DECISION DOCUMENT

509 West 34th Street
Brownfield Cleanup Program
New York, New York County
Site No. C231094
October 2017

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

DECLARATION STATEMENT - DECISION DOCUMENT

509 West 34th Street
Brownfield Cleanup Program
New York, New York County
Site No. C231094
October 2017

Statement of Purpose and Basis

This document presents the remedy for the 509 West 34th Street site, a brownfield cleanup 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.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (the Department) for the 509 West 34th Street site and the public's input to the proposed remedy presented by the Department.

Description of Selected Remedy

The elements of the selected remedy are as follows:

1. Remedial Design

A remedial design program will be implemented to provide the details necessary for the construction, operation, optimization, maintenance, and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and 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 gases 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;
- Maximizing habitat value and creating habitat when possible;
- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals; and
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development.

2. Excavation

The existing on-site buildings will be demolished and materials which cannot be beneficially reused on-site will be taken off-site for proper disposal to implement the remedy. All on-site soils which exceed unrestricted use soil cleanup objectives (UUSCOs), as defined by 6 NYCRR Part 375-6.8, will be removed and disposed off-site. All on-site soil will be excavated to bedrock, which is located approximately 2 to 30 feet below grade, except for possibly the southeast corner where excavation may stop at approximately 23 feet if post-excavation soil samples indicated UUSCOs have been met. A total of approximately 23,000 cubic yards of material (i.e., soil and bedrock) will be removed from the site. If encountered, underground storage tanks (USTs), petroleum-contaminated soil, fuel dispensers, underground piping and appurtenances will be removed and disposed off-site. Dewatering, with proper treatment for permitted sewer discharge and/or disposal at a permitted off-site facility, will occur throughout excavation and construction. It is anticipated that backfill will not be required at the site. In the event backfill is required, all materials proposed for import onto the site will be approved by the Department and meet unrestricted use SCGs.

It is anticipated that backfill will not be required at the site. In the event backfill is required, clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d), in this case UUSCOs, will be brought in to establish the designed grades at the site.

3. Vapor Intrusion Evaluation

As part of the Track 1 remedy, a soil vapor intrusion (SVI) evaluation will be completed. The evaluation will include a provision for implementing any actions recommended to address exposures related to soil vapor intrusion.

Contingent Track 1:
The intent of the remedy is to achieve Track 1 unrestricted use; therefore, no environmental easement or site management plan is anticipated.

In the event that Track 1 unrestricted use is not achieved, the following contingent remedial elements will be required and the remedy will achieve a Track 2 restricted residential cleanup:

4. Groundwater Restrictions

If no EE or SMP is needed to achieve soil or soil vapor remedial action objectives, then the following local use restriction will be relied upon to prevent ingestion of groundwater: Article 141 of the NYCDOH code which prohibits potable use of groundwater without prior approval.

5. Institutional Controls

Imposition of an institutional control in the form of an EE 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);

- allows the use and development of the controlled property for restricted residential, commercial and industrial uses as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restricts the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH; and,
- requires compliance with the Department approved SMP.

6. 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 in Paragraph 5 above.

This plan includes, but may not be limited to:

- an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;

descriptions of the provisions of the environmental easement including any land use, and/or groundwater and/or surface water 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, if any;
- maintaining site access controls and Department notification; and,
- the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.

b. A Monitoring Plan to assess the performance and effectiveness of the remedy.

This plan includes, but may not be limited to:

- monitoring of groundwater to assess the performance and effectiveness of the remedy;
- a schedule of monitoring and frequency of submittals to the Department; and,
- monitoring for vapor intrusion for any new buildings developed on the site, as may be required by the Institutional and Engineering Control Plan discussed above.

Declaration

The remedy conforms with promulgated standards and criteria that are directly applicable, or that are relevant and appropriate and takes into consideration Department guidance, as appropriate.

The remedy is protective of public health and the environment.

10/27/2017

Date

Gerard Burke, Director
Remedial Bureau B

DECISION DOCUMENT

509 West 34th Street
New York, New York County
Site No. C231094
October 2017

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 contaminants at the site has resulted in threats to public health and the environment that would be addressed by the remedy. The disposal or release of contaminants at this site, as more fully described in this document, has contaminated various environmental media. Contaminants include hazardous waste and/or petroleum.

The New York State Brownfield Cleanup Program (BCP) is a voluntary program. The goal of the BCP is to enhance private-sector cleanups of brownfields and to reduce development pressure on "greenfields." A brownfield site is real property, the redevelopment or reuse of which may be complicated by the presence or potential presence of a contaminant.

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 comments 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 repositories:

New York Public Library
Attn: John Balow
Science, Industry and Business Library
188 Madison Avenue at 34th Street
New York, NY 10016
Phone: 917-275-6975

Manhattan Community Board 4
Attn: Jesse Bodine
330 West 42nd Street, Suite 2618

New York, NY 10036
Phone: 212-736-4536

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 site is located at 509-527 West 34th Street, 435 Tenth Avenue and 447-449 10th Avenue in the Borough of Manhattan, City of New York in New York County. The site is comprised of five separate lots (i.e., lots 17, 20, 29, 35 and 36 of Block 706) and is approximately 1.548 acres in size.

Site Features: Lot 17 is a 0.07-acre vacant lot. Lot 20 is 0.49 acres and is entirely covered by a four-story vacant structure formerly utilized as a parking garage, photography studio, artist studio, elevator services and mixed office and warehouse space. Lot 29 is a 0.87 acre paved parking lot formerly utilized for commercial truck rental and parking. Lots 35 and 36, located in the northeast corner of the site, include two vacant buildings.

Current Zoning and Land Use: The site, currently used for commercial purposes, is zoned C6-4, which is typically mapped within a major business district.

Past Use of the Site: Historical uses include an iron and brass foundry, a hatter's fur cutting company (Lots 29, 35 and 36), an electrical conduit company (Lot 17) and a parking garage (Lot 20).

Site Geology and Hydrogeology: Bedrock is present beneath the site at depths ranging from less than 2 feet to over 18 feet below grade. A fill layer comprised of sand, gravel, boulders, concrete, and brick fragments is present from grade to bedrock except in the western portion of the site the fill is underlain by a 3- to 6-foot thick native glacial silty sand layer. Groundwater is at a depth of 12 feet and flows towards the Hudson River located 1,500 feet to the west.

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 Remedial Investigation (RI) against unrestricted use standards, criteria and guidance values (SCGs) for the site contaminants is available in the RI Report.

SECTION 5: ENFORCEMENT STATUS

The Applicant under the Brownfield Cleanup Agreement is a Volunteer. The Applicant does not have an obligation to address off-site contamination. However, the Department has determined that this site does not pose a significant threat to public health or the environment; accordingly, no enforcement actions are necessary.

SECTION 6: SITE CONTAMINATION

6.1: Summary of the Remedial Investigation

A remedial investigation (RI) serves as the mechanism for collecting data to:

- characterize site conditions;
- determine the nature of the contamination; and
- assess risk to human health and the environment.

The RI is intended to identify the nature (or type) of contamination which may be present at a site and the extent of that contamination in the environment on the site, or leaving the site. The RI reports on data gathered to determine if the soil, groundwater, soil vapor, indoor air, surface water or sediments may have been contaminated. Monitoring wells are installed to assess groundwater and soil borings or test pits are installed to sample soil and/or waste(s) identified. If other natural resources are present, such as surface water bodies or wetlands, the water and sediment may be sampled as well. Based on the presence of contaminants in soil and groundwater, soil vapor will also be sampled for the presence of contamination. Data collected in the RI influence the development of remedial alternatives. The RI report is available for review in the site document repository and the results are summarized in section 6.3.

The analytical data collected on this site includes data for:

- groundwater
- soil
- soil 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. 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 contaminant 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 below. Additionally, the RI Report contains a full discussion of the data. The contaminant(s) of concern identified at this site is/are:

mercury
benzo(a)pyrene
benzo(a)anthracene
benzo(b)fluoranthene
lead
trichloroethene (TCE)
tetrachloroethene (PCE)
toluene
chrysene
fluoranthene
pyrene
cis-1,2-dichloroethene
benzene
PCB aroclor 1254
PCB aroclor 1260
nickel
4,4' – DDD
4,4'- DDE
4,4' - DDT

The contaminant(s) of concern exceed the applicable SCGs for:

- groundwater
- soil

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 Decision Document.

There were no IRMs performed at this site during the RI.

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. The RI report presents a detailed discussion of any existing and potential impacts from the site to fish and wildlife receptors.

During the Remedial Investigation (RI), soil and groundwater were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, polychlorinated biphenyls (PCBs), and pesticides. Soil vapor was analyzed for VOCs. As a result, the primary contaminants of concern at the site include Trichloroethene (TCE), Tetrachloroethene (PCE), Toluene, Lead, Nickel, Mercury, PCBs and Poly-Aromatic Hydrocarbons (PAHs). Surface soil, subsurface soil, soil vapor and groundwater are impacted because of historical uses including an iron and brass foundry, an electrical conduit company and a hatter's fur cutting company, which historically utilized a chemical treatment process of nitric acid and mercury to treat animal fur. Dissolved mercury, found in overburden wells near the down-gradient property line, may have migrated off-site. However, the proposed extensive excavation of all site soils and into bedrock, which is not impacted by site-related contaminants, will address the source of the mercury in the groundwater. Otherwise, site-related contamination does not appear to extend off-site in soil or soil vapor.

Soil

VOCS: VOCs were detected site-wide in shallow (0-2 feet) soils. Cis-1,2-dichloroethylene (cis-1,2-DCE) and trichloroethylene (TCE) were detected at concentrations exceeding NYSDEC Unrestricted Use soil cleanup objectives (UUSCOs). The cis-1,2-DCE (1.7 ppm) and TCE (4.9 ppm) exceedances were from SSB-7 (0 ft. to 2 ft.).

SVOCs: Maximum concentrations of SVOCs (PAHs) exceeding UUSCOs were all detected in soil boring sample SSB-2B (0-2 ft. depth) including benzo(a)anthracene (71 ppm), benzo(b)fluoranthene (70 ppm), chrysene (62 ppm), fluoranthene (160 ppm), and pyrene (120 ppm).

Metals: Metals were also detected site-wide in shallow soils (0-2 ft.). Mercury was detected in soil above UUSCOs, with a maximum concentration of 300 ppm within the footprint of the former hatter's fur cutting factory (Lot 29). Lead was detected in SSB-9 (840 ppm at 0 ft. to 2 ft.) and in SB-8 (2,100 ppm at 0 ft. to 2 ft.); both exceeded UUSCOs as did the majority of the other soil samples.

PCBs: PCBs were detected sporadically throughout the Site (typically parking lots) in shallow soil samples (0-2 ft. depth) at concentrations between 0.234 ppm to 13.1 ppm with several samples exceeding the NYSDEC UUSCO.

Pesticides and Herbicides: Pesticides and herbicides were detected in site-wide soils (0-9 ft. depth) including 4,4'- DDD (0.805 ppm), 4,4'- DDE (0.468 ppm) and 4,4'- DDT (0.060 ppm) at concentrations above NYSDEC UUSCOs in over half of the soil samples.

Groundwater

VOCs: From nine groundwater samples collected at seven on-site monitoring wells, three VOCs - benzene, chloroform, and toluene were detected in samples at moderate to low concentrations exceeding NYSDEC Ambient Water Quality Standards and Guidance Values (AWQSGVs). Benzene (1.9 parts per billion [ppb]) and toluene (26 ppb) were from monitoring well SMW-02

and chloroform (10 ppb) was detected in monitoring well SMW-03. Historic underground storage tanks in the existing parking garage may be contributing to the benzene and toluene groundwater contamination. Chloroform does not appear to be site related and it is not a contaminant of concern. It is likely a byproduct of chlorination coming from chlorinated water leaking from adjacent water lines. No chlorinated compounds were detected in the groundwater.

SVOCs: Four SVOCs, primarily PAHs, benzo(a)anthracene (0.05 ppb), benzo(a)pyrene (0.09 ppb), benzo(b)fluoranthene (0.05 ppb), and chrysene (0.04 ppb) were detected in one unfiltered groundwater sample from monitoring well MW-02 at concentrations exceeding NYSDEC AWQSGVs (0.002 ppb).

Metals: Of the seven metals detected from nine on-site groundwater samples, Mercury was the only analyte of concern which exceeded the NYSDEC AWQSGV of 0.70 ppb. Unfiltered Mercury samples ranged from 28.45 to 153.1 ppb, and filtered Mercury samples ranged from 15.32 to 103.2 ppb. On-site soil is the source of mercury in groundwater.

PCBs: PCBs were not detected in any groundwater samples (7).

Pesticides and Herbicides: Pesticides and herbicides were detected in one groundwater sample, but none exceeded NYSDEC AWQSGVs.

Soil Vapor

Analytical data from eleven soil vapor samples across the site found several VOCs including chlorinated compounds (CVOCs) and petroleum-related compounds. PCE was detected in all samples (2.5 ft. to 3.0 ft. deep) ranging from 2.35 micrograms per liter (ug/m3) to 114 ug/m3 and TCE was detected in all samples ranging from 3.27 ug/m3 to 511 ug/m3. Toluene ranged from 1.09 ug/m3 to 16.4 ug/m3.

6.4: Summary of Human Exposure Pathways

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 may contact contaminated soil if they dig below the ground surface. People are not drinking the contaminated groundwater because the area is served by a public water supply that is not affected by this contamination. Volatile organic compounds in soil vapor (air spaces within the soil) may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of the buildings, is referred to as soil vapor intrusion. Because the site is vacant, the inhalation of site-related contaminants due to soil vapor intrusion does not represent a current concern. The potential exists for the inhalation of site contaminants due to soil vapor intrusion in the event that on-site buildings are re-occupied and in any future buildings developed on the site. Environmental sampling indicates that soil vapor intrusion is not a concern for off-site buildings.

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.
- Remove the source of ground or surface water contamination.

Soil

RAOs for Public Health Protection

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

RAOs for Environmental Protection

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

SECTION 7: ELEMENTS OF THE SELECTED REMEDY

The alternatives developed for the site and the evaluation of the remedial criteria are presented in the Alternative Analysis. The remedy is selected pursuant to the remedy selection criteria set forth in DER-10, Technical Guidance for Site Investigation and Remediation and 6 NYCRR Part 375.

The selected remedy is a Track 1: Unrestricted use remedy.

The selected remedy is referred to as the Excavation to Bedrock remedy.

The elements of the selected remedy, as shown in Figure 2, are as follows:

1. Remedial Design

A remedial design program will be implemented to provide the details necessary for the construction, operation, optimization, maintenance, and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and 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 gases 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;
- Maximizing habitat value and creating habitat when possible;
- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals; and
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development.

2. Excavation

The existing on-site buildings will be demolished and materials which cannot be beneficially reused on-site will be taken off-site for proper disposal in order to implement the remedy. All on-site soils which exceed unrestricted use soil cleanup objectives (UUSCOs), as defined by 6 NYCRR Part 375-6.8, will be removed and disposed off-site. All on-site soil will be excavated to bedrock, which is located approximately 2 to 30 feet below grade, except for possibly the southeast corner where excavation may stop at approximately 23 feet if post-excavation soil samples indicated UUSCOs have been met. A total of approximately 23,000 cubic yards of material (i.e., soil and bedrock) will be removed from the site. If encountered, underground storage tanks (USTs), petroleum-contaminated soil, fuel dispensers, underground piping and appurtenances will be removed and disposed off-site. Dewatering, with proper treatment for permitted sewer discharge and/or disposal at a permitted off-site facility, will occur throughout excavation and construction.

It is anticipated that backfill will not be required at the site. In the event backfill is required, clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d), in this case UUSCOs, will be brought in to establish the designed grades at the site.

3. Vapor Intrusion Evaluation

As part of the Track 1 remedy, a soil vapor intrusion (SVI) evaluation will be completed. The evaluation will include a provision for implementing any actions recommended to address exposures related to soil vapor intrusion.

4. Local Institutional Controls

If no EE and SMP is needed to achieve soil or soil vapor remedial action objectives, then the following local use restriction will be relied upon to prevent ingestion of groundwater: Article 141 of the NYCDOH code, which prohibits potable use of groundwater without prior approval.

Contingent Remedy:
The intent of the remedy above is to achieve Track 1 unrestricted use; therefore, no environmental easement or site management plan is anticipated.

In the event that Track 1 unrestricted use is not achieved, the following contingent remedial elements will be required and the remedy will achieve a Track 2 restricted residential use cleanup:

5. Institutional Controls

Imposition of an institutional control in the form of an EE 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);
- allows the use and development of the controlled property for restricted residential, commercial and industrial uses as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restricts the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH; and,
- requires compliance with the Department approved SMP.

6. 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 in Paragraph 5 above.

This plan includes, but may not be limited to:
- an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;

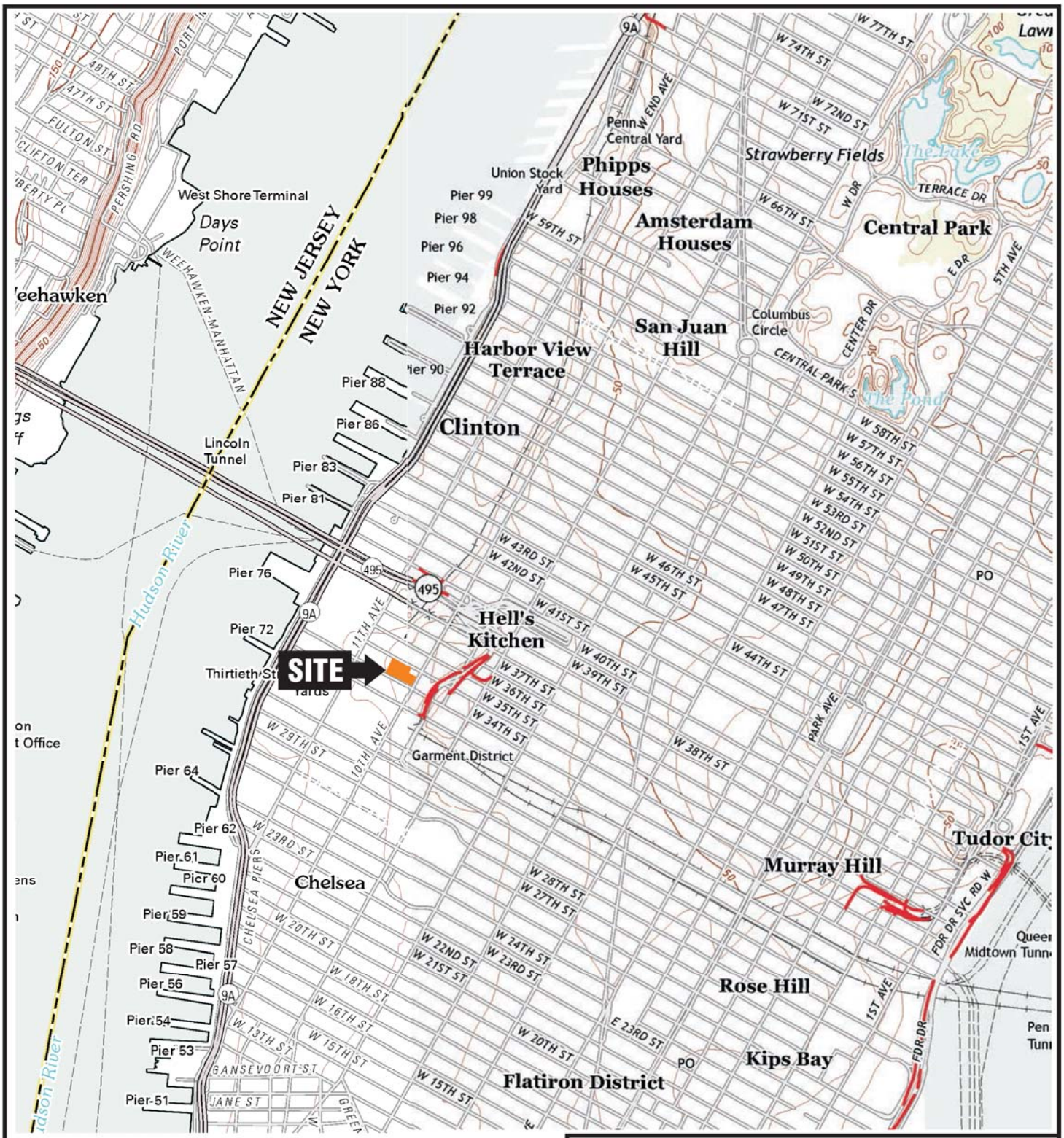
descriptions of the provisions of the environmental easement including any land use, and/or groundwater and/or surface water use restrictions;

- 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, if any;
- maintaining site access controls and Department notification; and,
- the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.

b. A Monitoring Plan to assess the performance and effectiveness of the remedy.

This plan includes, but may not be limited to:

- monitoring for vapor intrusion for any new buildings developed on the site, as may be required by the Institutional and Engineering Control Plan discussed above.



LOCATION OF DETAIL

SOURCE:
USGS; Central Park, NY-NJ (2013), Weehawken, NJ-NY (2011), Jersey City, NJ-NY (2011), and Brooklyn, NY (2013) 7.5 Minute Topographic Quadrangle

N

0 2000'

Title:

SITE LOCATION MAP

509 WEST 34TH STREET
NEW YORK, NEW YORK

Prepared for:

509 W 34, L.L.C.

ROUX
ROUX ASSOCIATES, INC.
Environmental Consulting & Management

Compiled by: K.S.	Date: 23APR15	FIGURE
Prepared by: B.H.C.	Scale: AS SHOWN	1
Project Mgr.: K.S.	Project No.: 2409.0002Y000	
File: 2409.0002Y104.01.CDR		

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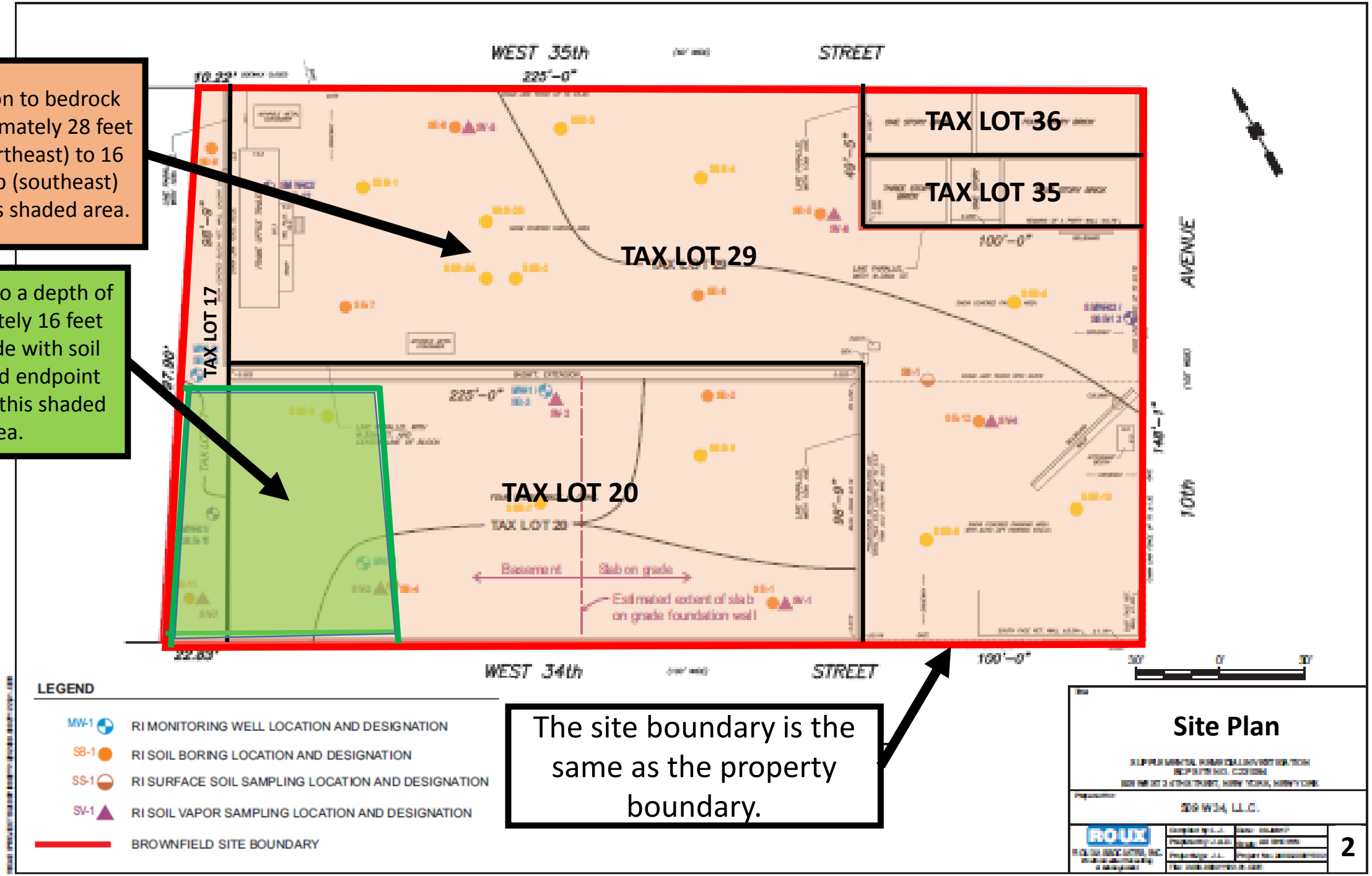
Excavation to bedrock to approximately 28 feet deep (northeast) to 16 feet deep (southeast) within this shaded area.

Excavation to a depth of approximately 16 feet below grade with soil bottom and endpoint samples in this shaded area.



The site boundary is the same as the property boundary.

Site Plan

559 W34, LLC.

ROUX

2