RECORD OF DECISION

Elks Plaza
State Superfund Project
Freeport, Nassau County
Site No. 130193
March 2014

Prepared by
Division of Environmental Remediation
New York State Department of Environmental Conservation

DECLARATION STATEMENT - RECORD OF DECISION

Elks Plaza
State Superfund Project
Freeport, Nassau County
Site No. 130193
March 2014

Statement of Purpose and Basis

This document presents the remedy for the Elks Plaza site, a Class 2 inactive hazardous waste disposal site. The remedial program was chosen in accordance with the New York State Environmental Conservation Law and Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR) Part 375, and is not inconsistent with the National Oil and Hazardous Substances Pollution Contingency Plan of March 8, 1990 (40CFR300), as amended.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (the Department) for the Elks Plaza site and the public's input to the proposed remedy presented by the Department. A listing of the documents included as a part of the Administrative Record is included in Appendix B of the ROD.

Description of Selected Remedy

During the course of the investigation certain actions, known as interim remedial measures (IRMs), were undertaken at the above referenced site. An IRM is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the remedial investigation (RI) or feasibility study (FS). The IRM(s) undertaken at this site are discussed in Section 6.2.

Based on the implementation of the IRM(s), the findings of the investigation of this site indicate that the site no longer poses a threat to human health or the environment; therefore No Further Action is the selected remedy. The remedy may include continued operation of a remedial system if one was installed during the IRM and the implementation of any prescribed institutional controls/engineering controls (ICs/ECs) that have been identified as being part of the remedy for the site.

The IRM(s) conducted at the site attained the remediation objectives identified for this site in Section 6.5 for the protection of public health and the environment.

New York State Department of Health Acceptance

The New York State Department of Health (NYSDOH) concurs that the remedy for this site is protective of human health.

Declaration

The selected remedy is protective of human health and the environment, complies with State and Federal requirements that are legally applicable or relevant and appropriate to the remedial action to the extent practicable, and is cost effective. This remedy utilizes permanent solutions and alternative treatment or resource recovery technologies, to the maximum extent practicable, and satisfies the preference for remedies that reduce toxicity, mobility, or volume as a principal element.

March 24, 2014	
Date	Robert W. Schick, P.E., Director Division of Environmental Remediation

RECORD OF DECISION

Elks Plaza
Freeport, Nassau County
Site No. 130193
March 2014

SECTION 1: SUMMARY AND PURPOSE

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), has selected a remedy for the above referenced site. The disposal of hazardous wastes at the site resulted in threats to public health and the environment that were addressed by actions known as interim remedial measures (IRMs), which were undertaken at the site. An IRM is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the remedial investigation (RI) or feasibility study (FS). The IRMs undertaken at this site are discussed in Section 6.2.

Based on the implementation of the IRM(s), the findings of the investigation of this site indicate that the site no longer poses a threat to human health or the environment. The IRM(s) conducted at the site attained the remediation objectives identified for this site, which are presented in Section 6.5, for the protection of public health and the environment. No Further Action is the remedy selected by this Record of Decision (ROD). A No Further Action remedy may include site management, which will include continued operation of any remedial system installed during the IRM and the implementation of any prescribed controls that have been identified as being part of the remedy for the site. This ROD identifies the IRM(s) conducted and discusses the basis for No Further Action.

The New York State Inactive Hazardous Waste Disposal Site Remedial Program (also known as the State Superfund Program) is an enforcement program, the mission of which is to identify and characterize suspected inactive hazardous waste disposal sites and to investigate and remediate those sites found to pose a significant threat to public health and environment.

The Department has issued this document in accordance with the requirements of New York State Environmental Conservation Law and 6 NYCRR Part 375. This document is a summary of the information that can be found in the site-related reports and documents.

SECTION 2: CITIZEN PARTICIPATION

The Department seeks input from the community on all remedies. A public comment period was held, during which the public was encouraged to submit comment on the proposed remedy. All comments on the remedy received during the comment period were considered by the Department in selecting a remedy for the site. Site-related reports and documents were made

available for review by the public at the following document repository:

Freeport Memorial Library
Attn: Hope Schnee
144 W. Merrick Road
Freeport, NY 11520
Phone: 516-379-3274

A public meeting was also conducted. At the meeting, the findings of the remedial investigation (RI) and the feasibility study (FS) were presented along with a summary of the proposed remedy. After the presentation, a question-and-answer period was held, during which verbal or written comments were accepted on the propsed remedy.

Comments on the remedy received during the comment period are summarized and addressed in the responsiveness summary section of the ROD.

Receive Site Citizen Participation Information By Email

Please note that the Department's Division of Environmental Remediation (DER) is "going paperless" relative to citizen participation information. The ultimate goal is to distribute citizen participation information about contaminated sites electronically by way of county email listservs. Information will be distributed for all sites that are being investigated and cleaned up in a particular county under the State Superfund Program, Environmental Restoration Program, Brownfield Cleanup Program, Voluntary Cleanup Program, and Resource Conservation and Recovery Act Program. We encourage the public to sign up for one or more county listservs at http://www.dec.ny.gov/chemical/61092.html

SECTION 3: SITE DESCRIPTION AND HISTORY

Location: The Elks Plaza site is located in a mixed commercial and residential area at 157-189 W. Merrick Road in Freeport, Nassau County approximately ¼ mile south of the Sunrise Highway. The property is bounded by Merrick Road to the north and commercial lots to the south, east, and west.

Site Features: This site is a tenant unit (approximately 0.22 acres) located in the southwest corner of an L-shaped, one-story concrete strip mall and the parking area to the south and west of that space. The main building is constructed with a partial basement (used for parking) which underlies only the southern portion of the structure. The building is surrounded by parking lot on all sides on the property.

Current Zoning/Use: The site is an active laundromat (no dry-cleaning) and is zoned commercial. The surrounding parcels are zoned commercial and residential. There is a residential apartment building immediately southwest of the site and a school located to the west.

Past Use of the Site: Review of the available historical records indicate the subject property was initially developed with residential dwellings and sheds from at least 1910 to 1925. From 1928 to

1980 the subject property maintained a structure utilized by the Elks Club. The site is a former dry cleaner built in 1984, that was operated from 1985 to 1996.
The space is currently a laundromat (no dry-cleaning). Phase I and II Environmental Site Assessments (ESAs) were conducted in 2006 prompted by a financial transaction for the property. Results from the Phase II ESA indicated tetrachloroethene (PCE) in the groundwater on-site. A Preliminary Site Assessment (PSA) was completed in March 2010. A Supplemental Soil Vapor Study was completed in June 2010. The site was listed as Class 2 on the State's Registry of Inactive Hazardous Waste Disposal Sites in April 2011. Subsequently, an Order on Consent was negotiated between the Responsible Party and the Department.

Site Geology and Hydrogeology: The site is situated at an elevation of approximately 20-feet above mean sea level in the Village of Freeport, Town of Hempstead, Nassau County. The subsurface geology consists primarily of sand with some gravel and silt. The slope on-site is flat. Surface runoff is controlled by gently sloping pavement towards on-site storm drains. The regional topography slopes downward in a southern direction, toward Randall Bay. Groundwater flow is to the south by southeast at a depth of 12 ft below ground surface.

A site location map is attached as Figure 1.

SECTION 4: LAND USE AND PHYSICAL SETTING

The Department may consider the current, intended, and reasonably anticipated future land use of the site and its surroundings when evaluating a remedy for soil remediation. For this site, an alternative which allows for unrestricted use of the site was evaluated.

A comparison of the results of the investigation against unrestricted use standards, criteria and guidance values (SCGs) for the site contaminants is included in the Tables for the media being evaluated in Exhibit A.

SECTION 5: ENFORCEMENT STATUS

Potentially Responsible Parties (PRPs) are those who may be legally liable for contamination at a site. This may include past or present owners and operators, waste generators, and haulers.

The PRPs for the site, documented to date, include:

Elks Plaza LLC

The Department and the PRP (owner of Elks Plaza) entered into a Consent Order W1-1120-08-04 on August 27, 2008. The Order obligates the responsible party to implement a full remedial program.

SECTION 6: SITE CONTAMINATION

6.1: Summary of the Remedial Investigation

A Remedial Investigation (RI) has been conducted. The purpose of the RI was to define the nature and extent of any contamination resulting from previous activities at the site. The field activities and findings of the investigation are described in the RI Report.

The following general activities are conducted during an RI:

- Research of historical information,
- Geophysical survey to determine the lateral extent of wastes,
- Test pits, soil borings, and monitoring well installations,
- Sampling of waste, surface and subsurface soils, groundwater, and soil vapor,
- Sampling of surface water and sediment,
- Ecological and Human Health Exposure Assessments.

The analytical data collected on this site includes data for:

- air
- groundwater
- soil
- soil vapor
- indoor air
- sub-slab vapor

6.1.1: Standards, Criteria, and Guidance (SCGs)

The remedy must conform to promulgated standards and criteria that are directly applicable or that are relevant and appropriate. The selection of a remedy must also take into consideration guidance, as appropriate. Standards, Criteria and Guidance are hereafter called SCGs.

To determine whether the contaminants identified in various media are present at levels of concern, the data from the RI were compared to media-specific SCGs. The Department has developed SCGs for groundwater, surface water, sediments, and soil. The NYSDOH has developed SCGs for drinking water and soil vapor intrusion. The tables found in Exhibit A list the applicable SCG in the footnotes. For a full listing of all SCGs see: http://www.dec.ny.gov/regulations/61794.html

6.1.2: RI Results

The data have identified contaminants of concern. A "contaminant of concern" is a hazardous waste that is sufficiently present in frequency and concentration in the environment to require evaluation for remedial action. Not all contaminants identified on the property are contaminants of concern. The nature and extent of contamination and environmental media requiring action

are summarized in Exhibit A. Additionally, the RI Report contains a full discussion of the data. The contaminant(s) of concern identified at this site is/are:

TETRACHLOROETHYLENE (PCE) DICHLOROETHYLENE
TRICHLOROETHENE (TCE)

Based on the investigation results, comparison to the SCGs, and the potential public health and environmental exposure routes, certain media and areas of the site required remediation. These media were addressed by the IRM(s) described in Section 6.2. More complete information can be found in the RI Report and the IRM Construction Completion Report.

6.2: Interim Remedial Measures

An interim remedial measure (IRM) is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before issuance of the Record of Decision.

The following IRM(s) has/have been completed at this site based on conditions observed during the RI.

IRM -Sub Slab Depressurization System

A Soil Vapor Extraction System (SVE) was installed in June 2012 to ensure that the potential for soil vapor intrusion in the building on-site is being addressed and to remediate subsurface vapors. Four suction pits were installed around the location of the former dry-cleaning machine. These pits were initially piped to carbon treatment per the Department's Air Guide 1 requirements. Then piped to a blower to ensure there was enough vacuum through the carbon. The influent concentration decreased significantly over seven months to the point that carbon treatment was no longer required. The carbon treatment was removed in January 2013 and the blower was changed to an inline radon-style fan, typical for an sub-slab depressurization system (SSDS) for mitigating exposures related to soil vapor intrusion.

This system was installed and is operated by the PRP.

6.3: Summary of Environmental Assessment

This section summarizes the assessment of existing and potential future environmental impacts presented by the site. Environmental impacts may include existing and potential future exposure pathways to fish and wildlife receptors, wetlands, groundwater resources, and surface water.

Based upon the resources and pathways identified and the toxicity of the contaminants of ecological concern at this site, a Fish and Wildlife Resources Impact Analysis (FWRIA) was deemed not necessary for OU 01.

Nature and Extent of Contamination:

On-site Area:

The primary contaminant of concern at the site is tetrachloroethene (PCE) and its degradation products. PCE was detected at 0.026 parts per million (ppm) in soil directly underneath the former dry cleaning equipment location on-site. No detections were found to be above the soil cleanup objective (PCE SCO for unrestricted use is 1.3 ppm) in soils during investigations of the site. PCE and its associated degradation products are found in the groundwater slightly exceeding the groundwater standard (5 parts per billion [ppb]), with a maximum of 17.7 ppb PCE

PCE was found in sub-slab soil vapor underneath the floor slab at the site at elevated levels (14,900 micrograms per cubic meter [ug/m3]) during the Site Characterization. A Sub-slab Depressurization System was installed as an Interim Remedial Measure for the building and is currently operating.

Off-site:
PCE was found at maximum concentration of 9.8 ppb off-site directly downgradient of the suspect source area in groundwater at a depth of 56-60 ft below ground surface (bgs). Samples were collected at three locations downgradient of the site with four depth intervals each of 11-15 ft bgs, 26-30 ft bgs, 41-43 ft bgs, and 56-60 ft bgs. All downgradient concentrations of PCE at the top of the water table (11-15 ft bgs) and the intermediate depth of 26-30 ft bgs were below the groundwater standard. The only samples found above the standard were located directly downgradient of the source area at depths of 41-45 ft bgs with 5.6 ppb of PCE and 56-60 ft bgs with 9.8 ppb of PCE.

In the school to the west, sub-slab soil vapor and indoor air indicated monitoring was warranted to confirm that actions to address the potential for exposure are not needed. Sub-slab soil vapor and indoor air have thus far been evaluated twice. The maximum concentration of PCE found in the sub-slab soil vapor underneath the basement maintenance room has been 163 ug/m3 and the corresponding indoor air concentration was 0.26 ug/m3. The concentrations of PCE detected in the indoor air ground level room samples ranged from non-detect to 0.27 ug/m3. This concentration of PCE is below NYSDOH's recently revised air guideline of 30 ug/m3 and falls within a typical range of background values in similar structures.

There is no potential for soil vapor intrusion further downgradient of the site since sampling indicated that off-site soil vapor intrusion is limited to one off-site building.

6.4: <u>Summary of Human Exposure Pathways</u>

This human exposure assessment identifies ways in which people may be exposed to site-related contaminants. Chemicals can enter the body through three major pathways (breathing, touching or swallowing). This is referred to as *exposure*.

People are not drinking the contaminated groundwater because the area is served by a public water supply that is not affected by this contamination. People are not coming into contact with the groundwater unless they dig below the ground surface. Volatile organic compounds in the groundwater may move into the soil vapor (air spaces within the soil) which in turn may move into overlying buildings and affect indoor air quality. This process, which is similar to the

movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. A sub-slab depressurization system has been installed in the on-site building to prevent the indoor air quality from being affected by the contamination in soil vapor underneath the building. Sampling at an off-site structure indicates there is currently no impact to indoor air quality, however monitoring for the potential for soil vapor intrusion to occur is ongoing. Off-site soil vapor intrusion concerns are limited to this one building.

6.5: Summary of the Remediation Objectives

The objectives for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375. The goal for the remedial program is to restore the site to pre-disposal conditions to the extent feasible. At a minimum, the remedy shall eliminate or mitigate all significant threats to public health and the environment presented by the contamination identified at the site through the proper application of scientific and engineering principles.

The remedial action objectives for this site are:

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.

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 a site.

SECTION 7: SUMMARY OF SELECTED REMEDY

Based on the results of the investigations at the site, the IRM that has been performed, and the evaluation presented here, the Department is proposing No Further Action as the remedy for the site. This No Further Action remedy includes continued operation of the SSDS and the implementation of ICs/ECs as the proposed remedy for the site. The Department believes that this remedy is protective of human health and the environment and satisfies the remediation objectives described in Section 6.5.

The remedy consists of the elements of the IRM already completed and the institutional and engineering controls are listed below:

1. Institutional Control

Imposition of an institutional control in the form of an environmental easement for the controlled property that:

- requires the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
- restricts the use of on-site groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH;
- requires compliance with the Department approved Site Management Plan.

2. Site Management Plan

A Site Management Plan is required, which includes the following:

a. an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:

Institutional Controls: The Environmental Easement discussed above.

Engineering Controls: Monitoring of indoor air and sub-slab soil vapor at the Woodward School and the continued operation of the sub-slab depressurization system on-site. This plan includes, but may not be limited to:

- descriptions of the provisions of the environmental easement including any groundwater use restrictions
- a provision for evaluation of the potential for soil vapor intrusion for any buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
- provisions for the management and inspection of the identified engineering controls;
- maintaining site access controls and Department notification; and
- the steps necessary for the periodic reviews and certification of the engineering controls.

b. a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:

- monitoring of on-site groundwater periodically to assess that concentration of contaminants are continuing to decrease;
- Soil sampling on-site to confirm unrestricted use.
- monitoring for vapor intrusion for any developed on the site, as may be required by the Institutional and Engineering Control Plan discussed above.
- Continued monitoring of sub slab vapor and indoor air at the nearby school.
- a schedule of monitoring and frequency of submittals to the Department;

Green remediation principals and techniques will be implemented to the extent feasible in the site management of the remedy as per DER-31. The major green remediation components are as follows;

- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
- Reducing direct and indirect greenhouse gas and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;

•Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste.

Exhibit A

Nature and Extent of Contamination

This section describes the findings of the Remedial Investigation for all environmental media that were evaluated. As described in Section 6.1, samples were collected from various environmental media to characterize the nature and extent of contamination.

For each medium for which contamination was identified, a table summarizes the findings of the investigation. The tables present the range of contamination found at the site in the media and compares the data with the applicable SCGs for the site. The contaminants are arranged in one category: volatile organic compounds (VOCs). For comparison purposes, the SCGs are provided for each medium that allows for unrestricted use. For soil, if applicable, the Restricted Use SCGs identified in Section 4 and Section 6.1.1 are also presented.

Groundwater

Three permanent groundwater monitoring wells were installed to assess the nature and extent of contamination and ascertain groundwater flow direction and depth to groundwater. The assessment determined that chlorinated Volatile Organic Compounds (cVOCs) are found in the shallow groundwater exceeding applicable SCGs immediately downgradient of the site. Chlorinated VOCs are likely attributable to former on-site dry cleaning operations.

In addition to the permanent wells, twelve temporary well points were installed downgradient, approximately one block south of the site. These samples were analyzed for VOCs. Tetrachloroethene (PCE) was found in two of these temporary well points slightly above the groundwater standard in the intermediate (41-45' bgs) and deep (56-60' bgs) groundwater depths immediately south of the site. PCE was found below the standard in the shallow well point at this same location. The well points to the southeast and southwest exhibited PCE at concentrations below the standard. No other contaminants of concern were detected in off-site groundwater.

Table 1- Groundwater

Detected Constituents	Concentration Range Detected (ppb)[a]	SCG[b] (ppb)	Frequency Exceeding SCG
VOCs			
Cis-1,2-dichloroethene	ND - 6.7	5	1/15
Trichloroethene	ND – 10.2	5	1/15
Tetrachloroethene	ND – 17.7	5	3/15

a - ppb: parts per billion, which is equivalent to micrograms per liter, ug/L, in water.
b- SCG: Standard Criteria or Guidance - Ambient Water Quality Standards and Guidance Values (TOGs 1.1.1), 6 NYCRR Part 703, Surface water and Groundwater Quality Standards, and Part 5 of the New York State Sanitary Code (10 NYCRR Part 5).

The primary groundwater contaminants are tetrachloroethene (PCE) and its breakdown products, trichloroethene (TCE), and cis-1,2-dichloroethene (DCE) associated with the operation of the former dry-cleaning facility. As noted on Figures 2 and 5, the primary groundwater contamination is associated with a small amount of contamination from underneath the location of the former dry-cleaning machines in the soil. However, due to the relatively low concentrations observed no active remediation method will be necessary.

Soil

In an effort to locate source material and determine if it was contributing to the presence of chlorinated VOCs in groundwater, subsurface soil samples were collected during the RI and the IRM and analyzed for VOCs. One soil sample was collected from the leaching pool (Pool #1) and one soil boring (EP-01) was installed in the floor of the laundromat at the location of the former dry cleaning machine. The pool sample was advanced through the top 6" of soil at the bottom of the poo0l and analyzed for VOCs by USEPA Method 8260. The soil boring was advanced to a depth of 15 ft below the concrete floor slab. Soil samples were collected from EP-01 at 1-2 ft bgs, 7-8 ft bgs, 12-13 ft bgs, and 13-15 ft bgs and analyzed for VOCs by USEPA Method 8260.

The soil analytical results found that cVOCs were detected in the leaching pool and at EP-01. In EP-01 (1-2 ft bgs), the PCE concentration was 0.0216 ppm which is below the NYSDEC Protection of Groundwater SCO of 1.3 ppm. The leaching pool sample exhibited 0.0215 ppm of PCE. The RI soil results indicate there is no significant residual source of PCE or TCE in subsurface soils.

No site-related soil contamination of concern was identified during the RI. Therefore, no remedial alternatives need to be evaluated for soil.

Soil Vapor

The evaluation of the potential for soil vapor intrusion resulting from the presence of site related soil or groundwater contamination was evaluated by the sampling of soil vapor, sub-slab soil vapor under structures, outdoor air and indoor air of structures. At this site, due to the presence of buildings in the impacted area, a full suite of samples were collected to evaluate whether soil vapor intrusion was occurring.

On-Site Soil Vapor

Sub-slab soil vapor samples were collected from beneath the slab-on-grade building at the site. Indoor air and outdoor air samples were also collected at this time. PCE concentrations in the sub-slab soil vapor and indoor air samples were 14,900 ug/m3 and 3.33 ug/m3, respectively. TCE concentrations in the sub-slab soil vapor and indoor air samples were 171 ug/m3 and 0.18 ug/m3, respectively. DCE was non-detect. The data showed PCE and TCE in on-site sub-slab soil vapor and indoor air at indicates mitigation of potential exposures via soil vapor intrusion are warranted pursuant to "Guidance for Evaluating Soil Vapor Intrusion in the State of New York". An active sub-slab depressurization system (SSDS) was installed in the Elks Plaza site to address potential soil vapor intrusion as an IRM.

Based on the concentration detected, and in comparison with the "Guidance for Evaluating Soil Vapor Intrusion in the State of New York", soil vapor contamination identified during the RI was addressed during the IRM described in Section 6.2.

Off-Site Soil Vapor

Soil vapor samples were collected to the west and south of the site to assess the concentration of contaminants of concern at the border of the property and to determine the potential for sub-slab vapor intrusion off-site. The contaminants of concern were identified in both sample points, however the results for PCE of the soil vapor samples to the west were greater than the detection of PCE in the southern sample point.

Two soil vapor intrusion evaluations were conducted at the school building to the west. Both indicated that immediate actions are not necessary to address potential exposure via soil vapor intrusion. In addition, the levels detected in the indoor air samples are commonly found in similar structures and do not represent a health concern. The PCE concentration in the sub-slab soil vapor detected underneath the basement room of the building was 163 ug/m3 and the corresponding indoor air PCE concentration was 0.26 ug/m3. Based on the evaluation of this data collected from the basement, monitoring is recommended to confirm that actions to address the potential for exposure are not needed.

Based on the findings of the Remedial Investigation the presence of PCE has resulted in the contamination of soil vapor. The site contaminant that is considered to be the primary contaminant of concern which will drive the remediation of soil vapor to be addressed by the remedy selection process is tetrachloroethene.

N
W E
S

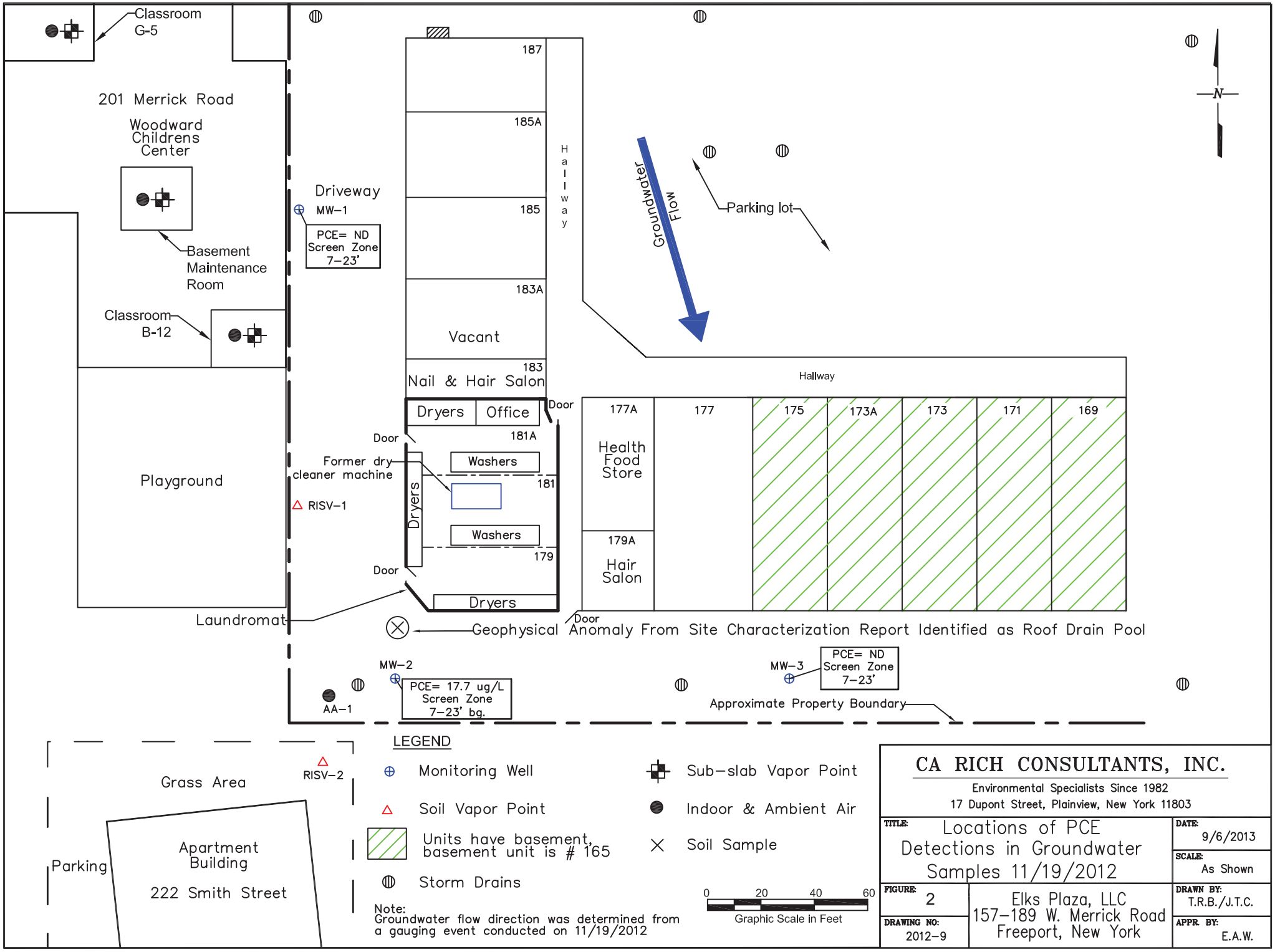
0 1,000 2,000
Feet

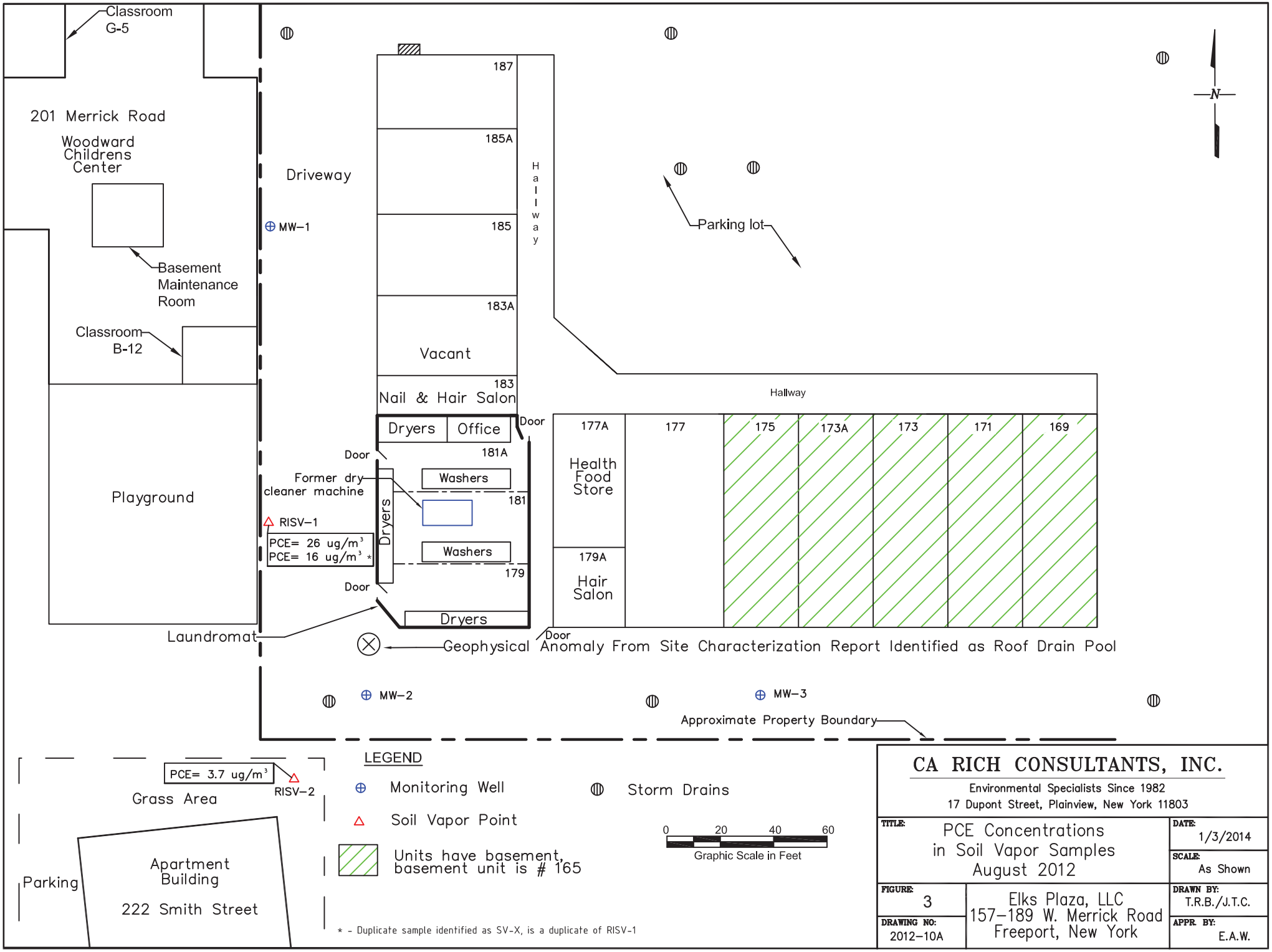
Figure 1

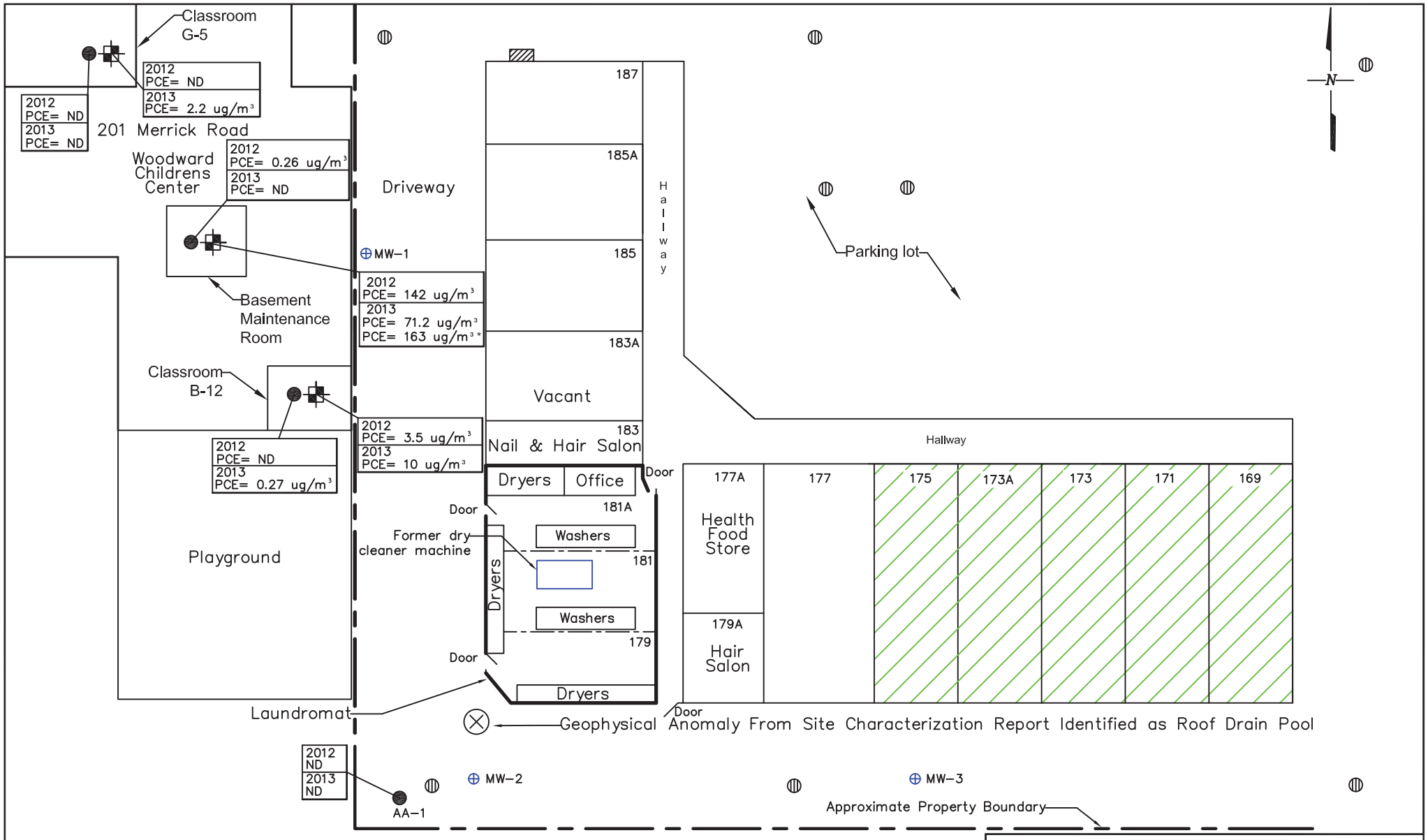
Site Location Map

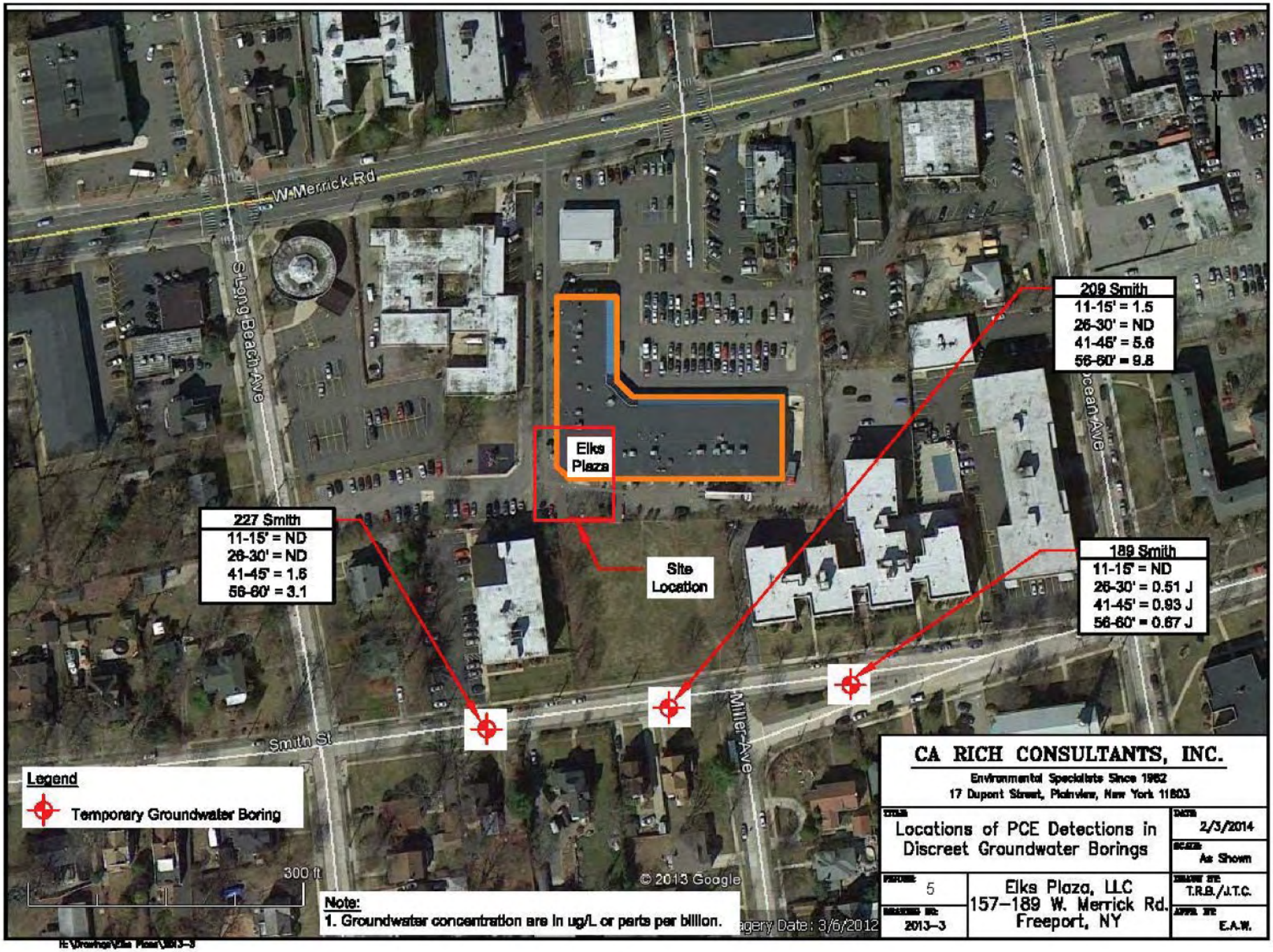
Elks Plaza
Town of Hempstead, Nassau County
Site No. 130193

DEPARTMENT OF ENVIRONMENTAL CONSERVATION • NEW YORK STATE •


Classroom G-5
201 Merrick Road
Woodward Childrens Center
Basement Maintenance Room
Classroom B-12
Playground
Laundromat
Driveway
MW-1
PCE= ND Screen Zone 7-23'
RISV-1
Former dry cleaner machine
Door
187
185A
185
183A
Vacant
183
Nail & Hair Salon
Dryers
Office
181A
Washers
181
Dryers
Washers
179
Dryers
Hallway
Groundwater Flow
Parking lot
N
177A
Health Food Store
179A
Hair Salon
177
175
173A
173
171
169
Geophysical Anomaly From Site Characterization Report Identified as Roof Drain Pool
MW-2
PCE= 17.7 ug/L Screen Zone 7-23' bg.
AA-1
MW-3
PCE= ND Screen Zone 7-23'
Approximate Property Boundary
Grass Area
RISV-2
Parking
Apartment Building
222 Smith Street
LEGEND
Monitoring Well
Soil Vapor Point
Units have basement, basement unit is # 165
Storm Drains
Sub-slab Vapor Point
Indoor & Ambient Air
Soil Sample
Note:
Groundwater flow direction was determined from a gauging event conducted on 11/19/2012
0 20 40 60
Graphic Scale in Feet
CA RICH CONSULTANTS, INC.
Environmental Specialists Since 1982
17 Dupont Street, Plainview, New York 11803
TITLE: Locations of PCE Detections in Groundwater Samples 11/19/2012
DATE: 9/6/2013
SCALE: As Shown
FIGURE: 2
DRAWING NO: 2012-9
Elks Plaza, LLC
157-189 W. Merrick Road
Freeport, New York
DRAWN BY: T.R.B./J.T.C.
APPR. BY: E.A.W.


Classroom G-5
201 Merrick Road
Woodward Childrens Center
Basement Maintenance Room
Classroom B-12
Playground
Driveway
MW-1
187
185A
185
183A
Vacant
183
Nail & Hair Salon
Dryers
Office
181A
Door
Former dry cleaner machine
Washers
181
Dryers
RISV-1
PCE= 26 ug/m³
PCE= 16 ug/m³ *
Washers
179
Dryers
Laundromat
Hallway
Parking lot
N
Hallway
177A
Health Food Store
179A
Hair Salon
177
175
173A
173
171
169
Door
Geophysical Anomaly From Site Characterization Report Identified as Roof Drain Pool
MW-2
MW-3
Approximate Property Boundary
PCE= 3.7 ug/m³
RISV-2
Grass Area
Parking
Apartment Building
222 Smith Street
LEGEND
Monitoring Well
Soil Vapor Point
Units have basement, basement unit is # 165
Storm Drains
0 20 40 60
Graphic Scale in Feet
* - Duplicate sample identified as SV-X, is a duplicate of RISV-1
CA RICH CONSULTANTS, INC.
Environmental Specialists Since 1982
17 Dupont Street, Plainview, New York 11803
TITLE: PCE Concentrations in Soil Vapor Samples August 2012
DATE: 1/3/2014
SCALE: As Shown
FIGURE: 3
DRAWN BY: T.R.B./J.T.C.
DRAWING NO: 2012-10A
Elks Plaza, LLC
157-189 W. Merrick Road
Freeport, New York
APPR. BY: E.A.W.


Classroom G-5
2012 PCE= ND
2013 PCE= 2.2 ug/m³
2012 PCE= ND
2013 PCE= ND
201 Merrick Road
Woodward Childrens Center
2012 PCE= 0.26 ug/m³
2013 PCE= ND
Driveway
MW-1
2012 PCE= 142 ug/m³
2013 PCE= 71.2 ug/m³
PCE= 163 ug/m³ *
Basement Maintenance Room
Classroom B-12
2012 PCE= 3.5 ug/m³
2013 PCE= 10 ug/m³
2012 PCE= ND
2013 PCE= 0.27 ug/m³
Playground
187
185A
185
183A
Vacant
183
Nail & Hair Salon
Hallway
Parking lot
Dryers
Office
Door
181A
Washers
181
Former dry cleaner machine
Dryers
Washers
179
Door
Dryers
Laundromat
Hallway
177A
Health Food Store
179A
Hair Salon
177
175
173A
173
171
169
Door
Geophysical Anomaly From Site Characterization Report Identified as Roof Drain Pool
2012 ND
2013 ND
AA-1
MW-2
MW-3
Approximate Property Boundary
N
Grassy Area
Parking
Apartment Building
222 Smith Street
LEGEND
Monitoring Well
Units have basement, basement unit is # 165
Storm Drains
Sub-slab Vapor Point
Indoor & Ambient Air
Soil Sample
0 20 40 60
Graphic Scale in Feet
* - PCE concentration is for duplicate sub-slab soil vapor sample collected from basement maintenance room.
CA RICH CONSULTANTS, INC.
Environmental Specialists Since 1982
17 Dupont Street, Plainview, New York 11803
TITLE: PCE Concentrations at Sub-Slab, Indoor and Outdoor Air Samples 2012 & 2013
DATE: 1/3/2014
SCALE: As Shown
FIGURE: 4
DRAWN BY: T.R.B./J.T.C.
DRAWING NO: 2012-11A
Elks Plaza, LLC
157-189 W. Merrick Road
Freeport, New York
APPR. BY: E.A.W.


W Merrick Rd
S Long Beach Ave
Smith St
Miller Ave
Ocean Ave
Elks Plaza
Site Location
227 Smith
11-15' = ND
26-30' = ND
41-45' = 1.6
56-60' = 3.1
209 Smith
11-15' = 1.5
26-30' = ND
41-45' = 5.6
56-60' = 9.8
189 Smith
11-15' = ND
26-30' = 0.51 J
41-45' = 0.93 J
56-60' = 0.67 J
Legend
Temporary Groundwater Boring
300 ft
© 2013 Google
Note:
1. Groundwater concentration are in ug/L or parts per billion.
CA RICH CONSULTANTS, INC.
Environmental Specialists Since 1982
17 Dupont Street, Plainview, New York 11803
Locations of PCE Detections in Discreet Groundwater Borings
2/3/2014
As Shown
5
2013-3
Elks Plaza, LLC
157-189 W. Merrick Rd.
Freeport, NY
T.R.B./J.T.C.
E.A.W.

APPENDIX A

Responsiveness Summary

RESPONSIVENESS SUMMARY

Elks Plaza
State Superfund Project
Freeport, Nassau County, New York
Site No. 130193

The Proposed Remedial Action Plan (PRAP) for the Elks Plaza site was prepared by the New York State Department of Environmental Conservation (the Department) in consultation with the New York State Department of Health (NYSDOH) and was issued to the document repositories on February 21, 2014. The PRAP outlined the remedial measure proposed for the contaminated groundwater and soil vapor at the Elks Plaza site.

The release of the PRAP was announced by sending a notice to the public contact list, informing the public of the opportunity to comment on the proposed remedy.

A public meeting was held on March 5, 2014 which included a presentation of the remedial investigation (RI) for the Elks Plaza as well as a discussion of the proposed remedy. The meeting provided an opportunity for citizens to discuss their concerns, ask questions and comment on the proposed remedy. These comments have become part of the Administrative Record for this site. The public comment period for the PRAP ended on March 23, 2014.

This responsiveness summary responds to all questions and comments raised during the public comment period. The following are the comments received, with the Department's responses:

COMMENT 1:
How do you know that nobody was affected by this site by either working there or living near it?

RESPONSE 1:
Without historical data, we are not able to quantify the potential for past exposures. Whether or not former workers or nearby residents at the dry-cleaners were exposed to site contaminants is unknown. Based on the NYSDOH's assessment of the potential exposure pathways during the recent site investigation, exposures to contaminated groundwater and soils are not currently occurring. The potential for exposure via inhalation is being addressed by the operation of a sub-slab depressurization system.

COMMENT 2:
Have we done a health or cancer study in this area?

RESPONSE 2:
The NYSDOH has not done a health or cancer study in this area. There are a number of factors the NYSDOH considers when determining whether a cancer study may be indicated for an area. These include questions related to what is known about cancer in the community, what is known about the community's exposures to environmental contaminants, whether a study is feasible, and whether

there is interest and support in the community. The Department of Health does provide information on the reported rates of various cancers for all areas of New York State. This information can be found on the "Environmental Facilities and Cancer Map" web page located at the following link: https://apps.health.ny.gov/statistics/cancer/environmental_facilities/mapping/map/

COMMENT 3:
Will somebody continue to monitor the site and the Woodward building and for how long?

RESPONSE 3:
Monitoring for vapor intrusion will continue as long as the results indicate that there is a need for it. Groundwater will be sampled periodically until the results indicate that there is no longer a need for such monitoring because levels have dropped below those of concern.

COMMENT 4:
When will this site no longer be considered to be a State Superfund site?

RESPONSE 4:
The site is currently listed as a Class 2 site, which identifies it as posing a significant threat to public health and the environment. After implementation of the remedy (i.e., development of a Site Management Plan, imposition of use restrictions), the classification is expected to be changed to a Class 4. This means that the site has been properly closed, but requires continued site management consisting of operation, maintenance and monitoring. Should monitoring confirm that further remediation is not needed, the site may be reclassified to a Class C, meaning remediation is complete. At that point, the site would no longer be considered to be a Superfund site.

APPENDIX B

Administrative Record

Administrative Record

Elks Plaza
State Superfund Project
Freeport, Nassau County, New York
Site No. 130193

1. *Proposed Remedial Action Plan for the Elks Plaza site*, dated February 2014, prepared by the Department.

2. Order on Consent, Index No. W1-1120-08-04, between the Department and Elks Plaza LLC, executed on August 5, 2008.

3. "Site Characterization Report", March 2010, prepared by Preferred Environmental Services.

4. "Supplemental Soil Vapor Investigation", June 2010, prepared by Preferred Environmental Services.

5. "Final Remedial Investigation Work Plan for Elks Plaza", July 2012, prepared by CA Rich Consultants Inc.

6. "Revised Supplemental Remedial Investigation Work Plan for Elks Plaza", July 9, 2013, prepared by CA Rich Consultants, Inc.

7. "Remedial Investigation Report for Elks Plaza", January 2014, prepared by CA Rich Consultants, Inc.

8. "Sub-Slab Depressurization System Construction Completion Report for Elks Plaza", September 2012, prepared by CA Rich Consultants, Inc.