DECISION DOCUMENT

240 Huntington Street
Brownfield Cleanup Program
Brooklyn, Kings County
Site No. C224314
May 2022

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

DECLARATION STATEMENT - DECISION DOCUMENT

240 Huntington Street
Brownfield Cleanup Program
Brooklyn, Kings County
Site No. C224314
May 2022

Statement of Purpose and Basis

This document presents the remedy for the 240 Huntington 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 240 Huntington 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. Green Remediation

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

- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
- Reducing direct and indirect greenhouse gas and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;
- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste; 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
- soils that create a nuisance condition, as defined in Commissioner Policy CP-51 Section G.

Excavation and off-site disposal of all soils in the upper foot which exceed the commercial SCOs..

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

Approximately 10,800 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. Cover System

A site cover will be required to allow for commercial use of the site in areas where the upper one foot 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 one foot 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.

5. Coal Tar Recovery

Installation and operation of coal tar recovery wells along the bulkhead on the eastern edge of the property to remove potentially mobile coal tar from the subsurface. The number, depth, type and spacing of the recovery wells will be determined during the design phase of the remedy. Coal tar will be collected periodically from each well; however, if wells are determined by the Department to accumulate large quantities of coal tar over extended time periods, they can be converted to automated collection.

6. In-Situ Chemical Oxidation

In-situ chemical oxidation (ISCO) will be implemented to treat contaminants in groundwater. A chemical oxidant will be injected into the subsurface to destroy the contaminants within the suspected UST area. 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. It is estimated that the chemical oxidant

will be injected during a single event.

Monitoring will be required within the treatment zone. Monitoring will be conducted for "contaminants of concern" upgradient and downgradient of the treatment zone. The treatment zone will be monitored for dissolved oxygen and oxidation/reduction potential.

7. Vapor Mitigation

Any on-site buildings will be required to have a sub-slab depressurization system, or other acceptable measures, to mitigate the migration of vapors into the building from soil and/or groundwater.

8. 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 4 commercial cleanup at a minimum and will include imposition of a site cover.

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 commercial 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.

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 8 above.

   – Engineering Controls: The soil cover discussed in Paragraph 4, coal tar recovery discussed in Paragraph 5, and the sub-slab depressurization system discussed in Paragraph 7 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;
- 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 one foot 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 buildings on the site, as may be required by the Institutional and Engineering Control Plan discussed above.

c. 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) and coal tar recovery wells. 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.

May 2, 2022

Date

Gerard Burke, Director
Remedial Bureau B

DECISION DOCUMENT

240 Huntington Street
Brooklyn, Kings County
Site No. C224314
May 2022

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=C224314

Brooklyn Public Library - Carroll Gardens Branch
396 Clinton Street
Brooklyn, NY 11231
Phone: (718) 596-6972

Brooklyn Community Board 6
250 Baltic Street
Brooklyn, NY 11201-6401
Phone: (718) 643-3027

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 site is identified as Brooklyn Tax Block 477, Lot 8 and is located on the city block bounded by Huntington Street to the north, the Gowanus Canal to the east, 9th Street to the south, and Smith Street to the west. The subject property occupies an area of 49,854 square feet (about 1.15 acres) in the northeastern portion of a city block and is bound to the south and west by a Metropolitan Transit Authority (MTA) easement containing an elevated New York City Transit (NYCT) structure.

Site Features: The site is currently vacant and has been used for parking since February 2018. The site cover consists of about 6 inches of gravel. The site elevation ranges from approximately elevation (el) 10.5 to el 16, or approximately 13.25 to 18.75 feet above mean sea level. The site is generally flat and slopes down gradually to the east; the general topographic gradient of the surrounding area slopes gradually to the east towards the Gowanus Canal. A new steel sheet pile bulkhead was installed along the eastern portion of the site and completed in February 2020 under a US EPA Order on Consent. As part of the construction, anchor piles were installed about 50 feet inland of the canal, connected to the bulkhead with double channel wales. Sheet piles were installed to approximately el -45, or approximately 55 feet below ground surface (bgs).

Current Zoning and Land Use: The site is zoned for industrial/manufacturing use. The entire site is located in the M2-1 manufacturing district. The surrounding area includes commercial, industrial, residential, and transportation/utility buildings, as well as vacant lots, construction sites, and open space.

Past Use of the Site: Historical use of the site includes a contractor's yard with concrete mixing plant equipment from as early as 1915, an automobile house with a gasoline tank from as early as 1938 until at least 1950, and a blacksmith from as early as 1938 until at least 1969. Concrete equipment was demolished by the end of 2017. A new bulkhead along the eastern portion of the site was constructed and completed in February 2020 under a US EPA Order on Consent. During excavation of a trench for the installation of anchor piles, two areas of soils exhibiting petroleum-like impacts were encountered at about 4 feet bgs at the base of the trench. The soils were dark gray to black, exhibited petroleum-like odors, and returned photoionization detector (PID)

readings up to 103 parts per million (ppm). Based on these findings, a spill was reported and assigned NYSDEC Spill No. 1908119.

Site Geology and Hydrogeology: Historic fill is present from surface grade to about 8 feet bgs, intersected by an approximately 8-inch concrete slab about 4 feet bgs. The fill layer is about 9 to 23 feet thick across the site and consists of gray-brown sand with varying amounts of silt, gravel, cobbles, bricks, roots, and wood. The fill was underlain by native fine sand with varying amounts of silt. An approximately 4 foot layer of dark gray clay was observed from approximately 22 to 26 feet bgs. Beneath the clay, the soil consisted of dark brown to black, fine- to medium-grained sands with varying amounts of silt.

A February 2018 Geotechnical Memorandum described glacial deposits encountered below the estuarine (tidal stream) deposits. The top of the glacial deposits were observed about 17 to 20 feet below the top of the existing bulkhead (corresponding to el -14 to -17, or 26 to 29 feet bgs). The glacial deposits consisted typically of dark-brown to gray-brown medium to fine sand with varying amounts of silt, clay, and gravel. Lenses of fine sandy silt were occasionally encountered at the top of this layer.

Bedrock in the area is part of the Hartland Formation and is expected at about 150 feet bgs. The groundwater flow direction for the area surrounding the site is tidally influenced. Shallow, intermediate, and deep groundwater flow east towards Gowanus Canal. Groundwater underlying the site was observed at about 8 feet bgs.

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 commercial as described in Part 375-1.8(g) 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 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:

1,2,4-trimethylbenzene
1,3,5-trimethylbenzene
benzene
xylene (mixed)
benzo(a)anthracene
benzo(a)pyrene
benzo(b)fluoranthene
chrysene
tetrachloroethene
ethylbenzene
lead
copper

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

- groundwater
- soil
- soil vapor intrusion

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), per- and polyfluoroalkyl substances (PFAS), and pesticides. Soil vapor was analyzed for VOCs. Based upon investigations conducted to date, the primary contaminants of concern include petroleum VOCs, SVOCs and metals in soil, petroleum VOCs in groundwater, and chlorinated VOCs in soil vapor.

Soil: Soil data were compared to Commercial Use Soil Cleanup Objectives (CSCOs) and Protection of Groundwater Soil Cleanup Objectives (PGSCOs). Contaminants of concern are VOCs, SVOCs, and metals to a depth of approximately 10 feet below grade. Petroleum-related VOCs identified include 1,2,4-trimethylbenzene at a maximum concentration of 430 parts per million (ppm) (CSCO: 190 ppm and PGSCO: 3.6 ppm), 1,3,5-trimethylbenzene at a maximum concentration of 160 ppm (CSCO: 190 ppm and PGSCO: 8.4 ppm), benzene at a maximum concentration of 60 ppm (CSCO: 44 ppm and PGSCO: 0.06 ppm), and total xylenes at a maximum concentration 720 ppm (CSCO: 500 ppm and PGSCO: 1.6 ppm). SVOCs found include benzo(a)anthracene at a maximum concentration of 10.8 ppm (CSCO: 5.6 ppm and PGSCO: 1 ppm), benzo(a)pyrene at a maximum concentration of 9.28 ppm (CSCO: 1 ppm and PGSCO: 22

ppm), and benzo(b)fluoranthene at a maximum concentration of 8.66 (CSCO: 5.6 ppm and PGSCO: 1.7 ppm). Metals found include copper at a maximum concentration of 737 ppm (CSCO: 270 ppm and PGSCO: 1,720 ppm) and lead at a maximum concentration of 1,750 ppm (CSCO: 270 ppm and PGSCO: 450 ppm). Coal tar was identified in on-site borings from 35-60 feet below grade surface. Coal tar impacts will be further delineated under a phase design investigation under the remedial action work plan. No PCBs or pesticides were detected at concentrations exceeding the CSCOs. Data does not indicate any off-site impacts in soil related to this site. Perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) were reported at concentrations below soil cleanup guidance values for commercial use and protection of groundwater within soil.

Data do not indicate any off-site impacts in soil related to the site.

Groundwater: Groundwater data was compared to the Department's Ambient Water Quality Standards (AWQS). Contaminants of concern are VOCs, SVOCs, and metals. VOCs identified include 1,2,4-trimethylbenzene at a maximum concentration of 1,190 parts per billion (ppb) (AWQS: 5 ppb), 1,3,5-trimethylbenzene at a maximum concentration of 353 ppb (AWQS: 5 ppb), benzene at a maximum concentration of 7,650 ppb (AWQS: 5ppb), ethylbenzene at a maximum concentration of 1,420 ppb (AWQS: 5ppb), m,p-xylene at a maximum concentration of 3,320 ppb (AWQS: 5 ppb), and o-xylene at a maximum concentration of 821 ppb (AWQS: 5 ppb). The SVOC chrysene was found at a maximum concentration of 1.33 ppb (AWQS: 0.002 ppb). For metals, lead was found at a maximum concentration of 6,360 ppb (AWQS: 300 ppb).

Perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) were reported at concentrations of up to 126 and 51.8 parts per trillion (ppt), respectively, exceeding the Maximum Contaminant Level (drinking water standard) of 10 ppt in groundwater.

Data do not indicate any off-site impacts in groundwater related to the site.

Soil Vapor: Nine soil vapor samples were collected throughout the site during the RI. Tetrachloroethene (PCE) was detected at a maximum concentration of 62 micrograms per cubic meter (ug/m3), benzene was detected at a maximum concentration of 5,300 ug/m3, and ethylbenzene was detected at a maximum concentration of 570 ug/m3. Data do not indicate any off-site impacts in soil vapor related to the 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.*

Access to the site is restricted by a fence. People who enter the site may come into contact with site-related soil and groundwater contamination if they dig below the surface. People are not drinking the contaminated groundwater because the area is served by a public water supply that obtains water from a different source 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 is no on-site building, inhalation of site contaminants in indoor air due to soil vapor intrusion does not represent a concern for the site in its current condition. However, the potential exists for the inhalation of site contaminants due to soil vapor intrusion for any future on-site development. 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.
- Prevent contact with, or inhalation of volatiles, from contaminated groundwater.

RAOs for Environmental Protection

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

Soil

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 4 remedy.

The selected remedy is referred to as the excavation, ISCO, vapor mitigation and coal tar recovery remedy.

The elements of the selected remedy, as shown in Figure 3, are as follows:

1. Green Remediation

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

- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
- Reducing direct and indirect greenhouse gas and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;
- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste; 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.

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Prior to the full implementation of this technology, laboratory and on-site pilot scale studies will be conducted to more clearly define design parameters. It is estimated that the chemical oxidant will be injected during a single event.

Monitoring will be required within the treatment zone. Monitoring will be conducted for "contaminants of concern" upgradient and downgradient of the treatment zone. The treatment zone will be monitored for dissolved oxygen and oxidation/reduction potential.

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- allow the use and development of the controlled property for commercial 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.

Site Management Plan

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

d. 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 8 above.

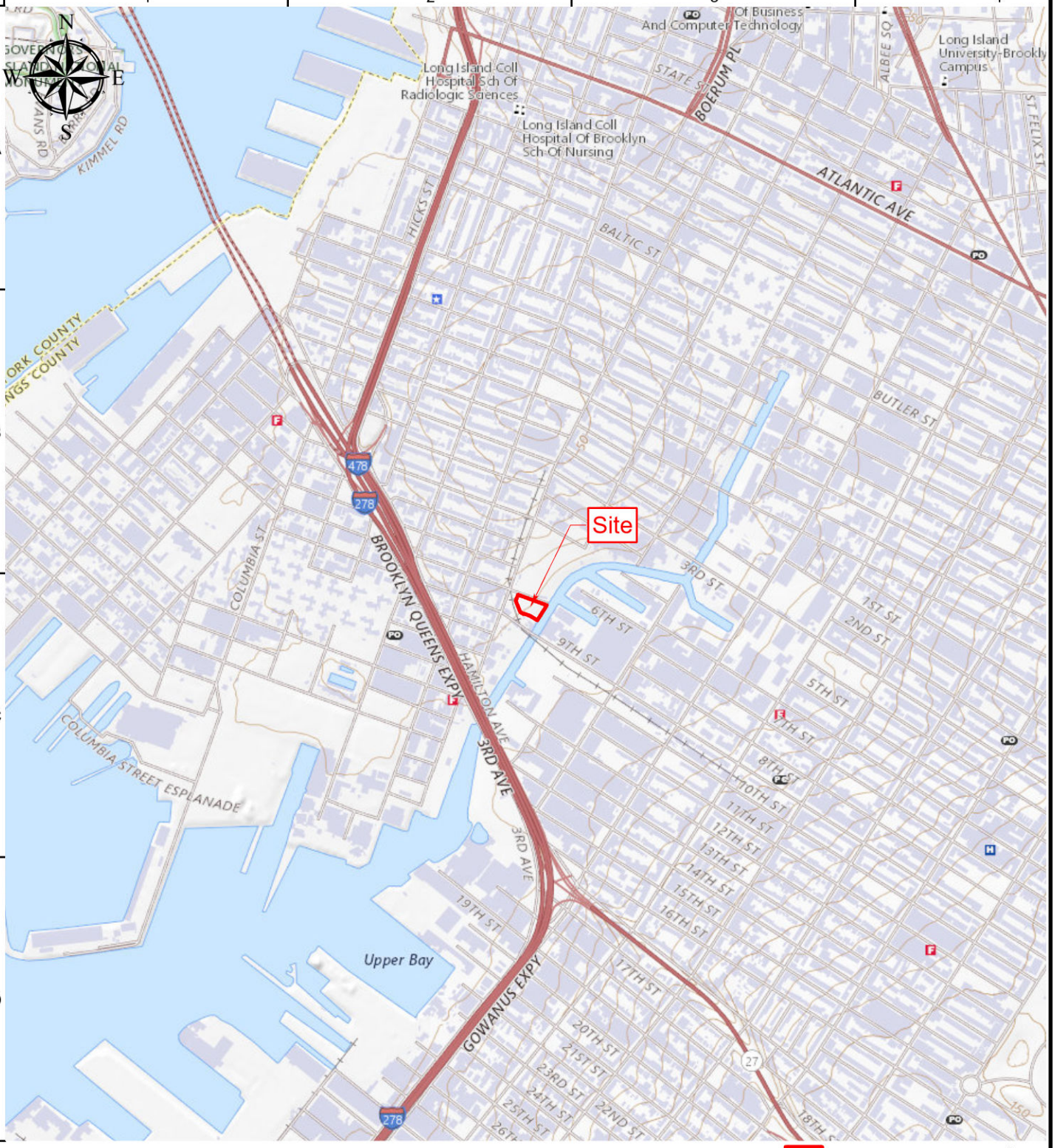
   – Engineering Controls: The soil cover discussed in Paragraph 4, coal tar recovery discussed in Paragraph 5, and the sub-slab depressurization system discussed in Paragraph 7 above.

   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;
   - 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 one foot 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.

e. 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 buildings on the site, as may be required by the Institutional and Engineering Control Plan discussed above.

f. 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) and coal tar recovery wells. 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.



BASEMAP SOURCE: BROOKLYN, 7.5-MINUTE SERIES, TOPOGRAPHIC QUADRANGLE MAPS, DATED 2019.

Approximate Site Boundary

WARNING : IT IS A VIOLATION OF THE NYS EDUCATION LAW ARTICLE 145 FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS ITEM IN ANY WAY.

1,500 0 1,500
SCALE IN FEET

LANGAN
21 Penn Plaza, 360 West 31st Street, 8th Floor
New York, NY 10001-2727
T: 212.479.5400 F: 212.479.5444 www.langan.com

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Project
240 HUNTINGTON STREET
BLOCK No. 477, LOT No. 8
BROOKLYN NEW YORK

Figure Title
SITE LOCATION MAP

Project No. 170430003	Figure No. 1
Date 4/21/2022	
Scale 1"=1,500'	
Drawn By LDB	

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Legend

Approximate Site Boundary

NOTES:
1. BASE MAP REFERENCED FROM ORDER NO. 112129-B, PREPARED BY BLD LAND SURVEYORS LLP, DATED DECEMBER 18, 2019

WARNING: IT IS A VIOLATION OF THE NYS EDUCATION LAW ARTICLE 145 FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS ITEM IN ANY WAY.

100 0 100
SCALE IN FEET

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BROOKLYN NEW YORK

Figure Title
SITE BOUNDARIES

Project No.	Figure No.
170430001	2
Date: 4/21/2022	
Scale: 1"=100'	
Drawn By: LDB	

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Legend

- Soil Boring Location
- DNAPL Recovery Well
- Approximate Site Boundary
- Excavation to about 1 to 2 feet below the groundwater table (about 5 to 10 feet below grade surface)
- Areas of backfill/excavation up to 2 feet for site cover installation
- Suspected UST Area

NOTES:
1. WORLD STREET BASEMAP IS PROVIDED THROUGH LANGAN'S ESRI AND ARCGIS SOFTWARE LICENSING AND ARCGIS ONLINE.
2. DNAPL - DENSE NON-AQUEOUS PHASE LIQUID
3. EXCAVATION DEPTH BASED ON DEPTH TO GROUNDWATER TABLE.
4. EXCAVATION WILL EXTEND ABOUT ONE TO TWO FEET BELOW THE GROUNDWATER TABLE, ABOUT FIVE TO 10 FEET BELOW GROUND SURFACE.

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Collectively known as Langan

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BROOKLYN NEW YORK

Drawing Title
ELEMENTS OF THE REMEDY

Project No.	170430001
Date	4/21/2022
Scale	1"=40'
Drawn By	LDB
Submission Date	
Figure	3

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