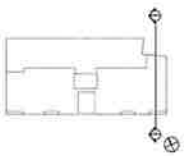

MHG
Architects PE
442 Park Avenue South
New York, NY 10016
T. 212|689|7272
F. 212|545|1687
info@MHGArch.com
www.MHGArch.com

Client/Developer:
East 138th Street LLC
334-336 East 110th Street
New York, N.Y. 10029

Architect:
MHG Architects
442 Park Avenue South
New York, N.Y. 10016

Landscape Architect
Abel Bainnson Butz, LLP
50 6th Avenue, Suite 710b
New York, N.Y. 10011

Structural Engineer
Robert Silman Associates
88 University Place
New York, N.Y. 10003

Mechanical/Electrical/Plumbing Engineer
Ettinger Engineering Associates
308 Eighth Avenue
New York, N.Y. 10018

11/20/11 Buildings Department Comments
05/24/11 Buildings Department Comments

Rev Date Description

255 East 138th Street

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Building Section

Date 01/06/12
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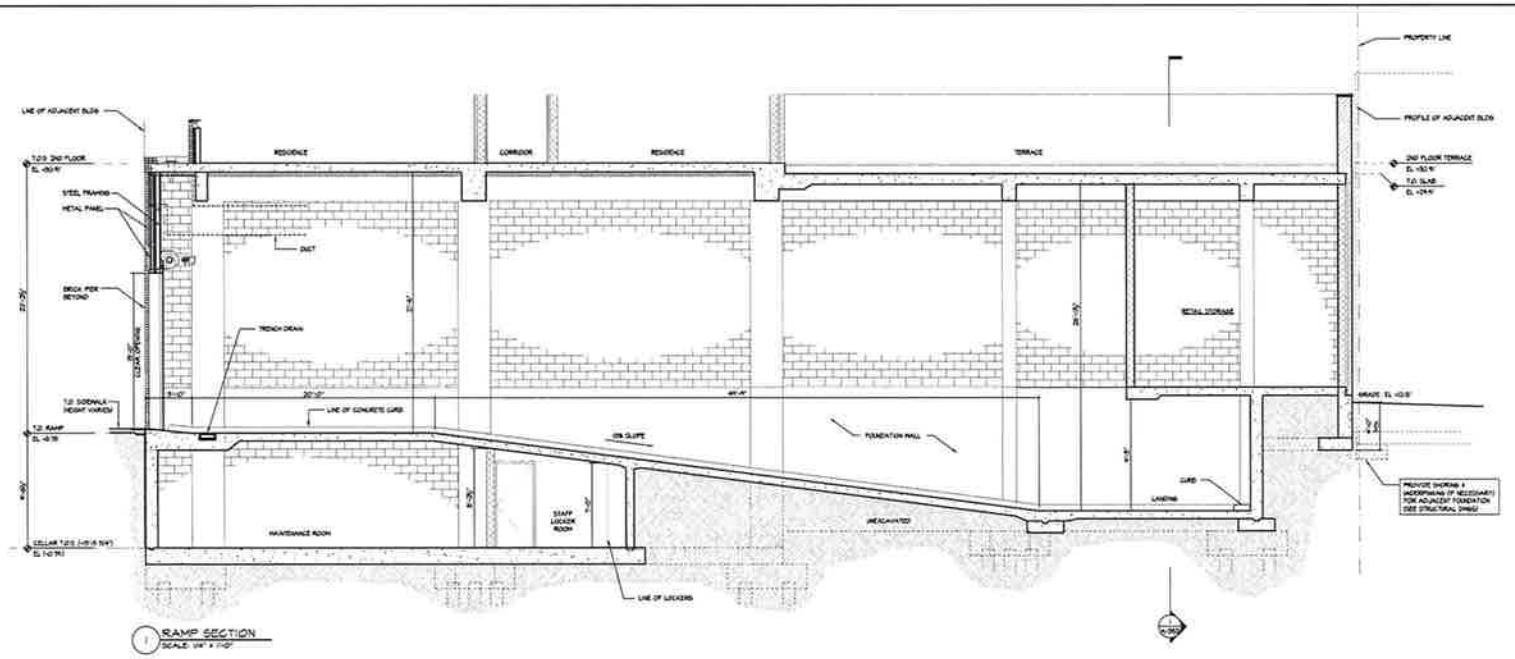
Drawing No. A-352.00
NYC DOB No. none



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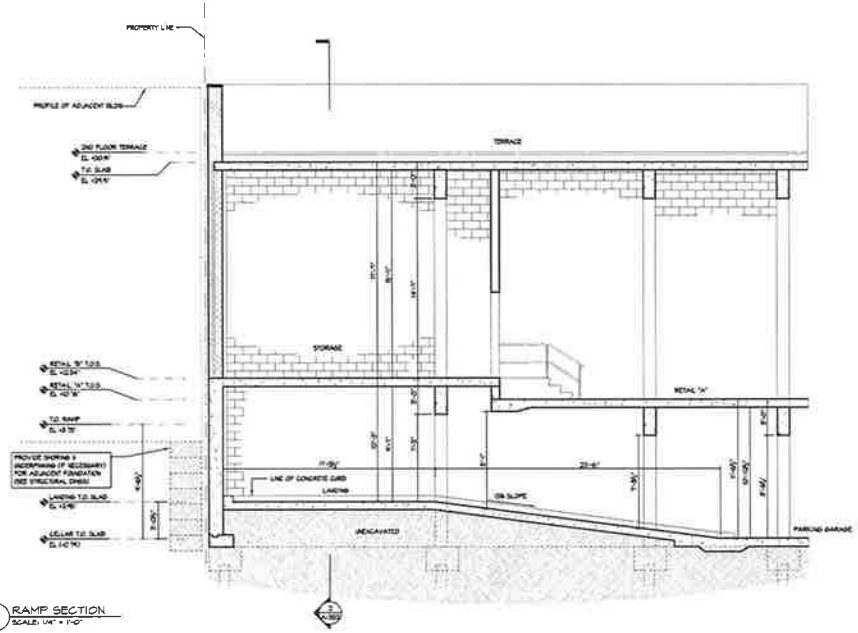

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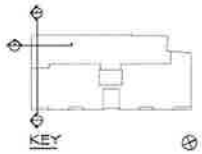

MHG
Architects PC
443 Park Avenue South
New York, NY 10016
T 212|689|7070
F 212|545|1687
info@MHGArch.com
www.MHGArch.com

Client/Developer
East 138th Street LLC
334-336 East 110th Street
New York, N.Y. 10029

Architect
MHG Architects
443 Park Avenue South
New York, N.Y. 10016

Landscape Architect
Abel Bainnson Butz, LLP
60 8th Avenue, Suite 1105
New York, N.Y. 10011

Structural Engineer
Robert Silman Associates
88 University Place
New York, NY 10003

Mechanical/Electrical/Plumbing Engineer
Ettinger Engineering Associates
508 Eighth Avenue
New York, N.Y. 10018

Rev	Date	Description
	11/00/11	Buildings Department Comments
	09/04/11	Buildings Department Comments

255 East 138th Street

Dwg Title
Ramp Sections

Sheet
Date 01/04/12
Scale 1/4" = 1'-0"
Job No 1001
Dwg No
A-353.00

NYC DOB No Issue

III

New York State Department of Environmental Conservation

Brownfield Cleanup Program

Citizen Participation Plan

for

Former G & C Services

2551 3rd Avenue and 245 East 138th Street
Bronx, New York

October 2011

Contents

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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: **East 138th Street, LLC (Applicant)**
Site Name: **Former G & C Services**
Site Address: **2551 3rd Avenue and 245 East 138th Street**
Site County: **Bronx County**
Site Number: **C#203057**

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 that 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 interest 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.

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.

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 Requirements (Activities)	Timing of CP Activity(ies)
Application Process:	
• Prepare site contact list • Establish document repositories	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:	
• Prepare Citizen Participation (CP) Plan	Before start of Remedial Investigation
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 proposed 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 summarizes the Final Engineering Report • Distribute fact sheet to site contact list announcing issuance of Certificate of Completion (COC)	At the time NYSDEC approves Final Engineering Report. These two fact sheets are combined if 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 investigation and cleanup process.

To date, no major issues of public concern have been raised in relation to the project. The applicant was able to secure a number of letters of support for the project including one from the South Bronx Overall Economic Development Corp. (SoBRO), the local community based organization working on a Brownfield Opportunity Area (BOA) designation for this neighborhood. The low income housing project for this site is consistent with the evolving BOA plan for the community.

This Site is in an environmental justice area. As such, the Volunteer will make all possible efforts to be sensitive to the needs of the community and ensure that community members are aware of activities at the Site.

It is anticipated that cleanup of the site will involve significant excavation of contaminated soil. This is expected to generate temporary increased truck traffic as contaminated soil is removed from the Site. A truck route that takes into consideration surrounding land uses and traffic patterns will be proposed prior to the cleanup. Any potential odors, air quality concerns or other nuisances which may affect the community during the investigation and/or cleanup process will be addressed by adherence to a Community Air Monitoring Plan and an Odor, Dust, and Nuisance Control Plan, which will be included in the Remedial Action Work Plan.

The site contact list (Appendix B) has been voluntarily edited to include the stakeholders related to the community, including SoBRO.

Due to the significant number of Spanish-speaking residents in the community, fact sheets will be disseminated in Spanish as well as English. If any public meetings are to be held, the need for a translator at such events will be evaluated at that time.

4. Site Information

Appendix C contains a map identifying the location of the site.

Site Description

The Site is made up of two lots (Block 2333 Lots 1 and 6) totaling approximately .4678 acres in the South Bronx, New York, Bronx County. Lot 1 is developed with a one-story vacant building formerly occupied by a Kentucky Fried Chicken (KFC) fast food restaurant. Prior to the KFC, the parcel was operated as a Cities Services Gas Station. The remaining portion of this parcel is a paved parking lot. The parcel has been vacant since approximately 2006. Lot 2 is developed

with a one-story garage building, including an office and two garage bays. This parcel was operated for 80 years as various gas stations, and most recently as a Getty gas station and auto repair shop. The remaining portion of this parcel is a paved parking lot. This parcel has been vacant since approximately 2001.

Large, multi-story former industrial buildings, the front of which are along East 139th Street and several smaller buildings are located on the corner of 139th Street and 3rd Avenue to the north of the Site. A one-story garage building currently limited to parking and storage by the owner is located along Rider Avenue to the west of the Site. Third Avenue and a federally assisted Section 8 Senior Residential Building are located to the east of the Site. East 138th Street, an abandoned gas station and commercial storefronts with residential apartments above are located on the other side of East 138th Street to the south of the Site.

History of Site Use, Investigation, and Cleanup

Both lots were in the past operated as commercial uses. Lot 1 is a vacant former Kentucky Fried Chicken fast food restaurant, and before that, a gas station. Lot 2 is a vacant gas station/auto repair and paint shop. Both lots have a documented history of leaking underground storage tanks. Petroleum, chlorinated solvents, and the metals lead, chromium, copper and mercury are known to be present in the soil and groundwater. Lacquer paint is suspected to also be present in the soil and groundwater. Petroleum and chlorinated solvents are suspected to be present in soil gas.

Three Phase I Environmental Site Assessments, three Phase II reports, one Remedial Action Work Plan, two Underground Storage Thank (UST) Closure Reports, and two geophysical reports were included in the initial Brownfield Cleanup Program application. The reports date from October 1998 to 2010. While the tanks have been removed, and some contaminated petroleum soil source material has also been removed, residual contamination in both soil and groundwater remains present requiring remediation.

5. Investigation and Cleanup Process

Application

The Applicant has applied for and been accepted into New York's Brownfield Cleanup Program as a Volunteer. This means that the Applicant was not responsible for the disposal or discharge of the contaminants or whose ownership or operation of the site took place after the discharge or disposal of contaminants. The Volunteer must fully characterize the nature and extent of contamination onsite, and 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 unrestricted 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 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 workplan, 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.

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.

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 proposed Remedial Work Plan for approval, NYSDEC would announce the availability of the proposed 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 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

Site management is the last phase of the site cleanup program. This phase begins when the COC is issued. Site management may be conducted by the Applicant under NYSDEC oversight, if contamination will remain in place. 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 is pumping and treating 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):

Ms. Dana Kaplan, Project Manager
NYSDEC Region 2 Office
One Hunters Point Plaza
47-40 21st Street
Long Island City, NY 11101
(718) 482-7541
dpkaplan@gw.dec.state.ny.us

Thomas V. Panzone
Regional Citizen Participation Specialist
NYSDEC, Region 2
Division of Public Affairs & Education
47-40 21st Street
Long Island City, NY 11101
tvpanzon@gw.dec.state.ny.us
718-482-4900

New York State Department of Health (NYSDOH):

Steven Bates
NYSDOH
Bureau of Env. Exposure Investigation
Flanigan Square
547 River Street
Troy, NY 12180-2216
smb02@health.state.ny.us
518-402-7860

Locations of Reports and Information

The facilities identified below are being used to provide the public with convenient access to important project documents:

Mott Haven Library
321 East 140th Street
Bronx, NY 10454
Attn: Jeanine Thomas Cross
Phone: (718)665-4878
Hours: Mon and Thurs 10:00am to 6:00pm
Tues and Wed 10:00am to 7:00pm
Fri and Sat 10:00am to 5:00pm
Sunday closed

NYSDEC Region 2 Office
One Hunters Point Plaza
47-40 21st Street
Long Island City, NY 11101
Attn: Ms. Dana Kaplan
Phone: (718) 482-7541
Hours: Monday – Friday 9-5
(call for appointment)

Appendix B Site Contact List

Elected/Government Officials:

Hon. Michael Bloomberg
Mayor of the City of New York
City Hall
New York, NY 10007

Daniel Walsh
Director, New York City Office
of Environmental Remediation
253 Broadway ,14th Floor
New York NY 10007

John Liu
NYC Comptroller
1 Centre Street
New York NY 10007
Email: press@comptroller.nyc.gov

Bill De Blasio
Public Advocate
1 Centre Street, 15th Floor
New York NY 10007
Email: mwing@pubadvocate.nyc.gov

John Wuthenow
Office of Environmental Planning
& Assessment, NYCDEP
96-05 Horace Harding Expressway
FlushingNY 11373

Charles Schumer
U.S. Senator
757 Third Avenue, Suite 17-02
New York NY 10017

Kirsten Gillibrand
U.S. Senator
780 Third Avenue, Suite 2601
New York NY 10017

Luis M. Diaz
Bronx County Clerk's Office
851 Grand Concourse, Room 118
Bronx NY 10451

Maria Del Carmen Arroyo
NYC Councilmember
384 E. 149th Street
3rd Avenue, Suite 300
Bronx NY 10455
Phone: 212-788-7384
Fax: 212-788-8920

Jose M. Serrano
NYS Senator
157 East 104th Street
New YorkNY 10029
Email: serrano@senate.state.ny.us
Phone: 212-828-5829
Fax: 212-828-2420

Carmen E. Arroyo
NYS Assembly Member
384 E. 149th Street
3rd Avenue, Suite 301
Bronx NY 10455

Jose E. Serrano
U.S. House of Representatives
1231 Lafayette Avenue,
4th Floor Bronx
NY 10474
Phone: 718-620-0084
Fax: 718-620-0658

Hon. Rubin Diaz, Jr.
Office of the Bronx Borough Pres.
851 Grand Concourse, 3rd Floor
Bronx, NY 10451

Hon. Amanda M. Burden, Chair
City Planning Commission
22 Reade Street
New York, NY 10007-1216

Caswell, Holloway, Commissioner
Dept of Environmental Protection
Bureau of Water & Sewer Operations
59-17 Junction Blvd.
Flushing, NY 11373

John Wuthenow
Office of Environmental Planning & Assessment,
NYCDEP
96-05 Horace Harding Expressway
Flushing, NY 11373

James Rausse AICP
Director of Budget & Housing
Office of the Bronx Borough Pres.
851 Grand Concourse, 3rd Floor
Bronx, NY 10451

Hon. George Rodriquez, Chairperson
Bronx Community Board 1
3024 Third Avenue
Bronx, NY 10455
Email: brxcb1@optonline.net

Cedric Loftin, District Manager
Bronx Community Board 1
3024 Third Avenue
Bronx, NY 10455
Email: brxcb1@optonline.net

Simon Bacchus
NYC Housing Dev. Corp.
110 William St., 10th Floor
New York, NY 10038

Dana Kaplan, Project Manager
NYSDEC, Region 2
email: dpkaplan@gw.dec.state.ny.us

Robert Cozzy, Director
NYSDEC
email: rjcozzy@gw.dec.state.ny.us

Jane O'Connell
NYSDEC
email: jhoconne@gw.dec.state.ny.us

Ben Conlon
NYSDEC
email: bxconlon@gw.dec.state.ny.us

Barb Wolosen
NYSDEC
email: brwolose@gw.dec.state.ny.us

Megan Joplin, Esq. (Regional Counsel)
NYSDEC
mjjoplin@gw.dec.state.ny.us

Steve Bates
NYSDOH
email: smb02@health.state.ny.us

Local Media Outlets:

Bronx 12 News
930 Soundview Avenue
Bronx, NY 10473

NY1 News
75 Ninth Avenue
New York, NY 10011
Email: ny1news@ny1.com

New York Daily News
450 W. 33rd Street
New York, NY 10001

New York Post
1211 Avenue of the Americas
New York, NY 10036

El Diario La Prensa
1 Metrotech Center, 18th Floor
Brooklyn, NY 11201

Bronx Times Reporter
900 East 132nd Street
Bronx, NY 10454

Bronx News
135 Dreiser Loop
Bronx, NY 10475

Mott Haven Herald
c/o Bronx News Network
3400 Reservoir Oval
Bronx, NY 10467

Hunts Point Express
c/o Bronx News Network
3400 Reservoir Oval
Bronx, NY 10467

Bronx News Network
3400 Reservoir Oval
Bronx, NY 10467

Inner City Press
PO Box 580188
Mount Carmel Station
Bronx, NY 10458

Civic/Community/Religious:

Lenny Caro
Bronx Chamber of Commerce
1200 Waters Place, Suite 106
Bronx, NY 10461

Shira Gidding, Project Manager and
Philip Morrow
SoBRO, Real Estate Dev & Environmental Planning
555 Bergen Ave., 3rd Floor
Bronx, NY 10455

Father Gustavo Nieto
St. Jerome's Church
230 Alexander Avenue
Bronx, NY 10454
Email: gustavonieto@ive.org

Centor Christiano Emanuel
2612 Third Ave
Bronx, NY 10454

Third Spanish Baptist Church
322 Alexander Avenue
Bronx, NY 10454

Erica Packard
Bronx Land Trust
232 East 11th Street
Bronx, NY 10454
Email: erica_packard@yahoo.com

Green Worker Cooperatives
461 Timpson Place
Bronx, NY 10454
Email: info@greenworker.coop

Luis Rojas
For a Better Bronx
199 Lincoln Avenue, Suite 214
Bronx, NY 10454
Email: rojasiguamo@aol.com

Mitchel Community Center, Director
210 Alexander Avenue
Bronx, NY 10454

Mott Haven Community Center
375 East 143rd Street
Bronx, NY 10454

Andre Pabon
Abraham House
340 Willis Avenue
Bronx, NY 10454
Email: apabon@abrahamhouse.org

Executive Director
ASPIRA of NY
520 8th Avenue, 22nd Floor
New York, NY 10018

Adjacent Property Owners:

270 Rider Avenue LLC
c/o Yorkville Van & Storage Co. Inc.
1587 Third Avenue
New York, NY 10028

Patterson House (NYCHA)
301 East 143rd Street
Bronx, NY 10451

Peter Standish
East Side House Settlement
337 Alexander Avenue
Bronx, NY 10454
Email: inquiries@eastsidehouse.org

Gilberto Chavez
1850 Loring Pl S
Bronx, NY 10453-5204

243 East 138th Street LLC
c/o Yorkville Van & Storage Co. Inc.
1587 Third Avenue
New York, NY 10028

Borinquen Court Housing Dev Fund Corp.
271 East 138th Street
Bronx, NY 10454

US Dept of Housing & Urban Dev't.
5 Points Plaza
40 Marietta Street
Atlanta, GA 30303

138th Street Realty LLC
579 Grand Concourse
Bronx, NY 10451

Adfia Realty LLC
573 Grand Concourse
Bronx, NY 10451

East 138th Street Bronx Realty Corp
535 East 14th Street
New York, NY 10009-3012

The Bank of New York Mellon
Cust. for the NYCTL 1999-1 Trust
101 Barclay Street, 4W
New York, NY 10286

Mitchel Houses
225 Alexander Avenue
Bronx, NY 10454

Mott Haven Houses
373East 141st Street
Bronx, NY 10454

250 East 139th Street LLC
c/o Bradford N. Swett Management LLC
1536 Third Avenue, 3rd Floor
New York, NY 10028

Third Avenue/138th Street LLC
c/o Bradford N. Swett Management LLC
1536 Third Avenue
New York, NY 10028-2167

Schools/ Daycare Facilities:

Darlene Morris
St. Jerome's School
222 Alexander Avenue
Bronx, NY 10454
Email: DGMorris@stjeromebronx.org

William Hewlett Jr.
Middle School
203 339 Morris Avenue
Bronx NY 10451
Phone: 718-292-1052
Fax: 718-292-5765

Rosa Nieves Greene
Public School
68 339 Morris Avenue
Bronx NY 10451
Phone: 718-585-2100
Fax: 718-585-8315

Anna Hall
Bronx Academy of Letters
339 Morris Avenue
Bronx NY 10451
Phone: 718-401-4891
Fax: 718-401-6626

East Side House
Settlement Day Care Facilities
210 Alexander Street
Bronx NY 10454

East Side House
Settlement Day Care Facilities
414 Morris Avenue
Bronx NY 10454

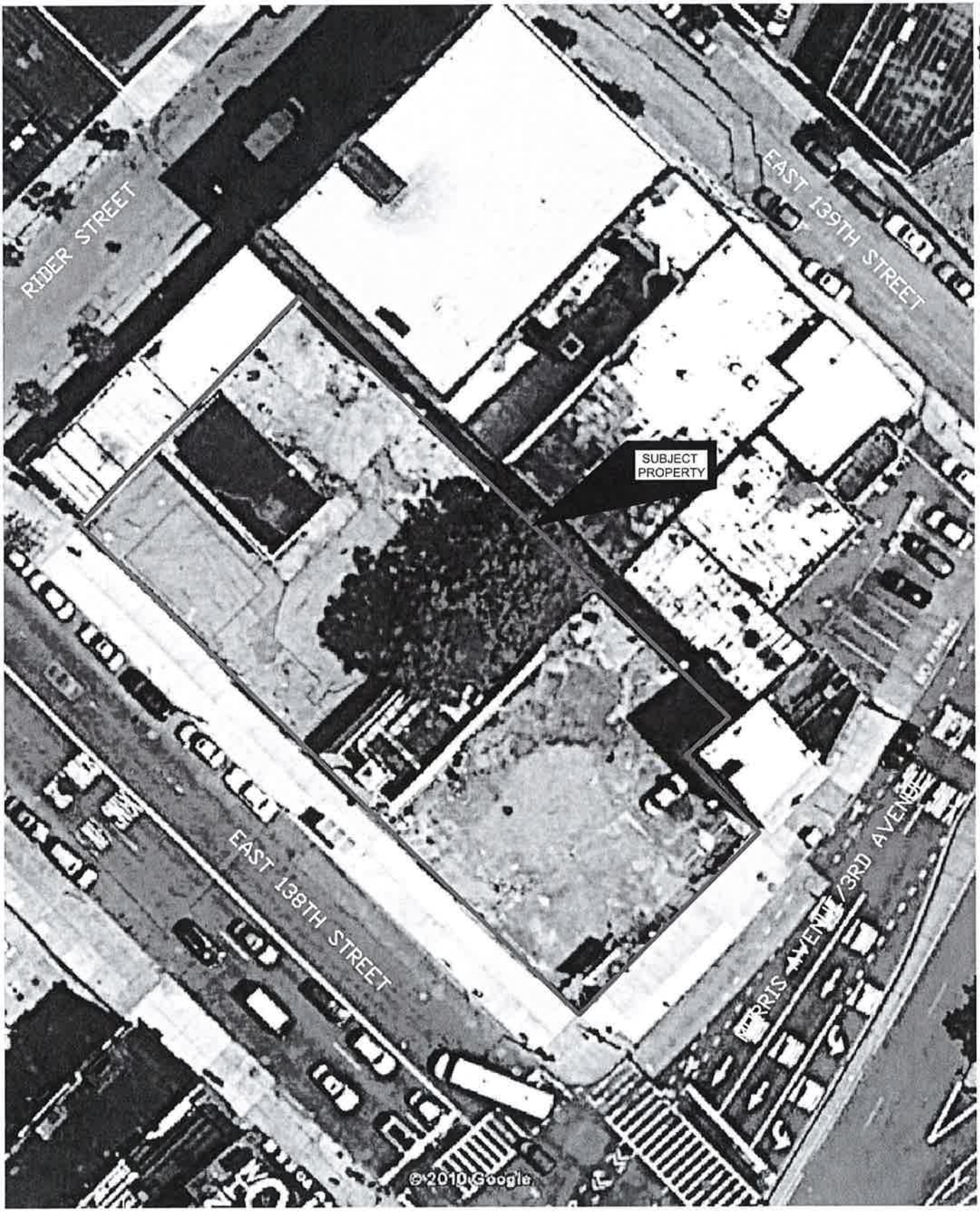
Director
Winifred Wheeler Nursery School
200 Alexander Avenue
Bronx NY 10454

Principal
Bronx Elementary School
49 383 East 139th Street
Bronx NY 10454
Phone: 718-292-4623

Principal
South Bronx Charter School
for International Cultures & Arts
383 East 139th Street Bronx
NY 10454
Email: information@sbcsica.org
Phone: 718-401-9216
Fax: 718-401-9219

Marsha Elliot
P.S. 154 Jonathan Hyatt
333 East 135th Street
Bronx NY 10454
Phone: 718-292-4742
Fax: 718-292-4721

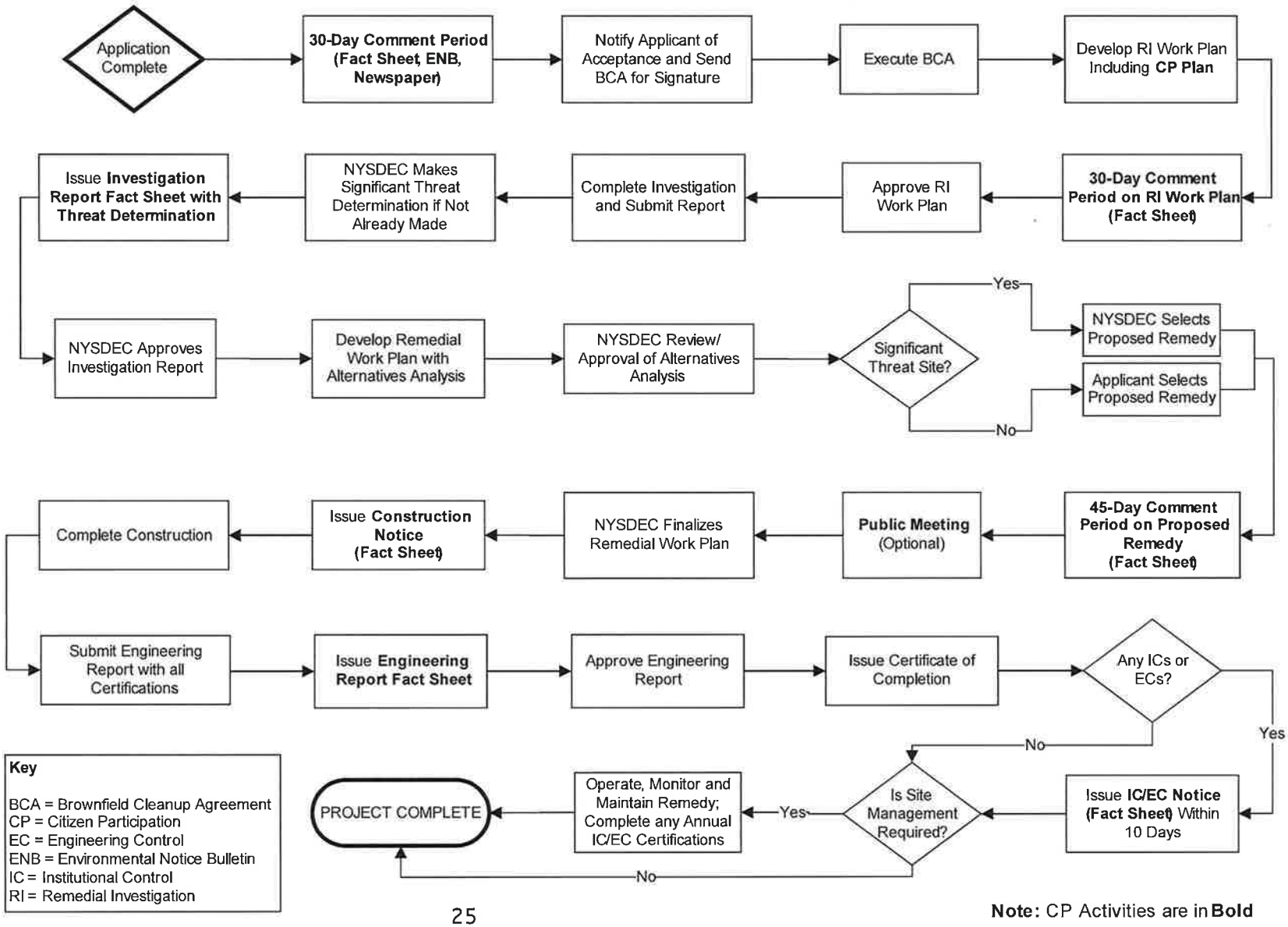
Appendix C Site Location Map



LEGEND

- SITE BOUNDARY

Appendix D– Brownfield Cleanup Program Process



Note: CP Activities are in **Bold**

New York State Department of Environmental Conservation
Division of Environmental Remediation

Remedial Programs
Scoping Sheet for Major Issues of Public Concern (see instructions)

Remedial Party: East 138th Street, LLC

Site Name: Former G & C Services

Site Number: C203057

Site County: Bronx County

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/or information. **Use this information as an aid to prepare or update the Major Issues of Public Concern section of the site Citizen Participation Plan.**

There are no known major issues of public concern and/or information the community wants at this time. The applicant believes the community is in support of this project and received a number of letters of support for the project including one from the South Bronx Overall Economic Development Corp. (SoBRO), the local community based organization working on a Brownfield Opportunity Area (BOA) designation for this neighborhood. The low income housing project for this site is consistent with the evolving BOA plan for the community. However, as work proceeds on the Site, the public will be kept informed through Fact Sheets describing the work to be performed before the work begins.

Based on the demographic information for this area, which includes a large Hispanic minority population, this Site is in an environmental justice area. As such, the Volunteer will make all possible efforts to be sensitive to the needs of the community and ensure that community members are aware of activities at the Site. Once the cleanup of the Site begins, there will be truck traffic generated as contaminated soil is excavated from the Site. All effected groups and parties are listed in this Scoping Sheet and in the Citizen Participation Plan. Before such work occurs, a Fact Sheet will be sent to all adjacent property owners and parties on the site contact list, including SoBRO, informing them that the trucks entering and existing the Site traveling along 138th Street will contain contaminated material. Flagmen are used for all truck operations. Trucks are loaded with an excavator. Trucks will be typically on-site for approximately 10 minutes and are hosed down as required before they leave the site. If soil is removed from the site for the entire day, then each truck makes two rounds, one at 7 AM and another around 1 PM. Because the community has a large Hispanic population, fact sheets will also be translated into Spanish by State representatives.

How were these issues and/or information identified?

See response above.

Part 2. List important information needed **from** the community, if applicable. Identify groups, organizations, businesses and/or units of government related to the needed information.

If there are issues, the community should bring them to the attention of the DEC and/or DOH site contacts found in the Site Contact List for this Site.

How were these information needs identified?

See response above.

Part 3. List major issues and information that need to be communicated **to** the community. Identify groups, organizations, businesses and/or units of government related to the issue(s) and/or information.

See response to Part 1. Since the BCP Applicant has elected to attempt to achieve the highest level of cleanup, known as Track 1, a significant amount of contaminated soil will be excavated and removed from the site, which will generate temporary truck traffic. In addition, sometimes despite the best intentions and attempts to remove all the contamination soil, Track 1 cannot be achieved. The Applicant will keep the public informed as the final cleanup progresses regarding to whether Track 1 has been achieved.

How were these issues and/or information identified?

These issues have not occurred yet, but when they do, the issues will be described to the public in Fact Sheet documents so the public knows what to expect during and after the remediation.

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 around site:

■ Residential ▫ Agricultural ▫ Recreational ■ Commercial ▫■ Industrial

b. Residential type around site:	■	Urban	▫	Suburban	▫	Rural
c. Population density around site:	■	High	▫	Medium	▫	Low
d. Community Economic status: Median Household Income **$20,307**	▫	High	▫	Medium	■	Low
e. Water supply of nearby residences:	■	High	▫	Medium	▫	Low

f. Other environmental issues significantly impacting affected community? (yes/No) No

Explain if "Yes" _____

_____

_____

g. Special considerations: ☐ **Language** ☐ Age ☐ Transportation ☐ Other

Explain marked categories in **g.**: **The population is approximately 71% Hispanic; therefore, Spanish is spoken in this community. The next highest population category is African American at approximately 26% of the population. Therefore, fact sheets will be translated into Spanish.**

Part 5. The site contact list must include, at a minimum, the individuals, groups and organizations identified in the instructions for **Part 5.** Are other individuals, groups and organizations 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) **See attached site contact list, which has been adjusted to include appropriate organizations.**

■ Adjacent Residents/Property Owners: **NORTH - Liquor Store (Gilberto Sanchez), Vacant Retail with Offices (Bradford Swett Management); Former Factory and now auto body shop on ground floor and apartments above (Bradford Swett Management); WEST – Former Factory and now warehouse facility for Yorkville Van & Storage; EAST – Borinquen Court Senior Housing (Borinquen Court Housing Development Fund Corp. & U.S. HUD); SOUTH – Warehouse (East 138th Bronx Realty Corp.); Retail with Offices (138th Street Realty LLC & Adfia Realty LCC); Abandoned Gas Station now unlicensed parking lot (The Bank of New York Mellon Custodian for the NYCTL 1999-1 Trust, 101); See also Exhibit G Adjacent Use Map and Exhibit M Site Contact List for Adjacent Owners in the BCP Application**.

■ Local Officials: **Mayor Michael R. Bloomberg; Hon. Amanda M. Burden (City Planning Chair); Dr. Robert Kulikowski (City OER); Hon. Caswell Holloway, Commissioner NYC Dept of Environmental Protection; Simon Bacchus, New York City Housing Development Corporation; Hon. Rubin Diaz Jr. & James Rausse AICP, Director of Budget & Housing; Office of the Bronx Borough President; Maria del Carmen Arroyo, New York City Council Member – District 17; Hon. George Rodriguez, Chairperson, Bronx Community Board 1; Shira Gidding, South Bronx Overall Economic Development Corporation (SoBRO), Real Estate Development and Environmental Planning, Project Manager (Harlem River BOA) See also Exhibit M Site Contact List in the BCP Application.**

■ Media: **NY 1 News; New York Daily News; Bronx News 12; Bronx Times Reporter; Bronx News; Mott Haven Herald; Hunts Point Express; Bronx News Network; Inner City Press; New York Post; El Diario La Prensa.**

■ Business/Commercial Interests (Adjacent): **Liquor Store; HUD Borinquen Senior Housing Project; Yorkville Van & Storage Co., Inc.**

□ Labor Group(s)/Employees: **N/A**

□ Indian Nation: **N/A**

■ Citizens/Community Group(s): **Bronx Community Board #1; See also Civic Groups listed in Site Contact List.**

■ Environmental Justice Group(s): **See groups listed in Site Contact List.**

■ Environmental Group(s): **See groups listed in Site Contact List.**

■ Civic Group(s): **South Bronx Overall Economic Development Corporation (SoBRO)**

■ Recreational Group(s): **None**

■ Other(s): Schools & Daycares: **Please see the Site Contact List for the nearby schools and daycare centers.**

Date Completed:	Prepared By:	Reviewed by:
August 10, 2011	Knauf Shaw LLP	Thomas V. Panzone, DEC

Site Contact List

Instructions:

1. Enter Site name and ID No. in cells A10 and C10 and the date of the list in E10.
2. Each contact list must include the site property owner(s), adjacent property owner(s)/resident(s), the municipal CEO, public water supplier for the area, and any other intererested parties for sites in counties where there is not a functional list serve.
3. Items in red with an asterisk are required. Items in blue with no asterisk are optional. "Titles" are typically for elected officials (e.g., "Senator," "Mayor," "Supervisor").
4. Row 13 shows the expected format of the cells and should be deleted once actual information is entered.
5. To enter data, it is convenient to select the Excel option where keying "Enter" moves the cell one to the right (Office Button, Excel Options, Advanced, Direction, select "right").
6. If a notice comes back indicating that an individual at a residence has moved, the "last name" should be replaced with "Resident" and the first name deleted.

Site Name	Site ID No.	List Last Updated
Former G & C Services	C203057	7/21/11

Last Name*	First Name*	Title	Address 1*	Address 2	Address 3	Address 4	Category	City*	State*	Zip*	Email	Phone	Fax
	270 Rider Avenue LLC	c/o Yorkville Van & Storage Co. Inc.	1587 Third Avenue				Adjacent Property Owners	New York	NY	10028			
Bloomberg	Michael	NYC Mayor	City Hall				Elected/Government Officials	New York	NY	10007			
Walsh	Daniel	Director, New York City Office of Envir	253 Broadway - 14th Floor				Elected/Government Officials	New York	NY	10007			
Liu	John	NYC Comptroller	1 Centre Street				Elected/Government Officials	New York	NY	10007	press@comptroller.nyc.gov		
de Blasio	Bill	Public Advocate	1 Centre Street, 15th Floor				Elected/Government Officials	New York	NY	10007	mwing@pubadvocate.nyc.gov		
Wuthenow	John	Office of Environmental Planning & Asse	96-05 Horace Harding Expressway				Elected/Government Officials	Flushing	NY	11373			
Schumer	Charles	U.S. Senator	757 Third Avenue, Suite 17-02				Elected/Government Officials	New York	NY	10017			
Gillibrand	Kirsten	U.S. Senator	780 Third Avenue, Suite 2601				Elected/Government Officials	New York	NY	10017			
Diaz	Luis M.	Bronx County Clerk's Office	851 Grand Concourse, Room 118				Elected/Government Officials	Bronx	NY	10451			
Diaz Jr.	Ruben	Bronx Borough President	851 Grand Concourse, 3rd Floor				Elected/Government Officials	Bronx	NY	10451	webmail@bronxbp.nyc.gov		
Arroyo	Maria del Carmen	NYC Councilmember	384 E. 149th Street 3rd Avenue, Suite 300				Elected/Government Officials	Bronx	NY	10455		212-788-7384	212-788-8920
Serrano	Jose M.	NYS Senator	157 East 104th Street				Elected/Government Officials	New York	NY	10029	serrano@senate.state.ny.us	212-828-5829	212-828-2420
Arroyo	Carmen E.	NYS Assemblymember	384 E. 149th Street 3rd Avenue, Suite 301				Elected/Government Officials	Bronx	NY	10455			
Serrano	Jose E.	U.S. House of Representatives	1231 Lafayette Avenue, 4th Floor				Elected/Government Officials	Bronx	NY	10474		718-620-0084	718-620-0658
		News 12 Bronx	930 Soundview Avenue				Local Media Outlets	Bronx	NY	10473			
		New York 1 News	75 Ninth Avenue				Local Media Outlets	New York	NY	10011	ny1news@ny1.com		
		New York Daily News	450 West 33rd Street				Local Media Outlets	New York	NY	10001			
		New York Post	1211 Avenue of the Americas				Local Media Outlets	New York	NY	10036			
		El Diario La Prensa	1 MetroTech Center, 18th Floor				Local Media Outlets	Brooklyn	NY	11201		212-807-4785	
Caro	Lenny	Bronx Chamber of Commerce	1200 Waters Place, Suite 106				Civic/Community/Religious	Bronx	NY	10461		718-828-3900	718-409-5748
Wuthenow	John	Office of Environmental Planning & Asse	96-05 Horace Harding Expressway				Elected/Government Officials	Flushing	NY	11373			
		Patterson Houses (NYCHA)	301 East 143rd Street				Adjacent Property Owners	Bronx	NY	10451		718-292-5800	718-665-4354
Standish	Peter	East Side House Settlement	337 Alexander Avenue				Adjacent Property Owners	Bronx	NY	10454	inquiries@eastsidehouse.org	718-665-5250	718-585-1433
Hewlett Jr.	William	Middle School 203	339 Morris Avenue				School/Daycare Facilities	Bronx	NY	10451		718-292-1032	718-292-5765
Nieves-Greene	Rosa	Public School 168	339 Morris Avenue				School/Daycare Facilities	Bronx	NY	10451		718-585-2100	718-585-8315
Hall	Anna	Bronx Academy of Letters	339 Morris Avenue				School/Daycare Facilities	Bronx	NY	10451		718-401-4891	718-401-6626
Chavez	Gilberto		1850 Loring Place South				Resident/Owner	Bronx	NY	10453			
	243 East 138th Street Ll	c/o Yorkville Van & Storage Co. Inc.	1587 Third Avenue				Adjacent Property Owners	New York	NY	10028			
	Boringuen Court Housing Dev Fund Corp		271 East 138th Street				Civic/Community/Religious	Bronx	NY	10454			
	US Dept of Housing & Urban Dev't		5 Points Plaza				Elected/Government Officials	Atlanta	GA	30303			
	138th Street Realty LLC		579 Grand Concourse				Adjacent Property Owners	Bronx	NY	10451			
	Adfia Realty LLC		573 Grand Concourse				Adjacent Property Owners	Bronx	NY	10451			
	East 138th Street Bronx Realty Corp		535 East 14th Street				Adjacent Property Owners	New York	NY	10009			
	The Bank of New York Cust. for the NYCTL 1999-1 Trust		101 Barclay Street, 4W				Adjacent Property Owners	New York	NY	10286			
Burden	Amanda	Commissioner, New York City Dept. of C	22 Reade Street				Elected/Government Officials	New York	NY	10007			
Holloway	Caswell	Commissioner, New York City Dept. of E	59-17 Junction Boulevard				Elected/Government Officials	Flushing	NY	11373			
		Bronx Times Reporter	900 East 132nd				Local Media Outlets	Bronx	NY	10454			
		Bronx News	135 Dreiser Loop				Local Media Outlets	Bronx	NY	10475			
		Mott Haven Herald	3400 Reservoir Oval				Local Media Outlets	Bronx	NY	10467			
		Hunts Point Express	3400 Reservoir Oval				Local Media Outlets	Bronx	NY	10467			
		Bronx News Network	3400 Reservoir Oval				Local Media Outlets	Bronx	NY	10467			
		Inner City Press	PO Box 580188				Local Media Outlets	Bronx	NY	10458			
Rausse AICP	James	Director of Budget & Housing, Office of t	851 Grand Concourse, 3rd Floor				Elected/Government Officials	Bronx	NY	10451			
Rodriguez	George	Chairperson, Bronx Community Board 1	3024 Third Avenue				Elected/Government Officials	Bronx	NY	10455	brxcb1@optonline.net	718-585-7117	718-292-0558
Loftin	Cedric	District Manager, Bronx Community Boar	3024 Third Avenue				Elected/Government Officials	Bronx	NY	10455	brxcb1@optonline.net	718-585-7117	718-292-0558
Gidding	Shira	Project Manager, SoBRO, Real Estate Dev	555 Bergen Avenue, 3rd Floor				Civic/Community/Religious	Bronx	NY	10455			
Bacchus	Simon	NYC Housing Dev. Corp.	110 William St., 10th Floor				Elected/Government Officials	New York	NY	10038			
Kaplan	Dana	NYSDEC, Project Manager	47-40 21st Street				Elected/Government Officials	Long Island City	NY	11101	dpkaplan@gw.dec.state.ny.us		
Cozzy	Bob	NYSDEC, Director	625 Broadway				Elected/Government Officials	Albany	NY	12233	rjcozzy@gw.dec.state.ny.us		

O'Connell	Jane	NYSDEC, Chief of Superfund	47-40 21st Street				Elected/Government Officials	Long Island City	NY	11101	jhoconne@gw.dec.state.ny.us		
Conlon	Ben	NYSDEC	625 Broadway				Elected/Government Officials	Albany	NY	12233	bxconlon@gw.dec.state.ny.us		
Wolosen	Barb	NYSDEC	625 Broadway				Elected/Government Officials	Albany	NY	12233	brwolose@gw.dec.state.ny.us		
Joplin	Megan	NYSDEC	47-40 21st Street				Elected/Government Officials	Long Island City	NY	11101	mjoplin@gw.dec.state.ny.us		
Bates	Steve	NYSDOH	Flanigan Square, 547 River Street				Elected/Government Officials	Troy	NY	12180	smb02@health.state.ny.us		
Thomas-Cross	Jeanine	Mott Haven Library	321 East 140th Street				Elected/Government Officials	Bronx	NY	10454			
Nieto	Fr. Gustavo	St. Jerome's Church	230 Alexander Avenue				Civic/Community/Religious	Bronx	NY	10454	gustavonieto@ive.org		
Morris	Darlene	St. Jerome's School	222 Alexander Avenue				School/Daycare Facilities	Bronx	NY	10454	DGMorris@stjeromebronx.org	718-292-4920	718-292-3111
		Mitchel Houses	225 Alexander Avenue				Adjacent Property Owners	Bronx	NY	10454			
		Mott Haven Houses	373 East 141st Street				Adjacent Property Owners	Bronx	NY	10454		718-665-1020	718-993-4131
		Centor Christiano Emanuel	2612 3rd Avenue				Civic/Community/Religious	Bronx	NY	10454			
		Third Spanish Baptist Church	322 AlexanderAvenue				Civic/Community/Religious	Bronx	NY	10454			
Morrow	Phillip	South Bronx Overall Economic Development	555 Bergen Avenue				Civic/Community/Religious	Bronx	NY	10455		718-292-3113	
	250 East 139th Street LL	c/o Bradford N. Swett Management LLC	1536 Third Avenue, 3rd Floor				Adjacent Property Owners	New York	NY	10028			
	Third Avenue/138th Str	c/o Bradford N. Swett Management LLC	1536 Third Avenue				Adjacent Property Owners	New York	NY	10028			
Packard	Erica	Bronx Land Trust	232 East 11th Street				Civic/Community/Religious	New York	NY	10003	erica_packard@yahoo.com	212-228-5482	212-471-9987
		Green Worker Cooperatives	461 Tempson Place				Civic/Community/Religious	Bronx	NY	10455	info@greenworker.coop	718-617-7807	718-742-1116
Rojas	Luis	For a Better Bronx	199 Lincoln Avenue, Suite 214				Civic/Community/Religious	Bronx	NY	10454	rojasjrtamw@aol.com	718-292-4344	718-665-0833
		East Side House Settlement Day Care Facilitie	210 Alexander Street				School/Daycare Facilities	Bronx	NY	10454			
		East Side House Settlement Day Care Facilitie	414 Morris Avenue				School/Daycare Facilities	Bronx	NY	10454			
	Director	Winifred Wheeler Nursery School	200 Alexander Avenue				School/Daycare Facilities	Bronx	NY	10454			
	Director	Mitchel Community Center	210 Alexander Avenue				Civic/Community/Religious	Bronx	NY	10454		718-993-9355	
		Mott Haven Community Center	375 East 143rd Street				Civic/Community/Religious	Bronx	NY	10454			
Pabon	Andre	Abraham House	340 Willis Avenue				Civic/Community/Religious	Bronx	NY	10454	apabon@abrahamhouse.org	718-292-9321	718-292-5925
	Principal	Bronx Elementary School 49	383 East 139th Street				School/Daycare Facilities	Bronx	NY	10454		718-292-4623	
	Principal	South Bronx Charter School for International	383 East 139th Street				School/Daycare Facilities	Bronx	NY	10454	information@sbcsica.org	718-401-9216	718-401-9219
Elliot	Marsha	P.S. 154 Jonathan Hyatt	333 East 135th Street				School/Daycare Facilities	Bronx	NY	10454		718-292-4742	718-292-4721
	Executive Director	ASPIRA of NY	520 8th Avenue, 22nd Floor				Civic/Community/Religious	New York	NY	10018		212-564-6880	

SITE-SPECIFIC HEALTH AND SAFETY PLAN

255 East 138th Street
Bronx, New York

1.0 INTRODUCTION

This Site-Specific Health and Safety Plan (HASP) was prepared in accordance with the requirements and guidelines of the applicable Occupational Safety and Health Administration (OSHA) requirements in 29 Code of Federal Regulations (CFR) Part 1910.120. This HASP has been prepared for the property at 255 East 138th Street, Bronx, New York. The HASP will be available for inspection and review by site workers and regulatory personnel during work activities involving the installation of monitoring wells, soil vapor sampling and structural support work related to retaining wall repair. Site workers are required to comply with this HASP when conducting the site activities listed in Section 2.0. Site workers will notify the Site Safety Officer of matters regarding health, safety, and security.

All personnel and subcontractors must familiarize themselves with material contained herein, including special conditions and facilities located near each project as listed on the following pages. The information contained in this HASP pertains to the installation of soil borings and the collection of soil and groundwater samples for laboratory analysis.

2.0 ENTRY OBJECTIVES

The objective of entry to the Work Area is to conduct support of excavation operations, conduct dewatering, excavation, and transportation of contaminated soil to an off-site disposal facility, and conduct environmental monitoring, oversight and sampling. Soil has been documented to be impacted by contaminants associated with urban historic fill and petroleum-related compounds associated with the former use of the site as gasoline service stations. Work performed at the site will be done in accordance with 29 CFR 1926, Subpart P, and all other appropriate federal and state regulations.

3.0 ON-SITE ORGANIZATION AND COORDINATION

Key project personnel and their responsibilities to carry out the stated job function at the site are discussed below.

Brinkerhoff Environmental Services, Inc. (Brinkerhoff) will provide health and safety support associated with environmental issues. The contact information for the designated person to provide Health and Safety support for this project is:

Duane Shinton, Project Geologist
Brinkerhoff Environmental Services, Inc.
1805 Atlantic Avenue
Manasquan, New Jersey 08736
Phone: (732) 223-2225 Fax: (732) 223-3666

The contact information for the Construction Health and Safety Officer for overall administration of this HASP during installation of piles and footings is outlined below. The Construction Health and Safety Officer's responsibilities will include overall project safety and health monitoring for the work to be performed. The Construction Health and Safety Officer will enforce and audit the effectiveness of the HASP on a continuing basis and make changes to ensure that the intent of the HASP is maintained. The Construction Health and Safety Officer will be determined prior to beginning construction operations at the site.

To be Determined
East 138th Street, LLC
334-336 East 110th Street, New York, NY 10029
Office: 212-966-6640

4.0 ON-SITE CONTROL

Excavating Precautions (Utilities)

1. A utility markout of all underground utilities will be completed prior to the inception of ground-intrusive work, in compliance with 29 CFR 1926.651. The utility markout will utilize the One Call system prior to the commencement of operations at the site. Work will commence less than 10 business days after contacting the One Call system.
2. Visually inspect all utility markout locations on site.
3. Operations in the vicinity of overhead power lines will be conducted in accordance with 29 CFR 1910.333 (c)(3).
4. Conduct all excavations and subsequent soil sampling in the vicinity of a utility with caution.
5. If a utility line is damaged, call the utility company immediately.

Dust Prevention and Control (Track out onto Paved Public Roadways)

1. Vehicles leaving the site should be cleaned/decontaminated prior to exiting.
2. Promptly remove mud, dirt, or similar debris from the paved road.
3. Water flush and/or vacuum sweep the paved road.
4. Prepare unpaved site ingress and egress points by applying gravel to the surface to control track out and erosion.
5. The surface of the ingress and egress points must be kept adequately wet with water.

Dust Prevention and Control (General Procedures for Unpaved Areas)

1. Apply gravel to entrance, exit, and other areas of the site that are likely to see heavy vehicular traffic.
2. Limit vehicle traffic to required vehicles.
3. Limit vehicle speeds on unpaved areas of the site. Placement of signs near the site entrance that denote site speed restrictions is advised.
4. Apply sufficient water to unpaved surfaces that are likely to be disturbed to keep them adequately wet. According to 40 CFR Part 61, adequately wet means sufficiently mixed or penetrated with liquid to prevent the release of particulates. Visibly detectable dust emissions are the primary indication that the unpaved work area has not been kept adequately wet.

Dust Prevention and Control (Procedures for Grading and Excavation)

1. When soil is to be moved or stockpiled, the drop height of the soil should be reduced as much as possible.
2. Limit the height of soil stockpiles.
3. Limit the disturbance of soil stockpiles.
4. Keep the surface of stockpiles adequately wet.
5. All stockpiled soil shall be covered with plastic sheeting or other suitable cover material.
6. RECORD AND MONITOR ALL DUST PREVENTION/CONTROL ACTIVITIES. Recording this information will provide a superior method of monitoring and evaluating the success of the dust prevention and control plan.

In the event that visible dust is observed, associated work activities are to stop immediately and measures to mitigate will commence as soon as possible (i.e., wetting down material with water).

5.0 HAZARD EVALUATION

5.1 Environmental Hazards

At present, suspected contaminants in the subsurface soil constitute an environmental hazard. Various chemical compounds have been identified in the soil at low concentrations. If encountered in the soil at higher concentrations than anticipated, exposure concerns could become a health issue. The following are known or suspected to be present at the site.

5.1.1 Volatile Organic Compounds (VOCs)

Volatile organic compounds (VOCs) such as benzene, toluene, ethylbenzene, xylenes (BTEX) and tetrachloroethene (PCE) have been identified in the soil vapor samples at the site. BTEX compounds were also detected in the groundwater beneath the site. Although soil sampling did not identify these compounds at elevated concentrations, should VOCs be detected during excavation, monitoring of the air using a photoionization detector (PID) will be performed. VOCs may cause chronic liver and kidney damage, and some are suspected human carcinogens. Benzene is a suspected human carcinogen. Acute exposure may include headache, dizziness, nausea, and skin and eye irritation. The primary route of exposure to VOCs is through inhalation; therefore, air monitoring and respiratory protection are the primary controls against exposure to VOCs.

5.1.2 Urban Historic Fill Compounds

Urban historic fill has been identified on the property. The urban historic fill is impacted with polynuclear aromatic hydrocarbons (PAHs) and metals. PAHs, arsenic, mercury, copper, lead, nickel, and zinc were detected over the New York State Department of Conservation's (NYSDEC's) Subpart 375-6 Track 2 Remedial Cleanup Objectives (RCO) in soil samples collected from the site.

5.2 Physical Hazards

The work to be completed at the site in conjunction with this HASP consists of installation of wells, piles, and excavation for the installation of footings. Additional physical hazards expected on site include buried utilities, slip, trip, and fall hazards, and hazards associated with heavy machinery.

6.0 HAZARD MONITORING

6.1 Air Monitoring Using a PID

Air monitoring and visual inspection of soil during excavation will be conducted. A PID will be used to screen both the soil and ambient air for the presence of VOCs.

The following are the Short Term (ST) Exposure Limits on a 15-minute time weighted average and the Immediate Danger to Life and Health (IDLH) conditions for VOCs which may be present in the subsurface soil. The levels are presented in parts per million (ppm).

Compound	ST	IDLH
Benzene	5 ppm	500 ppm
Ethyl benzene	100 ppm	500 ppm
Toluene	150 ppm	500 ppm
Xylenes	150 ppm	900 ppm

- If the ambient air concentration of total organic vapors at the downwind perimeter of the work area exceeds five (5) 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 five (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 five (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 five (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 shut down.

All 15-minute readings will be recorded and be available for review. Instantaneous readings, if any, used for decision purposes will also be recorded.

6.2 Air Monitoring Using a Dust Trak Monitor

Particulate concentrations will be monitored both in the upwind and downwind directions at temporary particulate monitoring stations. The particulate monitoring will be performed using

real-time monitoring equipment such as the Dust Trak Aerosol Monitor, Model 8530, 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/m^3) 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/m^3 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/m^3 above the upwind level, work will be stopped and a reevaluation 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/m^3 of the upwind level and in preventing visible dust migration.

All readings will be recorded and be available for review.

6.3 Personal Protective Equipment (PPE)

Based upon evaluation of potential hazards, the following levels of personal protection have been designated for the Work Area:

Location	Job Function	Level of Protection
Entire Site	Soil/Groundwater sampling	A B C D

If VOCs are detected which indicate a need to upgrade the PPE, the Health and Safety Officer will stop all work and evaluate the level of protection required to complete the project. A determination will be made regarding the safety of the situation and the type of PPE that will be required. *At no time will work be conducted in an environment where an IDLH condition could be present.*

The following is the monitoring level for which a change in the level of protection or evacuation of the work area would be implemented. If the work area is evacuated, procedures such as the use of ventilation would be utilized if possible to lower monitoring levels to below the threshold for raising the level of protection.

PID 150 ppm

It should be noted that the work proposed will not be performed in a level of PPE other than Level D. Procedures would have to be put in place to lower the PPE requirement to Level D, should conditions suggest an increase in the level of PPE required.

Precautions will be implemented to limit direct contact with the soil or inhalation of dust. At a minimum, nitrile gloves are to be worn when handling soil, dust control procedures used if necessary, and thorough hand washing prior to handing food.

Specific protective equipment for potential levels of protection is as follows:

6.3.l Levels A & B

Since levels A & B are for IDLH environments, they are not applicable to this project.

6.3.2 Level C

The concentration(s) and type(s) of airborne substance(s) is (are) known and the criteria for using air-purifying respirators are met. The following constitute Level C equipment:

- National Institute for Occupational Safety and Health (NIOSH)-approved full-face or half-face air purifying respirators;
- Chemical-resistant clothing (overalls, chemical-splash suit, disposable chemical-resistant overalls);
- Gloves, outer and inner, chemical-resistant;
- Boots, outer, chemical-resistant, with steel toe and shank;
- Optional chemical resistant boot covers;
- Hard hat;
- Safety glasses with side shields;
- Face shield and safety glasses when not wearing a full face respirator; and,
- Hearing protection when working in noise hazardous areas or near operating heavy equipment.

6.3.3 Level D

A work uniform providing no respiratory protection is used only for prevention of skin contamination. The following constitute Level D equipment:

- Coveralls or other skin-protective clothing (long-sleeve shirts and long pants);
- Gloves;
- Boots or shoes, chemical-resistant, steel toe and shank;
- Optional chemical resistant boot covers;
- Safety glasses or chemical splash goggles;
- Hard hat;
- Hearing protection when working in noise-hazardous areas or near operating heavy equipment; and,
- High-visibility safety vest.

NO CHANGES TO THE SPECIFIED LEVELS OF PROTECTION SHALL BE MADE WITHOUT THE APPROVAL OF THE CONSTRUCTION SITE SAFETY OFFICER.

7.0 COMMUNICATION PROCEDURES

The following standard hand signals will be used in case of emergency:

Message	Interpretation(s)
Hands gripping throat	Out of air; can't breathe.
Grip partner's wrist	Leave area immediately.
Hands on top of head	Need assistance.
Thumbs up	OK; I am all right; I understand.
Thumbs down	No; Negative.

8.0 DECONTAMINATION PROCEDURES

Should hazardous materials be encountered, a decontamination procedure will be implemented. Generated waste, such as disposable PPE, will be disposed of in accordance with applicable local, state, and federal regulations. The decontamination protocol shall be used with the following decontamination stations:

(1) Equipment drop;
(2) Detergent and water rinse (optional); and,
(3) Remove PPE (if utilized) and place in waste container.

Decontamination of equipment is not anticipated to be required for this project.

9.0 MEDICAL MONITORING

As per 29 CFR 1910.120 (b)(4)(ii)(D) and in accordance with 29 CFR 1910.120 (f), persons engaging in on-site activities during which they are or may be exposed to hazardous substances or health hazards at or above the permissible exposure limits or published exposure levels for 30 days or more a year are included in a Medical Surveillance Program.

The timing and location of this project may be such that heat/cold stress could pose a threat to the health and safety of site personnel. Work/rest regimens will be employed as deemed necessary by the Site Safety Officer so site workers do not suffer adverse effects from heat/cold stress. Special clothing and an appropriate diet and fluid intake will be recommended to all on-site personnel to further reduce these temperature-related hazards. Site workers should stop work and notify the Site Safety Officer when they observe symptoms of heat/cold stress in themselves or co-workers.

9.1 Heat Stress Monitoring

Heat stress monitoring of personnel wearing protective clothing (i.e., impermeable fabric) should be considered when the ambient temperature is 70 degrees Fahrenheit or above. To monitor the worker, one of the following methods should be employed:

- Heart rate should be measured by the radial pulse for a 30-second period as early as possible in the rest period. If the heart rate exceeds 110 beats per minute, shorten the

next work cycle by one-third (0.3) and keep the rest period the same. If the heart rate still exceeds 110 beats per minute at the next rest period, shorten the following cycle by one-third (0.3).

- Oral temperature should be measured at the end of the work period (before drinking). If oral temperature exceeds 99.6 degrees Fahrenheit, shorten the next work cycle by one-third (0.3) without changing the rest period. If the oral temperature still exceeds 99.6 degrees Fahrenheit at the beginning of the next rest period, shorten the next work cycle by one-third (0.3). Do not permit a worker to wear a semipermeable or impermeable garment when his/her oral temperature exceeds 100.6 degrees Fahrenheit.

9.2 Cold Stress Monitoring

Work/rest schedules must be altered to minimize the potential for cold stress. Cold stress is defined as a decrease in core body temperature to 96.8 degrees Fahrenheit and/or cold injury to body extremities. Decreases in core body temperature are associated with reduced mental alertness, reduction in rational decision-making, or loss of consciousness in severe cases. Symptoms of cold stress include pain in extremities (i.e., hands and feet) and severe shivering.

10.0 MEDICAL EMERGENCIES

10.1 Emergency Medical Care

- First Aid & Rescue Squad (Call 911)
- Lincoln Hospital, 235 East 149th Street, Bronx, New York
- Phone: 718-579-5000

10.2 Directions to Lincoln Hospital

Driving directions are attached to this HASP.

10.3 List of Emergency Phone Numbers

Agency/Facility	Phone Number
All Services	911
Police	911
Fire Emergency	911
Lincoln Hospital	718-579-5000

10.4 First Aid Equipment

First aid equipment is available on site at the following locations:

Equipment	Location
First Aid Kit	Field Vehicle
Fire Extinguisher	Field Vehicle

11.0 EMERGENCY PROCEDURES

On-site personnel will use the following standard emergency procedures. The Construction Health and Safety Officer shall be notified of on-site emergencies and be responsible for ensuring that the appropriate procedures are followed.

11.1 Personnel Injury in the Work Area

Upon notification of an injury in the Work Area, the Construction Health and Site Safety Officer will assess the nature of the injury. For a true emergency, 911 shall be called and local emergency services personnel shall initiate the appropriate first aid and contact the designated medical facility, if required.

If the cause of the injury or loss of the injured person does not affect the performance of site personnel, operations may continue with the local emergency services personnel initiating the appropriate first aid and necessary follow-up, as stated above. If the injury increases the risk to others, the designated emergency signal shall be sounded and all site personnel shall move to the site entrance for further instructions. Activities on site will stop until the added risk is removed or minimized. No persons shall reenter the Work Area until the cause of the symptoms or injury is determined by the Construction Health and Safety Officer.

11.2 Fire/Explosion

Upon notification of a fire or explosion on site, the designated emergency signal (three [3] horn blasts) shall be sounded, and all site personnel shall be assembled at the site entrance. The fire department shall be alerted, and all personnel shall be moved to a safe distance from the involved area.

11.3 PPE Failure

If utilization of PPE is necessitated by conditions in the Work Area and a site worker experiences a failure or alteration of protective equipment which affects the protection factor, that person shall immediately leave the Work Area. Reentry shall not be permitted until the equipment has been repaired or replaced.

11.4 Other Equipment Failure

If other equipment on site fails to operate properly, the Construction Health and Safety Officer shall be notified to determine the effect of this failure on continuing operations. If the failure affects the safety of personnel or prevents completion of the planned tasks, all personnel shall leave the Work Area until the situation is evaluated and appropriate actions taken.

In all situations, when an on-site emergency results in evacuation of the Work Area, personnel shall not reenter until:

1. The conditions resulting in the emergency have been corrected;
2. The hazards have been reassessed;
3. The HASP has been revised; and,
4. Site personnel have been briefed regarding changes in the HASP.

12.0 SITE PERSONNEL SIGNATURE PAGE

ALL SITE PERSONNEL HAVE READ THE ABOVE HEALTH AND SAFETY PLAN AND ARE FAMILIAR AND WILL COMPLY WITH ITS PROVISIONS, AS EVIDENCED BY SIGNATURE BELOW.

Name	Signature	Date

SOIL/MATERIALS MANAGEMENT PLAN

1.1 SOIL SCREENING METHODS

Visual, olfactory, and photoionization detector (PID) soil screening and assessment will be performed during soil excavation activities under the direction of the Professional Engineer(PE)/Qualified Environmental Professional (QEP). Soil screening will be performed during invasive work performed during the remedy and development phases prior to issuance of the Notice of Completion.

1.2 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. Excavated soils will be stockpiled on, at minimum, 8-mil 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 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.

1.3 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.

1.4 MATERIALS EXCAVATION, LOAD-OUT, AND DEPARTURE

The PE 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 Remedial Action Work Plan (RAWP);
- 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; and,
- 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.

1.5 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.

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.

1.6 MATERIALS DISPOSAL OFF-SITE

The following documentation will be established and reported by the PE for each disposal destination used in this project to document that the disposal of regulated material exported from the Site conforms to applicable laws and regulations:

(1) A letter from the PE/QEP or Enrollee 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 in New York under a governmental remediation program. The letter will provide the project identity and the name and phone number of the PE/QEP or Enrollee. The letter will include as an attachment a summary of all chemical data for the material being transported; and,

(2) 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 Remedial Action Report (RAR).

The RAR 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.

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 Quality Assurance (QA)/Quality Control (QC) will be reported in the RAR. A manifest system for off-Site transportation of exported materials will be employed. Manifest information will be reported in the RAR. Hazardous wastes derived from on Site will be stored, transported, and disposed of in compliance with applicable laws and regulations.

1.7 MATERIALS REUSE ON-SITE

Soil and fill that is derived from the property that meets the soil cleanup objectives established in this plan may be reused on Site. The soil cleanup objectives for on-Site reuse are listed in the RAWP. "Reused 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 comparable soil/fill material and addressed pursuant to Engineering Controls. The PE/QEP will ensure that reused materials are segregated from other materials to be exported from the Site.

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.

1.8 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:

(1) 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 Site Management Plan (SMP); or,

(2) 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,

(3) 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 RAR.

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 SMP.

1.9 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 imported soils will meet Office of Environmental Remediation (OER)-approved backfill and cover soil quality objectives for this Site.

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. Material from industrial sites, spill sites, environmental remediation sites, or other potentially contaminated sites will not be imported to the Site.

The following potential sources may be used pending attainment of backfill and cover soil quality objectives:

- Clean soil from construction projects at non-industrial sites in compliance with applicable laws and regulations;
- Clean soil from roadway or other transportation-related projects in compliance with applicable laws and regulations; and,
- Clean recycled concrete aggregate (RCA) from facilities permitted or registered by the regulations of the New York State Department of Environmental Conservation (NYSDEC).

All materials received for import to the Site will be approved by a PE/QEP and will be in compliance with provisions in this RAWP. The RAR will report the source of the fill, evidence that an inspection was performed on the source, chemical sampling results, frequency of testing, and a Site map indicating the locations where backfill or soil cover was placed.

1.10 SOURCE SCREENING AND TESTING

Inspection of imported fill material will include visual, olfactory, and PID screening for evidence of contamination. Materials imported to the Site will be subject to inspection, as follows:

- Trucks with imported fill material will be in compliance with applicable laws and regulations and will enter the Site at designated locations;
- The PE/QEP is responsible to ensure that every truck load of imported material is inspected for evidence of contamination; and,
- Fill material will be free of solid waste including pavement materials, debris, stumps, roots and other organic matter, as well as ashes, oil, perishables, or foreign matter.

Composite samples of imported material will be taken at a minimum frequency of one sample for every 500 cubic yards of material. Once it is determined that the fill material meets imported backfill or cover soil chemical requirements, is non-hazardous, and lacks petroleum contamination, the material will be loaded onto trucks for delivery to the Site.

RCA will be imported from facilities permitted or registered by the NYSDEC. Facilities will be identified in the RAR. A PE/QEP is responsible to ensure that the facility is compliant with 6NYCRR Part 360 registration and permitting requirements for the period of acquisition of RCA. RCA imported from compliant facilities will not require additional testing, unless required by NYSDEC under its terms for operation of the facility. RCA imported to the Site must be derived from recognizable and uncontaminated concrete. RCA material is not acceptable for, and will not be used as, cover material.

1.11 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 New York City sewer system will receive prior approval by the New York City Department of Environmental Protection (NYCDEP). The NYCDEP regulates discharges to the New York City sewers under Title 15, Rules of the City of New York, Chapter 19. Discharge to the New York City 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 NYCDEP 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 State Pollutant Discharge Elimination System (SPDES) permit issued by NYSDEC.

1.12 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 RAWP (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 maintained at the Site and available for inspection by OER. 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.

1.13 CONTINGENCY PLAN

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 OER'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 OER. Chemical analytical testing will be performed for Target Analyte List (TAL) metals, Target Compound List (TCL) volatiles and semi-volatiles, TCL pesticides, and polychlorinated biphenyls (PCBs), as appropriate.

1.14 ODOR, DUST AND NUISANCE CONTROL

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. OER 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 certifying the RAR.

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 of extra care during dry and high-wind periods; and,
- Use of gravel or RCA 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. OER 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 responsible for certifying the RAR.

IRA N. PIERCE, P.E., P.C.
Vice President, Engineering Services
Principal Engineer

QUALIFICATIONS AND EXPERIENCE

Mr. Pierce is a civil engineer and planner with over 30 years experience in the metropolitan regions of New York, New Jersey, and Pennsylvania. Mr. Pierce is responsible for preparation of engineering studies and designs for private and public facilities, environmental studies including impact assessments, wetlands banking; alternatives analyses, traffic and transport studies, and construction programs.

Mr. Pierce prepared environmental impact assessments for Newark Airport and for the US Postal Service in New Jersey. He prepared both military and civilian master plans, engineering studies, transportation plans, and capital programs for the US Department of Defense, New York City Transit, the Regional Planning Commission in Philadelphia. He has prepared structural design for private sector industrial and residential facilities as well as extensive environmental and geotechnical engineering designs and studies. He pioneered the use of quantitative deterministic and probabilistic analysis tools for scheduling, cost studies, value engineering, and risk assessment programs on large-scale infrastructure projects and programs. He provided testimony and technical assistance on that subject to the US Office of Management and Budget, ASCE's Civil Engineering Research Foundation, state, local, and quasi-public agencies.

EDUCATION

B.S.C.E., The Cooper Union School of Engineering, New York, NY
M. Public Administration, Specialty in Urban Planning Engineering, Graduate School of Public Affairs, Albany, NY
Doctoral Candidate, Graduate School of Public Administration, New York University, New York, NY

PROFESSIONAL REGISTRATIONS AND CERTIFICATINS

Professional Engineer in New York, New Jersey, and Pennsylvania
NYC Certified Brownfield Professional

PROFESSIONAL MEMBERSHIPS AND AFFILIATIONS

President, Greater New York Construction User Council of the Business Roundtable
Advisory Board Member, Civil Engineering Research Foundation
Instructor, Cooper Union School of Engineering, New York, NY
Program on Transportation Planning, Highway, Bridges, and Tunnel Construction for New Immigrants from the former Soviet Union
Design Team Volunteer, The Partnership for the Homeless, Peter's Place, New York, NY
Member, New York Building Congress Committees on Transportation and Infrastructure; Environment and Economic Development
Board Member, Mechanics Institute, New York, NY
President, Philadelphia Section, ASCE

DOUGLAS L. HARM, PG, LSRP
Vice President

QUALIFICATIONS AND EXPERIENCE

Mr. Harm is a Professional Geologist and a New Jersey Department of Environmental Protection (NJDEP) Licensed Site Remediation Professional (LSRP). Mr. Harm's primary area of expertise is directing geologic and hydrogeologic investigations, site remediation, and the management of technical personnel, including Geologists, Hydrogeologists, Biologists, Geotechnicians, and Environmental Scientists. He has more than 32 years of extensive experience as a Geologist/Hydrogeologist and has managed a diverse range of projects involving complex environmental, remedial, geologic, hydrogeologic, and regulatory issues.

Licensed Site Remediation Professional (LSRP)

On July 10, 2012, Mr. Harm became a permanent LSRP. Mr. Harm presently provides LSRP services to over 80 clients and has issued over 20 Response Action Outcome Letters to these clients closing a variety of open cases with the NJDEP.

Underground Storage Tank Management

Mr. Harm has directed environmental projects at more than 500 residential, retail gasoline stations and commercial sites for independent dealers and major oil companies, including subsurface evaluation during UST removal, groundwater investigations, design of soil and groundwater remediation systems, oversight during installation of remedial systems, and supervised operation and maintenance of the systems. He has successfully remediated UST discharges for homeowners and their insurance carriers and submitted compliance documents upon completion for regulatory approval.

Mr. Harm has conducted more than 1,000 site assessments following UST closures for various residential and commercial accounts, including Fortune 500 companies. He has directed numerous projects for municipalities, including the development of bid specifications, management of the bidding process, and implemented projects involving the removal and/or replacement/upgrade of USTs.

New York City Office of Environmental Remediation (OER) Certified Environmental Professional

Mr. Harm is certified with the New York City OER as an Environmental Professional for the City Brownfields/Voluntary Cleanup and the "E" Designation Programs. Mr. Harm has worked with OER on over 30 brownfield and other contaminated properties. These properties were re-developed into new residential and commercial sites. Work included meeting with OER, developing and implementing Phase I and Phase II investigations, developing Remedial Action Plans and directing the implementation of those plans. Remedial Closure Reports were prepared at the completion of the projects and submitted to OER . A Notice of Satisfaction was then issued by OER to the developer to allow a Certificate of Occupancy to be issued.

Expert Testimony

Mr. Harm provides expert witness testimony at legal depositions for cases involving soil and groundwater contamination issues. He provides expert witness testimony in Courts of Law and was sanctioned by the Superior Court of Burlington, Ocean, Monmouth and Mercer Counties in New Jersey and Montgomery County in Pennsylvania as being an expert in the field of environmental issues associated with leaking tanks, geologic and hydrogeologic evaluation.

Phase I and II Environmental Site Assessments

He supervises Phase I and II Environmental Site Assessments according to ASTM 1527-05, and Site Investigations and Remedial Investigations for municipalities for commercial property owners, banks and other public sector clients.

Soil and Groundwater Remediation

Mr. Harm has extensive experience in evaluating geologic/hydrogeologic data for the purposes of evaluating groundwater contaminant transport computer models and evaluating effectiveness of remedial applications. He designs soil and groundwater remediation projects ranging from pump-and-treat systems to passive systems. He is licensed to run remediation systems requiring an N-2 Industrial Wastewater Treatment System Operator.

Landfill Management and Closure

Mr. Harm has directed investigations at numerous hazardous waste landfills, CERCLA, and Superfund sites. He coordinates environmental affairs associated with obtaining closure approval and commercial development on former landfills. Projects involved coordinating liner placement, dynamic compaction plans, and methane monitoring.

Subsurface Exploration

From 1979 to 1986, Mr. Harm worked as an Exploration Geologist in the oil and gas industry. He developed oil and gas field prospects, interpreting a wide variety of geologic and geophysical data. The prospects were then presented to various investor groups for participation in the exploration programs.

EDUCATION

B.S., Geology, West Virginia University, 1979

REGISTRATIONS AND PROFESSIONAL CERTIFICATIONS

NJDEP Permanent Licensed Site Remediation Professional (LSRP) No. 574862
Registered Professional Geologist, Pennsylvania, No. PG000238G
Registered Professional Geologist, Delaware, No. S4-0001217
Licensed Subsurface Evaluator and UST Closure, No. 10556
40-Hour OSHA Certification, 29 CFR 1910.120
Licensed N-2 Industrial Wastewater Treatment System Operator, No. 0016442
NYC Certified Brownfield Professional

DUANE A. SHINTON
Project Geologist

QUALIFICATIONS AND EXPERIENCE

Mr. Shinton is a Geologist with over 10 years experience in evaluating subsurface soils, preparing geologic and hydrogeologic maps, conducting Phase I Environmental Site Assessments, managing underground storage tank (UST) closures, and performing field investigations. He also has experience with laboratory testing of soil samples for permeability, grain size, and other geotechnical parameters. Under the direction of a senior level Project Manager (PM), Mr. Shinton has worked on projects for private and public agencies throughout New Jersey.

Mr. Shinton utilizes Auto Cad to prepare site maps, geologic cross sections, hydrogeologic maps, and engineering plans.

Asbestos Inspections and Testing

Mr. Shinton conducts asbestos inspections and monitoring in accordance with EPA/AHERA regulations. He is trained in field experiences to perform inspections and identify suspected asbestos containing materials (ACM's) and subsequent sampling according to AHERA protocol. His field knowledge encompasses historical applications of asbestos to heating systems and industrial/commercial boilers, pipe wrap materials, wall coatings, fireproofing and insulation materials, caulks, glazes, tiles and roofing materials.

Lead Inspection Testing and Risk Assessment

Mr. Shinton conducts site investigations with emphasis on Lead-Based Paint hazards. Mr. Shinton has completed the 40-hour OSHA Certification Course, and receives annual 8 hour refresher training. He is trained in sampling methods outlined in the New Jersey Department of Environmental Protection's (NDJEP's) Field Sampling Procedures Manual and Technical Requirements for Site Remediation, N.J.A.C. 7:26E. Mr. Shinton conducts lead-based paint hazard investigations using an LPA-1 nondestructive XRF instrument that uses a Cobalt 57 source. His experience includes selecting lead-based paint testing combinations and downloading XRF information for computer generated reports. Upon receipt of laboratory analytical data, Mr. Shinton evaluates the results in comparison with acceptable published standards and prepares reports of findings for review by the Project Manager and Client.

Underground Storage Tank Management

Certified by the New Jersey Department of Environmental Protection (NJDEP) as a Subsurface Evaluator, Mr. Shinton manages the closure of regulated and unregulated USTs, conducts subsurface evaluations associated with UST removal, directs site remediation, postexcavation soil sampling and backfilling of excavations. He has completed Site Investigation Reports as required by the NJDEP upon closure of a regulated UST.

Remedial Investigations

When a discharge of petroleum or other hazardous substances is verified, Mr. Shinton oversees the gathering, correlation, and interpretation of field and laboratory analytical data as required for preparation of Remedial Investigation Reports. He has overseen field sampling projects requiring the use of GeoProbe equipment and standard drilling techniques such as split-spoon sampling and well construction using hollow-stem augers. Detailed technical reports are prepared including contaminant concentration tables and diagrams.

Soil And Groundwater Investigations

Mr. Shinton directs investigations involving the construction of monitoring wells, installation of soil borings and well points, groundwater sampling and laboratory analysis for hydrogeological and

environmental characterization. He conducts remedial investigations to determine the extent of contamination and scope of remediation required.

Geophysical Investigations

On sites where subsurface metallic objects are suspected, Mr. Shinton has successfully performed gravity and magnetic surveys to locate buried drums, underground storage tanks, and other subsurface structures. He has used both remote sensing and impressed current methods.

Phase I Environmental Site Assessments

Mr. Shinton is responsible for coordinating and conducting Phase I Environmental Site Assessments in accordance with American Society for Testing and Materials (ASTM) standards. His experience includes performing on-site inspections, review of historical aerial photographs, Sanborn fire insurance maps, title search review, permit and license review, and searches of all county, state, and federal records.

Geotechnical Testing

Mr. Shinton has performed geotechnical testing on disturbed and undisturbed soil samples using ASTM methods. He is familiar with grain size testing and plotting particle size distribution graphs, soil classification using the Unified, Burmeister, and other methods and evaluating permeability using the sieve/hydrometer method, falling-head permeability, and tube permeameter tests.

EDUCATION

B.S., Geology, The Richard Stockton College of New Jersey, 1994
A.S., Civil Engineering Technology, Ocean County College, 1993

REGISTRATIONS, CERTIFICATIONS, AND AFFILIATIONS

Lead Inspector/Risk Assessor, Permit #022067
Lead Inspector/Risk Assessor Refresher, Certificate #24357
AHERA Asbestos Building Inspector
NJDEP Subsurface Evaluator, No.0019689
40-Hour/8 Hour OSHA Certification, 29 CFR 1910.120
EPA-HUD-Model Lead Paint Safety Renovation Certificate

GARY G. DiMARTINIS
Senior Project Manager/Environmental Scientist

QUALIFICATIONS AND EXPERIENCE

Mr. DiMartinis is a Senior Project Manager and Environmental Scientist with more than 20 years of experience in environmental services and consulting. He has extensive experience in hazardous waste site investigations and remediation under State and Federal regulatory programs. Mr. DiMartinis has performed contamination assessments and supervised the closure of more than 150 underground storage tanks (USTs) for both private clients and governmental agencies, including the US Army.

Mr. DiMartinis' specialized knowledge and experience encompasses site characterization, soil and groundwater remediation, Brownfields redevelopment, and hazardous materials management. Mr. DiMartinis is a New Jersey Department of Environmental Protection (NJDEP) licensed Subsurface Evaluator and Industrial Wastewater Treatment System Operator (N-2 Industrial).

Mr. DiMartinis has a broad background in field services and is knowledgeable in health and safety concerns, confined space entry, field instrument calibration and maintenance, construction equipment operation, and tank tightness testing. In addition, he is experienced in direct-push sampling and traditional drilling methods and licensed by the NJDEP as a Journeyman Well Driller.

Underground Storage Tank Management

Mr. DiMartinis interfaces with clients and regulatory officials to coordinate and direct UST closure and site assessment activities. He evaluates subsurface conditions and proposes remedial actions, generates tank closure and remedial action reports, and oversees tank testing and new tank installations.

He has directed numerous UST management projects throughout New Jersey, including more than 100 tank closures for the US Army at Fort Monmouth, New Jersey.

Remedial Investigations

Mr. DiMartinis conducts remedial investigations for various classes of contaminants, including solvents and petroleum products, metals, pesticides/herbicides, and polychlorinated biphenyls (PCBs). He specializes in the use of historical data to guide investigation activities, particularly at sites where buildings have been demolished or altered, or the site use has changed dramatically.

He has assisted the US Army in investigating several areas of environmental concern at Fort Monmouth, New Jersey, in addition to managing hundreds of projects for private clients throughout New Jersey.

Mr. DiMartinis also has extensive experience in the delineation of highly complex groundwater contamination plumes for gasoline constituents and chlorinated solvents.

Preliminary Assessments/Phase I and II Environmental Site Assessments

Mr. DiMartinis supervises Preliminary Assessments, as well as Phase I and II ESAs for commercial/industrial property owners, banks, and public sector clients. His experience includes the investigation of properties under regulatory oversight, such as the Resource Conservation and Recovery Act (RCRA) Corrective Action, Industrial Site Recovery Act (ISRA), or State Hazardous Waste Sites.

He has performed hundreds of Phase I ESAs at sites located along the East Coast. In addition, he has directed numerous Phase II ESAs, including environmental drilling and sampling, asbestos and lead surveys, in several states including Massachusetts, New York, Pennsylvania, and New Jersey.

EDUCATION

B.S., Marine Science, The Richard Stockton College of New Jersey, 1993
Industrial Wastewater System Operator's Course, Rutgers University, 2000
Accelerated Bioremediation of Chlorinated Solvents, 2000
Fundamentals and Troubleshooting of Programmable Logic Controllers, 2000
Preparation of Discharge Monitoring Reports, 2003
Management and Leadership Skills, 2003
Advanced Technologies for Natural Attenuation, 2003
Regulatory Training in Underground Storage Tanks, 2007
8-Hour Refresher Training for Hazardous Waste Site Operations, Annual

REGISTRATIONS AND PROFESSIONAL CERTIFICATIONS

NJDEP Licensed Site Remediation Professional (LSRP) No. 574851
Licensed N2 Industrial Wastewater Treatment Operator, No. 0022129
Licensed Subsurface Evaluator No. 10027, 1993
UST Closure, Tank Testing (Certification No. 10027), 1990
NJ Licensed Journeyman Well Driller, No. 1631, 1993
40-Hour OSHA Hazardous Waste Operations Certification, 29 CFR 1910.120

PROJECTED REMEDIAL COST SUMMARY
255 EAST 138TH STREET, BRONX

	A	B	C	D	E	F	H
1							
2	**TRACK 2 REMEDIATION**						
3	**Category**	**Item**	**Unit / Hrs**	**Rate**	**Rate Unit**		**Total**
4		**ENVIRONMENTAL ASSESSMENT**					
5		Remediation Oversight/Monitoring	30	$950	Per Day		$28,500
6		Laboratory	15	$750	Per Sample		$11,250
7		Groundwater Investigation	1	$8,500	Per Event		$8,500
8		Dewatering Oversight/Sampling	1	$5,500	Per Event		$5,500
9		Reporting	1	$10,000	Per Event		$10,000
10		Project Management	1	$7,500	Per Event		$7,500
11					**Sub-Total**		**$71,250**
12		**REMEDIATION**					
13		Support of Excavation	1	$2,500,000	Per Event		$2,500,000
14		Excavation of Soil	1	$650,000	Per Event		$650,000
15		Transportation & Disposal	10,000	$45	Per Ton		$450,000
16		Dewatering	1	$250,000	Per Event		$250,000
17		Placement of Pre Prufe Vapor Barrier	1	$275,000	Per Event		$275,000
18					**Sub-Total**		**$4,125,000**
19							
20		**PROJECTED TOTAL TRACK 2 CLEANUP**			**$4,196,250**		
21							
22	**TRACK 1 REMEDIATION**						
23		**ENVIRONMENTAL ASSESSMENT**					
24		Remediation Oversight/Monitoring	35	$950	Per Day		$33,250
25		Laboratory	20	$750	Per Sample		$15,000
26		Groundwater Investigation	1	$8,500	Per Event		$8,500
27		Dewatering Oversight/Sampling	1	$6,500	Per Event		$6,500
28		Reporting	1	$12,000	Per Event		$12,000
29		Project Management	1	$7,500	Per Event		$7,500
30					**Sub-Total**		**$82,750**
31		**REMEDIATION**					
32		Support of Excavation	1	$2,500,000	Per Event		$2,500,000
33		Excavation of Soil	1	$670,000	Per Event		$670,000
34		Transportation & Disposal	11,300	$45	Per Ton		$508,500
35		Dewatering	1	$350,000	Per Event		$350,000
36		Placement of Pre Prufe Vapor Barrier	1	$275,000	Per Event		$275,000
37					**Sub-Total**		**$4,303,500**
38							
39		**PROJECTED TRACK 1 CLEANUP**			**$4,386,250**		
40							

GRACE

PREPRUFE® 300R & 160R

Pre-applied waterproofing membranes that bond integrally to poured concrete for use below slabs or behind basement walls on confined sites

Description

Preprufe® 300R & 160R membranes are unique composite sheets comprising a thick HDPE film, an aggressive pressure sensitive adhesive and a weather resistant protective coating.

Unlike conventional non-adhering membranes, which are vulnerable to water ingress tracking between the unbonded membrane and structure, the unique Preprufe bond to concrete prevents ingress or migration of water around the structure.

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.
- **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**—as above for use in Hot Climates (minimum 50°F (10°C)).
- **Bituthene® Liquid Membrane**—for sealing around penetrations, etc.

Preprufe 300R & 160R membranes are applied either horizontally to smooth prepared concrete, carton forms or well rolled and compacted sand 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 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:
  - not reliant on confining pressures or hydration
  - unaffected by freeze/thaw, wet/dry cycling
- **Chemical resistant**—effective in most types of soils and waters, protects structure from salt or sulphate attack

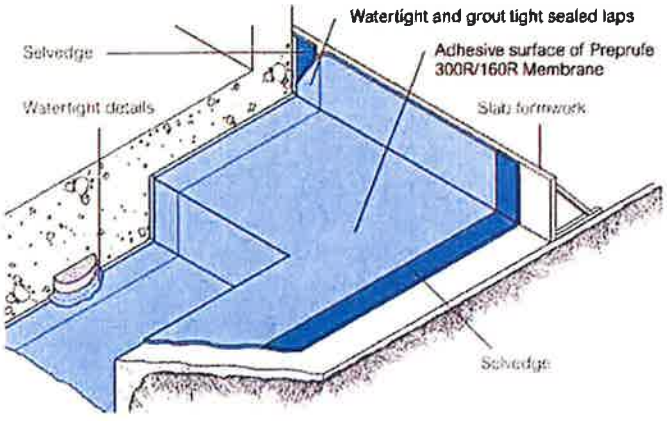
Installation

The most current application instructions, detail drawings and technical letters can be viewed at www.graceconstruction.com. Technical letters are provided for the following subjects to assist in the installation of Preprufe:

- Chemical Resistance
- Minimizing Concrete Shrinkage and Curling
- Rebar Chairs on Preprufe 300R Membrane
- Removal of Formwork Placed Against Preprufe Membranes
- Winter Lap Sealing and the use of Preprufe Tape LT

For other technical information contact your local Grace representative.

Preprufe 300R & 160R membranes are supplied in rolls 4 ft (1.2 m) wide, with a selvedge 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.



Drawings are for illustration purposes only.
Please refer to www.graceconstruction.com for specific application details.

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. The surface does not need to be dry, but standing water must be removed.

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.

Membrane Installation

Preprufe can be applied at temperatures of 25°F (-4°C) or above. When installing Preprufe 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.

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 selvedge. 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 Grace Tech Letters for information on suitable rebar chairs for Preprufe.

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. Secure the top of the membrane using a batten such as a termination bar or similar 2 in. (50 mm) below the top edge (see Figure 3). Fastening can be made through the selvedge so that the membrane lays flat and allows firmly rolled overlaps. Immediately remove the plastic release liner. Any additional fasteners must be covered with a patch of Preprufe Tape (see Figure 4).

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 and roll firmly. Immediately remove printed plastic release liner from the tape.

Details

Refer to Preprufe Field Application Manual, Section V Application Instructions or visit www.graceconstruction.com. This Manual gives comprehensive guidance and standard details for:

- internal and external corners
- penetrations
- tiebacks
- columns
- grade beam pilecaps
- tie-ins
- terminations

Membrane Repair

Inspect the membrane before installation of reinforcement steel, formwork and final placement of concrete. The membrane can be easily cleaned by jet 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 and roll firmly. Remove the release liner from the tape. 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, remove the release liner from the tape and roll firmly. Any areas of damaged adhesive should be covered with Preprufe Tape. Remove printed plastic release liner from tape. Where exposed selvedge has lost adhesion or laps have not been sealed, ensure the area is clean and dry and cover with fresh Preprufe Tape, rolling firmly. Alternatively, use a hot air gun or similar to activate adhesive and firmly roll lap to achieve continuity.

Pouring of Concrete

Ensure the plastic release liner is removed from all areas of Preprufe R Membrane and Tape.

It is recommended that concrete be poured within 56 days (42 days in hot climates) of application of the membrane. Concrete must be placed and compacted carefully to avoid damage to the membrane. Never use a sharp object to consolidate the concrete.

Removal of Formwork

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.

A minimum concrete compressive strength of 1500 psi (10 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.

As a guide, to reach the minimum compressive strength stated above, a structural concrete mix with an ultimate strength of 6000 psi (40 N/mm²) will typically require a cure time of approximately 6 days at an average ambient temperature of 25°F (-4°C), or 2 days at 70°F (21°C).

Figure 1

Figure 2

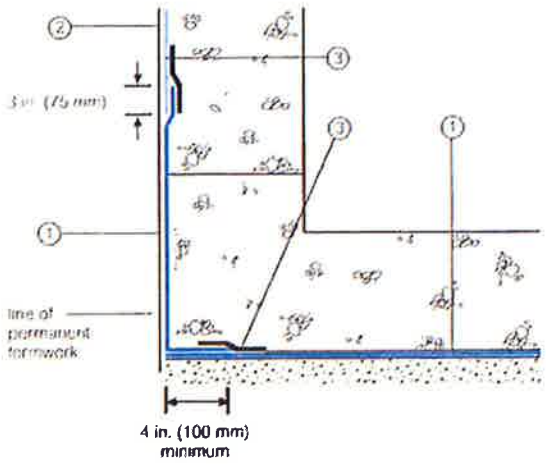
Figure 3

Figure 4

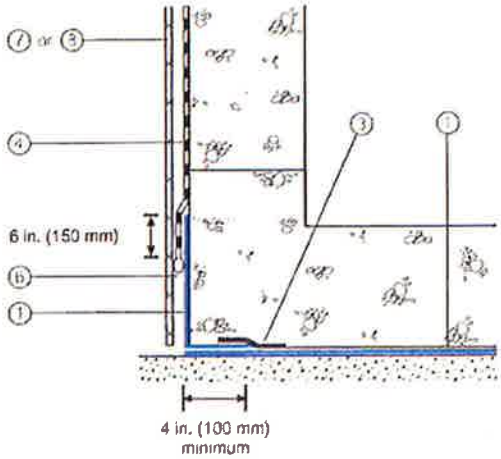
Detail Drawings

Details shown are typical illustrations and not working details. For a list of the most current details, visit us at www.graceconstruction.com. For technical assistance with detailing and problem solving please call toll free at 866-333-3SBM (3726).

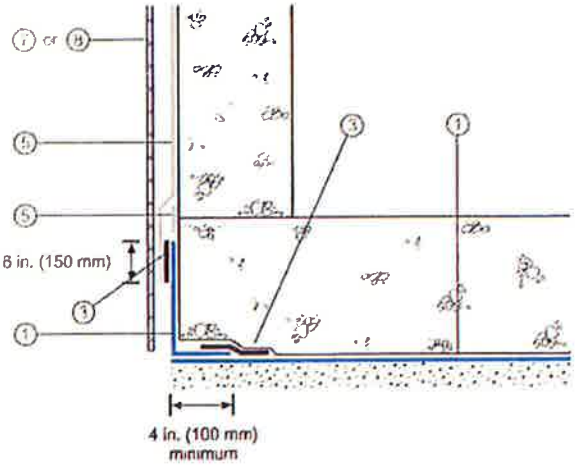
Wall base detail against permanent shutter



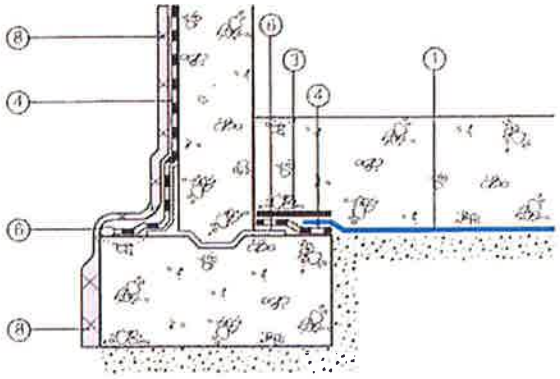
Bituthene wall base detail (Option 1)



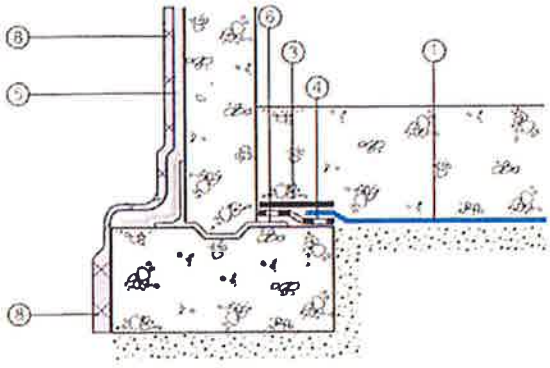
Procor wall base detail (Option 1)



Bituthene wall base detail (Option 2)



Procor wall base detail (Option 2)



1 Preprufe 300R
2 Preprufe 160R
3 Preprufe Tape
4 Bituthene
5 Procor
6 Bituthene Liquid Membrane
7 Protection
8 Hydroduct®

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 ft² (36 m²)	460 ft² (42 m²)	
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)
* LT denotes Low Temperature (between 25°F (-4°C) and 86°F (+30°C)) HC denotes Hot Climate (50°F (>+10°C))			
Ancillary Products			
Bituthene Liquid Membrane—1.5 US gal (5.7 liter) or 4 US gal (15.1 liter)			

Physical Properties

Property	Typical Value 300R	Typical Value 160R	Test Method
Color	white	white	
Thickness	0.046 in. (1.2 mm) nominal	0.032 in. (0.8 mm) nominal	ASTM D3767
Low temperature flexibility	Unaffected at -10°F (-23°C)	Unaffected at -10°F (-23°C)	ASTM D1970
Resistance to hydrostatic head, minimum	231 ft (70 m)	231 ft (70 m)	ASTM D5385, modified[1]
Elongation, minimum	300%	300%	ASTM D412, modified[2]
Tensile strength, film, minimum	4000 psi (27.6 MPa)	4000 psi (27.6 MPa)	ASTM D412
Crack cycling at -10°F (-23°C), 100 cycles	Unaffected	Unaffected	ASTM C836
Puncture resistance, minimum	221 lbs (990 N)	100 lbs (445 N)	ASTM E154
Peel adhesion to concrete, minimum	5.0 lbs/in. (880 N/m) width	5.0 lbs/in. (880 N/m) width	ASTM D903, modified[3]
Lap peel adhesion	2.5 lbs/in. (440 N/m) width	2.5 lbs/in. (440 N/m) width	ASTM D1876, modified[4]
Permeance to water vapor transmission, maximum	0.01 perms (0.6 ng/(Pa × s × m²))	0.01 perms (0.6 ng/(Pa × s × m²))	ASTM E96, method B
Water absorption, maximum	0.5%	0.5%	ASTM D570
Methane permeability	9.1 mls/m²/day	N/A	University of London, QMW College[3]
Permeability[5] (hydraulic conductivity)	K=<1.4 x 10^{-11}cm.s^{-1}	K=<1.4 x 10^{-11}cm.s^{-1}	ASTM D5084-90

Footnotes:

1. 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.
2. Elongation of membrane is run at a rate of 2 in. (50 mm) per minute.
3. 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.
4. The test is conducted 15 minutes after the lap is formed (per Grace published recommendations) and run at a rate of 2 in. (50 mm) per minute at 25°F (-4°C).
5. Result is lower limit of apparatus. Membrane therefore considered impermeable.

Specification Clauses

Preprufe 300R or 160R shall be applied with its adhesive face presented to receive fresh concrete to which it will integrally bond. Only Grace Construction Products approved membranes shall be bonded to Preprufe 300R/160R. All Preprufe 300R/160R system materials shall be supplied by Grace Construction Products, and applied strictly in accordance with their instructions.

Specimen performance and formatted clauses are also available.

NOTE: Use Preprufe Tape to tie-in Procor with Preprufe.

Health and Safety

Refer to relevant Material Safety data sheet. Complete rolls should be handled by a minimum of two persons.

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For technical assistance call toll free at 866-333-3SBM (3726)

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