DECISION DOCUMENT

Surf Avenue Railroad Cleaners Site
Brownfield Cleanup Program
Brooklyn, Kings County
Site No. C224310
June 2021

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

DECLARATION STATEMENT - DECISION DOCUMENT

Surf Avenue Railroad Cleaners Site
Brownfield Cleanup Program
Brooklyn, Kings County
Site No. C224310
June 2021

Statement of Purpose and Basis

This document presents the remedy for the Surf Avenue Railroad Cleaners 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 Surf Avenue Railroad Cleaners Site and the public's input to the proposed remedy presented by the Department.

Description of Selected Remedy

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; and
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development
- 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 and historic fill which exceed unrestricted use SCOs, as defined by 6 NYCRR Part 375-6.8. Approximately, 19,000 cubic yards of material will be removed for remediation down to 5 feet below ground surface (bgs) across the entire site with deeper excavations in areas, where semi-volatile organic compounds (SVOCs), metals or pesticides exceed the unrestricted use soil cleanup objectives (SCOs).

If a Track 1 cleanup is achieved, a cover system will not be required.

3. **Backfill**

As necessary, clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to complete required backfilling of the excavation and establish the design grades at the site.

4. **Vapor Intrusion Evaluation**

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

Local Institutional Controls

If no EE or SMP is needed to achieve soil, groundwater, or soil vapor remedial action objectives, then the following local use restriction will be relied upon to prevent ingestion of groundwater: Article 141 of the NYCDOH code which prohibits potable use of groundwater without prior approval.

Contingent Remedy Elements

The intent of the remedy is to achieve Track 1 unrestricted use; therefore, no environmental easement or site management plan is anticipated.

In the event that Track 1 unrestricted use is not achieved, the following contingent remedial elements will be required and the remedy will achieve a Track 4 Restricted Residential cleanup.

5. Cover System

A site cover will be required to allow for restricted residential use of the site in areas where the upper two feet of exposed surface soil will exceed the applicable SCOs. Where a soil cover is to be used it will be a minimum of two feet of soil placed over a demarcation layer, with the upper six inches of soil of sufficient quality to maintain a vegetative layer. Soil cover material, including any fill material brought to the site, will meet the SCOs for cover material for the use of the site as

set forth in 6 NYCRR Part 375-6.7(d). Substitution of other materials and components may be allowed where such components already exist or are a component of the tangible property to be placed as part of site redevelopment. Such components may include, but are not necessarily limited to: pavement, concrete, paved surface parking areas, sidewalks, building foundations and building slabs.

6. **Institutional Controls**

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.
- 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 Cover System 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 and groundwater use restrictions;
- a provision for evaluation of the potential for soil vapor intrusion for any occupied buildings on the site, including provisions for implementing actions recommended to address exposures related to soil vapor intrusion.
- 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. Monitoring Plan to assess the performance and effectiveness of the remedy. The plan

includes, but may not be limited to:

- 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.

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.

June 15, 2021

Date

Gerard Burke, Director
Remedial Bureau B

DECISION DOCUMENT

Surf Avenue Railroad Cleaners Site
Brooklyn, Kings County
Site No. C224310
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=C224310

Brooklyn Community Board
131201 Surf Avenue, 3rd Floor
Brooklyn, NY 11224

Coney Island Library
1901 Mermaid Avenue
Brooklyn, NY 11224
Phone: (718) 265-3220

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

Site Location: The site is located at 2910 West 15th Street - Block 7063, Lot 12, Brooklyn, New York, in a mixed-use residential and commercial neighborhood. The Coney Island amusement park and beach are located one block from the site.

Site Features: The site is 1.521 acres, is currently vacant, and the only structure on the site is a parking attendant booth. Otherwise, the site is poorly paved with an old cracked asphalt parking lot surface.

Current Zoning and Land Use: The site is split between two zoning districts R7A (Mermaid Avenue Subdistrict) and R7X (Coney Island North Subdistrict), each of which permits medium-density residential apartment house development and includes a C2-4 commercial overlay for commercial uses on the ground level of the development. The site is identified as a NYC E-Designation site in the NYC regulatory database report.

Past Use of the Site: According to available sources, the site was formerly developed with several small dwellings and stores, intersected by a railroad between 1895 and 1924. By 1930, the site was developed with several small dwellings and stores including the two current mixed-use structures. Between 1950 and 1961, the subject property was additionally developed with parking areas and an auto track on the southeastern portion of the property. A larger commercial structure was developed on the southeastern portion of the property between 1976 and 1982, with one commercial structure on the eastern portion and one larger commercial structure on the southeastern portion of the subject property between 1983 and 1984. Tenants on the subject property included various commercial tinsmiths, laundry, painters clothing cleaner, sheet metal works, publishing and printing. The laundry and clothing cleaners, each of which may have been dry cleaners, operated on the site at former addresses 2914 West 15th Street in 1934, and 2912 and 2911 West 16th Street from at least 1934 to 1940, respectively, and which likely contributed to the chlorinated solvents soil vapor contamination on the site in the vicinity of these former cleaners.

Site Geology and Hydrogeology: The subsurface conditions observed during the RI consist of

historic fill from below the asphalt pavement at grade to depths ranging from two to five feet below ground surface (bgs). The historic fill consists of dark brown fine sand with varying amounts of brick, wood, asphalt and concrete. Underlying the fill exists grey brown coarse to fine sand, to depths of at least 15 feet bgs. Bedrock was not encountered during the RI.

The nearest surface water in the vicinity of the subject property is the Lower New York Bay, which is located approximately 0.30-miles south of the subject property. Groundwater was encountered at depths of approximately 6 feet to 8 feet bgs in the monitoring wells on site during the RI. The groundwater flow was observed to be in a north/northeasterly direction across 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, alternatives (or an alternative) that restrict(s) the use of the site to restricted residential 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(s) under the Brownfield Cleanup Agreement is a/are Volunteer(s). The Applicant(s) does/do not have an obligation to address off-site contamination. However, the Department has determined that this site does not pose a significant threat to public health or the environment; accordingly, no enforcement actions are necessary.

SECTION 6: SITE CONTAMINATION

6.1: Summary of the Remedial Investigation

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

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

The RI is intended to identify the nature (or type) of contamination which may be present at a site and the extent of that contamination in the environment on the site, or leaving the site. The RI reports on data gathered to determine if the soil, groundwater, soil vapor, indoor air, surface water or sediments may have been contaminated. Monitoring wells are installed to assess groundwater and soil borings or test pits are installed to sample soil and/or waste(s) identified. If other natural

resources are present, such as surface water bodies or wetlands, the water and sediment may be sampled as well. Based on the presence of contaminants in soil and groundwater, soil vapor will also be sampled for the presence of contamination. Data collected in the RI influence the development of remedial alternatives. The RI report is available for review in the site document repository and the results are summarized in section 6.3.

The analytical data collected on this site includes data for:

- groundwater
- soil
- soil vapor

6.1.1: Standards, Criteria, and Guidance (SCGs)

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

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

6.1.2: RI Results

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

fluoranthene
benzo(a)pyrene
benzo(a)anthracene
benzo(b)fluoranthene
chrysene
dibenz[a,h]anthracene
indeno(1,2,3-CD)pyrene
pyrene
barium
cadmium
lead
dieldrin
tetrachloroethene (PCE)
trichloroethene (TCE)

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), pesticides and 1,4-dioxane. Soil vapor was analyzed for VOCs. Based upon investigations conducted to date, the primary contaminants of concern in the soil and groundwater for the site include SVOCs, chlorinated VOCs, pesticides and metals.

Soil: Soil data were compared to unrestricted use soil cleanup objectives (UUSCOs). The contaminants of concern in soil are SVOCs, metals and pesticides, found in soil down to 12.5 feet bgs. The SVOCs detected include fluoranthene detected at a maximum concentration of 160 parts per million (ppm) which exceeds the UUSCO of 100 ppm; benzo(a)anthracene detected at a maximum concentration of 73 ppm above the UUSCO of 1 ppm; benzo(a)pyrene detected at a maximum concentration of 57 ppm above the UUSCO of 1 ppm; benzo(b)fluoranthene detected at a maximum concentration of 76 ppm above the UUSCO of 1 ppm; chrysene detected at a maximum concentration of 67 ppm above the UUSCO of 1 ppm; dibenz(a,h)anthracene detected at a maximum concentration of 11 ppm above the UUSCO of 0.33 ppm; indeno(1,2,3-cd)pyrene was detected at a maximum concentration of 34 ppm above the UUSCO of 0.5 ppm and pyrene was detected at a maximum concentration of 130 ppm above the UUSCO of 100 ppm. The metals detected include barium at a maximum concentration of 963 ppm above the UUSCO of 350 ppm; cadmium at a maximum concentration of 6.18 ppm above the UUSCO of 2.5 ppm and lead at a maximum concentration of 2,750 ppm above the UUSCO of 63 ppm. The pesticide dieldrin was detected at 0.11 ppm above the UUSCO of 0.005 ppm. PFAS was detected at a maximum concentration of 8.07 ppb above the UUSCO of 0.88 ppb. Data does not indicate any off-site impacts in soil related to this site.

Groundwater: Groundwater data was compared to the NYS DEC TOGS Ambient Water Quality Standards (NY-AWQS). SVOCs were detected throughout the site and include benzo(a)anthracene detected at a maximum concentration of 0.12 parts per billion (ppb), which exceeds the NY-AWQS of 0.002 ppb; benzo(b)fluoranthene detected at a maximum concentration of 0.17 ppb which exceeds the NY-AWQS of 0.002 ppb; and chrysene detected at a maximum

concentration of 0.15 ppb which exceeds the NY-AWQS of 0.002 ppb. 1,4-Dioxane was not detected above the reporting limit. PFOA and PFOS were reported at concentrations of up to 122 and 25.7 parts per trillion (ppt), respectively, exceeding the Maximum Contaminant level (drinking water standard) of 10 ppt in groundwater. The source of PFOA and PFOS is unknown, however it does not appear to be associated with the site and may be coming from an upgradient source. Data does not indicate potential for off-site impacts to groundwater related to this site.

Soil Vapor: Chlorinated and petroleum related VOCs were detected in soil vapor across the site. PCE was detected at a maximum concentration of 115 micrograms per cubic meter (µg/m3). TCE was detected at a maximum concentration of 434 µg/m3, while cis-1,2-DCE was detected at a single location at 9.99 µg/m3. Vinyl chloride was detected at a single location at 5.62 µg/m3. Petroleum-related compounds, namely benzene, 1,3-butadiene, heptane, hexane, toluene and xylenes, were detected in soil vapor. Specifically, benzene was detected at a concentration of 19.3 ug/m3. 1,3-butadiene was detected across the site at concentrations ranging from 0.746 ug/m3 to 24.3 ug/m3. Heptane was detected across the site at concentrations ranging from 1.05 ug/m3 to 8,730 ug/m3. Hexane was detected across the site at concentrations ranging from 1.32 ug/m3 to 12,400 ug/m3. Toluene was detected across the site at concentrations ranging from 3.99 ug/m3 to 35 ug/m3. Finally, xylenes were detected across the site at concentrations ranging from 4.09 ug/m3 to 17.1 ug/m3. Data does not indicate potential for off-site impacts to soil vapor related to this site.

6.4: Summary of Human Exposure Pathways

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

People are not drinking the contaminated groundwater because the area is served by a public water supply that is not affected by site-related contamination. Access to the site is currently not restricted and people who enter the site may come into contact with soil and groundwater contamination if they dig below the ground surface. 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. The site is currently vacant so inhalation of site contaminants in indoor air via the soil vapor intrusion pathway in not a current concern. Environmental sampling also indicates that soil vapor intrusion is not a concern for offsite buildings.

6.5: Summary of the Remediation Objectives

The objectives for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375. The goal for the remedial program is to restore the site to pre-disposal conditions to the extent feasible. At a minimum, the remedy shall eliminate or mitigate all significant threats to public health and the environment presented by the contamination identified at the site through the proper application of scientific and engineering principles.

The remedial action objectives for this site are:

Groundwater

RAOs for Public Health Protection

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.
-

RAOs for Environmental Protection

- Remove the source of ground or surface water contamination.

Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.

RAOs for Environmental Protection

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

Soil Vapor

RAOs for Public Health Protection

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

SECTION 7: ELEMENTS OF THE SELECTED REMEDY

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

The selected remedy is referred to as the Excavation and Vapor Evaluation remedy.

The elements of the selected remedy, as shown in Figure 2, are as follows:

1. **Remedial Design**

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

- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
- Reducing direct and indirect greenhouse gases and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;

- Conserving and efficiently managing resources and materials;
- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;
- Maximizing habitat value and creating habitat when possible;
- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals; and
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development
- 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 and historic fill which exceed unrestricted use SCOs, as defined by 6 NYCRR Part 375-6.8. Approximately 19,000 cubic yards of material will be removed for remediation down to 5 feet bgs across the entire site with deeper excavations in areas where SVOCs, metals or pesticides exceed the unrestricted use SCOs.

If a Track 1 cleanup is achieved, a cover system will not be required.

3. **Backfill**

As necessary, clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to complete required backfilling of the excavation and establish the design grades at the site.

4. **Vapor Intrusion Evaluation**

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

Local Institutional Controls

If no EE or SMP is needed to achieve soil, groundwater, or soil vapor remedial action objectives, then the following local use restriction will be relied upon to prevent ingestion of groundwater: Article 141 of the NYCDOH code which prohibits potable use of groundwater without prior approval.

Contingent Remedy Elements

The intent of the remedy is to achieve Track 1 unrestricted use; therefore, no environmental easement or site management plan is anticipated.

In the event that Track 1 unrestricted use is not achieved, the following contingent remedial

elements will be required and the remedy will achieve a Track 4 Restricted Residential cleanup.

5. Cover System

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

6. **Institutional Controls**

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.
- 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 Cover System discussed in Paragraph 5 above.

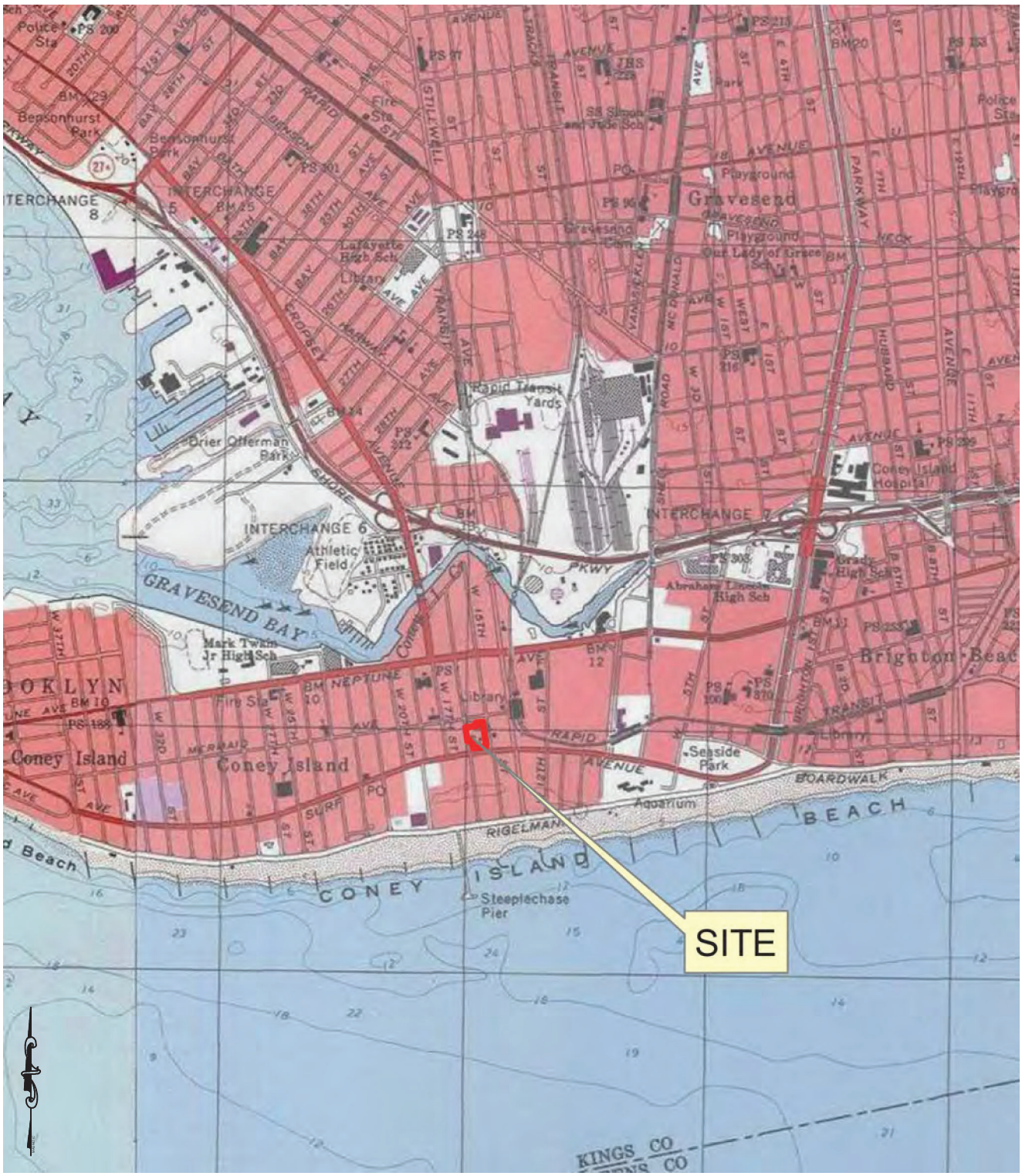
This plan includes, but may not be limited to:

- 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 and groundwater use restrictions;

- a provision for evaluation of the potential for soil vapor intrusion for any occupied buildings on the site, including provisions for implementing actions recommended to address exposures related to soil vapor intrusion.
- 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. Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:

- 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.



REFERENCE:
SITE INFORMATION TAKEN FROM DRAWING ENTITLED "NJDEP AND NJGIN DATA" PREPARED BY PSG ENGINEERING, DPC. DATED 02/20/2020.

FIG-1

2910 WEST 15TH STREET
BLOCK 7063 LOT 12
BROOKLYN, NEW YORK

SITE LOCATION PLAN

SESI
CONSULTING
ENGINEERS D.P.C.
SOILS / FOUNDATIONS
SITE DESIGN
ENVIRONMENTAL
12A MAPLE AVE. PINE BROOK, N.J. 07058 PH: 973-808-9050

DRAWN BY:	yy
CHECKED BY:	SG
SCALE:	AS NOTED
DATE:	08/31/2020
JOB NO.:	11404

LEGEND:

- SB-20 - SOIL BORING NUMBER & APPROX. LOCATION (COMPLETED OCTOBER 2020)
- SB-25 - SOIL BORING NUMBER & APPROX. LOCATION (COMPLETED SEPTEMBER 2020)
- SB-30 - SOIL BORING NUMBER & APPROX. LOCATION (COMPLETED DECEMBER 2020)
- SB-9 - SOIL BORING NUMBER & APPROX. LOCATION (SEPTEMBER, 2019)
- (9.5) - EXCAVATION DEPTH
- HOTSPOT EXCAVATION AREAS W/ ANTICIPATED EXCAVATION DEPTH
- AREA TO BE EXCAVATED TO 5 FEET BGS

NOTES:

I: THE OWNER VALUE OF THE TWO COLUMNS HAS BEEN REPORTED DUE TO OBVIOUS INTERDERENCE
J: ESTIMATED VALUE
P: THE RPD BETWEEN THE RESULTS OF THE TWO COLUMNS EXCEEDS THE METHOD-SPECIFIED CRITERIA.
U: INDICATES THE ANALYTE WAS ANALYZED FOR BUT NOT DETECTED.
PFAS UNITS IN ug/kg; ALL OTHER UNITS IN mg/kg
USCO = UNRESTRICTED SOIL CLEANUP OBJECTIVE
RRSCO = RESTRICTED RESIDENTIAL CLEANUP OBJECTIVE
PGSCO = PROTECTION OF GROUNDWATER SOIL CLEANUP OBJECTIVES
NA = NO STANDARD

Scale: 1"= 20'

0 10 20 40 60 80

REFERENCE:

EXISTING CONDITIONS AND SURVEY INFORMATION TAKEN FROM "ALTA/NSPS TITLE AND ARCHITECTURAL SURVEY" PREPARED BY WOHL & O'MARA CIVIL ENGINEERS AND LAND SURVEYORS, DATED OCTOBER 15, 2019.

rev	date	description	by

dwg by: sass
chk by: SSG
scale: AS NOTED
date: 04/20/2021

SESI CONSULTING ENGINEERS
SOILS / FOUNDATIONS
SITE DESIGN
ENVIRONMENTAL
12A MAPLE AVE. PINE BROOK, NJ. 07058 PH: 973-808-9050

1515 SURF AVENUE
BROOKLYN, NEW YORK

title: TRACK 1 - EXCAVATION REMEDIATION PLAN

job no. 11404
drawing no. FIG-2