DECISION DOCUMENT

1100 Myrtle Avenue
Brownfield Cleanup Program
Brooklyn, Kings County
Site No. C224312
June 2021

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

DECLARATION STATEMENT - DECISION DOCUMENT

1100 Myrtle Avenue
Brownfield Cleanup Program
Brooklyn, Kings County
Site No. C224312
June 2021

Statement of Purpose and Basis

This document presents the remedy for the 1100 Myrtle Avenue 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 1100 Myrtle Avenue 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

The existing on-site building(s) will be demolished and materials which can't be beneficially reused on site will be taken off-site for proper disposal in order to implement the remedy.

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

- grossly contaminated soil, as defined in 6 NYCRR Part 375-1.2(u);
- 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;
- soils that create a nuisance condition, as defined in Commissioner Policy CP-51 Section G.

Excavation and off-site disposal of all on-site soils which exceed restricted-residential 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.

Approximately 4,000 cubic yards of contaminated soil will be removed from the site. Excavation and removal of any underground storage tanks (USTs), fuel dispensers, underground piping or other structures associated with a source of contamination.

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. Soil Vapor Extraction

Soil vapor extraction (SVE) will be implemented to remove volatile organic compounds (VOCs) from the subsurface. VOCs will be physically removed from the soil by applying a vacuum to wells that have been installed into the vadose zone (the area below the ground surface but above the water table). The vacuum draws air through the soil matrix which carries the VOCs from the soil to the SVE well. The air extracted from the SVE wells is then treated as necessary prior to being discharged to the atmosphere.

An estimated total of two SVE wells will be installed into the vadose zone and screened from 10 feet below the ground surface to a depth of approximately 20 feet. The air containing VOCs extracted from the SVE wells will be treated by passing the air stream through activated carbon which removes the VOCs from the air prior to it being discharged to the atmosphere.

5. Vapor Mitigation

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

6. 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 NYCDOHMH; and
- require compliance with the Department approved Site Management Plan.

7. 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 6 above.
- Engineering Controls: The soil vapor extraction system in Paragraph 4 and sub-slab depressurization systems discussed in Paragraph 5 above.

This plan includes, but may not be limited to:

- an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
- descriptions of the provisions of the environmental easement including any land use and groundwater use restrictions;
- 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 soil vapor to assess the performance and effectiveness of the remedy;
- a schedule of monitoring and frequency of submittals to the Department; and
- monitoring for vapor intrusion for any 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). 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 protected of public health and the environment.

June 4, 2021

Date

Gerard Burke, Director
Remedial Bureau B

DECISION DOCUMENT

1100 Myrtle Avenue
Brooklyn, Kings County
Site No. C224312
June 2021

SECTION 1: SUMMARY AND PURPOSE

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), has selected a remedy for the above referenced site. The disposal of contaminants at the site has resulted in threats to public health and the environment that would be addressed by the remedy. The disposal or release of contaminants at this site, as more fully described in this document, has contaminated various environmental media. Contaminants include hazardous waste and/or petroleum.

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

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

SECTION 2: CITIZEN PARTICIPATION

The Department seeks input from the community on all remedies. A public comment period was held, during which the public was encouraged to submit 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=C224312

Brooklyn Public Library-Marcy Branch
617 DeKalb Ave. at Nostrand Ave.
Brooklyn, NY 11216
Phone: (718) 935-0032

Brooklyn Community Board 3
Attn: Henry Butler

Restoration Plaza
1360 Fulton Street, 2nd Floor
Brooklyn, NY 11216
Phone: (718) 622-6601

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 located at 1100-1122 Myrtle Avenue and 367-373 Vernon Avenue in the Bedford Stuyvesant section of Brooklyn, NY. The approximately 47,079-square foot site is bounded by Myrtle Avenue followed by commercial buildings to the north; a Metropolitan Transit Authority support building followed by one-story commercial buildings and above ground tracks for the J-, M-, and Z-Lines of the subway to the east; Vernon Avenue followed by residential buildings to the south; and a hotel and commercial buildings to the west. The larger surrounding area is occupied by predominantly residential and commercial uses.

Site Features:
Currently, the site is occupied by a single-story former grocery store (which includes a partial cellar), an attached single-story warehouse used as storage and receiving for the former grocery store, and asphalt-paved and gravel parking lots. The surrounding area comprises predominantly residential and commercial uses, including a hotel.

Current Zoning and Land Use:
The current zoning designation of the site is R6B/C4-4L (residential/commercial use). The site contains a former grocery store with related warehousing and parking. The surrounding area is largely variations of C4-4L (commercial) and EC-4 (special enhanced commercial district) to the north, east, and west. Properties south of the site include multi-family residential and mixed-use buildings zoned as R6B (residential).

Past Use of the Site:
According to the New York City Department of Buildings (NYCDOB) records and historical sources (i.e., fire insurance maps, and city directories), the site was historically used for residential as well as various commercial and light industrial activities that included an automobile garage, auto repair activities, and furniture manufacturing. These parcels were previously occupied by residential buildings that appeared to have been demolished in the 1970s

and 1980s.

Site Geology and Hydrology:
The site lies at an elevation varying between approximately 72 and 77 feet above mean sea level. The immediate surrounding area topography slopes in a westerly to northwesterly direction toward Wallabout Bay (approximately 1.7 miles away), which feeds into the East River. Subsurface materials consist of historic fill (including sand, silt, wood, brick, metal fragments, cinders and/or glass) from the surface to a depth of approximately 10 feet below ground surface (bgs) across the site. The fill material is generally underlain by apparent native material consisting of sand and silt layers with a minor gravel component to at least 85 feet bgs. Bedrock was not encountered during previous site investigations.

Groundwater is present at depths of approximately 63 and 67 feet below ground surface, as measured from monitoring wells across the site. Groundwater flows in a northwesterly direction. Groundwater in Brooklyn is not used as a source of potable water.

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 Applicant under the Brownfield Cleanup Agreement is a Participant. The Applicant has an obligation to address on-site and off-site contamination. 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:

benzo(a)anthracene
benzo(a)pyrene
benzo(b)fluoranthene
chrysene
dibenz[a,h]anthracene
indeno(1,2,3-CD)pyrene
barium
cadmium
lead
copper
perfluorooctane sulfonic acid
perfluorooctanoic acid
chloroform
1,2,4-TMB
benzene
1,3,5-trimethylbenzene

2,2,4-trimethylpentane	tetrachloroethene (PCE)
ethylbenzene	trichloroethene (TCE)
xylene (mixed)	1,1,1-Trichloroethane (TCA)
toluene	vinyl chloride

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.

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. Based upon investigations conducted to date, the primary contaminants of concern for this site include SVOCs and metals in soil, and VOCs in groundwater and soil vapor.

Soil - SVOCs and metals exceeding restricted residential soil cleanup objectives (RRSCOs) were detected in soil throughout the site, including benzo(a)anthracene at a maximum concentration of 39 parts per million (ppm) compared to RRSCO of 1 ppm, benzo(a)pyrene at 36 ppm (RRSCO is 1 ppm), benzo(b)fluoranthene at 47 ppm (RRSCO is 1 ppm), benzo(k)fluoranthene at 19 ppm (RRSCO is 3.9 ppm), chrysene at 37 ppm (RRSCO is 3.9 ppm), dibenzo(a,h)anthracene at 4.9 ppm (RRSCO is 0.33 ppm), and indeno(1,2,3-cd)pyrene at 19 ppm (RRSCO is 0.5 ppm). Several metals were detected at concentrations exceeding the RRSCOs, including barium at a maximum concentration of 1,860 ppm (RRSCO is 400 ppm), cadmium at 5.4 ppm (RRSCO is 4.3 ppm), lead at 1,140 ppm (RRSCO is 400 ppm), and copper at 273 ppm (RRSCO is 270 ppm). No VOCs, pesticides or PCBs were found at concentrations exceeding the RRSCOs.

Perfluorooctanesulfonic acid (PFOS) was found in shallow soil at concentrations ranging from 0.96 parts per billion (ppb) to 17.7 ppb, exceeding the protection of groundwater value of 3.7 ppb. Perfluorooctanoic acid (PFOA) was measured in shallow soil at concentrations ranging

from 0.87 ppb to 2.16 ppb, exceeding the guidance value for protection of groundwater of 1.1 ppb.

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

Groundwater - The VOC PCE was detected in groundwater at concentrations exceeding the ambient water quality standard (AWQS) at a maximum concentration of 55 ppb compared to the AWQS of 5 ppb. Chloroform was detected in groundwater at concentrations exceeding AWQS at a maximum concentration of 14 ppb compared to the AWQS of 7 ppb. Four dissolved metals (antimony, iron, manganese and sodium) were detected at concentrations exceeding their respective AWQS at maximum concentrations of 4.5 ppb, 1,460 ppb, 1,980 ppb, and 118,000 ppb. These are naturally-occurring metals and are not considered to be site-specific contaminants of concern. For PFAS, PFOA and PFOS were reported at concentrations up to 95.7 and 25.2 parts per trillion (ppt), respectively, exceeding the Maximum Contaminant Level (MCL) (drinking water standard) of 10 ppt each in groundwater. There are no public water supply wells within a half a mile and there is a municipal prohibition for use of groundwater at the site. No pesticides or PCBs were found exceeding AWQS.

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

Soil Vapor - Petroleum and chlorinated VOCs were detected in soil vapor samples. The maximum concentration of petroleum VOCs, including 1,2,4-trimethylbenzene at 850 micrograms per cubic meter (ug/m3), 1,3,5-trimethylbenzene at 920 ug/m3, 2,2,4-trimethylpentane at 180,000 ug/m3, benzene at 34,000 ug/m3, ethylbenzene at 17,000 ug/m3, m,p-xylenes at 33,000 ug/m3, o-xylene at 7,100 ug/m3, and toluene at 280,000 ug/m3. The maximum concentration of chlorinated VOCs, including PCE was 260 ug/m3, trichloroethylene (TCE) was 20 ug/m3, vinyl chloride at 1.4 ug/m3, and 1,1,1-TCA was 1.4 ug/m3.

Data does indicate off-site impacts in soil vapor related to this site, which will be addressed by the remedy.

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 by 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 the on-site building is vacant, inhalation of site contaminants in indoor air due to soil vapor intrusion does not represent a concern for the

site in its current condition. Environmental sampling indicates that soil vapor intrusion is not a concern for off-site structures.

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

- Remove the source of ground or surface water contamination.

Soil

RAOs for Public Health Protection

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

RAOs for Environmental Protection

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

Soil Vapor

RAOs for Public Health Protection

- Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a site.

SECTION 7: ELEMENTS OF THE SELECTED REMEDY

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

The selected remedy is a Track 2: Restricted use with generic soil cleanup objectives remedy.

The selected remedy is referred to as the Excavation, SVE & SSDS remedy.

The elements of the selected remedy, as shown in Figures 2 and 3, 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;
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- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;
- Maximizing habitat value and creating habitat when possible;
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- 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.

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

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- 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;
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Excavation and off-site disposal of all on-site soils which exceed restricted-residential 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.

Approximately 4,000 cubic yards of contaminated soil will be removed from the site. Excavation and removal of any underground storage tanks (USTs), fuel dispensers, underground piping or other structures associated with a source of contamination.

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. Soil Vapor Extraction
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5. Vapor Mitigation
Any on-site building will be required to have a sub-slab depressurization system (SSDS), or other acceptable measures, to mitigate the migration of vapors into the building from soil and groundwater.

6. 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 NYCDOHMH; and
- require compliance with the Department approved Site Management Plan.

7. 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 6 above.
- Engineering Controls: The soil vapor extraction system in Paragraph 4 and sub-slab depressurization systems discussed in Paragraph 5 above.

This plan includes, but may not be limited to:

- an Excavation Plan which details the provisions for management of future

excavations in areas of remaining contamination;

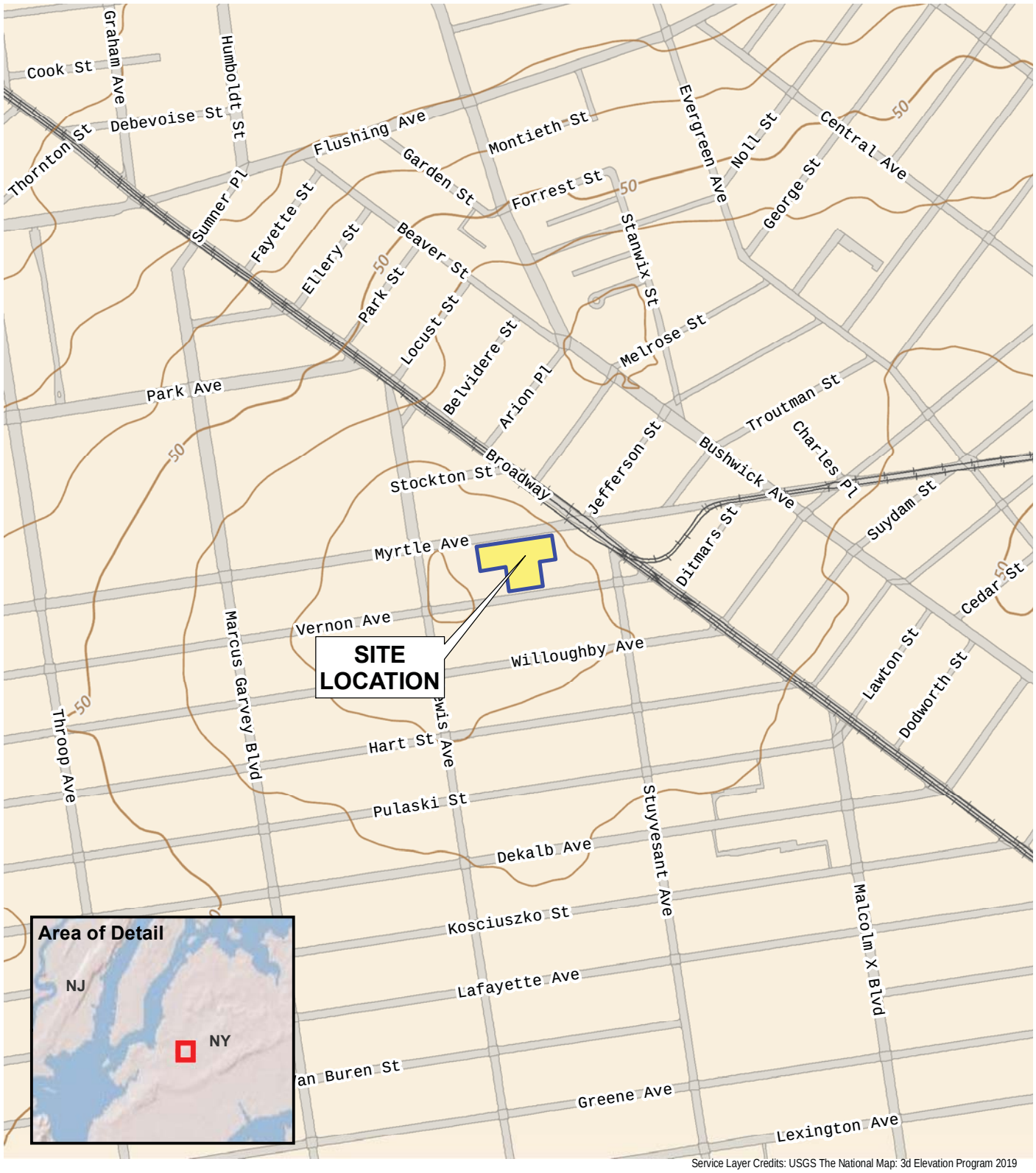
- descriptions of the provisions of the environmental easement including any land use and groundwater use restrictions;
- provisions for the management and inspection of the identified engineering controls;
- maintaining site access controls and Department notification; and
- the steps necessary for 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 soil vapor to assess the performance and effectiveness of the remedy;
- a schedule of monitoring and frequency of submittals to the Department; and
- monitoring for vapor intrusion for any buildings on the site, as may be required by the Institutional and Engineering Control Plan discussed above.

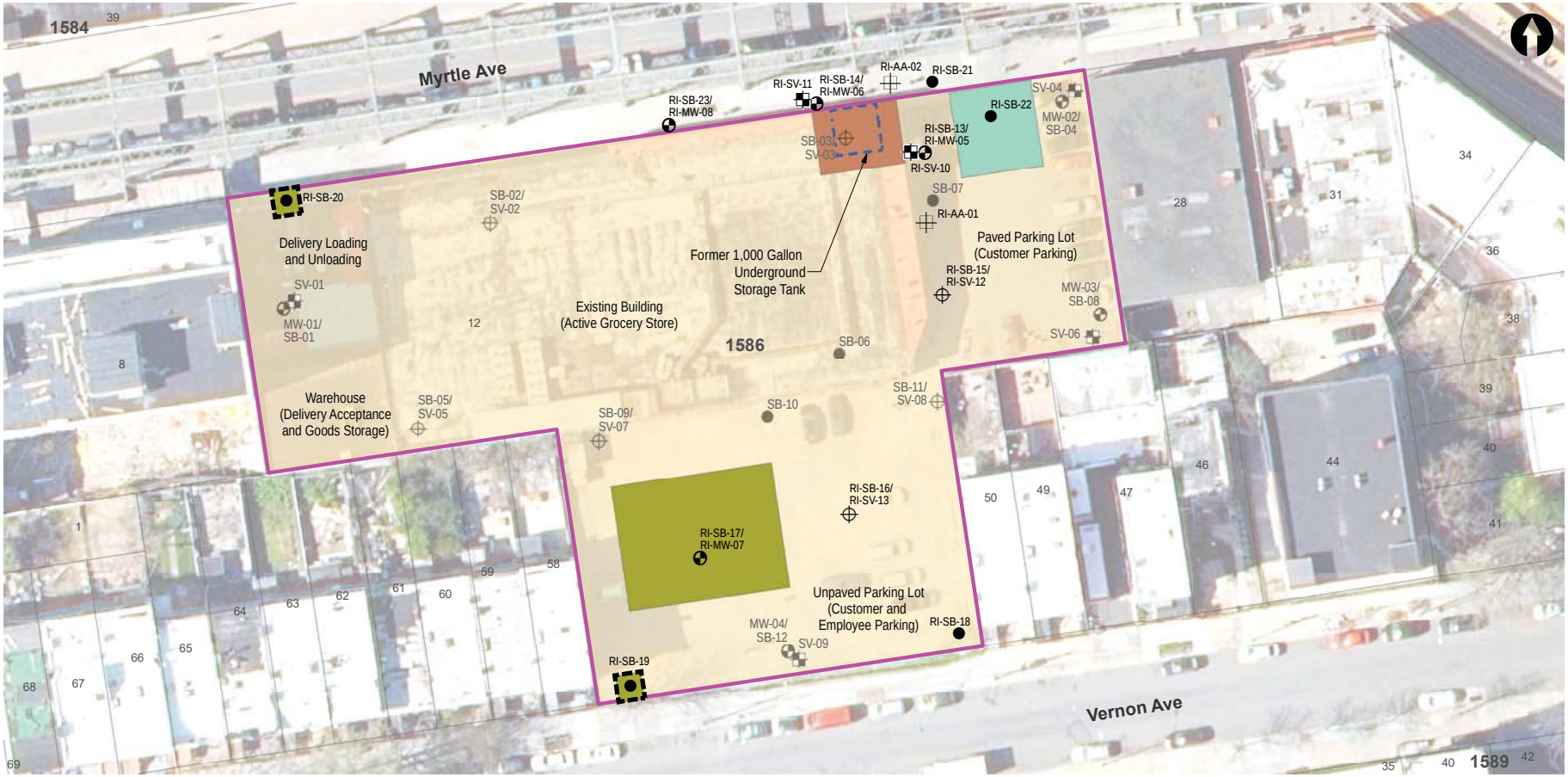
c) An Operation and Maintenance (O&M) Plan to ensure continued operation, maintenance, inspection, and reporting of any mechanical or physical components of the active vapor mitigation system(s). The plan includes, but is not limited to:

- 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.



Service Layer Credits: USGS The National Map: 3d Elevation Program 2019

	1100 MYRTLE AVENUE Brooklyn, New York	
	BCP SITE LOCATION	FIGURE **1**



LEGEND

- BCP PROJECT SITE BOUNDARY
- EXISTING PARTIAL CELLAR (FORMER BOILER ROOM)
- SI SOIL BORING (JANUARY 2020)
- SI SOIL BORING/MONITORING WELL (JANUARY 2020)
- SI SOIL BORING/SOIL VAPOR POINT (JANUARY 2020)
- SI SOIL VAPOR POINT (JANUARY 2020)
- 12 LOT BOUNDARY AND TAX LOT NUMBER
- 1586 BLOCK NUMBER
- RI SOIL BORING (OCTOBER/NOVEMBER 2020)
- RI SOIL BORING/MONITORING WELL (OCTOBER/NOVEMBER 2020)
- RI SOIL BORING/SOIL VAPOR POINT (OCTOBER/NOVEMBER 2020)
- RI SOIL VAPOR POINT (OCTOBER/NOVEMBER 2020)
- RI AMBIENT AIR SAMPLE LOCATION (OCTOBER/NOVEMBER 2020)
- CONTINGENT PFAS REMEDIATION AREA: TBD BASED UPON PDI GROUNDWATER SAMPLING. OTHERWISE, REMEDIAL EXCAVATION TO 3 FEET BELOW GROUND SURFACE
- EXCAVATION TO 3 FEET BELOW GROUND SURFACE
- EXCAVATION TO 13 FEET BELOW GROUND SURFACE
- EXCAVATION TO 16 FEET BELOW GROUND SURFACE
- EXCAVATION TO 20 FEET BELOW GROUND SURFACE (TO REMOVE PETROLEUM HOTSPOT FOR SPILL CASE No. 1911848 CLOSURE)

NOTE: GENERAL EXCAVATION TO APPROXIMATELY 15 FEET BELOW GROUND SURFACE WILL BE CONDUCTED FOR CONSTRUCTION OF THE NEW BUILDING

Aerial Source:
2018 New York State ITS GIS Orthoimagery

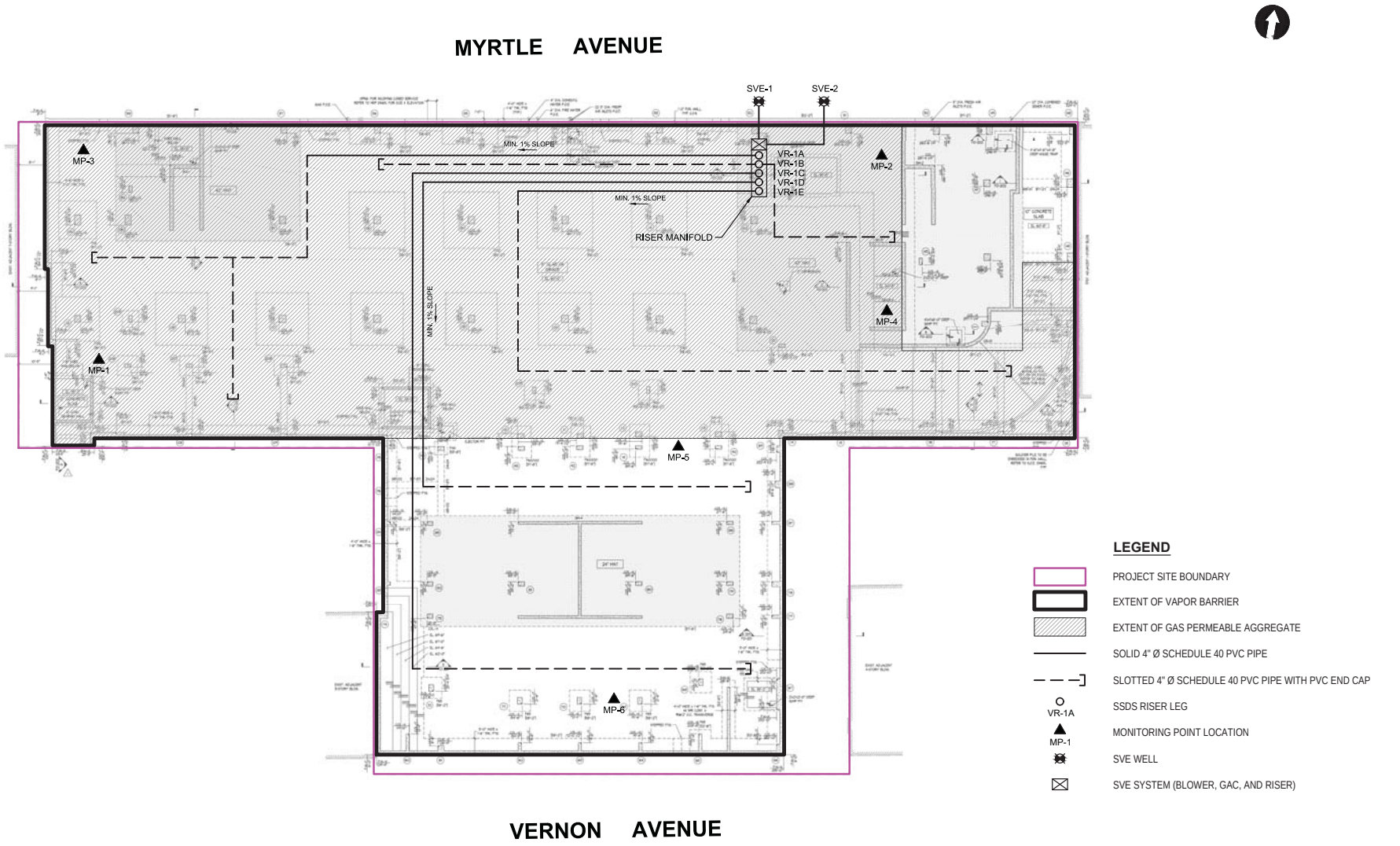
Map Source:
NYCDCP (NYC Dept. of City Planning) GIS database

0 20 40 80
SCALE IN FEET

1100 MYRTLE AVENUE
Brooklyn, New York

PROPOSED REMEDIAL EXCAVATION PLAN

FIGURE
2



Map Source:
HILL / WEST Architects, "Foundation/Cellar Framing Plan", DWG No. FO-101.00, Dated 12-23-2020.

1100 Myrtle Avenue
Brooklyn, New York

SSDS AND SVES PIPING LAYOUT

FIGURE
3