IZZY'S DRY CLEANERS FACILITY

NASSAU COUNTY

WOODBURY, NEW YORK

SITE MANAGEMENT PLAN

NYSDEC Site: 926, 928 and 930 Woodbury Road

Woodbury, NY

Tax Map # Section 12, Block 527, Lot 24

NYSDEC Order on Consent #130200

Index #W1-0001-07-05

Prepared for:

Joe III, LLC and Joan III, LLC

Prepared by:

FPM Group, Ltd.
909 Marconi Avenue
Ronkonkoma, NY 11779
631-737-6200

Revisions to Final Approved Site Management Plan:

Revision No.	Date Submitted	Summary of Revision	NYSDEC Approval Date
1	January 6, 2020	Discontinue groundwater monitoring and SVI testing and active mitigation	1/8/20

JULY 2016

SITE MANAGEMENT PLAN REVISION #1

IZZY'S DRY CLEANERS FACILITY

926, 928 and 930 Woodbury Road, Nassau County, Woodbury, NY

Tax Map # Section 12, Block 527, Lot 24

NYSDEC Order on Consent #130200

Index #W1-0001-07-05

JANUARY 2020

A request to modify the Site Management Plan (SMP) for the above-referenced Site was submitted to the New York State Department of Environmental Conservation (NYSDEC) on November 25, 2019. The NYSDEC responded on December 27, 2019 approving the proposed changes and requesting that a Revision outlining the modifications to the SMP be prepared. This Revision #1 to the SMP outlines the approved changes to the groundwater monitoring and soil vapor intrusion (SVI) mitigation aspects of the SMP, as further described in the following sections.

As noted in the NYSDEC's December 27, 2019 correspondence, if Site conditions change or information is provided to the NYSDEC that indicates that SVI testing and/or groundwater monitoring is required, the need for those requirements will be determined and if deemed necessary, the SMP will be revised to include those requirements.

Groundwater Monitoring

Groundwater monitoring has been conducted and completed for the Site in accordance with the SMP. Groundwater monitoring results demonstrated that the Site-related impacts in groundwater declined over time and, at the time of the final monitoring event (February 14, 2018), remained present only at a very low level at one location in proximity to the former source area. The final groundwater monitoring results were documented in a February 26, 2018 report submitted to the NYSDEC. In this report it was recommended to terminate the groundwater monitoring program and abandon the Site's monitoring wells; these recommendations were approved by the NYSDEC in May 2, 2018 correspondence.

A Well Abandonment Work Plan was submitted to the NYSDEC on May 3, 2018 and received NYSDEC approval on May 3, 2018. Well abandonment was conducted on May 8, 2018 and was documented in a May 14, 2018 report submitted to the NYSDEC. Well abandonment was conducted in accordance with procedures in the NYSDEC's Region I Water Unit "Specifications for Abandoning Wells and Boreholes in Unconsolidated Materials", as referenced in NYSDEC's CP-43.

As the groundwater monitoring program has been completed for this Site and the monitoring wells are no longer present, it was recommended that the portions of the SMP related to groundwater monitoring (generally including Section 4.4.1 and associated portions of the SMP) be discontinued as they are no longer necessary or applicable. This recommendation does not apply to the institutional control (IC) concerning the restriction on groundwater use. The NYSDEC approved the discontinuation of the groundwater monitoring portions of the SMP in their December 27, 2019 correspondence.

SVI Mitigation

The sub-grade portions (slab and slab penetrations) of the assisted living building constructed at the Site in 2018-2019 were fitted with a vapor barrier and seal system for mitigation of potential

SVI. Through-slab SVI monitoring points were also installed. As a precautionary measure, the sub-slab and through-slab elements of a sub-slab depressurization system (SSDS), including slotted piping and piping risers, were also installed in conjunction with building construction. Construction of the vapor barrier and sub-slab and through-slab SSDS elements was documented in the 2018 and 2019 Periodic Review Reports (PRRs).

SVI testing was performed in 2019, prior to building occupancy, to evaluate whether the SSDS may need to be operated. SVI testing was conducted in accordance with the SMP and NYSDEC recommendations and was documented in July 9 and August 6, 2019 reports submitted to the NYSDEC. The SVI testing results demonstrated that indoor air quality in the assisted living facility was comparable to typical background conditions in homes and businesses, no further action was needed to address the potential for SVI at the Site, and active mitigation for potential SVI was not needed. The NYSDEC approved this completed work on August 7, 2019.

As no further action is needed to address the potential for SVI at this Site, it was recommended that the portions of the SMP related to SVI testing and active SVI mitigation (generally including Sections 4.3, 4.4.2, 5.0 and associated portions of the SMP) be discontinued as they were no longer applicable. This recommendation does not apply to the installed engineering control (EC) for SVI and it is noted that the sub-slab and through-slab measures for potential SVI mitigation (vapor barrier, sub-slab piping, and monitoring points) remain in place within and beneath the building slab. The NYSDEC approved the discontinuation of the SVI testing and active SVI mitigation portions of the SMP in their December 27, 2019 correspondence.

IZZY'S DRY CLEANERS FACILITY

NASSAU COUNTY

WOODBURY, NEW YORK

SITE MANAGEMENT PLAN

NYSDEC Site: 926, 928 and 930 Woodbury Road

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Revisions to Final Approved Site Management Plan:

Revision No.	Date Submitted	Summary of Revision	NYSDEC Approval Date

JULY 2016

CERTIFICATION STATEMENT

I Stephanie O. Davis certify that I am currently a Qualified Environmental Professional as in defined in 6 NYCRR Part 375 and that this Site Management 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).

Stephanie O. Davis QEP

7-5-2016 DATE

IZZY'S DRY CLEANER FACILITY

NASSAU COUNTY

WOODBURY, NEW YORK

SITE MANAGEMENT PLAN

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LIST OF ACRONYMS

AS	Air Sparging
ASP	Analytical Services Protocol
BCA	Brownfield Cleanup Agreement
BCP	Brownfield Cleanup Program
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CAMP	Community Air Monitoring Plan
C/D	Construction and Demolition
CFR	Code of Federal Regulation
CLP	Contract Laboratory Program
COC	Certificate of Completion
CO2	Carbon Dioxide
CP	Commissioner Policy
DER	Division of Environmental Remediation
EC	Engineering Control
ECL	Environmental Conservation Law
ELAP	Environmental Laboratory Approval Program
ERP	Environmental Restoration Program
GHG	Green House Gas
GWE&T	Groundwater Extraction and Treatment
HASP	Health and Safety Plan
IC	Institutional Control
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
NYCRR	New York Codes, Rules and Regulations
O&M	Operations and Maintenance
OM&M	Operation, Maintenance and Monitoring
OSHA	Occupational Safety and Health Administration
OU	Operable Unit
PID	Photoionization Detector
PRP	Potentially Responsible Party
PRR	Periodic Review Report
QA/QC	Quality Assurance/Quality Control
QAPP	Quality Assurance Project Plan
RAO	Remedial Action Objective
RAWP	Remedial Action Work Plan
RCRA	Resource Conservation and Recovery Act
RI/FS	Remedial Investigation/Feasibility Study
ROD	Record of Decision
RP	Remedial Party
RSO	Remedial System Optimization
SAC	State Assistance Contract
SCG	Standards, Criteria and Guidelines
SCO	Soil Cleanup Objective
SMP	Soil Management Plan

LIST OF ACRONYMS (Continued)

SOP	Standard Operating Procedures
SOW	Statement of Work
SPDES	State Pollutant Discharge Elimination System
SSD	Sub-slab Depressurization
SVE	Soil Vapor Extraction
SVI	Soil Vapor Intrusion
SVMS	Soil Vapor Mitigation System
TAL	Target Analyte List
TCL	Target Compound List
TCLP	Toxicity Characteristic Leachate Procedure
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank
VCA	Voluntary Cleanup Agreement
VCP	Voluntary Cleanup Program

EXECUTIVE SUMMARY

The following provides a brief summary of the controls implemented for the Site, as well as the inspections, monitoring, maintenance and reporting activities required by this Site Management Plan:

Site Identification:	Izzy's Dry Cleaner Facility, Woodbury, NY, Order on Consent (#130200, Index #W1-0001-07-05)
Institutional Controls:	• The property may be used for restricted residential, commercial, or industrial purposes provided that the long-term Institutional Controls included in this SMP are employed; • The property may be used for restricted residential; commercial, or industrial use. The property may not be used for a higher level of use, such as unrestricted use, without the necessary additional investigation and possible remediation; • The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Nassau County Department of Health to render it safe for use as drinking water or for process purposes, and the user must first notify and obtain written approval to do so from the Department. • All future activities that will disturb remaining contaminated material beneath the retail building or soil in the southern wooded area must be conducted in accordance with this SMP; • Activities within the IC boundary must be in compliance with the NYSDEC-approved SMP; • The site owner or remedial party will 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 in the controls were approved by the NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and the environment or that constitutes a violation or failure to comply with the SMP. This certification shall be submitted annually, or an alternate period of time that the NYSDEC may allow and will be made by an expert that the NYSDEC finds acceptable;

Site Identification:	Izzy's Dry Cleaner Facility, Woodbury, NY, Order on Consent (#130200, Index #W1-0001-07-05)	
Institutional Controls (cont'd):	• Access to the site must be provided to agents, employees or other representatives of the NYSDEC with reasonable prior notice to the property owner to assure compliance with the restrictions identified by the Environmental Easement. • Any future new buildings constructed onsite will be fitted with vapor barriers and evaluated for soil vapor intrusion prior to occupancy; • The existing retail building onsite is scheduled for demolition. Once it is removed, the subsurface soils in the footprint and immediate surrounding area will be investigated to determine the extent of soil contamination. If found, contaminated soils must be delineated and addressed by necessary means to meet restricted residential SCOs; and • Vegetable gardens and/or farming on the site are prohibited, although community vegetable gardens may be considered with NYSDEC approval. • All ECs must be inspected at a frequency and in a manner defined in the SMP. • The NYSDEC will be notified if the Site has a change of use, is sold, or is subdivided.	
Engineering Controls:	• Excavation Work Plan for soil • Vapor barrier • SSDS for soil vapor if needed for SVI mitigation	
Inspections:		Frequency
1. ECs inspection		Annually

Site Identification:	Izzy's Dry Cleaner Facility, Woodbury, NY, Order on Consent (#130200, Index #W1-0001-07-05)
Monitoring:	
1. SSDS operation (if installed)	Monthly
2. Groundwater Monitoring Wells MW-1 through MW-6	Quarterly (initial)
3. SVI evaluation of new construction (via collection of sub-slab soil vapor, indoor air and outdoor (ambient) air samples)	Initial Thereafter in accordance with the Operation and Monitoring Plan.
Maintenance:	
1. SSDS maintenance (if installed)	As needed
2. Well maintenance	Quarterly
Reporting:	
1. Periodic Review Report	Annually

Further descriptions of the above requirements are provided in detail in the latter sections of this Site Management Plan.

1.0 INTRODUCTION

1.1 General

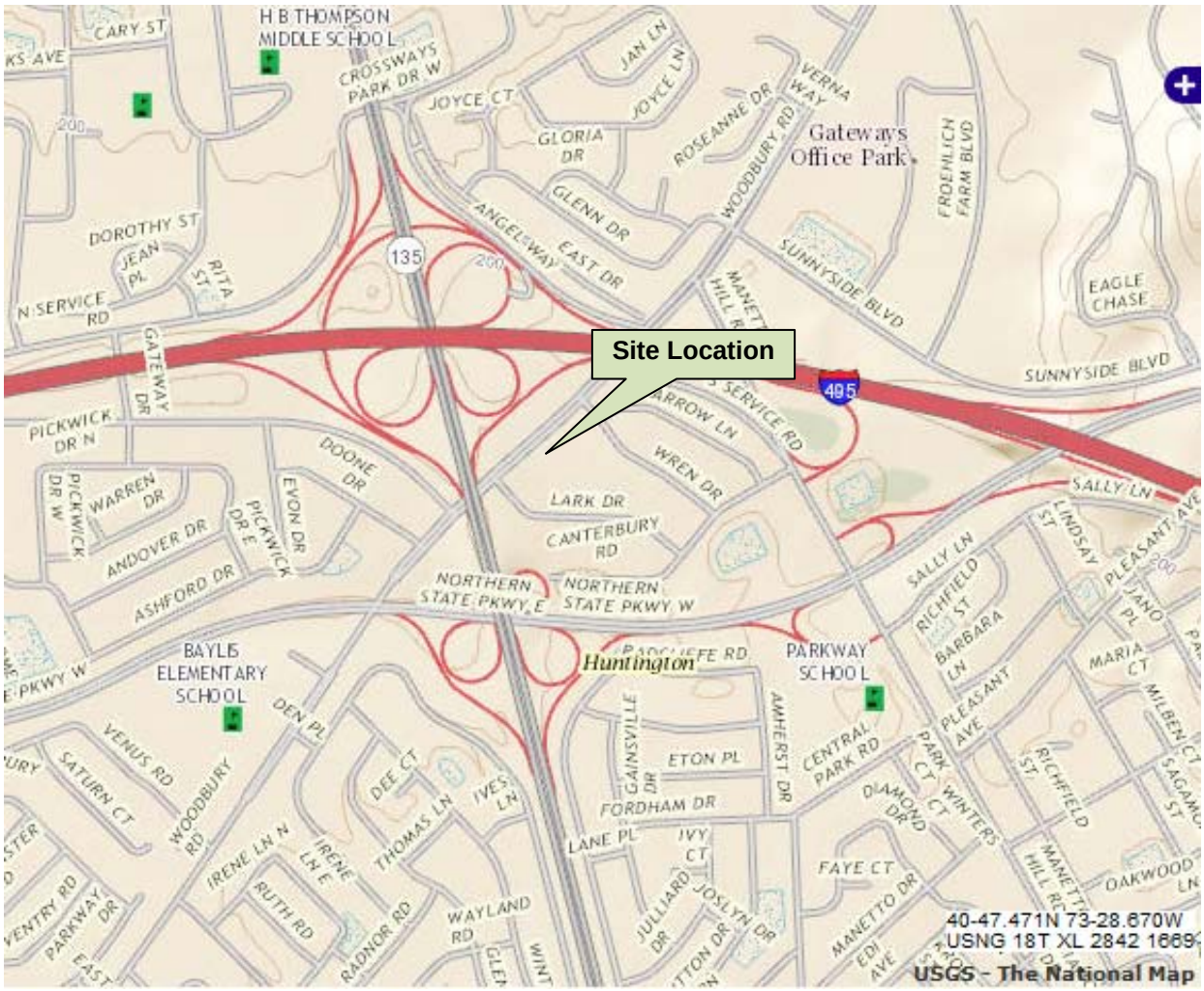
This Site Management Plan (SMP) is a required element of the remedial program for the Izzy's Dry Cleaner Facility located in Woodbury, New York (hereinafter referred to as the "Site"). See Figure 1.1.1 for the general Site location. The Site is currently managed under an Order on Consent (#130200, Index #W1-0001-07-05) which is administered by New York State Department of Environmental Conservation (NYSDEC).

Joe III, LLC and Joan III, LLC, the current property owner, entered into an Order on Consent on February 23, 2011 with the NYSDEC to remediate the site. The property owner will implement this SMP. BSL NY Development LLC has contracted to purchase the property. If BSL NY Development LLC purchases the property, then it is intended that BSL NY Development LLC will undertake the remedial activities described herein.

A figure showing the site location and boundaries of this site is provided in Figure 1.1.2. The boundaries of the site are more fully described in the metes and bounds site description provided on the ALTA/ASCM Land Survey in Appendix A.

After completion of the remedial work, some contamination may have been left at this site, which is hereafter referred to as "potential remaining contamination". Institutional and Engineering Controls (ICs and ECs) have been incorporated into the site remedy to control exposure to remaining contamination to ensure protection of public health and the environment. An Environmental Easement will be granted to the NYSDEC, and recorded with the Nassau County Clerk; this Easement will require compliance with this SMP and all ECs and ICs placed on the site.

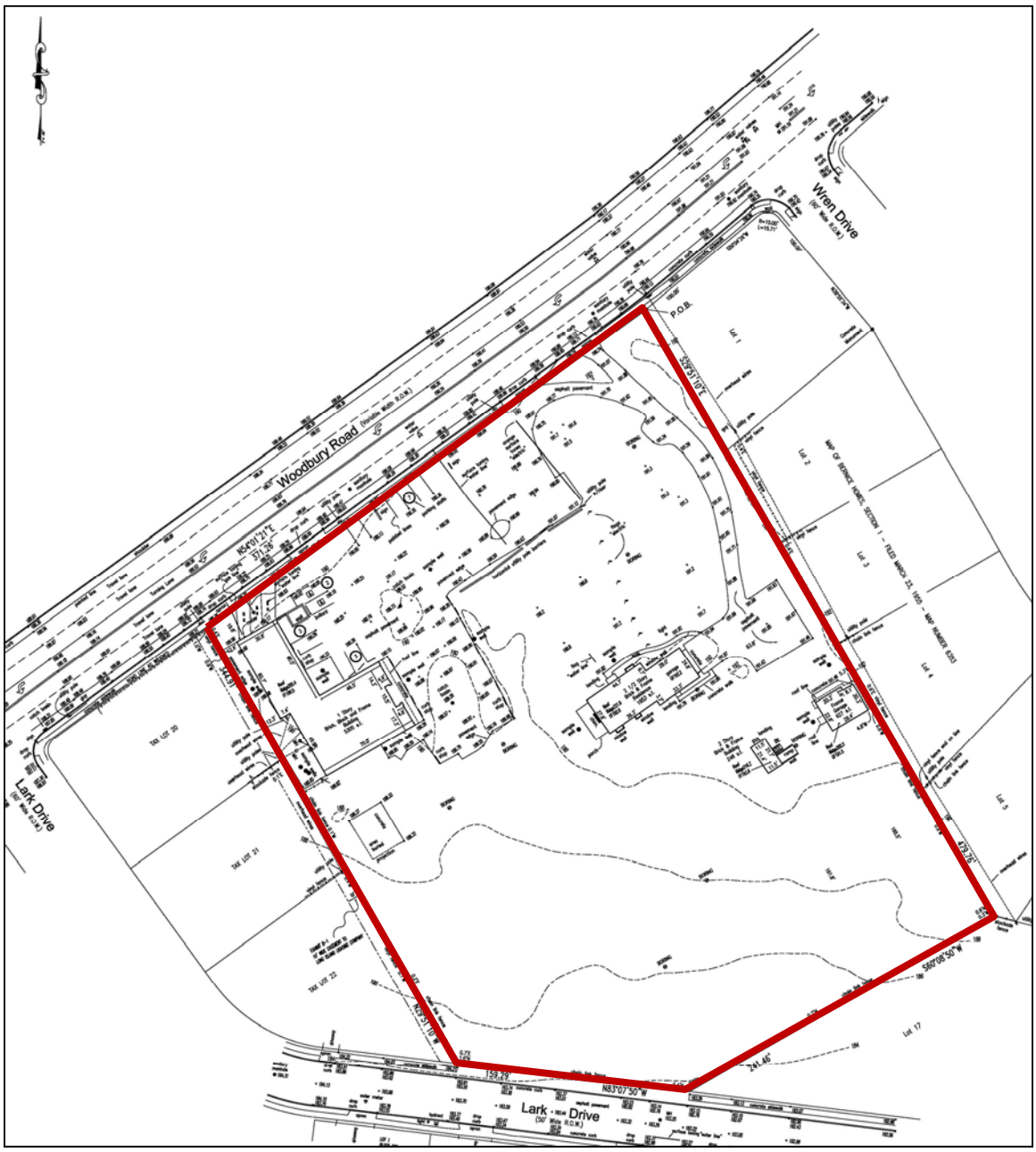
This SMP was prepared to manage remaining contamination at the site until the Environmental Easement is extinguished in accordance with ECL Article 71, Title 36. This plan has been approved by the NYSDEC, and compliance with this plan is required



NORTH

Source: US Geological Survey
The National Map (digital)

FPM GROUP		
FIGURE 1.1.1 SITE LOCATION MAP 926, 928 AND 930 WOODBURY ROAD WOODBURY, NEW YORK		
Drawn by: SOD	Checked By: SOD	Date: 5/15/15



Source: JM Land Surveying
ALTA/ACSM Land Title Survey

Site Boundary

FPM GROUP		
FIGURE 1.1.2 SITE BOUNDARY MAP 926, 928 and 930 WOODBURY ROAD WOODBURY, NEW YORK		
Drawn by: SOD	Checked By: SOD	Date: 5/15/15

by the grantor of the Environmental Easement and the grantor's successors and assigns. This SMP may only be revised with the approval of the NYSDEC.

It is important to note that:

- This SMP details the site-specific implementation procedures that will be required by the Environmental Easement. Failure to properly implement the SMP will be a violation of the Environmental Easement, which is grounds for revocation of the Certificate of Completion (COC);

- Failure to comply with this SMP is also a violation of Environmental Conservation Law, 6NYCRR Part 375 and the Order on Consent (#130200, Index #W1-0001-07-05) for the site, and thereby subject to applicable penalties.

All reports associated with the site can be viewed by contacting the NYSDEC or its successor agency managing environmental issues in New York State. A list of contacts for persons involved with the site is provided in Appendix B of this SMP.

This SMP was prepared by FPM Group, Ltd., at the request of BSL NY Development LLC and on behalf of Joe III, LLC and Joan, III, LLC, in accordance with the requirements of the NYSDEC's DER-10 ("Technical Guidance for Site Investigation and Remediation"), dated May 2010, and the guidelines provided by the NYSDEC. This SMP addresses the means for implementing the ICs and/or ECs that will be required by the Environmental Easement for the site.

1.2 Revisions

Revisions to this plan will be proposed in writing to the NYSDEC's project manager. Revisions will be necessary upon, but not limited to, the following occurring: a change in media monitoring requirements, upgrades to or shut-down of a remedial system, post-remedial removal of contaminated sediment or soil, or other significant

change to the site conditions. In accordance with the Environmental Easement to be recorded for the site, the NYSDEC will provide a notice of any approved changes to the SMP, and append these notices to the SMP that is retained in its files.

1.3 Notifications

Notifications will be submitted by the property owner to the NYSDEC, as needed, in accordance with NYSDEC's DER – 10 for the following reasons:

- 60-day advance notice of any proposed changes in site use that are required under the terms of the Order on Consent, 6NYCRR Part 375 and/or Environmental Conservation Law.
- 7-day advance notice of any field activity associated with the remedial program.
- 15-day advance notice of any proposed ground-intrusive activity pursuant to the Excavation Work Plan.
- Notice within 48-hours of any damage or defect to the foundation, structures or EC that reduces or has the potential to reduce the effectiveness of an EC, and likewise, any action to be taken to mitigate the damage or defect.
- Verbal notice by noon of the following day of any emergency, such as a fire; flood; or earthquake that reduces or has the potential to reduce the effectiveness of ECs in place at the site, with written confirmation within 7 days that includes a summary of actions taken, or to be taken, and the potential impact to the environment and the public.
- Follow-up status reports on actions taken to respond to any emergency event requiring ongoing responsive action submitted to the NYSDEC within 45 days describing and documenting actions taken to restore the effectiveness of the ECs.

Any change in the ownership of the site or the responsibility for implementing this SMP will include the following notifications:

- At least 60 days prior to the change, the NYSDEC will be notified in writing of the proposed change. This will include a certification that the prospective purchaser/Remedial Party has been provided with a copy of the Order on Consent, and all approved work plans and reports, including this SMP.

- Within 15 days after the transfer of all or part of the site, the new owner's name, contact representative, and contact information will be confirmed in writing to the NYSDEC.

Table 1.3.1 (below) includes contact information for the above notification. The information on this table will be updated as necessary to provide accurate contact information. A full listing of site-related contact information is provided in Appendix B.

Table 1.3.1: Notifications*

Name	**Contact Information**
NYSDEC Project Manager: John Sheehan	(631) 444-0244; jcsheeha@dec.ny.gov
NYSDEC Regional HW Engineer: Walter Parish	(631) 444-0240; wjparish@dec.ny.gov
NYSDEC Site Control: Kelly Lewandowski, Chief, Site Control Section	(518) 402-9553; kelly.lewandowski@dec.ny.gov

* Note: Notifications are subject to change and will be updated as necessary.

2.0 SUMMARY OF PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

2.1 Site Location and Description

The site is located in Woodbury, Nassau County, New York and is identified as Section 12, Block 527, and Lot 24 on the Nassau County Tax Map (see Figure 2.1.1). The boundary survey of the site indicates that it is located at N 540 01'21" E and N 290 51' 10" W on the south side of Woodbury Road between Wren and Lark Drives. The site is an approximately 3.75-acre area and is bounded by Woodbury Road to the north, residences to the south, residences to the east, and residences to the west (see Figure 2.1.2 – Site Layout Map). The boundaries of the site are more fully described on the ALTA/ACSM land survey in Appendix A. The owner of the site parcel at the time of issuance of this SMP is:

Joe III, LLC and Joan III, LLC

The property owner will implement this SMP. BSL NY Development LLC has contracted to purchase the property. If BSL NY Development LLC purchases the property, then it is intended that BSL NY Development LLC will undertake the remedial activities described herein.

2.2 Physical Setting

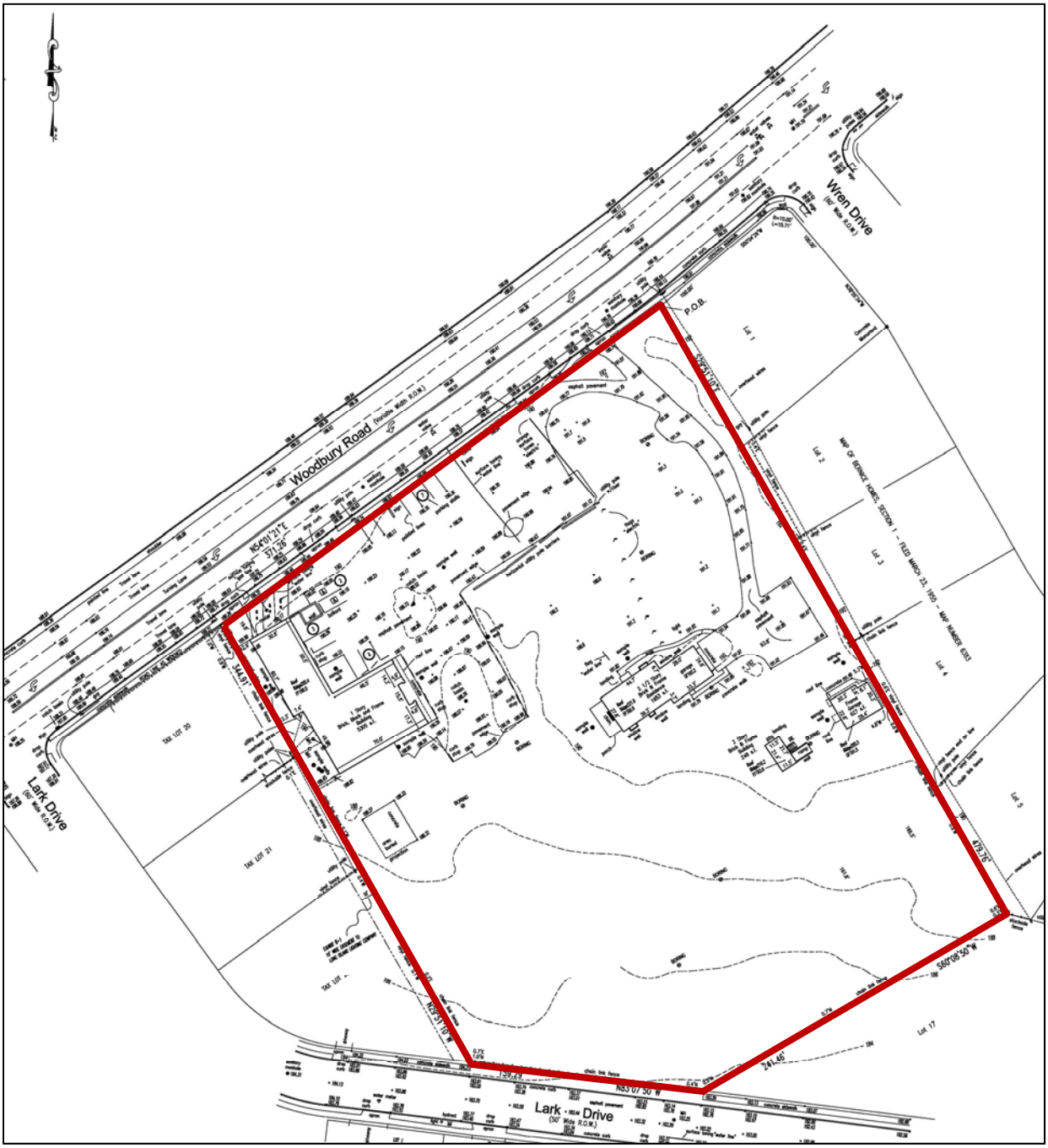
2.2.1 Land Use

The Site presently consists of the following: a one-story masonry retail building, a two-story brick residential building, a two-story brick storage building, a one-story wood frame garage, a concrete pad associated with a former garage, and asphalt paved parking areas and driveways. The remaining areas of the property consist of lawns, landscaped areas, and wooded areas.

Source: Nassau County Land Records Viewer

Site Boundary

FPM GROUP		
FIGURE 2.1.1 NCTM SECTION 12, BLOCK 527, LOT 24 926, 928 and 930 WOODBURY ROAD WOODBURY, NEW YORK		
Drawn by: SOD	Checked By: SOD	Date: 5/15/15



Source: RMS Engineering Existing Conditions Plan (4/17/15)

Site Boundary

FPM GROUP

FIGURE 2.1.2

SITE LAYOUT
926, 928 and 930 WOODBURY ROAD
WOODBURY, NEW YORK

Drawn by: SOD	Checked By: SOD	Date: 5/15/15

The Site is zoned NB – Neighborhood Business Zone and has been used for commercial and residential purposes. The commercial portion of the property includes a retail building that is now mostly vacant but was most recently occupied by Izzy's Dry Cleaners (926 Woodbury Road), a former deli (928 Woodbury Road), and Mary Corsetieres Ltd. (930 Woodbury Road). Mary's Corsetieres Ltd. continues to occupy a portion of the retail building. Izzy's Dry Cleaners was most recently a "drop shop" type business but previously provided full dry cleaning services. The residential portion of the property includes a residential structure (900 Woodbury Road), an associated storage building, and a garage, all of which are currently unoccupied.

The residential structure was constructed in 1938, the existing garage and a former garage were moved to the property in 1957, and the retail building was built in 1956, with an attached greenhouse built in 1957 and an attached shed constructed in 1966. The greenhouse was demolished in 1972. In 1973 an addition was made to the retail building in the area of the removed greenhouse. No construction data was obtained regarding the storage building. Reportedly, the retail building and associated former greenhouse were originally (circa 1956-1970) utilized for retail sales of fruit, vegetables, plants, and nursery-related products. Growing of fruits, vegetables, plants, and other nursery-related products was not conducted at the subject property. Former tenants of the retail building include Sharon's of Woodbury, Gold Creations, Sybaris Hair Design, Shop & Go Farms Inc., Woodbury Culinary Deli, GF Lynch Insurance, Sterling Brokerage, Mary Corsetieres Ltd, Woodbury Garden Liquors, and Garden Center.

Redevelopment plans for the subject property, which is currently transitioning ownership, include construction of a two-story assisted living facility.

The properties adjoining the Site and in the neighborhood surrounding the Site primarily include residential properties and a major roadway. The properties immediately south of the Site and across Lark Drive include residential properties; the properties immediately north of the Site, across Woodbury Road, include a large cloverleaf intersection between the Long Island Expressway (LIE) and the Seaford-Oyster Bay Expressway; the properties immediately east of the Site include residential properties; and the properties to the west of the Site include residential properties.

2.2.2 Geology

The site is immediately underlain by fine to coarse-grained sand with gravel associated with Upper Pleistocene glacial deposits. A discontinuous clay layer was identified at several locations; the top of this clay was found between approximately 83 and 94 feet bgs. This clay appears to extend to approximately 108 to 146 feet bgs at the locations where it was fully penetrated. Site-specific boring logs are provided in Appendix C.

2.2.3 Hydrogeology

Perched groundwater is present on top of the clay layer at a depth of about 85 to 87 feet bgs. The regional water table aquifer is present in the sandy deposits beneath the clay.

The site-specific groundwater flow direction for the water table aquifer has been determined on several occasions and is generally to the south. Some variation in flow directions may be observed and is consistent with the property's location near the regional groundwater divide. Flow direction for the perched groundwater above the discontinuous clay layer may be variable.

The site is connected to the municipal water supply system. Based on the relatively recent development of the surrounding residences (between 1967 and 1979), private water supply wells are unlikely to be present. The closest public supply wells are located approximately one mile to the south.

A groundwater contour map is shown on a boring log site plan in Appendix C. Groundwater elevation data is provided on the contour map. Groundwater monitoring well construction logs are provided in Appendix C.

2.3 Investigation and Remedial History

The following narrative provides a remedial history timeline and a brief summary of the available project records to document key investigative and remedial milestones for the Site. Full titles for each of the reports referenced below are provided in Section 8.0 - References. A summary of the remaining impacts is presented at the end of this

section. It is noted that investigation and remedial work conducted prior to February 23, 2011, the date that the Consent Order was executed, was conducted without NYSDEC oversight or supervision. Nevertheless, the NYSDEC took the results of this investigation and remedial work into consideration during subsequent oversight and supervision activities.

2.3.1 History of Investigations and Remediation

The investigation and remedial work has been performed by Soil Mechanics Environmental Services, Inc. (SMES). The available reports for the site include the following:

- Phase II Environmental Site Assessment (SMES, 1/28/09);
- Supplemental Subsurface Investigation and Interim Remedial Measures Report (SMES, 10/09);
- Supplemental Groundwater Investigation Report (SMES, 9/10);
- Phase I Environmental Site Assessment (SMES, 4/11)
- Supplemental Site Assessment Report of Findings (SMES, 8/12);
- Retail Building - Post Sub-Slab Venting System Activation Vapor Intrusion Assessment (results presented in work plan, SMES, 8/2/13);
- Underground Injection Well Remedial Action Work Plan Report of Findings (SMES, 7/14);
- Supplemental Soil Vapor and Groundwater Assessment Report (SMES, 10/24/14);
- Construction Completion Report (SMES, 3/20/15);

SMES was engaged to conduct a Phase II investigation at the site to confirm the findings of a previous (2007) investigation by others, which had identified elevated levels of PCE in sub-slab soil and soil vapor and in indoor air within the former dry cleaning operation. The results of the Phase II investigation (1/28/09 report) confirmed the release of chlorinated solvents at the site. The NYSDEC Spill hotline was contacted and Spill # 0811416 was reported for the site.

A supplemental subsurface investigation was performed and an Interim Remedial Measure (IRM) was implemented during the latter part of 2009. The IRM included removal and disposal of all idle dry cleaning equipment and associated supplies and

wastes from within Izzy's Dry Cleaners, excavation and offsite disposal of all accessible PCE-impacted soil from beneath the building slab within Izzy's Dry Cleaners, installation of a vapor barrier and a passive sub-slab venting system within the remedial excavation, and removal of a 550-gallon fuel oil underground storage tank (UST). The supplemental investigation included sampling of onsite stormwater leaching structures, existing/former septic system structures, and exposed soil surfaces, exploration and investigation of USTs, assessment of groundwater quality beneath the site, and post-remedial assessment sub-slab soil vapor and indoor quality within the former dry cleaning operation.

The remedial activities are documented in the Construction Completion Report. Post-remediation endpoint samples acquired from the remedial excavation beneath Izzy's Dry Cleaner confirmed that the soil removal efforts were successful in that VOCs were not detected in any of the post-remediation soil samples. Nevertheless, post-remediation sub-slab soil vapor and associated indoor air samples indicated that mitigation for soil vapor intrusion (SVI) was warranted. Mitigation measures had included backfilling the remedial excavation with 3/8" diameter pea gravel and installing 4 inch-diameter factory-slotted PVC piping in the gravel backfill with solid piping extended to above grade. A Stego Wrap 30-mil vapor barrier was installed above the piping and backfill and the remedial excavation was capped with a concrete slab. The venting system was enabled to passively vent sub-slab soil vapors starting in December 2010.

A 550-gallon fuel oil UST was identified in the area to the east of the retail building during the investigation. The UST was removed and properly disposed under the direct supervision of the Nassau County Department of Health (NCDOH). No contamination was identified and no further action was required.

Stormwater leaching structures located in the parking areas for the retail building (DW-l, DW-2, and DW-3) were sampled and found to be impacted by semivolatile organic compounds (SVOCs), mercury, and/or chromium attributed to routine parking lot runoff. None of the leaching structures, including DW-3 which received outfall from a former floor drain within Izzy's Dry Cleaner, were impacted by chlorinated solvents. Remediation of each of the leaching structures was recommended and has been conducted, as discussed below.

The retail building was confirmed via trace dye analysis to be connected to the municipal sewer system. The geophysical survey identified a buried 55-gallon drum and the septic connection cleanout pit. Samples of the materials in these structures indicated that they were not impacted. The buried drum was removed and properly disposed and no further action was recommended.

Exposed soil in the alleyway at rear of Izzy's Dry Cleaners was sampled at three locations (S-l, S-2, and S-3) and no VOCs were detected, with the exception of methylene chloride (a common laboratory contaminant) in sample S-1 at a very low concentration (6.28 ug/kg). No further action was recommended.

A 550-gallon UST formerly associated with the boiler room of Izzy's Dry Cleaners was confirmed to have been previously removed. Soil samples (GP-l to GP-4) tested for VOCs and SVOCs indicated that the former UST area was slightly impacted with one SVOC in two of the samples. This detection was not indicative of a significant environmental concern warranting further action and no further action was recommended.

Groundwater sampling was conducted at wells MW-l, MW-2 and MW-3, which are installed in the perched groundwater above the clay layer. PCE was detected at concentrations ranging from 13.6 to 42.2 ug/L. Lead was also detected at concentrations ranging from 0.008 to 0.033 mg/L, which may have been associated with sample turbidity.

The NYSDEC reviewed the results of the above-described remedial and investigation efforts and requested an additional investigation of groundwater, including an assessment of groundwater quality beneath the clay layer, an assessment of the extent and thickness of the clay layer, and preparation of a site-specific groundwater flow direction map. This work was conducted in mid-2010 and reported in September 2010. The dense layer of clay previously identified at the site was confirmed to be discontinuous. Groundwater beneath the site was determined during this investigation to flow to the south-southwest. The three wells installed into the regional water table aquifer beneath the site (MW-4, MW-5, and MW-6) contained PCE at relatively low concentrations ranging from 20.2 to 34.6 ug/L.

The NYSDEC reviewed the findings of this investigation and concluded that the site owner, Joe III, LLC and Joan III, LLC, must sign a Consent Order with the NYSDEC and complete all further investigation and remedial efforts under NYSDEC supervision. Consent Order #130200, Index #W1-0001-07-05 was executed in February 2011.

A Supplemental Site Assessment was conducted to complete the characterization of the site. During this assessment the onsite sewage disposal systems associated with the remaining onsite occupants were investigated. Mary's Corsetieres, which occupied the original portion of the retail building, continued to utilize an onsite sanitary waste disposal system with a cesspool (CS-3). It was confirmed that the vacant deli which occupied a newer portion of the retail building (together with Izzy's Dry Cleaner) was connected to the municipal sewer system. The storage building and the residence were confirmed to both utilize onsite sanitary waste disposal cesspools (CS-1 and CS-2, respectively). Sampling of the cesspools indicated that the CS-2 and CS-3 structures (associated with the residence and Mary's Corsetieres) had been impacted by select metals; remediation was recommended. Neither of these structures was impacted by chlorinated solvents. The CS-1 cesspool (associated with the storage building) was not impacted.

A 1,080-gallon fuel oil UST was identified at the residence. Soil sampling was performed in proximity to this UST and no impacts were identified. No further action was recommended for this UST.

Additional groundwater sampling of the MW-2 through MW-6 wells was conducted. Well MW-1 could not be sampled as it was dry during the investigation. Groundwater flow was noted to be to the south-southwest. PCE was detected at each of the sampled wells, but at concentrations that were approximately 50% lower than during the previous sampling event.

Additional soil sampling was performed to more generally characterize site soils. The results of these general site characterization soil samples indicated that no impacts were present with the exception of marginally elevated concentrations of iron. Iron occurs naturally in Long Island soils and no further assessment was recommended.

Sub-slab soil vapor and associated indoor air samples were obtained to evaluate the effectiveness of remedial measures at Izzy's Dry Cleaners. Indoor air quality was also assessed in the other units in the retail building (vacant former deli and occupied Mary's Corsetieres), the garage, and the residence. The results were evaluated in conformance with NYSDOH guidance. Mitigation for potential SVI was not indicated for the garage or the residence; however, mitigation was indicated for the units in the retail building. The passive venting system beneath the former dry cleaner was subsequently modified to operate actively by installing a continuously-operating 6" PVC centrifugal in-line duct blower (115 volt, 60 hz, minimum 230 CFM capacity). Additional sampling was recommended to assess the effectiveness of the now active sub-slab venting system; this sampling was conducted in 2012 as described below.

Soil vapor samples were collected from selected locations (SV-4 through SV-6) to further characterize soil vapor conditions between the site and offsite residences located on Lark Drive. Several VOCs, including carbon tetrachloride (CCl_4), 1,1,1-trichloroethane (TCA), PCE and/or TCE, were noted in these samples.

A post sub-slab venting system activation SVI assessment was conducted in 2012 and included sub-slab soil vapor and indoor air samples from within each of the units of the retail building. It was reported that the PCE and TCE concentrations in the sub-slab and indoor air were significantly reduced. However, extending or expanding the existing venting system into the vacant deli and Mary’s Corsetiere’s was warranted along with continued monitoring of indoor air quality.

Remediation of the impacted sanitary waste disposal system structures and stormwater leaching structures (underground injection control structures, or UICs) was conducted in May 2014 in accordance with an August 2013 work plan approved by the USEPA and NCDOH. All of the Site’s impacted UIC structures (identified as CS-2, CS-3, DW-1, DW-2, and DW-3) were remediated under the direct supervision of Mr. John Lovejoy of the NCDOH. The remedial activities were reported to the NCDOH (7/2014) and the NCDOH concluded that no further investigation or remedial activities were necessary for the UIC structures (NCDOH 10/3/14 correspondence).

A supplemental SVI and groundwater assessment was conducted, the results of which are documented in an October 24, 2014 report. This assessment was conducted in accordance with a scope of work reviewed and approved by the NYSDEC.

The results of the groundwater assessment indicated that the perched groundwater was not impacted by the targeted VOC, SVOC, pesticide or PCB constituents. Several metals were marginally elevated, but it was concluded that further investigation was not warranted. The results from the regional water table aquifer samples indicated that this groundwater was also not impacted by SVOCs, pesticides, or PCBs. Several metals and VOCs, including PCE, were detected. The PCE levels were noted to have further declined relative to previous groundwater results.

The results of the SVI assessment conducted within the onsite retail building indicated that the potential for SVI had been reduced, likely due to previous source removal and activation of the sub-slab venting system beneath the former dry cleaner. However, indoor air exceedances of the Air Guideline Value for PCE were noted in the former deli (57.0 ug/m^3) and former dry cleaner (41.0 ug/m^3). It was noted that the deli space had been vacant since at least 2008 and the space formerly occupied by Izzy's Dry Cleaners was vacated in November 2014; as there are no occupants of these spaces, there are no potential exposures at present. It was noted that this building will be demolished as part of the proposed site redevelopment. It was recommended that indoor air quality in Mary's Corsetieres continue to be monitored. It was also recommended that once the retail building is demolished that the soil beneath the former building location be further investigated and any impacted soil be properly removed and disposed.

Potential SVI concerns for offsite residences on Lark Drive were assessed during this investigation. Soil vapor, sub-slab soil vapor, and co-located indoor air samples were collected from several residences adjoining the site to the southwest. This investigation indicated that, in accordance with NYSDOH guidance, neither monitoring nor mitigation was indicated for any of these offsite residences, which are noted to be the closest residences to the former dry cleaner location. It was concluded that SVI does not present a concern for offsite residences.

2.3.2 Summary of Remaining Impacts

Although the post-remediation confirmation samples collected from the remedial excavation beneath the former Izzy's Dry Cleaners indicated non-detectable concentrations of VOCs, SVI testing suggests that residual VOC-impacted soil may be present beneath the retail building.

Groundwater beneath the site has been sampled on four occasions between 2009 and 2013. The most recent monitoring data (11/26/13) indicate that perched groundwater (wells MW-1, MW-2, and MW-3) is not impacted by targeted VOC, SVOC, pesticide or PCB constituents. Marginally elevated concentrations of selected metals do not present a concern or indicate a release associated with the site. The regional water table aquifer (wells MW-4, MW-5, and MW-6) is not impacted by targeted SVOC, pesticide or PCB constituents. Marginally elevated concentrations of metals and VOC constituents, including PCE (from 5.73 to 11.6 ug/L) were noted. However, the PCE concentrations are reduced from previous levels and are only slightly above the applicable regulatory criteria (5 ug/L). Further investigation was not recommended.

Soil vapor beneath the onsite retail building contains elevated levels of PCE and indoor air exceedances of the Air Guideline Value for PCE were noted in the former deli (57.0 ug/m^3) and former dry cleaner (41.0 ug/m^3) in 2014. Soil vapor beneath the parking area to the southwest of this building also indicates impacts by PCE. Offsite residences are not impacted by PCE vapors.

Since impacted soil may remain present, and impacted groundwater and soil vapor are confirmed to remain present beneath the site, Institutional and Engineering Controls (ECs/ICs) are required to protect human health and the environment. These ECs and ICs are described in the following sections. Long-term management of these EC/ICs and residual contamination will be performed under this SMP approved by the NYSDEC.

2.4 Remedial Action Objectives

The Remedial Action Objectives (RAOs) for the Site are as follows:

Groundwater

RAOs for Public Health Protection

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of, volatiles from contaminated groundwater.

RAOs for Environmental Protection

- Restore ground water aquifer to pre-disposal/pre-release conditions, to the extent practicable.
- Remove the source of ground water contamination.

Soil

RAOs for Public Health Protection

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

RAOs for Environmental Protection

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

Soil Vapor

RAOs for Public Health Protection

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

2.5 Remaining Contamination

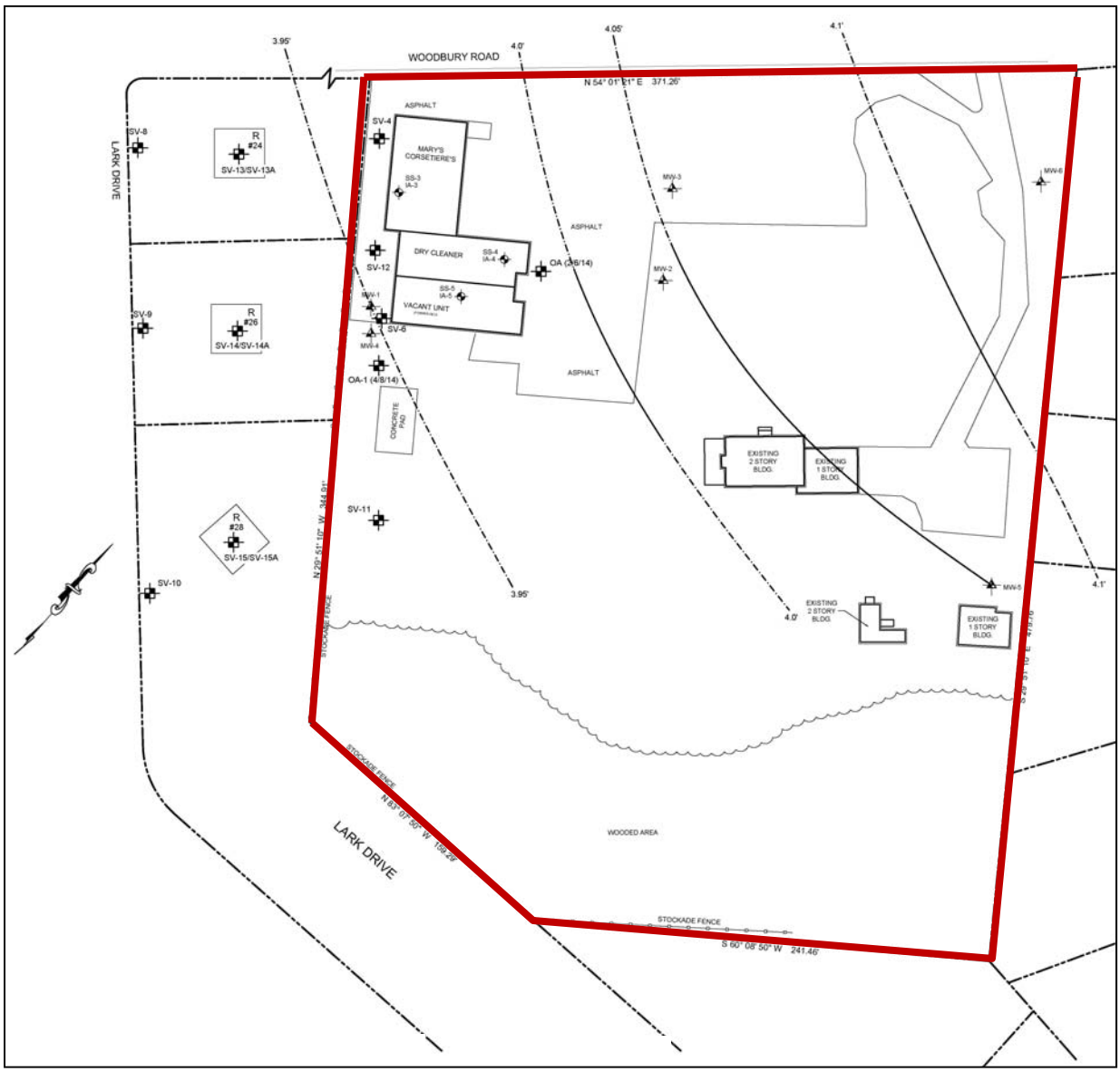
The contamination associated with this site may consist of residual levels of PCE and related chlorinated solvents beneath the retail building. Concentrations of these VOCs that exceed applicable regulatory criteria are considered residual contamination to be managed under this SMP. Figure 2.5.1 shows the well and soil vapor sample locations; locations where regulatory criteria are exceeded include MW-4 through MW-6, SS-4/IA-4, SS-5/IA-5, SV-4 and SV-6.

2.5.1 Soil

Post-remediation confirmation samples collected from the remedial excavation beneath the former Izzy's Dry Cleaners indicated non-detectable concentrations of PCE and related VOCs. Testing of surface soils and soils in UIC structures did not reveal any exceedances of the 6 NYCRR Part 375-6 Soil Cleanup Objectives (SCOs) for unrestricted use. However, SVI testing suggests that residual PCE-impacted soil may be present beneath the retail building, which is planned to be demolished. This SMP includes provisions for assessment of the sub-slab soil beneath the retail building if it is demolished, assessment of soil in the southern wooded area, and removal of residual soil if identified.

2.5.2 Groundwater

Groundwater beneath the site has been impacted by PCE; four rounds of sampling were conducted between 2009 and 2013 and document a consistent decline in PCE concentrations over time due to natural attenuation. The most recent monitoring data (11/26/13) indicate that perched groundwater (wells MW-1, MW-2, and MW-3) is no longer impacted by PCE; PCE was not detected in any of the perched groundwater samples. The regional water table aquifer (wells MW-4, MW-5, and MW-6) continues to contain marginally elevated concentrations of PCE (from 5.73 to 11.6 ug/L). The PCE concentrations are reduced from previous levels and are only slightly above the applicable regulatory criteria (5 ug/L); these concentrations are anticipated to continue to naturally attenuate. Table 2.5.2.1 summarizes the results of all samples of groundwater; groundwater constituents that exceed the SCGs are noted.



Source: Soil Mechanics Environmental Services
Drawing 08R711 (7/8/14)

Site Boundary

FPM GROUP

FIGURE 2.5.1

SAMPLE LOCATIONS
926, 928 and 930 WOODBURY ROAD
WOODBURY, NEW YORK

Drawn by: SOD	Checked By: SOD	Date: 5/15/15

TABLE 2.5.2.1

GROUNDWATER CHEMICAL ANALYTICAL DATA

926, 928 and 930 WOODBURY ROAD, WOODBURY, NY

Parameters	MW-1**				MW-2**				MW-3**				MW-4				MW-5				MW-6				Groundwater Standard/Criteria
Sampling Date	5/28/09	7/12/10	12/28/11	**11/26/13**	5/28/09	7/12/10	12/28/11	**11/26/13**	5/28/09	7/12/10	12/28/11	**11/26/13**	5/28/09	7/12/10	12/28/11	**11/26/13**	5/28/09	7/12/10	12/28/11	**11/26/13**	5/28/09	7/12/10	12/28/11	**11/26/13**	
VOCs (ug/L)	-	NA	***	ND	-	NA	-	ND	-	NA	-	ND	NA	-	-	-	NA	-	-	-	NA	-	-	-	-
chloroform	-	NA	***	-	-	NA	-	-	-	NA	-	-	NA	**211.0**	-	-	NA	-	-	-	NA	11.4	-	-	7.0
bromodichloromethane	-	NA	***	-	-	NA	-	-	-	NA	-	-	NA	**12.2**	-	-	NA	-	-	-	NA	-	-	-	-
tetrachloroethylene	**42.2**	NA	***	-	**13.6**	NA	**9.96**	-	**17.8**	NA	**9.57**	-	NA	**34.6**	**15.4**	**11.6**	NA	**24.5**	**12.2**	**7.53**	NA	**20.2**	**7.47**	**5.73**	5.0
SVOCs (ug/L)	ND	NA	***	ND	ND	NA	-	ND	ND	NA		ND	NA	NA	ND	ND	NA	NA	ND	ND	NA	NA	ND	ND	-
bis(2ethylhexyl)phthalate	-	NA	***	-	-	NA	**19.1**	-		NA	**10.7**	-	NA	NA	-	-	NA	NA	-	-	NA	NA	-	-	5.00
Metals (mg/L)	-	NA	***	-	-	NA	-	-	-	NA	-	-	NA	NA	-	-	NA	NA	-	-	NA	NA	-	-	-
aluminum	-	NA	***	41.5	-	NA	0.54	29.3	-	NA	22.8	11.4	NA	NA	0.38	9.84	NA	NA	1.46	11.5	NA	NA	1.97	4.63	-
calcium	-	NA	***	20.1	-	NA	13.0	10.4	-	NA	19.5	33.5	NA	NA	9.79	11.9	NA	NA	10.6	11.7	NA	NA	18.9	20.8	-
arsenic	-	NA	***	-	-	NA	-		-	NA	-	-	NA	NA	-	-	NA	NA	-	0.07	NA	NA	-	-	0.025
barium	-	NA	***	0.57	-	NA	0.05	0.27	-	NA	0.28	0.38	NA	NA	0.07	0.17	NA	NA	0.03	0.3	NA	NA	0.12	0.16	1.0
chromium	-	NA	***	**0.14**	-	NA	-	0.05	-	NA	**0.06**	-	NA	NA	-	-	NA	NA	**0.1**	-	NA	NA	-	-	0.05
cobalt	-	NA	***	**0.05**	-	NA	-	-	-	NA	-	-	NA	NA	-	0.05	NA	NA	-	-	NA	NA	-	-	-
copper	-	NA	***	**0.23**	-	NA	-	0.07	-	NA	0.07	0.04	NA	NA	-	0.04	NA	NA	-	0.04	NA	NA	-	0.02	0.2
iron	-	NA	***	**83.3**	-	NA	**0.85**	**39.8**	-	NA	**28.8**	**18.1**	NA	NA	**0.51**	**28.4**	NA	NA	**4.77**	**71.3**	NA	NA	**2.54**	**18.4**	0.3
lead	0.011	NA	***	**0.085**	**0.033**	NA	-	-	0.008	NA	0.024	-	NA	NA	-	-	NA	NA	-	**0.081**	NA	NA	-	-	0.025
magnesium	-	NA	***	15.1	-	NA	6.02	6.39	-	NA	10.7	12.7	NA	NA	3.31	5.23	NA	NA	1.83	2.34	NA	NA	6.38	7.74	-
manganese	-	NA	***	**0.86**	-	NA	-	**1.03**	-	NA	**0.96**	0.05	NA	NA	-	0.28	NA	NA	0.09	**2.61**	NA	NA	0.06	0.07	0.3
nickel	-	NA	***	0.1	-	NA	-	-	-	NA	0.08	-	NA	NA	-	-	NA	NA	0.07	-	NA	NA	-	-	0.1
potassium	-	NA	***	11.3	-	NA	2.18	6.24	-	NA	10.2	9.12	NA	NA	2.35	4.25	NA	NA	1.55	2.99	NA	NA	3.29	4.74	-
sodium	-	NA	***	**29.3**	-	NA	19.6	**20.4**	-	NA	**41.2**	-	NA	NA	11.8	**20.1**	NA	NA	10.4	10.2	NA	NA	**76.9**	**74.8**	20.0
vanadium	-	NA	***	0.18	-	NA	-	0.08	-	NA	0.08	-	NA	NA	-	0.05	NA	NA	-	0.09	NA	NA	-	-	-
zinc	-	NA	***	0.37	-	NA	-	0.11	-	NA	0.15	0.09	NA	NA	-	0.06	NA	NA	-	0.05	NA	NA	-	-	-
Pesticides (ug/L)	NA	NA	***	ND	NA	NA	ND	ND	NA	NA	ND	ND	NA	NA	ND	ND	NA	NA	ND	ND	NA	NA	ND	ND	-
PCBs (ug/L)	NA	NA	***	ND	NA	NA	ND	ND	NA	NA	ND	ND	NA	NA	ND	ND	NA	NA	ND	ND	NA	NA	ND	ND	-

\+ Only targeted compounds detected at concentrations exceeding laboratory minimum reporting limits (MRLs) are tabulated
** Perched groundwater monitoring well
*** Well Dry
\- Not Applicable or targeted compound not detected at concentration exceeding laboratory MRLs
ND Targeted compound not detected at concentration exceeding laboratory MRLs
NA Not Applicable
Standard/Criteria NYSDEC 6NYCRR part 703 or NYSDEC TOGS 1.1.1
+ Elevations referenced to assumed top of casing elevation (north rim of MW-2 or El. 115.13)

2.5.3 Soil Vapor

Soil vapor beneath the onsite retail building contains elevated levels of PCE and indoor air exceedances of the Air Guideline Value for PCE were noted in the former deli (57.0 ug/m^3) and former dry cleaner (41.0 ug/m^3) in 2014. Soil vapor at select locations (SV-4 and SV-6) beneath the parking area to the southwest of this building were also impacted by PCE. Offsite residences are not impacted by PCE soil vapors. Table 2.5.3.1 summarizes the results of all samples of soil vapor, including those that exceed the SCGs after completion of the remedial action.

TABLE 2.5.3.1

SUB-SLAB SOIL VAPOR, INDOOR AIR AND SOIL VAPOR

CHEMICAL ANALYTICAL DATA (in ug/m^3)

926, 928 and 930 WOODBURY ROAD, WOODBURY, NY

Sample Location	Mary's Corset Shop		Izzy's Cleaners		Vacant Deli		Outdoor Air
Sample ID	SS-3	IA-3	SS-4	IA-4	SS-5	IA-5	OA (2/6/14)
Sample Description	Sub-Slab	Indoor Air	Sub-Slab	Indoor Air	Sub-Slab	Indoor Air	-
1,1,1-Trichloroethane	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	-	-	-	-	-	-	-
1,1,2-Trichloroethane	-	-	-	-	-	-	-
1,1-Dichloroethane	-	-	-	-	-	-	-
1,1-Dichloroethene	7.1	-	-	-	-	-	-
1,2,4-Trichlorobenzene	-	-	-	-	-	-	-
1,2,4-Trimethylbenzene	-	0.95	0.60	41.0	28.0	0.70	0.95
1,2-Dibromoethane	0.70	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-	
1,2-Dichloroethane	2.0	-	-	-	-	-	-
1,2-Dichloropropane	-	-	-	-	-	-	-
1,3,5-Trimethylbenzene	-	-	-	11.0	8.7	-	-
1,3-butadiene	-	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-	-
1,4-Dioxane	-	-	-	-	-	-	-
2,2,4-trimethylpentane	2.6	-	-	-	0.85	-	-
4-ethyltoluene	3.3	-	-	18.0	10.0	-	-
Acetone	30.0	11.0	8.2	220.0	250.0	6.8	11.0
Allyl chloride	-	-	-	-	-	-	-
Benzene	8.4	0.94	0.78	5.4	4.4	0.78	0.81
Benzyl chloride	-	-	-	-	-	-	-
Bromodichloromethane	-	-	-	-	-	-	-
Bromoform	-	-	-	-	-	-	-
Bromomethane	-	-	-	-	-	-	-
Carbon disulfide	-	-	-	-	0.32	-	-
Carbon tetrachloride	-	0.51	-	-	-	0.58	0.58
Chlorobenzene	-	-	-	-	-	-	-
Chloroethane	-	-	-	-	-	-	-
Chloroform	-	-	-	-	-	-	-
Chloromethane	-	0.94	0.99	0.34	0.46	-	1.0
cis-1,2-Dichloroethene	0.77	-	-	-	-	-	-
cis-1,3-Dichloropropene	-	-	-	-	-	-	-
Cyclohexane	2.2	-	-	38.0	0.98	-	-

TABLE 2.5.3.1 (Continued)

SUB-SLAB SOIL VAPOR, INDOOR AIR AND SOIL VAPOR

CHEMICAL ANALYTICAL DATA (in ug/m^3)

926, 928 and 930 WOODBURY ROAD, WOODBURY, NY

Sample Location	Mary's Corset Shop		Izzy's Cleaners		Vacant Deli		Outdoor Air
Sample ID	SS-3	IA-3	SS-4	IA-4	SS-5	IA-5	OA (2/6/14)
Sample Description	Sub-Slab	Indoor Air	Sub-Slab	Indoor Air	Sub-Slab	Indoor Air	-
Dibromochloromethane	-	-	-	-	-	-	-
Ethyl acetate	8.8	3.8	-	7.7	-	-	-
Ethylbenzene	34.0	0.93	-	30.0	25.0	-	-
Freon 11	1.4	1.4	1.7	1.3	1.3	2.1	1.5
Freon 113	-	-	-	-	-	-	-
Freon 114	-	-	-	-	-	-	-
Freon 12	2.7	2.8	3.2	2.3	2.3	3.4	3.1
Heptane	12.0	3.5	0.62	22.0	3.2	0.42	0.42
Hexachloro-1,3-butadiene	-	-	-	-	-	-	-
Hexane	8.6	1.1	1.1	140.0	-	0.90	0.86
Isopropyl alcohol	8.0	9.5	5.3	-	-	5.4	9.6
m&p-Xylene	88.0	2.4	0.71	120.0	97.0	0.79	0.57
Methyl Butyl Ketone	-	-	-	-	-	-	-
Methyl Ethyl Ketone	25	1.7	1.1	540.0	610.0	1.2	1.1
Methyl Isobutyl Ketone	1.4	-	-	0.79	0.71	-	-
Methyl tert-butyl ether	-	-	-	-	-	-	-
Methylene chloride	2.4	1.1	1.7	1.7	0.95	0.88	0.56
o-Xylene	16.0	0.71	-	27.0	23.0	-	-
Propylene	-	-	-	-	-	-	-
Styrene	4.6	-	-	-	-	-	-
Tetrachloroethylene	5.7	2.7	77.0	41.0	32.0	57.0	-
Tetrahydrofuran	20.0	-	-	530.0	490.0	-	-
Toluene	81.0	6.8	3.1	470.0	98.0	2.6	1.6
trans-1,2-Dichloroethene	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	-	-	-	-	-	-	-
Trichloroethene	1.7	-	-	0.76	-	-	0.44
Vinyl acetate	-	-	-	-	-	-	-
Vinyl Bromide	-	-	-	-	-	-	-
Vinyl chloride	-	-	-	-	-	-	-
Helium	-	-	-	-	-	-	-

- Not detected at concentration exceeding laboratory minimum detection limit (MDL)
Date of work: 2/6/14 (partly cloudy, 25^0 F; barometric pressure 30.2 inches mercury
shaded constituents are identified in Table 3.3 (Volatile Chemicals and Their Decision Making Matrices) of NYSDOH - Guidance for Evaluating Soil Vapor Intrusion in New York State (10/06)

TABLE 2.5.3.1 (Continued)

SUB-SLAB SOIL VAPOR, INDOOR AIR AND SOIL VAPOR

CHEMICAL ANALYTICAL DATA (in ug/m^3)

926, 928 and 930 WOODBURY ROAD, WOODBURY, NY

Sample ID (1 hour duration)	SV-4	SV-4	SV-6	SV-6	SV-8	SV-9	SV-10	SV-11	SV-12	OA-1
Sample Description	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Outside Air
Sample Date	4/8/14	1/12/12	4/8/14	1/12/12	4/8/14	4/8/14	4/8/14	4/8/14	4/8/14	4/8/14
1,1,1-Trichloroethane	-	5.2	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	-	-	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethene	-	-	-	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	-	-	-	-	-	-	-	-	-	-
1,2,4-Trimethylbenzene	170.0	12.0	1.7	-	4.0	9.4	1.9	8.1	-	-
1,2-Dibromoethane	-	-	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-	-	-	-	-
1,2-Dichloroethane	-	1.9	-	2.2	-	-	-	-	-	-
1,2-Dichloropropane	1.7	-	-	-	-	-	-	-	-	-
1,3,5-Trimethylbenzene	84	2.5	0.90	-	1.6	4.6	1.2	2.8	-	-
1,3-butadiene	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	-	-	-	1.5	-	-
1,4-Dichlorobenzene	-	0.79	-	-	3.3	6.3	-	8.2	-	-
1,4-Dioxane	1.1	-	-	-	-	-	-	-	-	-
2,2,4-trimethylpentane	-	2.1	-	1.1	-	2.4	0.52	0.52	-	-
4-ethyltoluene	28.0	2.4	-	-	0.75	2.5	-	2.3	-	-
Acetone	25.0	88.0	12.0	21.0	62.0	100.0	37.0	56.0	14.0	7.5
Allyl chloride	-	-	-	-	-	-	-	-	-	-
Benzene	1.9	5.2	0.58	1.8	1.1	3.7	1.1	1.6	0.62	0.68
Benzyl chloride	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	-	-	-	2.7	-	-	-	-	-	-
Bromoform	-	-	-	-	-	-	-	-	-	-
Bromomethane	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	-	1.0	-	0.47	25.0	17.0	22.0	8.2	0.41	-
Carbon tetrachloride	-	0.96	0.64	-	0.64	0.70	0.64	1.0	0.70	0.70
Chlorobenzene	-	-	-	-	-	-	-	-	-	-
Chloroethane	1.0	-	-	-	-	-	-	-	0.32	-
Chloroform	11	1.1	-	49.0	0.84	4.7	0.60	0.69	-	-
Chloromethane	-	-	1.2	-	-	-	-	-	1.4	1.3
cis-1,2-Dichloroethene	5.3	8.2	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	-	-	-	-	-	-	-	-	-	-
Cyclohexane	-	2.8	0.70	2.0	-	1.7	-	-	-	-

TABLE 2.5.3.1 (Continued)

SUB-SLAB SOIL VAPOR, INDOOR AIR AND SOIL VAPOR

CHEMICAL ANALYTICAL DATA (in ug/m^3)

926, 928 and 930 WOODBURY ROAD, WOODBURY, NY

Sample ID (1 hour duration)	SV-4	SV-4	SV-6	SV-6	SV-8	SV-9	SV-10	SV-11	SV-12	OA-1
Sample Description	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Outside Air
Sample Date	4/8/14	1/12/12	4/8/14	1/12/12	4/8/14	4/8/14	4/8/14	4/8/14	4/8/14	4/8/14
Dibromochloromethane	-	-	-	-	-	-	-	-	-	-
Ethyl acetate	-	-	-	0.84	-	-	-	-	-	-
Ethylbenzene	41.0	3.3	0.79	0.44	1.0	4.5	0.62	2.3	-	-
Freon 11	1.8	2.2	1.6	2.6	1.6	1.7	1.7	2.3	1.7	1.7
Freon 113	-	1.2	-	1.0	-	-	-	1.0	-	-
Freon 114	-	-	-	-	-	-	-	-	-	-
Freon 12	3.0	3.8	3.0	3.8	3.0	2.9	3.1	3.7	3.1	3.2
Heptane	-	2.5	0.58	1.2	5.6	8.7	2.8	6.5	-	-
Hexachloro-1,3-butadiene	17.0	-	-	-	-	-	-	-	-	-
Hexane	-	7.4	0.50	4.6	-	-	-	-	-	-
Isopropyl alcohol	-	3.9	4.0	3.2	120.0	110.0	88.0	56.0	-	3.3
m&p-Xylene	4.5	16.0	1.7	1.1	2.6	15.0	1.6	8.1	1.1	1.1
Methyl Butyl Ketone	54.0	-	-	-	2.0	5.6	1.8	1.5	0.67	-
Methyl Ethyl Ketone	-	12.0	1.0	-	12.0	22.0	8.5	16	2.4	0.72
Methyl Isobutyl Ketone	4.3	1.4	-	1.2	1.8	4.6	1.6	3.0	-	-
Methyl tert-butyl ether	0.96	-	-	-	-	-	-	-	-	-
Methylene chloride	0.67	4.7	0.67	2.8	1.0	1.2	1.5	0.95	0.71	0.74
o-Xylene	50.0	5.1	0.97	0.44	1.5	6.0	0.88	3.7	0.62	0.49
Propylene	-	-	-	-	-	-	-	-	-	-
Styrene	18.0	1.0	-	0.52	1.3	-	-	-	-	-
Tetrachloroethylene	2700.0	320.0	47.0	1200.0	7.4	11.0	-	1.4	-	-
Tetrahydrofuran	4.7	4.6	-	-	-	-	-	-	-	-
Toluene	12.0	32.0	2.0	6.8	2.9	10.0	2.5	4.5	1.0	2.1
trans-1,2-Dichloroethene	-	-	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	-	-	-	-	-	-	-	-	-	-
Trichloroethene	22.0	64.0	-	3.8	-	-	0.98	-	-	-
Vinyl acetate	-	-	-	-	-	-	-	-	-	-
Vinyl Bromide	-	-	-	-	-	-	-	-	-	-
Vinyl chloride	-	-	-	-	-	-	-	-	-	-
Helium	-	-	-	-	-	-	-	-	-	-

- Not detected at concentration exceeding laboratory minimum detection limit (MDL)
Date of work: 1/12/13 (rain 45 F; barometric pressure 29.45 inches mercury)
Date of work: 4/8/14 (overcast 43° F; barometric pressure 29.74 inches mercury)
Shaded constituents are identified in Table 3.3 (Volatile Chemicals and Their Decision Making Matrices) of NYSDOH - Guidance for Evaluating Soil Vapor Intrusion in New York State (10/06)

3.0 INSTITUTIONAL AND ENGINEERING CONTROL PLAN

3.1 General

Since remaining contamination exists at the site, Institutional Controls (ICs) and Engineering Controls (ECs) are required to protect human health and the environment. This IC/EC Plan describes the procedures for the implementation and management of all IC/ECs at the site. The IC/EC Plan is one component of the SMP and is subject to revision by the NYSDEC.

This plan provides:

- A description of all IC/ECs on the site;
- The basic implementation and intended role of each IC/EC;
- A description of the key components of the ICs set forth in the Environmental Easement;
- A description of the controls to be evaluated during each required inspection and periodic review;
- A description of plans and procedures to be followed for implementation of IC/ECs, such as the implementation of the Excavation Work Plan (EWP) (as provided in Appendix D) for the proper handling of remaining contamination that may be disturbed during maintenance or redevelopment work on the site; and
- Any other provisions necessary to identify or establish methods for implementing the IC/ECs required by the site remedy, as determined by the NYSDEC.

3.2 Institutional Controls

A series of ICs is required by the NYSDEC to: (1) implement, maintain and monitor Engineering Control systems; (2) prevent future exposure to remaining contamination; and, (3) limit the use and development of the site to restricted residential, commercial, or industrial uses only. Adherence to these ICs on the site will be required by the Environmental Easement and will be implemented under this SMP. ICs identified in the Environmental Easement may not be discontinued without an amendment to or

extinguishment of the Environmental Easement. The IC boundaries are shown on the ALTA/ASCM Land Title Survey included in Appendix A. These ICs are:

- The property may be used for: restricted residential, commercial, or industrial use. The property may not be used for a higher level of use, such as unrestricted use, without the necessary additional investigation and possible remediation;
- The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Nassau County Department of Health to render it safe for use as drinking water or for process purposes, and the user must first notify and obtain written approval to do so from the Department;
- All future activities that will disturb any remaining contaminated material beneath the retail building must be conducted in accordance with this SMP;
- Activities within the IC boundary must be in compliance with the NYSDEC-approved SMP;
- The site owner or remedial party will 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 in the controls were approved by the NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and the environment or that constitutes a violation or failure to comply with the SMP. This certification shall be submitted annually, or an alternate period of time that the NYSDEC may allow and will be made by an expert that the NYSDEC finds acceptable;
- Access to the site must be provided to agents, employees or other representatives of the NYSDEC with reasonable prior notice to the property owner to assure compliance with the restrictions identified by the Environmental Easement.
- Any future new buildings constructed onsite will be fitted with vapor barriers and evaluated for soil vapor intrusion prior to occupancy;

- The existing retail building onsite is scheduled for demolition. Once it is removed, the subsurface soils in the approximate footprint of the former building will be investigated to determine the extent of soil contamination. If found, contaminated soils must be delineated and addressed by necessary means to meet restricted residential SCOs;
- The NYSDEC will be notified if the Site has a change of use, is sold, or is subdivided; and
- Vegetable gardens and/or farming on the site are prohibited, although community vegetable gardens may be considered with NYSDEC approval.

A copy of the Environmental Easement, including the recording page, is included in Appendix A.

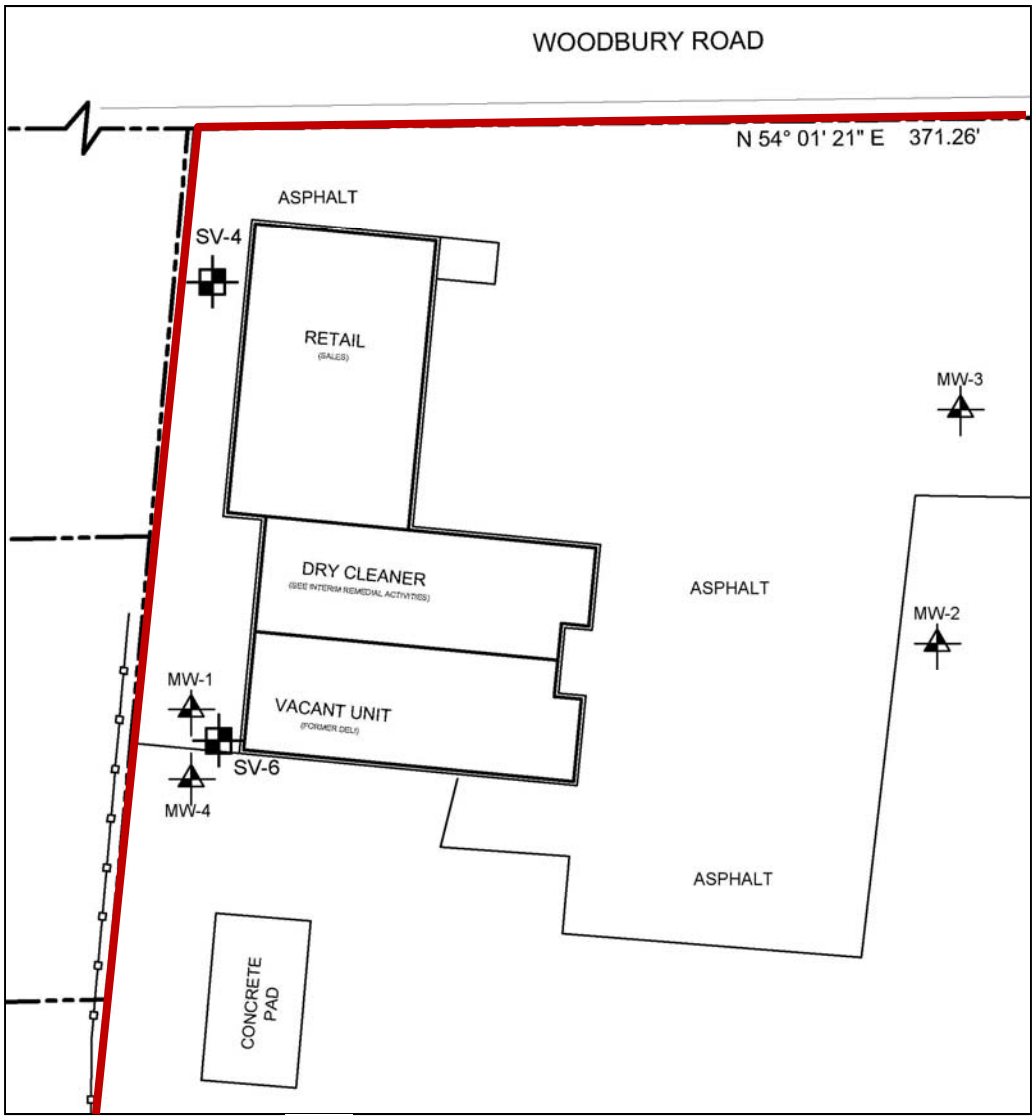
3.3 Engineering Controls

3.3.1 Soil

Although soil with PCE impacts in excess of applicable criteria has not been identified as remaining onsite and an EC for soil is not required, it is possible that PCE-impacted soil remains present beneath or in close proximity to the retail building, which is scheduled for demolition. Figure 3.3.1.1 presents the location of the retail building and associated former dry cleaner. The Excavation Work Plan (EWP) provided in Appendix D, reviewed and approved by the NYSDEC as part of this SMP, outlines the procedures required to be implemented in the event the retail building is demolished. Pursuant to the NYSDEC, the EWP also includes procedures to be used for excavations in the southern wooded portion of the Site that has not been characterized during previous investigations. Completion of activities documented in the EWP is anticipated to eliminate any need for an EC for soil. Any work conducted pursuant to the EWP must also be conducted in accordance with the procedures defined in a Health and Safety Plan (HASP) and associated Community Air Monitoring Plan (CAMP) prepared for the site and provided in Appendix E.

3.3.2 Vapor Barrier and Sub-slab Depressurization System

A new building to be used as an assisted living facility is planned to be constructed onsite. This new building will be equipped with a vapor barrier in accordance with the IC.



Source: Soil Mechanics Environmental Services Drawing 8R711 (8/8/13)

Site Boundary

FPM GROUP		
FIGURE 3.3.1.1 RETAIL BUILDING 926, 928 and 930 WOODBURY ROAD WOODBURY, NEW YORK		
Drawn by: SOD	Checked By: SOD	Date: 5/15/15

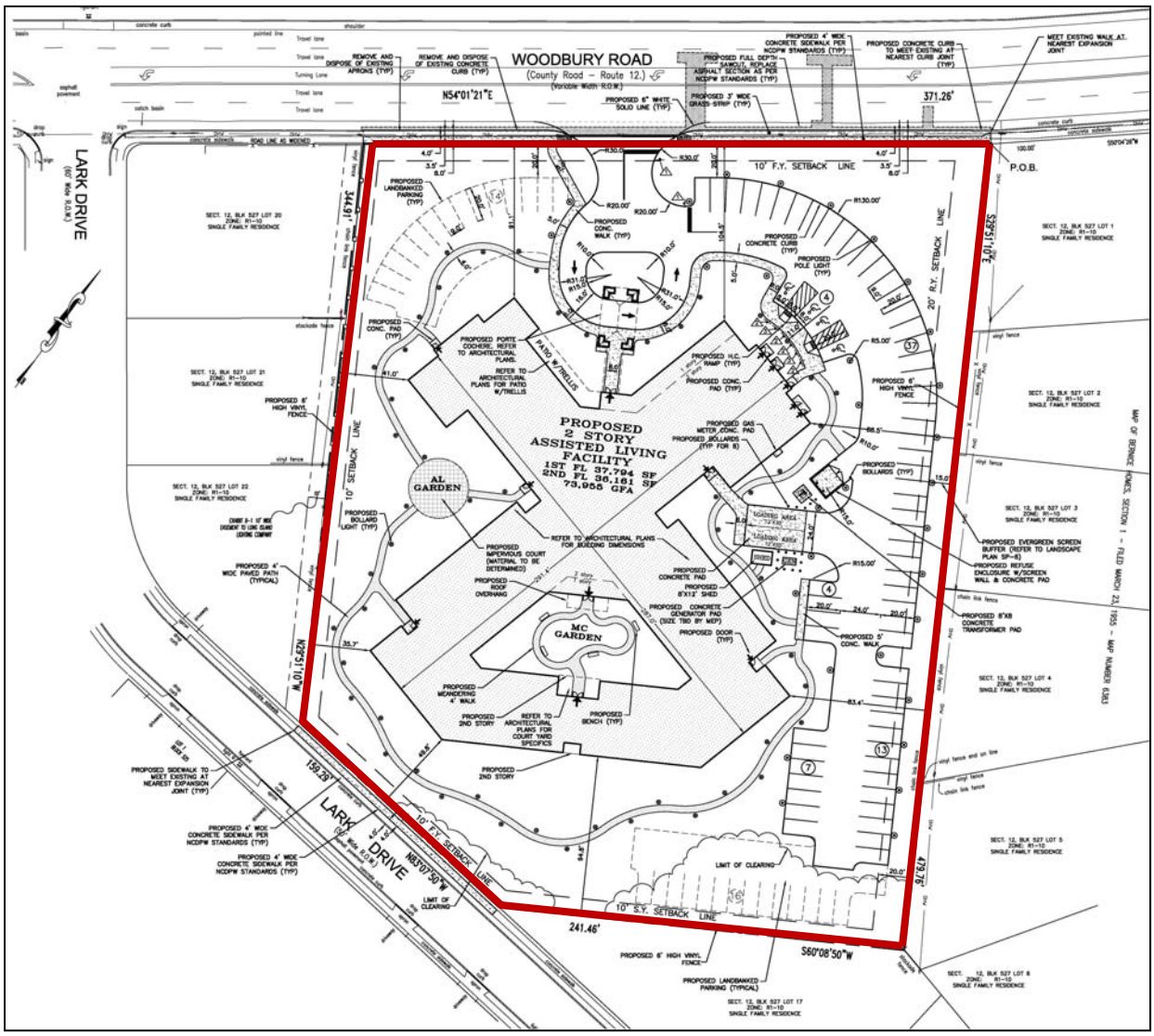
A sub-slab depressurization system (SSDS) is presently in place beneath the Izzy's Dry Cleaner portion of the existing retail building. This building is presently mostly vacant (Mary's Corsetieres, Ltd. is occupied) and the SSDS is operating. In the event that this building continues to be occupied, then the SSDS will be operated and modified as required by the NYSDEC.

As a precautionary measure, the new assisted living facility to be constructed onsite will be constructed with the sub-slab components of an SSDS. SVI testing will be performed, as described in Section 4.4.2 of this SMP. If the results of the SVI testing indicate that mitigation is needed, then the above-grade components of the SSDS will be installed and the SSDS will be operated. Prior to operation the SSDS will be tested and evaluated to determine its mitigation effectiveness.

Although the plans for the proposed assisted living facility have not yet been finalized, the following describes the general implementation of each of the ECs for soil vapor. It is anticipated that any changes in the designs for these measures, if necessary, will be submitted to the NYSDEC.

A vapor barrier will be implemented as an IC for the proposed building to prevent potential impacts to indoor air quality from soil vapors that may remain present onsite. In addition, the proposed new building will be constructed with the sub-slab components of an SSDS. Figure 3.3.2.1 shows the location of the proposed building to be constructed on the site; the vapor barrier EC will coincide with the footprint of the proposed building. The sub-slab SSDS components will also coincide with the building footprint.

If SVI testing conducted for the completed new building indicates that mitigation is necessary for potential SVI concerns, then the above-grade components of the SSDS will be installed and the SSDS will be operated. The SSDS and vapor barrier will be constructed by a construction contractor firm that is familiar with SSDS and vapor barrier construction. Contractor selection will be conducted following NYSDEC approval of this SMP and in conjunction with selection of the redevelopment construction contractor. SSDS and vapor barrier construction will be observed by a QEP and supervised by a PE.



Source: RMS Engineering Preliminary Conceptual Site Plan SP-2 (4/17/15)

Site Boundary

FPM GROUP		
FIGURE 3.3.2.1 PROPOSED REDEVELOPMENT 926, 928 and 930 WOODBURY ROAD WOODBURY, NEW YORK		
Drawn by: SOD	Checked By: SOD	Date: 5/15/15

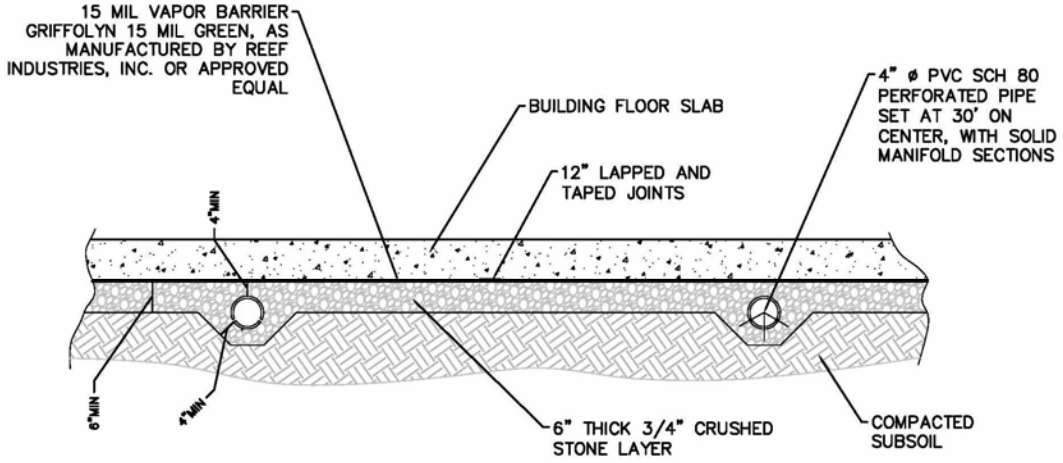
Sub-slab SSDS construction will include installation of lateral piping beneath the concrete slab of the new onsite building. The spacing and locations of the lateral piping will be based on the configuration of the proposed building and typical radius of influence (ROI) testing results from local properties with installed SSDSs. The layout of the SSDS laterals will be developed in a manner so as to provide mitigation for SVI throughout the entire building footprint. The proposed sub-slab SSDS components are shown on Figure 3.3.2.2.

In general, the SSDS lateral piping will be constructed of perforated Schedule 40 PVC pipe with solid slip-on end caps. T-connections will be placed near the center of each lateral for connection to solid piping that will extend to the remedial equipment area(s). Backfill around the lateral piping will consist of uniform gradation gravel-size base material for the concrete slab to be constructed above the laterals. Following lateral piping placement, the backfill will be field-compacted in a manner to reduce the potential for settlement while not damaging the installed lateral piping.

The vapor barrier will be placed during building construction and will be installed beneath the final finished slab and above the sub-slab SSDS components. The vapor barrier will be constructed of a VOC-resistant barrier material (15-mil Griffolyn Green, or approved equivalent) meeting or exceeding the ASTM E-1745 Class A Standard for vapor barriers used in contact with soil under concrete slabs. A geotextile fabric may be used above the sub-slab base material and below the vapor barrier to protect the barrier from possible damage from the base material. Sealing tape will be used to seal joins between sheets of vapor barrier and any pipe penetrations will also be sealed with vapor barrier material or pipe boots in accordance with the manufacturer's instructions. Following placement of the vapor barrier the concrete slab will be constructed.

The perforated laterals for the SSDS will be connected to solid Schedule 40 PVC piping that will be extended above the slab, to the building roof, and capped, pending the outcome of SVI testing.

If the SVI testing for the new building indicates that mitigation is necessary, then the solid piping from each leg of the SSDS will be connected to appropriate operating equipment and the SSDS will be operated. Typical operating equipment may include in-



SUBSLAB VENTING PIPE

Source: RMS Engineering (6/5/15)

FPM GROUP		
FIGURE 3.3.2.2 PROPOSED SUB-SLAB SSDS COMPONENTS 926, 928 and 930 WOODBURY ROAD WOODBURY, NEW YORK		
Drawn by: SOD	Checked By: SOD	Date: 6/5/15

line fans or blowers that discharge above the building roof via stacks. Fan/blower selection will be in accordance with the necessary air flow and vacuum needed to achieve the desired ROI(s). The selected equipment will be installed, together with appropriate ancillary equipment (which may include a moisture separator with a high water safety switch, an air filter, an air flow meter, vacuum gauges, and/or an associated control panel).

The SSDS exhaust stack(s) will be located above the roof a minimum of 10 feet from windows and ventilation inlets. The stack height(s) will be determined based on the results of the SSDS emissions testing performed during the initial start-up period. Stack discharge limits will conform to the NYSDEC's DAR-1 guidance. The stack(s) will be outfitted to allow the use of carbon or other effluent treatment, if required based on the initial start-up results.

Sub-slab monitoring points will be necessary to conduct the initial SVI testing to determine whether mitigation is necessary. If it is necessary to operate the SSDS, then the monitoring points will also be used to optimize the operation of the SSDS and to allow for periodic SVI monitoring to confirm the SSDS ROI and to assess when/if the potential for SVI is no longer present, as described in Section 4 of this SMP. Monitoring points will be installed through the slab at select locations. Each monitoring point will be constructed using a stainless steel screen connected to inert tubing. The screens will be installed through the slab and into the underlying soil at a depth of approximately six inches below the slab. The top of the tubing will be equipped with a valve for monitoring purposes. Each monitoring point annulus will be gravel-packed to approximately six inches below grade and a bentonite seal will be installed above the gravel pack and in contact with the concrete slab. Each monitoring point will be protected by installing a steel protective manhole encased in concrete at the top of the slab. The base of the manhole will be layered with poly sheeting to further reduce the potential for SVI through the monitoring points and for short-circuiting between the atmosphere and the monitoring point screens.

If SVI mitigation is necessary, then following the completion of construction of the above-grade components of the SSDS the SSDS will be placed online by the system construction contractor with oversight by the QEP. The SSDS will be monitored until system vacuums and airflows are stabilized. Modifications (valve adjustments) may be made to operating equipment to optimize SSDS performance. Additional monitoring will be conducted on a weekly basis during the startup period.

A calibrated photoionization detector (PID) will be utilized to monitor initial SSDS effluent emissions. Effluent samples will also be collected to evaluate SSDS emissions compliance following system startup, as described in Section 4 below. Based on the existing soil vapor data, effluent treatment is unlikely to be necessary. However, in the event that effluent treatment is required (carbon canisters or other), then sampling will be performed between the blower and the effluent treatment to monitor system performance and also downstream of the effluent treatment to monitor emissions compliance.

Following SSDS startup, the performance of the SSDS with respect to sub-slab depressurization will be verified by monitoring the pressure beneath the building at the monitoring points to confirm that a downward pressure gradient is established. Monitoring will be performed during the startup period with the results reported in the Construction Completion Report.

Periodic sub-slab pressure monitoring will be continued following the startup of the SSDS to confirm that a downward pressure gradient remains established while the SSDS is running. Additional SVI monitoring may be conducted following termination of the SSDS operation to confirm the post-remedial condition. Procedures for sub-slab pressure and SVI monitoring are provided in Section 4 of this SMP.

All SSDS observations will be recorded in a system logbook that will be kept at the Site for operator reference. The logbook will include operating logs for recording system parameters from the various gauges and figures showing the SSDS lateral piping and monitoring point layout and equipment configuration. SSDS performance observations to be recorded will include obtaining pressure readings at the designated monitoring points to evaluate the SSDS ROIs.

General procedures for operating and maintaining an SSDS are documented in the Operation and Maintenance Plan (Section 5.0 of this SMP). As-built drawings, signed and sealed by a professional engineer, will be included in the Operations and Maintenance Manual to be included in the Construction Completion Report to be prepared after the construction of the vapor barrier and sub-slab components of the SSDS (and above-grade SSDS components, if necessary).

3.3.3 Criteria for Completion of Remediation/Termination of Remedial Systems

Generally, remedial processes are considered completed when monitoring indicates that the remedy has achieved the remedial action objectives identified by the Decision Document. The framework for determining when remedial processes are complete is provided in Section 6.4 of NYSDEC DER-10.

3.3.3.1 - Vapor Barrier

The vapor barrier is a long-term control and the quality and integrity of this system will be inspected at defined, regular intervals in accordance with this SMP. In the event that SVI monitoring demonstrates that SVI no longer presents a concern at this site, then the remedial party may request to discontinue the inspections and certifications of the vapor barrier. The inspections and certifications will not be discontinued without prior written approval from the NYSDEC and NYSDOH.

3.3.3.2 - Sub-Slab Depressurization System

As long as the existing onsite retail building is occupied, then the existing SSDS will be operated and will not be discontinued without prior written approval by the NYSDEC and NYSDOH.

Although an SSDS is not a required EC for the proposed building to be constructed at this site, if the initial SVI evaluation demonstrates that SVI presents a concern, then the above-grade components of the SSDS will be installed and operated. In this case, the active SSDS will not be discontinued without prior written approval from the NYSDEC and the NYSDOH. In the event that the initial SVI evaluation data indicates that SVI does not present a concern but the SSDS is operated as a precautionary

measure, then the active SSDS operation may be discontinued voluntarily by the remedial party, who will notify the NYSDEC and NYSDOH in writing.

3.3.3.3 - Monitoring Wells

Groundwater monitoring activities to assess the anticipated continued decline in PCE levels will continue, as determined by the NYSDEC with consultation with NYSDOH, until residual groundwater concentrations are found to be consistently below ambient water quality standards, the site SCGs, or have become asymptotic at an acceptable level over an extended period. In the event that monitoring data indicates that monitoring may no longer be required, a proposal to discontinue the monitoring system will be submitted by the remedial party. Monitoring will continue until permission to discontinue is granted in writing by the NYSDEC. If groundwater contaminant levels become asymptotic at a level that is not acceptable to the NYSDEC, additional source removal, treatment and/or control measures will be evaluated.

4.0 MONITORING AND SAMPLING PLAN

4.1 General

This Monitoring and Sampling Plan describes the measures for evaluating the overall performance and effectiveness of the remedy. This Monitoring and Sampling Plan may only be revised with the approval of the NYSDEC. Details regarding the sampling procedures, data quality usability objectives, analytical methods, etc. for all samples collected as part of site management for the site are included in the Quality Assurance Project Plan provided in Appendix F.

This Monitoring and Sampling Plan describes the methods to be used for:

- Sampling and analysis of all appropriate media (e.g., groundwater, indoor air, soil vapor, soils);
- Assessing compliance with applicable NYSDEC standards, criteria and guidance (SCGs), particularly groundwater standards and Part 375 SCOs for soil; and
- Evaluating site information periodically to confirm that the remedy continues to be effective in protecting public health and the environment;

To adequately address these issues, this Monitoring and Sampling Plan provides information on:

- Sampling locations, protocol and frequency;
- Information on all designed monitoring systems;
- Analytical sampling program requirements;
- Inspection and maintenance requirements for monitoring wells;
- Monitoring well decommissioning procedures; and
- Annual inspection and periodic certification.

Reporting requirements are provided in Section 7.0 of this SMP.

4.2 Site–wide Inspection

Site-wide inspections will be performed at a minimum of once per year. Modification to the frequency or duration of the inspections will require approval from the NYSDEC. Site-wide inspections will also be performed after all severe weather conditions (for example, a four-inch rain event) that may affect ECs or monitoring devices. During these inspections, an inspection form will be completed as provided in Appendix G – Site Management Forms. The form will compile sufficient information to assess the following:

- Compliance with all ICs, including site usage;
- An evaluation of the condition and continued effectiveness of ECs;
- General site conditions at the time of the inspection;
- The site management activities being conducted including, where appropriate, confirmation sampling and a health and safety inspection; and
- Confirm that site records are up to date.

Inspections of all remedial components installed at the site will be conducted. A comprehensive site-wide inspection will be conducted and documented according to the SMP schedule, regardless of the frequency of the Periodic Review Report. The inspections will determine and document the following:

- Whether ECs continue to perform as designed;
- If these controls continue to be protective of human health and the environment;
- Compliance with requirements of this SMP and the Environmental Easement;
- Achievement of remedial performance criteria; and
- If site records are complete and up to date.

Reporting requirements are outlined in Section 7.0 of this plan.

Inspections will also be performed in the event of an emergency. If an emergency, such as a natural disaster or an unforeseen failure of any of the ECs occurs that reduces or has the potential to reduce the effectiveness of ECs in place at the site, verbal notice to the NYSDEC must be given by noon of the following day. In addition, an inspection of the site will be conducted within 5 days of the event to verify the effectiveness of the IC/ECs implemented at the site by a qualified environmental professional, as determined by the NYSDEC. Written confirmation must be provided to the NYSDEC within 7 days of the event that includes a summary of actions taken, or to be taken, and the potential impact to the environment and the public.

4.3 Mitigation System Monitoring and Sampling

4.3.1 SSDS Monitoring

If an SSDS is required to be operated, then a calibrated photoionization detector (PID) will be utilized to monitor initial SSDS effluent emissions. Effluent samples will also be collected to evaluate SSDS emissions compliance following system startup. During the startup period, effluent samples will be collected from the effluent sampling port located between the blower and the effluent stack utilizing a Summa canister. Each sample will be transported via overnight courier to a NYSDOH ELAP-certified laboratory for analysis of VOCs by EPA Method T0-15. The analytical results will be compared to NYSDEC's DAR-1 guidance to evaluate system emissions and determine emissions treatment requirements. Based on the existing soil vapor data, effluent treatment is unlikely to be necessary. However, in the event that effluent treatment is required (carbon canisters or other), then sampling will be performed between the blower and the effluent treatment to monitor system performance and also downstream of the effluent treatment to monitor emissions compliance.

If an SSDS is required to be operated, then following SSDS startup the performance of the SSDS with respect to sub-slab depressurization will be verified by monitoring the pressure beneath the building at the monitoring points to confirm that a negative pressure gradient is established. Monitoring will be performed during the startup period. Monitoring will be performed using magnahelic gauges and/or a

calibrated Landtec gas monitor with a sensitivity of 0.01" WC. The SSDS operating parameters may be adjusted during the startup period as needed to ensure that a downward pressure gradient is established across the building slab. The results of the startup period sub-slab pressure monitoring will be reported in the Construction Completion Report.

If an SSDS is required to be operated, then periodic sub-slab pressure monitoring will be continued following the startup of the SSDS to confirm that a downward pressure gradient remains established while the SSDS is running. Additional SVI monitoring may be conducted following termination of the SSDS operation to confirm the post-remedial condition.

If an SSDS is required, SSDS monitoring will be performed on a routine basis, as identified in Table 4.3.1.1 - Mitigation System Monitoring Requirements and Schedule (see below). The NYSDEC will be notified of any modification to the frequency or sampling protocols. A visual inspection of the complete system will be conducted during each monitoring event. Unscheduled inspections and/or sampling may take place when a suspected failure of the SSDS has been reported or an emergency occurs that is deemed likely to affect the operation of the system. SSDS components to be monitored include, but are not limited to, the components included in Table 4.3.1.1 below.

Table 4.3.1.1 – Mitigation System Monitoring Requirements and Schedule

Mitigation System Component	Monitoring Parameter	Operating Range	Monitoring Schedule
• Blower(s) • Piping, gauges, filters • Monitoring points	• Flow Rate and Vacuum • Operating Condition • Vacuum & VOCs	• TBD • Operational • TBD	•Monthly •Monthly •Initial and Annual (vacuum), and initial and periodic (VOCs)

A complete list of components to be inspected will be provided in the Inspection Checklist to be included in the Construction Completion Report. If any equipment readings are not within their specified operation range, any equipment is observed to be malfunctioning or the system is not performing within specifications; maintenance and repair, as per the Operation and Maintenance Plan, is required immediately.

4.3.2 Mitigation System Sampling

If an SSDS is operated, then samples shall be collected from the SSDS emissions on a routine basis for the first year of operation. Thereafter, emissions sampling may be discontinued if the results demonstrate that emissions are consistently below NYSDEC Air Guide 1 criteria. Sampling locations, required analytical parameters and schedule will be provided in the Construction Completion Report; example sampling criteria are provided in Table 4.3.2.1 - Mitigation System Sampling Requirements and Schedule below. The NYSDEC will be notified of any modification to the frequency or sampling criteria.

Table 4.3.2.1 – Mitigation System Sampling Requirements and Schedule

Sampling Location	Analytical Parameters	Schedule
	VOC (Method TO-15)	
SSDS Effluent	X	Quarterly (if needed)

Effluent samples will be collected to evaluate SSDS emissions compliance following system startup. The analytical results will be compared to NYSDEC's DAR-1 guidance to evaluate system emissions and determine emissions treatment requirements.

Detailed sample collection and analytical procedures and protocols are provided in Appendix -H – Field Sampling Plan and Appendix F – Quality Assurance Project Plan.

4.4 Post-Remediation Media Monitoring and Sampling

If the initial SVI evaluation demonstrates that mitigation for SVI is required in accordance with NYSDOH guidance, then samples of sub-slab soil vapor, indoor air and ambient (outdoor) air shall be collected to assess the potential for SVI in accordance with the Operation and Monitoring Plan. Groundwater monitoring will be conducted on a quarterly basis to assess the anticipated continued decrease in PCE concentrations. Sampling locations, required analytical parameters and schedule are provided in Table 4.4.1 – Post-Remediation Sampling Requirements and Schedule below. The NYSDEC will be notified of any modification to the frequency or sampling protocols.

Table 4.4.1 – Post Remediation Sampling Requirements and Schedule

Sampling Location	Analytical Parameters		Schedule
	VOCs (EPA Method 8260)	VOCs (Method TO-15)	
SVI locations		X	Initially If needed, then in accordance with the Operation and Monitoring Plan
MW-1 through MW-6	X		Quarterly (initial)

Detailed sample collection and analytical procedures and protocols are provided in Appendix H – Field Sampling Plan and Appendix F – Quality Assurance Project Plan.

4.4.1 Groundwater Sampling

Groundwater monitoring will be initially be performed on a quarterly basis to assess the performance of the remedy. Modification to the frequency or sampling requirements will require approval from the NYSDEC.

The network of monitoring wells has been installed to monitor groundwater conditions at the site. The network of on-site wells has been designed in consultation with the NYSDEC and includes three wells to monitor perched groundwater and three wells to monitor the regional water table aquifer.

Monitoring well construction logs and the locations of the monitoring wells are shown on the monitoring well logs in Appendix C of this SMP. Table 4.4.1.1 summarizes the well identification numbers, as well as the completion interval, location, depths, diameter and screened intervals of the wells.

Table 4.4.1.1 – Monitoring Well Construction Details

Monitoring Well ID	Well Completion Interval	Coordinates (longitude/ latitude)	Well Diameter (inches)	Elevation above mean sea level unless noted as *			
				Casing	Depth to Water (initial)*	Screen Top	Screen Bottom
MW-1	Perched	40°47'49.98"N 73°29'11.84"W	2			80*	100*
MW-2	Perched	40°47'50.94"N 73°29'10.23"W	2			79*	99*
MW-3	Perched	40°47'51.46"N 73°29'10.72"W	2			77*	97*
MW-4	Water Table	40°47'49.98"N 73°29'11.81"W	2	109.04	105.84*	-33.96	-53.96
MW-5	Water Table	40°47'50.97"N 73°29'7.26"W	2	112.29	108.84*	2.29	-16.71
MW-6	Water Table	40°47'52.75"N 73°29'8.86"W	2	112.86	109.49*	2.86	-12.14

* = Depths from grade or top of casing, as appropriate.

If biofouling or silt accumulation occurs in the on-site monitoring wells, the wells will be physically agitated/surged and redeveloped. Additionally, monitoring wells will be properly decommissioned and replaced, if an event renders the wells unusable.

Repairs and/or replacement of wells in the monitoring well network will be performed based on assessments of structural integrity and overall performance.

The NYSDEC will be notified prior to any repair or decommissioning of any monitoring well for the purpose of replacement, and the repair or decommissioning and replacement process will be documented in the subsequent Periodic Review Report. Well decommissioning without replacement will be done only with the prior approval of the NYSDEC. Well abandonment will be performed in accordance with NYSDEC's

guidance entitled “CP-43: Groundwater Monitoring Well Decommissioning Procedures.” Monitoring wells that are decommissioned because they have been rendered unusable will be replaced in kind in the nearest available location, unless otherwise approved by the NYSDEC.

The sampling frequency may only be modified with the approval of the NYSDEC. This SMP will be modified to reflect changes in sampling plans approved by the NYSDEC.

Deliverables for the groundwater monitoring program are specified in Section 7.0 – Reporting Requirements.

4.4.2 Soil Vapor Intrusion Sampling

Soil vapor intrusion (SVI) sampling information is presented on Table 4.4.2.1 – SVI Sampling Requirements and Schedule. SVI sampling will be performed initially following completion of construction of the proposed building via collection of sub-slab soil vapor samples from monitoring points, co-located indoor air samples, and an ambient (outdoor) air sample. This initial sampling will be performed prior to building occupancy to evaluate whether mitigation for potential SVI is needed in accordance with NYSDOH guidance.

If mitigation is not needed, then no further SVI sampling is planned. In the event further SVI sampling is conducted, then the NYSDEC will be informed in writing of any results of SVI sampling.

If mitigation is needed, then the above-grade components of the SSDS will be installed and the SSDS will be operated. Prior to operation, the SSDS will be tested and evaluated to determine its mitigation effectiveness. In this case, SVI sampling will be performed during the pre-operation testing and then periodically to assess indoor air quality, and/or to evaluate when operation of the SSDS may no longer be necessary. In the event that mitigation of SVI (operation of the SSDS) is required, then modification to the frequency or sampling requirements will require approval from the NYSDEC.

The network of on-site soil vapor intrusion sample locations has been designed based on the proposed building design and the following criteria:

- Locations relative to the SSDS laterals so as to confirm ROIs (in the event that the SSDS is operated);
- Locations distributed throughout the building footprint; and
- Locations in proximity to the former dry cleaning facility.

Table 4.4.2.1 – SVI Sampling Requirements and Schedule

Sampling Location	Analytical Parameters		Schedule
	VOC (Method TO-15 low level)	VOC (Method TO-15)	
Sub-slab monitoring points		X	Initial (following construction) If the SSDS is operated, then during pre-operation testing and periodically thereafter
Co-located indoor air monitoring locations	X		
Outdoor (ambient) location	X		

This SMP will be modified to reflect changes in sampling plans approved by the NYSDEC.

Deliverables for the soil vapor intrusion sampling program are specified in Section 7.0 – Reporting Requirements.

4.4.3 Monitoring and Sampling Protocol

All sampling activities will be recorded in a field book and associated sampling log as provided in Appendix G - Site Management Forms. Other observations (e.g., groundwater monitoring well integrity, etc.) will be noted on the sampling log. The sampling log will serve as the inspection form for the monitoring network. Additional detail regarding monitoring and sampling protocols are provided in the site-specific Field Sampling Plan provided as Appendix H of this document.

5.0 OPERATION AND MAINTENANCE PLAN

5.1 General

Although the remedy for this site has not been confirmed to require a mechanical system (SSDS) if the site is redeveloped, this Operation and Maintenance Plan provides a brief description of the measures anticipated to be necessary to operate, monitor and maintain the mechanical components of an SSDS if it is necessary for any future onsite structures. This Operation and Maintenance Plan will be supplemented by an Operation and Maintenance Manual that will:

- Include the procedures necessary to allow individuals unfamiliar with the site to operate and maintain an SSDS;
- Will be updated periodically to reflect changes in site conditions or the manner in which an SSDS is operated and maintained.

Further detail regarding the Operation and Maintenance of the SSDS (if necessary) will be provided in an Operation and Maintenance Manual to be included in the Construction Completion Report. A copy of this Operation and Maintenance Manual, along with the complete SMP, will be maintained at the site. This Operation and Maintenance Plan is not to be used as a stand-alone document, but as a component document of this SMP and together with the Operation and Maintenance Manual.

5.2 SSDS Performance Criteria

The sub-slab SSDS (if required) is intended to be operated such that the ROI of the system will include the entire footprint of the building to prevent the indoor air quality from being affected by any contamination in soil vapor beneath the building. SSDS emissions will meet NYSDEC requirements in DAR-1 Air Guide 1.

5.3 Operation and Maintenance of Sub-slab Depressurization System

The following sections will be included in the Operation and Maintenance Manual for the SSDS for the new building (if necessary) to provide a description of the operations and maintenance of the SSDS. Cut-sheets and as-built drawings for the SSDS will be provided in an Appendix in the Operations and Maintenance Manual.

5.3.1 System Start-Up and Testing

This section will include a description of:

- Manufacturer's recommendations;
- Pre start-up inspection;
- Baseline measurements;
- Testing methods:
  - Checks for leaks;
  - Checks of seals;
  - Pressure tests;
  - System balancing;
  - Warning devices; and
  - Sampling.

The system testing to be described in the Operations and Maintenance Manual will be conducted if, in the course of the SSDS lifetime, the system goes down or significant changes are made to the system and the system must be restarted. If the system is modified or changes are made to the system or associated building, the system will be tested and evaluated for mitigation effectiveness.

5.3.2 Routine System Operation and Maintenance

This section will include a brief description of:

- Manufacturer's recommendations;
- Troubleshooting guide;
- Adjustment and repairs;
- Operation schedule.
- Inspections; and
- Routine maintenance activities and minimum schedules.

A copy of an Operations and Maintenance Manual specific to the SSDS will be provided in the Construction Completion Report, which will provide further detail on the above.

5.3.3 Non-Routine Operation and Maintenance

This section will include a brief description of:

- Warning devices initiated;
- Damage;
- Reduced effectiveness;
- System or component replacement.

A table will be provided that includes a summary and schedule of routine maintenance.

5.3.4 System Monitoring Devices and Alarms

This section will include a description of the SSDS monitoring devices and alarms. Examples of typical SSDS monitoring devices and alarms are provided below:

- Monitoring device and alarm notification for SSDS vacuum blower failure;
- System monitoring device for water level in moisture separator; and
- An alarm notification for high-high moisture separator level.

The following text will be included:

The SSDS has warning devices to indicate that the system is not operating properly. In the event that a warning device is activated, applicable maintenance and repairs will be conducted, as specified in the Operation and Maintenance Manual, and the SSDS will be restarted. Operational problems will be noted in the Periodic Review Report to be prepared for that reporting period.

6.0 PERIODIC ASSESSMENTS/EVALUATIONS

6.1 Climate Change Vulnerability Assessment

Increases in both the severity and frequency of storms/weather events, an increase in sea level elevations along with accompanying flooding impacts, shifting precipitation patterns and wide temperature fluctuation, resulting from global climactic change and instability, have the potential to significantly impact the performance, effectiveness and protectiveness of a given site and associated remedial systems. Vulnerability assessments provide information so that the site and associated remedial systems are prepared for the impacts of the increasing frequency and intensity of severe storms/weather events and associated flooding.

A vulnerability assessment has not been prepared for the site and a vulnerability assessment is not planned. The site is not located in a flood plain or low-lying area. When the site is redeveloped all stormwater will be managed onsite using typical groundwater recharge devices; the site stratigraphy is conducive to such recharge. The site surface is relatively level and erosion does not present a concern. If high winds occur it is unlikely that damage may result as the redeveloped site will not feature large trees in proximity to the building or above-grade SSDS equipment (if installed). Due to the nature of the proposed facility (assisted living), backup power generation will be provided in the event that electric power is interrupted by severe weather. Therefore, SSDS operation (if necessary) is not anticipated to be interrupted. There is not anticipated to be a reasonable possibility of a spill or other contaminant release that could affect the remedial measures; petroleum storage will be very limited and the nature of the proposed use (assisted living) does not include generation or storage of materials that might be considered contaminants.

6.2 Green Remediation Evaluation

NYSDEC's DER-31 Green Remediation requires that green remediation concepts and techniques be considered during all stages of the remedial program, including site management, with the goal of improving the sustainability of the cleanup and summarizing the net environmental benefit of any implemented green technology. This

section of the SMP provides a summary of any green remediation evaluations to be completed for the site during site management, and as reported in the Periodic Review Report (PRR).

This assessment to be included in the PRRs should include, but not be limited to, a discussion of items listed below in relation to the implementation, operation, and maintenance of the selected remedy. Where appropriate, quantification of these items will be provided:

- Waste Generation (describe the management of waste associated with the site remediation and any waste reduction projects implemented).
- Energy usage (electrical usage for operation of remedial systems).
- Emissions (vapor-phase emissions, fuel usage for transportation to and from the site for inspections and/or sampling).
- Water usage (identify sources of water used for remedial purposes).
- Land and/or ecosystems (describe any disturbances and restoration of land and/or ecosystems as part of implementation/operation of the remedy).

Methods proposed to reduce energy consumption, resource usage, waste generation, water usage, etc., if applicable, will be included in the PRR.

6.2.1 SSDS (if necessary)

The SSDS (if necessary) will be operated properly considering the current site conditions to conserve materials and resources to the greatest extent possible. Consideration will be given to operating rates and use of consumables. Spent materials, if generated, will be sent for recycling, as appropriate.

The parameters to be evaluated for the SSDS (if installed) include, but are not limited to:

- SSDS laterals (operating rates/locations); and
- Effluent treatment systems (spent carbon replacement and disposal or regeneration).

6.2.2 SSDS Equipment Enclosure Operations

Structures containing SSDS equipment (if installed) will be operated and maintained to provide for the most efficient operation of the remedy, while minimizing energy, waste generation and water consumption.

Components to be evaluated should include, but are not limited to:

- Heating/cooling systems and temperature set-points;
- Building skin, insulation and building use and occupancy;
- Ventilation;
- Lighting and plug loads; and
- Grounds and property management.

6.2.3 Frequency of System Checks, Sampling and Other Periodic Activities

Transportation to and from the Site and use of consumables in relation to visiting the Site to conduct system checks and/or collect samples and shipping samples to a laboratory for analyses have direct and/or inherent energy costs. The schedule and/or means of these periodic activities will be prepared so that these tasks can be accomplished in a manner that does not impact remedy protectiveness but reduces expenditure of energy or resources.

In the case of this site consideration shall be given to:

- Reduced sampling frequencies;
- Reduced site visits and system checks;
- Installation of remote sensing/operations and telemetry; and
- Coordination/consolidation of activities to maximize labor time.

6.2.4 Metrics and Reporting

Information on energy usage, solid waste generation, transportation and shipping, water usage, and land use and ecosystems during the remedial process will be recorded to facilitate and document implementation of green remediation during site management and to identify corresponding benefits. This information will be reported in the PRRs.

6.3 Remedial System Optimization

A Remedial Site Optimization (RSO) study is unlikely to be necessary for this site, given the relatively low levels of any residual contamination remaining and the absence of active remedial systems. However, an RSO may be conducted if the NYSDEC or the remedial party requests in writing that an in-depth evaluation of the remedy is needed. An RSO may be appropriate if any of the following occur:

- The remedial actions have not met or are not expected to meet RAOs in the time frame estimated in the Decision Document;
- The management and operation of the remedial system is exceeding the estimated costs;
- The remedial system is not performing as expected or as designed;
- Previously unidentified source material may be suspected;
- Plume shift has potentially occurred;
- Site conditions change due to development, change of use, change in groundwater use, etc.;
- There is an anticipated transfer of the site management to another remedial party or agency; and/or
- A new and applicable remedial technology becomes available.

An RSO typically provides a critique of a site's conceptual model, gives a summary of past performance, documents current cleanup practices, summarizes progress made toward the site's cleanup goals, gathers additional performance or media-specific data and information, and provides recommendations for improvements to enhance the ability of the present system to reach RAOs or to provide a basis for changing the remedial strategy.

An RSO study will focus on the overall site cleanup strategy, process optimization, and management with the intent of identifying impediments to cleanup and improvements to site operations to increase efficiency, cost-effectiveness and remedial time frames. Green remediation technology and principals are to be considered when performing the RSO.

7.0. REPORTING REQUIREMENTS

7.1 Site Management Reports

All site management inspection, maintenance and monitoring events will be recorded on the appropriate site management forms provided in Appendix G. These forms are subject to revision and NYSDEC approval.

All applicable inspection forms and other records, including media sampling data and system maintenance reports, generated for the site during the reporting period, will be provided in electronic format to the NYSDEC in accordance with the requirements of Table 7.1.1, and summarized in the Periodic Review Report.

Table 7.1.1: Schedule of Interim Monitoring/Inspection Reports

Task/Report	Reporting Frequency*
Inspection Report	Annually
Periodic Review Report	Annually, or as otherwise determined by the Department

* The frequency of events will be conducted as specified until otherwise approved by the NYSDEC.

All interim monitoring/inspections reports will include, at a minimum:

- Date of event or reporting period;
- Name, company, and position of person(s) conducting monitoring/inspection activities;
- Description of the activities performed;
- Where appropriate, color photographs or sketches showing the approximate location of any problems or incidents noted (included either on the checklist/form or on an attached sheet);
- Type of samples collected (e.g., sub-slab vapor, indoor air, outdoor air, etc);

- Copies of all field forms completed (e.g., well sampling logs, chain-of-custody documentation, etc.);
- Sampling results in comparison to appropriate standards/criteria;
- A figure illustrating sample type and sampling locations;
- Copies of all laboratory data sheets and the required laboratory data deliverables required for all points sampled (to be submitted electronically in the NYSDEC-identified format);
- Any observations, conclusions, or recommendations; and
- A determination as to whether contaminant conditions have changed since the last reporting event.

Routine maintenance event reporting forms will include, at a minimum:

- Date of event;
- Name, company, and position of person(s) conducting maintenance activities;
- Description of maintenance activities performed;
- Any modifications to the system;
- Where appropriate, color photographs or sketches showing the approximate location of any problems or incidents noted (included either on the checklist/form or on an attached sheet); and,
- Other documentation such as copies of invoices for maintenance work, receipts for replacement equipment, etc., (attached to the checklist/form).

Non-routine maintenance event reporting forms will include, at a minimum:

- Date of event;
- Name, company, and position of person(s) conducting non-routine maintenance/repair activities;
- Description of non-routine activities performed;
- Where appropriate, color photographs or sketches showing the approximate location of any problems or incidents (included either on the form or on an attached sheet); and

- Other documentation such as copies of invoices for repair work, receipts for replacement equipment, etc. (attached to the checklist/form).

Data will be reported in digital format as determined by the NYSDEC. Currently, data is to be supplied electronically and submitted to the NYSDEC EQuIS^{TM} database in accordance with the requirements found at this link:

http://www.dec.ny.gov/chemical/62440.html

7.2 Periodic Review Report

A Periodic Review Report (PRR) will be submitted to the Department beginning sixteen (16) months after the Certificate of Completion or equivalent document (e.g., Satisfactory Completion Letter, No Further Action Letter, etc.) is issued. After submittal of the initial PRR, the next PRR shall be submitted annually to the Department or at another frequency as may be required by the Department. In the event that the site is subdivided into separate parcels with different ownership, a single PRR will be prepared that addresses the site described in Appendix A. The report will be prepared in accordance with NYSDEC's DER-10 and submitted within 60 days of the end of each certification period. Media sampling results will also be incorporated into the PRR. The report will include:

- Identification, assessment and certification of all ECs/ICs required by the remedy for the site.
- Results of the required annual site inspections and severe condition inspections, if applicable.
- All applicable site management forms and other records generated for the site during the reporting period in the NYSDEC-approved electronic format, if not previously submitted.
- A summary of any discharge monitoring data and/or information generated during the reporting period, with comments and conclusions.
- Data summary tables and graphical representations of contaminants of concern by media (groundwater, soil vapor, etc.), which include a listing of all compounds analyzed, along with the applicable standards, with all exceedances highlighted. These will include a presentation of past data as part of an evaluation of contaminant concentration trends.

- Results of all analyses, copies of all laboratory data sheets, and the required laboratory data deliverables for all samples collected during the reporting period will be submitted in digital format as determined by the NYSDEC. Currently, data is supplied electronically and submitted to the NYSDEC EQuIS™ database in accordance with the requirements found at this link: http://www.dec.ny.gov/chemical/62440.html

- A site evaluation, which includes the following:

  – The compliance of the remedy with the requirements of the site-specific Decision Document;

  – The operation and the effectiveness of all treatment units, etc., including identification of any needed repairs or modifications;

  – Any new conclusions or observations regarding site contamination based on inspections or data generated by the Monitoring and Sampling Plan for the media being monitored;

  – Recommendations regarding any necessary changes to the remedy and/or Monitoring and Sampling Plan; and

  – Trends in contaminant levels in the affected media will be evaluated to determine if the remedy continues to be effective in achieving remedial goals as specified by the Decision Document.

  – The overall performance and effectiveness of the remedy.

7.2.1 Certification of Institutional and Engineering Controls

Following the last inspection of the reporting period, a qualified environmental professional will prepare, and include in the Periodic Review Report, the following certification as per the requirements of NYSDEC DER-10:

"*For each institutional or engineering control identified for the site, I certify that all of the following statements are true:*

- *The inspection of the site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under my direction;*

- *The institutional control and/or engineering control employed at this site is unchanged from the date the control was put in place, or last approved by the Department;*

- *Nothing has occurred that would impair the ability of the control to protect the public health and environment;*

- *Nothing has occurred that would constitute a violation or failure to comply with any site management plan for this control;*

- *Access to the site will continue to be provided to the Department to evaluate the remedy, including access to evaluate the continued maintenance of this control;*

- *If a financial assurance mechanism is required under the oversight document for the site, the mechanism remains valid and sufficient for the intended purpose under the document;*

- *Use of the site is compliant with the environmental easement;*

- *The engineering control systems are performing as designed and are effective;*

- *To the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program; and*

- *The information presented in this report is accurate and complete.*

I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law. I, [name], of [business address], am certifying as [Owner/Remedial Party or Owner's/Remedial Party's Designated Site Representative] for the site."

The signed certification will be included in the Periodic Review Report.

The Periodic Review Report will be submitted, in electronic format, to the NYSDEC Central Office, Regional Office in which the site is located and the NYSDOH Bureau of Environmental Exposure Investigation. The Periodic Review Report may need to be submitted in hard-copy format, as requested by the NYSDEC project manager.

7.3 Corrective Measures Work Plan

If any component of the remedy is found to have failed, or if the periodic certification cannot be provided due to the failure of an institutional or engineering control, a Corrective Measures Work Plan will be submitted to the NYSDEC for approval. This plan will explain the failure and provide the details and schedule for performing work necessary to correct the failure. Unless an emergency condition exists, no work will be performed pursuant to the Corrective Measures Work Plan until it has been approved by the NYSDEC.

7.4 Remedial Site Optimization Report

In the event that an RSO is to be performed (see Section 6.3), upon completion of an RSO, an RSO report must be submitted to the Department for approval. The RSO report will document the research/ investigation and data gathering that was conducted, evaluate the results and facts obtained, and present a revised conceptual site model and recommendations. RSO recommendations are to be implemented upon approval from the NYSDEC. Additional work plans, design documents, HASPs etc., may still be required to implement the recommendations, based upon the actions that need to be taken. A final engineering report and update to the SMP may also be required.

The RSO report will be submitted, in electronic format, to the NYSDEC Central Office, Regional Office in which the site is located, Site Control and the NYSDOH Bureau of Environmental Exposure Investigation.

8.0 REFERENCES

6NYCRR Part 375, Environmental Remediation Programs, December 14, 2006

NYSDEC DER-10 – "Technical Guidance for Site Investigation and Remediation"

NYSDEC, 1998. Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1. June 1998 (April 2000 addendum)

NYSDOH, Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006

SMES, Phase II Environmental Site Assessment, 1/28/09

SMES, Supplemental Subsurface Investigation and Interim Remedial Measures Report, 10/09

SMES, Supplemental Groundwater Investigation Report, 9/10

SMES, Phase I Environmental Site Assessment, 4/11

SMES, Supplemental Site Assessment Report of Findings, 8/12

SMES, Retail Building - Post Sub-Slab Venting System Activation Vapor Intrusion Assessment (results presented in work plan), 8/2/13

SMES, Underground Injection Well Remedial Action Work Plan Report of Findings, 7/14

SMES, Supplemental Soil Vapor and Groundwater Assessment Report, 10/24/14

SMES, Construction Completion Report, 3/20/15

APPENDIX A

ALTA/ACSM LAND SURVEY WITH METES AND BOUNDS ENVIRONMENTAL EASEMENT

A copy of the ALTA/ASCM Land Survey showing the metes and bounds of the Site is included in this Appendix.

A copy of the Environmental Easement, including the recording page, is included in this Appendix.

UNAUTHORIZED ALTERATION OR ADDITION TO THIS SURVEY IS A VIOLATION OF SECTION 7209 OF THE NEW YORK STATE EDUCATION LAW.

COPIES OF THIS SURVEY MAP NOT BEARING THE LAND SURVEYOR'S INKED SEAL OR EMBOSSED SEAL SHALL NOT BE CONSIDERED TO BE A VALID TRUE COPY.

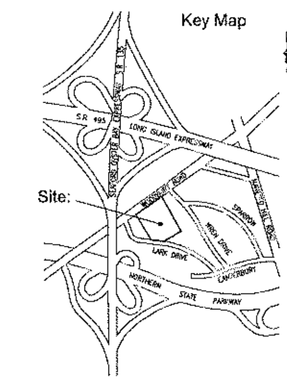
GUARANTEES INDICATED HEREON SHALL RUN ONLY TO THE PERSON FOR WHOM THE SURVEY IS PREPARED, AND ON HIS BEHALF TO THE TITLE COMPANY, GOVERNMENTAL AGENCY AND LENDING INSTITUTION LISTED HEREON, AND TO THE ASSIGNEES OF THE LENDING INSTITUTION. GUARANTEES ARE NOT TRANSFERABLE.

Note: ALL SUBSURFACE STRUCTURES; WATER SUPPLY, SANITARY SYSTEMS, DRAINAGE, DRYWELLS AND UTILITIES, SHOWN ARE FROM FIELD OBSERVATIONS AND OR DATA OBTAINED FROM OTHERS.

DRAWN BY: BM	CHECKED BY: JM
CAD FILE DATE: MAY2013	
DRAWING NO.: 13\WOODBURY900	

Legend

- PAINTED TRAFFIC ARROWS
- FIRE HYDRANT
- UTILITY POLE
- WATER VALVE
- WATER METER
- LIGHT STANCHION
- CATCH BASIN (CURB TYPE)
- CATCH BASIN
- PARKING STALLS (handicapped)
- SIGN
- MANHOLE
- PAINTED PARKING STALLS (quantity)
- BORING
- SAMPLE WELL



Schedule B (Exceptions)

FIDELITY NATIONAL TITLE INSURANCE COMPANY
Title Number 13-7406-29785-N Dated April 16, 2013

5.	Liber 6247 Page 475	Covenants (EXHIBIT A)	Affects entire parcel. No graphic representation shown.
6.	Liber 6415 Page 234	Agreement (EXHIBIT B)	No affect on subject parcel. Graphic representation for Easement 1 only, Labeled Exhibit B-1
7.	Liber 6415 Page 240	Agreement (EXHIBIT C)	No affect on subject parcel. No Graphic representation shown.

Utility Marking

SOURCE OF INFOMATION	
CABLEVISION OF WOODBURY	800.262.8600
JERICHO WATER DISTRICT	516.921.8280
LONG ISLAND POWER AUTHORITY	800.262.8600
NASSAU COUNTY TRAFFIC SIGNALS	516.572.0465
TOWN OF OYSTER BAY	516.677.5757

FLOOD ZONE (FIRM)

ZONE X, OUTSIDE 500 YEAR FLOOD
MAP NUMBER 36059C EFFECTIVE DATE 9/11/2009
PANEL: 36059C0165G

This property is not located within a FEMA flood hazard zone.

On Site Parking

13 PAINTED STANDARD PARKING STALLS
2 PAINTED HANDICAP PARKING STALLS
15 TOTAL PAINTED PARKING STALLS

Zoning- Town of Oyster Bay

NB - NEIGHBORHOOD BUSINESS ZONE

MAX. FRONT YARD- 50'
MIN. FRONT YARD- 10'
ONE SIDE YARDS- 0' *
BOTH SIDE YARDS- 0'
REAR YARD- 20'
MAXIMUM HEIGHT- (2 STORY) 30'
MIN. LOT AREA- 10,000 S.F.
MIN. LOT WIDTH FRONTAGE- 50'
MAX. BUILDING COVERAGE- 60%

* Except, a minimum of 5 feet, if a sideyard is provided, and a minimum of 10 feet where adjacent to a residence district.

Site Notes

POST OFFICE -	WOODBURY 11797
WATER DISTRICT -	JERICHO
SCHOOL DISTRICT-	WOODBURY
SEWER DISTRICT-	COLLECTION DIST. 3
FIRE DISTRICT-	PLAINVIEW
WETLANDS-	NONE

Description:

All that certain Plot or Parcel of Land with the buildings and improvements thereon erected, situate, lying and being at Woodbury, Town of Oyster Bay, Nassau County and State of New York bounded and described as follows:

BEGINNING at a point on the southeasterly side of Woodbury Road (as widened) distant 100.00' feet southwesterly from the extreme westerly end of an arc of a curve connecting the southwesterly side of Wren Drive and the southeasterly side of Woodbury Road (as widened);

Thence, south 29 degrees 51 minutes 10 seconds east a distance of 479.76' feet;
Thence, south 60 degrees 08 minutes 50 seconds west a distance of 241.46' feet;
Thence, north 83 degrees 07 minutes 50 seconds west a distance of 159.29' feet;
Thence, north 29 degrees 51 minutes 10 seconds west a distance of 344.91' feet to the southeasterly side of Woodbury Road (as widened);
Thence, along the southeasterly side of Woodbury Road (as widened), north 54 degrees 01 minute 21 seconds east a distance of 371.26' feet to the POINT OF BEGINNING.

Premises known as:
900 Woodbury Road, Woodbury, New York

ELEVATIONS REFER TO NAVD88.

Area= 163,709 s.f. or 3.76 Acres

CERTIFICATION

To Fidelity National Title Insurance Company:

This is to certify that this map or plot and the survey on which it is based were made in accordance with the 2011 Minimum Standard Detail Requirements for ALTA/ACSM Land Title Surveys, jointly established and adopted by ALTA and NSPS and includes Items 1-4, 5, 6a, 6b, 7a, 7b, 7c, 8, 9, 11a, 11b, 14, 16-19, and 20a of Table A thereof. The field work was completed on April 29, 2013.

John Mato, L.S. N.Y.S. License No. 49866

GRAPHIC SCALE

(IN FEET)
1 inch = 40 ft.

JM LAND SURVEYING
SUBDIVISIONS
TITLE & MORTGAGE SURVEYS
TOPOGRAPHIC SURVEYS
LAND PLANNERS
SITE PLANS

JOHN MINTO, L.S.
LICENSED PROFESSIONAL LAND SURVEYOR
NEW YORK STATE LIC. NO. 49866
PHONE: (631) 724-4832
FAX: (631) 724-5456
93 SMITHTOWN BOULEVARD SMITHTOWN, N.Y. 11787

ALTA / ACSM LAND TITLE SURVEY
of property situate at
#900 Woodbury Road, Woodbury
Town of Oyster Bay, Nassau County, New York
Tax Map Section 12 Block 527
Lot 24
Scale 1"= 40' May 20, 2013

**** Electronically Filed Document ****

Instrument Number: 2016-53655

Recorded As: EX-D06 - DEED AGREEM

Recorded On: June 01, 2016

Recorded At: 11:42:05 am Receipt Number: 279462

Number of Pages: 11 Processed By: 001 CI

Book-VI/Pg: Bk-D VI-13368 Pg-87

Total Rec Fee(s): $400.00

** Examined and Charged as Follows **

06 - DEED AGREEMENT	$ 95.00	EX-Blocks - Deeds - $300	$ 300.00	EX-TP-584 Affidavit Fee	$ 5.00

	Tax Amount	Consid Amt	RS#/CS#		
Tax-Transfer OYSTER BAY	$ 0	$ 0	RE 21244	Basic	$ 0.00
				Local NY CITY	$ 0.00
				Additional MTA	$ 0.00
				Spec ASST	$ 0.00
				Spec ADDL SONYMA	$ 0.00
				Transfer	$ 0.00
Tax Charge:	$ 0				

Property Information:

Section	Block	Lot	Unit	Town Name
12	527	24		OYSTER BAY

**********THIS PAGE IS PART OF THE INSTRUMENT **********

Any provision herein which restricts the Sale, Rental or use of the described REAL PROPERTY because of color or race is invalid and unenforceable under federal law.

NASSAU COUNTY STATE OF NEW YORK

Maureen O'Connell

County Clerk Maureen O'Connell

County: Nassau Site No: 130200 Order on Consent Index : A1-0658-01-11 ST1627286

SEC: 12 Block: 527 Lot: 24

ENVIRONMENTAL EASEMENT GRANTED PURSUANT TO ARTICLE 71, TITLE 36 OF THE NEW YORK STATE ENVIRONMENTAL CONSERVATION LAW

THIS INDENTURE made this 13th day of May, 2016, between Owner(s) Joan III, LLC and Joe III, LLC, having an office at 30 Rolling Drive, Brookville, County of Nassau, State of New York (the "Grantor"), and The People of the State of New York (the "Grantee."), acting through their Commissioner of the Department of Environmental Conservation (the "Commissioner", or "NYSDEC" or "Department" as the context requires) with its headquarters located at 625 Broadway, Albany, New York 12233,

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to encourage the remediation of abandoned and likely contaminated properties ("sites") that threaten the health and vitality of the communities they burden while at the same time ensuring the protection of public health and the environment; and

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to establish within the Department a statutory environmental remediation program that includes the use of Environmental Easements as an enforceable means of ensuring the performance of operation, maintenance, and/or monitoring requirements and the restriction of future uses of the land, when an environmental remediation project leaves residual contamination at levels that have been determined to be safe for a specific use, but not all uses, or which includes engineered structures that must be maintained or protected against damage to perform properly and be effective, or which requires groundwater use or soil management restrictions; and

WHEREAS, the Legislature of the State of New York has declared that Environmental Easement shall mean an interest in real property, created under and subject to the provisions of Article 71, Title 36 of the New York State Environmental Conservation Law ("ECL") which contains a use restriction and/or a prohibition on the use of land in a manner inconsistent with engineering controls which are intended to ensure the long term effectiveness of a site remedial program or eliminate potential exposure pathways to hazardous waste or petroleum; and

WHEREAS, Grantor, is the owner of real property located at the address of 926 Woodbury Road in the Town of Oyster Bay, County of Nassau and State of New York, known and designated on the tax map of the County Clerk of Nassau as tax map parcel numbers: Section 12 Block 527 Lot 24, being the same as that property conveyed to Grantor by deed dated January 3, 2006 and recorded in the Nassau County Clerk's Office in Liber and Page 12060/976. The property subject to this Environmental Easement (the "Controlled Property") comprises approximately 3.79 +/- acres, and is hereinafter more fully described in the Land Title Survey dated May 20, 2013 prepared by John Minto, L.S., which will be attached to the Site Management Plan. The Controlled Property description is set forth in and attached hereto as Schedule A; and

WHEREAS, the Department accepts this Environmental Easement in order to ensure the protection of public health and the environment and to achieve the requirements for remediation established for the Controlled Property until such time as this Environmental Easement is extinguished pursuant to ECL Article 71, Title 36; and

NOW THEREFORE, in consideration of the mutual covenants contained herein and the terms and conditions of Order on Consent Index Number: A1-0658-01-11, Grantor conveys to Grantee a permanent Environmental Easement pursuant to ECL Article 71, Title 36 in, on, over, under, and upon the Controlled Property as more fully described herein ("Environmental Easement")

1. Purposes. Grantor and Grantee acknowledge that the Purposes of this Environmental Easement are: to convey to Grantee real property rights and interests that will run with the land in perpetuity in order to provide an effective and enforceable means of encouraging the reuse and redevelopment of this Controlled Property at a level that has been determined to be safe for a specific use while ensuring the performance of operation, maintenance, and/or monitoring requirements; and to ensure the restriction of future uses of the land that are inconsistent with the above-stated purpose.

2. Institutional and Engineering Controls. The controls and requirements listed in the Department approved Site Management Plan ("SMP") including any and all Department approved amendments to the SMP are incorporated into and made part of this Environmental Easement. These controls and requirements apply to the use of the Controlled Property, run with the land, are binding on the Grantor and the Grantor's successors and assigns, and are enforceable in law or equity against any owner of the Controlled Property, any lessees and any person using the Controlled Property.

A. (1) The Controlled Property may be used for:

Restricted Residential as described in 6 NYCRR Part 375-1.8(g)(2)(ii), Commercial as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and Industrial as described in 6 NYCRR Part 375-1.8(g)(2)(iv)

(2) All Engineering Controls must be operated and maintained as specified in the Site Management Plan (SMP);

(3) All Engineering Controls must be inspected at a frequency and in a manner defined in the SMP;

(4) The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Nassau County Department of Health to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department;

(5) Groundwater and other environmental or public health monitoring must be performed as defined in the SMP;

(6) Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in the SMP;

(7) All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;

(8) Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP;

(9) Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy shall be performed as defined in the SMP;

(10) Access to the site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by this Environmental Easement.

B. The Controlled Property shall not be used for Residential purposes as defined in 6NYCRR 375-1.8(g)(2)(i), and the above-stated engineering controls may not be discontinued without an amendment or extinguishment of this Environmental Easement.

C. The SMP describes obligations that the Grantor assumes on behalf of Grantor, its successors and assigns. The Grantor's assumption of the obligations contained in the SMP which may include sampling, monitoring, and/or operating a treatment system, and providing certified reports to the NYSDEC, is and remains a fundamental element of the Department's determination that the Controlled Property is safe for a specific use, but not all uses. The SMP may be modified in accordance with the Department's statutory and regulatory authority. The Grantor and all successors and assigns, assume the burden of complying with the SMP and obtaining an up-to-date version of the SMP from:

Site Control Section
Division of Environmental Remediation
NYSDEC
625 Broadway
Albany, New York 12233
Phone: (518) 402-9553

D. Grantor must provide all persons who acquire any interest in the Controlled Property a true and complete copy of the SMP that the Department approves for the Controlled Property and all Department-approved amendments to that SMP.

E. Grantor covenants and agrees that until such time as the Environmental Easement is extinguished in accordance with the requirements of ECL Article 71, Title 36 of the ECL, the property deed and all subsequent instruments of conveyance relating to the Controlled Property shall state in at least fifteen-point bold-faced type:

This property is subject to an Environmental Easement held by the New York State Department of Environmental Conservation pursuant to Title 36 of Article 71 of the Environmental Conservation

Law.

F. Grantor covenants and agrees that this Environmental Easement shall be incorporated in full or by reference in any leases, licenses, or other instruments granting a right to control a portion of the Controlled Property.

G. Grantor covenants and agrees that it shall, at such time as NYSDEC may require, submit to NYSDEC a written statement by an expert the NYSDEC may find acceptable certifying under penalty of perjury, in such form and manner as the Department may require, that:

(1) the inspection of the site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under the direction of the individual set forth at 6 NYCRR Part 375-1.8(h)(3).

(2) the institutional controls and/or engineering controls employed at such site:

(i) are in-place;

(ii) are unchanged from the previous certification, or that any identified changes to the controls employed were approved b the NYSDEC and that all controls are in the Department-approved format; and

(iii) that nothing has occurred that would impair the ability of such control to protect the public health and environment;

(3) the owner will continue to allow access to such real property to evaluate the continued maintenance of such controls;

(4) nothing has occurred that would constitute a violation or failure to comply with any site management plan for such controls;

(5 the report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

(6) to the best of his/her knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and

(7) the information presented is accurate and complete.

3. Right to Enter and Inspect. Grantee, its agents, employees, or other representatives of the State may enter and inspect the Controlled Property in a reasonable manner and at reasonable times to assure compliance with the above-stated restrictions.

4. Reserved Grantor's Rights. Grantor reserves for itself, its assigns, representatives, and successors in interest with respect to the Property, all rights as fee owner of the Property, including:

A. Use of the Controlled Property for all purposes not inconsistent with, or limited by the terms of this Environmental Easement;

B. The right to give, sell, assign, or otherwise transfer part or all of the underlying fee interest to the Controlled Property, subject and subordinate to this Environmental Easement;

5. Enforcement

A. This Environmental Easement is enforceable in law or equity in perpetuity by

Grantor, Grantee, or any affected local government, as defined in ECL Section 71-3603, against the owner of the Property, any lessees, and any person using the land. Enforcement shall not be defeated because of any subsequent adverse possession, laches, estoppel, or waiver. It is not a defense in any action to enforce this Environmental Easement that: it is not appurtenant to an interest in real property; it is not of a character that has been recognized traditionally at common law; it imposes a negative burden; it imposes affirmative obligations upon the owner of any interest in the burdened property; the benefit does not touch or concern real property; there is no privity of estate or of contract; or it imposes an unreasonable restraint on alienation.

B. If any person violates this Environmental Easement, the Grantee may revoke the Certificate of Completion with respect to the Controlled Property.

C. Grantee shall notify Grantor of a breach or suspected breach of any of the terms of this Environmental Easement. Such notice shall set forth how Grantor can cure such breach or suspected breach and give Grantor a reasonable amount of time from the date of receipt of notice in which to cure. At the expiration of such period of time to cure, or any extensions granted by Grantee, the Grantee shall notify Grantor of any failure to adequately cure the breach or suspected breach, and Grantee may take any other appropriate action reasonably necessary to remedy any breach of this Environmental Easement, including the commencement of any proceedings in accordance with applicable law.

D. The failure of Grantee to enforce any of the terms contained herein shall not be deemed a waiver of any such term nor bar any enforcement rights.

6. Notice. Whenever notice to the Grantee (other than the annual certification) or approval from the Grantee is required, the Party providing such notice or seeking such approval shall identify the Controlled Property by referencing the following information:

County, NYSDEC Site Number, NYSDEC Brownfield Cleanup Agreement, State Assistance Contract or Order Number, and the County tax map number or the Liber and Page or computerized system identification number.

Parties shall address correspondence to:

Site Number: 130200
Office of General Counsel
NYSDEC
625 Broadway
Albany New York 12233-5500

With a copy to:

Site Control Section
Division of Environmental Remediation
NYSDEC
625 Broadway
Albany, NY 12233

All notices and correspondence shall be delivered by hand, by registered mail or by Certified mail and return receipt requested. The Parties may provide for other means of receiving and communicating notices and responses to requests for approval.

7. Recordation. Grantor shall record this instrument, within thirty (30) days of execution of this instrument by the Commissioner or her/his authorized representative in the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

8. Amendment. This Environmental Easement may only be amended upon mutual consent of the parties. Any amendment to this Environmental Easement may only be executed by the Commissioner of the New York State Department of Environmental Conservation or the Commissioner's Designee, and must be filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

9. Extinguishment. This Environmental Easement may be extinguished only by a release by the Commissioner of the New York State Department of Environmental Conservation, or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

10. Joint Obligation. If there are two or more parties identified as Grantor herein, the obligations imposed by this instrument upon them shall be joint and several.

Remainder of Page Intentionally Left Blank

IN WITNESS WHEREOF, Grantor has caused this instrument to be signed in its name.

JOAN III, LLC:

By: Joan A. D'Auria

Print Name: JOAN A D'AURIA

Title: MEMBER Date: 4/15/16

Grantor's Acknowledgment

STATE OF FLORIDA)
) ss:
COUNTY OF SARASOTA)

On the 15th day of APRIL, in the year 2016, before me, the undersigned, personally appeared JOAN D'AURIA, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

Notary Public - State of ~~New York~~ FLORIDA
RAYMOND MIRARCHI

Raymond Mirarchi
MY COMMISSION # FF221373
EXPIRES: June 01, 2019

IN WITNESS WHEREOF, Grantor has caused this instrument to be signed in its name.

JOE III, LLC:

By: _____

Print Name: JOE LEBKUECHER

Title: OWNER Date: 4/19/2016

Grantor's Acknowledgment

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

On the 19 day of April, in the year 2016, before me, the undersigned, personally appeared JOSEPH LEBKUECHER, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

_____
Notary Public - State of New York

PATRICIA RICHERT
Notary Public, State of New York
No. 30-4741154
Qualified in Nassau / Suffolk Counties
Commission Expires 10/31/17

THIS ENVIRONMENTAL EASEMENT IS HEREBY ACCEPTED BY THE PEOPLE OF THE STATE OF NEW YORK, Acting By and Through the Department of Environmental Conservation as Designee of the Commissioner,

By: _____

Robert W. Schick, Director
Division of Environmental Remediation

Grantee's Acknowledgment

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

On the 13th day of May, in the year 2016 before me, the undersigned, personally appeared Robert W. Schick, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/ executed the same in his/her/ capacity as Designee of the Commissioner of the State of New York Department of Environmental Conservation, and that by his/her/ signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

_____
Notary Public - State of New York

David J. Chiusano
Notary Public, State of New York
No. 01CH5032146
Qualified in Schenectady County
Commission Expires August 22, 2018

SCHEDULE "A" PROPERTY DESCRIPTION

ALL that certain plot, piece or parcel of land, situate, lying and being at Woodbury, Town of Oyster Bay, County of Nassau and State of New York, being more particularly bounded and described as follows:

BEGINNING at a point on the Southeasterly side of Woodbury Road (as widened), distant 100.00 feet Southwesterly from the extreme Westerly end of an arc of a curve connecting the Southwesterly side of Wren Drive and the Southeasterly side of Woodbury Road (as widened);

RUNNING THENCE South 29 degrees 51 minutes 10 seconds East, a distance of 479.76 feet;

THENCE South 60 degrees 08 minutes 50 seconds West, a distance of 241.46 feet;

THENCE North 83 degrees 07 minutes 50 seconds West, a distance of 159.29 feet;

THENCE North 29 degrees 51 minutes 10 seconds West, a distance of 344.91 feet to the Southeasterly side of Woodbury Road (as widened); and

THENCE along the Southeasterly side of Woodbury Road (as widened), North 54 degrees 01 minutes 21 seconds East, a distance of 371.26 feet to the point or place of BEGINNING.

APPENDIX B
LIST OF SITE CONTACTS

Name	Phone/Email Address
Current Site Owner/Remedial Party: Joe III, LLC and Joan III, LLC (Joan D'Auria)	(516) 626-1155 LANDKHOLDING@aol.com
Potential Site Owner/Remedial Party: BSL NY Development LLC, John Dragat (contact)	(781) 489-2808 jdragat@benchmarkquality.com
Qualified Environmental Professional: Stephanie O. Davis, FPM Group	(631) 737-6200, ext. 228 s.davis@fpm-group.com
NYSDEC DER Project Manager: John Sheehan	(631) 444-0244 jcsheeha@dec.ny.gov
NYSDEC Regional HW Engineer: Walter Parish	(631) 444-0240 wjparish@dec.ny.gov
NYSDEC Site Control: Kelly Lewandowski, Chief, Site Control Section	(518) 402-9553 kelly.lewandowski@dec.ny.gov
Remedial Party Attorney: Aaron Gershonowitz	(516) 248-1700 AGershonowitz@ForchelliLaw.com

APPENDIX C

MONITORING WELL BORING AND CONSTRUCTION LOGS

The monitoring well boring and construction logs for the six monitoring wells at this Site are included on the two following pages. A site plan showing the site-specific groundwater flow direction is included on the second page.

B-1

(EL. 99.27') GROUND SURFACE

FEET	NO	SB	CLASSIFICATION
1	1	P 1 4	DK. BRN. ORG. LOAM (OL) / DK. BRN. SILT, TR. CLAY, SAND (ML-OL?)(FILL?) / BRN. SILT, TR. SAND, THIN FINE ROOTS (ML-OL?)(FILL?)
5	2	10 15 10 11	BRN./ LT. BRN./ TAN SAND, LITTLE GRAVEL, SILT (SP)
10	3	8 10 10 12	LT. BRN. GRAVELLY SAND, TR. SILT (SP)
15	4	8 8 15 13	BRN. GRAVELLY SAND, TR. SILT (SP)
20	5	5 8 10 11	
25	6	10 16 15 15	LT. BRN. GRAVELLY SAND (SP)
30	7	8 9 10 10	LT. BRN./ TAN GRAVELLY SAND (SP)
35	8	8 9 11 13	LT. BRN. SAND, TR. GRAVEL (SP)
40	9	10 14 16 17	
45	10	11 16 18 21	
50	11	8 12 17 21	TAN/ LT. BRN. SAND, TR. GRAVEL (SP)
55	12	11 16 20 22	
60	13	11 14 17 21	
65	14	11 14 17 19	TAN/ LT. BRN. GRAVELLY SAND (SP)
70	15	10 12 14 17	LT. BRN. SAND, LITTLE SILT (SP)
75	16	10 13 17 17	TAN/ LT. BRN. GRAVELLY SAND (SP)
80	17	10 12 13 16	TAN/ LT. BRN. SAND, TR. GRAVEL (SP)
85	18	11 13 16 19	
90	19	5 5 5 8	BRN./ LT. BRN. GRAVELLY SAND, TR. SILT (SP) / LT. BRN. SILTY CLAY, TR. THIN SILT LENSES (CL)
95	20	4 5 5 8	LT. BRN./ BRN. CLAY (CL)
100	21	4 6 8 9	GRAY BRN./ BRN. CLAY (CL)
105	22	4 8 10 12	
110	23	4 6 8 11	
115	24	5 7 11 14	
120	25	5 9 13 15	LT. BRN. CLAY (CL)
			END OF BORING 122' - 0"

PERCHED 88'-0"

B-2/MW-2

(EL. 99.60') GROUND SURFACE

FEET	NO	SB	CLASSIFICATION
1			DK. BRN. ORG. LOAM (OL)
80	1	18 24 31 36	LT. BRN./ TAN SAND, TR. GRAVEL (SP)
85	2	16 26 24 22	LT. BRN./ TAN GRAVELLY SAND (SP)
90	3	10 12 15 18	
95	4	6 8 8 12	LT. BRN./ BRN. CLAY (CL)
100	5	6 7 9 12	BRN. CLAY (CL)
105	6	5 7 9 13	BRN. CLAY, TR. THIN SANDY CLAY LENSES (CL) / GRAY CLAY (CL)
			END OF BORING 107' - 0"

AUGERED

PERCHED 87'-6"

B-3/MW-3

(EL. 99.92') GROUND SURFACE

FEET	NO	SB	CLASSIFICATION
80	1	11 18 24 25	LT. BRN./ TAN SAND, TR. GRAVEL (SP)
85	2	13 17 16 24	LT. BRN./ TAN GRAVELLY SAND (SP)
90	3	10 14 12 7	LT. BRN. SAND, LITTLE SILT (SW)
95	4	4 7 10 13	BRN. CLAY (CL)
100	5	5 8 12 14	LT. BRN./ BRN. CLAY, TR. THIN GRAY CLAY LENSE (CL) / BRN./ GRAY BRN. CLAY (CL)
105	6	4 7 8 12	BRN. CLAY (CL)
			END OF BORING 107' - 0"

AUGERED

PERCHED 88'-1"

B-4/MW-1

GROUND SURFACE

BLACKTOP

FEET	NO	SB	CLASSIFICATION
80	1	16 19 20 23	BRN./ LT. BRN. SAND, TR. GRAVEL (SP)
85	2	13 16 16 19	
90	3	6 9 12 15	BRN./ LT. BRN. CLAY (CL)
95	4	4 6 8 12	BRN./ GRAY BRN. CLAY (CL)
100	5	7 10 12 14	
			END OF BORING 102' - 0"

AUGERED

PERCHED 87'-3"

NOTES :

1. - SOIL DESCRIPTIONS ARE BY VISUAL EXAMINATION OF SOIL SAMPLES RECOVERED DURING DRILLING OPERATIONS.
2. - SOIL DESCRIPTIONS ARE IN ACCORDANCE WITH THE UNIFIED SOIL CLASSIFICATION SYSTEM.
3. - GROUND WATER ENCOUNTERED AT THIS SITE IS PERCHED AND NOT CONSIDERED RELIABLE.
4. - SOIL STRATIFICATIONS ARE ACCURATE TO WITHIN TWO FEET VERTICALLY.
5. - ELEVATIONS WERE REFERENCED TO B.M. - FINISHED FLOOR OF EXISTING BUILDING, ASSUMED ELEVATION AT 100.0'.
6. - SOIL SAMPLES WERE OBTAINED USING A CENTRAL MINE EQUIPMENT (CME) AUTOMATIC TRIP HAMMER.

OBSERVATION WELL LOG MW-1

STAND PIPE

PVC STICK UP

FT. DIA." STEEL PIPE

CAST IRON MANHOLE

FT. 8 " DIAM.

CONC. BLACKTOP

8 INCH DIAM. DRILLED HOLE

WELL RISER PIPE 2 INCH DIAM.

RISER MATERIAL: ☒ PVC ☐ STAINLESS STEEL ☐ OTHER

BENTENITE SEAL: ☒ PELLETS ☐ SLURRY ☐ NONE

BACKFILL ☒ GROUT ☐ OTHER

75 FT.* 76 FT.*

SCREEN MATERIAL: ☒ PVC ☐ STAINLESS STEEL ☐ OTHER

80 FT.* WELL SCREEN 2 INCH DIAM. 10 SLOT

GRAVEL PACK ☐ SAND PACK ☐ FORMATION COLLAPSE

100 FT.* 101 FT.*

NOTE: MEASURING POINT IS GROUND SURFACE UNLESS OTHERWISE NOTED.

* DEPTH BELOW GROUND SURFACE

INSTALLATION DATE: MAY 12, 2009

WELL HEAD ELEVATION

DEPTH TO WATER: 87.37'

DEPTH TO WELL BOTTOM: 100'

LENGTH OF WATER COLUMN:

CALCULATED VOL. OF WATER IN WELL:

DEVELOPMENT:

DEVELOPMENT DATE:

DEVELOPMENT RATE G P M:

PUMP DURATION (MINUTES)

METHOD: ☐ PUMP ☐ BAILER ☐ OTHER

DEPTH TO WATER

NOTES:

PREPARED BY: S. MITCHELL

OBSERVATION WELL LOG MW-2

STAND PIPE

PVC STICK UP

1 FT. 4 DIA." STEEL PIPE

CAST IRON MANHOLE

FT. " DIAM.

CONC. BLACKTOP

8 INCH DIAM. DRILLED HOLE

WELL RISER PIPE 2 INCH DIAM.

RISER MATERIAL: ☒ PVC ☐ STAINLESS STEEL ☐ OTHER

BENTENITE SEAL: ☒ PELLETS ☐ SLURRY ☐ NONE

BACKFILL ☐ GROUT ☐ OTHER

76 FT.* 77 FT.*

SCREEN MATERIAL: ☒ PVC ☐ STAINLESS STEEL ☐ OTHER

79 FT.* WELL SCREEN 2 INCH DIAM. 20 SLOT

GRAVEL PACK ☐ SAND PACK ☐ FORMATION COLLAPSE

99 FT.* 100 FT.*

NOTE: MEASURING POINT IS GROUND SURFACE UNLESS OTHERWISE NOTED.

* DEPTH BELOW GROUND SURFACE

INSTALLATION DATE: MAY 9, 2009

WELL HEAD ELEVATION

DEPTH TO WATER: 88.53'

DEPTH TO WELL BOTTOM: 99'-6"

LENGTH OF WATER COLUMN:

CALCULATED VOL. OF WATER IN WELL:

DEVELOPMENT:

DEVELOPMENT DATE:

DEVELOPMENT RATE G P M:

PUMP DURATION (MINUTES)

METHOD: ☐ PUMP ☐ BAILER ☐ OTHER

DEPTH TO WATER

NOTES:

PREPARED BY: S. MITCHELL

OBSERVATION WELL LOG MW-3

STAND PIPE

PVC STICK UP

FT. DIA." STEEL PIPE

CAST IRON MANHOLE

FT. 8 " DIAM.

CONC. BLACKTOP

8 INCH DIAM. DRILLED HOLE

WELL RISER PIPE 2 INCH DIAM.

RISER MATERIAL: ☒ PVC ☐ STAINLESS STEEL ☐ OTHER

BENTENITE SEAL: ☐ PELLETS ☐ SLURRY ☒ NONE

BACKFILL ☐ GROUT ☐ OTHER

-- FT.* -- FT.*

SCREEN MATERIAL: ☒ PVC ☐ STAINLESS STEEL ☐ OTHER

77 FT.* WELL SCREEN 2 INCH DIAM. 20 SLOT

GRAVEL PACK ☐ SAND PACK ☐ FORMATION COLLAPSE

97 FT.* 100 FT.*

NOTE: MEASURING POINT IS GROUND SURFACE UNLESS OTHERWISE NOTED.

* DEPTH BELOW GROUND SURFACE

INSTALLATION DATE: MAY 9, 2009

WELL HEAD ELEVATION

DEPTH TO WATER: 88.08'

DEPTH TO WELL BOTTOM: 97'

LENGTH OF WATER COLUMN:

CALCULATED VOL. OF WATER IN WELL:

DEVELOPMENT:

DEVELOPMENT DATE:

DEVELOPMENT RATE G P M:

PUMP DURATION (MINUTES)

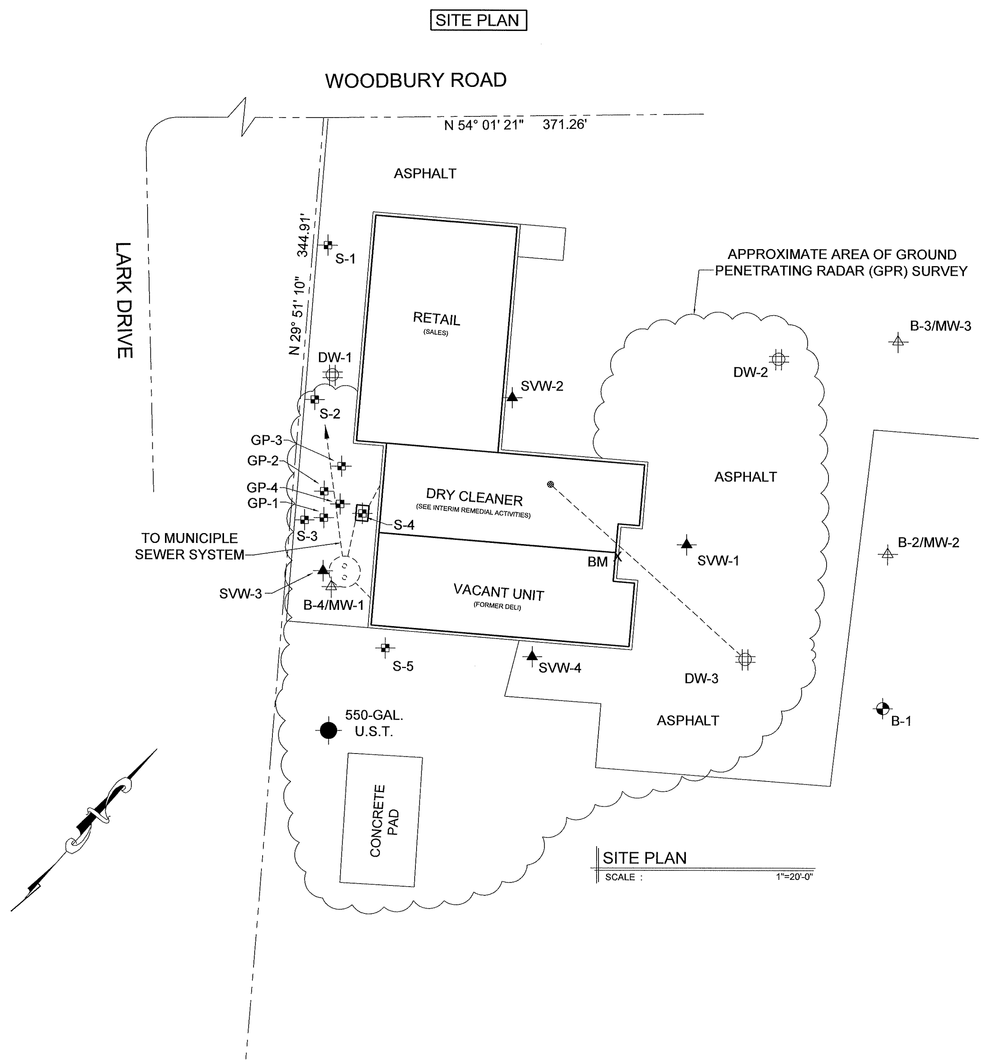
METHOD: ☐ PUMP ☐ BAILER ☐ OTHER

DEPTH TO WATER

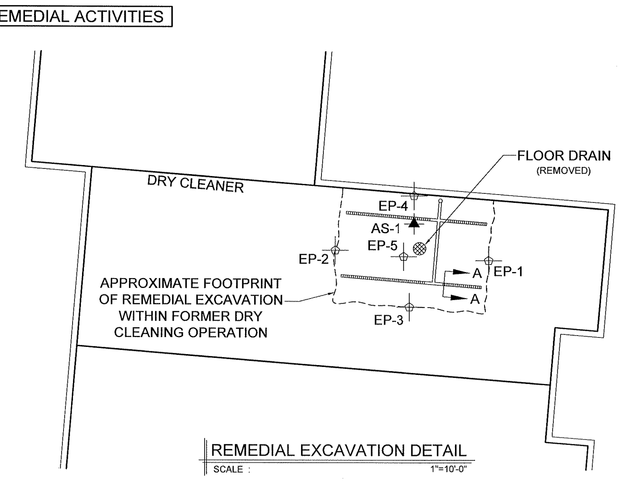
NOTES:

PREPARED BY: S. MITCHELL

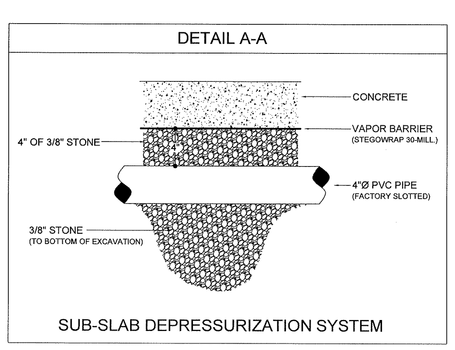
SITE PLAN



INTERIM REMEDIAL ACTIVITIES



DETAIL A-A



SUB-SLAB DEPRESSURIZATION SYSTEM

LEGEND:

- DENOTES 550-GAL. FUEL OIL U.S.T.
- DENOTES SOIL BORING(S) LOCATION
- DENOTES SOIL SAMPLE
- DENOTES ENDPOINT SAMPLE(S) LOCATION
- DENOTES SOIL VAPOR SAMPLE LOCATIONS
- DENOTES PREVIOUSLY EXISTING FLOOR DRAIN
- DENOTES EXISTING DRYWELL LOCATIONS
- DENOTES GROUND WATER MONITORING WELL LOCATIONS

UNIFIED SOIL CLASSIFICATION

SOIL GROUPS	TYPICAL NAMES AND SOIL SYMBOLS
GW	WELL GRADED GRAVELS, GRAVEL SAND MIXTURES, LITTLE OR NO FINES
GP	POORLY GRADED GRAVELS, GRAVEL SAND MIXTURES, LITTLE OR NO FINES
GM	SILTY GRAVELS, GRAVEL-SAND-SILT MIXTURES
GC	CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES
SW	WELL GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
SP	POORLY GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
SM	SILTY SANDS, SAND-SILT MIXTURES
SC	CLAYEY SANDS, SAND-CLAY MIXTURES
ML	INORGANIC SILTS,VERY FINE SANDS,CLAYEY SILTS,SLIGHT PLASTICITY
CL	INORGANIC CLAYS OF LOW TO MEDIUM PLAST-ICITY,GRAVELLY,SANDY,SILTY CLAYS
OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
MH	INORGANIC SILTS,MICACEOUS OR DIATOMACEOUS FINE SANDY OR SILTY SOILS,ELASTIC SILTS
CH	INORGANIC CLAYS OF HIGH PLASTICITY,FAT CLAYS
OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
Pt	PEAT AND OTHER HIGHLY ORGANIC SOILS

ALLOWABLE SOIL BEARING PRESSURES

(N.Y.C. BUILDING CODE C26-1103)

CLASS OF MATERIAL	DESCRIPTION	ALLOWABLE BEARING TONS/SQ.FT.
1-65	HARD SOUND ROCK	60
2-65	MEDIUM HARD ROCK	40
3-65	INTERMEDIATE ROCK	20
4-65	SOFT ROCK	8
5-65	HARDPAN	8-12
6-65	GRAVEL AND GRAVEL SOILS (SOIL GROUPS GW,GP,GM & GC AND GROUPS SW,SP & SM CONTAINING MORE THAN 10% GRAVEL)	4-10
7-65	SANDS (OTHER THAN FINE SANDS) (SOIL GROUPS SW,SP & SM BUT CONTAINING NOT MORE THAN 10% GRAVEL)	3-6
8-65	FINE SAND	2-4
9-65	CLAYS AND CLAY SOILS (SOIL GROUPS SC,CL & CH) HARD / MEDIUM / SOFT	(5 MAX) / (2 MAX) / BY TEST
10-65	SILTS AND SILT SOILS (SOIL GROUPS ML & MH) DENSE / MEDIUM / LOOSE	3 / 1.5 / BY TEST
11-65	NOMINALLY UNSATISFACTORY BEARING MATERIALS	BY TEST

COMPACTION RELATED TO SPOON BLOWS/FOOT

SAND		SILT & CLAY	
LOOSE	15 OR LESS	SOFT	10 OR LESS
MEDIUM	16 TO 39	MEDIUM	11 TO 29
DENSE	40 OR MORE	HARD	30 OR MORE

"N" STANDARD PENETRATION TEST

(2"SPOON,140lb HAMMER,30"FALL)

6 8 9 12 N=17 BLOWS PER FOOT

SPOON BLOW COUNT IS GENERALLY SHOWN IN 6" INCREMENTS FOR 2'DRIVE,TO OBTAIN BLOWS PER FOOT(N) USE 2ND & 3RD 6" INCREMENT

	ROTARY CASING	X-HEAVY CASING	SPOON
SIZE, INCHES	2.5		2.0
HAMMER WEIGHT, LBS.	——		140
HAMMER FALL, INCHES	——		30

CB - CASING BLOWS PER 1 FOOT DRIVE

SB - SPOON BLOWS PER 6 INCH DRIVE

P - PUSHED BY WEIGHT OF HAMMER

UD - UNDISTURBED SOIL SAMPLE

NO - SAMPLE NUMBER

FEET - DEPTH FROM GND.SUR. NOTED AT EACH 5'

SOIL MECHANICS DRILLING CORP.
subsoil investigations
3770 MERRICK ROAD * SEAFORD, NEW YORK 11783 * 516 - 221-2333

SITE PLAN

WOODBURY, NEW YORK

VERTICAL BORING SCALE : 1/4"=1'-0"

DATE(S) OF BORING(S): MAY 6th, 7th, & 11th, 2009

DRAWING DATE: MAY 13, 2009

DWN. BY: JMR CKD. BY: AG

DRAWING NUMBER: 08L711-4

SHEET 1 OF 1.

B-5/MW-5

(EL. 112.29') TOP OF CASING

FEET	NO	SB	CLASSIFICATION
1	1	1/2/3	DK. BRN. ORG. LOAM (OL) / DK. BRN. SILTY SAND, TR. GRAVEL, THIN FINE ROOTS (SM)(FILL) / DK. BRN. SANDY SILT, TR. GRAVEL, ROOTS (ML-OL?)(FILL?)
5	2	6/14/12/16	LT. BRN. SAND, LITTLE GRAVEL, TR. SILT, COBBLE (SP)
10	3	7/12/12/14	LT. BRN./ ORANGE SAND, TR. GRAVEL, SILT, COBBLE (SP)
15	4	5/8/10/12	LT. BRN. GRAVELLY SAND, TR. SILT (SP)
20	5	5/8/8/10	TAN/ LT. BRN. SAND, LITTLE GRAVEL, TR. SILT (SP)
25	6	14/15/20/22	LT. BRN./ TAN GRAVELLY SAND, TR. COBBLE, SILT (SP)
30	7	14/19/11/12	TAN SAND, LITTLE GRAVEL (SP) / LT. BRN./ ORANGE F-M SAND, TR. SILT (SP) / TAN/ LT. BRN. SAND, TR. GRAVEL, SILT (SP)
35	8	5/10/16/18	TAN/ LT. BRN. SAND, TR. GRAVEL (SP)
40	9	18/21/22/28	TAN SAND, TR. GRAVEL W/ THIN BRN. M-F SAND LENSES (SP)
45	10	15/18/18/20	TAN/ LT. BRN. SAND, TR. GRAVEL, W/ THIN TAN/ LT. BRN. SAND, LITTLE GRAVEL LENSES (SP)
50	11	12/14/17/18	TAN/ LT. BRN. SAND, TR. GRAVEL (SP)
55	12	10/16/21/27	
60	13	13/17/17/20	TAN/ LT. BRN. SAND, TR. GRAVEL, W/ THIN TAN/ LT. BRN. SAND, LITTLE GRAVEL LENSES (SP)
65	14	18/22/25/29	
70	15	13/19/24/31	TAN/ LT. BRN. SAND, TR. GRAVEL W/ VERY THIN ORANGE SAND, TR. GRAVEL, SILT LENSE (SP)
75	16	11/26/13/19	TAN/ LT. BRN. SAND, LITTLE GRAVEL (SP)

END OF BORING 130' - 0"

CONTINUED

FEET	NO	SB	CLASSIFICATION
80	17	15/27/28/34	TAN/ LT. BRN. SAND, TR. GRAVEL (SP)
85	18	20/33/35/40	
90	19	18/10/27/31	BRN./ TAN SAND, TR. GRAVEL, SILT, CONCRETIONS, VERY THIN BRN./ TAN SANDY CLAY LENSE (SP) / LT. BRN./ ORANGE M-F SAND, TR. SILT (SP)
95	20	10/13/16/19	DK. GRAY BRN./ GRAY BRN. SAND, TR. GRAVEL, SILT (SP) / BRN./ ORANGE BRN./ TAN SAND, TR. GRAVEL, SILT, CLAY & THIN GRAY FINE SANDY CLAY LENSES (SP-CL)
100	21	29/59/64/80	TAN/ LT. YELLOWISH ORANGE/ ORANGE FINE SAND (SP)
105	22	44/55/65/78	ORANGE/ LT. BRN./ TAN FINE SAND, TR. SILT (SP)
110	23	40/45/60/54	LT. BRN. FINE SAND, TR. SILT W/ ORANGE FINE SAND, TR. SILT LENSES (SP)
115	24	42/52/55/57	LT. BRN. FINE SAND, TR. SILT (SP)
120	25	37/40/43/46	
125	26	38/43/54/61	LT. BRN./ TAN FINE SAND, TR. SILT (SP) EXTENDED BOREHOLE USING A 4-1/8" TRI-CONE ROLLER BIT
130			

B-6/MW-6

(EL. 112.86') TOP OF CASING

FEET	NO	SB	CLASSIFICATION
1	1	1/2/3	DK. BRN. ORG. LOAM (OL) / DK. BRN. ORG. SANDY SILT, TR. GRAVEL LOAM (OL)
5	2	7/14/16/21	LT. BRN. GRAVELLY SAND, TR. SILT (SP)
10	3	5/9/13/14	LT. BRN. SAND, LITTLE GRAVEL, TR. SILT (SP)
15	4	4/5/7/9	LT. BRN. SAND, TR. GRAVEL, SILT (SP)
20	5	6/8/10/12	LT. BRN./ TAN GRAVELLY SAND, TR. SILT (SP)
25	6	5/10/12/14	LT. BRN./ TAN SAND, LITTLE GRAVEL, TR. SILT (SP)
30	7	7/8/10/12	LT. BRN./ TAN SAND, TR. GRAVEL, SILT (SP)
35	8	10/15/17/21	TAN/ LT. ORANGE SAND, TR. GRAVEL (SP)
40	9	15/18/21/25	
45	10	10/14/16/18	TAN/ LT. BRN. SAND, TR. GRAVEL (SP)
50	11	12/14/15/17	
55	12	8/12/17/16	
60	13	13/16/13/14	LT. BRN./ TAN SAND, TR. GRAVEL, SILT (SP)
65	14	7/9/12/16	
70	15	10/12/13/15	TAN SAND, LITTLE GRAVEL (SP)
75	16	8/12/14/14	TAN/ LT. BRN. SAND, LITTLE GRAVEL (SP)
80	17	15/28/41/30	TAN/ BRN. GRAVELLY SAND, TR. COBBLE, SILT (SP)
85	18	4/5/8/10	LT. BRN. CLAY (CL)
90	19	5/4/5/7	LT. BRN. CLAY W/ GRAY/ GRAY BRN. CLAY (CL)
95	20	1/6/8/10	GRAY/ GRAY BRN. CLAY (CL)
100	21	1/6/8/10	
105	22	1/5/8/14	BRN./ LT. BRN. CLAY (CL)
110	23	24/48/54/62	LT. BRN. M-F SAND, TR. GRAVEL, COARSE SAND (SP)
115	24	26/26/23/28	LT. BRN./ LT. ORANGE M-F SAND, TR. SILT (SP)
120	25	16/22/54/61	LT. BRN./ ORANGE BRN. SAND, TR. GRAVEL, SILT & VERY THIN SANDY SILTY CLAY LENSES (SP) EXTENDED BOREHOLE USING A 4-1/8" TRI-CONE ROLLER BIT
125			

END OF BORING 125' - 0"

B-7/MW-4

(EL. 109.04') TOP OF CASING

FEET	NO	SB	CLASSIFICATION
1	1	5/6	BLACKTOP
5	2	6/8/10/12	DK. BRN. SAND, TR. GRAVEL, LITTLE SILT (SP)/(FILL) / LT. BRN. SAND, TR. GRAVEL, SILT (SP)
10	3	11/16/21/18	LT. BRN. SAND, LITTLE GRAVEL, TR. SILT (SP)
15	4	6/7/8/10	
20	5	8/10/10/11	LT. BRN. GRAVELLY SAND, TR. SILT (SP)
25	6	8/11/13/10	LT. BRN./ BRN. SAND, LITTLE GRAVEL, TR. SILT (SP)
30	7	15/12/11/9	LT. BRN./ BRN. SAND, LITTLE GRAVEL, TR. COBBLE, SILT (SP)
35	8	5/8/8/9	LT. BRN. SAND, LITTLE GRAVEL, TR. SILT (SP)
40	9	8/11/9/11	TAN M-F SAND, TR. GRAVEL, COARSE SAND (SP)
45	10	9/11/13/16	TAN SAND, TR. GRAVEL (SP)
50	11	9/11/17/18	TAN/ LT. BRN. GRAVELLY SAND, TR. SILT (SP)
55	12	9/10/18/17	TAN/ LT. BRN. M-F SAND, TR. GRAVEL, SILT (SP)
60	13	8/11/15/16	
65	14	12/15/17/21	LT. BRN./ TAN SAND, TR. GRAVEL, SILT (SP)
70	15	10/14/17/19	TAN SAND, LITTLE GRAVEL (SP)
75	16	12/16/25/29	TAN/ LT. BRN. SAND, LITTLE GRAVEL, TR. SILT (SP)
80	17	11/15/20/22	TAN SAND, LITTLE GRAVEL (SP)
85	18	25/33/37/45	LT. BRN. GRAVELLY SAND, TR. SILT (SP)
90	19	4/6/12/14	LT. BRN. SAND, TR. GRAVEL (SP) / LT. BRN. CLAY (CL)
95	20	2/10/12	
100	21	5/9/12	
105	22	P/10/12	
110	23	P/3/10	GRAY BRN./ GRAY CLAY (CL)
115	24	P/6/9/14	
120	25	P/3/8/10	

CONTINUED

FEET	NO	SB	CLASSIFICATION
125	26	P/5/8/10	
130	27	P/3/8/10	
135	28	P/3/8	
140	29	P/2/8	BRN. CLAY (CL)
145	30	P/12/28/31	BRN. CLAY, TR. LT. BRN. FINE SAND, SILT SEAMS (CL) / TAN W/ BRN. FINE SAND (SP)
150	31	24/29/32/38	
155	32	31/42/40/38	LT. BRN./ TAN M-F SAND, TR. SILT (SP) EXTENDED BOREHOLE USING A 4-1/8" TRI-CONE ROLLER BIT
160			

END OF BORING 163' - 0"

PERCHED 84'-0"

OBSERVATION WELL LOG MW-4

STAND PIPE

PVC STICK UP FT. / DIA." STEEL PIPE / CAST IRON MANHOLE FT. 8 " DIAM. / CONC. / BLACKTOP / *2 INCH DIAM. DRILLED HOLE / WELL RISER PIPE 2 INCH DIAM. / BACKFILL / GROUT / OTHER / BENTENITE SEAL *1 PELLETS SLURRY NONE / SCREEN MATERIAL PVC STAINLESS STEEL OTHER / GRAVEL PACK SAND PACK FORMATION COLLAPSE

138' FT.* / 143' FT.* / 143' FT.* / WELL SCREEN 2 INCH DIAM. 10 SLOT / 163' FT.* / 163' FT.*

INSTALLATION DATE:	JUNE 25, 2009
WELL HEAD ELEVATION	109.04'
DEPTH TO WATER:	105.84'
DEPTH TO WELL BOTTOM:	163'
LENGTH OF WATER COLUMN:	57.32'
CALCULATED VOL. OF WATER IN WELL:	9.27 GALLONS
DEVELOPMENT:	
DEVELOPMENT DATE:	
DEVELOPMENT RATE G P M:	
PUMP DURATION (MINUTES)	
METHOD:	☒ PUMP ☐ BAILER ☐ OTHER

NOTES:

PREPARED BY: S. MITCHELL

NOTE: MEASURING POINT IS GROUND SURFACE UNLESS OTHERWISE NOTED.

* DEPTH BELOW GROUND SURFACE

OBSERVATION WELL LOG MW-5

STAND PIPE

1.6' FT. / 4 DIA." STEEL PIPE / CAST IRON MANHOLE FT. " DIAM. / CONC. / BLACKTOP / *2 INCH DIAM. DRILLED HOLE / WELL RISER PIPE 2 INCH DIAM. / BACKFILL / GROUT / OTHER / BENTENITE SEAL *1 PELLETS SLURRY NONE / SCREEN MATERIAL PVC STAINLESS STEEL OTHER / GRAVEL PACK SAND PACK FORMATION COLLAPSE

101' FT.* / 105' FT.* / 110' FT.* / WELL SCREEN 2 INCH DIAM. 10 SLOT / 129' FT.* / 129' FT.*

INSTALLATION DATE:	JUNE 14, 2010
WELL HEAD ELEVATION	112.29'
DEPTH TO WATER:	108.84'
DEPTH TO WELL BOTTOM:	129.0'
LENGTH OF WATER COLUMN:	20.3'
CALCULATED VOL. OF WATER IN WELL:	3.28 GALLONS
DEVELOPMENT:	
DEVELOPMENT DATE:	
DEVELOPMENT RATE G P M:	
PUMP DURATION (MINUTES)	
METHOD:	☒ PUMP ☐ BAILER ☐ OTHER

NOTES:

PREPARED BY: S. MITCHELL

NOTE: MEASURING POINT IS GROUND SURFACE UNLESS OTHERWISE NOTED.

* DEPTH BELOW GROUND SURFACE

OBSERVATION WELL LOG MW-6

STAND PIPE

PVC STICK UP FT. / DIA." STEEL PIPE / CAST IRON MANHOLE FT. " DIAM. / CONC. / BLACKTOP / *2 INCH DIAM. DRILLED HOLE / WELL RISER PIPE 2 INCH DIAM. / BACKFILL / GROUT / OTHER / BENTENITE SEAL *1 PELLETS SLURRY NONE / SCREEN MATERIAL PVC STAINLESS STEEL OTHER / GRAVEL PACK SAND PACK FORMATION COLLAPSE

104' FT.* / 104' FT.* / 110' FT.* / WELL SCREEN 2 INCH DIAM. 10 SLOT / 125' FT.* / 125' FT.*

INSTALLATION DATE:	JUNE 18, 2010
WELL HEAD ELEVATION	112.86'
DEPTH TO WATER:	109.49'
DEPTH TO WELL BOTTOM:	125'
LENGTH OF WATER COLUMN:	15.73'
CALCULATED VOL. OF WATER IN WELL:	2.54 GALLONS
DEVELOPMENT:	
DEVELOPMENT DATE:	
DEVELOPMENT RATE G P M:	
PUMP DURATION (MINUTES)	
METHOD:	☒ PUMP ☐ BAILER ☐ OTHER

NOTES:

PREPARED BY: S. MITCHELL

NOTE: MEASURING POINT IS GROUND SURFACE UNLESS OTHERWISE NOTED.

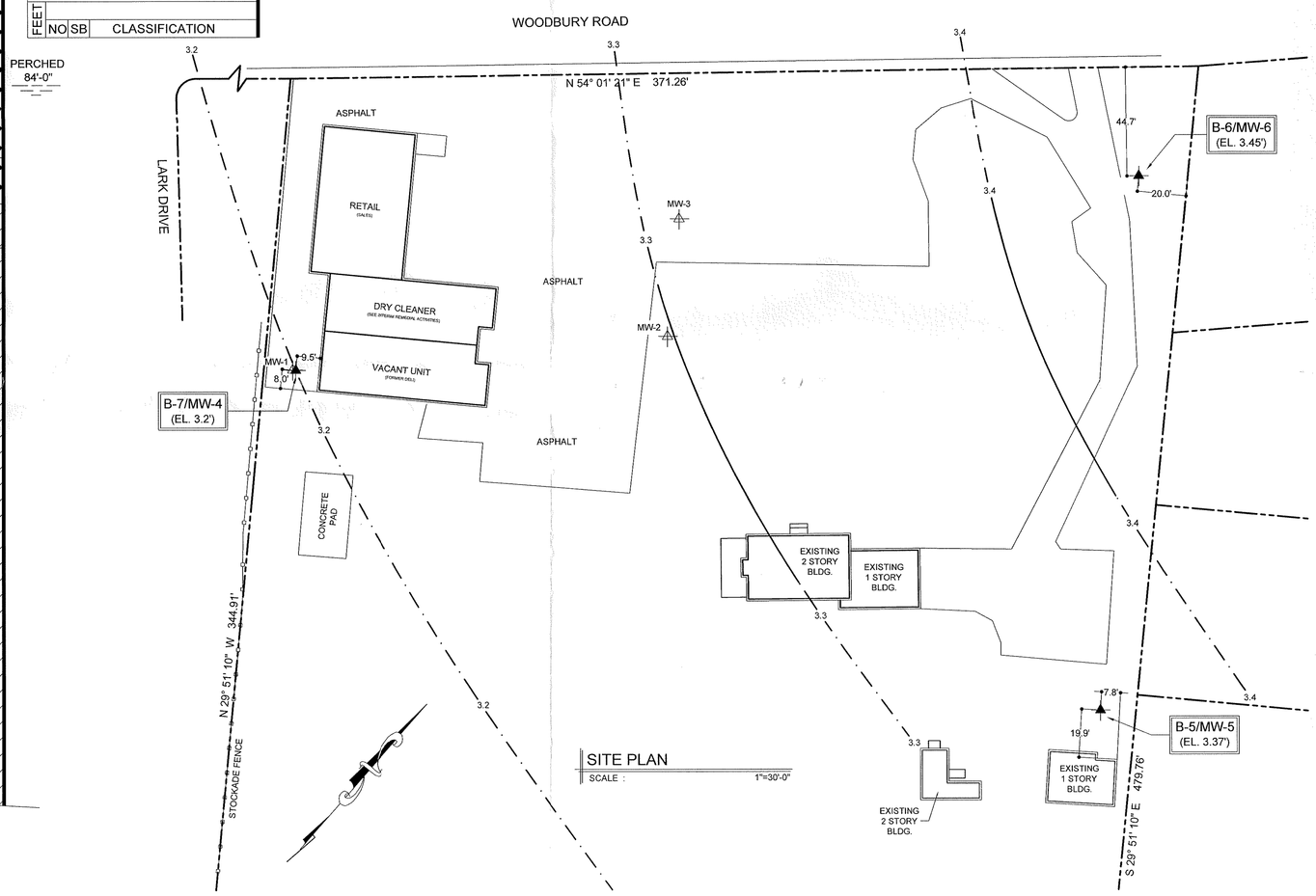
* DEPTH BELOW GROUND SURFACE

NOTES :

1. - SOIL DESCRIPTIONS ARE BY VISUAL EXAMINATION OF SOIL SAMPLES RECOVERED DURING DRILLING OPERATIONS.
2. - SOIL DESCRIPTIONS ARE IN ACCORDANCE WITH THE UNIFIED SOIL CLASSIFICATION SYSTEM.
3. - GROUND WATER ENCOUNTERED AT THIS SITE IS PERCHED AND NOT CONSIDERED RELIABLE.
4. - SOIL STRATIFICATIONS ARE ACCURATE TO WITHIN TWO FEET VERTICALLY.
5. - ELEVATIONS WERE REFERENCED TO B.M. - AT TOP OF CASING ELEVATION OF MW-2. ASSUMED ELEVATION AT 110.13'.
6. - SOIL SAMPLES WERE OBTAINED USING A CENTRAL MINE EQUIPMENT (CME) AUTOMATIC TRIP HAMMER.

LEGEND:

- DENOTES SUPPLEMENTALLY DRILLED BORINGS/MONITORING WELL LOCATIONS
- DENOTES PREVIOUSLY DRILLED MONITORING WELL LOCATIONS



SITE PLAN

SCALE : 1"=30'-0"

UNIFIED SOIL CLASSIFICATION

SOIL GROUPS	TYPICAL NAMES AND SOIL SYMBOLS
GW	WELL GRADED GRAVELS, GRAVEL SAND MIXTURES, LITTLE OR NO FINES
GP	POORLY GRADED GRAVELS OR GRAVEL SAND MIXTURES. LITTLE OR NO FINES
GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURE
GC	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURE
SW	WELL GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
SP	POORLY GRADED SANDS OR GRAVELLY SANDS, LITTLE OR NO FINES
SM	SILTY SANDS, SAND - SILT MIXTURES
SC	CLAYEY SANDS, SAND - CLAY MIXTURES
ML	INORGANIC SILTS, VERY FINE SANDS, CLAYEY SILTS, SLIGHT PLASTICITY
CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS SANDY CLAYS, SILTY CLAYS
OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SANDY OR SILTY SOILS, ELASTIC SILTS
CH	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS
OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
Pt	PEAT AND OTHER HIGHLY ORGANIC SOILS

ALLOWABLE SOIL BEARING PRESSURES, N.Y.C. BLDG. CODE TABLE 1804.1

CLASS OF MATERIALS (Notes 1 & 3)	MAXIMUM ALLOWABLE FOUNDATION PRESSURE (TSF)	MAXIMUM ALLOWABLE FOUNDATION PRESSURE (kPa)
1. BEDROCK (NOTES 2 & 7)		
1a HARD SOUND ROCK - GNEISS, DIABASE, SCHIST	60	5,746
1b MEDIUM HARD ROCK - MARBLE, SERPENTINE	40	3,830
1c INTERMEDIATE ROCK - SHALE, SANDSTONE	20	1,915
1d SOFT ROCK - WEATHERED ROCK	8	766
2. SANDY GRAVEL & GRAVEL (GW, GP) (NOTES 3, 4, 8, & 9)		
2a DENSE	10	958
2b MEDIUM	6	575
3. GRANULAR SOILS (GC, GM, SW, SP, SM, & SC)(NOTES 4, 5, 8, & 9)		
3a DENSE	6	575
3b MEDIUM	3	287
4. CLAYS (SC, CL, & CH)(NOTES 4, 6, 8, & 9)		
4a HARD	5	479
4b STIFF	3	287
4c MEDIUM	2	192
5. SILTS & SILTY SOILS (ML & MH)(NOTES 4, 8, & 9)		
5a DENSE	3	287
5b MEDIUM	1.5	144
6. ORGANIC SILTS, ORGANIC CLAYS, PEATS, SOFT CLAYS, LOOSE GRANULAR SOILS, & VARVED SILTS	SEE 1804.2.1	SEE 1804.2.1
7. CONTROLLED & UNCONTROLLED FILLS	SEE 1804.2.2 OR 1804.2.3	SEE 1804.2.2 OR 1804.2.3

COMPACTION RELATED TO SPOON BLOWS/FOOT			
SAND		SILT & CLAY	
LOOSE	15 OR LESS	SOFT	10 OR LESS
MEDIUM	16 TO 39	MEDIUM	11 TO 29
DENSE	40 OR MORE	HARD	30 OR MORE

"N" — STANDARD PENETRATION TEST (2"SPOON,140lb HAMMER,30"FALL)

P 8 9 12 — N=17 BLOWS PER FOOT

SPOON BLOW COUNT IS GENERALLY SHOWN IN 6" INCREMENTS FOR 2'DRIVE,TO OBTAIN BLOWS PER FOOT(N) USE 2ND & 3RD 6" INCREMENT

	ROTARY CASING	X-HEAVY CASING	SPOON
SIZE, INCHES	2.3		2.0
HAMMER WEIGHT, LBS.	———		140
HAMMER FALL, INCHES	———		30

CB - CASING BLOWS PER 1 FOOT DRIVE
SB - SPOON BLOWS PER 6 INCH DRIVE
P - PUSHED BY WEIGHT OF HAMMER
UD - UNDISTURBED SOIL SAMPLE
NO - SAMPLE NUMBER
FEET - DEPTH FROM GND.SUR. NOTED AT EACH 5'

SOIL MECHANICS DRILLING CORP.
subsoil investigations
3770 MERRICK ROAD * SEAFORD, NEW YORK 11783 * 516 - 221-2333

SITE PLAN

WOODBURY, NEW YORK

VERTICAL BORING SCALE :	DRAWING DATE		DRAWING NUMBER
1/4"=1'-0"	AUGUST 4, 2010		08L711A-3
DATE(S) OF BORING(S) JUNE 10th thru 25th, 2010	DWN. BY: JMR	CKD. BY: AG	SHEET 1 OF 1.

APPENDIX D
EXCAVATION WORK PLAN (EWP)

As noted in the Site Management Plan (SMP) for this Site, post-remedial samples collected from the limited remedial excavation beneath a portion of the Izzy's dry cleaner indicated non-detectable concentrations of volatile organic compounds (VOCs). Furthermore, soil sampling performed elsewhere on the Site did not document any soil with VOCs exceeding the 6 NYCRR Soil Cleanup Objectives (SCOs) for unrestricted use. However, as the area of the remedial excavation included approximately 25% of the dry cleaner footprint, it is possible that residual VOC-impacted soil may remain present beneath the existing retail building. In addition, pursuant to the NYSDEC, the undeveloped southern portion of the Site (wooded area) was not characterized during previous investigations. Therefore, the SMP includes provisions for assessment of sub-slab soil beneath the retail building if it is demolished and removal of any residual soil, if identified, to meet restricted residential SCOs. In addition, soil not previously characterized in the southern wooded area of the Site will be assessed during excavation in this area and residual soil, if any is identified, will be removed. This Excavation Work Plan (EWP) will be applicable for removal of residual soil only if such soil is identified beneath the existing retail building on the Site or in the undeveloped southern portion of the Site (wooded area).

D.1 NOTIFICATION

At least 15 days prior to the start of any activity that is anticipated to encounter remaining contamination or to disturb soils not previously disturbed in the southern wooded area, the site owner or their representative will notify the NYSDEC. Table D.1.1 includes contact information for the above notification. The information on this table will be updated as necessary to provide accurate contact information. A full listing of site-related contact information is provided in Appendix B.

Table D.1.1: Notifications*

Name	Phone/Email Address
NYSDEC DER Project Manager: John Sheehan	(631) 444-0244 jcsheeha@dec.ny.gov
NYSDEC Regional HW Engineer: Walter Parish	(631) 444-0240 wjparish@dec.ny.gov
NYSDEC Site Control: Kelly Lewandowski, Chief, Site Control Section	(518) 402-9553 kelly.lewandowski@dec.ny.gov

*Note: Notifications are subject to change and will be updated as necessary.

This notification will include:

- A detailed description of the work to be performed, including the location and areal extent of excavation, plans/drawings for site re-grading, estimated volumes of contaminated soil to be excavated and any work that may impact an engineering control;
- A summary of environmental conditions anticipated to be encountered in the work areas, including the nature and concentration levels of contaminants of concern, potential presence of grossly contaminated media, and plans for any pre-construction sampling;
- A schedule for the work, detailing the start and completion of all intrusive work;
- A summary of the applicable components of this EWP;
- A statement that the work will be performed in compliance with this EWP and 29 CFR 1910.120;
- A copy of the contractor's health and safety plan (HASP), in electronic format, if it differs from the HASP provided in Appendix E of this SMP;
- Identification of disposal facilities for potential waste streams; and
- Identification of sources of any anticipated backfill, along with all required chemical testing results.

D.2 SOIL SCREENING METHODS AND POST-EXCAVATION SAMPLING

Visual, olfactory and instrument-based (e.g. photoionization detector) soil screening will be performed by a qualified environmental professional during all excavations into suspect contaminated material (remaining contamination) and in the southern wooded area of the Site not previously characterized. Soil screening will be performed when invasive work is done in these areas and will include all excavation and invasive work performed in these areas during redevelopment until such time as the residual soil has been removed.

Soils will be segregated based on previous environmental data and screening results into material that may require off-site disposal and material that requires testing to determine if the material can be reused on-site. Further discussion of off-site disposal of materials and on-site reuse is provided in Section D-7 of this Appendix.

Post-excavation sampling will be conducted if residual soil is identified and removed. Post-excavation sampling will be conducted to confirm that any identified residual soils have been removed. Post-excavation sampling will be in accordance with the soil sampling procedures in Appendix H (Field Sampling Plan) and in accordance with the frequencies and locations identified in Section 5.4 of the NYSDEC's DER-10 (*Technical Guidance for Site Investigation and Remediation, May 2010).*

D.3 SOIL STAGING METHODS

Soil stockpiles containing residual soil, if created, will be continuously encircled with a berm and/or silt fence. Hay bales will be used as needed near catch basins, surface waters and other discharge points.

Stockpiles of residual soil, if created, will be kept covered at all times with appropriately anchored tarps. Stockpiles will be routinely inspected and damaged tarp covers will be promptly replaced.

Stockpiles of residual soil, if created, 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.

D.4 MATERIALS EXCAVATION AND LOAD-OUT

A qualified environmental professional or person under their supervision will oversee all invasive work involving residual soil and the excavation and load-out of all excavated residual soil.

The owner of the property and remedial party (if applicable) and its contractors are responsible for safe execution of all invasive and other work performed under this EWP.

The presence of utilities and easements on the portion of the site where residual soil may be present will be investigated prior to intrusive activities. It will be determined whether a risk or impediment to the planned work under this EWP is posed by utilities or easements on the affected portion of the site.

Loaded vehicles with residual soil leaving the site will be appropriately lined, tarped, securely covered, manifested, and placarded in accordance with appropriate Federal, State, local, and NYSDOT requirements (and all other applicable transportation requirements).

A truck cleaning area will be operated on-site, as appropriate. The qualified environmental professional will be responsible for ensuring that all outbound trucks loaded with residual soil will be cleaned at the truck wash before leaving the site until the activities performed under the EWP are complete. Truck wash waters, if generated, will be collected and disposed of off-site in an appropriate manner.

Locations where vehicles containing residual soil enter or exit the site shall be inspected daily for evidence of off-site soil tracking.

The qualified environmental professional will be responsible for ensuring that all egress points for truck and equipment transport involving residual soil from the site are clean of dirt and other materials derived from the site during intrusive excavation activities involving residual soil. Cleaning of the adjacent streets will be performed as needed to maintain a clean condition with respect to site-derived residual soil.

D.5 MATERIALS TRANSPORT OFF-SITE

All transport of residual soil 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.

Residual soil 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.

Truck transport routes are as follows:

- Exit Site onto Woodbury Road, turn right and travel about ¼ mile to Manetto Hill Road;
- Turn right onto Manetto Hill Road and travel about ½ mile to Sunnyside Boulevard;
- Turn left onto Sunnyside Boulevard and travel about ½ mile to the Long Island Expressway(LIE); and
- Enter LIE either east-bound or west-bound, as appropriate.

All trucks loaded with residual soil will exit the vicinity of the site using only this approved truck route. 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.

Trucks involved in residual soil transport will be prohibited from stopping and idling in the neighborhood outside the project site.

Egress points for truck and equipment transport involving residual soil from the site will be kept clean of dirt and other materials during site remediation.

Queuing of trucks involving residual soil will be performed on-site in order to minimize off-site disturbance. Off-site queuing will be prohibited.

D.6 RESIDUAL SOIL DISPOSAL OFF-SITE

All residual soil excavated, once confirmed to be contaminated above the UU SCOs, will be removed from the site as a regulated material and will be transported and disposed in accordance with all local, State (including 6NYCRR Part 360) and Federal regulations. Unregulated off-site management of residual soil from this site will not occur without formal NYSDEC approval.

Off-site disposal locations for excavated residual soils will be identified in the pre-excavation notification. This will include estimated quantities and a breakdown by class of disposal facility if appropriate, i.e. hazardous waste disposal facility, solid waste landfill, petroleum treatment facility, C/D recycling facility, etc. Actual disposal quantities and associated documentation for residual soil will be reported to the NYSDEC in the Periodic Review Report. This documentation will include: waste profiles, test results, facility acceptance letters, manifests, bills of lading and facility receipts.

Non-hazardous residual soils taken off-site will be handled, at minimum, as a Municipal Solid Waste per 6NYCRR Part 360-1.2. Material that does not meet Unrestricted SCOs is prohibited from being taken to a New York State recycling facility (6NYCRR Part 360-16 Registration Facility).

D.7 MATERIALS REUSE ON-SITE

The qualified environmental professional will ensure that procedures defined for materials reuse in this SMP are followed and that unacceptable material (residual soil containing VOCs exceeding Unrestricted SCOs) does not remain on-site. Contaminated on-site material, including VOC-contaminated soil, will not be reused onsite.

D.8 FLUIDS MANAGEMENT

All liquids to be removed from the site, including but not limited to, excavation dewatering, decontamination waters and groundwater monitoring well purge and development waters, will be handled, transported and disposed in accordance with applicable local, State, and Federal regulations. Dewatering, purge and development fluids will not be recharged back to the land surface or subsurface of the site, and will be managed off-site, unless prior approval is obtained from NYSDEC.

Discharge of water generated during large-scale construction activities to surface waters (i.e. a local pond, stream or river) will be performed under a SPDES permit.

D.9 COVER SYSTEM

This site does not require a cover system and no cover system is planned. In the unlikely event that any residual soil is identified in the existing retail building area or in the southern wooded area and this soil is not completely removed under this EWP, then a cover system may be necessary. If a cover system becomes necessary, then the NYSDEC will be notified and a cover system design will be submitted.

D.10 BACKFILL FROM OFF-SITE SOURCES

All materials proposed for import onto the site for use as backfill in a remedial excavation will be approved by the qualified environmental professional and will be in compliance with provisions in the SMP prior to receipt at the site. A Request to Import/Reuse Fill or Soil form, which can be found at http://www.dec.ny.gov/regulations/ 67386.html, will be prepared and submitted to the NYSDEC project manager allowing a minimum of 5 business days for review.

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

All imported soils for use as backfill in a remedial excavation will meet the backfill and cover soil quality standards established in 6NYCRR 375-6.7(d). Based on an evaluation of the proposed land use (restricted residential) and protection of groundwater criteria, the resulting soil quality standards are listed in Table 375-6.8(b). Soils that meet 'exempt' fill requirements under 6 NYCRR Part 360, but do not meet backfill objectives for this site, will not be imported onto the site without prior approval by NYSDEC. Solid waste will not be imported onto the site.

Trucks entering the site with imported soils will be securely covered with tight fitting covers. Imported soils will be stockpiled separately from excavated residual soil and covered to prevent dust releases.

D.11 STORMWATER POLLUTION PREVENTION

It is anticipated that any remedial excavation to remove residual soil under this EWP will be relatively small. In the event that the remedial excavation remains open for more than one day, then barriers and hay bale checks will be installed around the remedial excavation 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 the 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 this EWP 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.

D.12 EXCAVATION CONTINGENCY PLAN

If underground tanks or other previously unidentified contaminant sources are found during post-remedial subsurface excavations or development related construction, excavation activities will be suspended until sufficient equipment is mobilized to address the condition.

Sampling will be performed on product, sediment and surrounding soils, etc. as necessary to determine the nature of the material and proper disposal method. Chemical analysis will be performed for a full list of analytes (TAL metals; TCL volatiles and semi-volatiles, TCL pesticides and PCBs), unless the site history and previous sampling results provide a sufficient justification to limit the list of analytes. In this case, a reduced list of analytes will be proposed to the NYSDEC for approval prior to sampling.

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. Reportable quantities of petroleum product will also be reported to the NYSDEC spills hotline. These findings will be also included in the Periodic Review Report.

APPENDIX E
HEALTH AND SAFETY PLAN AND COMMUNITY AIR MONITORING PLAN

This worker Health and Safety Plan (HASP) has been prepared for a New York State Department of Environmental Conservation (NYSDEC) site identified as 926, 928 and 930 Woodbury Road, Woodbury, NY (Site), which is managed under Order on Consent #130200. This HASP is part of the Site Management Plan (SMP) for this Site and includes measures for the protection of worker health and safety during site management activities. A Community Air Monitoring Plan (CAMP) is also included to address potential issues that may affect the Site community during onsite intrusive activities involving residual soil, groundwater or soil vapor.

E.1 Worker Health and Safety Plan

E.1.1 Introduction

This HASP has been written for compliance with "OSHA Hazardous Waste Operations Standards (29 CFR 1910.120)", the guidance documents, "Standard Operating Safety Guidelines (Office of Solid Waste and Emergency Response, 1992)" and the "Occupational Safety and Health Guidance Manual for Hazardous Waste Activities" (U.S. Department of Health and Human Services, 1985).

E.1.2 Scope and Applicability of the HASP

This HASP is designed to be applicable to locations where soil borings, soil vapor sampling, monitoring well sampling, and/or indoor/outdoor air sampling, if any, are performed at the Site by all parties that either perform or witness the activities. This HASP may also be modified or amended to meet specific needs of the proposed work.

This HASP details the Site safety procedures, Site background, and safety monitoring. Contractors will be required to adopt this HASP in full or to follow an approved HASP. The Health and Safety Officer (HSO) will be present at the Site to inspect the implementation of the HASP; however, it is the sole responsibility of the contractor(s) to comply with the HASP.

The HASP has been formulated as a guide to complement professional judgment and experience. The appropriateness of the information presented should always be evaluated with respect to unforeseen Site conditions that may arise.

E.1.3 Site Work Zone and Visitors

The Site work zone (a.k.a. exclusion zone) during the performance of any boring and sampling activities will be a 30-foot radius about the work location. This work zone may be extended if, in the judgment of the HSO, Site conditions warrant a larger work zone.

No visitors will be permitted within the work zone without the consent of the HSO. All visitors will be required to be familiar with, and comply with, the HASP. The HSO will deny access to those whose presence within the work zone is unnecessary or those who are deemed by the HSO to be in non-compliance with the HASP.

All Site workers, including the contractors, with the potential to contact residual materials will be required to have 40-hour hazardous material training (eight-hour refresher courses annually), respirator fit test certification, and current medical surveillance as stated in 29 CFR 1910.120.

The HSO will also give an on-Site health and safety discussion to all Site personnel, including the contractors, prior to initiating Site work involving residual materials. Workers not in attendance during the health and safety talk will be required to have the discussion with the HSO prior to entering the work zone involving residual materials.

Emergency telephone numbers and directions to the nearest hospital are shown in Table E.1.3.1 and will be kept at the Site in the possession of the HSO and will be available to all Site workers and visitors.

TABLE E.1.3.1
EMERGENCY TELEPHONE NUMBERS AND
DIRECTIONS TO NORTH SHORE UNIVERSITY HOSPITAL AT PLAINVIEW

Police 911
Ambulance 911
LI Regional Poison Control Center..... 1-800-222-1222
North Shore University Hospital (Emergency Room) 516-719-2336

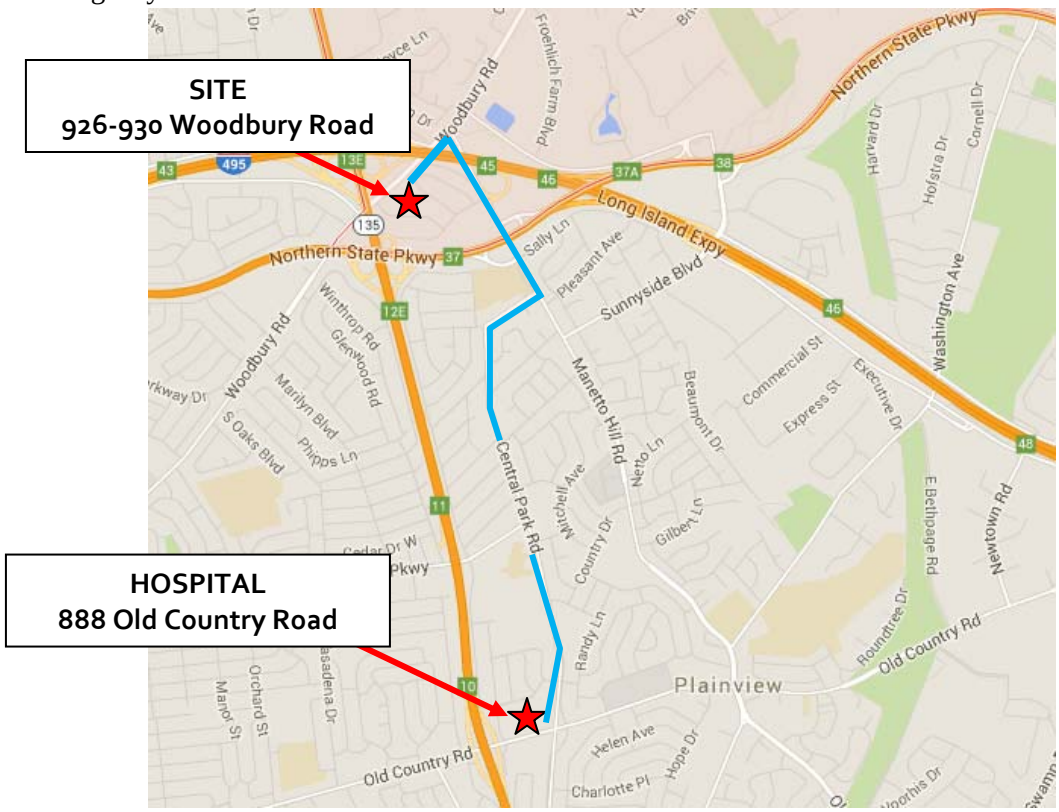
FPM Contact Personnel (631-737-6200)

Dr. Kevin J. Phillips, P.E. ..... Cell # 631-374-6066
Stephanie Davis, Program Director ..... Cell # 516-381-3400
Ben Cancemi, Project Manager ..... Cell # 516-383-7106

Directions to the North Shore University Hospital at Plainview

888 Old Country Road
Plainview, NY 11803
Tel: 516-719-3000

Exit the Site and turn right onto Woodbury Road. Travel northeast on Woodbury Road for about ¼ mile to Manetto Hill Road. Make a right onto Manetto Hill Road continue south for about ½ mile to Central Park Road (just past the school). Turn right onto Central Park Road for about 2 miles to Old Country Road. Turn right onto Old Country Road and the Hospital is immediately on the right; follow the signs to the Emergency Room.



E.1.4 Key Personnel/Alternates

The project coordinator and Quality Assurance Officer (QAO) for this project will be identified in advance of field activities and will be a qualified environmental professional (QEP). The project manager will also be a QEP and will also act as the HSO. An assistant project manager and assistant health and safety officer may be designated for the field activities.

E.1.5 Site Background

Based on the Site history and previous analyses of samples, the known chemicals present at the Site include the volatile organic compound tetrachloroethylene (PCE). This chemical is present in soil, groundwater, soil vapor, and indoor air at the Site. Site management activities will include collection of soil, soil vapor, groundwater, and indoor/outdoor air samples.

E.1.6 Task/Operation Health and Safety Analysis

This section presents health and safety analyses for the boring and sampling tasks. In general, one QEP will be onsite during these activities. No soil borings or other intrusive Site operations will be conducted by contractors without the presence of a QEP onsite. In the event that the HSO is not present on the Site, the Assistant HSO will implement the HASP. Levels of personal protection mentioned in this section are defined in Section E.1.9.

- Soil Boring and Intrusive Sampling Safety Analysis

Intrusive activities, including performing soil borings, will be performed by a direct-push contractor and/or the QEPs. The soil borings will be performed by advancing a decontaminated hand auger or direct-push tooling into unconsolidated deposits consisting primarily of sand. The depth to groundwater is approximately 85 feet below grade at the Site and will not be contacted during intrusive activities except during well sampling. A QEP will be present to coordinate, oversee, and monitor intrusive activities.

To minimize the potential for dust inhalation during intrusive activities involving residual materials, the HSO will assess wind and soil moisture conditions and, if it is deemed necessary by the HSO, the affected area will be wetted with potable water. If this measure is determined to be ineffective, the HSO may decide to upgrade personal protection to Level C respiratory

protection to include respirators with dust cartridges. If extremely dusty conditions exist that cannot be successfully controlled by dust suppression with potable water, then the HSO may choose to postpone intrusive activities until such time as conditions improve.

Organic vapor concentrations will be monitored in the work zone during intrusive activities involving residual materials by utilizing a Photovac MicroTIP PID or equivalent. The PID will be "zeroed" by exposing the PID to ambient (outdoor) air prior to intrusive activities and the upper range of calibration will be established by calibrating at 98 to 100 parts per million (ppm) of isobutylene. Background organic vapor concentrations will then be established in the work zone prior to intrusive activities and recorded in the HSO field book. Upon commencement of intrusive activities, PID readings will be obtained in the workers' breathing zone. Readings will be obtained following the initial advance into the ground and every five feet thereafter. At the discretion of the HSO, PID readings may be obtained more frequently. All readings and observations will be recorded in the HSO field book. PID air monitoring will be conducted by a QEP.

Steady-state PID readings greater than five ppm in the worker's breathing zone will require upgrading to Level C personal protective equipment. Steady-state readings, for this purpose, will be defined as readings exceeding five ppm above background for a minimum of ten seconds at points approximately one foot above and then around the borehole opening. These points will define the worker's breathing zone. Level C personal protection will be implemented including full-face air-purifying respirators with dust and organic vapor cartridges (personal protective equipment will be described in greater detail in Section E.1.9). All onsite personnel with the potential to contact residual materials must be properly trained and fit tested prior to donning respirators.

If PID readings exceed steady-state levels greater than 50 ppm above background or any conditions exist for which the HSO determines require Level B personal protective equipment, all work at the Site will cease immediately and all personnel will evacuate the work zone. Evacuation will occur in the upwind direction if discernible. Specific evacuation routes will be discussed prior to commencement of work at each location based on work location and wind direction and an evacuation meeting place will be determined. Level B conditions are not anticipated to be encountered; however, if level B conditions arise, no Site work will be

performed by the QEPs or contractors and a complete evaluation of the operation will be performed and this HASP will be modified.

All personnel will be required to wear chemical-resistant nitrile gloves when the potential for dermal contact with the soil or groundwater is possible. This will include handling equipment retrieved from boreholes or wells. Dermal contact with soil or groundwater and equipment that has been in contact with soil or groundwater will be avoided.

➢ Other Safety Considerations

- Noise

During operations that may generate potentially harmful levels of noise, the HSO will monitor noise levels with a Realistic[tm] hand-held sound level meter. Noise levels will be monitored in decibels (dBs) in the A-weighted, slow-response mode. Noise level readings which exceed the 29 CFR 1910.95 permissible noise exposure limits will require hearing protection (see Table E.1.6.1 for Permissible Noise Exposures).

Hearing protection will be available to all Site workers and will be required for exceedances of noise exposure limits. The hearing protection will consist of foam, expansion-fit earplugs (or other approved hearing protection) with a noise reduction rating of at least 29 dB. Hearing protection must alleviate worker exposure to noise to an eight-hour time-weighted average of 85 dB or below. In the event that the hearing protection is inadequate, work will cease until a higher level of hearing protection can be incorporated.

- Slip/Trip/Fall Preventative Measures

To reduce the potential for slipping, tripping, or falling, the work zone will be kept clear of unnecessary equipment. In addition, all Site workers will be required to wear work boots with adequate tread to reduce the potential for slipping (work boots must be leather or chemical-resistant and contain steel toes and steel shanks).

TABLE E.1.6.1
PERMISSIBLE NOISE EXPOSURES*

Duration Per Day Hours	Sound Level dBA Slow Response
8	90
6	92
4	95
3	97
2	100
1.5	102
1	105
0.5	110

Notes:

When the daily noise exposure is composed of two or more periods of noise exposure of different levels, their combined effect should be considered, rather than the individual effect of each. If the sum of the following fractions: $C_1/T_1+C_2/T_2+.....C_n/T_n$ exceeds unity, then, the mixed exposure should be considered to exceed the limit value. C_n indicates the total time of exposure at a specified noise level, and T_n indicates the total time of exposure permitted at that level.

Exposure to impulsive or impact noise should not exceed 140 dB peak sound pressure level.

*Standards derived from 29 CFR 1910.95

- Insects

Potential insect problems include, but are not limited to stinging insects such as bees, wasps, and hornets, and ticks. Prior to commencement of work, each work area will be surveyed for nests and hives to reduce the possibility of disturbing stinging insects. In addition, each Site worker will be asked to disclose any allergies related to insect stings or bites. The worker will be requested to keep his or her anti-allergy medicine on Site.

Tick species native to Long Island consist of the pinhead-sized deer tick and the much-larger dog tick. Ticks may exist at the Site. All Site workers will be advised to avoid walking through vegetated areas and will be advised to check for ticks on clothing periodically.

- Potential Electrical and Other Utility Hazards

Potential electric hazards consist mainly of overhead and underground power lines. Other utilities that may present hazards include telephone lines, gas lines, sewer lines, water lines, and other overhead or underground utilities. Prior to commencement of intrusive work at the Site, all locations will be inspected with respect to overhead lines. Intrusive

work involving heavy equipment will not be performed when the horizontal distance between the equipment and overhead wires is less than 30 feet.

Underground potential utility hazards will be minimized by contacting the One-Call service to provide markouts of the utilities beneath adjoining public streets.

- Heat/Cold Stress

Heat stress may become a concern especially if protective clothing is donned that will decrease natural ventilation. To assist in reducing heat stress, an adequate supply of water or other liquids will be staged on the Site and personnel will be encouraged to rehydrate at least every two hours even if not thirsty. In addition, a shady rest area will be designated to provide shelter during sunny or warm days and Site workers will break for at least 10 minutes every two hours in the rest area, and, in very hot weather, workers wearing protective clothing may be rotated.

Indications of heat stress range from mild (fatigue, irritability, anxiety, decreased concentration, dexterity or movement) to fatal. Medical help will be obtained for serious conditions. Heat-related problems include:

- Heat rash: caused by continuous exposure to heat and humid air and aggravated by chafing clothes. Decreases ability to tolerate heat.
- Heat cramps: caused by profuse perspiration with inadequate fluid intake and chemical replacement (especially salts). Signs: muscle spasm and pain in the extremities and abdomen.
- Heat exhaustion: caused by increased stress on various organs to meet increased demands to cool the body. Signs: shallow breathing; pale, cool, moist skin; profuse sweating; dizziness and lassitude.
- Heat stroke: the most severe form of heat stress. Can be fatal. Medical help must be obtained immediately. Body must be cooled immediately to prevent severe injury and/or death. Signs: red, hot, dry skin; no perspiration; nausea; dizziness and confusion; strong, rapid pulse; coma.

Cold exposure is a concern if work is conducted during cold weather, marginally cold weather during precipitation periods, or moderate to high wind periods. To assist in reducing cold exposure the following measures will be taken when cold exposure concerns are present:

- All personnel will be required to wear adequate and appropriate clothing. This will include head gear to prevent the high percentage loss of heat that occurs in this area (thermal liners for hard hats if hard hats are required).
- A readily-available warm shelter will be identified near the work zone.
- Work and rest periods will be scheduled to account for the current temperature and wind velocity conditions.
- Work patterns and the physical condition of workers will be monitored and personnel will be rotated, as necessary.
- Indications of cold exposure include shivering, dizziness, numbness, confusion, weakness, impaired judgment, impaired vision, and drowsiness. Medical help will be obtained for serious conditions if they occur.

Cold exposure-related problems are:

- Frost bite: Ice crystal formation in body tissues. The restricted blood flow to the injured part results in local tissue destruction.
- Hypothermia: Severe exposure to cold temperature resulting in the body losing heat at a rate faster than the body can generate heat. The stages of hypothermia are shivering, apathy, loss of consciousness, decreasing pulse and breathing rate, and death.

➢ **The Buddy System**

All activities in contaminated or potentially contaminated areas will be conducted by pairing off the Site workers in groups of two (or three if necessary). Each person (buddy) will be able to provide his or her partner with assistance, observe his or her partner for signs of chemical, cold, or heat exposure, periodically check the integrity of his or her partner's protective clothing, and notify the HSO or others if emergency help is needed. The buddy system will be instituted at the beginning of each work day. If new workers arrive on Site, a buddy will be chosen prior to the new worker entering the work zone.

- **Site Communications**

Two communication systems will be established at the Site: internal communication among personnel onsite, and external communication between onsite and offsite personnel. Internal communication will be used to alert team members to emergencies, pass along safety information such as heat stress check, protective clothing check, etc, communicate changes in the work to be accomplished, and maintain Site control. Due to ambient noise, verbal communications may be difficult at times. The HSO will carry a whistle (and compressed air horn if respirators are donned) to signal Site workers. A single whistle blast will be the signal to immediately evacuate the work zone through the access control point. This signal will be discussed with all Site workers prior to commencement of work.

An external communication system will be established between onsite and offsite personnel to coordinate emergency response, report to the Project Manager, and maintain contact with essential off-Site personnel. A field telephone will be available at all times in the HSO's vehicle. In addition, a backup telephone will be identified prior to the commencement of Site operations and this location will be relayed to all Site workers.

- **General Safe Work Practices**

Standing orders applicable during Site operations are as follows:

- No smoking, eating, drinking, or application of cosmetics in the work zone.
- No matches or lighters in the work zone.
- All Site workers will enter/exit work zone through the Site access point.
- Any signs of contamination, radioactivity, explosivity, or unusual conditions will require evacuating the Site immediately and reporting the information to the HSO.
- Loose-fitting clothing and loose long hair will be prohibited in the work zone during heavy equipment operations.
- A signal person will direct the backing of work vehicles.
- Equipment operators will be instructed to check equipment for abnormalities such as oozing liquids, frayed cables, unusual odors, etc.

E.1.7 Personnel Training Requirements

All onsite personnel with the potential to contact residual materials will receive adequate training prior to entering the Site. These personnel will, at a minimum, have completed OSHA-approved, 40-hour hazardous materials Site safety training and OSHA-approved, eight-hour safety refresher course within one year prior to commencing field work. In addition, each worker must have a minimum of three days field experience under the direct supervision of a trained, experienced supervisor.

Prior to Site field work, the HSO will conduct an in-house review of the project with respect to health and safety with all personnel who will be engaged with field work involving residual materials at the Site. The review will include discussions of signs and symptoms of chemical exposure and heat/cold stress that indicate potential medical emergencies. In addition, review of PPE will be conducted to include the proper use of air-purifying respirators.

E.1.8 Medical Surveillance Program

All workers at the Site with the potential to contact residual materials must participate in a medical surveillance program in accordance with 29 CFR 1910.120. A medical examination and consultation must have been performed within the last twelve months to be eligible for field work. The content of the examination and consultation will include a medical and work history with special emphasis on symptoms related to the handling of hazardous substances, health hazards, and fitness for duty including the ability to wear required personal protective equipment under conditions (i.e., temperature extremes) that may be expected at the work Site.

All medical examinations and procedures will be performed by, or under the supervision of, a licensed physician. The Physician shall furnish a written opinion containing:

- The results of the medical examination and tests;
- The physician’s opinion as to whether the employee has any detected medical conditions which would place the worker at increased risk of material impairment of the employee's health from work in hazardous waste operations;
- The physician's recommended limitations upon the worker assigned to the work; and

- A statement that the worker has been informed by the physician of the results of the medical examination and any further examination or treatment.
- An accurate record of the medical surveillance will be retained. The record will consist of at least the following information:
- The name and social security number of the employee;
- The physician's written opinions, recommended limitations, and results of examinations and tests; and
- Any worker medical complaints related to exposure to hazardous substances.

E.1.9 Personal Protective Equipment

General Considerations

The two basic objectives of the personal protective equipment (PPE) are to protect the wearer from safety and health hazards, and to prevent the wearer from incorrect use and/or malfunction of the PPE.

Potential Site hazards have been discussed previously in Section E.1.6. The duration of Site activities is estimated to be periods of several days. All work is expected to be performed during daylight hours and workdays, in general, are expected to be eight to ten hours in duration. Any work performed beyond daylight hours will require the permission of the HSO. This decision will be based on the adequacy of artificial illumination and the type and necessity of the task being performed.

Personal protection levels for the Site activities, based on past investigations at the Site, are anticipated to be Level D with the possibility of upgrading to Level C. The equipment included for each level of protection is provided as follows:

➢ Level C Protection

Level C personnel protective equipment includes:

- Air-purifying respirator, full-face

- Chemical-resistant clothing includes: Tyvek[tm] (spunbonded olefin fibers) for particulate and limited splash protection or Saranex[tm] (plastic film-laminated Tyvek) for permeation resistance to solvents.
- Coveralls*, or
- Long cotton underwear*
- Gloves (outer), chemical-resistant
- Gloves (inner), chemical-resistant
- Boots (outer), leather or chemical-resistant, steel toe and shank
- Boot covers (outer), chemical-resistant (disposable)*
- Hard hat (face shield)*
- Escape mask*
- 2-way radio communications (inherently safe)*

(*) optional

Meeting all of these criteria permits use of Level C protection:

- Oxygen concentrations are not less than 19.5% by volume.
- Measured air concentrations of identified substances will be reduced by the respirator below the substance's threshold limit value (TLV).
- Atmospheric contaminants, liquid splashes, or other direct contact will not adversely affect any body area left unprotected by chemical-resistant clothing.
- Job functions do not require self-contained breathing apparatus.
- Direct readings are below 50 ppm on the PID.

➢ Level D Protection

Level D personnel protective equipment includes:

- Coveralls

- Gloves*
- Boots/shoes, leather or chemical-resistant, steel toe and shank
- Safety glasses or chemical splash goggles*
- Hard hat (face shield*)
- Escape mask*

(*) optional

Meeting any of these criteria allows use of Level D protection:

- No contaminant levels above 5 ppm organic vapors or dusty conditions are present.
- Work functions preclude splashes, immersion, or the reasonable potential for unexpected inhalation of any chemicals above the TLV.

➢ Additional Considerations for Selecting Levels of Protection

Another factor that will be considered in selecting the appropriate level of protection is heat and physical stress. The use of protective clothing and respirators increases physical stress, in particular, heat stress on the wearer. Chemical protective clothing greatly reduces natural ventilation and diminishes the body's ability to regulate its temperature. Even in moderate ambient temperatures, the diminished capacity of the body to dissipate heat can result in one or more heat-related problems.

All chemical protective garments can be a contributing factor to heat stress. Greater susceptibility to heat stress occurs when protective clothing requires the use of a tightly-fitted hood against the respirator face piece, or when gloves or boots are taped to the suit. As more body area is covered, less cooling takes place, increasing the probability of heat stress.

Wearing protective equipment also increases the risk of accidents. It is heavy, cumbersome, decreases dexterity, agility, interferes with vision, and is fatiguing to wear. These factors all increase physical stress and the potential for accidents. In particular, the necessity of selecting a level of protection will be balanced against the increased probability of heat stress and accidents.

➢ Donning and Doffing Ensembles

- Donning an Ensemble

A routine will be established and practiced periodically for donning a Level C ensemble. Assistance may be provided for donning and doffing since these operations are difficult to perform alone. Table E.1.9.1 lists sample procedures for donning a Level C ensemble. These procedures should be modified depending on the particular type of suit and/or when extra gloves and/or boots are used.

- Doffing an Ensemble

Exact procedures for removing Level C ensembles must be established and followed to prevent contaminant migration from the work area and transfer of contaminants to the wearer's body, the doffing assistant, and others. Doffing procedures are provided in Table E.1.9.2. These procedures should be performed only after decontamination of the suited worker. They require a suitably attired assistant. Throughout the procedures, both worker and assistant should avoid any direct contact with the outside surface of the suit.

➢ Respirator Fit Testing

The fit or integrity of the facepiece-to-face seal of a respirator affects its performance. Most facepieces fit only a certain percentage of the population; thus each facepiece must be tested on the potential wearer in order to ensure a tight seal. Facial features such as scars, hollow temples, very prominent cheekbones, deep skin creases, dentures or missing teeth, and the chewing of gum and tobacco may interfere with the respirator-to-face seal. A respirator shall not be worn when such conditions prevent a good seal. The worker's diligence in observing these factors shall be evaluated by periodic checks. Fit testing will comply with 29 CFR 1910.1025 regulations.

➢ Inspection

The PPE inspection program will entail five different inspections:

- Inspection and operational testing of equipment received from the factory or distributor;
- Inspection of equipment as it is issued to workers;
- Inspection after use;

TABLE E.1.9.1
SAMPLE LEVEL C DONNING PROCEDURES

1. Inspect the clothing and respiratory equipment before donning (see Inspection in subsection E.1.7).

2. Adjust hard hat or headpiece if worn, to fit user's head.

3. Standing or sitting, step into the legs of the suit; ensure proper placement of the feet within the suit; then gather the suit around the waist.

4. Put on chemical-resistant safety boots over the feet of the suit. Tape the leg cuff over the tops of the boots.

5. Don the respirator and adjust it to be secure, but comfortable.

6. Perform negative and positive respirator facepiece seal test procedures.

   - To conduct a negative pressure test, close the inlet part with the palm of the hand or squeeze the breathing tube so it does not pass air, and gently inhale for about 10 seconds. Any inward rushing of air indicates a poor fit. Note that a leaking facepiece may be drawn tightly to the face to form a good seal, giving a false indication of adequate fit.

   - To conduct a positive pressure test, gently exhale while covering the exhalation valve to ensure that a positive pressure can be built up. Failure to build a positive pressure indicates a poor fit.

7. Depending on type of suit:

   - Put on inner gloves (surgical gloves).

   - Additional overgloves, worn over attached suit gloves, may be donned later.

8. Put on hard hat

9. Have assistant observe the wearer for a period of time to ensure that the wearer is comfortable, psychologically stable, and that the equipment is functioning properly.

TABLE E.1.9.2
DOFFING PROCEDURES

1. Remove any extraneous or disposable clothing, boot covers, outer gloves, and tape.

2. Remove respirator by loosening straps and pulling straps over the top of the head and move mask away from head. Do not pull mask over the top of the head.

3. Remove arms, one at a time, from suit, avoiding any contact between the outside surface of the suit and wearer's body and lay the suit out flat behind the wearer. Leave internal gloves on, if any.

4. Sitting, if possible, remove both legs from the suit.

5. After suit is removed, remove internal gloves by rolling them off the hand, inside out.

- Periodic inspection of stored equipment; and
- Periodic inspection when a question arises concerning the appropriateness of the selected equipment, or when problems with similar equipment arise.

The inspection checklist is provided in Table E.1.9.3. Records will be kept of all inspection procedures. Individual identification numbers will be assigned to all reusable pieces of equipment and records should be maintained by that number. At a minimum, each inspection should record the ID number, date, inspector, and any unusual conditions or findings. Periodic review of these records may indicate an item or type of item with excessive maintenance costs or a particularly high level of down-time.

➢ Storage

Clothing and respirators will be stored properly to prevent damage or malfunction due to exposure to dust, moisture, sunlight, damaging chemicals, extreme temperatures, and impact.

Potentially-contaminated clothing will be stored in a well-ventilated area separate from street clothing, with good air flow around each item, if possible. Different types and materials of clothing and gloves will be stored separately to prevent issuing the wrong materials by mistake, and protective clothing will be folded or hung in accordance with manufacturer's recommendations.

TABLE E.1.9.3
PPE INSPECTION CHECKLIST

CLOTHING

- Determine that the clothing material is correct for the specified task at hand.
- Visually inspect for imperfect seams, non-uniform coatings, tears, and/or malfunctioning closures.
- Hold up to light and check for pinholes and flex product and observe for cracks or other signs of deterioration.
- If the product has been used previously, inspect inside and out for signs of chemical attack, including discoloration, swelling, and/or stiffness.

During the work task, periodically inspect for:

- Evidence of chemical attack such as discoloration, swelling, stiffening, and softening. Keep in mind that chemical attack can occur without visible effects.
- Indication of physical damage, including closure failure, tears, punctures, and/or seam discontinuities.

GLOVES

- Before use pressurize glove to check for pinholes. Either blow into glove, then roll gauntlet toward fingers, or inflate glove and hold under water. In either case, no air should escape.

AIR-PURIFYING RESPIRATORS

- Inspect air-purifying respirators before each use to be sure they have been adequately cleaned. Check material conditions for signs of pliability, deterioration, and/or distortion.
- Examine cartridges to ensure that they are the proper type for the intended use, the expiration date has not been passed, and they have not been opened or used previously. Check faceshields and lenses for cracks, crazing, and/or fogginess.

Air-purifying respirators will be stored individually in resealable plastic bags. After each use air-purifying respirators will be dismantled, washed, and placed in sealed plastic bags.

- PPE Maintenance

  - Specialized PPE maintenance will be performed only by the factory or an authorized repair person. Routine maintenance, such as cleaning, will be performed by the personnel to whom the equipment is assigned. Respirators will be cleaned at the end of each day with alcohol pads or, preferably, by washing with warm soapy water.

- Decontamination Methods

All personnel, clothing, equipment, and samples leaving the work zone area involving residual materials at the Site must be decontaminated to remove any harmful chemicals that may have adhered to them. Decontamination methods either (1) physically remove contaminants (2) inactivate contaminants by chemical detoxification or disinfection/sterilization, or (3) remove contaminants by a combination of both physical and chemical means. In many cases, gross contamination can be removed by physical means involving dislodging/displacement, rinsing, wiping off, and evaporation. Contaminants that can be removed by physical means include dust, vapors, and volatile liquids. All reusable equipment will be decontaminated by rinsing in a bath of detergent and water (respirators, gloves to be reused). Monitoring equipment will be decontaminated by wiping with paper towels and water. All used PPE to be discarded will be disposed offsite as solid waste.

The effectiveness of the decontamination will be evaluated near the beginning of Site activities and will be modified if determined to be ineffective. Visual observation will be used for this purpose. The HSO will inspect decontaminated materials for discoloration, stains, corrosive effects, visible dirt, or other signs of possible residual contamination.

E.2 Community Air Monitoring Plan

This Community Air Monitoring Plan (CAMP) will be implemented at the Site by the QEP during intrusive activities involving residual materials, including soil borings and sampling. Due to the nature of the contaminant at the Site, there is a potential for organic vapor emissions as these activities occur. In addition, there is the potential for dust to be associated with intrusive activities. To address these concerns, organic vapor monitoring and dust monitoring will be performed during intrusive activities involving residual materials.

Any CAMP monitoring results that exceed the action levels described below will be reported (or notice provided by another arrangement acceptable to the NYSDEC) when identified if a NYSDEC representative is present at the Site or within two hours by phone call or email to the NYSDEC Project manager when no NYSDEC representative is onsite. Exceedances of the CAMP action levels will also be summarized in the monthly progress reports, including the duration of the exceedance(s) and any response actions taken.

E.2.1 Organic Vapor Monitoring

Under the CAMP, organic vapor concentrations will be monitored at the boundaries of the work zone involving residual materials. It will be the responsibility of the HSO to implement the plan and to ensure that proper action is taken in the event that any of the established action levels are exceeded.

To monitor organic vapors, a PID capable of calculating 15-minute running average concentrations will be used and maintained in good operating condition. Calibration of the PID will be performed according to manufacturer's instructions. Background levels of organic vapors will be measured at the work zone boundary prior to beginning work and upwind of the work area periodically using a PID. Monitoring may be performed more frequently at the discretion of the HSO. Organic vapors will be monitored continuously at the downwind perimeter of the work area during ground intrusive activities involving residual materials.

PID readings will be recorded in the field logbook for both background and work area perimeter. Logbook recordings will include the time, location, and PID readings observed. Downwind perimeter levels will be recorded in the log whenever the level reaches 5 ppm above the background along with the action(s) taken to mitigate the level. If the level of organic vapors exceeds 5 ppm above the background at the downwind perimeter of the work area, work activities will be halted and monitoring continued. The vapor emission response plan will then be implemented.

E.2.1.1 Vapor Emission Response Plan

The vapor emission response plan includes the following trigger levels and responses:

- Greater than 5 ppm at perimeter: In the event the level of organic vapors exceeds 5 ppm above the background at the downwind perimeter of the residual materials work

area, activities will be halted and monitoring continued. If the organic vapor level then decreases to below 5 ppm above background, work activities can resume but organic vapor readings will be obtained more frequently as directed by the HSO.

- 5 ppm to 25 ppm at perimeter and less than 5 ppm at the work zone boundary: If the level of organic vapors is greater than 5 ppm but less than 25 ppm over background at the downwind perimeter of the residual materials work area, activities will be halted, the source of the vapors will be identified and corrective actions will be taken. Monitoring will be continued and activities will resume if the organic vapor concentration at half the distance to the nearest residential or commercial structure, whichever is less, is below 5 ppm over background. More frequent intervals of monitoring will be performed as directed by the HSO.
- Above 25 ppm at perimeter: If the level of organic vapors is above 25 ppm at the perimeter of the residual materials work area, activities will be shut down. Should such a shutdown be necessary, downwind air monitoring will continue as directed by the HSO to confirm that organic vapor concentrations decrease. Actions will be taken to abate the source of vapor emissions and activities will not resume until the source is controlled.

E.2.1.2 Major Vapor Emission Response Plan

The Major Vapor Emission Response Plan will automatically be placed into effect if:

- Efforts to abate the emission source are unsuccessful and levels above 5 ppm persist for more than 30 minutes in the 20-foot zone; or
- The vapor levels are greater than 10 ppm above background in the 20-foot zone.

Upon activation of the Major Vapor Emission Response Plan, the following activities will be undertaken:

- All emergency response contacts as listed in the HASP will be notified;
- Air monitoring will be conducted at 30-minute intervals within the 20-foot zone. If two successive readings below action levels are measured, air monitoring will be halted or modified as directed by the HSO; or

- If air monitoring readings remain above action levels, work will be halted and further measures taken to reduce organic vapors.

If a Major Vapor Emission Response Plan is implemented, the NYSDEC and NYSODH will be contacted within 24 hours.

E.2.2 Dust Monitoring

Dust (particulate) monitoring will be performed during intrusive activities involving residual materials with the potential to create dust by using a Miniram personal monitor calibrated according to the manufacturer's instructions. The Miniram will be capable of calculating 15-minute running average concentrations and operated continuously at the downwind perimeter of the work zone during ground intrusive activities.

To ensure the validity of the fugitive dust measurements, appropriate QA/QC measures will be employed, including periodic instrument calibration, operator training, daily instrument performance (span) checks, and record-keeping on daily log sheets. If measurable dust levels are noted, then readings will also be obtained upwind of the work zone. If the downwind particulate level exceeds the upwind level by more than 100 micrograms per cubic meter (ug/m^3), then dust suppression techniques will be employed or work will be halted or controlled such that dust levels are reduced at the downwind perimeter to within 150 ug/m^3 of the upwind level.

If dust is generated during boring or other intrusive activities, then dust suppression will be performed, as discussed in Section E.1.6 of this HASP. Corrective measures may include increasing the level of PPE for onsite personnel and implementing additional dust suppression techniques. Should the action level of 150 $\mu g/m^3$ continue to be exceeded, work will stop and the NYSDEC will be notified as described in Section C.2 above. The notification will include a description of the control measures implemented to prevent further exceedances.

Reasonable fugitive dust suppression techniques will be employed during all intrusive Site activities involving residual materials that may generate fugitive dust. Particulate (fugitive dust) monitoring will be employed during the handling of contaminated soil or when onsite activities may generate fugitive dust from exposed contaminated soil.

Fugitive dust from contaminated soil that migrates offsite has the potential to transport contaminants offsite. Although there may be situations when the monitoring equipment does not

measure dust at or above the action level, visual observation may indicate that dust is leaving the Site. If dust is observed leaving the working area, additional dust suppression techniques will be employed.

The following techniques have been shown to be effective for controlling the generation and migration of dust during intrusive activities and will be used as needed during intrusive activities involving residual materials at the Site:

- Wetting equipment and exposed soil;
- Restricting vehicle speeds to 10 mph;
- Covering areas of exposed soil after investigation activity ceases; and
- Reducing the size and/or number of areas of exposed soil.

When techniques involving water application are used, care will be taken not to use excess water, which can result in unacceptably wet conditions. Using atomizing sprays will be considered to prevent overly wet conditions, conserve water, and provide an effective means of suppressing fugitive dust.

Evaluation of weather conditions is also necessary for proper fugitive dust control. When extreme wind conditions may make dust control ineffective, investigation actions may be suspended until wind speeds are reduced.

E.2.3 Noise Monitoring

Due to the use of heavy equipment, there is a potential for noise to impact the surrounding community. Work will be performed only during normal working hours when ambient noise levels are elevated due to ongoing activities and traffic in the surrounding community. Therefore, the potential for noise impacts on the surrounding community is low.

If pedestrians are present in the Site vicinity, it is possible for noise impacts to occur. To address these concerns and other safety concerns, pedestrians will be barred from entering the work zone. In addition, during activities involving residual contamination the HSO will periodically monitor noise levels at the work zone boundary and the closest property boundary with a Realistic^{tm} hand-held sound level meter. Noise levels will be monitored in dBs in the A-weighted, slow-response mode. If noise level readings exceed an eight-hour time-weighted

average of 85 dB at the work zone boundary or at the closest property boundary, the HSO will take appropriate measures to reduce noise exposure beyond these boundaries. These measures may include extension of the work zone boundary, issuing appropriate hearing protection devices as discussed in Section E.1.6, or other measures, as appropriate. In the event that the noise exposure measures are inadequate, work will cease until noise levels can be reduced to below 85 dB at the work zone boundary and/or at the closest property boundary.

APPENDIX F
QUALITY ASSURANCE PROJECT PLAN

This Quality Assurance Project Plan (QAPP) is applicable to all sampling activities at this Site.

F.1 Data Quality Objectives

The Data Quality Objectives (DQOs) will be applicable to all data-gathering activities at the Site. DQOs will be incorporated into sampling, analysis, and quality assurance tasks.

The data users for this project are the qualified environmental professional (QEP), the Site Owner/Remedial Party, the NYSDEC, and the NYSDOH. No other data users are anticipated. The collected data are intended to further evaluate the nature and extent of volatile organic compounds (VOCs), if any, in onsite soil, groundwater, soil vapor and indoor air.

For this project, field screening will be performed during sampling activities. Field screening includes monitoring for organic vapors in soil and in the air in the work zone using a Photovac MicroTIP PID (or equivalent) and visual observations of soil or groundwater characteristics. All readings and observations will be recorded by the QEP in his or her field notebook. All field analytical equipment will be calibrated immediately prior to each day's use. Calibration procedures will conform to manufacturer's standard instructions.

F.2 Standards, Criteria, and Guidance

The following standards, criteria, and guidance (SCGs) have been identified for the Site:

- NYSDEC DER-10;
- The NYSDEC Class GA Ambient Water Quality Standards, which are used to evaluate the groundwater chemical analytical results;
- The 6 NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives, which are used to evaluate soil sample results;
- The 6 NYCRR Parts 370, 371, and 372 regulations for hazardous waste management, which are used to guide hazardous waste characterization and disposal;

- The NYSDOH *Final Guidance for Evacuating Soil Vapor Intrusion in the State of New York (October 2006); and*
- The NYSDEC Division of Air Resources (DAR-1) *Guidelines for the Control of Toxic Ambient Air Contaminants (November 1997,October 2010)*

F.3 Quality Assurance/Quality Control Procedures

QA/QC procedures will be utilized during the performance of field sampling work to ensure that the resulting chemical analytical data accurately represent Site conditions. The following sections include descriptions of the QA/QC procedures to be utilized.

➢ Equipment Decontamination Procedures

All non-disposable downhole equipment (i.e., direct-push rods, submersible pumps) used during sampling activities will be decontaminated by washing in a potable water and Alconox solution and rinsing in potable water prior to use at each location to reduce the potential for cross-contamination. All sampling equipment will be either dedicated disposable equipment or will be decontaminated prior to use at each location. The decontamination procedures utilized for all non-disposable sampling equipment will be as follows:

1. The equipment will be scrubbed in a bath of potable water and low-phosphate detergent followed by a potable water rinse;
2. The equipment will be rinsed with distilled water; and
3. The equipment will be allowed to air dry, if feasible, and wrapped in aluminum foil (shiny side out) for storage and transportation.

➢ QA/QC Samples

QA/QC samples will be collected and utilized to evaluate the potential for field or laboratory contamination and to evaluate the laboratory's analytical precision and accuracy. The specific types of QA/QC samples to be collected are described below.

The decontamination procedures will be evaluated by the use of equipment blank samples. These samples consist of aliquots of laboratory-supplied water that are poured over or through the dedicated or decontaminated sampling equipment and then submitted to the laboratory for analysis. An equipment blank sample will be prepared for each day that soil or

groundwater sampling is conducted at the Site and will be analyzed for the same analytes as the primary environmental samples collected that day (VOCs). The equipment blanks will be labeled in a manner to prevent identification by the analytical laboratory.

Trip blank samples will be utilized to evaluate the potential for VOC cross-contamination between samples in the same cooler or shipping container. Trip blank samples consist of laboratory-provided containers filled with laboratory water or laboratory air that are sealed in sample containers at the laboratory and that are transported to and in the field with the other sample containers. A trip blank will be shipped with each group of soil, groundwater, and soil vapor/indoor air samples and will be managed in the field and analyzed in the laboratory in the same manner as the primary environmental samples.

Blind duplicate samples will be obtained at a frequency of at least one per every 20 environmental samples and will be used to attest to the precision of the laboratory. A blind duplicate consists of a separate aliquot of sample collected at the same time, in the same manner, and analyzed for the same parameters as the primary environmental sample. The blind duplicate samples are labeled in a manner such that they cannot be identified by the laboratory. The sample results are compared to those of the primary environmental sample to evaluate laboratory analytical precision.

Matrix spike/matrix spike duplicate (MS/MSD) samples will be collected at a frequency of one per 20 environmental soil or groundwater samples. The purpose of the MS/MSD samples is to confirm the accuracy and precision of laboratory results based on a particular matrix. The MS/MSD results will be evaluated during the preparation of the DUSRs, as discussed below.

- Chain-of-Custody Procedures

For each day of sampling, chain-of-custody (COC) sheets will be completed and submitted to the laboratory with the samples collected that day. A copy of each COC sheet will be retained by the QEP for sample tracking purposes. Each COC sheet will include the project name, the sampler's signature, the sampling locations and intervals, and the analytical parameters requested.

- Data Usability Summary Reports

All chemical analytical results will be evaluated using the sample data packages, sample data summary packages, and case narratives provided by the analytical laboratory. The data evaluation will be performed to verify that the analytical results are of sufficient quality to be relied upon to assess the potential presence of contaminants in the groundwater, soil vapor, indoor air, and/or soil samples. A DUSR will be prepared for each data package following the "Guidance for the Development of Data Usability Summary Reports" provided by the NYSDEC (Appendix 2B of DER-10).

F.4 Sample Analysis

All samples will be submitted to NYSDOH ELAP-certified laboratories. Holding times will be in accordance with NYSDEC ASP requirements. Analytical data will be provided by the laboratories in electronic format, in accordance with DER-10, Section 1.15.

The soil and groundwater samples will be analyzed for TCL VOCs using EPA Method 5035/5035A and 8260B. The soil vapor, sub-slab soil vapor and indoor/outdoor air samples will be analyzed for VOCs using Method TO-15. Low-level analyses will be performed for the indoor air samples. The analytical methods used will be as per NYS ASP with Category B deliverables.

F.5 Data Evaluation and Reporting

The data collected will be assembled, reviewed, and evaluated following each sampling round. The soil and groundwater samples will be used to assess the nature and extent of the remaining contamination in the soil and groundwater at the Site. The sub-slab soil vapor, outdoor, and indoor air samples will be used to assess the potential for soil vapor intrusion in onsite buildings. The resulting data will be reported to the NYSDEC in the appropriate reports documenting Site-related activities (FER, PRR, as appropriate).

Electronic Data Deliverables (EDDs) will be prepared for each data package and uploaded into the NYSDEC's environmental information management system.

APPENDIX G
SITE MANAGEMENT FORMS

This Appendix includes initial versions of site management forms, including an example site inspection form, monitoring well sampling form, canister sampling form. Additional forms, including routine operation and maintenance forms (if required) and non-routine operations and maintenance forms, will be developed as needed and incorporated into this SMP. The forms will be completed during site maintenance activities and provided to the NYSDEC in electronic format in accordance with the reporting requirements specified in Section 7.0 of the SMP. All forms are subject to approval of the NYSDEC and include the minimum reporting requirements as described in Section 7.0.

Site-Wide Inspection List
926, 928 and 930 Woodbury Road
Woodbury, New York

Date of Inspection: _____

Site-wide inspections will be performed annually, at a minimum. A site-wide inspection shall also be performed after severe events that may affect the Engineering Controls (ECs) or monitoring wells.

The following inspection form will be completed during each site-wide inspection. Supporting documentation will be attached, as necessary. The completed site-wide inspection checklist and supporting documentation will be included in the associated Periodic Review Report.

Compliance with Institutional Controls

Institutional Controls (ICs) are required to: (1) implement, maintain and monitor EC systems; (2) prevent future exposure to residual contamination by controlling disturbances of residual materials; and, (3) restrict the use of the Site to industrial, commercial and/or restricted residential uses only. Adherence to these ICs on the Site (Controlled Property) is required under the Environmental Easement. These ICs are described in Section 2.3 of the Site Management Plan. Please complete the following checklist to confirm compliance with the Site ICs:

- The Controlled Property may be used for industrial, commercial, or restricted residential use. Confirm the use of the Site:
- All Engineering Controls (vapor barrier system) must be operated and maintained as specified in the Site Management Plan for the Controlled Property. Confirm operation and maintenance of ECs:
- Annual inspections and certifications must be conducted in accordance with the Site Management Plan. Confirm compliance with annual inspections and certifications:
- Groundwater and other environmental or public health monitoring, and reporting of information thus obtained, must be performed in a manner specified in the Site Management Plan (SMP). Confirm that the required monitoring and reporting are in accordance with the SMP:

- Onsite environmental monitoring devices, including but not limited to groundwater monitoring wells, will be protected and replaced as necessary to ensure continued functioning in the manner specified in the Site Management Plan. Confirm that monitoring devices have been protected and/or replaced:
- Vegetable gardens and farming activities are prohibited on the Controlled Property, although community gardens may be considered with NYSDEC approval. Confirm the status of vegetable gardens and farming on the Controlled Property:
- All soil disturbance activities that will impact residual contaminated material (if present), must be conducted in accordance with the NYSDEC-approved Site Management Plan and Excavation Work Plan (EWP). Confirm that these activities are in compliance with the SMP and EWP:
- Use of the groundwater underlying the Controlled Property is prohibited without treatment rendering it safe for the intended purpose. Confirm that groundwater use has not occurred:
- As per the Environmental Easement, the Controlled Property may not be used for a higher level of use, such as unrestricted use, and the above-stated engineering controls may not be discontinued without proper notification of the NYSDEC of the change and approval of that use by the NYSDEC, and an amendment of the Site Management Plan approved by the NYSDEC. Confirm continued compliance with the Environmental Easement:
- Grantor covenants and agrees that until such time as the Environmental Easement is extinguished in accordance with the requirements of Article 71, Title 36 of the ECL, the property deed and all subsequent instruments of conveyance relating to the Controlled Property shall state in at least fifteen-point bold-faced type:

This property is subject to an environmental easement held by the New York State Department of Environmental Conservation pursuant to Title 36 to Article 71 of the Environmental Conservation Law.

- Confirm that property deed and all subsequent instruments of conveyance are in compliance:
- The NYSDEC will be notified if the Site has a change of use, is sold, or is subdivided. Confirm that the NYSDEC has been notified if the property use has changed, or if the property has been sold or subdivided:
- Grantor covenants and agrees that the Environmental Easement shall be incorporated in full or by reference in any leases, license, or other instruments granting a right to use the Controlled Property. Confirm that leases, licenses or other right-to-use documents incorporate or reference the Environmental Easement:
- Grantor covenants and agrees that it shall annually, or such time as NYSDEC may allow, submit to NYSDEC a written statement by an expert the NYSDEC may find acceptable certifying under penalty of perjury that the controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls employed at the Controlled Property were approved by the NYSDEC, and that nothing has occurred that would impair the ability of such control to protect the public health and environment or constitute a violation or failure to comply with any Site Management Plan for such controls and giving access to such Controlled Property to evaluate continued maintenance of such controls. Confirm the submittal of the Annual Certification Statement:

Compliance with Engineering Controls

Provide a written evaluation of the condition and continued effectiveness of the ECs:

- The vapor barrier system EC:

General Site Conditions

Provide a written description of the Site conditions at the time of the site-wide inspection. Attach digital photographs or other supporting information as needed:

Site Management Activities

Provide a discussion and assessment of ongoing site management activities including, but not limited to, soil/residual materials management, groundwater monitoring, community air monitoring, nuisance control, well replacement/repair, health and safety monitoring, and other applicable and pertinent activities. Attach supporting documentation as necessary:

Compliance with Permits and Schedules

The Operation and Maintenance Plan included in Section 4 of the Site Management Plan does not include any permit requirements but does include a schedule for groundwater monitoring well maintenance. Discuss compliance with the groundwater monitoring well maintenance schedule:

Site Records

The Site records include, but are not limited to, groundwater monitoring reports, EC inspections, site-wide inspection checklists, soil management documents, community air monitoring documents, regulatory agency correspondence, reports, and the PRR. Confirm that each type of Site record is up to date and provide comments:

Inspector Information

Name and Affiliation of Inspector(s):

Date of Inspection:

Reason for Inspection:

List additional inspections or activities conducted in association with this inspection:

Attachments:

Correspondence …..

Vapor Barrier System Inspection and supporting documents.

Photolog.

WELL SAMPLING DATA FORM

Project: _____

Location: _____

Well No.: _____ Well Diameter: _____

Date: _____ Start Time: _____

Weather: _____ Finish Time: _____

Sampled By: _____

Depth to Bottom of Well: _____ Feet.

Depth to Water: _____ Feet.

Height of Water Column: _____ Feet.

Water Volume in Casing: _____ Gallons.

Water Volume to be Purged: _____ Gallons.

Water Volume Actually Purged: _____ Gallons.

Purge Method: _____

Physical Appearance/Comments: _____

FIELD MEASUREMENTS:

Time	Gallons	pH	Cond. (uS)	Temp. (^{o}F)	Turbidity (NTU)

Sampling and Analytical Methods: _____

Laboratory Name and Location: _____

CANISTER FIELD SAMPLING RECORD

Project: _____

Site Location: _____

Sample ID _____ Canister ID _____

Sampler _____ Canister Volume _____

Location _____ Flow Controller ID _____

Height _____ Flow Controller Setting _____

Sample Type (sub-slab, soil gas, amb, indoor) _____

Reading	Date	Time	Vacuum
Initial Canister Vacuum			
Final Canister Vacuum			

Weather or Ambient Conditions: _____

Purge Data: _____

Helium Check Data: _____

Comments: _____

APPENDIX H
FIELD SAMPLING PLAN

This Field Sampling Plan is applicable to activities involving sampling of residual soil, groundwater, sub-slab soil vapor and indoor/outdoor air at the Site.

H.1 Soil Sampling

Soil sampling will be performed within the footprint of the retail building following the demolition of the building and prior to any significant movement of the underlying soil. Initially, the soil underlying the building will be screened by a qualified environmental professional for visual and/or PID indications of potential VOC contamination. Any soil identified as potentially contaminated will be sampled. In addition, soil borings will be performed in at least 10 locations within and in proximity to the footprint of the former retain building to evaluate the potential presence of residual soil impacted by VOCs. Each soil boring will be performed to an approximate depth of 10 feet below grade. The samples will be obtained continuously, visually examined, screened by an environmental professional with a calibrated PID, and classified using the Unified Soil Classification System (USCS). The soil sample locations will be identified using a GPS.

Samples will be collected from each boring and submitted for laboratory analysis. The samples retained for VOC analysis will be collected using Method 5035A preservation procedures and at depths so as to characterize potential VOC impacts and their vertical extent. In general, it is anticipated that one sample from each boring will be collected from the two-foot interval just below the former building slab and one sample will be collected from a deeper interval. Additional samples may be collected if necessary to vertically delineate any visible contamination or if intervals of significant visible contamination are noted.

All samples retained for analysis will be tested for TCL VOCs. Upon completion of sampling, the sample containers shall be sealed, labeled, managed, transported, and tracked as described in Section H-4 below.

H.2 Soil Vapor and Indoor/Outdoor Sampling

Following construction of the proposed building at the Site, sub-slab soil vapor sampling and indoor air sampling will be conducted at each of the installed monitoring points through the

building slab. An ambient (outdoor) air sample will also be collected during the sampling event to assess potential impacts of outdoor air quality on the indoor air quality. In the event that other occupied structures are proposed to be constructed onsite, then soil vapor intrusion evaluations will be conducted for these structures prior to occupancy. Based on the results of these evaluations additional actions may be warranted.

At each monitoring point co-located sub-slab soil vapor and indoor air samples will be collected. Prior to sample collection three to five volumes of air will be purged through the monitoring point using an air pump so as to ensure that a representative sample is obtained. To confirm the integrity of the monitoring point seal a helium tracer gas will be confined over the seal and the potential presence of helium in the polyethylene tubing will be checked with a helium meter. Following purging and the seal integrity check, the sub-slab soil vapor sample will be collected into a laboratory-supplied Summa canister equipped with a calibrated flow controller. Co-located indoor air samples and an ambient (outdoor) air sample will also be collected concurrently with the sub-slab vapor samples over an approximate 24-hour time period. The flow controller for each canister will be set so as not to exceed 0.2 liters per minute. The environmental professional will observe the flow controllers and seal the canisters while some vacuum remains. Upon completion of sampling, each canister will be sealed, labeled, managed, transported, and tracked as described in Section H-4 below. The soil vapor, indoor air, and outdoor air sample locations will be identified using a GPS.

During the sampling event, a building inventory will be completed using the most current NYSDOH inventory form. The information obtained will be used to assess factors that may affect the indoor air sample results.

H.3 Groundwater Monitoring Well Sampling

Groundwater monitoring well sampling will be performed as specified in the SMP for this Site. During each groundwater monitoring event the depth to the static water level and depth of the well will be measured at each well using an interface probe. The potential presence of non-aqueous-phase liquid (NAPL) will also be assessed. Then a decontaminated low-flow pump will be used to purge each well until the turbidity of the produced water is less than 50 NTU or until five well volumes of water have been purged. Following the removal of each well volume, field parameters, including pH, turbidity, specific conductivity, and temperature, will be

monitored. When all stability parameters vary by less than 10 percent between the removal of successive well volumes, the well will be sampled. Well sampling forms documenting the well purging and sampling procedures will be completed.

Following purging, sampling will be performed. Samples will be obtained directly from the pump or using dedicated disposable polyethylene bailers suspended from dedicated cotton or polypropylene lines. The retrieved samples will be decanted into laboratory-supplied sample containers. Upon completion of sampling, the sample containers will be sealed, labeled, managed, transported, and tracked as described in Section H-4 below.

H.4 Sample Management and Analyses

Each sample container will be labeled, and the labeled containers containing soil or groundwater samples will be placed in a cooler with ice to depress the sample temperature. The filled labeled Summa canisters shall be secured in shipping containers. A chain of custody form will be completed and kept with each of the coolers and shipping containers to document the sequence of sample possession. At the end of each day, the filled coolers and shipping containers will be transported by overnight courier to the analytical laboratory.

The analytical laboratories for all samples will be NYSDOH ELAP-certified for the proposed analyses. All of the soil and groundwater samples will be analyzed for TCL VOCs using EPA Method 5035/5035A and 8260B. The soil vapor samples will be analyzed for VOCs using Method TO-15. Low-level TO-15 analyses will be performed for the indoor air samples. The analytical methods used will be as per NYS Analytical Services Protocol (ASP) with Category B deliverables. Electronic data deliverables (EDDs) will be prepared and uploaded into the NYSDEC's environmental information management system.