

# Former Columbia Smelting and Refining Works Site a.k.a. Red Hook Recreation Area Ball Fields 5 – 8 and Ball Field 9

KINGS COUNTY BROOKLYN, NEW YORK

# **CONSTRUCTION COMPLETION REPORT**

NYSDEC Site Number: 224231 USEPA ID Number: NYN000206593

## **Prepared for:**

New York City Department of Parks and Recreation Olmsted Center, Flushing Meadows Corona Park Flushing, NY 11368

# Prepared by:

TRC Engineers, Inc. 1430 Broadway, 10<sup>th</sup> Floor New York, NY (212) 221-7822

# **Revisions to Final Approved Construction Completion Report:**

Revision No.	Date Submitted	Summary of Revision	NYSDEC Approval Date

**SEPTEMBER 2023** 



#### **AECOM CERTIFICATION STATEMENT**

I, <u>John G. Hartmann</u>, am currently a Registered Landscape Architect licensed by the State of New York. I had direct responsibility for the personnel engaged in the oversight and inspection of the implementation of the remedial program activities, and I certify to the best of my knowledge, information, and belief, based on information made available and provided to me, that the remedial work completed by the construction contractor is in substantial conformance with the Remedial Design specifications and drawings.

I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law. I, <u>John G. Hartmann</u>, of <u>AECOM USA</u>, <u>Inc.</u>, am certifying as Owner's Designated Site Representative.



9/29/2023

NYS Landscape Architect No. 001808 Date

Signature

It is a violation of Article 145 of New York State Education Law for any person to alter this document in any way without the express written verification of adoption by any New York State licensed engineer in accordance with Section 7209(2), Article 145, New York State Education Law.



#### TRC CERTIFICATION STATEMENT

I, <u>James Peronto</u>, certify that the data submitted to the Department with this Construction Completion Report demonstrates that the remediation requirements set forth in the Remedial Design specifications and drawings and in all applicable statutes and regulations have been or will be achieved in accordance with the time frames, if any, established for the remedy.

I certify that all use restrictions, Institutional Controls, Engineering Controls, and/or any operation and maintenance requirements applicable to the Site are contained in a Deed Restriction created and recorded with the Office of the City Register of the City of New York (ID No. [TO BE DETERMINED]).

I certify that a Site Management Plan has been submitted for the continual and proper operation, maintenance, and monitoring of all Engineering Controls employed at the Site and that such plan has been approved by the Department.

I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law. I, <u>James Peronto</u>, <u>of TRC Engineers</u>, <u>Inc.</u>, am certifying as Owner's Designated Site Representative for the site.



9/29/23

NYS Professional Engineer #83861

Date

Signature

It is a violation of Article 145 of New York State Education Law for any person to alter this document in any way without the express written verification of adoption by any New York State licensed engineer in accordance with Section 7209(2), Article 145, New York State Education Law.



#### **OWNERS CERTIFICATION STATEMENT**

In accordance with the Administrative Settlement Agreement and Order on Consent for a Removal Action (USEPA Index No. CERCLA 02-2016-2010) Section VIII Part 34, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature of Responsible Corporate Official of Respondent

Date

Christopher S. Adkins, NYC Parks Agency Chief Contracting Officer

Name



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# 1. Background and Site Description

This Construction Completion Report (CCR) has been prepared for the Red Hook Ball Fields 5 through 8 and Ball Field 9 (Former Columbia Smelting and Refining Works Site) site (the "Site"; New York State Department of Environmental Conservation [NYSDEC] Site Number 224231; United States Environmental Protection Agency [USEPA] ID Number NYN000202593). The Site consists of two non-contiguous properties located within the 58-acre Red Hook Recreation Area in Brooklyn, New York. Ball Fields 5 through 8 (overlain with Soccer Field 7) and the Ball Fields 5 through 8 Planting Strips are located at 98 Lorraine Street, Brooklyn, New York, 11231, designated as Block 581, Lot 1, and consist of a 4.731-acre portion of the Red Hook Recreation Area. Ball Field 9 and the Ball Field 9 Planting Strips are located at 825 Henry Street, Brooklyn, New York, 11231, designated as portions of Block 614, Lot 300 and Block 602, Lot 1, and consist of a 3.4-acre portion of the Red Hook Recreation Area. A Site Location Map is provided as **Figure 1**.

The Site consists of a public park (Ball Fields 5 through 8 overlain with Soccer Field 7 and Ball Field 9) and associated planting strips as a part of the Red Hook Recreation Area. The Site is zoned as PARK for public park recreational use. The Ball Fields 5 through 8 park area was reopened to the public on December 15, 2021. The Ball Field 9 park area was reopened to the public on November 30, 2022. The Site is surrounded by residential, recreational, and manufacturing/industrial properties. Site location information is provided on **Figure 2**. Preconstruction conditions plans for Ball Fields 5 through 8 and Ball Field 9 showing the Site locations and boundaries prior to the removal actions are provided as **Figures 3**, **4A**, **4B**, **and 4C**, **respectively**. The boundaries of the Site are depicted and more fully described in the metes and bounds site description included on the EPA Deed Restriction Exhibit drawing providing in **Appendix L**. The asbuilt drawing depicting the metes and bounds site description included on the EPA Deed Restriction is provided **Appendix K**.

According to available historical photos and fire insurance maps, at least a portion, if not all, of the Site was formerly land under water and wetlands. Ball Fields 5 through 8 were filled prior to 1900 and Ball Field 9 was filled in stages between 1886 and 1940. The Site was occupied by a shantytown in the 1920s and early 1930s. According to the USEPA, Ball Fields 5 through 8 were occupied by smelting and refining companies from the late 1920s through the late 1930s, including Columbia Smelting & Refining Works, Inc. (Columbia). The Columbia facility was demolished in the late 1930s and the Site has been utilized as a public park dating back to the 1940s.

In January 2014, NYSDEC referred the Site to USEPA to determine whether a removal action was appropriate. Between January 2014 and February 2015, USEPA conducted a removal site evaluation for the Site, including a round of soil sampling at Ball Fields 7 and 8, which are downwind of and in close proximity to the historic secondary smelting facility footprint, in October 2014. Analytical results of the soil samples demonstrated that lead, arsenic, antimony, and iron were present at some locations at the Site at levels exceeding the respective USEPA Removal Management Levels ("RMLs"). USEPA determined that the pattern of elevated lead levels within the upper foot of soil as well as correlations between the lead, antimony, and tin detections indicated the elevated contaminant levels

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at the Site are characteristic of secondary lead smelting emissions and therefore are attributable to the historic, secondary lead smelting facility formerly located at the Site.

In March 2015, USEPA conducted a second round of soil sampling at the Site to determine whether the historic smelting facility impacted the remainder of the block that includes Ball Fields 7 and 8 and additional downwind areas. The USEPA RML for lead in residential soil is 400 parts per million (ppm). The results indicated the presence of lead at levels exceeding the USEPA RML in Ball Fields 5-8 and the surrounding areas. Lead levels in the upper foot of soil on these ball fields were, on average, as follows: 1,580 ppm in the uppermost inch, 2,240 ppm at the one- to six-inch interval below the ground surface, and 2,590 ppm at the six- to twelve-inch depth interval. Antimony, arsenic, cobalt, iron, and thallium were also found at levels exceeding the respective USEPA RMLs for residential soil in the same geographic areas. USEPA determined that the correlations between lead, antimony, and tin detections in this area indicate that the elevated contaminant levels are attributable to the historic, secondary lead smelting facility that was located at the Site.

Based on these findings, on April 8, 2015, USEPA recommended closure of and restriction of public access to Ball Fields 5-8 and all nearby grassy areas until such time that a removal action could be completed to address contaminants in this area properly. On April 13, 2015, DPR voluntarily agreed to undertake this action, and DPR notified park users of the field closures by April 22, 2015. Public access to all grassy areas on Block 581, Lot 1 was prohibited and access prevented by fencing.

In April 2015, USEPA conducted a third round of soil sampling in additional areas of the Red Hook Recreation Area to further delineate the aerial extent of the elevated contaminant levels that are associated with the historic, secondary lead smelting facility. Results of that sampling indicate the presence of antimony, arsenic, iron, and lead at levels above the respective USEPA RMLs for residential soil in Ball Field 9 and the Ball Field 9 Planting Strips at depths greater than six inches below the ground surface. Based on the correlations between antimony, lead, and tin, USEPA has determined that these contaminants are attributable to the historic, secondary lead smelting facility that was located at the Site.

The chemicals identified above, with the exception of iron, are "hazardous substances" under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14). Exposure to lead can cause damage to the nervous system, leading to cognitive deficits and/or disabilities in children or an increase in blood pressure in adults. Exposure to antimony may cause adverse health effects to the lungs, heart, liver and/or kidneys. Exposure to arsenic can cause damage to the throat, lungs, skin, and/or circulatory system. In addition, USEPA has determined that lead is a probable human carcinogen and arsenic is a known human carcinogen.

The USEPA determined that an exposure pathway for direct contact with the elevated levels of the hazardous substances at Ball Fields 5-8 and the Ball Fields 5-8 Planting Strips could arise that would present an unacceptable risk to public health. If the grassy areas on and surrounding Ball Fields 5-8 were not properly maintained, it could result in a reduced grass cover and/or areas containing bare soil. In addition, aeration of the soil or removal of weeds during maintenance may pull subsurface contaminated soil to the surface and distribute it over the outfields and other nearby grassy areas or the

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surrounding sidewalks, where it may become available for direct contact. While this area was actively maintained to prevent exposures and was at that time closed off to the public, if it were to remain in use without proper maintenance, an exposure pathway would arise. If trespassing were to occur or the fields or Planting Strips otherwise became accessible to the public, direct contact with contaminated soil may occur. Contaminated soil may be ingested or adhere to footwear, skin or clothing, and may be tracked off the fields or surrounding grassy areas. In addition, during maintenance activities, or because of a lack of maintenance resulting in the presence of bare soil, contaminated soil may become disturbed and become available for inhalation or may migrate into publicly accessible areas via storm water.

Although sampling results from Ball Field 9 and the Ball Field 9 Planting Strips indicate that elevated contaminant levels were present only at depths greater than six inches below the ground surface in these areas, an exposure pathway to the contaminated subsurface soil was possible. If these areas were to be significantly disturbed, excavated, or were allowed to become worn down over the years through routine heavy usage of the fields, vandalism, large public events, natural disasters or aeration conducted during maintenance, direct contact with the elevated contaminant levels in the subsurface could occur. In the event that these circumstances were not properly addressed, contaminated soil that could potentially be brought up from the subsurface could be ingested or adhere to baseball cleats, other footwear, skin or clothing, and could be tracked or carried off the field. Once at the surface, contaminated soil could be further disturbed through the typical heavy usage of the field or by maintenance activities and could potentially become airborne and available for inhalation or may migrate onto the adjacent walkways via storm water.

The City of New York Department of Parks and Recreation (DPR) entered into an Administrative Settlement Agreement and Order on Consent for a Removal Action (USEPA Index No. CERCLA 02-2016-2010), referred to henceforth as "Settlement Agreement," on July 7, 2016 with the USEPA to perform removal actions at the Site. A copy of the USEPA Settlement Agreement is provided in Appendix A. In addition, DPR entered into an Order on Consent and Administrative Settlement Agreement (Index No. R2-20170726-452) on April 1, 2021 with NYSDEC and was assigned Site No. 224231. A copy of the NYSDEC Settlement Agreement is provided in Appendix A.

This CCR has been completed to summarize the removal actions conducted at the Site between May 2019 and November 2022.



# 2. Summary of Site Remedy

# 2.1. Remedial Action Objectives

The Remedial Action Objectives (RAOs) for the Site as based on the removal action requirements in the USEPA Settlement Agreement are as follows.

#### 2.1.1. **Soil RAOs**

**RAOs for Public Health Protection** 

Prevent ingestion/direct contact with contaminated soil.

#### 2.1.2. Groundwater RAOs

RAOs for Public Health Protection

 Prevent ingestion or use of groundwater with contaminant levels exceeding groundwater quality standards.

# 2.2. Description of Selected Remedy

The USEPA Settlement Agreement identified the scope of the removal action in Article VIII Paragraphs 23.d, 23.e, and 24 as follows:

- 1. Place a permeable demarcation layer over existing contaminated soil and provide at least a 12-inch cover layer of clean soil, fill or other material, approved by the USEPA that meets the requirements of 6 New York City Codes, Rules, and Regulations (NYCRR) 375-6.7(d) and the substantive requirements of NYSDEC Technical Guidance for Site Investigation and Remediation (DER-10) 5.4(e).
- 2. Where it is anticipated that such cover in the Planting Strips will damage the existing trees or adversely affect survival of trees, an alternate methodology to eliminate exposure to soil contaminants within the upper 12-inches of soil may be proposed by DPR for approval by USEPA within the Interim Design Plans discussed in Article VIII, Paragraphs 26(d) and 26(e) of the Settlement Agreement.
- 3. Restore the Site to public park usage following completion of the response action pursuant to Paragraph 23(d).
- 4. Establish Institutional Controls (ICs) for the Site, as determined by the NYSDEC and USEPA, and under NYSDEC oversight to prevent future exposure to Site-related hazardous substances that are left in place at the Site, including, but not limited to, a deed restriction. The ICs are documented in the NYSDEC-approved Site Management Plan (SMP).

As indicated above, the scope of the removal action consisted of placement of a clean cover system across the Site, restoring the park to public usage, and establishment of long-term institutional controls. The new park design incorporates the environmental protections required under the Settlement Agreement and approved by the USEPA. The new park design is protective of public health and environment by preventing exposure to on-Site contaminated soil. The removal primarily included a cover system consisting of synthetic turf, paved areas, clean topsoil, bonded aggregate, and permeable pavers



underlain by a demarcation layer. Prior to the installation of the new cover system, the removal of existing park features, site utilities, and topsoil and infield clay occurred. Long-term institutional controls consist of a Deed Restriction. A NYSDEC-approved SMP has been approved under separate cover that provides the Site remedy inspection, maintenance, and monitoring protocols to verify and document that the remedy continues to protect public health and environment in the future. A copy of the SMP is provided in **Appendix M**.

The scope of the removal action included the following key components for the Site:

- 1. Removal of approximately 6-inches of topsoil and infield clay layer and off-site disposal.
- 2. Installation of an approximately 1-foot thick synthetic turf cover system (turf/infill, polyethylene drainage/shock pad, porous aggregate, drainage panel, geogrid, clean imported fill) underlain by a demarcation layer;
- 3. Installation of a minimum 1-foot thick layer or more of clean soil cover underlain by a demarcation layer in the grassed lawn/planting areas;
- 4. Installation of up to a 1-foot thick layer of clean cover, paving, bonded aggregate, permeable pavers, mulch, and ground cover where existing mature trees will be maintained (and provided with fencing) or new paving or pavers were installed, underlain by a demarcation layer;
- 5. Implementation of a long-term Site inspection, maintenance, and monitoring program, the requirements of which are detailed in the SMP; and
- 6. Establishment of institutional controls including deed restrictions for the Site.

Contaminant concentration criteria established for fill material proposed for import to Site for construction of the clean Site cover are included in **Table 1**. Removal Plans for Ball Fields 5 through 8 and Ball Field 9 are included as **Figures 5** and **6**, respectively. Remedial Plans for Ball Fields 5 through 8 and Ball Field 9 are included as **Figures 7** and **8**, respectively. Waste characterization laboratory analytical data packages are included in **Appendix B**. **Figures 9** and **10** present semivolatile organic compounds (SVOCs) and metals remaining in soil at the Site after the completion of the removal action, respectively, and **Figures 11** and **12** present SVOCs and metals remaining in groundwater at the Site after the completion of the removal action, respectively. **Figure 13** presents the remaining soil data after the removal of the UST at Ball Fields 5 through 8.



# 3. Interim Remedial Measures

Prior to the completion of the Site removal actions, the actions taken to fulfill the interim removal measure requirements of Paragraphs 23(a)-(c) of the USEPA Settlement Agreement included:

- Continue to prohibit public access to Ball Fields 5-8 and the surrounding planting strips until the removal action was completed, including access restriction with fencing.
- 2. Provide signage, legible from the street and including contact information, regarding the closure of Ball Fields 5-8 and all entrances to Ball Fields 5-8, until the removal action was completed.
- 3. The natural turf (grass) cover on Ball Fields 5-8 and Ball Field 9 and surrounding planting strips, mulch, and vegetation cover was maintained. The purpose was to stabilize the soils and reduce the presence of bare soil in these areas, in order to minimize erosion and the potential for exposure to contaminants via direct contact and off-Site migration of soil contaminants by air travel or stormwater runoff.
- 4. As requested by USEPA via emails on October 27 and 31, 2017, and similar to the requirements for Ball Fields 5-8 in accordance with Paragraph 23(b) of the Settlement Agreement, signage was provided, legible from the street and included contact information, and the need to take measures to avoid exposure, until such time that the removal action was completed, and maintained signage until removal action completion to ensure continued protectiveness.

The interim removal measures (IRMs) listed above were inspected and maintained on a weekly basis by DPR employees. Routine maintenance of the vegetative cover consisted of visual inspections and mowing. Additional wood mulch was added to the street trees as needed to maintain several inches of mulch cover where present. Results of weekly inspection and maintenance of IRMs are included in the weekly progress reports included in **Appendix C**.

A Contingency Plan included as Appendix B of the November 20, 2017 Interim Design Plan prepared by TRC was developed to be implemented following a change in Site conditions or significant disturbance that causes or threatens to cause a potential release of waste material on, at, or from the Site that either constitutes an emergency situation or that may present an immediate threat to public health or welfare or the environment. This was to include a significant disturbance or a disruption of the Site cover, contaminated soils, or other change in Site conditions which may have resulted in the significant disturbance of and/or exposure to soil containing elevated contaminant levels. However, the Contingency Plan was not implemented at either Site as significant disturbance of the Site cover and/or contaminated soils and/or emergency situations did not occur during the interim measures period.



# 4. Description of Remedial Actions Performed

Remedial activities completed at the Site were conducted in accordance with the USEPA Settlement Agreement, the USEPA-approved Design and Implementation Plans (D&IPs), and Remedial Design specifications and drawings for Ball Fields 5 through 8 (May 19, 2017) and Ball Field 9 (April 23, 2018).

The completed removal actions consist of a new cover system constructed across the Site and long-term institutional controls. Prior to the installation of the new cover system, the removal of existing park features, site utilities, and topsoil occurred. The new cover system consists of synthetic turf, paved areas, clean topsoil, bonded aggregate, and/or permeable pavers underlain by a demarcation layer. As part of the site redevelopment, new buried utilities (electric, stormwater, and water) were also installed. Detailed drawings on the locations and cross sections of each cover type are provided on the asbuilt drawings in Appendix K. Long-term institutional controls consist of a Deed Restriction on the property that restricts site use to recreational parkland use, prohibits disturbing, removing, or otherwise interfering with the engineering controls, and restricts the use of the site groundwater. An SMP has been prepared for the Site remedy inspection, maintenance, and monitoring protocols to verify and document that the remedy continues to protect public health and environment in the future.

The following presents the written plans that made up the Remedial Action Work Plan that governed the site work and remedial activities, a description of the remedial program elements (e.g., service providers, construction schedule, site controls, monitoring, reporting), summary of material removals and reuse, summary of imported backfill materials, summary of remaining site contamination, a description of the cover system, a description of the institutional controls/deed restriction, and a description of any deviations from the approved design.

# 4.1. Governing Documents

## 4.1.1. Project Management Plan

Project Management Plans (PMPs) were prepared to describe the management structure for the implementation of the Removal Action Work Plan (RAWP) at the Site as required by Article VIII Paragraph 26.b of the USEPA Settlement Agreement. The PMPs defined key personnel, subcontractors and overall project teams for the implementation of each component of the RAWP and the associated responsibilities for each person or group. The plans identified the management structure for each design/construction component of the project (e.g., the design work, removal of Site features, installation of the required depth of soil, reinstallation of utilities and park features, and completion of the final report). The PMP for Ball Fields 5 through 8 was submitted to USEPA on June 2, 2016 and approved on July 28, 2016. The PMP for Ball Field 9 was submitted to USEPA on January 24, 2017 and approved on February 15, 2017.

## 4.1.2. Interim Design Plans

Interim Design Plans (IDPs) were prepared to describe the interim removal actions implemented at the Site and present the general methodology and schedule for the implementation of the RAWP at the Site as required by Article VIII, Paragraph 26.d of the



USEPA Settlement Agreement. The IDPs included descriptions of phasing and permitting requirements, preliminary drawings (including detailed existing condition and topographical drawings), and preliminary lists of specifications. In addition, the IDPs conceptually identified staging areas to be utilized during construction, Site security provisions, traffic control provisions and any associated permitting requirements, environmental monitoring plans, dust control plans to minimize disturbance to the surrounding residential community, and an estimated schedule for the construction work. The IDP for Ball Fields 5 through 8 was submitted to USEPA on July 6, 2016 and approved on September 22, 2016. The IDP for Ball Field 9 was submitted to USEPA on September 21, 2017 and approved on November 20, 2017.

## 4.1.3. Design and Implementation Plan

TRC Engineers, Inc. (TRC) prepared D&IPs for Ball Fields 5 through 8, dated May 19, 2017, and Ball Field 9, dated April 23, 2018, in accordance with Article VIII Paragraph 26.f of the USEPA Settlement Agreement which detailed the design for the removal action and planned logistics for on-Site work during construction. The D&IPs for Ball Fields 5 through 8 and Ball Field 9 were approved by USEPA via email on May 22, 2017, and May 10, 2018, respectively.

#### 4.1.4. Construction Plans

Several construction plans were prepared for the project to provide detailed descriptions of the logistics required to complete the Site construction work including Stormwater Pollution Prevention Plans (SWPPPs), Construction Quality Assurance/Quality Control (CQA/QC) Plans, Equipment Decontamination Plans, Equipment and Materials Staging Plans, Site Security Plans, Traffic Control Plans, Health and Safety Plans (HASPs) with Community Air Monitoring Plans (CAMPs), and Waste Transport and Disposal Plans discussed below.

#### 4.1.4.1. Stormwater Pollution Prevention Plans

Erosion and sediment control measures were implemented at the Site in accordance with the SWPPPs prepared for Ball Field 5 through 8 (Provident Design Engineering, PLLC; May 8, 2018) and Ball Field 9 (Provident Design Engineering, PLLC; October 25, 2018). The SWPPPs were prepared in accordance with the NYSDEC State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity, Permit No. GP-0-15-002 for the disturbance of an area greater than one acre and the New York City Department of Environmental Protection (NYCDEP) Guidelines for the Design and Construction of Stormwater Management Systems. The SWPPPs also discuss the long term maintenance and monitoring of the designed stormwater management systems.

Notices of Intent were filed with NYSDEC by the DPR prior to the start of construction activities. Acknowledgements of the filing of the NOIs were received from NYSDEC for Ball Fields 5 through 8 (received June 29, 2018, permit identification number NYR11D889) and Ball Field 9 (received November 6, 2018, permit identification number NYR11E427); copies of the NYSDEC NOI filing acknowledgement letters are provided in **Appendix D**.



The soil erosion and sediment controls, including silt fencing, stabilized construction entrance, soil stockpile covers, and catch basin inlet controls, were installed and maintained by LAWS Construction Corporation (LAWS) in accordance with the design drawings and SWPPPs and inspected at least once a week and after every storm event by a qualified inspector to ensure that they were performing appropriately.

# 4.1.4.2. Construction Quality Assurance/Quality Control Plans

CQA/QC Plans were prepared for Ball Fields 5 through 8 (American Environmental Solutions, Inc. (AES); March 12, 2019) and Ball Field 9 (AES, Inc.; October 2019) to detail the approach to quality assurance and quality control taken during construction activities including the inspection and certification of the construction, measurement, and daily logging in accordance with Article VIII Paragraph 26.f(4) of the Settlement Agreement. The purpose of the CQA/QC Plans was to describe the activities necessary to verify that removal action construction had satisfied all design plans, specifications, and related project requirements. The CQA/QC Plans met the requirements indicated in the project design Specification titled *Quality Monitoring & Inspections*.

## 4.1.4.3. Equipment Decontamination Plans

Equipment decontamination was performed in accordance with the Equipment Decontamination Plans prepared in accordance with Article VIII Paragraph 26.f(7) of the USEPA Settlement Agreement for Ball Fields 5 through 8 (AES; January 4, 2019) and Ball Field 9 (AES; October 2019). Prior to the start of construction activities, LAWS established designated equipment decontamination areas pads covered with stone at the Site. Equipment decontamination was performed by LAWS to prevent contamination from being carried off-Site and all construction equipment arrived at and departed from the Site free of any visible potential contamination (e.g., adhered soil, oily surfaces).

Construction equipment and vehicles that came in contact with impacted soil or liquid or had any visible contamination were decontaminated by LAWS prior to exiting the Site. Decontamination procedures included the removal of soil, debris, and other miscellaneous materials from vehicles, construction equipment and tools utilized within the Site limits, and recyclable remnant structures and piping encountered and planned for removal from the Site using a high-pressure low volume steam cleaner. Physical/mechanical agitation (e.g., dry scraping or brushing with hand tools/brushes) to remove soil from recycled materials, vehicle undercarriage/tires, and equipment was utilized outside of the decontamination pad area to minimize the amount of wastewater requiring treatment/disposal. Decontamination fluids and solids were released to the ground surface within the stone-covered equipment decontamination areas.

# 4.1.4.4. Equipment and Materials Staging Plans

Equipment and Materials Staging Plans were prepared for Ball Fields 5 through 8 (LAWS, November 27, 2018) and Ball Field 9 (LAWS, August 3, 2019) and implemented in accordance with Article VIII Paragraph 26.f(6) of the USEPA Settlement Agreement to provide a safe environment, minimize disruption to the surrounding community, and provide for an efficient sequencing of construction activities. The plans included the proposed locations of equipment and material staging areas, office trailer, truck inspection



station, stockpile areas, decontamination pad and other pertinent staging and access features.

In accordance with the Equipment and Materials Staging Plans, equipment and materials including construction equipment, construction office trailers, decontamination areas, dumpsters and roll-off containers, and all imported materials which were part of the construction were stored and staged by LAWS in a manner that complied with applicable laws and regulations. In addition, direct contact of construction materials and existing soils were minimized by staging materials on polyethylene sheeting when practicable and in accordance with project specifications. The parking of worker vehicles on the Site was kept to a minimum as off-Site street parking was typically sufficient for the project. In addition, partial temporary closure of the traffic lanes adjacent to the Site was necessary at various times during construction to allow for staging of equipment and materials.

# 4.1.4.5. Site Security Plans

Site Security Plans were prepared for Ball Fields 5 through 8 (LAWS, August 8, 2018) and Ball Field 9 (LAWS, May 28, 2019) and implemented in accordance with Article VIII Paragraph 26.f(8) of the USEPA Settlement Agreement to prevent the public from having access to the Site and to prevent the theft of or damage to on-Site facilities. The plans included planned locations of construction fences and entrance gates.

In accordance with the Site Security Plans, site access was controlled by gated entrances to the fenced property. The Site gates were locked following the completion of daily work activities. An unarmed security guard was provided by LAWS for all gated entrances not locked during work hours until substantial completion of the installation of the remedial cover. Temporary lighting was provided by LAWS as needed for any night-time work. A daily worker and visitor sign in sheet was maintained by LAWS in a Site log book and made available for inspection upon request.

#### 4.1.4.6. Traffic Control Plans

Traffic Control Plans were prepared for Ball Fields 5 through 8 (LAWS, February 19, 2019) and Ball Field 9 (LAWS, September 17, 2019) and implemented in accordance with Article VIII Paragraph 26.f(9) of the USEPA Settlement Agreement to provide a safe environment, efficient completion of work activities, and minimize the impact of the Project work on normal traffic flow. Implementation of the Traffic Control Plans is described further in Section 4.2.6 below.

## 4.1.4.7. Health and Safety Plans

Health and Safety Plans (HASPs) were prepared for Ball Fields 5 through 8 (LAWS, January 30, 2019) and Ball Field 9 (LAWS, October 2019) and implemented in accordance with Article VIII Paragraph 26.f(10) and Paragraph 28 of the USEPA Settlement Agreement and all applicable requirements and regulations of federal, state, and local government agencies. On-Site personnel and visitors were required to sign in before entering the Site, read the HASPs prior to accessing controlled work zones, and comply with the requirements of the HASPs.



# 4.1.4.8. Community Air Monitoring Plans

During activities which disturbed existing contaminated soil, real-time air monitoring for particulate levels was performed at the perimeter of the exclusion zone and in the work areas as specified by the CAMPs prepared by TRC in accordance with NYSDEC/New York State Department of Health (NYSDOH) guidance (Appendix 1A of NYSDEC DER-10 [NYSDEC, 2010]) and Article VIII Paragraph 26.f(10) of the USEPA Settlement Agreement. Approaching or exceeding particulate action levels listed in the CAMPs were used along with visual evidence of excessive dust levels as a trigger to implement appropriate dust control measures (e.g., tarp covers for soil piles, water exposed soil areas). Results of the CAMP monitoring are discussed further below in Section 4.2.7.

# 4.1.4.9. Waste Transport and Disposal Plan

Waste Transport and Disposal Plans were prepared for Ball Fields 5 through 8 (LAWS, February 21, 2019) and Ball Field 9 (AES; September 2019) in accordance with Article VIII Paragraph 26.f(11) of the USEPA Settlement Agreement for the removal, testing, storage, handling, transportation, and disposal of waste materials from the Site. The plans included the planned frequency and estimated quantity of waste that would be generated during the performance of the work, the valid Resource Conservation and Recovery Act (RCRA) waste transporter and disposal facility identification numbers for the waste transporters and disposal facilities, details for how waste and recyclables transported offsite would be tracked and documented, and documentation of the current permit status of the waste transporters and disposal facilities.

# 4.2. Remedial Program Elements

#### 4.2.1. Contractors and Consultants

The following provides a list of contractors and consultants that provided services for work performed on the Site and their associated tasks:

- LAWS of Pleasantville, NY performed the Site construction activities associated with the Ball Fields 5 through 8 and Ball Field 9 Projects including installation of erosion and sediment controls and security fencing, removal of the former park components (fencing, sidewalks, etc.), excavation of impacted topsoil, excavation and backfill of utility trenches, installation of orange-colored plastic demarcation layer over the Site prior to placement of clean fill, installation of new park features (synthetic turf, utilities, game tables, bike racks, signage, etc.), installation of geogrid, and construction of tree guards, retaining walls, drainage structures, concrete foundations and structures (curbs, stairs, etc.), and clean fill layer;
- American Environmental Solutions (AES), under contract with LAWS, prepared construction plans and performed waste characterization sampling at Ball Fields 5 through 8 and Ball Field 9;
- Allocco Recycling of Brooklyn, NY, under contract to LAWS, received waste asphalt and concrete generated from Ball Fields 5 through 8 and Ball Field 9 for recycling at their Brooklyn, New York facility;



- Green Asphalt of Long Island City, NY, under contract to LAWS, received waste asphalt generated from Ball Field 9 for recycling at their Long Island City, New York facility;
- Clean Earth of North Jersey, Inc. of Kearny, New Jersey, under contract to LAWS, received hazardous soil for ultimate disposal generated from Ball Fields 5 through 8 and Ball Field 9 and non-hazardous soil generated from the underground storage tank (UST) closure at Ball Fields 5 through 8 at their Kearny, New Jersey facility;
- Waste Management of Kearny, New Jersey, under contract to LAWS, received nonhazardous soil generated from Ball Fields 5 through 8 and Ball Field 9 for ultimate disposal at their Fairless Landfill in Morrisville, Pennsylvania facility;
- JB Gardens, Inc. of Brooklyn, NY, under contract to LAWS, removed the trees along the sidewalks adjacent to the Site, installed tree anchors, pruned trees and placed mulch at planting beds at Ball Fields 5 through 8 and Ball Field 9;
- Tectonic Engineering & Surveying Consultants P.C. of Mountainville, NY, under contract with LAWS, performed initial Site land surveys and surveyed for demarcation barrier installation at Ball Fields 5 through 8 and Ball Field 9;
- InProduction of Hauppauge, NY, under contract to LAWS, installed bleachers at Ball Fields 5 through 8 and Ball Field 9;
- Mainstream Electric, Inc. of Bronx, NY, under contract to LAWS, removed former lighting components and installed new lighting fixtures at Ball Fields 5 through 8 and Ball Field 9;
- CM Testing Lab, Inc. of Garden City Park, NY, under contract to LAWS, performed compaction and permeability testing at Ball Fields 5 through 8 and Ball Field 9;
- American Pile and Foundation, LLC of Somerville, NJ, under contract to LAWS, installed piles and performed load testing at Ball Fields 5 through 8;
- Metric Consulting and Inspection of Hicksville, NY, under contract to LAWS, performed supervision of American Pile and Foundation, LLC, testing including lateral load testing, soil stockpile proctor sampling, compaction testing along Henry Street, and construction inspection including rebar, driven pile and concrete inspections;
- Key Cast Concrete Inc. of Amityville, NY under contract to LAWS, constructed and delivered the pre-cast concrete piers for Ball Field 9;
- CO-OP Industries of Garrettsville, OH, under contract to LAWS, performed calibration of the "Load Rite" scale tool associated with the on-Site excavator;
- LMC Trucking Corp. of Staten Island, NY, under contract to LAWS, transported concrete debris from Ball Fields 5 through 8 to Allocco Recycling and delivered borrowed fill to Ball Field 9;
- JC Transport Trucks of North Arlington, NJ, under contract to LAWS, transported nonhazardous soil from Ball Fields 5-8 and Ball Field 9 to Fairless Landfill;
- Munoz Trucking of North Arlington, NJ, under contract to AARCO transported nonhazardous soil from the underground storage tank excavation at Ball Fields 5-8 to Clean Earth of North Jersey.
- Munoz, under contract to LAWS, transported hazardous soil to Clean Earth of North Jersey in Kearny, NJ.
- Fresh Meadow Mechanical Plumbing of Fresh Meadows, NY, under contract to LAWS, installed the water line, hydrants, spray fixtures, and drinking fountains at Ball Field 9;



- Forrester Fence Co. of Brooklyn, NY, under contract to LAWS, installed chain link fence at Ball Field 9;
- Nathan Enterprises, LLC of Bronx, NY, under contract to LAWS, installed chain link fence at Ball Fields 5 through 8;
- MP Engineers of New York, NY, under contract to LAWS, delivered concrete to and performed concrete rebar inspection at Ball Field 9;
- Sunny Acres of Davidsonville, MD, under contract to LAWS, installed the synthetic turf and performed porous aggregate installation inspection at Ball Field 9;
- Nature's Choice Corporation of Middlesex, NJ, under contract to LAWS, delivered topsoil and mulch to Ball Fields 5 through 8 and 9;
- Tilcon New York, under contract to LAWS, delivered porous aggregate to Ball Fields
   5 through 8 and 9;
- HERA Sports Surfaces of Newark, DE, under contract to LAWS, installed the synthetic turf and performed grade inspection and shock pad installation/repair along Bay Street at Ball Fields 5 through 8;
- Evergreen Recycling of Corona of Flushing, NY, under contract to LAWS, delivered borrowed fill to Ball Fields 5 through 8 and Ball Field 9;
- Vitello Sewer, Watermain, Heating & Plumbing Services, Inc. of Bronx, NY, under contract to LAWS, installed ductile iron sewer connections at Ball Fields 5 through 8;
- A&T Ironworks of New Rochelle, NY, under contract to LAWS, installed steel fence on the Clinton Street retaining wall at Ball Field 9;
- 11 Enviro Group, LLC of Brooklyn, NY, under contract to LAWS, performed dye tests for the drainage structures at Ball Field 9;
- West Shore Consulting, Inc. of Manalapan, NJ, under contract with LAWS, installed water main and hydrants and conducted water pressure and hydrostatic testing at Ball Fields 5 through 8;
- Advanced Soil Technologies, LLC under contract to LAWS, provided structural soil foundation material to Ball Fields 5 through 8 and Ball Field 9;
- Island Wide New Photo Service of Inwood, NY, under contract with LAWS, conducted preconstruction photography;
- AARCO Environmental Services Corp. (AARCO) of Lindenhurst, NY completed the removal of the 3,000-gallon UST discovered on Ball Fields 5 through 8;
  - Preferred Environmental Services of North Merrick, NY, under contract to AARCO provided environmental services during the removal of the 3,000-gallon UST.
  - Dale Transfer Corp. of West Babylon, NY under contract to AARCO transported drums of tank bottoms to Clean Earth of Carteret in Carteret NJ for disposal.
  - Benson Scrap Metal of Brooklyn, NY accepted the scrap metal UST for recycling.
  - York Analytical Laboratory of Queens, NY provided laboratory analytical services for the UST soil samples.
- TRC Engineers, Inc. (TRC) of New York, NY provided site investigation, remedial design services, and environmental consulting support under contract to DPR prior to and during the construction of Ball Fields 5 through 8 and Ball Field 9 and implemented the CAMP for Ball Field 9;

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- Provident Design Engineering of Hawthorne, NY, under contract to TRC, prepared the Stormwater Pollution Prevention Plans and designed the storm drainage infrastructure for Ball Fields 5 through 8 and Ball Field 9;
- Abel Bainnson Butz, LLP (ABB) of New York, NY, under contract to TRC, provided landscape architecture design services for the new athletic sports fields and surrounding lawn and planting strips for Ball Fields 5 through 8 and Ball Field 9; and
- AECOM USA Inc. of New York, NY (AECOM) provided resident engineering services and daily oversight under contract to DPR during construction and during the implementation of Site remedial measures for Ball Fields 5 through 8 and Ball Field 9 and implemented the CAMP for Ball Fields 5 through 8.

Mr. Robert Roslewicz of AECOM served as the Resident Engineer during the construction of the site remedy and park. Mr. Roslewicz is a Registered Landscape Architect in New York State. As the Resident Engineer, Mr. Roslewicz was responsible for the oversight of the construction of the project and thereby had direct responsibility for personnel engaged in the oversight and inspection of the implementation of the remedy in accordance with the remedial design specifications and drawings, Mr. [TO BE DETERMINED] of AECOM, a licensed Professional Engineer in New York State, is the person at AECOM with primary responsibility for Mr. Roslewicz. Therefore, Mr. [TO BE DETERMINED] of AECOM is the certifying Engineer of Record for the remedial activities for which AECOM provided oversight.

Mr. James Peronto of TRC Engineers, Inc. (TRC) of New York, NY was the Engineer responsible for the oversight of the preparation of the remedial design technical specifications and remedial drawings. Mr. Peronto is a licensed Professional Engineer in New York State. During construction, TRC attended project progress meetings, replied to contractor requests for information, and reviewed contractor submittals related to the remedial design. James Peronto of TRC is the certifying Engineer of Record for the above-listed remedial activities for which TRC provided oversight and for the preparation of the CCR.

A project organization chart with the major parties involved in the project is provided in **Appendix N**.

Consultants and contractors associated with the UST closure completed on Ball Fields 5 through 8 are discussed in Section 4.3.4.

#### 4.2.2. Site Construction Timeline

The following provides an overview of the general timeline for the major Site construction activities:

#### Ball Fields 5 through 8

- Mobilization: March 2019 Mobilize equipment, perform initial Site survey and preconstruction photographs, and install signage for the project.
- Erosion and Sediment Controls: March 2019 Silt fence, wind screen mesh, and stabilized Site construction entrance.
- Construction Fence Install: March 2019.
- Remove trees and install asphalt pavement in the street tree pits: March 2019
- Remove existing park appurtenances and install tree protection: April 2019.



- Remove concrete sidewalk and install piles: May 2019 through June 2019.
- Strip topsoil and clay infield, excavate utility trenches, and install utilities, drainage system, and foundation wall: August 2019 through December 2019.
- Install bioswale, drainage and catch basins, and demarcation barrier in bioswale locations: January 2019 through March 2020.
- Closure of 3,000-gallon UST: February 2020.
- Install curbing, stairs, ramps and footings, excavate for utilities and footings, install demarcation layer, and import fill to Site: July 2020 through January 2021.
- Import and install topsoil and landscaping components: April 2021.
- Perform site survey for demarcation installation: May 2021.
- Install fencing, bleachers, and demarcation barrier, backfill, and compact imported fill:
   March 2021 through October 2021
- Perform Land Survey on borrowed fill: July 2021.
- Perform Land Survey: September 2021.
- Install shock pads and artificial turf field system: September 2021 through December 2021.
- Install trees: November 2021.
- Opened to public December 2021.
- Complete punch list work items while park opened to public: January 2022 through August 2022.

#### Ball Field 9

- Mobilization: September 2019 and October 2019 Mobilize equipment, trailer and security guard house, perform initial Site survey, and install signage for the project.
- Erosion and Sediment Controls: September 2019 through November 2019 Build tree guards and install dust netting and silt fencing.
- Stabilized Site Construction Entrance: January 2020.
- Construction Fence Install: September 2019 through November 2019.
- Remove existing park appurtenances and concrete footings: November 2019 through January 2020.
- Excavate topsoil: December 2019 through February 2020.
- Install tree guards and anchors: February 2020 through March 2020.
- Install utilities and drainage structures: March 2020, November 2020 through September 2021, and March 2022 through May 2022.
- Off-Site disposal of non-hazardous contaminated soil and concrete: July 2020.
- Install retaining wall, curbs, and staircase footings: July 2020 through February 2022, April 2022, and June 2022.
- Excavate critical root zone for trees: August 2020 through October 2020.
- Install demarcation layer: August 2020 through June 2022.
- Install clean topsoil: August 2020 through January 2021 and April 2022 through May 2022.
- Install sports lighting fixtures: September 2020 through November 2020.
- Backfill utility trenches with borrowed fill: March 2021 through April 2021 and January 2022 through April 2022.



- Excavate for curbing: March 2021 through July 2021 and March 2022 through May 2022.
- Install pedestrian path lighting: May 2021 through July 2021, October 2021, June 2022, and July 2022.
- Install piers: May 2021 through December 2021.
- Install permanent fencing: October 2021 through July 2022.
- Form concrete bench pads and install benches: December 2021 through February 2022 and June 2022.
- Install geogrid and geotextile: November 2020 through January 2021 and January 2022 through May 2022.
- Remove asphalt for tree pits and utility connections: January 2022 through March 2022.
- Install porous aggregate: March 2022 through July 2022.
- Install steel gates at entrances: April 2022.
- Compact exterior of Ball Field 9 and roadways: May 2022.
- Install landscaping components: May 2022 through June 2022.
- Install shock pads and artificial turf field system: June 2022 through July 2022.
- Install pavers: July 2022.
- Opened to public November 2022.

#### 4.2.3. General Site Controls

General Site controls were established to prevent trespassing, prevent unqualified or unprotected workers from entering restricted areas, prevent tracking of contaminants out of the Site, and maintain a log of employees and visitors at the Site. The general Site controls consisted of Site security guard and fencing, erosion and sediment controls, traffic controls, and daily, weekly and monthly reporting. Daily work reports and weekly progress reports prepared by AECOM and monthly progress reports prepared by TRC are included in **Appendices E, C**, and **F**, respectively.

# 4.2.4. Site Security

During construction, the Site was secured utilizing chain-link fences that extended along the entire perimeter of the Site. Lockable access gates were located at Hicks Street to the west of Ball Fields 5 through 8 and at Clinton Street to the southeast of Ball Field 9. Additionally, LAWS provided a full-time, unarmed, uniformed, state registered security guard during working hours at the main entrance gates until substantial completion of the installation of the remedial cover for much of the construction duration.

#### 4.2.5. Erosion and Sediment Controls

Erosion and sedimentation controls established for the Site by LAWS included perimeter silt fencing, stone-covered stabilized construction entrances at the gated Site entrances, soil stockpile covers, and catch basin inlet controls.

The stabilized construction entrances were constructed of one-inch to two-inch coarse aggregate in accordance with ASTM C33 overtop of geotextile fabric. The stabilized

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construction entrances were a minimum of 50 feet long and 12 feet wide with a minimum six-inch layer of stone. The stabilized construction entrances were maintained by regrading and redressing with stone as needed for continued effectiveness.

Excavated soil/material stockpiles were staged on 40 mil scrim reinforced plastic sheeting with a 10 mil thick HDPE cover secured using sand bags or other weights along the perimeter and on the pile. The stockpiles were covered at all times when material was not being added or removed.

Silt sacks, consisting of open-top geotextile bags, were installed in each catch basin to filter sediment laden storm water. The silt sacks were maintained by removing accumulated sediment after each storm event.

Trucks and heavy equipment leaving the work Site were broom swept and washed (using a pressure washer) on the decontamination pad at the entrance prior to leaving the Site to remove visible loose soil adhered to the undercarriage or tires. LAWS also swept the sidewalk and roadway at the Site construction entrances of soil tracked from the Site by construction vehicles or heavy equipment.

#### 4.2.6. Traffic Controls

Drivers of trucks leaving the Site with soil/fill were instructed to proceed without making unnecessary stops in the immediate vicinity of the Site to minimize concentrated neighborhood impacts from truck traffic and engine idling. In accordance with the New York City Administrative Code, Title 24, Section 24-163, truck idling at the Site was restricted such that "no person should allow the engine of a motor vehicle to idle for longer than three minutes while parking, standing, or stopping."

Truck routes for trucks arriving and leaving the Site on local roads were established within the Traffic Control Plans and copies of the truck route maps were provided to all trucking companies prior to working on the project. All truck drivers were required to have a copy of the maps in their truck. Extra copies of the truck route maps were made available at the Site. The truck routing took into account the following factors: (a) limiting transport through residential areas and past sensitive sites; (b) use of mapped truck routes; (c) minimizing off-Site queuing of trucks entering the Site; (d) limiting total distance to major highways; (e) promoting safety in access to highways; (f) overall safety in transport; and (g) compliance with applicable laws and regulations. To the extent possible, all trucks loaded with Site materials travelled to and from the Site using the designated truck routes.

At a minimum, the New York City Department of Transportation (NYCDOT) Truck Route Network (available at http://www.nyc.gov/html/dot/html/motorist/trucks.shtml#map) was followed. The Truck Route Network is a set of roads that commercial vehicles must use in New York City in lieu of alternative routes. This network is comprised of two distinct classes of roadways, Local Truck Routes and Through Truck Routes. The network is defined in Title 34, Chapter 4, Section 4-13 of the New York City Traffic Rules. All commercial vehicles defined as a truck (two axles and six tires, or three or more axles) are required to follow the Truck Route Network. Commercial vehicles that do not meet the definition of a truck are not required to follow this network, but must follow all posted signage regarding the operation of commercial vehicles.



In addition, any sidewalk and/or partial temporary street closures needed for the project were performed in accordance with NYCDOT rules and regulations and obtained permits and approvals.

#### 4.2.7. CAMP Results

The CAMP was implemented consistent with the project CAMPs prepared in accordance with the NYSDOH requirements for a Generic CAMP in Appendix 1A of NYSDEC DER-10 for the duration of ground intrusive and soil handling activities at the Sites. TRC prepared the CAMPs for Ball Fields 5 through 8 and Ball Field 9. AECOM implemented the CAMP for Ball Fields 5 through 8 and TRC implemented the CAMP for Ball Field 9. Instrumentation associated with each CAMP consisted of three perimeter ambient air dust monitoring stations each outfitted with a dust/particulate monitor capable of continuous monitoring. One station was located at the property perimeter upwind of work activities and two of the stations were located at the property perimeter downwind of work activities.

Per the CAMP, dust suppression techniques were required if the downwind particulate level was found to be 100 micrograms per cubic meter ( $\mu g/m^3$ ) greater than the upwind particulate level. Work was to be halted in the downwind particulate level was found to be 150  $\mu g/m^3$  greater than the upwind particulate level.

CAMP data including any exceedances of air monitoring criteria are included in **Appendix G**. Exceedances of dust criteria were documented on September 24, 2019; October 1, 2 and 25, 2019; January 10, 2020; August 12, 2020; November 9, 2020; January 14, 2021; April 5 and 7, 2021; May 18, 2021; and July 16, 2021, at Ball Fields 5 through 8. Generally, dust criteria exceedances occurred during excavation of utility trenches, drainage areas, and curb dugouts. Exceedances of dust criteria were documented on December 9 and 12, 2019; January 24, 2019; August 10, 2020; October 7, 2020; November 17, 2020; June 1, 2021; October 25, 2021; January 25, 2022; and September 29, 2022, at Ball Field 9. Generally, dust criteria exceedances occurred during sawing/cutting of materials, unknown reasons, and weather conditions. The exceedance documented on August 10, 2020 was not caused from Site work.

Typically, the dust exceedances were short duration, one time exceedances when there were also visible dust levels. The contractor would typically use a hydrant hose at the site throughout construction activities to spray water on truck and heavy equipment pathways and open exposed soil areas for dust suppression, as needed. When significantly elevated dust levels (i.e., greater than 150  $\mu g/m^3$ ) were observed at the downwind monitoring station, associated construction activities stopped and water was either applied to the work area to reduce dust levels or the dust levels quickly subsided.

# 4.2.8. Reporting

The following reports were prepared for the Site construction activities:

• AECOM prepared Daily Work Reports (DWRs) to document their oversight of LAWS construction activities including any related Site work for submittal to DPR. DWRs included the number of employees at the Site for each subcontractor and a breakdown of employees by trades, weather conditions, work performed, major equipment and materials used, installed, delivered or removed from the Site, and a photolog of the Site activities. Copies of the DWRs are provided in Appendix E.



- AECOM prepared Weekly Progress Reports for the project for submittal to DPR. The weekly reports summarize the construction progress, reasons for no progress, major outstanding issues, conditions causing delays, subcontractors approved for work during the week, and a description of the work performed at the Site during the week. Copies of the weekly progress reports are provided in Appendix C.
- TRC prepared Monthly Progress Reports for the project for submittal to USEPA. The monthly reports summarize the removal work activities conducted at the Site during the month. Copies of these reports are provided in **Appendix F**.

## 4.2.9. Approximate Project Costs

The total estimated cost for completion of this work is approximately \$31,146,000. A summary of the approximate project costs spent to date is provided below.

- Contractor Costs \$25,000,000
- AECOM Resident Engineering and Air Monitoring Costs \$2,500,000
- TRC Environmental Engineering Design \$3,218,000
- DPR Staff Costs \$428,000

## 4.3. Materials Removal and Reuse

## 4.3.1. Off-Site Management of Debris

Surface covers including asphalt and concrete were removed from the Site for recycling to accommodate removal action activities at Red Hook Ball Fields 5 through 8 and Ball Field 9. Recycled concrete generated from Ball Fields 5 through 8 and Ball Field 9 was transported to the following facility:

Allocco Recycling 540 Kingsland Avenue Brooklyn, NY 11222

Recycled asphalt generated from Ball Field 9 was transported to the following facilities:

Allocco Recycling Green Asphalt
540 Kingsland Avenue 37-98 Railroad Avenue
Brooklyn, NY 11222 Long Island City, NY 11101

A total of 1,272.04 tons of concrete was removed from Ball Fields 5 through 8 and 756.58 tons of concrete was removed from Ball Field 9 and transported to Allocco Recycling for recycling. A total of 744.85 tons of asphalt was removed from Ball Field 9 and transported to Allocco Recycling and Green Asphalt for recycling. Bills of lading are included in electronic format in **Appendix H**. Off-Site material disposal quantities and facilities are shown in **Table 2**.

# 4.3.2. Off-Site Management of Contaminated Soil

During the removal action at Red Hook Ball Fields 5 through 8 and Ball Field 9, soils were excavated and removed from the Site for proper off-Site disposal to accommodate installation of buried utilities and the construction of foundations. The USEPA hazardous waste generator identification number obtained by DPR for the Site is NYR000231670. The following disposal facility was used for the off-Site disposal of hazardous soil



generated from Ball Fields 5-8 and Ball Field 9 and non-hazardous soil generated from the UST closure at Ball Fields 5 through 8:

Clean Earth of North Jersey, Inc. (CENJ) 115 Jacobus Avenue Kearny, NJ 07032

The following disposal facility was used for the off-Site disposal of non-hazardous soil generated from the remainder of Ball Fields 5-8 and Ball Field 9:

Waste Management - Fairless Landfill 1000 Bordentown Road Morrisville, PA 19067

Approximately 160.20 tons of non-hazardous contaminated soil was removed from the UST area at Ball Fields 5 through 8 and transported to CENJ on November 16, 2020. Approximately 170.83 tons of hazardous soil was removed from Ball Fields 5 through 8 and transported to CENJ on July 1, 2020. Approximately 4,832.94 tons of non-hazardous contaminated soil was removed from Ball Fields 5 through 8 and transported to Fairless Landfill between August 22, 2019 and November 6, 2019. Approximately 4,712.75 tons of non-hazardous contaminated soil was removed from Ball Field 9 and transported to Fairless Landfill between July 13, 2020 and August 8, 2021. Approximately 1,311.94 tons of hazardous soil was removed from Ball Field 9 and transported to Waste Management at Kearny, New Jersey between May 26, 2021 and July 21, 2021. Off-Site material disposal quantities and facilities are shown in **Table 2**.

Copies of the waste transporter permits/licenses, waste disposal facility permits, completed disposal facility waste applications/profiles, USEPA CERCLA off-site disposal rule facility notification verifications, disposal facility approvals, and completed waste manifests and bills of lading are provided in **Appendix H**.

# 4.3.3. Underground Storage Tank Removal

LAWS discovered one 3,000-gallon steel UST in the northwestern portion of Ball Fields 5 through 8 while conducting construction activities. The UST exhibited signs of pitting and corrosion with one ½-inch diameter corrosion hole in the sidewall of the UST. On February 27, 2020, AARCO Environmental Services, Inc. (AARCO) removed and cleaned the UST. Three 55-gallon drums of tank sludge were generated which were transferred to Dale Transfer Corp. located at 129 Dale Street, West Babylon, New York for disposal. From Dale Transfer Corp., the tank bottom sludge was co-mingled with other petroleum contaminated solids then transported to and disposed of at Clean Earth of Carteret in Carteret, New Jersey. The cleaned UST was transported by AARCO to Benson Scrap Metal located at 543 Smith Street, Brooklyn, New York for recycling. The former UST location is shown on **Figure 13** and UST closure documentation is included in **Appendix I**.

Under contract to DPR, Preferred Environmental Services collected six post-removal soil samples from the UST excavation including four soil samples (EP-1 through EP-4) collected from the base of the excavation from 7.0 feet below ground surface (bgs) to 7.5 feet bgs and two soil samples (EP-5 and EP-6) collected from the sidewalls of the excavation from 6.0 feet bgs to 6.5 feet bgs on February 27, 2020. The base samples

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were collected for every five feet of UST length and the sidewall samples were collected from the areas exhibiting the highest evidence of impacts. Post-removal soil sample locations are shown on **Figure 13**.

The six post-removal soil samples were analyzed for NYSDEC CP-51 list VOCs and SVOCs via USEPA Method 8260/5053 and USEPA Method 8270, respectively, by York Analytical Laboratories, Inc., a NYSDOH Environmental Laboratory Approval Program (ELAP)-certified laboratory. Results of the soil sample analytical results were compared to the NYSDEC CP-51 Soil Cleanup Objectives (SCOs). A summary of the soil analytical testing data is provided in Table 1 of the report in Appendix I. VOCs were not detected at concentrations exceeding CP-51 SCOs in the post-removal soil samples. Select SVOCs, including benzo(a)anthracene, benzo(a)pyrene, benzo(k)fluoranthene, chrysene and indeno(1,2,3-c,d)pyrene were detected at concentrations exceeding CP-51 SCOs in soil samples EP-3, EP-5 and EP-6. The SVOC exceedances are consistent with elevated SVOC concentrations observed in the soils throughout the Site attributed to historic fill contamination.

As referenced in Section 4.3.2, approximately 160.20 tons of non-hazardous contaminated soil was removed from the UST location and transported to CENJ on November 16, 2020.

## 4.3.4. On-Site Soil Reuse

During the construction of the Ball Fields 5 through 8 and Ball Field 9 projects, six inches of topsoil and infield clay were stripped and removed from the Site for off-Site disposal. Select areas throughout the Site required excavation of soil deeper than the top six inches (i.e., up to approximately 10 feet below ground surface in support of installation of the stormwater management system) to accommodate construction (e.g., utility trenches). This soil was determined to be geotechnically suitable and was reused within the Site below the demarcation layer in accordance with the remedial design specifications. Soil excavated in association with the UST closure was not reused on-Site.

# 4.4. Imported Backfill

Borrowed fill was imported to the Site for use as clean cover and structural fill. Generally, a minimum 1-foot thick clean fill cover was placed across the Site. Prior to the placement of the clean cover, a demarcation layer, consisting of orange-colored plastic safety fencing material, was placed over the Site soils and historic fill. Approximately 9,762 cubic yards of borrowed fill was imported to the Site for use as clean fill cover. Approximately 7,351 cubic yards of broken natural quarried stone was imported to construct the drainage layer beneath the synthetic turf field and for concrete pavement subbase. Approximately 761 cubic yards of bioretention soil was imported for placement in the bioswale around the perimeter of Ball Fields 5 through 8. Additionally, approximately 2,309 cubic yards of topsoil was imported for the planting beds and pits, and approximately 1,084 cubic yards of topsoil was imported for the seeded and sodded areas. Prior to delivery to the Site, the borrowed fill and topsoil was sampled and tested in accordance with the project imported borrowed fill and topsoil clean soil criteria listed in **Table 1**.

Coarse aggregate stone from the Tilcon New York, Inc. quarry located in Mount Hope, New Jersey was imported for temporary use as the construction entrances. In addition,



approximately 66 cubic yards of structural soil foundation material was imported to the Site for installation in street tree pits beneath permeable pavers.

A summary listing of all sources of imported backfill material with quantities received from each source is provided in **Table 3**. Copies of available source facility documentation including soil testing laboratory analytical reports and material shipping tickets documenting the quantities imported for the Site construction are provided in **Appendix J**.

# 4.5. Contamination Remaining at the Site

The following summarizes the findings of the June 9, 2016 Infiltration, Soil, and Groundwater Testing Report for Ball Fields 5 through 8 and the limited soil and groundwater testing activities performed at Ball Field 9 in December 2016 that represent residual Site contamination. This summary takes into account the removal of the top 6 inches of topsoil and infield clay from across the Site. Considering the current and future Park use of the Site, the Restricted Residential Use (RRU) SCOs defined in Part 375 and USEPA Removal Management Levels (RMLs) for Residential Soil are the most appropriate soil cleanup standards for the Site.

#### 4.5.1. Soil

The results of the soil sampling performed at Ball Fields 5 through 8 and Ball Field 9 in 2016 indicate the following soil conditions, not including any data associated with the near surface soil interval (0-6 inches bgs) that has since been removed from the Site during the implementation of the Site remedy:

Several SVOCs were detected at concentrations exceeding the NYSDEC RRUSCOs and USEPA RMLs in the soil samples collected from Ball Fields 5 through 8. Additionally, post-removal soil samples collected during the UST closure documented elevated SVOC concentrations in soil. The following table provides a summary of SVOCs detected in soil at concentrations exceeding the NYSDEC RRUSCOs and/or USEPA RMLs at Ball Fields 5 through 8.

SVOCs Detected in Soil at Concentrations Above RRUSCOs and RMLs at Ball Fields 5 Through 8									
		Sample ID	RHGT-02 (2-	RHGT-03 (2-	RHGT-08				
		4')	4')	(2-4')					
	С	3/23/16	3/22/16	3/22/16					
SVOCs	RRUSCO	RML	Result	Result	Result				
Benzo(a)anthracene	1,000	16,000	1,560	411	8,370				
Benzo(a)pyrene	1,000	1,600	1,720	723 J	7,920				
Benzo(b)fluoranthene	1,000	16,000	2,090	981 J	8,370				
Chrysene	3,900	1,600,000	1,780	435	8,170				
Dibenzo(a,h)anthracene	330	1,600	299	146	1,060				
Indeno(1,2,3-cd)pyrene	500	16,000	1,240	702	4,690				

#### Notes:

All results shown are in micrograms per kilogram (µg/kg).

Gold shading with bold text – values exceed 6 NYCRR Part 375-6.8 Restricted Residential Use SCOs. Gray shading with bold text – values exceed USEPA Removal Management Levels for Residential Soil (HQ=1), May 2016.

J – Estimated value.



Several SVOCs were detected at concentrations exceeding the NYSDEC RRUSCOs and/or EPA RMLs in the soil samples collected from Ball Field 9. The following table provides a summary of SVOCs detected in soil at concentrations exceeding the NYSDEC RRUSCOs and/or USEPA RMLs at Ball Field 9.

SVOCs Det	SVOCs Detected in Soil at Concentrations Above RRUSCOs and RMLs at Ball Field 9											
		Sample ID	RHBF9- 01 (2-4')	RHBF9- 01 (5-7')	RHBF9- 01 (8- 10')	RHBF9- 02 (2-4')	RHBF9- DUP-01	RHBF9- 02 (8- 10')				
	Col	lection Date	12/22/16	12/22/16	12/22/16	12/27/16	12/27/16	12/27/16				
SVOCs	RRUSCO	RML	Result	Result	Result	Result	Result	Result				
Benzo(a)anthracene	1,000	16,000	9,550	3,670	887	3,800	5,340	5,960				
Benzo(a)pyrene	1,000	1,600	8,670	3,320	894	3,630	4,560	5,950				
Benzo(b)fluoranthene	1,000	16,000	11,000	4,360	1,130	4,140	4,970	7,030				
Chrysene	3,900	1,600,000	9,320	3,600	910	3,600	4,960	5,690				
Dibenzo(a,h)anthracene	330	1,600	1,490	628	162	519 J	1,040 J	743				
Indeno(1,2,3-cd)pyrene	500	16,000	5,600	2,500	608	2,220	3,530	3,860				

	RHBF9- 03 (2-4')	RHBF9- 03 (5-7')	RHBF9- 03 (8- 10')	RHBF9- 04 (2-4')	RHBF9- 04 (5-7')	RHBF9- 04 (8- 10')		
Collection Date			12/27/16	12/27/16	12/27/16	12/27/16	12/27/16	12/27/16
SVOCs	RRUSCO	RML	Result	Result	Result	Result	Result	Result
Benzo(a)anthracene	1,000	16,000	29,500	10,200	5,200	5,860	5,680	1,240
Benzo(a)pyrene	1,000	1,600	28,400	8,970	4,370	6,010	5,500	1,210
Benzo(b)fluoranthene	1,000	16,000	36,900	12,600	5,220	6,940	6,620	1,410
Benzo(k)fluoranthene	3,900	160,000	12,200	3,370	1,850	2,460	2,690	469
Chrysene	3,900	1,600,000	30,700	11,900	5,460	5,900	5,700	1,230
Dibenzo(a,h)anthracene	330	1,600	3,680	2,220	691	1,370	993 J+	185
Indeno(1,2,3-cd)pyrene	500	16,000	17,800	6,650	2,840	3,870	3,290	794

#### Notes:

All results shown are in micrograms per kilogram (µg/kg).

Gold shading with bold text – values exceed 6 NYCRR Part 375-6.8 Restricted Residential Use SCOs. Gray shading with bold text – values exceed USEPA Removal Management Levels for Residential Soil (HQ=1), May 2016.

Metals including arsenic, barium, copper, lead, and mercury were detected at concentrations exceeding NYSDEC RRUSCOs and/or USEPA RMLs in a majority of soil samples collected from Ball Fields 5 through 8. The following table provides a summary of metals detected in soil at concentrations exceeding the NYSDEC RRUSCOs and/or USEPA RMLs at Ball Fields 5 through 8.

Metals	Metals Detected in Soil at Concentrations Above RRUSCOs and RMLs at Ball Fields 5									
	Through 8									
Sample ID			RHGT-02	RHGT-02	RHGT-03	RHGT-03	RHGT-08			
			(2-4')	(5-7')	(2-4')	(5-7')	(2-4')			
Collection Date			3/23/16	3/23/16	3/22/16	3/22/16	3/22/16			
Metals	RRUSCO	RML	Result	Result	Result	Result	Result			
Arsenic	16	35	30	5.4	12.9	14.9	16.5			

J – Estimated value.

J+ - Estimated value, biased high.



Metals	Metals Detected in Soil at Concentrations Above RRUSCOs and RMLs at Ball Fields 5									
	Through 8									
	Sa	ample ID	RHGT-02 (2-4')	RHGT-02 (5-7')	RHGT-03 (2-4')	RHGT-03 (5-7')	RHGT-08 (2-4')			
Collection Date			3/23/16	3/23/16	3/22/16	3/22/16	3/22/16			
Metals	RRUSCO	RML	Result	Result	Result	Result	Result			
Barium	400	15,000	256	365	314	285	622			
Copper	270	3,100	207 J	50.2 J	266 J	46.1 J	356 J			
Lead	400	400	1,420 J+	1,350	1,050 J+	584	1,560 J+			
Mercury	0.81	11	5 J	2.7 J	0.84 J	1.3 J	1.4 J			

	Sa	imple ID	RHGT-08 (5-7')	RHGT-08 (8-10')	RHGT-13 (2-4')	RHGT-13 (5-7')	RHGT-14 (2-4')
Collection Date		3/22/16	3/22/16	3/23/16	3/23/16	3/23/16	
Metals	RRUSCO	RMLs	Result	Result	Result	Result	Result
Arsenic	16	35	80.7	11.5	24.4	12.8	10.5
Barium	400	15,000	260	260	1,080	720	476
Copper	270	3,100	67.7 J	44.8 J	195 J	89.9 J	285 J
Lead	400	400	1,480 J+	695	5,270	4,060	924
Mercury	0.81	11	1.5 J	10.2 J	0.58 J	0.34 J	0.83 J

#### Notes:

All results shown are in milligrams per kilogram (mg/kg).

J – Estimated value.

Gold shading with bold text – values exceed 6 NYCRR Part 375-6.8 Restricted Residential Use SCOs. Gray shading with bold text – values exceed USEPA Removal Management Levels for Residential Soil (HQ=1), May 2016.

Metals including antimony, arsenic, barium, cadmium, copper, iron, lead, and mercury were detected at concentrations exceeding the NYSDEC RRUSCOs and/or USEPA RMLs in a majority of soil sample locations collected from Ball Field 9. The following table provides a summary of metals detected in soil at concentrations exceeding the NYSDEC RRUSCOs and/or USEPA RMLs at Ball Field 9.



	Metals Detec	ted in So	I at Concent	rations Abo	ve RRUSCO:	s and RMLs	at Ball Field	9
	c	ample ID	RHBF9-	RHBF9-	RHBF9-	RHBF9-	RHBF9-	RHBF9-03
	3	ample ID	01 (2-4')	01 (5-7')	02 (2-4')	DUP-01	02 (8-10')	(2-4')
	Collection Date			12/22/16	12/27/16	12/27/16	12/27/16	12/27/16
Metals	RRUSCO	RML	Result	Result	Result	Result	Result	Result
Antimony	NC	31	8.6	2.2 U	2.3 U	2.3 U	2.6 U	37.4
Arsenic	16	35	29.0	10.2	10.3	10	17.6	41.8
Barium	400	15,000	655	661	212	213	468	724
Cadmium	4.3	71	3.3	1.5	0.75	1.2	1.4	5.3
Copper	270	3,100	541	239	130	124	207	1,660
Iron	NC	55,000	29,500	15,700	17,800	18,300	30,600	93,400
Lead	400	400	1,600	998	460	504	830	4,310
Mercury	0.81	11	2.0	0.76	2.1	3.5	2.7	4.0

	S	ample ID	RHBF9- 03 (5-7')	RHBF9- 03 (8-10')	RHBF9- 04 (2-4')	RHBF9- 04 (5-7')	RHBF9- 04 (8-10')
	Collection Date			12/27/16	12/27/16	12/27/16	12/27/16
Metals	RRUSCO	RML	Result	Result	Result	Result	Result
Arsenic	16	35	39.3	23.0	11.6	54.8	10.2
Barium	400	15,000	1,030	290	122	1,930	133
Cadmium	4.3	71	9.3	1.6	1.1	2.8 U	0.56 U
Cobalt	NC	23	10.5	7.7	5.9	25.4	5.6 U
Copper	270	3,100	1,360	333	356	1,280	48.2
Iron	NC	55,000	60,800	16,200	17,000	116,000	10,200
Lead	400	400	3,590	1,130	375	4,230	245
Mercury	0.81	11	1.5	3.4	1.5	6.1	2.7

#### Notes:

Results shown are in milligrams per kilogram (mg/kg)

NC - No criterion.

U - Non-detect.

Gold shading with bold text – values exceed 6 NYCRR Part 375-6.8 Restricted Residential Use SCOs. Gray shading with bold text – values exceed USEPA Removal Management Levels for Residential Soil (HQ=1), May 2016.

Exceedances of manganese were not included in the above table.

**Figures 9** and **10** present soil sample locations and results of the SVOC and metal analyses above NYSDEC RRUSCOs and USEPA RMLs, respectively, at the Site at the time of the indicated sampling events and are believed to be generally representative of the existing Site soil conditions.

#### 4.5.2. Groundwater

The results of the analyses of groundwater samples were evaluated by comparison to the New York State Class GA groundwater standards and guidance values (Class GA Values), in the NYSDEC Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1, Ambient Water Quality Standards and Guidance Values. The results of the groundwater sampling activities performed at Ball Fields 5 through 8 and Ball Field 9 in December 2016 indicate the following groundwater conditions at the Site:

 SVOCs were not detected at concentrations exceeding Class GA Values in the groundwater samples collected from Ball Fields 5 through 8.



 SVOCs, specifically polycyclic aromatic hydrocarbons (PAHs), were detected at concentrations above Class GA Values in three of the groundwater samples collected from Ball Field 9. The following table provides a summary of SVOCs detected in groundwater at concentrations exceeding Class GA Values at Ball Field 9.

SVOCs in Grour	ndwater at Concen	trations Abov	e Class GA V	alues at Ball F	ield 9
	Sample ID	RHBF9-01	RHBF9-02	RHBF9- GW-DUP- 01	RHBF9-04
	Collection Date	12/22/16	12/27/16	12/27/16	12/27/16
SVOCs	Class GA Value	Result	Result	Result	Result
Benzo(a)anthracene	0.002	0.53 J	2.2 J	3.1 J	0.93 J
Benzo(a)pyrene	ND*	0.53 J	2.5	3.3	0.83 J
Benzo(b)fluoranthene	0.002	0.54 J	2.5 J	3.7 J	0.82 J
Benzo(k)fluoranthene	0.002	1.0 U	0.86 J	1.2	1.0 U
Chrysene	0.002	1.0 U	2.2	2.9	1.3
Ideno(1,2,3-cd)pyrene	0.002	1.0 U	1.7 J	2.4 J	1.0 U
Naphthalene	10	1.0 U	1.1 U	0.50 J	56.4

#### Notes:

Results shown are in micrograms per liter (µg/L).

U - Non-detect.

J - Estimated Value

ND\* - Benzo(a)pyrene exceedance is any concentration above the detection limit.

Gold shading with bold text values exceed Class GA Values.

Barium was detected in two filtered groundwater samples and silver was detected in one filtered groundwater sample collected from Ball Fields 5 through 8 at concentrations slightly above the Class GA Values. Arsenic was detected in one filtered groundwater sample collected from Ball Field 9 at a concentration above its Class GA Value. Iron, magnesium, manganese, and sodium were detected in filtered groundwater samples collected through the Site above Class GA Values; however, they are naturally occurring metals and the concentrations detected in the Site groundwater may be result of saltwater intrusion from the nearby basin and harbor. The following table provides a summary of metals detected in groundwater at concentrations exceeding Class GA Values at Ball Fields 5 through 8.



Metals De	Metals Detected in Filtered Groundwater at Concentrations Above Class GA Values at Ball Fields 5 through 8									
	Sample ID RHGT-02 RHGT-03 RHGT-08 RHGT-13 RHGT-14									
	Collection Date	3/23/16	3/22/16	3/22/16	3/23/16	3/23/16				
Metals	Class GA Value	Result	Result	Result	Result	Result				
Barium	1,000	200 U	351	1,120	1,040	272				
Iron	300	17,800	15,300	50,200	35,900	10,500				
Magnesium	35,000	98,000	82,900	45,500	75,400	64,000				
Manganese	300	1,440	1,190	1,250	1,310	1,940				
Silver	50	66.8	10 U	10 U	10 U	10 U				
Sodium	20,000	866,000	711,000	225,000	408,000	374,000				

#### Notes:

Results shown are in micrograms per liter (µg/L)

U - Non-detect.

Gold shading with bold text values exceed Class GA Values.

Arsenic was detected in one filtered groundwater sample collected from Ball Field 9 at a concentration above its Class GA Value. Iron, magnesium, manganese, and sodium were detected in filtered groundwater samples collected through the Site above Class GA Values; however, they are naturally occurring metals and the concentrations detected in the Site groundwater may be result of saltwater intrusion from the nearby basin and harbor. The following table provides a summary of metals detected in groundwater at concentrations exceeding Class GA Values at Ball Field 9.

Metals Detected in Filtered Groundwater at Concentrations Above Class GA Values in `Ball Field 9						
	Sample ID	RHBF9-01	RHBF9-02	RHBF9- GW-DUP- 01	RHBF9-03	RHBF9-04
Collection Date		12/22/16	12/27/16	12/27/16	12/27/16	12/27/16
Metals	Class GA Value	Result	Result	Result	Result	Result
Arsenic	25	10.1	12.7	12.4	9.7	174
Iron	300	31,300	16,500	17,000	3,530	14,200
Magnesium	35,000	38,600	47,100	47,900	64,700	49,000
Manganese	300	1,020	328	324	234	1,170
Sodium	20,000	70,100	50,300	50,500	117,000	365,000

#### Notes:

Results shown are in micrograms per liter (µg/L)

Gold shading with bold text values exceed Class GA Values.

**Figures 11** and **12** present groundwater sample locations and results of the SVOC and metals analyses, respectively, above Class GA Values in the unfiltered groundwater samples collected from the Site at the time of the indicated sampling events and are believed to be generally representative of the existing Site groundwater conditions.

Since contaminated soil and groundwater remain beneath the Site after completion of the Remedial Action, Institutional and Engineering Controls are required to protect human health and the environment. These Engineering and Institutional Controls (ECs/Ics) are described in the following sections. Long-term management of these EC/Ics and residual contamination will be performed under the Site Management Plan (SMP) approved by the NYSDEC.



# 4.6. Cover System

Exposure to remaining contamination in soil/fill at the site is prevented by a cover system placed over the Site. This cover system is generally comprised of a minimum 12-inch thick synthetic turf (turf/infill, polyethylene drainage/shock pad, porous aggregate, drainage panel, geogrid, clean imported fill), clean cover, paving, bonded aggregate and permeable pavers, and/or mulch ground cover underlain by a physical demarcation layer consisting of orange-colored plastic safety fencing. The cover system was constructed in accordance with the remedial plans included as **Figure 7** for Ball Fields 5 through 8 and **Figure 8** for Ball Field 9. Locations of the cover system and applicable demarcation layers are presented in **Figure 14** for Ball Fields 5 through 8 and **Figure 15** for Ball Field 9. As-built drawings showing the locations and cross-sections of each component of the cover system for Ball Fields 5 through 8 and Ball Field 9 are presented in **Appendix K**.

An Excavation Work Plan, which outlines the procedures required in the event the cover system and/or underlying residual contamination are disturbed, is provided in Appendix D of the SMP.

## 4.7. Institutional Controls

The site remedy requires that a Deed Restriction be executed and recorded for the property to (1) implement, maintain and monitor Engineering Control systems; (2) prevent future exposure to remaining contamination; and, (3) limit the use and development of the Site to parkland uses only.

Specifically, the Deed Restriction includes but is not limited to the following conditions:

- there shall be no construction, use or occupancy of the Property that results in the disturbance or excavation of the Property which threatens the integrity of the engineering controls or which results in unacceptable human exposure to contaminated soils.
- the owner of the Property shall not disturb, remove, or otherwise interfere with the
  installation, use, operation, and maintenance of engineering controls required for
  the Remedy, unless in each instance the owner first obtains a written waiver of
  such prohibition from the NYSDEC or Relevant Agency.
- the Property shall not be used for purposes other than for parkland use, without the express written waiver of such prohibition by the NYSDEC or Relevant Agency.
- the owner of the Property shall prohibit the use of the groundwater underlying the Property from extraction points on the Property or from other property under their control, without treatment to render it safe for drinking water or for industrial purposes, as appropriate, and the user must first notify and obtain written approval to do so from the NYSDEC or Relevant Agency.
- the owner of the Property shall provide a periodic certification, prepared and submitted by a professional engineer or environmental professional acceptable to the NYSDEC or Relevant Agency, which will certify that the institutional and engineering controls put in place are unchanged from the previous certification, comply with the SMP, and have not been impaired.



 the owner of the Property shall continue in full force and effect any institutional and engineering controls required for the Remedy and maintain such controls, unless the owner first obtains permission to discontinue such controls from the NYSDEC or Relevant Agency, in compliance with the approved SMP, which is incorporated and made enforceable hereto, subject to modifications as approved by the NYSDEC or Relevant Agency.

Within 30 days after the approval of the final SMP, the City of New York will file the Deed Restriction for the Site. A copy of the Deed Restriction is included as Exhibit C in the NYSDEC Settlement Agreement provided in **Appendix A**.

# 4.8. Deviations from the Design Plans and Specifications

As described herein, the remedial measures were implemented in substantial conformance with the USEPA-approved Settlement Agreement, Remedial Design specifications and drawings, and D&IPs.



# 5. References

- 1. USEPA Region 2, Administrative Settlement Agreement and Order on Consent for a Removal Action, Columbia Smelting and Refining Works site, Brooklyn, New York, Index No. CERCLA-02-2016-2010, July 7, 2016.
- 2. NYSDEC, Order on Consent and Administrative Settlement, Index Ni. R2-20170726-452, April 1, 2021.
- 3. NYSDEC, Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1. June 1998 (April 2000 addendum).
- 4. 6 NYCRR Part 375, Environmental Remediation Programs. December 14, 2006.
- 5. NYSDEC, DER-10, Technical Guidance for Site Investigation and Remediation, May 2010.
- 6. NYSDEC, CP-51, Soil Cleanup Guidance, October 21, 2010.
- 7. TRC Engineers, Inc., Design and Implementation Plan, Red Hook Ball Fields 5, 6, 7, and 8, May 19, 2017.
- 8. TRC Engineers, Inc., Project Management Plan for Removal Action, Red Hook Ball Fields 5, 6, 7, and 8, June 24, 2016.
- 9. TRC Engineers, Inc., Interim Design Plan for Red Hook Ball Fields 5, 6, 7, and 8, September 22, 2016.
- 10. TRC Engineers, Inc., Design and Implementation Plan, Red Hook Recreation Area Ball Field 9 and the Ball Field 9 Planting Strips, April 23, 2018.
- 11. TRC Engineers, Inc., Project Management Plan for Removal Action, Red Hook Ball Field 9 and Ball Field 9 Planting Strips, February 14, 2017.
- 12. TRC Engineers, Inc., Interim Design Plan for Red Hook Ball Field 9 and Ball Field 9 Planting Strips, November 20, 2017.
- 13. TRC Engineers, Inc., Infiltration, Soil and Groundwater Testing Report, Red Hook Ball Fields 5 to 8, June 9, 2016.
- 14. TRC Engineers, Inc., Infiltration, Soil and Groundwater Testing Report, Red Hook Ball Fields 5 to 8, June 9, 2016.

# Table 1 City of New York Department of Parks and Recreation Construction Completion Report Red Hook Park - Ball Fields 5, 6, 7, 8, & 9 Imported Soil Criteria

Constituent	Imported Soil Criteria <sup>1</sup> (mg/kg)
Volatile Organic Compounds	
1113 Freon (1,1,2-TFE)	6
1,1,1-Trichloroethane	0.68
1,1,2,2-Tetrachloroethane	0.6
1,1-Dichloroethane	0.27
1,1-Dichloroethene	0.33
1,2,3-Trichloropropane	0.34
1,2,4-Trichlorobenzene	3.4
1,2,4-Trimethylbenzene	3.6
1,2-Dichlorobenzene	1.1
1,2-Dichloroethane	0.02
1,3,5-Trimethylbenzene	8.4
1,3-Dichlorobenzene	2.4
1,3-Dichloropropane	0.3
1,4-Dichlorobenzene	1.8
1,4-Dioxane	0.1
2,6-Dinitrotoluene	0.17
4-Methyl-2-pentanone	1.0
Acetone	0.05
Benzene	0.06
Carbon disulfide	2.7
Carbon tetrachloride	0.76
Chlorobenzene	1.1
Chloroform	0.37
Ethylbenzene	1
Hexachlorobenzene	1.2
Isopropylbenzene	2.3
Methyl ethyl ketone (2-Butanone)	0.12
Methyl tert butyl ether	0.93
Methylene chloride	0.05
n-Propylbenzene	3.9
p-Isopropyltoluene	10
sec-Butylbenzene	11
tert-Butylbenzene	5.9
Tetrachloroethene	1.3
Toluene	0.7
Trichloroethene	0.47
Vinyl chloride	0.02
Xylenes, Total	1.6



# Table 1 City of New York Department of Parks and Recreation Construction Completion Report Red Hook Park - Ball Fields 5, 6, 7, 8, & 9 Imported Soil Criteria

Constituent	Imported Soil Criteria <sup>1</sup> (mg/kg)
Semivolatile Organic Compounds	
2,4,5-Trichlorophenol	0.1
2,4-Dichlorophenol	0.40
2,4-Dinitrophenol	0.2
2,6-Dinitrotoluene	1.0
2-Nitroaniline	0.4
2-Nitrophenol	0.3
3-Nitroaniline	0.5
4-Chloroaniline	0.22
4-Methyl-2-pentanone	1.0
4-Methyl-naphthalene	36.4
4-Nitrophenol	0.1
Acenaphthylene	100
Aniline	0.33
Anthracene	100
Benzo(a)anthracene	1
Benzo(a)pyrene	1
Benzo(b)fluoranthene	1
Benzo(ghi)perylene	100
Benzo(k)fluoranthene	1.7
Benzoic acid	2.7
Bis(2-ethylhexyl)phthalate	435
Butylbenzyl-phthalate	122
Chloroethane	1.9
Chrysene	1
Dibenzo(a,h)anthracene	0.33
Diethylphthalate	7.1
Dimethylphthalate	27
Di-n-butyl-phthalate	8.1
Di-n-octylphthalate	120
Fluoranthene	100
Fluorene	100
Hexachlorobenzene	1.4
Indeno(1,2,3-cd)pyrene	0.5
Isophorone	4.4
m-Cresol(s)	0.33
Naphthalene	12
Nitrobenzene	0.17



# Table 1 City of New York Department of Parks and Recreation Construction Completion Report Red Hook Park - Ball Fields 5, 6, 7, 8, & 9 Imported Soil Criteria

Constituent	Imported Soil Criteria <sup>1</sup> (mg/kg)
o-Cresol(s)	0.33
p-Cresol(s)	0.33
Pentachlorophenol	0.8
Phenanthrene	100
Phenol	0.33
Pyrene	100
Polychlorinated Biphenyls/Pesticide	s
2,4,5-TP (Silvex)	1.9
2,4,5-TP (Silvex)	3.8
2,4-D	0.5
4,4'-DDD	13
4,4'-DDE	8.9
4,4'-DDT	7.9
Aldrin	0.097
Alpha-BHC	0.02
Beta-BHC	0.09
Chlordane (alpha)	2.9
Delta-BHC	0.25
Dieldrin	0.1
Dibenzofuran	6.2
Endosulfan I	24
Endosulfan II	24
Endosulfan sulfate	24
Endrin	0.06
Gamma chlordane	14
Heptachlor	0.38
Heptachlor epoxide	0.02
Lindane	0.1
Methoxychlor	900
Parathion	1.2
Polychlorinated biphenyls	1



## Table 1

## City of New York Department of Parks and Recreation Construction Completion Report Red Hook Park - Ball Fields 5, 6, 7, 8, & 9 Imported Soil Criteria

Constituent	Imported Soil Criteria <sup>1</sup> (mg/kg)
Metals	
Arsenic	16
Barium	400
Beryllium	47
Cadmium	4.3
Chromium, Hexavalent	19
Chromium, Trivalent	180
Copper	270
Cyanide	27
Lead	400
Manganese	2,000
Mercury	0.73
Nickel	130
Selenium	4
Silver	8.3
Zinc	2,480

### Notes:

mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).

NYSDEC - New York State Department of Environmental Conservation



<sup>&</sup>lt;sup>1</sup> - Lower value of the Protection of Groundwater or Protection of Public Health for Restricted Residential Use per NYSDEC Technical Guidance for Site Investigation and Remedation (DER-10) Subdivision 5.4(e) and Table 1 of NYSDEC CP-51.

Location	Date Transported Off-Site	Manifest Number	Disposal Facility	Net Weight (Tons)
	***	Ball Fields 5 Through 8		
	7/1/2020	azardous Contaminated Soil 00 6853645		19.66
	7/1/2020	00 6253875	<del>- </del>	19.00
	7/1/2020	00 6253613	<b>⊣</b> ⊢	20.31
	7/1/2020	00 6253872	Clean Earth of North Jersey, Inc.	19.72
Red Hook Ballfields 5-8	7/1/2020	00 6253877	(Direct Landfill)	19.62
Treat Floor Bullions 5 0	7/1/2020	00 6253878		16.70
	7/1/2020	00 6253876	<u> </u>	18.00
	7/1/2020 7/1/2020	00 6253873 00 6253874	<del>- </del>	18.00 19.82
	//1/2020 Subtotal	00 6253874		170.83
	Non	-Hazadous Contaminated Soi		
	11/16/2020	3304054-8	_	20.39
	11/16/2020	3304054-3	→	18.42
Red Hook Ballfields 5-8	11/16/2020 11/16/2020	3304054-7 3304054-2	Clean Earth of North Jersey, Inc.	22.94 19.16
Jnderground Storage Tank	11/16/2020	3304054-5	(Direct Landfill)	20.88
Closure	11/16/2020	3304054-4	┦ ` ′ ├	19.09
	11/16/2020	3304054-6	<del>-</del>	20.02
	11/16/2020	3304054-1		19.30
	Subtotal	l		160.20
	8/22/2019 8/22/2010	WMNA-8506745	<del>- </del>	19.92 17.12
	8/22/2019 8/22/2910	WMNA-8505722 WMNA-8505724	⊣ ⊢	17.12
	8/22/2910	WMNA-8505726	- <del> </del>	22.12
	8/22/2019	WMNA-8505720	-  F	23.05
	8/22/2019	WMNA-8505727		22.06
	8/22/2019	WMNA-8505725		23.02
	8/22/2019	WMNA-8505723	→ ⊢	22.74
	8/23/2019	WMNA-8506753	⊢ ⊢	23.29
	8/23/2019 8/23/2019	WMNA-8506752 WMNA-8506751	⊢ ⊢	22.43 23.20
	8/23/2019	WMNA-8506750	<del> </del>	24.12
	8/23/2019	WMNA-8506749	<del>-</del>	22.41
	8/23/2019	WMNA-8506748	<b>-</b>	19.37
	8/23/2019	WMNA-8506754		21.26
	8/23/2019	WMNA-8506747		23.04
	8/26/2019	WMNA-8533307	→ ⊢	16.77
	8/26/2019	WMNA-8533309	4	17.97
	8/26/2019 8/26/2019	WMNA-8533310 WMNA-8533311	⊢ ⊢	19.87 18.06
	8/26/2019	WMNA-8533308	<del> </del>	19.43
	8/26/2019	WMNA-8533312	<b>-</b>	18.90
	8/26/2019	WMNA-8533313		17.74
	8/26/2019	WMNA-8533318		18.56
	8/26/2019	WMNA-8533314	→	20.82
	8/26/2019	WMNA-8533317	⊢ ⊢	23.09
	8/27/2019 8/27/2019	WMNA-8533322 WMNA-8533319	<del>- </del>	21.78 20.52
Red Hook Ballfields 5-8	8/27/2019	WMNA-8533320	Fairless Landfill (Ultimate	20.96
Dumoido 5 0	8/27/2019	WMNA-8533320 WMNA-8533321	Disposal)	21.21
	8/27/2019	WMNA-8533323	<u> </u>	24.67
	8/27/2019	WMNA-8533324		24.42
	8/27/2019	WMNA-8533327		27.41
	8/27/2019	WMNA-8533325	→	24.05
	8/27/2019 8/27/2019	WMNA-8533326	<b>⊣</b> ⊢	26.22 24.39
	8/27/2019 8/28/2019	WMNA-8533330 WMNA-8533331	⊢ ⊢	24.39
	8/28/2019	WMNA-8533342	<b>⊣</b> ⊢	21.29
	8/28/2019	WMNA-8533332	<b>-</b>	20.58
	8/28/2019	WMNA-8533333		20.99
	8/28/2019	WMNA-8533334	_  [	20.24
	8/28/2019	WMNA-8533335	→ -	21.63
	8/28/2019 8/28/2010	WMNA-8533336	⊣ ⊦	20.46
	8/28/2019 8/28/2019	WMNA-8533337 WMNA-8533338	⊣ ⊦	22.27 21.38
	8/28/2019	WMNA-8533338 WMNA-8533343	- <del> </del>	20.58
	8/29/2019	WMNA-8533344	<b>-</b>	20.04
	8/29/2019	WMNA-8533345	<u> </u>	19.42
	8/29/2019	WMNA-8533346		17.48
	8/29/2019	WMNA-8533347		16.72
	8/29/2019	WMNA-8533348	→	21.54
	8/29/2019	WMNA-8533349	⊣ ⊢	21.00 20.17
	8/29/2019 8/29/2019	WMNA-8533350 WMNA-8533351	⊣ ⊢	19.75
	8/29/2019	WMNA-8533351 WMNA-8533352	- <del> </del>	19.73
	8/30/2019	WMNA-8533355	-     -	20.76
	<u> </u>	WMNA-8533356	<b>→</b> ⊢	19.27





Location	Date Transported Off-Site	Manifest Number	Disposal Facility	Net Weight (Tons)
	8/30/2019	WMNA-8533357		18.34
-	8/30/2019	WMNA-8533366	-	22.54
-	8/30/2019 8/30/2019	WMNA-8533365 WMNA-8533354	+ +	21.02 20.29
	8/30/2019	WMNA-8533334 WMNA-85333328	†	22.84
	8/30/2019	WMNA-8533329	1 1	20.62
	8/30/2019	WMNA-8533316	] [	21.40
	8/30/2019	WMNA-8533315	4	20.80
-	9/3/2019	WMNA-8533367	-	19.25 19.75
-	9/3/2019 9/3/2019	WMNA-8533368 WMNA-8533369	<del> </del>	22.26
<u> </u>	9/3/2019	WMNA-8533370	† 1	19.81
	9/3/2019	WMNA-8533371	] [	21.16
	9/3/2019	WMNA-8533372	] [	22.98
	9/3/2019	WMNA-8533373	4	20.97
-	9/3/2019 9/3/2019	WMNA-8533374	-	23.14 22.19
-	9/3/2019	WMNA-8533375 WMNA-8533376	<del> </del>	24.27
	9/4/2019	WMNA-8533379	†	22.80
	9/4/2019	WMNA-8533380	] [	22.97
	9/4/2019	WMNA-8533381	] [	22.40
	9/4/2019	WMNA-8533382	1 1	22.51
-	9/4/2019	WMNA-8533383	<del> </del>	23.10
-	9/4/2019 9/4/2019	WMNA-8533384 WMNA-8533385	<del> </del>	21.90 21.98
-	9/4/2019	WMNA-8533386	†	22.19
	9/4/2019	WMNA-8533387	†	23.04
	9/4/2019	WMNA-8533388	] [	22.75
	9/5/2019	WMNA-8533391	]	25.21
	9/5/2019	WMNA-8533392	4	42.10
-	9/5/2019	WMNA-8533393	-	22.16 25.76
-	9/5/2019 9/5/2019	WMNA-8533394 WMNA-8533395	1 1	23.01
	9/5/2019	WMNA-8533396	† †	24.69
	9/5/2019	WMNA-8533397	] [	25.48
	9/5/2019	WMNA-8533398	] [	26.09
	9/5/2019	WMNA-8533399	4	25.09
-	9/5/2019	WMNA-8533400	-	22.24
	9/6/2019 9/6/2019	WMNA-8533412 WMNA-8533411	Fairless Landfill (Ultimate	24.38
Red Hook Ballfields 5-8	9/6/2019	WMNA-8533403	Disposal)	24.10
	9/6/2019	WMNA-8533404	]	23.78
	9/6/2019	WMNA-8533405	] [	25.46
	9/6/2019	WMNA-8533406	-	23.56
-	9/6/2019 9/6/2019	WMNA-8533407	-	23.70 21.56
	9/6/2019	WMNA-8533408 WMNA-8533409	1 1	24.56
	9/9/2019	WMNA-8533413	† †	23.02
	9/9/2019	WMNA-8533414	] [	24.19
	9/9/2019	WMNA-8533415	] [	25.42
-	9/9/2019	WMNA-8533416	4	23.83
-	9/9/2019	WMNA-8533417 WMNA-8533418	-	23.65 23.50
-	9/9/2019 9/9/2019	WMNA-8533418 WMNA-8533419	1 1	21.90
	9/9/2019	WMNA-8533420	†	24.53
ļ	9/9/2019	WMNA-8533421	]	19.52
[	9/9/2019	WMNA-8533422	]	20.57
	9/10/2019	WMNA-8533358	4	23.55
-	9/10/2019 9/10/2019	WMNA-8533359	<del> </del>	24.14
-	9/10/2019	WMNA-8533364 WMNA-8533430	<del> </del>	23.36
ŀ	9/10/2019	WMNA-8533363	†	23.74
	9/10/2019	WMNA-8533431	]	24.13
	9/10/2019	WMNA-8533432	] [	20.81
	9/10/2019	WMNA-8533433	4	21.75
-	9/10/2019 9/10/2019	WMNA-8533429 WMNA-8533428	<del> </del>	22.83 21.83
}	9/10/2019	WMNA-8533428 WMNA-8533339	<del> </del>	23.56
	9/11/2019	WMNA-8533340	†	21.10
	9/11/2019	WMNA-8533341	]	19.36
	9/11/2019	WMNA-8533389	] [	18.55
[	9/11/2019	WMNA-8533390	] [	20.96
	9/11/2019	WMNA-8533324	4	20.53
	9/11/2019 9/11/2019	WMNA-8533353	<del> </del>	18.18 19.90
-	9/11/2019	WMNA-8533425 WMNA-8533378	<del> </del>	20.02
	9/11/2019	WMNA-8533378 WMNA-8533377	†	20.88
ļ	9/12/2019	WMNA-8533434	<u> </u>	21.82
	9/12/2019	WMNA-8533435	] [	22.27
	9/12/2019	WMNA-8533436		20.42





Red Hook Ballfields 5-8	9/12/2019 9/12/2019 9/12/2019 9/12/2019 9/12/2019 9/12/2019 9/12/2019 9/12/2019 9/12/2019 9/12/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019	WMNA-8533437 WMNA-8533439 WMNA-8533440 WMNA-8533440 WMNA-8533441 WMNA-8533441 WMNA-8533442 WMNA-8533447 WMNA-8533447 WMNA-8533447 WMNA-8533449 WMNA-8533451 WMNA-8533451 WMNA-8533451 WMNA-8533451 WMNA-8533454 WMNA-8533454 WMNA-8533454 WMNA-8533454 WMNA-8533456 WMNA-8533464 WMNA-8533464 WMNA-8533467 WMNA-8533467 WMNA-8533467 WMNA-8533467 WMNA-8533471 WMNA-8533471 WMNA-8533475		20.86 19.54 22.36 22.34 20.17 20.41 20.34 21.25 22.85 21.35 21.58 23.22 19.34 21.52 23.53 19.38 19.86 17.22 17.49 18.82 19.25 19.60 21.73 19.51 23.78 21.27 22.30
Red Hook Ballfields 5-8	9/12/2019 9/12/2019 9/12/2019 9/12/2019 9/12/2019 9/12/2019 9/12/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019	WMNA-8533449 WMNA-8533441 WMNA-8533441 WMNA-8533442 WMNA-8533442 WMNA-8533443 WMNA-8533447 WMNA-8533449 WMNA-8533449 WMNA-8533450 WMNA-8533451 WMNA-8533451 WMNA-8533453 WMNA-8533454 WMNA-8533454 WMNA-8533454 WMNA-8533461 WMNA-8533460 WMNA-8533460 WMNA-8533461 WMNA-8533461 WMNA-8533461 WMNA-8533461 WMNA-8533461 WMNA-8533463 WMNA-8533465 WMNA-8533465 WMNA-8533465 WMNA-8533465 WMNA-8533467 WMNA-8533473 WMNA-8533473		22.36 22.34 20.17 20.41 20.34 21.25 22.85 21.35 21.58 23.22 19.34 21.52 23.53 19.38 19.86 17.22 17.49 18.82 19.25 19.60 21.73 19.51 23.78 21.27
Red Hook Ballfields 5-8	9/12/2019 9/12/2019 9/12/2019 9/12/2019 9/12/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019	WMNA-8533440 WMNA-8533441 WMNA-8533442 WMNA-8533443 WMNA-8533443 WMNA-8533447 WMNA-8533448 WMNA-8533449 WMNA-8533450 WMNA-8533451 WMNA-8533451 WMNA-8533452 WMNA-8533454 WMNA-8533454 WMNA-8533454 WMNA-8533456 WMNA-8533461 WMNA-8533461 WMNA-8533461 WMNA-8533461 WMNA-8533461 WMNA-8533461 WMNA-8533467 WMNA-8533465 WMNA-8533465 WMNA-8533465 WMNA-8533467 WMNA-8533471 WMNA-8533471		22.34 20.17 20.41 20.34 21.25 22.85 21.35 21.35 21.58 23.22 19.34 21.52 23.53 19.38 19.86 17.22 17.49 18.82 19.25 19.60 21.73 19.51 23.78 21.27
Red Hook Ballfields 5-8	9/12/2019 9/12/2019 9/12/2019 9/12/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019	WMNA-8533441 WMNA-8533443 WMNA-8533443 WMNA-8533447 WMNA-8533447 WMNA-8533447 WMNA-8533449 WMNA-8533450 WMNA-8533451 WMNA-8533451 WMNA-8533452 WMNA-8533454 WMNA-8533456 WMNA-8533456 WMNA-8533460 WMNA-8533461 WMNA-8533461 WMNA-8533461 WMNA-8533467 WMNA-8533467 WMNA-8533465 WMNA-8533465 WMNA-8533465 WMNA-8533467 WMNA-8533471 WMNA-8533471		20.17 20.41 20.34 21.25 22.85 21.35 21.58 23.22 19.34 21.52 23.53 19.38 19.86 17.22 17.49 18.82 19.25 19.60 21.73 19.51 23.78 21.27
Red Hook Ballfields 5-8	9/12/2019 9/12/2019 9/12/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019	WMNA-8533442 WMNA-8533447 WMNA-8533447 WMNA-8533448 WMNA-8533448 WMNA-8533448 WMNA-8533449 WMNA-8533451 WMNA-8533451 WMNA-8533451 WMNA-8533452 WMNA-8533455 WMNA-8533456 WMNA-8533460 WMNA-8533460 WMNA-8533460 WMNA-8533460 WMNA-8533460 WMNA-8533461 WMNA-8533460 WMNA-8533463 WMNA-8533463 WMNA-8533465 WMNA-8533465 WMNA-8533465 WMNA-8533466 WMNA-8533467 WMNA-8533471 WMNA-8533471		20.41 20.34 21.25 22.85 21.35 21.58 23.22 19.34 21.52 23.53 19.38 19.86 17.22 17.49 18.82 19.25 19.60 21.73 19.51 23.78 21.27
Red Hook Ballfields 5-8	9/12/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019	WMNA-8533443 WMNA-8533444 WMNA-8533449 WMNA-8533449 WMNA-8533450 WMNA-8533451 WMNA-8533451 WMNA-8533453 WMNA-8533454 WMNA-8533454 WMNA-8533456 WMNA-8533460 WMNA-8533461 WMNA-8533461 WMNA-8533461 WMNA-8533461 WMNA-8533464 WMNA-8533465 WMNA-8533465 WMNA-8533465 WMNA-8533465 WMNA-8533465 WMNA-8533467 WMNA-8533473 WMNA-8533473		21.25 22.85 21.35 21.58 23.22 19.34 21.52 23.53 19.38 19.86 17.22 17.49 18.82 19.25 19.60 21.73 19.51 23.78 21.27
Red Hook Ballfields 5-8	9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019	WMNA-8533448 WMNA-8533449 WMNA-8533450 WMNA-8533451 WMNA-8533451 WMNA-8533452 WMNA-8533454 WMNA-8533455 WMNA-8533456 WMNA-8533456 WMNA-8533460 WMNA-8533461 WMNA-8533462 WMNA-8533463 WMNA-8533464 WMNA-8533465 WMNA-8533465 WMNA-8533473 WMNA-8533471 WMNA-8533473 WMNA-8533473		22.85 21.35 21.58 23.22 19.34 21.52 23.53 19.38 19.86 17.22 17.49 18.82 19.25 19.60 21.73 19.51 23.78
Red Hook Ballfields 5-8	9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019	WMNA-8533449 WMNA-8533451 WMNA-8533451 WMNA-8533452 WMNA-8533452 WMNA-8533453 WMNA-8533455 WMNA-8533456 WMNA-8533460 WMNA-8533460 WMNA-8533460 WMNA-8533460 WMNA-8533460 WMNA-8533463 WMNA-8533464 WMNA-8533465 WMNA-8533465 WMNA-8533473 WMNA-8533471		21.35 21.58 23.22 19.34 21.52 23.53 19.38 19.86 17.22 17.49 18.82 19.25 19.60 21.73 19.51 23.78
Red Hook Ballfields 5-8	9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019	WMNA-8533450 WMNA-8533451 WMNA-8533451 WMNA-8533453 WMNA-8533454 WMNA-8533455 WMNA-8533460 WMNA-8533460 WMNA-8533461 WMNA-8533461 WMNA-8533462 WMNA-8533464 WMNA-8533464 WMNA-8533467 WMNA-8533467 WMNA-8533473 WMNA-8533473		21.58 23.22 19.34 21.52 23.53 19.38 19.86 17.22 17.49 18.82 19.25 19.60 21.73 19.51 23.78 21.27
Red Hook Ballfields 5-8	9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019	WMNA-8533451 WMNA-8533452 WMNA-8533453 WMNA-8533454 WMNA-8533454 WMNA-8533456 WMNA-8533460 WMNA-8533461 WMNA-8533461 WMNA-8533463 WMNA-8533463 WMNA-8533465 WMNA-8533465 WMNA-8533467 WMNA-8533473 WMNA-8533473		23.22 19.34 21.52 23.53 19.38 19.86 17.22 17.49 18.82 19.25 19.60 21.73 19.51 23.78 21.27
Red Hook Ballfields 5-8	9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019	WMNA-8533452 WMNA-8533453 WMNA-8533454 WMNA-8533455 WMNA-8533456 WMNA-8533461 WMNA-8533461 WMNA-8533462 WMNA-8533463 WMNA-8533464 WMNA-8533465 WMNA-8533467 WMNA-8533471 WMNA-8533473 WMNA-8533473		19.34 21.52 23.53 19.38 19.86 17.22 17.49 18.82 19.25 19.60 21.73 19.51 23.78 21.27
Red Hook Ballfields 5-8	9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/13/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019	WMNA-8533453 WMNA-8533454 WMNA-8533456 WMNA-8533456 WMNA-8533460 WMNA-8533461 WMNA-8533461 WMNA-8533462 WMNA-8533464 WMNA-8533465 WMNA-8533466 WMNA-8533467 WMNA-8533473 WMNA-8533473 WMNA-8533473		21.52 23.53 19.38 19.86 17.22 17.49 18.82 19.25 19.60 21.73 19.51 23.78
Red Hook Ballfields 5-8	9/13/2019 9/13/2019 9/13/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019	WMNA-8533455 WMNA-8533460 WMNA-8533460 WMNA-8533461 WMNA-8533461 WMNA-8533463 WMNA-8533464 WMNA-8533465 WMNA-8533465 WMNA-8533467 WMNA-8533473 WMNA-8533472 WMNA-8533473		19.38 19.86 17.22 17.49 18.82 19.25 19.60 21.73 19.51 23.78 21.27
Red Hook Ballfields 5-8	9/13/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019	WMNA-8533456 WMNA-8533461 WMNA-8533461 WMNA-8533462 WMNA-8533463 WMNA-8533464 WMNA-8533465 WMNA-8533466 WMNA-8533471 WMNA-8533471 WMNA-8533472 WMNA-8533473		19.86 17.22 17.49 18.82 19.25 19.60 21.73 19.51 23.78 21.27
Red Hook Ballfields 5-8	9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019	WMNA-8533460 WMNA-8533461 WMNA-8533462 WMNA-8533463 WMNA-8533464 WMNA-8533465 WMNA-8533466 WMNA-8533471 WMNA-8533472 WMNA-8533473 WMNA-8533474		17.22 17.49 18.82 19.25 19.60 21.73 19.51 23.78 21.27
Red Hook Ballfields 5-8	9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019	WMNA-8533461 WMNA-8533462 WMNA-8533463 WMNA-8533464 WMNA-8533465 WMNA-8533466 WMNA-8533471 WMNA-8533471 WMNA-8533472 WMNA-8533473 WMNA-8533474		17.49 18.82 19.25 19.60 21.73 19.51 23.78 21.27
Red Hook Ballfields 5-8	9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019	WMNA-8533462 WMNA-8533463 WMNA-8533464 WMNA-8533465 WMNA-8533466 WMNA-8533471 WMNA-8533472 WMNA-8533472 WMNA-8533473		18.82 19.25 19.60 21.73 19.51 23.78 21.27
Red Hook Ballfields 5-8	9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/16/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019	WMNA-8533463 WMNA-8533464 WMNA-8533465 WMNA-8533466 WMNA-8533471 WMNA-8533471 WMNA-8533473 WMNA-8533473		19.25 19.60 21.73 19.51 23.78 21.27
Red Hook Ballfields 5-8	9/16/2019 9/16/2019 9/16/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019	WMNA-8533465 WMNA-8533466 WMNA-8533471 WMNA-8533471 WMNA-8533472 WMNA-8533473 WMNA-8533474		21.73 19.51 23.78 21.27
Red Hook Ballfields 5-8	9/16/2019 9/16/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019	WMNA-8533466 WMNA-8533467 WMNA-8533471 WMNA-8533472 WMNA-8533473 WMNA-8533474		19.51 23.78 21.27
Red Hook Ballfields 5-8	9/16/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019	WMNA-8533467 WMNA-8533471 WMNA-8533472 WMNA-8533473 WMNA-8533474		23.78 21.27
Red Hook Ballfields 5-8	9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019	WMNA-8533471 WMNA-8533472 WMNA-8533473 WMNA-8533474		21.27
Red Hook Ballfields 5-8	9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019	WMNA-8533472 WMNA-8533473 WMNA-8533474	1	
Red Hook Ballfields 5-8	9/17/2019 9/17/2019 9/17/2019 9/17/2019 9/17/2019	WMNA-8533473 WMNA-8533474	<u> </u>	
Red Hook Ballfields 5-8	9/17/2019 9/17/2019 9/17/2019 9/17/2019	WMNA-8533474	<b>⊣</b> ⊢	21.87
Red Hook Ballfields 5-8	9/17/2019 9/17/2019 9/17/2019		1	20.40
Red Hook Ballfields 5-8	9/17/2019	V 1911 V.T. 03333473	] [	22.11
Red Hook Ballfields 5-8		WMNA-8533476		20.94
Red Hook Ballfields 5-8		WMNA-8533477		18.58
Red Hook Ballfields 5-8	9/17/2019	WMNA-8533478	-  -	21.75
Red Hook Ballfields 5-8	9/17/2019 9/17/2019	WMNA-8533479 WMNA-8533480	-   -	20.85 21.57
Red Hook Ballfields 5-8	9/18/2019	WMNA-8533490	† †	20.80
Red Hook Ballfields 5-8	9/18/2019	WMNA-8533491	†	24.25
Red Hook Ballfields 5-8	9/18/2019	WMNA-8533492	] [	21.57
Red Hook Ballfields 5-8	9/18/2019	WMNA-8533493	↓	20.24
	9/18/2019	WMNA-8533494	Fairless Landfill (Ultimate	20.03
	9/18/2019	WMNA-8533483	Disposal)	21.15 22.13
	9/18/2019 9/20/2019	WMNA-8533485 WMNA-8533495	<del> </del>	16.71
	9/20/2019	WMNA-8533496	† †	17.03
	9/20/2019	WMNA-8533497	†	19.50
	9/20/2019	WMNA-8533498	] [	20.01
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	9/20/2019	WMNA-8533501	-l	18.08 18.57
	9/20/2019 9/20/2019	WMNA-8533502 WMNA-8533503	<del> </del>	19.48
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	9/23/2019	WMNA-8533510	- <del> </del>	18.53
	9/23/2019 9/23/2019	WMNA-8533511 WMNA-8533512	<del> </del>	17.88 18.22
	9/23/2019	WMNA-8533512 WMNA-8533513	† †	17.57
	9/23/2019	WMNA-8533513	†	17.11
	9/23/2019	WMNA-8533515	]	17.30
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	9/24/2019	WMNA-8533520	- <del>-</del>	17.82
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	9/24/2019	WMNA-8533522 WMNA-8533523	<del> </del>	15.40
	9/24/2019	WMNA-8533523 WMNA-8533524	†	15.56
	9/24/2019	WMNA-8533525	]	16.61
	9/24/2019	WMNA-8533526	] [	17.97
	9/25/2019	WMNA-8533527		19.55
	9/25/2019	WMNA-8533528	4	18.77
	9/25/2019	WMNA-8533529	- <del></del>	15.30
<del></del>	9/25/2019 9/25/2019	WMNA-8533530 WMNA-8533531	<del> </del>	21.25 19.55
	9/25/2019	WMNA-8533531 WMNA-8533517	<del> </del>	21.74
	9/25/2019	WMNA-8533517 WMNA-8533518	† †	RETURNED
	9/25/2019	WMNA-8533444	j	RETURNED
	9/25/2019	WMNA-8533446 WMNA-8533445	1 [	RETURNED RETURNED



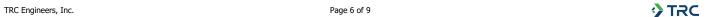


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	11/4/2019	WMNA-8778901	_	17.01
	11/4/2019	WMNA-8778902		16.99
	11/4/2019	WMNA-8778903		21.13
	11/4/2019	WMNA-8778904		22.95
	11/4/2019	WMNA-8778905	Fairless Landfill (Ultimate	20.42
Red Hook Ballfields 5-8	11/4/2019	WMNA-8778906	Disposal)	21.82
	11/4/2019	WMNA-8778907	Disposar)	22.18
	11/4/2019	WMNA-8778908	7 [	17.69
	11/4/2019	WMNA8778909	7 [	23.91
	11/4/2019	WMNA-8778910	7	24.54
	11/4/2019	WMNA-8778911	7 [	25.48
	11/6/2019	WMNA-8778912	7	21.08
	11/6/2019	WMNA-8778913	┥	22.21
	Subtotal			4,993.14
	5/2/2010	Concrete		17.24
	5/3/2019	1	┥ ト	17.24
	5/3/2019	2	╡	16.79
	5/3/2019	3	→ -	22.84
	5/3/2019	4	⊣ ⊦	22.83
	5/3/2019	5	_	16.79
	5/3/2019	6	_	22.19
	5/6/2019	7	_	20.19
	5/6/2019	8	_  [	15.79
	5/6/2019	9	[	22.09
	5/6/2019	10		17.97
	5/6/2019	11		23.64
	5/6/2019	12		19.95
	5/8/2019	13	7	13.62
	5/8/2019	14	¬	20.84
	5/8/2019	15	7	18.50
	5/8/2019	16	7	14.44
	5/8/2019	17	┦	20.74
	5/8/2019	18	╡	RETURNED
	5/8/2019	19	┥	18.90
	5/8/2019	20	┥ ト	14.74
		20	<b>⊣</b> ⊦	19.35
	5/8/2019		┥ ト	21.53
	5/9/2019	22	┥ ト	
	5/9/2019	23	┥ ト	16.29
	5/9/2019	24	ᆗ	20.77
	5/9/2019	25	→ -	16.51
	5/9/2019	26	<b>⊣</b> ⊦	20.67
	5/9/2019	27	_	17.04
	5/13/2019	28	_	14.09
	5/13/2019	29	_	11.22
	5/13/2019	30	_	14.67
	5/13/2019	31	_	17.96
Red Hook Ballfields 5-8	5/13/2019	32	_  _ [	12.58
Trook Samients 5-0	5/13/2019	33	Alloco Recycling - Brooklyn, NY	14.70
	5/13/2019	34	[	18.26
	5/13/2019	35		12.99
	5/13/2019	36	_  [	16.05
	5/14/2019	37	_  [	16.79
	5/14/2019	38		17.74
	5/14/2019	39		11.14
	5/14/2019	40		10.94
	5/14/2019	41	<b>コ</b>	18.76
	5/14/2019	42	7	15.53
	5/14/2019	43	7	8.66
	5/14/2019	44	7 1	13.48
	5/14/2019	45	┥	13.43
	5/21/2019	46	<del>- </del>	16.51
	11/7/2019	47	┥	17.69
	2/14/2020	48	<b>⊣</b>	21.62
	3/11/2020	49	<b>⊣</b>	25.61
	3/11/2020	50	- <del> </del>	29.41
	9/14/2020		- <del> </del>	19.73
		51	- <del> </del>	19.70
	9/14/2020	52	<del>- </del>	
	9/14/2020	53	⊣ ⊦	20.23
	10/21/2020	54	_	18.09
	10/21/2020	55	_	18.40
			1	19.45
	11/13/2020	56		
		56 57	<u> </u>	19.83
	11/13/2020		₫	21.08
	11/13/2020 11/13/2020	57		
	11/13/2020 11/13/2020 11/13/2020	57 58		21.08
	11/13/2020 11/13/2020 11/13/2020 11/7/2021 9/24/2021	57 58 59 60		21.08 8.35
	11/13/2020 11/13/2020 11/13/2020 11/13/2020 12/7/2021 9/24/2021 9/24/2021	57 58 59 60 61		21.08 8.35 12.76 13.03
	11/13/2020 11/13/2020 11/13/2020 11/7/2021 9/24/2021	57 58 59 60		21.08 8.35 12.76

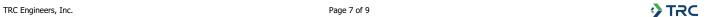
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	10/5/2021	67	-	15.35
	10/5/2021	68	_	13.81
	10/6/2021	69		16.44
D 111 1 D 115 11 5 0	10/6/2021	70	Alloco Recycling - Brooklyn, NY	17.25
Red Hook Ballfields 5-8	10/6/2021	71	<b>↓</b>	15.30
	10/7/2021	72		16.03
	10/7/2021	73		15.65
	10/7/2021	74		6.49
	10/14/2021	75	4	15.69
	10/14/2021	76		16.98
	Subtotal	Ball Field 9		1,272.04
	Н	azardous Contaminated Soil		
	5/26/2021	6286743		24.32
	5/26/2021	6286746		25.52
	5/26/2021	6286745		23.66
	5/27/2021	6294942	1 [	23.10
	5/27/2021	6294930	1	23.13
	5/27/2021	6294931	]	24.27
	5/27/2021	6294941	]	24.01
	5/27/2021	6294932	]	23.54
	5/27/2021	6294933	]	23.05
	5/27/2021	6294934	7	23.85
	5/27/2021	6294935	7	23.27
	5/27/2021	6294936	]	24.24
	5/27/2021	6294937	7	21.62
	5/27/2021	6294938	7 -	23.12
	5/27/2021	6294943	7 -	22.93
	5/28/2021	6294940	7	17.01
	5/28/2021	6294939	1 -	23.79
	7/12/2021	6283852	1 -	24.90
	7/12/2021	6283853	1 -	24.81
	7/12/2021	6283850	1 -	24.48
	7/12/2021	6282851	1	24.23
	7/13/2021	6283846	1	25.54
	7/13/2021	6283847	1	26.60
	7/13/2021	6283848	1	27.94
	7/13/2021	6283849	1 -	28.22
	7/14/2021	6283842	1 -	25.60
	7/14/2021	6283843	Clean Earth of North Jersey, Inc.	25.52
Red Hook Ball Field 9	7/14/2021	6283845	(Direct Landfill)	25.40
	7/14/2021	6283844	1 ` [	24.86
	7/15/2021	6283838	1	24.48
	7/15/2021	6283839	1	25.25
	7/15/2021	6283840	1	24.31
	7/15/2021	6283841	1	23.54
	7/16/2021	6283834	1	23.99
	7/16/2021	6282835	1	25.49
	7/16/2021	6283836	1 -	23.88
	7/16/2021	6283837	1	24.63
	7/19/2021	6283829	┧ ├	24.61
	7/19/2021	6283830	┪	24.55
	7/19/2021	6283832	┥ ⊢	25.32
	7/19/2021	6283831	┪ ⊢	25.65
	7/20/2021	6283965	┥ ⊢	24.32
	7/20/2021	6283966	┪ ⊢	26.78
	7/20/2021	6283967	┥ ⊢	24.48
	7/20/2021	6283968	┥ ├	26.39
	7/20/2021	6283979	┥ ⊢	22.67
	7/21/2021	6283977	┥ ├	23.18
	7/21/2021	6283978	┥ ├	22.73
	7/21/2021	6283994	┥ ⊢	23.42
	7/21/2021	6283976	┥ ⊢	23.98
	7/21/2021	6283972	┥ ⊢	24.45
	7/21/2021	6283973	┥ ├	23.27
	7/21/2021	6283974	┪ ⊢	24.64
	7/21/2021	6283971	┥ ⊢	23.40
	Subtotal	02037/1		1,311.94
		-Hazardous Contaminated Soil		
	7/13/2020	WMNA-9472020		25.80
	7/13/2020	WMNA-9472021	7	25.58
	7/13/2020	WMNA-9472022	7	25.52
	7/13/2020	WMNA-9472023	1 F	23.95
D. 1111 D #20 110	7/13/2020	WMNA-9472024	Fairless Landfill (Ultimate	24.75
Red Hook Ball Field 9	7/13/2020	WMNA-9472025	Disposal)	25.86
	7/13/2020	WMNA-9472026	<b>1</b>	24.92
			→ ⊢	
	7/13/2020	WMNA-9472027		25.15
	7/13/2020 7/13/2020	WMNA-9472027 WMNA-9472028	<del> </del>	25.15 25.01

**♦** TRC

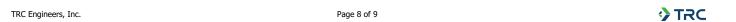
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-	7/13/2020		-	25.26
-	7/13/2020	WMNA-9472033 WMNA-9472034	╡	26.76
	7/13/2020	WMNA-9472035	1	25.47
	7/13/2020	WMNA-9472036	]	24.09
	7/13/2020	WMNA-9472037		24.88
-	7/14/2020	WMNA-9472038	<b>-</b>	25.20
_	7/14/2020	WMNA-9472039	4	26.46
-	7/14/2020	WMNA-9472040	4	25.96
-	7/14/2020	WMNA-9472041	-	26.24
-	7/14/2020	WMNA-9472042 WMNA-9472043	-	25.80 25.17
-	7/14/2020 7/14/2020	WMNA-9472044	<del>- </del>	25.45
•	7/14/2020	WMNA-9472045	†	25.32
-	7/14/2020	WMNA-9472046	7	25.24
•	7/14/2020	WMNA-9472047	7	25.53
•	7/14/2020	WMNA-9472048	7	25.15
	7/14/2020	WMNA-9472049	1	24.50
	7/14/2020	WMNA-9472050		25.44
	7/14/2020	WMNA-9472051	_	25.51
	7/14/2020	WMNA-9472052	-	25.71
-	7/14/2020	WMNA-9472053	4	26.10
}	7/14/2020	WMNA-9472054	-	25.43
-	7/14/2020 7/14/2020	WMNA-9472055 WMNA-9472056	-	24.86 24.42
}	7/14/2020	WMNA-9472056 WMNA-9472058	┥	25.92
}	7/14/2020	WMNA-9472059	┪	24.52
	7/14/2020	WMNA-9472060	┪ !	25.57
ļ	7/14/2020	WMNA-9472061	╡	24.81
•	7/14/2020	WMNA-9472062	7	24.85
	7/14/2020	WMNA-9472063	]	24.68
	7/14/2020	WMNA-9472064		25.42
	7/14/2020	WMNA-9472065		25.29
	7/14/2020	WMNA-9472066	_	24.06
_	7/14/2020	WMNA-9472067	_	24.09
-	7/14/2020	WMNA-9472068	4	24.38
-	7/15/2020	WMNA-9472069	4	25.28
Red Hook Ball Field 9	7/15/2020	WMNA-9472077	Fairless Landfill (Ultimate	25.78 24.78
Red Hook Ball Field 9	7/15/2020 7/15/2020	WMNA-9472071 WMNA-9472072	Disposal)	25.27
-	7/15/2020	WMNA-9472073	┪	25.20
-	7/15/2020	WMNA-9472074	┪	26.02
-	7/15/2020	WMNA-9472075	7	26.00
•	7/15/2020	WMNA-9472076	7	23.77
	7/15/2020	WMNA-9472078	1	26.13
	7/15/2020	WMNA-9472079		25.47
_	7/15/2020	WMNA-9472082		24.29
<u> </u>	7/15/2020	WMNA-9472080	4	25.68
].	7/15/2020	WMNA-9472081	-	25.33
-	7/15/2020	WMNA-9472083	-	24.80
-	7/15/2020	WMNA-9472084	-	24.87
}	7/15/2020 7/15/2020	WMNA-9472085 WMNA-9472086	-	24.38 22.91
-	7/15/2020	WMNA-9472086 WMNA-9472087	┥	22.58
}	7/15/2020	WMNA-9472088	<del>-</del>	21.96
	7/15/2020	WMNA-9472089	╡	23.55
ļ	7/15/2020	WMNA-9472090	7	23.18
ļ	7/15/2020	WMNA-9472091		23.22
	7/15/2020	WMNA-9472092		23.22
	7/15/2020	WMNA-9472093	_	22.73
[	7/15/2020	WMNA-9472094	_	22.33
<u> </u>	7/15/2020	WMNA-9472095	4	23.32
-	7/15/2020	WMNA-9472096	-	23.27
-	7/15/2020	WMNA-9472097	4	23.10
}	7/15/2020 7/15/2020	WMNA-9472098 WMNA-9472099	-	21.98 22.43
}	7/16/2020	WMNA-9472100	┪	23.95
}	7/16/2020	WMNA-9472100 WMNA-9472101	╡	24.41
ļ	7/16/2020	WMNA-9472101 WMNA-9472102	┪	23.89
ļ	7/16/2020	WMNA-9472103	╡	23.99
ļ	7/16/2020	WMNA-9472104	7	24.63
ļ	7/16/2020	WMNA-9472105		22.79
ļ	7/16/2020	WMNA-9472106		23.26
	7/16/2020	WMNA-9472107		24.38
	7/16/2020	WMNA-9472108	_	23.84
	7/16/2020	WMNA-9472109	_	23.51
<u> </u>	7/16/2020	WMNA-9472110	4	22.03
	7/16/2020	WMNA-9472111	i	22.87



Location	Date Transported Off-Site	Manifest Number	Disposal Facility	Net Weight (Tons)
	7/16/2020	WMNA-9472113		23.06
	7/16/2020	WMNA-9472114	_	23.84
	7/16/2020	WMNA-9472115	-	22.96
	7/16/2020	WMNA-9472116	┥	22.62
ŀ	7/16/2020 7/16/2020	WMNA-9472117 WMNA-9472118	-	23.69 23.33
	7/16/2020	WMNA-9472118 WMNA-9472120	<del>- </del>	22.47
ŀ	7/16/2020	WMNA-9472121	┪	23.43
ŀ	7/16/2020	WMNA-9472122	┪	23.23
	7/16/2020	WMNA-9472123	┪	23.07
İ	7/16/2020	WMNA-9472124	7 1	24.21
	7/16/2020	WMNA-9472125	7 i	24.69
	7/16/2020	WMNA-9472126	ַ	23.68
	7/16/2020	WMNA-9472127		22.79
	7/16/2020	WMNA-9472128	<u> </u>	23.49
	7/16/2020	WMNA-9472129	_	23.91
	7/16/2020	WMNA-9472130	-	22.61
	7/16/2020	WMNA-9472131	-	23.44
ŀ	7/16/2020	WMNA-9472132	-	25.91
ŀ	7/16/2020 7/16/2020	WMNA-9472133 WMNA-9472134	-	23.27 23.30
	7/16/2020	WMNA-9472134 WMNA-9472135	<del>- </del>	23.91
ŀ	7/16/2020	WMNA-9472136	┥	22.87
ŀ	7/16/2020	WMNA-9472137	┦	23.33
ľ	7/16/2020	WMNA-9472138	7	23.64
ļ	7/16/2020	WMNA-9472139	7 1	22.82
ļ	7/16/2020	WMNA-9472140	]	24.17
	7/16/2020	WMNA-9472141		24.05
	7/16/2020	WMNA-9472142		24.23
	7/16/2020	WMNA-9472143	<u> </u>	23.25
	7/16/2020	WMNA-9472144	4	22.97
	7/16/2020	WMNA-9472145	-	22.93
	7/17/2020	WMNA-9472146	-	23.86
-	7/17/2020	WMNA-9472147	-	23.30
-	7/17/2020 7/17/2020	WMNA-9472148 WMNA-9472149	<del>- </del>	22.85 23.45
	7/17/2020	WMNA-9472150	┥	22.82
ŀ	7/17/2020	WMNA-9472151	┪	23.51
	7/17/2020	WMNA-9472152	7 1	22.88
	7/17/2020	WMNA-9472153	T	23.42
Red Hook Ball Field 9	7/17/2020	WMNA-9472154	Fairless Landfill (Ultimate Disposal)	23.29
	7/17/2020	WMNA-9472155	Disposar)	22.85
	7/17/2020	WMNA-9472156		23.26
	7/17/2020	WMNA-9472157	<u> </u>	23.35
	7/17/2020	WMNA-9472158	_	22.07
	7/17/2020	WMNA-9472159	4	23.13
	7/17/2020	WMNA-9472160	-	23.18
	7/17/2020	WMNA-9472161	-	22.25
	7/17/2020	WMNA-9472162	-	24.07 23.55
ŀ	7/17/2020 7/17/2020	WMNA-9472163 WMNA-9472164	<del>- </del>	23.75
ŀ	7/17/2020	WMNA-9472165	┪	24.08
ŀ	7/17/2020	WMNA-9472166	┦	23.49
ļ	7/17/2020	WMNA-9472167	7	23.36
ľ	7/17/2020	WMNA-9472168	7 1	24.29
	7/17/2020	WMNA-9472169	]	23.03
ľ	7/17/2020	WMNA-9472170	_  [	23.40
[	7/17/2020	WMNA-9472171	_  [	23.20
[	7/17/2020	WMNA-9472172	_	24.35
	7/17/2020	WMNA-9472173	_	24.51
	7/17/2020	WMNA-9472174	-	23.60
	7/17/2020	WMNA-9472175	⊣	23.84
	7/17/2020	WMNA-9472176	-	24.36
-	7/17/2020 7/17/2020	WMNA-9472177 WMNA-9472178	┥	22.86 23.97
ŀ	7/20/2020	WMNA-9472178 WMNA-9472179	┥	22.71
ŀ	7/20/2020	WMNA-9472179 WMNA-9472180	┥	23.65
ŀ	7/20/2020	WMNA-9472181	┦	23.83
ļ	7/20/2020	WMNA-9472182	7	23.37
ľ	7/20/2020	WMNA-9472183	7 1	23.30
ļ	7/20/2020	WMNA-9472184	7 1	23.39
ļ	7/20/2020	WMNA-9472185	]	22.93
Ţ	7/20/2020	WMNA-9472186	<u> </u>	22.78
	7/20/2020	WMNA-9472187	_  [	23.45
[	7/20/2020	WMNA-9472188	_  [	22.56
[	7/20/2020	WMNA-9472189	<b>⊣</b>	23.60
	7/20/2020	WMNA-9472190	_  ↓	24.89
	7/20/2020	WMNA-9472191	-	23.80
	7/20/2020	WMNA-9472192		22.50
ŀ	7/21/2020	WMNA-9472193	'	23.38



Location	Date Transported Off-Site	Manifest Number	Disposal Facility	Net Weight (Tons)
	6/3/2021	WMNA-10471957		25.12
	6/3/2021	WMNA-10471958	7	24.72
	6/3/2021	WMNA-1047959	7	24.40
	6/3/2021	WMNA-10471960	7	23.64
	6/3/2021	WMNA-10471961	7	22.64
	6/3/2021	WMNA-10471962	7	22.47
	6/3/2021	WMNA-10471963	7	23.38
	6/3/2021	WMNA-10471964		22.32
	6/4/2021	WMNA-10471965	7	23.59
	6/4/2021	WMNA-10471966	7	22.85
	6/4/2021	WMNA-10471969	7	23.70
	6/4/2021	WMNA-10471968	Fairless Landfill (Ultimate	23.81
Red Hook Ball Field 9	6/4/2021	WMNA-10471970	Disposal)	24.54
	6/4/2021	WMNA-10471971		24.92
	6/4/2021	WMNA-10471972	7	25.89
	6/4/2021	WMNA-10471973	7	24.07
	6/7/2021	WMNA-10471974	7	25.81
	6/7/2021	WMNA-10471975	7	24.88
	6/7/2021	WMNA-10471976	7	23.83
	6/7/2021	WMNA-10471978	7	24.83
	6/7/2021	WMNA-10471979	7	25.10
	6/7/2021	WMNA-10471980	7	23.72
	6/8/2021	WMNA-10471981	7	21.26
	6/8/2021	WMNA-10471977	7	23.82
	Subtotal			4,712.75
		all Field 9 and Soccer Field 2	<u> </u>	
		Concrete		
	1/8/2020	747868	_  _	23.97
	1/8/2020	747826	_  _	23.70
	1/8/2020	747784	_  _	22.64
	1/8/2020	747902	_  _	23.74
	1/10/2020	748218		23.13
	1/10/2020	748324		27.19
	1/13/2020	748612		22.58
	1/13/2020	748613	-	22.68
	1/17/2020	749436	-  -	28.15
	1/17/2020	749508	-  -	27.06
	1/24/2020	750575		
			<del>-</del>	25.76
	1/24/2020	750500		25.87
	1/27/2020	750888	]	25.87 25.60
	1/27/2020 3/11/2020	750888 758460		25.87 25.60 26.75
	1/27/2020 3/11/2020 8/3/2020	750888 758460 100738094		25.87 25.60 26.75 23.83
	1/27/2020 3/11/2020 8/3/2020 8/3/2020	750888 758460 100738094 100738177		25.87 25.60 26.75 23.83 26.29
	1/27/2020 3/11/2020 8/3/2020 8/3/2020 10/8/2020	750888 758460 100738094 100738177 100947440	Allocco Recycling - Brooklyn,	25.87 25.60 26.75 23.83 26.29 19.32
Red Hook Ball Field 9	1/27/2020 3/11/2020 8/3/2020 8/3/2020 10/8/2020 10/8/2020	750888 758460 100738094 100738177 100947440 100947493	Allocco Recycling - Brooklyn,	25.87 25.60 26.75 23.83 26.29 19.32 22.30
Red Hook Ball Field 9	1/27/2020 3/11/2020 8/3/2020 8/3/2020 10/8/2020 10/8/2020 10/9/2020	750888 758460 100738094 100738177 100947440 100947493 10094753		25.87 25.60 26.75 23.83 26.29 19.32 22.30 22.55
Red Hook Ball Field 9	1/27/2020 3/11/2020 8/3/2020 8/3/2020 10/8/2020 10/8/2020 10/9/2020 10/9/2020	750888 758460 100738094 100738177 100947440 100947493 10094753 10094769		25.87 25.60 26.75 23.83 26.29 19.32 22.30 22.55 21.16
Red Hook Ball Field 9	1/27/2020 3/11/2020 8/3/2020 8/3/2020 10/8/2020 10/8/2020 10/9/2020 10/9/2020 10/9/2020	750888 758460 100738094 100738177 100947440 100947493 10094753 10094769 100947629		25.87 25.60 26.75 23.83 26.29 19.32 22.30 22.55 21.16 20.27
Red Hook Ball Field 9	1/27/2020 3/11/2020 8/3/2020 8/3/2020 10/8/2020 10/8/2020 10/9/2020 10/9/2020 10/9/2020 11/13/2020	750888 758460 100738094 100738177 100947440 100947493 10094769 10094769 100947629		25.87 25.60 26.75 23.83 26.29 19.32 22.30 22.55 21.16 20.27 22.33
Red Hook Ball Field 9	1/27/2020 3/11/2020 8/3/2020 8/3/2020 10/8/2020 10/8/2020 10/9/2020 10/9/2020 10/9/2020 11/13/2020 11/13/2020	750888 758460 100738094 100738177 100947440 100947493 10094753 10094769 100947629 100947629 10094736		25.87 25.60 26.75 23.83 26.29 19.32 22.30 22.55 21.16 20.27 22.33 17.04
Red Hook Ball Field 9	1/27/2020 3/11/2020 8/3/2020 8/3/2020 10/8/2020 10/8/2020 10/9/2020 10/9/2020 10/9/2020 11/13/2020 11/19/2020 11/19/2020	750888 758460 100738094 100738177 100947440 100947493 10094769 100947629 100947629 100947629 100953086 100953257		25.87 25.60 26.75 23.83 26.29 19.32 22.30 22.55 21.16 20.27 22.33 17.04 19.95
Red Hook Ball Field 9	1/27/2020 3/11/2020 8/3/2020 8/3/2020 10/8/2020 10/8/2020 10/9/2020 10/9/2020 10/9/2020 11/13/2020 11/19/2020 11/19/2020 11/19/2020 11/19/2020 11/19/2020	750888 758460 100738094 100738177 100947440 100947493 10094769 10094769 10094769 100947736 100953086 100953257 100953131		25.87 25.60 26.75 23.83 26.29 19.32 22.30 22.55 21.16 20.27 22.33 17.04 19.95 19.43
Red Hook Ball Field 9	1/27/2020 3/11/2020 8/3/2020 8/3/2020 10/8/2020 10/8/2020 10/9/2020 10/9/2020 11/13/2020 11/19/2020 11/19/2020 11/19/2020 11/19/2020 11/19/2020 11/19/2020 11/19/2020 11/19/2020 11/19/2020	750888 758460 100738094 100738177 100947440 100947493 10094769 100947629 100947629 100953086 100953257 100953131 822818		25.87 25.60 26.75 23.83 26.29 19.32 22.30 22.55 21.16 20.27 22.33 17.04 19.95 19.43 15.70
Red Hook Ball Field 9	1/27/2020 3/11/2020 8/3/2020 8/3/2020 10/8/2020 10/8/2020 10/9/2020 10/9/2020 11/13/2020 11/19/2020 11/19/2020 11/19/2020 11/19/2020 11/19/2020 11/19/2020 11/19/2020 11/19/2020 11/19/2020 11/19/2020 4/9/2021	750888 758460 100738094 100738177 100947440 100947493 10094769 10094769 100947629 100947736 100953086 100953131 822818 128015		25.87 25.60 26.75 23.83 26.29 19.32 22.30 22.55 21.16 20.27 22.33 17.04 19.95 19.43 15.70 22.50
Red Hook Ball Field 9	1/27/2020 3/11/2020 8/3/2020 8/3/2020 10/8/2020 10/8/2020 10/9/2020 10/9/2020 10/9/2020 11/13/2020 11/19/2020 11/19/2020 11/19/2020 11/19/2020 11/19/2020 11/19/2020 4/9/2021 4/9/2021	750888 758460 100738094 100738177 100947440 100947493 10094753 10094769 100947629 100947629 100953086 100953257 100953131 822818 128015 823236		25.87 25.60 26.75 23.83 26.29 19.32 22.30 22.55 21.16 20.27 22.33 17.04 19.95 19.43 15.70 22.50 19.02
Red Hook Ball Field 9	1/27/2020 3/11/2020 8/3/2020 8/3/2020 10/8/2020 10/8/2020 10/8/2020 10/9/2020 10/9/2020 11/13/2020 11/13/2020 11/19/2020 11/19/2020 11/19/2020 11/19/2020 4/9/2021 4/9/2021 4/9/2021 4/21/2021	750888 758460 100738094 100738094 100738177 100947440 100947493 10094769 10094769 100947736 100953086 100953257 100953131 822818 128015 823236 825114		25.87 25.60 26.75 23.83 26.29 19.32 22.30 22.55 21.16 20.27 22.33 17.04 19.95 19.43 15.70 22.50 19.02 20.48
Red Hook Ball Field 9	1/27/2020 3/11/2020 8/3/2020 8/3/2020 8/3/2020 10/8/2020 10/8/2020 10/9/2020 10/9/2020 11/13/2020 11/19/2020 11/19/2020 11/19/2020 11/19/2020 11/19/2020 11/19/2020 4/9/2021 4/9/2021 4/9/2021 4/21/2021 4/21/2021	750888 758460 100738094 100738177 100947440 100947493 10094769 10094769 10094769 100947736 100953086 100953257 100953131 822818 128015 823236 825114 825047		25.87 25.60 26.75 23.83 26.29 19.32 22.30 22.55 21.16 20.27 22.33 17.04 19.95 19.43 15.70 22.50 19.02 20.48 18.59
Red Hook Ball Field 9	1/27/2020 3/11/2020 8/3/2020 8/3/2020 10/8/2020 10/8/2020 10/9/2020 10/9/2020 11/13/2020 11/19/2020 11/19/2020 11/19/2020 11/19/2020 11/19/2020 11/19/2020 11/19/2020 11/19/2020 4/9/2021 4/9/2021 4/9/2021 4/21/2021 4/21/2021	750888 758460 100738094 100738177 100947440 100947440 100947493 10094769 10094769 100947629 100947736 100953086 100953131 822818 128015 823236 825114 825047 824984		25.87 25.60 26.75 23.83 26.29 19.32 22.30 22.55 21.16 20.27 22.33 17.04 19.95 19.43 15.70 22.50 19.02 20.48 18.59 19.15
Red Hook Ball Field 9	1/27/2020 3/11/2020 8/3/2020 8/3/2020 10/8/2020 10/8/2020 10/9/2020 10/9/2020 11/13/2020 11/19/2020 11/19/2020 11/19/2020 11/19/2020 11/19/2020 11/19/2020 11/19/2021 4/9/2021 4/9/2021 4/21/2021 4/21/2021 4/21/2021 4/21/2021	750888 758460 100738094 100738177 100947440 100947440 100947493 10094769 10094769 100947629 100947736 100953086 100953257 100953131 822818 128015 823236 825114 825047 824984 827302		25.87 25.60 26.75 23.83 26.29 19.32 22.30 22.55 21.16 20.27 22.33 17.04 19.95 19.43 15.70 22.50 19.02 20.48 18.59 19.15 18.67
Red Hook Ball Field 9	1/27/2020 3/11/2020 8/3/2020 8/3/2020 10/8/2020 10/8/2020 10/9/2020 10/9/2020 11/13/2020 11/19/2020 11/19/2020 11/19/2020 11/19/2020 11/19/2020 11/19/2020 11/19/2020 11/19/2020 4/9/2021 4/9/2021 4/9/2021 4/21/2021 4/21/2021	750888 758460 100738094 100738177 100947440 100947440 100947493 10094769 10094769 100947629 100947736 100953086 100953131 822818 128015 823236 825114 825047 824984		25.87 25.60 26.75 23.83 26.29 19.32 22.30 22.55 21.16 20.27 22.33 17.04 19.95 19.43 15.70 22.50 19.02 20.48 18.59 19.15



Location	Date Transported Off-Site	Manifest Number	Disposal Facility	Net Weight (Tons
		Asphalt		
	10/14/2020	792279		22.98
	10/14/2020	792226	7	19.03
	10/15/2020	792361	7	21.46
	10/15/2020	113072		17.28
	10/15/2020	113062		17.88
	10/16/2020	113147		22.58
	10/16/2020	113128		18.01
-	10/19/2020	113141	7	17.40
	10/19/2020	113246		20.89
	10/19/2020	113237		22.80
	10/19/2020	113258		22.33
	10/15/2020	113075		19.26
	1/19/2021	118175	7	19.62
	1/19/2021	119147		17.73
	1/20/2021	118201		18.36
	1/21/2021	118377		16.39
	1/21/2021	118351	Allocco Recycling - Brooklyn,	18.35
Red Hook Ball Field 9	1/28/2021	118813	NY and Green Asphalt - Queens,	27.28
Red flook Dall Field 9	1/28/2021	118850	NY	29.56
	2/17/2021	119518		19.63
	2/17/2021	119498		19.33
	2/17/2021	111909		21.18
	2/26/2021	119960	7	26.40
- -	2/26/2021	119984		26.58
	2/26/2021	119985		15.82
	2/26/2021	119968		25.51
	2/26/2021	119988		21.20
	3/31/2021	464070		16.84
	4/7/2021	465090		28.14
	4/8/2021	464077		32.11
	4/8/2021	465159		37.17
	4/12/2021	465512		21.67
	4/29/2021	467962		16.27
	4/29/2021	467911	1	17.86
	5/14/2021	469659		9.95
	Subtotal			744.85

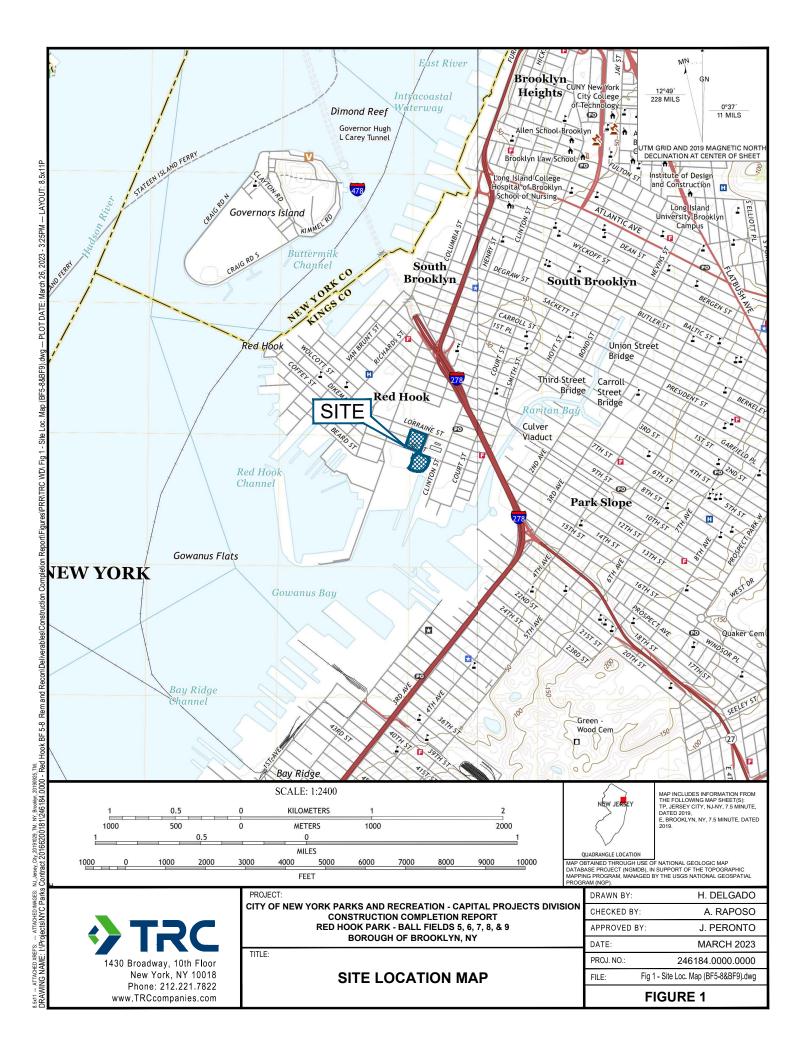
Notes: Soil/Waste includes concrete, asphalt, non-hazardous soil, and hazardous soil generated from Ball Fields 5-8 and Ball Field 9.

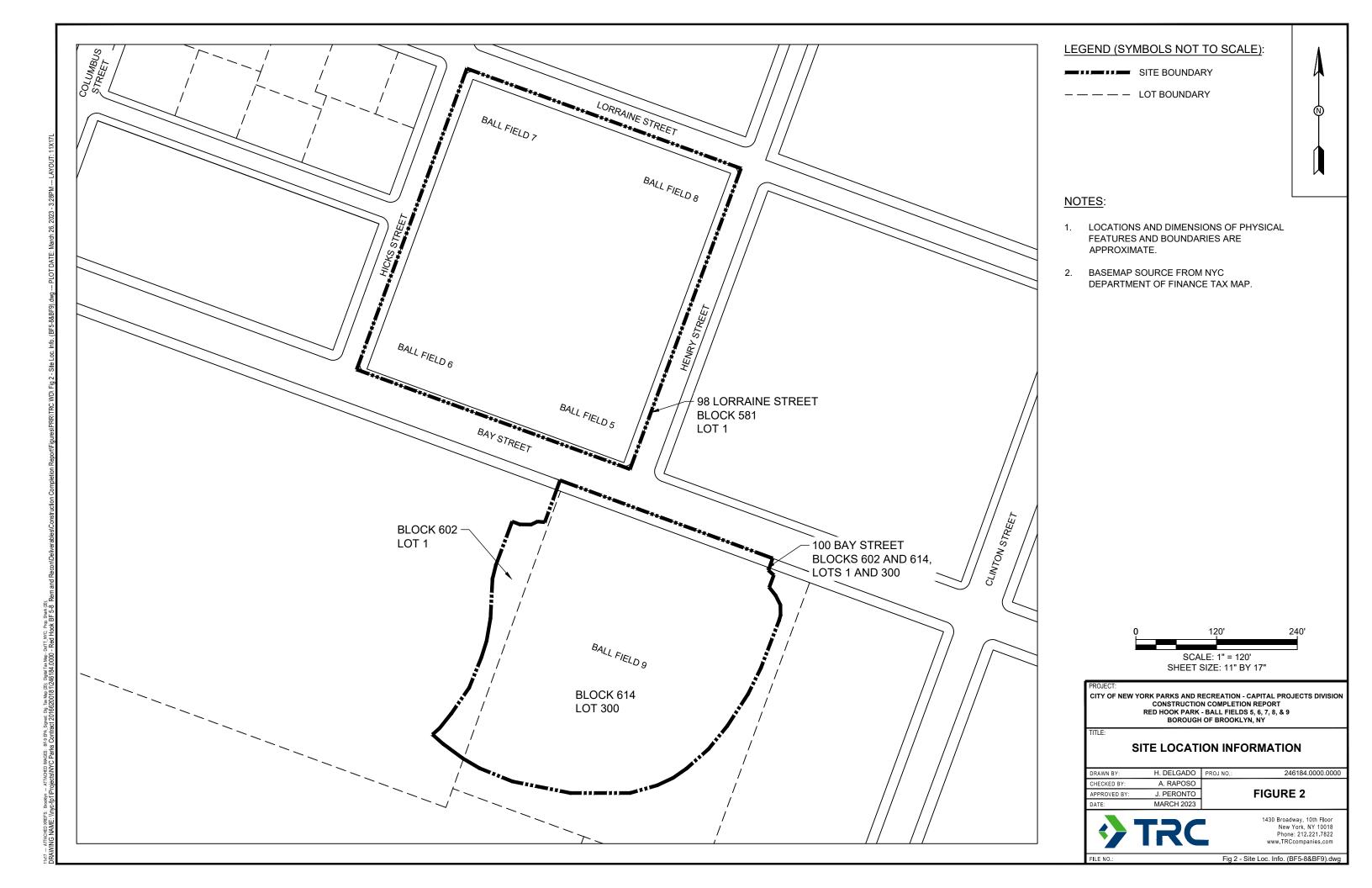
## Table 3 City of New York Department of Parks and Recreation Construction Completion Report Red Hook Park - Ball Fields 5, 6, 7, 8, & 9 Imported Backfill Material Quantities and Sources

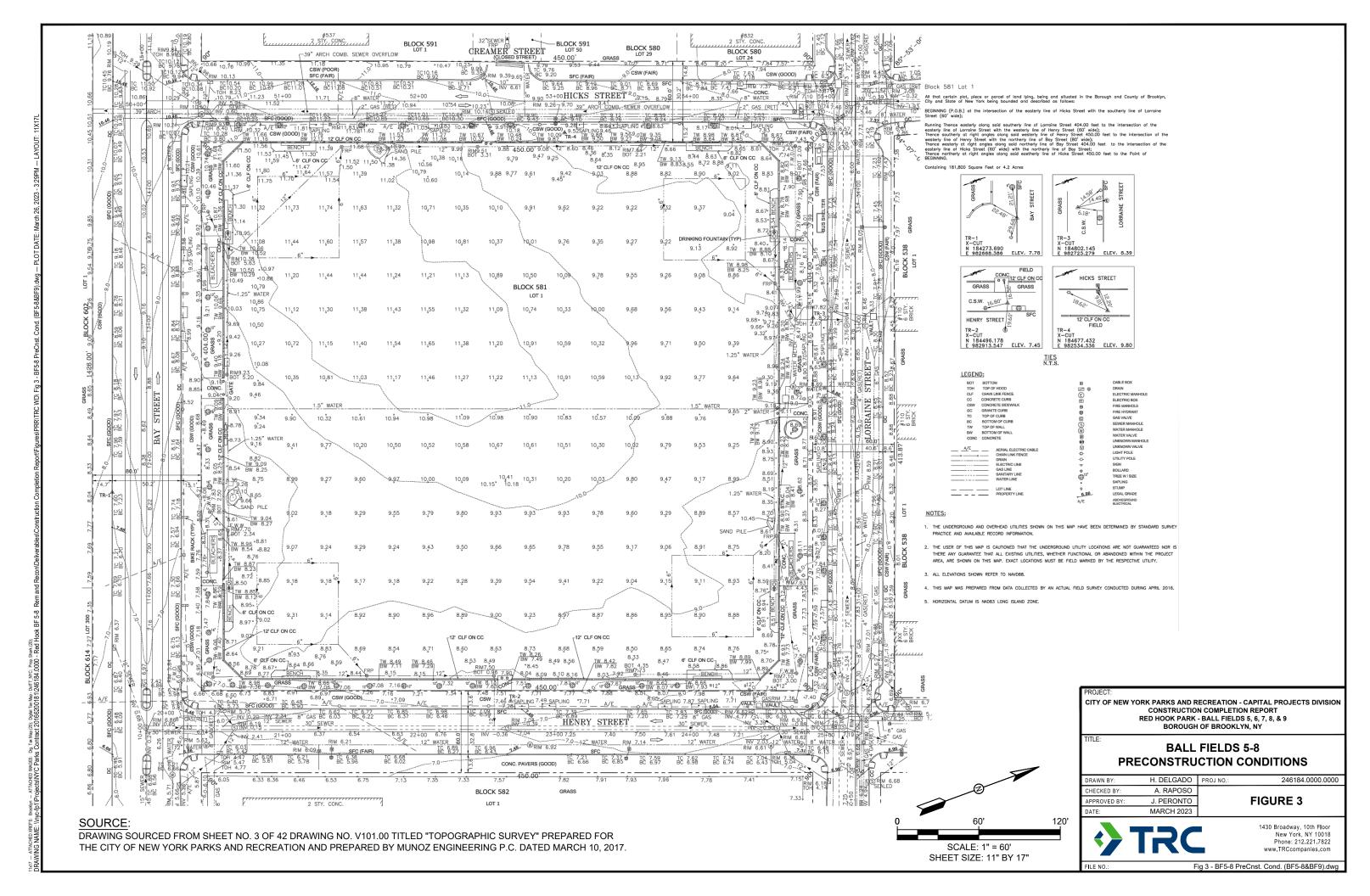
	B1	26-116M Red Hook	Ball Fields 5-8 Imported Material Log	
Material	Source	Quantity (cy)	Sampling & Chemical Testing	NYSDEC Soil Criteria Met
Borrow Fill	Evergreen Recycling of Corona, 127-50 Northern Blvd., Queens, NY	6,252.36	1 soil sample per 500 cubic yards for VOCs (8260), SVOCs (8270), pesticides (8081), PCBs (8082), Herbicides (8151), Metals (6010, 7471), Cyanide (9021), & Hexavalent Chromium (7196).	Most Stringent of Protection of Public Health for Restricted Residential Use and Protection of Groundwater (1)
Structural Soil Foundation Material	Advanced Soil Technologies, LLC	7.38	1 soil sample per 500 cubic yards for VOCs (8260), SVOCs (8270), pesticides (8081), PCBs (8082), Herbicides (8151), Metals (6010, 7471), Cyanide (9021), & Hexavalent Chromium (7196).	Most Stringent of Protection of Public Health for Restricted Residential Use and Protection of Groundwater (1)
Topsoil for Planting Beds and Pits	Nature's Choice Corporation	766.75	1 soil sample per 500 cubic yards for VOCs (8260), SVOCs (8270), pesticides (8081), PCBs (8082), Herbicides (8151), Metals (6010, 7471), Cyanide (9021), & Hexavalent Chromium (7196).	Most Stringent of Protection of Public Health for Restricted Residential Use and Protection of Groundwater (1)
Bioretention Soil	Nature's Choice Corporation and Long Island Compost	761.73	1 soil sample per 500 cubic yards for VOCs (8260), SVOCs (8270), pesticides (8081), PCBs (8082), Herbicides (8151), Metals (6010, 7471), Cyanide (9021), & Hexavalent Chromium (7196).	Most Stringent of Protection of Public Health for Restricted Residential Use and Protection of Groundwater (1)
Porous Aggregate Drainage Base	Tilcon New York	4,164.41		Not Applicable
	E	3126-117M Red Hoo	k Ball Field 9 Imported Material Log	
Material	Source	Quantity (cy)	Sampling & Chemical Testing	NYSDEC Soil Criteria Met
Borrow Fill	Evergreen Recycling of Corona, 127-50 Northern Blvd., Queens, NY	3,509.68	l soil sample per 500 cubic yards for VOCs (8260), SVOCs (8270), pesticides (8081), PCBs (8082), Herbicides (8151), Metals (6010, 7471), Cyanide (9021), & Hexavalent Chromium (7196).	Most Stringent of Protection of Public Health for Restricted Residential Use and Protection of Groundwater (1)
Structural Soil Foundation Material	Advanced Soil Technologies, LLC	59.08	1 soil sample per 500 cubic yards for VOCs (8260), SVOCs (8270), pesticides (8081), PCBs (8082), Herbicides (8151), Metals (6010, 7471), Cyanide (9021), & Hexavalent Chromium (7196).	Most Stringent of Protection of Public Health for Restricted Residential Use and Protection of Groundwater (1)
			1 soil sample per 500 cubic yards for VOCs (8260), SVOCs (8270), pesticides (8081),	
Topsoil for Planting Beds and Pits	Nature's Choice Corporation	1,542.26	(6010, 7471), Cyanide (9021), & Hexavalent Chromium (7196).	Most Stringent of Protection of Public Health for Restricted Residential Use and Protection of Groundwater (1)
	Nature's Choice Corporation  Nature's Choice Corporation	1,542.26	PCBs (8082), Herbicides (8151), Metals (6010, 7471), Cyanide (9021), & Hexavalent	

<sup>&</sup>lt;sup>1</sup> - Lower value of the Protection of Groundwater or Protection of Public Health for Restricted Residential Use per NYSDEC Technical Guidance for Site Investigation and Remediation (DER-10) Subdivision 5.4(e) and Table 1 of NYSDEC CP-51.









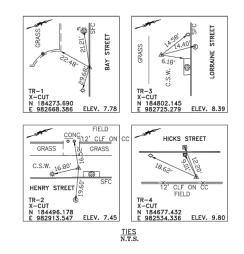
- THE OFFICIAL TAX MAP OF THE BOROUGH OF BROOKLYN, KINGS COUNTY, STATE OF NEW YORK. EFFECTIVE DEC. 9, 2008.
- SECTION MAP ENTITLED "CITY OF NEW YORK, BOROUGH OF BROOKLYN, OFFICE OF THE PRESIDENT, TOPOGRAPHICAL SECTION MAP ENTITLED "CITYON NEW YORK, GUNDAGH OF BROOKEN, OFFICE OF THE PRESIDENT, TO FOODPAPE, BUREAU, MAP, No. 4294, A CHARDEN THE CITY MAP SHOWING, THE ESTABLISHMENT OF ENGLEWOOD AVENUE, BETWEEN ARTH-HUR IRLI, ROAD TO KENT STREET AND BRICKTOWN WAY, FROM VETERANS ROAD WEST TO VETERANS ROAD WEST, AND TYRELAN AVENUE, FROM VETERANS ROAD WEST TO BRICKTOWN WAY AND ESTABLISHMENT OF FAIRYBEY PARK AND THE EXTINGUISHMENT OF SEVERAL RECORD STREETS AND THE ADJUSTMENT OF GRADES ROCESSIVATED THEREBY, DATED SEPT. 29, 1988; SHEETS NO. 31 AND 32.
- CITY OF NEW YORK, DEPARTMENT OF PARKS MAP ENTITLED "RED HOOK RECREATIONAL AREA, BORO OF BROOKLINE, SUGGESTED LOCATION FOR STORM DRAINS, CATCH BASINS, DRAIN INLET & M.Hs.," DATED FEB. 4, 1941. MAP No. B-E-126, 103W.S.
- WATER AND SEWER MAPPING, PREPARED AND PROVIDED BY NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION, PRINTED ON NOV. 22, 2016.
- 5. SKETCH OF TELECOMMUNICATION UTILITIES FROM SUNSET PARK TO REDHOOK, PREPARED BY TIME WARNER CABLE.
- MAPS ENTITLED 'LOW TENSION MAINS AND SERVICE PLATE," PREPARED BY CONSOLIDATED EDISON CO. OF N.Y. INC. FOR QUEENS/BROOKLYN, PLATE 38-J, ISSUED DEC. 22, 2015 AND PLATE 39-J, ISSUED NOV. 5, 2013.

## SOURCE:

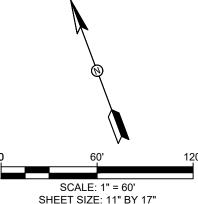
DRAWING SOURCED FROM SHEET NO. 3 OF 48 DRAWING NO. V101.00 TITLED "TOPOGRAPHIC SURVEY 1" PREPARED FOR THE CITY OF NEW YORK PARKS AND RECREATION AND PREPARED BY MUNOZ ENGINEERING P.C. DATED JUNE 29, 2018.

### **GENERAL NOTES**

- PROJECT AREA KNOWN AS LOT 1, BLOCK 602, LOT 300, BLOCK 614, LOT 1, BLOCK 617, IN RED HOOK RECREATIONAL PARK IN THE BOROUGH OF BROOKLYN, NEW YORK.
- 2. MAP REFLECTS FIELD CONDITIONS AS OF DECEMBER 23, 2016
- WERE MADE DURING THE PROGRESS OF THIS SURVEY TO LOCATE BURIED JTILITIES/STRUCTURES, ADDITIONAL BURIED UTILITIES/STRUCTURES MAY BE VERIFIED BY THE PROPER UTILITY COMPANIES BEFORE ANY CONSTRUCTION BEGINS
- PERTINENT DOCUMENTS OF RECORD REVIEWED AND CONSIDERED AS A PART OF THIS SURVEY ARE NOTED HEREON. OTHER DOCUMENTS OF RECORD MAY EXIST THAT WOULD AFFECT THIS PARCEL.
- 6. COORDINATES SHOWN HEREON ARE BASED ON THE NORTH AMERICAN DATUM OF 1983 (NAD83) NEW YORK STATE, LONG ISLAND, AS ESTABLISHED BY THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA).
- THIS PLAN IS MADE FOR THE PURPOSE OF A TOPOGRAPHIC SURVEY. NO OTHER PURPOSES IS INTENDED NOR IMPLIED. THE UNDERSIGNED PROFESSIONAL IS NEITHER RESPONSIBLE NOR LIABLE FOR THE USE OF THIS PLAN BEYOND ITS INTENDED PURPOSE.



			LEGEND:		
BOT	BOTTOM	GC	GRANITE CURB	C	CABLE BOX
TOH	TOP OF HOOD	TC	TOP OF CURB	☑ 0	DRAIN
CLF	CHAIN LINK FENCE	BÇ	BOTTOM OF CURB	(E)	ELECTRIC MANHOLE
MF	METAL FENCE	TW	TOP OF WALL	Ē	ELECTRIC BOX
CC	CONCRETE CURB	BW	BOTTOM OF WALL	B	FIRE MANHOLE
CSW	CONCRETE SIDEWALK	CONC	CONCRETE	0	FIRE HYDRANT
RCP	REINFORCED CONC. PIPE	INV.	INVERT	G	GAS VALVE
					SEWER MANHOLE
_	LOT LI	NE ERTY LIN		© W	WATER MANHOLE
		JENT LIN		W	WATER VALVE
=		LINK FE			UNKNOWN MANHOLE
	METAL	FENCE	/RAIL	M	UNKNOWN VALVE
_		OUR LIN	E	*	LIGHT POLE
_	DRAIN			-O-	UTILITY POLE
_	ELECT	RIÇ LINI			SIGN
_		INE ARY LINI		0	BOLLARD
	WATE		-		DECIDIOUS TREE W / SI
	OVER	HEAD UT	TL, LINE	88 <sup>12″</sup> ₩ <sup>10″</sup>	EVERGREEN TREE W / SI
				*	SAPLING
♡	▼ ∇ ▼ HIGH I	MAST LIC	SHTING	•	STUMP
		AND BE	MOU	7.31	LEGAL GRADE



CITY OF NEW YORK PARKS AND RECREATION - CAPITAL PROJECTS DIVISION CONSTRUCTION COMPLETION REPORT RED HOOK PARK - BALL FIELDS 5, 6, 7, 8, & 9 BOROUGH OF BROOKLYN, NY

## **BALL FIELD 9** PRECONSTRUCTION CONDITIONS

		<u>IORI</u>
AWN BY:	H. DELGADO	PROJ NO
ECKED BY:	A. RAPOSO	

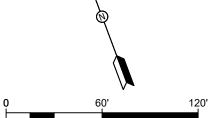
MARCH 2023

246184.0000.0000 J. PERONTO **FIGURE 4A** PPROVED BY:



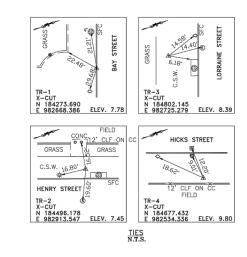
New York, NY 10018 Phone: 212.221.7822 www.TRCcompanies.com

Fig 4A-4C - BF9 PreCnst. Cond. NSE (BF5-8&BF9).dwg



### GENERAL NOTES

- PROJECT AREA KNOWN AS LOT 1, BLOCK 602, LOT 300, BLOCK 614, LOT 1, BLOCK 617, IN RED HOOK RECREATIONAL PARK IN THE BOROUGH OF BROOKLYN, NEW YORK.
- 2. MAP REFLECTS FIELD CONDITIONS AS OF DECEMBER 23, 2016
- 3. THE LOCATION OF ALL UNDERGROUND UTILITIES AS SHOWN HEREON ARE APPROXIMATE AND ARE BASED ON VISIBLE ABOVE GROUND STRUCTURES, ANY UTILITY MAPS PROVIDED BY UTILITY COMPANIES ARE REFERENCED HEREON. NO EXCAVATIONS WERE MADE DURING THE PROGRESS OF THIS SURVEY TO LOCATE BURIED UTILITIES/STRUCTURES, ADDITIONAL BURIED UTILITIES/STRUCTURES MAY BE ENCOUNTERED, THE CONTRACTOR SHALL HAVE ALL UNDERGROUND UTILITIES RELD VERHIED BY THE PROPER UTILITY COMPANIES BEFORE ANY CONSTRUCTION BEGINS.
- PERTINENT DOCUMENTS OF RECORD REVIEWED AND CONSIDERED AS A PART OF THIS SURVEY ARE NOTED HEREON. OTHER DOCUMENTS OF RECORD MAY EXIST THAT WOULD AFFECT THIS PARCEL.
- ALL ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
- COORDINATES SHOWN HEREON ARE BASED ON THE NORTH AMERICAN DATUM OF 1983 (NAD83) NEW YORK STATE, LONG ISLAND, AS ESTABLISHED BY THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOA4).
- 7. THIS PLAN IS MADE FOR THE PURPOSE OF A TOPOGRAPHIC SURVEY, NO OTHER PURPOSES IS INTENDED NOR IMPLIED. THE UNDERSIGNED PROFESSIONAL IS NEITHER RESPONSIBLE NOR LIABLE FOR THE USE OF THIS PLAN BEYOND ITS INTENDED PURPOSE.



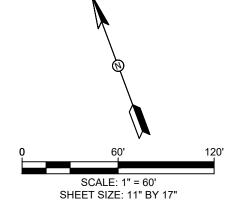
BOT	воттом	GC	GRANITE CURB	0	CABLE BOX
TOH	TOP OF HOOD	TC	TOP OF CURB		DRAIN
CLF	CHAIN LINK FENCE	BC	BOTTOM OF CURB	(E)	ELECTRIC MANHOLE
MF	METAL FENCE	TW	TOP OF WALL	Ē	ELECTRIC BOX
CC	CONCRETE CURB	BW	BOTTOM OF WALL	E3	FIRE MANHOLE
CSW	CONCRETE SIDEWALK		CONCRETE	Ø	FIRE HYDRANT
RCP	REINFORCED CONC. PIPE	INV.	INVERT	G	GAS VALVE
				<u></u>	SEWER MANHOLE
_	LOT LI	NE ERTY LIN	IE.	© W	WATER MANHOLE
=		MENT LIN		M	WATER VALVE
	X CHAIN	LINK FE	NCE	<u></u>	UNKNOWN MANHOLE
_		FENCE		M	UNKNOWN VALVE
_	—10— CONTO	DUR LINI	E	÷	LIGHT POLE
		RIC LINE	:	-0-	UTILITY POLE
=	GAS LI		-	-	SIGN
_	SANIT	ARY LINE		0	BOLLARD
_	WATER			£912"	DECIDUOUS TREE W /
_	OVER	HEAD UT	IL. LINE	₩ <sup>12</sup> *	EVERGREEN TREE W
	▼	WAST LIC	PLITING	•	SAPLING
_	nion i	WHAT LIC	SHIING	8	STUMP
	TABLE	AND BE	NCH	7.31	LEGAL GRADE

### MAP REFERENCES

- THE OFFICIAL TAX MAP OF THE BOROUGH OF BROOKLYN, KINGS COUNTY, STATE OF NEW YORK. EFFECTIVE DEC. 9, 2008.
- SECTION MAP ENTITLED 'CITY OF NEW YORK, BOROUGH OF BROOKLYN, OFFICE OF THE PRESIDENT, TOPOGRAPHICAL BUREAU, MAP No. 4234, A CHANGE IN THE CITY MAP SHOWING, THE ESTABLISHMENT OF ENGLEWOOD AVENUE, BETWEEN ARTHUR KILL ROAD TO KENT STREET AND BRICKTOWN WAY, FROM VETERANS ROAD WEST OF VETERANS ROAD WEST, AND TYPELLAN AVENUE, FROM YETERANS ROAD WEST TO BRICKTOWN WAY AND ESTABLISHMENT OF FAIRVIEW PARK AND THE EXTINGUISHMENT OF SEVERAL RECORD STREETS AND THE ADJUSTMENT OF GRADES NECESSITATED THEREBY. DATED SEPT. 29, 1988," SHEETS No. 31 AND 32.
- CITY OF NEW YORK, DEPARTMENT OF PARKS MAP ENTITLED "RED HOOK RECREATIONAL AREA, BORO OF BROOKLINE. SUGGESTED LOCATION FOR STORM DRAINS, CATCH BASINS, DRAIN INLET & M.Hs.," DATED FEB. 4, 1941, MAP No. BL-1304 GROWS
- WATER AND SEWER MAPPING, PREPARED AND PROVIDED BY NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION, PRINTED ON NOV. 22, 2016.
- SKETCH OF TELECOMMUNICATION UTILITIES FROM SUNSET PARK TO REDHOOK, PREPARED BY TIME WARNER CABLE MAP No. LW 43 & LX 43.
- MAPS ENTITLED 'LOW TENSION MAINS AND SERVICE PLATE," PREPARED BY CONSOLIDATED EDISON CO. OF N.Y. INC. FOR QUEENS/BROOKLYN, PLATE 38-J, ISSUED DEC. 22, 2015 AND PLATE 39-J, ISSUED NOV. 5, 2013.
- MAP ENTITLED "CITY OF NEW YORK, DEPARTMENT OF TRANSPORTATION DIVISION OF STREET LIGHTING, CONTRACT NO. B126-386 PARKS, REDHOOK RECREATION CENTER, TRACK AND FIELD AREA, NEW LIGHTING, BROOKLYN." 8 SHEETS. DRAWING NO. B60398.

### SOURCE:

DRAWING SOURCED FROM SHEET NO. 4 OF 48 DRAWING NO. V102.00 TITLED "TOPOGRAPHIC SURVEY 2" PREPARED FOR THE CITY OF NEW YORK PARKS AND RECREATION AND PREPARED BY MUNOZ ENGINEERING P.C. DATED JUNE 29, 2018.



CITY OF NEW YORK PARKS AND RECREATION - CAPITAL PROJECTS DIVISION CONSTRUCTION COMPLETION REPORT RED HOOK PARK - BALL FIELDS 5, 6, 7, 8, & 9

BOROUGH OF BROOKLYN, NY

## BALL FIELD 9 PRECONSTRUCTION CONDITIONS

DRAWN BY:	H. DELGADO
CHECKED BY:	A. RAPOSO
APPROVED BY:	J. PERONTO
DATE:	MARCH 2023

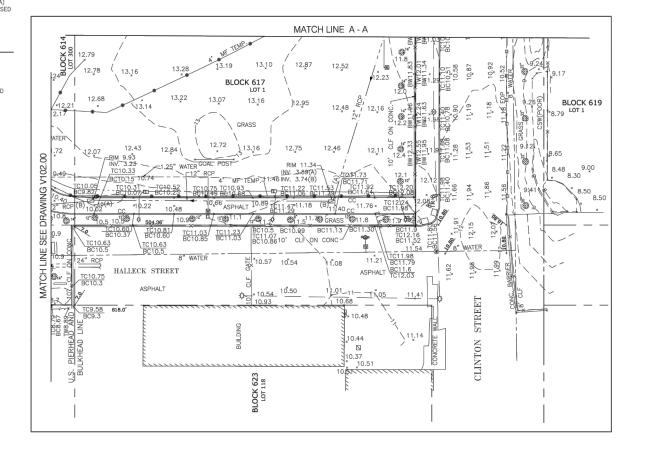
FIGURE 4B



1430 Broadway, 10th Floor New York, NY 10018 Phone: 212.221.7822 www.TRCcompanies.com

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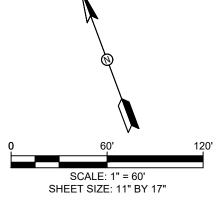
Fig 4A-4C - BF9 PreCnst. Cond. NSE (BF5-8&BF9).dwg



- 2. MAP REFLECTS FIELD CONDITIONS AS OF DECEMBER 23, 2016
- 3. THE LOCATION OF ALL UNDERGROUND UTILITIES AS SHOWN HEREON ARE APPROXIMATE AND ARE BASED ON NISIBLE ABOVE GROUND STRUCTURES AND RECORD UTILITY MAPS. ANY UTILITY MAPS PROVIDED BY UTILITY COMPANIES AR REFERENCED HEREON. NO EXCAVATIONS WERE MADE DURING THE PROGRESS THIS SURVEY TO LOCATE BURIED UTILITIES/STRUCTURES, ADDITIONAL BURIED UTILITIES/STRUCTURES MAY BE ENCOUNTEED, THE CONTRACTOR SHALL HAVE BEFORE ANY CONSTRUCTION BEGINS.
- PERTINENT DOCUMENTS OF RECORD REVIEWED AND CONSIDERED AS A PART OF THIS SURVEY ARE NOTED HEREON. OTHER DOCUMENTS OF RECORD MAY EXIST THAT WOULD AFFECT THIS PARCEL.
- ALL ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
- THIS PLAN IS MADE FOR THE PURPOSE OF A TOPOGRAPHIC SURVEY. NO OTHER PURPOSES IS INTENDED NOR IMPLIED. THE UNDERSIGNED PROFESSIONAL IS NETHER RESPONSIBLE NOR LIABLE FOR THE USE OF THIS PLAN BEYOND ITS INTENDED PURPOSE.
- SECTION MAP ENTITLED "CITY OF NEW YORK, BOROUGH OF BROOKLYN, OFFICE OF THE PRESIDENT, TOPOGRAPHICAL BUREAU, MAP No. 4234, A CHANGE IN THE CITY MAP SHOWING, THE ESTABLISHMENT OF ENGLEWOOD AVENUE, BETWEEN ARTHIK ILL ROAD TO KENT STRIEET AND BRICKTOWN WAY, FROM YETERANS ROAD WEST TO YETERANS ROAD WEST, AND TYRELLAN AVENUE, FROM YETERANS ROAD WEST TO BRICKTOWN WAY AND ESTABLISHMENT OF FAIRPIEW PARK AND THE EXTINGUISHMENT OF SEVERAL RECORD STREETS AND THE ADJUSTMENT OF GRADES NECESSITATED THEREBY, DATED SEPT. 29, 1988, "SHEETS No. 31 AND 29
- CITY OF NEW YORK, DEPARTMENT OF PARKS MAP ENTITLED 'RED HOOK RECREATIONAL AREA, BORO OF BROOKLINE, SUGGESTED LOCATION FOR STORM DRAINS, CATCH BASINS DRAIN INLET & M.Hs., \* DATED FEB. 4, 1941. MAP No. B-E-126, 103W.S.
- WATER AND SEWER MAPPING, PREPARED AND PROVIDED BY NEW YORK CITY DEPARTMENT
- 5. SKETCH OF TELECOMMUNICATION UTILITIES FROM SUNSET PARK TO REDHOOK, PREPARED BY TIME WARNER CABLE. MAP No. LW 43 & LX 43.
- MAPS ENTITLED 'LOW TENSION MAINS AND SERVICE PLATE,' PREPARED BY CONSOLIDATED EDISON CO. OF NY, INC. FOR QUEENS/BROOKLYN, PLATE 38-J, ISSUED DEC. 22, 2015 AND PLATE 38-J, ISSUED NOV. 5, 2013.
- MAP ENTITLED 'CITY OF NEW YORK, DEPARTMENT OF TRANSPORTATION DIVISION OF STREET LIGHTING, CONTRACT NO. B128-388 PARKS, REDHOOK RECREATION CENTER, TRACK AND FIELD AREA, NEW LIGHTING, BROOKLYN. 8 SHEETS. DRAWING No. B60398.

## LEGEND TOP OF CURB BOTTOM OF CURB TOP OF WALL TOP OF HOOD HIGH MAST LIGHTING TABLE AND BENCH

DRAWING SOURCED FROM SHEET NO. 5 OF 48 DRAWING NO. V103.00 TITLED "TOPOGRAPHIC SURVEY 3" PREPARED FOR THE CITY OF NEW YORK PARKS AND RECREATION AND PREPARED BY MUNOZ ENGINEERING P.C. DATED JUNE 29, 2018.



CITY OF NEW YORK PARKS AND RECREATION - CAPITAL PROJECTS DIVISION CONSTRUCTION COMPLETION REPORT RED HOOK PARK - BALL FIELDS 5, 6, 7, 8, & 9 BOROUGH OF BROOKLYN, NY

## BALL FIELD 9 PRECONSTRUCTION CONDITIONS **EAST**

H. DELGADO PROJ NO.: DRAWN BY: CHECKED BY A. RAPOSO J. PERONTO PPROVED BY MARCH 2023

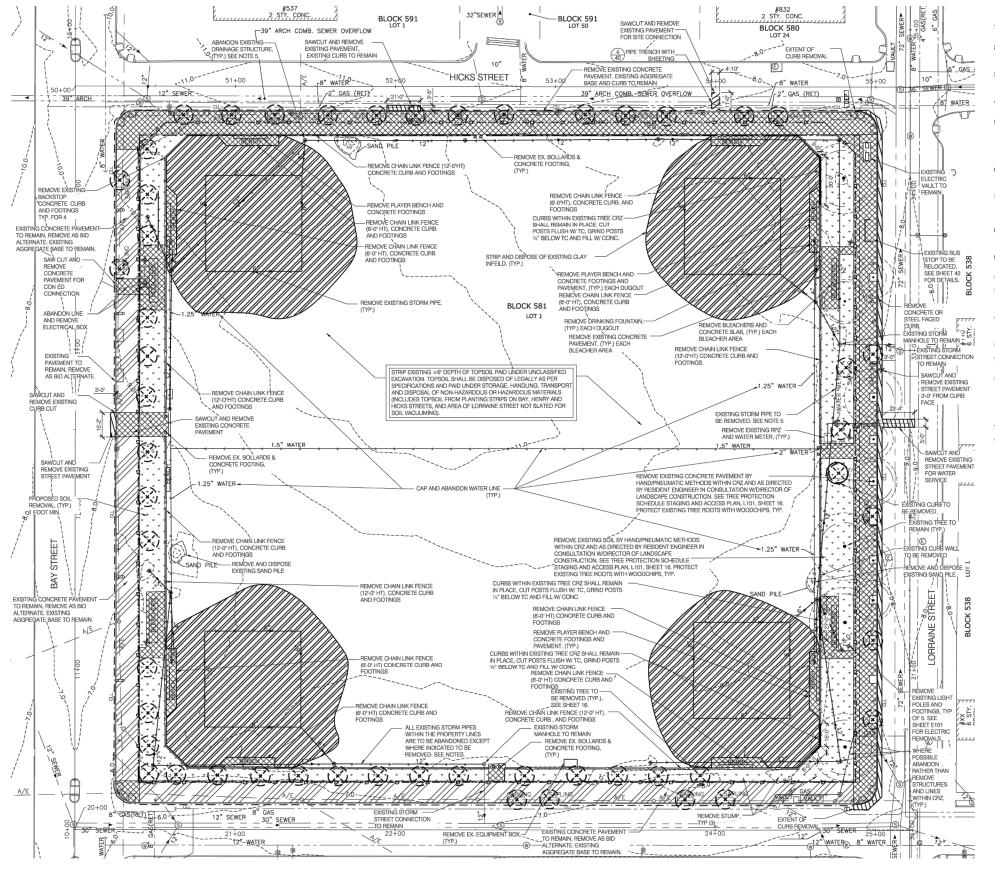
FIGURE 4C



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Fig 4A-4C - BF9 PreCnst. Cond. NSE (BF5-8&BF9).dwg



REMOVAL NOTES

- ALL EXISTING SURVEY AND TOPOGRAPHICAL DATA TAKEN FROM SURVEY BY MUNOZ ENGINEERING P.C. 505

- ALL EXISTING SURVEY AND TOPOGRAPHICAL DATA TAKEN FROM SURVEY BY MUNOZ ENGINEERING P.C., 505 EIGHTH AWENUE, NEW YORK, NY 10018. ALL ELEVATIONS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM, 1988 (NAVD 88). SEE SHEET VIOLO FOR SURVEY LEGEND.

  IT IS THE CONTRACTORS RESPONSIBILITY TO VERBY? ALL EXISTING SITE CONDITIONS, BOTH ABOVE AND BELOW THE SURFACE, PRIOR TO COMMENCING WORK. ANY DISCREPANCIES BETWEEN THE INFORMATION SHOWN ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE RESIDENT ENGINEER AND NYC DEPARTMENT OF PARKS AND RECREATION OPEN, IN WEITING PRIOR TO COMMENCING WORK AND THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE RESIDENT ENGINEER AND NYC DEPARTMENT OF PARKS AND RECREATION OPEN, IN WEITING PRIOR TO COMMENCING WORKENING WORK WITH A WITH A PRIOR THE CONTRACTOR TO NOTIFY NEW YORK SIT AT LEAST FORTY-CERT (48) HOURS BEFORE COMMENCING SCRAVATION (TIEM, "UNCLASSIFIED EXCAVATION)," THE EMAIL ADDRESS IS EMALIGNEW/YORKS INC. COM AND THE WEB SITE IS HTTP://NEWYORKS IT STAND OF THE CONTRACTORS SYPENSE, WITH NO ADDITIONAL EXPENSE TO THE COTTY OF NEW YORK OF THE CONTRACTORS EXPENSE, WITH NO ADDITIONAL EXPENSE TO THE COTTY OF NEW YORK OF THE CONTRACTORS EXPENSE, WITH NO ADDITIONAL EXPENSE TO THE COTTY OF NEW YORK OF THE CONTRACTORS EXPENSE, WITH NO ADDITIONAL EXPENSE TO THE COTTY OF NEW YORK OF THE CONTRACTORS EXPENSE, WITH NO ADDITIONAL EXPENSE TO THE COTTY OF THE YORK OF THE CONTRACTOR ANY THE PLANS, ALL ABANDONED PIPES ARE ENCOUNTERED DURING EXCAVATION, THEN THE CONTRACTOR SHOULD REPORT SHATE AND EXCAVATION THEN THE CONTRACTOR SHOULD REPORT SHATE AND ADDITIONAL EXPENSE OF THE CONTRACTOR SHOULD REPORT SHATE AND EXAMINATE AND ADDITIONAL EXPENSE OF THE CONTRACTOR SHOULD REPORT SHATE AND EXCAVATION THEN THE CONTRACTOR SHOULD REPORT SHATE AND EXCAVATION THEN THE CONTRACTOR SHOULD REPORT SHATE AND THE PLANS, ALL ABANDONED PIPES ARE ENCOUNTERED DURING EXCAVATION. THEN THE CONTRACTOR SHOULD REPORT PROORMS AND EXCLUSIVE SHATE AND EXCAVATION. THEN THE CONTRACTOR SHOULD REPORT MERCONS AS REQUIRED TO ENSURE THE
- THE CONTRACTOR TO GREE DURING CONSTRUCTION TO AND DISTRICTION TO BE THE CONTRACTOR OF DEVARRANCE OF THE CONTRACTOR OF THE CONTRACTOR OF DRIVEN AND DAMAGE RESULTING FROM THIS WORK WILL BE RESTORED TO THE SATISFACTION OF DRIVEN WHERE NEW CONSTRUCTION ABUTS EXISTING PAVEMENTS, AUXILIARY HE EXISTING MATERIALS WHERE NEW CONSTRUCTION ABUTS EXISTING PAVEMENTS, CURRS, OR WALLS, THE EXISTING MATERIALS SHALL BE CLEANLY SANICLIT TO PROVIDE A CLEAN, NEAT MATCH AND A SMOOTH, FLUSH TRANSITION, AS DIRECTED BY THE RESIDENT ENGINEER. ALL SANICLITING SHALL BE DONE TO NEAT, STRAIGHT, AND ACQUIRATE LINES. CONTRACTOR SHALL PROVIDE EXPANSION JOINTS (TIE ROD AND/OR SLIP JOINT) WHERE CLI DAND IN CURRS OF THE CONTRACTOR SHALL PROVIDE EXPANSION JOINTS (TIE ROD AND/OR SLIP JOINT) WHERE CLI DAND IN CURRS HERE THE CONTRACTOR SHALL PROVIDE EXPANSION JOINTS (TIE ROD AND/OR SLIP JOINT) WHERE CLI DAND IN CURRS HERE THE CONTRACTOR SHALL PROVIDE EXPANSION JOINTS (TIE ROD AND/OR SLIP JOINT) WHERE CLI DAND IN CURRS HERE THE CONTRACTOR SHALL PROVIDE EXPANSION JOINTS (TIE ROD AND/OR SLIP JOINT) WHERE CLI DAND IN CURRS HERE THE CONTRACTOR SHALL PROVIDE EXPANSION JOINTS (TIE ROD AND/OR SLIP JOINT) WHERE CLI DAND IN CURRS HERE THE CONTRACTOR SHALL PROVIDE EXPANSION JOINTS (TIE ROD AND/OR SLIP JOINT) WHERE CLI DAND IN CURRS HERE THE CONTRACTOR SHALL PROVIDE EXPANSION JOINTS (TIE ROD AND/OR SLIP JOINT) WHERE CLI DAND IN CURRS HERE THE CONTRACTOR SHALL PROVIDE EXPANSION JOINTS (TIE ROD AND/OR SLIP JOINT) WHERE CONTRACTOR SHALL PROVIDE EXPANSION JOINTS (TIE ROD AND/OR SLIP JOINT) WHERE CONTRACTOR SHALL PROVIDE EXPANSION JOINTS (TIE ROD AND/OR SLIP JOINT) WHERE CONTRACTOR SHALL PROVIDE EXPANSION JOINTS (TIE ROD AND/OR SLIP JOINT) WHERE CONTRACTOR SHALL PROVIDE EXPANSION JOINTS (TIE ROD AND/OR SLIP JOINT) WHERE CONTRACTOR SHALL PROVIDE EXPANSION JOINTS (TIE ROD AND/OR SLIP JOINT) WHERE CONTRACTOR SHALL PROVIDE EXPANSION JOINTS (TIE ROD AND/OR SLIP JOINT).
- ACCUPATE LINES. CONTRACTION SHALL PHOVILE EXPANSION JUINTS (TIE HOD AND/OF SLIP JUINT) WHENE OLD AND NEW CURBS MEET. THE CONTRACTOR SHALL REPLACE ANY EXISTING CURBS, FENCING, OR PAVEMENTS THAT WERE INTENDED TO REMAIN BUT ARE DAMAGED OR DISTURBED DURING CONSTRUCTION. IF REPLACEMENT IS NECESSARY, IT SHALL BE DONE AT THE CONTRACTORS EXPENSE, TO THE SATISFACTION OF DPR AND THE RESIDENT
- ENGINEER.
  THE CONTRACTOR SHALL TAKE EXTREME CARE TO PROTECT THE ROOT SYSTEMS OF EXISTING TREES TO REMAIN. MATERIAL, EQUIPMENT, OR VEHICLES SHALL NOT BE STOCKPILED OR PARKED WITHIN THE DRIPLINE OF ANY TREE.
  SEE TREE PROTECTION AND STAGING PLAN FOR ADDITIONAL NOTES REGARDING PROTECTION, PRUNING AND DECOMPACTION OF EXISTING TREES.
  WHEN NECSBARY, THE CONTRACTOR SHALL ALWAYS EXCAVATE BY HAND AND/OR VACUUM METHODS WITHIN THE CRITICAL ROOT ZONE (CRZ) OF EXISTING TREES, OR AS DIRECTED BY THE RESIDENT ENGINEER.
- NO ROOTS OVER 1'Ø SHALL BE CUT WITHOUT THE WRITTEN AUTHORIZATION OF THE DPR DIRECTOR OF LANDSCAPE CONSTRUCTION.
- LANDSCAPE CONSTRUCTION.

  2. THE CONTRACTOR SHALL EXERCISE EXTREME CARE IN REMOVING CONCRETE OR ASPHALL WITHIN THE PRIPLINE OF EXISTING TREES. LIFTING RATHER THAN DRAGGING PIECES OF PAVING. TOOLS FOR THIS ACTIVITY SHALL BE APPROVED BY THE DIRECTOR OF LANDSCAPE CONSTRUCTION OR THEIR REPRESENTIATE AND THE RESIDENT ENGINEER PRIPLOR TO THE START OF EXCAVATION.

  1. ALL FOOTINGS AND OTHER BELOW-GRADE STRUCTURES TO BE REMOVED SHALL BE EXCAVATED TO A DEPTH OF 4"O BELOW FINISHED GRADE AND BACKFILLED WITH APPROVED SLITABLE FILL MATERIAL.

  1. THE CONTRACTOR SHALL DISPOSE OF ALL ITEMS AND MATERIALS REMOVED AND NOT SALVAGED, INCLUDING ALL EXCAVATED MATERIAL, OFF-SITE AND IN A LEGAL MANNER, IN ACCORDANCE WITH THE SPECIFICATIONS.

- SPECIFICATIONS.

  SPECIFICATIONS TO BE SALVAGED FOR DPR MAINTENANCE & OPERATIONS (M&O) SHALL BE DELIVERED BY THE CONTRACTOR TO THE CHIEF OF OPERATIONS OF THE APPROPRIATE BORQUIGH. ALL MAITERIALS NOT NEEDED BY MAO SHALL BE REMOVED AS INDICATED IN REMOVALS ITEM THE QUANTITY OF SALVAGED MATERIALS MUST BE PROVIDED TO THE RESIDENT ENGINEER PRIOR TO OFF-SITE SHIPMENT INCLUDING: CONTAMINATED SOIL RELISED FOR A BENEFICIAL USE (E.G. LANDEILL COVER MATERIAL); WOOD FOR REUSE: RECYCLED FERROUS/NONFERROUS METAL; MASONRY CRUSHING FOR REUSE; TIPE SHREDDING FOR REUSE: CHIMICAL SOR WASTE OIL FOR REUSE: AND FULL OF WASTES.

  16. THE CONTRACTOR SHALL REMOVE, EXCAVATE, AND DISPOSE OF ALL MATERIALS ACCORDING TO SPECIFICATION.
- 17. REMOVE TOPSOIL FROM TREE PITS. PROVIDE BORROWED FILL TO SUBGRADE AND FOUNDATION MATERIAL PRIOR TO INSTALLATION OF NEW SIDEWALK PAYEMENT, SEE SHEET NO. 9 FOR ENVIRONMENTAL NOTES.

## LEGEND

CRITICAL ROOT ZONE (CRZ)
(LIMIT OF HAND/PNEUMATIC EXCAVATION) CONTRACT LIMIT LINE

TREE REMOVAL (SEE SHEET #16)

REMOVE AND DISPOSE OF EXISTING CLAY INFIELD REMOVE EXISTING CONCRETE PAVEMENT

EXISTING CONCRETE PAVEMENT TO REMAIN, REMOVE CONCRETE PAVEMENT AS ALTERNATE #1 REMOVE EXISTING STREET PAVEMENT

SOIL REMOVAL, HAND/PNEUMATIC METHOD WITHIN CRZ)

-CF----CF---- CONSTRUCTION FENCE

CITY OF NEW YORK PARKS AND RECREATION - CAPITAL PROJECTS DIVISION CONSTRUCTION COMPLETION REPORT RED HOOK PARK - BALL FIELDS 5, 6, 7, 8, & 9 BOROUGH OF BROOKLYN, NY

120'

SCALE: 1" = 60'

SHEET SIZE: 11" BY 17"

## **BALL FIELDS 5-8 REMOVALS**

H. DELGADO PROJ NO.: RAWN BY: HECKED BY A. RAPOSO J. PERONTO PROVED BY MARCH 2023

246184.0000.0000 FIGURE 5



New York, NY 10018 Phone: 212.221.7822 www.TRCcompanies.com

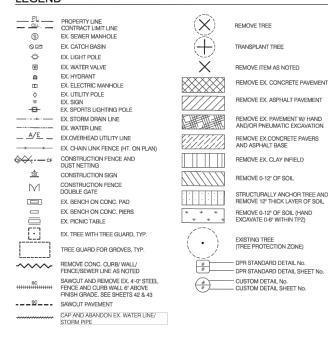
Fig 5 - BF5-8 Removals (BF5-8&BF9).dwg

SOURCE:

DRAWING SOURCED FROM SHEET NO. 11 OF 42 DRAWING NO. C101.00 TITLED "REMOVALS PLAN" PREPARED FOR THE CITY OF NEW YORK PARKS AND RECREATION AND PREPARED BY PROVIDENT DESIGN ENGINEERING DATED JUNE 28, 2017.

DRAWING SOURCED FROM SHEET NO. 17 OF 48 DRAWING NO. L104.00 TITLED "REMOVALS PLAN 1" PREPARED FOR THE CITY OF NEW YORK PARKS AND RECREATION AND PREPARED BY ABEL BAINNSON BUTZ, LLP DATED JUNE 29, 2018.

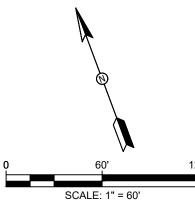
### **LEGEND**



NOTES:

1. ITEMS NOT FOUND IN REMOVALS SCHEDULE ARE TO BE CONSIDERED AS PART OF REMOVALS ITEMS AND SHALL BE A LUMP SUM BID PRICE.

- 2. STORAGE, HANDLING, TRANSPORT AND DISPOSAL OF ASPHALT, CONCRETE, NON-HAZARDOUS AND HAZARDOUS SOIL PAID FOR SEPARATELY.
- 3. SEE SHEET #45 FOR ELECTRICAL REMOVALS.
- 4. MAINTAIN CONSTRUCTION FENCE (CF) AS SHOWN UNTIL WALL CONSTRUCTION AND FENCE INSTALLATION IS COMPLETE. RELOCATE AS REQUIRED TO ACCOMMODATE INSTALLATION OF NEW CONCRETE SIDEWALK.



SHEET SIZE: 11" BY 17"

CITY OF NEW YORK PARKS AND RECREATION - CAPITAL PROJECTS DIVISION CONSTRUCTION COMPLETION REPORT RED HOOK PARK - BALL FIELDS 5, 6, 7, 8, & 9

### **BALL FIELD 9 REMOVALS**

DRAWN BY:	H. DELGADO	PROJ N
CHECKED BY:	A. RAPOSO	
APPROVED BY:	J. PERONTO	
DATE:	MARCH 2023	

FIGURE 6



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Fig 6 - BF9 Removals (BF5-8&BF9).dwg

BOROUGH OF BROOKLYN, NY

246184.0000.0000

### SOURCE:

BAY STREET

DRAWING SOURCED FROM SHEET NO. 10 OF 42 DRAWING NO. H201.00 TITLED "REMEDIAL PLAN" PREPARED FOR THE CITY OF NEW YORK PARKS AND RECREATION AND PREPARED BY TRC ENGINEERS, INC. DATED MAY 2, 2017.

### LEGEND (SYMBOLS NOT TO SCALE):

### SHADING/HATCHING TYPE OF COVER SYNTHETIC TURF

NEW PAVING (SEE NOTE 5)

NEW TREES AND/OR

PLANTINGS WITHIN PLANTING STRIPS

NEW TREE WITHIN TREE PIT

REMEDIAL COVER

MINIMUM OF 1-FOOT THICK LAYER OF CLEAN COVER WITH DEMARCATION LAYER BELOW. GRASSES WITH 3-INCH THICK LAYER OF MULCH ABOVE A MINIMUM 1-FOOT THICK LAYER OF CLEAN COVER WITH DEMARCATION LAYER BELOW. BIOSWALE

APPROXIMATELY 10-INCH THICK LAYER OF CONCRETE AND SUBBASE. REMOVE AND REPLACE WITH MINIMUM OF 10-INCH THICK LAYER OF CONCRETE AND SUBBASE WITH DEMARCATION LAYER AS BID ALTERNATE.

MINIMUM OF 10-INCH THICK LAYER OF CONCRETE AND SUBBASE WITH DEMARCATION LAYER.

REMOVE 0-6-INCHES OF SOIL AS PER THE HAND/PNEUMATIC EXCAVATION SPECIFICATION. PLACE DEMARCATION LAYER. CLEAN TOPSOIL AND COVER WITH 3-INCH THICK LAYER OF MULICH AND GROUND COVER. 4-FOOT FENCE.

GROUND COYER WITH 3-INCH THICK LAYER OF MULCH ABOVE A MINIMUM 1-FOOT THICK LAYER OF CLEAN COVER WITH DEMARCATION LAYER BELOW.

EXISTING MATURE TREE WITHIN TREE PITS REMOVE 0-6-INCHES OF SOIL AS PER THE HAND/PNEUMATIC EXCAVATION SPECIFICATION. PLACE DEMARCATION LAYER, CLEAN TOP SOIL AND COVER WITH 2-INCH THICK LAYER OF BONDED AGGREGATE OR PERMEABLE PAVERS.

REMOVE MINIMUM OF 12-INCHES OF SOIL. PLACE DEMARCATION LAYER, CLEAN TOP SOIL AND COVER WITH MULCH AND PERMEABLE PAVERS.

NEW TREE

# DPR STANDARD DETAIL No.

DPR STANDARD DETAIL SHEET No.

 CUSTOM DETAIL No.
 CUSTOM DETAIL SHEET No. CONTRACT LIMIT LINE

- 1. REFER TO DETAIL SHEETS FOR MORE DETAIL REGARDING REMEDIAL COVER SYSTEM
- 3. DRAWING SHALL BE USED FOR REMOVAL WORK ONLY AND SHALL NOT BE USED FOR ANY OTHER PURPOSE.
- UNDER NEW YORK STATE EDUCATION LAW ARTICLE 145 (ENGINEERING), SECTION 7200 (2), IT IS A VIOLATION
  OF THIS LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL
  ENGINEER, TO ALTER THIS DOCUMENT.
- 5. EXISTING SIDEWALK PAVING ALONG BAY AND HENRY STREETS SHALL BE REMOVED AND REPLACED AS BID ALTERNATE # 1.
- ALL REMEDIAL COVERS SHALL BE INSTALLED PER PROJECT SPECIFICATIONS AND DRAWING DETAILS AND OTHER CONTRACT DOCUMENTS.
- 7. CONTRACTOR SHALL ADHERE TO ALL REQUIREMENTS OF THE ENVIRONMENTAL NOTES SHEET.

CITY OF NEW YORK PARKS AND RECREATION - CAPITAL PROJECTS DIVISION CONSTRUCTION COMPLETION REPORT RED HOOK PARK - BALL FIELDS 5, 6, 7, 8, & 9 BOROUGH OF BROOKLYN, NY

**BALL FIELDS 5-8 REMEDIAL PLAN** 

DRAWN BY: H. DELGADO PROJ NO.: HECKED BY: A. RAPOSO PPROVED BY J. PERONTO MARCH 2023

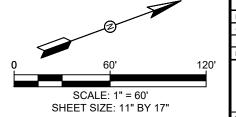
FIGURE 7



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246184.0000.0000

Fig 7 - BF5-8 Remedial Plan (BF5-8&BF9).dwg



LEGEND (SYMBOLS NOT TO SCALE):

HATCHING TYPE OF COVER

SYNTHETIC TURE

EXISTING PAVING

(TO REMAIN)

REMOVE TOPSOIL/CLAY SOIL. MINIMUM OF 1-FOOT THICK LAYER OF CLEAN COVER WITH UNDERLYING DEMARCATION LAYER.

APPROXIMATELY 10-INCH THICK LAYER OF CONCRETE

REMOVE 0-10 INCHES OF SOIL, PAVERS, OR ASPHALT. MINIMUM OF 10-INCH THICK LAYER OF CONCRETE PAVERS AND SUBBASE WITH UNDERLYING NEW CONCRETE PAVERS DEMARCATION LAYER.

REMEDIAL COVER

REMOVE 0-10 INCHES OF SOIL, PAVERS, OR ASPHALT. MINIMUM OF 10-INCH THICK LAYER OF ASPHALT OR CONCRETE AND SUBBASE WITH UNDERLYING DEMARCATION LAYER.

REMOVE 0-12-INCHES OF SOIL (0-6-INCHES WITHIN THE TPZ) AS PER THE HAND/PNEUMATIC EXCAVATION SPECIFICATION. PLACE DEMARCATION LAYER, 0-12-INCHES OF CLEAN TOPSOIL AND COVER WITH ANICH THICK LAYER OF MULCH AND GROUND COVER 4-FOOT HIGH FENCE. EXISTING TREES (PROPOSED FENCING)

EXISTING TREES
KING PROPOSED FENCING)
STRUCTURALLY ANCHOR TREE AND REMOVE 12-INCH
THICK LAVER OF SOLL AS PER THE HAND/PREUMATIC
EXCAVATION SPECIFICATION, PLACE DEMARCATION
LAYER AND 12-INCHES OF CLEAN TOPSOIL. NO FENCE.

REMOVE 0-6-INCHES OF SOIL AS PER THE HAND/PINEUMATIC EXCAVATION SPECIFICATION. PLACE DEMARCATION LAYER, CLEAN TOPSOIL AND COVER WITH 2-INCH THICK LAYER OF BONDED AGGREGATE AND PERMEABLE PAVERS.

REMOVE MINIMUM OF 12-INCHES OF SOIL. PLACE DEMARCATION LAYER, CLEAN TOPSOIL AND COVER WITH MULCH AND PERMEABLE PAVERS.

EXISTING EVERGREEN TREE
TO REMAIN TREE PROTECTION ZONE

NEW TREE WITHIN TREE PIT

NEW TREE TREE PROTECTION ZONE

EXISTING TREE TO REMAIN
 TREE PROTECTION ZONE

### NOTES:

REFER TO DETAIL SHEETS 38, 39. AND 40 FOR MORE DETAIL REGARDING REMEDIAL COVER SYSTEM.

DRAWING SHALL BE USED FOR REMEDIAL WORK ONLY AND SHALL NOT BE USED FOR ANY OTHER PURPOSE.

# DPR STANDARD DETAIL No.

B DPR STANDARD DETAIL SHEET No.

— CUSTOM DETAIL No. — CUSTOM DETAIL SHEET No.

CONTRACT LIMIT LINE

5. ALL REMEDIAL COVERS SHALL BE INSTALLED PER PROJECT SPECIFICATIONS AND DRAWING DETAILS AND OTHER CONTRACT DOCUMENTS.

CONTRACTOR SHALL ADHERE TO ALL REQUIREMENTS OF THE ENVIRONMENTAL NOTES SHEET #11 H001.00.

CITY OF NEW YORK PARKS AND RECREATION - CAPITAL PROJECTS DIVISION CONSTRUCTION COMPLETION REPORT RED HOOK PARK - BALL FIELDS 5, 6, 7, 8, & 9 BOROUGH OF BROOKLYN, NY

120'

**BALL FIELD 9 REMEDIAL PLAN** 

DRAWN BY: CHECKED BY: A. RAPOSO J. PERONTO PPROVED BY MARCH 2023

H. DELGADO PROJ NO.:

FIGURE 8



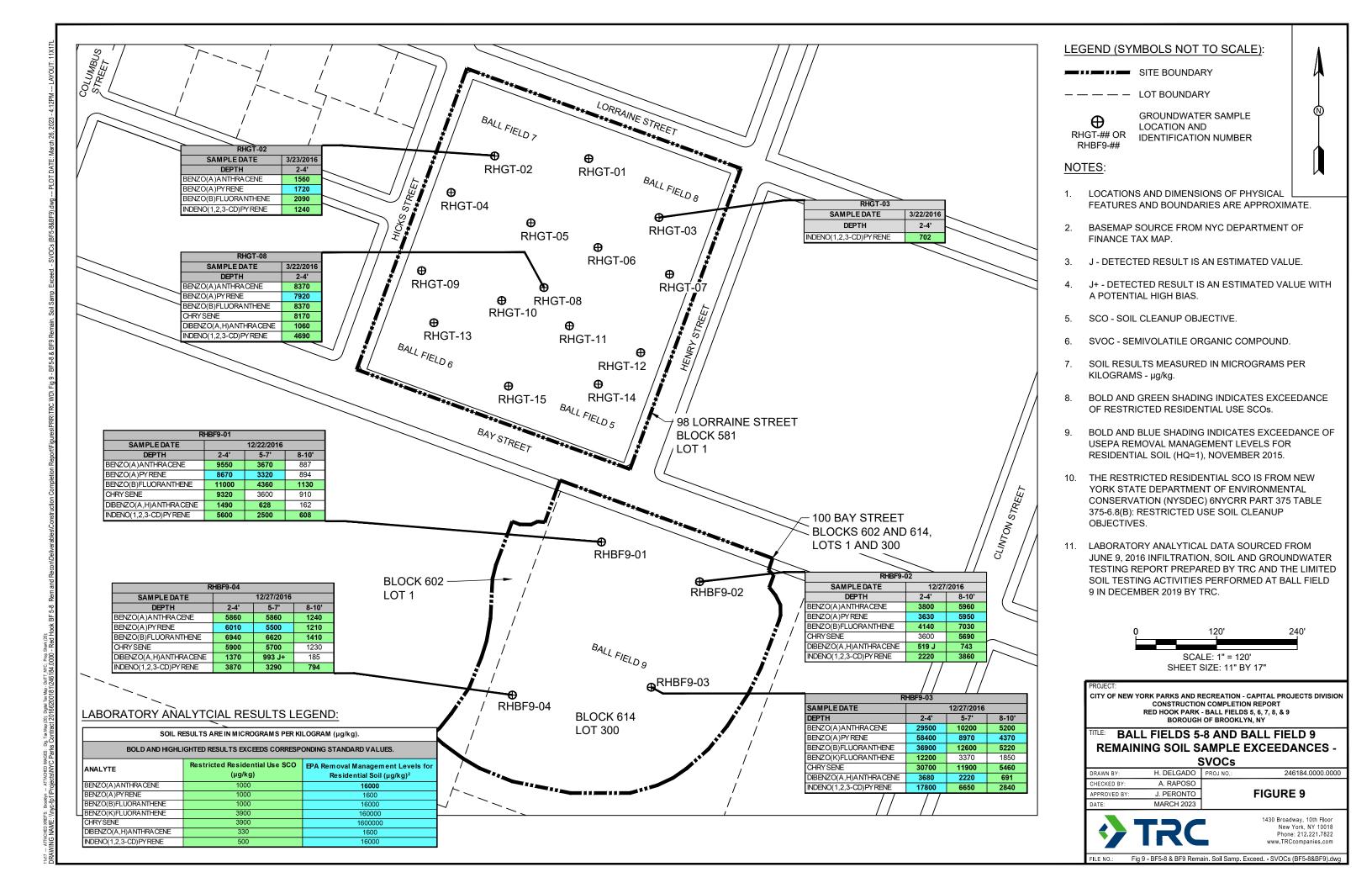
1430 Broadway, 10th Floor New York, NY 10018 Phone: 212.221.7822 www.TRCcompanies.com

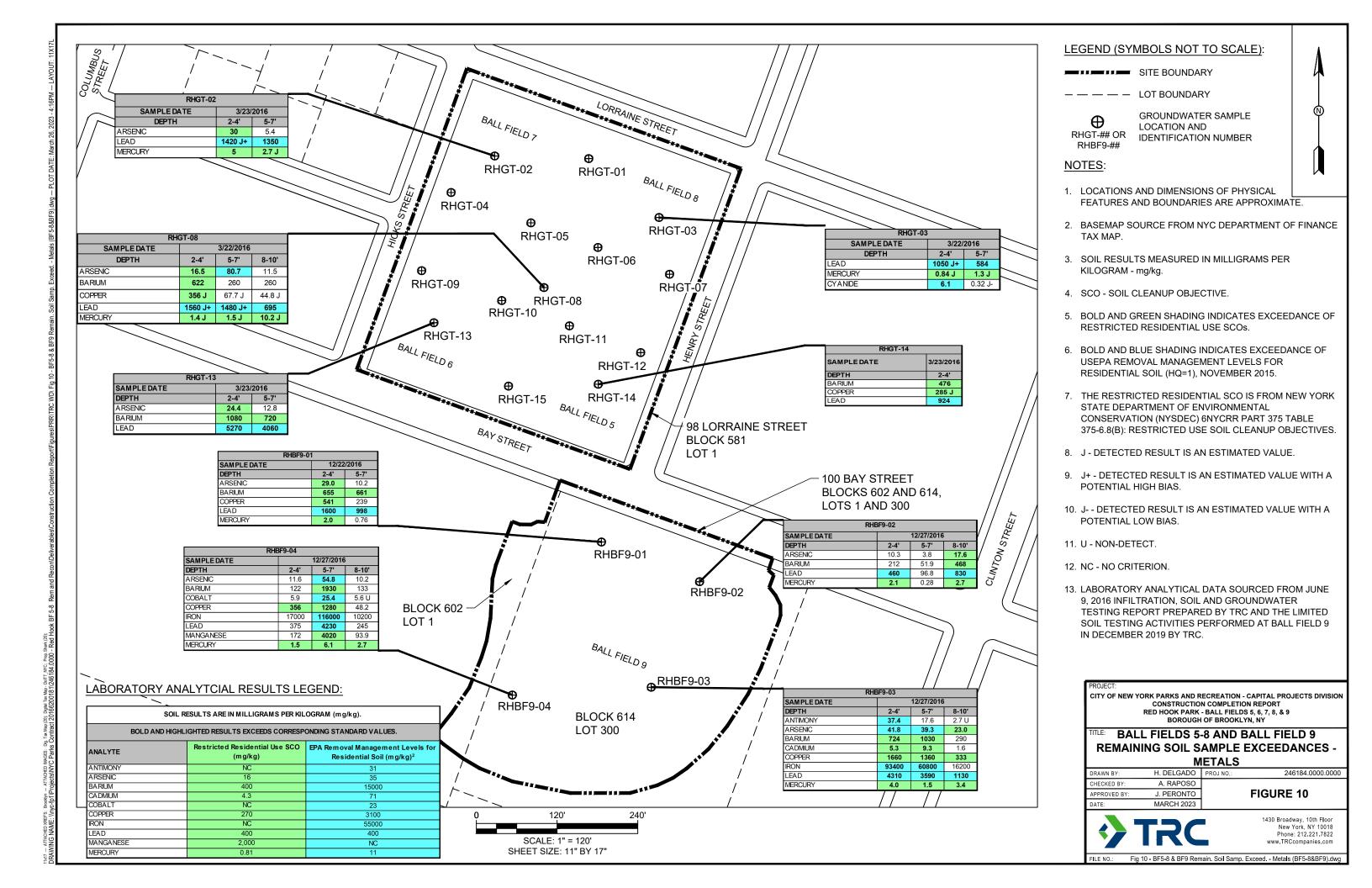
Fig 8 - BF9 Remedial Plan (BF5-8&BF9).dwg

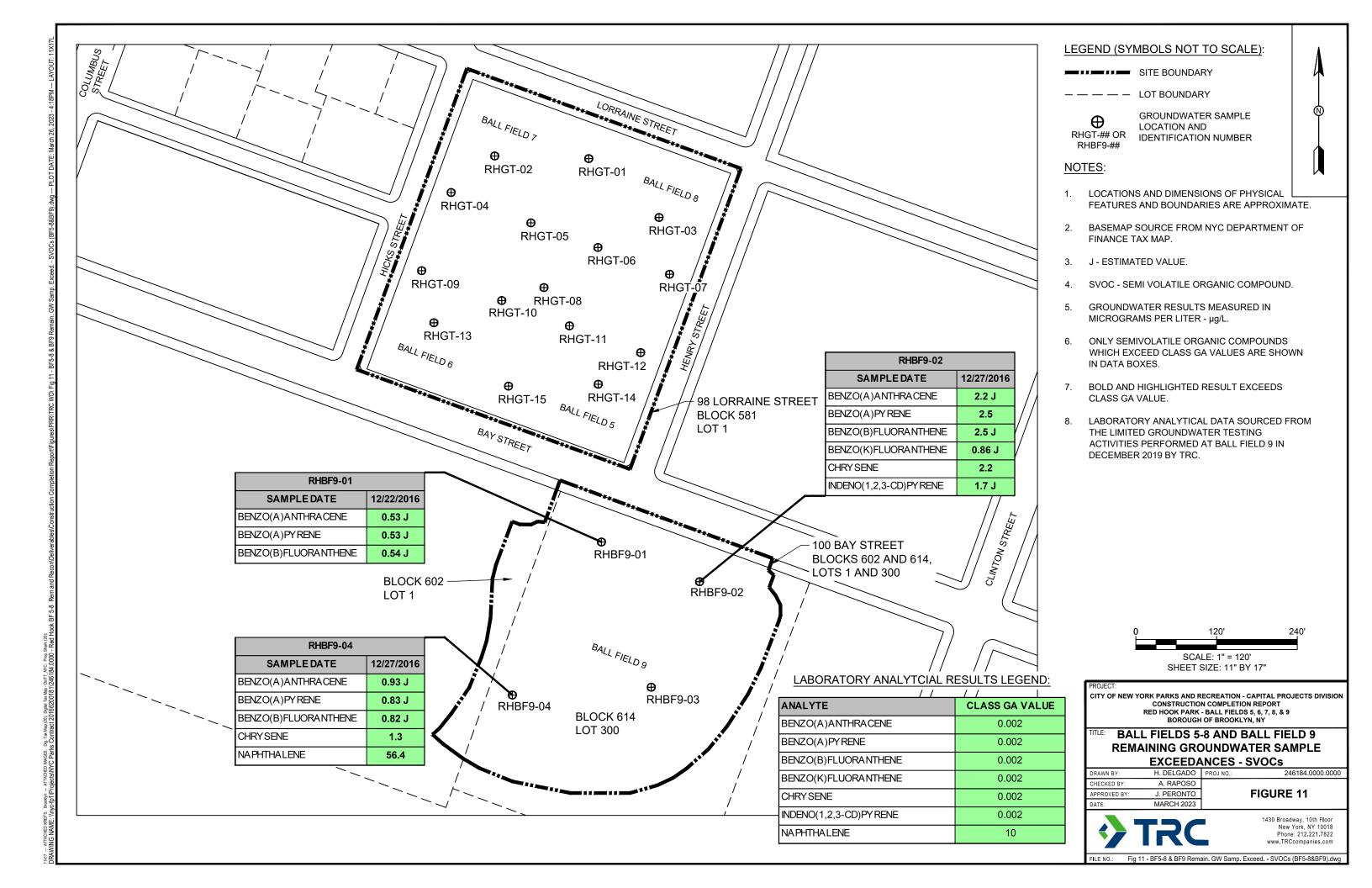
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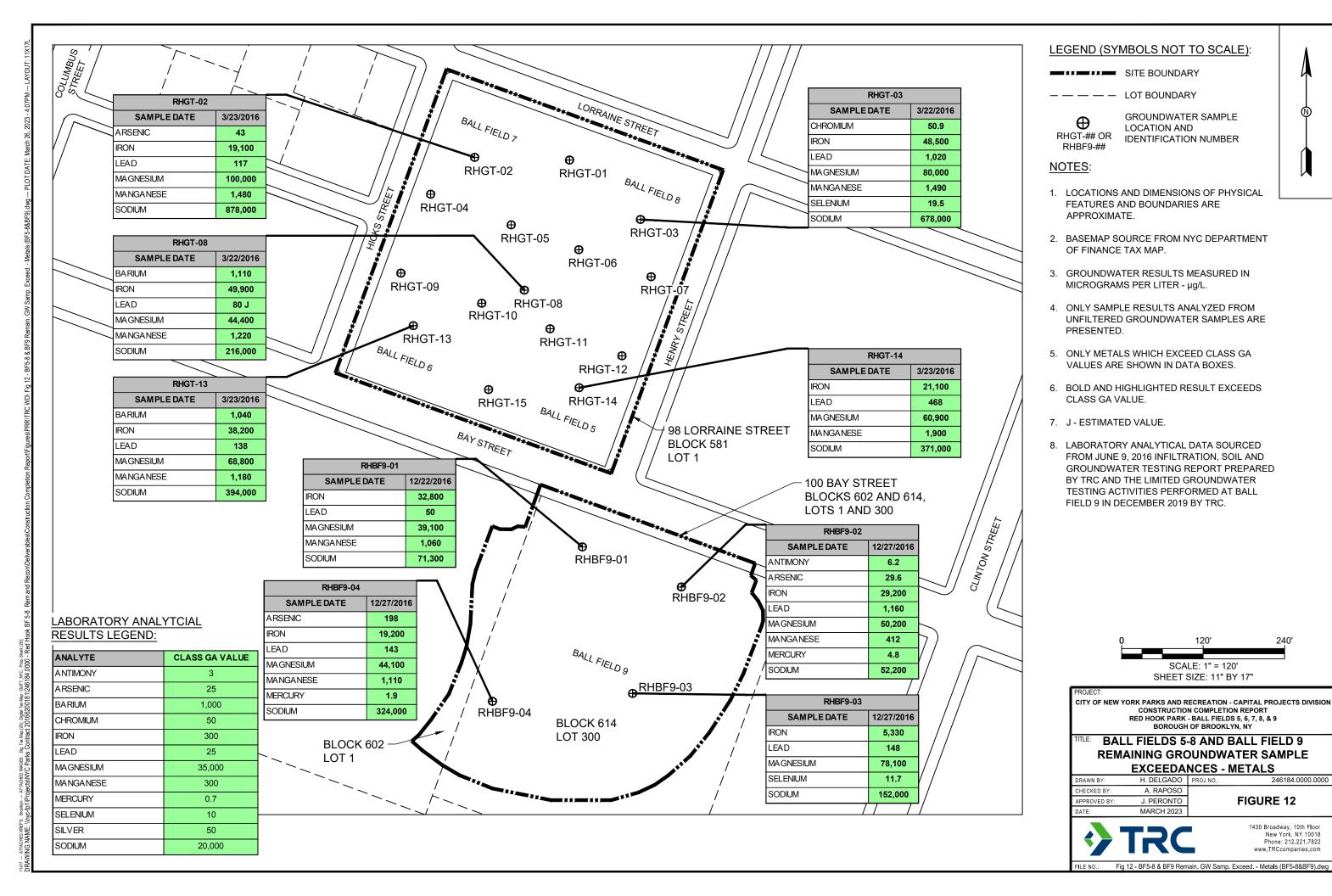
SCALE: 1" = 60'

SHEET SIZE: 11" BY 17"

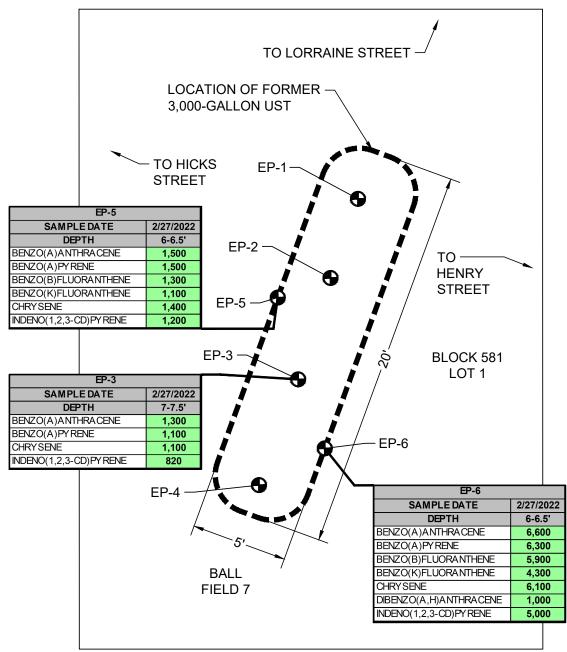


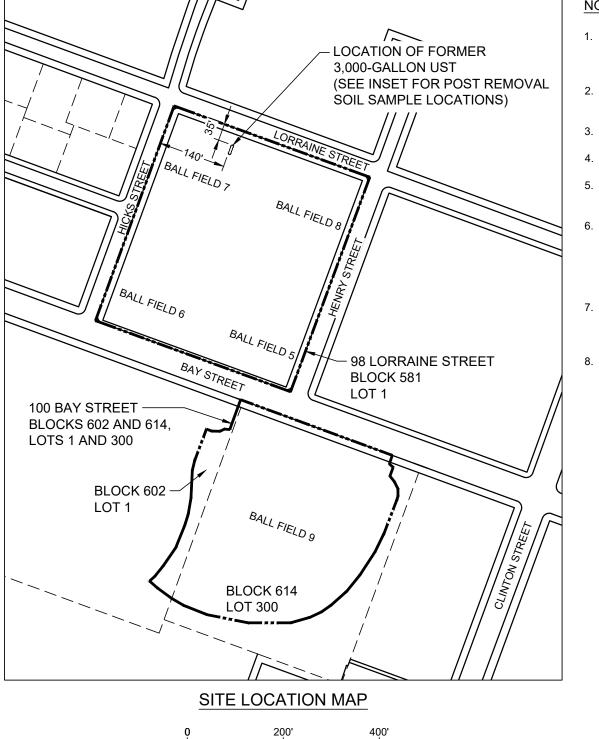






(N)





SCALE: 1" = 200'

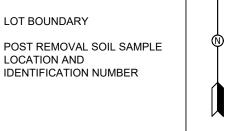
## LEGEND (SYMBOLS NOT TO SCALE):

SITE BOUNDARY



0 EP-##

LOCATION AND **IDENTIFICATION NUMBER** 



### NOTES:

- 1. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND BOUNDARIES ARE APPROXIMATE.
- 2. BASEMAP SOURCE FROM NYC DEPARTMENT OF FINANCE TAX MAP.
- 3. UST UNDERGROUND STORAGE TANK.
- 4. SCO SOIL CLEANUP OBJECTIVE.
- 5. BOLD AND GREEN SHADING INDICATES EXCEEDANCE OF NYSDEC CP-51 SCOs.
- THE CP-51 SCO IS FROM NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC) CP-51 SOIL CLEANUP GUIDANCE TABLE 3: SOIL CLEANUP LEVELS FOR FUEL OIL CONTAMINATED SOIL.
- 7. ONLY SEMIVOLATILE ORGANICS WHICH EXCEED CP-51 SCOs ARE SHOWN IN DATA BOXES.
- 8. LABORATORY ANALYTICAL RESULTS SOURCED FROM APRIL 26, 2020 UST REMOVAL LETTER REPORT PREPARED BY AARCO ENVIRONMENTAL SERVICES CORP.

SHEET SIZE: 11" BY 17"

CITY OF NEW YORK PARKS AND RECREATION - CAPITAL PROJECTS DIVISION CONSTRUCTION COMPLETION REPORT RED HOOK PARK - BALL FIELDS 5, 6, 7, 8, & 9 BOROUGH OF BROOKLYN, NY

**BALL FIELDS 5-8 UST POST REMOVAL SOIL SAMPLE LOCATION PLAN** 

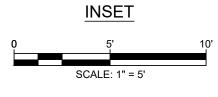
DRAWN BY: CHECKED BY: A. RAPOSO .PPROVED BY: J. PERONTO

H. DELGADO PROJ NO.: 246184.0000.0000 FIGURE 13

MARCH 2023

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Fig 13 - BF5-8 UST Post Rem. Soil Samp. Loc. Plan (BF5-8&BF9).dwg



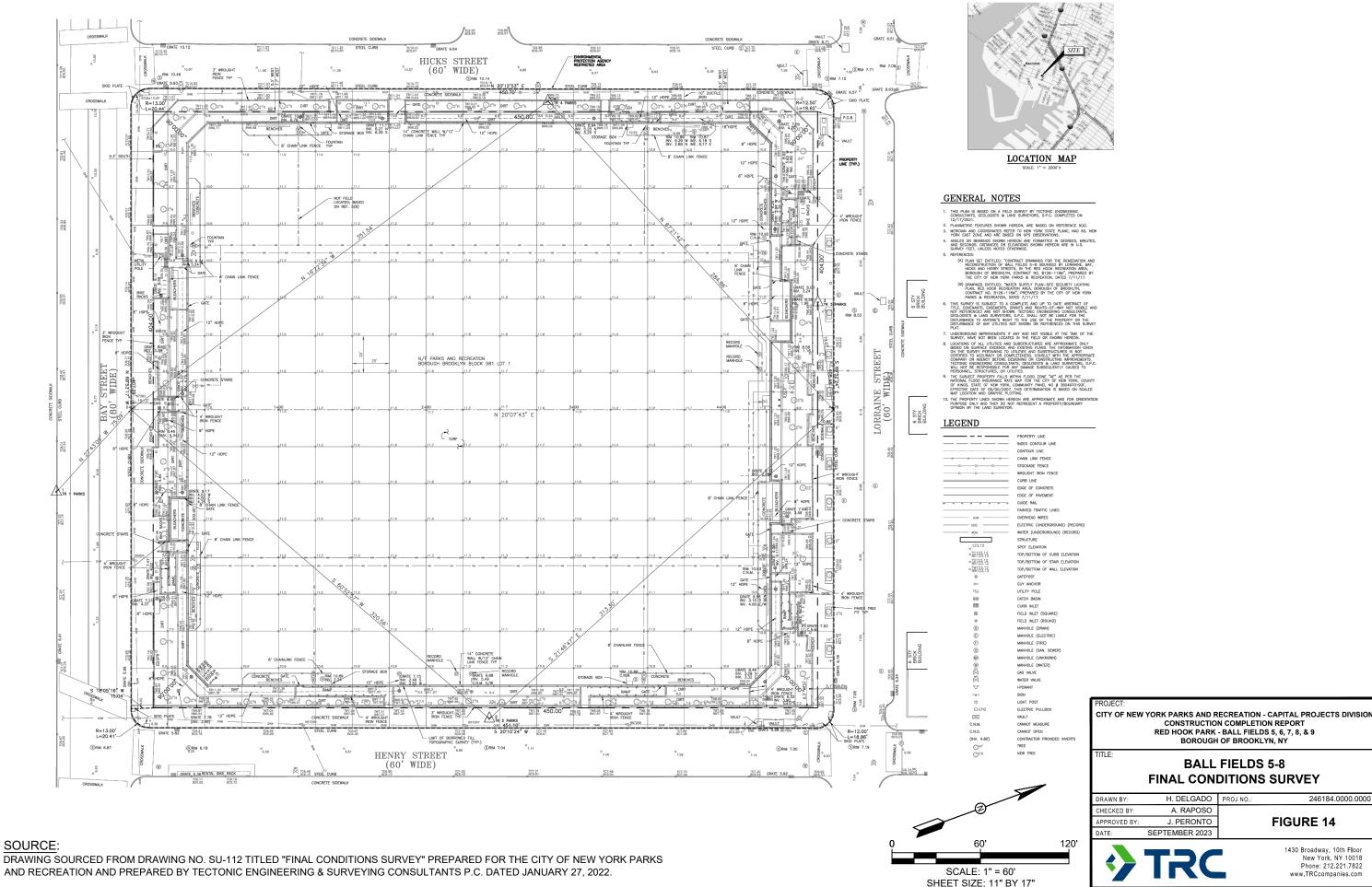


Fig 14 - BF5-8 Final Cond. Survey (BF5-8&BF9).dwg

FIGURE 14

New York, NY 10018

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## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 2

IN THE MATTER OF:	)	
IN THE WITH LEK OT.	, ,	
Columbia Smelting and Refining Works Site	)	Index No. CERCLA-02-2016-2010
	)	
Brooklyn, New York	)	
	)	
	)	
City of New York,	)	
Respondent	)	
	)	
Proceeding Under Sections 104, 106(a),	)	
107 and 122 of the Comprehensive	)	
Environmental Response, Compensation,	)	
and Liability Act, 42 U.S.C. §§ 9604,	)	
9606(a), 9607 and 9622	)	
	1	

ADMINISTRATIVE SETTLEMENT AGREEMENT AND ORDER ON CONSENT FOR A REMOVAL ACTION

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## I. JURISDICTION AND GENERAL PROVISIONS

- 1. This Administrative Settlement Agreement and Order on Consent ("Settlement Agreement") is entered into voluntarily by the United States Environmental Protection Agency ("EPA") and the City of New York ("Respondent"). This Settlement Agreement provides for the performance of a removal action by Respondent and the payment of certain response costs incurred by the United States at or in connection with the "Columbia Smelting and Refining Works Site" (the "Site") generally located in the vicinity of Red Hook Recreation Area Ball Field Numbers 5, 6, 7, 8 and 9 in Brooklyn, New York.
- 2. This Settlement Agreement is issued under the authority vested in the President of the United States by Sections 104, 106(a), 107, and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. §§ 9604, 9606(a), 9607 and 9622 ("CERCLA"). This authority was delegated to the Administrator of EPA on January 23, 1987, by Executive Order 12580, 52 Fed. Reg. 2923 (Jan. 29, 1987), and further delegated to Regional Administrators by EPA Delegation Nos. 14-14-A (Determinations of Imminent and Substantial Endangerment, Nov. 1, 2001), 14-14-C (Administrative Actions Through Consent Orders, Apr. 15, 1994) and 14-14-D (Cost Recovery Non-Judicial Agreements and Administrative Consent Orders, May 11, 1994). These authorities were further redelegated by the Regional Administrator of EPA Region 2 to the Director of the Emergency and Remedial Response Division in Region 2 by Regional Delegation R-1200, dated November 23, 2004.
- 3. EPA has notified the State of New York (the "State") of this action pursuant to Section 106(a) of CERCLA, 42 U.S.C. § 9606(a).
- 4. EPA and Respondent recognize that this Settlement Agreement has been negotiated in good faith and that the actions undertaken by Respondent in accordance with this Settlement Agreement do not constitute an admission of any liability. Respondent does not admit, and retains the right to controvert in any subsequent proceedings other than proceedings to implement or enforce this Settlement Agreement, the validity of the findings of facts, conclusions of law, and determinations in Section IV (Findings of Fact) and Section V (Conclusions of Law and Determinations) of this Settlement Agreement. Respondent agrees to comply with and be bound by the terms of this Settlement Agreement and further agree that it will not contest the basis or validity of this Settlement Agreement or its terms.

## II. PARTIES BOUND

- 5. This Settlement Agreement is binding upon EPA and upon Respondent. Any change in legal status of Respondent shall not alter Respondent's responsibilities under this Settlement Agreement.
- 6. Respondent shall provide a copy of this Settlement Agreement to each contractor hired to perform the Work required by this Settlement Agreement and to each person representing Respondent with respect to the Site or the Work, and shall condition all contracts entered into hereunder upon performance of the Work in conformity with the terms of this

Settlement Agreement. Respondent or its contractors shall provide written notice of this Settlement Agreement to all subcontractors hired to perform any portion of the Work required by this Settlement Agreement. Respondent shall nonetheless be responsible for ensuring that its contractors and subcontractors perform the Work in accordance with the terms of this Settlement Agreement.

#### III. DEFINITIONS

7. Unless otherwise expressly provided in this Settlement Agreement, terms used in this Settlement Agreement that are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in CERCLA or in such regulations. Whenever terms listed below are used in this Settlement Agreement or its attached appendices, the following definitions shall apply:

"CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9601-9675.

"Day" or "day" shall mean a calendar day. In computing any period of time under this Settlement Agreement, where the last day would fall on a Saturday, Sunday, or federal or State holiday, the period shall run until the close of business of the next working day.

"Effective Date" shall mean the effective date of this Settlement Agreement as provided in Section XXIX.

"EPA" shall mean the United States Environmental Protection Agency and its successor departments, agencies, or instrumentalities.

"EPA Hazardous Substance Superfund" shall mean the Hazardous Substance Superfund established by the Internal Revenue Code, 26 U.S.C. § 9507.

"NYSDEC" shall mean the New York State Department of Environmental Conservation and any successor departments or agencies of the State.

"Future Response Costs" shall mean all costs, including, but not limited to, direct and indirect costs, that the United States incurs in reviewing or developing deliverables submitted pursuant to this Settlement Agreement, in overseeing implementation of the Work, or otherwise implementing, overseeing, or enforcing this Settlement Agreement, including but not limited to, payroll costs, contractor costs, travel costs, laboratory costs, the costs incurred pursuant to Section IX (Property Requirements) (including, but not limited to, cost of attorney time and any monies paid to secure or enforce access or land, water, or other resource use restrictions, and/or to secure, implement, monitor, maintain, or enforce ICs), Section XIII (Emergency Response and Notification of Releases), Paragraph 79 (Work Takeover), Section XXV (Financial Assurance), and Paragraph 30 (Community Involvement Plan) (including, but not limited to, the costs of any technical assistance grant under Section 117(e) of CERCLA, 42 U.S.C. § 9617(e). Future Response Costs shall also

include Agency for Toxic Substances and Disease Registry ("ATSDR") costs regarding the Site.

"Institutional Controls" or "ICs" shall mean state or local laws, regulations, ordinances, zoning restrictions, easements or covenants running with the land or other governmental controls or notices that (a) limit land, water, or other resource use to minimize the potential for human exposure to Waste Material at or in connection with the Site; (b) limit land, water, or other resource use to implement, ensure non-interference with, or ensure the integrity of the removal action; (c) provide access rights to ensure the integrity of the removal action; (d) are created pursuant to common law or statutory law by an instrument that is recorded by the owner in the appropriate land records office, and/or (e) provide information intended to modify or guide human behavior at or in connection with the Site.

"Interest" shall mean interest at the rate specified for interest on investments of the EPA Hazardous Substance Superfund established by 26 U.S.C. § 9507, compounded annually on October 1 of each year, in accordance with 42 U.S.C. § 9607(a). The applicable rate of interest shall be the rate in effect at the time the interest accrues. The rate of interest is subject to change on October 1 of each year. Rates are available online at <a href="http://www.epa.gov/superfund/superfund-interest-rates">http://www.epa.gov/superfund/superfund-interest-rates</a>.

"National Contingency Plan" or "NCP" shall mean the National Oil and Hazardous Substances Pollution Contingency Plan promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, codified at 40 C.F.R. Part 300, and any amendments thereto.

"Paragraph" shall mean a portion of this Settlement Agreement identified by an Arabic numeral or an upper or lower case letter.

"Parties" shall mean EPA and Respondent.

"Planting Strips" shall mean the unpaved areas adjacent to the Red Hook Recreation Area Ball Fields 5-8 or Ball Field 9, between the ball fields and the surrounding sidewalks.

"Post-Removal Site Control" shall mean actions necessary to ensure the effectiveness and integrity of the removal action to be performed pursuant to this Settlement Agreement consistent with Sections 300.415(*l*) and 300.5 of the NCP and "Policy on Management of Post-Removal Site Control" (OSWER Directive No. 9360.2-02, Dec. 3, 1990).

"RCRA" shall mean the Solid Waste Disposal Act, 42 U.S.C. §§ 6901-6992 (also known as the Resource Conservation and Recovery Act).

"Respondent" shall mean the City of New York.

"Section" shall mean a portion of this Settlement Agreement identified by a Roman numeral.

"Settlement Agreement" shall mean this Administrative Settlement Agreement and Order on Consent and all appendices attached hereto (listed in Section XXVIII (Integration/Appendices)). In the event of conflict between this Settlement Agreement and any appendix, this Settlement Agreement shall control.

"Site" shall mean the Columbia Smelting and Refining Works Site in Brooklyn, New York, encompassing (1) Red Hook Recreation Area Ball Field Numbers 5, 6, 7, and 8 ("Ball Fields 5-8"); (2) the Ball Fields 5-8 Planting Strips; (3) Red Hook Recreation Area Ball Field Number 9 ("Ball Field 9"); (4) the Ball Field 9 Planting Strips; (5) the sidewalks bordering the Ball Fields 5-8 Planting Strips and the Ball Field 9 Planting Strips; and (6) any other areas impacted by the historic operations of the former Columbia Smelting and Refining Works facility that are currently owned and/or operated by Respondent. Ball Fields 5-8 and the Ball Fields 5-8 Planting Strips collectively comprise approximately 4.17 acres and are located on Block 581, Lot 1 of the Tax Map of Kings County, New York, bordered on the north by Lorraine Street, on the east by Henry Street, on the south by Bay Street and on the west by Hicks Street. Ball Field 9 and the Ball Field 9 Planting Strips collectively comprise approximately 3.4 acres, and are bordered on the north by Bay Street, on the east by Soccer Field #2, on the south by Halleck Street, and on the west by the track surrounding Soccer Field #3, located generally in the vicinity of Block 614, Lot 300 and Block 602, Lot 1 of the Tax Map of Kings County, New York.

"Site Special Account" shall mean the special account within the EPA Hazardous Substance Superfund, established for the Site by EPA pursuant to Section 122(b)(3) of CERCLA, 42 U.S.C. § 9622(b)(3).

"State" shall mean the State of New York.

"Transfer" shall mean to sell, assign, convey, lease, mortgage, or grant a security interest in, or where used as a noun, a sale, assignment, conveyance, or other disposition of any interest by operation of law or otherwise.

"United States" shall mean the United States of America and each department, agency, and instrumentality of the United States, including EPA.

"Waste Material" shall mean (a) any "hazardous substance" under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); (b) any pollutant or contaminant under Section 101(33) of CERCLA, 42 U.S.C. § 9601(33); and (c) any "solid waste" under Section 1004(27) of RCRA, 42 U.S.C. § 6903(27).

"Work" shall mean those activities and obligations Respondent is required to perform under this Settlement Agreement except the implementation of Institutional Controls and those activities required by Section XI (Record Retention).

#### IV. FINDINGS OF FACT

- 8. The Site is located within the Red Hook Recreation Area in Brooklyn, New York. It is bordered generally by a public housing complex (the Red Hook East Houses) to the north, a community pool and other fields within the Red Hook Recreation Area to the east and south of Ball Fields 5-8 and Ball Field 9, Red Hook Recreation Area Soccer Field 3 to the west of Ball Field 9, and an historic dye manufacturer and residences to the west of Ball Fields 5-8. The Site is depicted in Appendix 1.
- 9. The Site included a facility that was operated by smelting and refining companies, including Columbia Smelting & Refining Works, from the late 1920s through the late 1930s. It included a building which was built in the mid-1920s and demolished in approximately 1940, which was used as a smelting works and refinery. On-site operations included the manufacture of various metals, including white metals and alloys, brass and bronze ingots and other metals containing lead using a secondary smelting process. It is currently understood that the Site was acquired by Respondent at some point between 1935 and 1947, and it has been operated by Respondent as a public park area, including ball fields and soccer fields, since that time.
- 10. In January 2014, NYSDEC referred the Site to EPA to determine whether a removal action was appropriate. Between January 2014 and February 2015, EPA conducted a removal site evaluation for the Site, including a round of soil sampling at Ball Fields 7 and 8, which are downwind of and in close proximity to the historic secondary smelting facility footprint, in October 2014. Analytical results of the soil samples demonstrate that lead, arsenic, antimony, and iron are present at some locations at the Site at levels exceeding the respective EPA Removal Management Levels ("RMLs"). EPA has determined that the pattern of elevated lead levels within the upper foot of soil as well as correlations between the lead, antimony, and tin detections indicate the elevated contaminant levels at the Site are characteristic of secondary lead smelting emissions, and, therefore are attributable to the historic, secondary lead smelting facility formerly located at the Site.
- determine whether the historic smelting facility impacted the remainder of the block that includes Ball Fields 7 and 8 and additional downwind areas. The EPA RML for lead is 400 parts per million ("ppm"). The results indicated the presence of lead at levels exceeding the EPA RML in Ball Fields 5-8 and the surrounding areas. Lead levels in the upper foot of soil on these ball fields are, on average, as follows: 1,580 ppm in the uppermost inch, 2,240 ppm at the one-to-six inch interval below the ground surface, and 2,590 ppm at the six-to-twelve inch depth interval. Antimony, arsenic, cobalt, iron, and thallium were also found at levels exceeding the respective EPA RMLs in the same geographic areas. EPA has determined that the correlations between lead, antimony, and tin detections in this area indicate that the elevated contaminant levels are attributable to the historic, secondary lead smelting facility that was located at the Site.
- 12. Based on these findings, on April 8, 2015, EPA recommended closure of and restriction of public access to Ball Fields 5-8 and all nearby grassy areas until such time that a removal action could be completed to address contaminants in this area properly. On April 13,

- 2015, Respondent voluntarily agreed to undertake this action, and Respondent notified park users of the field closures by April 22, 2015. Public access to all grassy areas on Block 581, Lot 1 is currently prohibited, and access is prevented by fencing.
- 13. In April 2015, EPA conducted a third round of soil sampling in additional areas of the Red Hook Recreation Area to further delineate the aerial extent of the elevated contaminant levels that are associated with the historic, secondary lead smelting facility. Results of that sampling indicate the presence of antimony, arsenic, iron, and lead at levels above the respective EPA RMLs in Ball Field 9 and the Ball Field 9 Planting Strips at depths greater than six inches below the ground surface. Based on the correlations between antimony, lead, and tin, EPA has determined that these contaminants are attributable to the historic, secondary lead smelting facility that was located at the Site.
- 14. The chemicals identified above, with the exception of iron, are "hazardous substances" under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14). Exposure to lead can cause damage to the nervous system, leading to cognitive deficits and/or disabilities in children or an increase in blood pressure in adults. Exposure to antimony may cause adverse health effects to the lungs, heart, liver and/or kidneys. Exposure to arsenic can cause damage to the throat, lungs, skin, and/or circulatory system. In addition, EPA has determined that lead is a probable human carcinogen and arsenic is a known human carcinogen.
- 15. An exposure pathway for direct contact with the elevated levels of the hazardous substances at the Ball Fields 5-8 and the Ball Fields 5-8 Planting Strips could arise that would present an unacceptable risk to public health. If the grassy areas on and surrounding Ball Fields 5-8 are not properly maintained, it could result in a reduced grass cover and/or areas containing bare soil. Aeration of the soil or removal of weeds during maintenance may pull subsurface contaminated soil to the surface and distribute it over the outfields and other nearby grassy areas or the surrounding sidewalks, where it may become available for direct contact. While this area was actively maintained to prevent exposures and is currently closed off to the public, if it were to remain in use without proper maintenance, an exposure pathway would arise. If trespassing were to occur or the fields or Planting Strips otherwise became accessible to the public, direct contact with contaminated soil may occur. Contaminated soil may be ingested or adhere to footwear, skin or clothing, and may be tracked off the fields or surrounding grassy areas. In addition, during maintenance activities, or because of a lack of maintenance resulting in the presence of bare soil, contaminated soil may become disturbed and become available for inhalation or may migrate into publicly accessible areas via storm water.
- 16. Although sampling results from Ball Field 9 and the Ball Field 9 Planting Strips indicate that elevated contaminant levels are present only at depths greater than six inches below the ground surface in these areas, an exposure pathway to the contaminated subsurface soil is possible. If these areas were to be significantly disturbed, excavated, or were allowed to become worn down over the years through routine heavy usage of the fields, vandalism, large public events, natural disasters or aeration conducted during maintenance, direct contact with the elevated contaminant levels in the subsurface could occur. In the event that these circumstances were not properly addressed, contaminated soil that could potentially be brought up from the

subsurface could be ingested or adhere to baseball cleats, other footwear, skin or clothing, and could be tracked or carried off the field. Once at the surface, contaminated soil could be further disturbed through the typical heavy usage of the field or by maintenance activities, and could potentially become airborne and available for inhalation or may migrate onto the adjacent walkways via storm water.

## V. CONCLUSIONS OF LAW AND DETERMINATIONS

- 17. Based on the Findings of Fact set forth above, and the administrative record, EPA has determined that:
- a. The Columbia Smelting and Refining Works Site is a "facility" as defined by Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).
- b. The contamination found at the Site, as identified in the Findings of Fact above, includes "hazardous substances" as defined by Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).
- c. Respondent is a "person" as defined by Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).
- d. Respondent is a responsible party under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), and is liable for performance of a response action and for response costs incurred and to be incurred at the Site.
- e. Respondent is the "owner" and/or "operator" of the facility, as defined by Section 101(20) of CERCLA, 42 U.S.C. § 9601(20), and within the meaning of Section 107(a)(1) of CERCLA, 42 U.S.C. § 9607(a)(1).
- f. The conditions described in Paragraphs 10, 11, and 13 of the Findings of Fact above constitute an actual or threatened "release" of a hazardous substance from the facility as defined by Section 101(22) of CERCLA, 42 U.S.C. § 9601(22).
- g. The conditions described in Paragraphs 15 and 16 of the Findings of Fact above may constitute an imminent and substantial endangerment to the public health or welfare or the environment because of an actual or threatened release of a hazardous substance from the facility within the meaning of Section 106(a) of CERCLA, 42 U.S.C. § 9606(a).
- h. The removal action required by this Settlement Agreement is necessary to protect the public health, welfare, or the environment and, if carried out in compliance with the terms of this Settlement Agreement, will be consistent with the NCP, as provided in Section 300.700(c)(3)(ii) of the NCP.

#### VI. SETTLEMENT AGREEMENT AND ORDER

18. Based upon the foregoing Findings of Fact, Conclusions of Law, Determinations, and the administrative record, it is hereby ordered and agreed that Respondent shall comply with all provisions of this Settlement Agreement, including, but not limited to, all attachments to this Settlement Agreement and all documents incorporated by reference into this Settlement Agreement.

# VII. DESIGNATION OF CONTRACTOR, PROJECT COORDINATOR, AND ON-SCENE COORDINATOR

- 19. Respondent shall retain one or more contractors to perform the Work. Respondent has proposed, and EPA has approved, the use of TRC Engineers, Inc. for the Work to be performed under this Settlement Agreement. Respondent shall also notify EPA of the name(s) and qualification(s) of any other contractor(s), including those which may be proposed to replace the contractor approved by EPA in this paragraph. In the case of replacement of TRC Engineers, Inc., Respondent shall make such notification at least 30 days prior to the anticipated date of replacement, and in the case of replacement of subcontractor(s) or other contractors retained to perform the Work, at least ten days prior to commencement of such Work. EPA retains the right to disapprove of any or all of the contractors and/or subcontractors retained by Respondent, including contractors proposed to replace TRC Engineers, Inc. If EPA disapproves of a selected contractor, Respondent shall retain a different contractor and shall notify EPA of that contractor's name and qualifications within 14 days after EPA's disapproval. The contractor proposed by Respondent must be able to demonstrate compliance with ANSI/ASQC E-4-2004, "Quality Systems for Environmental Data and Technology Programs: Requirements with Guidance for Use" (American National Standard), by submitting a copy of the proposed contractor's Quality Management Plan ("QMP"). The QMP should be prepared in accordance with "EPA Requirements for Quality Management Plans (QA/R-2)" (EPA/240/B0-1/002, March 2001, reissued May 2006), or equivalent documentation as required by EPA.
- 20. Respondent has designated, and EPA has approved, Mary Salig of the New York City Department of Parks and Recreation as Respondents' Project Coordinator for the Work required under this Settlement Agreement. The Project Coordinator shall be responsible for administration of all actions by Respondent required by this Settlement Agreement, and shall be responsible for oversight of Respondent's implementation of this Settlement Agreement. To the greatest extent possible, the Project Coordinator shall be present on Site or readily available during Site work. The Project Coordinator shall be knowledgeable at all times about all matters relating to the Work being performed under this Settlement Agreement. Respondents shall ensure that all Work requiring certification by a professional engineer licensed in the State of New York shall be reviewed and certified by such. If a different Project Coordinator is proposed at any time during the Work, EPA retains the right to disapprove of the designated Project Coordinator. If EPA disapproves of the designated Project Coordinator, Respondent shall designate a different Project Coordinator and shall notify EPA of that person's name, address, telephone number, and qualifications within seven days following EPA's disapproval. Notice or

communication relating to this Settlement Agreement from EPA to Respondent's Project Coordinator shall constitute notice or communication to Respondent.

- 21. EPA has designated Margaret Gregor of the Emergency and Remedial Response Division, Region 2, as its On-Scene Coordinator ("OSC"). EPA and Respondent shall have the right, subject to Paragraph 19, to change their respective designated OSC or Project Coordinator. Respondent shall notify EPA seven days before such a change is made.
- 22. The OSC shall be responsible for overseeing Respondent's implementation of this Settlement Agreement. The OSC shall have the authority vested in an OSC by the NCP, including the authority to halt, conduct, or direct any Work required by this Settlement Agreement, or to direct any other removal action undertaken at the Site. Absence of the OSC from the Site shall not be cause for stoppage of work unless specifically directed by the OSC.

## VIII. WORK TO BE PERFORMED

- 23. Respondent shall perform, at a minimum, all actions necessary to implement the Work as set forth and described in this Section. The actions to be implemented generally include, but are not limited to, the following:
- a. Continue to prohibit public access to Ball Fields 5-8 and the surrounding Planting Strips until such time as the removal action described herein is completed, including access restriction with fencing, a physical cover, or other means to eliminate public exposure to the unpaved areas, and maintain these controls until removal action completion to ensure continued protectiveness;
- b. Provide signage, legible from the street and including contact information, regarding the closure of Ball Fields 5-8 at all entrances to Ball Fields 5-8, until such time that the removal action described herein is completed, and maintain signage until removal action completion to ensure continued protectiveness;
- c. Maintain an adequate vegetative cover over all grassy areas of Ball Fields 5-8 and Ball Field 9 and the surrounding Planting Strips until the removal action described herein is completed to reduce the presence of bare soil in these areas and therefore reduce the potential for exposure to contaminants as well as migration of contaminants via air or storm water runoff.
- d. For Ball Fields 5-8, the Ball Fields 5-8 Planting Strips, Ball Field 9 and the Ball Field 9 Planting Strips, place a permeable demarcation layer over the contaminated soil and provide at least a 12-inch cover of clean soil, fill or other material approved by EPA that meets the requirements of 6 NYCRR 375-6.7(d) and the substantive requirements of NYSDEC Technical Guidance for Site Investigation and Remediation (DER-10) 5.4(e). Where it is anticipated that such cover in the Planting Strips will damage the existing trees or adversely affect survival of trees, an alternate methodology to eliminate exposure to soil contaminants

within the upper 12 inches of soil may be proposed by Respondent for approval by EPA within the Interim Design Plans discussed in Paragraphs 26.d and 26.e;

- e. Restore the Site to park usage following completion of the response action pursuant to Paragraph 23.d at the Site; and
- f. Participate with EPA, as requested, in communications with elected officials, park users, community groups, and the general public regarding the planning, implementation, and completion of the above items.
- 24. Respondent further agrees to establish Institutional Control(s) for the Site, as determined by NYSDEC and EPA, and under NYSDEC oversight to prevent future exposure to Site-related hazardous substances that are left in place at the Site, including, but not limited to, a Declaration of Covenants and Restrictions, which cannot be altered without prior NYSDEC approval, for each parcel at the Site. These ICs shall be documented in a NYSDEC-approved Site Management Plan. Respondent agrees to implement the Site Management Plan and ICs at the time of construction completion for each parcel subject to this Settlement Agreement. Respondent shall provide EPA with documentation of all IC commitments.
- 25. For any regulation or guidance referenced in this Settlement Agreement, the reference will be read to include any subsequent modification, amendment, or replacement of such regulation or guidance. Such modifications, amendments, or replacements apply to the Work only after Respondent receives notification from EPA of the modification, amendment, or replacement.

# 26. Work Plan and Implementation.

- a. Within the time frames specified in this Settlement Agreement, in accordance with Paragraph 27 (Submission of Deliverables), Respondent shall submit to EPA for approval the following documents which, collectively, will constitute a work plan for performing the removal action (the "Removal Action Work Plan") generally described in Paragraph 23 above. The Removal Action Work Plan shall provide a description of, and an expeditious schedule for, the actions required by this Settlement Agreement, CERCLA, the NCP, EPA's relevant guidance documents, and other applicable Federal and State laws and regulations.
  - (1) Project Management Plan for Ball Fields 5-8;
  - (2) Project Management Plan for Ball Field 9;
  - (3) Interim Design Plan for Ball Fields 5-8 and the Ball Fields 5-8

Planting Strips;

(4) Interim Design Plan for Ball Field 9 and the Ball Field 9 Planting

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Strips;

- (5) Design and Implementation Plan for Ball Fields 5-8 and the Ball Fields 5-8 Planting Strips;
- (6) Construction Plan for Ball Fields 5-8 and the Ball Fields 5-8 Planting Strips;
- (7) Design and Implementation Plan for Ball Field 9 and the Ball Field 9 Planting Strips; and
- (8) Construction Plan for Ball Field 9 and the Ball Field 9 Planting Strips.
- b. Within 60 days of the Effective Date of this Settlement Agreement, Respondent shall submit a Project Management Plan which sets forth a management structure for all Work at Ball Fields 5-8 and the Ball Fields 5-8 Planting Strips, including, but not limited to, identification of Respondent's key personnel, contractors and overall project teams for the implementation of each component of the Removal Action Work Plan and the associated responsibilities for each person or group. This plan may identify different management structures for different components of the Work required by this Settlement Agreement (e.g., the design work, on-site removal of Site features, installation of the required depth of soil and reinstallation of utilities and park features, and completion of the Final Report). If portions of the Work will involve contractors and subcontractors that are not retained within 30 days of the Effective Date and/or if additional roles are added during performance of the Work, provide updates to the Project Management Plan within seven days of retention of each contractor or assignment of the additional role.
- c. Within 365 days of EPA approval of the Project Management Plan for Ball Fields 5-8 (Paragraph 26.b), Respondent shall submit a Project Management Plan which sets forth a management structure for all Work at Ball Field 9 and the Ball Field 9 Planting Strips, including, but not limited to, identification of Respondent's key personnel, contractors and overall project teams for the implementation of each component of the Removal Action Work Plan and the associated responsibilities for each person or group. This plan may identify different management structures for different components of the Work required by this Settlement Agreement (e.g., the design work, on-site removal of Site features, installation of the required depth of soil and reinstallation of utilities and park features, and completion of the Final Report). If portions of the Work will involve contractors and subcontractors that are not retained within 30 days of the Effective Date and/or if additional roles are added during performance of the Work, provide updates to the Project Management Plan within seven days of retention of each contractor or assignment of the additional role.
- d. Respondent shall submit the Interim Design Plan for Ball Fields 5-8 and the Ball Fields 5-8 Planting Strips in accordance with the schedule provided below, which will include, but not be limited to:

- (1) within seven days of the Effective Date, a description of the actions which have been and will continue to be taken to achieve the required work pursuant to Paragraphs 23.a, 23.b and 23.c, inspection and maintenance schedules for these three items, a template for an inspection report with a maintenance checklist for these three items to be submitted to EPA on no less than a monthly basis, and a contingency plan to be enacted following a change in Site conditions or significant disturbance as discussed in Paragraph 52;
- (2) within 90 days of the Effective Date, a general proposal for the methodology to achieve the response action described in Paragraph 23.d associated with Ball Fields 5-8 and the Ball Fields 5-8 Planting Strips, including preliminary plans, drawings, and sketches of the overall design, designation of staging areas to be utilized during construction, and a discussion of planned provisions for Site security, traffic control, and environmental monitoring; and
- (3) within 90 days of the Effective Date, a general schedule for completion of all activities within the Removal Action Work Plan associated with Ball Fields 5-8 and the Ball Fields 5-8 Planting Strips, including time frames for the completion of all design work and construction drawings, retention of a construction contractor, Site setup/mobilization of personnel and equipment, all on-site construction work including Site restoration, and finalization of the Site Management Plan in support of the Institutional Controls.
- e. Within 365 days of EPA approval of the Interim Design Plan for Ball Fields 5-8 (Paragraph 26.d), Respondent shall submit the Interim Design Plan for Ball Field 9 and the Ball Field 9 Planting Strips, which shall include, but not be limited to:
- (1) a general proposal for the methodology to achieve the response action described in Paragraph 23.d associated with Ball Field 9 and the Ball Field 9 Planting Strips, including preliminary plans, drawings, and sketches of the overall design, designation of staging areas to be utilized during construction, and a discussion of planned provisions for Site security, traffic control, and environmental monitoring; and
- (2) a general schedule for completion of all activities within the Removal Action Work Plan associated with Ball Field 9 and the Ball Field 9 Planting Strips, including time frames for the completion of all design work and construction drawings, retention of a construction contractor, Site setup/mobilization of personnel and equipment, all on-site construction work including Site restoration, and finalization of the Site Management Plan in support of the Institutional Controls.
- f. Within 240 days of EPA approval of the Interim Design Plan for Ball Fields 5-8 (Paragraph 26.d), Respondent shall submit a Design and Implementation Plan which details the design for the removal action and planned logistics for all on-site work for Ball Fields 5-8 and the Ball Fields 5-8 Planting Strips, including, but not limited to:
- (1) the required specifications for all on-site construction work, and identification of and methodology for complying with applicable regulatory requirements;

- (2) a design, including detailed plans and drawings, for achieving the response action set forth in Paragraph 23.d herein at Ball Fields 5-8 and Ball Fields 5-8 Planting Strips. The design should specify compaction requirements necessary to achieve this response action;
- (3) a design, including detailed plans and drawings, for restoration of all areas subject to or affected by the Work at Ball Fields 5-8 and Ball Fields 5-8 Planting Strips, including detailed storm water management plans;
- (4) a construction quality assurance/quality control ("QA/QC") plan that details the approach to quality assurance during construction activities at Ball Fields 5-8 and Ball Fields 5-8 Planting Strips, including inspection and certification of the construction, measurement, and daily logging;
- (5) a detailed schedule for all construction activities, including time frames for the mobilization of all equipment and personnel, the initiation of field work, and all demolition, construction, and Site restoration activities at Ball Fields 5-8 and Ball Fields 5-8 Planting Strips;
- (6) an equipment and materials staging plan, including a list of all equipment and materials to be staged, a schedule for staging of equipment and materials, detailed plans and drawings, and a discussion of and schedule for any permitting requirements;
- (7) procedures and plans for the decontamination of equipment and the disposal of contaminated materials;
- (8) a plan for providing security of all areas that are subject to or affected by the Work at Ball Fields 5-8 and Ball Fields 5-8 Planting Strips, including, but not limited to, measures to be taken to keep unauthorized personnel from entering restricted work areas for the duration of the Work;
  - (9) a Traffic Control Plan, including any permitting requirements;
- (10) an Environmental Monitoring Plan, to include a discussion of community air monitoring and Site safety monitoring; and
- (11) a Transport and Disposal Plan, which includes the planned frequency and estimated quantity of waste that will be generated during performance of the Work, the valid RCRA transporter and disposal identification numbers for each proposed transporter and disposal facility, the date of the most recent State or EPA regulatory inspection of each proposed disposal facility, and any special provisions or conditions attached to the RCRA disposal permits as a result of the most recent inspection, and documentation of the current permit status of proposed transporters and disposal facilities.
- g. Within 300 days of EPA approval of the Design and Implementation Plan for Ball Fields 5-8 (Paragraph 26.f), Respondent shall submit a Construction Plan for Ball Fields

5-8 and the Ball Fields 5-8 Planting Strips which details the construction plans for the removal action and logistics for all on-site work for Ball Fields 5-8 and the Ball Fields 5-8 Planting Strips, including, but not limited to, the documents identified in Paragraphs 26.f(4) through 26.f(11).

- h. Within 240 days of EPA approval of the Interim Design Plan for Ball Field 9 (Paragraph 26.e), Respondent shall submit a Design and Implementation Plan for Ball Field 9 and the Ball Field 9 Planting Strips which details the design for the removal action and planned logistics for all on-site work for Ball Field 9 and Ball Field 9 Planting Strips. These documents shall include all of the documents identified in Paragraph 26.f(1) through 26.f(11) herein for the Work at Ball Field 9 and the Ball Field 9 Planting Strips.
- i. Within 390 days of EPA approval of the Design and Implementation Plan for Ball Field 9 (Paragraph 26.h), Respondent shall submit a Construction Plan for Ball Field 9 and the Ball Field 9 Planting Strips which details the construction plans for the removal action and logistics for all on-site work for Ball Field 9 and the Ball Field 9 Planting Strips, including, but not limited to the documents identified in Paragraphs 26.f(4) through 26.f(11) for Ball Field 9 and the Ball Field 9 Planting Strips.
- j. EPA may approve, disapprove, require revisions to, or modify the draft Removal Action Work Plan in whole or in part as set forth in Paragraphs 27.a(2) and 27.a(3). Respondent shall implement the Removal Action Work Plan as approved in writing by EPA in accordance with the schedule approved by EPA. Once approved, or approved with modifications, the Removal Action Work Plan, the schedule, and any subsequent modifications shall be incorporated into and become fully enforceable under this Settlement Agreement.
- k. Upon approval or approval with modifications of the Removal Action Work Plan, Respondent shall commence implementation of the Work in accordance with the schedule included therein. Respondent shall not commence any Work except in conformance with the terms of this Settlement Agreement.
- l. Unless otherwise provided in this Settlement Agreement, any additional deliverables that require EPA approval under the Removal Action Work Plan shall be reviewed and approved by EPA in accordance with this Paragraph.

## 27. Submission of Deliverables.

# a. <u>General Requirements for Deliverables.</u>

(1) Except as otherwise provided in this Settlement Agreement, Respondent shall direct all submissions required under this Settlement Agreement to Margaret Gregor, On Scene Coordinator, Emergency Remedial and Response Division, 2890 Woodbridge Avenue, MS-211, Edison, New Jersey, 08837, phone: 732-321-4424, email: Gregor.margaret@epa.gov. Respondent shall submit all deliverables required by this Settlement

Agreement, the Removal Action Work Plan, or any approved work plan to EPA in accordance with the schedule set forth in such plan.

- (2) <u>Initial Submissions</u>. Upon receipt by EPA of any plan, report, or other deliverable that is required to be submitted for approval pursuant to this Settlement Agreement, EPA shall either (i) approve the submission; (ii) approve the submission with specified conditions; (iii) disapprove the submission, or (iv) any combination of the foregoing. EPA may elect to modify an initial submission to cure deficiencies in the submission if EPA determines that disapproving the submission and awaiting a resubmission would cause substantial disruption to the Work or if one or more previous submission(s) have been disapproved because of material defects and the deficiencies in the initial submission in question indicate a bad faith lack of effort to submit an acceptable plan, report, or deliverable.
- (3) Resubmissions. Upon receipt of a notice of disapproval or if required by a notice of approval with specified conditions as described in Paragraph 27.a(2), Respondent shall, within fourteen days or such longer time as specified by EPA in such notice, correct the deficiencies and resubmit the plan, report, or deliverable for approval. After review of the resubmitted plan, report, or other deliverable, EPA may (a) approve the resubmission; (b) approve the resubmission with specified conditions; (c) disapprove the resubmission requiring Respondent to correct the deficiencies; (c) modify the resubmission; or (e) any combination of the foregoing. If any initially submitted or resubmitted plan, report, or other deliverable contains a material defect, and it is disapproved or requires modification by EPA as a result of the material defect, this may constitute a lack of compliance under this Settlement Agreement. The provisions of Section XVII (Stipulated Penalties) shall govern the accrual and payment of any stipulated penalties regarding Respondent's submissions under this Section.
- (4) Implementation. Upon approval, approval with conditions, or modification by EPA of any plan, report, or other deliverable, or any portion thereof, such plan, report, or other deliverable shall be incorporated into and enforceable under this Settlement Agreement. The implementation of any non-deficient portion of a plan, report, or other deliverable approved by EPA shall not relieve Respondent of any liability for stipulated penalties under Section XVII (Stipulated Penalties) for the deficient portions. EPA shall be the final arbiter in any dispute regarding the sufficiency or acceptability of any document submitted, any approval, approval with conditions, or modification by EPA of any plan, report, or other deliverable, and all activities performed pursuant to this Settlement Agreement with the exception of those items specifically subject to the procedures in Section XV (Dispute Resolution).
- (5) Respondent shall submit all deliverables in electronic form. If any deliverable includes maps, drawings, or other exhibits that are larger than 8.5" by 11", Respondent shall also provide EPA with paper copies of such exhibits.

# b. <u>Technical Specifications for Deliverables.</u>

- (1) Sampling and monitoring data should be submitted in a manner that is consistent with the Region 2 Electronic Data Deliverable ("EDD") format (information available at <a href="http://www.epa.gov/superfund/region-2-superfund-electronic-data-submission">http://www.epa.gov/superfund/region-2-superfund-electronic-data-submission</a>). Other delivery methods may be allowed if electronic direct submission presents a significant burden or as technology changes.
- (2) Spatial data, including spatially-referenced data and geospatial data, should be submitted: (a) in the Environmental Systems Research Institute ("ESRI") File Geodatabase; and (b) as unprojected geographic coordinates in decimal degree format using North American Datum 1983 (NAD83) or World Geodetic System 1984 (WGS84) as the datum. If applicable, submissions should include the collection method(s). Projected coordinates may optionally be included but must be documented. Spatial data should be accompanied by metadata, and such metadata should be compliant with the Federal Geographic Data Committee ("FGDC") Content Standard for Digital Geospatial Metadata and its EPA profile, the EPA Geospatial Metadata Technical Specification. An add-on metadata editor for ESRI software, the EPA Metadata Editor, complies with these FGDC and EPA metadata requirements and is available at <a href="https://edg.epa.gov/EME/">https://edg.epa.gov/EME/</a>.
- (3) Each file must include an attribute name for each site unit or subunit submitted. Consult <a href="http://www.epa.gov/geospatial/policies.html">http://www.epa.gov/geospatial/policies.html</a> for any further available guidance on attribute identification and naming.
- (4) Spatial data submitted by Respondent does not, and is not intended to, define the boundaries of the Site.

## 28. <u>Health and Safety Plan.</u>

- a. Within the time frames specified below, Respondent shall submit for EPA review and comment plans that ensure the protection of the public health and safety during performance of Work under this Settlement Agreement. Provide a Health and Safety Plan for each phase of the Work, including:
- (1) all pre-construction activities at Ball Fields 5-8 and the Ball Fields 5-8 Planting Strips, including the interim action pursuant to Paragraphs 23.a through 23.c as well as all design work for these areas within 60 days after the Effective Date;
- (2) all construction activities related to the removal action at Ball Fields 5-8 and the Ball Fields 5-8 Planting Strips within 270 days of EPA approval of the Design and Implementation Plan for Ball Fields 5-8 and the Ball Field 5-8 Planting Strips (Paragraph 26.f).; and
- (3) all pre-construction activities at Ball Field 9 and the Ball Field 9 Planting Strips within 365 days of EPA approval of the Health and Safety Plan for pre-

construction activities at Ball Fields 5-8 and the Ball Fields 5-8 Planting Strips (Paragraph 28.a(1));

- (4) all construction activities related to the removal action at Ball Field 9 and the Ball Field 9 Planting Strips within 420 days of EPA approval of the Design and Implementation Plan for Ball Field 9 (Paragraph 26.h).
- b. All Health and Safety Plans shall be prepared in accordance with "OSWER Integrated Health and Safety Program Operating Practices for OSWER Field Activities," Pub. 9285.0-OIC (Nov. 2002), available on the NSCEP database at <a href="http://www.epa.gov/nscep/index.html">http://www.epa.gov/nscep/index.html</a>, and "EPA's Emergency Responder Health and Safety Manual," OSWER Directive 9285.3-12 (July 2005 and updates), available at <a href="http://www.epaosc.org/">http://www.epaosc.org/</a> HealthSafetyManual/manual-index.htm. In addition, the plans shall comply with all currently applicable Occupational Safety and Health Administration ("OSHA") regulations found at 29 C.F.R. Part 1910. The plans shall also include contingency planning in the event of a hurricane or flood, as well as an evacuation plan. Respondent shall incorporate all changes to the plans recommended by EPA and shall implement the plan during the pendency of the removal action.

# 29. Quality Assurance, Sampling, and Data Analysis.

- a. Respondent shall use QA/QC and other technical activities and chain of custody procedures for all samples consistent with "EPA Requirements for Quality Assurance Project Plans (QA/R5)" (EPA/240/B-01/003, March 2001, reissued May 2006), "Guidance for Quality Assurance Project Plans (QA/G-5)" (EPA/240/R-02/009, December 2002), and subsequent amendments to such guidelines upon notification by EPA to Respondent of such amendment. Amended guidelines shall apply only to procedures conducted after such notification.
- Prior to the commencement of any monitoring project under this Settlement Agreement, Respondent shall submit to EPA for approval a Quality Assurance Project Plan ("QAPP") that is consistent with the Removal Action Work Plan, the NCP, the Uniform Federal Policy for Implementing Quality Systems ("UFP-QS"), EPA-505-F-03-001, March 2005; Uniform Federal Policy for Quality Assurance Project Plans ("UFP-QAPP"), Parts 1, 2, and 3, EPA-505-B-04-900A, B, and C, March 2005 and March 2012 or newer, and other guidance documents referenced in the aforementioned guidance documents as well as http://www2.epa.gov/fedfac/assuring-quality-federal-cleanups. Respondent shall ensure that EPA personnel and its authorized representatives are allowed access at reasonable times to all laboratories utilized by Respondent in implementing this Settlement Agreement. In addition, Respondent shall ensure that such laboratories shall analyze all samples submitted by EPA pursuant to the QAPP for quality assurance, quality control, and technical activities that will satisfy the stated performance criteria as specified in the QAPP and that sampling and field activities are conducted in accordance with "EPA QA Field Activities Procedure" (https://www.epa.gov/irmpoli8/epa-qa-field-activities-procedures). Respondent shall ensure that the laboratories it utilizes for the analysis of samples taken pursuant to this Settlement

Agreement meet the competency requirements set forth in EPA's "Policy to Assure Competency of Laboratories, Field Sampling, and Other Organizations Generating Environmental Measurement Data under Agency-Funded Acquisitions" (http://www.epa.gov/fem/pdfs/fem-labcompetency-policy.pdf) and that the laboratories perform all analyses according to accepted EPA methods. Accepted EPA methods consist of, but are not limited to, methods that are documented in the EPA's Contract Laboratory Program (http://www.epa.gov/superfund/programs/clp/), SW 846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (http://www.epa.gov/epawaste/hazard/testmethods/sw846/online/index.htm), "Standard Methods for the Examination of Water and Wastewater" (http://www.standardmethods.org/), 40 C.F.R. Part 136, "Air Toxics - Monitoring Methods" (http://www.epa.gov/ttnamti1/airtox.html)," and any amendments made thereto during the course of the implementation of this Settlement Agreement. However, upon approval by EPA, Respondent may use other appropriate analytical method(s), as long as (a) QA/QC criteria are contained in the method(s) and the method(s) are included in the QAPP, (b) the analytical method(s) are at least as stringent as the methods listed above, and (c) the method(s) have been approved for use by a nationally recognized organization responsible for verification and publication of analytical methods, e.g., EPA, ASTM, NIOSH, OSHA, etc. Respondent shall ensure that all laboratories it uses for analysis of samples taken pursuant to this Settlement Agreement have a documented Quality System that complies with ANSI/ASQC E-4-2004, "Quality Systems for Environmental Data and Technology Programs: Requirements with Guidance for Use" (American National Standard, 2004, and "EPA Requirements for Quality Management Plans (QA/R-2)" (EPA/240/B-01/002, March 2001, reissued May 2006), or equivalent documentation as determined by EPA. EPA may consider Environmental Response Laboratory Network laboratories, laboratories accredited under the National Environmental Laboratory Accreditation Program, or laboratories that meet International Standardization Organization (ISO 17025) standards or other nationally recognized programs (http://www.epa.gov/fem/accredit.htm) as meeting the Quality System requirements. Respondent shall ensure that all field methodologies utilized in collecting samples for subsequent analysis pursuant to this Settlement Agreement are conducted in accordance with the procedures set forth in the QAPP approved by EPA.

- c. Upon request, Respondent shall provide split or duplicate samples to EPA or its authorized representatives. Respondent shall notify EPA not less than seven days in advance of any sample collection activity unless shorter notice is agreed to by EPA. In addition, EPA shall have the right to take any additional samples that EPA deems necessary. Upon request, EPA shall provide to Respondent split or duplicate samples of any samples it takes as part of EPA's oversight of Respondent's implementation of the Work.
- d. Respondent shall submit to EPA the results of all sampling and/or tests or other data obtained or generated by or on behalf of Respondent with respect to the Site and/or the implementation of this Settlement Agreement.
- e. Respondent waives any objections to any data gathered, generated, or evaluated by EPA or Respondent in the performance or oversight of the Work that has been verified according to the QA/QC procedures required by this Settlement Agreement or any EPA-approved work plans or sampling and analysis plans. If Respondent objects to any other data

relating to the Work, Respondent shall submit to EPA a report that specifically identifies and explains its objections, describes the acceptable uses of the data, if any, and identifies any limitations to the use of the data. The report must be submitted to EPA within 15 days after the monthly progress report containing the data.

- 30. Community Involvement Plan. EPA will prepare a Community Involvement Plan, in accordance with EPA guidance and the NCP. If requested by EPA, Respondent shall participate in community involvement activities pursuant to the plan, including participation in (1) the preparation of information regarding the Work for dissemination to the public, with consideration given to including mass media and/or Internet notification, and (2) public meetings that may be held or sponsored by EPA to explain activities at or relating to the Site.

  Respondent's support of EPA's community involvement activities may include providing online access to initial submissions and updates of deliverables to (1) any community advisory groups, (2) any technical assistance grant recipients and their advisors, and (3) other entities to provide them with a reasonable opportunity for review and comment. All community involvement activities conducted by Respondent at EPA's request are subject to EPA's oversight. At EPA's discretion, Respondent shall establish a community information repository at or near the Site to house one copy of the administrative record.
- 31. Post-Removal Site Control. In accordance with the Removal Action Work Plan schedule, or as otherwise directed by EPA, Respondent shall submit a proposal for Post-Removal Site Control which shall include, but not be limited to, a NYSDEC-approved Site Management Plan as discussed in Paragraph 24, to be implemented at the time of construction completion, to prevent exposure to all hazardous substances which are left in place at the Site. This includes scheduled monitoring and maintenance of the removal action at the Site and periodic certification of the effectiveness of all engineering and Institutional Controls which have been, are being, or are planned to be, employed at the Site. Upon EPA approval, Respondent shall conduct Post-Removal Site Control activities until such time as the ICs for the Site are implemented or EPA determines that no further Post-Removal Site Control is necessary. Respondent shall provide EPA with documentation of all Post-Removal Site Control commitments.
- 32. Progress Reports. Respondent shall submit a written progress report to EPA concerning actions undertaken pursuant to this Settlement Agreement on a monthly basis, or as otherwise requested by EPA, from the date of receipt of EPA's approval of the first submittal of the Removal Action Work Plan until issuance of Notice of Completion of Work pursuant to Section XXVII, unless otherwise directed in writing by the OSC. These reports shall describe all significant developments during the preceding period, including the actions performed and the dates on which they were performed, any problems encountered, analytical data received during the reporting period, and the developments anticipated during the next reporting period, including a schedule of actions to be performed, anticipated problems, and planned resolutions of past or anticipated problems.
- 33. <u>Construction Completion Report</u>. Upon completion of construction required under this Settlement Agreement, Respondents shall submit to EPA a Construction Completion

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Report for EPA review and approval. This report shall include, but not be limited to, identification of the boundaries subject to the ICs to be implemented at Ball Fields 5-8, the Ball Fields 5-8 Planting Strips, Ball Field 9 and the Ball Field 9 Planting Strips, a metes and bounds description and survey map, a detailed description of removal activities completed in these areas in accordance with this Settlement Agreement, a detailed description of the source and quality of any fill material imported to the Site, a complete description of the Post-Removal Site Controls and ICs to be employed at each parcel, a description of the nature and extent of all contamination left in place on-site, a summary of the aerial and vertical extent of the materials installed as part of the Site cover system, a summary of any excavation conducted on-site including the depth of the excavations, the quantity of waste removed and where it was disposed, and as-built drawings of all features and materials installed at each parcel as part of the Work with survey markers.

34. <u>Final Report</u>. Within 60 days after completion of all Work required by this Settlement Agreement, other than continuing obligations listed in Paragraph 101 (Notice of Completion of Work), Respondent shall submit for EPA review and approval a final report summarizing the actions taken to comply with this Settlement Agreement. The final report shall conform, at a minimum, with the requirements set forth in Section 300.165 of the NCP entitled "OSC Reports." The final report shall include a good faith estimate of total costs or a statement of actual costs incurred in complying with this Settlement Agreement, a listing of quantities and types of materials removed off-Site or handled on-Site, a discussion of removal and disposal options considered for those materials, a listing of the ultimate destination(s) of those materials, a presentation of the analytical results of all sampling and analyses performed, a schematic, map or drawing showing the overall Site layout following Site restoration activities, as-built drawings of all structures and utilities installed at the Site during Site restoration activities, and accompanying appendices containing all relevant documentation generated during the removal action (e.g., manifests, invoices, bills, contracts, and permits). The final report shall also include the following certification signed by a responsible corporate official of Respondent: "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

## 35. Off-Site Shipments.

a. Respondent may ship hazardous substances, pollutants, and contaminants from the Site to an off-Site facility only if that facility is in compliance with Section 121(d)(3) of CERCLA, 42 U.S.C. § 9621(d)(3), and 40 C.F.R. § 300.440. Respondent will be deemed to be in compliance with Section 121(d)(3) of CERCLA and 40 C.F.R. § 300.440 regarding a shipment if Respondent obtains a prior determination from EPA that the proposed receiving facility for such shipment is acceptable under the criteria of 40 C.F.R. § 300.440(b). Respondent may ship Investigation Derived Waste from the Site to an off-Site facility only if Respondent complies

with EPA's "Guide to Management of Investigation Derived Waste," OSWER 9345.3-03FS (Jan. 1992), as amended or modified by EPA.

- b. Respondent may ship Waste Material from the Site to an out-of-state waste management facility only if, prior to any shipment, it provides written notice to the appropriate state environmental official in the receiving facility's state and to the OSC. This written notice requirement shall not apply to any off-Site shipments when the total quantity of all such shipments will not exceed ten cubic yards. The written notice must include the following information, if available: (1) the name, location and RCRA identification number of the receiving facility; (2) the type and quantity of Waste Material to be shipped; (3) the schedule for the shipment; and (4) the method of transportation. Respondent also shall notify the state environmental official referenced above and the OSC of any major changes in the shipment plan, such as a decision to ship the Waste Material to a different out-of-state facility. Respondent shall provide the written notice after the award of the contract for the removal action and before the Waste Material is shipped.
- 36. Respondent shall conduct the Work required hereunder in accordance with CERCLA, the NCP, and in addition to guidance documents referenced above, *EPA Region 2's* "Clean and Green Policy" which may be found at <a href="http://www.epa.gov/greenercleanups/epa-region-2-clean-and-green-policy">http://www.epa.gov/greenercleanups/epa-region-2-clean-and-green-policy</a>.

# IX. PROPERTY REQUIREMENTS

- 37. Agreements Regarding Access and Non-Interference. Respondent shall provide EPA and its designated representatives with access to the Site. With respect to any portion of the Site that is not owned by Respondent and to which access is required to perform the Work under this Settlement Agreement, Respondent shall use best efforts to secure an agreement for access to such property, enforceable by Respondent and EPA. Any such agreement shall provide EPA, NYSDEC, Respondent, and their representatives, contractors, and subcontractors with access at all reasonable times to said property to conduct any activity required under this Settlement Agreement, including those activities listed in Paragraph 37.a (Access Requirements), within the time frames specified in the Design and Implementation Plan. Respondent shall refrain from using the Site in any manner that EPA determines will pose an unacceptable risk to human health or to the environment because of exposure to Waste Material, or interfere with or adversely affect the implementation, integrity, or protectiveness of this removal action, including the restrictions listed in Paragraph 37.b (Land, Water, or Other Resource Use Restrictions).
- a. <u>Access Requirements</u>. The following is a list of activities for which access is required at the Site:
  - (1) Monitoring the Work;
  - (2) Verifying any data or information submitted to EPA;
  - (3) Conducting investigations regarding contamination at or near the

Site:

- (4) Obtaining samples;
- (5) Assessing the need for, planning, implementing, or monitoring response actions;
- (6) Assessing implementation of QA/QC practices as defined in the approved construction QA/QC plan as provided in the Removal Action Work Plan and as defined in the approved QAPP;
- (7) Implementing the Work pursuant to the conditions set forth in Paragraph 79 (Work Takeover);
- (8) Inspecting and copying records, files, photographs, documents, sampling and monitoring data, operating logs, contracts, or other documents maintained or generated by Respondent or its agents, consistent with Section X (Access to Information);
- (9) Assessing Respondent's compliance with this Settlement Agreement;
- (10) Determining whether the Site is being used in a manner that is prohibited or restricted, or that may need to be prohibited or restricted under this Settlement Agreement; and
- (11) Implementing, monitoring, maintaining, reporting on, and enforcing any land, water, or other resource use restrictions regarding the Site.
- b. <u>Land, Water, or Other Resource use Restrictions</u>. The following is a list of land, water, or other resource use restrictions applicable to the Site during the Work:
  - (1) Prohibiting use of contaminated groundwater;
- (2) Prohibiting the following activities which could result in exposure to contaminants in subsurface soils: moving vehicles, equipment, or materials off-site which were in contact with on-site soils without first decontaminating these items, proceeding with on-site Work without implementing dust control and environmental monitoring measures as specified within the Removal Action Work Plan, and allowing unauthorized personnel at the Site during construction work;
- (3) Ensuring that any new structures at the Site will not be constructed in a manner which could interfere with the removal action; and
- (4) Ensuring that any new structures on the Site will be constructed in a manner which will minimize potential risk of inhalation of contaminants: antimony, arsenic, cobalt, iron, lead and thallium.

- 38. Best Efforts. As used in this Section, "best efforts" means the efforts that a reasonable person in the position of Respondent would use so as to achieve the goal in a timely manner, including the cost of employing professional assistance to secure access and use restriction agreements. If Respondent is unable to accomplish what is required through "best efforts" in a timely manner, Respondent shall notify EPA and include a description of the steps taken to comply with the requirements. If EPA deems it appropriate, it may assist Respondent, or take independent action, in obtaining such access and/or use restrictions, as applicable. All costs incurred by the United States in providing such assistance or taking such action, including the cost of attorney time, constitute Future Response Costs to be reimbursed under Section XIV (Payment of Future Response Costs).
- 39. Respondent shall not Transfer its Site unless it has: (a) first secured EPA's approval of, and transferee's consent to, an agreement that: (i) is enforceable by EPA; and (ii) requires the transferee to provide access to and refrain from using the Site to the same extent as is provided under Paragraphs 37.a and 37.b; and (b) implemented and recorded, as appropriate, all necessary Institutional Controls.
- 40. Respondent shall cooperate with EPA's and the State's efforts to secure and ensure compliance with such Institutional Controls.
- 41. In the event of any Transfer of the Site, unless the United States otherwise consents in writing, Respondent shall continue to comply with its obligations under this Settlement Agreement, including its obligation to secure access and ensure compliance with any land, water, or other resource use restrictions regarding the Site, and to implement, maintain, monitor, and report on Institutional Controls.

## 42. Notice to Successors-in-Title.

- a. Respondent shall, prior to entering into a contract to Transfer the Site, or 60 days prior to Transferring the Site, whichever is earlier:
- (1) Notify the proposed transferee that EPA has selected a removal action regarding the Site, that it has entered into this Settlement Agreement requiring implementation of such removal action, (identifying the name, docket number, and the effective date of this Settlement Agreement); and
- (2) Notify EPA and the State of the name and address of the proposed transferee and provide EPA and the State with a copy of the above notice that it provided to the proposed transferee.
- 43. Notwithstanding any provision of this Settlement Agreement, EPA retains all of its rights to require land, water, or other resource use restrictions, and Institutional Controls, including enforcement authorities related thereto under CERCLA, RCRA, and any other applicable statute or regulations.

#### X. ACCESS TO INFORMATION

44. Respondent shall provide to EPA, upon request, copies of all records, reports, documents, and other information (including records, reports, documents, and other information in electronic form) (hereinafter referred to as "Records") within Respondent's possession or control or that of its contractors or agents relating to activities at the Site or to the implementation of the Work under this Settlement Agreement within a period of three days from EPA's request unless an alternate time frame is proposed by Respondent and approved by EPA, including, but not limited to, sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample traffic routing, correspondence, or other documents or information regarding the Work. Respondent shall also make available to EPA, for purposes of investigation, information gathering, or testimony, its employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work.

# 45. Privileged and Protected Claims.

- a. Respondent may assert that all or part of a Record requested by EPA is privileged or protected as provided under federal law, in lieu of providing the Record, provided Respondent complies with Paragraph 45.b, and except as provided in Paragraph 45.c.
- b. If Respondent asserts such a privilege or protection, it shall provide EPA with the following information regarding such Record: its title; its date; the name, title, affiliation (e.g., company or firm), and address of the author, of each addressee, and of each recipient; a description of the Record's contents; and the privilege or protection asserted. If a claim of privilege or protection applies only to a portion of a Record, Respondent shall provide the Record to EPA in redacted form to mask the privileged or protected portion only. Respondent shall retain all Records that it claims to be privileged or protected until EPA has had a reasonable opportunity to contest the privilege or protection claim and until any such claim has been resolved in Respondent's favor.
- c. Respondent may make no claim of privilege or protection regarding the following: (1) any data regarding the Site, including, but not limited to, all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, radiological, engineering, or transport and disposal data, or the portion of any other Record that evidences conditions at or around the Site; or (2) the portion of any Record that Respondent is required to create or generate pursuant to this Settlement Agreement.
- 46. Notwithstanding any provision of this Settlement Agreement, EPA retains all of its information gathering and inspection authorities and rights, including enforcement authorities related thereto, under CERCLA, RCRA, and any other applicable statutes or regulations.

#### XI. RECORD RETENTION

47. Until ten years after EPA provides Respondent with notice, pursuant to Section XXVII (Notice of Completion of Work), that all Work has been fully performed in accordance with this Settlement Agreement, Respondent shall preserve and retain all non-identical copies of

Records (including Records in electronic form) now in its possession or control, or that come into its possession or control, that relate in any manner to its or any other party's liability under CERCLA with regard to the Site. Respondent must also retain, and instruct its contractors and agents to preserve, for the same period of time specified above all non-identical copies of the last draft or final version of any Records (including Records in electronic form) now in its possession or control or that come into its possession or control that relate in any manner to the performance of the Work, provided, however, that Respondent (and its contractors and agents) must retain, in addition, copies of all data generated during the performance of the Work and not contained in the aforementioned Records required to be retained. Each of the above record retention requirements shall apply regardless of any corporate retention policy to the contrary.

- 48. At the conclusion of the document retention period, Respondent shall notify EPA at least 90 days prior to the destruction of any such Records, and, upon request by EPA, and except as provided in Paragraph 45 (Privileged and Protected Claims), Respondent shall deliver any such Records or copies thereof to EPA.
- 49. Respondent certifies that, to the best of its knowledge and belief, after thorough inquiry, it has not altered, mutilated, discarded, destroyed, or otherwise disposed of any Records (other than identical copies) relating to its potential liability regarding the Site.

## XII. COMPLIANCE WITH OTHER LAWS

- 50. Nothing in this Settlement Agreement limits Respondent's obligations to comply with the requirements of all applicable state and federal laws and regulations, except as provided in Section 121(e) of CERCLA, 42 U.S.C. § 6921(e), and 40 C.F.R. §§ 300.400(e) and 300.415(j). In accordance with 40 C.F.R. § 300.415(j), all on-site actions required pursuant to this Settlement Agreement shall, to the extent practicable, as determined by EPA, considering the exigencies of the situation, attain applicable or relevant and appropriate requirements ("ARARs") under federal environmental or state environmental or facility siting laws. Respondent shall identify ARARs in the Removal Action Work Plan, subject to EPA approval.
- 51. No local, state, or federal permit shall be required for any portion of the Work conducted entirely on-site (i.e., within the areal extent of contamination, in very close proximity to the contamination, and in and adjacent to equipment and material staging areas utilized in association with the Work and necessary for implementation of the Work), including studies, if the action is selected and carried out in compliance with Section 121 of CERCLA, 42 U.S.C. § 9621. Where any portion of the Work that is not on-site requires a federal or state permit or approval, Respondent shall submit timely and complete applications and take all other actions necessary to obtain and to comply with all such permits or approvals. Respondent may seek relief under the provisions of Section XVI (Force Majeure) for any delay in the performance of the Work resulting from a failure to obtain, or a delay in obtaining, any permit or approval required for the Work, provided that it has submitted timely and complete applications and taken all other actions necessary to obtain all such permits or approvals. This Settlement Agreement is not, and shall not be construed to be, a permit issued pursuant to any federal or state statute or regulation.

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#### XIII. EMERGENCY RESPONSE AND NOTIFICATION OF RELEASES

- 52. Emergency Response. If any event occurs during performance of the Work that causes or threatens to cause a release of Waste Material on, at, or from the Site that either constitutes an emergency situation or that may present an immediate threat to public health or welfare or the environment, including a disturbance or a disruption of the Site or other change in Site conditions which may result in exposure to soil containing elevated contaminant levels. Respondent shall immediately take all appropriate action to prevent, abate, or minimize such release, threat of release, and/or potential for exposure. Respondent shall take these actions in accordance with all applicable provisions of this Settlement Agreement, including, but not limited to, the Health and Safety Plan. Respondent shall also immediately notify the OSC or, in the event of his/her unavailability, the Regional Duty Officer through the National Response Center at (800) 424-8802 of the incident or Site conditions, and provide a plan and schedule for the appropriate assessment and/or response actions. In the event that Respondent fails to take appropriate response action as required by this Paragraph, and EPA takes such action instead, such costs shall constitute Future Response Costs, and Respondent shall reimburse EPA all costs of the response action not inconsistent with the NCP pursuant to Section XIV (Payment of Future Response Costs).
- 53. Release Reporting. In addition, in the event of any release of a hazardous substance from the Site, Respondent shall immediately notify the OSC or, in the event of his/her unavailability, the Regional Duty Officer through the National Response Center at (800) 424-8802. Respondent shall submit a written report to EPA within seven days after any such release, setting forth the events that occurred and the measures taken or to be taken to mitigate any release or endangerment caused or threatened by the release and to prevent the reoccurrence of such a release. This reporting requirement is in addition to, and not in lieu of, reporting under Section 103(c) of CERCLA, 42 U.S.C. § 9603(c), and Section 304 of the Emergency Planning and Community Right-To-Know Act of 1986, 42 U.S.C. § 11004.

## XIV. PAYMENT OF FUTURE RESPONSE COSTS

- 54. <u>Payments of Future Response Costs</u>. Respondent shall pay to EPA all Future Response Costs not inconsistent with the NCP pursuant to the instructions in Paragraph 55.
- a. On a periodic basis, EPA will send Respondent a bill requiring payment that includes a SCORPIOS Report, which includes direct and indirect costs incurred by EPA, its contractors, subcontractors, and the United States Department of Justice. Respondent shall make all payments within 30 days after Respondent's receipt of each bill requiring payment, except as otherwise provided in Paragraph 57 (Contesting Future Response Costs), and in accordance with Paragraph 55. (Method of Payment).
- b. <u>Deposit of Future Response Costs Payments</u>. The total amount to be paid by Respondent pursuant to Paragraph 54.a shall be deposited by EPA in the Site Special Account to be retained and used to conduct or finance response actions at or in connection with the Site, or to be transferred by EPA to the EPA Hazardous Substance Superfund, provided, however, that

EPA may deposit a Future Response Costs payment directly into the EPA Hazardous Substance Superfund if, at the time the payment is received, EPA estimates that the Site Special Account balance is sufficient to address currently anticipated future response actions to be conducted or financed by EPA at or in connection with the Site. Any decision by EPA to deposit a Future Response Cost payment directly into the EPA Hazardous Substance Superfund for this reason shall not be subject to challenge by Respondent.

55. <u>Method of Payment</u>. All payments to EPA under this Settlement Agreement shall be made by Fedwire Electronic Funds Transfer to:

Federal Reserve Bank of New York

ABA = 021030004

Account = 68010727

SWIFT address = FRNYUS33

33 Liberty Street

New York, NY 10045

Field Tag 4200 of the Fedwire message should read "D 68010727 Environmental Protection Agency"

and shall reference Site/Spill ID Number A24F and the EPA Index Number CERCLA-02-2016-2010. At the time of payment, Respondent shall send notice that payment has been made to Margaret Gregor and to the EPA Cincinnati Finance Office by email at cinwd\_acctsreceivable@epa.gov, or by mail to:

EPA Cincinnati Finance Office 26 W. Martin Luther King Drive Cincinnati, Ohio 45268

Such notice shall reference Site/Spill ID Number A24F and the EPA docket number for this action.

- 56. <u>Interest</u>. In the event that any payment for Future Response Costs is not made by the date required, Respondent shall pay Interest on the unpaid balance. The Interest on all Future Response Costs shall begin to accrue on the date of the bill transmitted pursuant to Paragraph 55. The Interest shall accrue through the date of Respondent's payment. Payments of Interest made under this Paragraph shall be in addition to such other remedies or sanctions available to the United States by virtue of Respondent's failure to make timely payments under this Section, including, but not limited to, payment of stipulated penalties pursuant to Paragraph 66 (Stipulated Penalties Work).
- 57. <u>Contesting Future Response Costs</u>. Respondent may submit a Notice of Dispute, initiating the procedures of Section XV (Dispute Resolution) regarding payment of any Future Response Costs billed under Paragraph 54 if it determines that EPA has made a mathematical error or included a cost item that is not within the definition of Future Response Costs, or if it believes EPA incurred excess costs as a direct result of an EPA action that was inconsistent with

a specific provision or provisions of the NCP. Such Notice of Dispute shall be submitted in writing within 30 days after receipt of the bill and must be sent to the OSC. Any such Notice of Dispute shall specifically identify the contested Future Response Costs and the basis for objection. If Respondent submits a Notice of Dispute, Respondent shall within the 30-day period pay all uncontested Future Response Costs to EPA in the manner described in Paragraph 54. Simultaneously, Respondent shall establish, in a duly chartered bank or trust company, an interest-bearing escrow account that is insured by the Federal Deposit Insurance Corporation, and remit to that escrow account funds equivalent to the amount of the contested Future Response Costs. Respondent shall send to the OSC a copy of the transmittal letter and check paying the uncontested Future Response Costs, and a copy of the correspondence that establishes and funds the escrow account, including, but not limited to, information containing the identity of the bank and bank account under which the escrow account is established as well as a bank statement showing the initial balance of the escrow account. If EPA prevails in the dispute, within 5 days after the resolution of the dispute, Respondent shall pay the sums due (with accrued interest) to EPA in the manner described in Paragraph 54. If Respondent prevails concerning any aspect of the contested costs, Respondent shall pay that portion of the costs (plus associated accrued interest) for which it did not prevail to EPA in the manner described in Paragraph 54. Respondent shall be disbursed any balance of the escrow account. The dispute resolution procedures set forth in this Paragraph in conjunction with the procedures set forth in Section XV (Dispute Resolution) shall be the exclusive mechanisms for resolving disputes regarding Respondent's obligation to reimburse EPA for its Future Response Costs.

## XV. DISPUTE RESOLUTION

- 58. The dispute resolution procedures of this Section shall be the exclusive mechanism for resolving disputes arising under the following Sections of this Settlement Agreement: Paragraph 57 of Section XIV (Payment of Future Response Costs); Section XVII (Stipulated Penalties); and Paragraph 79 (Work Takeover). The Parties shall attempt to resolve any disagreements concerning these Sections of this Settlement Agreement expeditiously and informally.
- 59. <u>Informal Dispute Resolution</u>. If Respondent objects to any EPA action taken pursuant to Paragraph 57 of Section XIV (Payment of Future Response Costs), Section XVII (Stipulated Penalties), or Paragraph 79 (Work Takeover), it shall send EPA a written Notice of Dispute describing the objection(s). For disputes regarding Section XVII (Stipulated Penalties), or Paragraph 79 (Work Takeover), any such Notice of Dispute shall be sent within 10 days after such action. For disputes regarding Paragraph 57 of Section XIV (Payment of Future Response Costs), any Notice of Dispute shall be submitted in writing within 30 days after receipt of a bill. EPA and Respondent shall have 14 days from EPA's receipt of Respondent's Notice of Dispute to resolve the dispute through formal negotiations (the "Negotiation Period"). The Negotiation Period may be extended at the sole discretion of EPA. Any agreement reached by the Parties pursuant to this Section shall be in writing and shall, upon signature by the Parties, be incorporated into and become an enforceable part of this Settlement Agreement.

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- 60. Formal Dispute Resolution. If the Parties are unable to reach an agreement within the Negotiation Period, Respondent shall, within 20 days after the end of the Negotiation Period, submit a statement of position to the OSC. EPA may, within 20 days thereafter, submit a statement of position. Thereafter, an EPA management official at the Deputy Division Director level or higher will issue a written decision on the dispute to Respondent. EPA's decision shall be incorporated into and become an enforceable part of this Settlement Agreement. Following resolution of the dispute, as provided by this Section, Respondent shall fulfill the requirement that was the subject of the dispute in accordance with the agreement reached or with EPA's decision, whichever occurs.
- 61. Except as provided in Paragraph 57 (Contesting Future Response Costs) or as agreed by EPA, the invocation of formal dispute resolution procedures under this Section does not extend, postpone, or affect in any way any obligation of Respondent under this Settlement Agreement. Stipulated penalties with respect to the disputed matter shall continue to accrue, but payment shall be stayed pending resolution of the dispute as provided in Paragraph 69. Notwithstanding the stay of payment, stipulated penalties shall accrue from the first day of noncompliance with any applicable provision of this Settlement Agreement. In the event that Respondents do not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section XVII (Stipulated Penalties).

## XVI. FORCE MAJEURE

- 62. "Force Majeure", for purposes of this Settlement Agreement, is defined as any event arising from causes beyond the control of Respondent, of any entity controlled by Respondent, including Respondent's contractors, that delays or prevents the performance of any obligation under this Settlement Agreement despite Respondent's best efforts to fulfill the obligation. The requirement that Respondent exercise "best efforts to fulfill the obligation" includes using best efforts to anticipate any potential force majeure event and to use best efforts to address the effects of any potential force majeure event (a) as it is occurring and (b) following the potential force majeure event such that the delay and any adverse effects of the delay are minimized to the greatest extent possible. "Force majeure" does not include financial inability to complete the Work or increased cost of that performance.
- obligation under this Settlement Agreement for which Respondent intends or may intend to assert a claim of force majeure, Respondent shall notify EPA's OSC orally or, in his or her absence, the alternate EPA OSC, or, in the event both of EPA's designated representatives are unavailable, the Chief of the Removal Action Branch of the Emergency and Remedial Response Division, EPA Region 2, within three days of when Respondent first knew that the event might cause a delay. Within ten days thereafter, Respondent shall provide in writing to EPA an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay or the effect of the delay; Respondent's rationale for attributing such delay to a force majeure event; and a statement as to whether, in the opinion of Respondent, such event may cause or contribute to an endangerment to public health

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or welfare, or the environment. Respondent shall include with any notice all available documentation supporting its claim that the delay was attributable to a force majeure event. Respondent shall be deemed to know of any circumstance of which Respondent, any entity controlled by Respondent, including Respondent's contractors, knew or should have known. Failure to comply with the above requirements regarding an event shall preclude Respondent from asserting any claim of force majeure regarding that event, provided, however, that if EPA, despite the late or incomplete notice, is able to assess to its satisfaction whether the event is a force majeure under Paragraph 62 and whether Respondent has exercised its best efforts under Paragraph 62, EPA may, in its unreviewable discretion, excuse in writing Respondent's failure to submit timely or complete notices under this Paragraph.

64. If EPA agrees that the delay or anticipated delay is attributable to a force majeure event, the time for performance of the obligations under this Settlement Agreement that are affected by the force majeure event will be extended by EPA for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the force majeure event shall not, of itself, extend the time for performance of any other obligation. If EPA does not agree that the delay or anticipated delay has been or will be caused by a force majeure event, EPA will notify Respondent in writing of its decision. If EPA agrees that the delay is attributable to a force majeure event, EPA will notify Respondent in writing of the length of the extension, if any, for performance of the obligations affected by the force majeure event.

#### XVII. STIPULATED PENALTIES

- 65. Respondent shall be liable to EPA for stipulated penalties in the amounts set forth in Paragraphs 66 and 67 for failure to comply with the requirements of this Settlement Agreement specified below, unless excused under Section XVI (Force Majeure). "Compliance" by Respondent shall include completion of all activities and obligations, including payments, required under this Settlement Agreement, or any deliverable approved under this Settlement Agreement, in accordance with all applicable requirements of law, this Settlement Agreement, the Removal Action Work Plan, and any deliverables approved under this Settlement Agreement and within the specified time schedules established by and approved under this Settlement Agreement. Respondent may request, and EPA shall consider, an extension for any milestone provided such request is made five business days prior to the milestone date.
- 66. <u>Stipulated Penalty Amounts Work (Including Payments and Excluding Deliverables).</u>
- a. The following stipulated penalties shall accrue per violation per day for any noncompliance identified in Paragraph 66.b:

Penalty Per Violation Per Day	Period of Noncompliance
\$1,500	1st through 14th day
\$3,000	15th through 30th day

# b. <u>Compliance Milestones.</u>

- (1) Submission and, if necessary, revision and resubmission of any plan, report, or other deliverable required by Section VIII (Work to be Performed) or by the Removal Action Work Plan or by any plan that is prepared pursuant to Section VIII or the Removal Action Work Plan and approved by EPA;
- (2) Any deadline imposed by the Removal Action Work Plan or by any plan that is prepared pursuant to Section VIII or the Removal Action Work Plan and approved by EPA;
- (3) Any obligations imposed by Section XIII (Emergency Response and Notification of Releases);
  - (4) Any obligations imposed by Section IX (Property Requirements)
- (5) Permitting split or duplicate samples, quality assurance, and other requirements pursuant to Section VIII (Work to be Performed)
- (6) Designation of Contractors and/or Project Coordinator pursuant to Section VII (Designation of Contractor, Project Coordinator, and On-Scene Coordinator);
- (7) Establishment and maintenance of financial assurance in compliance with the timelines and other substantive and procedural requirements of Section XXV (Financial Assurance);
- (8) Timely notification regarding any delay or anticipated delay, consistent with Section XVI (Force Majeure);
- (9) Indemnification and Insurance Requirements set forth in Section XXIII (Indemnification) and Section XXIV (Insurance);
- (10) Timely submission of written notification of any off-site shipments of Waste Material from the Site to an out-of-state waste management facility pursuant to Paragraph 35;
- (11) Submission of documents and other information in accordance with X (Access to Information);
- (12) Payments required by Section XIV (Payment of Future Response Costs);
- Work Plan or by any plan that is prepared pursuant to Section VIII and approved by EPA; and

- (14) Establishment of escrow accounts, if necessary, to hold contested Future Response Costs pursuant to the process set forth in Paragraph 57.
- 67. <u>Stipulated Penalty Amounts Deliverables</u>. The following stipulated penalties shall accrue per violation per day for failure to submit timely or adequate deliverables other than those specifically listed above in Paragraph 66, pursuant to this Settlement Agreement:

Penalty Per Violation Per Day	Period of Noncompliance
\$ 750	1st through 14th day
\$1,500	15th through 30th day
\$3,000	31st day and beyond

- 68. In the event that EPA assumes performance of all or any portion(s) of the Work pursuant to Paragraph 79 (Work Takeover), Respondent shall be liable for a stipulated penalty in the amount of \$5 million. Stipulated penalties under this Paragraph are in addition to the remedies available to EPA under Paragraphs 79 (Work Takeover) and Section XXV (Financial Assurance).
- 69. All penalties shall begin to accrue on the day after the complete performance is due or the day a violation occurs and shall continue to accrue through the final day of the correction of the noncompliance or completion of the activity. However, stipulated penalties shall not accrue: (a) with respect to a deficient submission under Paragraph 26 (Work Plan and Implementation), during the period, if any, beginning on the 31st day after EPA's receipt of such submission until the date that EPA notifies Respondent of any deficiency; and (b) with respect to a decision by the EPA Management Official at the Deputy Director level or higher, under Paragraph 60 (Formal Dispute Resolution), during the period, if any, beginning the 21<sup>st</sup> day after the Negotiation Period begins until the date that the EPA Management Official issues a final decision regarding such dispute. Nothing in this Settlement Agreement shall prevent the simultaneous accrual of separate penalties for separate violations of this Settlement Agreement. Penalties shall continue to accrue during any dispute resolution period, and shall be paid within 15 days after the agreement or the receipt of EPA's decision.
- 70. Following EPA's determination that Respondent has failed to comply with a requirement of this Settlement Agreement, EPA may provide Respondent with written notification of the failure and describe the noncompliance. EPA may send Respondent a written demand for payment of the penalties. Penalties shall accrue as provided in and consistent with the preceding Paragraph regardless of whether EPA has notified Respondent of a violation, however, any obligation to pay any penalties that may be assessed does not arise until notice of the failure and the description of the noncompliance have been provided by EPA.
- 71. All penalties accruing under this Section shall be due and payable to EPA within 30 days after Respondent's receipt from EPA of a demand for payment of the penalties. All payments to EPA under this Section shall indicate that the payment is for stipulated penalties and shall be made in accordance with Paragraph 54 (Payments of Future Response Costs).

- 72. If Respondent fails to pay stipulated penalties and Interest when due, the United States may institute proceedings to collect the penalties and Interest.
- 73. The payment of penalties and Interest, if any, shall not alter in any way Respondent's obligation to complete the performance of the Work required under this Settlement Agreement.
- 74. Nothing in this Settlement Agreement shall be construed as prohibiting, altering, or in any way limiting the ability of EPA to seek any other remedies or sanctions available by virtue of Respondent's violation of this Settlement Agreement or of the statutes and regulations upon which it is based, including, but not limited to, penalties pursuant to Sections 106(b) and 122(l) of CERCLA, 42 U.S.C. §§ 9606(b) and 9622(l), and punitive damages pursuant to Section 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3), provided however, that EPA shall not seek civil penalties pursuant to Section 106(b) or Section 122(l) of CERCLA or punitive damages pursuant to Section 107(c)(3) of CERCLA for any violation for which a stipulated penalty is provided in this Settlement Agreement, except in the case of a willful violation of this Settlement Agreement or in the event that EPA assumes performance of a portion or all of the Work pursuant to Paragraph 79 (Work Takeover).
- 75. Notwithstanding any other provision of this Section, EPA may, in its unreviewable discretion, waive any portion of stipulated penalties that have accrued pursuant to this Settlement Agreement.

#### XVIII. COVENANTS BY EPA

76. Except as provided in Section XIX (Reservations of Rights by EPA), EPA covenants not to sue or to take administrative action against Respondent pursuant to Sections 106 and 107(a) of CERCLA, 42 U.S.C. §§ 9606 and 9607(a), for the Work and Future Response Costs. These covenants shall take effect upon the Effective Date. These covenants are conditioned upon the complete and satisfactory performance by Respondent of its obligations under this Settlement Agreement. These covenants extend only to Respondent and do not extend to any other person.

# XIX. RESERVATIONS OF RIGHTS BY EPA

77. Except as specifically provided in this Settlement Agreement, nothing in this Settlement Agreement shall limit the power and authority of EPA or the United States to take, direct, or order all actions necessary to protect public health, welfare, or the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants, or contaminants, or hazardous or solid waste on, at, or from the Site. Further, nothing in this Settlement Agreement shall prevent EPA from seeking legal or equitable relief to enforce the terms of this Settlement Agreement, from taking other legal or equitable action as it deems appropriate and necessary, or from requiring Respondent in the future to perform additional activities pursuant to CERCLA or any other applicable law.

- 78. The covenants set forth in Section XVIII (Covenants by EPA) do not pertain to any matters other than those expressly identified therein. EPA reserves, and this Settlement Agreement is without prejudice to, all rights against Respondent with respect to all other matters, including, but not limited to:
- a. liability for failure by Respondent to meet a requirement of this Settlement Agreement;
- b. liability for costs not included within the definition of Future Response Costs;
  - c. liability for performance of response actions other than the Work;
  - d. criminal liability;
- e. liability for violations of federal or state law that occur during or after implementation of the Work;
- f. liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments;
- g. liability arising from the past, present, or future disposal, release, or threat of release of Waste Materials outside of the Site; and
- h. liability for costs to be incurred by the Agency for Toxic Substances and Disease Registry, if determined to be necessary, related to the Site but not paid as Future Response Costs under this Settlement Agreement.

#### 79. Work Takeover.

- a. In the event EPA determines that Respondent: (1) has ceased implementation of any portion of the Work; (2) is seriously or repeatedly deficient or late in their performance of the Work; or (3) is implementing the Work in a manner that may cause an endangerment to human health or the environment, EPA may issue a written notice ("Work Takeover Notice") to Respondent. Any Work Takeover Notice issued by EPA (which writing may be electronic) will specify the grounds upon which such notice was issued and will provide Respondent a period of three days within which to remedy the circumstances giving rise to EPA's issuance of such notice.
- b. If, after expiration of the three-day notice period specified in Paragraph 79.a, Respondent has not remedied to EPA's satisfaction the circumstances giving rise to EPA's issuance of the relevant Work Takeover Notice, EPA may at any time thereafter assume the performance of all or any portion(s) of the Work as EPA deems necessary ("Work Takeover"). EPA will notify Respondent in writing (which writing may be electronic) if EPA determines that implementation of a Work Takeover is warranted under this Paragraph 79.b.

c. Notwithstanding any other provision of this Settlement Agreement, EPA retains all authority and reserves all rights to take any and all response actions authorized by law.

## XX. COVENANTS BY RESPONDENT

- 80. Respondent covenants not to sue and agrees not to assert any claims or causes of action against the United States, or its contractors or employees, with respect to the Work, Future Response Costs, or this Settlement Agreement, including, but not limited to:
- a. any direct or indirect claim for reimbursement from the EPA Hazardous Substance Superfund through Sections 106(b)(2), 107, 111, 112, or 113 of CERCLA, 42 U.S.C. §§ 9606(b)(2), 9607, 9611, 9612, or 9613, or any other provision of law;
- b. any claims under Sections 107 and 113 of CERCLA, Section 7002(a) of RCRA, 42 U.S.C. § 6972(a), or state law regarding the Work, Future Response Costs, or this Settlement Agreement; and
- c. any claim arising out of response actions at or in connection with the Site, including any claim under the United States Constitution, the Tucker Act, 28 U.S.C. § 1491, the Equal Access to Justice Act, 28 U.S.C. § 2412, or at common law.
- 81. Except as provided in Paragraph 84 (Waiver of Claims by Respondent), these covenants not to sue shall not apply in the event the United States brings a cause of action or issues an order pursuant to any of the reservations set forth in Section XIX (Reservations of Rights by EPA), other than in Paragraph 78.a (liability for failure to meet a requirement of this Settlement Agreement), 78.d (criminal liability), or 78.e (violations of federal/state law during or after implementation of the Work), but only to the extent that Respondent's claims arise from the same response action, response costs, or damages that the United States is seeking pursuant to the applicable reservation.
- 82. Nothing in this Settlement Agreement shall be deemed to constitute approval or preauthorization of a claim within the meaning of Section 111 of CERCLA, 42 U.S.C. § 9611, or 40 C.F.R. § 300.700(d).
- 83. Respondent reserves, and this Settlement Agreement is without prejudice to, claims against the United States, subject to the provisions of Chapter 171 of Title 28 of the United States Code, and brought pursuant to any statute other than CERCLA or RCRA and for which the waiver of sovereign immunity is found in a statute other than CERCLA or RCRA, for money damages for injury or loss of property or personal injury or death caused by the negligent or wrongful act or omission of any employee of the United States, as that term is defined in 28 U.S.C. § 2671, while acting within the scope of his or her office or employment under circumstances where the United States, if a private person, would be liable to the claimant in accordance with the law of the place where the act or omission occurred. However, the foregoing shall not include any claim based on EPA's selection of response actions, or the oversight or approval of Respondent's deliverables or activities.

## 84. Waiver of Claims by Respondent.

a. Respondent agrees not to assert any claims and to waive all claims or causes of action (including but not limited to claims or causes of action under Sections 107(a) and 113 of CERCLA) that it may have for all matters relating to the Site against any person where the person's liability to Respondent with respect to the Site is based solely on having arranged for disposal or treatment, or for transport for disposal or treatment, of hazardous substances at the Site, or having accepted for transport for disposal or treatment of hazardous substances at the Site, if all or part of the disposal, treatment, or transport occurred before April 1, 2001, and the total amount of material containing hazardous substances contributed by such person to the Site was less than 110 gallons of liquid materials or 200 pounds of solid materials.

## b. Exceptions to Waivers.

- (1) The waivers under this Paragraph 84 shall not apply with respect to any defense, claim, or cause of action that a Respondent may have against any person otherwise covered by such waivers if such person asserts a claim or cause of action relating to the Site against Respondent.
- (2) The waiver under Paragraph 84.a shall not apply to any claim or cause of action against any person otherwise covered by such waiver if EPA determines that: (i) the materials containing hazardous substances contributed to the Site by such person contributed significantly or could contribute significantly, either individually or in the aggregate, to the cost of the response action or natural resource restoration at the Site; or (ii) such person has failed to comply with any information request or administrative subpoena issued pursuant to Section 104(e) or 122(e) of CERCLA, 42 U.S.C. § 9604(e) or 9622(e), or Section 3007 of RCRA, 42 U.S.C. § 6927, or has impeded or is impeding, through action or inaction, the performance of a response action or natural resource restoration with respect to the Site; or if (iii) such person has been convicted of a criminal violation for the conduct to which the waiver would apply and that conviction has not been vitiated on appeal or otherwise.

#### XXI. OTHER CLAIMS

- 85. By issuance of this Settlement Agreement, the United States and EPA assume no liability for injuries or damages to persons or property resulting from any acts or omissions of Respondent. The United States or EPA shall not be deemed a party to any contract entered into by Respondent or its directors, officers, employees, agents, successors, representatives, assigns, contractors, or consultants in carrying out actions pursuant to this Settlement Agreement.
- 86. Except as expressly provided in Paragraphs 84 (Waiver of Claims by Respondent) and Section XVIII (Covenants by EPA), nothing in this Settlement Agreement constitutes a satisfaction of or a release from any claim or cause of action against Respondent or any person not a party to this Settlement Agreement for any liability such person may have under CERCLA, other statutes, or common law, including but not limited to any claims of the United States for

costs, damages, and interest under Sections 106 and 107 of CERCLA, 42 U.S.C. §§ 9606 and 9607.

87. No action or decision by EPA pursuant to this Settlement Agreement shall give rise to any right to judicial review, except as set forth in Section 113(h) of CERCLA, 42 U.S.C. § 9613(h).

# XXII. EFFECT OF SETTLEMENT/CONTRIBUTION

- 88. Except as provided in Paragraphs 84 (Waiver of Claims by Respondent), nothing in this Settlement Agreement shall be construed to create any rights in, or grant any cause of action to, any person not a Party to this Settlement Agreement. Except as provided in Section XX (Covenants by Respondent), each of the Parties expressly reserves any and all rights (including, but not limited to, pursuant to Section 113 of CERCLA, 42 U.S.C. § 9613), defenses, claims, demands, and causes of action which each Party may have with respect to any matter, transaction, or occurrence relating in any way to the Site against any person not a Party hereto. Nothing in this Settlement Agreement diminishes the right of the United States, pursuant to Section 113(f)(2) and (3) of CERCLA, 42 U.S.C. § 9613(f)(2)-(3), to pursue any such persons to obtain additional response costs or response action and to enter into settlements that give rise to contribution protection pursuant to Section 113(f)(2).
- 89. The Parties agree that this Settlement Agreement constitutes an administrative settlement pursuant to which Respondent has, as of the Effective Date, resolved liability to the United States within the meaning of Sections 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 9622(h)(4), and is entitled, as of the Effective Date, to protection from contribution actions or claims as provided by Sections 113(f)(2) and 122(h)(4) of CERCLA, or as may be otherwise provided by law, for the "matters addressed" in this Settlement Agreement. The "matters addressed" in this Settlement Agreement are the Work and Future Response Costs.
- 90. The Parties further agree that this Settlement Agreement constitutes an administrative settlement pursuant to which Respondent has, as of the Effective Date, resolved liability to the United States within the meaning of Section 113(f)(3)(B) of CERCLA, 42 U.S.C. § 9613(f)(3)(B).
- 91. Respondent shall, with respect to any suit or claim brought by it for matters related to this Settlement Agreement or the Site, notify EPA in writing no later than 60 days prior to the initiation of such suit or claim. Respondent also shall, with respect to any suit or claim brought against it for matters related to this Settlement Agreement or the Site, notify EPA in writing within ten days after service of the complaint or claim upon it. In addition, Respondent shall notify EPA within ten days after service or receipt of any Motion for Summary Judgment and within ten days after receipt of any order from a court setting a case for trial, for matters related to this Settlement Agreement.
- 92. In any subsequent administrative or judicial proceeding initiated by EPA, or by the United States on behalf of the EPA, for injunctive relief, recovery of response costs, or other

relief relating to the Site, Respondent agrees not to assert any defense or claim based on the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim-splitting, or other defenses based upon any contention that the claims raised in the subsequent proceeding were or should have been brought in the past; provided however, that nothing in this Paragraph affects the enforceability of the covenant by EPA set forth in Section XVIII (Covenants by EPA).

### XXIII. INDEMNIFICATION

- 93. The United States does not assume any liability by entering into this Settlement Agreement. Respondent shall indemnify, save, and hold harmless the United States, its officials, agents, employees, contractors, subcontractors, and representatives for or from any and all claims or causes of action arising from, or on account of, negligent or other wrongful acts or omissions of Respondent, its officers, directors, employees, agents, contractors, or subcontractors, or any persons acting on Respondent's behalf or under its control, in carrying out activities pursuant to this Settlement Agreement. Further, Respondent agrees to pay the United States all costs it incurs, including but not limited to attorneys' fees and other expenses of litigation and settlement arising from, or on account of, claims made against the United States based on negligent or other wrongful acts or omissions of Respondent, its officers, directors, employees, agents, contractors, subcontractors, or any persons acting on its behalf or under its control, in carrying out activities pursuant to this Settlement Agreement. The United States shall not be held out as a party to any contract entered into by or on behalf of Respondent in carrying out activities pursuant to this Settlement Agreement. Neither Respondent nor any such contractor shall be considered an agent of the United States.
- 94. The United States shall give Respondent notice of any claim for which the United States plans to seek indemnification pursuant to this Section and shall consult with Respondent prior to settling such claim.
- 95. Respondent covenants not to sue and agrees not to assert any claims or causes of action against the United States for damages or reimbursement or for set-off of any payments made or to be made to the United States, arising from or on account of any contract, agreement, or arrangement between Respondent and any person for performance of Work on or relating to the Site, including, but not limited to, claims on account of construction delays. In addition, Respondent shall indemnify and hold harmless the United States with respect to any and all claims for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between Respondent and any person for performance of Work on or relating to the Site, including, but not limited to, claims on account of construction delays.

### XXIV. INSURANCE

96. Respondent is self-insured and represents that it has and will maintain adequate insurance coverage or indemnification for liabilities for injuries or damages to persons or property which may result from the activities to be conducted by or on behalf of Respondent pursuant to this Settlement Agreement. For the duration of the Settlement Agreement, Respondent shall satisfy, or shall ensure that its contractors or subcontractors satisfy, all

applicable laws and regulations regarding the provision of worker's compensation insurance for all persons performing the Work on behalf of Respondent in furtherance of this Settlement Agreement.

### XXV. FINANCIAL ASSURANCE

- 97. Within (30) days of the effective date of this Settlement Agreement, Respondent shall demonstrate its financial ability to complete the Work, initially valued at \$36 million, by submitting to EPA one or more of the following:
- a. Information showing that it has outstanding, rated, general obligation bonds that (i) are not secured by insurance, a letter of credit, or other collateral or guarantee and (ii) have a current rating of Aaa, or Baa as issued by Moody's, or AAA, AA, A, or BBB, as issued by Standard and Poor's on all such general obligation bonds; or
  - b. Such other form of financial insurance as EPA may approve in writing.

### XXVI. MODIFICATION

- 98. The OSC may modify any plan or schedule or the Removal Action Work Plan in writing or by oral direction. Any oral modification will be memorialized in writing by EPA promptly, but it shall have as its effective date the date of the OSC's oral direction. Any other requirements of this Settlement Agreement may be modified in writing by mutual agreement of the parties.
- 99. If Respondent seeks permission to deviate from any approved work plan or schedule or the Removal Action Work Plan, Respondent's Project Coordinator shall submit a written request to EPA for approval outlining the proposed modification and its basis. Respondent may not proceed with the requested deviation until receiving oral or written approval from the OSC pursuant to Paragraph 98.
- 100. No informal advice, guidance, suggestion, or comment by the OSC or other EPA representatives regarding any deliverable submitted by Respondent shall relieve Respondent of its obligation to obtain any formal approval required by this Settlement Agreement, or to comply with all requirements of this Settlement Agreement, unless it is formally modified.

### XXVII. NOTICE OF COMPLETION OF WORK

101. When EPA determines, after EPA's review of the Final Report, that all Work has been fully performed in accordance with this Settlement Agreement (excluding those continuing obligations required by this Settlement Agreement that do not fall within the definition of Work, such as the implementation of Institutional Controls), EPA will provide written notice to Respondent that the Work has been successfully completed. If EPA determines that such Work has not been completed in accordance with this Settlement Agreement, EPA will notify Respondent, provide a list of the deficiencies, and require that Respondent modify the Removal Action Work Plan, as appropriate, in order to correct such deficiencies. Respondent shall

implement the modified and approved Removal Action Work Plan and shall submit a modified Final Report in accordance with the EPA notice. Failure by Respondent to implement the approved modified Removal Action Work Plan shall be a violation of this Settlement Agreement.

### XXVIII. INTEGRATION/APPENDICES

102. This Settlement Agreement and its appendices constitute the final, complete, and exclusive agreement and understanding among the Parties with respect to the settlement embodied in this Settlement Agreement. The parties acknowledge that there are no representations, agreements, or understandings relating to the settlement other than those expressly contained in this Settlement Agreement. "Appendix 1" is the map of the Site and is attached to and incorporated into this Settlement Agreement.

### XXIX. EFFECTIVE DATE

103. This Settlement Agreement shall be effective upon receipt of a fully executed copy of this Settlement Agreement by Respondent from EPA.

IT IS SO AGREED AND ORDERED:

July 7, 2016

U.S. ENVIRONMENTAL PROTECTION AGENCY:

Walter E. Mugdan

Director, Emergency and Remedial Response Division U.S. Environmental Protection Agency, Region 2

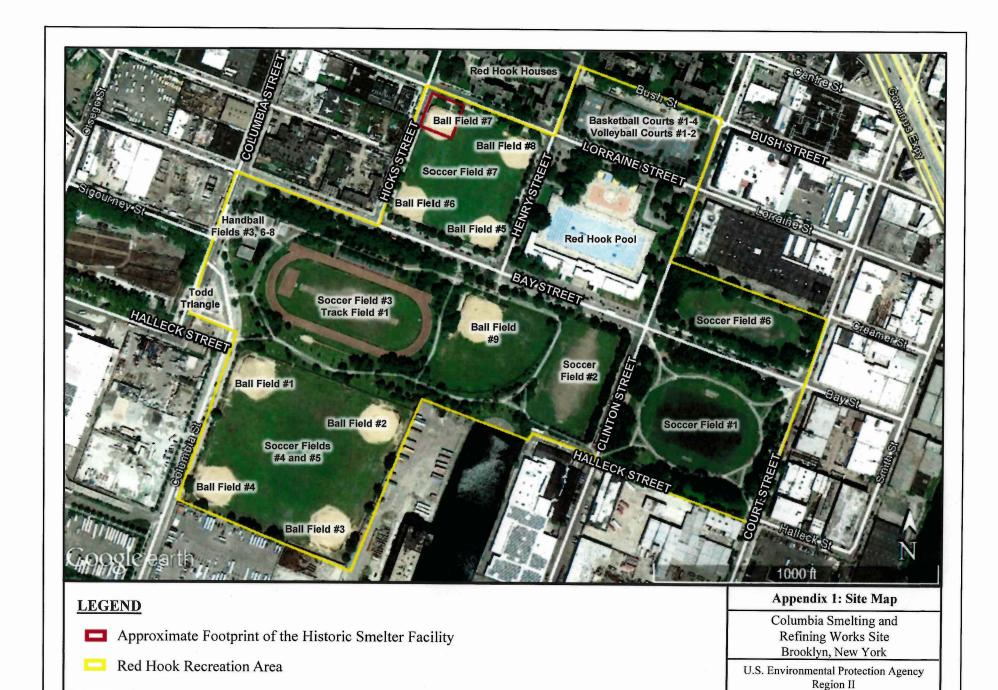
Signature Page for Settlement Agreement Regarding Columbia Smelting and Refining Works Site

City of New York

City of New York

Liam Kavanagh
First Deputy Commissioner
New York City Department of Parks and Recreation

i e.a.



# NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION STATE SUPERFUND PROGRAM ECL §27-1301 et seg.

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In the Matter a Remedial Program for

ORDER ON CONSENT AND ADMINISTRATIVE SETTLEMENT Index No. R2-20170726-452

**DEC Site Name:** Former Columbia Smelting

DEC Site No.: 224231

Site Address: Approximately 98 Lorraine Street

Brooklyn, NY 11231

Kings County

Kings County Tax Map Block 581, Lot 1; Block 614, Lot 300; and

Block 602, Lot 1

Hereinafter referred to as "Site"

by:

The City of New York

Hereinafter referred to as "Respondent"

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- 1. A. The New York State Department of Environmental Conservation ("Department") is responsible for inactive hazardous waste disposal site remedial programs pursuant to Article 27, Title 13 of the Environmental Conservation Law ("ECL") and Part 375 of Title 6 of the Official Compilation of Codes, Rules and Regulations ("6 NYCRR") and may issue orders consistent with the authority granted to the Commissioner by such statute.
- B. The Department is responsible for carrying out the policy of the State of New York to conserve, improve and protect its natural resources and environment and control water, land, and air pollution consistent with the authority granted to the Department and the Commissioner by Article 1, Title 3 of the ECL.
- C. Respondent, by and through the Department of Parks and Recreation, entered into an Administrative Order on Consent with the U.S. Environmental Protection Agency (Index No. CERCLA-02-2016-2010) to perform a Removal Action at the Site, which provides for the Respondent to establish a Declaration of Covenants and Restrictions for the Site and implement a Department-approved Site Management Plan for the Site. The Administrative Order on Consent is attached as Exhibit "A". All capitalized terms used and not defined in this Order shall have the same meaning as set forth in the Administrative Order on Consent between the U.S. Environmental Protection Agency and Respondent.

- D. This Order is issued pursuant to the Department's authority under, *inter alia*, ECL Article 27, Title 13 and ECL 3-0301, and resolves Respondent's liability to the State as provided at 6 NYCRR 375-1.5(b)(5).
- 2. The Site is not currently listed in the Registry of Inactive Hazardous Waste Disposal Sites in New York State.
- 3. Respondent consents to the issuance of this Order without (i) an admission or finding of liability, fault, wrongdoing, or violation of any law, regulation, permit, order, requirement, or standard of care of any kind whatsoever; (ii) an acknowledgment that there has been a release or threatened release of hazardous waste at or from the Site; and/or (iii) an acknowledgment that a release or threatened release of hazardous waste at or from the Site constitutes a significant threat to the public health or environment.
- 4. Notwithstanding the presence of hazardous waste at the Site and the threatened release of hazardous waste at or from the Site, it is currently understood that Respondent did not cause the presence of hazardous waste at the Site.
- 5. Solely with regard to the matters set forth below, Respondent hereby waives any right to a hearing as may be provided by law, consents to the issuance and entry of this Order, and agrees to be bound by its terms. Respondent consents to and agrees not to contest the authority or jurisdiction of the Department to issue or enforce this Order, and agrees not to contest the validity of this Order or its terms or the validity of data submitted to the Department by Respondent pursuant to this Order.

**NOW**, having considered this matter and being duly advised, **IT IS ORDERED THAT**:

### I. Real Property

The Site subject to this Order has been assigned number 224231, consists of approximately 4.170 acres, is a portion of Red Hook Recreation Area, and is known and designated as Kings County Tax Map Block 581, Lot 1 developed with four baseball fields numbered 5, 6, 7, 8; and Ballfield 9 consisting of approximately 3.4 acres, is a portion of Red Hook Recreation Area, and is known and designated as Kings County Tax Map Block 614, Lot 300; and Block 602, Lot 1 and is as follows:

### Subject Property Description

Areas 1 and 2 on the Map of the Site attached as Exhibit "B" and described in the Deed Restriction attached as Exhibit "C"

98 Lorraine Street Brooklyn, NY 11231

Owner: NYC Department of Parks and Recreation

### II. Work Plan

The Site Management Plan for Area 1 shall be submitted to the Department within thirty (30) days after the effective date of this Order, followed by a modified Site Management Plan to include Area 2 within 90 days after the effective date of this Order.

### III. <u>Deed Restriction</u>

Within thirty (30) days after the approval of a final Site Management Plan, Respondent shall file a Deed Restriction for the Site to run with the land in favor of the State and attached here as Exhibit "C".

### IV. Payment of State Costs

Invoices shall be sent to Respondent at the following address:

New York City Department of Parks & Recreation Attn: Budget The Arsenal, Central Park 830 Fifth Avenue New York, NY 10065

with an electronic copy to:

New York City Department of Parks & Recreation Attn: General Counsel The Arsenal, Central Park 830 Fifth Avenue New York, NY 10065 noah.rappaport@parks.nyc.gov

Respondent shall not be liable for past State Costs incurred prior to the effective date of this Order.

### V. Communications

- A. All written communications required by this Consent Order shall be transmitted by United States Postal Service, by private courier service, by hand delivery, or by electronic mail.
  - 1. Communication from Respondent shall be sent to:

Wendi Zheng (1 hard copy (unbound for work plans) & 1 electronic copy)
New York State Department of Environmental Conservation
Division of Environmental Remediation
One Hunters Point Plaza 47-40 21st Street
Long Island City, NY 11101

### wendi.zheng@dec.ny.gov

Christine Vooris (electronic copy only)
New York State Department of Health
Bureau of Environmental Exposure Investigation
Empire State Plaza
Corning Tower Room 1787
Albany, NY 12237
beei@health.ny.gov

Patrick Foster, Esq. (electronic correspondence only)
New York State Department of Environmental Conservation
Office of General Counsel
One Hunters Point Plaza 47-40 21st Street
Long Island City, NY 11101
patrick.foster@dec.ny.gov

2. Communication from the Department to Respondent shall be sent to:

Kay Zias
New York City Department of Parks & Recreation
The Olmsted Center
Flushing Meadows-Corona Park
Queens, NY 11368

New York City Department of Parks & Recreation Attn: General Counsel The Arsenal, Central Park 830 Fifth Avenue New York, NY 10065 noah.rappaport@parks.nyc.gov

- B. The Department and Respondent reserve the right to designate additional or different addressees for communication on written notice to the other. Additionally, the Department reserves the right to request that the Respondent provide more than one paper copy of any work plan or report.
- C. Each party shall notify the other within ninety (90) days after any change in the addresses listed in this paragraph or in Paragraph 1 of this section.

### VI. <u>Miscellaneous</u>

A. Appendix A - "Standard Clauses for All New York State Superfund Orders" is attached to and hereby made a part of this Order as if set forth fully herein, except for Section I and II, which are not applicable to this matter.

- B. In the event of a conflict between the terms of this Order (including any and all attachments thereto and amendments thereof) and the terms of Appendix A, the terms of this Order shall control.
- C. The effective date of this Order is the 10th day after it is signed by the Commissioner or the Commissioner's designee.

**DATED:** April 1, 2021

BASIL SEGGOS COMMISSIONER NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

By:

Michael J. Ryan, Fl.E., Director

Division of Environmental Remediation

### CONSENT BY RESPONDENT

Respondent hereby consents to the issuing and entering of this Consent Order, waives Respondent's right to a hearing herein as provided by law, and agrees to be bound by this Consent Order.

New York City Department of Parks & Recreation
The Arsenal, Central Park
830 Fifth Avenue
New York, NY 10065

By:

Title: Deput Commissioner

Date: 2 | 1 / 2 |

STATE OF NEW YORK )

SS:

COUNTY OF New York )

On the Moday of Tobrowy in the year 2021, before me, the undersigned, personally appeared Lian Karum (full name) personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her capacity, and that by his/her signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

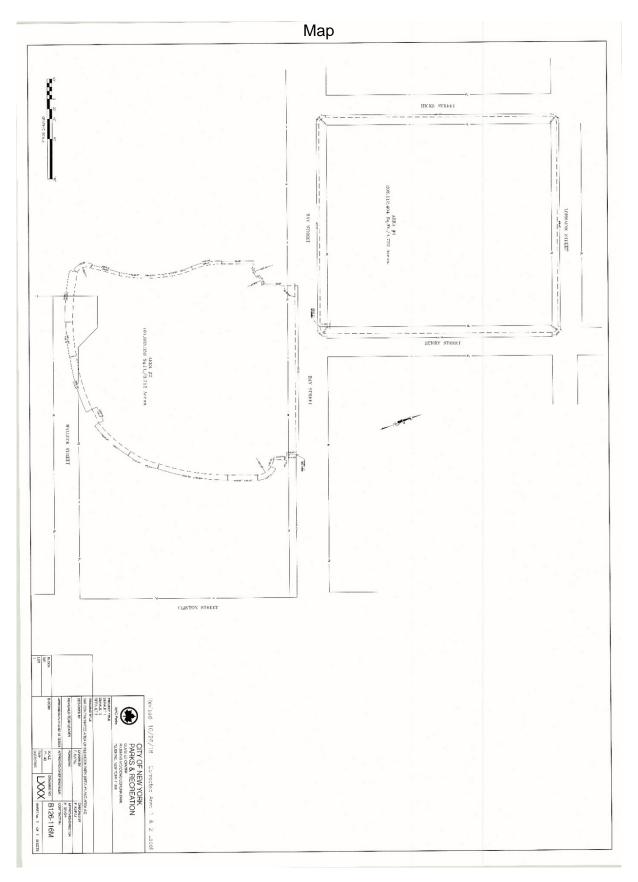
ALESSANDRO G. OLIVIERI
Notary Public, State of New York
No. 02OL6001937
Qualified in New York County
Commission Expires

Nótary Public. State of New York

## EXHIBIT "A"

Administrative Order on Consent Index Number CERCLA-02-2016-2010 Incorporated by Reference

# EXHIBIT "B"



## EXHIBIT "C"

**Deed Restriction** 

### **DECLARATION OF COVENANTS AND RESTRICTIONS**

**THIS COVENANT** made this \_\_\_ day of \_\_\_, 2021, by the City of New York ("City"), a municipal corporation organized and existing under the laws of the State of New York ("State"), acting by and through the New York City Department of Parks and Recreation ("DPR") and having an office for the transaction of business 830 Fifth Avenue, New York, New York, 10065, in favor of the New York State Department of Environmental Conservation ("Department"), an agency of the State, with offices at 625 Broadway, Albany, New York, 12233 (collectively "Parties");

**WHEREAS**, City is the owner of and DPR has jurisdiction over roughly 58 acres of parkland located in the Red Hook neighborhood of Brooklyn, County of Kings and State of New York, shown in Deed Restriction Exhibit "A" ("Red Hook Park").

**WHEREAS**, the land subject to these Covenants and Restrictions is a 4.17-acre portion of Red Hook Park, and is known and designated as Block 581, Lot 1 developed with four baseball fields numbers 5, 6, 7, and 8; and ball field 9, a 3.4 acre portion of Red Hook Recreation Area, and is known and designated as Kings County Tax Map Block 614, Lot 300; and Block 602, Lot 1 (collectively the "Property") as shown on Deed Restriction Exhibit "A" and described in Deed Restriction Exhibit "B".

WHEREAS, Environmental Protection Agency ("EPA") has found a release of a Comprehensive Environmental Response, Compensation Liability Act ("CERCLA") hazardous substance, as defined in Section 101(22) of CERCLA, 42 U.S.C. Section § 9601(22), at the Property and EPA found that a CERCLA removal action is warranted to mitigate the threat to public health or welfare posed by the presence of the hazardous substance at the Property. EPA has required the City to undertake CERCLA action to address the hazardous substance at the Property.

WHEREAS, in a Consent Order dated July 2016, Index No. CERCLA-02-2016-2010 ("Order") between EPA and City, EPA selected a remedial action for the Property pursuant to CERCLA, which provided for, in pertinent part, the installation of a demarcation fabric placed over the existing contaminated soil and the placement of one foot of new soil above on the Property, preventing further public exposure.

**WHEREAS**, the Order further provides a Site Management Plan ("SMP") will be implemented on the Property, the implementation of which will be overseen by the Department.

**WHEREAS**, the Parties hereto have agreed that City shall execute a deed restriction for the Property to run with the land in perpetuity that recites and requires compliance with the SMP, as identified in the Order.

**WHEREAS**, City wishes to cooperate fully with the Department in the implementation of the SMP at the Property.

**NOW THEREFORE**, the City, for itself and its successors and/or assigns, covenants that:

First, the Property subject to this Declaration of Covenants and Restrictions is as shown on a map attached to this declaration as Deed Restriction Exhibit "A" and described in Deed Restriction Exhibit "B" and made a part hereof.

Second, unless prior written approval by the Department or, if the Department shall no longer exist, any New York State agency or agencies subsequently created to protect the environment of the State and the health of the State's citizens, hereinafter referred to as "the Relevant Agency," is first obtained, where contamination remains at the Property subject to the provisions of the SMP, there shall be no construction, use or occupancy of the Property that results in the disturbance or excavation of the Property which threatens the integrity of the engineering controls or which results in unacceptable human exposure to contaminated soils.

Third, the owner of the Property shall not disturb, remove, or otherwise interfere with the installation, use, operation, and maintenance of engineering controls required for the Remedy, which are described in the SMP, unless in each instance the owner first obtains a written waiver of such prohibition from the Department or Relevant Agency.

Fourth, the Property shall not be used for purposes other than for parkland use, without the express written waiver of such prohibition by the Department or Relevant Agency.

Fifth, the owner of the Property shall prohibit the use of the groundwater underlying the Property from extraction points on the Property or from other property under their control, without treatment to render it safe for drinking water or for industrial purposes, as appropriate, and the user must first notify and obtain written approval to do so from the Department or Relevant Agency.

Sixth, the owner of the Property shall provide a periodic certification, prepared and submitted by a professional engineer or environmental professional acceptable to the Department or Relevant Agency, which will certify that the institutional and engineering controls put in place are unchanged from the previous certification, comply with the SMP, and have not been impaired.

Seventh, the owner of the Property shall continue in full force and effect any institutional and engineering controls required for the Remedy and maintain such controls, unless the owner first obtains permission to discontinue such controls from the Department or Relevant Agency, in compliance with the approved SMP, which is incorporated and made enforceable hereto, subject to modifications as approved by the Department or Relevant Agency.

Eighth, this Declaration is and shall be deemed a covenant that shall run with the land and shall be binding upon all future owners of the Property, and shall provide that the owner and its successors and assigns consent to enforcement by the Department or Relevant Agency of the prohibitions and restrictions that the Order requires to be recorded, and hereby covenant not to contest the authority of the Department or Relevant Agency to seek enforcement.

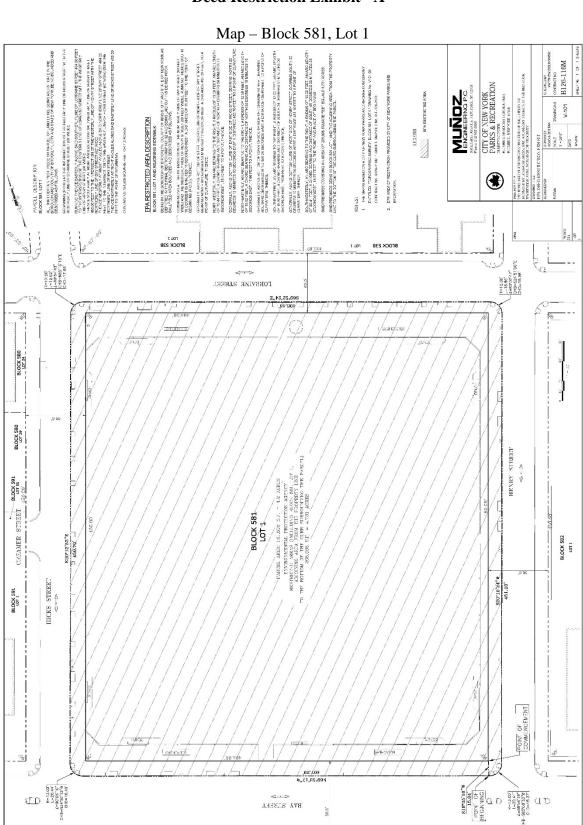
Ninth, any deed of conveyance of the Property, or any portion thereof, shall recite, unless the Department or Relevant Agency has consented to the termination of such covenants and

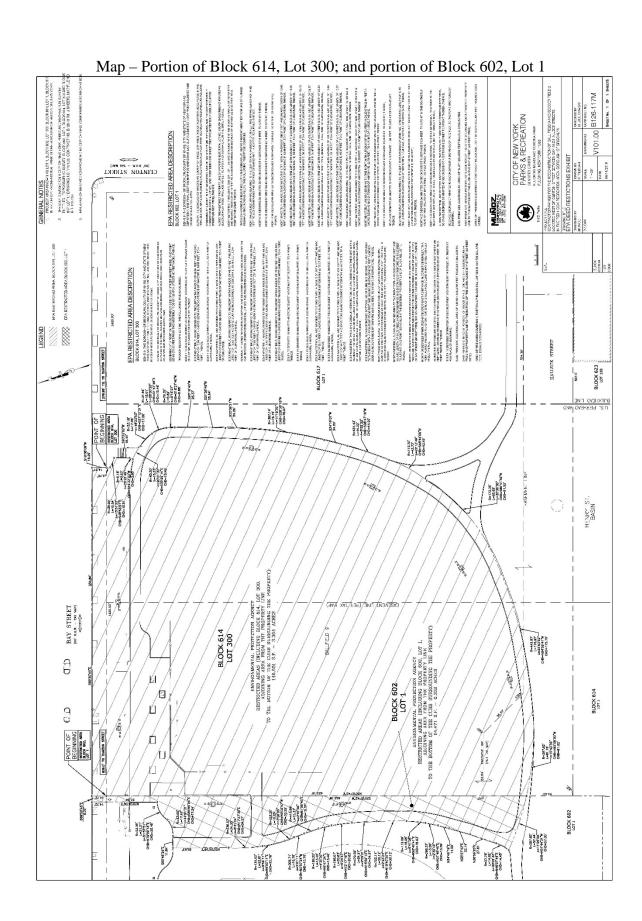
restrictions, that said conveyance is subject to this Declaration of Covenants and Restrictions.

Tenth, City shall record this instrument, within thirty (30) days of execution of this instrument by the Commissioner or her/his authorized representative in the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law

IN WITNESS WHEREOF, City has caused this instrument to be signed in its name.	
	Executed this day of, 2021.  New York City/ Department of Parks and Recreation
	By:
	Title:
	Acknowledgment
State of New York County of Kings	)
County of Kings	) 55.
, persona the individual(s) who me that he/she/they ex signature(s) on the ins	y of, in the year 2021, before me, the undersigned, personally appeared lly known to me or proved to me on the basis of satisfactory evidence to be see name is (are) subscribed to the within instrument and acknowledged to secuted the same in his/her/their capacity(ies), and that by his/her/their strument, the individual(s), or the person upon behalf of which the secuted the instrument.
Notary Public – State	of New York

## **Deed Restriction Exhibit "A"**





### **Deed Restriction Exhibit "B"**

# BLOCK 581 Lot 1 ENVIRONMENTAL PROTECTION AGENCY RESTRICTED AREA

BEING IN THE BOROUGH OF BROOKLYN, COUNTY OF KINGS, CITY AND STATE OF NEW YORK AS DEPICTED IN THE FINAL SECTION MAP NO. 32 AND BEING LAID OUT INSIDE RED HOOK BALLFIELD AREA BOUNDED AND DESCRIBED AS FOLLOWS:

COMMENCING AT THE INTERSECTION OF THE NORTHERLY SIDE OF BAY STREET (80 FEET WIDE) AND THE WESTERLY SIDE OF HENRY STREET (60 FEET WIDE), RUNNING THENCE SOUTH 18 DEGREES 05 MINUTES 16 SECONDS WEST A DISTANCE OF 15.04 FEET TO THE POINT OF BEGINNING (P.O.B.); THENCE,

GENERALLY, ALONG BOTTOM OF STEEL FACED CURB OF NORTH SIDE OF BAY STREET, BEARING NORTH 69 DEGREES 53 MINUTES 17 SECONDS WEST A DISTANCE 407.29 FEET, TO A POINT OF CURVATURE; THENCE,

NORTHWESTERLY, AN ARC BEARING TO THE RIGHT, A RADIUS OF 13.00 FEET, AN ARC LENGTH OF 20.44 FEET, A CHORD BEARING AND DISTANCE OF NORTH 24 DEGREES 50 MINUTES 12 SECONDS WEST, 18.40 FEET TO A POINT; THENCE,

GENERALLY, ALONG BOTTOM CURB OF EAST SIDE OF HICKS STREET, BEARING NORTH 20 DEGREES 12 MINUTES 53 SECONDS EAST A DISTANCE 450.70 FEET TO A POINT OF CURVATURE:

NORTHEASTERLY, AN ARC BEARING TO THE RIGHT, A RADIUS OF 12.50 FEET, AN ARC LENGTH OF 19.62 FEET, A CHORD BEARING AND DISTANCE OF NORTH 65 DEGREES 10 MINUTES 15 SECONDS EAST, 17.66 FEET TO A POINT; THENCE,

GENERALLY, ALONG BOTTOM OF CURB OF SOUTH SIDE OF LORRAINE STREET, BEARING SOUTH 69 DEGREES 52 MINUTES 24 SECONDS EAST A DISTANCE 408.46 FEET, TO A POINT OF CURVATURE; THENCE,

SOUTHEASTERLY, AN ARC BEARING TO THE RIGHT, A RADIUS OF 12.00 FEET, AN ARC LENGTH OF 18.86 FEET, A CHORD BEARING AND DISTANCE OF SOUTH 24 DEGREES 51 MINUTES 00 SECONDS EAST, 16.98 FEET TO A POINT; THENCE,

GENERALLY, ALONG BOTTOM CURB OF WEST SIDE OF HENRY STREET, BEARING SOUTH 20 DEGREES 10 MINUTES 24 SECONDS WEST A DISTANCE 451.10 FEET TO A POINT OF CURVATURE; THENCE,

SOUTHWESTERLY, AN ARC BEARING TO THE RIGHT, A RADIUS OF 13.00 FEET, AN ARC LENGTH OF 20.41 FEET, A CHORD BEARING AND DISTANCE OF SOUTH 65 DEGREES 08 MINUTES 33 SECONDS WEST, 18.37 FEET TO THE POINT AND PLACE OF BEGINNING.

SAID PREMISES COVERING AN AREA OF 206,096 SQUARE FEET EQUALS 4.731 ACRES.

SAID PREMISES BEING IN BLOCK 581 LOT 1 AND THE ADJOINING AREA FROM THE PROPERTY LINE TO THE BOTTOM OF THE CURB SURROUNDING THE PARCEL.

# PART OF BLOCK 614 Lot 300 ENVIRONMENTAL PROTECTION AGENCY RESTRICTED AREA

BEING IN THE BOROUGH OF BROOKLYN, COUNTY OF KINGS, CITY AND STATE OF NEW YORK AS DEPICTED IN THE FINAL SECTION MAP # 32 AND BEING LAID OUT INSIDE RED HOOK PARK BOUNDED AND DESCRIBED AS FOLLOWS;

BEGINNING AT A POINT ON THE SOUTHERLY SIDE OF BAY STREET (80 FEET WIDE), SAID POINT BEING 276.95 FEET FROM THE WESTERLY SIDE OF CLINTON STREET (80 FEET WIDE); THENCE,

THROUGH BLOCK 614, LOT 300, THE FOLLOWING FIVE (5) COURSES.

SOUTH 19 DEGREES 08 MINUTES 09 SECONDS WEST A DISTANCE OF 3.72 FEET THROUGH BLOCK 614 LOT 300, TO A POINT OF CURVATURE; THENCE,

SOUTHEASTERLY, AN ARC BEARING TO THE LEFT WITH A RADIUS OF 38.09 FEET AND AN ARC LENGTH OF 10.54 FEET A CHORD BEARING AND DISTANCE OF \$46°53'07"E, 10.51 FEET, TO A POINT; THENCE,

SOUTH 20 DEGREES 22 MINUTES 02 SECONDS WEST A DISTANCE OF 15.41 FEET, TO A POINT OF CURVATURE; THENCE,

SOUTHWESTERLY, AN ARC BEARING TO THE RIGHT WITH A RADIUS OF 8.18 FEET AND AN ARC LENGTH OF 3.63 FEET A CHORD BEARING AND DISTANCE OF \$42°37'03"W, 3.60 FEET, TO A POINT OF CURVATURE;

SOUTHEASTERLY, AN ARC BEARING TO THE RIGHT WITH A RADIUS OF 43.70 FEET AND AN ARC LENGTH OF 15.53 FEET A CHORD BEARING AND DISTANCE OF S39°29'14"E, 15.45 FEET, TO A POINT OF CURVATURE; THENCE,

GENERALLY, ALONG THE EXTERIOR BOTTOM LINE OF CURBED SIDEWALK AROUND BALLFIELD 9 AND THROUGH AFORESAID BLOCK 614, LOT 300, THE FOLLOWING NINE (9) COURSES.

SOUTHEASTERLY, AN ARC BEARING TO THE RIGHT WITH A RADIUS OF 53.18 FEET AND AN ARC LENGTH OF 17.08 FEET A CHORD BEARING AND DISTANCE OF S27°12'31"E, 17.00 FEET, TO A POINT OF CURVATURE: THENCE,

SOUTHEASTERLY, AN ARC BEARING TO THE RIGHT WITH A RADIUS OF 31.94 FEET AND AN ARC LENGTH OF 15.61 FEET A CHORD BEARING AND DISTANCE OF S01°47'45"E, 15.46 FEET, TO A POINT OF CURVATURE; THENCE,

SOUTHEASTERLY, AN ARC BEARING TO THE RIGHT WITH A RADIUS OF 79.32 FEET AND AN ARC LENGTH OF 8.69 FEET A CHORD BEARING AND DISTANCE OF \$16°27'40"W, 8.68 FEET, TO A POINT; THENCE,

SOUTH 20 DEGREES 18 MINUTES 40 SECONDS WEST A DISTANCE OF 25.37 FEET, TO A POINT; THENCE

SOUTH 21 DEGREES 38 MINUTES 46 SECONDS WEST A DISTANCE OF 25.64 FEET, TO A POINT; THENCE,

SOUTH 22 DEGREES 09 MINUTES 21 SECONDS WEST A DISTANCE OF 24.26 FEET, TO A POINT OF CURVATURE; THENCE,

SOUTHWESTERLY, AN ARC BEARING TO THE RIGHT WITH A RADIUS OF 387.14 FEET AND AN ARC LENGTH OF 76.19 FEET A CHORD BEARING AND DISTANCE OF S28°36'18"W, 76.07 FEET, TO A POINT; THENCE,

SOUTH 34 DEGREES 16 MINUTES 07 SECONDS WEST A DISTANCE OF 24.09 FEET, TO A POINT OF CURVATURE; THENCE,

SOUTHWESTERLY, AN ARC BEARING TO THE RIGHT WITH A RADIUS OF 431.43 FEET AND AN ARC LENGTH OF 44.22 FEET A CHORD BEARING AND DISTANCE OF S38°47'16"W, 44.20 FEET, TO A POINT; THENCE,

SOUTHWESTERLY THROUGH SIDEWALK INTERSECTION, AN ARC BEARING TO THE RIGHT WITH A RADIUS OF 112.70 FEET AND AN ARC LENGTH OF 43.73 FEET A CHORD BEARING AND DISTANCE OF \$48°44'08"W, 43.45 FEET, TO A POINT OF CURVATURE, SAID POINT BEING GENERALLY ALONG BOTTOM LINE OF CURB; THENCE,

SOUTHWESTERLY, ALONG AFORESAID BOTTOM LINE OF CURB AND BEYOND, AN ARC BEARING TO THE RIGHT WITH A RADIUS OF 173.35 FEET AND AN ARC LENGTH OF 92.62 FEET A CHORD BEARING AND DISTANCE OF S66°41'52"W, 91.52 FEET, TO A POINT OF CURVATURE; THENCE,

NORTHWESTERLY, ALONG THE AFORESAID BOTTOM LINE OF CURB AND BEYOND, AN ARC BEARING TO THE RIGHT WITH A RADIUS OF 442.97 FEET AND AN ARC LENGTH OF 176.97 FEET A CHORD BEARING AND DISTANCE OF N84°26'41"W, 175.79 FEET, TO A POINT OF CURVATURE; THENCE,

NORTHWESTERLY, ALONG AN ARC BEARING TO THE RIGHT WITH A RADIUS OF 297.82 FEET AND AN ARC LENGTH OF 81.78 FEET, A CHORD BEARING AND DISTANCE OF N65°08'00"W, 81.52 FEET, TO A POINT, SAID POINT BEING ALONG THE EASTERLY PROPERTY LINE OF BLOCK 602, LOT 1; THENCE,

NORTH 20 DEGREES 07 MINUTES 43 SECONDS EAST A DISTANCE OF 423.18 FEET, TO A POINT IN THE SAME, SAID POINT BEING THE INTERSECTION OF THE SOUTHERLY RIGHT OF WAY (R.O.W.) OF BAY STREET (80 FEET WIDE) AND SOUTHEASTERLY CORNER OF BLOCK 602, LOT 1; THENCE,

NORTH 20 DEGREES 07 MINUTES 43 SECONDS EAST A DISTANCE 14.72 FEET GENERALLY, TO A POINT ALONG THE SOURTHERLY BOTTOM LINE OF STEEL FACED CURB IN BAY STREET (80 FEET WIDE); THENCE,

ALONG THE BOTTOM LINE OF STEEL FACED CURB ON THE SOUTHERLY SIDE OF BAY STREET (80 FEET WIDE), SOUTH 69 DEGREES 50 MINUTES 45 SECONDS EAST A DISTANCE 330.80 FEET, TO A POINT THEREIN; THENCE,

SOUTH 19 DEGREES 08 MINUTES 09 SECONDS WEST A DISTANCE OF 14.57 FEET, TO THE POINT AND PLACE OF BEGINNING.

SAID PREMISES COVERING AN AREA OF 146,551 SQUARE FEET EQUALS 3.364 ACRES. SAID PREMISES BEING A PORTION OF BLOCK 614 LOT 300 AND THE ADJOINING AREA FROM THE PROPERTY LINE TO THE BOTTOM OF THE CURB ALONG BAY STREET (80 FEET WIDE).

AREA OF PREMISES COVERING A PORTION OF BLOCK 614, LOT 300 IS 141,705 SQUARE FEET, EQUALS 3.253 ACRES.

# **APPENDIX "A"**

# STANDARD CLAUSES FOR ALL NEW YORK STATE STATE SUPERFUND ORDERS

### APPENDIX A

# STANDARD CLAUSES FOR ALL NEW YORK STATE SUPERFUND ADMINISTRATIVE ORDERS

The parties to the State Superfund Order (hereinafter "Order") agree to be bound by the following clauses which are hereby made a part of the Order. The word "Respondent" herein refers to any party to the Order, other than the New York State Department of Environmental Conservation (hereinafter "Department").

### I. Citizen Participation Plan

Within twenty (20) days after the effective date of this Order, Respondent shall submit for review and approval a written citizen participation plan prepared in accordance with the requirements of ECL §27-1417 and 6 NYCRR sections 375-1.10 and 375-3.10. Upon approval, the Citizen Participation Plan shall be deemed to be incorporated into and made a part of this Order.

### II. Initial Submittal

Within thirty (30) days after the effective date of this Order, Respondent shall submit to the Department a Records Search Report prepared in accordance with Exhibit "B" attached to the Order. The Records Search Report can be limited if the Department notifies Respondent that prior submissions satisfy specific items required for the Records Search Report.

# III. <u>Development, Performance, and Reporting of</u> Work Plans

### A. Work Plan Requirements

All activities at the Site that comprise any element of an Inactive Hazardous Waste Disposal Site Remedial Program shall be conducted pursuant to one or more Department-approved work plans ("Work Plan" or "Work Plans") and this Order and all activities shall be consistent with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 C.F.R. Part 300, as required under CERCLA, 42 U.S.C. § 9600 *et seq.* The Work Plan(s) under this Order shall address both on-Site and off-Site conditions and shall be developed and implemented in accordance with 6 NYCRR § 375-1.6(a), 375-3.6, and 375-6. All Department-approved Work Plans shall be incorporated into and become enforceable parts of this Order. Upon approval of a

Work Plan by the Department, Respondent shall implement such Work Plan in accordance with the schedule contained therein. Nothing in this Subparagraph shall mandate that any particular Work Plan be submitted.

The Work Plans shall be captioned as follows:

- 1. Site Characterization ("SC") Work Plan: a Work Plan which provides for the identification of the presence of any hazardous waste disposal at the Site;
- 2. Remedial Investigation/Feasibility Study ("RI/FS") Work Plan: a Work Plan which provides for the investigation of the nature and extent of contamination within the boundaries of the Site and emanating from such Site and a study of remedial alternatives to address such on-site and off-site contamination:
- 3. Remedial Design/Remedial Action ("RD/RA") Work Plan: a Work Plan which provides for the development and implementation of final plans and specifications for implementing the remedial alternative set forth in the ROD:
- 4. "IRM Work Plan" if the Work Plan provides for an interim remedial measure;
- 5. "Site Management Plan" if the Work Plan provides for the identification and implementation of institutional and/or engineering controls as well as any necessary monitoring and/or operation and maintenance of the remedy; or
- 6. "Supplemental" if additional work plans other than those set forth in II.A.1-5 are required to be prepared and implemented.

### B. Submission/Implementation of Work Plans

- 1. Respondent may opt to propose one or more additional or supplemental Work Plans (including one or more IRM Work Plans) at any time, which the Department shall review for appropriateness and technical sufficiency.
- 2. Any proposed Work Plan shall be submitted for the Department's review and approval

and shall include, at a minimum, a chronological description of the anticipated activities, a schedule for performance of those activities, and sufficient detail to allow the Department to evaluate that Work Plan.

- i. The Department shall notify Respondent in writing if the Department determines that any element of a Department-approved Work Plan needs to be modified in order to achieve the objectives of the Work Plan as set forth in Subparagraph III.A or to ensure that the Remedial Program otherwise protects human health and the environment. Upon receipt of such notification, Respondent shall, subject to dispute resolution pursuant to Paragraph XV, modify the Work Plan.
- ii. The Department may request, subject to dispute resolution pursuant to Paragraph XV, that Respondent submit additional or supplemental Work Plans for the Site to complete the current remedial phase within thirty (30) Days after the Department's written request.
- 3. A Site Management Plan, if necessary, shall be submitted in accordance with the schedule set forth in the IRM Work Plan or Remedial Work Plan.
- 4. During all field activities conducted under a Department-approved Work Plan, Respondent shall have on-Site a representative who is qualified to supervise the activities undertaken in accordance with the provisions of 6 NYCRR 375-1.6(a)(3).
- 5. A Professional Engineer licensed and registered in New York State must stamp and sign all Work Plans other than SC or RI/FS Work Plans.

# C. <u>Submission of Final Reports and Periodic</u> Reports

- 1. In accordance with the schedule contained in a Work Plan, Respondent shall submit a final report as provided at 6 NYCRR 375-1.6(b) and a final engineering report as provided at 6 NYCRR 375-1.6(c).
- 2. Any final report or final engineering report that includes construction activities shall include "as built" drawings showing any changes made to the remedial design or the IRM.
- 3. In the event that the final engineering report for the Site requires Site management,

Respondent shall submit an initial periodic report by in accordance with the schedule in the Site Management Plan and thereafter in accordance with a schedule determined by the Department. Such periodic report shall be signed by a Professional Engineer or by such other qualified environmental professional as the Department may find acceptable and shall contain a certification as provided at 6 NYCRR 375-1.8(h)(3). Respondent may petition the Department for a determination that the institutional and/or engineering controls may be terminated. Such petition must be supported by a statement by a Professional Engineer that such controls are no longer necessary for the protection of public health and the environment. The Department shall not unreasonably withhold its approval of such petition.

4. Within sixty (60) days of the Department's approval of a Final Report, Respondent shall submit such additional Work Plans as is required by the Department in its approval letter of such Final Report. Failure to submit any additional Work Plans within such period shall be a violation of this Order.

### D. Review of Submittals

- 1. The Department shall make a good faith effort to review and respond in writing to each submittal Respondent makes pursuant to this Order within sixty (60) Days. The Department's response shall include, in accordance with 6 NYCRR 375-1.6(d), an approval, modification request, or disapproval of the submittal, in whole or in part.
- i. Upon the Department's written approval of a Work Plan, such Department-approved Work Plan shall be deemed to be incorporated into and made a part of this Order and shall be implemented in accordance with the schedule contained therein.
- ii. If the Department modifies or requests modifications to a submittal, it shall specify the reasons for such modification(s). Within fifteen (15) Days after the date of the Department's written notice that Respondent's submittal has been disapproved, Respondent shall notify the Department of its election in accordance with 6 NYCRR 375-1.6(d)(3). If Respondent elects to modify or accept the Department's modifications to the submittal, Respondent shall make a revised submittal that incorporates all of the Department's modifications to the first submittal in accordance with the time period set forth in 6 NYCRR 375-1.6(d)(3). In the event that Respondent's revised submittal is disapproved,

the Department shall set forth its reasons for such disapproval in writing and Respondent shall be in violation of this Order unless it invokes dispute resolution pursuant to Paragraph XV and its position prevails. Failure to make an election or failure to comply with the election is a violation of this Order.

- iii. If the Department disapproves a submittal, it shall specify the reasons for its disapproval. Within fifteen (15) Days after the date of the Department's written notice that Respondent's submittal has been disapproved, Respondent shall notify the Department of its election in accordance with 6 NYCRR 375-1.6(d)(4). If Respondent elects to modify the submittal, Respondent shall make a revised submittal that addresses all of the Department's stated reasons for disapproving the first submittal in accordance with the time period set forth in 6 NYCRR 375-1.6(d)(4). In the event that Respondent's revised submittal is disapproved, the Department shall set forth its reasons for such disapproval in writing and Respondent shall be in violation of this Order unless it invokes dispute resolution pursuant to Paragraph XV and its position prevails. Failure to make an election or failure to comply with the election is a violation of this Order.
- 2. Within thirty (30) Days after the Department's approval of a final report, Respondent shall submit such final report, as well as all data gathered and drawings and submittals made pursuant to such Work Plan, in an electronic format acceptable to the Department. If any document cannot be converted into electronic format, Respondent shall submit such document in an alternative format acceptable to the Department.

#### E. Department's Issuance of a ROD

- 1. Respondent shall cooperate with the Department and provide reasonable assistance, consistent with the Citizen Participation Plan, in soliciting public comment on the proposed remedial action plan ("PRAP"), if any. After the close of the public comment period, the Department shall select a final remedial alternative for the Site in a ROD. Nothing in this Order shall be construed to abridge any rights of Respondent, as provided by law, to judicially challenge the Department's ROD.
- 2. Respondent shall have 60 days from the date of the Department's issuance of the ROD to notify the Department in writing whether it will implement the remedial activities required by such ROD. If the Respondent elects not to implement the required remedial activities, then this order shall

terminate in accordance with Paragraph XIV.A. Failure to make an election or failure to comply with the election is a violation of this Order.

### F. <u>Institutional/Engineering Control</u> <u>Certification</u>

In the event that the remedy for the Site, if any, or any Work Plan for the Site, requires institutional or engineering controls, Respondent shall submit a written certification in accordance with 6 NYCRR 375-1.8(h)(3) and 375-3.8(h)(2).

### IV. Penalties

- A. 1. Respondent's failure to comply with any term of this Order constitutes a violation of this Order, the ECL, and 6 NYCRR 375-2.11(a)(4). Nothing herein abridges Respondent's right to contest any allegation that it has failed to comply with this Order.
- 2. Payment of any penalties shall not in any way alter Respondent's obligations under this Order.
- B. 1. Respondent shall not suffer any penalty or be subject to any proceeding or action in the event it cannot comply with any requirement of this Order as a result of any Force Majeure Event as provided at 6 NYCRR 375-1.5(b)(4). Respondent must use best efforts to anticipate the potential Force Majeure Event, best efforts to address any such event as it is occurring, and best efforts following the Force Majeure Event to minimize delay to the greatest extent possible. "Force Majeure" does not include Respondent's economic inability to comply with any obligation, the failure of Respondent to make complete and timely application for any required approval or permit, and non-attainment of the goals, standards, and requirements of this Order.
- 2. Respondent shall notify the Department in writing within five (5) Days of the onset of any Force Majeure Event. Failure to give such notice within such five (5) Day period constitutes a waiver of any claim that a delay is not subject to penalties. Respondent shall be deemed to know of any circumstance which it, any entity controlled by it, or its contractors knew or should have known.
- 3. Respondent shall have the burden of proving by a preponderance of the evidence that (i) the delay or anticipated delay has been or will be caused by a Force Majeure Event; (ii) the duration of the delay or the extension sought is warranted under

the circumstances; (iii) best efforts were exercised to avoid and mitigate the effects of the delay; and (iv) Respondent complied with the requirements of Subparagraph IV.B.2 regarding timely notification.

- 4. If the Department agrees that the delay or anticipated delay is attributable to a Force Majeure Event, the time for performance of the obligations that are affected by the Force Majeure Event shall be extended for a period of time equivalent to the time lost because of the Force majuere event, in accordance with 375-1.5(4).
- 5. If the Department rejects Respondent's assertion that an event provides a defense to non-compliance with this Order pursuant to Subparagraph IV.B, Respondent shall be in violation of this Order unless it invokes dispute resolution pursuant to Paragraph XV and Respondent's position prevails.

### V. Entry upon Site

- A. Respondent hereby consents, upon reasonable notice under the circumstances presented, to entry upon the Site (or areas in the vicinity of the Site which may be under the control of Respondent) by any duly designated officer or employee of the Department or any State agency having jurisdiction with respect to matters addressed pursuant to this Order, and by any agent, consultant, contractor, or other person so authorized by the Commissioner, all of whom shall abide by the health and safety rules in effect for the Site, for inspecting, sampling, copying records related to the contamination at the Site, testing, and any other activities necessary to ensure Respondent's compliance with this Order. Upon request, Respondent shall (i) provide the Department with suitable work space at the Site, including access to a telephone, to the extent available, and (ii) permit the Department full access to all non-privileged records relating to matters addressed by this Order. Raw data is not considered privileged and that portion of any privileged document containing raw data must be provided to the Department. In the event Respondent is unable to obtain any authorization from third-party property owners necessary to perform its obligations under this Order, the Department may, consistent with its legal authority, assist in obtaining such authorizations.
- B. The Department shall have the right to take its own samples and scientific measurements and the Department and Respondent shall each have the right to obtain split samples, duplicate samples, or both, of all substances and materials sampled. The Department shall make the results of any such

sampling and scientific measurements available to Respondent.

#### VI. Payment of State Costs

- A. Within forty-five (45) days after receipt of an itemized invoice from the Department, Respondent shall pay to the Department a sum of money which shall represent reimbursement for State Costs as provided by 6 NYCRR 375-1.5 (b)(3)(i). Failure to timely pay any invoice will be subject to late payment charge and interest at a rate of 9% from the date the payment is due until the date the payment is made.
- B. Costs shall be documented as provided by 6 NYCRR 375-1.5(b)(3). The Department shall not be required to provide any other documentation of costs, provided however, that the Department's records shall be available consistent with, and in accordance with, Article 6 of the Public Officers Law.
- C. Each such payment shall be made payable to the New York State Department of Environmental Conservation and shall be sent to:

Director, Bureau of Program Management Division of Environmental Remediation New York State Department of Environmental Conservation 625 Broadway Albany, New York 12233-7012

- D. The Department shall provide written notification to the Respondent of any change in the foregoing addresses.
- E. If Respondent objects to any invoiced costs under this Order, the provisions of 6 NYCRR 375-1.5 (b)(3)(v) and (vi) shall apply. Objections shall be sent to the Department as provided under subparagraph VI.C above.
- F. In the event of non-payment of any invoice within the 45 days provided herein, the Department may seek enforcement of this provision pursuant to Paragraph IV or the Department may commence an enforcement action for non-compliance with ECL '27-1423 and ECL 71-4003.

### VII. Release and Covenant Not to Sue

Upon the Department's issuance of a Certificate of Completion as provided at 6 NYCRR 375-1.9 and 375-2.9, Respondent shall obtain the benefits

conferred by such provisions, subject to the terms and conditions described therein.

### VIII. Reservation of Rights

- A. Except as provided at 6 NYCRR 375-1.9 and 375-2.9, nothing contained in this Order shall be construed as barring, diminishing, adjudicating, or in any way affecting any of the Department's rights or authorities, including, but not limited to, the right to require performance of further investigations and/or response action(s), to recover natural resource damages, and/or to exercise any summary abatement powers with respect to any person, including Respondent.
- B. Except as otherwise provided in this Order, Respondent specifically reserves all rights and defenses under applicable law respecting any Departmental assertion of remedial liability and/or natural resource damages against Respondent, and further reserves all rights respecting the enforcement of this Order, including the rights to notice, to be heard, to appeal, and to any other due process. The existence of this Order or Respondent's compliance with it shall not be construed as an admission of liability, fault, wrongdoing, or breach of standard of care by Respondent, and shall not give rise to any presumption of law or finding of fact, or create any rights, or grant any cause of action, which shall inure to the benefit of any third party. Further, Respondent reserves such rights as it may have to seek and obtain contribution, indemnification, and/or any other form of recovery from its insurers and from other potentially responsible parties or their insurers for past or future response and/or cleanup costs or such other costs or damages arising from the contamination at the Site as may be provided by law, including but not limited to rights of contribution under section 113(f)(3)(B) of CERCLA, 42 U.S.C. § 9613(f)(3)(B).

### IX. Indemnification

Respondent shall indemnify and hold the Department, the State of New York, the Trustee of the State's natural resources, and their representatives and employees harmless as provided by 6 NYCRR 375-2.5(a)(3)(i).

#### X. Public Notice

A. Within thirty (30) Days after the effective date of this Order, Respondent shall provide notice as required by 6 NYCRR 375-1.5(a). Within sixty (60) Days of such filing, Respondent shall provide the

Department with a copy of such instrument certified by the recording officer to be a true and faithful copy.

B. If Respondent proposes to transfer by sale or lease the whole or any part of Respondent's interest in the Site, or becomes aware of such transfer, Respondent shall, not fewer than forty-five (45) Days before the date of transfer, or within forty-five (45) Days after becoming aware of such conveyance, notify the Department in writing of the identity of the transferee and of the nature and proposed or actual date of the conveyance, and shall notify the transferee in writing, with a copy to the Department, of the applicability of this Order. However, such obligation shall not extend to a conveyance by means of a corporate reorganization or merger or the granting of any rights under any mortgage, deed, trust, assignment, judgment, lien, pledge, security agreement, lease, or any other right accruing to a person not affiliated with Respondent to secure the repayment of money or the performance of a duty or obligation.

### XI. Change of Use

Applicant shall notify the Department at least sixty (60) days in advance of any change of use, as defined in 6 NYCRR 375-2.2(a), which is proposed for the Site, in accordance with the provisions of 6 NYCRR 375-1.11(d). In the event the Department determines that the proposed change of use is prohibited, the Department shall notify Applicant of such determination within forty-five (45) days of receipt of such notice.

### XII. Environmental Easement

- A. If a Record of Decision for the Site relies upon one or more institutional and/or engineering controls, Respondent (or the owner of the Site) shall submit to the Department for approval an Environmental Easement to run with the land in favor of the State which complies with the requirements of ECL Article 71, Title 36, and 6 NYCRR 375-1.8(h)(2). Upon acceptance of the Environmental Easement by the State, Respondent shall comply with the requirements of 6 NYCRR 375-1.8(h)(2).
- B. If the ROD provides for no action other than implementation of one or more institutional controls, Respondent shall cause an environmental easement to be recorded under the provisions of Subparagraph XII.A.
- C. If Respondent does not cause such environmental easement to be recorded in accordance

with 6 NYCRR 375-1.8(h)(2), Respondent will not be entitled to the benefits conferred by 6 NYCRR 375-1.9 and 375-2.9 and the Department may file an Environmental Notice on the site.

#### XIII. Progress Reports

Respondent shall submit a written progress report of its actions under this Order to the parties identified in Subparagraph IV.A.1 of the Order by the 10th day of each month commencing with the month subsequent to the approval of the first Work Plan and ending with the Termination date as set forth in Paragraph XIV, unless a different frequency is set forth in a Work Plan. Such reports shall, at a minimum, include: all actions relative to the Site during the previous reporting period and those anticipated for the next reporting period; all approved activity modifications (changes of work scope and/or schedule); all results of sampling and tests and all other data received or generated by or on behalf of Respondent in connection with this Site, whether under this Order or otherwise, in the previous reporting period, including quality assurance/quality control information; information regarding percentage of completion; unresolved delays encountered or anticipated that may affect the future schedule and efforts made to mitigate such delays; and information regarding activities undertaken in support of the Citizen Participation Plan during the previous reporting period and those anticipated for the next reporting period.

### XIV. Termination of Order

- A. This Order will terminate upon the earlier of the following events:
- 1. Respondent's election in accordance with Paragraph III.E.2 not to implement the remedial activities required pursuant to the ROD. In the event of termination in accordance with this Subparagraph, this Order shall terminate effective the 5th Day after the Department's receipt of the written notification, provided, however, that if there are one or more Work Plan(s) for which a final report has not been approved at the time of Respondent's notification of its election not to implement the remedial activities in accordance with the ROD, Respondent shall complete the activities required by such previously approved Work Plan(s) consistent with the schedules contained therein. Thereafter, this Order shall terminate effective the 5th Day after the Department's approval of the final report for all previously approved Work Plans; or

- 2. The Department's written determination that Respondent has completed all phases of the Remedial Program (including Site Management), in which event the termination shall be effective on the 5th Day after the date of the Department's letter stating that all phases of the remedial program have been completed.
- B. Notwithstanding the foregoing, the provisions contained in Paragraphs VI and IX shall survive the termination of this Order and any violation of such surviving Paragraphs shall be a violation of this Order, the ECL, and 6 NYCRR 375-2.11(a)(4), subjecting Respondent to penalties as provided under Paragraph IV so long as such obligations accrued on or prior to the Termination Date.
- C. If the Order is terminated pursuant to Subparagraph XIV.A.1, neither this Order nor its termination shall affect any liability of Respondent for remediation of the Site and/or for payment of State Costs, including implementation of removal and remedial actions, interest, enforcement, and any and all other response costs as defined under CERCLA, nor shall it affect any defenses to such liability that may be asserted by Respondent. Respondent shall also ensure that it does not leave the Site in a condition, from the perspective of human health and environmental protection, worse than that which existed before any activities under this Order were commenced. Further, the Department's efforts in obtaining and overseeing compliance with this Order shall constitute reasonable efforts under law to obtain a voluntary commitment from Respondent for any further activities to be undertaken as part of a Remedial Program for the Site.

### XV. <u>Dispute Resolution</u>

- A. In the event disputes arise under this Order, Respondent may, within fifteen (15) Days after Respondent knew or should have known of the facts which are the basis of the dispute, initiate dispute resolution in accordance with the provisions of 6 NYCRR 375-1.5(b)(2).
- B. All cost incurred by the Department associated with dispute resolution are State costs subject to reimbursement pursuant to this Order.
- C. Nothing contained in this Order shall be construed to authorize Respondent to invoke dispute resolution with respect to the remedy selected by the Department in the ROD or any element of such remedy, nor to impair any right of Respondent to

seek judicial review of the Department's selection of any remedy.

#### XVI. Miscellaneous

- A. Respondent agrees to comply with and be bound by the provisions of 6 NYCRR Subparts 375-1 and 375-2; the provisions of such Subparts that are referenced herein are referenced for clarity and convenience only and the failure of this Order to specifically reference any particular regulatory provision is not intended to imply that such provision is not applicable to activities performed under this Order.
- B. The Department may exempt Respondent from the requirement to obtain any state or local permit or other authorization for any activity conducted pursuant to this Order in accordance with 6 NYCRR 375-1.12(b), (c), and (d).
- C. 1. Respondent shall use best efforts to obtain all Site access, permits, easements, approvals, institutional controls, and/or authorizations necessary to perform Respondent's obligations under this Order, including all Department-approved Work Plans and the schedules contained therein. If, despite Respondent's best efforts, any access, permits, easements, approvals, institutional controls, or authorizations cannot be obtained, Respondent shall promptly notify the Department and include a summary of the steps taken. The Department may, as it deems appropriate and within its authority, assist Respondent in obtaining same.
- 2. If an interest in property is needed to implement an institutional control required by a Work Plan and such interest cannot be obtained, the Department may require Respondent to modify the Work Plan pursuant to 6 NYCRR 375-1.6(d)(3) to reflect changes necessitated by Respondent's inability to obtain such interest.
- D. The paragraph headings set forth in this Order are included for convenience of reference only and shall be disregarded in the construction and interpretation of any provisions of this Order.
- E. 1. The terms of this Order shall constitute the complete and entire agreement between the Department and Respondent concerning the implementation of the activities required by this Order. No term, condition, understanding, or agreement purporting to modify or vary any term of this Order shall be binding unless made in writing and subscribed by the party to be bound. No

- informal advice, guidance, suggestion, or comment by the Department shall be construed as relieving Respondent of Respondent's obligation to obtain such formal approvals as may be required by this Order. In the event of a conflict between the terms of this Order and any Work Plan submitted pursuant to this Order, the terms of this Order shall control over the terms of the Work Plan(s). Respondent consents to and agrees not to contest the authority and jurisdiction of the Department to enter into or enforce this Order.
- 2. i. Except as set forth herein, if Respondent desires that any provision of this Order be changed, Respondent shall make timely written application to the Commissioner with copies to the parties listed in Subparagraph IV.A.1.
- ii. If Respondent seeks to modify an approved Work Plan, a written request shall be made to the Department's project manager, with copies to the parties listed in Subparagraph IV.A.1.
- iii. Requests for a change to a time frame set forth in this Order shall be made in writing to the Department's project attorney and project manager; such requests shall not be unreasonably denied and a written response to such requests shall be sent to Respondent promptly.
- F. 1. If there are multiple parties signing this Order, the term "Respondent" shall be read in the plural, the obligations of each such party under this Order are joint and several, and the insolvency of or failure by any Respondent to implement any obligations under this Order shall not affect the obligations of the remaining Respondent(s) under this Order.
- 2. If Respondent is a partnership, the obligations of all general partners (including limited partners who act as general partners) under this Order are joint and several and the insolvency or failure of any general partner to implement any obligations under this Order shall not affect the obligations of the remaining partner(s) under this Order.
- 3. Notwithstanding the foregoing Subparagraphs XVI.F.1 and 2, if multiple parties sign this Order as Respondents but not all of the signing parties elect to implement a Work Plan, all Respondents are jointly and severally liable for each and every obligation under this Order through the completion of activities in such Work Plan that all such parties consented to; thereafter, only those Respondents electing to perform additional work

shall be jointly and severally liable under this Order for the obligations and activities under such additional Work Plan(s). The parties electing not to implement the additional Work Plan(s) shall have no obligations under this Order relative to the activities set forth in such Work Plan(s). Further, only those Respondents electing to implement such additional Work Plan(s) shall be eligible to receive the release and covenant not to sue referenced in Paragraph VII.

- G. Respondent shall be entitled to receive contribution protection and/or to seek contribution to the extent authorized by ECL 27-1421(6) and 6 NYCRR 375-1.5(b)(5).
- H. Unless otherwise expressly provided herein, terms used in this Order which are defined in ECL Article 27 or in regulations promulgated thereunder shall have the meaning assigned to them under said statute or regulations.
- I. Respondent's obligations under this Order represent payment for or reimbursement of response costs and shall not be deemed to constitute any type of fine or penalty.
- J. Respondent and Respondent's successors and assigns shall be bound by this Order. Any change in ownership or corporate status of Respondent shall in no way alter Respondent's responsibilities under this Order.
- K. This Order may be executed for the convenience of the parties hereto, individually or in combination, in one or more counterparts, each of which shall be deemed to have the status of an executed original and all of which shall together constitute one and the same.

# APPENDIX B – WASTE CHARACTERIZATION LABORATORY ANALYTICAL DATA PACKAGES

# APPENDIX D – NYSDEC STORMWATER PERMIT NOTICE OF INTENT ACKNOWLEDGEMENT LETTERS

#### NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Water, Bureau of Permits 625 Broadway, Albany, New York 12233-3505 P: (518) 402-8111 | F: (518) 402-9029 www.dec.ny.gov

11/6/2018

**County: KINGS** 

NYC Parks Capital Projects - Brooklyn Kay Zias Olmstead Center - Corona Park Flushing, NY 11368

Re ACKNOWLEDGMENT of NOTICE of INTENT for Coverage Under SPDES General Permit for Storm Water Discharges from CONSTRUCTION ACTIVITY General Permit No. GP-0-15-002

Dear Prospective Permittee:

This is to acknowledge that the New York State Department of Environmental Conservation (Department) has received a complete Notice of Intent (NOI) for coverage under General Permit No. GP-0-15-002 for the construction activities located at:

Reconstruction of Ballifields 9 & 2
Bay Street
Brooklyn, NY 11231

Pursuant to Environmental Conservation Law (ECL) Article 17, Titles 7 and 8, ECL Article 70, discharges in accordance with GP-0-15-002 from the above construction site will be authorized 5 business days from 11/01/2018, which is the date we received your final NOI, unless notified differently by the Department.

The permit identification number for this site is: **NYR11E427**. Be sure to include this permit identification number on any forms or correspondence you send us. When coverage under the permit is no longer needed, you must submit a Notice of Termination to the Department.

This authorization is conditioned upon the following:

- 1. The information submitted in the NOI received by the Department on 11/01/2018 is accurate and complete.
- 2. You have developed a Storm Water Pollution Prevention Plan (SWPPP) that complies with GP-0-15-002 which must be implemented as the first element of construction at the above-noted construction site.
- 3. Activities related to the above construction site comply with all other requirements of GP-0-15-002.



- 4. Payment of the annual \$110 regulatory fee, which is billed separately by the Department in the late fall. The regulatory fee covers a period of one calendar year. In addition, since September 1, 2004, construction stormwater permittees have been assessed an initial authorization fee which is now \$110 per acre of land disturbed and \$675 per acre of future impervious area. The initial authorization fee covers the duration of the authorized disturbance.
- 5. When applicable, project review pursuant to the State Environmental Quality Review Act (SEQRA) has been satisfied.
- 6. You have obtained all necessary Department permits subject to the Uniform Procedures Act (UPA). You should check with your Regional Permit Administrator for further information.

\*Note: Construction activities cannot commence until project review pursuant to SEQRA has been satisfied, when SEQRA is applicable; and, where required, all necessary Department permits subject to the UPA have been obtained.

Please be advised that the Department may request a copy of your SWPPP for review.

Should you have any questions regarding any aspect of the requirements specified in GP-0-15-002, please contact Dave Gasper at (518) 402-8114 or the undersigned at (518) 402-8109.

Sincerely,

10mm meller

Toni Cioffi

**Environmental Program Specialist 1** 

PLEASE NOTE: EPA HAS FINALIZED THE eREPORTING RULE; AND, IN THE NEAR FUTURE, ALL NOIS WILL HAVE TO BE SUBMITTED ELECTRONICALLY.
BY FILING AN NOI ELECTRONICALLY, A PROJECT CAN TYPICALLY GAIN COVERAGE IN 5 BUSINESS DAYS COMPARED TO 10 BUSINESS DAYS FOR THE PAPER NOI. INFORMATION ON THE eNOI CAN BE FOUND ON OUR WEBSITE AT: http://www.dec.ny.gov/chemical/43133.html UNDER "FORMS."

cc RWE - 2 SWPPP Preparer

Provident Design Engineering, PLLC Peragine, Ralph P. 7 Skyline Drive Hawthorne, NY 10532

#### NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Water, Bureau of Permits 625 Broadway, Albany, New York 12233-3505 P: (518) 402-8111 | F: (518) 402-9029 www.dec.ny.gov

6/29/2018

County: KINGS

NYC Parks & Recreation, Capital Projects Division Kay Zias 117-02 Roosevelt Avenue, Flushing Meadows Coron Flushing, NY 11368

Re ACKNOWLEDGMENT of NOTICE of INTENT for Coverage Under SPDES General Permit for Storm Water Discharges from CONSTRUCTION ACTIVITY General Permit No. GP-0-15-002

Dear Prospective Permittee:

This is to acknowledge that the New York State Department of Environmental Conservation (Department) has received a complete Notice of Intent (NOI) for coverage under General Permit No. GP-0-15-002 for the construction activities located at:

Reconstruction of Ball Fields 5-8 84 Bay Street Brooklyn, NY 11231

Pursuant to Environmental Conservation Law (ECL) Article 17, Titles 7 and 8, ECL Article 70, discharges in accordance with GP-0-15-002 from the above construction site will be authorized 5 business days from 06/28/2018, which is the date we received your final NOI, unless notified differently by the Department.

The permit identification number for this site is: **NYR11D889**. Be sure to include this permit identification number on any forms or correspondence you send us. When coverage under the permit is no longer needed, you must submit a Notice of Termination to the Department.

This authorization is conditioned upon the following:

- 1. The information submitted in the NOI received by the Department on 06/28/2018 is accurate and complete.
- 2. You have developed a Storm Water Pollution Prevention Plan (SWPPP) that complies with GP-0-15-002 which must be implemented as the first element of construction at the above-noted construction site.
- 3. Activities related to the above construction site comply with all other requirements of GP-0-15-002.



- 4. Payment of the annual \$110 regulatory fee, which is billed separately by the Department in the late fall. The regulatory fee covers a period of one calendar year. In addition, since September 1, 2004, construction stormwater permittees have been assessed an initial authorization fee which is now \$110 per acre of land disturbed and \$675 per acre of future impervious area. The initial authorization fee covers the duration of the authorized disturbance.
- 5. When applicable, project review pursuant to the State Environmental Quality Review Act (SEQRA) has been satisfied.
- 6. You have obtained all necessary Department permits subject to the Uniform Procedures Act (UPA). You should check with your Regional Permit Administrator for further information.

\*Note: Construction activities cannot commence until project review pursuant to SEQRA has been satisfied, when SEQRA is applicable; and, where required, all necessary Department permits subject to the UPA have been obtained.

Please be advised that the Department may request a copy of your SWPPP for review.

Should you have any questions regarding any aspect of the requirements specified in GP-0-15-002, please contact Dave Gasper at (518) 402-8114 or the undersigned at (518) 402-8109.

Sincerely,

Toni Cioffi

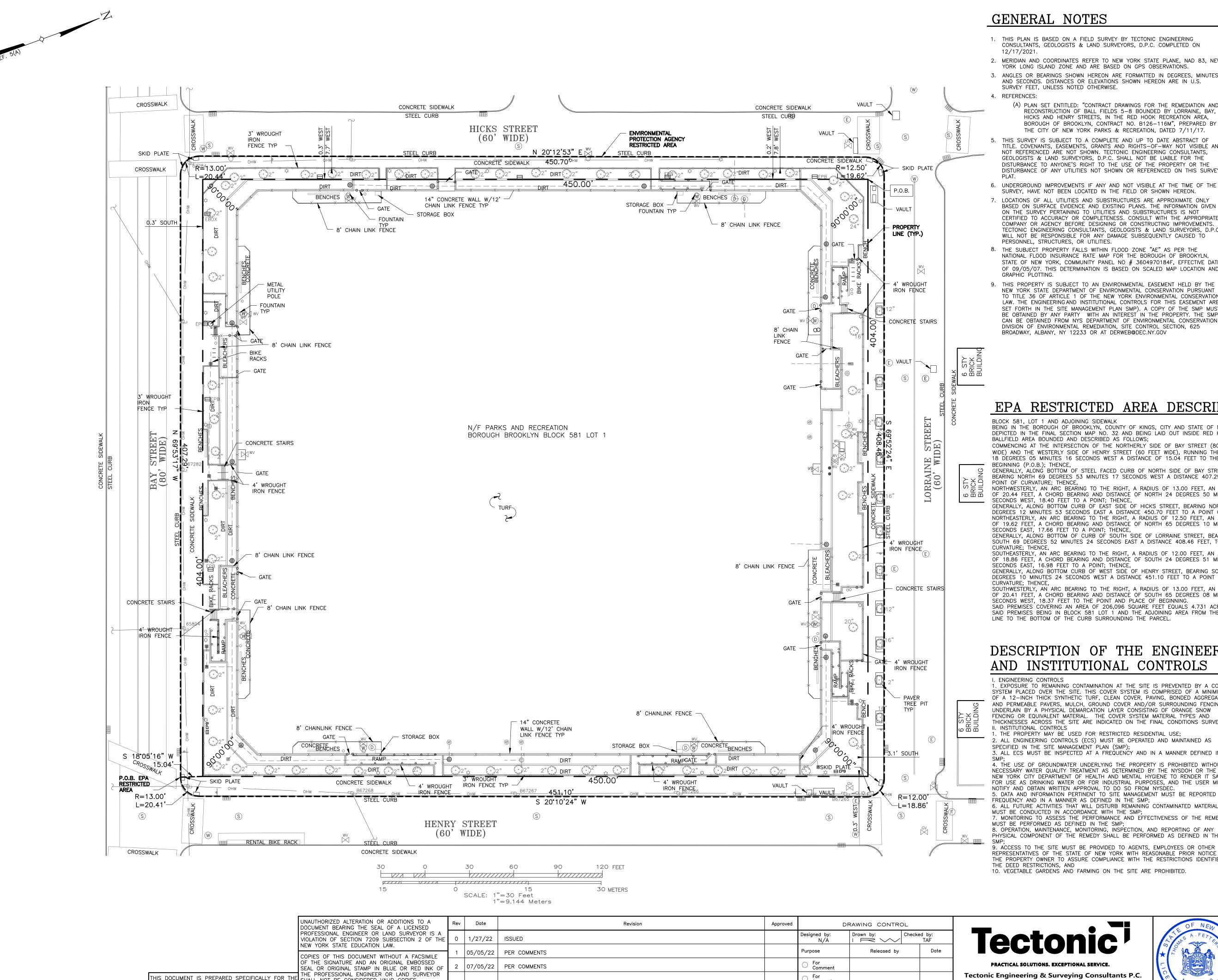
**Environmental Program Specialist 1** 

PLEASE NOTE: EPA HAS FINALIZED THE eREPORTING RULE; AND, IN THE NEAR FUTURE, ALL NOIS WILL HAVE TO BE SUBMITTED ELECTRONICALLY.
BY FILING AN NOI ELECTRONICALLY, A PROJECT CAN TYPICALLY GAIN COVERAGE IN 5 BUSINESS DAYS COMPARED TO 10 BUSINESS DAYS FOR THE PAPER NOI. INFORMATION ON THE eNOI CAN BE FOUND ON OUR WEBSITE AT: http://www.dec.ny.gov/chemical/43133.html UNDER "FORMS."

cc RWE - 2 SWPPP Preparer

> Provident Design Engineering, PLLC Peragine Ralph P 7 Skyline Drive Hawthorne, New York 10532

# APPENDIX I – UST REGISTRATION, CLOSURE, AND DISPOSAL DOCUMENTATION



SHALL NOT BE CONSIDERED VALID COPIES.

ORIGINAL SIZE IN INCHES

CLIENT AND PROJECT DESIGNATED HEREON.

OR USE WITHOUT THE CONSENT OF TECTONIC

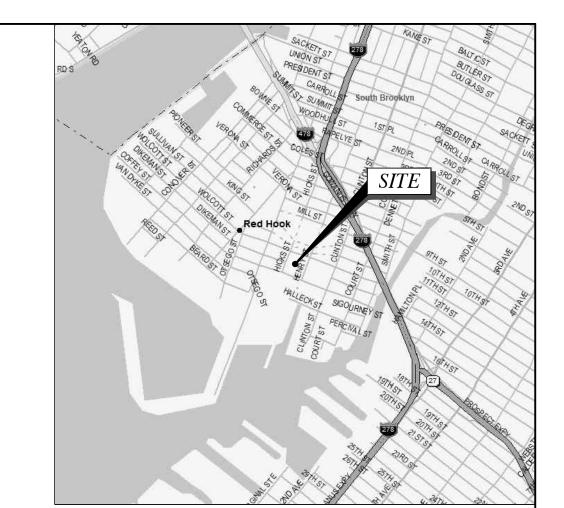
MODIFICATION, ALTERATION, REVISION, DUPLICATION,

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ECTONIC ENGINEERING, PC. ALL RIGHTS RESERVED.

### GENERAL NOTES

- 1. THIS PLAN IS BASED ON A FIELD SURVEY BY TECTONIC ENGINEERING CONSULTANTS, GEOLOGISTS & LAND SURVEYORS, D.P.C. COMPLETED ON
- 2. MERIDIAN AND COORDINATES REFER TO NEW YORK STATE PLANE, NAD 83, NEW YORK LONG ISLAND ZONE AND ARE BASED ON GPS OBSERVATIONS.
- 3. ANGLES OR BEARINGS SHOWN HEREON ARE FORMATTED IN DEGREES, MINUTES, AND SECONDS. DISTANCES OR ELEVATIONS SHOWN HEREON ARE IN U.S. SURVEY FEET, UNLESS NOTED OTHERWISE.
- - (A) PLAN SET ENTITLED: "CONTRACT DRAWINGS FOR THE REMEDIATION AND RECONSTRUCTION OF BALL FIELDS 5-8 BOUNDED BY LORRAINE, BAY, HICKS AND HENRY STREETS, IN THE RED HOOK RECREATION AREA, BOROUGH OF BROOKLYN, CONTRACT NO. B126-116M", PREPARED BY THE CITY OF NEW YORK PARKS & RECREATION, DATED 7/11/17.
- 5. THIS SURVEY IS SUBJECT TO A COMPLETE AND UP TO DATE ABSTRACT OF TITLE. COVENANTS, EASEMENTS, GRANTS AND RIGHTS-OF-WAY NOT VISIBLE AND NOT REFERENCED ARE NOT SHOWN. TECTONIC ENGINEERING CONSULTANTS, GEOLOGISTS & LAND SURVEYORS, D.P.C. SHALL NOT BE LIABLE FOR THE DISTURBANCE TO ANYONE'S RIGHT TO THE USE OF THE PROPERTY OR THE DISTURBANCE OF ANY UTILITIES NOT SHOWN OR REFERENCED ON THIS SURVEY
- SURVEY, HAVE NOT BEEN LOCATED IN THE FIELD OR SHOWN HEREON. 7. LOCATIONS OF ALL UTILITIES AND SUBSTRUCTURES ARE APPROXIMATE ONLY BASED ON SURFACE EVIDENCE AND EXISTING PLANS. THE INFORMATION GIVEN ON THE SURVEY PERTAINING TO UTILITIES AND SUBSTRUCTURES IS NOT CERTIFIED TO ACCURACY OR COMPLETENESS. CONSULT WITH THE APPROPRIATE COMPANY OR AGENCY BEFORE DESIGNING OR CONSTRUCTING IMPROVEMENTS. TECTONIC ENGINEERING CONSULTANTS, GEOLOGISTS & LAND SURVEYORS, D.P.C. WILL NOT BE RESPONSIBLE FOR ANY DAMAGE SUBSEQUENTLY CAUSED TO
- 8. THE SUBJECT PROPERTY FALLS WITHIN FLOOD ZONE "AE" AS PER THE NATIONAL FLOOD INSURANCE RATE MAP FOR THE BOROUGH OF BROOKYLN, STATE OF NEW YORK, COMMUNITY PANEL NO # 3604970184F, EFFECTIVE DATE OF 09/05/07. THIS DETERMINATION IS BASED ON SCALED MAP LOCATION AND GRAPHIC PLOTTING
- 9. THIS PROPERTY IS SUBJECT TO AN ENVIRONMENTAL EASEMENT HELD BY THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION PURSUANT TO TITLE 36 OF ARTICLE 1 OF THE NEW YORK ENVIRONMENTAL CONSERVATION LAW. THE ENGINEERING AND INSTITUTIONAL CONTROLS FOR THIS EASEMENT ARE SET FORTH IN THE SITE MANAGEMENT PLAN SMP). A COPY OF THE SMP MUST BE OBTAINED BY ANY PARTY WITH AN INTEREST IN THE PROPERTY. THE SMP CAN BE OBTAINED FROM NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION, DIVISION OF ENVIRONMENTAL REMEDIATION, SITE CONTROL SECTION, 625 BROADWAY, ALBANY, NY 12233 OR AT DERWEB@DEC.NY.GOV



## LOCATION MAP

PROPERTY LINE

SCALE:  $1" = 2000' \pm$ 

PAINTED TRAFFIC LINES

OVERHEAD WIRES

## **LEGEND**

INDEX CONTOUR LINE \_\_\_\_\_\_ CONTOUR LINE \_\_\_X\_\_\_X\_\_\_X\_\_\_X\_\_\_\_X CHAIN LINK FENCE STOCKADE FENCE WROUGHT IRON FENCE CURB LINE EDGE OF CONCRETE EDGE OF PAVEMENT <del>ω ο ο ο ο ο ο</del> GUIDE RAIL

### EPA RESTRICTED AREA DESCRIPTION BLOCK 581, LOT 1 AND ADJOINING SIDEWALK

BEING IN THE BOROUGH OF BROOKLYN, COUNTY OF KINGS, CITY AND STATE OF NEW YORK AS DEPICTED IN THE FINAL SECTION MAP NO. 32 AND BEING LAID OUT INSIDE RED HOOK BALLFIELD AREA BOUNDED AND DESCRIBED AS FOLLOWS; COMMENCING AT THE INTERSECTION OF THE NORTHERLY SIDE OF BAY STREET (80 FEET WIDE) AND THE WESTERLY SIDE OF HENRY STREET (60 FEET WIDE), RUNNING THENCE SOUTH 18 DEGREES 05 MINUTES 16 SECONDS WEST A DISTANCE OF 15.04 FEET TO THE POINT OF BEGINNING (P.O.B.); THENCE,

GENERALLY, ALONG BOTTOM OF STEEL FACED CURB OF NORTH SIDE OF BAY STREET, BEARING NORTH 69 DEGREES 53 MINUTES 17 SECONDS WEST A DISTANCE 407.29 FEET, TO A POINT OF CURVATURE; THENCE, NORTHWESTERLY, AN ARC BEARING TO THE RIGHT, A RADIUS OF 13.00 FEET, AN ARC LENGTH OF 20.44 FEET. A CHORD BEARING AND DISTANCE OF NORTH 24 DEGREES 50 MINUTES 12 SECONDS WEST, 18.40 FEET TO A POINT; THENCE, GENERALLY, ALONG BOTTOM CURB OF EAST SIDE OF HICKS STREET, BEARING NORTH 20

DEGREES 12 MINUTES 53 SECONDS EAST A DISTANCE 450.70 FEET TO A POINT OF CURVATURE; NORTHEASTERLY, AN ARC BEARING TO THE RIGHT, A RADIUS OF 12.50 FEET, AN ARC LENGTH OF 19.62 FEET. A CHORD BEARING AND DISTANCE OF NORTH 65 DEGREES 10 MINUTES 15 SECONDS EAST, 17.66 FEET TO A POINT: THENCE, GENERALLY, ALONG BOTTOM OF CURB OF SOUTH SIDE OF LORRAINE STREET, BEARING SOUTH 69 DEGREES 52 MINUTES 24 SECONDS EAST A DISTANCE 408.46 FEET, TO A POINT OF SOUTHEASTERLY, AN ARC BEARING TO THE RIGHT, A RADIUS OF 12.00 FEET, AN ARC LENGTH OF 18.86 FEET, A CHORD BEARING AND DISTANCE OF SOUTH 24 DEGREES 51 MINUTES 00 SECONDS EAST, 16.98 FEET TO A POINT; THENCE, GENERALLY, ALONG BOTTOM CURB OF WEST SIDE OF HENRY STREET, BEARING SOUTH 20 DEGREES 10 MINUTES 24 SECONDS WEST A DISTANCE 451.10 FEET TO A POINT OF

SOUTHWESTERLY, AN ARC BEARING TO THE RIGHT, A RADIUS OF 13.00 FEET. AN ARC LENGTH OF 20.41 FEET, A CHORD BEARING AND DISTANCE OF SOUTH 65 DEGREES 08 MINUTES 33 SECONDS WEST, 18.37 FEET TO THE POINT AND PLACE OF BEGINNING SAID PREMISES COVERING AN AREA OF 206,096 SQUARE FEET EQUALS 4.731 ACRES. SAID PREMISES BEING IN BLOCK 581 LOT 1 AND THE ADJOINING AREA FROM THE PROPERTY LINE TO THE BOTTOM OF THE CURB SURROUNDING THE PARCEL.

### STRUCTURE GATEPOST GUY ANCHOR UTILITY POLE CATCH BASIN CURB INLET FIELD INLET (SQUARE) FIELD INLET (ROUND) MANHOLE (DRAIN) MANHOLE (ELECTRIC) MANHOLE (FIRE) MANHOLE (SAN. SEWER) MANHOLE (UNKNOWN) MANHOLE (WATER) GAS VALVE WATER VALVE HYDRANT SIGN LIGHT POST ELECTRIC PULLBOX ■ EPB

## DESCRIPTION OF THE ENGINEERING AND INSTITUTIONAL CONTROLS

I. EXPOSURE TO REMAINING CONTAMINATION AT THE SITE IS PREVENTED BY A COVER SYSTEM PLACED OVER THE SITE. THIS COVER SYSTEM IS COMPRISED OF A MINIMUM OF A 12-INCH THICK SYNTHETIC TURF, CLEAN COVER, PAVING, BONDED AGGREGATED AND PERMEABLE PAVERS, MULCH, GROUND COVER AND/OR SURROUNDING FENCING UNDERLAIN BY A PHYSICAL DEMARCATION LAYER CONSISTING OF ORANGE SNOW FENCING OR EQUIVALENT MATERIAL. THE COVER SYSTEM MATERIAL TYPES AND THICKNESSES ACROSS THE SITE ARE INDICATED ON THE FINAL CONDITIONS SURVEY.

. THE PROPERTY MAY BE USED FOR RESTRICTED RESIDENTIAL USE; 2. ALL ENGINEERING CONTROLS (ECS) MUST BE OPERATED AND MAINTAINED AS SPECIFIED IN THE SITE MANAGEMENT PLAN (SMP);

3. ALL ECS MUST BE INSPECTED AT A FREQUENCY AND IN A MANNER DEFINED IN THE 4. THE USE OF GROUNDWATER UNDERLYING THE PROPERTY IS PROHIBITED WITHOUT NECESSARY WATER QUALITY TREATMENT AS DETERMINED BY THE NYSDOH OR THE NEW YORK CITY DEPARTMENT OF HEALTH AND MENTAL HYGIENE TO RENDER IT SAFE FOR USE AS DRINKING WATER OR FOR INDUSTRIAL PURPOSES, AND THE USER MUST FIRST NOTIFY AND OBTAIN WRITTEN APPROVAL TO DO SO FROM NYSDEC 5. DATA AND INFORMATION PERTINENT TO SITE MANAGEMENT MUST BE REPORTED AT THE FREQUENCY AND IN A MANNER AS DEFINED IN THE SMP; 6. ALL FUTURE ACTIVITIES THAT WILL DISTURB REMAINING CONTAMINATED MATERIAL

MUST BE CONDUCTED IN ACCORDANCE WITH THE SMP; 7. MONITORING TO ASSESS THE PERFORMANCE AND EFFECTIVENESS OF THE REMEDY MUST BE PERFORMED AS DEFINED IN THE SMP; 8. OPERATION, MAINTENANCE, MONITORING, INSPECTION, AND REPORTING OF ANY PHYSICAL COMPONENT OF THE REMEDY SHALL BE PERFORMED AS DEFINED IN THE 9. ACCESS TO THE SITE MUST BE PROVIDED TO AGENTS, EMPLOYEES OR OTHER

REPRESENTATIVES OF THE STATE OF NEW YORK WITH REASONABLE PRIOR NOTICE TO THE PROPERTY OWNER TO ASSURE COMPLIANCE WITH THE RESTRICTIONS IDENTIFIED BY THE DEED RESTRICTIONS, AND 10. VEGETABLE GARDENS AND FARMING ON THE SITE ARE PROHIBITED.

# PARCEL DESCRIPTION

BLOCK 581, LOT 1.

 $\geq$ 

ALL THAT CERTAIN PLOT, PIECE OR PARCEL OF LAND LYING, BEING AND SITUATED IN THE BOROUGH AND COUNTY OF KINGS, CITY AND STATE OF NEW YORK BEING BOUNDED AND DESCRIBED AS FOLLOWS:

VAULT

BEGINNING AT POINT OF INTERSECTION FORMED BY THE EASTERLY SIDELINE OF HICKS STREET (60' WIDE) WITH THE SOUTHERLY SIDELINE OF LORRAINE STREET (60' WIDE)

RUNNING THENCE EASTERLY ALONG SAID SOUTHERLY SIDELINE OF LORRAINE STREET 404.00 FEET TO POINT OF INTERSECTION WITH THE EASTERLY SIDELINE OF LORRAINE STREET WITH THE WESTERLY SIDELINE OF HENRY STREET (60' WIDE) SAID POINT FORMING AN INTERIOR ANGLE TO THE LEFT OF 90°00'00" WITH THE FINAL COURSE; THENCE SOUTHERLY AT RIGHT ANGLES AND FORMING INTERIOR ANGLES TO THE LEFT OF 90°00'00" ALONG SAID WESTERLY SIDELINE OF HENRY STREET 450.00 FEET TO THE INTERSECTION OF THE WESTERLY SIDELINE OF HENRY STREET WITH THE NORTHERLY SIDELINE OF BAY STREET (80'

THENCE WESTERLY AT RIGHT ANGLES AND FORMING INTERIOR ANGLES TO THE LEFT OF 90°00'00" ALONG SAID NORTHERLY SIDELINE OF BAY STREET 404.00 FEET TO THE INTERSECTION OF THE EASTERLY SIDELINE OF HICKS STREET (60' WIDE) WITH THE NORTHERLY LINE OF BAY

THENCÉ NORTHERLY AT RIGHT ANGLES AND FORMING INTERIOR ANGLES TO THE LEFT OF 90°00'00" ALONG SAID EASTERLY LINE OF HICKS STREET 450.00 FEET TO THE POINT OF BEGINNING.

CONTAINING 181,800 SQUARE FEET OR 4.2 ACRES.

Approval

Constructio

**Tectonic Engineering & Surveying Consultants P.C.** 70 Pleasant Hill Road Phone: (845) 534-5959 P.O. Box 37 (800) 829-6531 Mountainville, NY 10953

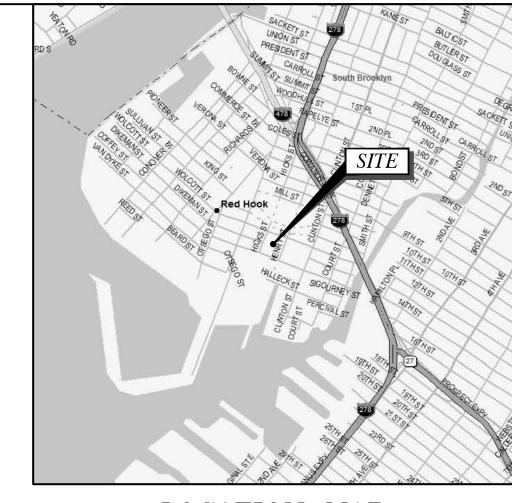
www.tectonicengineering.com

ENVIRONMENTAL EASEMENT BOUNDARY SURVEY HOMAS A. FETTERMAN, P.L.S. 5069

CONTRACT NO. B126-116M REMEDIATION & RECONSTRUCTION OF BALL FIELDS 5-8 98 LORRAINE STREET BOROUGH OF BROOKLYN, KINGS COUNTY, NEW YORK

01/12/22 SU-111 9463.01

HICKS STREET HENRY STREET



LOCATION MAP SCALE:  $1" = 2000' \pm$ 

# GENERAL NOTES

- THIS PLAN IS BASED ON A FIELD SURVEY BY TECTONIC ENGINEERING CONSULTANTS, GEOLOGISTS & LAND SURVEYORS, D.P.C. COMPLETED ON
- 2. PLANIMETRIC FEATURES SHOWN HEREON, ARE BASED ON REFERENCE 5(A).
- 3. MERIDIAN, COORDINATES AND ELEVATION DATUM ARE BASED ON REFERENCE 5(A). 4. ANGLES OR BEARINGS SHOWN HEREON ARE FORMATTED IN DEGREES, MINUTES, AND SECONDS. DISTANCES OR ELEVATIONS SHOWN HEREON ARE IN U.S. SURVEY FEET, UNLESS NOTED OTHERWISE.
- REFERENCES:
  - (A) PLAN SET ENTITLED: "CONTRACT DRAWINGS FOR THE REMEDIATION AND RECONSTRUCTION OF BALL FIELDS 5-8 BOUNDED BY LORRAINE, BAY, HICKS AND HENRY STREETS, IN THE RED HOOK RECREATION AREA, BOROUGH OF BROOKLYN, CONTRACT NO. B126-116M", PREPARED BY THE CITY OF NEW YORK PARKS & RECREATION, DATED 7/11/17.
- 6. THE PROPERTY LINES SHOWN HEREON ARE APPROXIMATE AND FOR ORIENTATION PURPOSE ONLY AND THEY DO NOT REPRESENT A PROPERTY/BOUNDARY OPINION BY THE LAND SURVEYOR.
- UTILITIES SHOWN HEREON ARE TAKEN DIRECTLY FROM REFERENCE 5(A), TOPOGRAPHIC SURVEY PREPARED BY MUNOZ ENGINEERING, P.C., DRAWING NO. V101.00, SHEET 3 OF 42.

# LEGEND

	PROPERTY LINE
	INDEX CONTOUR LINE
	CONTOUR LINE
xxx	CHAIN LINK FENCE
X X X	CONCRETE WALL WITH CHAIN LINK FENCE
	CURB LINE
	EDGE OF CONCRETE
c	UNDERGROUND CABLE (PER MARKOUT)
G	UNDERGROUND GAS (PER MARKOUT)
	SURVEY BASELINE
×9.6	SPOT ELEVATION OF DEMARCATION LAYER
×BW9.3	BOTTOM OF WALL ELEVATION
•	BOLLARD
0	UTILITY POLE
<b>==</b>	CATCH BASIN
E	MANHOLE (ELECTRIC)
C	PULLBOX (CABLE)
FB	PULLBOX (FIRE)
(\$)	MANHOLE (SAN. SEWER)
GV ⋉	GAS VALVE
wv 	WATER VALVE
$\forall$	HYDRANT
\$	LIGHT POST

# CONTRACTOR INFO.

LAWS CONSTRUCTION CORP. 34 IRVINGTON STREET PLEASANTVILLE, NY 10570

PAGE 1 OF 1

	UNAUTHORIZED ALTERATION OR ADDITIONS TO A PLAN BEARING A LICENSED ENGINEER'S OR	Rev	Date	Revision Approved	DRAWING CONTROL		
	SURVEYOR'S SEAL IS A VIOLATION OF SECTION 7209 SUBDIVISION 2 OF THE NEW YORK STATE	0	06/14/21	ISSUED	Designed N/A Drawn RD Checked by:	TAF	Tool
	EDUCATION LAW.  COPIES OF THIS DOCUMENT WITHOUT A FACSIMILE	1	07/01/21	PER COMMENTS	Purpose Released by	Date	
	OF THE SIGNATURE AND AN ORIGINAL EMBOSSED  SEAL OR ORIGINAL STAMP IN BLUE OR RED INK OF				O For Comment		PRACTICAL SOLUTION
HIS DOCUMENT IS PREPARED SPECIFICALLY FOR THE LIENT AND PROJECT DESIGNATED HEREON.	THE PROFESSIONAL ENGINEER OR LAND SURVEYOR SHALL NOT BE CONSIDERED VALID COPIES.				O For Approval		Tectonic Engineering 70 Pleasant Hill Road
DDIFICATION, ALTERATION, REVISION, DUPLICATION,  R USE WITHOUT THE CONSENT OF TECTONIC	0 1 2 3				O For Bid		P.O. Box 37 Mountainville, NY 10953
NGINEERING, PC IS PROHIBITED. COPYRIGHT 2021 ECTONIC ENGINEERING, PC. ALL RIGHTS RESERVED.	ORIGINAL SIZE IN INCHES				For Construction		www.tecto

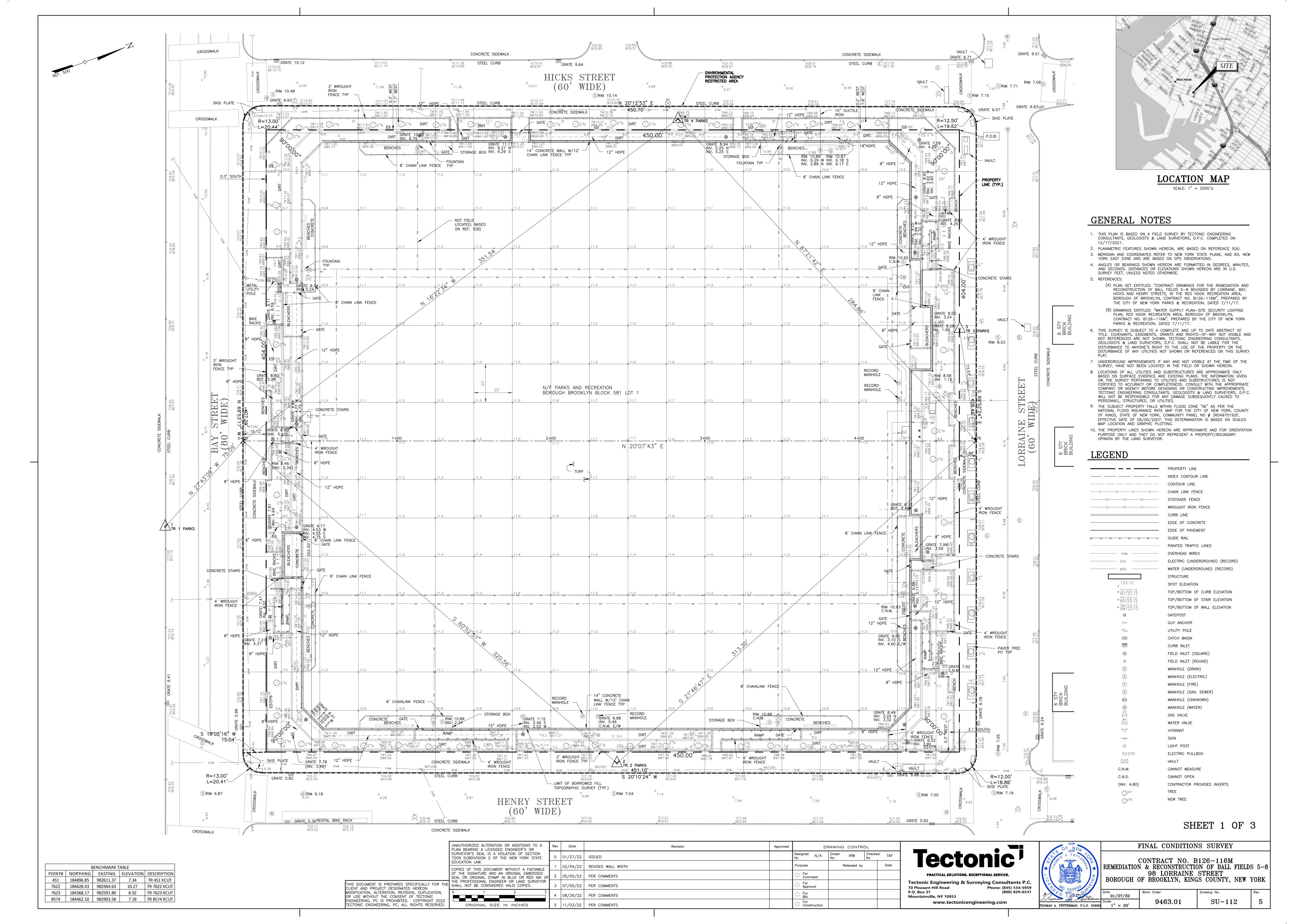


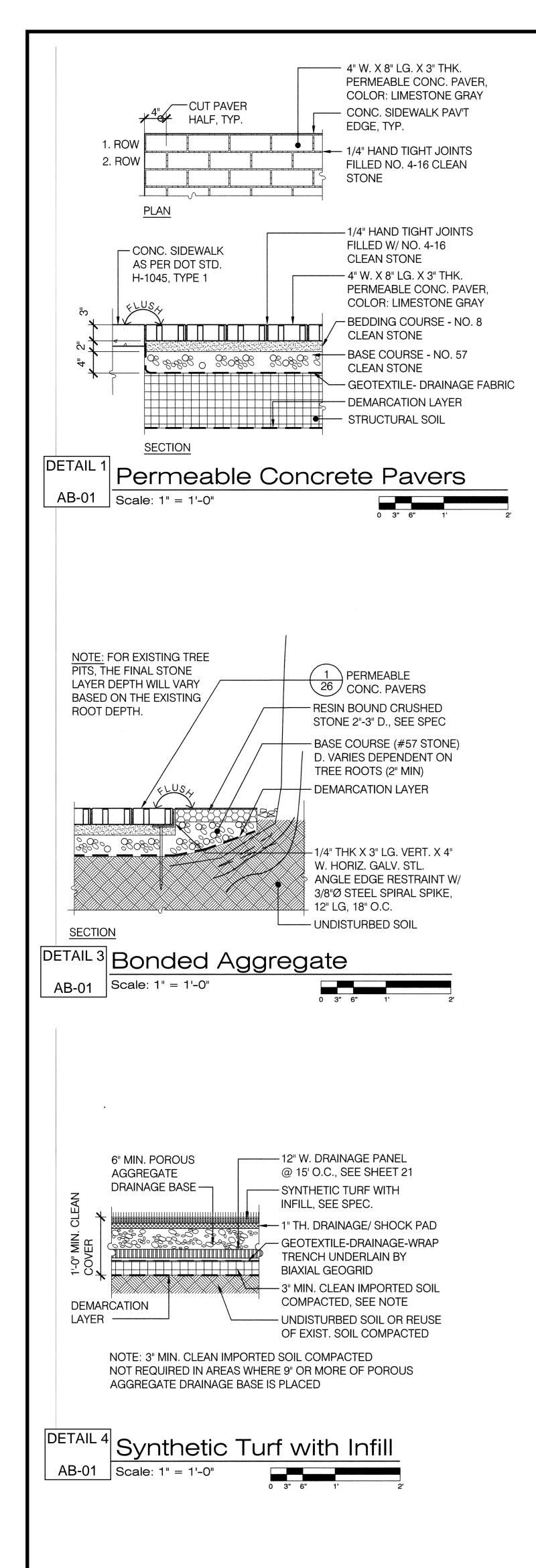
www.tectonicengineering.com

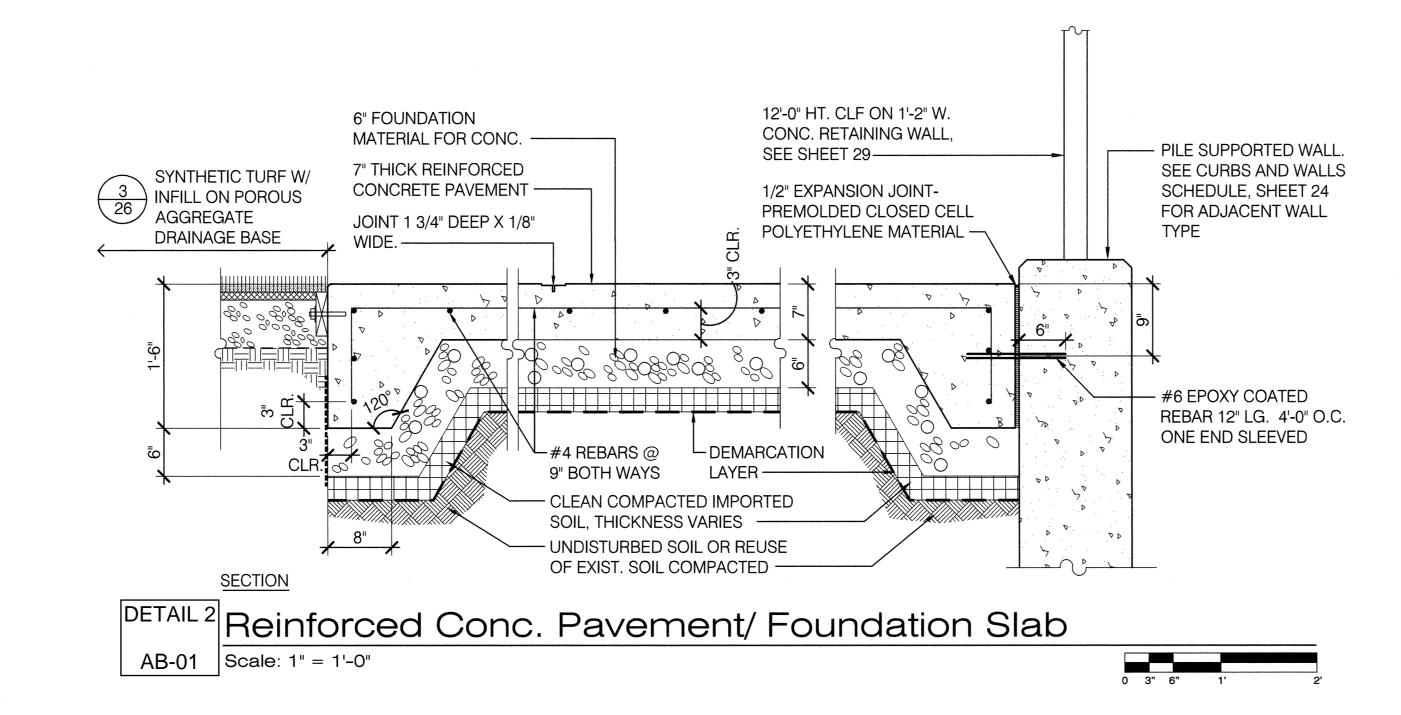


SURVEY OF SUBGRADES FOR DEMARCATION LAYER

CONTRACT NO. B126-116M
REMEDIATION & RECONSTRUCTION OF BALL FIELDS 5-8
LORRAINE, BAY, HICKS & HENRY STREETS
BOROUGH OF BROOKLYN, KINGS COUNTY, NEW YORK ettermon 06/14/2021 SU-102









AS-BUILT CERTIFICATION

CONSTRUCTED BY: LAWS CONSTRUCTION CORP CONSTRUCTED FOR: CITY OF NEW YORK DEPARTMENT PARKS & RECREATION

BALL FIELDS 5-8 BOUNDED BY LORRAINE, BAY HICKS, AND HENRY STREETS IN THE RED HOOK CONTRACT No.: B126-116M

PROJECT TITLE: THE REMEDIATION AND RECONSTRUCTION OF

# CONTRACT No. B126-116M

THE REMEDIATION AND RECONSTRUCTION OF BALL FIELDS 5-8 BOUNDED BY LORRAINE, BAY, HICKS AND HENRY STREETS IN THE RED HOOK RECREATION AREA BOROUGH OF BROOKLYN

CONSTRUCTION

Sitework - Utilities

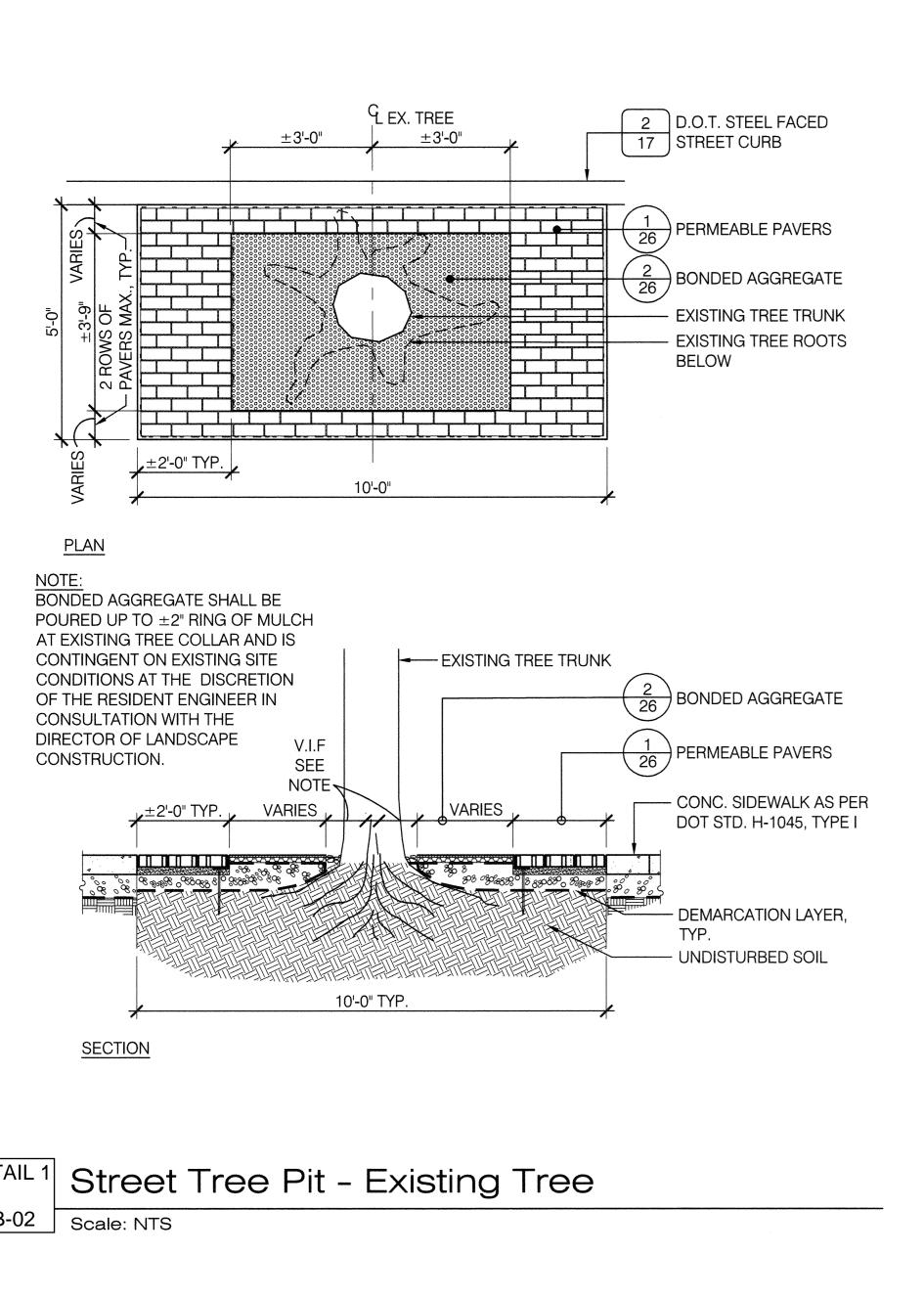
Heavy Highway - Parks

34 IRVINGTON STREET PLEASANTVILLE, NEW YORK 10570 PHONE: (914) 741-2100

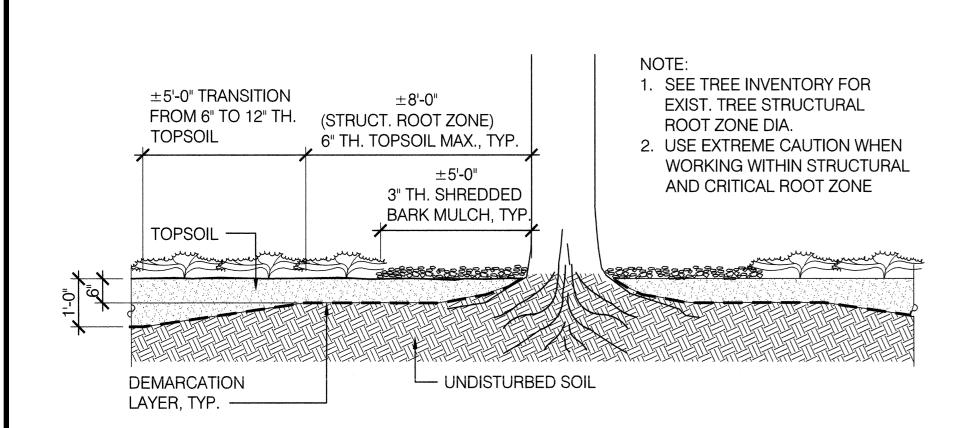
www.lawscc.com

**AS-BUILT** COVER CROSS SECTIONS

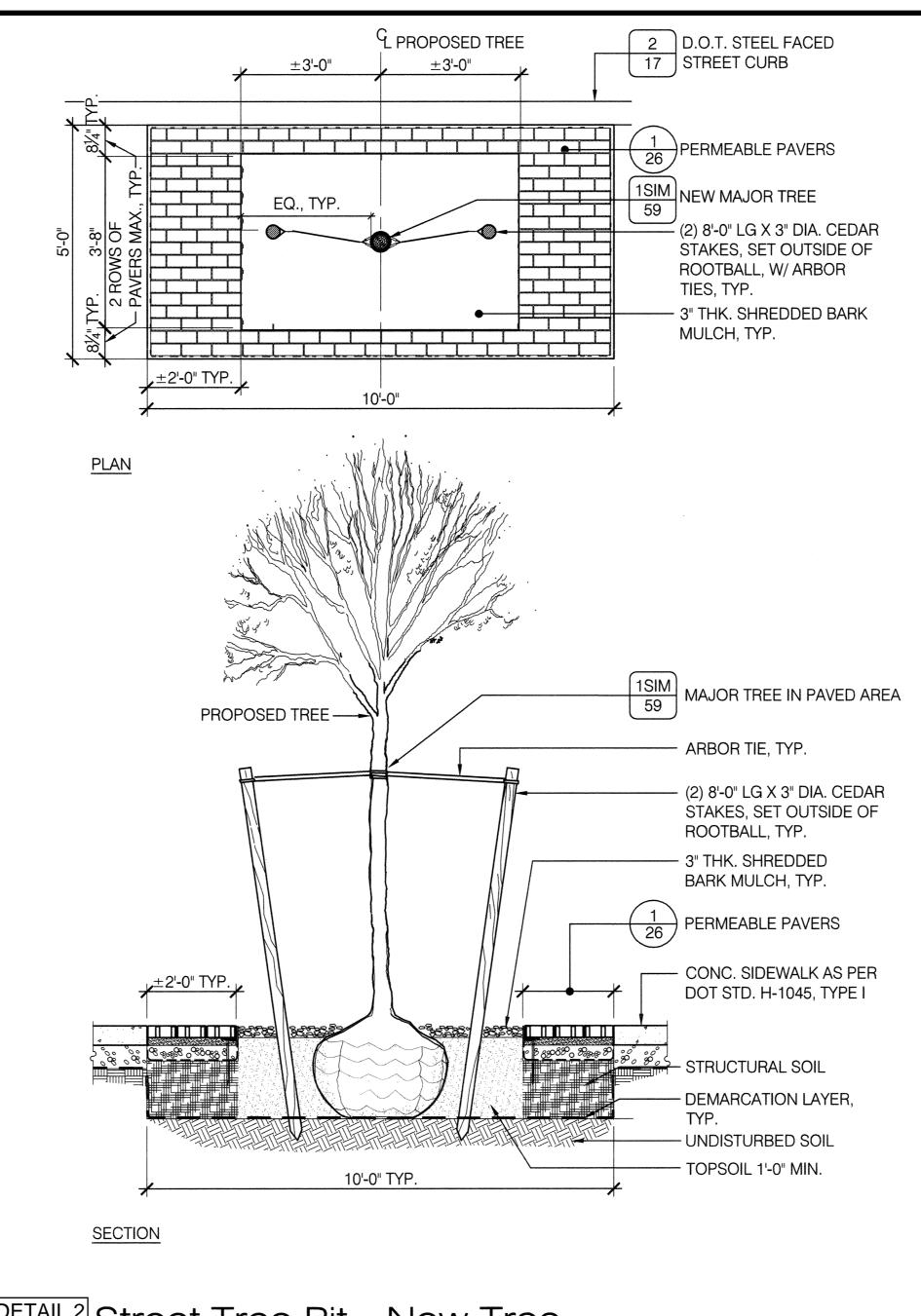
AB-01.1



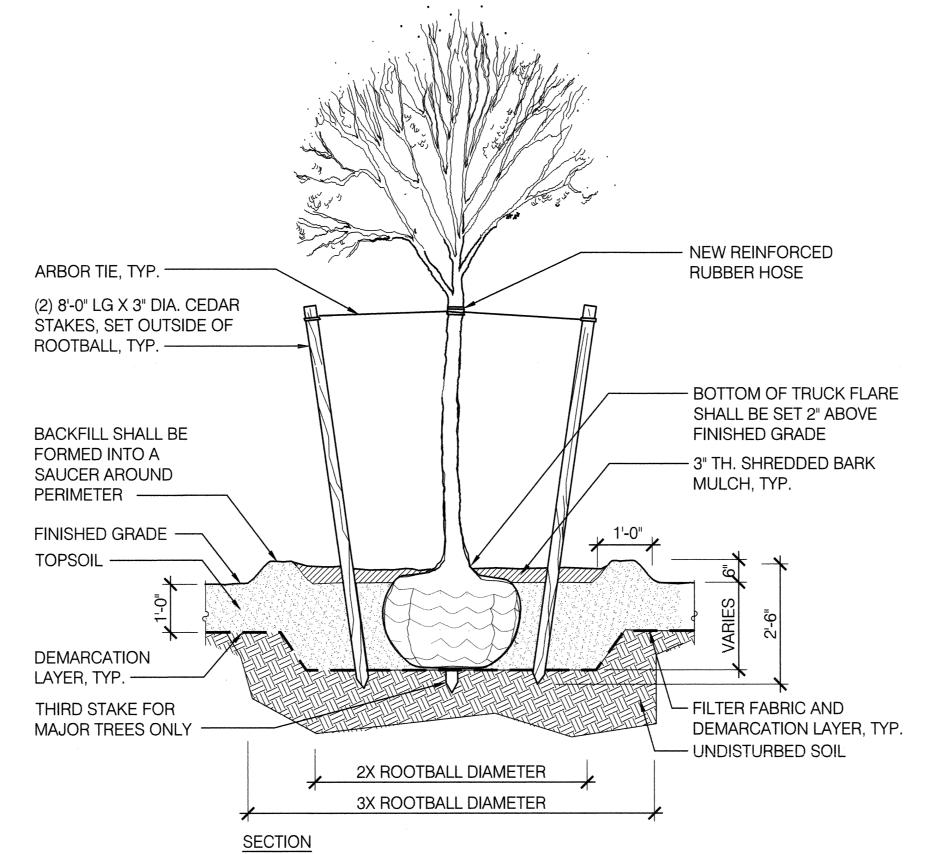
AB-02 Scale: NTS



DETAIL 4 Remedial Cover at Planting Strip - Existing Tree



|DETAIL 2 | Street Tree Pit - New Tree AB-02 Scale: NTS



UNDISTURBED SOIL OR **BIORETENTION SOIL MIX,** REUSE OF EXIST, SOIL SEE SPEC -COMPACTED 1:1 SLOPE -DEMARCATION LAYER. FOOTING AT EXPANSION JOINT BOTTOM TO MATCH SUBGRADE OPEN GRADED STONE BASE (BROKEN STONE) WRAPPED IN GEOTEXTILE 12" PERFORATED PIPE SEE SHEET 12 ALL AROUND. UNDISTURBED SOIL OR REUSE 3'-0"± OF EXIST. SOIL COMPACTED DETAIL 3 Bioswale - Section AB-02 | Scale: 3/4" = 1'-0"



AS-BUILT CERTIFICATION

12'-0" HT. CLF ON 1'-2" W. CONC. RETAINING WALL, SEE SHEET 29 AND 30 -

GEOTEXTILE FABRIC-

DRAINAGE -

RIVER STONE

**BOULDER ROCK** 

CONC. CURB SEE SH. 24 -

FIN. GR. - PLANTING AREA-

ADD ALTERNATE - 1

CONTRACT No.: B126-116M

CONTRACT No. B126-116M

THE REMEDIATION AND RECONSTRUCTION OF BALL FIELDS 5-8 BOUNDED BY LORRAINE, BAY, HICKS AND HENRY STREETS IN THE RED HOOK RECREATION AREA BOROUGH OF BROOKLYN

CONSTRUCTION

www.lawscc.com

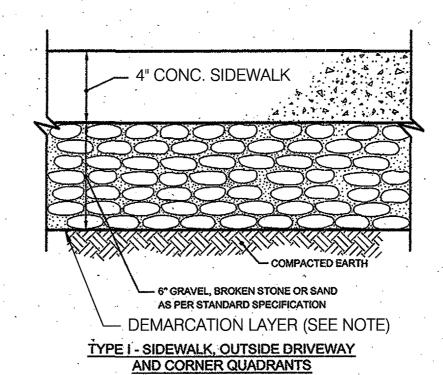
Sitework - Utilities

**AS-BUILT COVER CROSS SECTIONS** 

Heavy Highway - Parks 34 IRVINGTON STREET AB-02.1 PLEASANTVILLE, NEW YORK 10570 PHONE: (914) 741-2100

Remedial Cover at Planting Strip - New Tree

AB-02 Scale: NTS



5" CONC. SIDEWALK -- COMPACTED EARTH - 6" GRAVEL, BROKEN STONE OR SAND AS PER STANDARD SPECIFICATION DEMARCATION LAYER (SEE NOTE)

> TYPE II - SIDEWALK, IN DRIVEWAY AND IN CORNER QUADRANTS N.T.S.

#### **AS-BUILT CERTIFICATION**

CONSTRUCTED BY: LAWS CONSTRUCTION CORP

CONSTRUCTED FOR: CITY OF NEW YORK

**DEPARTMENT PARKS & RECREATION** PROJECT TITLE: THE REMEDIATION AND RECONSTRUCTION OF BALL FIELDS 5-8 BOUNDED BY LORRAINE, BAY

HICKS, AND HENRY STREETS IN THE RED HOOK RECREATION AREA, BOROUGH OF BROOKLYN

CONTRACT No.: B126-116M

DATE: 7/25/2023

#### NOTES:

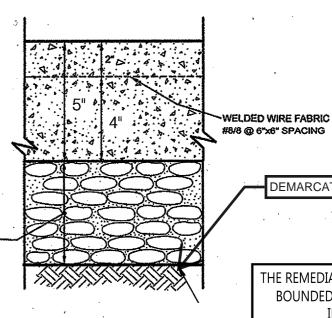
- ALL MATERIALS AND CONSTRUCTION METHODS USED ARE TO CONFORM TO SECTION #4.13 OF THE NYC DEPARTMENT OF TRANSPORTATION (DOT) STANDARD HIGHWAY SPECIFICATIONS.
- WELDED WIRE FABRIC, WHERE SPECIFIED, SHALL BE ASTM DESIGNATION A-185, GAUGE #8/8 AT 6"x6" SPACING, AND CONFORM TO SECTION # 2.25 OF THE NYCOOT STANDARD HIGHWAY SPECIFICATIONS.
- 3. IN AREAS OF THE SIDEWALK WHERE THE EXISTING CONCRETE GRAVEL SUB BASE MATERIAL WILL BE REUSED THE DEMARCATION LAYER WILL BE PLACED ABOVE EXISTING SUB BASE MATERIAL

STONE OR SAND AS PER

WITH WELDED WIRE FABRIC

DETAIL 1 NYC DOT Concrete Sidewalk

Scale: NTS



DEMARCATION LAYER

CONTRACT No. B126-116M

THE REMEDIATION AND RECONSTRUCTION OF BALL FIELDS 5-8 BOUNDED BY LORRAINE, BAY, HICKS AND HENRY STREETS IN THE RED HOOK RECREATION AREA



Sitework - Utilities Heavy Highway - Parks

**AS-BUILT COVER CROSS SECTIONS** 

34 IRVINGTON STREET PLEASANTVILLE, NEW YORK 10570 PHONE: (914) 741-2100

AB-03.1

LEGEND (SYMBOLS NOT TO SCALE):

SHADING/HATCHING TYPE OF COVER

SYNTHETIC TURF

BIOSWALE

EXISTING PAVING

**NEW PAVING** 

(TO REMAIN)

**EXISTING MATURE** TREES WITHIN PLANTING STRIPS

AB-02 & + DETAIL 1

NEW TREES AND/OR PLANTINGS WITHIN PLANTING STRIPS

**EXISTING MATURE** TREE WITHIN TREE PITS

TREE PIT

NEW TREE WITHIN

COVER. 4-FOOT FENCE. GROUND COVER WITH 3-INCH THICK LAYER OF MULCH ABOVE A MINIMUM 1-FOOT THICK LAYER OF CLEAN

REMEDIAL COVER

DEMARCATION LAYER, CLEAN TOP SOIL AND COVER WITH 2-INCH THICK LAYER OF BONDED AGGREGATE OR PERMEABLE PAVERS.

MINIMUM OF 1-FOOT THICK LAYER OF CLEAN COVER

GRASSES WITH 3-INCH THICK LAYER OF MULCH ABOVE

APPROXIMATELY 10-INCH THICK LAYER OF CONCRETE

MINIMUM OF 10-INCH THICK LAYER OF CONCRETE AND

DEMARCATION LAYER. CLEAN TOPSOIL AND COVER

WITH 3-INCH THICK LAYER OF MULCH AND GROUND

COVER WITH DEMARCATION LAYER BELOW.

A MINIMUM 1-FOOT THICK LAYER OF CLEAN COVER WITH

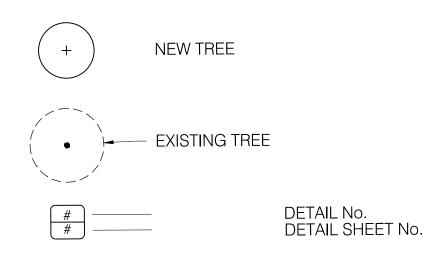
WITH DEMARCATION LAYER BELOW.

SUBBASE WITH DEMARCATION LAYER.

DEMARCATION LAYER BELOW.

AND SUBBASE.

DEMARCATION LAYER, CLEAN TOP SOIL AND COVER WITH MULCH AND PERMEABLE PAVERS.



CONTRACT LIMIT LINE

NOTES:

1. REFER TO DETAIL SHEETS FOR MORE DETAIL REGARDING REMEDIAL COVER SYSTEM.

2. UTILITIES NOT SHOWN.



CONTRACT No. B126-116M

THE REMEDIATION AND RECONSTRUCTION OF BALL FIELDS 5-8 BOUNDED BY LORRAINE, BAY, HICKS AND HENRY STREETS IN THE RED HOOK RECREATION AREA

BOROUGH OF BROOKLYN



Sitework - Utilities

Heavy Highway - Parks

34 IRVINGTON STREET

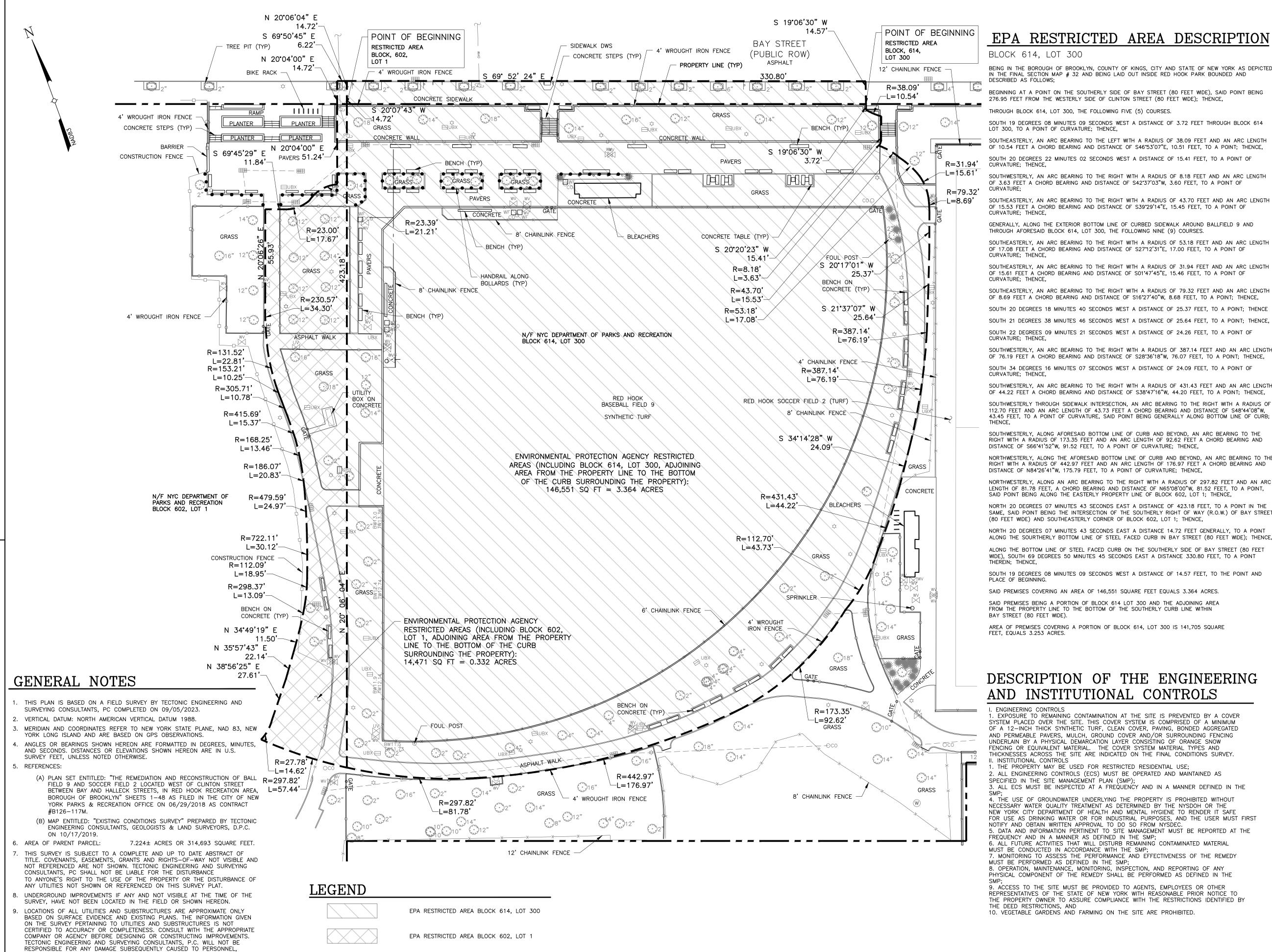
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PLEASANTVILLE, NEW YORK 10570 PHONE: (914) 741-2100

**AS-BUILT** COVER CROSS SECTIONS

A-04.0

REMEDIAL PLAN SCALE: 1"=20'-0"



STRUCTURES, OR UTILITIES.

GRAPHIC PLOTTING.

10. THIS SURVEY PLAT IS FOR SITE PLAN/ENGINEERING PURPOSES ONLY AND IS

11. THE SUBJECT PROPERTY FALLS WITHIN FLOOD ZONE "X" AS PER THE NATIONAL

09/05/2007. THIS DETERMINATION IS BASED ON SCALED MAP LOCATION AND

YORK, COMMUNITY PANEL NO # 3604970192F, EFFECTIVE DATE OF

12. THE PROPERTY LINES SHOWN HEREON ARE BASED ON REFERENCE 5(A).

FLOOD INSURANCE RATE MAP FOR THE BOROUGH OF BROOKLYN, STATE OF NEW

CLIENT AND PROJECT DESIGNATED HEREON.

OR USE WITHOUT THE CONSENT OF TECTONIC

MODIFICATION, ALTERATION, REVISION, DUPLICATION,

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NOT INTENDED TO BE USED FOR THE TRANSFER OF TITLE.

# EPA RESTRICTED AREA DESCRIPTION

BLOCK 614, LOT 300

BEING IN THE BOROUGH OF BROOKLYN. COUNTY OF KINGS. CITY AND STATE OF NEW YORK AS DEPICTED IN THE FINAL SECTION MAP # 32 AND BEING LAID OUT INSIDE RED HOOK PARK BOUNDED AND DESCRIBED AS FOLLOWS;

BEGINNING AT A POINT ON THE SOUTHERLY SIDE OF BAY STREET (80 FEET WIDE), SAID POINT BEING 276.95 FEET FROM THE WESTERLY SIDE OF CLINTON STREET (80 FEET WIDE); THENCE, THROUGH BLOCK 614, LOT 300, THE FOLLOWING FIVE (5) COURSES.

SOUTH 19 DEGREES 08 MINUTES 09 SECONDS WEST A DISTANCE OF 3.72 FEET THROUGH BLOCK 614 LOT 300, TO A POINT OF CURVATURE; THENCE,

SOUTHEASTERLY, AN ARC BEARING TO THE LEFT WITH A RADIUS OF 38.09 FEET AND AN ARC LENGTH OF 10.54 FEET A CHORD BEARING AND DISTANCE OF \$46\*53'07"E, 10.51 FEET, TO A POINT; THENCE, SOUTH 20 DEGREES 22 MINUTES 02 SECONDS WEST A DISTANCE OF 15.41 FEET, TO A POINT OF CURVATURE; THENCE,

SOUTHWESTERLY, AN ARC BEARING TO THE RIGHT WITH A RADIUS OF 8.18 FEET AND AN ARC LENGTH OF 3.63 FEET A CHORD BEARING AND DISTANCE OF S42°37'03"W, 3.60 FEET, TO A POINT OF

SOUTHEASTERLY, AN ARC BEARING TO THE RIGHT WITH A RADIUS OF 43.70 FEET AND AN ARC LENGTH OF 15.53 FEET A CHORD BEARING AND DISTANCE OF S39'29'14"E, 15.45 FEET, TO A POINT OF CURVATURE; THENCE,

GENERALLY, ALONG THE EXTERIOR BOTTOM LINE OF CURBED SIDEWALK AROUND BALLFIELD 9 AND THROUGH AFORESAID BLOCK 614, LOT 300, THE FOLLOWING NINE (9) COURSES.

SOUTHEASTERLY, AN ARC BEARING TO THE RIGHT WITH A RADIUS OF 53.18 FEET AND AN ARC LENGTH OF 17.08 FEET A CHORD BEARING AND DISTANCE OF S27"12'31"E, 17.00 FEET, TO A POINT OF CURVATURE: THENCE.

SOUTHEASTERLY. AN ARC BEARING TO THE RIGHT WITH A RADIUS OF 31.94 FEET AND AN ARC LENGTH OF 15.61 FEET A CHORD BEARING AND DISTANCE OF S01°47'45"E, 15.46 FEET, TO A POINT OF CURVATURE; THENCE,

OF 8.69 FEET A CHORD BEARING AND DISTANCE OF \$16°27'40"W, 8.68 FEET, TO A POINT; THENCE, SOUTH 20 DEGREES 18 MINUTES 40 SECONDS WEST A DISTANCE OF 25.37 FEET, TO A POINT; THENCE SOUTH 21 DEGREES 38 MINUTES 46 SECONDS WEST A DISTANCE OF 25.64 FEET, TO A POINT; THENCE, SOUTH 22 DEGREES 09 MINUTES 21 SECONDS WEST A DISTANCE OF 24.26 FEET, TO A POINT OF CURVATURE; THENCE,

SOUTHWESTERLY, AN ARC BEARING TO THE RIGHT WITH A RADIUS OF 387.14 FEET AND AN ARC LENGTH OF 76.19 FEET A CHORD BEARING AND DISTANCE OF \$28'36'18"W, 76.07 FEET, TO A POINT; THENCE, SOUTH 34 DEGREES 16 MINUTES 07 SECONDS WEST A DISTANCE OF 24.09 FEET, TO A POINT OF CURVATURE: THENCE.

SOUTHWESTERLY, AN ARC BEARING TO THE RIGHT WITH A RADIUS OF 431.43 FEET AND AN ARC LENGTH OF 44.22 FEET A CHORD BEARING AND DISTANCE OF S38'47'16"W, 44.20 FEET, TO A POINT; THENCE, SOUTHWESTERLY THROUGH SIDEWALK INTERSECTION, AN ARC BEARING TO THE RIGHT WITH A RADIUS OF 112.70 FEET AND AN ARC LENGTH OF 43.73 FEET A CHORD BEARING AND DISTANCE OF S48°44'08"W, 43.45 FEET, TO A POINT OF CURVATURE, SAID POINT BEING GENERALLY ALONG BOTTOM LINE OF CURB

SOUTHWESTERLY, ALONG AFORESAID BOTTOM LINE OF CURB AND BEYOND, AN ARC BEARING TO THE RIGHT WITH A RADIUS OF 173.35 FEET AND AN ARC LENGTH OF 92.62 FEET A CHORD BEARING AND

NORTHWESTERLY, ALONG THE AFORESAID BOTTOM LINE OF CURB AND BEYOND, AN ARC BEARING TO THE RIGHT WITH A RADIUS OF 442.97 FEET AND AN ARC LENGTH OF 176.97 FEET A CHORD BEARING AND DISTANCE OF N84°26'41"W, 175.79 FEET, TO A POINT OF CURVATURE; THENCE,

LENGTH OF 81.78 FEET, A CHORD BEARING AND DISTANCE OF N65°08'00"W, 81.52 FEET, TO A POINT, SAID POINT BEING ALONG THE EASTERLY PROPERTY LINE OF BLOCK 602, LOT 1; THENCE, NORTH 20 DEGREES 07 MINUTES 43 SECONDS EAST A DISTANCE OF 423.18 FEET, TO A POINT IN THE SAME. SAID POINT BEING THE INTERSECTION OF THE SOUTHERLY RIGHT OF WAY (R.O.W.) OF BAY STREET

NORTH 20 DEGREES 07 MINUTES 43 SECONDS EAST A DISTANCE 14.72 FEET GENERALLY, TO A POINT ALONG THE SOURTHERLY BOTTOM LINE OF STEEL FACED CURB IN BAY STREET (80 FEET WIDE); THENCE,

ALONG THE BOTTOM LINE OF STEEL FACED CURB ON THE SOUTHERLY SIDE OF BAY STREET (80 FEET WIDE), SOUTH 69 DEGREES 50 MINUTES 45 SECONDS EAST A DISTANCE 330.80 FEET, TO A POINT

SOUTH 19 DEGREES 08 MINUTES 09 SECONDS WEST A DISTANCE OF 14.57 FEET, TO THE POINT AND PLACE OF BEGINNING.

SAID PREMISES COVERING AN AREA OF 146,551 SQUARE FEET EQUALS 3.364 ACRES. SAID PREMISES BEING A PORTION OF BLOCK 614 LOT 300 AND THE ADJOINING AREA FROM THE PROPERTY LINE TO THE BOTTOM OF THE SOUTHERLY CURB LINE WITHIN BAY STREET (80 FEET WIDE).

AREA OF PREMISES COVERING A PORTION OF BLOCK 614, LOT 300 IS 141,705 SQUARE FEET, EQUALS 3.253 ACRES

### DESCRIPTION OF THE ENGINEERING AND INSTITUTIONAL CONTROLS

. EXPOSURE TO REMAINING CONTAMINATION AT THE SITE IS PREVENTED BY A COVER SYSTEM PLACED OVER THE SITE. THIS COVER SYSTEM IS COMPRISED OF A MINIMUM OF A 12-INCH THICK SYNTHETIC TURF, CLEAN COVER, PAVING, BONDED AGGREGATED AND PERMEABLE PAVERS, MULCH, GROUND COVER AND/OR SURROUNDING FENCING UNDERLAIN BY A PHYSICAL DEMARCATION LAYER CONSISTING OF ORANGE SNOW FENCING OR EQUIVALENT MATERIAL. THE COVER SYSTEM MATERIAL TYPES AND HICKNESSES ACROSS THE SITE ARE INDICATED ON THE FINAL CONDITIONS SURVEY.

THE PROPERTY MAY BE USED FOR RESTRICTED RESIDENTIAL USE; ALL ENGINEERING CONTROLS (ECS) MUST BE OPERATED AND MAINTAINED AS SPECIFIED IN THE SITE MANAGEMENT PLAN (SMP) . ALL ECS MUST BE INSPECTED AT A FREQUENCY AND IN A MANNER DEFINED IN THE

4. THE USE OF GROUNDWATER UNDERLYING THE PROPERTY IS PROHIBITED WITHOUT NECESSARY WATER QUALITY TREATMENT AS DETERMINED BY THE NYSDOH OR THE NEW YORK CITY DEPARTMENT OF HEALTH AND MENTAL HYGIENE TO RENDER IT SAFE FOR USE AS DRINKING WATER OR FOR INDUSTRIAL PURPOSES, AND THE USER MUST FIRST NOTIFY AND OBTAIN WRITTEN APPROVAL TO DO SO FROM NYSDEC 5. DATA AND INFORMATION PERTINENT TO SITE MANAGEMENT MUST BE REPORTED AT THE FREQUENCY AND IN A MANNER AS DEFINED IN THE SMP;

6. ALL FUTURE ACTIVITIES THAT WILL DISTURB REMAINING CONTAMINATED MATERIAL MUST BE CONDUCTED IN ACCORDANCE WITH THE SMP; 7. MONITORING TO ASSESS THE PERFORMANCE AND EFFECTIVENESS OF THE REMEDY MUST BE PERFORMED AS DEFINED IN THE SMP 8. OPERATION, MAINTENANCE, MONITORING, INSPECTION, AND REPORTING OF ANY PHYSICAL COMPONENT OF THE REMEDY SHALL BE PERFORMED AS DEFINED IN THE

9. ACCESS TO THE SITE MUST BE PROVIDED TO AGENTS, EMPLOYEES OR OTHER REPRESENTATIVES OF THE STATE OF NEW YORK WITH REASONABLE PRIOR NOTICE TO THE PROPERTY OWNER TO ASSURE COMPLIANCE WITH THE RESTRICTIONS IDENTIFIED BY THE DEED RESTRICTIONS, AND 10. VEGETABLE GARDENS AND FARMING ON THE SITE ARE PROHIBITED.



# LOCATION MAP

SCALE: 1" = 2000'

### EPA RESTRICTED AREA DESCRIPTION

BLOCK 602, LOT 1

CURVATURE; THENCE,

BEING IN THE BOROUGH OF BROOKLYN, COUNTY OF KINGS, CITY AND STATE OF NEW YORK AS DEPICTED IN THE FINAL SECTION MAP # 32 AND BEING LAID OUT INSIDE RED HOOK PARK BOUNDED AND DESCRIBED AS FOLLOWS;

BEGINNING AT A POINT IN THE SOUTHERLY SIDE OF BAY STREET (80 FEET WIDE) AND THE NORTHWESTERLY CORNER OF BLOCK 614, LOT 300. SAID POINT BEING 608.00 FEET WEST FROM WESTERLY SIDE OF CLINTON STREET (80 FEET WIDE); THENCE,

ALONG THE WESTERLY PROPERTY LINE OF AFORESAID BLOCK 614, LOT 300, SOUTH 20 DEGREES 07 MINUTES 43 SECONDS WEST A DISTANCE 423.18 FEET TO A POINT OF CURVATURE IN THE SAME; THENCE, NORTHWESTERLY, THROUGH BLOCK 602, LOT 1, AN ARC BEARING TO THE RIGHT WITH A RADIUS OF 297.82 FEET AND AN ARC LENGTH OF 57.44 FEET TO A CHORD BEARING AND DISTANCE OF N51\*44'31"W, 57.35 FEET. TO A POINT IN THE SAME; THENCE,

THROUGH AFORESAID BLOCK 602, LOT 1 AND GENERALLY, ALONG THE NORTHERLY BOTTOM LINE OF

NORTHWESTERLY, AN ARC BEARING TO THE LEFT WITH A RADIUS OF 27.78 FEET AND AN ARC LENGTH OF 14.62 FEET TO A CHORD BEARING AND DISTANCE OF N48°57'46"E, 14.45 FEET, TO A POINT; THENCE, NORTH 38 DEGREES 56 MINUTES 25 SECONDS EAST A DISTANCE 27.61 FEET, TO A POINT; THENCE, NORTH 35 DEGREES 57 MINUTES 43 SECONDS EAST A DISTANCE 22.14 FEET, TO A POINT; THENCE, NORTH 34 DEGREES 49 MINUTES 19 SECONDS EAST A DISTANCE 11.50 FEET, TO A POINT OF

CURBED SIDEWALK AROUND BALLFIELD 9, THE FOLLOWING TWENTY (20) COURSES;

NORTHEASTERLY. AN ARC BEARING TO THE LEFT WITH A RADIUS OF 298.37 FEET AND AN ARC LENGTH OF 13.09 FEET A CHORD BEARING AND DISTANCE OF N31°48'40"E, 13.09 FEET, TO A POINT OF CURVATURE;

NORTHEASTERLY, AN ARC BEARING TO THE LEFT WITH A RADIUS OF 112.09 FEET AND AN ARC LENGTH OF 18.95 FEET A CHORD BEARING AND DISTANCE OF N25'42'41"E, 18.93 FEET, TO A POINT OF CURVATURE;

NORTHEASTERLY, AN ARC BEARING TO THE LEFT WITH A RADIUS OF 722.11 FEET AND AN ARC LENGTH OF 30.12 FEET A CHORD BEARING AND DISTANCE OF N19\*40'25"E, 30.12 FEET, TO A POINT OF CURVATURE;

NORTHEASTERLY, AN ARC BEARING TO THE LEFT WITH A RADIUS OF 479.59 FEET AND AN ARC LENGTH OF 24.97 FEEL A CHORD BEARING AND DISTANCE OF N165913 E, 24.97 FEEL, TO A POINT OF CURVATURE

NORTHEASTERLY, AN ARC BEARING TO THE LEFT WITH A RADIUS OF 186.07 FEET AND AN ARC LENGTH OF 20.83 FEET A CHORD BEARING AND DISTANCE OF N12'17'19"E, 20.82 FEET, TO A POINT OF CURVATURE;

NORTHEASTERLY, AN ARC BEARING TO THE LEFT WITH A RADIUS OF 168.25 FEET AND AN ARC LENGTH OF 13.46 FEET A CHORD BEARING AND DISTANCE OF NO6\*47'24"E, 13.46 FEET, TO A POINT OF CURVATURE;

NORTHEASTERLY, AN ARC BEARING TO THE LEFT WITH A RADIUS OF 415.69 FEET AND AN ARC LENGTH OF 15.37 FEET A CHORD BEARING AND DISTANCE OF NO1\*06'45"E, 15.37 FEET, TO A POINT OF CURVATURE;

NORTHWESTERLY, AN ARC BEARING TO THE RIGHT WITH A RADIUS OF 305.71 FEET AND LENGTH 10.78 FEET A CHORD BEARING AND DISTANCE OF NO0\*57'24"W, 10.78 FEET, TO A POINT OF CURVATURE;

NORTHWESTERLY, AN ARC BEARING TO THE RIGHT WITH A RADIUS OF 153.21 FEET AND LENGTH 10.25

FEET A CHORD BEARING AND DISTANCE OF NO0002'57"W, 10.25 FEET, TO A POINT OF CURVATURE;

NORTHEASTERLY, AN ARC BEARING TO THE RIGHT WITH A RADIUS OF 131.52 FEET AND LENGTH 22.81 FEET A CHORD BEARING AND DISTANCE OF NO6\*50'11"E, 22.78 FEET, TO A POINT OF CURVE; THENCE, NORTHEASTERLY, AN ARC BEARING TO THE RIGHT WITH A RADIUS OF 230.57 FEET AND LENGTH 34.30 FEET A CHORD BEARING AND DISTANCE OF N17\*27'30"E, 34.27 FEET, TO A POINT; THENCE, NORTH 20 DEGREES 06 MINUTES 26 SECONDS EAST A DISTANCE 55.93 FEET, TO A POINT; THENCE,

SOUTHEASTERLY, AN ARC BEARING TO THE LEFT WITH A RADIUS OF 23.00 FEET AND AN ARC LENGTH OF 17.67 FEET A CHORD BEARING AND DISTANCE OF S88'59'06"E, 17.24 FEET, TO A POINT OF CURVATURE;

SOUTH 69 DEGREES 45 MINUTES 29 SECONDS EAST A DISTANCE 11.84 FEET, TO A POINT OF CURVATURE;

NORTHEASTERLY, AN ARC BEARING TO THE RIGHT WITH A RADIUS OF 23.39 FEET AN ARC LENGTH OF 21.21 FEET A CHORD BEARING AND DISTANCE OF N79°59'18"E, 20.49 FEET, TO A POINT; THENCE, NORTH 20 DEGREES 04 MINUTES 00 SECONDS EAST A DISTANCE 51.24 FEET, TO A POINT IN THE

SOUTHERLY RIGHT OF WAY (R.O.W.) OF BAY STREET (80 FEET WIDE); THENCE,

NORTH 20 DEGREES 04 MINUTES 00 SECONDS EAST A DISTANCE 14.72 FEET GENERALLY, TO A POINT IN THE SOUTHERLY BOTTOM LINE OF STEEL FACED CURB IN BAY STREET (80 FEET WIDE); THENCE,

WIDE), SOUTH 69 DEGREES 50 MINUTES 45 SECONDS EAST A DISTANCE 6.22 FEET TO A POINT THEREIN;

ALONG THE BOTTOM LINE OF STEEL FACED CURB ON THE SOUTHERLY SIDE OF BAY STREET (80 FEET

SOUTH 20 DEGREES 07 MINUTES 43 SECONDS WEST A DISTANCE OF 14.72 FEET, TO THE POINT AND PLACE OF BEGINNING.

SAID PREMISES COVERING AN AREA OF 14,471 SQUARE FEET EQUALS 0.332 ACRES. SAID PREMISES BEING A PORTION OF BLOCK 602 LOT 1 AND THE ADJOINING AREA FROM THE PROPERTY LINE TO THE BOTTOM OF THE SOUTHERLY CURB LINE WITHIN BAY STREET (80 FEET WIDE). AREA OF PREMISES COVERING A PORTION OF BLOCK 602, LOT 1 IS 14,379 SQUARE FEET,

CONTRACT NUMBER: B126-117M

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**Tectonic Engineering & Surveying Consultants P.C.** 70 Pleasant Hill Road Phone: (845) 534-5959 P.O. Box 37 (800) 829-6531 Mountainville, NY 10953

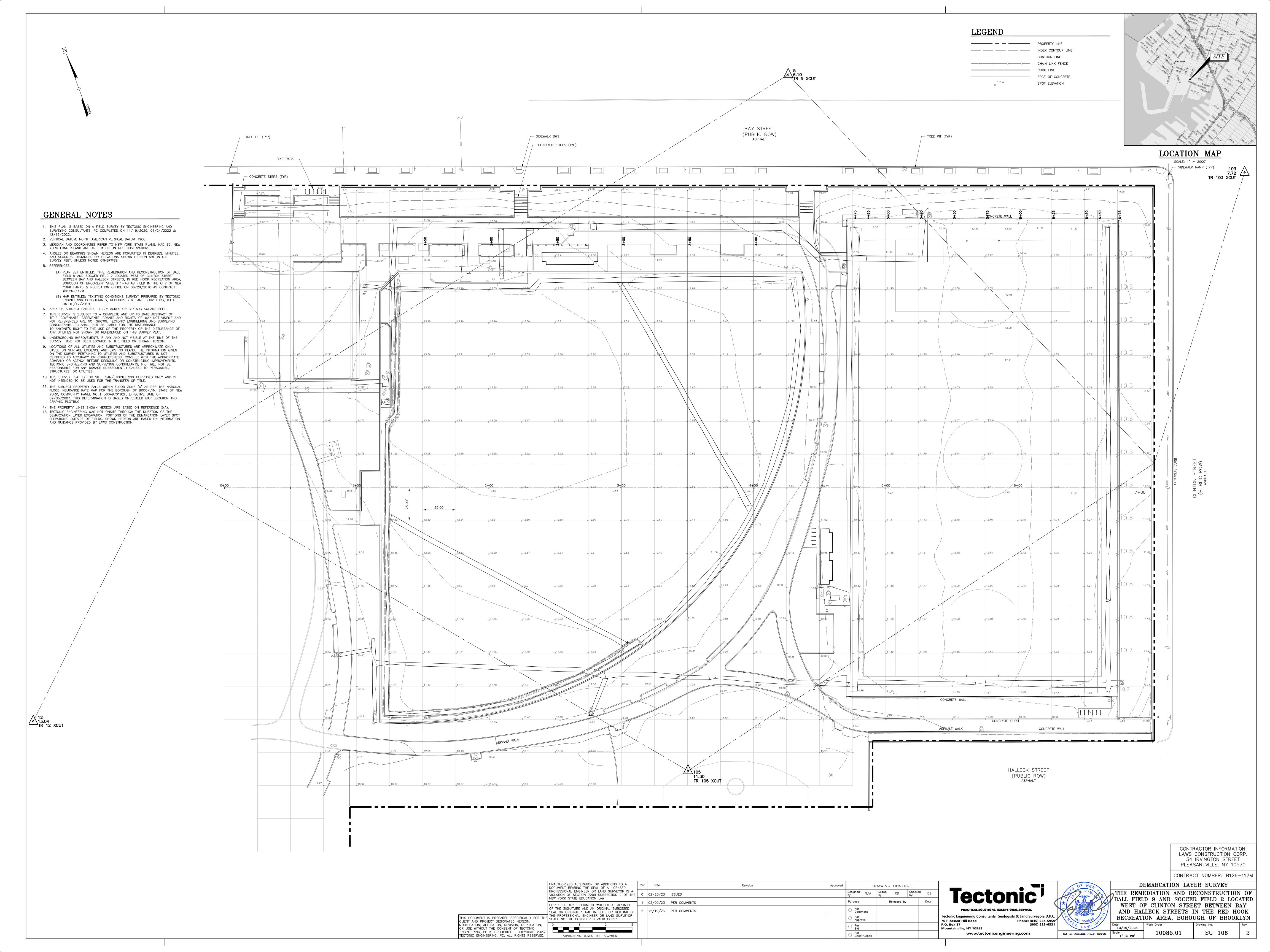
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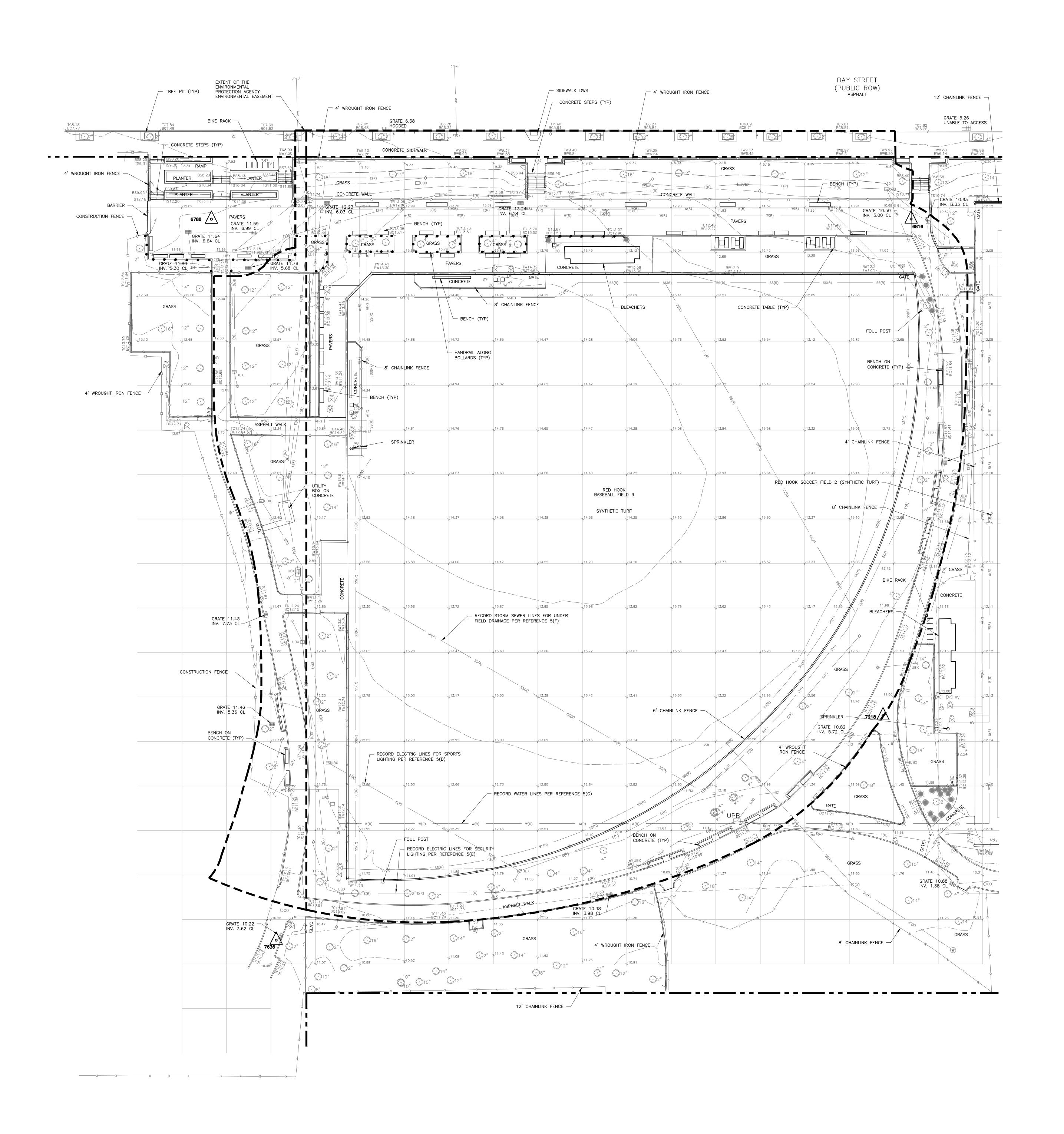


ENVIRONMENTAL EASEMENT BOUNDARY SURVEY THE REMEDIATION AND RECONSTRUCTION OF BALL FIELD 9 LOCATED WEST OF CLINTON STREET BETWEEN BAY AND HALLECK STREETS IN THE RED HOOK RECREATION AREA, BOROUGH OF BROOKLYN

10085.01 SU-113

09/28/2023 JAY M. KIMLER, P.L.S. 50695







LOCATION MAP

SCALE: 1" = 2000'

# GENERAL NOTES

- THIS PLAN IS BASED ON A FIELD SURVEY BY TTECTONIC ENGINEERING CONSULTANTS, GEOLOGISTS & LAND SURVEYORS, D.P.C. COMPLETED ON
- 09/05/2023. 2. VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM 1988.
- MERIDIAN AND COORDINATES REFER TO NEW YORK STATE PLANE, NAD 83, NEW YORK LONG ISLAND AND ARE BASED ON GPS OBSERVATIONS.
   ANGLES OR BEARINGS SHOWN HEREON ARE FORMATTED IN DEGREES, MINUTES,
- 4. ANGLES OR BEARINGS SHOWN HEREON ARE FORMATTED IN DEGREES, MINUTES, AND SECONDS. DISTANCES OR ELEVATIONS SHOWN HEREON ARE IN U.S. SURVEY FEET, UNLESS NOTED OTHERWISE.
  5. REFERENCES:
  - (A) PLAN SET ENTITLED: "THE REMEDIATION AND RECONSTRUCTION OF BALL FIELD 9 AND SOCCER FIELD 2 LOCATED WEST OF CLINTON STREET BETWEEN BAY AND HALLECK STREETS, IN RED HOOK RECREATION AREA, BOROUGH OF BROOKLYN" SHEETS 1—48 AS FILED IN THE CITY OF NEW YORK PARKS & RECREATION OFFICE ON 06/29/2018 AS CONTRACT
  - #B126-117M.

    (B) MAP ENTITLED: "EXISTING CONDITIONS SURVEY" PREPARED BY TECTONIC ENGINEERING CONSULTANTS, GEOLOGISTS & LAND SURVEYORS, D.P.C. ON 10/17/2019.
- (C) MAP ENTITLED: "WATER SUPPLY LAYOUT PLAN" PREPARED BY TRC ENGINEERS, INC. ON 06/29/18.(D) MAP ENTITLED: "SPORTS LIGHTING PLAN" PREPARED BY TRC ENGINEERS,
- INC. ON 06/29/18.
  (E) MAP ENTITLED: "SITE SECURITY LIGHTING PLAN" PREPARED BY TRC ENGINEERS, INC. ON 06/29/18.
- (F) MAP ENTITLED: "FIELD UNDERDRAINAGE PLAN 1" PREPARED BY TRC ENGINEERS, INC. ON 06/29/18.
- AREA OF PARENT PARCEL: 7.224± ACRES OR 314,693 SQUARE FEET.
   THIS SURVEY IS SUBJECT TO A COMPLETE AND UP TO DATE ABSTRACT OF TITLE. COVENANTS, EASEMENTS, GRANTS AND RIGHTS—OF—WAY NOT VISIBLE AND NOT REFERENCED ARE NOT SHOWN. TECTONIC ENGINEERING AND SURVEYING
- CONSULTANTS, PC SHALL NOT BE LIABLE FOR THE DISTURBANCE
  TO ANYONE'S RIGHT TO THE USE OF THE PROPERTY OR THE DISTURBANCE OF
  ANY UTILITIES NOT SHOWN OR REFERENCED ON THIS SURVEY PLAT.

  8. UNDERGROUND IMPROVEMENTS IF ANY AND NOT VISIBLE AT THE TIME OF THE
  SURVEY, HAVE NOT BEEN LOCATED IN THE FIELD OR SHOWN HEREON.
- 9. LOCATIONS OF ALL UTILITIES AND SUBSTRUCTURES ARE APPROXIMATE ONLY BASED ON SURFACE EVIDENCE AND EXISTING PLANS. THE INFORMATION GIVEN ON THE SURVEY PERTAINING TO UTILITIES AND SUBSTRUCTURES IS NOT CERTIFIED TO ACCURACY OR COMPLETENESS. CONSULT WITH THE APPROPRIATE COMPANY OR AGENCY BEFORE DESIGNING OR CONSTRUCTING IMPROVEMENTS. TECTONIC ENGINEERING AND SURVEYING CONSULTANTS, P.C. WILL NOT BE RESPONSIBLE FOR ANY DAMAGE SUBSEQUENTLY CAUSED TO PERSONNEL,
- STRUCTURES, OR UTILITIES.

  10. THIS SURVEY PLAT IS FOR SITE PLAN/ENGINEERING PURPOSES ONLY AND IS NOT INTENDED TO BE USED FOR THE TRANSFER OF TITLE.

  11. THE SUBJECT PROPERTY FALLS WITHIN FLOOD ZONE "X" AS PER THE NATIONAL FLOOD INSURANCE RATE MAP FOR THE BOROUGH OF BROOKLYN, STATE OF NEW YORK, COMMUNITY PANEL NO # 3604970192F, EFFECTIVE DATE OF
- GRAPHIC PLOTTING.

  12. THE PROPERTY LINES SHOWN HEREON ARE BASED ON REFERENCE 5(A).

  13. ALL RECORD UTILITY LINES SHOWN HEREON ARE BASED ON CAD FILES PROVIDED, AND NOT FIELD LOCATED BY TECTONIC ENGINEERING CONSULTANTS,

GEOLOGISTS & LAND SURVEYORS, D.P.C.

09/05/2007. THIS DETERMINATION IS BASED ON SCALED MAP LOCATION AND

# LEGEND

	PROPERTY LINE	•	BOLLARD
	EASEMENT LINE	0	GATEPOST
	INDEX CONTOUR LINE	0	UTILITY POLE
	CONTOUR LINE		CATCH BASIN
xx	CHAIN LINK FENCE	o CO	CLEAN OUT
	CONSTRUCTION FENCE	Mb	MANHOLE (UNKNOWN)
<del></del>	WROUGHT IRON FENCE	₩V 	WATER VALVE
	CURB LINE	UV ├──	UNKNOWN VALVE
	CURB TYPE TRANSITION	~	HYDRANT
	EDGE OF CONCRETE	*	STANDPIPE
	EDGE OF GRAVEL	<del>- o -</del>	SIGN
	EDGE OF PAVEMENT	<b>\$</b>	LIGHT POST
o <del>o o o o o</del> ·	GUIDE RAIL	OPS	PEDESTRIAN SIGNAL
OHW	OVERHEAD WIRES	□UPX	UNKNOWN PULLBOX
	STORM SEWER	☐ WF	WATER FOUNTAIN
E(R)	ELECTRIC (UNDERGROUND) (RECORD)	(i)36"	TREE
W(R)	WATER (UNDERGROUND) (RECORD)		ORNAMENT
SS(R)	STORM SEWER (RECORD)	$\triangle$	CONTROL POINT
	STRUCTURE		
×BC11.46 *TC11.92	BOTTOM/TOP OF CURB ELEVATION		
×BW11.54 TW12.01	BOTTOM/TOP OF WALL ELEVATION		
11.9 ×	SPOT ELEVATION		

Tectonic Engineering Consultants, Geologists & Land Surveyors, D.P.C.
70 Pleasant Hill Road
P.O. Box 37
Mountainville, NY 10953

www.tectonicengineering.com

TO BE DE LAND SUR Date

JAY M. KIMLER, P.L.S. 50695

FINAL CONDITIONS SURVEY
THE REMEDIATION AND RECONSTRUCTION OF
BALL FIELD 9 AND SOCCER FIELD 2 LOCATED
WEST OF CLINTON STREET BETWEEN BAY
AND HALLECK STREETS IN THE RED HOOK
RECREATION AREA, BOROUGH OF BROOKLYN

CONTRACT NUMBER: B126-117M

 BENCHMARK TABLE

 POINT #
 NORTHING
 EASTING
 ELEVATION
 DESCRIPTION

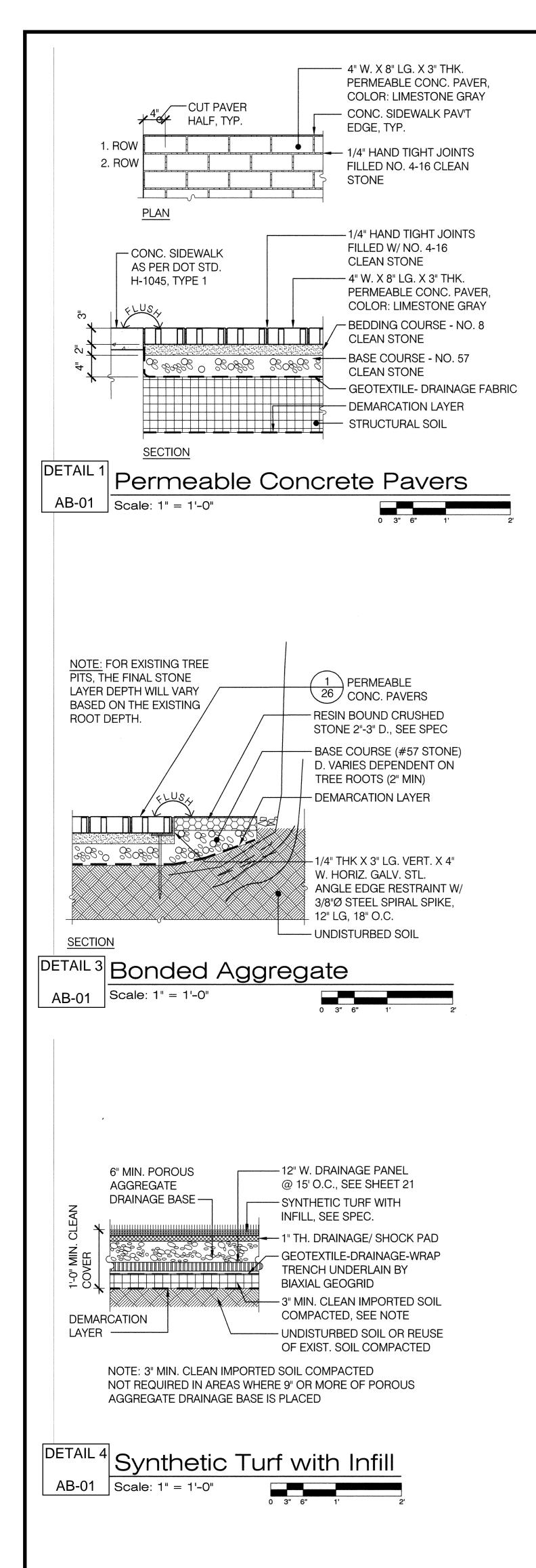
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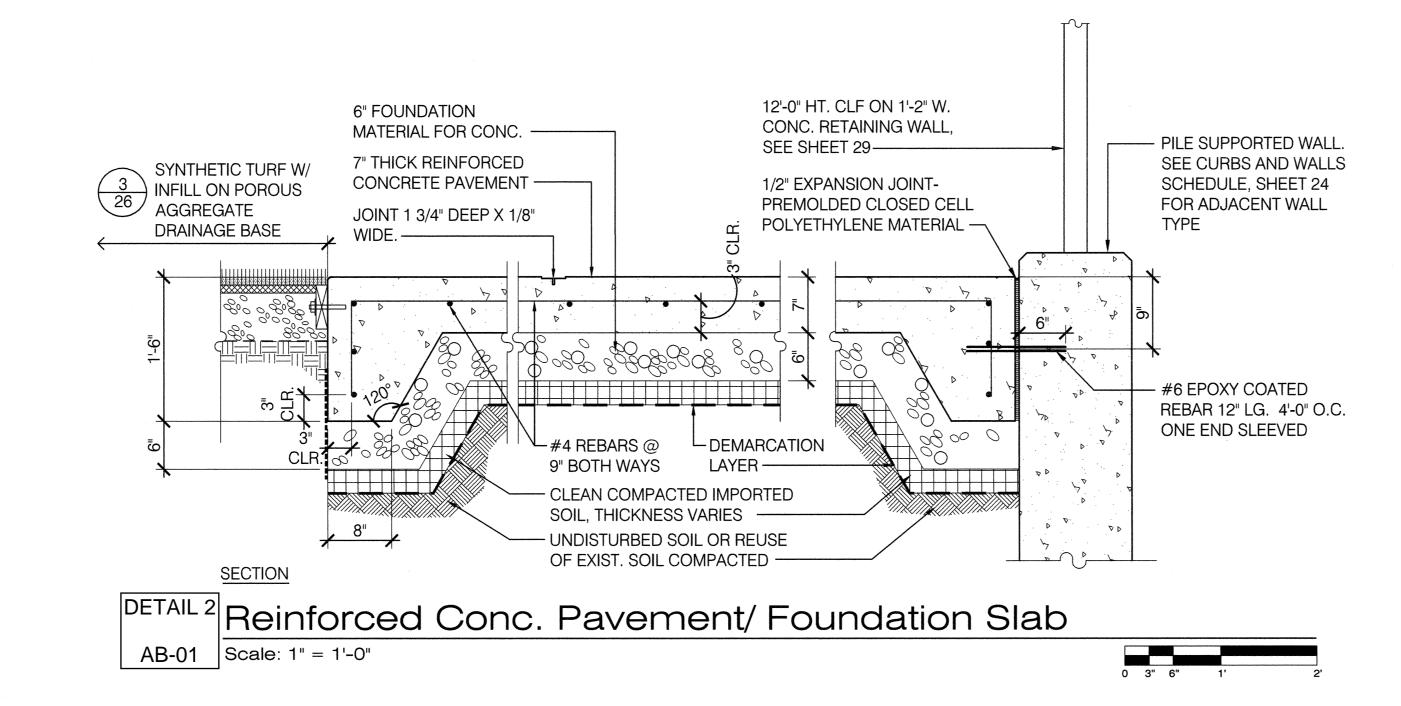
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 TR 7636 MN

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AS-BUILT CERTIFICATION:

CONSTRUCTED BY: LAWS CONSTRUCTION CORP. CONSTRUCTED FOR: THE CITY OF NEW YORK DEPARTMENT OF

PARKS AND RECREATION

PROJECT TITLE: THE REMEDIATION AND RECONSTRUCTION OF BALL FIELD S AND SOCCER FIELD 2 LOCATED WEST OF CLINTON STREET BETWEEN BAY AND HALLECK STREETS, IN RED HOOK

RECREATION AREA, BOROUGH OF BROOKLYN

CONTRACT No.: B126-117M

AUGUST 28, 2023 DATE:

THE REMEDIATION & RECONSTRUCTION OF BALL FIELD 9 & SOCCER FIELD 2 LOCATED WEST OF CLINTON STREET BETWEEN BAY AND HALLECK STREETS IN THE RED HOOK RECREATION AREA, BOROUGH OF BROOKLYN



Sitework - Utilities

Heavy Highway - Parks

34 IRVINGTON STREET PLEASANTVILLE, NEW YORK 10570

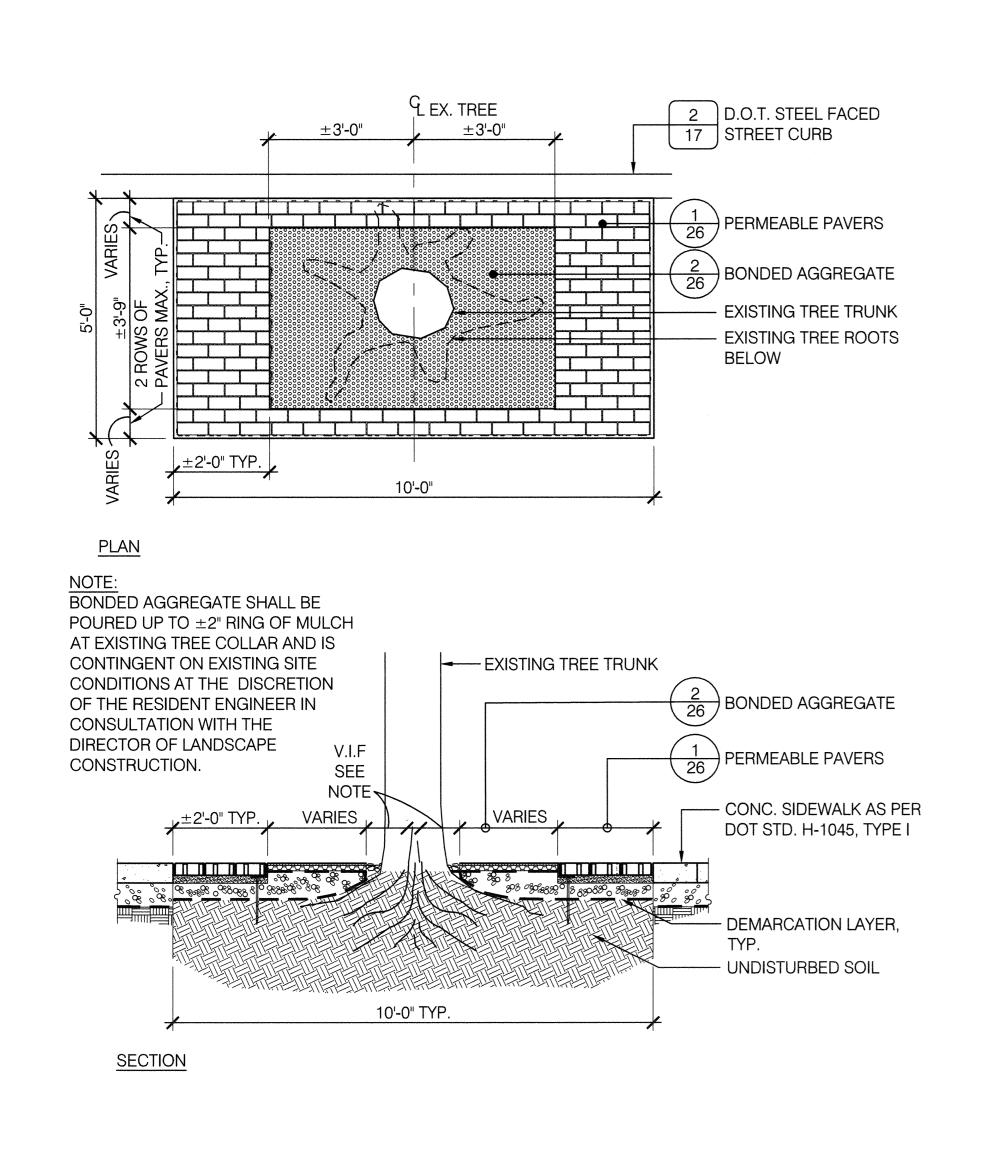
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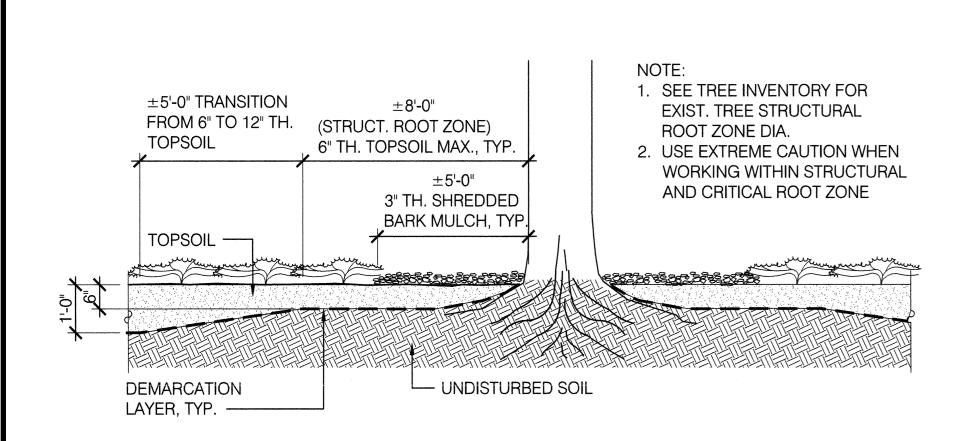
DATE: 8/28/2023

COVER CROSS SECTIONS

AB-01.0

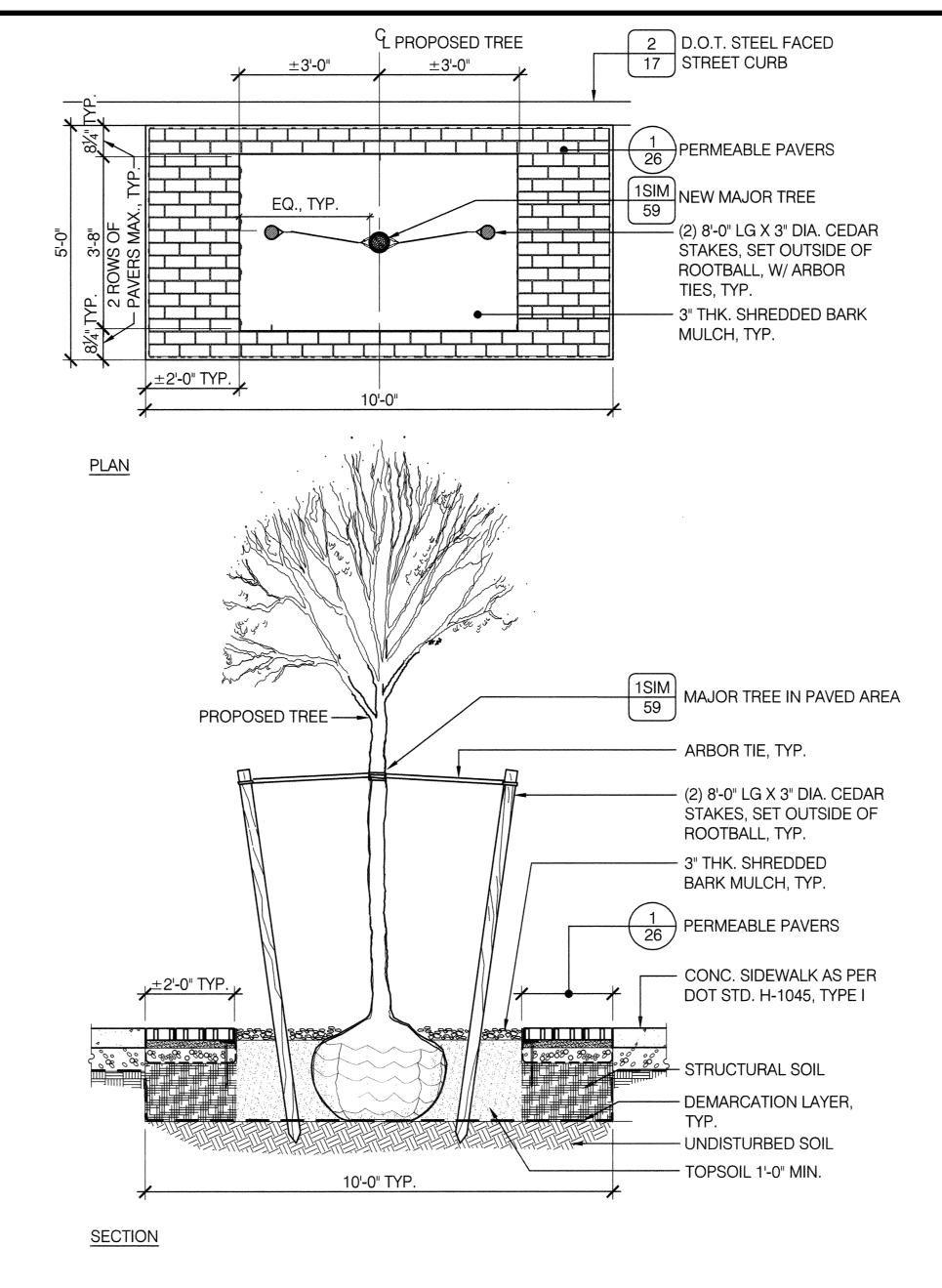


Street Tree Pit - Existing Tree AB-02 Scale: NTS

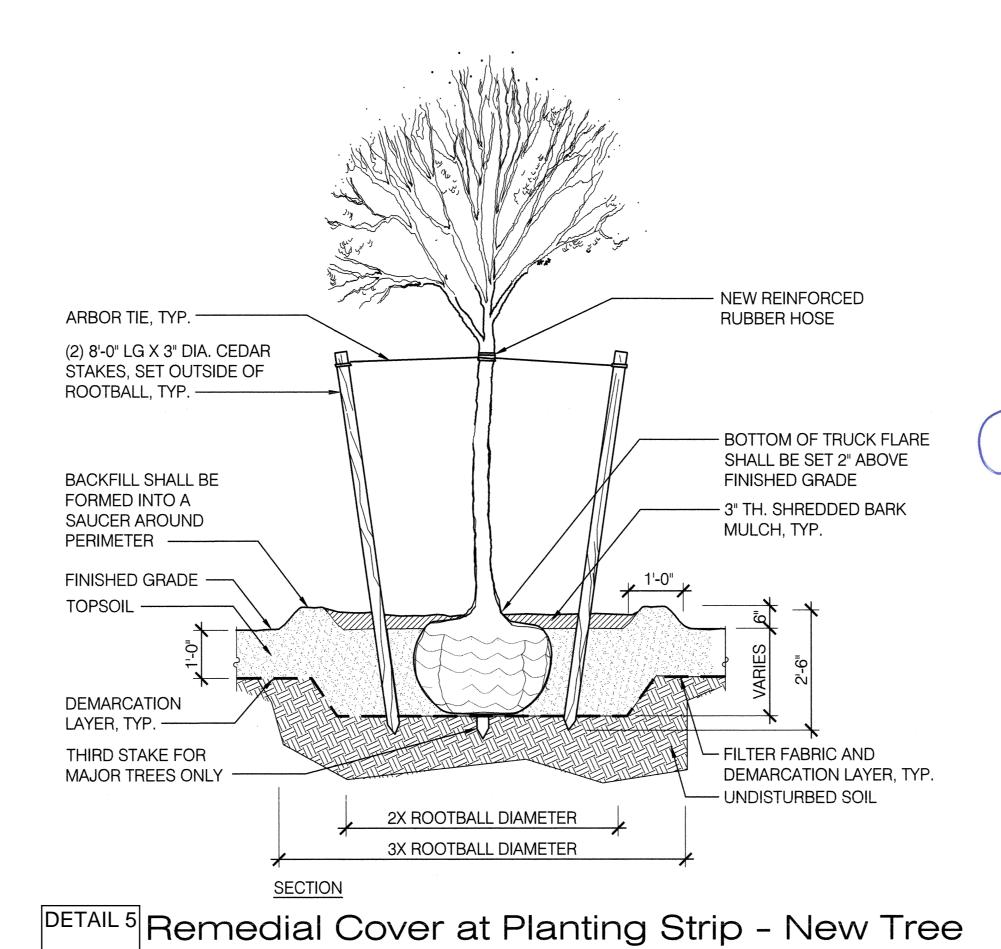


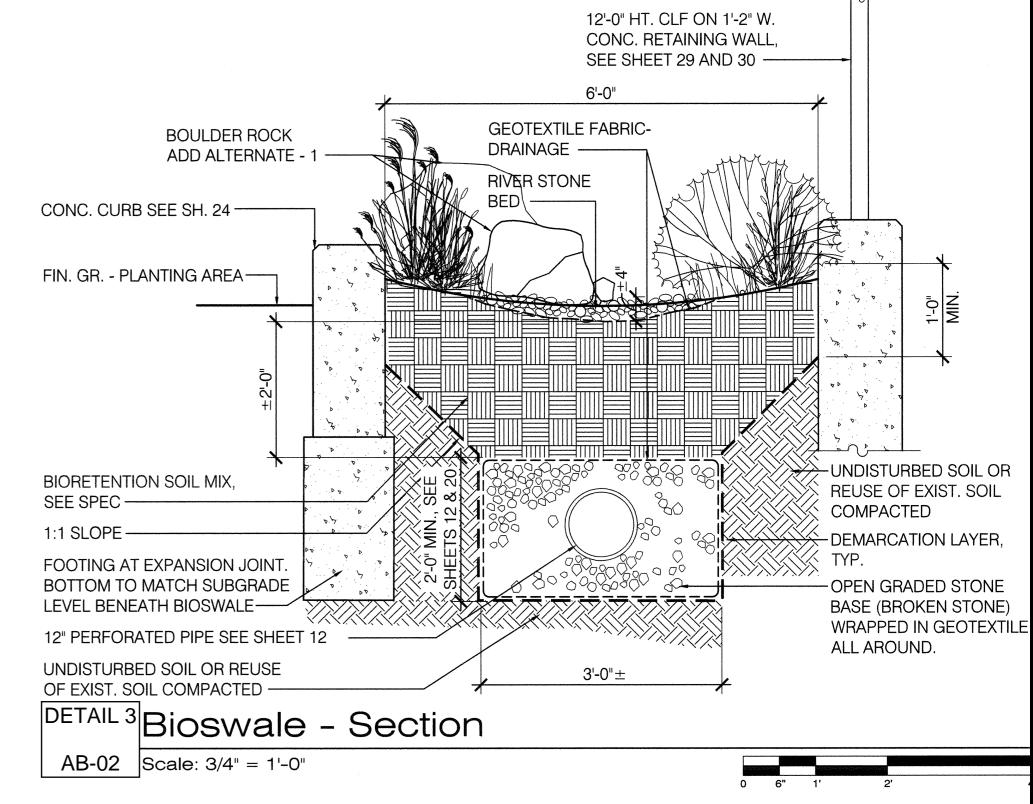
DETAIL 4 Remedial Cover at Planting Strip - Existing Tree AB-02 Scale: NTS

AB-02 Scale: NTS



|DETAIL 2 | Street Tree Pit - New Tree AB-02 Scale: NTS







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PARKS AND RECREATION PROJECT TITLE: THE REMEDIATION AND RECONSTRUCTION OF BALL FIELD

AND SOCCER FIELD 2 LOCATED WEST OF CLINTON STREET

BETWEEN BAY AND HALLECK STREETS, IN RED HOOK RECREATION AREA, BOROUGH OF BROOKLYN

CONTRACT No.: B126-117M

AUGUST 28, 2023 DATE:

THE REMEDIATION & RECONSTRUCTION OF BALL FIELD 9 & SOCCER FIELD 2 LOCATED WEST OF CLINTON STREET BETWEEN BAY AND HALLECK STREETS IN THE RED HOOK

RECREATION AREA, BOROUGH OF BROOKLYN



Sitework - Utilities Heavy Highway - Parks

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DATE: 8/28/2023

**AS-BUILT** COVER CROSS SECTIONS

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PARKS AND RECREATION

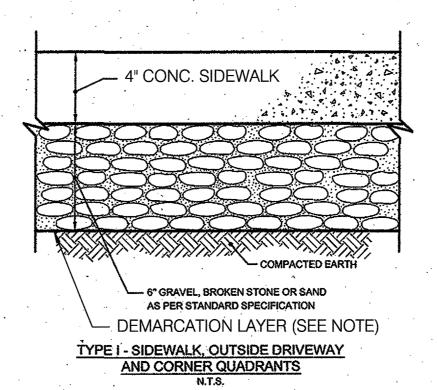
THE REMEDIATION AND RECONSTRUCTION OF BALL FIELD 9

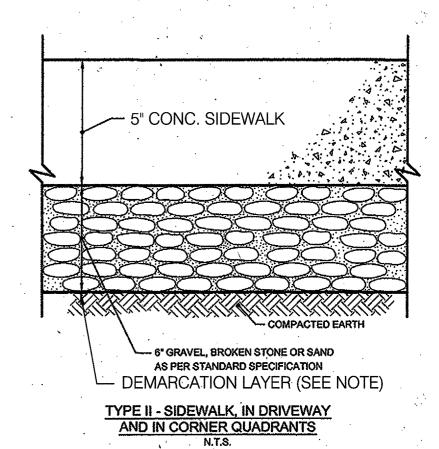
AND SOCCER FIELD 2 LOCATED WEST OF CLINTON STREET BETWEEN BAY AND HALLECK STREETS, IN RED HOOK

RECREATION AREA, BOROUGH OF BROOKLYN

CONTRACT No.: B126-117M

DATE: AUGUST 28, 2023





NOTES:

1. ALL MATERIALS AND CONSTRUCTION METHODS USED ARE TO CONFORM TO SECTION #4.13 OF THE NYC DEPARTMENT OF TRANSPORTATION (DOT) STANDARD HIGHWAY SPECIFICATIONS.

2. WELDED WIRE FABRIC, WHERE SPECIFIED, SHALL BE ASTM DESIGNATION A-185, GAUGE #8/8 AT 6"x6" SPACING, AND CONFORM TO SECTION # 2.25 OF THE NYCDOT STANDARD HIGHWAY SPECIFICATIONS.

3. IN AREAS OF THE SIDEWALK WHERE THE EXISTING CONCRETE GRAVEL SUB BASE MATERIAL WILL BE REUSED THE DEMARCATION LAYER WILL BE PLACED ABOVE EXISTING SUB BASE MATERIAL.

WELDED WIRE FABRIC #8/8 @ 6"x6" SPACING

DEMARCATION LAYER

WITH WELDED WIRE FABRIC CONSTRUCTION

> Sitework - Utilities Heavy Highway - Parks

34 IRVINGTON STREET PLEASANTVILLE, NEW YORK 10570 PHONE: (914) 741-2100 DATE: 8/28/2023

**AS-BUILT COVER CROSS SECTIONS** 

THE REMEDIATION AND RECONSTRUCTION OF BALL FIELD

9 AND SOCCER FIELD 2 LOCATED WEST OF CLINTON

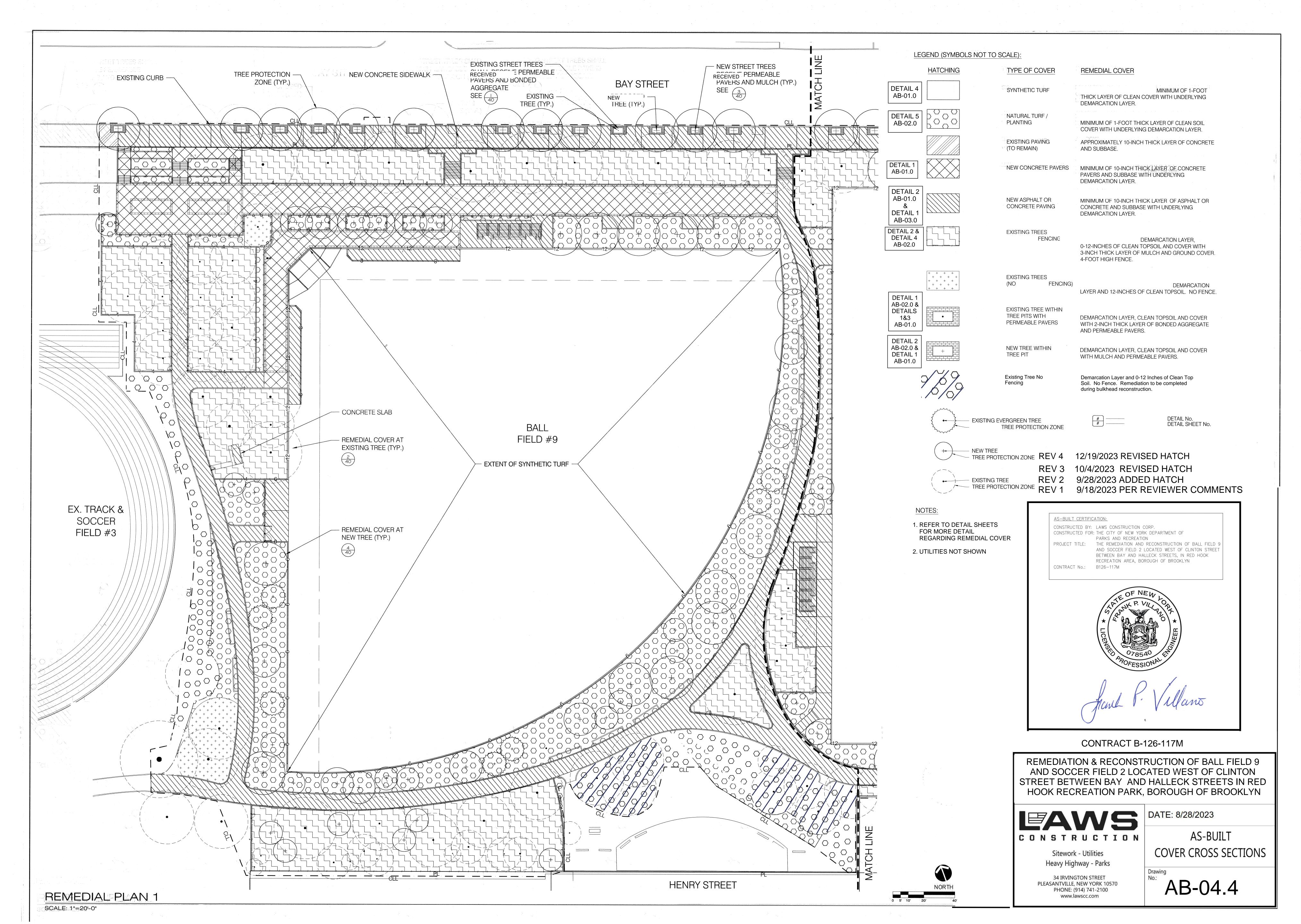
STREET BETWEEN BAY AND HALLECK STREETS IN THE RED HOOK RECREATION AREA, BOROUGH OF BROOKLYN

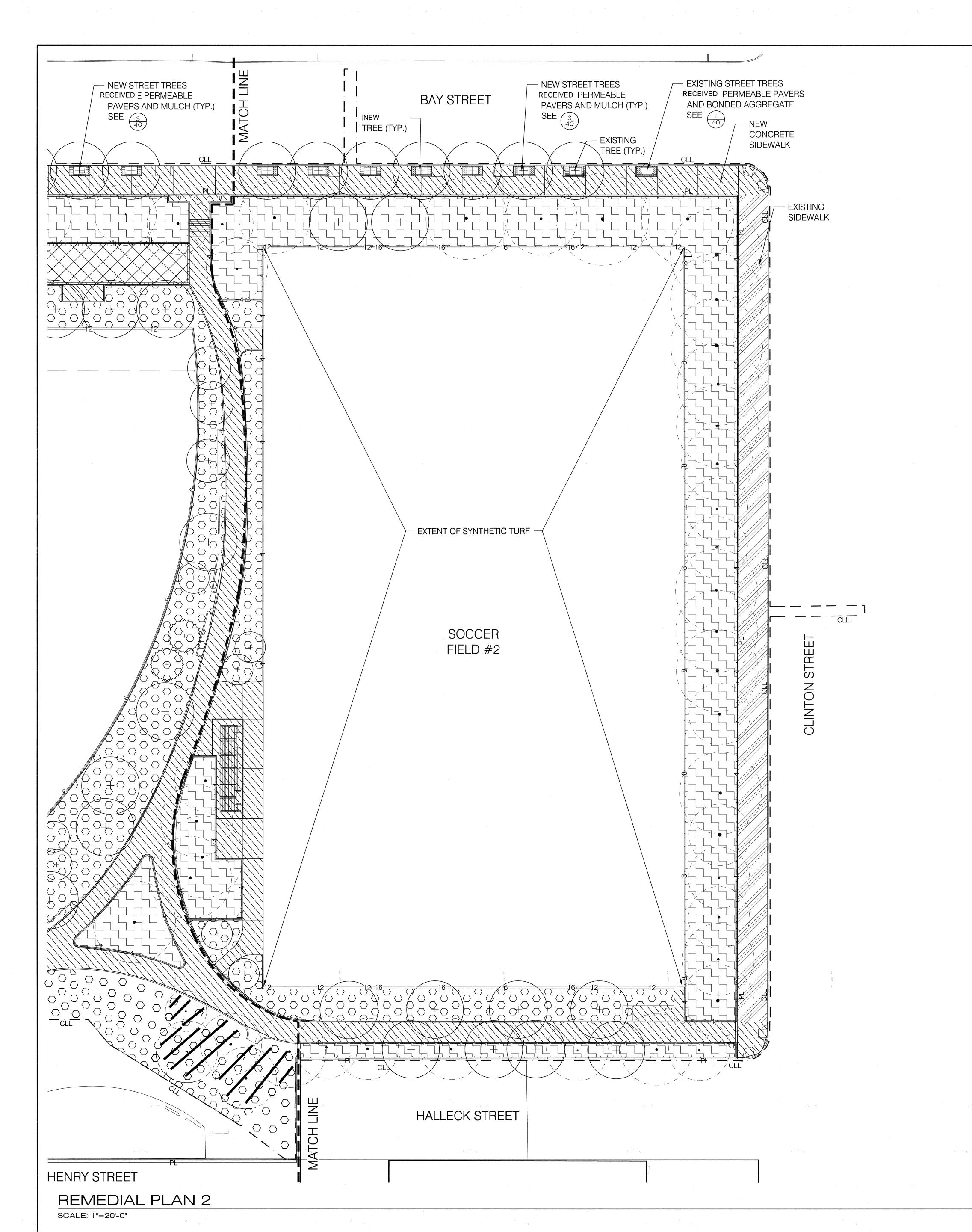
AB-03.0

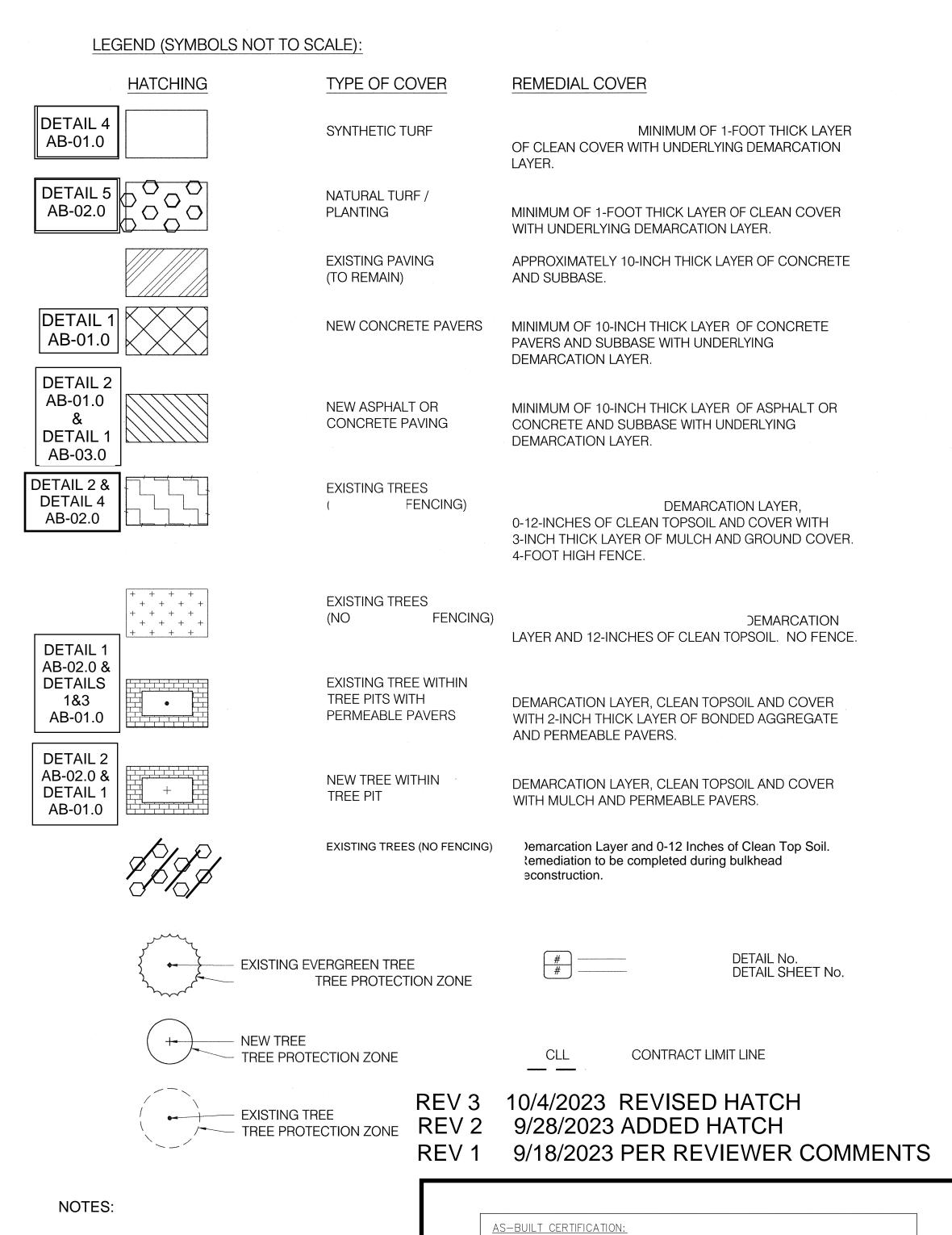
DETAIL 1 NYC DOT Concrete Sidewalk

STONE OR SAND AS PER

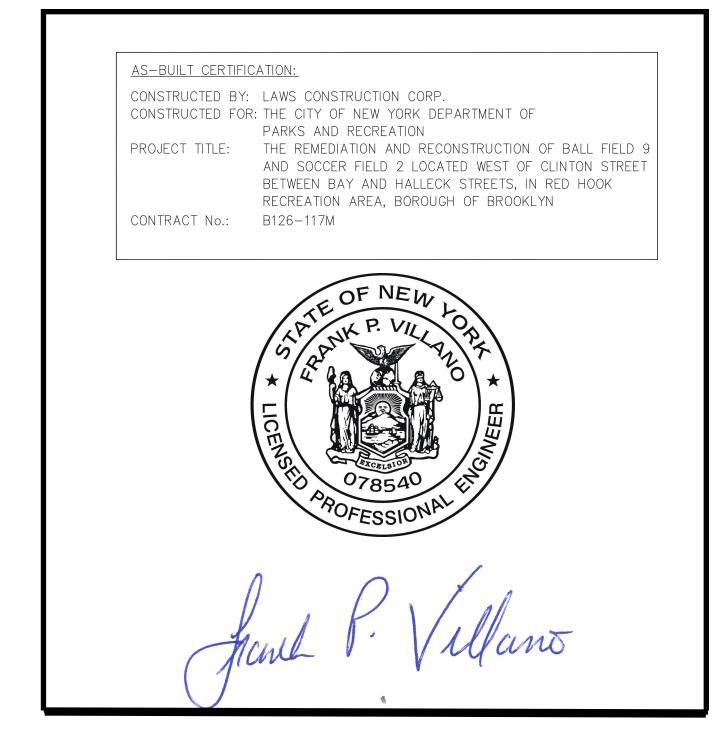
Scale: NTS







- 1. REFER TO DETAIL SHEETS FOR MORE DETAIL REGARDING REMEDIAL COVER
- 2. UTILITIES NOT SHOWN



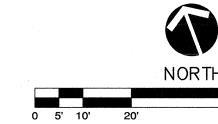
CONTRACT B-126-117M

REMEDIATION & RECONSTRUCTION OF BALL FIELD 9 AND SOCCER FIELD 2 LOCATED WEST OF CLINTON STREET BETWEEN BAY AND HALLECK STREETS IN RED HOOK RECREATION PARK, BOROUGH OF BROOKLYN



**AS-BUILT COVER CROSS SECTIONS** 

AB-05.3



Sitework - Utilities Heavy Highway - Parks

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APPENDIX L - PROPERTY SURV	/EY DRAWINGS (METES & BOUNDS)
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