DECISION DOCUMENT

Jean's Place
Brownfield Cleanup Program
Brooklyn, Kings County
Site No. C224275
August 2022

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

DECLARATION STATEMENT - DECISION DOCUMENT

Jean's Place
Brownfield Cleanup Program
Brooklyn, Kings County
Site No. C224275
August 2022

Statement of Purpose and Basis

This document presents the remedy for the Jean's Place 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 Jean's Place site and the public's input to the proposed remedy presented by the Department.

Description of Selected Remedy

The elements of the selected remedy are as follows:

1. Remedial Design

A remedial design program will be implemented to provide the details necessary for the construction, operation, optimization, maintenance, and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedy as per DER-31. The major green remediation components are as follows:

- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
- Reducing direct and indirect greenhouse gases and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;
- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;
- Maximizing habitat value and creating habitat when possible;
- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals;
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development; and
- Additionally, to incorporate green remediation principles and techniques to the extent feasible in the future development at this site, any future on-site buildings will include, at a minimum, a 20-mil vapor barrier/waterproofing membrane on the foundation to

improve energy efficiency as an element of construction.

2. Excavation

Excavation and off-site disposal of all on-site soils which exceed restricted-residential SCOs, as defined by 6 NYCRR Part 375-6.8 will be conducted to approximately 2 feet below ground surface (bgs) across the site. If a Track 2 restricted residential cleanup is achieved, a Cover System will not be a required element of the remedy.

Approximately 2,500 cubic yards of contaminated soil will be removed from the site. If found on the site, any underground storage tanks (USTs), fuel dispensers, underground piping or other structures will be excavated and properly disposed of off-site.

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 on-site, 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) may be brought on-site to replace the excavated soil 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 and prevent contaminated soil vapor from migrating off-site. VOCs will be physically removed by applying a vacuum to wells that will be installed into the vadose zone (the area below the ground but above the water table). The vacuum draws air through the soil matrix which carries the VOCs to the SVE well. The air extracted from the SVE wells is then treated as necessary prior to being discharged to the atmosphere.

Six SVE wells will be installed into the vadose zone and screened from 15 feet below the ground surface to a depth of approximately 25 feet below grade. 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 buildings will be required to have an active sub-slab depressurization system, or other acceptable measures, to mitigate the migration of vapors into the building from the subsurface.

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 NYCDOH; 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 SVE and sub-slab depressurization system discussed in Paragraphs 4 and 5 above, respectively.

   This plan includes, but may not be limited to:
   - descriptions of the provisions of the environmental easement including any land use, and groundwater;
   - 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;
   - 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, optimization, monitoring, inspection, and reporting of any mechanical or physical components of the remedy including active vapor mitigation systems. The plan includes, but is not limited to:
   - procedures for operating and maintaining the remedy;
   - compliance monitoring of treatment and mitigation systems to ensure proper O&M as well as providing the data for any necessary permit or permit equivalent reporting;
   - maintaining site access controls and Department notification; and
   - providing the Department access to the site and O&M records.

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.

August 15, 2022

Date

Gerard Burke, Director
Remedial Bureau B

DECISION DOCUMENT

Jean's Place
Brooklyn, Kings County
Site No. C224275
August 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:

Brooklyn Public Library - Stone Avenue Branch
581 Mother Gaston Boulevard
Brooklyn, NY 11212
718-485-8347

Brooklyn Community Board 5
127 Pennsylvania Avenue, 2nd Floor
Brooklyn, NY 11207
929-221-8261

DECInfo Locator - Web Application
https://gisservices.dec.ny.gov/gis/dil/index.html?rs=C224275

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 0.59-acre site is located at 485 Van Sinderen Avenue in an urban area of Brooklyn and is currently vacant without any structures. The site is bounded by a medical clinic to the north, a new residential building and private residences to the east, Van Sinderen Avenue to the west, and a recently constructed affordable housing apartment building adjacent to the southern site boundary. There are elevated Metropolitan Transit Authority (MTA) subway tracks above Van Sinderen Avenue to the west and elevated MTA subway tracks above Livonia Avenue to the south.

Site Features:
Two industrial buildings that had occupied most of the site were recently razed. Presently, the site is an empty, unpaved lot.

Current Zoning and Land Use:
The site is zoned M1-1 manufacturing and located in an industrial business zone (IBZ). While the proposed residential use does not comply with the current zoned land use designation, the Volunteers received a variance under Section 72-21 of the Zoning Resolution to permit residential and accessory uses within an M1-1 zoning district through the board of standards and appeals (BSA). Along Van Sinderen Avenue are other manufacturing, industrial, and transportation uses, with many vacant buildings. The surrounding area to the east is composed of predominantly residential and commercial uses.

Past Use of the Site:
Historic records indicate that the site was developed for industrial and manufacturing uses, including furniture, sash, door and blind manufacturing and woodworking between 1905 and 2015. The site has remained vacant since 2015.

An adjacent property to the east was part of the same industrial facility throughout its decades of active operation. The adjacent property has recently been redeveloped as Beverly's Place and remediated under the New York City's Voluntary Cleanup Program with oversight from NYC's

Office of Environmental Remediation. Remediation of Beverly's Place included excavation of contaminated soil and installation of a cover system, a sub-slab depressurization system under the new building and a soil vapor extraction system over the remainder of the site.

Site Geology and Hydrology:
Surface topography at the site is generally level and lies at an elevation of approximately 35 feet above mean sea level. The surrounding area gradually slopes down to the south. Site lithology consists of historic fill materials (including sand, gravel, silt, brick, concrete, and asphalt) from just below the surface to depths up to approximately seven to 10 feet below grade underlain by native sand, gravel, and silt to a minimum depth 40 feet below surface grade. Bedrock was not encountered during site investigations.

Groundwater is located approximately 30 feet below grade at the site and flows in a southerly direction. There are no surface water bodies or streams on or immediately adjacent to the site.

A site location map is attached as Figure 1.

SECTION 4: LAND USE AND PHYSICAL SETTING

The Department may consider the current, intended, and reasonably anticipated future land use of the site and its surroundings when evaluating a remedy for soil remediation. For this site, an alternative that restricts 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) 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 Volunteers do not have an obligation to address off-site contamination. The Department has determined that this site poses a significant threat to human health and the environment and there are off-site impacts that require remedial activities; accordingly, enforcement actions are necessary.

The Department will seek to identify any parties (other than the Volunteer) known or suspected to be responsible for contamination at or emanating from the site, referred to as Potentially Responsible Parties (PRPs). The Department will bring an enforcement action against the PRPs. If an enforcement action cannot be brought or does not result in the initiation of a remedial program by any PRPs, the Department will evaluate the off-site contamination for action under the State Superfund. The PRPs are subject to legal actions by the State for recovery of all response costs the State incurs or has incurred.

SECTION 6: SITE CONTAMINATION

6.1: Summary of the Remedial Investigation

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

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

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

The analytical data collected on this site includes data for:

- groundwater
- soil
- soil vapor

6.1.1: Standards, Criteria, and Guidance (SCGs)

The remedy must conform to promulgated standards and criteria that are directly applicable or that are relevant and appropriate. The selection of a remedy must also take into consideration guidance, as appropriate. Standards, Criteria and Guidance are hereafter called SCGs.

To determine whether the contaminants identified in various media are present at levels of concern, the data from the RI were compared to media-specific SCGs. The Department has developed SCGs for groundwater, surface water, sediments, and soil. The NYSDOH has developed SCGs for drinking water and soil vapor intrusion. For a full listing of all SCGs see: http://www.dec.ny.gov/regulations/61794.html

6.1.2: RI Results

The data have identified contaminants of concern. A "contaminant of concern" is a contaminant that is sufficiently present in frequency and concentration in the environment to require evaluation for remedial action. Not all contaminants identified on the property are contaminants of concern. The nature and extent of contamination and environmental media requiring action are summarized below. Additionally, the RI Report contains a full discussion of the data. The

contaminants of concern identified at this site are:

benzo(a)anthracene
benzo(a)pyrene
benzo(b)fluoranthene
benzo(k)fluoranthene
chrysene
dibenz[a,h]anthracene
dibenzofuran
fluoranthene
indeno(1,2,3-cd)pyrene
phenanthrene
pyrene
chloroform
tetrachloroethene (PCE)
trichloroethene (TCE)
cis-1,2-dichloroethene

The contaminants of concern exceed the applicable SCGs for:

- soil
- groundwater

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), pesticides, and per and polyfluoroalkyl substances (PFAS). Soil vapor was analyzed for VOCs. The primary contaminants of concern are SVOCs in soil and chlorinated VOCs in soil vapor. The soil, groundwater, and soil vapor contaminants appear to be associated with historic fill and former industrial operations at the site and an adjacent parcel.

Soil - Several SVOCs attributed to historic fill are present at levels exceeding restricted residential soil cleanup objectives (RRSCOs) in shallow soil (within the upper 2 feet) throughout the site: benzo(a)anthracene up to 230 parts per million (ppm) (RRSCO of 1 ppm), benzo(a)pyrene at 190 ppm (RRSCO of 1 ppm), benzo(b)fluoranthene at 260 ppm (RRSCO of 1 ppm), benzo(k)fluoranthene at 77 ppm (RRSCO of 3.9 ppm), chrysene at 230 ppm (RRSCO of 3.9 ppm), dibenzo(a,h)anthracene at 35 ppm (RRSCO of 0.33 ppm), fluoranthene at 520 ppm (RRSCO is 100 ppm), indeno(1,2,3 cd)pyrene at 130 ppm (RRSCO of 0.5 ppm), phenanthrene at

610 ppm (RRSCO of 100 ppm), and pyrene at 480 ppm (RRSCO of 100 ppm). All these maximum concentrations were located at one boring in the northeastern corner of the site.

For PFAS, perfluorooctanoic acid (PFOA) was detected at a maximum concentration of 0.166 parts per billion (ppb), below the Restricted Residential Guidance Values of 33 ppb and perfluorooctanesulfonic acid (PFOS) was not detected.

No VOCs or metals were detected at levels exceeding the RRSCOs or protection of groundwater SCOs, where applicable. No PCBs or pesticides were detected in any of the soil samples analyzed.

The data do not indicate any off-site impacts in soil related to this site.

Groundwater - The following VOCs were detected in on-site groundwater exceeding Class GA Ambient Water Quality Standards (AWQS): tetrachloroethene (PCE) up to 8.0 ppb (AWQS is 5 ppb), trichloroethene TCE up to 11 ppb (AWQS is 5 ppb) and chloroform up to 20 ppb (AWQS of 7 ppb). No SVOCs, PCBs or pesticides were detected in the groundwater samples. 1,4-Dioxane was not detected either.

Sodium was detected at a level exceeding AWQS but is considered a naturally occurring metal.

For PFAS, PFOS and PFOA were detected at concentrations up to 42.4 parts per trillion (ppt) and 36.4 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.

The data do not indicate any off-site impacts in groundwater related to this site.

Soil Vapor - The following chlorinated VOCs were detected in on-site soil vapor: PCE up to 94,000 micrograms per cubic meter ($\mu g/m^3$), TCE up to 3,200 $\mu g/m^3$, and cis-1,2-dichloroethene (1,2-DCE) up to 360 $\mu g/m^3$. The maximum concentrations of PCE and 1,2-DCE were detected in a location near the northeastern site boundary and the maximum concentration of TCE was detected in the southern area of the site.

Site-related soil vapor impacts may be migrating off-site.

6.4: Summary of Human Exposure Pathways

This human exposure assessment identifies ways in which people may be exposed to site-related contaminants. Chemicals can enter the body through three major pathways (breathing, touching or swallowing). This is referred to as *exposure.*

The site is completely fenced, which restricts public access. However, persons who enter the site could contact contaminants in the soil by walking on the site, digging or otherwise disturbing the soil. Contaminated groundwater is not used for drinking and the site and surrounding areas are 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 the site 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. However, the potential exists for the inhalation of site contaminants due to soil vapor intrusion for any future on-site development. Environmental sampling indicates soil vapor intrusion associated with this site is a potential 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.

Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.

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.
- Prevent the off-site migration of contaminants.

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 and Vapor Mitigation 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;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;
- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;
- Maximizing habitat value and creating habitat when possible;
- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals;
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development; and
- Additionally, to incorporate green remediation principles and techniques to the extent feasible in the future development at this site, any future on-site buildings will include, at a minimum, a 20-mil vapor barrier/waterproofing membrane on the foundation to improve energy efficiency as an element of construction.

2. Excavation

Excavation and off-site disposal of all on-site soils which exceed restricted-residential SCOs, as defined by 6 NYCRR Part 375-6.8 will be conducted to approximately 2 feet below ground surface (bgs) across the site. If a Track 2 restricted residential cleanup is achieved, a Cover System will not be a required element of the remedy.

Approximately 2,500 cubic yards of contaminated soil will be removed from the site. If found on the site, any underground storage tanks (USTs), fuel dispensers, underground piping or other structures will be excavated and properly disposed of off-site.

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 on-site, 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) may be brought on-site to replace the excavated soil 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 and prevent contaminated soil vapor from migrating off-site. VOCs will be physically removed by applying a vacuum to wells that will be installed into the vadose zone (the

area below the ground but above the water table). The vacuum draws air through the soil matrix which carries the VOCs to the SVE well. The air extracted from the SVE wells is then treated as necessary prior to being discharged to the atmosphere.

Six SVE wells will be installed into the vadose zone and screened from 15 feet below the ground surface to a depth of approximately 25 feet below grade. 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 buildings will be required to have an active sub-slab depressurization system, or other acceptable measures, to mitigate the migration of vapors into the building from the subsurface.

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 NYCDOH; 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 SVE and sub-slab depressurization system discussed in Paragraphs 4 and 5 above, respectively.

   This plan includes, but may not be limited to:

   - descriptions of the provisions of the environmental easement including any land use, and groundwater;
   - 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;

- 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, optimization, monitoring, inspection, and reporting of any mechanical or physical components of the remedy including active vapor mitigation systems. The plan includes, but is not limited to:
   - procedures for operating and maintaining the remedy;
   - compliance monitoring of treatment and mitigation systems to ensure proper O&M as well as providing the data for any necessary permit or permit equivalent reporting;
   - maintaining site access controls and Department notification; and
   - providing the Department access to the site and O&M records.

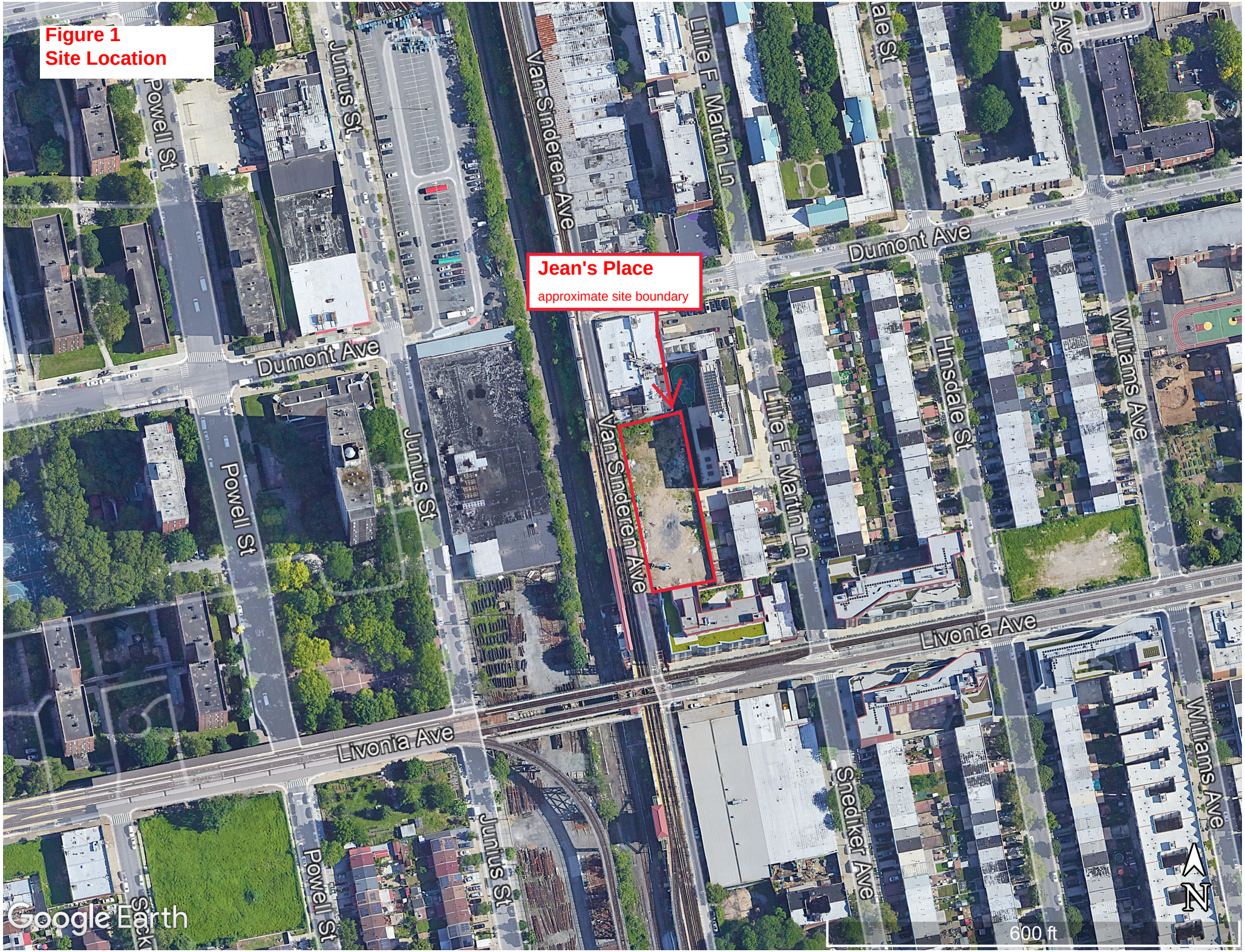
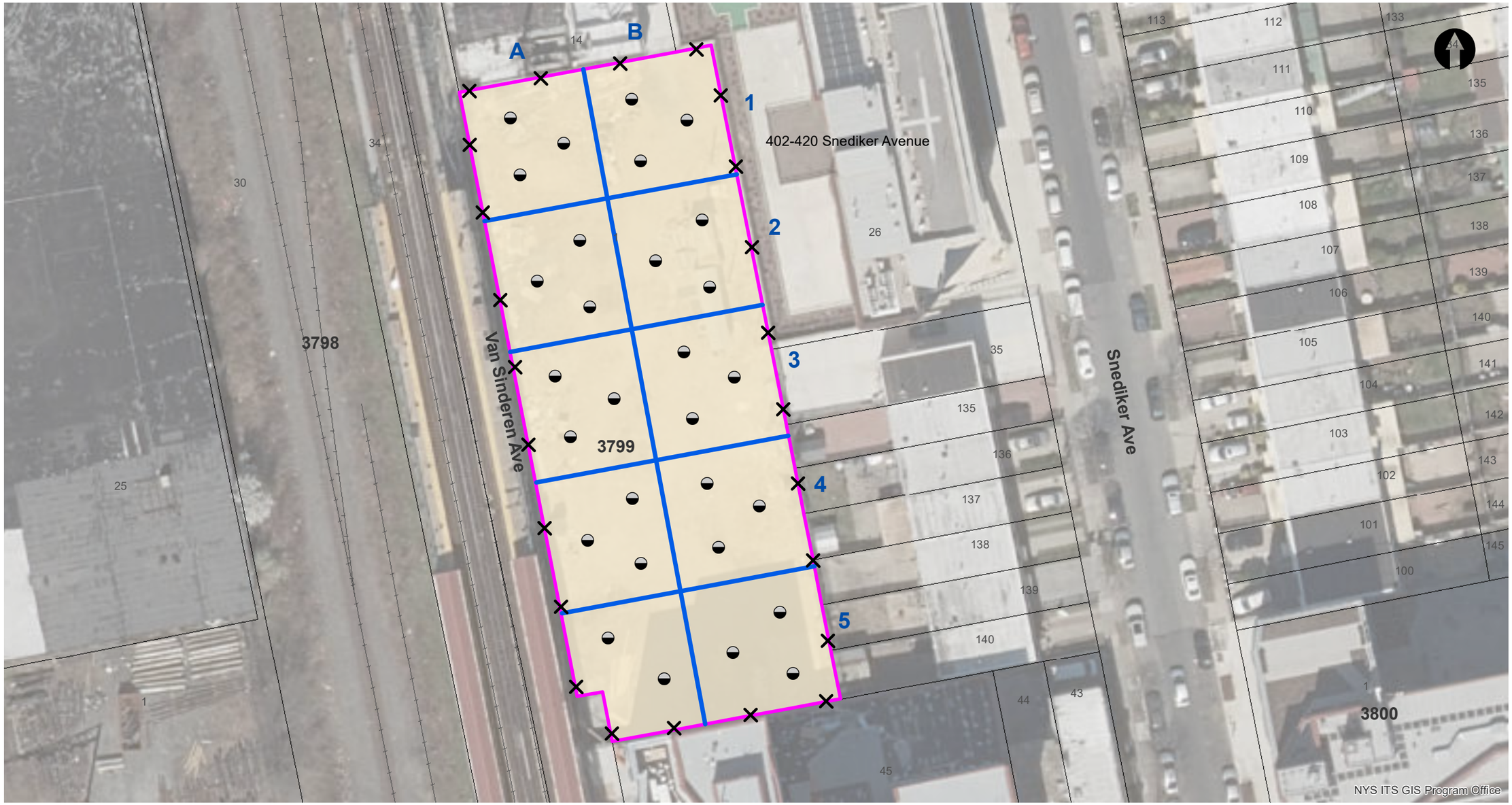


Figure 1
Site Location
Jean's Place
approximate site boundary
Powell St
Junius St
Van Sinderen Ave
Lillie F. Martin Ln
Dumont Ave
Hinsdale St
Williams Ave
Livonia Ave
Snediker Ave
Google Earth
600 ft
N



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

LEGEND

- BCP SITE BOUNDARY
- 35 — LOT BOUNDARY AND TAX LOT NUMBER
- 3799 — TAX BLOCK NUMBER
- REMEDIAL EXCAVATION AREA
- ALPHANUMERIC GRID
- PROPOSED BOTTOM, POST-EXCAVATION CONFIRMATORY SAMPLE LOCATION FOR REMEDIATION DOCUMENTION
- PROPOSED SIDEWALL POST-EXCAVATION CONFIRMATORY ENDPOINT SAMPLE LOCATION (IF ACCESSIBLE)

Site-wide remedial excavation from two to 15 feet below surface grade as needed based on site conditions.

0 20 40 80
SCALE IN FEET

AKRF
440 Park Avenue South, New York, NY 10016

Jean's Place
485 Van Sinderen Avenue
Brooklyn, New York

PROPOSED REMEDIAL EXCAVATION AND ENDPOINT SAMPLE LOCATION PLAN

DATE
7/9/2021

FIGURE
2

LEGEND

- BCP SITE BOUNDARY
- LOT BOUNDARY
- EQUIPMENT ENCLOSURE
- 4-INCH DIAMETER SVE PIPING
- 6-INCH DIAMETER SVE PIPING
- PROPOSED SOIL VAPOR EXTRACTION WELL
- 40-FOOT RADIUS OF INFLUENCE

0 20 40 80

SCALE IN FEET

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

AKRF
440 Park Avenue South, New York, NY 10016

Jean's Place
485 Van Sinderen Avenue
Brooklyn, New York

Conceptual SVES Layout Plan

DATE
8/25/2021

FIGURE
3