

# DECISION DOCUMENT

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**La Central Phase II  
Brownfield Cleanup Program  
Bronx, Bronx County  
Site No. C203143  
October 2022**



**Department of  
Environmental  
Conservation**

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

# DECLARATION STATEMENT - DECISION DOCUMENT

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La Central Phase II  
Brownfield Cleanup Program  
Bronx, Bronx County  
Site No. C203143  
October 2022

## **Statement of Purpose and Basis**

This document presents the remedy for the La Central Phase II 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 La Central Phase II 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 contaminant source areas, including:

- Soils which exceed the protection of groundwater soil cleanup objectives (PGWSCOs), as defined by 6 NYCRR Part 375-6.8 for those contaminants found in site groundwater above standards; and
- Excavation and removal of any underground storage tanks (USTs), fuel dispensers, underground piping or other structures associated with a source of contamination.

Track 2 Area: Excavation and off-site disposal of all on-site soils which exceed restricted residential soil cleanup objectives (SCOs), as defined by 6 NYCRR Part 375-6.8, in the upper 15 feet. If a Track 2 restricted residential cleanup is achieved, a Cover System will not be a required element of the remedy for this portion of the site. Approximately 22,000 cubic yards of contaminated soil will be removed from this area of the site.

Track 4 Area: All soils in the upper two feet which exceed the restricted residential SCOs will be excavated and transported off-site for disposal. Approximately 6,000 cubic yards of contaminated soil will be removed from this area of the site.

Approximately 28,000 cubic yards of contaminated soil will be removed from the site in total. Collection and analysis of confirmation and documentation samples at the remedial excavation depths will be used to verify that SCOs for the site have been achieved. If confirmation/documentation sampling indicates that SCOs were not achieved at the stated remedial depth, the Applicant must notify DEC, submit the sample results and, in consultation with DEC, determine if further remedial excavation is necessary. Further excavation for development will proceed after confirmation samples demonstrate that SCOs for the site have been achieved.

## **3. Backfill**

On-site soil which does not exceed the above excavation criteria or the protection of groundwater SCOs for any constituent may be used anywhere beneath the cover system, including below the water table, to backfill the excavation or re-grade the site.

Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to replace the excavated soil, establish the designed grades at the site, and as part of the composite cover system in Track 4 areas.

The site will be re-graded to accommodate installation of a cover system as described in remedy element 4.

## **4. Cover System**

A site cover will be required to allow for restricted residential use of the site in the Track 4 Area of the site where the upper two feet of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). Where a soil cover is to be used it will be a minimum of two feet of soil placed over a demarcation layer, with the upper six inches of soil of sufficient quality to maintain a vegetative layer. Soil cover material, including any fill material brought to the site, will meet the SCOs for cover material for the use of the site as set forth in 6 NYCRR Part 375-6.7(d). Substitution of other materials and components may be allowed where such components already exist or are a component of the tangible property to be placed as part of site redevelopment. Such components may include, but are not necessarily limited to: pavement, concrete, paved surface parking areas, sidewalks, building foundations and building slabs. Where a Track 2 restricted residential cleanup is achieved, a Cover System will not be a required element of the remedy.

## **5. Groundwater Remedy: In-Situ Chemical Oxidation or Reduction**

In-situ chemical oxidation (ISCO) will be implemented to treat VOCs in groundwater. A chemical oxidant will be injected into the subsurface to destroy the contaminants in the eastern portion of the site. The method and depth of injection will be determined during the remedial design.

Prior to the full implementation of this technology, laboratory and on-site pilot scale studies will be conducted to more clearly define design parameters.

Monitoring will be conducted for contaminants of concern upgradient and downgradient of the treatment zone to determine effectiveness of the remedy.

## **6. Vapor Intrusion Evaluation**

As part of the 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.

## **7. Engineering and Institutional Controls**

Imposition of an institutional control in the form of an environmental easement and a Site Management Plan, as described below, will be required. At a minimum, the remedy will achieve a Track 2 and Track 4 restricted residential cleanup

### **Institutional Control**

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

- require 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);
- allow the use and development of the controlled property for restricted residential use as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restrict the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or NYCDOH; and
- require compliance with the Department-approved Site Management Plan.

## **8. Site Management Plan**

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

1.
  - 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 7 above.

Engineering Controls: The soil cover discussed in Paragraph 4 and the soil vapor intrusion evaluation and remedial actions deemed necessary in Paragraph 6 above.

This plan includes, but may not be limited to:

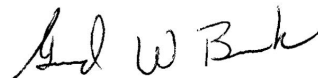
- an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
  - description of the provisions of the environmental easement including any land use and groundwater;
  - a provision for evaluation of the potential for soil vapor intrusion for any occupied buildings on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
  - a provision that should a building foundation or building slab be removed in the future, a cover system consistent with that described in Paragraph 4 above will be placed in any areas where the upper two feet of exposed surface soil exceed the applicable soil cleanup objectives (SCOs)
  - 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 institutional and/or 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 groundwater to assess the performance and effectiveness of the remedy;
    - a schedule of monitoring and frequency of submittals to the Department;

- 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.
2. an Operation and Maintenance (O&M) Plan to ensure continued operation, maintenance, inspection, and reporting of any mechanical or physical components of the active vapor mitigation system(s), if required. The plan includes, but is not limited to:
- procedures for operating and maintaining the system(s); and
  - compliance inspection of the system(s) to ensure proper O&M as well as providing the data for any necessary reporting.

**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.

October 24, 2024



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Date

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Gerard Burke, Director  
Remedial Bureau B

# DECISION DOCUMENT

La Central Phase II  
Bronx, Bronx County  
Site No. C203143  
October 2022

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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=C203143>

Woodstock Library, NYPL  
761 East 160th Street  
Bronx, NY 10456  
Phone: (718) 655-6255

Bronx Community Board District 1  
3024 Third Avenue  
Bronx, NY 10455  
Phone: (718) 585-7117

#### 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 1.39-acre site is located at 625 Brook Avenue, 671 Brook Avenue, and 503 East 153rd Street, in the Woodstock section of the Bronx, NY. The site occupies Block 2361 Lots 26 and 50 and Block 2262 Lot 1. The site is bounded to the north by the Bergen Avenue and Brook Avenue intersection, followed by East 156th Street, to the east by Brook Avenue followed by athletic fields, to the south by mixed-use residential buildings, and to the west by a mixed-use residential building.

**Site Features:** The site consists of an asphalt-paved parking lot and overgrown vegetation.

**Current Zoning and Land Use:** The site is zoned residential and commercial (C6-2).

**Past Use of the Site:** The site was developed prior to 1891 with residential, commercial, and industrial buildings. Subsequent uses included residential buildings, stores, a wig factory, butcher/meatpacking facilities, and unspecified manufacturing. The site has remained vacant since 1991.

#### **Site Geology and Hydrology:**

The site is underlain by historic fill material extending to approximately 9.5 to 15 feet below ground surface (bgs). The fill material consists of sand, silt, and gravel with varying amounts of concrete, brick wood, scrap metal, glass, plastic, and rubber. Fill material is



underlain by native sand, gravel, and silt to boring termination depths (up to 20 feet bgs). Bedrock was not encountered during soil boring. Groundwater was observed approximately 15.5-19.5 feet bgs and flows in an easterly direction. The closest body of water is the East River approximately 1 mile away.

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, alternatives (or an alternative) that restrict(s) the use of the site to restricted-residential use (which allows for commercial use and industrial use) as described in Part 375-1.8(g) were/was evaluated in addition to an alternative which would allow for unrestricted use of the site.

A comparison of the results of the Remedial Investigation (RI) to the appropriate standards, criteria and guidance values (SCGs) for the identified land use and the unrestricted use SCGs for the site contaminants is available in the RI Report.

#### **SECTION 5: ENFORCEMENT STATUS**

The Applicants under the Brownfield Cleanup Agreement are Volunteers. The Applicants do 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:

tetrachloroethene (PCE)	chrysene
trichloroethene (TCE)	dibenzo(a, h)anthracene
cis-1,2-dichloroethene	fluoranthene
methylene chloride	indeno(1,2,3-c,d)pyrene
benzo(a)anthracene	phenanthrene
benzo(a)pyrene	barium
benzo(b)fluoranthene	lead
benzo(k)fluoranthene	mercury

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.

### **Nature and Extent of Contamination:**

Soil and groundwater samples were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, polychlorinated biphenyls (PCBs), pesticides, Per- and Polyfluoroalkyl Substances (PFAS), and 1,4-dioxane. Soil vapor samples were analyzed for VOCs. Based upon investigations conducted to date, the primary contaminants of concern for the site include SVOCs and metals in soil, VOCs and SVOCs in groundwater and VOCs in soil vapor.

Soil - Soil data were compared to Restricted-Residential Soil Cleanup Objectives (RRSCO). No VOCs, pesticides, or PCBs were detected at concentrations exceeding the RRSCOs. SVOCs and metals were both identified throughout the site at depths of up to 13 feet below ground surface (bgs). SVOCs identified include benzo(a)anthracene at a maximum concentration of 120 parts per million (ppm) (RRSCO is 1 ppm), benzo(a)pyrene at a maximum concentration of 95 ppm (RRSCO is 1 ppm) benzo(b)fluoranthene at a maximum concentration of 120 ppm (RRSCO is 1 ppm), benzo(k)fluoranthene at a maximum of 46 ppm (RRSCO is 3.9 ppm), chrysene at a maximum of 120 ppm (RRSCO is 3.9 ppm), dibenzo(a, h)anthracene at a maximum of 12 ppm (RRSCO is 0.33 ppm), fluoranthene at a maximum of 240 ppm (RRSCO is 100 ppm), indeno(1,2,3-c,d)pyrene at a maximum of 37 ppm (RRSCO is 0.5 ppm), and phenanthrene at a maximum of 240 ppm (RRSCO is 100 ppm). Metals include barium at a maximum of 1540 ppm (RRSCO is 400 ppm), lead at a maximum of 953 ppm (RRSCO is 400 ppm), and mercury at a maximum of 2.6 ppm (RRSCO is 0.81 ppm).

1,4-dioxane was not detected above the reporting limit. Perfluorooctanoic acid (PFOA) was detected at a maximum of 1.29 parts per billion (ppb) which exceeds both the Protection of Groundwater Guidance Value (PGGV) of 1.1 ppb and the Restricted Residential Guidance Value (RRGV) of 0.66 ppb. Perfluorooctanesulfonic acid (PFOS) was detected at a maximum of 5.54 ppb, which exceeds both the PGGV of 3.7 ppb and the RRGV of 0.88 ppb. Data does not indicate any off-site impacts in soil related to this site.

Groundwater - Groundwater data was compared to AWQSGVs. VOCs present in the water above AWQSGVs include tetrachloroethene (PCE) at a maximum of 130 ppb (AWQSGV is 5 ppb), trichloroethene (TCE) at a maximum of 8.2 ppb (AWQSGV is 5 ppb), cis-1,2-dichloroethene at a maximum of 11 ppb (AWQSGV is 5 ppb), and methylene chloride at a maximum of 8.2 ppb (AWQSGV is 5 ppb). Onsite sources of these VOCs were not detected in soil. SVOCs detected above AWQSGVs include benzo(a)anthracene at a maximum of 0.77 ppb (AWQSGV is 0.0002 ppb), and benzo(a)pyrene at a maximum of 0.55 ppb (AWQSGV is no detection). No metals, pesticides, or PCBs exceeded their water quality standards in groundwater.

1,4-Dioxane was not detected above the reporting limit and is not considered a contaminant of concern. PFOA was detected at a maximum of 70.7 parts per trillion (ppt); the maximum contaminant limit, or MCL (drinking water standard) is 10 ppt. PFOS was detected at a maximum of 42.4 ppt; the MCL is 10 ppt. PFOA and PFOS were detected throughout the site. PFOA and PFOS concentrations in the upgradient onsite wells indicate that PFOA and PFOS may be attributed to an upgradient source. Data does not indicate potential off-site impacts in groundwater related to this site.

Soil Vapor - PCE was detected in soil vapor at a maximum concentration 120 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ). TCE was detected in soil vapor at a maximum concentration of  $3.5 \mu\text{g}/\text{m}^3$ . Several petroleum-related VOCs were detected throughout the site. Data does not indicate potential 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*.

Since the site is fenced and covered in asphalt or concrete, people will not come into contact with site-related soil and groundwater contamination unless they dig below the 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 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 buildings, is referred to as soil vapor intrusion. Because there site is vacant, the inhalation of site-related contaminants due to soil vapor intrusion does not represent a current concern, however future buildings may present a concern for soil vapor intrusion. Current 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.
- 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 groundwater 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 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 Multiple Cleanup Tracks remedy.

The selected remedy is referred to as the Excavation and In-situ Groundwater Treatment 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

Excavation and off-site disposal of contaminant source areas, including:

- Soils which exceed the protection of groundwater soil cleanup objectives (PGWSCOs), as defined by 6 NYCRR Part 375-6.8 for those contaminants found in site groundwater above standards

Track 2 Area: Excavation and off-site disposal of all on-site soils which exceed restricted residential soil cleanup objectives (SCOs), as defined by 6 NYCRR Part 375-6.8 in the upper 15 feet. If a Track 2 restricted residential cleanup is achieved, a Cover System will not be a required element of the remedy for this portion of the site. Approximately XX cubic yards of contaminated soil will be removed from this area of the site.

Track 4 Area: All soils in the upper two feet which exceed the restricted residential SCOs will be excavated and transported off-site for disposal. Approximately XX cubic yards of contaminated soil will be removed from this area of the site.

Approximately 28,000 cubic yards of contaminated soil will be removed from the site in total. Collection and analysis of confirmation and documentation samples at the remedial

excavation depths will be used to verify that SCOs for the site have been achieved. If confirmation/documentation sampling indicates that SCOs were not achieved at the stated remedial depth, the Applicant must notify DEC, submit the sample results and, in consultation with DEC, determine if further remedial excavation is necessary. Further excavation for development will proceed after confirmation samples demonstrate that SCOs for the site have been achieved.

Excavation and removal of any underground storage tanks (USTs), fuel dispensers, underground piping or other structures associated with a source of contamination.

### **3. Backfill**

On-site soil which does not exceed the above excavation criteria or the protection of groundwater SCOs for any constituent may be used anywhere beneath the cover system, including below the water table, to backfill the excavation or re-grade the site.

Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to replace the excavated soil, establish the designed grades at the site, and as part of the composite cover system in Track 4 areas.

The site will be re-graded to accommodate installation of a cover system as described in remedy element 4.

### **4. Cover System**

A site cover will be required to allow for restricted residential use of the site in the Track 4 Area of the site where the upper two feet of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). Where a soil cover is to be used it will be a minimum of two feet of soil placed over a demarcation layer, with the upper six inches of soil of sufficient quality to maintain a vegetative layer. Soil cover material, including any fill material brought to the site, will meet the SCOs for cover material for the use of the site as set forth in 6 NYCRR Part 375-6.7(d). Substitution of other materials and components may be allowed where such components already exist or are a component of the tangible property to be placed as part of site redevelopment. Such components may include, but are not necessarily limited to: pavement, concrete, paved surface parking areas, sidewalks, building foundations and building slabs. Where a Track 2 restricted residential cleanup is achieved, a Cover System will not be a required element of the remedy.

### **5. Groundwater Remedies**

#### **In-Situ Chemical Oxidation or Reduction**

In-situ chemical oxidation (ISCO) will be implemented to treat VOCs in groundwater. A chemical oxidant will be injected into the subsurface to destroy the contaminants in the eastern portion of the site. The method and depth of injection will be determined during the remedial design.

Prior to the full implementation of this technology, laboratory and on-site pilot scale studies will be conducted to more clearly define design parameters.

Monitoring will be conducted for contaminants of concern upgradient and downgradient of the treatment zone.

## **6. Vapor Intrusion Evaluation**

As part of the 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.

## **7. Engineering and Institutional Controls**

Imposition of an institutional control in the form of an environmental easement and a Site Management Plan, as described below, will be required. The remedy will achieve a Track 2 and Track 4 restricted residential cleanup at a minimum.

### **Institutional Control**

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

- require 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);
- allow the use and development of the controlled property for restricted residential use as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restrict the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or NYCDOH; and
- require compliance with the Department approved Site Management Plan.

## **8. Site Management Plan**

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

1. 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:



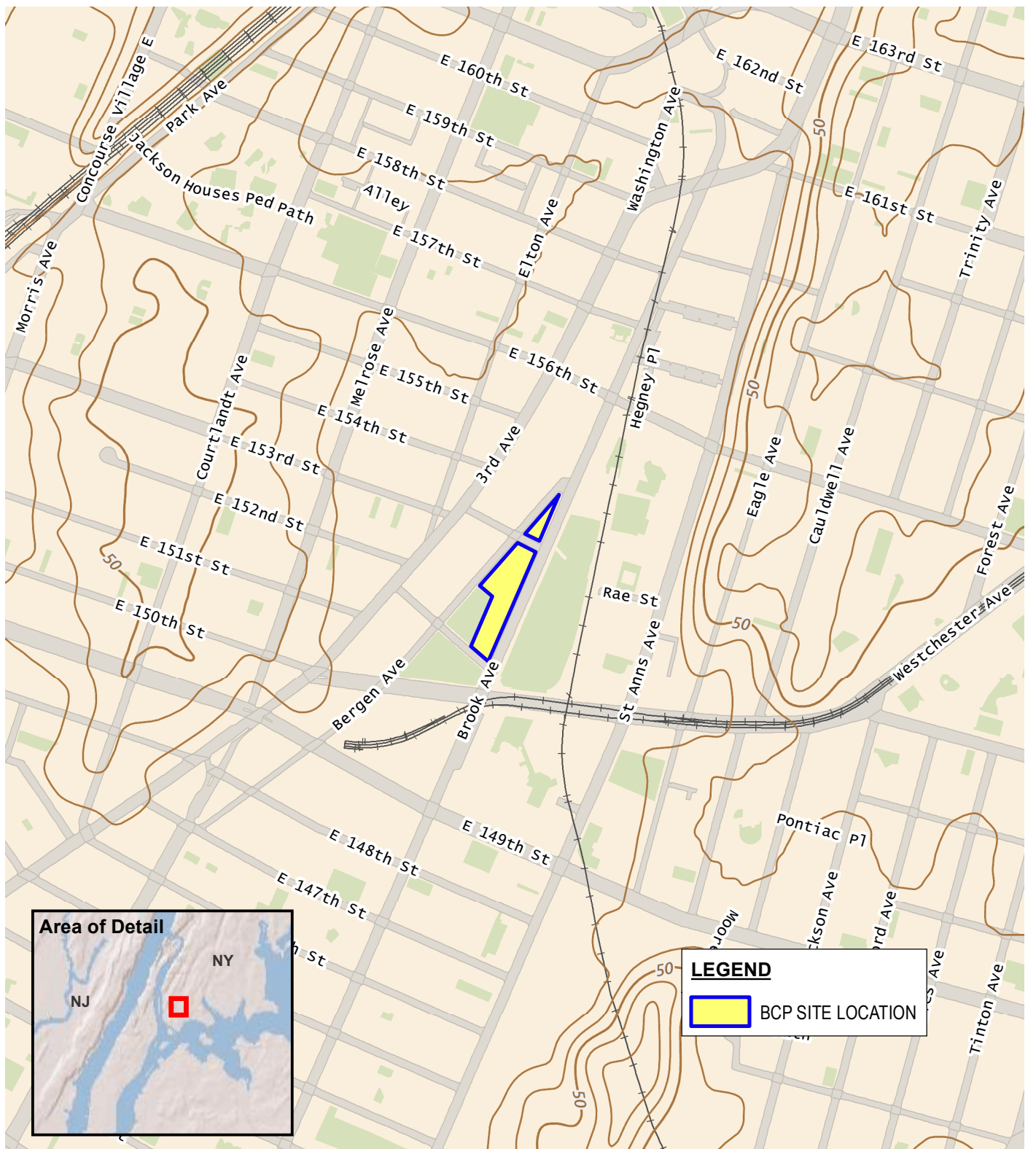
Institutional Controls: The Environmental Easement discussed in Paragraph 7 above.

Engineering Controls: The soil cover discussed in Paragraph 4 and the soil vapor intrusion evaluation and remedial actions deemed necessary in Paragraph 6 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 groundwater;
  - a provision for evaluation of the potential for soil vapor intrusion for any occupied buildings on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
  - a provision that should a building foundation or building slab be removed in the future, a cover system consistent with that described in Paragraph 4 above will be placed in any areas where the upper two feet of exposed surface soil exceed the applicable soil cleanup objectives (SCOs)
  - 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 institutional and/or 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 groundwater to assess the performance and effectiveness of the remedy;
  - a schedule of monitoring and frequency of submittals to the Department;
  - 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.
2. an Operation and Maintenance (O&M) Plan to ensure continued operation, maintenance, inspection, and reporting of any mechanical or physical components of the active vapor mitigation system(s), if required. The plan includes, but is not limited to:
- procedures for operating and maintaining the system(s); and
  - compliance inspection of the system(s) to ensure proper O&M as well as providing the data for any necessary reporting.

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Service Layer Credits: USGS The National Map: 3d Elevation Program 2020



440 Park Avenue South, New York, NY 10016

**La Central Phase II**  
Bronx, New York

**BCP SITE LOCATION**

DATE  
**6/18/2020**








PROJECT NO.  
**200166**

FIGURE  
**1**

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**LEGEND**

-  PROJECT SITE BOUNDARY
-  LOT BOUNDARY AND TAX LOT
- 2361** BLOCK NUMBER
-  EXISTING BUILDING
-  PROPOSED BUILDING
-  PROPOSED EXCAVATION TO APPROXIMATELY 15 FEET BELOW GRADE TO ACHIEVE A TRACK 2 CLEANUP
-  PROPOSED EXCAVATION TO A MINIMUM OF APPROXIMATELY 2 FEET BELOW GRADE TO ACHIEVE A TRACK 4 CLEANUP
-  PROPOSED EXTENT OF ISCO AREA AROUND RI-MW-07



Map Source:  
NYCDPC (NYC Dept. of City Planning) GIS database

DATE	10/10/2022
PROJECT NO.	200166
FIGURE	6