



Pre-Design Investigation (PDI) Summary Report

Hunts Point 400 Food Center Drive
NYSDEC BCP Site No. C203101

For the Property located at:
400 Food Center Drive, Bronx, New York

Submitted to:

New York Stated Department of Environmental Conservation
Division of Environmental Remediation, Remedial Bureau B
625 Broadway, 12th Floor
Albany, NY 12233-7020

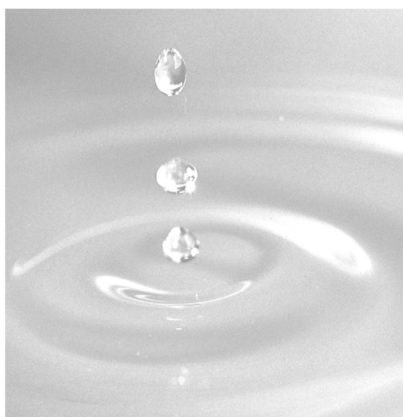
On Behalf of:

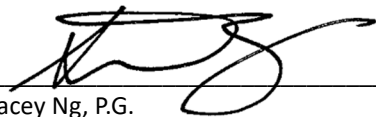
New York City Economic Development Corporation
One Liberty Plaza
New York, NY 10006

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August 2024
Project No. 2303627





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400 Food Center Drive, Bronx, New York
August 2024

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- Appendix A NYSDEC Notice of Termination and Opportunity to Cure Letter (July 9, 2024)
- Appendix B Daily Summary Reports & CAMP Data
- Appendix C Waterfront Investigation Memo

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Acronyms and Abbreviations

AA	Alternatives Analysis
BCA	Brownfield Cleanup Agreement
BCP	Brownfield Cleanup Program
CAMP	Community Air Monitoring Program
Con Edison	Consolidated Edison Company of New York
DD	Decision Document
DNAPL	Dense Non-Aqueous Phase Liquid
FCD	Food Center Drive
FSP	Field Sampling Plan
ftbgs	feet below ground surface
GEI	GEI Consultants, Inc.
GPR	Ground Penetrating Radar
H ₂ S	Hydrogen Sulfide
HASP	Health and Safety Plan
HAZWOPER	Hazardous Waste Operations and Emergency Response
HCN	Hydrogen Cyanide
IRM	Interim Remedial Measure
ISS	In-Situ Stabilization
MGP	Manufactured Gas Plant
NYCEDC	New York City Economic Development Corporation
NYCSBS	New York City Department of Small Business Services
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
OSHA	Occupational Safety and Health Administration
PDI	Pre-Design Investigation
PPE	Personal Protective Equipment
QA/QC	Quality Assurance/Quality Control
QAPP	Quality Assurance Project Plan
RA	Remedial Action
RAWP	Remedial Action Work Plan
RI	Remedial Investigation
RIWP	Remedial Investigation Work Plan
RR ROW	Railroad Right-of-Way
SB	Soil-Bentonite
SCG	Standards, Criteria and Guidance
SCO	Soil Cleanup Objectives
SSP	Steel Sheet Pile
VCP	Voluntary Cleanup Program
VOCs	Volatile Organic Compounds

1. Introduction

1.1. Purpose

GEI Consultants, Inc. (GEI) has prepared this Pre-Design Investigation (PDI) Summary Report on behalf of the New York City Economic Development Corporation (NYCEDC) for the property located at 400 Food Center Drive (FCD) in the borough and county of Bronx, New York (Site). The PDI Summary is being submitted to satisfy the July 9, 2024, *Notice of Termination and Opportunity to Cure* letter presented to NYCEDC and GEI by New York State Department of Environmental Conservation (NYSDEC), included in Appendix A. The letter indicated a PDI scope of work is required to be submitted to NYSDC with all intrusive activities completed in 2024 in addition to any air monitoring data. This PDI Summary Report provides the explanation for the work that was performed, how it applies to the overall remedial effort, and how the work conformed to the general procedures and methodologies under the Brownfield Cleanup Program (BCP).

400 FCD was accepted into the NYSDEC BCP as Site No. C203101 with NYCEDC, i.e., the Applicant, participating in the BCP as a Volunteer pursuant to a Brownfield Cleanup Agreement (BCA). The Site is operated by NYCEDC on behalf of the New York City Department of Small Business Services (NYCSBS). 400 FCD is located in a commercial and industrial area along the eastern portion of the Hunts Point Peninsula and is currently paved, developed and occupied by the Krasdale Foods distribution facility.

The Site is located directly east of FCD and is an approximate 18.97 acre lot contained within a larger tax lot of multiple parcels of land and properties identified on the New York City Tax Map as Block 2781, Lot 500. This BCP Site was previously subdivided into two separate parcels, each enrolled in the former NYSDEC Voluntary Cleanup Program (VCP). NYCEDC was responsible for the approximate 2-acre parcel previously referred to as Site F (Site No. V00671-2) and Consolidated Edison Company of New York (Con Edison) was responsible for the remaining portion of the Krasdale Foods parcel (approximately 17 acres) under Site No. V00544. Both parcels were enrolled into the VCP in the late 1990s and have had a number of different investigations, remedial treatability studies, and reports prepared and submitted to NYSDEC and New York State Department of Health (NYSDOH) prior to the larger Site being consolidated into a single parcel (400 FCD) under the BCP.

1.2. Background

In May 2021, a Remedial Investigation (RI) was performed, which allowed for further evaluation and delineation of Manufactured Gas Plant (MGP)-related impacts in the northern portion of Site, as well as an assessment of impacts beyond the larger 400 FCD boundaries. While waste material was noted to exist beyond 400 FCD and into the adjacent Railroad Right-of-Way (RR ROW) BCP Site (No. C203102), for purposes of this future remedy at 400 FCD, no remediation will extend into the RR ROW BCP Site, and it will be addressed under its own remedy.

Former VCP Parcel F, as well as the southern portion of the Site beyond the Site F boundary has previously been evaluated for In-Situ Stabilization (ISS) of purifier waste, and the treatability study

information obtained from that site continues to be applicable for the larger 400 FCD Site. The primary recommended remedial solution for the larger 400 FCD Site is a combination of the ISS and removal of purifier waste material that will allow for maintaining the existing facility parking lot elevations to the extent possible. Excess purifier waste and coal tar that is unable to be treated via ISS is proposed to be transported offsite for disposal and incineration. This may be subject to change as further supplemental investigations (e.g., PDIs) are performed prior to completion of the full design and submittal of a Remedial Action Work Plan (RAWP).

Since Krasdale Foods is currently operating a large and active food distribution facility on the 400 FCD Site, the overall remediation may need to be performed in multiple phases. The successful ISS of purifier waste (both above and below the water table) and Soil-Bentonite (SB) barrier wall at the Hunts Point BCP Parcel A-2 Site (No. C203094) in August 2018 and BCP Parcel D Site (No. C203100) in January 2021 shows that this methodology can be implemented on both waste types (purifier waste and coal tar) and that Steel Sheet Pile (SSP) walls as well as SB walls can support the remedy. The parameters for ISS will require an understanding of additives in order to bring the mix into compliance with NYSDEC performance criteria. Pilot testing has previously been performed on the Site F material and it may be required that an updated pilot test be performed for a contractor to meet contractual requirements, however, this is not expected to be necessary for completion of the RAWP since the parameters required by NYSDEC will be met or exceeded.

1.3. Objective of the PDI

A PDI was deemed necessary in early 2024 to further assess remedial design options and support drafting of the RAWP. A significant amount of time elapsed since completion of the RI and from that time, additional questions and issues developed within the 400 FCD Site that generated concern for the remedial design, and thus the need to gather additional data. The objectives of the PDI include the following:

- Perform Ground Penetrating Radar (GPR) and subsequent soil borings following notice of a waterfront inspection which identified areas of potential undermining at the eastern edge of the parking lot in the northeastern portion of the Krasdale Foods facility. GPR was also performed to evaluate conditions along the eastern portion of the building adjacent to loading docks where Krasdale building plans identified potential underground utilities that had previously been undetected.
- Perform a camera inspection of the storm drain line running east-west immediately north of the Krasdale building entrance to observe current conditions and confirm if any repairs will be needed during implementation of the Remedial Action (RA).
- Determine the north-south alignment of an SSP wall to be installed along the eastern portion of the 400 FCD property, connecting the sheet pile wall from Parcel D (BCP Site No. C203100) to the proposed sheet pile wall surrounding the southern 400 FCD area, currently proposed to undergo ISS.
- Collect groundwater measurements via existing wells and temporary wells since completion of the Parcel D RA and update the 400 FCD groundwater model.

- Perform test pits to confirm the pile type and locations of the building foundation since excavation and removal of impacted material is proposed immediately adjacent to the existing building as part of the RA.

A brief summary of the activities performed is provided in this PDI Summary Report. All findings (e.g., boring logs and waste volumes) and recommendations resulting from this PDI will be incorporated into the subsequent 400 FCD RAWP, to be submitted under a separate cover.

2. PDI Execution

2.1. Health and Safety

All work described in this report was performed in full compliance with applicable laws and regulations, including Site and Occupational Safety and Health Administration (OSHA) worker safety requirements and Hazardous Waste Operations and Emergency Response (HAZWOPER) requirements. The work described in this report was also performed in accordance with the Site-specific Health and Safety Plan (HASP) drafted for the Krasdale North Remedial Investigation Work Plan (RIWP), approved by NYSDEC on June 8, 2020.

Site work was generally performed between the hours of 7am-5pm, Monday through Friday. Occasional work was performed on Saturdays to limit disruption to Krasdale distribution operations if intrusive activities were required near loading docks and/or active roadways within the facility. During working hours, the drilling subcontractor made every effort to minimize potential community impacts. This included, but was not limited to, noise and traffic concerns associated with the execution of the PDI, as well as efforts to prevent contaminated material from migrating offsite.

The selected drilling and test pit excavation subcontractor performed work in accordance with their own HASP and OSHA, state, and industry safety standards. All on-site personnel performing intrusive activities that had the potential to come in contact with impacted materials had the requisite 1910.120 OSHA HAZWOPER 40-hour training, 8-hour refresher training and any other Site-specific training(s) prior to intrusive activities. Site-specific training included a review of potential Site hazards, required personal protective equipment (PPE), and Site warning and evacuation procedures.

2.2. Mobilization and Site Preparation

Access to the Site was provided by NYCEDC and Krasdale Foods. The drilling subcontractor mobilized all necessary labor, equipment, supplies, and materials to complete the PDI. Lay down areas for equipment, supplies and materials, the appropriate exclusion zone(s) and support area(s) were identified to conduct the planned activities safely and effectively. All equipment was decontaminated prior to arrival on the project site and prior to leaving the project site.

2.3. Subsurface Utility Clearance

Prior to beginning the field investigation work, the Dig Safely New York One-Call Center (i.e., 811) was contacted for a utility mark-out. No drilling and/or soil sampling was conducted at the Site until the following were completed:

- The GEI Project Manager and/or field team leader had thoroughly inspected and cleared the proposed drilling locations and surrounding area for utility mark-outs.
- GPR and a private utility mark-out was also performed to locate potential underground utilities or obstructions within the Krasdale facility at the proposed investigation locations.

- Utility drawings were reviewed to identify any potential underground utilities.

2.4. Community Air Monitoring

A modified Community Air Monitoring Program (CAMP) was implemented during all ground-intrusive activities in accordance with NYSDEC and NYSDOH requirements. The objective of the CAMP is to provide a measure of protection for the downwind community (i.e., offsite receptors, including residences and businesses, and onsite workers not involved with investigative Site activities) from potential airborne contaminant releases as a direct result of intrusive PDI activities. The modified CAMP procedure is instituted when drilling in very specific locations is proposed and then the investigation expands outward from those locations, which makes fixed-station CAMP monitoring at perimeter upwind and downwind locations extremely ineffective.

Air monitoring was performed using the following procedure during boring installation and excavation of test pits. Volatile Organic Compounds (VOCs), Hydrogen Sulfide (H₂S), Hydrogen Cyanide (HCN), and respirable particulates (PM-10) were monitored in the work-zone around the drilling and excavator equipment. No exceedances were detected during implementation of the PDI that were outside of the actual PDI work (sawcutting). Daily field summary reports and CAMP data when intrusive/ground-disturbing activities were performed are included in Appendix B.

2.5. Storm Drain Line and Void Investigation

2.5.1. Storm Drain Line

On January 30, 2024, a camera inspection of a storm drain line running east-west immediately north of the main Krasdale building entrance was performed. This was investigated due to the presence of purifier waste up to the front of the Krasdale building, as noted during implementation of the Krasdale North RI and discussed in the Krasdale North RIR (submitted to NYSDEC in June 2024). Additionally, former investigations have identified a damaged storm drain along the northern perimeter (approximately 150 ft north of the aforementioned drain line and adjacent to BCP Parcel D [Site No. C203100]) where purifier waste is also present. The repair of the northern-most line was formerly presented to NYSDEC as an Interim Remedial Measure (IRM) by Con Edison under the VCP, however, following the larger 400 FCD Site entry into the BCP, it was proposed that the repair would be combined with the overall remedial effort for the Site.

The camera inspection confirmed that the storm drain line in front of the Krasdale entrance was present and in good condition where accessible. Some portions of the pipe were not able to be inspected via camera due to muck buildup in the piping. As of this summary report, no repairs are anticipated to be needed for this drain line during implementation of the 400 FCD remedy. However, the northern-most drain line adjacent to Parcel D will still require repair/replacement.

2.5.2. *Waterfront Void Investigation*

In December 2023, a routine waterfront inspection was conducted by Marine Solutions on behalf of NYCEDC. This investigation by NYCEDC is completely separate and unrelated to the BCP work on 400 FCD. Results of the inspection identified areas of potential undermining at the eastern edge of the parking lot in the northeastern portion of the Krasdale Foods facility. Following notification and discussion between all involved parties (NYCEDC, Krasdale, Marine Solutions, and GEI), a plan to further investigate the area from the surface/parking lot was prompted. On January 30, 2024, GPR was performed by Accu-Scan to scan the area of concern, which identified the presence of two minor air pockets in the subsurface, ranging from approximately 2 to 4 feet below ground surface (ftbgs). GEI and AARCO Environmental advanced two borings in these areas, PDI-02 and PDI-04 (depicted on Fig. 1), both of which did not identify voids or hollow areas during drilling. Daily field summary reports and air monitoring data are included in Appendix B, and a summary of the investigation is provided in Appendix C.

2.6. Sheet Pile Alignment Investigation

Between January 31 to February 2, 2024, 19 borings (PDI-01 through PDI-12 and PDI-14 through PDI-20) were installed via Sonic Rig along the eastern perimeter of the Krasdale Foods facility to determine a clear path for the north-south alignment of a SSP wall, connecting the sheet pile wall from Parcel D (BCP Site No. C203100) to the currently proposed SSP wall surrounding the southern 400 FCD area to undergo ISS.

Borings were advanced in three separate alignments running north-south: at approximately 13 ft west of the eastern bulkhead, approximately 20 ft west of the bulkhead (5 ft west of the hydrant line), and approximately 45 ft west of the bulkhead (10 ft east of the catch basin line). PDI-45 and PDI-46 were advanced on March 4, 2024, near the northeastern portion of the site to collect additional information for the proposed SSP wall alignment. Several of the borings were also advanced to the native till layer when possible.

The recommended alignment will be determined during preparation of the remedial design and RAWP to be submitted under a separate cover along with all boring logs. Due to the presence of very coarse, angular gravel (greater than 3 to 4 inches) and hard drilling at the eastern-most line closest to the bulkhead, it is unlikely that this alignment will be utilized for installation of the SSP wall. The center line and western-most alignments currently provide a clearer path with limited obstructions in the subsurface and primarily consist of silty sand with fine to coarse gravel.

Boring locations and their respective alignment lines are presented in Fig. 1. Daily field summary reports and air monitoring data are included in Appendix B.

2.7. Waste Delineation

Two borings (PDI-13 and PDI-20) encountered MGP-related waste during drilling. PDI-13, installed to collect groundwater measurements near the Krasdale loading docks (further discussed in Section 2.8

below), encountered minor purifier waste at approximately 3 to 5 ftbgs and coal tar-impacted fill at 8 to 10 ftbgs. PDI-20, installed as part of the sheet pile wall alignment borings, encountered minor coal tar-impacted fill at approximately 2.5 to 4 ftbgs.

Waste encountered in PDI-13 was delineated on March 2, 2024, via borings PDI-21 through PDI-34. Prior to completion of these borings, an additional GPR survey was completed due to review of Krasdale building design plans which identified potential underground utilities that had previously been undetected. No additional unknown utilities were detected in this area. The delineation borings determined that both coal tar and purifier waste extended to the north and west of PDI-13 and up to the Krasdale building/loading docks. MGP-impacted waste also extended to south and east, overall covering an area of approximately 125 ft by 35 feet. Impacts were primarily limited to depths of 2 to 10 ftbgs, however, minor coal tar impacts were noted in PDI-30 at approximately 13.5 to 14.5 ftbgs. Boring locations are presented in Fig. 2. Boring logs and remedial suggestions for this area will be provided in the RAWP under a separate cover.

PDI-35 through PDI-41 were advanced on March 4, 2024, via direct-push rig to delineate the extent of shallow coal tar impacts near PDI-20. Delineation borings were performed at 5-foot and 10-foot step-outs where possible, none of which encountered any additional coal tar. Material encountered mainly consisted of historic fill material with varying amounts of black coal ash and faint to moderate MGP-like odors, which is typical of the shallow historic fill layer in Hunts Point. The minor amount of solidified coal tar encountered in PDI-20 is considered to be a non-significant amount and not part of a larger deposit requiring remediation. At this time, it is predicted that this material may be removed during installation of the SSP wall, however, no additional action will be recommended. Boring locations are presented in Fig. 3 and boring logs will be provided in the RAWP under a separate cover.

Daily field summary reports and air monitoring data collected during all intrusive activities are included in Appendix B.

2.8. Temporary Well Installations and Groundwater Measurements

During drill rig mobilization for the sheet pile alignment investigation and waste delineation, multiple additional borings were performed to install temporary wells and collect groundwater measurements. This was a necessary part of the PDI to update the groundwater model since completion of the BCP Parcel D remedy in 2020 and to further support preparation of the remedial design and RAWP.

These borings included PDI-13, PDI-29, PDI-31, PDI-32, PDI-42, PDI-43, PDI-44 and PDI-47. All locations are depicted on Fig. 4. Daily field summary reports and air monitoring data are included in Appendix B. All temporary 1-inch wells were removed from their respective locations either the same day following gauging or within one workday of installation.

Additionally, a round of well gauging for certain pre-existing wells was performed on April 19, 2024. During this event at 102-S, located near the southwestern corner of the Krasdale building, dense non-aqueous phase liquid (DNAPL) was found to be present at the bottom of the well. Further investigation, delineation and recommendations for removal will be presented in the RAWP under a separate cover.

2.9. Test Pits

On May 6 and 7, 2024, a total of four test pits were performed as part of the PDI to confirm the pile type and locations of the building foundation, since excavation and removal of impacted material is proposed immediately adjacent to the existing building as part of the RA. Two test pits were performed along the northern side of the Krasdale building, and two test pits were performed along the southern side of the Krasdale warehouse. Each test pit was approximately 8 ft long x 8 ft wide x 5 to 7 ft deep. Bottom depths were dependent on the location of the pile caps and depth to groundwater.

Material within the northern test pits primarily consisted of historic fill with varying amounts of silty sand with gravel and debris (wood, brick, coal ash). Some chunks of solidified coal tar-impacted fill were present. Material within the southern test pits primarily consisted of coal ash, minimal solidified coal tar-impacted fill and wood chips (purifier waste).

The piles and pile caps were found to be consistent with the original design drawings available for the building. Test pit locations are presented in Fig. 5. Daily field summary reports and air monitoring data are included in Appendix B.

2.10. Laboratory Analysis

No soil or groundwater samples were collected from the soil borings or temporary wells for laboratory analysis.

2.11. Quality Assurance/Quality Control (QA/QC)

Relevant field investigation procedures were performed in accordance with the Field Sampling Plan (FSP) and Quality Assurance Project Plan (QAPP) as provided in the approved Krasdale North RIWP. Laboratory QA/QC procedures were not necessary since no samples were collected and submitted for laboratory analysis.

3. Remedial Evaluation

3.1. Summary of PDI Findings

The objectives and brief summary of the PDI include the following:

- GPR and subsequent soil borings following identification of areas of potential undermining at the eastern edge of the parking lot in the northeastern portion of the Krasdale Foods facility indicated that no major voids were present that would cause immediate concern regarding the stability of the existing parking lot.
- A camera inspection of the storm drain line running east-west immediately north of the Krasdale building entrance concluded that the existing piping is currently in good condition and will likely not require any additional repair or replacement. However, recent issues with the second-floor sanitary line of the Krasdale office building requires complete re-routing and connection into a solid section of sanitary sewer located on the first floor. This will be discussed further as part of an IRM Work Plan to be submitted under a separate cover.
- To determine a recommendation for the north-south alignment of an SSP wall to be installed along the eastern portion of the 400 FCD property, borings were installed in three alignments at different distances from the eastern bulkhead/concrete sea wall. Due to the presence of very coarse, angular gravel and hard drilling at the eastern-most line closest to the bulkhead, it is unlikely that this alignment will be utilized, while the center line and western-most alignments currently provide a clearer path with limited obstructions in the subsurface.
- Groundwater measurements collected from existing wells and temporary wells since completion of the BCP Parcel D RA contributed to the update of the 400 FCD groundwater model. Additionally, DNAPL was discovered in a pre-existing well near the southwestern corner of the Krasdale warehouse, which will be further investigated, and a remedy will be recommended in the RAWP.
- Performance of test pits confirmed the pile type and locations of the building foundation (for both the original building and expansion) since excavation and removal of impacted material is proposed immediately adjacent to the existing building as part of the RA.

3.2. Remedial Action Work Plan

The results of this PDI, along with supporting documentation, will be provided to NYSDEC as part of the RAWP. Based on the findings of the previously performed RI and the PDI, a list of RA objectives will be developed with the requirement for the selected remedial measures to be protective of human health and the environment under the proposed future use scenario.

The selected RA will exhibit the following characteristics:

- Protects public health and the environment.

- Attains federal and state public health and environmental requirements identified for the Site.
- Utilizes permanent solutions and alternative treatment technologies to the most practical extent within proven technological feasibility and availability.
- Utilizes treatment to permanently reduce the toxicity, mobility, volume, or extent of contamination.
- Minimizes costs.

Soil Cleanup Objectives (SCOs) will be based on published standards, criteria, and guidance (SCGs) and other NYSDEC and NYSDOH accepted values for a Commercial property based on the current and future use of the Site. SCOs at this time are not anticipated to be met as the entire Site is filled with historically generated material as well as highly contaminated MGP-related waste. The Commercial SCOs will be presented in the RAWP in order to evaluate imported material, engineering controls, and other restrictions on groundwater use. Additionally, an Alternatives Analysis (AA) will be prepared and submitted along with the RAWP to allow NYSDEC to decide on the proposed remedy and prepare a Decision Document (DD).

4. References

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Figures

Figure 1. Steel Sheet Pile Wall Alignment Borings

Figure 2. PDI-13 Waste Delineation

Figure 3. PDI-20 Waste Delineation

Figure 4. Temporary Wells for Groundwater Measurements

Figure 5. Test Pits



SOURCE:
1. ESRI WORLD IMAGERY

NOTES:
1. EASTERN-MOST ALIGNMENT LINE (GREEN) IS APPROXIMATELY 13 FEET WEST OF THE BULKHEAD.
2. CENTER ALIGNMENT LINE (PINK) IS APPROXIMATELY 20 FEET WEST OF THE BULKHEAD.
3. WESTERN-MOST ALIGNMENT LINE (YELLOW) IS APPROXIMATELY 45 FEET WEST OF THE BULKHEAD.

0 100 200
SCALE:1:1,260

Pre-Design Investigation
400 Food Center Drive (BCP Site No. C203101)
Bronx, New York

New York City Economic Development Corporation (NYCEDC)
New York, New York

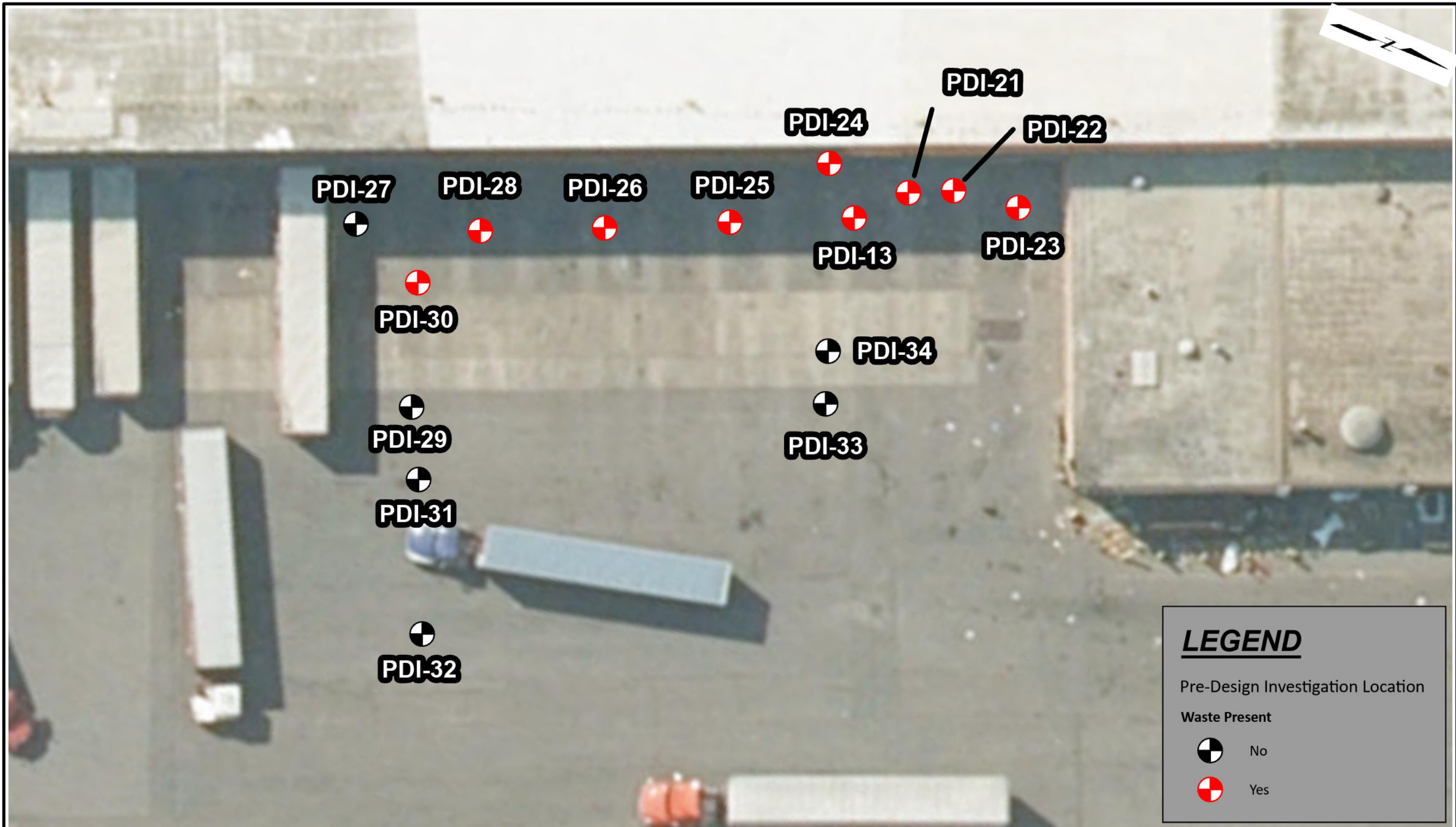


Project 2303627

PRE-DESIGN
INVESTIGATION (SHEETPILE
WALL ALIGNMENT)

August 2024

Fig. 1





LEGEND

Pre-Design Investigation Location

Waste Present



No



Yes



Site Boundary



SOURCE:
1. ESRI WORLD IMAGERY

Pre-Design Investigation
400 Food Center Drive (BCP Site No. C203101)
Bronx, New York

New York City Economic Development Corporation (NYCEDC)
New York, New York



Project 2303627



PDI-20 WASTE DELINEATION

August 2024

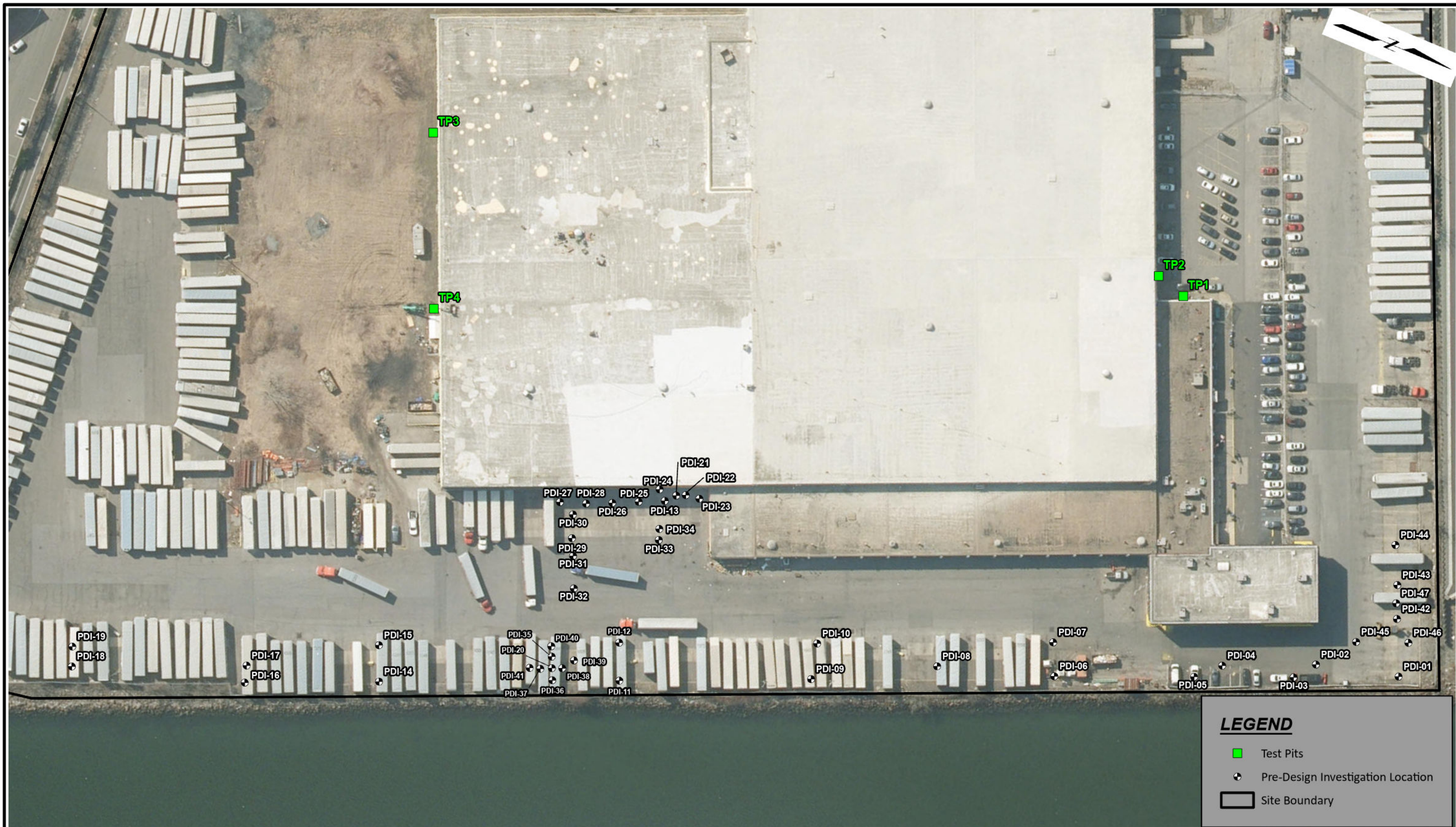
Fig. 3



LEGEND

 Temporary Well
 Site Boundary

<p>SOURCE: 1. ESRI WORLD IMAGERY</p>	<p>0 100 200</p>  <p>SCALE:1:1,260</p>	<p>Pre-Design Investigation 400 Food Center Drive (BCP Site No. C203101) Bronx, New York</p>	<p>GEI  Consultants</p>	<p>TEMPORARY WELLS FOR GROUNDWATER MEASUREMENTS</p>	
		<p>New York City Economic Development Corporation (NYCEDC) New York, New York</p>		<p>Project 2303627</p>	<p>August 2024</p>



SOURCE:
1. ESRI WORLD IMAGERY

0 80 160
SCALE:1:1,000

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400 Food Center Drive (BCP Site No. C203101)
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New York City Economic Development Corporation (NYCEDC)
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TEST PITS

August 2024

Fig. 5

Pre-Design Investigation (PDI) Summary Report
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Appendix A NYSDEC Notice of Termination and Opportunity to Cure Letter (July 9, 2024)

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Remedial Bureau B

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Transmitted Via FedEx

July 9, 2024

New York City Economic Development Corporation
Attn: Rasheed Lucas, Assistant Vice President
One Liberty Plaza
New York, NY 10006
rlucas@edc.nyc

New York City Economic Development Corporation
Attn: Jill Braverman, Assistant General Counsel
One Liberty Plaza
New York, NY 10006
jbraverman@edc.nyc

GEI Consultants, Inc., P.C.
Attn: Kevin McCarty
1385 Broadway, 20th Floor
New York, NY 10018
kmccarty@geiconsultants.com

Notice of Termination and Opportunity to Cure

Re: Brownfield Cleanup Program
Site: 400 Food Center Drive
Site No: C203101
Location: City of New York, Bronx County

Dear Rasheed Lucas, Jill Braverman, and Kevin McCarty,

As you know, NYC Dept. of Small Business Services (the “Applicant”) and the New York State Department of Environmental Conservation (“NYSDEC”), executed a Brownfield Cleanup Agreement (Index # C203101-10-17), (the “Agreement”), relative to the 400 Food Center Drive Site (the site) on February 12, 2018.

Pre-Design Investigation (PDI) work was performed at the site from January to May 2024 without the approval of a detailed work plan, which is a violation of the requirements of the Agreement and 6 NYCRR 375-1.6(a). Additionally, the PDI work was conducted without proper notification to NYSDEC, which is in violation of the Agreement and 6 NYCRR 375-1.6(a)(4). Furthermore, NYSDEC did not receive daily reports documenting on-site PDI activities.



Department of
Environmental
Conservation

NYSDEC considers the progress of the Remedial Program for the site, or lack thereof, to be unsatisfactory, non-conforming to the approved schedule, and the delay to be in violation of the requirements of the Agreement. Relevant facts in this matter include, but are not limited to:

1. A Remedial Investigation Work Plan (RIWP) was approved by NYSDEC in June 2020. On May 30, 2024, NYSDEC transmitted a letter to the Applicant noting the failure to submit a Remedial Investigation Report (RIR) in accordance with the schedule contained in the work plan. On June 17, 2024, NYSDEC received a response from the Applicant to NYSDEC's May 30, 2024 letter. Upon review of the Applicant's response letter, NYSDEC learned that PDI fieldwork was performed at the site from January to May 2024, by GEI Consultants, Inc., P.C. without an approved work plan. Per the Agreement and 6 NYCRR 375-1.6(a), all work undertaken as part of a remedial program for a site must be conducted in accordance with a NYSDEC-approved work plan.
2. NYSDEC did not receive any notification of the PDI work mentioned above. Per the Agreement, approved RIWP, and 6 NYCRR 375-1.6 (a)(4), NYSDEC shall be notified at least 7 days in advance of, and be allowed to attend, any field activities to be conducted under a NYSDEC-approved work plan.
3. NYSDEC did not receive daily reports documenting on-site activities, including Community Air Monitoring (CAMP) data.

Violations

- a. The Applicant violated 6 NYCRR 375-1.6(a) by engaging in an activity without the approval of a detailed work plan.
- b. The Applicant violated 6 NYCRR 375-16(a)(4) by performing work without advance notice to NYSDEC.

Additionally, since the PDI work was performed outside of an approved work plan, the investigation work is not considered to be part of the remedial program under the Agreement and the actions taken by the Applicant constitute a violation of the Agreement.

This letter serves to put you on notice of NYSDEC's objection to violations of requirements of the Remedial Program at the Site and to provide an opportunity for you to remain in the Brownfield Cleanup Program, provided you submit the following, prepared in accordance with ECL § 27-1411 (1) and 6 NYCRR § 375-1.6 and which is acceptable to NYSDEC, within 30 days of the date of receipt of this letter:

- A scope of the work completed.
- The outstanding written daily reports documenting PDI field activities, including CAMP data.

The work conducted as part of the PDI will also need to be presented to NYSDEC, detailing how the standard work plan requirements were followed such as methodologies, Community Air Monitoring Plans (CAMP), Health and Safety Procedures (HASP), and Quality Assurance Project Plan (QAPP).

If the Applicant does not respond within the time frame above NYSDEC will Terminate the Agreement, in accordance with Paragraph XII of the Agreement-Standard Clauses for all New York State Brownfield Site Cleanup Agreements. However, be advised that certain obligations of the Volunteer survive the termination of the Agreement as stated in 6 NYCRR § 375-3.5(d).

Nothing contained herein constitutes a waiver by NYSDEC or the State of New York of any rights held pursuant to any applicable state and/or federal law or the Agreement or a release for any party from any obligations held under those same laws and the Agreement.

If you have any questions, please contact the project manager, Ronnie Lee, Ronnie.lee@dec.ny.gov or (518) 402-9615.

Sincerely,


A handwritten signature in black ink, appearing to read 'Sarah Quandt', with a stylized flourish at the end.

Sarah Quandt
Section Chief
Remedial Bureau B
Division of Environmental Remediation

cc: A. Guglielmi
L. Schmidt
J. Brown
M. Murphy
J. O'Connell
S. Deyette
S. Quandt
R. Lee
S. Selmer, NYSDOH
J. Deming, NYSDOH


Pre-Design Investigation (PDI) Summary Report
Hunts Point 400 Food Center Drive
NYSDEC BCP Site No. C203101
For the Property located at:
400 Food Center Drive, Bronx, New York
August 2024

Appendix B Daily Summary Reports & CAMP Data

	Daily Work Summary Report	
	NYCEDC Hunts Point 400 Food Center Drive (Krasdale Foods)	
	400 Food Center Drive, Bronx, NY 10474	
	NYSDEC BCP Site No. C203101	
Daily Site Information		
Date	Wednesday, January 31, 2024	
Weather	Cloudy, 35°F (H 40°F), 15 mi Vis, 78% RH	
Wind Speed & Direction	E 5 mph	
GEI Personnel On Site	Stacey Ng	
GEI Equipment On Site	1 x CAMP Station (containing a particulate matter meter and MultiRae).	
Site Work Activities	Began soil borings via sonic rig to investigate potential N-S alignments for the proposed steel sheet pile wall to be installed as part of the remedy along the eastern perimeter of 400 FCD. PDI-01 through PDI-05 were completed. Air monitoring was performed for dust, Total Volatile Organic Compounds (TVOCs), Hydrogen Cyanide (HCN) and Hydrogen Sulfide (H ₂ S).	
Contractor(s)		
	Contracting Company	Equipment
	AARCO Environmental Services	GeoProbe 8140LC (Sonic)
CAMP Station	Work Zone Station	
Action Level Exceedances	None	
Corrective Action	NA	
Notes/Comments	NA	


Air Monitoring Data - 1/31/24				
Timestamp	Mass Conc. Total (mg/m ³)	TVOC Concentration (ppm)	HCN Concentration (ppm)	H ₂ S Concentration (ppm)
	Work Zone	Work Zone	Work Zone	Work Zone
1/31/2024 7:30	0.004	0	0	0
1/31/2024 7:45	0.005	0	0	0
1/31/2024 8:00	0.005	0	0	0
1/31/2024 8:15	0.005	0	0	0
1/31/2024 8:30	0.005	0	0	0
1/31/2024 8:45	0.006	0	0	0
1/31/2024 9:00	0.006	0	0	0
1/31/2024 9:15	0.007	0	0	0
1/31/2024 9:30	0.007	0	0	0
1/31/2024 9:45	0.008	0	0	0
1/31/2024 10:00	0.008	0	0	0
1/31/2024 10:15	0.008	0	0	0
1/31/2024 10:30	0.008	0	0	0
1/31/2024 10:45	0.008	0	0	0
1/31/2024 11:00	0.007	0	0	0
1/31/2024 11:15	0.006	0	0	0
1/31/2024 11:30	0.006	0	0	0
1/31/2024 11:45	0.006	0	0	0
1/31/2024 12:00	0.006	0	0	0
1/31/2024 12:15	0.006	0	0	0
1/31/2024 12:30	0.007	0	0	0
1/31/2024 12:45	0.006	0	0	0
1/31/2024 13:00	0.007	0	0	0
1/31/2024 13:15	0.01	0	0	0
1/31/2024 13:30	0.012	0	0	0
1/31/2024 13:45	0.009	0	0	0
1/31/2024 14:00	0.007	0	0	0

Action level limits: 0.10 mg/m³ (dust), 5 ppm (TVOC), 3 ppm (HCN), 5 ppm (H₂S)

	Daily Work Summary Report	
	NYCEDC Hunts Point 400 Food Center Drive (Krasdale Foods)	
	400 Food Center Drive, Bronx, NY 10474	
	NYSDEC BCP Site No. C203101	
	Daily Site Information	
Date	Thursday, February 1, 2024	
Weather	Cloudy, 33°F (H 45°F), 14 mi Vis, 88% RH	
Wind Speed & Direction	SW 5 mph	
GEI Personnel On Site	Stacey Ng	
GEI Equipment On Site	1 x CAMP Station (containing a particulate matter meter and MultiRae).	
Site Work Activities	Continue soil borings via sonic rig to investigate potential N-S alignments for the proposed steel sheet pile wall to be installed as part of the remedy along the eastern perimeter of 400 FCD. PDI-06 through PDI-10 were completed. Air monitoring was performed for dust, Total Volatile Organic Compounds (TVOCs), Hydrogen Cyanide (HCN) and Hydrogen Sulfide (H ₂ S).	
	Contractor(s)	
	Contracting Company	Equipment
	AARCO Environmental Services	GeoProbe 8140LC (Sonic)
CAMP Station	Work Zone Station	
Action Level Exceedances	None	
Corrective Action	NA	
Notes/Comments	Slightly elevated particulate matter concentrations present due to unknown/background atmospheric conditions from 0745-0845 hrs. No visible dust generated from drilling activities.	


Air Monitoring Data - 2/1/24				
Timestamp	Mass Conc. Total (mg/m ³)	TVOC Concentration (ppm)	HCN Concentration (ppm)	H ₂ S Concentration (ppm)
	Work Zone	Work Zone	Work Zone	Work Zone
2/1/2024 7:30	0.086	0	0	0
2/2/2024 7:45	0.1	0	0	0
2/3/2024 8:00	0.099	0	0	0
2/4/2024 8:15	0.099	0	0	0
2/5/2024 8:30	0.11	0	0	0
2/6/2024 8:45	0.109	0	0	0
2/7/2024 9:00	0.082	0	0	0
2/8/2024 9:15	0.049	0	0	0
2/9/2024 9:30	0.046	0	0	0
2/10/2024 9:45	0.047	0	0	0
2/11/2024 10:00	0.044	0	0	0
2/12/2024 10:15	0.06	0	0	0
2/13/2024 10:30	0.064	0	0	0
2/14/2024 10:45	0.065	0	0	0
2/15/2024 11:00	0.059	0	0	0
2/16/2024 11:15	0.046	0	0	0
2/17/2024 11:30	0.059	0	0	0
2/18/2024 11:45	0.087	0	0	0
2/19/2024 12:00	0.083	0	0	0
2/20/2024 12:15	0.083	0	0	0
2/21/2024 12:30	0.073	0	0	0
2/22/2024 12:45	0.054	0	0	0
2/23/2024 13:00	0.057	0	0	0
2/24/2024 13:15	0.054	0	0	0

Action level limits: 0.10 mg/m³ (dust), 5 ppm (TVOC), 3 ppm (HCN), 5 ppm (H₂S)

	Daily Work Summary Report	
	NYCEDC Hunts Point 400 Food Center Drive (Krasdale Foods)	
	400 Food Center Drive, Bronx, NY 10474	
	NYSDEC BCP Site No. C203101	
Daily Site Information		
Date	Friday, February 2, 2024	
Weather	Cloudy, light rain, 38°F (H 43°F), 6 mi Vis, 75% RH	
Wind Speed & Direction	S 2 mph	
GEI Personnel On Site	Stacey Ng	
GEI Equipment On Site	1 x CAMP Station (containing a particulate matter meter and MultiRae).	
Site Work Activities	Continue soil borings via sonic rig to investigate potential N-S alignments for the proposed steel sheet pile wall to be installed as part of the remedy along the eastern perimeter of 400 FCD. PDI-11 through PDI-15 were completed. Air monitoring was performed for dust, Total Volatile Organic Compounds (TVOCs), Hydrogen Cyanide (HCN) and Hydrogen Sulfide (H ₂ S).	
Contractor(s)		
	Contracting Company	Equipment
	AARCO Environmental Services	GeoProbe 8140LC (Sonic)
CAMP Station	Work Zone Station	
Action Level Exceedances	None	
Corrective Action	NA	
Notes/Comments	NA	


Air Monitoring Data - 2/2/24				
Timestamp	Mass Conc. Total (mg/m ³)	TVOC Concentration (ppm)	HCN Concentration (ppm)	H ₂ S Concentration (ppm)
	Work Zone	Work Zone	Work Zone	Work Zone
2/2/2024 7:30	0.066	0	0	0
2/2/2024 7:45	0.068	0	0	0
2/2/2024 8:00	0.063	0	0	0
2/2/2024 8:15	0.058	0	0	0
2/2/2024 8:30	0.056	0	0	0
2/2/2024 8:45	0.057	0	0	0
2/2/2024 9:00	0.056	0	0	0
2/2/2024 9:15	0.053	0	0	0
2/2/2024 9:30	0.056	0	0	0
2/2/2024 9:45	0.062	0	0	0
2/2/2024 10:00	0.059	0	0	0
2/2/2024 10:15	0.059	0	0	0
2/2/2024 10:30	0.059	0	0	0
2/2/2024 10:45	0.041	0	0	0
2/2/2024 11:00	0.031	0	0	0
2/2/2024 11:15	0.038	0	0	0
2/2/2024 11:30	0.072	0	0	0
2/2/2024 11:45	0.093	0	0	0
2/2/2024 12:00	0.054	0	0	0
2/2/2024 12:15	0.03	0	0	0
2/2/2024 12:30	0.018	0	0	0
2/2/2024 12:45	0.054	0	0	0
2/2/2024 13:00	0.057	0	0	0

Action level limits: 0.10 mg/m³ (dust), 5 ppm (TVOC), 3 ppm (HCN), 5 ppm (H₂S)

	Daily Work Summary Report	
	NYCEDC Hunts Point 400 Food Center Drive (Krasdale Foods)	
	400 Food Center Drive, Bronx, NY 10474	
	NYSDEC BCP Site No. C203101	
	Daily Site Information	
Date	Monday, February 5, 2024	
Weather	Sunny, 30°F (H 43°F), 19 mi Vis, 67% RH	
Wind Speed & Direction	N 7 mph	
GEI Personnel On Site	Stacey Ng	
GEI Equipment On Site	1 x CAMP Station (containing a particulate matter meter and MultiRae).	
Site Work Activities	Continue and complete soil borings via sonic rig to investigate potential N-S alignments for the proposed steel sheet pile wall to be installed as part of the remedy along the eastern perimeter of 400 FCD. PDI-16 through PDI-20 were completed. Air monitoring was performed for dust, Total Volatile Organic Compounds (TVOCs), Hydrogen Cyanide (HCN) and Hydrogen Sulfide (H ₂ S).	
	Contractor(s)	
	Contracting Company	Equipment
	AARCO Environmental Services	GeoProbe 8140LC (Sonic)
CAMP Station	Work Zone Station	
Action Level Exceedances	None	
Corrective Action	NA	
Notes/Comments	NA	


Air Monitoring Data - 2/5/24				
Timestamp	Mass Conc. Total (mg/m ³)	TVOC Concentration (ppm)	HCN Concentration (ppm)	H ₂ S Concentration (ppm)
	Work Zone	Work Zone	Work Zone	Work Zone
2/5/2024 7:30	0.027	0	0	0
2/5/2024 7:45	0.024	0	0	0
2/5/2024 8:00	0.016	0	0	0
2/5/2024 8:15	0.013	0	0	0
2/5/2024 8:30	0.011	0	0	0
2/5/2024 8:45	0.011	0	0	0
2/5/2024 9:00	0.019	0	0	0
2/5/2024 9:15	0.013	0	0	0
2/5/2024 9:30	0.019	0	0	0
2/5/2024 9:45	0.009	0	0	0
2/5/2024 10:00	0.011	0	0	0
2/5/2024 10:15	0.009	0	0	0
2/5/2024 10:30	0.01	0	0	0
2/5/2024 10:45	0.012	0	0	0
2/5/2024 11:00	0.014	0	0	0
2/5/2024 11:15	0.014	0	0	0
2/5/2024 11:30	0.013	0	0	0
2/5/2024 11:45	0.016	0	0	0
2/5/2024 12:00	0.016	0	0	0
2/5/2024 12:15	0.019	0	0	0
2/5/2024 12:30	0.014	0	0	0
2/5/2024 12:45	0.012	0	0	0
2/5/2024 13:00	0.012	0	0	0
2/5/2024 13:15	0.015	0	0	0
2/5/2024 13:30	0.016	0	0	0
2/5/2024 13:45	0.016	0	0	0

Action level limits: 0.10 mg/m³ (dust), 5 ppm (TVOC), 3 ppm (HCN), 5 ppm (H₂S)

	Daily Work Summary Report	
	NYCEDC Hunts Point 400 Food Center Drive (Krasdale Foods)	
	400 Food Center Drive, Bronx, NY 10474	
	NYSDEC BCP Site No. C203101	
	Daily Site Information	
Date	Saturday, March 2, 2024	
Weather	Rain, 44°F, 5 mi Vis, 92% RH	
Wind Speed & Direction	E 6 mph	
GEI Personnel On Site	Stacey Ng	
GEI Equipment On Site	1 x CAMP Station (containing a particulate matter meter and MultiRae).	
Site Work Activities	Perform soil borings via direct-push rig to delineate Manufactured Gas Plant (MGP)-related impacts encountered during drilling of PDI-13 on 2/2/24 (near Krasdale loading docks). Air monitoring was performed for dust, Total Volatile Organic Compounds (TVOCs), Hydrogen Cyanide (HCN) and Hydrogen Sulfide (H ₂ S).	
	Contractor(s)	
	Contracting Company	Equipment
	AARCO Environmental Services	GeoProbe 7822DT (Direct-Push)
CAMP Station	Work Zone Station	
Action Level Exceedances	None	
Corrective Action	NA	
Notes/Comments	Station was setup near work zone under shade/rain tent.	


Air Monitoring Data - 3/2/24				
Timestamp	Mass Conc. Total (mg/m ³)	TVOC Concentration (ppm)	HCN Concentration (ppm)	H ₂ S Concentration (ppm)
	Work Zone	Work Zone	Work Zone	Work Zone
3/2/2024 8:00	0.038	0	0	0
3/2/2024 8:15	0.037	0	0	0
3/2/2024 8:30	0.036	0	0	0
3/2/2024 8:45	0.033	0	0	0
3/2/2024 9:00	0.032	0	0	0
3/2/2024 9:15	0.033	0	0	0
3/2/2024 9:30	0.028	0	0	0
3/2/2024 9:45	0.027	0	0	0
3/2/2024 10:00	0.022	0	0	0
3/2/2024 10:15	0.033	0	0	0
3/2/2024 10:30	0.026	0	0	0
3/2/2024 10:45	0.03	0	0	0
3/2/2024 11:00	0.027	0	0	0
3/2/2024 11:15	0.026	0	0	0
3/2/2024 11:30	0.025	0	0	0
3/2/2024 11:45	0.024	0	0	0
3/2/2024 12:00	0.025	0	0	0
3/2/2024 12:15	0.024	0	0	0
3/2/2024 12:30	0.028	0	0	0
3/2/2024 12:45	0.028	0	0	0
3/2/2024 13:00	0.031	0	0	0
3/2/2024 13:15	0.052	0	0	0
3/2/2024 13:30	0.061	0	0	0
3/2/2024 13:45	0.057	0	0	0
3/2/2024 14:00	0.028	0	0	0
3/2/2024 14:15	0.027	0	0	0

Action level limits: 0.10 mg/m³ (dust), 5 ppm (TVOC), 3 ppm (HCN), 5 ppm (H₂S)

<div><div>GEI</div><div><div>Consultants</div></div></div>	Daily Work Summary Report	
	NYCEDC Hunts Point 400 Food Center Drive (Krasdale Foods)	
	400 Food Center Drive, Bronx, NY 10474	
	NYSDEC BCP Site No. C203101	
	Daily Site Information	
Date	Monday, March 4, 2024	
Weather	Partly Cloudy, 45°F (H 58°F), 10 mi Vis, 77% RH	
Wind Speed & Direction	NE 12 mph	
GEI Personnel On Site	Stacey Ng	
GEI Equipment On Site	1 x CAMP Station (containing a particulate matter meter and MultiRae).	
Site Work Activities	Perform soil borings via direct-push rig to delineate Manufactured Gas Plant (MGP)-related impacts encountered during drilling of PDI-20 on 2/5/24 (near eastern perimeter) and additional alignment borings and temporary wells near the northeastern corner of site. Air monitoring was performed for dust, Total Volatile Organic Compounds (TVOCs), Hydrogen Cyanide (HCN) and Hydrogen Sulfide (H ₂ S).	
	Contractor(s)	
	Contracting Company	Equipment
	AARCO Environmental Services	GeoProbe 7822DT (Direct-Push)
CAMP Station	Work Zone Station	
Action Level Exceedances	None	
Corrective Action	NA	
Notes/Comments	NA	


Air Monitoring Data - 3/4/24				
Timestamp	Mass Conc. Total (mg/m ³)	TVOC Concentration (ppm)	HCN Concentration (ppm)	H ₂ S Concentration (ppm)
	Work Zone	Work Zone	Work Zone	Work Zone
3/4/2024 8:00	0.018	0	0	0
3/4/2024 8:15	0.024	0	0	0
3/4/2024 8:30	0.015	0	0	0
3/4/2024 8:45	0.012	0	0	0
3/4/2024 9:00	0.015	0	0	0
3/4/2024 9:15	0.019	0	0	0
3/4/2024 9:30	0.021	0	0	0
3/4/2024 9:45	0.019	0	0	0
3/4/2024 10:00	0.022	0	0	0
3/4/2024 10:15	0.021	0	0	0
3/4/2024 10:30	0.021	0	0	0
3/4/2024 10:45	0.02	0	0	0
3/4/2024 11:00	0.019	0	0	0
3/4/2024 11:15	0.016	0	0	0
3/4/2024 11:30	0.018	0	0	0
3/4/2024 11:45	0.017	0	0	0
3/4/2024 12:00	0.012	0	0	0
3/4/2024 12:15	0.014	0	0	0
3/4/2024 12:30	0.037	0	0	0
3/4/2024 12:45	0.051	0	0	0
3/4/2024 13:00	0.049	0	0	0
3/4/2024 13:15	0.062	0	0	0
3/4/2024 13:30	0.05	0	0	0

Action level limits: 0.10 mg/m³ (dust), 5 ppm (TVOC), 3 ppm (HCN), 5 ppm (H₂S)

	Daily Work Summary Report	
	NYCEDC Hunts Point 400 Food Center Drive (Krasdale Foods)	
	400 Food Center Drive, Bronx, NY 10474	
	NYSDEC BCP Site No. C203101	
	Daily Site Information	
Date	Monday, May 6, 2024	
Weather	Cloudy, 55°F (H 71°F), 9 mi Vis, 96% RH	
Wind Speed & Direction	NE 2 mph	
GEI Personnel On Site	Stacey Ng, Jordan Passno, Joe Engels	
GEI Equipment On Site	1 x CAMP Station (containing a particulate matter meter and MultiRae).	
Site Work Activities	Perform test pits (TP-1 and TP-2) in the northern portion of site to confirm pile type and location of the Krasdale building foundation. Air monitoring was performed for dust, Total Volatile Organic Compounds (TVOCs), Hydrogen Cyanide (HCN) and Hydrogen Sulfide (H ₂ S).	
	Contractor(s)	
	Contracting Company	Equipment
	AARCO Environmental Services	Bobcat E35 (Mini-Excavator)
CAMP Station	Work Zone Station	
Action Level Exceedances	Temporary elevated dust concentrations due to saw cutting concrete and asphalt.	
Corrective Action	AARCO implemented dust control measures by wetting the area and saw blade during cutting.	
Notes/Comments	Elevated concentrations were intermittent and did not last for more than 15 minutes.	


Air Monitoring Data - 5/6/24				
Timestamp	Mass Conc. Total (mg/m ³)	TVOC Concentration (ppm)	HCN Concentration (ppm)	H ₂ S Concentration (ppm)
	Work Zone	Work Zone	Work Zone	Work Zone
5/6/2024 8:15	0.040	0	0	0
5/6/2024 8:30	0.112	0	0	0
5/6/2024 8:45	0.057	0	0	0
5/6/2024 9:00	0.135	0	0	0
5/6/2024 9:15	0.057	0	0	0
5/6/2024 9:30	0.055	0	0	0
5/6/2024 9:45	0.041	0	0	0
5/6/2024 10:00	0.037	0	0	0
5/6/2024 10:15	0.026	0	0	0
5/6/2024 10:30	0.042	0	0	0
5/6/2024 10:45	0.036	0	0	0
5/6/2024 11:00	0.021	0	0	0
5/6/2024 11:15	0.047	0	0	0
5/6/2024 11:30	0.060	0	0	0
5/6/2024 11:45	0.061	0	0	0
5/6/2024 12:00	0.063	0	0	0
5/6/2024 12:15	0.061	0	0	0
5/6/2024 12:30	0.068	0	0	0
5/6/2024 12:45	0.142	0	0	0
5/6/2024 13:00	0.055	0	0	0
5/6/2024 13:15	0.067	0	0	0
5/6/2024 13:30	0.055	0	0	0
5/6/2024 13:45	0.033	0	0	0
5/6/2024 14:00	0.033	0	0	0
5/6/2024 14:15	0.030	0	0	0
5/6/2024 14:30	0.026	0	0	0
5/6/2024 14:45	0.027	0	0	0
5/6/2024 15:00	0.025	0	0	0


Action level limits: 0.10 mg/m³ (dust), 5 ppm (TVOC), 3 ppm (HCN), 5 ppm (H₂S)

	Daily Work Summary Report	
	NYCEDC Hunts Point 400 Food Center Drive (Krasdale Foods)	
	400 Food Center Drive, Bronx, NY 10474	
	NYSDEC BCP Site No. C203101	
	Daily Site Information	
Date	Tuesday, May 7, 2024	
Weather	Sunny, 68°F (H 78°F), 19 mi Vis, 48% RH	
Wind Speed & Direction	NE 5 mph	
GEI Personnel On Site	Stacey Ng, Jordan Passno	
GEI Equipment On Site	1 x CAMP Station (containing a particulate matter meter and MultiRae).	
Site Work Activities	Perform test pits (TP-3 and TP-4) in the southern portion of site to confirm pile type and location of the Krasdale building foundation. Air monitoring was performed for dust, Total Volatile Organic Compounds (TVOCs), Hydrogen Cyanide (HCN) and Hydrogen Sulfide (H ₂ S). Soil backfill and compaction was completed for TP-1 and TP-2 in preparation for future concrete pouring and paving. No MGP-related impacts noted in exposed fill at surface.	
	Contractor(s)	
	Contracting Company	Equipment
	AARCO Environmental Services	Bobcat E35 (Mini-Excavator)
CAMP Station	Work Zone Station	
Action Level Exceedances	None	
Corrective Action	NA	
Notes/Comments	NA	

Air Monitoring Data - 5/6/24				
Timestamp	Mass Conc. Total (mg/m ³)	TVOC Concentration (ppm)	HCN Concentration (ppm)	H ₂ S Concentration (ppm)
	Work Zone	Work Zone	Work Zone	Work Zone
5/7/2024 7:30	0.004	0	0	0
5/7/2024 7:45	0.016	0	0	0
5/7/2024 8:00	0.012	0	0	0
5/7/2024 8:15	0.003	0	0	0
5/7/2024 8:30	0.017	0	0	0
5/7/2024 8:45	0.016	0	0	0
5/7/2024 9:00	0.018	0	0	0
5/7/2024 9:15	0.030	0	0	0
5/7/2024 9:30	0.001	0	0	0
5/7/2024 9:45	0.002	0	0	0
5/7/2024 10:00	0.002	0	0	0
5/7/2024 10:15	0.002	0	0	0
5/7/2024 10:30	0.002	0	0	0
5/7/2024 10:45	0.002	0	0	0
5/7/2024 11:00	0.001	0	0	0
5/7/2024 11:15	0.002	0	0	0
5/7/2024 11:30	0.002	0	0	0
5/7/2024 11:45	0.002	0	0	0
5/7/2024 12:00	0.002	0	0	0
5/7/2024 12:15	0.005	0	0	0
5/7/2024 12:30	0.006	0	0	0

Action level limits: 0.10 mg/m³ (dust), 5 ppm (TVOC), 3 ppm (HCN), 5 ppm (H₂S)

	Daily Work Summary Report	
	NYCEDC Hunts Point 400 Food Center Drive (Krasdale Foods)	
	400 Food Center Drive, Bronx, NY 10474	
	NYSDEC BCP Site No. C203101	
Daily Site Information		
Date	Wednesday, May 8, 2024	
Weather	Cloudy, 65°F (H 86°F), 10 mi Vis, 84% RH	
Wind Speed & Direction	S 9 mph	
GEI Personnel On Site	Jordan Passno	
GEI Equipment On Site	NA	
Site Work Activities	Pour concrete for the sidewalk area where TP-1 and TP-2 were performed in the northern Krasdale lot. Air monitoring was not required as soil disturbance (backfilling and compaction) was completed on 5/7/24. No MGP-related impacts noted in exposed fill at surface prior to concrete pour.	
Contractor(s)		
	Contracting Company	Equipment
	AARCO Environmental Services	Hand tools (concrete pouring)
CAMP Station	Work Zone Station	
Action Level Exceedances	NA	
Corrective Action	NA	
Notes/Comments	NA	

	Daily Work Summary Report	
	NYCEDC Hunts Point 400 Food Center Drive (Krasdale Foods)	
	400 Food Center Drive, Bronx, NY 10474	
	NYSDEC BCP Site No. C203101	
Daily Site Information		
Date	Tuesday, May 21, 2024	
Weather	Cloudy, 62°F (H 80°F), 10 mi Vis, 83% RH	
Wind Speed & Direction	SW 5 mph	
GEI Personnel On Site	Stacey Ng	
GEI Equipment On Site	NA	
Site Work Activities	Patch asphalt in the northern Krasdale parking lot where TP-2 was performed. Air monitoring was not required as soil disturbance (backfilling and compaction) was completed on 5/7/24. No MGP-related impacts noted in exposed fill at surface prior to asphalt patching.	
Contractor(s)		
	Contracting Company	Equipment
	AARCO Environmental Services	Hand tools (asphalt patching), Plate Compactor
CAMP Station	Work Zone Station	
Action Level Exceedances	NA	
Corrective Action	NA	
Notes/Comments	NA	

Pre-Design Investigation (PDI) Summary Report
Hunts Point 400 Food Center Drive
NYSDEC BCP Site No. C203101
For the Property located at:
400 Food Center Drive, Bronx, New York
August 2024

Appendix C Waterfront Investigation Memo

Memo

To: Mr. Rasheed Lucas
From: Kevin McCarty
c: Stacey Ng
Date: February 28, 2024
Re: Krasdale Foods Waterfront Investigation
400 Food Center Drive
Bronx, NY
GEI Project No. 2303627

The following is based on the subsurface investigation implemented by GEI Consultants, Inc., P.C. (GEI), of the Ground Penetrating Radar (GPR) scan performed on January 30, 2024, and subsequent soil borings performed on January 31, 2024. This investigation was prompted following notice of the results of a waterfront inspection performed by Marine Solutions on December 6, 2023. The results reported to New York City Economic Development Corporation (NYCEDC) identified areas of undermining at the eastern edge of the parking lot in the northeastern portion of the Krasdale Foods facility.

Summary of GPR Scan and Soil Borings:

The results of the GPR scan as performed by Accu-Scan in the area of concern is provided in the attached *Utility Locating Investigation Report*. Accu-Scan identified two small areas that detected the presence of minor air pockets in the subsurface. These areas are presented in Figure 1 along with the locations of their respective borings (PDI-02 and PDI-04). Figure 1 also presents three additional borings (PDI-01, PDI-03 and PDI-05) advanced in this portion of the Krasdale Foods facility and closer to the waterfront (approximately 13 feet west of the concrete seawall). In general, a widely graded angular gravel up to 4-inches was present from approximately 5-25 feet below ground surface (ftbgs). Boring logs for all five locations are attached to this memo.

PDI-02 was advanced within an area that detected the presence of minor voids at approximately 2-4 ftbgs. As presented in the attached boring log and Photo 1 below, this interval primarily consisted of subangular gravel with silt and sand from 2.1 to 2.9 ftbgs and a dense silty sand with about 30% gravel from 2.9-3.7 ftbgs. Below this, there is a transition to a more loose, homogeneous sand with trace amounts of gravel, which may have contributed to why the GPR scan showed a lower density area. As the boring was advanced, no voids or hollow areas were identified.



Photo 1: Boring location PDI-02, 0-5-foot interval

PDI-04 was advanced within an area that detected the presence of minor voids at approximately 3-4 ftbgs. As presented in the attached boring log and Photo 2 below, this interval primarily consisted of narrowly graded, homogeneous sand with trace subrounded gravel. At a depth of 3.1 ftbgs, the subsurface transitioned from a more dense silty sand with about 15% gravel to a more loose sand, which may have contributed to why the GPR scan showed a lower density area (similar to PDI-02). As the boring was advanced, no voids or hollow areas were identified.



Photo 2: Boring location PDI-04, 0-5-foot interval

Other Observations/Information:

An area of concern was also identified along the stone riprap adjacent to a gate opening in the eastern fenceline, as depicted in Photo 3 and Photo 4 below. In discussions with the Krasdale management team, it was brought to GEI's attention that when the facility was first constructed in the 1970's, the gate was installed to provide a specific staging area to clear the facility of snow. The routine dumping of large amounts of snow likely contributed to the "flattening" of the rip rap stone in this area.

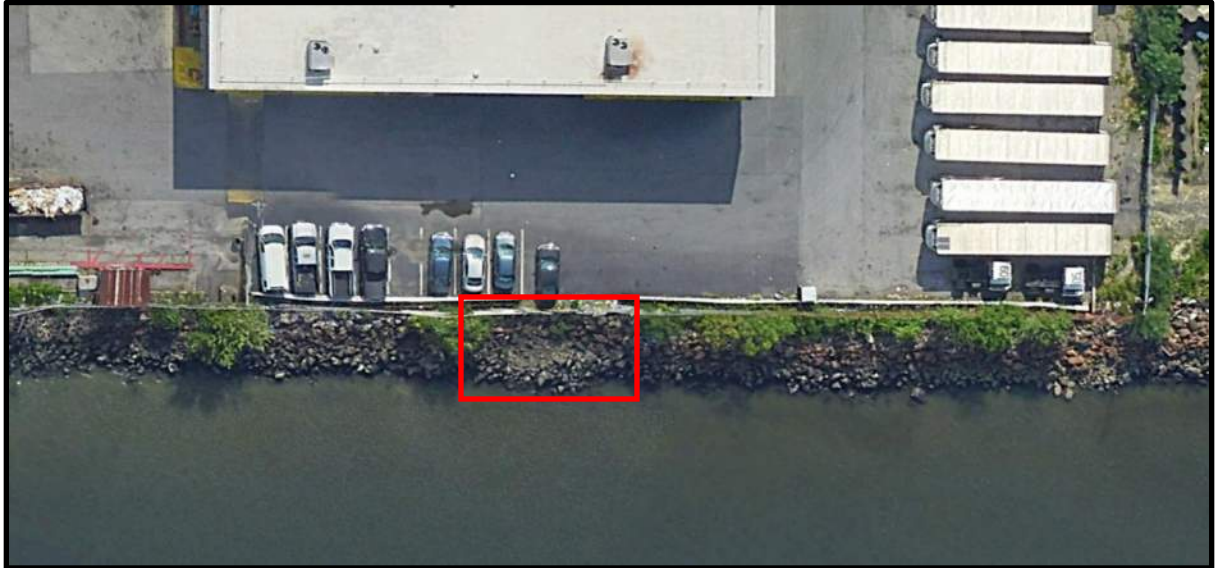


Photo 3: Area of “flattened” riprap stone adjacent to fence/gate opening.



Photo 4: Stone riprap adjacent to fence/gate opening.

Attachments:

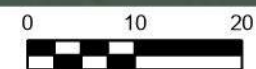
Figure 1 – GPR Scan and Boring Locations

Boring Logs (PDI-01 through PDI-05)

Utility Locating Investigation Report (Accu-Scan)



SOURCE:
1. ESRI WORLD IMAGERY



SCALE:1:215

400 Food Center Drive
Bronx, NY
400 FCD Memo
New York City Economic Development Corporation (NYCEDC)
New York, New York



GPR SCAN AND BORING
LOCATIONS

Project 2303627

February 2024

Fig. 1



GEI Consultants, Inc. P.C.
530 7th Avenue
Suite 2007
New York, New York
10018

CLIENT: NYCEDC
PROJECT: 400 Food Center Drive
CITY/STATE: Bronx, NY
GEI PROJECT NUMBER: 2303627

BORING LOG

PAGE
1 of 2

PDI-01

GROUND SURFACE ELEVATION (FT): 12.60 LOCATION: Bronx, NY
NORTHING (FT): 234432 EASTING (FT): 1020231 TOTAL DEPTH (FT): 35.0
DRILLED BY: AARCO DATUM VERT. / HORZ.: NAVD 88 / NAD83 NY East Zone
LOGGED BY: S. Ng DATE START / END: 1/31/2024 - 1/31/2024
DRILLING DETAILS: Sonic Coring / Geoprobe 8140LC / Core Size: 4 in. / Core Type: Sonic
WATER LEVEL DEPTHS (FT): _____
GENERAL NOTE: _____

ELEV. FT.	DEPTH FT.	SAMPLE INFO			STRATA	SOIL / BEDROCK DESCRIPTION
		TYPE and NO.	PEN/REC FT./FT.	PID (PPM)		
	0	S1	5/2	0.3 0.0		(0'- 0.5') ASPHALT. (0.5'- 2.5') SILTY SAND (SM); ~45% sand, fine to medium sand, ~40% gravel, fine to coarse gravel, subrounded, ~15% fines, non plastic; dry to moist, brown to dark brown, FILL. (2.5'- 4.25') SILTY SAND (SM); ~45% sand, fine to medium sand, ~40% gravel, medium to coarse, subangular, ~15% fines, non plastic; moist, gray-brown, FILL. (4.25'- 5') WIDELY GRADED GRAVEL (GW); ~90% gravel, medium to very coarse, subrounded; moist, gray, trace fine to medium orange-brown silty sand (10%). (5'- 6.7') NARROWLY GRADED SAND WITH GRAVEL (GP); ~85% gravel, coarse, subrounded; moist to wet, gray with brown, with fine to medium orange-brown silty sand (15%); gravel up to 3". (6.7'- 10') WIDELY GRADED GRAVEL (GW); ~95% gravel, fine to coarse gravel, subangular, ~5% sand, fine to medium; moist, gray with brown.
	5	S2	5/1.5	0.0		
	10	S3	5/1.5	0.0		(10'- 15') WIDELY GRADED GRAVEL WITH SAND (GW); ~85% gravel, coarse, subangular; saturated, gray with orange brown, with fine to medium orange-brown silty sand (15%); gravel up to 4".
	15	S4	5/2.2	0.0		(15'- 16.1') SILTY SAND WITH GRAVEL (SM); ~50% sand, fine to medium sand, ~30% gravel, fine to medium, subangular, ~20% fines, non plastic; saturated, brown to orangey-brown. (16.1'- 17') WIDELY GRADED GRAVEL WITH SAND (GW); ~85% gravel, fine to coarse, subangular; saturated, brownish-gray, 15% fine to medium silty sand; gravel up to 3". (17'- 20') WIDELY GRADED GRAVEL WITH SAND (GW); ~85% gravel, fine to coarse, subangular, ~10% sand, fine to coarse, ~5% fines, non plastic; wet, brownish-gray, gravel up to 4". (20'- 23.4') WIDELY GRADED GRAVEL WITH SAND (GW); ~85% gravel, medium to coarse, subangular; saturated, orange-brown, with fine to medium orange-brown silty sand (15%); gravel up to 3"; dark gray mottling.
	20	S5	5/1.6	0.0		
	25	S6	5/5	0.0		(23.4'- 25') CLAYEY GRAVEL WITH SAND (GC); ~80% gravel, medium to coarse, subangular, ~15% fines, low plasticity, 5; wet, dark gray. (25'- 30') SILTY SAND WITH GRAVEL (SM); ~60% sand, fine to medium, ~20% gravel, medium to coarse, rounded, ~20% fines, non plastic; moist, brown with beige, gravel up to 3"; weathered boulder at 28.1-30'; medium to very dense.
	30					

NOTES:

PEN = PENETRATION LENGTH OF SAMPLER OR CORE BARREL
REC = RECOVERY LENGTH OF SAMPLE
PID = PHOTOIONIZATION DETECTOR READING (PPM)
JHS = JAR HEADSPACE PID READING (PPM)



ppm = PARTS PER MILLION
IN. = INCHES
FT. = FEET

NLO = NAPHTHALENE LIKE ODOR
PLO = PETROLEUM LIKE ODOR
TLO = TAR LIKE ODOR
CLO = CHEMICAL LIKE ODOR
ALO = ASPHALT LIKE ODOR


CrLO= CREOSOTE LIKE ODOR
OLO = ORGANIC LIKE ODOR
SLO = SULFUR LIKE ODOR
MLO = MUSTY LIKE ODOR

NA = NOT APPLICABLE Q_p = POCKET PENETROMETER
NM = NOT MEASURED S_v = TORVANE PEAK

ENVIRONMENTAL BORING LOG KRASDALE PDI BORINGS 02222024.GPJ GEI TEMPLATE 11-7-13.GDT 2/27/24

 GEI Consultants GEI Consultants, Inc. P.C. 530 7th Avenue Suite 2007 New York, New York 10018		CLIENT: <u>NYCEDC</u> PROJECT: <u>400 Food Center Drive</u> CITY/STATE: <u>Bronx, NY</u> GEI PROJECT NUMBER: <u>2303627</u>		BORING LOG PAGE 2 of 2 PDI-01		
ELEV. FT.	DEPTH FT.	SAMPLE INFO			STRATA	SOIL / BEDROCK DESCRIPTION
		TYPE and NO.	PEN/REC FT./FT.	PID (PPM)		
	30	S7	5/4.6	0.0		(30'- 32.8') NARROWLY GRADED SAND WITH SILT AND GRAVEL (SP-SM); ~60% sand, medium, ~25% gravel, coarse, subangular, ~15% fines, non plastic; wet, brown. (32.8'- 35') ROCK; dry, black gray to beige, crushed rock.
	-20					
	35	End of Boring at 35 feet. Backfilled with cuttings/sand and patched at surface.				
NOTES: PEN = PENETRATION LENGTH OF SAMPLER OR CORE BARREL ppm = PARTS PER MILLION NLO = NAPHTHALENE LIKE ODOR CrLO= CREOSOTE LIKE ODOR REC = RECOVERY LENGTH OF SAMPLE IN. = INCHES PLO = PETROLEUM LIKE ODOR OLO = ORGANIC LIKE ODOR PID = PHOTOIONIZATION DETECTOR READING (PPM) FT. = FEET TLO = TAR LIKE ODOR SLO = SULFUR LIKE ODOR JHS = JAR HEADSPACE PID READING (PPM) ALO = ASPHALT LIKE ODOR CLO = CHEMICAL LIKE ODOR MLO = MUSTY LIKE ODOR NA = NOT APPLICABLE Q _p = POCKET PENETROMETER NM = NOT MEASURED S _v = TORVANE PEAK						

ENVIRONMENTAL BORING LOG KRASDALE PDI BORINGS 02222024.GPJ GEI TEMPLATE 11-7-13.GDT 2/27/24

		GEI Consultants, Inc. P.C. 530 7th Avenue Suite 2007 New York, New York 10018		CLIENT: <u>NYCEDC</u> PROJECT: <u>400 Food Center Drive</u> CITY/STATE: <u>Bronx, NY</u> GEI PROJECT NUMBER: <u>2303627</u>		BORING LOG PAGE 1 of 1 PDI-02	
GROUND SURFACE ELEVATION (FT): <u>12.53</u>		LOCATION: <u>Bronx, NY</u>					
NORTHING (FT): <u>234359</u>		EASTING (FT): <u>1020250</u>		TOTAL DEPTH (FT): <u>15.0</u>			
DRILLED BY: <u>AARCO</u>		DATUM VERT. / HORZ.: <u>NAVD 88 / NAD83 NY East Zone</u>					
LOGGED BY: <u>S. Ng</u>		DATE START / END: <u>1/31/2024 - 1/31/2024</u>					
DRILLING DETAILS: <u>Sonic Coring / Geoprobe 8140LC / Core Size: 4 in. / Core Type: Sonic</u>							
WATER LEVEL DEPTHS (FT): _____							
GENERAL NOTE: <u>Boring installed in location of minor subsurface void (at 2-4 feet deep) as identified during GPR scan.</u>							
<u>No voids or hollow areas were identified during drilling.</u>							
ELEV. FT.	DEPTH FT.	SAMPLE INFO			STRATA	SOIL / BEDROCK DESCRIPTION	
		TYPE and NO.	PEN/REC FT./FT.	PID (PPM)			
	0	S1	5/3.4	0.0		(0'- 0.7') ASPHALT.	
	10					(0.7'- 1.5') SILTY SAND WITH GRAVEL (SM); ~55% sand, fine to medium, ~30% gravel, fine to medium, subangular, ~15% fines, non plastic; dry, light brown, FILL.	
	5	S2	5/3.1	0.0		(1.5'- 2.1') NARROWLY GRADED GRAVEL WITH SILT AND SAND (GP-GM); ~60% gravel, medium, subangular, ~30% sand, fine to medium, ~10% fines, non plastic; moist, gray, FILL.	
	5					(2.1'- 2.9') NARROWLY GRADED GRAVEL WITH SILT AND SAND (GP-GM); ~85% gravel, medium, subangular, ~10% sand, fine to medium, ~5% fines, non plastic; dry to moist, gray, FILL.	
	10	S3	5/2.4	0.0		(2.9'- 3.7') SILTY SAND WITH GRAVEL (SM); ~55% sand, fine to medium, ~30% gravel, fine to medium, subangular, ~15% fines, non plastic; moist, brown, dense. FILL.	
	0					(3.7'- 5') NARROWLY GRADED SAND (SP); ~95% sand, fine to medium, ~5% gravel, fine, subrounded; moist, reddish brown, FILL.	
	15					(5'- 7.1') SILTY SAND WITH GRAVEL (SM); ~45% sand, fine to medium, ~40% gravel, fine to medium, subangular, ~15% fines, non plastic; dry, brown, potential cave-in material.	
						(7.1'- 9.2') NARROWLY GRADED SAND (SP); ~95% sand, fine to medium, ~5% gravel, fine, subrounded; moist, reddish brown.	
						(9.2'- 10') SILTY SAND WITH GRAVEL (SM); ~60% sand, fine to medium, ~40% gravel, fine to medium, subangular; moist, orange.	
						(10'- 10.3') SILTY SAND (SM); ~80% sand, fine to medium, ~20% fines, non plastic; moist, reddish brown.	
						(10.3'- 12.9') CONCRETE; dry, light gray-brown, crushed. CONCRETE.	
						(12.9'- 15') NARROWLY GRADED GRAVEL WITH SILT AND SAND (GP-GM); ~80% gravel, medium to coarse, subangular, ~15% sand, fine to medium, ~5% fines, non plastic; wet, orange and gray, gravel up to 2".	
						End of Boring at 15 feet.	
						Backfilled with cuttings/sand and patched at surface.	
NOTES:							
PEN = PENETRATION LENGTH OF SAMPLER OR CORE BARREL ppm = PARTS PER MILLION NLO = NAPHTHALENE LIKE ODOR CrLO= CREOSOTE LIKE ODOR							
REC = RECOVERY LENGTH OF SAMPLE IN. = INCHES PLO = PETROLEUM LIKE ODOR OLO = ORGANIC LIKE ODOR							
PID = PHOTOIONIZATION DETECTOR READING (PPM) FT. = FEET TLO = TAR LIKE ODOR SLO = SULFUR LIKE ODOR							
JHS = JAR HEADSPACE PID READING (PPM) ALO = ASPHALT LIKE ODOR							
NA = NOT APPLICABLE Qp = POCKET PENETROMETER							
NM = NOT MEASURED Sv = TORVANE PEAK							



GEI Consultants, Inc. P.C.
530 7th Avenue
Suite 2007
New York, New York
10018

CLIENT: NYCEDC
PROJECT: 400 Food Center Drive
CITY/STATE: Bronx, NY
GEI PROJECT NUMBER: 2303627

BORING LOG

PAGE
1 of 2

PDI-03

GROUND SURFACE ELEVATION (FT): 13.02 LOCATION: Bronx, NY
NORTHING (FT): 234345 EASTING (FT): 1020268 TOTAL DEPTH (FT): 35.0
DRILLED BY: AARCO DATUM VERT. / HORZ.: NAVD 88 / NAD83 NY East Zone
LOGGED BY: S. Ng DATE START / END: 1/31/2024 - 1/31/2024
DRILLING DETAILS: Sonic Coring / Geoprobe 8140LC / Core Size: 4 in. / Core Type: Sonic
WATER LEVEL DEPTHS (FT): _____
GENERAL NOTE: _____

ELEV. FT.	DEPTH FT.	SAMPLE INFO			STRATA	SOIL / BEDROCK DESCRIPTION
		TYPE and NO.	PEN/REC FT./FT.	PID (PPM)		
	0	S1	5/3.1	0.0		(0'- 0.5') ASPHALT. (0.5'- 2.7') NARROWLY GRADED GRAVEL WITH SILT AND SAND (GP-GM); ~70% gravel, fine to medium, subangular; dry, light gray and light brown, 30% silty sand decreasing to 15%. (2.7'- 5') NARROWLY GRADED GRAVEL WITH SILT AND SAND (GP-GM); ~75% sand, fine to medium, ~15% fines, non plastic, ~10% gravel, fine to medium, subrounded; moist, orange-brown, slightly dense to loose.
	5	S2	5/1.5	0.0		(5'- 10') WIDELY GRADED GRAVEL (GW); ~95% gravel, medium to coarse, subrounded; dry, light brown and light brown, trace fine silty sand; gravel up to 4".
	10	S3	5/0.5	0.0		(10'- 15') WIDELY GRADED GRAVEL (GW); ~95% gravel, fine to medium, subrounded; dry to moist, light gray and brown, gravel 0.5-2".
	15	S4	10/0.7	0.0		(15'- 25') WIDELY GRADED GRAVEL (GW); ~90% gravel, medium to coarse, subangular; saturated, gray-brown, 10% fine to medium silty sand.
	25	S5	5/4.7	0.0		(25'- 26.4') NARROWLY GRADED GRAVEL WITH SILT AND SAND (GP-GM); ~80% gravel, medium to coarse, subangular, ~20% sand, medium to coarse; wet, dark gray, gravel up to 4"; non-cohesive clayey sand at 25.7-26.4'. (26.4'- 26.6') CLAYEY SAND (SC); ~75% sand, fine, ~20% fines, low plasticity, ~5% gravel, fine, subrounded; moist, light gray, slight cohesion; dense; FeOx mottling. (26.5'- 28.4') SILTY SAND WITH GRAVEL (SM); ~65% sand, fine to medium, ~20% gravel, medium, subrounded, ~15% fines, non plastic; moist, brown-gray, trace 3" fragments of weathered bedrock.
	30					

NOTES:

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PID = PHOTOIONIZATION DETECTOR READING (PPM)
JHS = JAR HEADSPACE PID READING (PPM)



ppm = PARTS PER MILLION
IN. = INCHES
FT. = FEET


NLO = NAPHTHALENE LIKE ODOR
PLO = PETROLEUM LIKE ODOR
TLO = TAR LIKE ODOR
CLO = CHEMICAL LIKE ODOR
ALO = ASPHALT LIKE ODOR

CrLO= CREOSOTE LIKE ODOR
OLO = ORGANIC LIKE ODOR
SLO = SULFUR LIKE ODOR
MLO = MUSTY LIKE ODOR

NA = NOT APPLICABLE Q_p = POCKET PENETROMETER
NM = NOT MEASURED S_v = TORVANE PEAK

ENVIRONMENTAL BORING LOG KRASDALE PDI BORINGS 02222024.GPJ GEI TEMPLATE 11-7-13.GDT 2/27/24

 GEI Consultants GEI Consultants, Inc. P.C. 530 7th Avenue Suite 2007 New York, New York 10018		CLIENT: NYCEDC		BORING LOG PDI-03				
		PROJECT: 400 Food Center Drive CITY/STATE: Bronx, NY GEI PROJECT NUMBER: 2303627				PAGE 2 of 2		
ELEV. FT.	DEPTH FT.	SAMPLE INFO			STRATA	SOIL / BEDROCK DESCRIPTION		
		TYPE and NO.	PEN/REC FT./FT.	PID (PPM)				
	30	S6	5/4.6	0.0		(28.4'- 30') SILTY SAND WITH GRAVEL (SM); ~70% sand, fine to medium, ~20% fines, non plastic, ~10% gravel, medium, subrounded; moist, orange-brown. (30'- 31.2') NARROWLY GRADED GRAVEL WITH CLAY AND SAND (GP-GC); ~70% gravel, coarse, subrounded; wet, dark gray, possible cave-in material; gravel up to 4" with 30% clayey sand; very soft/mushy. (31.2'- 35') SILTY SAND WITH GRAVEL (SM); ~60% sand, fine to medium, ~25% gravel, fine to coarse, subrounded, ~15% fines, non plastic; moist, orange-brown to yellow-brown, mica throughout. End of Boring at 35 feet. Backfilled with cuttings/sand and patched at surface.		
	35							
NOTES: PEN = PENETRATION LENGTH OF SAMPLER OR CORE BARREL ppm = PARTS PER MILLION NLO = NAPHTHALENE LIKE ODOR CrLO= CREOSOTE LIKE ODOR REC = RECOVERY LENGTH OF SAMPLE IN. = INCHES PLO = PETROLEUM LIKE ODOR OLO = ORGANIC LIKE ODOR PID = PHOTOIONIZATION DETECTOR READING (PPM) FT. = FEET TLO = TAR LIKE ODOR SLO = SULFUR LIKE ODOR JHS = JAR HEADSPACE PID READING (PPM) ALO = ASPHALT LIKE ODOR CLO = CHEMICAL LIKE ODOR MLO = MUSTY LIKE ODOR NA = NOT APPLICABLE Qp = POCKET PENETROMETER NM = NOT MEASURED Sv = TORVANE PEAK								

<div><div>GEI</div><div><div>GEI Consultants</div></div></div>		<div>GEI Consultants, Inc. P.C. 530 7th Avenue Suite 2007 New York, New York 10018</div>	<div>CLIENT: <u>NYCEDC</u></div> <div>PROJECT: <u>400 Food Center Drive</u></div> <div>CITY/STATE: <u>Bronx, NY</u></div> <div>GEI PROJECT NUMBER: <u>2303627</u></div>	<div>BORING LOG</div> <div>PAGE 1 of 1</div> <div>PDI-04</div>	
GROUND SURFACE ELEVATION (FT): <u>12.96</u>		LOCATION: <u>Bronx, NY</u>			
NORTHING (FT): <u>234282</u> EASTING (FT): <u>1020283</u>		TOTAL DEPTH (FT): <u>15.0</u>			
DRILLED BY: <u>AARCO</u>		DATUM VERT. / HORZ.: <u>NAVD 88 / NAD83 NY East Zone</u>			
LOGGED BY: <u>S. Ng</u>		DATE START / END: <u>1/31/2024 - 1/31/2024</u>			
DRILLING DETAILS: <u>Sonic Coring / Geoprobe 8140LC / Core Size: 4 in. / Core Type: Sonic</u>					
WATER LEVEL DEPTHS (FT): _____					
GENERAL NOTE: <u>Boring installed in location of minor subsurface void (at 3-4 feet deep) as identified during GPR scan.</u>					
<u>No voids or hollow areas were identified during drilling.</u>					
ELEV. FT.	DEPTH FT.	SAMPLE INFO		STRATA	SOIL / BEDROCK DESCRIPTION
		TYPE and NO.	PEN/REC FT./FT.		
	0	S1	5/3.5	0.0	(0'- 0.7') ASPHALT.
					(0.7'- 1') NARROWLY GRADED GRAVEL WITH SILT AND SAND (GP-GM); ~70% gravel, medium, subangular, ~20% sand, fine, ~10% fines, non plastic; dry, gray to brown-gray.
	10				(1'- 3.1') SILTY SAND WITH GRAVEL (SM); ~65% sand, fine to medium, ~20% fines, non plastic, ~15% gravel, fine to medium, subrounded; moist, brown, very dense to dense.
	5	S2	5/3.2	0.0	(3.1'- 5') NARROWLY GRADED SAND (SP); ~85% sand, medium, ~10% gravel, fine to coarse, subrounded, ~10% fines, non plastic; moist, orange-brown, one gravel chunk up to 4".
					(5'- 10') NARROWLY GRADED SAND (SP); ~85% sand, medium, ~10% gravel, fine to coarse, subrounded, ~10% fines, non plastic; moist, orange-brown, interval of dense silty sand at 5.8-6.3'; gravel up to 1.5"; at 3.1'- chunk of split bluish-gray concrete with white and dark gray fibers.
	5				
	10	S3	5/1	0.0	(10'- 15') NARROWLY GRADED GRAVEL WITH SAND (GP); ~80% gravel, medium, subangular, ~15% sand, fine to medium, ~5% fines, non plastic; wet, orange and gray, gravel up to 2".
	0				
	15				End of Boring at 15 feet. Backfilled with cuttings/sand and patched at surface.
NOTES:					
PEN = PENETRATION LENGTH OF SAMPLER OR CORE BARREL ppm = PARTS PER MILLION NLO = NAPHTHALENE LIKE ODOR CrLO= CREOSOTE LIKE ODOR					
REC = RECOVERY LENGTH OF SAMPLE IN. = INCHES PLO = PETROLEUM LIKE ODOR OLO = ORGANIC LIKE ODOR					
PID = PHOTOIONIZATION DETECTOR READING (PPM) FT. = FEET TLO = TAR LIKE ODOR SLO = SULFUR LIKE ODOR					
JHS = JAR HEADSPACE PID READING (PPM) ALO = ASPHALT LIKE ODOR CLO = CHEMICAL LIKE ODOR MLO = MUSTY LIKE ODOR					
NA = NOT APPLICABLE Qp = POCKET PENETROMETER					
NM = NOT MEASURED Sv = TORVANE PEAK					

ENVIRONMENTAL BORING LOG KRASDALE PDI BORINGS 02222024.GPJ GEI TEMPLATE 11-7-13.GDT 2/27/24



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New York, New York
10018

CLIENT: NYCEDC
PROJECT: 400 Food Center Drive
CITY/STATE: Bronx, NY
GEI PROJECT NUMBER: 2303627

BORING LOG

PAGE
1 of 2

PDI-05

GROUND SURFACE ELEVATION (FT): 12.63 LOCATION: Bronx, NY
NORTHING (FT): 234262 EASTING (FT): 1020302 TOTAL DEPTH (FT): 30.0
DRILLED BY: AARCO DATUM VERT. / HORZ.: NAVD 88 / NAD83 NY East Zone
LOGGED BY: S. Ng DATE START / END: 1/31/2024 - 1/31/2024
DRILLING DETAILS: Sonic Coring / Geoprobe 8140LC / Core Size: 4 in. / Core Type: Sonic
WATER LEVEL DEPTHS (FT): _____
GENERAL NOTE: _____

ELEV. FT.	DEPTH FT.	SAMPLE INFO			STRATA	SOIL / BEDROCK DESCRIPTION
		TYPE and NO.	PEN/REC FT./FT.	PID (PPM)		
	0	S1	5/3	0.0		(0'- 0.7') ASPHALT.
	10					(0.7'- 1.7') WIDELY GRADED GRAVEL WITH SILT AND SAND (GW-GM); ~85% gravel, fine to coarse, subangular; dry, brown, 15% fine to medium silty sand. (1.7'- 3.7') SILTY SAND SANDY SILT (SM); ~70% sand, fine to medium, ~20% fines, non plastic, ~10% gravel, fine, subrounded; moist, brown, dense.
	5	S2	5/1	0.0		(3.7'- 5') WIDELY GRADED GRAVEL SANDY SILT (GW); ~100% gravel, medium to coarse, subrounded; dry, gray, fractured cobble up to 4". (5'- 10') WIDELY GRADED GRAVEL SANDY SILT (GW); ~85% gravel, medium to coarse, subangular, ~10% sand, fine to medium, ~5% fines, non plastic; wet, dark gray and brown, gravel up to 4".
	10	S3	5/1.8	0.0		(10'- 15') WIDELY GRADED GRAVEL (GW); ~80% gravel, fine to coarse, subangular, ~15% sand, medium to coarse, ~5% fines, non plastic; saturated, dark gray and brown, gravel up to 4".
	15	S4	5/2	0.0		(15'- 16.25') SILTY SAND WITH GRAVEL (SM); ~75% sand, medium to coarse, ~15% fines, non plastic, ~10% gravel, fine, subangular; saturated, orange-brown and dark gray. (16.25'- 20') WIDELY GRADED GRAVEL (GW); ~95% gravel, fine to coarse, subangular; saturated, dark gray and orange-brown, trace medium-coarse sand.
	20	S5	5/1	0.0		(20'- 25') WIDELY GRADED GRAVEL WITH SILT AND SAND (GW); ~85% gravel, fine to coarse, subangular; saturated, brown, 15% fine to medium silty sand.
	25					

NOTES:

PEN = PENETRATION LENGTH OF SAMPLER OR CORE BARREL
REC = RECOVERY LENGTH OF SAMPLE
PID = PHOTOIONIZATION DETECTOR READING (PPM)
JHS = JAR HEADSPACE PID READING (PPM)



ppm = PARTS PER MILLION
IN. = INCHES
FT. = FEET

NLO = NAPHTHALENE LIKE ODOR
PLO = PETROLEUM LIKE ODOR
TLO = TAR LIKE ODOR
CLO = CHEMICAL LIKE ODOR
ALO = ASPHALT LIKE ODOR

CrLO= CREOSOTE LIKE ODOR
OLO = ORGANIC LIKE ODOR
SLO = SULFUR LIKE ODOR
MLO = MUSTY LIKE ODOR

NA = NOT APPLICABLE Q_p = POCKET PENETROMETER
NM = NOT MEASURED S_v = TORVANE PEAK

ENVIRONMENTAL BORING LOG KRASDALE PDI BORINGS 02222024.GPJ GEI TEMPLATE 11-7-13.GDT 2/27/24

 GEI Consultants GEI Consultants, Inc. P.C. 530 7th Avenue Suite 2007 New York, New York 10018		CLIENT: NYCEDC PROJECT: 400 Food Center Drive CITY/STATE: Bronx, NY GEI PROJECT NUMBER: 2303627		BORING LOG PAGE 2 of 2 PDI-05		
ELEV. FT.	DEPTH FT.	SAMPLE INFO			STRATA	SOIL / BEDROCK DESCRIPTION
		TYPE and NO.	PEN/REC FT./FT.	PID (PPM)		
	25	S6	5/4.3	0.0		(25'- 26.5') WIDELY GRADED GRAVEL WITH CLAY AND SAND (GW-GC); ~80% gravel, fine to coarse, subangular, ~15% sand, fine to medium, ~5% fines, non plastic to low plasticity; wet, dark gray, loose. (26.5'- 30') SILTY SAND WITH GRAVEL (SM); ~65% sand, fine to medium, ~20% fines, non plastic, ~15% gravel, fine to medium, subrounded; moist, brown, very dense; mica throughout.
	-15					
	30					
End of Boring at 30 feet. Backfilled with cuttings/sand and patched at surface.						
NOTES: PEN = PENETRATION LENGTH OF SAMPLER OR CORE BARREL ppm = PARTS PER MILLION NLO = NAPHTHALENE LIKE ODOR CrLO= CREOSOTE LIKE ODOR REC = RECOVERY LENGTH OF SAMPLE IN. = INCHES PLO = PETROLEUM LIKE ODOR OLO = ORGANIC LIKE ODOR PID = PHOTOIONIZATION DETECTOR READING (PPM) FT. = FEET TLO = TAR LIKE ODOR SLO = SULFUR LIKE ODOR JHS = JAR HEADSPACE PID READING (PPM) ALO = ASPHALT LIKE ODOR CLO = CHEMICAL LIKE ODOR MLO = MUSTY LIKE ODOR NA = NOT APPLICABLE Qp = POCKET PENETROMETER NM = NOT MEASURED Sv = TORVANE PEAK						



Accu-Scan GPR

UTILITY LOCATING

PROJECT SUMMARY REPORT

Date: January 30, 2024

Hunts Point Market

355 Food Center Drive Bronx, NY 10474



Prepared For:



GEI Consultants
1385 Broadway Suite 20
New York, NY 10018



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To whom it may concern

RE: Utility Locating Investigation at Hunts Point Market 355 Food Center Drive Bronx, NY 10474

I would like to thank you once again for the opportunity to work with you on the Utility Locating project at Hunts Point Market 355 Food Center Drive Bronx, NY 10474; our objective was to investigate for a water line, subsurface voids, and possible cribbing. The general areas for GPR scanning were pre-selected and marked.

MATERIALS

Electromagnetic Detection Cable & Pipe Locator RD7000PL & TX-3 Transmitter for identifying buried cables/pipes. Sensors and Software LMX 200

METHODS

A visual inspection was performed within each area to search for utility poles, utility vaults, manholes, handholes, catch basins, drains, conduits, cleanouts, water valves, gas valves, tank pads, and vents located within or near the survey area. A visual inspection was also performed in the basement of each building surrounding each area to search for utilities exiting in the basement. The cable & pipe locator in Active Mode was performed within each area by directly applying a signal to an electrical conduit, telecommunication conduit, fire hydrants, water shut-off valves, ground wires, and metallic drain lines. A detectable duct rodder was inserted within all accessible non-metallic drains, storm sewer, and sanitary sewer lines that appeared to run through the survey area at a depth less than 6ft. Passive Mode with the Cable & Pipe Locator was performed to search for inaccessible high voltage electric & telecommunications lines. GPR scans were performed to determine the location and depth of each line more accurately and to search for non-metallic line, unknown, and abandoned utilities.

RESULTS

As requested, Accu-Scan GPR Corp. provided utility locating services using a combination of GPR and Electromagnetic Detection technology to locate underground utilities. Underground Utilities were marked with paint and/or flags using the standard American Public Works Association (APWA) Color Codes. Electric is marked in Red, Telecommunications is marked in Orange, Water is marked in Blue, Gas is marked in Yellow, Drains, Storm Sewer, and Sanitary Sewer is marked in Green, and Unknown lines are marked in Pink. The results of the survey will be discussed further into detail which will consist of on-site images, methods of detection, GPR data collected, and brief descriptions of findings.



UTILITY LOCATING APPLICATIONS GPR & EM DETECTION LIMITATIONS AND CONSIDERATIONS

Electromagnetic Detection Line Locating Techniques (Conduction): The successful detection of underground utilities is dependent primarily upon the composition and construction of the line of interest, and depth of burial. When using the EMLL techniques in the conduction mode, the utilities must be exposed at the surface or in accessible utility vaults close to the survey area. Utilities detectable with this technique include most continuously connected metal pipes, cables/wires or non-metallic utilities with tracer wires. Such utilities generally include water, electric, natural gas, telephone, and other conduits related to facility operations. Utilities that may not be detectable using these techniques include certain abandoned utilities, utilities not exposed at the ground surface, or those made of non-electrically conductive materials such as PVC, fiberglass, vitrified clay, and metal pipes with insulating joints. Pipes generally deeper than about five feet may not be detected. The detection of underground utilities using the conduction mode is also dependent upon the proximity of those utilities to other subsurface utilities and/or above ground cultural objects. Nearby buried utilities can mask or distort signals associated with the utility in questions. For example, if several utilities are buried in a common trench or in close proximity to one another, the signal applied to one utility can couple to the adjacent utility. This can lead to an error in the marked position of the utility in question, or to delineating the wrong utility altogether. In addition, when coupling of nearby utilities takes place, shallow utilities will generally produce a stronger response than adjacent deeper utilities. Therefore, shallow utilities buried over deeper utilities will generally mask effects from the deeper utilities. Besides buried utilities, above ground metal objects can also be affected by coupling of the conducted signal. These objects include rebar in concrete, railroad spurs, and above ground pipe alignments. Typically, subsurface utilities located beneath or near these features are difficult to accurately detect or delineate.

Electromagnetic Detection Line Locating Techniques (Passive): The ability to detect passive signals associated with 60 Hz electric lines is dependent upon the current flowing through the line. The passive signal strength has nothing to do with voltage. It is the current flowing through the line that produces the magnetic field, which in turn is detected by the locator. If an electric line is energized at high voltage, but the load is switched off, there is nowhere for current to flow. Without current flow, there will be no detectable power signal. This results in a line that will not be detected by the locating equipment, but still remains very dangerous if contacted by an excavator, auger, or metal pile.

Electromagnetic Detection Line Locating Techniques (Induction): The detection of buried metal utilities, using the handheld induction technique, is dependent upon the size of the utility, its depth of burial, and its proximity to above ground metal objects. As the size or diameter of the buried metal utility decreases, the depth at which it can be detected also decreases. For example, a relatively large utility such as a corrugated steel drain line, can be detected at depths of 3 to 4 feet. However, a smaller utility, such as an electric line associated with streetlights, may be detected only at depths of 1 to 2 feet. In addition, the ability to detect a buried metal utility is also based on its proximity to above ground metal objects or structure. Cultural features such as chain link fences, buildings, debris, railroad spurs, guard rails, other utilities, etc. may produce a response that can mask effects from the nearby buried metal utility.

Ground Penetrating Radar Limitations: As with any other geophysical technique, GPR performance is site-specific and it is unsuitable for use at some locations. Expected subsurface conditions and the target composition, location and size should be taken into account. GPR anomalies rely on a detectable contrast in subsurface electrical properties between the target of interest and its surrounding material. In the absence of a detectable contrast, no anomaly will be evident. GPR signal cannot penetrate through highly conductive material e.g., beneath metal sheets or very wet ground or in material saturated with salt water or highly conductive fluid. Velocity - depth calibration should always be carried out to obtain satisfactory depth estimates. GPR data processing and interpretation can be complicated - specialized geophysical analysis and interpretation is often required. GPR is unsuited to absolute measurement, e.g., it can find wet areas, but cannot determine actual moisture content. GPR is an interpretive method, based on the identification of reflectors, which may not uniquely identify an object. Additional constraining information from ground truthing or other geophysical methods is important to help resolve any ambiguities. In common with all surface geophysical methods GPR is inherently limited by decreasing resolution with depth.

Weather Conditions: Because moisture raises the conductivity of the ground, especially clay soil and silt, deep snow and rain can be a factor in utility locating. Once the radar touches any ground holding moisture, it bounces right back. This makes it tough to read anything past that water table. Therefore, during wet weather conditions are not ideal to do any type of locating.

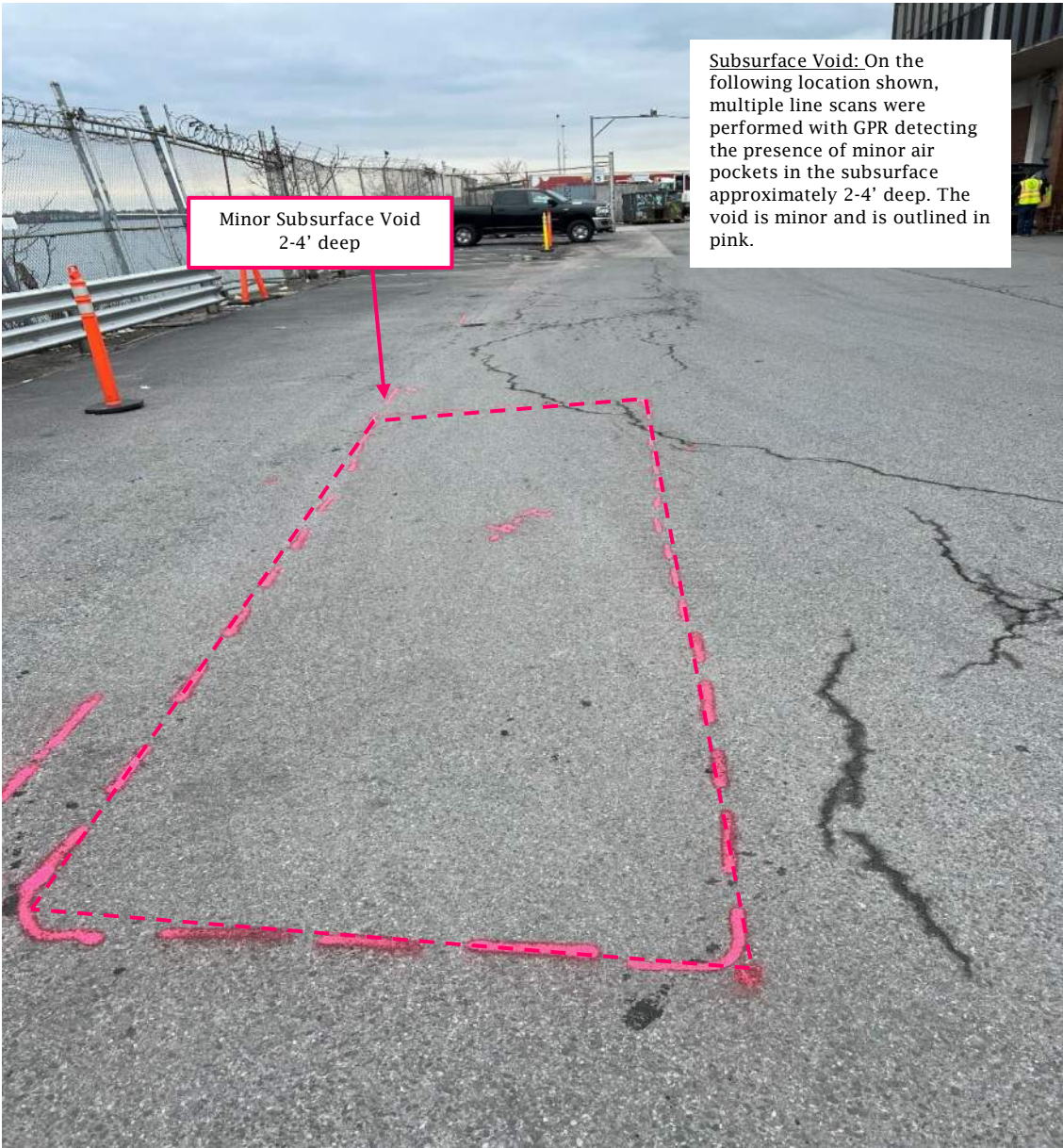
Surface Area Clearance of Obstacles: The surface being scanned becomes a factor for GPR data when the terrain is rough enough to cause the equipment to separate from the surface more than 2 to 3 inches. The quality of the data when this happens is then compromised. Ideally, the surface needs to be reasonably flat with a good amount of clearance. Obstacles, like trees and bushes, are mainly factors that can cause a delay in the time.

Limitations of Technology with Certain Materials: There are certain materials that are much more conductive and easily located than others. Metal, for example, is highly conductive, and PVC or plastic has no conductivity, which makes it more challenging to locate. PVC and other non-metallic objects do not show a signal, but rather the signal can show something inside the pipe, like air or water. The size of the PVC does impede the ability for the radar to read if it is smaller, like a 1" line. This is because the radar used is for utility locating is typically one that is too large to "see" a line that is that small.

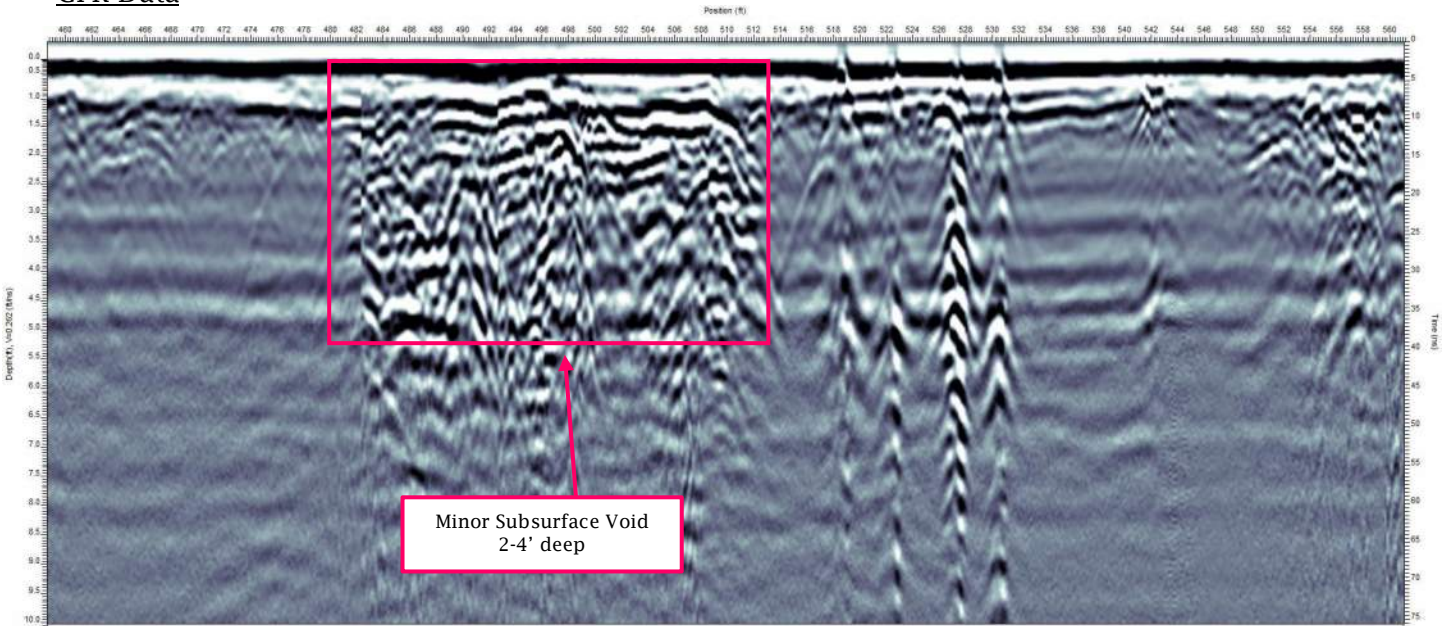
Identity of Target: GPR cannot tell the type or material of the buried utility line. Must be verified by potholing or tracing the utility line structure to structure. No excavation should take place outside of Utility Locating Survey area specified by client. The tolerance zone is defined as A) 2ft. on either side of the designated center line of the facility if the diameter is not provided. B) 2ft. from each outside edge of the diameter is provided.

Hunts Point Market 355 Food Center Drive Bronx NY 10474 Results: On the following project summary report images taken on-site, GPR data collected from the property will be shown, and brief description findings will be provided. The objective for this project was to investigate for a water line, to determine if there are subsurface voids in the pre-determined area, and to possibly detect abnormal subsurface features such as cribbing. The water line was detected using EM Detection conductive locating methods. GPR technology was used to investigate for subsurface voids and cribbing. The area that was investigated for cribbing, GPR data collection was limited due to truck trailers in the parking lot. All findings were marked in paint.

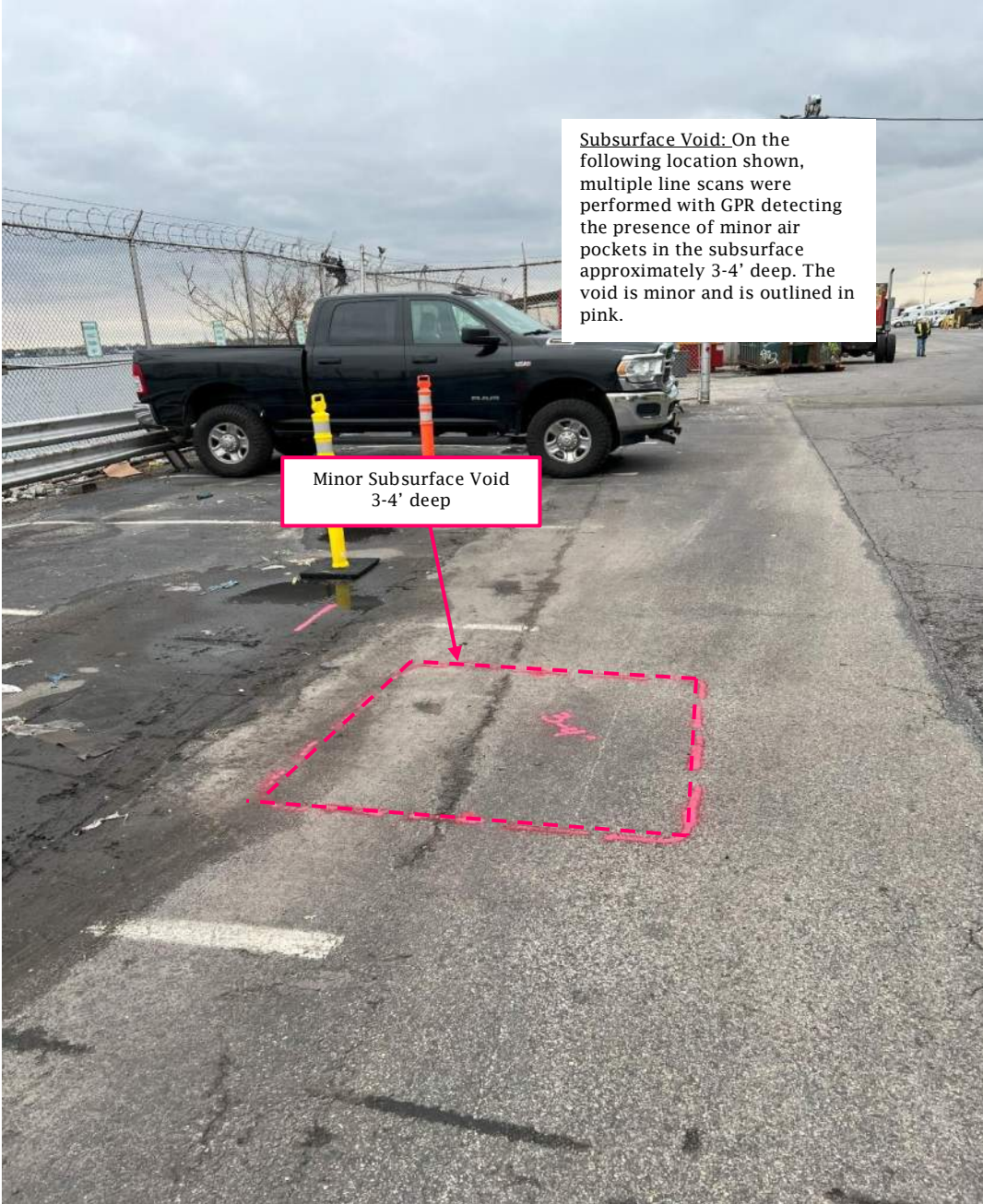
Subsurface Voids



GPR Data



Subsurface Voids



GPR Data

