DECISION DOCUMENT

495 Eleventh
Brownfield Cleanup Program
Manhattan, New York County
Site No. C231141
May 2022

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

DECLARATION STATEMENT - DECISION DOCUMENT

495 Eleventh
Brownfield Cleanup Program
Manhattan, New York County
Site No. C231141
May 2022

Statement of Purpose and Basis

This document presents the remedy for the 495 Eleventh 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 495 Eleventh 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;
   - Integrating the remedy with the end use where possible and encouraging green and sustainable re-development; and
   - Additionally, to incorporate green remediation principles and techniques to the

extent feasible in the future development at this site, any future on-site buildings will include, at a minimum, a 20-mil vapor barrier/waterproofing membrane on the foundation to improve energy efficiency as an element of construction.

2. Excavation

Excavation and off-site disposal of all on-site soils which exceed unrestricted SCOs, as defined by 6 NYCRR Part 375-6.8.

Approximately 9,700 cubic yards of contaminated soil will be removed from the site.

3. Backfill

Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to complete the backfilling of the excavation and establish the designed grades at the site.

4. Vapor Intrusion Evaluation

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

5. Local Institutional Controls

Since no Environmental Easement (EE) or Site Management Plan (SMP) is anticipated to be needed to achieve soil, groundwater, or soil vapor remedial action objectives, 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.

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.

May 3, 2022

Date

Gerard Burke, Director
Remedial Bureau B

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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, where a contaminant is present at levels exceeding the soil cleanup objectives or other health-based or environmental standards, criteria or guidance, based on the reasonably anticipated use of the property.

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 repositories:

DECInfo Locator - Web Application
https://gisservices.dec.ny.gov/gis/dil/index.html?rs=C231141

Manhattan Community Board 4
330 West 42nd Street, 20th Floor
New York, NY 10036
Phone: (212) 736-4536

New York Public Library-Columbus Library Branch
742 10th Avenue
Manhattan, NY 10019
Phone: (212) 586-5098

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 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 project site is located at 495 11th Avenue in the Hell's Kitchen neighborhood of Manhattan, and is identified as Block 685 and Lot 38 on the New York City Tax Map. The site is approximately 0.57 acres in size and is bounded by West 40th Street followed by a New York City Transit Authority bus garage with parking to the north; West 39th Street followed by the Lincoln Tunnel Land Ventilation Building (the Lincoln Tunnel runs under the southernmost end of the property) to the south; 11th Avenue followed by a 5-story multi-family residential building with parking to the east; and the Jacob K. Javits Convention Center to the west.

Site Features

The site has approximately 200 feet of frontage on the west side of 11th Avenue and 125 feet of frontage on the south side of West 40th Street and north side of West 39th Street. The property is currently asphalt-paved throughout. The Lincoln Tunnel runs under the southernmost end of the property.

Current Zoning and Land Use

The site is located within the Special Hudson Yards District. It is part of the C6-4 zone which allows for large commercial buildings having retail, department stores, large offices, hotels, and residential uses. The site is currently used as a New York City Police Department (NYPD) parking lot.

Past Uses of the Site

During the late-1800s to the mid-1900s, the site was occupied by a slaughterhouse and meat packaging facility and appears to have been associated with several other similar operations

immediately surrounding the site. By 1976, the site was utilized as a warehouse and general store until closure and vacancy by 1982. From at least 1991, all site structures were demolished. The site is currently utilized as an asphalt parking lot by NYPD.

Site Geology and Hydrogeology

Subsurface soils generally consist of unconsolidated fill (variable texture sand, with masonry and other debris materials) from surface grade to approximately 15 feet below ground surface (bgs). Metamorphic bedrock consisting of gneiss or schist was encountered at depths between 15 and 19 feet bgs during installation of the four groundwater monitoring wells.

Depth to groundwater is approximately 12 feet bgs. Groundwater flows westerly towards the nearby Hudson River which is located approximately 0.2 miles northwest of the site.

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 contaminants of concern identified at this site are:

benzo(a)anthracene
benzo(a)pyrene
benzo(b)fluoranthene
benzo(k)fluoranthene
chrysene
dibenz[a,h]anthracene
indeno(1,2,3-cd)pyrene
barium
lead
mercury
DDD
DDE
DDT
iron
tetrachloroethene (PCE)

The contaminants 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.

Nature and Extent of Contamination:

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. The primary contaminants of concern are SVOCs and metals in soil and SVOCs in groundwater. Per- and polyfluoroalkyl substances (PFAS) will be sampled as part of the pre-design investigation and are not anticipated to affect the proposed Track 1 remedy; sampling results will be evaluated to ensure the remedy sufficiently addresses any PFAS contamination.

Soil - Several SVOCs were detected in soil samples to a depth of 15 feet below ground surface (bgs) at levels above unrestricted use soil cleanup objectives (UUSCOs) including the following with their respective UUSCO noted in parentheses: benzo(a)anthracene up to 10.8 parts per million (ppm) (1.0 ppm), benzo(a)pyrene up to 9.4 ppm (1.0 ppm), benzo(b)fluoranthene up to 7.0 ppm (1.0 ppm), benzo(k)fluoranthene up to 7.8 ppm (0.8 ppm), chrysene up to 9.7 ppm (1 ppm), dibenzo(a,h)anthracene up to 1.5 ppm (0.33 ppm), and indeno(1,2,3-cd)pyrene up to 5.3 ppm (0.5 ppm). The protection of groundwater SCO is also applicable to benzo(a)anthracene although it is the same as the UUSCO of 1.0 ppm.

Metals were detected to a depth of 15 feet bgs above UUSCOs and include the following, with their respective UUSCO noted in parentheses: barium up to 444 ppm (350 ppm), lead up to 450 ppm (63 ppm), and mercury up to 1.8 ppm (0.18 ppm).

Total PCBs were detected in one sample up to 0.4 ppm in shallow soil compared to its UUSCO of 0.1 ppm. Several pesticides were detected to a depth of 15 feet bgs above UUSCOs, with their respective UUSCO noted in parentheses: 4,4'-DDD up to 0.0078 ppm (0.0033 ppm) in shallow soil, 4,4'-DDE up to 0.0087 ppm (0.0033 ppm), 4,4'-DDT up to 0.081 ppm (0.0033 ppm), and dieldrin up to 0.0066 ppm (0.005 ppm).

The only VOC detected above UUSCOs in soil was acetone at a maximum concentration of 0.22 ppm (0.05 ppm). 1,4-dioxane was not detected in any of the soil samples collected.

Data does not indicate any off-site impacts in soil related to this site.

Groundwater - Four groundwater samples were collected from on-site groundwater monitoring wells. The SVOC benzo(a)anthracene was found in all 4 wells up to 0.04 parts per billion (ppb) and has a Class GA Ambient Water Quality Standard (AWQS) of 0.002 ppb.

The only dissolved metals detected in groundwater were iron and sodium, which are considered naturally occurring and not site-related. Except for chloroform which was detected at 12 ppb in one sample and has a AWQS of 7 ppb, no other VOCs were detected in groundwater above their respective AWQS.

Data does not indicate any off-site impacts in groundwater related to this site.

Soil Vapor - Five soil vapor samples were collected at 4 feet bgs and analyzed for VOCs. The chlorinated VOC tetrachloroethylene (PCE) was detected in all five sample locations ranging from 18 micrograms per cubic meter ($\mu g/m^3$) up to 55 $\mu g/m^3$ in the western portion of the site. Other chlorinated VOC detections include: trichloroethene (TCE) up to 0.71 $\mu g/m^3$, methylene chloride up to 37 $\mu g/m^3$, acetone up to 180 $\mu g/m^3$, and carbon tetrachloride in one location at 0.61 $\mu g/m^3$. Several petroleum-related VOCs were detected in soil vapor samples throughout the site.

Data does not indicate any off-site impacts in soil vapor related to this site.

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.*

The site is currently a parking lot with intact asphalt across the entire site, therefore, people are not expected to come into direct contact with site related soil and groundwater contamination, unless they disturb the surface. People are not drinking the 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 structures 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 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. However, the potential exists for the inhalation of site contaminants due to soil vapor intrusion for any future on-site development and occupancy. In addition, environmental sampling indicates 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.

RAOs for Environmental Protection

- Remove the source of ground or surface water contamination.

Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated 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 and Soil Vapor Intrusion Evaluation 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;
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development; and
- Additionally, to incorporate green remediation principles and techniques to the extent feasible in the future development at this site, any future on-site buildings will include, at a minimum, a 20-mil vapor barrier/waterproofing membrane on the foundation to improve energy efficiency as an element of construction.

2. Excavation

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Approximately 9,700 cubic yards of contaminated soil will be removed from the site.

3. Backfill

Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to complete the backfilling of the excavation and establish the designed grades at the site.

4. Vapor Intrusion Evaluation

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

5. Local Institutional Controls

Since no Environmental Easement (EE) or Site Management Plan (SMP) is anticipated to be needed to achieve soil, groundwater, or soil vapor remedial action objectives, 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.

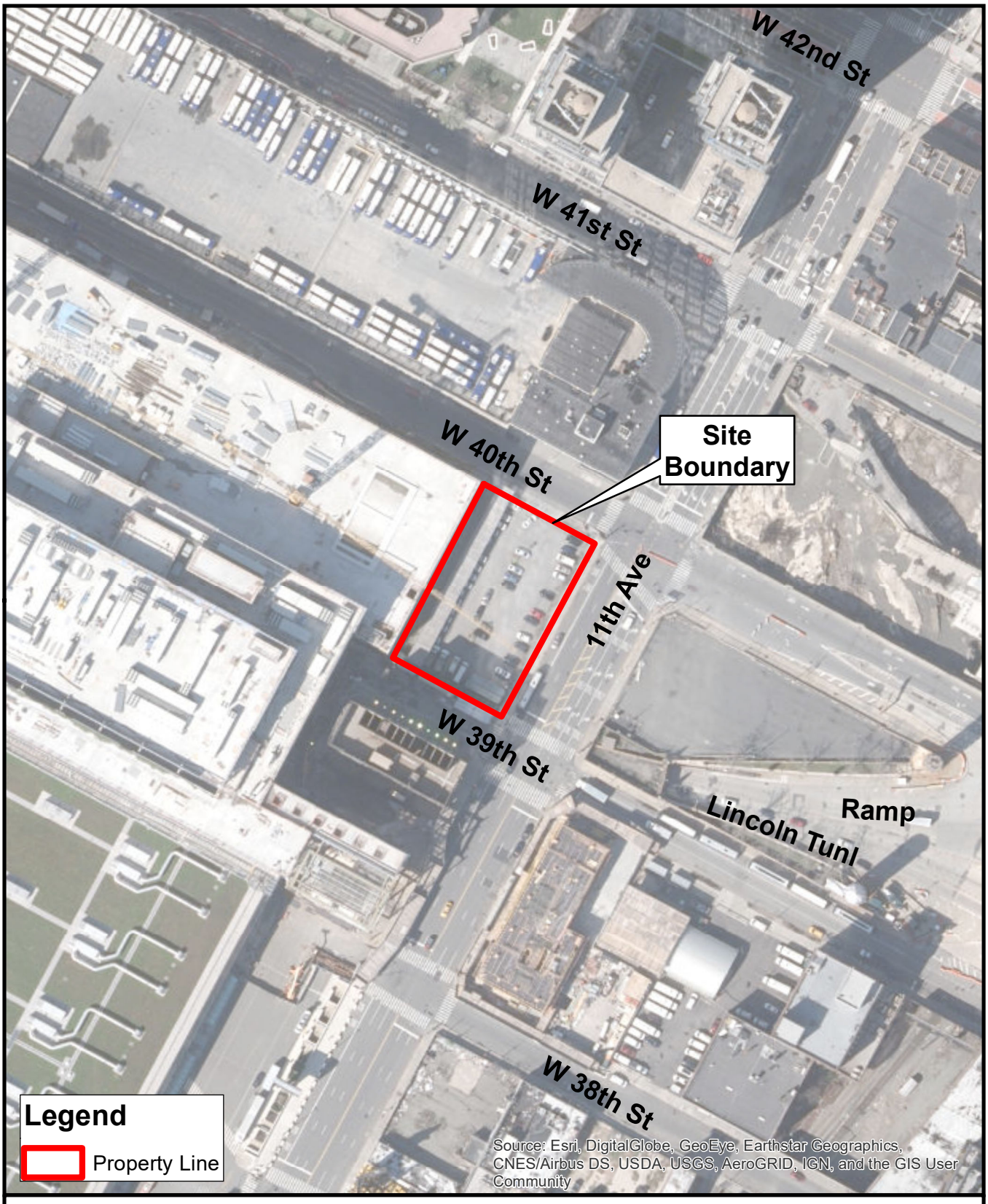

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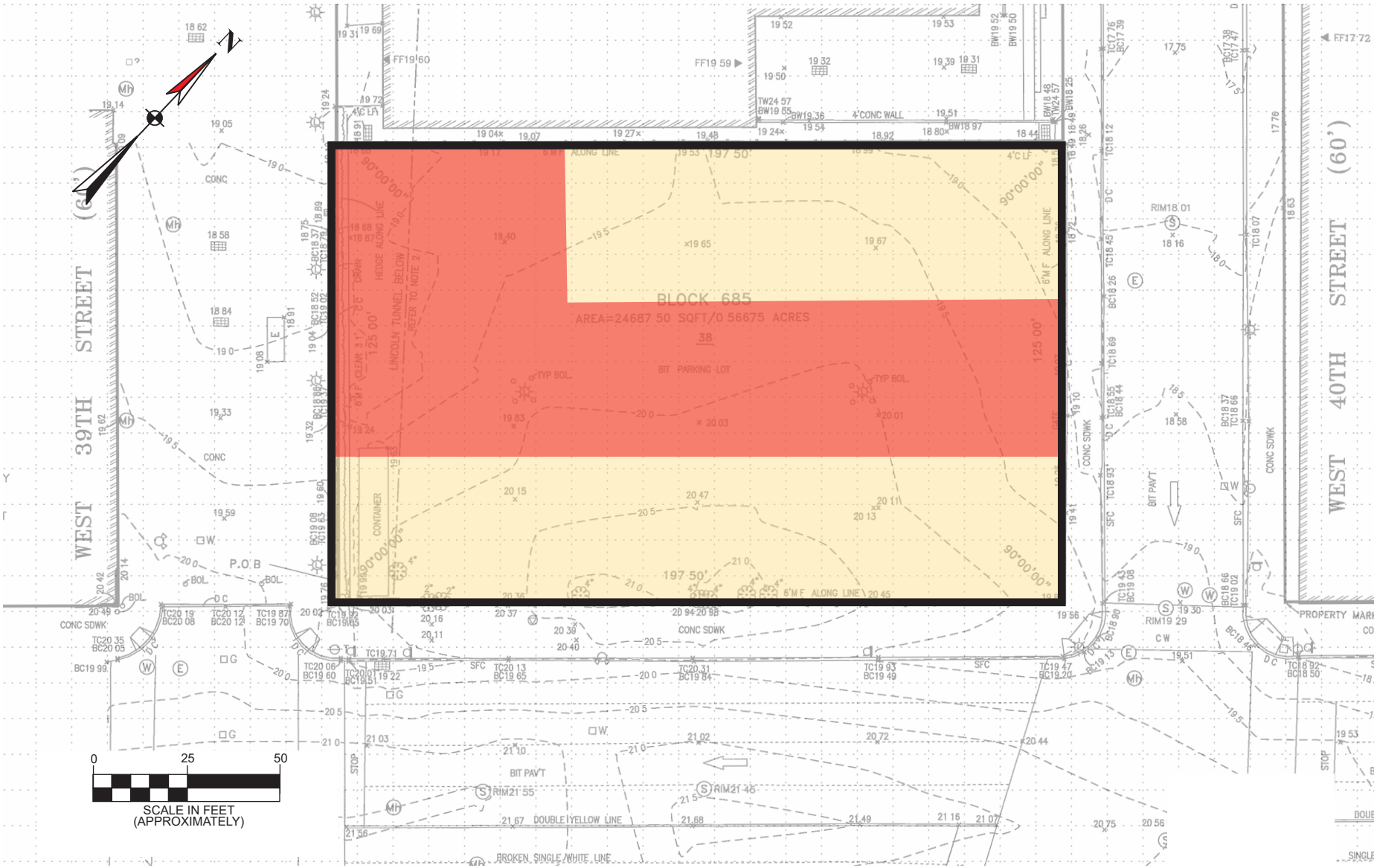
Figure 1

Site Location Map

495 Eleventh
New York, New York County
Site No. C231141

NEW YORK STATE OF OPPORTUNITY
Department of Environmental Conservation



Base map provided by HAKS Engineers, Architects & Land Surveyors PC survey dated 11/5/14. All feature locations are approximate.
This map is intended as a schematic to be used in conjunction with the associated report, and it should not be relied upon as a survey for planning or other activities.

Figure 2: Soil Excavation Plan (Track 1)

BCP Site: C231141
495 11th Avenue
Borough of Manhattan, New York

Legend:

- site boundary
- excavation to 3' to achieve UUSCOs
- excavation 18' to achieve UUSCOs

File:	KM17075.40
	February 2022
	Scale as shown
	Figures