

# DECISION DOCUMENT

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130 Saint Felix Street Site  
Brownfield Cleanup Program  
Brooklyn, Kings County  
Site No. C224306  
August 2024



**Department of  
Environmental  
Conservation**

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

# DECLARATION STATEMENT - DECISION DOCUMENT

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130 Saint Felix Street Site  
Brownfield Cleanup Program  
Brooklyn, Kings County  
Site No. C224306  
August 2024

## **Statement of Purpose and Basis**

This document presents the remedy for the 130 Saint Felix Street Site 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 (NYSDEC) for the 130 Saint Felix Street Site and the public's input to the proposed remedy presented by NYSDEC.

## **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 shall be

constructed, at a minimum, to meet the 2020 Energy Conservation Construction Code of New York (or most recent edition) to improve energy efficiency as an element of construction.

As part of the remedial design program, to evaluate the remedy with respect to green and sustainable remediation principles, an environmental footprint analysis will be completed. The environmental footprint analysis will be completed using an accepted environmental footprint analysis calculator such as SEFA (Spreadsheets for Environmental Footprint Analysis, USEPA), SiteWise™ (available in the Sustainable Remediation Forum [SURF] library) or similar NYSDEC accepted tool. Water consumption, greenhouse gas emissions, renewable and non-renewable energy use, waste reduction and material use will be estimated, and goals for the project related to these green and sustainable remediation metrics, as well as for minimizing community impacts, protecting habitats and natural and cultural resources, and promoting environmental justice, will be incorporated into the remedial design program, as appropriate. The project design specifications will include detailed requirements to achieve the green and sustainable remediation goals. Further, progress with respect to green and sustainable remediation metrics will be tracked during implementation of the remedial action and reported in the Final Engineering Report (FER), including a comparison to the goals established during the remedial design program.

Additionally, the remedial design program will include a climate change vulnerability assessment, to evaluate the impact of climate change on the project site and the proposed remedy. Potential vulnerabilities associated with extreme weather events (e.g., hurricanes, lightning, heat stress and drought), flooding, and sea level rise will be identified, and the remedial design program will incorporate measures to minimize the impact of climate change on potential identified vulnerabilities.

## **2. Excavation**

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

- any underground storage tanks (USTs), fuel dispensers, underground piping or other structures, if encountered.

For the Track 2 (eastern) portion of the site, excavation and off-site disposal of all on-site soils which exceed restricted-residential soil cleanup objectives (SCOs) as defined by 6 NYCRR Part 375-6.8 to depths ranging from 7 to 10.5 feet below grade surface (bgs). If a Track 2 restricted residential cleanup is achieved, a Cover System will not be a required element of the remedy for that portion of the site.

For the Track 4 (western) portion of the site, excavation and off-site disposal of all on-site soils which exceed the restricted residential SCOs as defined by 6 NYCRR Part 375-6.8 in the upper two feet bgs.

Approximately 3,400 cubic yards of contaminated soil will be removed from the site.

Collection and analysis of confirmation and documentation samples at the remedial excavation depths will be used to verify that SCOs for the site have been achieved. If

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

To ensure proper handling and disposal of excavated material, waste characterization sampling will be completed for all identified contaminated site material. Waste characterization sampling will be performed exclusively for the purposes of off-site disposal in a manner suitable to receiving facilities and in conformance with applicable federal, state and local laws, rules, and regulations and facility-specific permits.

### **3. Backfill**

Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to replace the excavated soil and establish the designed grades at the site.

### **4. Cover System**

A site cover will be required in the Track 4 area where the upper two feet of exposed surface soil will exceed the applicable soil SCOs, to allow for future restricted residential use of the site. 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.

### **5. 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 NYSDEC 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 New York City Department of Health and Mental Hygiene (NYCDOHMH); and
- require compliance with the NYSDEC approved Site Management Plan.

### **6. 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 5 above.
- Engineering Controls: The site cover system discussed in Paragraph 4.

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 water use restrictions;
  - a provision for evaluation of the potential for soil vapor intrusion for any occupied buildings on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
  - a provision that should a building foundation or building slab be removed in the future, a cover system consistent with that described in Paragraph 4 above will be placed in any areas where the upper two feet of exposed surface soil exceed the applicable soil cleanup objectives (SCOs);
  - provisions for the management and inspection of the identified engineering controls;
  - maintaining site access controls and NYSDEC 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:
- a schedule of monitoring and frequency of submittals to the NYSDEC; 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.

August 26, 2024

Date



Scott Deyette  
Director, Remedial Bureau B

# DECISION DOCUMENT

130 Saint Felix Street Site  
Brooklyn, Kings County  
Site No. C224306  
May 2024

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## **SECTION 1: SUMMARY AND PURPOSE**

The New York State Department of Environmental Conservation (NYSDEC), 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.

NYSDEC 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**

NYSDEC 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 NYSDEC 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=C224306>

Brooklyn Public Library - Pacific Branch  
25 Fourth Avenue  
Brooklyn, NY 11217  
Phone: (718) 638-1531

Brooklyn Community Board 2  
350 Jay Street, Eighth Floor  
Brooklyn, NY 11201  
Phone: (718) 596-5410

### **Receive Site Citizen Participation Information By Email**

Please note that NYSDEC'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 in an urban area at 130 Saint Felix Street in the Fort Greene Neighborhood of Brooklyn, NY and is designated as Tax Block 2111, Lot 40. The site is bordered by two multi-story buildings to the north, one four-story occupied by the Brooklyn Music School and the seven-story occupied by the Brooklyn Academy of Music, Saint Felix Street to the east, Ashland Place to the west and the 41-story mixed-use residential and commercial Williamsburg Savings Bank Tower, 1 Hanson Place, and a three-story church building to the south.

#### Site Features:

The site is 11,892 square feet (0.273 acres) in area and is currently vacant. The site is developed with an asphalt-paved parking lot and is located on an L-shaped city lot. The nearest body of water is the Gowanus Canal, which is approximately 0.57 miles southwest from the site.

#### Current Zoning and Land Use:

The site is currently zoned C6-1 (commercial) and is currently used for intermittent rentals to movie productions for equipment storage. The site is not in a flood zone.

#### Past Use of the Site:

Historical records identify the site as an at-grade asphalt-paved parking lot since 1950 and may have contained USTs due to its classification as a garage/gasoline station. Auto repair or service activities may have taken place on the site.

#### Site Geology and Hydrogeology:

A non-native fill layer as deep as 13 feet is generally underlain by a native sand layer that was consistently encountered until boring termination depth across the site. Gravel layers, within the native sands, ranging in thickness from approximately 1 to 5 feet were also identified between approximately 26.5 and 40 feet below ground surface (bgs) within two soil borings advanced in the eastern portion of the site. Bedrock was not encountered in any of the soil borings advanced

during the Remedial Investigation. Based on geotechnical investigations in the area, the depth to bedrock is greater than 90 feet bgs. Depth to groundwater is about 38 feet bgs and flows south-southwest towards the Gowanus Canal.

A site location map is attached as Figure 1.

#### **SECTION 4: LAND USE AND PHYSICAL SETTING**

NYSDEC 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 Applicant under the Brownfield Cleanup Agreement is a Volunteer. The Applicant does not have an obligation to address off-site contamination. However, NYSDEC 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. NYSDEC 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:

lead	benzo(k)fluoranthene
barium	chrysene
mercury	dibenz[a,h]anthracene
benzo(a)anthracene	indeno(1,2,3-cd)pyrene
benzo(a)pyrene	trichloroethene (TCE)
benzo(b)fluoranthene	

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

- groundwater
- soil

### **6.2: Interim Remedial Measures**

An interim remedial measure (IRM) is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before issuance of the Decision Document.

There were no IRMs performed at this site during the RI.

### **6.3: Summary of Environmental Assessment**

This section summarizes the assessment of existing and potential future environmental impacts presented by the site. Environmental impacts may include existing and potential future exposure pathways to fish and wildlife receptors, wetlands, groundwater resources, and surface water. The RI report presents a detailed discussion of any existing and potential impacts from the site to fish and wildlife receptors.

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

Soil and groundwater were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, polychlorinated biphenyls (PCBs), per- and polyfluoroalkyl substances (PFAS), and pesticides. Soil vapor samples were analyzed for VOCs. Based on the investigations conducted at the site, the contaminants of concern are SVOCs and metals in soil and groundwater, and VOCs in groundwater and soil vapor.

**Soil:** Soil samples were compared against the restricted residential soil cleanup objectives (RRSCOs). No VOCs were detected concentration in excess of the RRSCOs.

SVOCs were detected at concentrations exceeding the RRSCOs include benzo(a)anthracene up to 4.6 parts per million (ppm) (RRSCO is 1 ppm), benzo(a)pyrene up to 4.4 ppm (RRSCO is 1ppm), benzo(b)fluoranthene up to 6 ppm (RRSCO is 1 ppm), chrysene up to 5.4 ppm (RRSCO is 3.9 ppm), dibenz(a,h)anthracene up to 0.6 ppm (RRSCO is 0.33 ppm), indeno(1,2,3-c,d)pyrene up to 3 ppm (RRSCO is 0.5 ppm).

Metals detected at a concentration exceeding the RRSCO include mercury at 1.4 ppm (RRSCO is 0.81 ppm), lead at 2,800 ppm (RRSCO is 400 ppm), and barium at 860 ppm (RRSCO is 400 ppm).

No VOCs, pesticides, or PCBs were detected in exceedance of the RRSCOs. No PFAS compounds were detected in exceedance of the restricted residential guidance values. Data does not indicate any off-site impacts in soil related to the site.

**Groundwater:** VOCs exceeding the applicable Ambient Water Quality Standards and Guidance Values (AWQSGVs) include trichloroethene (TCE) up to 5.8 parts per billion (ppb) (AWQSGV is 5 ppb) and chloroform up to 27 ppb (AWQSGV is 7 ppb) located in the central eastern (upgradient/side gradient) portion of the site. Chloroform is a breakdown product of chlorine used for municipal drinking water disinfection and is likely attributed to the nearby leaking water main. No other VOCs were detected above the AWQSGVs.

SVOCs include benzo(a)anthracene up to 0.22 ppb (AWQSGV is 0.0022 ppb), benzo(a)pyrene up to 0.22 ppb (AWQSGV is 0 ppb), benzo(b)fluoranthene up to 0.27 ppb (AWQSGV is 0.002 ppb), benzo(k)fluoranthene up to 0.11 ppb (AWQSGV is 0.002 ppb), chrysene up to 0.24 ppb (AWQSGV is 0.002 ppb), and indeno(1,2,3-c,d)pyrene at 0.19 ppb (AWQSGV is 0.002 ppb) and bis(2-ethylhexyl)phthalate at 6.1 ppb (AWQSGV is 5 ppb). The highest concentrations of SVOCs exceeding the AWQSGVs identified during the investigation were located in the northeastern (upgradient) portion of the site.

Of the PFAS compounds, perfluorooctane sulfonic acid (PFOS) was found at a concentration 12.7 parts per trillion (ppt) (AWQSGV is 2.7 ppt) in one groundwater sample, and perfluorooctanoic acid (PFOA) up to 61.8 ppt (AWQSGV is 6.7 ppt) was detected in all groundwater samples collected.

Only the naturally occurring metals sodium, iron and manganese were detected in dissolved groundwater samples. No pesticides or PCBs were detected in groundwater at concentrations exceeding AWQSGVs. Data does not indicate any off-site impacts in groundwater related to the site.

Soil Vapor: Maximum detected concentrations of VOCs in soil vapor include TCE which was detected in both the shallow (5 ft-bgs) and deep (20 ft-bgs) samples collected at maximum concentrations of 6.99 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) and 18.9  $\mu\text{g}/\text{m}^3$ , respectively; tetrachloroethene (PCE) up to 18.4  $\mu\text{g}/\text{m}^3$  in shallow samples and up to 36.3  $\mu\text{g}/\text{m}^3$  in deep samples; methyl ethyl ketone (MEK) up to 684  $\mu\text{g}/\text{m}^3$  in shallow samples and up to 2,000  $\mu\text{g}/\text{m}^3$  in deep samples. Data does not indicate any off-site impacts in soil vapor related to the site.

#### **6.4: Summary of Human Exposure Pathways**

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

Access is restricted by a fence and direct contact with contaminants in the soil is unlikely because the majority of the site is covered with pavement. People are not drinking the contaminated groundwater because the area is served by a public water supply that is not affected by site contamination. Volatile organic compounds in soil vapor (air spaces within the soil) may move into structures 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 (SVI). The site is vacant so inhalation of site contaminants in indoor air via the SVI pathway is not a current concern. However, the potential exists for inhalation of site contaminants due to SVI for any future on-site development. Environmental sampling indicates that SVI from site contamination is not a concern for off-site buildings.

#### **6.5: Summary of the Remediation Objectives**

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

The remedial action objectives for this site are:

## **Groundwater**

### **RAOs for Public Health Protection**

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of volatiles, from contaminated groundwater.

## **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 a Multiple Cleanup Tracks remedy.

The selected remedy is referred to as the Soil Excavation and Partial Site Cover remedy.

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

### **1. Remedial Design**

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

- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
- Reducing direct and indirect greenhouse gases and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;
- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;
- Maximizing habitat value and creating habitat when possible;
- Fostering green and healthy communities and working landscapes which balance

ecological, economic and social goals;

- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development; and
- Additionally, to incorporate green remediation principles and techniques to the extent feasible in the future development at this site, any future on-site buildings shall be constructed, at a minimum, to meet the 2020 Energy Conservation Construction Code of New York (or most recent edition) to improve energy efficiency as an element of construction.

As part of the remedial design program, to evaluate the remedy with respect to green and sustainable remediation principles, an environmental footprint analysis will be completed. The environmental footprint analysis will be completed using an accepted environmental footprint analysis calculator such as SEFA (Spreadsheets for Environmental Footprint Analysis, USEPA), SiteWise™ (available in the Sustainable Remediation Forum [SURF] library) or similar NYSDEC accepted tool. Water consumption, greenhouse gas emissions, renewable and non-renewable energy use, waste reduction and material use will be estimated, and goals for the project related to these green and sustainable remediation metrics, as well as for minimizing community impacts, protecting habitats and natural and cultural resources, and promoting environmental justice, will be incorporated into the remedial design program, as appropriate. The project design specifications will include detailed requirements to achieve the green and sustainable remediation goals. Further, progress with respect to green and sustainable remediation metrics will be tracked during implementation of the remedial action and reported in the Final Engineering Report (FER), including a comparison to the goals established during the remedial design program.

Additionally, the remedial design program will include a climate change vulnerability assessment, to evaluate the impact of climate change on the project site and the proposed remedy. Potential vulnerabilities associated with extreme weather events (e.g., hurricanes, lightning, heat stress and drought), flooding, and sea level rise will be identified, and the remedial design program will incorporate measures to minimize the impact of climate change on potential identified vulnerabilities.

## **2. Excavation**

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- any underground storage tanks (USTs), fuel dispensers, underground piping or other structures, if encountered.

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For the Track 4 (western) portion of the site, excavation and off-site disposal of all on-site soils which exceed the restricted residential SCOs as defined by 6 NYCRR Part 375-6.8 in the upper two feet bgs.

Approximately 3,400 cubic yards of contaminated soil will be removed from the site.

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

To ensure proper handling and disposal of excavated material, waste characterization sampling will be completed for all identified contaminated site material. Waste characterization sampling will be performed exclusively for the purposes of off-site disposal in a manner suitable to receiving facilities and in conformance with applicable federal, state and local laws, rules, and regulations and facility-specific permits.

### **3. Backfill**

Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to replace the excavated soil and establish the designed grades at the site.

### **4. Cover System**

A site cover will be required in the Track 4 area where the upper two feet of exposed surface soil will exceed the applicable soil SCOs, to allow for future restricted residential use of the site. 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.

### **5. 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 NYSDEC 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 New York City Department of Health and Mental Hygiene (NYCDOHMH); and
- require compliance with the NYSDEC approved Site Management Plan.

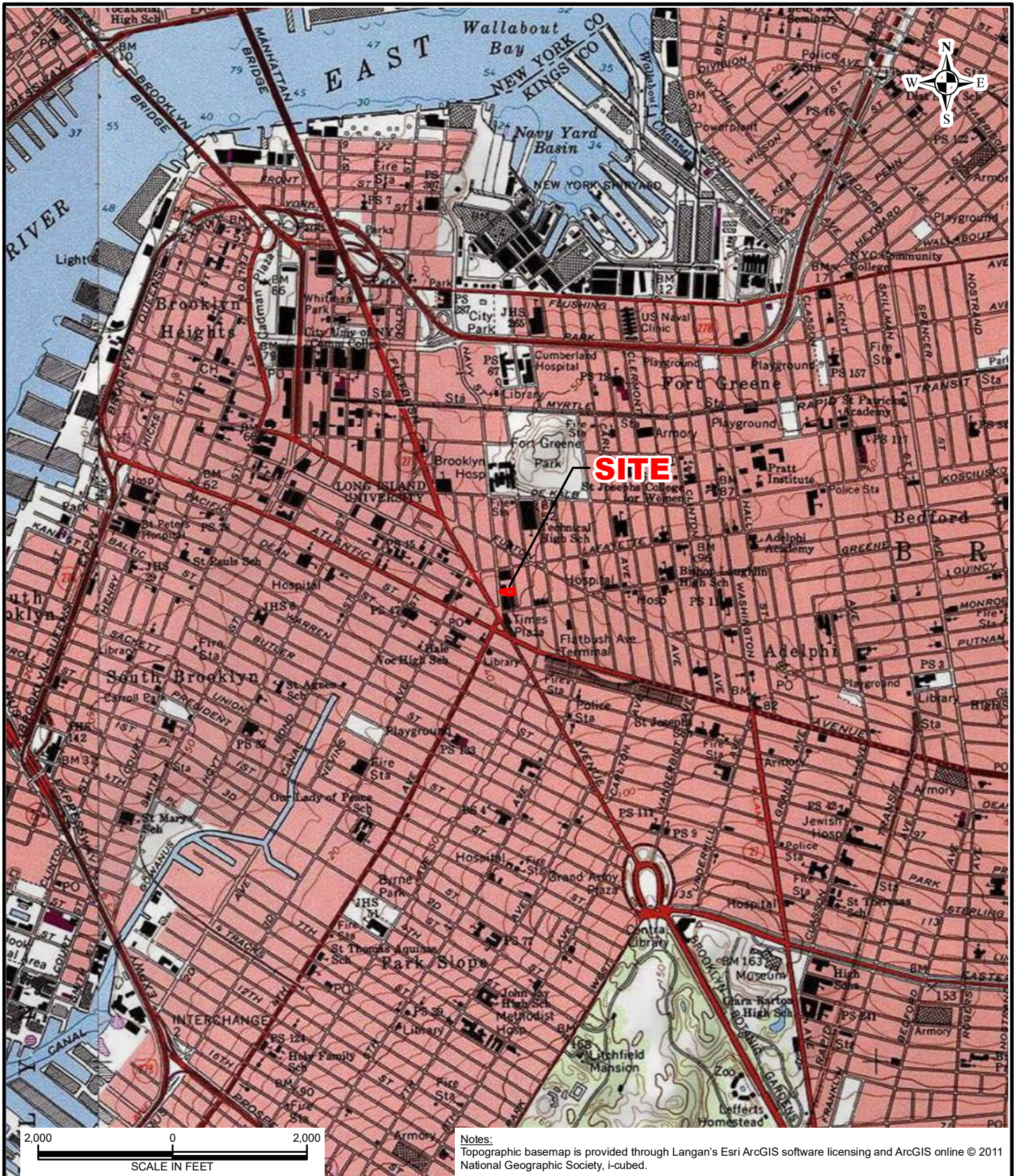
## 6. Site Management Plan

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

- b. 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 5 above.
  - Engineering Controls: The site cover system discussed in Paragraph 4.

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 water use restrictions;
  - a provision for evaluation of the potential for soil vapor intrusion for any occupied buildings on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
  - a provision that should a building foundation or building slab be removed in the future, a cover system consistent with that described in Paragraph 4 above will be placed in any areas where the upper two feet of exposed surface soil exceed the applicable soil cleanup objectives (SCOs);
  - provisions for the management and inspection of the identified engineering controls;
  - maintaining site access controls and NYSDEC 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:
    - a schedule of monitoring and frequency of submittals to the NYSDEC; and
    - monitoring for vapor intrusion for any buildings on the site, as may be required by the Institutional and Engineering Control Plan discussed above.



Notes:  
 Topographic basemap is provided through Langan's Esri ArcGIS software licensing and ArcGIS online © 2011 National Geographic Society, i-cubed.

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 Langan International LLC  
 Collectively known as Langan

NJ CERTIFICATE OF AUTHORIZATION No. 24GA27996400

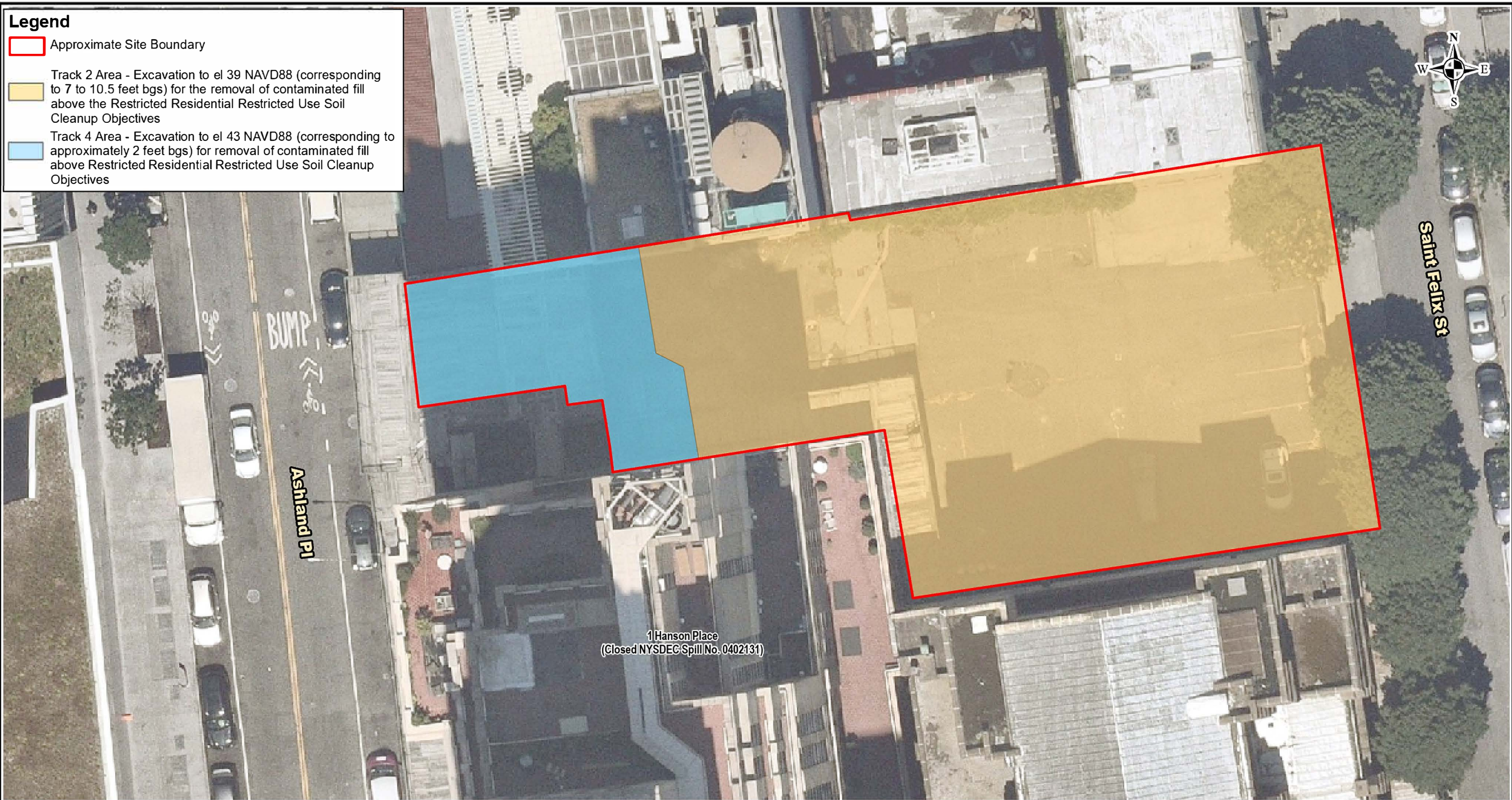
Project  
**130 SAINT FELIX STREET**  
 BLOCK No. 2111,  
 Portion of LOT No. 40

BROOKLYN NEW YORK

Drawing Title  
**SITE LOCATION MAP**

Project No. 100842301	Figure <b>1</b>
Date 9/27/2022	
Scale 1"=2,000'	
Drawn By IHB	





**Legend**

- Approximate Site Boundary
- Track 2 Area - Excavation to el 39 NAVD88 (corresponding to 7 to 10.5 feet bgs) for the removal of contaminated fill above the Restricted Residential Restricted Use Soil Cleanup Objectives
- Track 4 Area - Excavation to el 43 NAVD88 (corresponding to approximately 2 feet bgs) for removal of contaminated fill above Restricted Residential Restricted Use Soil Cleanup Objectives

Ashland Pl

Saint Felix St

1 Hanson Place  
(Closed NYSDEC Spill No. 0402131)



**Notes:**  
 1. Aerial imagery provided through Langan's subscription to Nearmap, dated 19 July 2022.  
 2. Parcel information from MapPLUTO 18v2 copyrighted by the New York City Department of Planning.  
 3. Site boundary extents are based on Metes and Bounds Description provided by True North Surveyors, P.C.  
 4. Elevation data based on the "Support of Excavation General Plan" SOE 101.00 prepared by FX Collaborative Architects LLC as dated 22 April 2022 and submitted 22 July 2022.

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	Path: W:\angan.com\data\PAR\data3\100842301\Project Data\ArcGIS\APRX\100842301\100842301.aprx Date: 3/12/2024 User: ibaker Time: 2:27 PM			

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