

February 17, 2021

Mandy Yau NYSDEC Division of Environmental Remediation, Region 2 47-40 21<sup>st</sup> Street, Long Island City, NY 11101

Re: RAWP Amendment – Former Pfizer Site A NYSDEC Brownfield Cleanup Program Site (C224284) 243-271 Wallabout Street, Brooklyn, New York

Dear Ms. Yau,

As a follow up to our January 27, 2021 conference call, where it was discussed the proposed changes in the Track Clean up Objective at a portion of the property, below is the narrative of the items that are being modified.

Please, let me know if you require any additional information.

Thanks

Cc:

Ariel Czemerinski, AMC Engineering

**EBC** 

Jane O'Connel, Chief, DER, NYSDEC

Linda Shaw, Esq.

#### **INTRODUCTION:**

The January 2020 Remedial Action Work Plan approved by the NYSDEC on January 13, 2020, provided an Alternatives Analysis that evaluated a Track 1 Cleanup (Alternative 1), a Track 2 Cleanup (Alternative 2), and a Track 4 Cleanup (Alternative 3). The remedy recommended for the Site within the RAWP was a Track 1 remedy (Alternative 1) which was to consist of the removal of all on-Site soil in exceedance of Track 1 Unrestricted Use Soil Cleanup Objectives (SCOs). It was expected that the Track 1 alternative would require excavation across the Site to a depth of 5 to 8 feet below grade with additional excavation to up to 10 feet below grade in some hotspot areas (HSA and HSC). All D008 Hazardous Lead soil/fill and all non-hazardous fill material with parameters above Unrestricted Use SCOs would be removed from the Site and properly disposed of at off-site facilities. The redevelopment plan described within the January 2020 Remedial Action Work Plan specifies excavation of the entire Site to depths as great as 15ft for a full height cellar.

Due to presence of a subway tunnel along Union Avenue, the Volunteer has determined the cost to install shoring along Union Avenue too prohibitive to include a cellar below the new buildings along Union Avenue (Building C and Building D). Therefore, limited excavation to 4 to 5ft is now proposed for the pile caps, grade beams, and footings for slab-on grade Building C and Building D. Excavation to a depth of approximately 15 ft for the remaining portion of the Site has been completed and the results of the endpoint soil samples collected from the area now designated as the Track 1 portion of the Site indicate the area as achieved a Track 1 cleanup.

This RAWP Amendment letter has been prepared to amend the January 2020 Remedial Action Work Plan to allow for a portion of the Site (55,377 ft²) to achieve Track 1 unrestricted use and the remedy for the remaining portion of the Site (15,928 ft²) along Union Avenue to achieve a Track 4 cleanup.

The Track 4 portion of the Site will require an Environmental Easement and a Site Management Plan. A soil vapor intrusion evaluation consisting of the collection and laboratory analysis of sub-slab soil gas samples and indoor air samples will be required for new Building C and new Building D which will be constructed on the Track 4 portion of the Site. Methods/procedures will be detailed in a Soil Vapor Intrusion Evaluation Work Plan to be submitted following construction of Building C and Building D.

Removal of D008 Hazardous Lead soil/fill from the two D008 Lead hotspots (HSA and HSB) located within the Track 4 area will be completed and bottom endpoint soil samples will be collected for laboratory analysis of Lead and TCLP lead to determine effectiveness of the remedial excavation. Figure 15A of the January 2020 Remedial Action Work Plan has been revised to depict the endpoint sampling locations (see attached). Site-wide endpoints are to be collected from the Track 4 portion of the Site following excavation for the pile caps, footings and grade beams for Building C and Building D in accordance with Figure 12 of the January 2020 Remedial Action Work Plan.

Amended figures and new figures added to the January 2020 Remedial Action Work Plan are attached.

#### **AMENDMENTS:**

Amendments to text of the January 2020 Remedial Action Work Plan are detailed below:

Section **1.2 Contemplated Redevelopment Plan** has been revised to the following:

The redevelopment project consists of the construction of four new mixed-use buildings. A description of each of the new buildings is provided below.

- Building A will be constructed on new Lot 41 and has been designated with the street address 269 Wallabout Street. Building A will be an 8-story, mixed use (residential, commercial, community facility) building with a full cellar. New Lot 41 is a rectangular shaped lot consisting of 200 ft of street frontage along Harrison Avenue and a depth of 100ft along Wallabout Street and Walton Street for a total of 20,000 ft<sup>2</sup>. Excavation to a depth of approximately 15ft will be required for the entire area of new Lot 41 for the Building A cellar.
- Building B will be constructed on new Lot 37 and has been designated with the street addresses 251 Wallabout Street and 58 Walton Street. Building B will be an 8-story, mixed use (residential, commercial, community facility) building with a full cellar. New Lot 37 is a rectangular shaped lot consisting of 160 ft of street frontage along both Walton Street and Wallabout Street for a total of 32,000 ft<sup>2</sup>. Excavation to a depth of approximately 15ft will be required for the entire area of new Lot 41 for the Building A cellar.
- Building C will be constructed on new Lot 23 and has been designated with the street address 58 Union Avenue. Building C will be a slab-on grade, 9-story, mixed use (residential, commercial, community facility) building. New Lot 23 is a slightly irregular, triangular shaped lot consisting of 145.29 ft of street frontage along Union Avenue and 8.35 ft of street frontage along Walton Street. With the exception of the area occupied by the NYC Transit Easement Stairs, excavation to a depth of approximately 4 to 5ft will be required across entire new Lot 41 for the grade beams, pile caps, and footings for the slab-on grade foundation for Building C.
- Building D will be constructed on new Lot 122 and has been designated with the street address 34 Union Avenue. Building D will be a slab-on grade, 12-story, mixed use (residential, commercial, community facility) building. New Lot 122 is a triangular

shaped lot consisting of 121.46 ft of street frontage along Union Avenue and 183.46 ft of street frontage along Wallabout Street. Excavation to a depth of approximately 4 to 5ft will be required across entire new Lot 122 for the grade beams, pile caps, and footings for the slab-on grade foundation for Building D.

The proposed development is compatible with the existing R7A and R8A zoning. For remedial purposes, an estimated 8,300 tons of D008 Hazardous Lead soil/fill be excavated/removed from the five lead hotspots, an estimated 15,100 tons of non-hazardous soil/fill will be excavated/removed to a depth of approximately 8 ft across the Track 1 portion of the Site, and an estimated 4,000 tons of non-hazardous soil/fill will be excavated and removed to a depth of approximately 4 to 5 ft across the Track 4 portion of the Site. An additional 20,000 tons of soil excavated from 8 to 15 feet in the Track 1 portion of the Site where a cellar is planned will likely consist of clean soil pending sampling results below the fill material layer. Groundwater was found at the Site at depths ranging between 7 to 9 ft below grade. Therefore, SOE and dewatering will be required during remediation and construction to remove contaminated soil/fill at/below the groundwater interface.

The **Summary of the Remedy** within the Executive Summary, and Section **3.8 Summary of Selected Remedial Actions** has been revised to the following:

The preferred remedy for the Site consists of the Track 1 alternative (Alternative 1) for a portion of the Site  $(55,377 \text{ ft}^2)$  and the Track 4 alternative (Alternative 3) for the remaining portion of the Site  $(15,928 \text{ ft}^2)$ .

#### Track 1 Area

The Track 1 portion of the Site requires the removal of all soil which exceeds Unrestricted Use SCOs. The Track 1 alternative requires excavation of the entire Track 1 portion of the Site to a depth of 5 to 8 feet below grade with additional excavation to 7 ft in some hotspot areas (HSC, HSD, and HSE) to achieve Unrestricted Use SCOs to remove soil/fill with contaminants above Unrestricted Use SCOs. All D008 Hazardous Lead soil/fill and fill material with parameters above Unrestricted Use SCOs will be removed from the Site and properly disposed of at off-site facilities.

The Track 1 remedy will include the following items:

- 1. Excavation of soil/fill exceeding Track 1 Unrestricted Use SCOs as listed in Table 1 to a depth of 5 to 8 feet across the Track 1 portion of the Site to remove all D008 Hazardous Lead soil/fill and non-hazardous historic fill material and additional excavation to 7 ft in some hotspot areas (HSC, HSD, and HSE) as needed to meet Track 1 Unrestricted Use SCOs;
- 2. Screening for indications of contamination (by visual means, odor, and monitoring with PID) of all excavated soil during any intrusive Site work;
- 3. Collection and analysis of end-point samples to evaluate the performance of the remedy with respect to attainment of Track 1 Unrestricted Use SCOs;
- 4. Appropriate off-Site disposal of all material removed from the Site in accordance with all Federal, State and local rules and regulations for handling, transport, and disposal;
- 5. Installation of a dewatering system to allow for excavation/removal of fill material at/below the groundwater table, and discharge of groundwater to the NYC sewer system under a NYCDEP sewer discharge permit;
- 6. Import of materials to be used for backfill and cover in compliance with: (1) chemical limits and other specifications included in Table 1, (2) all Federal, State and local rules and regulations for handling and transport of material;
- 7. If Track 1 SCOs are not achieved, and Track 2 SCOs are not achieved, a composite cover system consisting of the concrete building slab will be constructed;
- 8. If Track 1 cleanup is not achieved, implementation of a Site Management Plan (SMP) for long term maintenance of the Engineering Controls;
- 9. If Track 1 cleanup is not achieved, an Environmental Easement will be filed against the Site to ensure implementation of the SMP.

The goal of the remedy will be to remove all soil exceeding the Track 1 Unrestricted Use SCOs on the Track 1 portion of the Site as depicted on the attached map. If Track 1 Unrestricted Use SCOs cannot be achieved, then a Track 2 or Track 4 remedy may result.

All responsibilities associated with the Remedial Action, including permitting requirements and pretreatment requirements, will be addressed in accordance with all applicable Federal, State and local rules and regulations. Remedial activities will be performed at the Site in

accordance with this NYSDEC-approved RAWP. Any anticipated deviations to the RAWP shall be submitted to the NYSDEC for review.

#### Track 4 Area

The Track 4 portion of the Site requires the removal of all D008 Hazardous Lead soil/fill and some of the historic fill material to a depth of 4 to 5 ft. All D008 Hazardous Lead soil/fill and fill material with fill material removed for redevelopment purposes will be removed from the Site and properly disposed of at off-site facilities.

*The Track 4 remedy will include the following items:* 

- 1. Excavation of all D008 Hazardous Lead soil/fill within hotspot areas HSA, HSB and HSC;
- 2. Excavation of some non-hazardous historic fill material to a depth of 4 to 5 ft;
- 3. Screening for indications of contamination (by visual means, odor, and monitoring with PID) of all excavated soil during any intrusive Site work;
- 4. Collection and analysis of end-point samples to evaluate the performance of the remedy with respect to removal of D008 Hazardous Lead soil/fill;
- 5. Appropriate off-Site disposal of all material removed from the Track 4 portion of the Site in accordance with all Federal, State and local rules and regulations for handling, transport, and disposal;
- 6. Import of materials to be used for backfill and cover in compliance with: (1) chemical limits and other specifications included in Table 1, (2) all Federal, State and local rules and regulations for handling and transport of material;
- 7. Installation of a passive sub-slab depressurization system below the vapor barrier and building slab of both Building C and Building D;
- 8. Installation of a vapor barrier below the building slab of Building C and Building D;
- 9. Perform a post-construction soil vapor intrusion evaluation within new Building C and new Building D consisting of the collection and laboratory analysis of sub-slab soil gas samples and indoor air samples. The post-construction evaluation will include a provision for implementing actions recommended to address exposures related to soil vapor intrusion within new Building C and new Building D;
- 10. A composite cover system consisting of the concrete building slabs will be constructed

across the Track 4 portion of the Site;

- 11. Implementation of a Site Management Plan (SMP) for long term maintenance of the Engineering Controls on the Track 4 portion of the Site;
- 12. An Environmental Easement will be filed against the Track 4 portion of the Site to ensure implementation of the SMP.

All responsibilities associated with the Remedial Action, including permitting requirements and pretreatment requirements, will be addressed in accordance with all applicable Federal, State and local rules and regulations. Remedial activities will be performed at the Site in accordance with this NYSDEC-approved RAWP. Any anticipated deviations to the RAWP shall be submitted to the NYSDEC for review.

## Section 5.0 Remedial Action: Material Removal From Site has been revised to the following:

Excavation work within the Track 1 portion of the Site includes the removal and off-Site disposal of soil/fill exceeding Track 1 Unrestricted Use SCOs to a depth of 5 to 8 ft to remove all D008 Hazardous Lead soil/fill and on-hazardous historic fill material and additional excavation to 7 ft in hotspot areas (HSD and HSE) as needed to meet Track 1 Unrestricted Use SCOs and Protection of Groundwater SCOs. Soil excavation will be performed using conventional equipment such as track-mounted excavators, backhoes and loaders.

Excavation within the Track 4 portion of the Site includes the removal and off-Site disposal all D008 Hazardous Lead soil/fill in hotspot areas (HSA and HSB), and removal of historic fill material to a depth of 4 to 5 ft. Soil excavation will be performed using conventional equipment such as track-mounted excavators, backhoes and loaders.

All excavation work will be performed in accordance with the Site-specific HASP and CAMP. If an underground storage tank (UST) is discovered during excavation the NYSDEC Project Manager will be immediately notified and the UST removed and closed in accordance with DER-10, NYSDEC PBS regulations and NYC Fire Department regulations. Excavation of all D008 Hazardous Lead soil/fill will be performed by an excavation contractor using appropriately trained personnel (40 hr HAZWOPER). It is anticipated that the excavation of non-hazardous fill and native soil will be performed by an excavation contractor using appropriately trained personnel (24 hr HAZWOPER).

Additional excavation for the cellar level for Building A and Building B (Track 1 portion of Site) will likely continue to a depth of approximately 15 feet. Over excavated areas will be backfilled using clean native soil excavated from other areas of the Site or imported material meeting Unrestricted Use and Protection of Groundwater SCOs. An excavation plan showing the excavation depths to achieve the Track 1 remedy is provided in Figure 11.

Dewatering will be required to remove soil/fill above Unrestricted Use SCOs at/below the groundwater table (See section 5.10)

#### Section **5.4 Estimated Material Removal Quantities** has been revised to the following:

It is estimated that a total of 50,000 tons of soil/fill will require excavation and off-Site disposal for the cellar for Buildings A and B, and foundations for Buildings C and D. For remedial purposes, an estimated 8,300 tons of D008 Hazardous Lead soil/fill be excavated/removed from the five lead hotspots, an estimated 15,100 tons of non-hazardous soil/fill will be excavated/removed to a depth of approximately 8 ft across the Track 1 portion of the Site, and an estimated 4,000 tons of non-hazardous soil/fill will be excavated/removed to a depth of approximately 4 to 5 ft across the Track 4 portion of the Site. An additional 20,000 tons of soil excavated from 8 to 15 feet in the Track 1 portion of the Site where a cellar is planned will likely consist of clean soil pending sampling results below the fill material layer. Clean native soil, which may be reused, if found to be suitable, to backfill behind shoring installed around the perimeter of Site, or in over-excavated areas. The remainder of clean soil will be transported off-Site for disposal at a beneficial reuse facility or other approved destination.

#### Section **6.0 Residual Contamination to Remain On-Site** has been revised to the following:

#### Track 1 Area

If a Track 1 cleanup is achieved on the Track 1 portion of the Site, all soil remaining after completion of remediation will meet Track 1 Unrestricted Use SCOs, and an Institutional Control (IC) will not be required to protect human health and the environment.

However, if a Track 1 cleanup is not achieved for the Track 1 portion of the Site, the Track 2 alternative will be implemented as a contingency and an IC will be required for the Track 2

portion of the Site. The Track 2 alternative will allow Restricted Residential use of the Track 2 portion of the property. Long-term management of the IC will be executed under an environmental easement recorded with the NYC Department of Finance, Office of the City Register.

If Track 1 is not achieved for the Track 1 portion of the property, long-term management of ICs and of residual contamination will be executed under a Site-specific Site Management Plan (SMP) that will be developed and submitted to DEC, if needed. The FER will report residual contamination on the Site in tabular and map form.

#### Track 4 Area

The Track 4 portion of the Site will have residual historic fill material with SVOCs and metals at concentrations above Restricted Residential SCOs immediately below the Building C and Building D building slabs, requiring both an engineering control (EC) and an institutional control (IC). The Track 4 portion of the Site will allow restricted residential use of the property. Long-term management of the IC will be executed under an environmental easement recorded with the NYC Department of Finance, Office of the City Register.

Long-term management of ICs/ECs on the Track 4 portion of the Site, and of residual contamination, will be executed under a site-specific Site Management Plan (SMP) that will be developed and submitted to DEC. The FER will report residual contamination on the Site in tabular and map form.

#### Section **7.0 Engineering Controls** has been revised to the following:

#### Track 1 Area

If a Track 1 Cleanup cannot be achieved for the portion of the project proposed to achieve a Track 1, then a Track 2 Restricted Residential cleanup is proposed. If neither a Track 1 nor Track 2 Cleanup can be achieved, then a Track 4 Cleanup will be achieved.

If a Track 4 remedy is achieved, the Track 1 portion of the project will be restricted to Restricted-Residential, Commercial and Industrial uses and a site cover may be required to allow for the intended use of the Site. The cover will consist either of the structures such as buildings, pavement, sidewalks comprising the site development or two feet of soil meeting the SCOs as set forth in 6 NYCRR Part 375-6.7(d) and Table 375-6.8(b). The soil cover will be placed over a demarcation layer, with the upper six inches of the soil of sufficient quality to maintain a vegetation layer. Any fill material brought to the Site will meet the requirements for the identified site use as set forth in 6 NYCRR Part 375-6.7(d).

#### Track 4 Area

The Track 4 portion of the Site will be restricted to Restricted-Residential, Commercial and Industrial uses and a site cover will be required to allow for the intended use of the Site. The cover will consist either of the structures such as buildings, pavement, sidewalks comprising the site development or two feet of soil in landscaped areas meeting the SCOs as set forth in 6 NYCRR Part 375-6.7(d) and Table 375-6.8(b). Any soil cover in landscaped areas will be placed over a demarcation layer, with the upper six inches of the soil of sufficient quality to maintain a vegetation layer. Any fill material brought to the Site will meet the requirements for the identified site use as set forth in 6 NYCRR Part 375-6.7(d).

#### Section **8.0 Institutional Controls** has been revised to the following:

#### Track 1 Area

Institutional controls are not expected to be part of the final remedy for the Track 1 portion of the Site. If a Track 1 cleanup is not achieved, ICs will be incorporated into the remedy to render the overall Site remedy protective of public health and the environmental. Two elements have been designed to ensure continual and proper management of residual contamination in perpetuity: an Environmental Easement and a SMP.

If required, a Site-Specific Environmental Easement will be recorded with the City of New York to provide an enforceable means of ensuring the continual and proper management of residual contamination and protection of public health and the environment in perpetuity or until released in writing by NYSDEC. It requires that the grantor of the Environmental Easement and the grantor's successors and assigns adhere to all Engineering and Institutional Controls (ECs/ICs) placed on the Site by this NYSDEC-approved remedy. ICs provide restrictions on Site usage and mandate operation, maintenance, monitoring and reporting measures for all ECs and ICs.

The SMP describes appropriate methods and procedures to ensure compliance with all ECs and ICs that are required by the Environmental Easement. Once the SMP has been approved by the NYSDEC, compliance with the SMP is required by the grantor of the Environmental Easement and grantor's successors and assigns.

#### Track 4 Area

An IC will be part of the final remedy for the Track 4 portion of the Site. Institutional Controls will be incorporated into the remedy to render the Track 4 portion of the Site remedy protective of public health and the environment. Two elements have been designed to ensure continual and proper management of residual contamination in perpetuity: an Environmental Easement and a Site Management Plan (SMP).

A Site-Specific Environmental Easement will be recorded with the City of New York to provide an enforceable means of ensuring the continual and proper management of residual contamination and protection of public health and the environment in perpetuity or until released in writing by NYSDEC. It requires that the grantor of the Environmental Easement and the grantor's successors and assigns adhere to all Engineering and Institutional Controls (ECs/ICs) placed on the Site by this NYSDEC-approved remedy. ICs provide restrictions on the Track 4 area usage and mandate operation, maintenance, monitoring and reporting measures for all ECs and ICs.

The SMP describes appropriate methods and procedures to ensure compliance with all ECs and ICs that are required by the Environmental Easement. Once the SMP has been approved by the NYSDEC, compliance with the SMP is required by the grantor of the Environmental Easement and grantor's successors and assigns.

## **REVISED FIGURES**

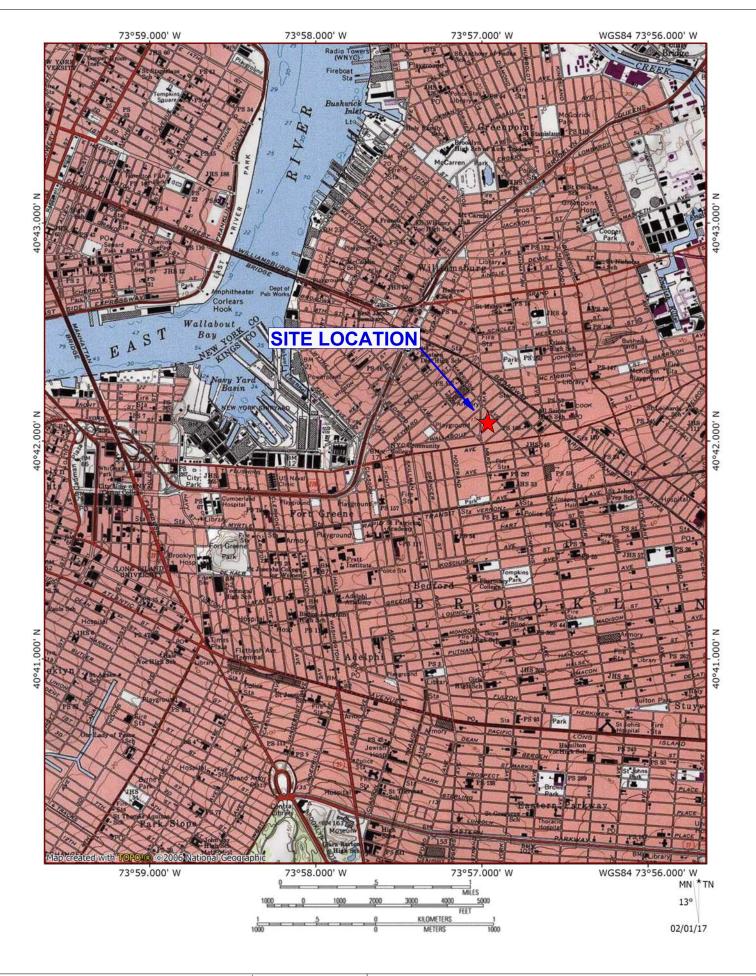
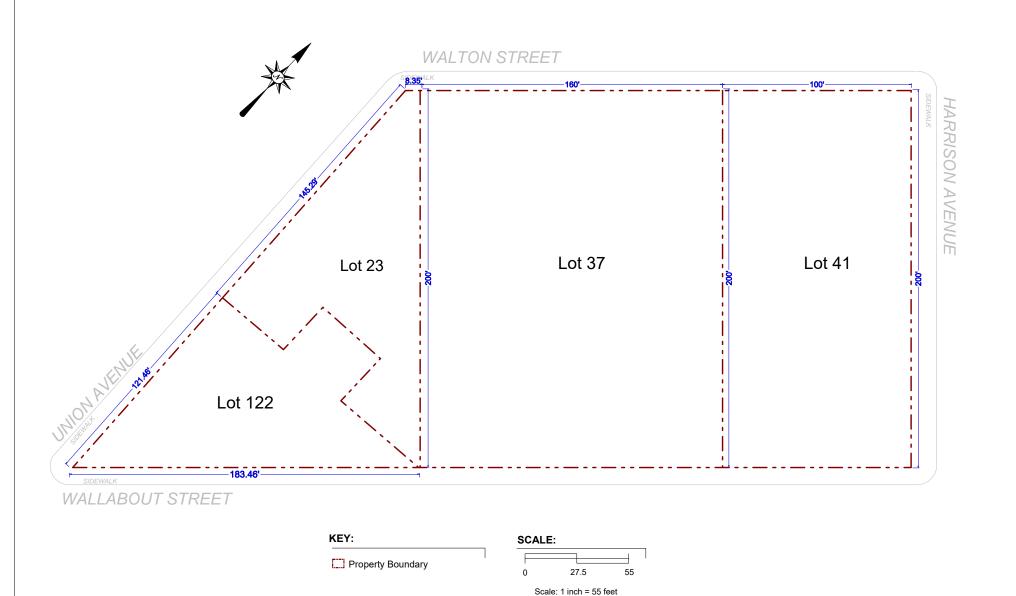


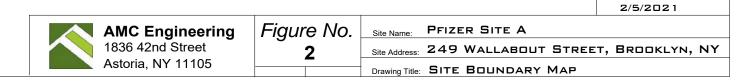
Figure No.
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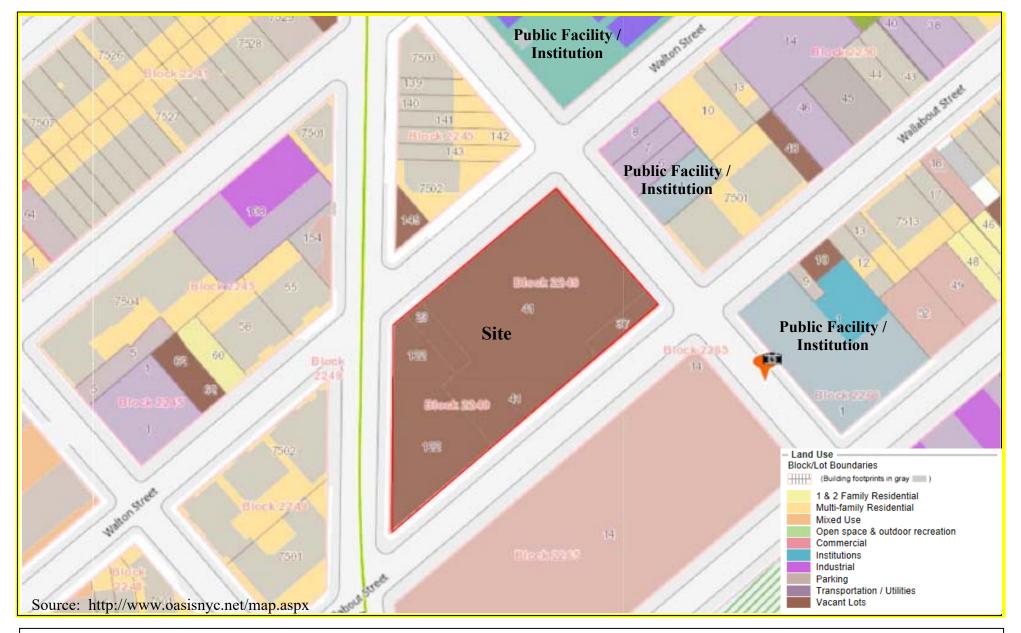
Site Name: PFIZER

Site Address: 249 WALLABOUT STREET, BROOKLYN, NY

Drawing Title: SITE LOCATION MAP







# FIGURE 3 SURROUNDING LAND USE MAP

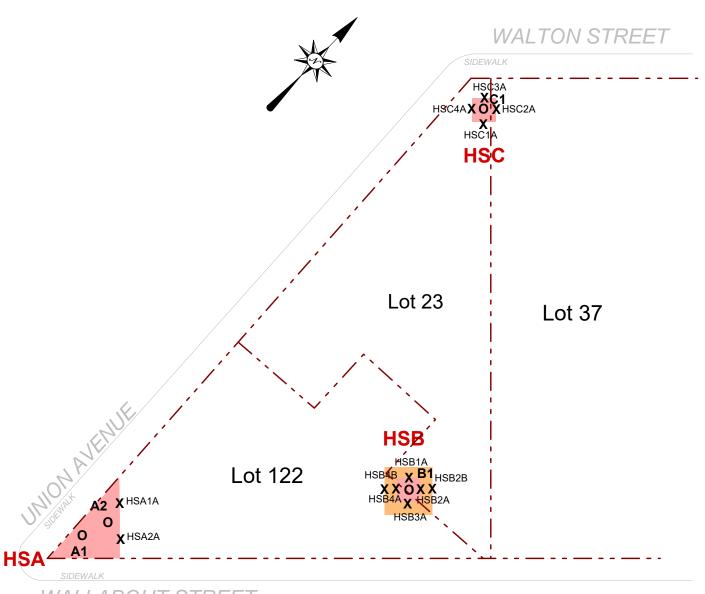
249 WALLABOUT STREET, BROOKLYN, NY



2/5/2021

ENVIRONMENTAL BUSINESS CONSULTANTS
1808 MIDDLE COUNTRY ROAD, RIDGE, NEW YORK 11961
PHONE: (631) 504-6000 FAX: (631) 924-2870

Phone 631.504.6000 Fax 631.924.2870 FAX 631.924.2870 FAX FIGURE 4A Site Name: PFIZER SITE A
Site Name: PFIZER SITE A
Site Address: 249 WALLABOUT STREET, BROOKLYN, NY
Drawling Title: SITEWIDE SOIL SAMPLING LOCATIONS



### WALLABOUT STREET

#### KEY: SCALE: Property Boundary O Vertical Delineation Boring X Horizontal Delineation Boring Scale: 1 inch = 40 feet

2/5/2021



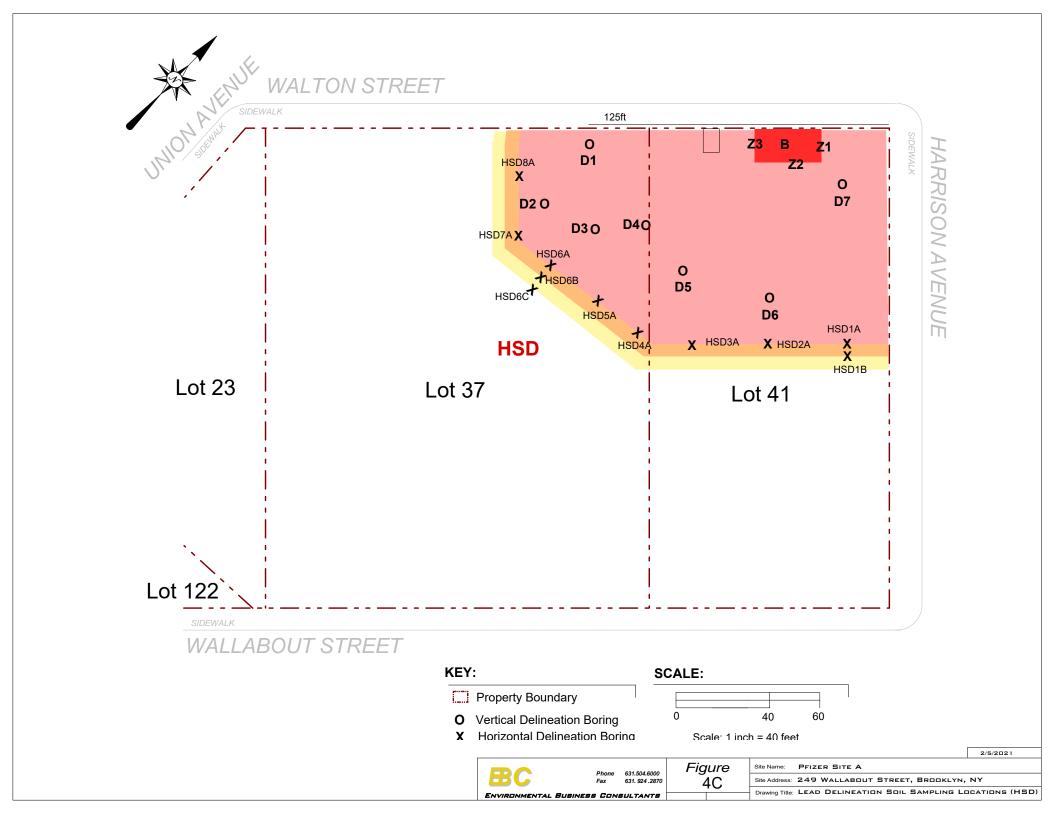
Environmental Business Consultants

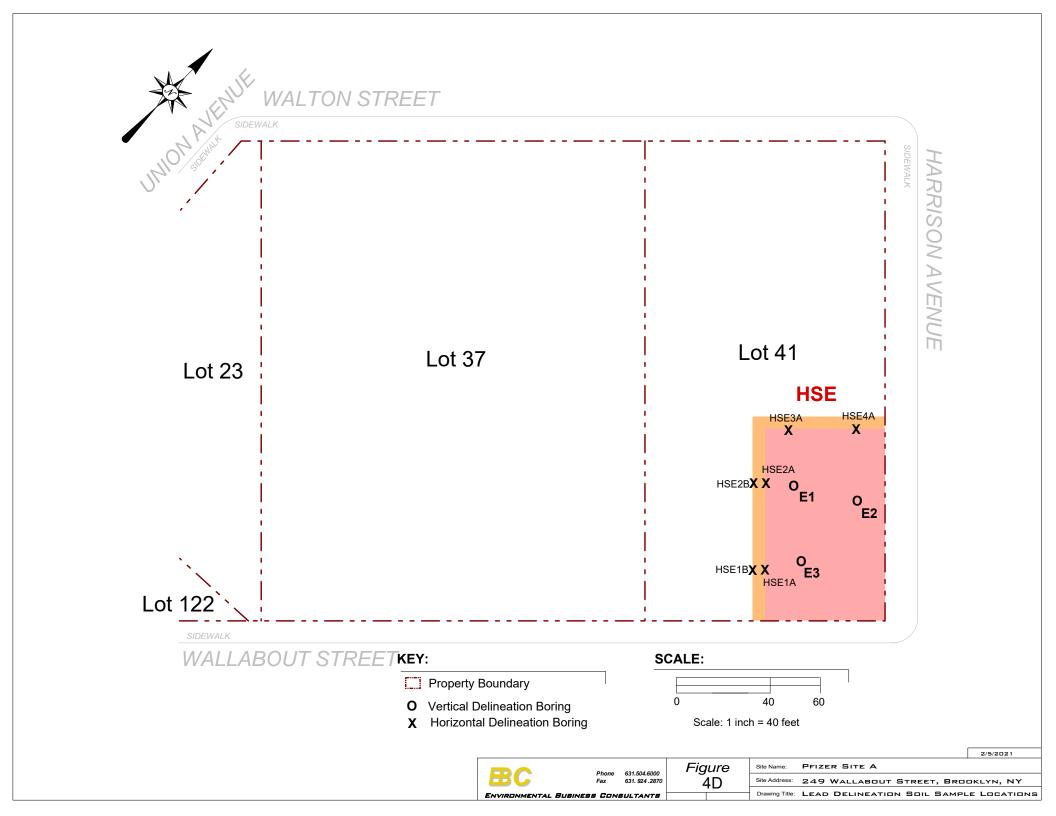
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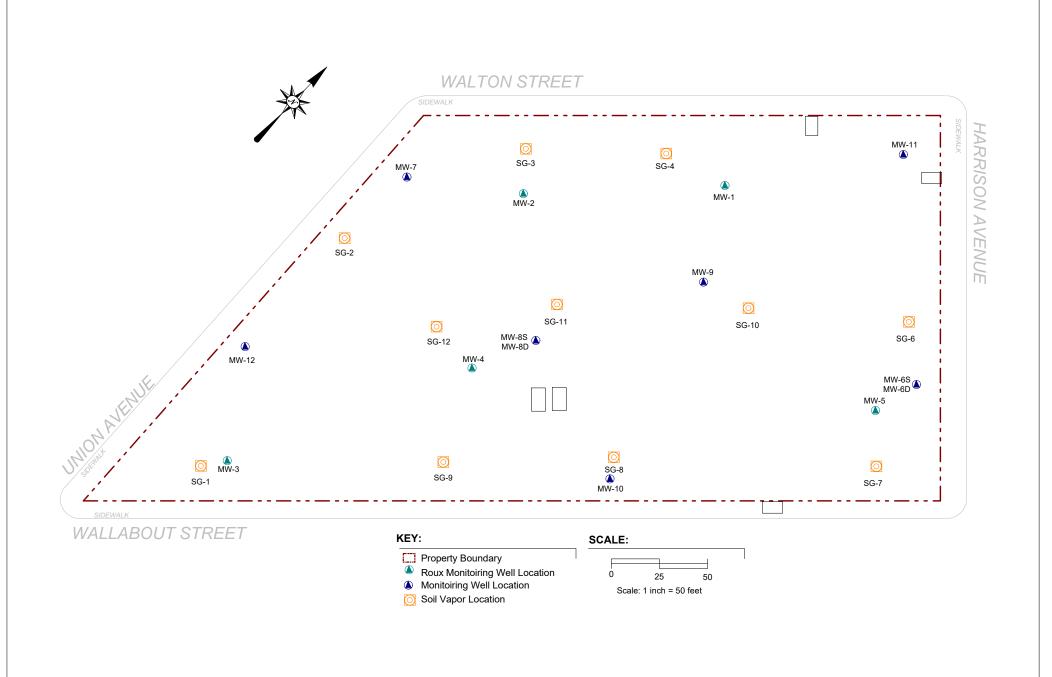
Site Name: PFIZER SITE A

249 WALLABOUT STREET, BROOKLYN, NY

Drawing Title: LEAD DELINEATION SOIL SAMPLING LOCATIONS (HSA, HSB, HSC)



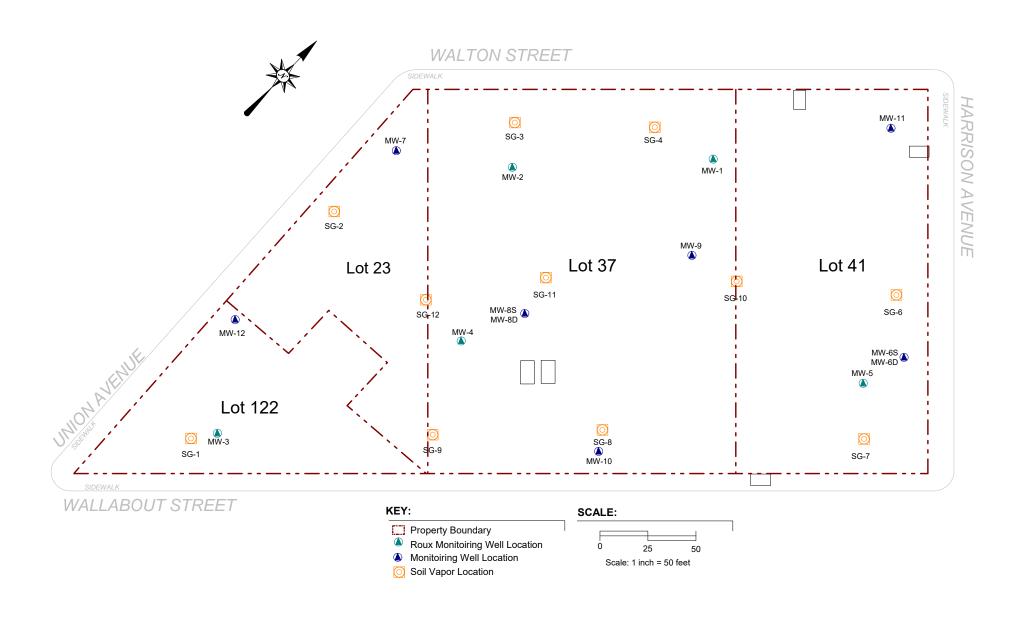




Phone 631.504.6000 Fax 631.924.2870 Site Name: PFIZER SITE A
Site Address: 249 WALLABOUT STREET, BROOKLYN, NY

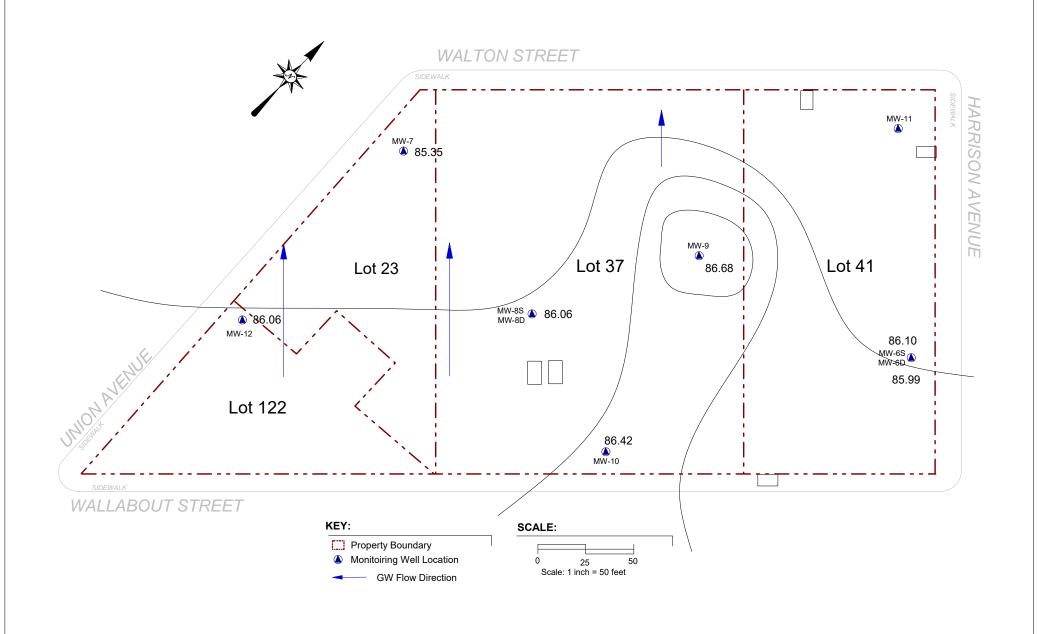
ENVIRONMENTAL BUBINESS CONSULTANTS

Drawing Title: GROUNDWATER AND SOIL VAPOR SAMPLING LOCATIONS

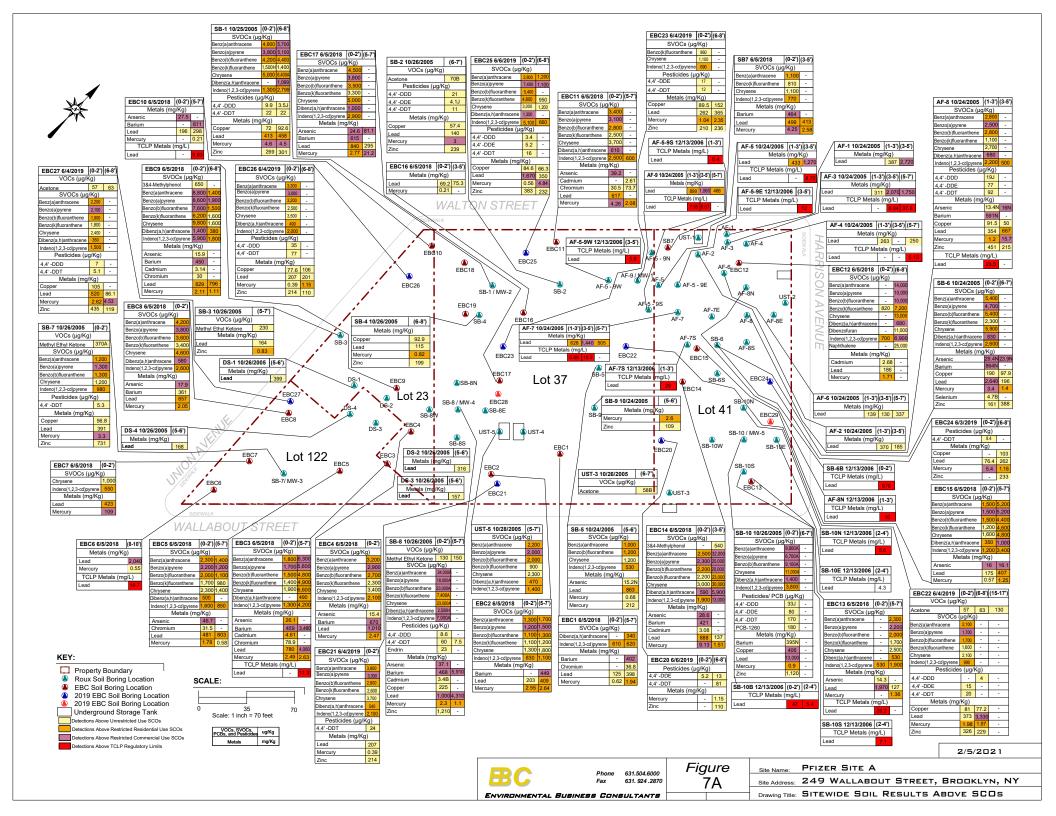


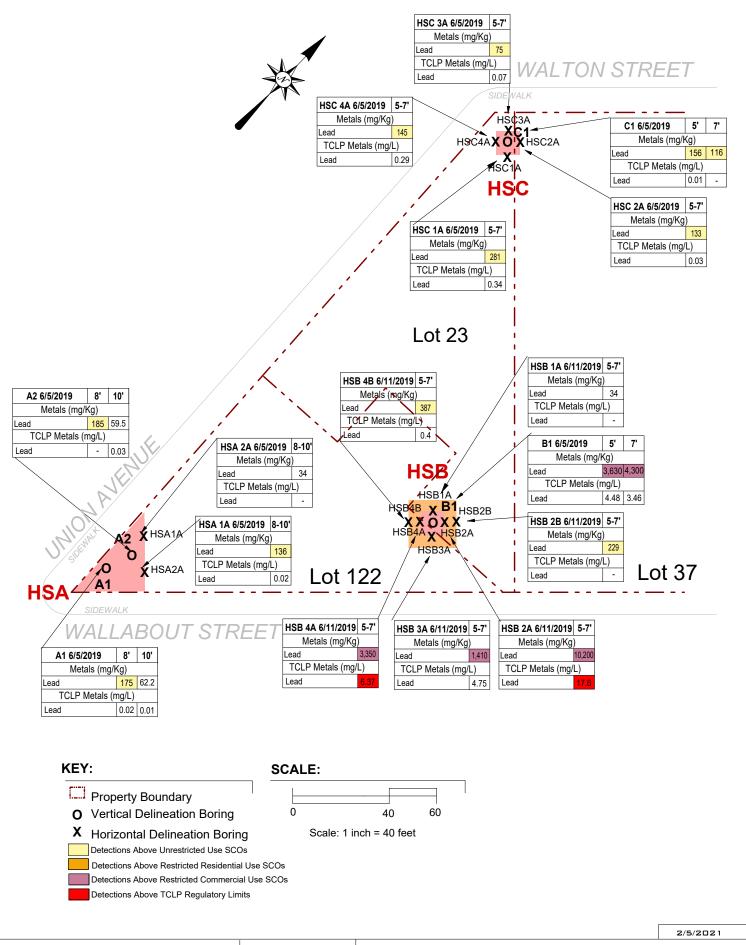
Phone 631.504.6000
Fax 631.924.2870
ENVIRONMENTAL BUBINESS CONSULTANTS

Figure
5 Site Name: PFIZER SITE A
Site Address: 249 WALLABOUT STREET, BROOKLYN, NY
Drawing Title: GROUNDWATER AND SOIL VAPOR SAMPLING LOCATIONS









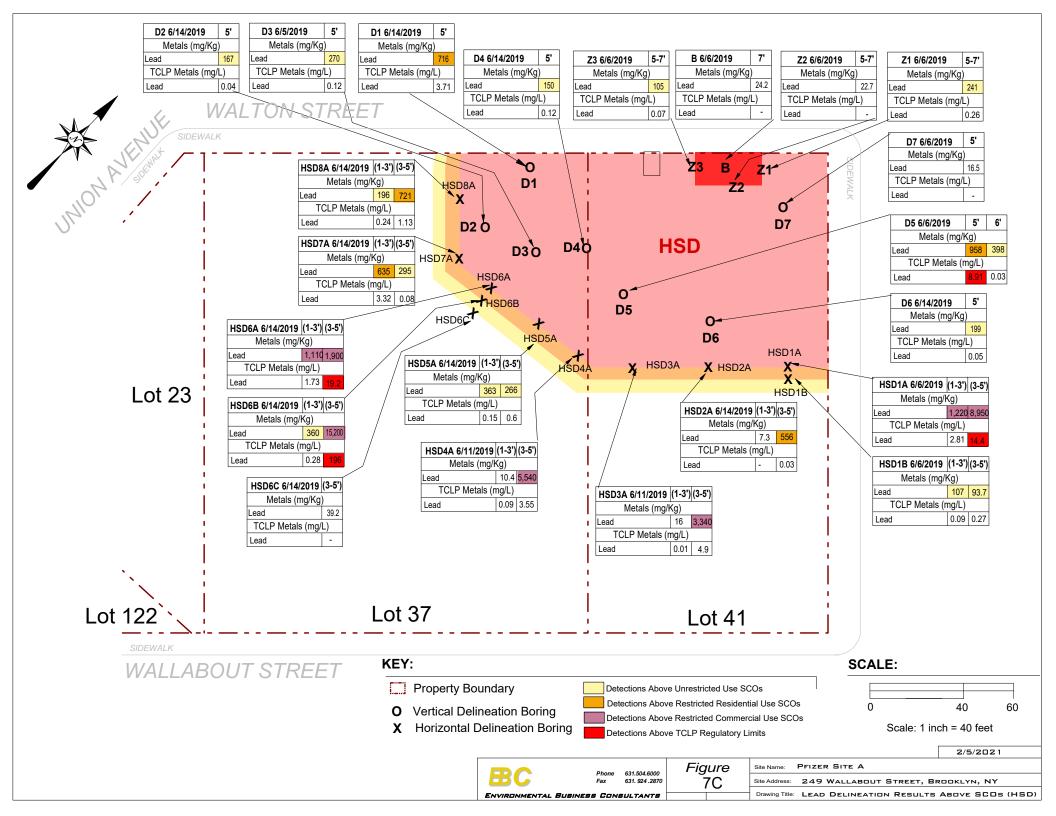
Fax 631. 924.287

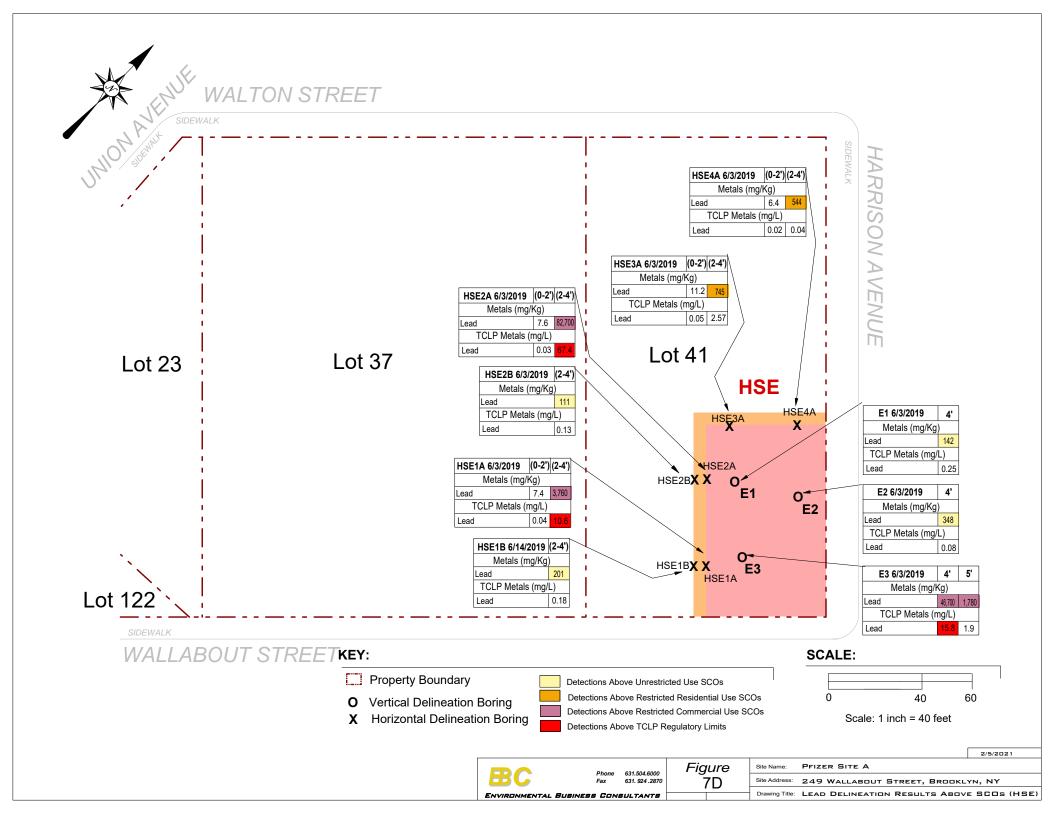
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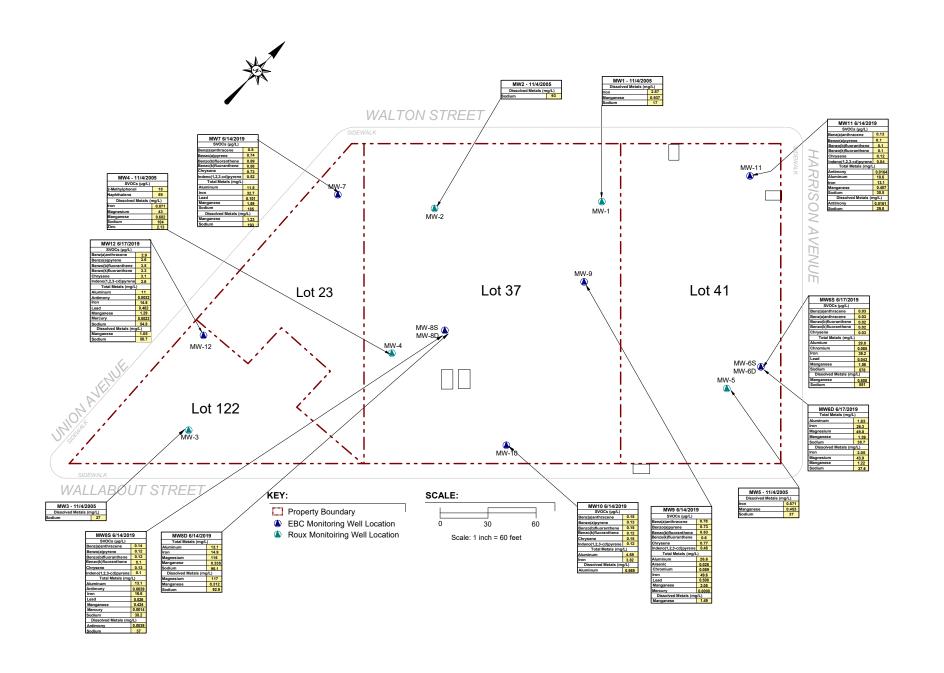
Site Name: PFIZER SITE A

Site Address: 249 WALLABOUT STREET, BROOKLYN, NY

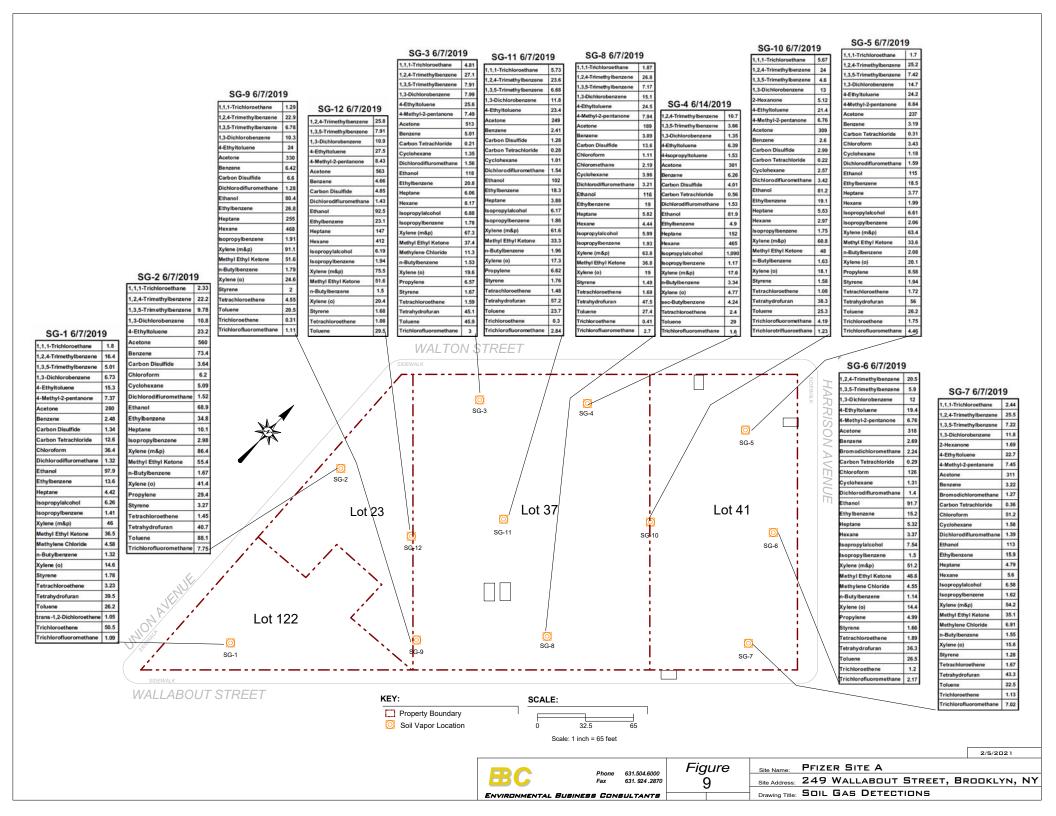
Drawing Title: LEAD DELINEATION RESULTS ABOVE SCOS (HSA, HSB, HSC)

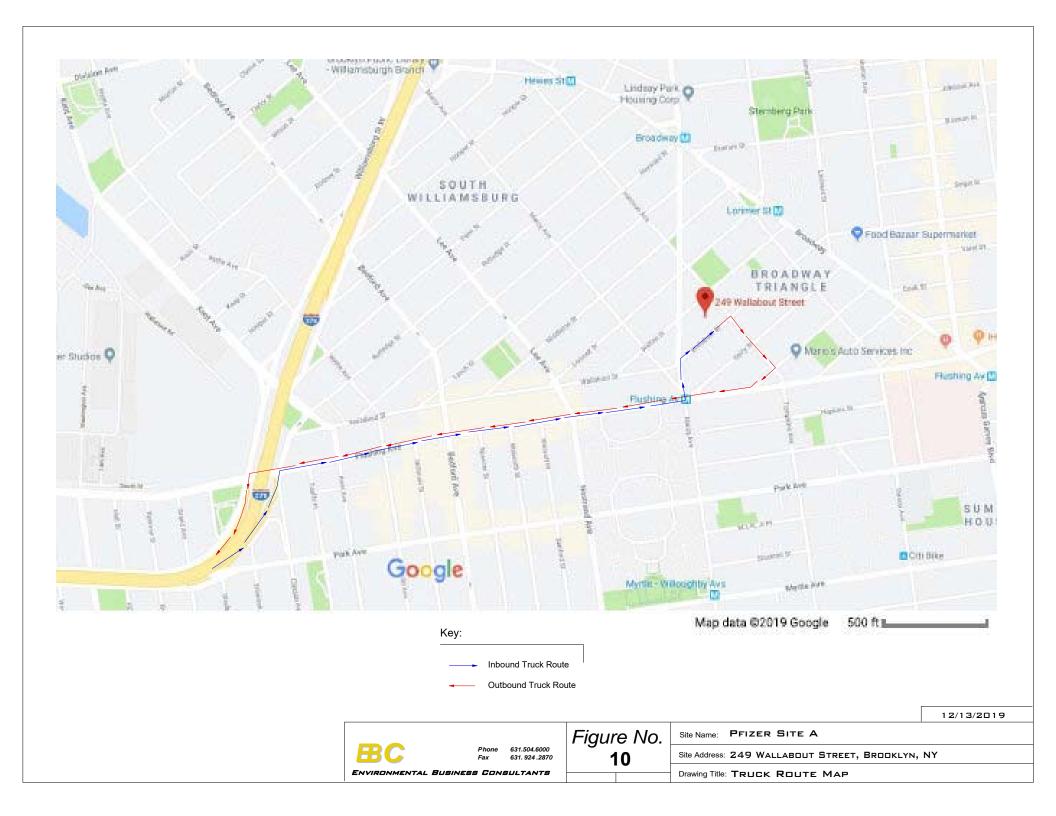


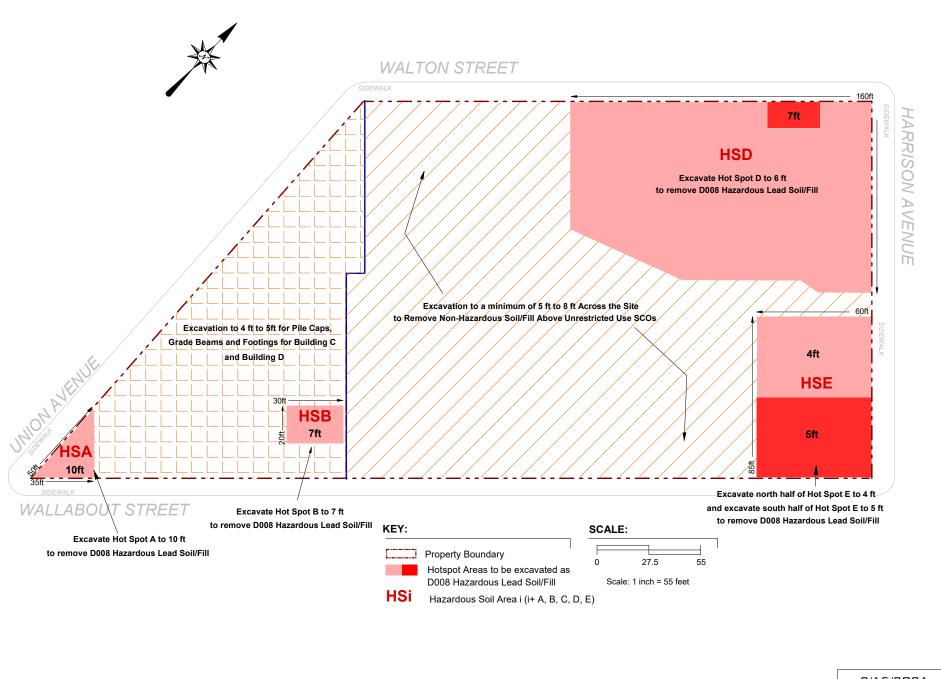


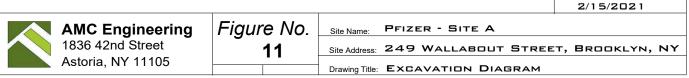


|                                    |  |             | 2/5/2021   |
|------------------------------------|--|-------------|--|
| BC                                 | Phone 631.504.6000<br>Fax 631. 924 .2870 | Figure<br>8 | Site Name: PFIZER - SITE A                       |
|                                    |  |             | Site Address: 249 WALLABOUT STREET, BROOKLYN, NY |
| ENVIRONMENTAL BUSINESS CONSULTANTS |  |             | Drawing Title: GROUNDWATER RESULTS ABOVE AWQS    |







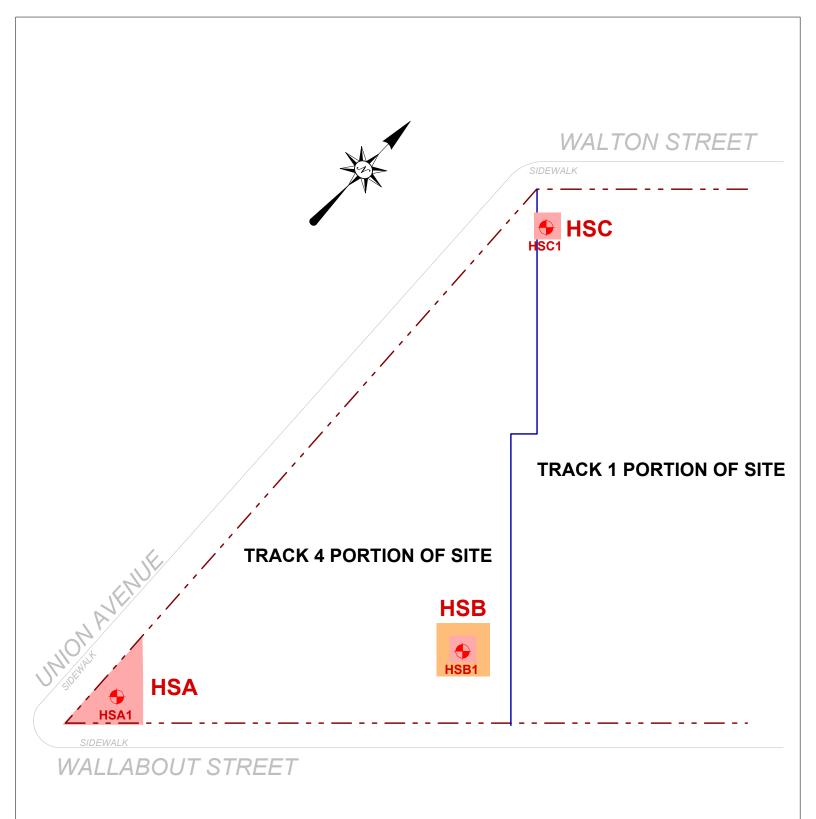






2/15/2021







60

AMC Engineering
1836 42nd Street
Astoria, NY 11105

AMC Engineering
1836 42nd Street
Astoria, NY 11105

Site Name: PFIZER SITE A

Site Address: 249 WALLABOUT STREET, BROOKLYN, NY

Drawing Title: LEAD DELINEATION RESULTS ABOVE SCOS (HSA, HSB, HSC)