DECISION DOCUMENT

Former Pfizer Site C
Brownfield Cleanup Program
Brooklyn, Kings County
Site No. C224288
August 2021

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

DECLARATION STATEMENT - DECISION DOCUMENT

Former Pfizer Site C
Brownfield Cleanup Program
Brooklyn, Kings County
Site No. C224288
August 2021

Statement of Purpose and Basis

This document presents the remedy for the Former Pfizer Site C 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 Former Pfizer Site C 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 unrestricted SCOs, as defined by 6 NYCRR Part 375-6.8 in the Track 1 area of the site;
- all on-site soils which exceed restricted residential SCOs as defined by 6 NYCRR Part 375-6.8 in the upper 2 feet in the Track 4 area of the site; and
- all on-site soils exceeding protection of groundwater soil cleanup objectives (PGWSCOs).

Approximately 48,600 tons of contaminated soil will be removed from the site.

3. Backfill

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

4. Cover System

A site cover will be required in the Track 4 area of the site 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.

5. Groundwater Dewatering & Treatment

Dewatering will be performed to facilitate the excavation of contaminated soil. Contaminated groundwater from dewatering operations will be treated as necessary prior to discharge to the municipal sewer system.

6. In-situ Chemical Oxidation (ISCO)

In-situ chemical oxidation will be implemented to treat petroleum volatile organic compounds in groundwater. Regenisis Pretrofix remediation fluid will be injected into the subsurface to destroy the contaminants in an approximately 3,000 square foot area located in the southeast portion of the proposed Track 1 portion of the site via injection wells screened from 9 to 30 feet and in an approximately 9,000 square feet area located central and northern portion of the proposed Track 4 portion of the site via injection wells screened from 8 feet to 20 feet where gasoline-related compounds were elevated in the groundwater. Monitoring will be required up-gradient, down-gradient, and within the treatment zone. Monitoring will be conducted for contaminants of concern upgradient and downgradient of the treatment zone.

7. Vapor Intrusion Evaluation

As part of the remedy, a soil vapor intrusion evaluation will be completed. The evaluation will include a provision for implementing actions (e.g. sub slab depressurization) recommended to address exposures related to soil vapor intrusion.

8. Institutional Control

Imposition of an institutional control in the form of an environmental easement for the portions of the site that do not achieve a Track 1 unrestricted use cleanup which will:

- require the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
- allow the use and development of the controlled property for restricted residential use as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restrict the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or NYCDOHMH; and
- require compliance with the Department approved Site Management Plan.

9. Site Management Plan

A Site Management Plan is required for all portions of the Site that do not achieve a Track 1 unrestricted use cleanup which includes the following:

a) an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:

   – Institutional Controls: The Environmental Easement discussed in Paragraph 8 above.
   – Engineering Controls: The cover system discussed in Paragraph 4 above.

   This plan includes, but may not be limited to:
   - an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
   - descriptions of the provisions of the environmental easement including any land use and groundwater use restrictions;
   - 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;
   - provisions for the management and inspection of the identified engineering controls;
   - maintaining site access controls and Department notification; and
   - the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.

b) A Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:
   - monitoring of groundwater to assess the performance and effectiveness of the remedy;
   - a schedule of monitoring and frequency of submittals to the Department; 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 27, 2021

Date

Gerard Burke, Director
Remedial Bureau B

DECISION DOCUMENT

Former Pfizer Site C
Brooklyn, Kings County
Site No. C224288
August 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, where a contaminant is present at levels exceeding the soil cleanup objectives or other health-based or environmental standards, criteria or guidance, based on the reasonably anticipated use of the property.

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

SECTION 2: CITIZEN PARTICIPATION

The Department seeks input from the community on all remedies. A public comment period was held, during which the public was encouraged to submit comment on the proposed remedy. All comments on the remedy received during the comment period were considered by the Department in selecting a remedy for the site. Site-related reports and documents were made available for review by the public at the following document repositories:

DECInfo Locator - Web Application
https://gisservices.dec.ny.gov/gis/dil/index.html?rs=C224288

Brooklyn Public Library - Bushwick Branch
340 Bushwick Avenue at Seigel Street
Brooklyn, NY 11206
Phone: 718-602-1348

Brooklyn Community Board 1

435 Graham Avenue
Brooklyn, NY 11211
Phone: 718-389-0009

Receive Site Citizen Participation Information By Email

Please note that the Department's Division of Environmental Remediation (DER) is "going paperless" relative to citizen participation information. The ultimate goal is to distribute citizen participation information about contaminated sites electronically by way of county email listservs. Information will be distributed for all sites that are being investigated and cleaned up in a particular county under the State Superfund Program, Environmental Restoration Program, Brownfield Cleanup Program and Resource Conservation and Recovery Act Program. We encourage the public to sign up for one or more county listservs at http://www.dec.ny.gov/chemical/61092.html

SECTION 3: SITE DESCRIPTION AND HISTORY

Location
The site is located at 334 Wallabout Street in the Brooklyn Triangle section of Brooklyn, NY. The site is comprised of four tax parcels totaling approximately 110,040 square feet (2.55 acres). The irregular shaped site occupies a full block with approximately 485 feet of frontage along Wallabout Street, 200 feet of frontage on Harrison Avenue, 225 feet of frontage on Union Avenue and 600 feet of frontage on Gerry Street.

Site Features
The site is currently vacant, paved, and surrounding by an 8-foot high chain-link fence with one gate on Wallabout Street. The surrounding area comprises residential and commercial uses, including two schools in the immediate vicinity.

Current Zoning and Land Use
The western portion of the site is zoned R8A, the central portion is zoned R7D, and the eastern portion is zoned R7A (all residential use). The site is currently used for the storage of scaffolding and related construction equipment. Surrounding land use includes residential apartment buildings to the west, former Pfizer Site A (BCP site no. C224284) to the north, commercial warehouses, residential buildings and a private school (Bais Ruchel High School) to the east; and a charter school (Beginning with Children) to the south. The closest school (Bais Ruchel High School) is located 60 feet to the east. The charter school is located 70 feet to the south and PS 318 is located 375 feet to the north.

Past Use of the Site
The historic use of the site includes residential homes, the Pfizer chemical works and varnish manufacturing in 1887-1918, a lumber yard and the Pfizer chemical works in 1935. By 1947 the Pfizer chemical works occupied the entire property and continued to do so through 1995 when the buildings were demolished.

Site Geology and Hydrogeology

Subsurface soils at the site consist of historic fill materials to a depth of approximately 4 to 9 feet below ground surface (bgs) followed by a native silt and clay layer. The elevation of the site is approximately 18 feet above mean sea level. The area topography is generally flat with little relief and no significant elevation changes. Bedrock was not encountered during previous site investigations.

Groundwater is present at depths of approximately 8 to13 feet bgs under perched water table conditions. Groundwater flow is generally west to southwest. The site is not located within a designated flood zone area. Groundwater in this area of Brooklyn is not used as a source of potable water.

A site location map is attached as Figure 1.

SECTION 4: LAND USE AND PHYSICAL SETTING

The Department may consider the current, intended, and reasonably anticipated future land use of the site and its surroundings when evaluating a remedy for soil remediation. For this site, alternatives (or an alternative) that restrict(s) the use of the site to restricted-residential use (which allows for commercial use and industrial use) as described in Part 375-1.8(g) were/was evaluated in addition to an alternative which would allow for unrestricted use of the site.

A comparison of the results of the Remedial Investigation (RI) to the appropriate standards, criteria and guidance values (SCGs) for the identified land use and the unrestricted use SCGs for the site contaminants is available in the RI Report.

SECTION 5: ENFORCEMENT STATUS

The Applicant(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:

chlorobenzene
benzene
benzo(a)anthracene
benzo(a)pyrene
benzo(b)fluoranthene
benzo(k)fluoranthene
chrysene
dibenz[a,h]anthracene
fluoranthene
indeno(1,2,3-CD)pyrene
cadmium
lead
mercury
perfluorooctane sulfonic acid
perfluorooctanoic acid
isopropylbenzene
naphthalene
chromium
nickel
tetrachloroethene (PCE)
trichloroethene (TCE)

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

- groundwater
- soil

6.2: Interim Remedial Measures

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

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

6.3: Summary of Environmental Assessment

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

Soil and groundwater were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, polychlorinated biphenyls (PCBs), per- and polyfluoroalkyl substances (PFAS), and pesticides. Based upon investigations conducted to date, the primary contaminants of concern for this site include VOCs, SVOCs, and metals in soil and in groundwater.

Soil - VOCs exceeding protection of groundwater soil cleanup objectives (PGWSCOs), including chlorobenzene at 3.20 parts per million (ppm) (PGWSCO is 1.1 ppm) and sec-butylbenzene at 16 ppm (PGWSCO is 11 ppm), were detected selected locations.

SVOCs exceeding restricted residential soil cleanup objectives (RRSCOs) were detected in soil throughout the site including benzo(a)anthracene at 61.6 ppm compared to RRSCO of 1 ppm, benzo(a)pyrene at 57.5 ppm (RRSCO is 1 ppm), benzo(b)fluoranthene at 45.7 ppm (RRSCO is 1 ppm), benzo(k)fluoranthene at 44.9 ppm (RRSCO is 3.9 ppm), chrysene at 54.4 ppm (RRSCO is 3.9 ppm), dibenzo(a,h)anthracene at 9.54 ppm (RRSCO is 0.33 ppm), fluoranthene at 113 ppm (RRSCO is 100 ppm), and indeno(1,2,3-cd)pyrene at 31.3 ppm (RRSCO is 0.5 ppm).

Several metals were detected at concentrations exceeding the RRSCOs, including arsenic at 39.90 ppm (RRSCO is 16 ppm), barium at 825 ppm (RRSCO is 400 ppm), cadmium at 4.48 ppm (RRSCO is 4.3 ppm), copper at 3,990 ppm (RRSCO is 270 ppm), lead at 5,290 ppm RRSCO is 400 ppm), and mercury at 290 ppm (RRSCO is 0.81 ppm).

Perfluorooctanesulfonic acid (PFOS) was measured in soil at concentrations ranging from 0.42 parts per billion (ppb) to 0.95 ppb, exceeding the guidance value for unrestricted use of 0.88 ppb. Data does not indicate any off-site impacts in soil related to this site.

Groundwater - VOCs were detected in groundwater at concentrations exceeding the ambient water quality standards (AWQS), including benzene at a maximum concentration of 11.6 ppb compared to the AWQS of 1 ppb, chlorobenzene at 1,750 ppb (AWQS of 5 ppb), isopropylbenzene at 67.8 ppb (AWQS of 5 ppb), naphthalene at 56.3ppb (AWQS of 10 ppb), n-butylbenzene at 7.2 ppb (AWQS of 5 ppb), and n-propylbenzene at 66 ppb (AWQS of 5 ppb).

SVOCs were detected at concentrations exceeding the AWQS including benzo(a)anthracene at a maximum concentration of 0.070 ppb, benzo(b)fluoranthene at 0.050 ppb, benzo(k)fluoranthene at 0.060 ppb, and chrysene at 0.130 ppb compared to their respective AWQS of 0.002 ppb.

Dissolved metals were detected at concentrations exceeding the AWQS, including chromium at 1,030 ppb (AWQS of 50 ppb), nickel at 109 ppb (AWQS of 100 ppb), antimony at 9.60 ppb (AWQS of 3 ppb), arsenic at 129 ppb (AWQS of 25 ppb), and mercury at 1.20 ppb (AWQS of 0.7 ppb).

PFOS and PFOA were detected above the maximum contaminant level (MCL) of 10 parts per trillion (ppt) with PFOS at a maximum concentration of 185 ppt and PFOA at 79.8 ppt. Data does not indicate any off-site impacts in groundwater related to this site.

Soil Vapor - Petroleum and chlorinated VOCs were detected in soil vapor samples. The maximum concentration of petroleum VOCs included toluene at 2,100 ug/m3. The maximum concentration of chlorinated VOCs included tetrachloroethene at 97 ug/m3, and trichloroethene at 65 ug/m3. Data does indicate any off-site impacts in 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.*

The site is completely fenced, which restricts access, and covered by pavement; therefore direct contact with contaminants in the soil is unlikely. Contaminated groundwater at the site is not used for drinking or other purposes and the site is served by a public water supply that obtains water from a different source not affected by this contamination. Volatile organic compounds in soil vapor (air spaces within the soil) may move into buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. Because the site is vacant the inhalation of site-related contaminants due to soil vapor intrusion does not represent a current concern, however, the potential exists for indoor air impacts from site contaminants in any future on-site buildings. Environmental sampling indicates soil vapor intrusion is not a concern for off-site buildings.

6.5: Summary of the Remediation Objectives

The objectives for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375. The goal for the remedial program is to restore the site to

pre-disposal conditions to the extent feasible. At a minimum, the remedy shall eliminate or mitigate all significant threats to public health and the environment presented by the contamination identified at the site through the proper application of scientific and engineering principles.

The remedial action objectives for this site are:

Groundwater

RAOs for Public Health Protection

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

RAOs for Environmental Protection

- Remove the source of ground or surface water contamination.

Soil

RAOs for Public Health Protection

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

RAOs for Environmental Protection

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

Soil Vapor

RAOs for Public Health Protection

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

SECTION 7: ELEMENTS OF THE SELECTED REMEDY

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

The selected remedy is a Multiple Cleanup Tracks remedy.

The selected remedy is referred to as the Excavation, Cover System, and Groundwater Treatment remedy.

The elements of the selected remedy, as shown in Figures 2 through 4, are as follows:

1. Remedial Design

A remedial design program will be implemented to provide the details necessary for the construction, operation, optimization, maintenance, and monitoring of the remedial program.

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

- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
- Reducing direct and indirect greenhouse gases and other emissions;
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- 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

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Approximately 48,600 tons of contaminated soil will be removed from the site.

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A site cover will be required in the Track 4 area of the site 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.

5. Groundwater Dewatering & Treatment

Dewatering will be performed to facilitate the excavation of contaminated soil. Contaminated groundwater from dewatering operations will be treated as necessary prior to discharge to the municipal sewer system.

6. In-situ Chemical Oxidation (ISCO)

In-situ chemical oxidation will be implemented to treat petroleum volatile organic compounds in groundwater. Regenisis Pretrofix remediation fluid will be injected into the subsurface to destroy the contaminants in an approximately 3,000 square foot area located in the southeast portion of the proposed Track 1 portion of the site via injection wells screened from 9 to 30 feet and in an approximately 9,000 square feet area located central and northern portion of the proposed Track 4 portion of the site via injection wells screened from 8 feet to 20 feet where gasoline-related compounds were elevated in the groundwater. Monitoring will be required up-gradient, down-gradient, and within the treatment zone. Monitoring will be conducted for contaminants of concern upgradient and downgradient of the treatment zone.

7. Vapor Intrusion Evaluation

As part of the remedy, a soil vapor intrusion evaluation will be completed. The evaluation will include a provision for implementing actions (e.g. sub slab depressurization) recommended to address exposures related to soil vapor intrusion.

8. Institutional Control

Imposition of an institutional control in the form of an environmental easement for the portions of the site that do not achieve a Track 1 unrestricted use cleanup which will:

- require the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
- allow the use and development of the controlled property for restricted residential use as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restrict the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or NYCDOHMH; and
- require compliance with the Department approved Site Management Plan.

9. Site Management Plan

A Site Management Plan is required for all portions of the Site that do not achieve a Track 1 unrestricted use cleanup which includes the following:

a) an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:

   - Institutional Controls: The Environmental Easement discussed in Paragraph 8 above.
   - Engineering Controls: The cover system discussed in Paragraph 4 above.

   This plan includes, but may not be limited to:

- an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
- descriptions of the provisions of the environmental easement including any land use and groundwater use restrictions;
- 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;
- provisions for the management and inspection of the identified engineering controls;
- maintaining site access controls and Department notification; and
- the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.

b) A Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:
   - monitoring of groundwater to assess the performance and effectiveness of the remedy;
   - a schedule of monitoring and frequency of submittals to the Department; and
   - monitoring for vapor intrusion for any buildings on the site, as may be required by the Institutional and Engineering Control Plan discussed above.

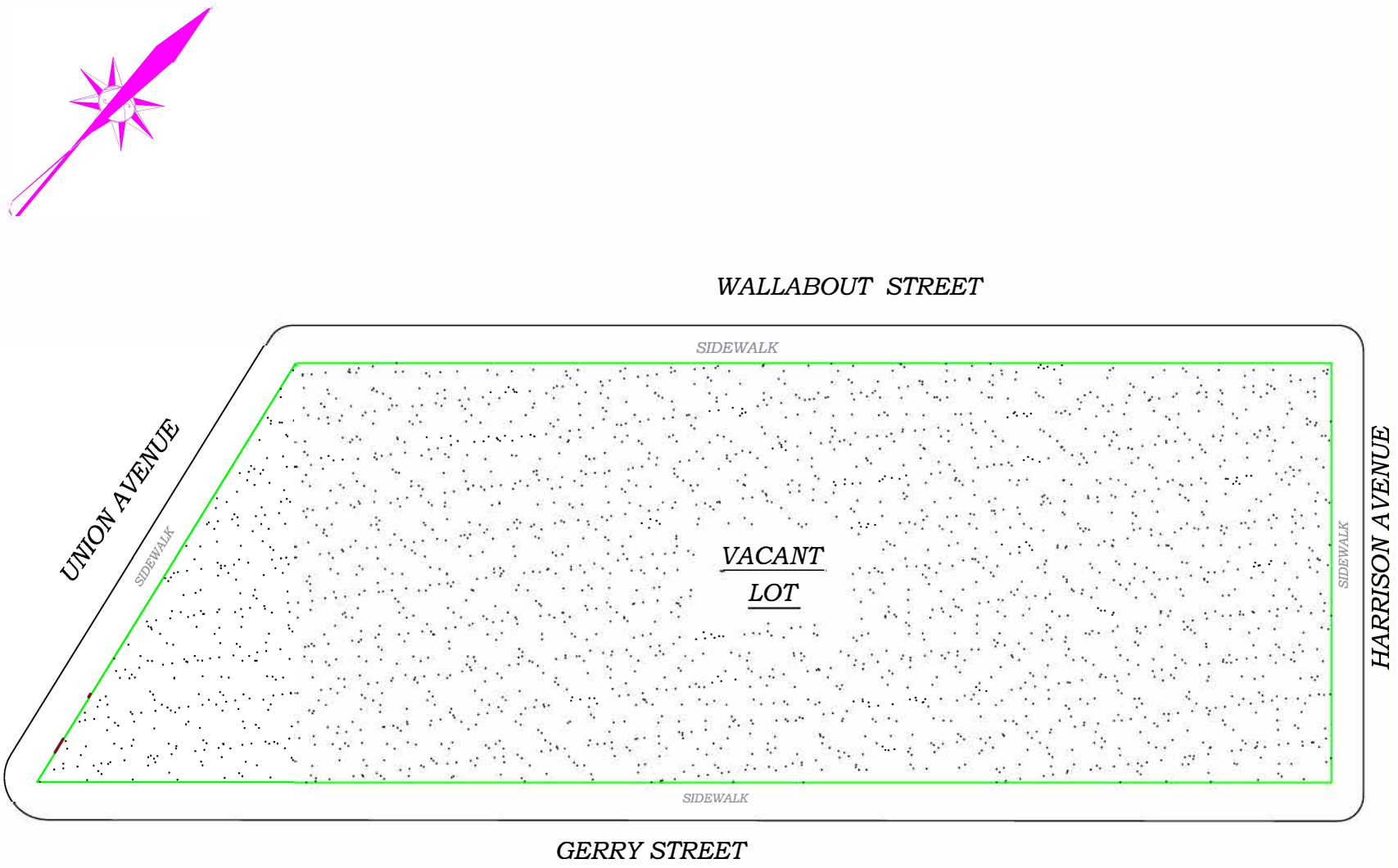


Figure 1:
Site Map

STRUCTURAL ENGINEERING TECHNOLOGIES, P.C.

CONSULTING STRUCTURAL, GEOTECHNICAL, & ENVIRONMENTAL ENGINEERS

40-12 28TH STREET
LONG ISLAND CITY, NY 11101
T:(718)706-7196 Email: info@set-ny.com

OWNER:

NO.	DATE	DESCRIPTION

REVISIONS:

FILINGS:

PROJECT

FORMER PFIZER SITE C

DRAWING TITLE:

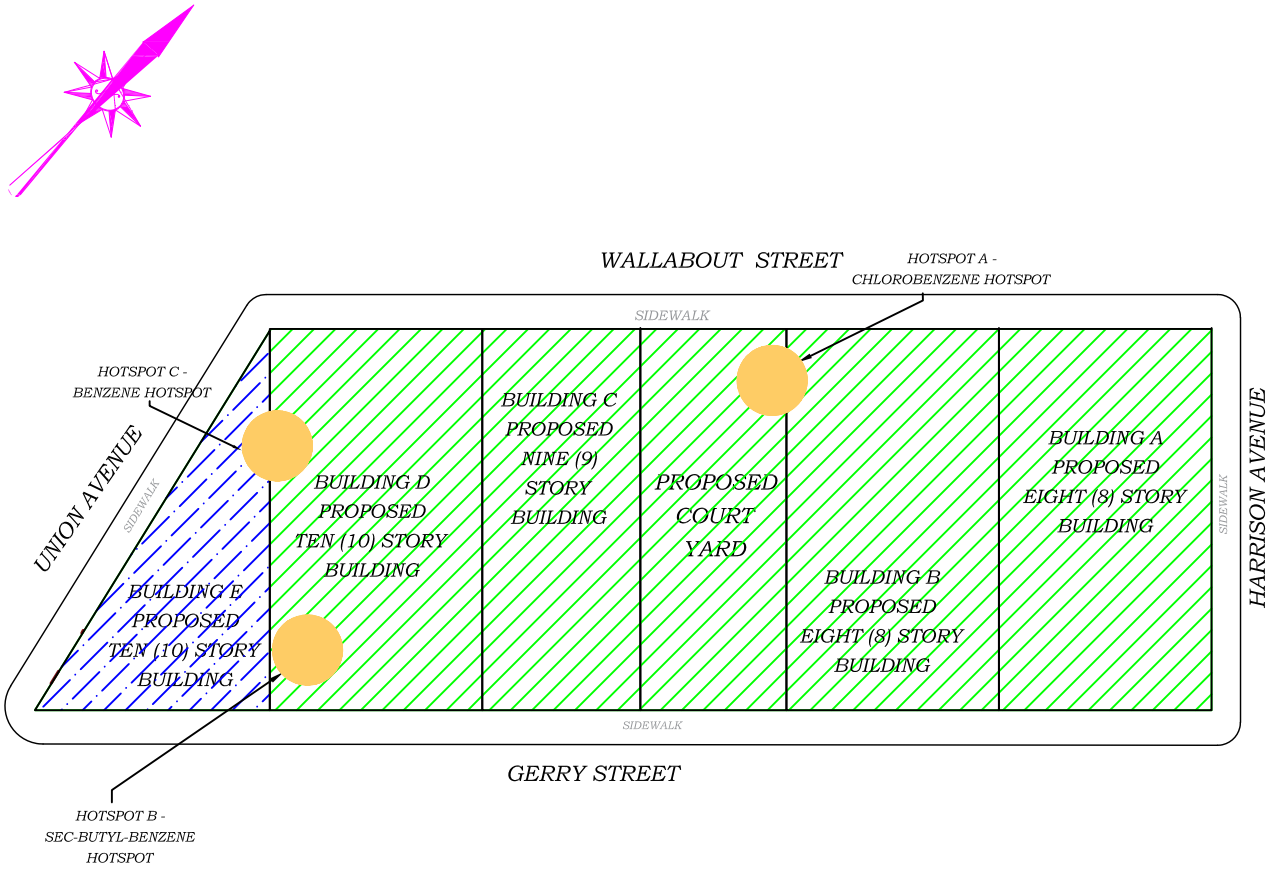
SEAL & SIGNATURE

DATE: 02-08-21
PROJECT NO:
SCALE: AS NOTED
DRAWING BY: A.M.C.
CHECKED BY: G.J.C.
DWGNO:
SHEETNO: OF 20

BSCAN STICKER

DOB APPROVAL STAMP

NYSDEC BCP
SITE # C224288



LEGEND:

AREA TO BE EXCAVATED TO 9 FEET BELOW GRADE

AREA TO BE EXCAVATED TO 2 FEET BELOW GRADE

HOT SPOTS TO BE EXCAVATED TO 17 FEET BELOW GRADE

0' 60' 120'
SCALE IN FEET (FT.)

STRUCTURAL ENGINEERING TECHNOLOGIES, P.C.

CONSULTING STRUCTURAL, GEOTECHNICAL, & ENVIRONMENTAL ENGINEERS

40-12 28TH STREET
LONG ISLAND CITY, NY 11101
T:(718)706-7196 Email: info@set-ny.com

OWNER:

NOTE:

STRUCTURAL ENGINEERING TECHNOLOGIES, P.C. HAS NOT BEEN RETAINED TO PERFORM CONTROLLED INSPECTIONS OF ANY KIND FOR THIS PROJECT.

THE DESIGN PROFESSIONAL SHALL BE RELEASED FROM ANY AND ALL LIABILITY IN THE COMMENCEMENT OF ANY WORK PERFORMED WITHIN THESE DOCUMENTS PRIOR TO OBTAINING ALL REQUIRED PERMITS FROM THE RESPECTIVE JURISDICTIONAL AGENCIES

NO.	DATE	DESCRIPTION

REVISIONS:

FILINGS:

PROJECT

334 WALLABOUT STREET, BROOKLYN, N.Y. 11206

DRAWING TITLE:

Figure 2
Excavation Plan

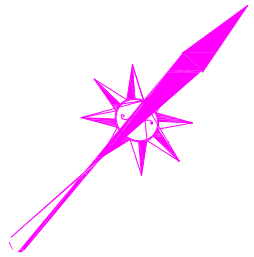
SEAL & SIGNATURE

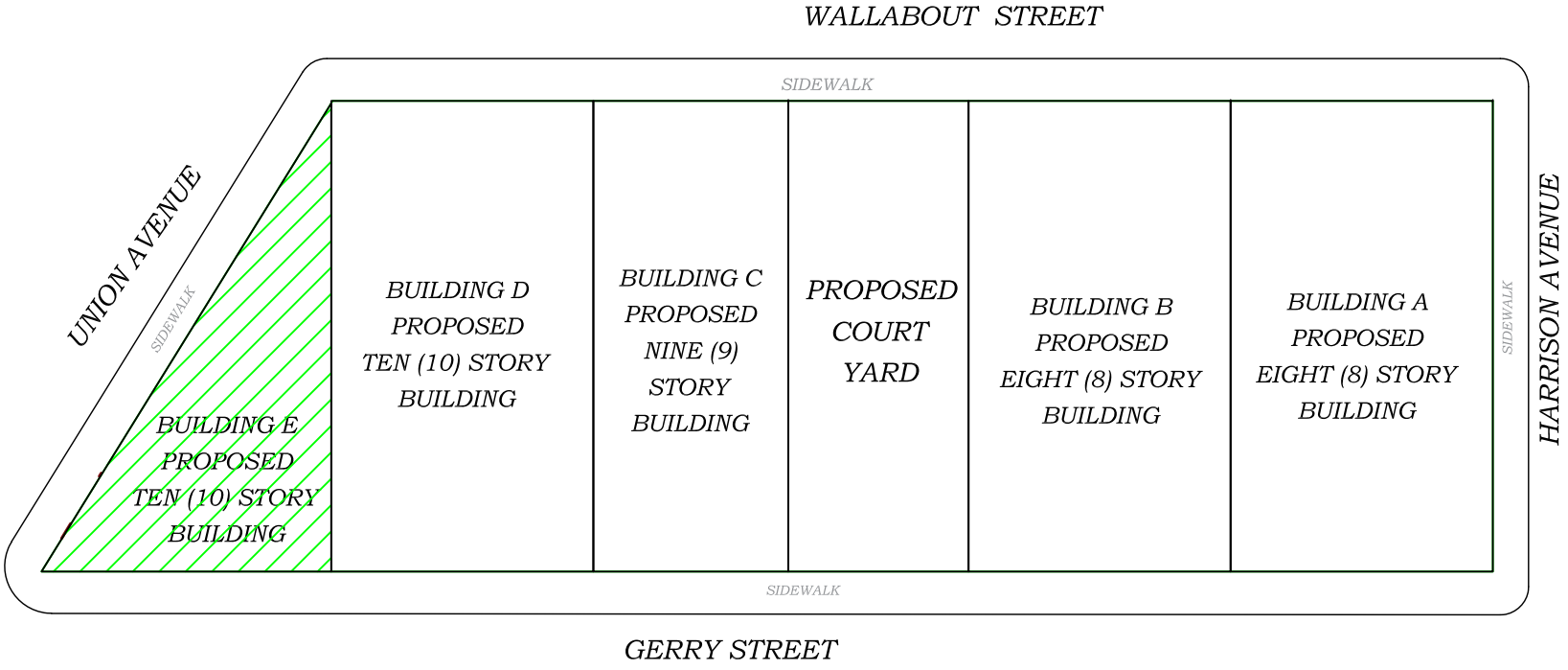
DATE: 02-08-21
PROJECT NO:
SCALE: AS NOTED
DRAWING BY: A.M.C.
CHECKED BY: G.J.C.
DWG NO:
SHEET NO: OF 20

BSCAN STICKER

DOB APPROVAL STAMP

NYSDEC BCP
SITE # C224288





LEGEND:

CONCRETE COVER SYSTEM OVER TRACK 4 AREA

0' 60' 120'
SCALE IN FEET (FT.)

STRUCTURAL ENGINEERING TECHNOLOGIES, P.C.

CONSULTING STRUCTURAL, GEOTECHNICAL, & ENVIRONMENTAL ENGINEERS

40-12 28TH STREET
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OWNER:

NOTE:

STRUCTURAL ENGINEERING TECHNOLOGIES, P.C. HAS NOT BEEN RETAINED TO PERFORM CONTROLLED INSPECTIONS OF ANY KIND FOR THIS PROJECT.

THE DESIGN PROFESSIONAL SHALL BE RELEASED FROM ANY AND ALL LIABILITY IN THE COMMENCEMENT OF ANY WORK PERFORMED WITHIN THESE DOCUMENTS PRIOR TO OBTAINING ALL REQUIRED PERMITS FROM THE RESPECTIVE JURISDICTIONAL AGENCIES

NO.	DATE	DESCRIPTION

REVISIONS:

FILINGS:

PROJECT

334 WALLABOUT STREET,
BROOKLYN, N.Y. 11206

DRAWING TITLE:

Figure 3
Cover Diagram

SEAL & SIGNATURE

DATE: 02-08-21
PROJECT NO:
SCALE: AS NOTED
DRAWING BY: A.M.C.
CHECKED BY: G.J.C.
DWG NO:
SHEET NO: OF 20

BSCAN STICKER

DOB APPROVAL STAMP