CORE ENVIRONMENTAL CONSULTANTS
22-48 119th Street, College Point, NY 11356 • Phone: 718.786.4730 • Fax: 718.786.4764

January 26, 2018

Mr. Peter D. Lopez
Region 2 Administrator
United States Environmental Protection Agency
290 Broadway
26th Floor
New York, New York 10007

RE: **Self-Implementing On-Site Cleanup and Disposal Plan**
Substation H (Building 297)/Drum Storage Area C
Brooklyn Navy Yard Industrial Park
63 Flushing Avenue, Brooklyn

Dear Mr. Lopez:

CORE Environmental Consultants (CORE) has prepared the attached *Self-Implementing On-Site Cleanup and Disposal Plan* (SIP) on behalf of the Brooklyn Navy Yard Development Corporation (BNYDC) for the former Substation H (Building 297)/Drum Storage Area C area at the Brooklyn Navy Yard Industrial Park (BNYIP) at 63 Flushing Avenue, Brooklyn, New York.

Polychlorinated biphenyls (PCBs) were detected in soil samples collected at the above-referenced Site at Toxic Substances Control Act (TSCA)-regulated concentrations. This report describes field methods and sampling utilized during the characterization, as well as a proposed cleanup action. The proposed cleanup action includes excavation of any soil containing PCB concentrations greater than 1 milligram per kilogram (mg/kg) in the upper one foot of soil and 10 mg/kg in subsurface soils consistent with the New York State Department of Environmental Conservation's (NYSDEC) February 2011 *Decision Document for the Brooklyn Navy Yard Industrial Park, Operable Unit Number: 01, Voluntary Cleanup Program, Brooklyn, Kings County, Site No. V00120*. The proposed cleanup action is more conservative than that required by the United States Environmental Protection Agency (USEPA) for a low-occupancy area.

If you have any questions, please contact me or Ronald Tramposch at (716) 204-8054.

Sincerely,
CORE Environmental Consultants, Inc.

Alyssa Cruikshank
Geologist

ec: Shani Leibowitz, BNYDC
Jonathan Greco, NYSDEC
James Haklar, USEPA

SELF-IMPLEMENTING ON-SITE CLEANUP AND DISPOSAL PLAN

Brooklyn Navy Yard Industrial Park

Substation H (Building 297)/Drum Storage Area C
63 Flushing Avenue
Brooklyn, New York 11205

Prepared for:

Brooklyn Navy Yard Development Corporation
63 Flushing Avenue, Unit 300
Brooklyn, New York 11205

Prepared by:

CORE Environmental Consultants, Inc.
22-48 119th Street
College Point, New York 11356

January 26, 2018

CERTIFICATION

The undersigned owner of the property where the cleanup Site is located and the party conducting the cleanup certify that all sampling plans, sampling collection procedures, sample preparation procedures, extraction procedures and instrumental/chemical analysis procedures used to assess or characterize the PCB contamination at the cleanup site are on file at the location indicated below and are available for EPA inspection, as set forth below

Document Location

Brooklyn Navy Yard Development Corporation
Building 297
63 Flushing Avenue
Brooklyn, New York 11205

Party Conducting the Cleanup:

_____ _____
Authorized Signature Date

_____
Name of Authorized Representative (print)

_____
Title

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1.0 INTRODUCTION

On behalf of the Brooklyn Navy Yard Development Corporation (BNYDC), CORE Environmental Consultants, Inc. (CORE) has prepared the following report describing field methods and sampling results for Site characterization of polychlorinated biphenyls (PCBs) in soil completed at former Substation H (Building 297)/Drum Storage Area C at the Brooklyn Navy Yard Industrial Park (BNYIP) in Brooklyn, New York. A Site Location Map is included as Figure 1 and a Site Map is included as Figure 2. The primary objective of the Site characterization was to determine the extent of PCBs in soil and building debris in and around former Substation H (Building 297)/Drum Storage Area C initially identified during a 2002 Phase II Investigation performed by Environmental Resources Management (ERM, 2002) so that a cleanup action can be designed and implemented to achieve PCB concentrations of:

- 1 milligram per kilogram (mg/kg) in the upper one foot of soils,
- 10 mg/kg in subsurface soils,
- 10 micrograms (µg) per 100 square centimeters (cm^2) for cleaned concrete, and
- 100 µg/100 cm^2 if the concrete is encapsulated in accordance with PCB Spill Decontamination standards and procedures identified in Title 40 of the Code of Federal Regulations Part 761.79 (40 CFR 761.79).

These cleanup goals were established in the New York State Department of Environmental Conservation's (NYSDEC) February 2011 *Decision Document for the Brooklyn Navy Yard Industrial Park, Operable Unit Number: 01, Voluntary Cleanup Program, Brooklyn, Kings County, Site No. V00120.* The Decision Document presents the remedy for Operable Unit Number 01 of the BNYIP Voluntary Cleanup Program (VCP) Site, the boundaries of which include former Substation H (Building 297)/Drum Storage Area C. The remedial program was chosen in accordance with the New York State Environmental Conservation Law (ECL), and applicable guidance.

In addition to the primary objective of defining horizontal and vertical extent of PCBs in support of the cleanup action, other objectives of the study include providing information that will facilitate minimizing the volume of soil for off-site disposal and completing the analytical characterization required by the disposal facility.

This report has been organized as follows:

- **Section 2. 0 Background and Purpose**: Briefly describes the site location, previous investigations, regulatory status, and rationale for polychlorinated biphenyl site characterization.

- **Section 3. 0 Site Characterization and Approach and Methodology**: Presents the technical approach that was used for the site characterization for the Building 297/Drum Storage C area.
- **Section 4. 0 Site Characterization Results**: Describes the results of the site characterization soil sampling program.
- **Section 5. 0 Proposed Cleanup Action Plan**: Presents details of the proposed soil cleanup action.
- **Section 6. 0 References**: Sites references used to compile this report.

2.0 BACKGROUND AND PURPOSE

2.1 SITE DESCRIPTION

The BNYIP is located in the County of Kings, New York and is identified as Block 2023, Lot 1 by the New York City Department of Finance (see Figure 2). The Site is an approximately 213-acre portion of the BNYIP that is bound by the East River to the north, Flushing Avenue to the south, Kent Avenue to the east, and Navy Street and the New York City Department of Environmental Protection (NYCDEP) Red Hook Water Pollution Control Plant (WPCP) to the west. The BNYIP consists of 49 buildings, 9 open spaces, 6 dry docks, and 5 piers, and is currently leased to more than 400 small and midsized businesses. The Site is zoned M3-1 by the New York City Department of City Planning, indicating that it can be used for light and heavy manufacturing purposes. Site occupants are engaged in commercial and light manufacturing activities, such as clothing manufacturers, production and distribution of various goods, furniture refinishing, and printing.

The BNYDC entered into a Voluntary Cleanup Agreement (VCA) on May 5, 1998 with NYSDEC (Index No. 02-0001-97-08) to address areas of concern for possible hazardous waste disposal at the BNYIP, both within and outside of the Site boundaries. The VCA required investigations be performed at 24 transformer substations and several drum storage areas within the BNYIP. Substation H, a transformer substation located within and immediately adjacent to Building 297, contained several oil filled electrical transformers that historically contained PCBs. The area to the north of Substation H was utilized as a drum storage area (designated Drum Storage Area C) and is presumed to have stored drums containing PCB oil. The transformers associated with Substation H were decommissioned in 2010 and the building was demolished in 2015, with the building debris utilized to backfill the building footprint. Substation H (Building 297)/Drum Storage Area C are located southeast of Wallabout Road's intersection with Washington Avenue. A Project Area Map is included as Figure 3.

2.2 PREVIOUS INVESTIGATION HISTORY

A Phase II Site Investigation was conducted in accordance with the VCA (ERM, 2002). As part of this investigation, ERM collected surficial soil samples, installed soil borings, and/or excavated test pits in and around the Substation H/Drum Storage Area C areas. Concrete wipe samples were collected from concrete pads in the outdoor courtyard and from concrete surfaces in Building to determine if operation of the historically PCB oil-filled electrical transformers associated with Substation H had resulted in spills or leaks that potentially impacted surrounding structures.

2.2.1 Drum Storage Area C

The initial investigation at former Drum Storage Area C included the installation of one soil boring (B-7) in April 1999. Soil samples were submitted for laboratory analysis of PCBs by NYSDEC Analytical Services Protocol (ASP) Contract Laboratory Program (CLP) Method 95-3. Soil samples collected from boring B-7 contained concentrations of PCBs at 1,400 milligrams per kilogram

(mg/kg) in surficial soils (0 to 2 inches), and 300 mg/kg (6 inches to 1 foot), 11,000 mg/kg (4 to 6 feet), and 4,700 mg/kg (7 to 7.5 feet) in subsurface soils. In January 2000, ERM installed four additional soil borings (B-15, B-16, B-17, and B-18) to delineate the horizontal and vertical extent of subsurface PCB impacts in the area of B-7. A total of 15 soil samples were collected and screened for PCBs by immunoassay by United States Environmental Protection Agency (USEPA) SW-846 Method 4020. Seven samples were subsequently submitted for confirmatory laboratory analysis via method NYSDEC ASP CLP Method 95-3. None of the soil samples from the delineation borings contained concentrations of PCBs greater than 1 mg/kg for surficial soils or 10 mg/kg for subsurface soils. Historical soil boring locations and soil data are located in Appendix A.

Surficial Soil Samples

PCB impacts in surficial soil were delineated in the vicinity of boring B-7 utilizing a 20-foot by 20-foot grid. A total of 44 surficial soil samples (0 to 8 inches) were collected by ERM and field screened by immunoassay field screening kits. In addition, 22 samples were subsequently submitted for confirmatory laboratory analysis via method NYSDEC ASP CLP Method 95-3. A total of 9 samples contained concentrations of PCBs in exceedence of the 1 mg/kg cleanup criteria for surficial soils. Historical surficial soil sample locations and soil data are located in Appendix A.

2.2.2 Substation H (Building 297)

Surficial Soil Samples

Eight surficial soil samples were collected in the courtyard area Substation H and analyzed via immunoassay field screening kits. All eight soil samples contained concentrations of PCBs greater than 1 mg/kg. Historical surficial soil sample locations and soil data are located in Appendix A.

Test Pit Excavation

Four test pits were excavated in soil areas in the courtyard area of Substation H (Building 297). Soil samples were collected from each test pit at 1-foot intervals (1 to 2 feet, 2 to 3 feet, etc.) for immunoassay field screening test kits. Four samples were submitted for confirmatory laboratory analysis. Soil samples collected from 1 to 2 feet below ground surface (bgs) in TP-01 and 1 to 2 feet and 2 to 3 feet bgs in TP-02 contained concentration of PCBs greater than 10 mg/kg. Historical test pit excavation locations and soil data are located in Appendix A.

Concrete Wipe Samples

A total of 12 concrete surface wipe samples were collected from concrete pads in the outdoor courtyard and from concrete surfaces in Building 297 in the area of the indoor transformer. The wipe samples were screened using immunoassay field screening test kits by USEPA Method 4020. Six of the wipe samples collected from concrete surfaces inside Building 297's subfloor and in the exterior courtyard contained PCBs at concentrations in exceedences of 10 µg/100 cm^2 for cleaned concrete. No samples exceeded 100 µg/100 cm^2. Historical concrete wipe sample locations and data are located in Appendix A.

2.3 PURPOSE AND RATIONALE

The objective of the Site characterization and cleanup action described in this document addresses the PCB soil impacts associated with former Substation H/Drum Storage Area C where PCB concentrations in subsurface soil samples were detected in exceedence of 10 mg/kg, and require special handling and disposal under the Toxic Substances Control Act (TSCA). This characterization, remediation, and disposal notification is made pursuant to the requirements of the "Self-Implementing" section for the cleanup and disposal of PCB-remediation waste per 40 CFR 761.61. Notification and reporting schedules will comply with 40 CFR 761.

3.0 SITE CHARACTERIZATION AND APPROACH AND METHODOLOGY

This section summarizes the approach and rationale for the former Substation H/Drum Storage Area C PCB Site characterization. Sampling results are discussed in Section 4.0 and details of the proposed soil cleanup action are discussed in Section 5.0. Field activities under this task include mobilization/demobilization, soil/waste profiling, *in-situ* soil and bulk sampling utilizing both direct push technology and sonic drilling methods, and management of investigation derived wastes (IDW).

The Site characterization included the following activities:

- Survey of the project area, surveyor mark out of boring locations, and survey of building corners of former Building 297;
- utility clearances;
- collection of soil samples utilizing direct push technology and bulk samples utilizing sonic drilling to delineate both the horizontal and vertical extent of PCBs in the soil in and around Substation H (Building 297) and Drum Storage Area C;
- collection of pre-excavation waste-profile samples as required by the soil disposal facility;
- laboratory chemical analysis on soil samples;
- ongoing third-party data validation for all analytical data; and
- evaluation of analytical data for this report.

3.1 MOBILIZATION / DEMOBILIZATION

Prior to mobilization by CORE, CORE procured the services of a New York State Licensed Surveyor to mark out soil boring locations and building corners of former Building 297. Survey work began December 5, 2017 and was completed on December 8, 2017. A total of 40 soil borings on a 20-foot by 20-foot grid were located in the areas of former Substation H/Drum Storage Area C. The grid was chosen to replicate sampling conditions encountered during the 2002 Phase II. In addition, CORE retained the services of a private utility locating firm to mark any privately-owned subsurface utilities in the investigation area. On December 11, 2017, CORE mobilized to the Site review marked boring locations, set up the decontamination area, and stage drums on Site for IDW generated during the investigation.

3.2 FIELD METHODOLOGY

The following sections contain summaries of methods used for Site characterization. Methods are provided for surficial soil sampling, direct push technology soil sample collection, sonic rig bulk and soil sample collection, and sample equipment decontamination. Soil borings B-20, B-30, and B-31

were not drilled due to their locations on sidewalks. A surficial soil sample was collected at B-28, approximately 13 feet to the north of its original planned location; however the boring was not advanced to collect subsurface soil samples. The boring location was covered with a large pile of asphalt millings and the adjusted boring location was within close proximity to multiple utilities. B-37 was moved approximately 10 feet to the southwest of its planned location due to the presence of several utilities near the original boring location. Boring locations are shown on Figure 4A.

3.2.1 Surficial Soil Sampling and Chemical Analysis

Thirty-seven surficial samples and two duplicates were collected on a 20-foot by 20-foot grid located in the area of former Substation H/Drum Storage Area C. The soil samples were collected from the 0 to 2-inch bgs depth interval utilizing a stainless steel trowel. The soil was immediately transferred to a laboratory-provided 4-ounce glass jar. The stainless steel trowel was decontaminated utilizing an Alconox® and tap water rinse between surficial sample locations to prevent sample cross-contamination. Soil samples were submitted to York Analytical Laboratories, Inc. (York) of Stratford, Connecticut, a New York State Department of Health (NYSDOH) Environmental Laboratory Accreditation Program (ELAP)-certified laboratory. Samples were transported via courier under Chain-of-Custody procedures for analysis of Target Compound List (TCL) Aroclors via USEPA SW-846 Method 8082A. Aroclors 1262 and 1268 were also reported for all samples. Sample preparation was performed in accordance with USEPA SW-846 Method 3550C.

A full analytical list including was analyzed at a rate of 25 percent of the surficial soil sample locations for soil characterization and potential waste disposal.

The analytical list consisted of the following:

- TCL volatile organic compounds (VOCs) via USEPA SW-846 Method 8260C, with sample preparation by Method 5035;
- TCL semi-volatile compounds (SVOCs) via USEPA SW-846 Method 8270, prepared by method 3550C;
- TCL Pesticides by USEPA SW-846 Method 8081, prepared by method 3550C;
- Target Analyte List (TAL) Metals by USEPA SW-846 Method 6010C, preparation via Method 3050B;
- Mercury via USEPA SW-846 Method 7473; and
- Cyanide via USEPA SW-846 Method 9014/9010C.

3.2.2 Subsurface Soil Sampling and Chemical Analysis

One hundred forty-one subsurface soil samples and five duplicates were collected from 36 borings spaced 20-foot by 20-foot grid located in the area of former Substation H/Drum Storage Area C. Soil boring locations were consistent with surficial soil sample locations. In general, four soil samples were collected from each boring at the following depth intervals:

- 2 inches to 2 feet bgs,
- 2 to 4 feet bgs,
- 4 to 6 feet bgs, and
- 6 to 8 feet bgs.

Samples were not collected below 3 feet bgs in B-6 or below 6 feet bgs in B-8 due to refusal. Where visual and/or olfactory indications of impacts were noted in the deepest sample interval (6 to 8 feet bgs) in a boring, the boring was advanced and an additional sample was collected from the to 8 to 10 feet bgs depth interval. Soil borings were advanced utilizing a truck-mounted direct push drill rig operated by CORE, a New York State Licensed Driller. Soil samples were collected either by Macro-core® or the Geoprobe Systems® DT22 Dual Tube Sampling System, dependent upon subsurface conditions (i.e. refusal). Macro-cores equipped with disposal acetate sleeves were advanced in four-foot increments; dual tube samplers were advanced in 2-foot increments. The soil was immediately transferred to a laboratory-provided 4-ounce glass jar. Soil borings were continuously field screened utilizing a photoionization detector (PID) and soil conditions were documented on a lithologic log. Macro-core and DT22 cutting heads were decontaminated utilizing an Alconox® and tap water rinse between each soil boring to prevent sample cross-contamination.

Subsurface soil samples were transported to York via courier under Chain-of-Custody procedures for analysis of TCL Aroclors via USEPA SW-846 Method 8082A. Sample preparation was performed in accordance with USEPA SW-846 Method 3550C. A full analytical list was analyzed in one subsurface sample from each boring for soil characterization and potential waste disposal.

3.2.3 Building 297 Bulk and Sub-slab Soil Sampling and Chemical Analysis

A sonic rig was utilized to advance five borings within the former Building 297 footprint. CORE subcontracted Aquifer Drilling and Testing (ADT) of Mineola, New York to penetrate the building backfill debris with the sonic rig for collection of representative bulk samples of the concrete sub-floor slab and sub-slab soil. Sub-slab soil samples were transported to York via courier under Chain-of-Custody procedures for analysis of TCL Aroclors via USEPA SW-846 Method 8082A. Sample preparation was performed in accordance with USEPA SW-846 Method 3550C.

Concrete bulk samples were transported to ALS Environmental (ALS) of Tucson, Arizona via FedEx under Chain-of-Custody procedures to be pulverized prior to analysis. Pulverized samples were

analyzed for TCL Aroclors by ALS of Rochester, New York, an ELAP-certified laboratory, via USEPA SW-846 Method 8082A. The samples were prepared by USEPA Method 3541 once pulverized. Concrete bulk and sub-slab soil sample locations are shown on Figure 4B.

3.2.4 Sample Nomenclature

Each sample collected for laboratory analysis during the soil investigation phase was identified with a unique sample identification tag. The sample identification tag for surficial soil samples consists of the designation “SS” (for surficial sample) followed by the sample location. Subsurface soil samples were given the identification tag “B” (for boring) followed by the boring location number then the sample depth interval identification. For example, sample B-1-1 is the subsurface sample collected from soil boring 1 at the depth interval of 2 inches to 2 feet bgs. Provided below is the sample depth identification tag and the corresponding sample depth interval following each boring location:

- 1 – 2 inches to 2 feet bgs
- 2 – 2 to 4 feet bgs
- 3 – 4 to 6 feet bgs
- 4 – 6 to 8 feet bgs
- 5 – 8 to 10 feet bgs
- 6 – 10 to 12 feet bgs

Bulk samples collected of the Building 297 sub-floor slab were identified as Bldg 297 Slab - 1 through Bldg 297 Slab - 5 corresponding to each of the five boring locations within the Building 297 footprint. Soil samples collected below the slab were identified as Slab Soil 1 through Slab Soil 5 corresponding to the five boring locations within the Building 297 footprint.

3.2.5 Documentation

Field activities were recorded in a field log book. Soil lithology encountered during the investigation was described on soil boring logs, included as Appendix B.

Sample Chain-of-Custody procedures document sample acquisition and integrity and consist of completed Chain-of-Custody reports. Chains-of-Custody are a standardized form that summarizes the date and time of sample collection, sample identification, sample container, sample preservation, and laboratory analysis requested.

3.2.6 Sample Handling

Sample handling includes field related considerations such as selection of sample containers, preservatives, allowable holding times, and analyses requested. Proper Chain-of-Custody procedures were followed throughout all phases of sample collection through laboratory receipt.

3.2.7 Waste Management

All miscellaneous IDW material (decontamination water, excess drill cuttings) were containerized in United States Department of Transportation (USDOT)-approved 55-gallon steel drums. A total of two drums were utilized, one for decontamination water and one for soil cuttings. Personal protective equipment (PPE) was brushed off and placed in trash bags for disposal in an on-Site municipal dumpster.

4.0 SITE CHARACTERIZATION RESULTS

This section summarizes analytical results for samples collected for PCB analysis. Laboratory analytical data for soil samples is currently being validated by a third-party validator.

4.1 SURFICIAL SOIL SAMPLE RESULTS

Aroclor 1260 was the most frequently detected PCB in surficial soil samples collected as part of the Site characterization, being detected in 24 of the 39 samples collected. Concentrations ranged from non-detect at several locations to 1.208 mg/kg total PCBs at surface sample location B-4. The concentration detected at B-4 is in exceedence of the applicable 1 mg/kg cleanup objective. Surficial soil analytical results are summarized in Table 1.

4.2 SUBSURFACE SOIL SAMPLE RESULTS

The following section summarizes PCB analytical results in subsurface soil samples. Aroclor 1260 was the predominant PCB detected in subsurface soil samples. Concentrations of PCBs in subsurface soil sample results are summarized on Figure 5 and in Tables 2A through 2F.

Sample Interval – 2 inches to 2 feet

Concentrations of total PCBs in the 2 inches to 2 feet bgs sample interval ranged from non-detect at several sample locations to 3,790 mg/kg at B-27. B-27-1 and B-33-1 contained total PCBs at concentrations in exceedence of the applicable 10 mg/kg cleanup objective for subsurface soils (3,790 mg/kg and 30.8 mg/kg, respectively). Three additional samples, B-6-1, B-9-1, and B-34-1, contained concentrations of PCBs greater than 1 mg/kg (1.79 mg/kg, 2.97 mg/kg, and 3.39 mg/kg, respectively). The 2 inches to 2 feet bgs sample interval contains a portion of the upper one foot of soils required to meet the 1 mg/kg cleanup objective; therefore B-6-1, B-9-1, and B-34-1 are also in exceedence of the applicable cleanup objectives.

Sample Interval – 2 to 4 feet

Concentrations of total PCBs in the 2 to 4 feet bgs sample interval ranged from non-detect at several sample locations to 2,430 mg/kg at B-37. Soil sample B-37-2 is the only sample collected from the 2 to 4 feet bgs sample interval in exceedence of the applicable 10 mg/kg cleanup objective.

Sample Interval – 4 to 6 feet

Concentrations of total PCBs in the 4 to 6 feet bgs sample interval ranged from non-detect at several sample locations to 356 mg/kg of at B-27. Samples B-27-3, B-35-3, B-36-3, and B-37-3 all contained concentrations of total PCBs in exceedence of the applicable 10 mg/kg cleanup objective (356 mg/kg, 14.6 mg/kg, 20.6 mg/kg, and 13.2 mg/kg, respectively).

Sample Interval – Below 8 feet

Samples were collected below 8 feet bgs at B-29 and B-37 as a result of visual or olfactory evidence of impacts during soil boring installation. Samples were collected from 8 to 10 feet bgs at B-29 and B-37, and 10 to 12 feet bgs at B-29. No samples collected below 8 feet bgs contained PCBs at concentrations greater than the applicable 10 mg/kg cleanup objective.

Sub-slab Soil

Soil samples were collected below the former Building 297 sub-floor slab at depths ranging from approximately 7 to 8 feet bgs as a result of the varying elevation at the surface. Aroclor 1260 was detected at a concentration of 0.0897 mg/kg in sample Sub Slab 3, collected near the center of the building footprint. No other PCBs were detected in any sub-slab soil samples.

4.3 BULK CONCRETE SAMPLE RESULTS

Five bulk concrete samples were collected of the sub-floor slab within the footprint of former Building 297. No PCBs were detected in bulk samples Bldg 297 – Slab 1, Bldg 297 – Slab 4, or Bldg 297 – Slab 5. Aroclor 1260 was detected in bulk sample Bldg 297 – Slab 2 at a concentration of 0.050 mg/kg and in Bldg 297 – Slab 3 at a concentration of 0.170 mg/kg. PCB concentrations in the bulk samples may have been diluted as the entire 4-inch thick concrete slab from each core was submitted to be pulverized and analyzed. Bulk concrete analytical results are summarized in Table 3.

5.0 PROPOSED CLEANUP ACTION PLAN

This section outlines the proposed cleanup action for PCB-impacted soil to the NYSDEC-prescribed 1 mg/kg in the upper one foot of soils and 10 mg/kg in subsurface soil in the project area as previously discussed. The proposed project area appears to qualify for cleanup of a PCB-impacted site under USEPA self-implementing regulations for cleanup and disposal of PCB remediation waste (40 CFR 761) at a low-occupancy site. In addition, the NYSDEC-required Soil Cleanup Objectives (SCOs) are more conservative than the USEPA-required 25 mg/kg of PCBs for a self-implementing cleanup in a low-occupancy area. Institutional and engineering controls (ICs/ECs) limiting access to subsurface soils consistent with the BNYIP Site remedy will be implemented following remediation. These include an Environmental Easement and protective cover.

The proposed cleanup action involves excavation and disposal of PCB-impacted soil in the area of former Substation H/Drum Storage Area C. PCBs in soil have been delineated in both vertical and horizontal directions to concentrations less than the proposed 1 mg/kg in the upper one foot of soils and 10 mg/kg in subsurface soils.

5.1 NOTIFICATIONS

On behalf of BNYDC, CORE will submit this report, inclusive of Form 7710-53 “Notification of PCB Activity” to the USEPA regional administration and NYSDEC. In addition, BNYDC will provide a signed letter to certify the location of all files related to the Site characterization and cleanup, that all sampling plans, sample collection and preparation procedures, and laboratory procedures used to characterize the Site are at the location identified and are available for USEPA inspection. These documents satisfy the notification requirement for the self-implementing cleanup and disposal of PCB remediation waste under 40 CFR 761.61. Form 7710-53 is included in Appendix C.

5.2 TRAINING REQUIREMENTS

CORE personnel and subcontractors must be trained in accordance with all state and federal protocols. All personnel working on Site will be Occupational Safety and Health Administration (OSHA)-compliant Hazardous Waste Operations and Emergency Response (HAZWOPER) trained with up-to-date annual refresher training in accordance with 29 CFR Part 1910.120. All subcontractor training certifications will be provided to the CORE project manager prior to commencement of work. CORE personnel certificates are maintained internally and can be provided upon request.

Training requirements and responsibilities for handling TSCA-regulated waste is overseen by USDOT. USDOT Hazardous Materials (HAZMAT) training is required for any persons involved in shipment, preparation, and transportation of hazardous waste. The waste management subcontractor will have documented HAZMAT training and required training renewals for any employee involved in the project. A facility that generates more than 1,000 kilograms of hazardous waste per month must comply with the emergency preparedness and personnel training

requirements outlined in 40 CFR Part 265.16. This training is intended for the waste generator's (BNYDC) contractors (CORE and subcontractors), and includes training by a person qualified in hazardous waste management and emergency response procedures.

5.3 UTILITY CLEARANCE

Prior to completing any subsurface intrusive activities, CORE will complete a New York State One-Call utility mark-out to prevent accidental damage to any underground utilities. Private utilities were located and marked prior to the Site characterization; however the locations of utilities will be verified prior to excavation activities and remarked as necessary. Flags will be used to identify utilities within the project area, which is currently unpaved.

5.4 GENERAL EXCAVATION

There are multiple excavations to depths of up to 8 feet bgs, as presented on Figure 6. Soil sample analytical results indicate that total concentrations of greater than the applicable 10 mg/kg in subsurface soil occur to depths of up to 8 feet bgs. Three sample locations that do not already require excavation to greater depths also contain total PCB concentrations greater than 1 mg/kg in the upper one foot of soil. A total of approximately 686 cubic yards (cy), or approximately 1,029 tons, of PCB-impacted soil will be removed. General excavation specifications are located in Appendix D.

Post-excavation endpoint samples will be collected to verify that all subsurface soils containing concentrations of PCBs greater than 10 mg/kg have been removed. Post-excavation endpoint samples will be collected in excavations to 1 foot bgs to verify that remaining soil below the excavation does not exceed the applicable 10 mg/kg in subsurface soil SCO. If confirmatory endpoint samples indicate PCB concentrations greater than the applicable 1 mg/kg and 10 mg/kg SCOs remain, additional soil will be removed. Endpoint samples will be recollected for verification that the additional soil removal was adequate. Additional excavation may be required north of the B-37 area in Wallabout Road as delineation borings were not drilled in that area.

The excavation subcontractor will use a rubber-tired or track-mounted excavator to remove soil. PCB-containing materials (such as soil and associated debris) will be transported to an approved facility licensed to accept TSCA PCB waste. The chosen disposal facility will be capable of accepting PCB wastes with concentrations greater than 50 mg/kg. The estimated volume of PCB waste is 686 cy (approximately 1,029 tons). Soils within the project area were delineated on a 20-foot by 20-foot grid. As such, excavation areas will initially be in 20-foot increments (see Figure 6). Soils will be direct-loaded onto trucks for off-Site transport.

Soil encountered during Site characterization did not contain liquid PCB wastes, water, or other materials that could not be transported via dump truck. If excavation is required to the north of the

current project area into Wallabout Road, the presence of several utilities may require additional machinery for excavation.

All excavation will be overseen by CORE personnel and photo-documented. Excavation procedures are addressed in the Site-specific Health and Safety Plan (HASP). Due to the excavation depths of up to 8 feet bgs, engineering controls will be required to ensure excavation stability. Sidewalls of excavations greater than 3 feet deep will be sloped in accordance with 29 CFR 1926 Subpart P. During Site characterization, the water table was encountered at 11 feet bgs at B-37. No dewatering is anticipated as the water table was encountered deeper than planned excavations. Excavated soil will be screened for volatile organic compounds (VOCs) utilizing a photoionization detector (PID). The horizontal extents of the excavations will be surveyed using a global positioning system (GPS) device.

5.5 MANIFESTING AND DISPOSAL

Prior to remediation activities, analytical data generated during the Site investigation will be used to characterize soil in accordance with disposal facility-specific requirements and 40 CFR 761 Subpart D. Soil with concentrations of PCBs between 1 and 50 mg/kg will be disposed of as non-hazardous in a lined, solid waste landfill. Soil containing PCBs at concentrations greater than 50 mg/kg will be transported to a hazardous waste landfill permitted under 40 CFR 761. Surface soil excavations in the areas of soil borings B-4, B-6, B-9, and B-34 contain concentrations of PCBs less than 50 mg/kg and can be managed as non TSCA-regulated. The entire depth of excavation at B-33 (2 feet) will be managed as non-TSCA regulated. The remaining subsurface soil will be treated as TSCA-regulated waste. BNYDC will sign all shipping manifests and will be responsible and liable for the hazardous waste being disposed of.

All soil removal will be coordinated with BNYDC. The BNYDC Site contact (or authorized representative) will be on Site to sign bills of lading (non-hazardous) or hazardous waste manifests (TSCA-regulated waste). Signed copies of bills of lading/hazardous waste manifests will be kept on file for a minimum of three years in accordance with 40 CFR 761.214, while notification, certification, and remediation records will be maintained for five years per 40 CFR 761.61(a). All documentation will be available for review by USEPA upon request.

Draft bills of lading/manifests will be provided by the landfill to BNYDC or their authorized representative for review prior to truck arrival on Site. CORE will review each bill of lading/manifest for accuracy and completeness, add the load-specific information, and approve the document before shipping. Before waste exits the Site CORE will complete a waste shipment checklist. The checklist will help ensure that each truck is placarded correctly, constructed with double-wall containment, tarped, and that the bills of lading/manifests contain the correct information. Each shipment will be recorded on a tracking sheet.

The HASP contains a contact list to be utilized in case of emergency. The Site-specific HASP complies with applicable regulations including 29 CFR 1903, 1904, 1910, and 1926.

5.6 POST-EXCAVATION CONFIRMATORY SAMPLING

After excavation is completed, confirmatory endpoint samples will be collected to confirm that the cleanup goal of 1 mg/kg in the upper one foot of soils and 10 mg/kg in subsurface soils has been achieved. Collection of endpoint samples at the base of the exaction will be collected on a 5-foot by 5-foot grid, with a minimum of three samples collected in accordance with 40 CFR 761 Subpart O. Excavation side wall samples will be collected at a frequency of two per 20 linear feet on each sidewall (approximately every 6.67 feet).

Excavation base endpoint samples will be identified as “Base-Y-ZZ“; Y being the excavation number and ZZ being the sequential number of the sample collected (i.e. - 01, 02, 03, etc.). Sidewall endpoint samples will be identified as “X-Wall-Y-ZZ”; X being compass direction (e.g. northwest) of the excavation wall from which the sample originates, Y being the excavation number, and ZZ being the sequential number of the sample collected (i.e. - 01, 02, 03, etc.). The location and depth of each sample will be recorded on a sketch of the project area.

5.7 BACKFILLING AND SITE RESTORATION

All materials proposed for import onto the Site will be approved by CORE prior to receipt at the Site. A Request to Import/Reuse Fill or Soil form will be prepared and submitted to the NYSDEC Project Manager, allowing a minimum of five business days for review. Material from industrial sites, spill sites or other environmental remediation sites, or potentially impacted sites will not be imported to the Site.

All imported soils will meet the backfill and cover soil quality standards established in Title 6 of the New York Cores, Rules and Regulations Part 375-6.7(d) (6 NYCRR 375.6-7(d)). Approval will also be based on an evaluation of the land use, protection of groundwater, and protection of ecological resources criteria. Soils that meet ‘exempt’ fill requirements under 6 NYCRR 360, but do not meet backfill or cover soil objectives for this Site, will not be imported onto the Site without prior approval by NYSDEC. Solid waste will not be imported onto the Site.

Imported materials will be tested at a rate consistent with Table 5.4(e)10 of NYSDEC *DER-10/Technical Guidance for Site Investigation and Remediation* (DER-10). Samples will analyzed for TCL VOCs, TCL SVOCs, TCL pesticides, TCL Aroclors, and TAL metals. Sample collection will be performed in accordance with the Quality Assurance Project Plan (QAPP). The top two feet of fill will meet NYSDEC Commercial Use SCOs in accordance with the Decision Document. The surface will not be sodded or seeded as additional construction will occur at the conclusion of remedial activities.

The proposed plan is anticipated to take 10 days to complete, 7 for excavation and load-out and an additional 3 days for backload and compaction. Hazards associated with leaving open excavation overnight will be mitigated by enclosing the project area with an 8-foot chain link fence and padlock enclosure. Excavation equipment will be stored within the fenced-in area overnight. All confirmatory endpoint samples will be analyzed on a 24-hour turn-around time allowing additional excavation to occur prior to backfill.

5.8 LABORATORY ANALYSIS

Post-excavation endpoint samples will be analyzed for TCL PCBs using USEPA SW-846 Method 8082A. One sample will be collected from decontamination water generated for characterization and disposal and will be analyzed for TCL VOCs, TCL PCBs, TAL metals, and ignitability. One trip blank will be submitted for analysis of TCL VOCs with the water VOC sample; however no additional quality assurance/quality control (QA/QC) samples (duplicates, blanks) will be collected. PCB endpoint samples will be analyzed on a 24-hour turn-around time, all other samples will be analyzed on the laboratory-specific standard turn-around time. Samples will be analyzed by a NYSDOH ELAP-certified laboratory.

5.9 DATA HANDLING AND MANAGEMENT

CORE will oversee all data management and will coordinate with the analytical laboratory to ensure they are aware of the number, type, and schedule of samples that will be submitted. After post-excavation confirmatory endpoint samples are collected, the Chains-of-Custody will be reviewed by the CORE project manager to ensure that each document adheres to project requirements and contains all the required information. This will allow CORE to verify that the correct samples are collected before sample analysis begins.

Analytical data will initially be reported to CORE as a summary portable document format (PDF) file and electronic database deliverables (EDDs). A USEPA CLP-equivalent deliverable will be issued by the laboratory upon completion. CORE will review the data immediately to determine if current excavation extents meet project cleanup goals, or if additional excavation will be required.

Upon receipt, the CLP analytical reports and EDDs will be provided to a third-party data validator for data validation and Data Usability Summary Report (DUSR) generation. Validation will be performed in accordance with the USEPA *National Functional Guidelines for Organic Data Review* in conjunction with method-specific criteria. Data will be flagged by appropriate qualifying symbols. The EDD will be updated by the validator with the required data flags. Data will be submitted via USEPA's electronic data processor (EDP) Environmental Quality Information System (EQuIS) and in hardcopy in subsequent remedial summary reports.

5.10 REPORTING

CORE will provide written verification that PCB impacts have been reduced below the cleanup goal of 1 mg/kg in the upper one foot of soils and 10 mg/kg in subsurface soils. The Environmental Easement for the Site has not been recorded to date; when recorded, the Easement will include a notation that the project area was remediated for PCB impacts and is restricted to low-occupancy use as defined in 40 CFR 761.30. The verification will include a certification signed by BNYDC that the appropriate notifications have been forwarded to the USEPA regional administrator, as indicated in 40 CFR 761.205.

5.11 SCHEDULE

The work required as part of this Self-Implementing Plan will be bid out to third-party contractors. Following selection of a contractor, the work is anticipated to occur on the following schedule.

Task	Expected Duration
Contractor Bidding/Contracting	4 weeks
Utility Clearances/Survey	2 weeks
Mobilization	1 week
Excavation, confirmatory endpoint sampling, backfill	2 weeks
Demobilization	3 days

6.0 REFERENCES

Environmental Resources Management, 2002. *Phase II Investigation Report, Brooklyn Navy Yard Industrial Park, Brooklyn, NY 11205, NYSDEC Site Code #224019.*

New York State Department of Environmental Conservation (NYSDEC), 2011. *Brooklyn Navy Yard Industrial Park, Operable Unit Number: 01, Voluntary Cleanup Program, Brooklyn, Kings County, Site No. V00120, February 2011.*

NYSDEC, 2010. DER-10, *Technical Guidance for Site Investigation and Remediation*.

Toxic Substances Control Act (TSCA) PCB Regulations. 40 CFR 761. 2012.

United States Environmental Protection Agency (USEPA), 2016. *National Functional Guidelines for Superfund Organic Methods Data Review*.

TABLES

Table 1
Polychlorinated Biphenyls in Surficial Soil (0 to 2 inches)
Brooklyn Navy Yard Industrial Park
Drum Storage Area C/Substation H

Sample ID	Sample Date	Surficial VCP Decision Document* (mg/kg)	Polychlorinated Biphenyls (mg/kg)									Total PCBs
			Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Aroclor 1262	Aroclor 1268	
SS-B-1	12/11/2017	1	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	ND
SS-B-2	12/11/2017	1	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	**0.0438**	**0.0603**	<0.0189	<0.0189	**0.1041**
SS-B-3	12/11/2017	1	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	**0.0637**	**0.0737**	<0.0189	<0.0189	**0.1374**
SS-B-4	12/11/2017	1	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	**0.494**	<0.0188	**0.714**	<0.0188	**1.208**
SS-B-5	12/11/2017	1	<0.0190	<0.0190	<0.0190	<0.0190	<0.0190	<0.0190	**0.0222**	<0.0190	<0.0190	**0.0222**
SS-B-6	12/11/2017	1	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	**0.0440**	<0.0186	<0.0186	**0.044**
SS-B-7	12/11/2017	1	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	ND
SS-B-8	12/11/2017	1	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	ND
SS-B-9	12/11/2017	1	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	ND
SS-B-10	12/11/2017	1	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	ND
SS-DUP-1		1	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	ND
SS-B-11	12/11/2017	1	<0.0190	<0.0190	<0.0190	<0.0190	<0.0190	<0.0190	<0.0190	<0.0190	<0.0190	ND
SS-B-12	12/11/2017	1	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	**0.0196**	<0.0184	<0.0184	**0.0196**
SS-B-13	12/11/2017	1	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	ND
SS-B-14	12/11/2017	1	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	**0.0386**	<0.0188	<0.0188	**0.0386**
SS-B-15	12/11/2017	1	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	**0.0460**	<0.0183	<0.0183	**0.0460**
SS-B-16	12/11/2017	1	<0.0190	<0.0190	<0.0190	<0.0190	<0.0190	<0.0190	**0.0470**	<0.0190	<0.0190	**0.0470**
SS-B-17	12/11/2017	1	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	**0.255**	<0.0192	<0.0192	**0.2550**
SS-B-18	12/11/2017	1	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	ND
SS-B-19	12/11/2017	1	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	ND
SS-B-21	12/11/2017	1	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	**0.0649**	<0.0194	<0.0194	**0.0649**
SS-B-22	12/11/2017	1	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	**0.0687**	<0.0195	<0.0195	**0.0687**
SS-B-23	12/11/2017	1	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	**0.0452**	<0.0189	<0.0189	**0.0452**
SS-B-24	12/11/2017	1	<0.0212	<0.0212	<0.0212	<0.0212	<0.0212	<0.0212	**0.0461**	<0.0212	<0.0212	**0.0461**
SS-B-25	12/11/2017	1	<0.0197	<0.0197	<0.0197	<0.0197	<0.0197	<0.0197	**0.0686**	<0.0197	<0.0197	**0.0686**
SS-B-26	12/11/2017	1	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	**0.0814**	<0.0188	<0.0188	**0.0814**
SS-B-27	12/11/2017	1	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	ND
SS-B-28	12/11/2017	1	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	**0.0228**	<0.0181	<0.0181	**0.0228**
SS-B-29	12/11/2017	1	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	ND
SS-B-32	12/11/2017	1	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	**0.116**	<0.0200	<0.0200	**0.116**
SS-DUP-2		1	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	**0.0979**	<0.0195	<0.0195	**0.0979**
SS-B-33	12/11/2017	1	<0.0201	<0.0201	<0.0201	<0.0201	<0.0201	<0.0201	**0.0657**	<0.0201	<0.0201	**0.0657**
SS-B-34	12/11/2017	1	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	**0.0367**	<0.0193	<0.0193	**0.0367**
SS-B-35	12/11/2017	1	<0.0190	<0.0190	<0.0190	<0.0190	<0.0190	<0.0190	**0.737**	<0.0190	<0.0190	**0.737**
SS-B-36	12/11/2017	1	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	**0.209**	<0.0198	<0.0198	**0.209**
SS-B-37	12/11/2017	1	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	**0.0516**	<0.0183	<0.0183	**0.0516**
SS-B-38	12/11/2017	1	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	**0.0854**	<0.0183	<0.0183	**0.0854**
SS-B-39	12/11/2017	1	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	ND
SS-B-40	12/11/2017	1	<0.0178	<0.0178	<0.0178	<0.0178	<0.0178	<0.0178	<0.0178	<0.0178	<0.0178	ND

NOTES:
mg/kg = milligrams per kilogram
Bold value indicates analyte detected above laboratory method detection limit
<# = analyte not detected at concentrations greater than the Reporting Limit shown
* Soil Cleanup Objectives from VCP Site No. V00120 Decision Document, February 2011.

= exceeds VCP DD SCO - Surficial (1 ppm)

Table 2A
Polychlorinated Biphenyls in Subsurface Soil (2 inches to 2 feet)
Brooklyn Navy Yard Industrial Park
Drum Storage Area C/Substation H

Sample ID	Sample Date	Surficial	Subsurface	Polychlorinated Biphenyls (mg/kg)									Total PCBs
		VCP Decision Document* (mg/kg)		Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Aroclor 1262	Aroclor 1268	
B-1-1	12/12/2017	1	10	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	**0.752**	<0.0182	<0.0182	**0.752**
B-2-1	12/12/2017	1	10	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	**0.0183**	<0.0182	<0.0182	**0.0183**
B-DUP-1		1	10	<0.0270	<0.0270	<0.0270	<0.0270	<0.0270	<0.0270	<0.0270	<0.0270	<0.0270	ND
B-3-1	12/14/2017	1	10	<0.0190	<0.0190	<0.0190	<0.0190	<0.0190	<0.0190	**0.144**	<0.0190	<0.0190	**0.144**
B-4-1	12/14/2017	1	10	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	**0.471**	<0.0185	<0.0185	**0.471**
B-5-1	12/12/2017	1	10	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	**0.0385**	<0.0194	<0.0194	**0.0385**
B-6-1	12/14/2017	1	10	<0.0908	<0.0908	<0.0908	<0.0908	<0.0908	<0.0908	**1.79**	<0.0908	<0.0908	**1.79**
B-7-1	12/14/2017	1	10	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	ND
B-8-1	12/12/2017	1	10	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	**0.0251**	<0.0185	<0.0185	**0.0251**
B-9-1	12/14/2017	1	10	<0.0922	<0.0922	<0.0922	<0.0922	<0.0922	<0.0922	**2.97**	<0.0922	<0.0922	**2.97**
B-10-1	12/14/2017	1	10	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	**0.175**	<0.0183	<0.0183	**0.175**
B-DUP-3		1	10	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	**0.0998**	<0.0192	<0.0192	**0.0998**
B-11-1	12/12/2017	1	10	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	ND
B-12-1	12/14/2017	1	10	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	**0.231**	<0.0182	<0.0182	**0.231**
B-13-1	12/12/2017	1	10	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	**0.0587**	**0.0598**	<0.0189	<0.0189	**0.1185**
B-14-1	12/14/2017	1	10	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	**0.659**	<0.0195	<0.0195	**0.659**
B-15-1	12/14/2017	1	10	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	**0.0310**	<0.0191	<0.0191	**0.0310**
B-16-1	12/14/2017	1	10	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	ND
B-17-1	12/14/2017	1	10	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	ND
B-18-1	12/13/2017	1	10	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	**0.0543**	<0.0189	<0.0189	**0.0543**
B-19-1	12/13/2017	1	10	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	**0.0738**	**0.247**	<0.0182	<0.0182	**0.3208**
B-21-1	12/12/2017	1	10	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	0.0678	**0.0544**	**<0.0187**	<0.0187	**0.1222**
B-22-1	12/13/2017	1	10	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	**0.154**	<0.0186	<0.0186	**0.154**
B-23-1	12/13/2017	1	10	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	**0.549**	<0.0192	<0.0192	**0.549**
B-24-1	12/13/2017	1	10	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	**0.756**	<0.0187	**0.756**
B-25-1	12/13/2017	1	10	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	**0.565**	<0.0180	<0.0180	**0.565**
B-26-1	12/13/2017	1	10	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	**0.853**	<0.0196	<0.0196	**0.853**
B-27-1	12/13/2017	1	10	<92.5	<92.5	<92.5	<92.5	<92.5	<92.5	**3790**	<92.5	<92.5	**3790**
B-29-1	12/13/2017	1	10	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	ND
B-32-1	12/13/2017	1	10	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	**0.884**	<0.0183	<0.0183	**0.884**
B-33-1	12/13/2017	1	10	<0.909	<0.909	<0.909	<0.909	<0.909	<0.909	**30.8**	<0.909	<0.909	**30.8**
B-34-1	12/13/2017	1	10	<0.198	<0.198	<0.198	<0.198	<0.198	<0.198	**3.39**	<0.198	<0.198	**3.39**
B-35-1	12/13/2017	1	10	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	**0.132**	<0.0183	<0.0183	**0.132**
B-36-1	12/13/2017	1	10	<0.0202	<0.0202	<0.0202	<0.0202	<0.0202	<0.0202	**0.443**	<0.0202	<0.0202	**0.443**
B-37-1	12/13/2017	1	10	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	**0.0585**	<0.0182	<0.0182	**0.0585**
B-38-1	12/12/2017	1	10	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	ND
B-39-1	12/12/2017	1	10	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	ND
B-40-1	12/12/2017	1	10	<0.0176	<0.0176	<0.0176	<0.0176	<0.0176	<0.0176	<0.0176	<0.0176	<0.0176	ND

NOTES:
mg/kg = milligrams per kilogram
Bold value indicates analyte detected above laboratory method detection limit
<# = analyte not detected at concentrations greater than the Reporting Limit shown
* Soil Cleanup Objectives from VCP Site No. V00120 Decision Document, February 2011.

= exceeds VCP DD SCO - Surficial (1 ppm)
= exceeds VCP DD SCO - Subsurface (10 ppm)

Table 2B
Polychlorinated Biphenyls in Subsurface Soil (2 to 4 feet)
Brooklyn Navy Yard Industrial Park
Drum Storage Area C/Substation H

Sample ID	Sample Date	Subsurface VCP Decision Document* (mg/kg)	Polychlorinated Biphenyls (mg/kg)									Total PCBs
			Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Aroclor 1262	Aroclor 1268	
B-1-2	12/12/2017	10	<0.0171	<0.0171	<0.0171	<0.0171	<0.0171	<0.0171	<0.0171	<0.0171	<0.0171	ND
B-2-2	12/12/2017	10	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	**0.0407**	**0.0809**	<0.0189	<0.0189	**0.1216**
B-3-2	12/14/2017	10	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	**0.109**	<0.0191	<0.0191	**0.109**
B-4-2	12/14/2017	10	<0.0932	<0.0932	<0.0932	<0.0932	<0.0932	<0.0932	**2.61**	<0.0932	<0.0932	**2.61**
B-5-2	12/12/2017	10	<0.0203	<0.0203	<0.0203	<0.0203	<0.0203	<0.0203	**0.0499**	<0.0203	<0.0203	**0.0499**
B-6-2	12/14/2017	10	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	**0.0418**	<0.0185	<0.0185	**0.0418**
B-7-2	12/14/2017	10	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	ND
B-8-2	12/12/2017	10	<0.0178	<0.0178	<0.0178	<0.0178	<0.0178	<0.0178	<0.0178	<0.0178	<0.0178	ND
B-9-2	12/14/2017	10	<0.0183	<0.0183	<0.0183	<0.0183	0.189	<0.0183	**0.0587**	<0.0183	<0.0183	**0.2477**
B-10-2	12/14/2017	10	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	**0.0325**	<0.0179	<0.0179	**0.0325**
B-11-2	12/12/2017	10	<0.0967	<0.0967	<0.0967	<0.0967	<0.0967	**0.584**	**1.65**	<0.0967	<0.0967	**2.234**
B-12-2	12/14/2017	10	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	ND
B-13-2	12/12/2017	10	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	**0.104**	**0.0858**	<0.0191	<0.0191	**0.1898**
B-14-2	12/14/2017	10	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	**0.111**	<0.0179	<0.0179	**0.111**
B-15-2	12/14/2017	10	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	**0.0896**	<0.0188	<0.0188	**0.0896**
B-16-2	12/14/2017	10	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	**0.0765**	<0.0184	<0.0184	**0.0765**
B-17-2	12/14/2017	10	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	**0.0490**	<0.0187	<0.0187	**0.0490**
B-18-2	12/13/2017	10	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	ND
B-19-2	12/13/2017	10	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	**0.197**	**0.408**	<0.0182	<0.0182	**0.605**
B-21-2	12/12/2017	10	<0.0174	<0.0174	<0.0174	<0.0174	<0.0174	<0.0174	<0.0174	<0.0174	<0.0174	ND
B-DUP-5		10	<0.0169	<0.0169	<0.0169	<0.0169	<0.0169	<0.0169	<0.0169	<0.0169	<0.0169	ND
B-22-2	12/13/2017	10	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	**0.114**	<0.0192	<0.0192	**0.114**
B-23-2	21/13/17	10	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	**0.0776**	<0.0184	<0.0184	**0.0776**
B-24-2	12/13/2017	10	<0.0938	<0.0938	<0.0938	<0.0938	**0.682**	<0.0938	**1.39**	<0.0938	<0.0938	**2.072**
B-25-2	12/13/2017	10	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	**0.0955**	**0.203**	<0.0181	<0.0181	**0.2985**
B-26-2	12/13/2017	10	<0.0922	<0.0922	<0.0922	<0.0922	<0.0922	**1.33**	**2.33**	<0.0922	<0.0922	**3.66**
B-27-2	12/13/2017	10	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	**0.462**	<0.0184	<0.0184	**0.462**
B-29-2	12/13/2017	10	<0.0176	<0.0176	<0.0176	<0.0176	<0.0176	<0.0176	<0.0176	<0.0176	<0.0176	ND
B-32-2	12/13/2017	10	<0.0207	<0.0207	<0.0207	<0.0207	<0.0207	<0.0207	<0.0207	<0.0207	<0.0207	ND
B-33-2	12/13/2017	10	<0.188	<0.188	<0.188	<0.188	<0.188	<0.188	**3.88**	<0.188	<0.188	**3.88**
B-34-2	12/13/2017	10	<0.183	<0.183	<0.183	<0.183	<0.183	<0.183	**2.17**	<0.183	<0.183	**2.17**
B-35-2	12/13/2017	10	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	**0.049**	<0.0184	<0.0184	0.049
B-36-2	12/13/2017	10	<0.185	<0.185	<0.185	<0.185	<0.185	<0.185	**5.33**	<0.185	<0.185	**5.33**
B-37-2	12/13/2017	10	<92.6	<92.6	<92.6	<92.6	<92.6	<92.6	**2430**	<92.6	<92.6	**2430**
B-38-2	12/12/2017	10	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	ND
B-DUP-8		10	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	**1.01**	<0.0194	<0.0194	**1.01**
B-39-2	12/12/2017	10	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	ND
B-40-2	12/12/2017	10	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	ND

NOTES:
mg/kg = milligrams per kilogram
Bold value indicates analyte detected above laboratory method detection limit
<# = analyte not detected at concentrations greater than the Reporting Limit shown
* Soil Cleanup Objectives from VCP Site No. V00120 Decision Document, February 2011.

= exceeds VCP DD SCO - Subsurface (10 ppm)

Table 2C
Polychlorinated Biphenyls in Subsurface Soil (4 to 6 feet)
Brooklyn Navy Yard Industrial Park
Drum Storage Area C/Substation H

Sample ID	Sample Date	Subsurface VCP Decision Document* (mg/kg)	Polychlorinated Biphenyls (mg/kg)									
			Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Aroclor 1262	Aroclor 1268	Total PCBs
B-1-3	12/12/2017	10	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	**0.0785**	<0.0204	<0.0204	**0.0785**
B-2-3	12/12/2017	10	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	ND
B-3-3	12/14/2017	10	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	ND
B-4-3	12/14/2017	10	<0.0879	<0.0879	<0.0879	<0.0879	<0.0879	<0.0879	**2.12**	<0.0879	<0.0879	**2.12**
B-5-3	12/12/2017	10	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	**0.0215**	<0.0196	<0.0196	**0.0215**
B-7-3	12/14/2017	10	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	ND
B-8-3	12/12/2017	10	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	**0.0422**	<0.0194	<0.0194	**0.0422**
B-9-3	12/14/2017	10	<0.0915	<0.0915	<0.0915	<0.0915	<0.0915	<0.0915	**1.84**	<0.0915	<0.0915	**1.84**
B-10-3	12/14/2017	10	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	ND
B-11-3	12/12/2017	10	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	**0.215**	<0.0183	<0.0183	**0.215**
B-12-3	12/14/2017	10	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	**0.536**	<0.0182	<0.0182	**0.536**
B-13-3	12/12/2017	10	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	**0.0704**	<0.0184	<0.0184	**0.0704**
B-14-3	12/14/2017	10	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	**0.614**	<0.0189	<0.0189	**0.614**
B-15-3	12/14/2017	10	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	ND
B-16-3	12/14/2017	10	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	**0.0677**	<0.0194	<0.0194	**0.0677**
B-17-3	12/14/2017	10	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	ND
B-18-3	12/13/2017	10	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	**0.0525**	<0.0187	<0.0187	**0.0525**
B-19-3	12/13/2017	10	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	**0.0432**	<0.0192	<0.0192	**0.0432**
B-21-3	12/12/2017	10	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	**0.0265**	<0.0181	<0.0181	**0.0265**
B-22-3	12/13/2017	10	<0.0177	<0.0177	<0.0177	<0.0177	<0.0177	<0.0177	<0.0177	<0.0177	<0.0177	ND
B-23-3	12/13/2017	10	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	**0.0534**	<0.0192	<0.0192	**0.0534**
B-24-3	12/13/2017	10	<0.0194	<0.0194	<0.0194	<0.0194	**0.267**	<0.0194	**0.159**	<0.0194	<0.0194	**0.426**
B-25-3	12/13/2017	10	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	**0.0193**	<0.0179	<0.0179	**0.0193**
B-26-3	12/13/2017	10	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	**0.0817**	<0.0186	<0.0186	**0.0817**
B-27-3	12/13/2017	10	<18.9	<18.9	<18.9	<18.9	<18.9	<18.9	**356**	<18.9	<18.9	**356**
B-29-3	12/13/2017	10	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	ND
B-32-3	12/13/2017	10	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	ND
B-33-3	12/13/2017	10	<0.0177	<0.0177	<0.0177	<0.0177	<0.0177	<0.0177	**0.326**	<0.0177	<0.0177	**0.326**
B-34-3	12/13/2017	10	<0.0174	<0.0174	<0.0174	<0.0174	<0.0174	<0.0174	**0.884**	<0.0174	<0.0174	**0.884**
B-35-3	12/13/2017	10	<0.931	<0.931	<0.931	<0.931	<0.931	<0.931	**14.6**	<0.931	<0.931	**14.6**
B-36-3	12/13/2017	10	<0.907	<0.907	<0.907	<0.907	<0.907	<0.907	**20.6**	<0.907	<0.907	**20.6**
B-37-3	12/13/2017	10	<0.385	<0.385	<0.385	<0.385	<0.385	<0.385	**13.2**	<0.385	<0.385	**13.2**
B-38-3	12/12/2017	10	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	**0.0365**	<0.0181	<0.0181	**0.0365**
B-39-3	12/12/2017	10	<.0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	**0.0334**	<0.0185	<0.0185	**0.0334**
B-40-3	12/12/2017	10	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	ND

NOTES:
mg/kg = milligrams per kilogram
Bold value indicates analyte detected above laboratory method detection limit
<# = analyte not detected at concentrations greater than the Reporting Limit shown
* Soil Cleanup Objectives from VCP Site No. V00120 Decision Document, February 2011.

= exceeds VCP DD SCO - Subsurface (10 ppm)

Table 2D
Polychlorinated Biphenyls in Subsurface Soil (6 to 8 feet)
Brooklyn Navy Yard Industrial Park
Drum Storage Area C/Substation H

Sample ID	Sample Date	Subsurface VCP Decision Document* (mg/kg)	Polychlorinated Biphenyls (mg/kg)									
			Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Aroclor 1262	Aroclor 1268	Total PCBs
B-1-4	12/12/2017	10	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	**0.0817**	<0.0185	<0.0185	**0.0817**
B-2-4	12/12/2017	10	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	**0.0590**	<0.0183	<0.0183	**0.0590**
B-3-4	12/14/2017	10	<0.0190	<0.0190	<0.0190	<0.0190	<0.0190	<0.0190	<0.0190	<0.0190	<0.0190	ND
B-4-4	12/14/2017	10	<0.0303	<0.0303	<0.0303	<0.0303	<0.0303	<0.0303	<0.0303	<0.0303	<0.0303	ND
B-5-4	12/12/2017	10	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	**0.0198**	<0.0192	<0.0192	**0.0198**
B-7-4	12/14/2017	10	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	ND
B-9-4	12/14/2017	10	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	ND
B-10-4	12/14/2017	10	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	ND
B-11-4	12/12/2017	10	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	ND
B-12-4	12/14/2017	10	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	ND
B-13-4	12/12/2017	10	<0.0197	<0.0197	<0.0197	<0.0197	<0.0197	<0.0197	**0.0424**	<0.0197	<0.0197	**0.0424**
B-14-4	12/14/2017	10	<0.0943	<0.0943	<0.0943	<0.0943	<0.0943	<0.0943	**2.07**	<0.0943	<0.0943	**2.07**
B-15-4	12/14/2017	10	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	ND
B-DUP-4		10	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	**0.0868**	<0.0185	<0.0185	**0.0868**
B-16-4	12/14/2017	10	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	**0.0600**	<0.0183	<0.0183	**0.0600**
B-17-4	12/14/2017	10	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	**0.0419**	<0.0181	<0.0181	**0.0419**
B-18-4	12/13/2017	10	<0.0973	<0.0973	<0.0973	<0.0973	<0.0973	<0.0973	**2.53**	<0.0973	<0.0973	**2.53**
B-19-4	12/13/2017	10	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	ND
B-21-4	12/12/2017	10	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	**0.0240**	**0.0536**	<0.0185	<0.0185	**0.0776**
B-22-4	12/13/2017	10	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	ND
B-23-4	12/13/2017	10	<0.0190	<0.0190	<0.0190	<0.0190	<0.0190	<0.0190	**0.211**	<0.0190	<0.0190	**0.211**
B-24-4	12/13/2017	10	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	**0.0584**	<0.0180	<0.0180	**0.0584**
B-25-4	12/13/2017	10	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	**0.296**	<0.0180	<0.0180	**0.296**
B-26-4	12/13/2017	10	<0.0972	<0.0972	<0.0972	<0.0972	<0.0972	<0.0972	**1.96**	<0.0972	<0.0972	**1.96**
B-27-4	12/13/2017	10	<38.0	<38.0	<38.0	<38.0	<38.0	<38.0	**978**	<38.0	<38.0	**978**
B-29-4	12/13/2017	10	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	ND
B-32-4	12/13/2017	10	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	ND
B-33-4	12/13/2017	10	<0.0175	<0.0175	<0.0175	<0.0175	<0.0175	<0.0175	**0.129**	<0.0175	<0.0175	**0.129**
B-34-4	12/13/2017	10	<0.177	<0.177	<0.177	<0.177	<0.177	<0.177	**1.61**	<0.177	<0.177	**1.61**
B-35-4	12/13/2017	10	<0.185	<0.185	<0.185	<0.185	<0.185	<0.185	**3.02**	<0.185	<0.185	**3.02**
B-36-4	12/13/2017	10	<0.185	<0.185	<0.185	<0.185	<0.185	<0.185	<0.185	<0.185	<0.185	ND
B-37-4	12/13/2017	10	<18.5	<18.5	<18.5	<18.5	<18.5	<18.5	**525**	<18.5	<18.5	**525**
B-38-4	12/12/2017	10	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	ND
B-39-4	12/12/2017	10	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	ND
B-40-4	12/12/2017	10	<0.0175	<0.0175	<0.0175	<0.0175	<0.0175	<0.0175	<0.0175	<0.0175	<0.0175	ND

NOTES:
mg/kg = milligrams per kilogram
Bold value indicates analyte detected above laboratory method detection limit
<# = analyte not detected at concentrations greater than the Reporting Limit shown
* Soil Cleanup Objectives from VCP Site No. V00120 Decision Document, February 2011.

= exceeds VCP DD SCO - Subsurface (10 ppm)

Table 2E
Polychlorinated Biphenyls in Subsurface Soil (Below 8 feet)
Brooklyn Navy Yard Industrial Park
Drum Storage Area C/Substation H

Sample ID	Sample Date	Subsurface VCP Decision Document* (mg/kg)	Polychlorinated Biphenyls (mg/kg)									
			Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Aroclor 1262	Aroclor 1268	Total PCBs
B-29-5	12/13/2017	10	<0.0176	<0.0176	<0.0176	<0.0176	<0.0176	<0.0176	<0.0176	<0.0176	<0.0176	ND
B-29-6	12/13/2017	10	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	**0.142**	<0.0179	<0.0179	**0.142**
B-37-5	12/13/2017	10	<0.0199	<0.0199	<0.0199	<0.0199	<0.0199	<0.0199	**0.110**	<0.0199	<0.0199	**0.110**

NOTES:
mg/kg = milligrams per kilogram
Bold value indicates analyte detected above laboratory method detection limit
<# = analyte not detected at concentrations greater than the Reporting Limit shown
* Soil Cleanup Objectives from VCP Site No. V00120 Decision Document, February 2011.

= exceeds VCP DD SCO - Subsurface (10 ppm)

Table 2F
Polychlorinated Biphenyls in Subsurface Soil (Building 297 Sub-slab)
Brooklyn Navy Yard Industrial Park
Drum Storage Area C/Substation H

Sample ID	Sample Date	Subsurface VCP Decision Document* (mg/kg)	Polychlorinated Biphenyls (mg/kg)									Total PCBs
			Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Aroclor 1262	Aroclor 1268	
Sub Slab 1	12/21/2017	10	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	ND
Sub Slab 2	12/21/2017	10	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	ND
Sub Slab 3	12/21/2017	10	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	**0.0897**	<0.0183	<0.0183	**0.0897**
Sub Slab 4	12/21/2017	10	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	ND
Sub Slab 5	12/21/2017	10	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	ND

NOTES:
mg/kg = milligrams per kilogram
Bold value indicates analyte detected above laboratory method detection limit
<# = analyte not detected at concentrations greater than the Reporting Limit shown
* Soil Cleanup Objectives from VCP Site No. V00120 Decision Document, February 2011.

= exceeds VCP DD SCO - Subsurface (10 ppm)

Table 3
Polychlorinated Biphenyls in Bulk Samples (Building 297 Sub-floor Slab)
Brooklyn Navy Yard Industrial Park
Drum Storage Area C/Substation H

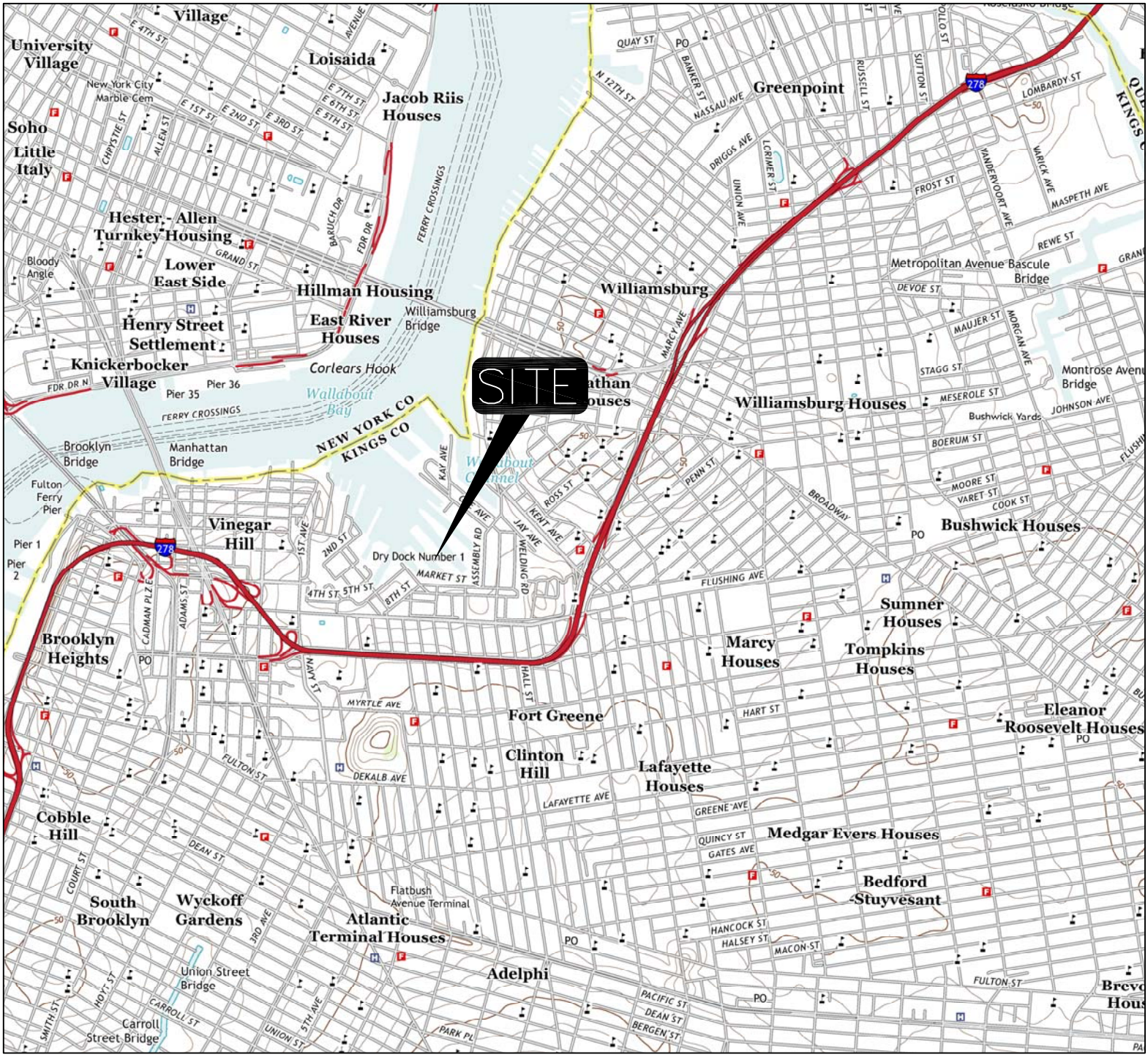
Sample ID	Sample Date	VCP Decision Document* (mg/kg)	Polychlorinated Biphenyls (mg/kg)									Total PCBs
			Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Aroclor 1262	Aroclor 1268	
Bldg 297 - Slab 1	12/21/2017	10	<0.350	<0.720	<0.350	<0.350	<0.350	<0.350	<0.350	<0.350	<0.350	ND
Bldg 297 - Slab 2	12/21/2017	10	<0.036	<0.073	<0.036	<0.036	<0.036	<0.036	**0.050**	<0.036	<0.036	**0.050**
Bldg 297 - Slab 3	12/21/2017	10	<0.036	<0.072	<0.036	<0.036	<0.036	<0.036	**0.170**	<0.036	<0.036	**0.170**
Bldg 297 - Slab 4	12/21/2017	10	<0.350	<0.720	<0.350	<0.350	<0.350	<0.350	<0.350	<0.350	<0.350	ND
Bldg 297 - Slab 5	12/21/2017	10	<0.350	<0.710	<0.350	<0.350	<0.350	<0.350	<0.350	<0.350	<0.350	ND

NOTES:
mg/kg = milligrams per kilogram
Bold value indicates analyte detected above laboratory method detection limit
<# = analyte not detected at concentrations greater than the Reporting Limit shown
* Soil Cleanup Objectives from VCP Site No. V00120 Decision Document, February 2011.

= exceeds VCP DD SCO - Subsurface (10 ppm)

FIGURES

CORE ENVIRONMENTAL CONSULTANTS



Source: USGS Topographic map Brooklyn 2013
USGS Topographic map Central Park 2013

QUADRANGLE LOCATION

JOB TITLE AND LOCATION:
BROOKLYN NAVY YARD
63 FLUSHINGS AVE,
BROOKLYN, NEW YORK

WARNING
IT IS A VIOLATION OF SECTION 7209, SUBDIVISION 2, OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, OTHER THAN THOSE WHOSE SEAL APPEARS ON THIS DRAWING, TO ALTER IN ANY WAY AN ITEM ON THIS DRAWING. IF AN ITEM IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

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28-48 119TH STREET
COLLEGE POINT, N.Y. 11356
T: 718-786-4730
F: 718-786-4764
2312 WEHRLE DRIVE
BUFFALO, N.Y. 14221
T: 716-204-8054
F: 716-204-8557
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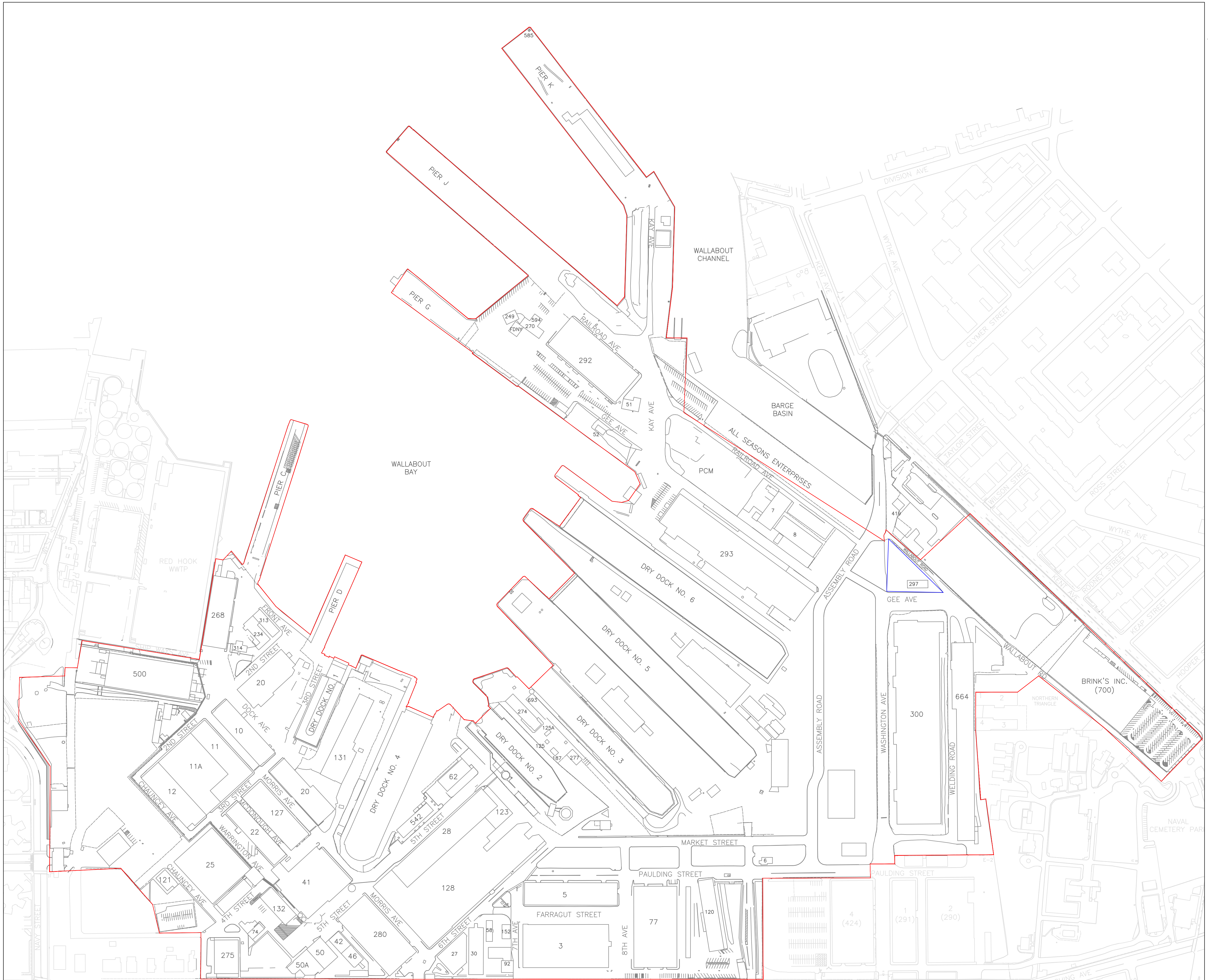
DRAWING TITLE:
SITE LOCATION MAP

DATE:		JOB NO.:	FIGURE NO.:
1/10/2018			1
DESIGNED BY: SH	CHECKED BY: AC	SCALE: 2 : 1	
DRAWN BY: SH	PROJ ENG.: AC	SHEET OF	



PIER K
PIER J
PIER G
PIER C
PIER D
WALLABOUT CHANNEL
WALLABOUT BAY
BARGE BASIN
RED HOOK WWTP
KAY AVE
RAILROAD AVE
GEE AVE
ALL SEASONS ENTERPRISES
PCM
DRY DOCK NO. 6
DRY DOCK NO. 5
DRY DOCK NO. 4
DRY DOCK NO. 3
DRY DOCK NO. 2
ASSEMBLY ROAD
WASHINGTON AVE
WELDING ROAD
WALLABOUT RD
BRINK'S INC. (700)
MARKET STREET
PAULDING STREET
FARRAGUT STREET
FRONT AVE
DOCK AVE
MORRIS AVE
CHAUNCEY AVE
WARRINGTON AVE
MCDONOUGH AVE
2ND STREET
3RD STREET
4TH STREET
5TH STREET
6TH STREET
7TH AVE
8TH AVE
DIVISION AVE
WYTHE AVE
KENT AVE
CLYMER STREET
TAYLOR STREET
WILSON STREET
ROSS STREET
RODNEY STREET
KEAP STREET
HOOPER
NORTHERN TRIANGLE
NAVAL CEMETERY PARK
FLUSHING AVE
585
249
270
594
FDNY
292
51
52
293
7
8
416
297
300
664
268
313
234
314
500
20
10
11
11A
12
131
20
127
22
25
121
41
132
74
275
50A
50
42
46
280
62
542
28
123
128
693
274
125A
120
187
277
5
77
3
120
58
152
27
30
92
6
4 (424)
1 (291)
2 (290)

LEGEND

APPROXIMATE SITE BOUNDARY (VCP SITE)

APPROXIMATE PROJECT AREA

CLIENT NAME

BROOKLYN NAVY YARD DEVELOPMENT CORPORATION
63 FLUSHING AVENUE
BROOKLYN, NY, 11205

SEAL & SIGNATURE

NO.	REVISIONS	DATE

CORE ENVIRONMENTAL CONSULTANTS

22-48 119TH STREET
COLLEGE POINT, N.Y. 11356
T: 718-786-4730
F: 718-786-4764

2312 WEHRLE DRIVE
BUFFALO, N.Y. 14221
T: 716-204-8054
F: 716-204-8557

www.COREenv.com

PROJECT TITLE:

BROOKLYN NAVY YARD
63 Flushing Avenue
Brooklyn, NY

DESCRIPTION:

SELF-IMPLEMENTING ON-SITE CLEANUP AND DISPOSAL PLAN

DRAWING TITLE:

SITE MAP

SEAL & SIGNATURE		
	DATE:	1/10/2018
	PROJECT No.:	–
	DRAWN BY:	SH
	DESIGNED BY:	SH
	CHECKED BY:	AC
	APPROVED BY:	AC
	FIGURE No.:	2
SCALE: 1=200	SHEET No.:	OF:
	REVISED BY:	–

LEGEND

PROJECT AREA

Scale
1"= 32'

CLIENT NAME

BROOKLYN NAVY YARD
DEVELOPMENT CORPORATION
63 FLUSHING AVENUE
BROOKLYN, NY, 11205

SEAL & SIGNATURE

NO.	REVISIONS	DATE

CORE
ENVIRONMENTAL
CONSULTANTS

22-48 119th STREET
COLLEGE POINT, NY 11356
T: 718-786-4730
F: 718-786-4764

2312 WEHRLE DRIVE
BUFFALO, N.Y. 14221
T: 716-204-8054
F: 716-204-8557

www.COREenv.com

PROJECT LOCATION:

BROOKLYN NAVY YARD
INDUSTRIAL PARK

DESCRIPTION:

SELF-IMPLEMENTING ON-SITE CLEANUP AND DISPOSAL PLAN

DRAWING TITLE:

PROJECT AREA MAP

SEAL & SIGNATURE	DATE:	DEC 2017
	PROJECT #:	
	DRAWN BY:	SH
	CHECKED BY:	AC
	DRAWING #:	3
	REVISED BY:	

LEGEND

- PROJECT AREA
- 20'X20' GRID
- B-32 BORING LOCATION
- B-31 BORING NOT DRILLED

Scale
1"= 32'

CLIENT NAME

BROOKLYN NAVY YARD DEVELOPMENT CORPORATION
63 FLUSHING AVENUE
BROOKLYN, NY, 11205

SEAL & SIGNATURE

NO.	REVISIONS	DATE

CORE ENVIRONMENTAL CONSULTANTS
22-48 119th STREET
COLLEGE POINT, NY 11356
T: 718-786-4730
F: 718-786-4764
2312 WEHRLE DRIVE
BUFFALO, N.Y. 14221
T: 716-204-8054
F: 716-204-8557
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PROJECT LOCATION:

BROOKLYN NAVY YARD INDUSTRIAL PARK

DESCRIPTION:

SELF-IMPLEMENTING ON-SITE CLEANUP AND DISPOSAL PLAN

DRAWING TITLE:

SOIL BORING LOCATION MAP

SEAL & SIGNATURE	DATE:	DEC 2017
	PROJECT #:	
	DRAWN BY:	SH
	CHECKED BY:	AC
	DRAWING #:	4-A
	REVISED BY:	

LEGEND

PROJECT AREA

BORING LOCATION

BLDG 297-1

Scale
1"= 32'

CLIENT NAME

BROOKLYN NAVY YARD
DEVELOPMENT CORPORATION
63 FLUSHING AVENUE
BROOKLYN, NY, 11205

SEAL & SIGNATURE

NO.	REVISIONS	DATE

CORE ENVIRONMENTAL CONSULTANTS
22-48 119th STREET
COLLEGE POINT, NY 11356
T: 718-786-4730
F: 718-786-4764
2312 WEHRLE DRIVE
BUFFALO, N.Y. 14221
T: 716-204-8054
F: 716-204-8557
www.COREenv.com

PROJECT LOCATION:

BROOKLYN NAVY YARD
INDUSTRIAL PARK

DESCRIPTION:

SELF-IMPLEMENTING ON-SITE CLEANUP AND DISPOSAL PLAN

DRAWING TITLE:

BULK & SUB-SLAB SOIL LOCATION MAP

SEAL & SIGNATURE	DATE:	DEC 2017
	PROJECT #:	
	DRAWN BY:	SH
	CHECKED BY:	AC
	DRAWING #:	4-B
	REVISED BY:	

LEGEND

- PROJECT AREA
- 20'X20' GRID
- B-32 BORING LOCATION
- B-31 BORING NOT DRILLED

SOIL SAMPLE TOTAL PCB CONCENTRATIONS

- >1 PPM
- >10 PPM

SOIL SAMPLE DEPTHS

- 2"-2'
- 2-4'
- 4'-6'
- 6'-8'

Scale
1" = 23.86'

CLIENT NAME

Brooklyn Navy Yard Development Corporation
63 Flushing Ave, Bldg 293
Brooklyn, NY 11205

SEAL & SIGNATURE

NO.	REVISIONS	DATE

CORE ENVIRONMENTAL CONSULTANTS
22-48 119TH STREET
COLLEGE POINT, NY 11356
T: 718-786-4730
F: 718-786-4764
2312 WEHRLE DRIVE
BUFFALO, NY 14221
T: 716-204-8054
F: 716-204-8557
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PROJECT TITLE:

BROOKLYN NAVY YARD INDUSTRIAL PARK

DESCRIPTION:

SELF-IMPLEMENTING ON-SITE CLEANUP AND DISPOSAL PLAN

DRAWING TITLE:

PCB CONCENTRATIONS IN SUBSURFACE SOIL SAMPLES

SEAL & SIGNATURE	DATE:	JAN 2018
	PROJECT No.:	-
	DRAWN BY:	SH
	DESIGNED BY:	-
	CHECKED BY:	AC
	APPROVED BY:	AC
	FIGURE No.:	5
SCALE:	SHEET No.:	OF:
	REVISED BY:	-

LEGEND

- PROJECT AREA
- 20'X20' GRID
- B-32 BORING LOCATION
- B-31 BORING NOT DRILLED
- 1FT EXCAVATION
- 2 FT EXCAVATION
- 6 FT EXCAVATION
- 8 FT EXCAVATION

Scale
1"= 32'

CLIENT NAME

BROOKLYN NAVY YARD DEVELOPMENT CORPORATION
63 FLUSHING AVENUE
BROOKLYN, NY, 11205

SEAL & SIGNATURE

NO.	REVISIONS	DATE

CORE ENVIRONMENTAL CONSULTANTS
22-48 119th STREET
COLLEGE POINT, NY 11356
T: 718-786-4730
F: 718-786-4764
2312 WEHRLE DRIVE
BUFFALO, N.Y. 14221
T: 716-204-8054
F: 716-204-8557
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PROJECT LOCATION:

BROOKLYN NAVY YARD INDUSTRIAL PARK

DESCRIPTION:

SELF-IMPLEMENTING ON-SITE CLEANUP AND DISPOSAL PLAN

DRAWING TITLE:

MINIMUM EXCAVATION REQUIREMENTS

SEAL & SIGNATURE	DATE:	JAN 2018
	PROJECT #:	
	DRAWN BY:	SH
	CHECKED BY:	AC
	DRAWING #:	6
	REVISED BY:	

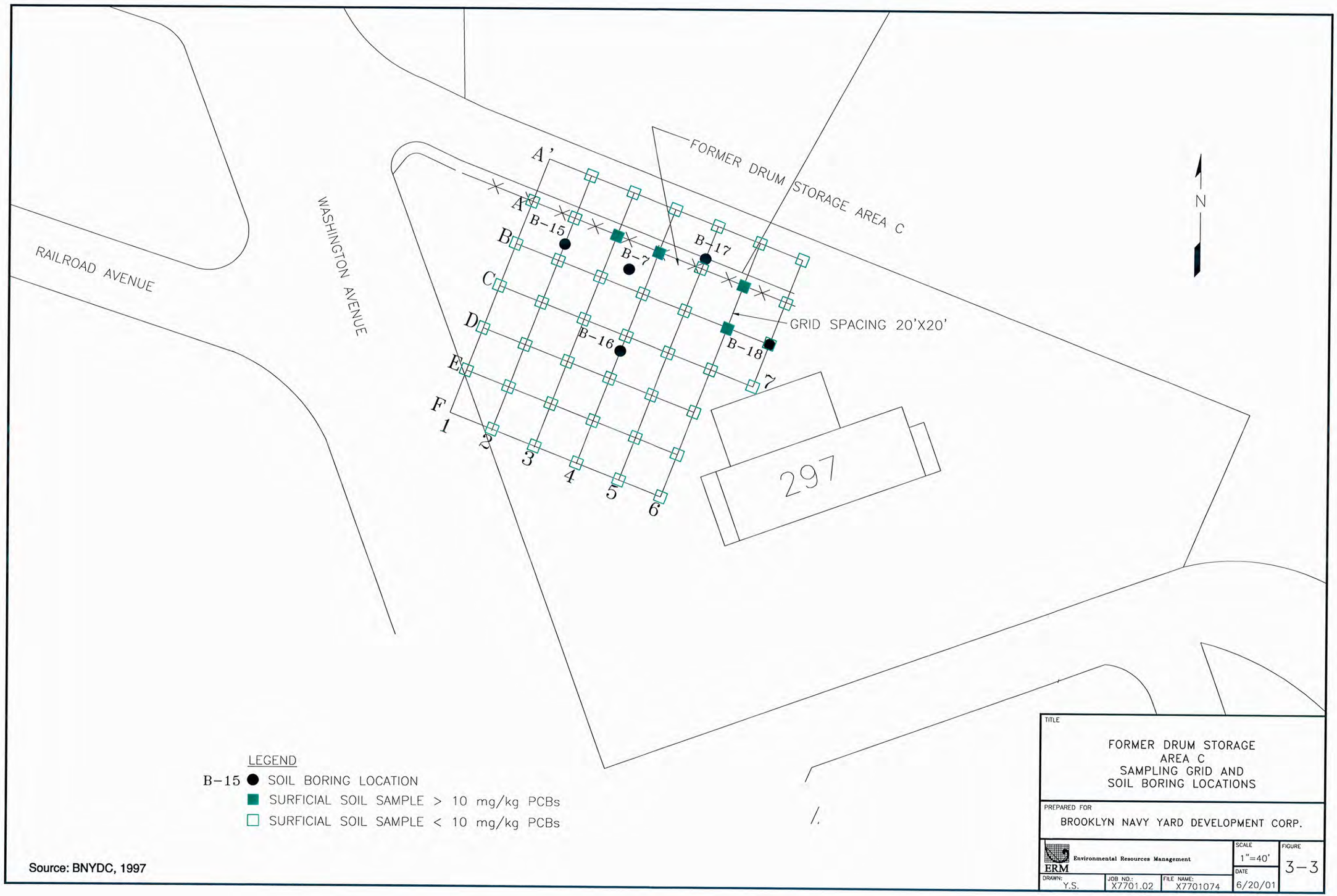
APPENDICES

CORE ENVIRONMENTAL CONSULTANTS

APPENDIX A

Historical Data

CORE ENVIRONMENTAL CONSULTANTS



LEGEND

B-15 ● SOIL BORING LOCATION

■ SURFICIAL SOIL SAMPLE > 10 mg/kg PCBs

□ SURFICIAL SOIL SAMPLE < 10 mg/kg PCBs

Source: BNYDC, 1997

TITLE

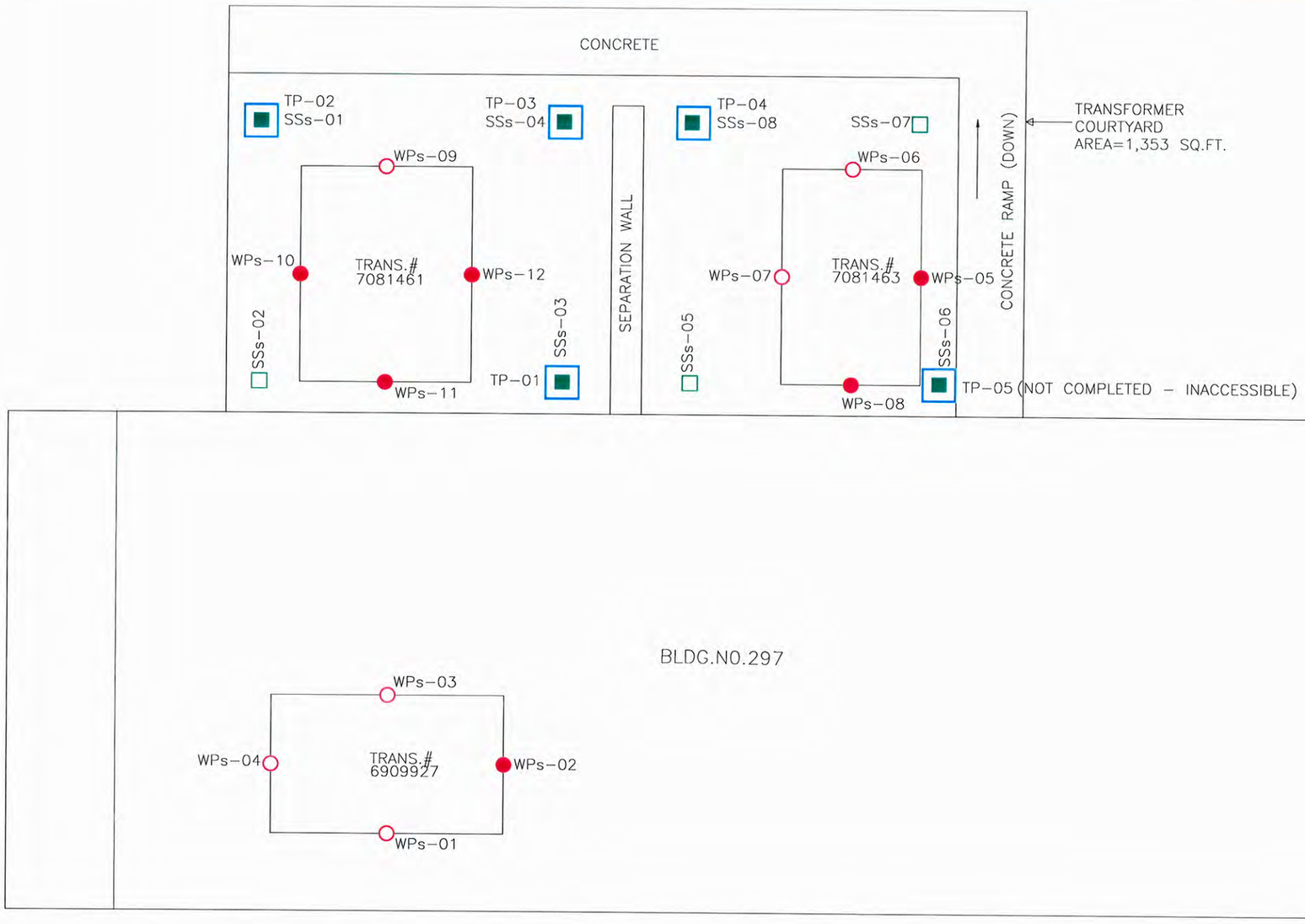
FORMER DRUM STORAGE
AREA C
SAMPLING GRID AND
SOIL BORING LOCATIONS

PREPARED FOR

BROOKLYN NAVY YARD DEVELOPMENT CORP.

ERM Environmental Resources Management

DRAWN:	JOB NO.:	FILE NAME:	SCALE	FIGURE
Y.S.	X7701.02	X7701074	1"=40'	3-3
			DATE 6/20/01	



LEGEND

- WIPE SAMPLE LOCATION > 10 ug/wipe PCBs
- WIPE SAMPLE LOCATION < 10 ug/wipe PCBs
- SOIL SAMPLE LOCATION > 10 mg/kg PCBs
- SOIL SAMPLE LOCATION < 10 mg/kg PCBs
- TP-01 TEST PIT LOCATION

Source: BNYDC, 1997

TITLE

SUBSTATION H - BUILDING 297 CONCRETE WIPE AND SOIL SAMPLING LOCATIONS

PREPARED FOR

BROOKLYN NAVY YARD DEVELOPMENT CORP.

Environmental Resources Management

ERM

DRAWN:	JOB NO.:	FILE NAME:	SCALE	FIGURE
Y.S.	X7701.02	X7701045	1/8"=1'	4-4
			DATE 4/17/01	

TABLE 3-1
SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS - FORMER DRUM STORAGE AREAS
BROOKLYN NAVY YARD, BROOKLYN, NEW YORK

SAMPLE NO.:		B7	B7	B7	B7	B8	B8	B8	B8	B8	B9	FIELD	FIELD
SAMPLE INTERVAL:	NYSDEC	6"-12"	2'-4'	4'-6'	7'-7'6"	1'-1'2"	1'6"-2'	5'-7'	8'6"-9'	13'-13'6"	0"-12"	BLANK	BLANK
SAMPLE DATE:	RSCO	4/16/99	4/16/99	4/16/99	4/16/99	4/16/99	4/16/99	4/16/99	4/16/99	4/16/99	4/16/99	4/16/99	4/17/99
Pesticides/PCBs													
alpha-BHC	110	9.6 U		9.7 U	11 U	9.5 U	9.3 U	10 U	10 U	9.8 U	9.8 U	0.050 U	0.050 U
beta-BHC	200	9.6 U		**9.7 J**	**13 J**	9.5 U	9.3 U	10 U	10 U	9.8 U	9.8 U	0.050 U	0.050 U
delta-BHC	300	9.6 U		9.7 U	11 U	9.5 U	9.3 U	10 U	10 U	9.8 U	9.8 U	0.050 U	0.050 U
gamma-BHC(Lindane)	60	9.6 U		9.7 U	11 U	9.5 U	9.3 U	10 U	10 U	9.8 U	9.8 U	0.050 U	0.050 U
Heptachlor	100	9.6 U		9.7 U	11 U	9.5 U	9.3 U	10 U	10 U	9.8 U	9.8 U	0.050 U	0.050 U
Aldrin	41	9.6 U		9.7 U	11 U	9.5 U	9.3 U	10 U	10 U	9.8 U	9.8 U	0.050 U	0.050 U
Heptachlor epoxide	20	9.6 U		**130 J**	**51 J**	9.5 U	9.3 U	10 U	10 U	9.8 U	9.8 U	0.050 U	0.050 U
Endosulfan I	900	9.6 U		9.7 U	11 U	9.5 U	9.3 U	10 U	10 U	9.8 U	9.8 U	0.050 U	0.050 U
Dieldrin	44	19 U		19 U	21 U	18 U	18 U	20 U	20 U	19 U	19 U	0.10 U	0.10 U
4,4'-DDE	2,100	**60 J**		19 U	21 U	18 U	18 UJ	20 U	20 U	**13 J**	19 U	0.10 U	0.10 U
Endrin	100	**190 J**		19 U	**810 J**	18 U	18 U	20 U	20 U	19 U	19 U	0.10 U	0.10 U
Endosulfan II	900	19 U		19 U	21 U	18 U	18 U	20 U	20 U	19 U	19 U	0.10 U	0.10 U
4,4'-DDD	2,900	19 U		19 U	21 U	18 U	18 UJ	**10 J**	**10 J**	**11 J**	19 U	0.10 U	0.10 U
Endosulfan sulfate	1,000	19 U		19 U	21 U	18 U	18 U	20 U	20 U	19 U	19 U	0.10 U	0.10 U
4,4'-DDT	2,100	19 U		19 U	21 U	18 U	18 UJ	20 U	20 U	**54 J**	19 U	0.10 U	0.10 U
Methoxychlor	*	96 U		97 U	110 U	95 U	93 U	100 U	100 U	98 U	98 U	0.50 U	0.50 U
Endrin ketone	NL	**1700 J**		19 U	**2000 J**	18 U	18 U	20 U	20 U	19 U	19 U	0.10 U	0.10 U
Endrin aldehyde	NL	19 U		**130000 J**	**57000 J**	**54 J**	**91 J**	**140 J**	**140 J**	**31 J**	**13 J**	0.10 U	0.10 U
alpha-Chlordane	540	9.6 U		9.7 U	11 U	9.5 U	9.3 UJ	10 U	10 U	**6.1 J**	9.8 U	0.050 U	0.050 U
gamma-Chlordane	540	9.6 U		9.7 U	11 U	9.5 U	9.3 UJ	10 U	10 U	**8.6 J**	9.8 U	0.050 U	0.050 U
Toxaphene	NL	960 UJ		970 UJ	1100 U	950 U	930 U	1000 U	1000 U	980 U	980 U	5.0 U	5.0 U
Aroclor-1016	**	**190 UJ***		**190 UJ***	**210 UJ***	180 U	180 U	200 U	200 U	190 U	190 U	1.0 U	1.0 U
Aroclor-1221	**	**380 UJ***		**380 UJ***	**430 UJ***	380 U	370 U	410 U	410 U	380 U	380 U	2.0 U	2.0 U
Aroclor-1232	**	**190 UJ***		**190 UJ***	**210 UJ***	180 U	180 U	200 U	200 U	190 U	190 U	1.0 U	1.0 U
Aroclor-1242	**	**190 UJ***		**190 UJ***	**210 UJ***	180 U	180 U	200 U	200 U	190 U	190 U	1.0 U	1.0 U
Aroclor-1248	**	**190 UJ***		**190 UJ***	**210 UJ***	180 U	180 U	200 U	200 U	190 U	190 U	1.0 U	1.0 U
Aroclor-1254	**	**190 UJ***		**190 UJ***	**210 UJ***	180 U	180 U	200 U	200 U	190 U	190 U	1.0 U	1.0 U
Aroclor-1260	**	**300000**		**11,000,000**	**4,700,000**	**4,600**	**7,200 J**	**12,000**	**12,000**	**2,000 J**	**920**	1 U	1 U

Notes:

Units are in micrograms per kilogram (ug/kg).

Detections are identified in bold format.

Shaded cells represent detections above NYSDEC Recommended Soil Cleanup Objectives (RSCO) as per NYSDEC TAGM No. HWR-94-4046 (1/24/94).

NL Indicates that no RSCO value for this compound is listed in NYSDEC TAGM No. HWR-94-4046 (1/24/94).

U Undetected at the indicated detection limit.

J Estimated value (concentration less than quantification limit or validation deficiency).

UJ Value undetermined due to peak saturation.

* As per TAGM NO. 4046, Total Pesticides<10 mg/kg.

** As per NYSDEC-approved January 1997 Final Project Work Plan, Cleanup levels for PCB's shall be 10 mg/kg for soil in the upper 12 inches, and 25 mg/kg for soils at depths greater than 12 inches.

TABLE 3-2
SOIL SAMPLE PCB ANALYTICAL RESULTS
FORMER DRUM STORAGE AREA C
BROOKLYN NAVY YARD, BROOKLYN, NY

Sample Number	Depth	Date Collected	Date Analyzed	Sample ID	Raw Result (mg/kg)	Qual.	Final Result (mg/kg)	Confirmatory Sample Result (mg/kg)	Confirmatory Sample Blind Duplicate Result (mg/kg)
1	0-8 (in)	01/17/00	01/18/00	A1	0.18	nd	<2	-	-
2	0-8 (in)	01/17/00	01/18/00	A2	0.18	nd	<2	-	-
3	0-8 (in)	01/17/00	01/18/00	A3	5.57	hi	>40	359.00J	-
4	0-8 (in)	01/17/00	01/18/00	A4	6.54	hi	>40	238.00J	-
5	0-8 (in)	01/17/00	01/18/00	A5	0.07	nd	<2	-	-
6	0-8 (in)	01/17/00	01/18/00	A6	17.04	hi	>40	1670.00J	-
7	0-8 (in)	01/17/00	01/18/00	B1	0.07	nd	<2	-	-
8	0-8 (in)	01/17/00	01/18/00	B2	0.14	nd	<2	-	-
9	0-8 (in)	01/17/00	01/18/00	B3	0.04	nd	<2	-	-
10	0-8 (in)	01/17/00	01/18/00	B4	0.07	nd	<2	0.977J	-
11	0-8 (in)	01/17/00	01/18/00	B5	0.07	nd	<2	-	-
12	0-8 (in)	01/17/00	01/18/00	B6	0.72		5.76	17.00J	-
13	0-8 (in)	01/17/00	01/18/00	C1	0.10	nd	<2	-	-
14	0-8 (in)	01/17/00	01/18/00	C2	0.08	nd	<2	-	-
15	0-8 (in)	01/17/00	01/18/00	C3	nd	nd	<2	-	-
16	0-8 (in)	01/17/00	01/18/00	C4	0.08	nd	<2	-	-
17	0-8 (in)	01/17/00	01/18/00	C5	0.32		2.56	1.19J	-
18	0-8 (in)	01/17/00	01/18/00	C6	0.11	nd	<2	5.89J	-
19	0-8 (in)	01/17/00	01/18/00	D1	0.10	nd	<2	-	-
20	0-8 (in)	01/17/00	01/18/00	D2	0.11	nd	<2	-	-
21	0-8 (in)	01/17/00	01/18/00	D3	0.14	nd	<2	0.336J	-
22	0-8 (in)	01/17/00	01/18/00	D4	0.08	nd	<2	-	-
23	0-8 (in)	01/17/00	01/18/00	D5	0.12	nd	<2	1.95J	-
24	0-8 (in)	01/17/00	01/18/00	D6	0.05	nd	<2	-	-
25	0-8 (in)	01/17/00	01/18/00	E1	0.12	nd	<2	-	-
26	0-8 (in)	01/17/00	01/18/00	E2	0.00	nd	<2	0.536J	-
27	0-8 (in)	01/17/00	01/18/00	E3	0.08	nd	<2	-	-
28	0-8 (in)	01/17/00	01/18/00	E4	0.09	nd	<2	-	-
29	0-8 (in)	01/17/00	01/18/00	E5	0.07	nd	<2	-	-
30	0-8 (in)	01/17/00	01/18/00	E6	0.09	nd	<2	0.245J	-
31	0-8 (in)	01/17/00	01/18/00	F2	0.10	nd	<2	-	-
32	0-8 (in)	01/17/00	01/18/00	F3	0.12	nd	<2	-	-
33	0-8 (in)	01/17/00	01/18/00	F4	0.10	nd	<2	-	-
34	0-8 (in)	01/17/00	01/18/00	F5	0.07	nd	<2	-	-
35	0-8 (in)	01/17/00	01/18/00	F6	0.10	nd	<2	0.288J	-

Notes:

Units are in milligrams per kilogram(mg/kg)

Detections are identified in bold format.

Shaded cells represent detections above NYSDEC Recommended Soil Cleanup Objectives (RSCO) as per NYSDEC-approved January 1997 Final Project Work Plan, Cleanup levels for PCB's shall be 10ppm for soil in the upper 12 inches, and 25ppm for soils at depths greater than 12 inches.

U - Indicates that compound was undetected at or above the indicated detection limit.

J - Estimated value (concentration less than quantification limit or validation deficiency).

TABLE 3-2
SOIL SAMPLE PCB ANALYTICAL RESULTS
FORMER DRUM STORAGE AREA C
BROOKLYN NAVY YARD, BROOKLYN, NY

Sample Number	Depth	Date Collected	Date Analyzed	Sample ID	Raw Result (mg/kg)	Qual.	Final Result (mg/kg)	Confirmatory Sample Result (mg/kg)	Confirmatory Sample Blind Duplicate Result (mg/kg)
1	0-8 (in)	01/27/00	1/31/00	A7	0.12		<2	1.10J	1.10J
2	0-8 (in)	01/27/00	1/31/00	B7	0.11		<2	1.60J	1.60J
3	0-8 (in)	01/27/00	1/31/00	C7	0.14		<2	-	-
4	0-8 (in)	01/27/00	1/31/00	A'2	0.05	nd	<2	-	-
5	0-8 (in)	01/27/00	1/31/00	A'3	0.06	nd	<2	-	-
6	0-8 (in)	01/27/00	1/31/00	A'4	0.07	nd	<2	-	-
7	0-8 (in)	01/27/00	1/31/00	A'5	0.11		<2	-	-
8	0-8 (in)	01/27/00	1/31/00	A'6	0.06	nd	<2	-	-
9	0-8 (in)	01/27/00	1/31/00	A'7	0.06	nd	<2	0.029J	0.033UJ
10	0-2 (ft)	02/02/00	2/3/00	B-15 (0-2)	0.03	nd	<2	0.048	-
11	2-4 (ft)	02/02/00	2/3/00	B-15 (2-4)	0.04	nd	<2	-	-
12	4-6 (ft)	02/02/00	2/3/00	B-15 (4-6)	0.03	nd	<2	-	-
13	6-9 (ft)	02/02/00	2/3/00	B-15 (6-9)	0.06	nd	<2	0.30	-
14	1-3 (ft)	02/02/00	2/3/00	B-16 (1-3)	0.54		4.32	0.52	-
15	35- (ft)	02/02/00	2/3/00	B-16 (35-)	0.04	nd	<2		-
16	5-7 (ft)	02/02/00	2/3/00	B-16 (5-7)	0.06	nd	<2		-
17	8.5-9 (ft)	02/02/00	2/3/00	B-16 (8.5-9)	0.03	nd	<2	0.037U	-
18	1-3 (ft)	02/02/00	2/3/00	B-17 (1-3)	0.07	nd	<2		-
19	5-7 (ft)	02/02/00	2/3/00	B-17 (5-7)	0.02	nd	<2	0.23J	-
20	7-8 (ft)	02/02/00	2/3/00	B-17 (7-8)	0.09	nd	<2		-
21	1-3 (ft)	02/02/00	2/3/00	B-18 (1-3)	0.01	nd	<2	0.019J	-
22	3-5 (ft)	02/02/00	2/3/00	B-18 (3-5)	0.07	nd	<2		-
23	5-7 (ft)	02/02/00	2/3/00	B-18 (5-7)	0.02	nd	<2		-
24	8.5-9 (ft)	02/02/00	2/3/00	B-18 (8.5-9)	0.03	nd	<2	0.040U	0.036U

Notes:

Units are in milligrams per kilogram(mg/kg)

Detections are identified in bold format.

Shaded cells represent detections above NYSDEC Recommended Soil Cleanup Objectives (RSCO) as per NYSDEC-approved January 1997 Final Project Work Plan, Cleanup levels for PCB's shall be 10ppm for soil in the upper 12 inches, and 25ppm for soils at depths greater than 12 inches.

U - Indicates that compound was undetected at or above the indicated detection limit.

J - Estimated value (concentration less than quantification limit or validation deficiency).

TABLE 4-3
CONCRETE WIPE SAMPLE PCB ANALYTICAL RESULTS
ELECTRICAL TRANSFORMER INVESTIGATION
BROOKLYN NAVY YARD, BROOKLYN, NY

No. Of Samples	Sample Number		Initial Run or Dilution	Date of Collection & Analysis	Screening Result (ug/wipe)	Confirm. Lab Sample Results (ug/wipe)	Qual.
251	SubstationG	WP17		12/08/98	14.8	26.0	
252	SubstationG	WP18	Diluted Run X4	12/11/98	>400	800.0	
253	SubstationG	WP19		12/08/98	20	26.0	
254	SubstationG	WP20		12/08/98	29.2	44.0	
255	SubstationG	WP21		12/08/98	15.8	22.0	
256	SubstationG	WP22		12/08/98	19.2	10.0	
257	SubstationG	WP23	Diluted Run X4	12/11/98	>400	19,000.0	
258	SubstationG	WP24		12/08/98	61.4	90.0	J
259	SubstationG	WP25		12/08/98	28.2	18.0	
260	SubstationG	WP26		12/08/98	6.6		
261	SubstationG	WP27	Diluted Run X4	12/11/98	>400		
262	SubstationG	WP28		12/08/98	41.8	47.0	
263	SubstationG	WP29		12/08/98	16.4	150.0	J
264	SubstationG	WP30		12/08/98	17.8	88.0	J
265	SubstationG	WP31		12/08/98	18	34.0	
266	SubstationG	WP32		12/08/98	34.2	250.0	
267	SubstationG	WP33		12/08/98	17.6	45.0	
268	SubstationG	WP34		12/08/98	31.4	130.0	
269	SubstationG	WP35		12/08/98	42		
270	SubstationG	WP36		12/08/98	41.6	260.0	
271	SubstationG	WP37		12/08/98	23.8	48.0	
272	SubstationH	WP01		12/08/98	<5		
273	SubstationH	WP02		12/08/98	69.4		
274	SubstationH	WP03		12/08/98	7		
275	SubstationH	WP04		12/08/98	<5		
276	SubstationH	WP05		12/08/98	11		
277	SubstationH	WP06		12/08/98	<5		
278	SubstationH	WP07		12/08/98	5.2		
279	SubstationH	WP08		12/08/98	24.6		
280	SubstationH	WP09		12/08/98	5.2		
281	SubstationH	WP10		12/08/98	52		
282	SubstationH	WP11		12/08/98	41.2		
283	SubstationH	WP12		12/08/98	57.2		
284	SubstationK	WP01		12/07/98	<5		
285	SubstationK	WP02		12/07/98	5.8		
286	SubstationK	WP03		12/07/98	6.4		
287	SubstationK	WP04		12/07/98	18		
288	SubstationK	WP06		12/07/98	23.4		
289	SubstationK	WP07		12/07/98	10.6		
290	SubstationK	WP08		12/07/98	22		
291	SubstationK	WP09		12/07/98	<5		
292	SubstationK	WP10		12/07/98	<5		
293	SubstationK	WP11		12/07/98	<5		
294	SubstationK	WP12		12/07/98	<5		
295	SubstationK	WP13		12/07/98	<5		
296	SubstationK	WP14		12/07/98	<5		
297	SubstationK	WP15		12/07/98	<5		
298	SubstationK	WP16		12/07/98	<5		
299	SubstationK	WP17		12/07/98	<5		
300	SubstationK	WP18		12/07/98	<5		
301	SubstationK	WP19		12/07/98	<5		
302	SubstationK	WP21		12/07/98	<5		

Shading indicates detected PCB concentrations equal/greater than 10 ug/wipe.
U - Undetected.
J - Estimated value.

TABLE 4-6
SURFICIAL SOIL SAMPLE PCB ANALYTICAL RESULTS
ELECTRICAL TRANSFORMER INVESTIGATION
BROOKLYN NAVY YARD, BROOKLYN, NY

No.of Samples	Sample Location & Number		Date of Collection & Analysis	Soil Concentration (mg/kg)	Confirm. Lab Results (mg/kg)	Qual.
1	Substation18	SS-01	12/11/98	2.4		
2	Substation13	SS-01	12/11/98	2.5		
3	Substation13	SS-02	12/11/98	27.7	3.7	J
4	SubstationG	SS-01	12/11/98	12.3		
5	SubstationG	SS-02	12/11/98	22.1		
6	SubstationG	SS-03	12/11/98	14.4		
7	SubstationG	SS-04	12/11/98	19.1		
8	SubstationG	SS-05	12/11/98	37.4		
9	SubstationG	SS-06	12/11/98	21.4		
10	SubstationH	SS-01	12/11/98	>50		
11	SubstationH	SS-02	12/11/98	5.6		
12	SubstationH	SS-03	12/11/98	22.7		
13	SubstationH	SS-04	12/11/98	29.2		
14	SubstationH	SS-05	12/11/98	3.4		
15	SubstationH	SS-06	12/11/98	12.5		
16	SubstationH	SS-07	12/11/98	8.6		
17	SubstationH	SS-08	12/11/98	18.9		
18	SubstationK	SS-03	12/11/98	19.8	16	J
19	SubstationK	SS-04	12/11/98	6.8		
20	SubstationK	SS-05	12/11/98	35.8	48	J
21	SubstationK	SS-06	12/11/98	3.5	5.3	J
22	SubstationK	SS-07	12/11/98	4.4	7.8	J
23	SubstationK	SS-08	12/11/98	5.6	6.1	J
24	SubstationK	SS-09	12/11/98	14.3		
25	SubstationK	SS-11	12/11/98	11.5		
26	SubstationK	SS-12	12/11/98	6.9	11	J
27	SubstationK	SS-13	12/11/98	9.5		
28	SubstationK	SS-14	12/11/98	3.7	6.4	J
29	SubstationK	SS-15	12/11/98	3.3	5.9	J
30	SubstationK	SS-16	12/11/98	7.6	7.3	J
31	SubstationK	SS-17	12/11/98	51	50	J
32	SubstationK	SS-18	12/11/98	11.8	12	J
33	SubstationQ	SS-02	12/11/98	2.3		
34	SubstationQ	SS-03	12/11/98	2.3		
35	SubstationQ	SS-04	12/11/98	1.8		

Shading indicates detected PCB concentrations equal/greater than 10 mg/kg.
J - Estimated value.

TABLE 4-8
TEST PIT SOIL SAMPLE PCB ANALYTICAL RESULTS
ELECTRICAL TRANSFORMER SUBSTATIONS G, H AND K
BROOKLYN NAVY YARD, BROOKLYN, NY

Sample Number	Substation	Test Pit (TP)	Depth (ft)	Date Collected	Date Analyzed	Sample ID	Final Result (mg/kg) Lot 9G1113	Confirmatory Sample Result (mg/kg) - Wet Weight	Qual
1	G	TP-01	1-2	11/10/99	11/20/99	G1 1-2	8.15	36.42	J
2	G	TP-01	2-3	11/10/99	11/20/99	G1 2-3	<1.25	NA	
3	G	TP-01	3-4	11/10/99	11/20/99	G1 3-4	2.15	NA	
4	G	TP-02	1-2	11/10/99	11/20/99	G2 1-2	10.55	67.06	J
5	G	TP-02	2-3	11/10/99	11/20/99	G2 2-3	7.45	NA	
6	G	TP-02	3-4	11/10/99	11/20/99	G2 3-4	2.50	3.92	J
7	G	TP-02	4-5	11/10/99	11/20/99	G2 4-5	9.20	NA	
8	G	TP-02	5-6	11/10/99	11/20/99	G2 5-6	7.00	NA	
9	G	TP-03	1-2	11/10/99	11/20/99	G3 1-2	12.20	60.37	J
10	G	TP-03	2-3	11/10/99	11/20/99	G3 2-3	15.75	63.76	J
11	G	TP-03	3-4	11/10/99	11/20/99	G3 3-4	<1.25	NA	
12	G	TP-04	1-2	11/10/99	11/20/99	G4 1-2	6.85	6.14	
13	G	TP-04	2-3	11/10/99	11/20/99	G4 2-3	<1.25	NA	
14	G	TP-04	3-4	11/10/99	11/20/99	G4 3-4	<1.25	NA	
15	G	TP-04	4-5	11/10/99	11/20/99	G4 4-5	<1.25	NA	
16	G	TP-04	5-6	11/10/99	11/20/99	G4 5-6	<1.25	NA	
17	G	TP-05	1-2	11/10/99	11/20/99	G5 1-2	14.05	NA	
18	G	TP-05	2-3	11/10/99	11/20/99	G5 2-3	11.75	19.32	J
19	G	TP-05	3-4	11/10/99	11/20/99	G5 3-4	4.80	NA	
20	G	TP-05	4-5	11/10/99	11/20/99	G5 4-5	9.55	NA	
21	G	TP-05	5-6	11/10/99	11/20/99	G5 5-6	<1.25	NA	
22	G	TP-06	1-2	11/10/99	11/20/99	G6 1-2	12.00	42.72	J
1	H	TP-01	1-2	10/27/99	11/20/99	H1 1-2	8.25	15.01	J
2	H	TP-01	2-3	10/27/99	11/20/99	H1 2-3	<1.25	NA	
3	H	TP-01	3-4	10/27/99	11/20/99	H1 3-4	3.75	8.03	J
4	H	TP-01	4-5	10/27/99	11/20/99	H1 4-5	<1.25	NA	
5	H	TP-02	1-2	10/27/99	11/20/99	H2 1-2	>25	NA	
6	H	TP-02	2-3	10/27/99	11/20/99	H2 2-3	>25	NA	
7	H	TP-02	3-4	10/27/99	11/20/99	H2 3-4	<1.25	4.41	J
8	H	TP-02	4-5	10/27/99	11/20/99	H2 4-5	3.70	NA	
9	H	TP-02	5-6	10/27/99	11/20/99	H2 5-6	<1.25	NA	
10	H	TP-03	1-2	10/27/99	11/20/99	H3 1-2	1.60	5.48	J
11	H	TP-03	2-3	10/27/99	11/20/99	H3 2-3	<1.25	NA	
12	H	TP-03	3-4	10/27/99	11/20/99	H3 3-4	<1.25	NA	
13	H	TP-03	4-5	10/27/99	11/20/99	H3 4-5	<1.25	NA	
14	H	TP-00	4-5	10/28/99	11/20/99	H0 4-5	<1.25	NA	
15	H	TP-04	1-2	10/28/99	11/20/99	H4 1-2	1.45	4.01	J
16	H	TP-04	2-3	10/28/99	11/20/99	H4 2-3	<1.25	NA	
17	H	TP-04	3-4	10/28/99	11/20/99	H4 3-4	<1.25	NA	
18	H	TP-04	4-5	10/28/99	11/20/99	H4 4-5	<1.25	NA	

Note: Sample Substation H #14 (TP-00 4'-5') is a blind dulicate of sample TP-04 4'-5'.
Shading indicates detected PCB concentrations equal/greater than 25 mg/kg.

APPENDIX B

Soil Boring Logs

CORE ENVIRONMENTAL CONSULTANTS

CORE ENVIRONMENTAL CONSULTANTS
CORE Environmental Consultants, Inc.
2312 Wehrle Drive
Buffalo, New York
Telephone: (716) 204-8054

BORING NUMBER B-1

CLIENT Brooklyn Navy Yard Development Corporation
PROJECT NAME Drum Storage Area C/Substation H
PROJECT NUMBER
PROJECT LOCATION 63 Flushing Avenue
DATE STARTED 12/12/17 **COMPLETED** 12/12/17
GROUND ELEVATION **HOLE SIZE** 2.5 inches
DRILLING CONTRACTOR CORE Environmental Consultants, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Direct Push
AT TIME OF DRILLING ---
LOGGED BY J. Quinn **CHECKED BY** A. Cruikshank
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0	SS-B-1		Light brown sandy silt, cobbles, concrete and metal debris, dry. URBAN FILL.	
1	B-1-1			
2			Bricks	0
3	B-1-2			
4			No concrete or metal debris	
5	B-1-3			
6				0
7	B-1-4			
8				

Bottom of borehole at 8.0 feet.

CORE ENVIRONMENTAL CONSULTANTS
CORE Environmental Consultants, Inc.
2312 Wehrle Drive
Buffalo, New York
Telephone: (716) 204-8054

BORING NUMBER B-2

CLIENT Brooklyn Navy Yard Development Corporation
PROJECT NAME Drum Storage Area C/Substation H
PROJECT NUMBER
PROJECT LOCATION 63 Flushing Avenue
DATE STARTED 12/12/17 **COMPLETED** 12/12/17
GROUND ELEVATION **HOLE SIZE** 2.5 inches
DRILLING CONTRACTOR CORE Environmental Consultants, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Direct Push
AT TIME OF DRILLING ---
LOGGED BY J. Quinn **CHECKED BY** A. Cruikshank
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0	SS-B-2		Light brown sandy silt, cobbles, concrete and metal debris, dry. URBAN FILL.	
1	B-2-1			
2				0
3	B-2-2			
4				
5	B-2-3			
6				0
7	B-2-4			
8				

Bottom of borehole at 8.0 feet.

CORE ENVIRONMENTAL CONSULTANTS
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2312 Wehrle Drive
Buffalo, New York
Telephone: (716) 204-8054

BORING NUMBER B-3

CLIENT Brooklyn Navy Yard Development Corporation
PROJECT NAME Drum Storage Area C/Substation H
PROJECT NUMBER
PROJECT LOCATION 63 Flushing Avenue
DATE STARTED 12/14/17 **COMPLETED** 12/14/17
GROUND ELEVATION **HOLE SIZE** 2.5 inches
DRILLING CONTRACTOR CORE Environmental Consultants, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Direct Push
AT TIME OF DRILLING ---
LOGGED BY J. Quinn **CHECKED BY** A. Cruikshank
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0	SS-B-3		Light brown sandy silt, cobbles, dry. URBAN FILL.	
1	B-3-1			
2				0
3	B-3-2			
4			Brick and cement debris	
5	B-3-3			
6				0
7	B-3-4			
8				

Bottom of borehole at 8.0 feet.

CORE ENVIRONMENTAL CONSULTANTS
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2312 Wehrle Drive
Buffalo, New York
Telephone: (716) 204-8054

BORING NUMBER B-4

CLIENT Brooklyn Navy Yard Development Corporation
PROJECT NAME Drum Storage Area C/Substation H
PROJECT NUMBER
PROJECT LOCATION 63 Flushing Avenue
DATE STARTED 12/14/17 **COMPLETED** 12/14/17
GROUND ELEVATION **HOLE SIZE** 2.5 inches
DRILLING CONTRACTOR CORE Environmental Consultants, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Direct Push
AT TIME OF DRILLING ---
LOGGED BY J. Quinn **CHECKED BY** A. Cruikshank
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0	SS-B-4		Light brown sandy silt, cobbles, concrete debris, dry. URBAN FILL.	
1	B-4-1			
2				0
3	B-4-2		Bricks	
4				
5	B-4-3			
6				0
7	B-4-4			
8				

Bottom of borehole at 8.0 feet.

CORE ENVIRONMENTAL CONSULTANTS
CORE Environmental Consultants, Inc.
2312 Wehrle Drive
Buffalo, New York
Telephone: (716) 204-8054

BORING NUMBER B-5

CLIENT Brooklyn Navy Yard Development Corporation
PROJECT NAME Drum Storage Area C/Substation H
PROJECT NUMBER
PROJECT LOCATION 63 Flushing Avenue
DATE STARTED 12/12/17 **COMPLETED** 12/12/17
GROUND ELEVATION **HOLE SIZE** 2.5 inches
DRILLING CONTRACTOR CORE Environmental Consultants, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Direct Push
AT TIME OF DRILLING ---
LOGGED BY J. Quinn **CHECKED BY** A. Cruikshank
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0	SS-B-5		Light brown sandy silt, cobbles, concrete and metal debris, dry. URBAN FILL.	
1	B-5-1			0
2			Bricks	
3	B-5-2			0
4				
5	B-5-3			0
6				
7	B-5-4			0
8				

Bottom of borehole at 8.0 feet.

CORE ENVIRONMENTAL CONSULTANTS
CORE Environmental Consultants, Inc.
2312 Wehrle Drive
Buffalo, New York
Telephone: (716) 204-8054

BORING NUMBER B-6

CLIENT Brooklyn Navy Yard Development Corporation
PROJECT NAME Drum Storage Area C/Substation H
PROJECT NUMBER
PROJECT LOCATION 63 Flushing Avenue
DATE STARTED 12/14/17 **COMPLETED** 12/14/17
GROUND ELEVATION **HOLE SIZE** 2.5 inches
DRILLING CONTRACTOR CORE Environmental Consultants, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Direct Push
AT TIME OF DRILLING ---
LOGGED BY J. Quinn **CHECKED BY** A. Cruikshank
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0	SS-B-6		Light brown silty sand, cobbles, concrete debris, bricks, dry. URBAN FILL.	
1	B-6-1			
2	B-6-2			0
3				

Refusal at 3.0 feet.
Bottom of borehole at 3.0 feet.

CORE ENVIRONMENTAL CONSULTANTS
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2312 Wehrle Drive
Buffalo, New York
Telephone: (716) 204-8054

BORING NUMBER B-7

CLIENT Brooklyn Navy Yard Development Corporation
PROJECT NAME Drum Storage Area C/Substation H
PROJECT NUMBER
PROJECT LOCATION 63 Flushing Avenue
DATE STARTED 12/14/17 **COMPLETED** 12/14/17
GROUND ELEVATION **HOLE SIZE** 2.5 inches
DRILLING CONTRACTOR CORE Environmental Consultants, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Direct Push
AT TIME OF DRILLING ---
LOGGED BY J. Quinn **CHECKED BY** A. Cruikshank
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0	SS-B-7		Light brown sandy silt, cobbles, concrete and metal debris, bricks, dry. URBAN FILL.	
1	B-7-1			
2				0
3	B-7-2			
4				
5	B-7-3			
6				0
7	B-7-4			
8				

Bottom of borehole at 8.0 feet.

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CORE Environmental Consultants, Inc.
2312 Wehrle Drive
Buffalo, New York
Telephone: (716) 204-8054

BORING NUMBER B-8

CLIENT Brooklyn Navy Yard Development Corporation
PROJECT NAME Drum Storage Area C/Substation H
PROJECT NUMBER
PROJECT LOCATION 63 Flushing Avenue
DATE STARTED 12/12/17 **COMPLETED** 12/12/17
GROUND ELEVATION **HOLE SIZE** 2.5 inches
DRILLING CONTRACTOR CORE Environmental Consultants, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Direct Push
AT TIME OF DRILLING ---
LOGGED BY J. Quinn **CHECKED BY** A. Cruikshank
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0	SS-B-8		Light brown sandy silt, cobbles, concrete and metal debris, bricks, dry. URBAN FILL.	
1	B-8-1			0
2				
3	B-8-2			0
4				
5	B-8-3			0
6				

Refusal at 6.0 feet.
Bottom of borehole at 6.0 feet.

CORE ENVIRONMENTAL CONSULTANTS
CORE Environmental Consultants, Inc.
2312 Wehrle Drive
Buffalo, New York
Telephone: (716) 204-8054

BORING NUMBER B-9

CLIENT Brooklyn Navy Yard Development Corporation
PROJECT NAME Drum Storage Area C/Substation H
PROJECT NUMBER
PROJECT LOCATION 63 Flushing Avenue
DATE STARTED 12/14/17 **COMPLETED** 12/14/17
GROUND ELEVATION **HOLE SIZE** 2.5 inches
DRILLING CONTRACTOR CORE Environmental Consultants, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Direct Push
AT TIME OF DRILLING ---
LOGGED BY J. Quinn **CHECKED BY** A. Cruikshank
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0	SS-B-9		Dark brown sandy silt, cobbles, concrete debris, dry. URBAN FILL.	
1	B-9-1			
2				0
3	B-9-2			
4			Metal debris	
5	B-9-3			
6				0
7	B-9-4			
8				

Bottom of borehole at 8.0 feet.

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2312 Wehrle Drive
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BORING NUMBER B-10

CLIENT Brooklyn Navy Yard Development Corporation
PROJECT NAME Drum Storage Area C/Substation H
PROJECT NUMBER
PROJECT LOCATION 63 Flushing Avenue
DATE STARTED 12/14/17 **COMPLETED** 12/14/17
GROUND ELEVATION **HOLE SIZE** 2.5 inches
DRILLING CONTRACTOR CORE Environmental Consultants, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Direct Push
AT TIME OF DRILLING ---
LOGGED BY J. Quinn **CHECKED BY** A. Cruikshank
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0	SS-B-10		Light brown sandy silt, cobbles, concrete debris, dry. URBAN FILL.	
1	B-10-1			
2				0
3	B-10-2			
4				
5	B-10-3			
6				0
7	B-10-4			
8				

Bottom of borehole at 8.0 feet.

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Telephone: (716) 204-8054

BORING NUMBER B-11

CLIENT Brooklyn Navy Yard Development Corporation
PROJECT NAME Drum Storage Area C/Substation H
PROJECT NUMBER
PROJECT LOCATION 63 Flushing Avenue
DATE STARTED 12/12/17 **COMPLETED** 12/12/17
GROUND ELEVATION **HOLE SIZE** 2.5 inches
DRILLING CONTRACTOR CORE Environmental Consultants, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Direct Push
AT TIME OF DRILLING ---
LOGGED BY J. Quinn **CHECKED BY** A. Cruikshank
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0	SS-B-11		Black clayey silt, cobbles, metal debris, dry. URBAN FILL.	
1	B-11-1			
2				0
3	B-11-2			
4				
5	B-11-3			
6				0
7	B-11-4			
8				

Bottom of borehole at 8.0 feet.

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Telephone: (716) 204-8054

BORING NUMBER B-12

CLIENT Brooklyn Navy Yard Development Corporation
PROJECT NAME Drum Storage Area C/Substation H
PROJECT NUMBER
PROJECT LOCATION 63 Flushing Avenue
DATE STARTED 12/14/17 **COMPLETED** 12/14/17
GROUND ELEVATION **HOLE SIZE** 2.5 inches
DRILLING CONTRACTOR CORE Environmental Consultants, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Direct Push
AT TIME OF DRILLING ---
LOGGED BY J. Quinn **CHECKED BY** A. Cruikshank
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0	SS-B-12		Light brown sandy silt, cobbles, dry. URBAN FILL.	
1	B-12-4			
2				0
3	B-12-3			
4				
5	B-12-2			
6				0
7	B-12-1			
8				

Bottom of borehole at 8.0 feet.

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Telephone: (716) 204-8054

BORING NUMBER B-13

CLIENT Brooklyn Navy Yard Development Corporation
PROJECT NAME Drum Storage Area C/Substation H
PROJECT NUMBER
PROJECT LOCATION 63 Flushing Avenue
DATE STARTED 12/12/17 **COMPLETED** 12/12/17
GROUND ELEVATION **HOLE SIZE** 2.5 inches
DRILLING CONTRACTOR CORE Environmental Consultants, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Direct Push
AT TIME OF DRILLING ---
LOGGED BY J. Quinn **CHECKED BY** A. Cruikshank
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0	SS-B-13		Dark brown clayey silt, coblles, concrete and metal debris, dry. URBAN FILL.	
1	SS-13-1			0
2			Light brown	
3	SS-13-2			0
4				
5	SS-13-3			0
6			Dark brown	
7	SS-13-4			0
8				

Bottom of borehole at 8.0 feet.

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2312 Wehrle Drive
Buffalo, New York
Telephone: (716) 204-8054

BORING NUMBER B-14

CLIENT Brooklyn Navy Yard Development Corporation
PROJECT NAME Drum Storage Area C/Substation H
PROJECT NUMBER
PROJECT LOCATION 63 Flushing Avenue
DATE STARTED 12/14/17 **COMPLETED** 12/14/17
GROUND ELEVATION **HOLE SIZE** 2.5 inches
DRILLING CONTRACTOR CORE Environmental Consultants, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Direct Push
AT TIME OF DRILLING ---
LOGGED BY J. Quinn **CHECKED BY** A. Cruikshank
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0	SS-B-14		Light brown sandy silt, cobbles, bricks, dry. URBAN FILL.	
1	B-14-1			
2				0
3	B-14-2			
4			Concrete and metal debris	
5	B-14-3			
6				0
7	B-14-4			
8				

Bottom of borehole at 8.0 feet.

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CORE Environmental Consultants, Inc.
2312 Wehrle Drive
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Telephone: (716) 204-8054

BORING NUMBER B-15

CLIENT Brooklyn Navy Yard Development Corporation
PROJECT NAME Drum Storage Area C/Substation H
PROJECT NUMBER
PROJECT LOCATION 63 Flushing Avenue
DATE STARTED 12/14/17 **COMPLETED** 12/14/17
GROUND ELEVATION **HOLE SIZE** 2.5 inches
DRILLING CONTRACTOR CORE Environmental Consultants, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Direct Push
AT TIME OF DRILLING ---
LOGGED BY J. Quinn **CHECKED BY** A. Cruikshank
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0	SS-B-15		Dark brown sandy silt, cobbles, dry. URBAN FILL	
1	B-15-1			
2				0
3	B-15-2		Bricks	
4				
5	B-15-3		No bricks	
6				0
7	B-15-4			
8				

Bottom of borehole at 8.0 feet.

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CORE Environmental Consultants, Inc.
2312 Wehrle Drive
Buffalo, New York
Telephone: (716) 204-8054

BORING NUMBER B-16

CLIENT Brooklyn Navy Yard Development Corporation
PROJECT NAME Drum Storage Area C/Substation H
PROJECT NUMBER
PROJECT LOCATION 63 Flushing Avenue
DATE STARTED 12/14/17 **COMPLETED** 12/14/17
GROUND ELEVATION **HOLE SIZE** 2.5 inches
DRILLING CONTRACTOR CORE Environmental Consultants, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Direct Push
AT TIME OF DRILLING ---
LOGGED BY J. Quinn **CHECKED BY** A. Cruikshank
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0	SS-B-16		Light brown sandy silt, cobbles, dry. URBAN FILL.	
1	B-16-1			
2				0
3	B-16-2			
4				
5	B-16-3			
6				0
7	B-16-4			
8				

Bottom of borehole at 8.0 feet.

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2312 Wehrle Drive
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Telephone: (716) 204-8054

BORING NUMBER B-17

CLIENT Brooklyn Navy Yard Development Corporation
PROJECT NAME Drum Storage Area C/Substation H
PROJECT NUMBER
PROJECT LOCATION 63 Flushing Avenue
DATE STARTED 12/14/17 **COMPLETED** 12/14/17
GROUND ELEVATION **HOLE SIZE** 2.5 inches
DRILLING CONTRACTOR CORE Environmental Consultants, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Direct Push
AT TIME OF DRILLING ---
LOGGED BY J. Quinn **CHECKED BY** A. Cruikshank
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0	SS-B-17		Light brown sandy silt, cobbles, dry. URBAN FILL.	
1	B-17-1			
2				0
3	B-17-2			
4				
5	B-17-3			
6				0
7	B-17-4			
8				

Bottom of borehole at 8.0 feet.

CORE ENVIRONMENTAL CONSULTANTS
CORE Environmental Consultants, Inc.
2312 Wehrle Drive
Buffalo, New York
Telephone: (716) 204-8054

BORING NUMBER B-18

CLIENT Brooklyn Navy Yard Development Corporation
PROJECT NAME Drum Storage Area C/Substation H
PROJECT NUMBER
PROJECT LOCATION 63 Flushing Avenue
DATE STARTED 12/13/17 **COMPLETED** 12/13/17
GROUND ELEVATION **HOLE SIZE** 2.5 inches
DRILLING CONTRACTOR CORE Environmental Consultants, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Direct Push
AT TIME OF DRILLING ---
LOGGED BY J. Quinn **CHECKED BY** A. Cruikshank
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0	SS-B-18		Light brown sandy silt, cobbles, bricks, dry. URBAN FILL.	
1	B-18-1			
2				0
3	B-18-2			
4			No bricks	
5	B-18-3			
6				0
7	B-18-4			
8				

Bottom of borehole at 8.0 feet.

CORE ENVIRONMENTAL CONSULTANTS
CORE Environmental Consultants, Inc.
2312 Wehrle Drive
Buffalo, New York
Telephone: (716) 204-8054

BORING NUMBER B-19

CLIENT Brooklyn Navy Yard Development Corporation
PROJECT NAME Drum Storage Area C/Substation H
PROJECT NUMBER
PROJECT LOCATION 63 Flushing Avenue
DATE STARTED 12/13/17 **COMPLETED** 12/13/17
GROUND ELEVATION **HOLE SIZE** 2.5 inches
DRILLING CONTRACTOR CORE Environmental Consultants, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Direct Push
AT TIME OF DRILLING ---
LOGGED BY J. Quinn **CHECKED BY** A. Cruikshank
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0	SS-B-19		Light brown sandy silt, cobbles, dry. URBAN FILL.	
1	B-19-1			
2				0
3	B-19-2			
4			Concrete and metal debris	
5	B-19-3			
6				0
7	B-19-4			
8				

Bottom of borehole at 8.0 feet.

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2312 Wehrle Drive
Buffalo, New York
Telephone: (716) 204-8054

BORING NUMBER B-21

CLIENT Brooklyn Navy Yard Development Corporation
PROJECT NAME Drum Storage Area C/Substation H
PROJECT NUMBER
PROJECT LOCATION 63 Flushing Avenue
DATE STARTED 12/12/17 **COMPLETED** 12/12/17
GROUND ELEVATION **HOLE SIZE** 2.5 inches
DRILLING CONTRACTOR CORE Environmental Consultants, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Direct Push
AT TIME OF DRILLING ---
LOGGED BY J. Quinn **CHECKED BY** A. Cruikshank
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0	SS-B-21		Light brown sandy silt, cobbles, bricks, dry. URBAN FILL.	
1	B-21-1			
2				0
3	B-21-2			
4			No bricks	
5	B-21-3		Bricks	
6				0
7	B-21-4			
8				

Bottom of borehole at 8.0 feet.

CORE ENVIRONMENTAL CONSULTANTS
CORE Environmental Consultants, Inc.
2312 Wehrle Drive
Buffalo, New York
Telephone: (716) 204-8054

BORING NUMBER B-22

CLIENT Brooklyn Navy Yard Development Corporation
PROJECT NAME Drum Storage Area C/Substation H
PROJECT NUMBER
PROJECT LOCATION 63 Flushing Avenue
DATE STARTED 12/13/17 **COMPLETED** 12/13/17
GROUND ELEVATION **HOLE SIZE** 2.5 inches
DRILLING CONTRACTOR CORE Environmental Consultants, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Direct Push
AT TIME OF DRILLING ---
LOGGED BY J. Quinn **CHECKED BY** A. Cruikshank
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0	SS-B-22		Light brown sandy silt, cobbles, concrete debris, dry. URBAN FILL.	
1	B-22-1			
2				0
3	B-22-2			
4			Metal debris	
5	B-22-3			
6				0
7	B-22-4			
8				

Bottom of borehole at 8.0 feet.

CORE ENVIRONMENTAL CONSULTANTS
CORE Environmental Consultants, Inc.
2312 Wehrle Drive
Buffalo, New York
Telephone: (716) 204-8054

BORING NUMBER B-23

CLIENT Brooklyn Navy Yard Development Corporation
PROJECT NAME Drum Storage Area C/Substation H
PROJECT NUMBER
PROJECT LOCATION 63 Flushing Avenue
DATE STARTED 12/13/17 **COMPLETED** 12/13/17
GROUND ELEVATION **HOLE SIZE** 2.5 inches
DRILLING CONTRACTOR CORE Environmental Consultants, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Direct Push
AT TIME OF DRILLING ---
LOGGED BY J. Quinn **CHECKED BY** A. Cruikshank
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0	SS-B-23		Light brown sandy silt, cobbles, concrete debris, dry. URBAN FILL.	
1	B-23-1			
2				0
3	B-23-2			
4			Metal debris	
5	B-23-3			
6			Bricks	0
7	B-23-4			
8				

Bottom of borehole at 8.0 feet.

CORE ENVIRONMENTAL CONSULTANTS
CORE Environmental Consultants, Inc.
2312 Wehrle Drive
Buffalo, New York
Telephone: (716) 204-8054

BORING NUMBER B-24

CLIENT Brooklyn Navy Yard Development Corporation
PROJECT NAME Drum Storage Area C/Substation H
PROJECT NUMBER
PROJECT LOCATION 63 Flushing Avenue
DATE STARTED 12/13/17 **COMPLETED** 12/13/17
GROUND ELEVATION **HOLE SIZE** 2.5 inches
DRILLING CONTRACTOR CORE Environmental Consultants, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Direct Push
AT TIME OF DRILLING ---
LOGGED BY J. Quinn **CHECKED BY** A. Cruikshank
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0	SS-B-24		Dark brown sandy silt, cobbles, concrete and metal debris, bricks, dry. URBAN FILL.	
1	B-24-1			
2				0
3	B-24-2			
4			No metal debris, no bricks	
5	B-24-3			
6				0
7	B-24-4			
8				

Bottom of borehole at 8.0 feet.

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CORE Environmental Consultants, Inc.
2312 Wehrle Drive
Buffalo, New York
Telephone: (716) 204-8054

BORING NUMBER B-25

CLIENT Brooklyn Navy Yard Development Corporation
PROJECT NAME Drum Storage Area C/Substation H
PROJECT NUMBER
PROJECT LOCATION 63 Flushing Avenue
DATE STARTED 12/13/17 **COMPLETED** 12/13/17
GROUND ELEVATION **HOLE SIZE** 2.5 inches
DRILLING CONTRACTOR CORE Environmental Consultants, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Direct Push
AT TIME OF DRILLING ---
LOGGED BY J. Quinn **CHECKED BY** A. Cruikshank
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0	SS-B-25		Light brown sandy silt, cobbles, dry. URBAN FILL.	
1	B-25-1			
2				0
3	B-25-2			
4			Concrete debris	
5	B-25-3			
6				0
7	B-25-4			
8				

Bottom of borehole at 8.0 feet.

CORE ENVIRONMENTAL CONSULTANTS
CORE Environmental Consultants, Inc.
2312 Wehrle Drive
Buffalo, New York
Telephone: (716) 204-8054

BORING NUMBER B-26

CLIENT Brooklyn Navy Yard Development Corporation
PROJECT NAME Drum Storage Area C/Substation H
PROJECT NUMBER
PROJECT LOCATION 63 Flushing Avenue
DATE STARTED 12/13/17 **COMPLETED** 12/13/17
GROUND ELEVATION **HOLE SIZE** 2.5 inches
DRILLING CONTRACTOR CORE Environmental Consultants, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Direct Push
AT TIME OF DRILLING ---
LOGGED BY J. Quinn **CHECKED BY** A. Cruikshank
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0	SS-B-26		Light brown sandy silt, cobbles, dry. URBAN FILL.	
1	B-26-1			
2				0
3	B-26-2			
4				
5	B-26-3			
6				0
7	B-26-4			
8				

Bottom of borehole at 8.0 feet.

CORE ENVIRONMENTAL CONSULTANTS
CORE Environmental Consultants, Inc.
2312 Wehrle Drive
Buffalo, New York
Telephone: (716) 204-8054

BORING NUMBER B-27

CLIENT Brooklyn Navy Yard Development Corporation
PROJECT NAME Drum Storage Area C/Substation H
PROJECT NUMBER
PROJECT LOCATION 63 Flushing Avenue
DATE STARTED 12/13/17 **COMPLETED** 12/13/17
GROUND ELEVATION **HOLE SIZE** 2.5 inches
DRILLING CONTRACTOR CORE Environmental Consultants, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Direct Push
AT TIME OF DRILLING ---
LOGGED BY J. Quinn **CHECKED BY** A. Cruikshank
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0	SS-B-27		Light brown sandy silt, cobbles, concrete and metal debris, dry. URBAN FILL.	
1	B-27-1			
2				0
3	B-27-2			
4				
5	B-27-3			
6				0
7	B-27-4			
8				

Bottom of borehole at 8.0 feet.

CORE ENVIRONMENTAL CONSULTANTS
CORE Environmental Consultants, Inc.
2312 Wehrle Drive
Buffalo, New York
Telephone: (716) 204-8054

BORING NUMBER B-29

CLIENT Brooklyn Navy Yard Development Corporation
PROJECT NAME Drum Storage Area C/Substation H
PROJECT NUMBER
PROJECT LOCATION 63 Flushing Avenue
DATE STARTED 12/13/17 **COMPLETED** 12/13/17
GROUND ELEVATION **HOLE SIZE** 2.5 inches
DRILLING CONTRACTOR CORE Environmental Consultants, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Direct Push
AT TIME OF DRILLING ---
LOGGED BY J. Quinn **CHECKED BY** A. Cruikshank
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0	SS-B-29		Dark brown clayey silt, cobbles, bricks, dry. URBAN FILL.	
1	B-29-1			
2				0
3	B-29-2			
4			No bricks	
5	B-29-3			
6				0
7	B-29-4			
8				

(Continued Next Page)

CORE ENVIRONMENTAL CONSULTANTS
CORE Environmental Consultants, Inc.
2312 Wehrle Drive
Buffalo, New York
Telephone: (716) 204-8054

BORING NUMBER B-29

CLIENT Brooklyn Navy Yard Development Corporation **PROJECT NAME** Drum Storage Area C/Substation H

PROJECT NUMBER **PROJECT LOCATION** 63 Flushing Avenue

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
8			No bricks *(continued)*	0.3
9	B-29-5			
10				
11	B-29-6			
12			Bottom of borehole at 12.0 feet.	

CORE ENVIRONMENTAL CONSULTANTS
CORE Environmental Consultants, Inc.
2312 Wehrle Drive
Buffalo, New York
Telephone: (716) 204-8054

BORING NUMBER B-32

CLIENT Brooklyn Navy Yard Development Corporation
PROJECT NAME Drum Storage Area C/Substation H
PROJECT NUMBER
PROJECT LOCATION 63 Flushing Avenue
DATE STARTED 12/13/17 **COMPLETED** 12/13/17
GROUND ELEVATION **HOLE SIZE** 2.5 inches
DRILLING CONTRACTOR CORE Environmental Consultants, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Direct Push
AT TIME OF DRILLING ---
LOGGED BY J. Quinn **CHECKED BY** A. Cruikshank
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0	SS-B-32		Light brown sandy silt, cobbles, concrete and metal debris, dry. URBAN FILL.	
1	B-32-2			
2				0
3	B-32-2			
4				
5	B-32-3			
6				0
7	B-32-4			
8				

Bottom of borehole at 8.0 feet.

CORE ENVIRONMENTAL CONSULTANTS
CORE Environmental Consultants, Inc.
2312 Wehrle Drive
Buffalo, New York
Telephone: (716) 204-8054

BORING NUMBER B-33

CLIENT Brooklyn Navy Yard Development Corporation
PROJECT NAME Drum Storage Area C/Substation H
PROJECT NUMBER
PROJECT LOCATION 63 Flushing Avenue
DATE STARTED 12/13/17 **COMPLETED** 12/13/17
GROUND ELEVATION **HOLE SIZE** 2.5 inches
DRILLING CONTRACTOR CORE Environmental Consultants, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Direct Push
AT TIME OF DRILLING ---
LOGGED BY J. Quinn **CHECKED BY** A. Cruikshank
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0	SS-B-33		Light brown sandy silt, coblles, concrete and metal debris, dry. URBAN FILL.	
1	B-33-1			
2				0
3	B-33-2			
4			No bricks	
5	B-33-3			
6				0
7	B-33-4			
8				

Bottom of borehole at 8.0 feet.

CORE ENVIRONMENTAL CONSULTANTS
CORE Environmental Consultants, Inc.
2312 Wehrle Drive
Buffalo, New York
Telephone: (716) 204-8054

BORING NUMBER B-34

CLIENT Brooklyn Navy Yard Development Corporation
PROJECT NAME Drum Storage Area C/Substation H
PROJECT NUMBER
PROJECT LOCATION 63 Flushing Avenue
DATE STARTED 12/13/17 **COMPLETED** 12/13/17
GROUND ELEVATION **HOLE SIZE** 2.5 inches
DRILLING CONTRACTOR CORE Environmental Consultants, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Direct Push
AT TIME OF DRILLING ---
LOGGED BY J. Quinn **CHECKED BY** A. Cruikshank
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0	SS-B-34		Light brown sandy silt, cobbles, concrete debris, bricks, dry. URBAN FILL.	
1	B-34-1			
2				0
3	B-34-2			
4			Metal debris, no bricks	
5	B-34-3			
6				0
7	B-34-4			
8				

Bottom of borehole at 8.0 feet.

CORE ENVIRONMENTAL CONSULTANTS
CORE Environmental Consultants, Inc.
2312 Wehrle Drive
Buffalo, New York
Telephone: (716) 204-8054

BORING NUMBER B-35

CLIENT Brooklyn Navy Yard Development Corporation
PROJECT NAME Drum Storage Area C/Substation H
PROJECT NUMBER
PROJECT LOCATION 63 Flushing Avenue
DATE STARTED 12/13/17 **COMPLETED** 12/13/17
GROUND ELEVATION **HOLE SIZE** 2.5 inches
DRILLING CONTRACTOR CORE Environmental Consultants, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Direct Push
AT TIME OF DRILLING ---
LOGGED BY J. Quinn **CHECKED BY** A. Cruikshank
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0	SS-B-35		Light brown sandy silt, cobbles, dry. URBAN FILL.	
1	B-35-1			
2				0
3	B-35-2			
4				
5	B-35-3			
6				0
7	B-35-4			
8				

Bottom of borehole at 8.0 feet.

CORE ENVIRONMENTAL CONSULTANTS
CORE Environmental Consultants, Inc.
2312 Wehrle Drive
Buffalo, New York
Telephone: (716) 204-8054

BORING NUMBER B-36

CLIENT Brooklyn Navy Yard Development Corporation
PROJECT NAME Drum Storage Area C/Substation H
PROJECT NUMBER
PROJECT LOCATION 63 Flushing Avenue
DATE STARTED 12/13/17 **COMPLETED** 12/13/17
GROUND ELEVATION **HOLE SIZE** 2.5 inches
DRILLING CONTRACTOR CORE Environmental Consultants, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Direct Push
AT TIME OF DRILLING ---
LOGGED BY J. Quinn **CHECKED BY** A. Cruikshank
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0	SS-B-36		Light brown sandy silt, cobbles, dry. URBAN FILL.	
1	B-36-1			
2				0
3	B-36-2			
4				
5	B-36-3			
6			Bricks	0
7	B-36-4			
8				

Bottom of borehole at 8.0 feet.

CORE ENVIRONMENTAL CONSULTANTS
CORE Environmental Consultants, Inc.
2312 Wehrle Drive
Buffalo, New York
Telephone: (716) 204-8054

BORING NUMBER B-37

CLIENT Brooklyn Navy Yard Development Corporation
PROJECT NAME Drum Storage Area C/Substation H
PROJECT NUMBER
PROJECT LOCATION 63 Flushing Avenue
DATE STARTED 12/13/17 **COMPLETED** 12/13/17
GROUND ELEVATION **HOLE SIZE** 2.5 inches
DRILLING CONTRACTOR CORE Environmental Consultants, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Direct Push
▽ **AT TIME OF DRILLING** 11.00 ft
LOGGED BY J. Quinn **CHECKED BY** A. Cruikshank
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0	SS-B-37		Light brown clayey silt, cobbles, bricks, dry. URBAN FILL.	
1	B-37-1			
2				0
3	B-37-2			
4			Metal debris	
5	B-37-3			
6				0.1
7	B-37-4			
8				

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CORE ENVIRONMENTAL CONSULTANTS
CORE Environmental Consultants, Inc.
2312 Wehrle Drive
Buffalo, New York
Telephone: (716) 204-8054

BORING NUMBER B-37

CLIENT Brooklyn Navy Yard Development Corporation **PROJECT NAME** Drum Storage Area C/Substation H

PROJECT NUMBER **PROJECT LOCATION** 63 Flushing Avenue

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
8	B-37-5		No bricks, petroleum odor, wet	
9				
10				0.2
11			▽	

Bottom of borehole at 11.0 feet.

CORE ENVIRONMENTAL CONSULTANTS
CORE Environmental Consultants, Inc.
2312 Wehrle Drive
Buffalo, New York
Telephone: (716) 204-8054

BORING NUMBER B-38

CLIENT Brooklyn Navy Yard Development Corporation
PROJECT NAME Drum Storage Area C/Substation H
PROJECT NUMBER
PROJECT LOCATION 63 Flushing Avenue
DATE STARTED 12/12/17 **COMPLETED** 12/12/17
GROUND ELEVATION **HOLE SIZE** 2.5 inches
DRILLING CONTRACTOR CORE Environmental Consultants, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Direct Push
AT TIME OF DRILLING ---
LOGGED BY J. Quinn **CHECKED BY** A. Cruikshank
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0	SS-B-38		Light brown sandy silt, cobbles, dry. URBAN FILL.	
1	B-38-1			
2				0
3	B-38-2			
4			Dark brown, metal debris, petroleum odor	
5	B-38-3			
6			Bricks	0.6
7	B-38-4			
8				

Bottom of borehole at 8.0 feet.

CORE ENVIRONMENTAL CONSULTANTS
CORE Environmental Consultants, Inc.
2312 Wehrle Drive
Buffalo, New York
Telephone: (716) 204-8054

BORING NUMBER B-39

CLIENT Brooklyn Navy Yard Development Corporation
PROJECT NAME Drum Storage Area C/Substation H
PROJECT NUMBER
PROJECT LOCATION 63 Flushing Avenue
DATE STARTED 12/12/17 **COMPLETED** 12/12/17
GROUND ELEVATION **HOLE SIZE** 2.5 inches
DRILLING CONTRACTOR CORE Environmental Consultants, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Direct Push
AT TIME OF DRILLING ---
LOGGED BY J. Quinn **CHECKED BY** A. Cruikshank
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0	SS-B-39		Light brown sandy silt, cobbles, bricks, dry. URBAN FILL.	
1	B-39-1			
2				0
3	B-39-2			
4			Concrete and metal debris, no bricks	
5	B-39-3			
6				0
7	B-39-4			
8				

Bottom of borehole at 8.0 feet.

CORE ENVIRONMENTAL CONSULTANTS
CORE Environmental Consultants, Inc.
2312 Wehrle Drive
Buffalo, New York
Telephone: (716) 204-8054

BORING NUMBER B-40

CLIENT Brooklyn Navy Yard Development Corporation
PROJECT NAME Drum Storage Area C/Substation H
PROJECT NUMBER
PROJECT LOCATION 63 Flushing Avenue
DATE STARTED 12/12/17 **COMPLETED** 12/12/17
GROUND ELEVATION **HOLE SIZE** 2.5 inches
DRILLING CONTRACTOR CORE Environmental Consultants, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Direct Push
AT TIME OF DRILLING ---
LOGGED BY J. Quinn **CHECKED BY** A. Cruikshank
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0	SS-B-40		Light brown sandy silt, cobbles, concrete and metal debris, dry. URBAN FILL.	
1	B-40-1			
2				0
3	B-40-2			
4			No concrete debris	
5	B-40-3			
6				0.6
7	B-40-4			
8				

Bottom of borehole at 8.0 feet.

CORE ENVIRONMENTAL CONSULTANTS
CORE Environmental Consultants, Inc.
2312 Wehrle Drive
Buffalo, New York
Telephone: (716) 204-8054

BORING NUMBER Bldg 297-1

CLIENT Brooklyn Navy Yard Development Corporation
PROJECT NAME Drum Storage Area C/Substation H
PROJECT NUMBER
PROJECT LOCATION 63 Flushing Avenue
DATE STARTED 12/21/17 **COMPLETED** 12/21/17
GROUND ELEVATION **HOLE SIZE** 8 inches
DRILLING CONTRACTOR Aquifer Drilling & Testing, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Sonic
AT TIME OF DRILLING ---
LOGGED BY J. Quinn **CHECKED BY** A. Cruikshank
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0			Dark brown sandy silt, concrete rubble, bricks, dry. URBAN FILL.	0
1				
2				
3				
4				
5				
6				

(Continued Next Page)

CORE ENVIRONMENTAL CONSULTANTS
CORE Environmental Consultants, Inc.
2312 Wehrle Drive
Buffalo, New York
Telephone: (716) 204-8054

BORING NUMBER Bldg 297-1

CLIENT Brooklyn Navy Yard Development Corporation **PROJECT NAME** Drum Storage Area C/Substation H

PROJECT NUMBER **PROJECT LOCATION** 63 Flushing Avenue

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
6			Dark brown sandy silt, concrete rubble, bricks, dry. URBAN FILL. *(continued)*	
7	Bldg 297 - Slab 1		7.0 Concrete slab 7.4	
			Dark brown sandy silt, concrete rubble, bricks, dry. URBAN FILL.	0
8	Sub Slab 1			
9				
10				

Bottom of borehole at 10.0 feet.

CORE ENVIRONMENTAL CONSULTANTS
CORE Environmental Consultants, Inc.
2312 Wehrle Drive
Buffalo, New York
Telephone: (716) 204-8054

BORING NUMBER Bldg 297-2

CLIENT Brooklyn Navy Yard Development Corporation
PROJECT NAME Drum Storage Area C/Substation H
PROJECT NUMBER
PROJECT LOCATION 63 Flushing Avenue
DATE STARTED 12/21/17 **COMPLETED** 12/21/17
GROUND ELEVATION **HOLE SIZE** 8 inches
DRILLING CONTRACTOR Aquifer Drilling & Testing, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Sonic
AT TIME OF DRILLING ---
LOGGED BY J. Quinn **CHECKED BY** A. Cruikshank
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0			Light brown sandy silt, cobbles, bricks, dry. URBAN FILL.	0
1				
2				
3				
4				
5				
6				

(Continued Next Page)

CORE ENVIRONMENTAL CONSULTANTS
CORE Environmental Consultants, Inc.
2312 Wehrle Drive
Buffalo, New York
Telephone: (716) 204-8054

BORING NUMBER Bldg 297-2

CLIENT Brooklyn Navy Yard Development Corporation **PROJECT NAME** Drum Storage Area C/Substation H

PROJECT NUMBER **PROJECT LOCATION** 63 Flushing Avenue

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
6			Light brown sandy silt, cobbles, bricks, dry. URBAN FILL. *(continued)*	
7	Bldg 297 - Slab 2		7.0 Concrete slab	
			7.4 Light brown sandy silt, cobbles, dry. URBAN FILL.	0
8	Sub Slab 2			
9				
10				

Bottom of borehole at 10.0 feet.

CORE ENVIRONMENTAL CONSULTANTS
CORE Environmental Consultants, Inc.
2312 Wehrle Drive
Buffalo, New York
Telephone: (716) 204-8054

BORING NUMBER Bldg 297-3

CLIENT Brooklyn Navy Yard Development Corporation
PROJECT NAME Drum Storage Area C/Substation H
PROJECT NUMBER
PROJECT LOCATION 63 Flushing Avenue
DATE STARTED 12/21/17 **COMPLETED** 12/21/17
GROUND ELEVATION **HOLE SIZE** 8 inches
DRILLING CONTRACTOR Aquifer Drilling & Testing, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Sonic
AT TIME OF DRILLING ---
LOGGED BY J. Quinn **CHECKED BY** A. Cruikshank
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0			Light brown sandy silt, concrete debris, bricks, dry. URBAN FILL.	0
1				
2				
3				
4				
5				
6				

(Continued Next Page)

CORE ENVIRONMENTAL CONSULTANTS
CORE Environmental Consultants, Inc.
2312 Wehrle Drive
Buffalo, New York
Telephone: (716) 204-8054

BORING NUMBER Bldg 297-3

CLIENT Brooklyn Navy Yard Development Corporation **PROJECT NAME** Drum Storage Area C/Substation H

PROJECT NUMBER **PROJECT LOCATION** 63 Flushing Avenue

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
6			Light brown sandy silt, concrete debris, bricks, dry. URBAN FILL. *(continued)*	
7	Bldg 297 - Slab 3		7.0 Concrete slab	
			7.4 Light brown sandy silt, bricks, dry. URBAN FILL.	0
8	Sub Slab 3			
9				
10				

Bottom of borehole at 10.0 feet.

CORE ENVIRONMENTAL CONSULTANTS
CORE Environmental Consultants, Inc.
2312 Wehrle Drive
Buffalo, New York
Telephone: (716) 204-8054

BORING NUMBER Bldg 297-4

CLIENT Brooklyn Navy Yard Development Corporation
PROJECT NAME Drum Storage Area C/Substation H
PROJECT NUMBER
PROJECT LOCATION 63 Flushing Avenue
DATE STARTED 12/21/17 **COMPLETED** 12/21/17
GROUND ELEVATION **HOLE SIZE** 8 inches
DRILLING CONTRACTOR Aquifer Drilling & Testing, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Sonic
AT TIME OF DRILLING ---
LOGGED BY J. Quinn **CHECKED BY** A. Cruikshank
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0			Light brown sandy silt, cobbles, concrete debris, bricks, dry. URBAN FILL.	0
1				
2				
3				
4				
5				
6				

(Continued Next Page)

CORE ENVIRONMENTAL CONSULTANTS
CORE Environmental Consultants, Inc.
2312 Wehrle Drive
Buffalo, New York
Telephone: (716) 204-8054

BORING NUMBER Bldg 297-4

CLIENT Brooklyn Navy Yard Development Corporation **PROJECT NAME** Drum Storage Area C/Substation H

PROJECT NUMBER **PROJECT LOCATION** 63 Flushing Avenue

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
6			Light brown sandy silt, cobbles, concrete debris, bricks, dry. URBAN FILL. *(continued)*	
7				0
8	Bldg 297 - Slab 4		8.0 Concrete slab	
			8.4	
9	Sub Slab 4		Light brown sandy silt, cobbles, bricks, dry. URBAN FILL.	
10				

Bottom of borehole at 10.0 feet.

CORE ENVIRONMENTAL CONSULTANTS
CORE Environmental Consultants, Inc.
2312 Wehrle Drive
Buffalo, New York
Telephone: (716) 204-8054

BORING NUMBER Bldg 297-5

CLIENT Brooklyn Navy Yard Development Corporation
PROJECT NAME Drum Storage Area C/Substation H
PROJECT NUMBER
PROJECT LOCATION 63 Flushing Avenue
DATE STARTED 12/21/17 **COMPLETED** 12/21/17
GROUND ELEVATION **HOLE SIZE** 8 inches
DRILLING CONTRACTOR Aquifer Drilling & Testing, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Sonic
AT TIME OF DRILLING ---
LOGGED BY J. Quinn **CHECKED BY** A. Cruikshank
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0			Light brown sandy silt, cobbles, concrete debris, bricks, dry. URBAN FILL.	0
1				
2				
3				
4				
5				
6				

(Continued Next Page)

CORE ENVIRONMENTAL CONSULTANTS
CORE Environmental Consultants, Inc.
2312 Wehrle Drive
Buffalo, New York
Telephone: (716) 204-8054

BORING NUMBER Bldg 297-5

CLIENT Brooklyn Navy Yard Development Corporation **PROJECT NAME** Drum Storage Area C/Substation H

PROJECT NUMBER **PROJECT LOCATION** 63 Flushing Avenue

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
6			Light brown sandy silt, cobbles, concrete debris, bricks, dry. URBAN FILL. *(continued)*	
7				0
8	Bldg 297 - Slab 5		8.0 Concrete slab	
			8.4	
9	Sub Slab 5		Light brown sandy silt, cobbles, bricks, dry. URBAN FILL.	
10				

Bottom of borehole at 10.0 feet.

APPENDIX C

Form 7710-53

CORE ENVIRONMENTAL CONSULTANTS

USEPA

United States
Environmental Protection Agency
Washington, DC 20460

Form Approved
OMB No. 2070-0112

Notification of PCB Activity

Return To:

Document Control Officer (5305P)
Office of Solid Waste
U.S. Environmental Protection Agency
1200 Pennsylvania Ave., N.W.
Washington, DC 20460-0001

For Official Use Only

1. Name of Facility
Brooklyn Navy Yard Industrial Park

Name of Owner Facility
Brooklyn Navy Yard Development Corporation

2. EPA Identification Number (if already assigned under RCRA)

3. Facility Mailing Address (Street or PO Box, City, State, & Zip Code)
63 Flushing Avenue
Unit 300
Brooklyn, New York 11205

4. Location of Facility (No. Street, City, State, & Zip Code)
63 Flushing Avenue
Brooklyn, New York 11205

5. Installation Contact (Name and Title)
Shani Leibowitz
Senior Vice President, Planning & Transportation

Telephone Number (Area Code and Number)
(718) 907-5900

6. Type of PCB Activity (Mark 'X' in appropriate box. See Instructions.)

- ☐ A. Generator w/onsite storage facility
- ☐ B. Storer (Commercial)
- ☐ C. Transporter
- ☐ D. R&D/Treatability
- ☐ E. Approved Disposer
- ☐ F. Scrap Metal Recovery Oven/Smelter, High Efficiency Boilers

7. Certification

Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C. 1001 and 15 U.S.C. 2615), I certify that the information contained in or accompanying this document is true, accurate, and complete. As to the identified section(s) of this document for which I cannot personally verify truth and accuracy, I certify as a company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate, and complete.

Signature	Name and Official Title (Type of Print)	Date Signed

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APPENDIX D

Excavation Specifications

CORE ENVIRONMENTAL CONSULTANTS

BROOKLYN NAVY YARD – BUILDING 297 SELF-IMPLEMENTATION PLAN

PROJECT SPECIFICATIONS

TABLE OF CONTENTS

SECTION 01 10 00 – SUMMARY

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Project Identification: Building 297 Self-Implementing On-Site Cleanup and Disposal, Brooklyn Navy Yard, Brooklyn, NY

B. Project Summary: Excavation, stockpiling, and disposal of approximately 690 cubic yards (CY) (1,030 tons) of PCB-contaminated soil material from Substation H (Building 297) and Drum Storage Area C.

C. Particular Project Requirements:
   1. Existing site conditions and restrictions: The Contractor shall limit the work area to as small a footprint as is feasible on-site.
   2. Requirements for sequencing, scheduling and completion date: The Contractor shall commence work as soon as possible. Coordinate all on-site work with the Owner (Brooklyn Navy Yard) and the Engineer (CORE Environmental Consultants, Inc.)
   3. Occupancy of adjacent facilities: Adjacent facilities are currently occupied by tenants. Work shall be limited such that the impact upon other tenants is minimal.
   4. Contractor's use of new and existing facilities: The Contractor shall coordinate use of on-site utilities with the Owner.

D. Permits and Fees: Contractor shall apply for, obtain, and pay for permits, fees, and utility company backcharges required to perform the work. Submit copies to Engineer.

E. Codes: Comply with applicable codes and regulations of authorities having jurisdiction. Submit copies of inspection reports, notices and similar communications to Engineer.

F. Dimensions: Verify dimensions indicated on drawings with field dimensions before fabrication or ordering of materials. Do not scale drawings.

G. Existing Conditions: Notify Engineer of existing conditions differing from those indicated on the drawings. Do not remove or alter structural components without prior written approval.

H. Coordination:
   1. Coordinate the work of all trades.
   2. Prepare coordination drawings for areas above ceilings where close tolerances are required between building elements and mechanical and electrical work.
   3. Verify location of utilities and existing conditions.

I. Installation Requirements, General:
   1. Inspect substrates and report unsatisfactory conditions in writing.
   2. Do not proceed until unsatisfactory conditions have been corrected.
   3. Take field measurements prior to fabrication where practical. Form to required shapes and sizes with true edges, lines and angles. Provide inserts and templates as needed for work of other trades.
   4. Install materials in exact accordance with manufacturer's instructions and approved submittals.
   5. Install materials in proper relation with adjacent construction and with proper appearance.
   6. Restore units damaged during installation. Replace units which cannot be restored at no additional expense to the Owner.
   7. Refer to additional installation requirements and tolerances specified under individual specification sections.

J. Limit of Use: Limit use of work as indicated. Keep driveways and entrances clear.

K. Definitions:
   1. Provide: Furnish and install, complete with all necessary accessories, ready for intended use. Pay for all related costs.
   2. Approved: Acceptance of item submitted for approval. Not a limitation or release for compliance with the Contract Documents or regulatory requirements. Refer to limitations of 'Approved' in General and Supplementary Conditions.
   3. Match Existing: Match existing as acceptable to the Owner.

L. Intent: Drawings and specifications are intended to provide the basis for proper completion of the work suitable for the intended use of the Owner. Anything not expressly set forth but which is reasonable implied or necessary for proper performance of the project shall be included.

M. Writing Style: Specifications are written in the imperative mode. Except where specifically intended otherwise, the subject of all imperative statements is the Contractor. For example, 'Provide tile' means 'Contractor shall provide tile.'

PART 2 PRODUCTS - Not applicable to this Section

PART 3 EXECUTION - Not applicable to this Section

END OF SECTION

SECTION 01 30 00 - ADMINISTRATIVE REQUIREMENTS

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Administration of Contract: Provide administrative requirements for the proper coordination and completion of work including the following:
   1. Supervisory personnel.
   2. Preconstruction conference.
   3. Project meetings, minimum of two per month; prepare and distribute minutes.

B. Reports: Submit daily and special reports.

C. Work Schedule: Submit progress schedule, updated monthly.

D. Submittal Schedule: Prepare submittal schedule; coordinate with progress schedule.

E. Schedule of Values: Submit schedule of values.

F. Schedule of Tests: Submit schedule of required tests including payment and responsibility.

G. Perform Surveys: Lay out the work and verifying locations during construction. Perform final site survey.

H. Emergency Contacts: Submit and post a list of emergency telephone numbers and address for individuals to be contacted in case of emergency.

I. Record Documents: Submit record drawings and specifications; to be maintained and annotated by Contractor as work progresses.

1.2 SUBMITTALS

A. Types of Submittals: Provide types of submittals listed in individual sections and number of copies required below.
   1. Shop drawings, reviewed and annotated by the Contractor - 4 copies.
   2. Product data - 4 copies.
   3. Samples - 2, plus extra samples as required to indicate range of color, finish, and texture to be expected.
   4. Inspection and test reports - 4 copies.
   5. Warranties - 4 copies.
   6. Survey data - 4 copies.
   7. Closeout submittals - 4 copies.
   8. Project photographs - 12 digital images each month submitted on CD. Submit cumulative CD at each subsequent submittal. Label each image with date.
   9. HAZWOPER 40-hour training and certificates of medical fitness – 4 copies.
   10. Disposal manifests – 4 copies.

B. Submittal Procedures: Comply with project format for submittals. Comply with submittal procedures established by Architect including Architect's submittal and shop drawing stamp. Provide required resubmittals if original submittals are not approved. Provide distribution of approved copies including modifications after submittals have been approved.
   1. Electronic submission in lieu of hard copies is permissible for this project.

C. Samples and Shop Drawings: Samples and shop drawings shall be prepared specifically for this project. Shop drawings shall include dimensions and details, including adjacent construction and

related work. Note special coordination required. Note any deviations from requirements of the Contract Documents.

D. Warranties: Provide warranties as specified; warranties shall not limit length of time for remedy of damages Owner may have by legal statute. Contractor, supplier or installer responsible for performance of warranty shall sign warranties.

PART 2 PRODUCTS - Not applicable to this Section

PART 3 EXECUTION - Not applicable to this Section

END OF SECTION

SECTION 01 50 00 - TEMPORARY FACILITIES AND CONTROLS

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Temporary Services: Provide temporary services and utilities, including payment of utility costs including the following.
   1. Water (potable and non-potable).
   2. Toilet facilities.
   3. Materials storage.

B. Construction Facilities: Provide construction facilities, including payment of utility costs including the following.
   1. Construction equipment.
   2. Dewatering and pumping.
   3. Enclosures.
   4. Access.

C. Security and Protection: Provide security and protection requirements including the following.
   1. Fire extinguishers.
   2. Site enclosure fence, barricades, and warning signs.
   a. Site enclosure fence shall be installed in accordance with
   3. Environmental protection.
   4. Snow and ice removal (if applicable).

D. Personnel Support: Provide personnel support facilities including the following.
   1. Engineer’s contact information.
   2. Sanitary facilities.
   3. Drinking water.
   4. Project identification sign.
   5. Decontamination pad.

PART 2 PRODUCTS - Not applicable to this Section

PART 3 EXECUTION - Not applicable to this Section

END OF SECTION

SECTION 31 20 00 – EARTHWORK

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Excavation, filling, compacting and grading operations both inside and outside building limits as required for below-grade improvements and to achieve grades and elevations indicated. Provide trenching and backfill for mechanical and electrical work and utilities.

B. Subbase materials, drainage fill, common fill, and structural fill materials for slabs, pavements, and improvements.

C. Suitable backfill from off-site, and legal transportation and disposal of PCB-impacted soils to an acceptable off-site disposal facility.

1.2 SUBMITTALS

A. Product Data: Manufacturer's data sheets on each product to be used, including:
   1. Preparation instructions and recommendations.
   2. Storage and handling requirements and recommendations.
   3. Installation methods.

B. Test Reports: Submit for approval test reports, list of materials and gradations proposed for use.

C. Transportation and Disposal (T&D) Manifests: Prior to the start of work, the Contractor shall submit a T&D Manifest to the Engineer for review and approval. T&D manifests must be accepted by NYSDEC, EPA, and TSCA for the transportation and disposal of PCB impacted soils.

D. 40-hour HAZWOPER training certificates: Prior to the start of work, the Contractor shall submit a list of all personnel that will be allowed to enter and work in the exclusion and warm zones. The Contractor shall include 40-hour HAZWOPER training certificates and statements of medical fitness for each employee as part of this submittal. All employees that are anticipated to enter the exclusion and warm zones, including equipment operators, shall have up-to-date 40-hour HAZWOPER training and a statement of medical fitness.

E. Sampling results: Post-excavation endpoint sampling results/report shall be submitted, in writing, to the Engineer upon receipt from the laboratory. The samples collected shall be analyzed on a 24-hour turnaround time (TAT) by the laboratory.

1.3 QUALITY ASSURANCE

A. Experience: Minimum 5 years’ experience with PCB remediation.

1.4 PRE-INSTALLATION MEETINGS

A. Convene minimum one week prior to starting work of this section.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Deliver and store products in manufacturer's unopened packaging bearing the brand name and manufacturer's identification until ready for installation.

B. Handling: Handle materials to avoid damage.

1.6 PROJECT CONDITIONS

A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits.

1.7 SEQUENCING

A. Ensure that products of this section are supplied to affected trades in time to prevent interruption of construction progress.

PART 2 PRODUCTS

2.1 MATERIALS

A. Earthwork:
1. Subbase Material: Graded gravel or crushed stone.
2. Bedding Course: Graded crushed gravel and sand.
3. Drainage Fill: ashed gravel or crushed stone.
4. Common Fill: Mineral soil free from unsuitable materials.
a. Common fill shall conform with NYSDEC DER-10, Appendix 5, “Allowable Constituent Levels for Imported Fill or Soil, Subdivision 5.4(e)” for Commercial or Industrial Use.
1) The Contractor shall test for all constituents listed in the table referenced above.
b. All common fill shall meet the backfill and cover soil quality standards established in 6 NYCRR 375-6.7(d). Soils that meet “exempt” fill requirements under 6 NYCRR 360, but do not meet backfill or soil cover objectives for this Site, will not be imported onto the site without prior approval by NYSDEC.
c. Prior to being imported to the site, common fill shall be tested at a frequency consistent with NYSDEC DER-10, Table 5.4(e)10, “Recommended Number of Soil Samples for Soil Imported To or Exported From a Site.”
5. Structural Fill: Graded gravel.
6. Impervious Fill: Gravel and sand mixture.

PART 3 EXECUTION

3.1 PREPARATION

A. Prior to the start of excavation, the Contractor shall install temporary construction fencing in accordance with NYC Building Code, Chapter 33, Section BC 3307.

B. Prior to the start of excavation, the Contractor shall mark out excavation grids in accordance with the Building 297 PCB Remediation Minimum Excavation Requirements Plan.

C. The Contractor shall designate the following zones associated with the excavation of PCB-impacted soils prior to the start of excavation:

1. Exclusion zone: The excavation, stockpiling, and loadout areas, where only authorized personnel and equipment are permitted to enter. Once personnel or equipment enter this area, they must go through the decontamination area prior to exiting the site.

2. Warm zone: The decontamination area, where all personnel and equipment are decontaminated prior to leaving the exclusion zone. This area shall include a decontamination pad for all equipment used as part of excavation and loadout activities, as well as a personnel decontamination station.

3. Cold zone: The area outside of the exclusion and warm zones, where support

equipment and personnel are located. PCB-impacted soils shall not enter this area under any circumstances.

D. The Contractor shall take care to protect all paved surfaces and roads. Any damage that occurs as a result of Contractor activities on-site is the sole responsibility of the Contractor and shall be repaired at no additional expense to the Owner.

3.2 COMMUNITY AIR MONITORING PROGRAM (CAMP)

A. Prior to the start of excavation each day, the Contractor shall install a minimum of three (3) real-time air monitors around the exclusion zone to monitor for the presence of particulate matter (PM).

1. The location of these air monitors shall be determined by the prevailing wind direction. At a minimum, one (1) upwind monitor and two (2) downwind monitors shall be installed. These meters shall record PM concentrations in air on a 15-minute average basis, which shall be downloaded by the Contractor at the end of each day.

2. CAMP monitors shall be programmed to have an action level of 150 $\mu g/m^3$ PM_{10} above background. At a minimum, these monitors shall have an audible alarm to alert all on-site personnel if the PM_{10} level exceeds the 150 $\mu g/m^3$ action level.

a. In the event that the 150 $\mu g/m^3$ PM_{10} above background action level is exceeded, all on-site work shall cease immediately. The Contractor shall execute measures to limit the amount of dust generated (i.e. apply water) prior to resuming work. If the action level is exceeded a second time, all on-site work shall cease immediately and additional dust control methods shall be discussed with the Engineer.

B. In the event that prevailing wind direction changes during the day, the Contractor shall re-position the CAMP monitors to provide accurate PM readings. The Engineer may direct the Contractor to reposition the CAMP monitors during the work.

C. The Contractor shall provide a Daily CAMP report to the Engineer, with a summary of CAMP monitor readings. At a minimum, the Daily CAMP report shall include:

1. A summary of PM_{10} readings recorded by all CAMP monitors displayed in graphical form.

2. A table showing downwind concentrations minus downwind concentrations which highlights any action level exceedances that occurred.

3. In the event that any exceedances occurred, the Contractor shall provide a written explanation of why the exceedance occurred and any steps taken to mitigate the exceedance(s).

3.3 EXCAVATION

A. Excavation depths are specified in the Building 297/Drum Storage Area C PCB Remediation Minimum Excavation Requirements Plan.

1. All excavations greater than 2’ in depth shall be handled and disposed of as TSCA-regulated PCB waste.

2. All excavations that are 2’ in depth or less shall be handled and disposed of as non-hazardous PCB-impacted waste.

3. The Contractor shall be responsible for conducting and documenting waste characterization sampling as part of the disposal process.

B. Maintain stability of excavations; coordinate shoring and bracing as required by authorities having jurisdiction. Prevent surface and subsurface water from accumulating in excavations. In excavations greater in depth than 3', side slopes shall be no steeper than 1H:1V.

C. Upon reaching the excavation depth for each excavation grid specified in the Building 297 PCB Remediation Minimum Excavation Requirements Plan, the Contractor shall perform endpoint and sidewall sampling. This sampling is detailed in Section 3.3, "Sampling," of this specification.

D. Additional excavation may be required as part of this project, contingent upon the results of the endpoint and sidewall soil sampling. In the event that additional excavation is required, the Engineer shall specify an excavate depth for the Contractor. Upon completion of this additional excavation, the Contractor shall perform additional endpoint and sidewall sampling in accordance with Section 3.3, "Sampling," of this specification.

E. Excavated soils may be handled the following ways:

1. Stockpiling: The Contractor may install a secure soil stockpiling area to store PCB-impacted soil material prior to off-site transportation and disposal. At a minimum, the soil shall be stored on an impervious base (e.g. HDPE liner, etc.) and tarped to prevent erosion during storm events and dust generation.

2. Direct loading: The Contractor may directly load excavated soil into haul trucks for off-site disposal. These haul trucks shall be lined, watertight, and covered to prevent any soil material or dust from escaping.

F. The Contractor shall take care to prevent the generation of visible dust during excavation activities. In the event that visible dust is observed, the Engineer may direct the Contractor to apply dust control methods to prevent dust from migrating outside of the exclusion zone.

3.4 SAMPLING

A. Upon reaching the excavation depth for each excavation grid specified in the Building 297 PCB Remediation Minimum Excavation Requirements Plan, the Contractor shall performed endpoint and sidewall sampling. Table 1 provides the required sampling frequency, naming conventions, sampling equipment, and required turnaround times (TATs). The Contractor is responsible for developing an acceptable sampling grid and determining the total number of samples required to meet EPA regulations.

Table 1: Sampling Requirements and Frequencies

Sampling Type	Frequency	Naming Convention	Sampling Container	TAT	QA/QC	Type	Est. Qty.
Sidewall	2 per 20 LF	BNY-G**X**-SW**Y**	4 oz. glass jar	24-hr.	5% Duplicate, 5% MS/MSD	Grab	28
Endpoint	5' x 5' grid sample collection	BNY-G**X**-EP**Y**	4 oz. glass jar	24-hr.	5% Duplicate, 5% MS/MSD	Grab	195

1. Naming Convention: Samples shall be labeled in accordance with the naming conventions presented in Table 1. These naming conventions identify the project (Brooklyn Navy Yard – BNY), grid number (G), and type of sample (sidewall – SW

or endpoint – EP).

a. Example: The third endpoint sample collected in Grid 2 would be labeled as BNY-G2-EP3.

B. Upon the conclusion of sample collection each day, samples shall be sent directly to the laboratory for analysis (by courier, mail, or direct delivery) and analyzed on a 24-hour turnaround time.

3.5 BACKFILL

A. Compact materials at the optimum moisture content as determined by ASTM D 1557 by aeration or wetting to the following percentages of maximum dry density:

1. Unpaved Areas: Top 6 inches of subgrade and each fill layer to 90 percent maximum dry density.

B. Place acceptable materials in layers not more than 8 inches loose depth for material compacted by heavy equipment and not more than 4 inches loose depth for material compacted by hand equipment to subgrades indicated as follows:

1. Structural Fill: Use under foundations, slabs on grade in layers as indicated.

2. Drainage Fill: Use under designated building slabs, at foundation drainage and elsewhere as indicated.

3. Common Fill: Use under unpaved areas and to fill in excavations.

4. Subbase Material: Use under pavement, walks, steps, piping, and conduit.

C. Excavated areas shall be restored to original grade with common fill.

D. Protect newly graded areas from traffic and erosion. Recompact and regrade settled, disturbed, and damaged areas as necessary to restore quality, appearance, and condition of work.

E. Control erosion to prevent runoff into sewers or damage to sloped or surfaced areas.

F. Dispose of non-PCB impacted waste and unsuitable materials off-site in a legal manner.

3.6 DECONTAMINATION

A. All Contractor personnel are responsible for their own health and safety. The Contractor shall develop a site-specific health and safety plan for this project. At a minimum, all personnel entering the exclusion zone shall be in Level D PPE with Tyvek suits. The Contractor shall provide Tyvek suits for any personnel entering the exclusion zone.

B. Prior to the start of excavation, the Contractor shall construct and establish an equipment and personnel decontamination station. This decontamination station shall include, at a minimum:

1. A decontamination pad large enough to house any equipment that will enter the exclusion zone during excavation activities. The base shall be impervious (e.g. HDPE liner) and capable of collecting any decontamination water generated.

2. Access to pressurized water to strip PCBs from any equipment surfaces. The Contractor shall coordinate directly with the Owner regarding access to water for decontamination purposes.

3. A minimum of three (3) temporary walls to prevent any overspray from exiting the decontamination station area or exclusion zone.

4. A boot wash station for all personnel to remove soil and other debris prior to exiting the exclusion zone.

5. A trash receptacle for Tyvek suits to safely be disposed of when exiting the exclusion zone.

C. Prior to exiting the exclusion zone, all equipment and personnel shall be decontaminated to prevent spreading contamination on the site.

1. The Contractor shall decontaminate equipment in accordance with 40 CFR 761.360 through 40 CFR 761.366, "Double Wash/Rinse Method for Decontaminating Non-Porous Surfaces."

a. All Contractor equipment shall be subjected to post-decontamination PCB wipe sampling prior to final demobilization from the site. The Contractor is responsible for conducting this wipe sampling and shall submit final wipe sampling results to the Engineer upon receipt from the laboratory.

2. All personnel shall remove all visible soil and dust from boots within the decontamination station. Prior to exiting this area, Tyvek suits shall be removed and disposed of in the trash receptacle provided in the decontamination station. At the conclusion of the project, these suits shall be disposed of as PCB-impacted waste.

a. This waste shall be disposed of in accordance with 40 CFR 761.61(a)(5)(v).

D. At the conclusion of the work, the Contractor shall be responsible for dismantling and properly disposing of the decontamination station.

3.7 OFF-SITE DISPOSAL

A. The Contractor shall properly stockpile, containerize, transport, and dispose of all excavated soils generated from this project as PCB-impacted soils.

1. All excavated soils shall be disposed of in accordance with 40 CFR 761.61, "PCB Remediation Waste."

2. The Contractor shall provide the Engineer with copies of all waste manifests generated as part of this project. The Contractor shall generate a waste manifest for each soil container transported and disposed of.

END OF SECTION

SECTION 31 23 19 – DEWATERING

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Dewatering system.

1.2 RELATED SECTIONS

A.Section 01 30 00 – Administrative Requirements.

B.Section 31 20 00 - Earthwork.

1.3 SUBMITTALS

A. Submit under provisions of Section 01 30 00 - Administrative Requirements.

B. Shop Drawings: Submit shop drawings indicating layout of dewatering system, details of construction, connections, and relationship with adjacent construction.

1.4 QUALITY ASSURANCE

A. Installer Qualifications: Minimum 2 year experience installing similar products.

1.5 PRE-INSTALLATION MEETINGS

A. Convene minimum one week prior to starting work of this section.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Deliver and store products in manufacturer's unopened packaging bearing the brand name and manufacturer's identification until ready for installation.

1.7 PROJECT CONDITIONS

A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits.

1.8 SEQUENCING

A. Ensure that products of this section are supplied to affected trades in time to prevent interruption of construction progress.

PART 2 PRODUCTS

2.1 MATERIALS

A. Dewatering:
   1. Provide a system to lower and control groundwater in order to permit construction activities. Install sufficient dewatering equipment to drain water-bearing strata above and below bottom of foundations, drains, and other excavations.
   2. Operate dewatering system continuously until dewatering is no longer required. Dispose of water removed from excavations in a manner to avoid endangering public health, property, and portions of work under construction or completed. Provide flow control devices as required by governing authorities.

PART 3 EXECUTION

3.1 EXAMINATION

A. Do not begin installation until substrates have been properly prepared.

B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.2 INSTALLATION

A. Install in accordance with manufacturer's instructions and in proper relationship with adjacent construction. Test for proper operation and adjust until satisfactory results are obtained. Install system to provide the following:
   1. Lowering and controlling groundwater levels during excavation and construction.
   2. Control of hydrostatic pressures during excavation and construction.
   3. Control of surface and subsurface water, ice, and snow related to dewatering.
   4. Standby equipment for system back-up.
   5. Legal disposal of water removed from excavations.
   a. Any water removed from excavations shall be containerized in 55-gallon drums and disposed of off-site as PCB-impacted contact water. The Contractor may elect to sample the contact water to determine if it has been impacted by PCBs.
   b. In the event that the contact water is not contaminated with PCBs, the Contractor may consult with NYSDEC as to how to legally dispose of the water.

END OF SECTION

SECTION 31 25 00 - EROSION AND SEDIMENTATION CONTROL

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Erosion and sedimentation control.

1.2 RELATED SECTIONS

A. Section 31 20 00 - Earthwork.

1.3 SUBMITTALS

A. Submit under provisions of Section 01 30 00 - Administrative Requirements.

B. Product Data: Manufacturer's data sheets on each product to be used, including:
   1. Preparation instructions and recommendations.
   2. Storage and handling requirements and recommendations.
   3. Installation methods.

C. Shop Drawings: Submit shop drawings indicating material characteristics, details of construction, connections, and relationship with adjacent construction.

1.4 QUALITY ASSURANCE

A. Manufacturer Qualifications: Minimum 5 year experience manufacturing similar products.

B. Installer Qualifications: Minimum 2 year experience installing similar products.

1.5 PRE-INSTALLATION MEETINGS

A. Convene minimum one week prior to starting work of this section.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Deliver and store products in manufacturer's unopened packaging bearing the brand name and manufacturer's identification until ready for installation.

B. Handling: Handle materials to avoid damage.

1.7 PROJECT CONDITIONS

A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits.

1.8 SEQUENCING

A. Ensure that products of this section are supplied to affected trades in time to prevent interruption of construction progress.

PART 2 PRODUCTS

2.1 MATERIALS

A. Erosion and Sedimentation Control:
   1. Type: High-density polypropylene reinforcing geogrids.

2. Type: High-strength geotextiles.
3. Type: Crushed stone bedding with filter fabric and stone riprap.
4. Type: Silt fence.
5. Type: Silt sock.
6. Type: Inlet protection controls.

PART 3 EXECUTION

3.1 EXAMINATION

A. Do not begin installation until substrates have been properly prepared.

B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.2 PREPARATION

A. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.3 INSTALLATION

A. Install in accordance with manufacturer's instructions and in proper relationship with adjacent construction.

B. Erosion and sedimentation control products shall be installed to prevent the migration of soil on-site. The Contractor shall install erosion and sedimentation control products downgradient of any soil stockpiles or excavations in accordance with the manufacturer’s recommendations.

1. The Contractor shall be solely responsible for the means and methods utilized to properly execute erosion and sedimentation control on-site.

3.4 PROTECTION AND REMOVAL

A. Protect installed products until completion of project.

B. The Contractor shall be responsible for removal and disposal of all erosion and sedimentation control products upon completion of the project.

END OF SECTION

MATERIAL SAFETY DATA SHEET

(POLYCHLORINATED BIPHENYLS)

COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients Name: polychlorinated biphenyls (PCBs)

HAZARD IDENTIFICATION

Reports of Carcinogenicity: YES

HEALTH HAZARDS ACUTE AND CHRONIC

- **Eyes**: Moderately irritating to eye tissues.
- **Skin**: Can be absorbed through intact skin, may cause de-fatting, potential for chloracne.
- **Inhalation**: Possible liver injury.
- **Ingestion**: Slightly toxic; reasonably anticipated to be carcinogenic.

EFFECTS OF OVER-EXPOSURE

Can cause dermatological symptoms; however, these are reversible upon removal of exposure source.

FIRST AID MEASURES

- **Eyes**: Irrigate immediately with copious quantities of running water for at least 15 minutes if liquid or solid PCBs get into them.
- **Skin:** Contaminated clothing should be removed and the skin washed thoroughly with soap and water. Hot PCBs may cause thermal burns.
- **Inhalation**: Remove to fresh air; if skin rash or respiratory irritation persists, consult a physician (if electrical equipment arcs over, PCBs may decompose to produce hydrochloric acid).
- **Ingestion**: Consult a physician. Do not induce vomiting or give any oily laxatives. (If large amounts are ingested, gastric lavage is suggested).

FIRE FIGHTING MEASURES: Flash Point: >141 ^{o}C (285.8 ^{o}F)

EXTINGUISHING MEDIA: PCBs are fire-resistant compounds.

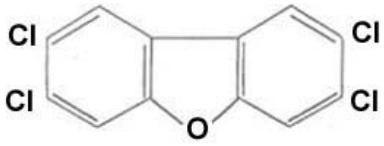
FIRE-FIGHTING PROCEDURES

Standard fire-fighting wearing apparel and self-contained breathing apparatus should be worn when fighting fires that involve possible exposure to chemical combustion products. Fire fighting equipment should be thoroughly cleaned and decontaminated after use.

UNUSUAL FIRE/EXPLOSION HAZARD

If a PCB transformer is involved in a fire-related incident, the owner of the transformer is required to report the incident. Consult and follow appropriate federal, provincial and local regulations.

***Note**: When askarel liquid becomes involved in a fire, toxic by-products of combustion are typically produced including polychlorinated dibenzofurans and polychlorinated dibenzodioxins, both known carcinogens. The structures of these chemical species are as follows:*

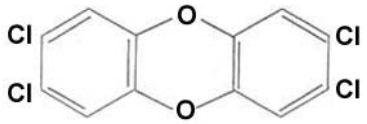


TCDF

$C_{12}H_{8-n}Cl_nO$

$n = 4 - 8$

2,3,7,8-tetrachlorodibenzofuran



TCDD

$C_{12}H_{8-n}Cl_nO_2$

$n = 4 - 8$

2,3,7,8-tetrachloro-dibenzo-p-dioxin

***Note**: 2,3,7,8-tetrachloro-dibenzo-p-dioxin is one of the most potent teratogenic, mutagenic and carcinogenic agents known to man.*

SPILL RELEASE PROCEDURES

Cleanup & disposal of liquid PCBs are strictly regulated by the federal government. Ventilate area. Contain spill/leak. Remove spill by means of absorptive material. Spill clean-up personnel should use proper protective clothing. All wastes and residues containing PCBs should be collected, containerized, marked and disposed of in the manner prescribed by applicable federal, provincial and local laws.

HANDLING AND STORAGE PRECAUTIONS

Care should be taken to prevent entry into the environment through spills, leakage, use, vaporization, or disposal of liquid. Avoid prolonged breathing of vapours or mists. Avoid contact with eyes or prolonged contact with skin. Comply with all federal, provincial and local regulations.

OTHER PRECAUTIONS

Federal regulations require PCBs, PCB items, storage areas, transformer vaults, and transport vehicles to be appropriately labelled.

RESPIRATORY PROTECTION

Use OHSA approved equipment when airborne exposure limits are exceeded. Full facepiece equipment is recommended and, if used, replaces need for face shield and/or chemical splash goggles. The respirator use limitations specified by the manufacturer must be observed.

VENTILATION

Provide natural or mechanical ventilation to control exposure levels below airborne exposure levels.

PROTECTIVE GLOVES: Wear appropriate chemical resistant gloves to prevent skin contact.

EYE PROTECTION: Wear chemical splash goggles and have eye baths available.

OTHER PROTECTIVE EQUIPMENT

Wear appropriate protective clothing. Provide a safety shower at any location where skin contact can occur.

WORK HYGIENIC PRACTICES

Wash thoroughly after handling. Supplemental safety and health : none

PHYSICAL/CHEMICAL PROPERTIES

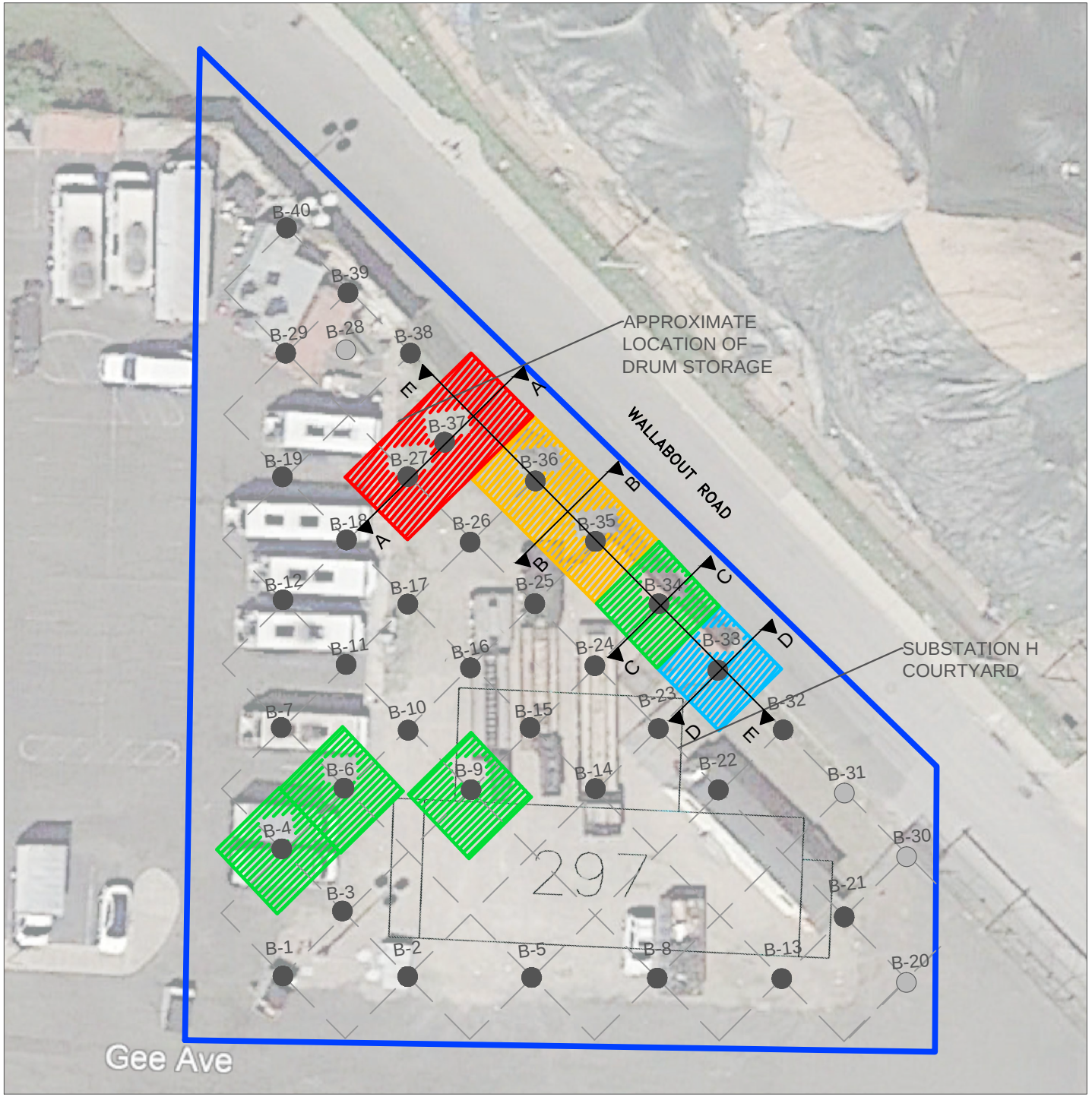
- **Vapour pressure:** (mm Hg @100 ^{o}F) 0.005 - 0.00006
- **Viscosity:** (CENTISTOKES) 3.6 - 540
- **Stability indicator/materials to avoid:** Yes
- **Stability Condition to Avoid:** PCBs are very stable, fire-resistant compounds.

HAZARDOUS DECOMPOSITION PRODUCTS

Carbon monoxide, carbon dioxide, hydrogen chloride, phenolics, aldehydes, furans, dioxins

WASTE DISPOSAL METHODS

Consult the applicable PCB regulations prior to any disposal of PCBs or PCB-contaminated items.



LEGEND

- PROJECT AREA
- 20'X20' GRID
- B-32 BORING LOCATION
- B-31 BORING NOT DRILLED
- 1FT EXCAVATION
- 2 FT EXCAVATION
- 6 FT EXCAVATION
- 8 FT EXCAVATION

Scale
1"= 32'

CLIENT NAME

BROOKLYN NAVY YARD DEVELOPMENT CORPORATION
63 FLUSHING AVENUE
BROOKLYN, NY, 11205

SEAL & SIGNATURE

NO.	REVISIONS	DATE

CORE ENVIRONMENTAL CONSULTANTS
22-48 119th STREET
COLLEGE POINT, NY 11356
T: 718-786-4730
F: 718-786-4764
2312 WEHRLE DRIVE
BUFFALO, N.Y. 14221
T: 716-204-8054
F: 716-204-8557
www.COREenv.com

PROJECT LOCATION:

BROOKLYN NAVY YARD INDUSTRIAL PARK

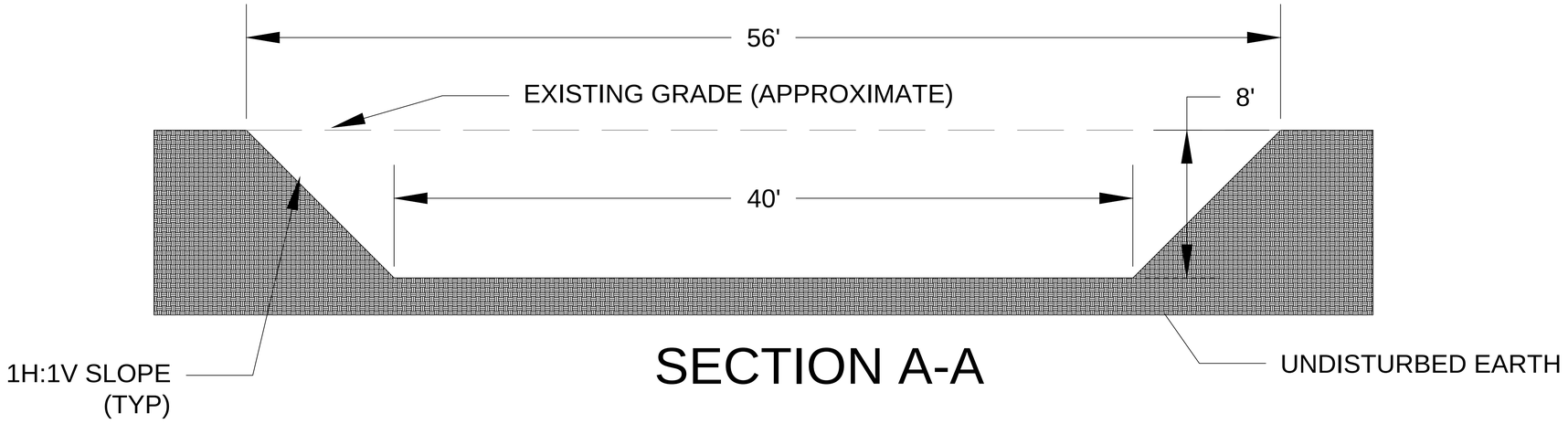
DESCRIPTION:

SELF-IMPLEMENTING ON-SITE CLEANUP AND DISPOSAL PLAN

DRAWING TITLE:

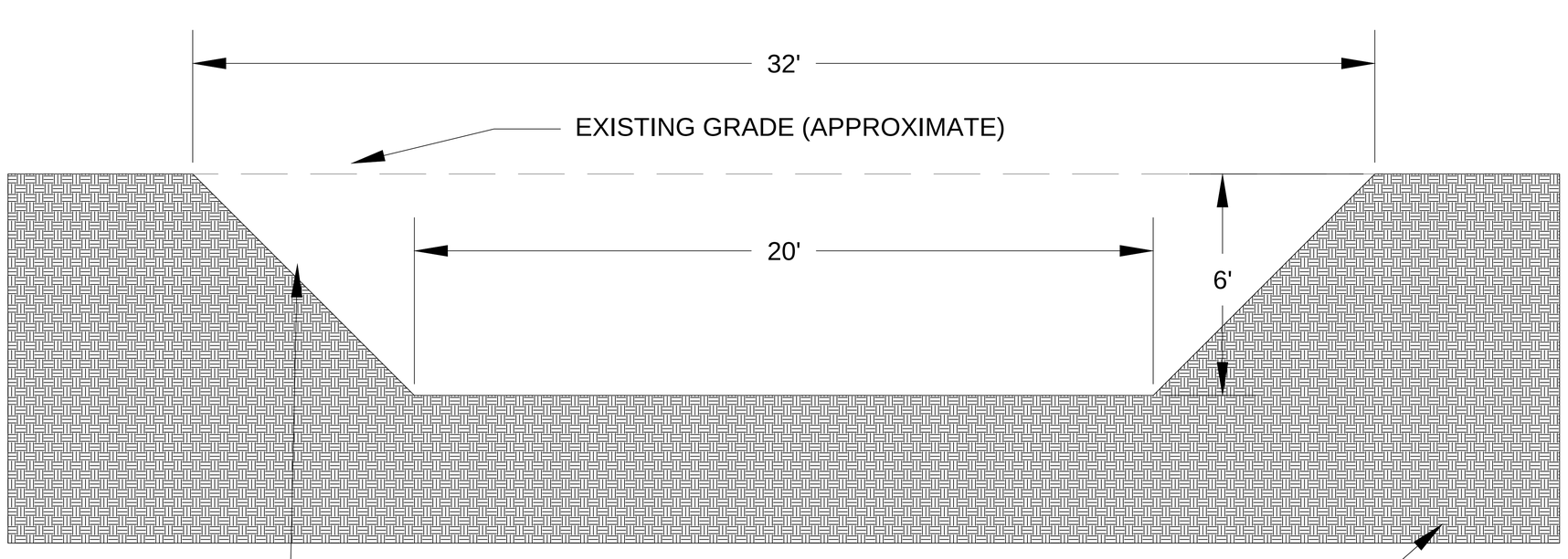
MINIMUM EXCAVATION REQUIREMENTS – SECTION LOCATIONS

SEAL & SIGNATURE		
	DATE:	JAN 2018
	PROJECT #:	
	DRAWN BY:	SH
	CHECKED BY:	AC
	DRAWING #:	S
	REVISED BY:	



SECTION A-A

SCALE: 1" = 10'



SECTION B-B

SCALE: 1" = 5'

CLIENT NAME

BROOKLYN NAVY YARD
DEVELOPMENT CORPORATION
63 FLUSHING AVENUE
BROOKLYN, NY, 11205

SEAL & SIGNATURE

NO.	REVISIONS	DATE

CORE ENVIRONMENTAL CONSULTANTS

22-48 119th STREET
COLLEGE POINT, NY 11356
T: 718-786-4730
F: 718-786-4764

2312 WEHRLE DRIVE
BUFFALO, N.Y. 14221
T: 716-204-8054
F: 716-204-8557

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PROJECT LOCATION:

BROOKLYN NAVY YARD INDUSTRIAL PARK

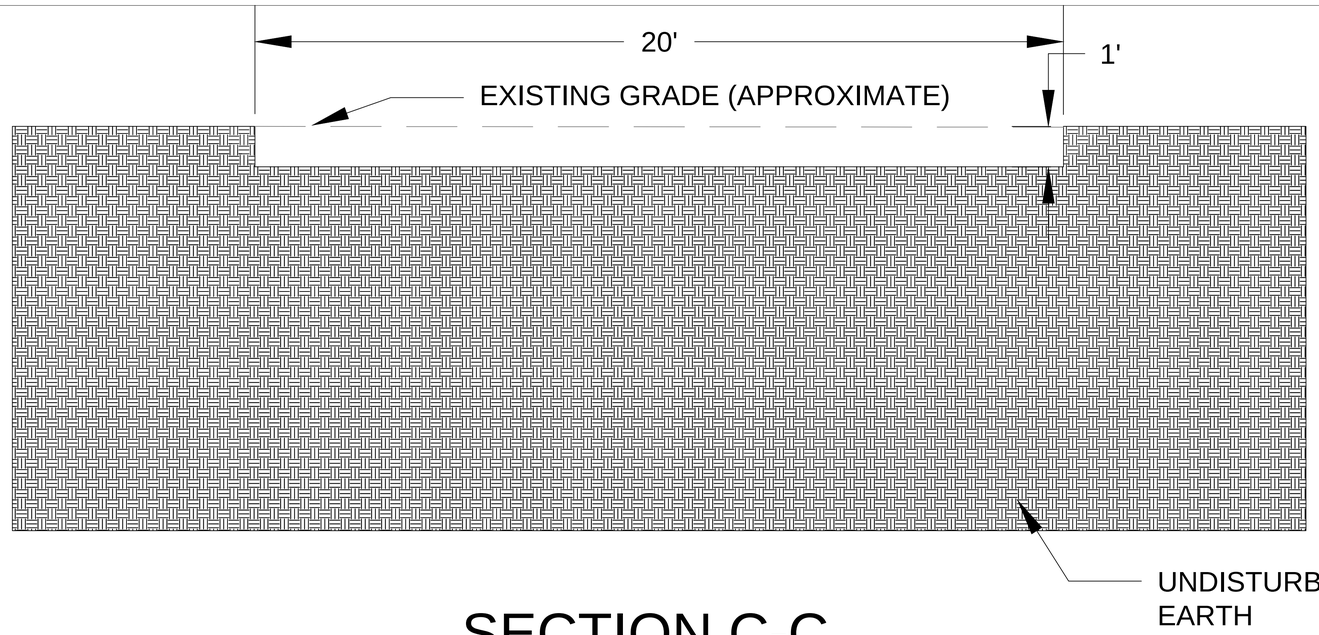
DESCRIPTION:

SELF-IMPLEMENTING ON-SITE CLEANUP AND DISPOSAL PLAN

DRAWING TITLE:

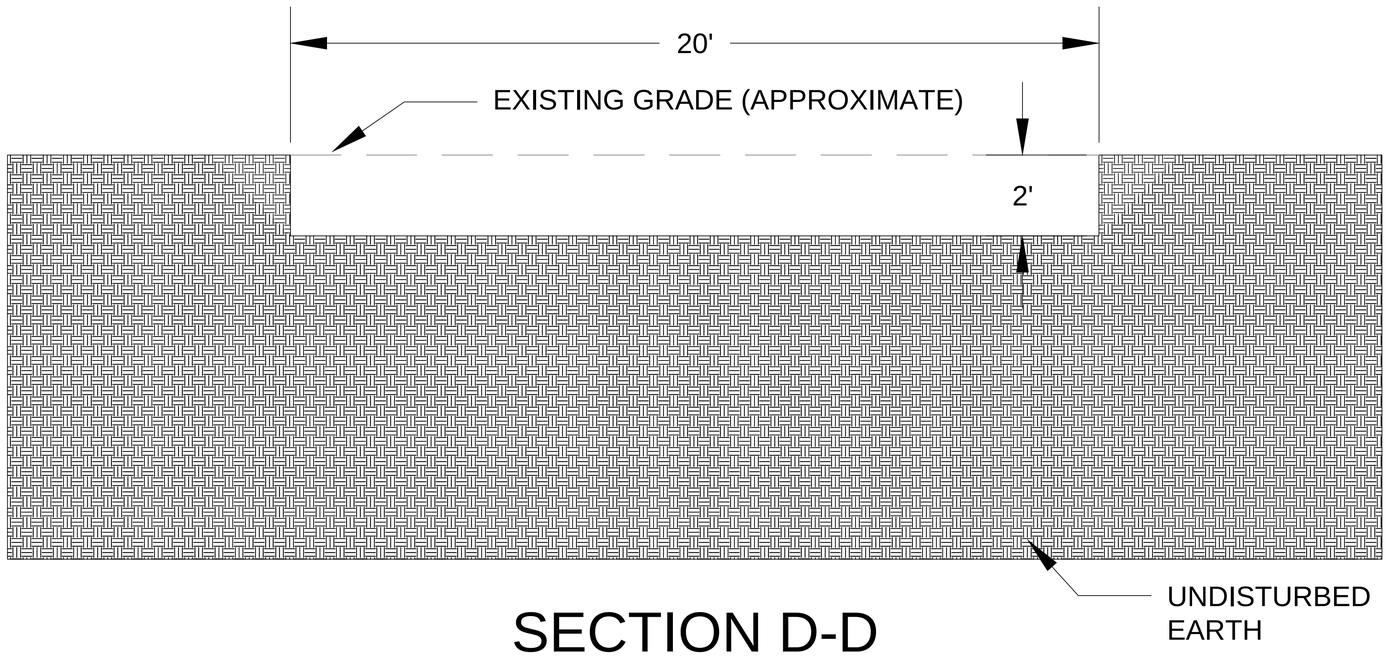
SIP EXCAVATION SECTIONS - 1

SEAL & SIGNATURE		
	DATE:	JAN. 2018
	PROJECT #:	
	DRAWN BY:	JAP
	CHECKED BY:	AC
	DRAWING #:	S-1
	REVISED BY:	



SECTION C-C

SCALE: 1" = 5'



SECTION D-D

SCALE: 1" = 5'

CLIENT NAME

BROOKLYN NAVY YARD
DEVELOPMENT CORPORATION
63 FLUSHING AVENUE
BROOKLYN, NY, 11205

SEAL & SIGNATURE

NO.	REVISIONS	DATE

CORE ENVIRONMENTAL CONSULTANTS

22-48 119th STREET
COLLEGE POINT, NY 11356
T: 718-786-4730
F: 718-786-4764

2312 WEHRLE DRIVE
BUFFALO, N.Y. 14221
T: 716-204-8054
F: 716-204-8557

www.COREenv.com

PROJECT LOCATION:

BROOKLYN NAVY YARD INDUSTRIAL PARK

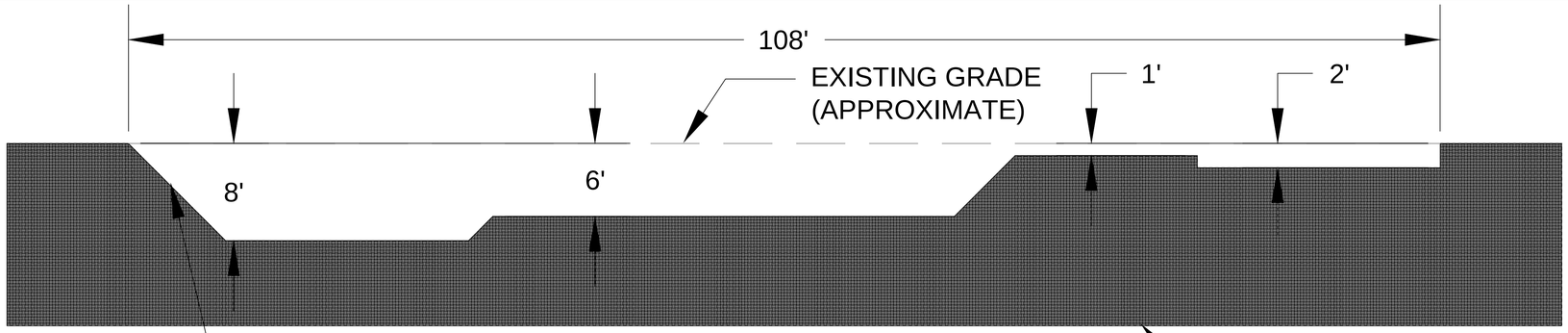
DESCRIPTION:

SELF-IMPLEMENTING ON-SITE CLEANUP AND DISPOSAL PLAN

DRAWING TITLE:

SIP EXCAVATION SECTIONS - 2

SEAL & SIGNATURE		
	DATE:	JAN. 2018
	PROJECT #:	
	DRAWN BY:	JAP
	CHECKED BY:	AC
	DRAWING #:	S-2
	REVISED BY:	



SECTION E-E

SCALE: 1" = 16'

NOTES:

1. ALL EXCAVATIONS GREAT THAN 3' TOTAL DEPTH SHALL HAVE 1H:1V SIDE SLOPES. THESE SLOPES SHALL BEGIN AT THE EDGE OF THE 20' X 20' EXCAVATION GRID.
2. SOIL EXCAVATED FROM 6' AND 8' TOTAL DEPTH GRIDS SHALL BE SEGREGATED AND DISPOSED OF AS TSCA-LEVEL PCV-CONTAMINATED WASTE.
3. SOIL EXCAVATED FROM 1' AND 2' TOTAL DEPTH GRIDS SHALL BE SEGREGATED AND DISPOSED OF AS NON-HAZARDOUS PCB-IMPACTED SOIL.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING EXCAVATION DEPTHS WITH THE ENGINEER IN THE FIELD. ANY UNAUTHORIZED EXCAVATION, TRANSPORTATION, AND DISPOSAL OF SOILS IN EXCEEDANCE OF THE EXCAVATION PLAN WITHOUT WRITTEN AUTHORIZATION FROM THE ENGINEER SHALL BE AT THE CONTRACTOR'S EXPENSE.

CLIENT NAME

BROOKLYN NAVY YARD
DEVELOPMENT CORPORATION
63 FLUSHING AVENUE
BROOKLYN, NY, 11205

SEAL & SIGNATURE

NO.	REVISIONS	DATE

CORE ENVIRONMENTAL CONSULTANTS

22-48 119th STREET
COLLEGE POINT, NY 11356
T: 718-786-4730
F: 718-786-4764

2312 WEHRLE DRIVE
BUFFALO, N.Y. 14221
T: 716-204-8054
F: 716-204-8557

www.COREenv.com

PROJECT LOCATION:

BROOKLYN NAVY YARD INDUSTRIAL PARK

DESCRIPTION:

SELF-IMPLEMENTING ON-SITE CLEANUP AND DISPOSAL PLAN

DRAWING TITLE:

SIP EXCAVATION SECTIONS - 3

SEAL & SIGNATURE		
	DATE:	JAN. 2018
	PROJECT #:	
	DRAWN BY:	JAP
	CHECKED BY:	AC
	DRAWING #:	S-3
	REVISED BY:	

CORE ENVIRONMENTAL CONSULTANTS
22-48 119th Street, College Point, NY 11356 ◆ Phone: 718.786.4730 ◆ Fax: 718.786.4764

March 2, 2018

Ms. Sadira Robles
USEPA Region 2
290 Broadway
New York, New York 10007

RE: **Comments Concerning the Self-Implementing On-Site Cleanup and Disposal Plan**
Brooklyn Navy Yard Industrial Park
Substation H (Building 297)/Drum Storage Area C
Flushing Avenue, Brooklyn, New York 11205
Responses to Comments – February 22, 2018

Dear Ms. Robles,

On behalf of the Brooklyn Navy Yard Development Corporation (BNYDC), CORE Environmental Consultants, Inc. (CORE) is pleased to provide responses to the United States Environmental Protection Agency's (USEPA's) comments to the Self-Implementing On-Site Cleanup and Disposal Plan for the Brooklyn Navy Yard Industrial Park (BNYIP).

CORE's responses to comments are indicated in red below.

RESPONSES TO COMMENTS:

1. Please provide a signed copy of the certification.

   A signed copy of the certification is attached. The hard copy can be forwarded at the request of USEPA.

2. In section 1.0 Introduction, Cleanup Levels for Concrete were provided as shown below. Please explain why cleanup levels for concrete were provided as the Self-implementing notification focuses on soil.

   - 10 micrograms (µg) per 100 square centimeters (cm2) for cleaned concrete, and
   - 100 µg/100 cm2 if the concrete is encapsulated in accordance with PCB Spill Decontamination standards and procedures identified in Title 40 of the Code of Federal Regulations Part 761.79 (40 CFR 761.79).

   The cleanup levels indicated for concrete are not applicable to this Self-Implementing Plan.

LEGEND

PROJECT AREA

BORING LOCATION
BLDG 297-1

Scale
1"= 32'

CLIENT NAME

BROOKLYN NAVY YARD
DEVELOPMENT CORPORATION
63 FLUSHING AVENUE
BROOKLYN, NY, 11205

SEAL & SIGNATURE

NO.	REVISIONS	DATE

CORE
ENVIRONMENTAL
CONSULTANTS

22-48 119th STREET
COLLEGE POINT, NY 11356
T: 718-786-4730
F: 718-786-4764

2312 WEHRLE DRIVE
BUFFALO, N.Y. 14221
T: 716-204-8054
F: 716-204-8557

www.COREenv.com

PROJECT LOCATION:

BROOKLYN NAVY YARD
INDUSTRIAL PARK

DESCRIPTION:

SELF-IMPLEMENTING ON-SITE CLEANUP AND DISPOSAL PLAN

DRAWING TITLE:

ADDITIONAL BULK SAMPLE LOCATION MAP

SEAL & SIGNATURE	DATE:	DEC 2017
	PROJECT #:	
	DRAWN BY:	SH
	CHECKED BY:	AC
	DRAWING #:	4-C
	REVISED BY:	

Table 3
Polychlorinated Biphenyls in Bulk Samples (Building 297)
Brooklyn Navy Yard Industrial Park
Drum Storage Area C/Substation H

Sample ID	Sample Depth (ft bgs)	Sample Date	VCP Decision Document* (mg/kg)	Polychlorinated Biphenyls (mg/kg)									Total PCBs
				Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Aroclor 1262	Aroclor 1268	
Bldg 297 - Slab 1	7 - 7.4	12/21/2017	10	<0.350	<0.720	<0.350	<0.350	<0.350	<0.350	<0.350	<0.350	<0.350	ND
Bldg 297 - Slab 2	7 - 7.4	12/21/2017	10	<0.036	<0.073	<0.036	<0.036	<0.036	<0.036	**0.050**	<0.036	<0.036	**0.050**
Bldg 297 - Slab 3	7 - 7.4	12/21/2017	10	<0.036	<0.072	<0.036	<0.036	<0.036	<0.036	**0.170**	<0.036	<0.036	**0.170**
Bldg 297 - Slab 4	8 - 8.4	12/21/2017	10	<0.350	<0.720	<0.350	<0.350	<0.350	<0.350	<0.350	<0.350	<0.350	ND
Bldg 297 - Slab 5	8 - 8.4	12/21/2017	10	<0.350	<0.710	<0.350	<0.350	<0.350	<0.350	<0.350	<0.350	<0.350	ND
Bldg 297-6-1	1.5	2/1/2018	10	<0.102	<0.102	<0.102	<0.102	<0.102	<0.102	**0.0852 J**	<0.102	<0.102	**0.0852**
Bldg 297-6-2	3.0	2/1/2018	10	<0.0941	<0.0941	<0.0941	<0.0941	<0.0941	<0.0941	<0.0941	<0.0941	<0.0941	ND
Bldg 297-6-3	5.5	2/1/2018	10	<0.103	<0.103	<0.103	<0.103	<0.103	<0.103	**0.0249 J**	<0.103	<0.103	**0.0249**
Bldg 297-6-4	7.0	2/1/2018	10	<0.0933	<0.0933	<0.0933	<0.0933	<0.0933	<0.0933	<0.0933	<0.0933	<0.0933	ND
Bldg 297-7-1	1.0	2/1/2018	10	<0.105	<0.105	<0.105	<0.105	<0.105	<0.105	**0.0605 J**	<0.105	<0.105	**0.0605**
Bldg 297-7-2	3.5	2/1/2018	10	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109	**0.0794 J**	<0.109	<0.109	**0.0794**
Bldg 297-7-3	4.5	2/1/2018	10	<0.0978	<0.0978	<0.0978	<0.0978	<0.0978	<0.0978	**0.0270 J**	<0.0978	<0.0978	**0.0270**
Bldg 297-7-4	6.5	2/1/2018	10	<0.101	<0.101	<0.101	<0.101	<0.101	<0.101	**0.124**	<0.101	<0.101	**0.124**
Bldg 297-8-1	1.5	2/1/2018	10	<0.110	<0.110	<0.110	<0.110	<0.110	<0.110	**0.0183 J**	<0.110	<0.110	**0.0183**
Bldg 297-8-2	2.5	2/1/2018	10	<0.104	<0.104	<0.104	<0.104	<0.104	<0.104	**0.0435 J**	<0.104	<0.104	**0.0435**
Bldg 297-8-3	5.0	2/1/2018	10	<0.101	<0.101	<0.101	<0.101	<0.101	<0.101	**0.0255 J**	<0.101	<0.101	**0.0255**
Bldg 297-8-4	6.5	2/1/2018	10	<0.111	<0.111	<0.111	<0.111	<0.111	<0.111	**0.0319 J**	<0.111	<0.111	**0.0319**
Bldg 297-9-1	1.0	2/1/2018	10	<0.108	<0.108	<0.108	<0.108	<0.108	<0.108	**0.0196 J**	<0.108	<0.108	**0.0196**
Bldg 297-9-2	3.0	2/1/2018	10	<0.102	<0.102	<0.102	<0.102	<0.102	<0.102	**0.0231 J**	<0.102	<0.102	**0.0231**
Bldg 297-9-3	5.5	2/1/2018	10	<0.0988	<0.0988	<0.0988	<0.0988	<0.0988	<0.0988	**0.256**	<0.0988	<0.0988	**0.256**
Bldg 297-9-4	7.0	2/1/2018	10	<0.112	<0.112	<0.112	<0.112	<0.112	<0.112	**0.0486 J**	<0.112	<0.112	**0.0486**
Bldg 297-10-1	1.5	2/1/2018	10	<0.0961	<0.0961	<0.0961	<0.0961	<0.0961	<0.0961	**0.190**	<0.0961	<0.0961	**0.190**
Bldg 297-10-2	2.5	2/1/2018	10	<0.108	<0.108	<0.108	<0.108	<0.108	<0.108	**0.0456 J**	<0.108	<0.108	**0.0456**
Bldg 297-10-3	5.5	2/1/2018	10	<0.111	<0.111	<0.111	<0.111	<0.111	<0.111	**0.0432 J**	<0.111	<0.111	**0.0432**
Bldg 297-10-4	7.0	2/1/2018	10	<0.101	<0.101	<0.101	<0.101	<0.101	<0.101	**0.0307 J**	<0.101	<0.101	**0.0307**
Bldg 297-11-1	1.0	2/1/2018	10	<0.107	<0.107	<0.107	<0.107	<0.107	<0.107	**0.0415 J**	<0.107	<0.107	**0.0415**
Bldg 297-11-2	3.5	2/1/2018	10	<0.0972	<0.0972	<0.0972	<0.0972	<0.0972	<0.0972	<0.0972	<0.0972	<0.0972	ND
Bldg 297-11-3	5.0	2/1/2018	10	<0.105	<0.105	<0.105	<0.105	<0.105	<0.105	**0.103 J**	<0.105	<0.105	**0.103**
Bldg 297-11-4	6.0	2/1/2018	10	<0.0956	<0.0956	<0.0956	<0.0956	<0.0956	<0.0956	**0.143**	<0.0956	<0.0956	**0.143**
Bldg 297-12-1	1.0	2/1/2018	10	<0.117	<0.117	<0.117	<0.117	<0.117	<0.117	**0.0768 J**	<0.117	<0.117	**0.0768**
Bldg 297-12-2	2.5	2/1/2018	10	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109	**0.0917 J**	<0.109	<0.109	**0.0917**
Bldg 297-12-3	4.0	2/1/2018	10	<0.107	<0.107	<0.107	<0.107	<0.107	<0.107	**0.0337 J**	<0.107	<0.107	**0.0337**
Bldg 297-12-4	6.5	2/1/2018	10	<0.107	<0.107	<0.107	<0.107	<0.107	<0.107	**0.0495 J**	<0.107	<0.107	**0.0495**
Bldg 297-13-1	1.5	2/1/2018	10	<0.104	<0.104	<0.104	**0.260**	<0.104	<0.104	**0.109**	<0.104	<0.104	**0.369**
Bldg 297-13-2	3.0	2/1/2018	10	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	**0.0540 J**	<0.100	<0.100	**0.0540**
Bldg 297-13-3	5.0	2/1/2018	10	<0.108	<0.108	<0.108	<0.108	<0.108	<0.108	<0.108	<0.108	<0.108	ND
Bldg 297-13-4	6.0	2/1/2018	10	<0.105	<0.105	<0.105	<0.105	<0.105	<0.105	**0.666 J**	<0.105	<0.105	**0.666**
Bldg 297-14-1	1.0	2/1/2018	10	<0.111	<0.111	<0.111	<0.111	<0.111	<0.111	**0.541**	<0.111	<0.111	**0.541**
Bldg 297-14-2	2.0	2/1/2018	10	<0.0955	<0.0955	<0.0955	<0.0955	<0.0955	<0.0955	**0.206**	<0.0955	<0.0955	**0.206**
Bldg 297-14-3	4.5	2/1/2018	10	<0.104	<0.104	<0.104	<0.104	<0.104	<0.104	**0.134**	<0.104	<0.104	**0.134**
Bldg 297-14-4	6.5	2/1/2018	10	<1.110	<1.110	<1.110	<1.110	<1.110	<1.110	**6.020**	<1.110	<1.110	**6.020**
Bldg 297-15-1	1.5	2/1/2018	10	<0.0981	<0.0981	<0.0981	<0.0981	<0.0981	<0.0981	**0.139**	<0.0981	<0.0981	**0.139**
Bldg 297-15-2	3.0	2/1/2018	10	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109	**0.158**	<0.109	<0.109	**0.158**
Bldg 297-15-3	5.0	2/1/2018	10	<0.0978	<0.0978	<0.0978	<0.0978	<0.0978	<0.0978	**0.0463 J**	<0.0978	<0.0978	**0.0463**
Bldg 297-15-4	6.5	2/1/2018	10	<0.111	<0.111	<0.111	<0.111	<0.111	<0.111	**0.0534 J**	<0.111	<0.111	**0.0534**

NOTES:
mg/kg = milligrams per kilogram
Bold value indicates analyte detected above laboratory method detection limit
<# = analyte not detected at concentrations greater than the Reporting Limit shown
J = estimated value
* Soil Cleanup Objectives from VCP Site No. V00120 Decision Document, February 2011.

= exceeds VCP DD SCO - Subsurface (10 ppm)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
290 BROADWAY
NEW YORK, NY 10007-1866

APR 05 2018

Mr. Paul Kelly
General Counsel & EVP
Brooklyn Navy Yard Development Corporation
Building 292, 3rd Floor
63 Flushing Avenue, Unit 300
Brooklyn, New York 11205

Re: Brooklyn Navy Yard Development Corporation
63 Flushing Avenue, Unit 300
Brooklyn, New York 11205
Approval for Cleanup and Disposal of PCB Remediation Waste under 40 CFR §761.61(a) and Approval for Characterization Sampling under 40 CFR §761.61(c)

Dear Mr. Kelly:

This is in response to the January 2018 document entitled "Self-Implementing Cleanup Plan for PCBs" (SICP), prepared by CORE Environmental Consultants on behalf of Brooklyn Navy Yard Corporation for the above-referenced site. The SICP was amended by submittal of additional information in CORE Environmental Consultants electronic correspondence dated March 2, 2018. These two documents will collectively be referred to as the "Application". The PCB contamination is considered to be PCB remediation waste that is subject to the applicable cleanup levels under the federal regulations at 40 CFR §761.61(a)(4).

With the exception of the characterization sampling requirements under Subpart N of 40 CFR Part 761, the proposed removal of PCB remediation waste meets the self-implementing cleanup and disposal requirements under 40 CFR §761.61(a). In addition, based on the characterization and proposed verification sampling, the United States Environmental Protection Agency (EPA) finds that this sampling, in this proposed remediation context, is acceptable for purposes of determining compliance with the low occupancy PCB cleanup standard of 25 parts per million (with implementation of a deed restriction meeting the requirements of 40 CFR §761.61(a)(8)).

EPA hereby approves Brooklyn Navy Yard Corporation's Application, and it may proceed with the cleanup and disposal under 40 CFR §761.61(a) and (c) and the Application, subject to this Approval. This Approval also constitutes an order under the authority of Section 6 of the Toxic Substances Control Act, 15 U.S.C. §2605.

Please note that this Approval does not constitute a determination by EPA that the transporters or the disposal facilities selected by Brooklyn Navy Yard Corporation are authorized to conduct the activities set forth in the Application. Brooklyn Navy Yard Corporation is responsible for ensuring that its selected transporters and disposal facilities are authorized to conduct any such activities in accordance with all applicable federal, state and local statutes and regulations.

Should you have any questions concerning this matter, please contact Sadira Robles at (212) 637-4318 or at robles.sadira@epa.gov.

Sincerely,

Ari Iglesias

for John Filippelli, Director
Clean Air and Sustainability Division

3. In section 2.2 Previous Investigation History, Concrete wipe samples were mentioned as stated

> "Concrete wipe samples were collected from concrete pads in the outdoor courtyard and from concrete surfaces in Building to determine if operation of the historically PCB oil-filled electrical transformers associated with Substation H had resulted in spills or leaks that potentially impacted surrounding structures".

In this instance concrete wipe samples are not representative because the spill or leak would be historical and not new or fresh. Bulk samples should have been taken instead.

Please also note that unless a comparative study is performed in accordance with the PCB regulations, EPA does not accept the use of immunoassay testing (which was used in the previous investigation).

Wipe samples were collected during an historical investigation. The results of the investigation were provided as information only. Brick and concrete was evaluated via the collection of bulk samples during the current Site characterization performed in December 2017 and February 2018.

4. In section 3.2.2 Subsurface Soil Sampling and Chemical Analysis, samples were taken at the increments listed below. Please be aware that dilution of any PCB's present could have occurred if the entire two-foot core was homogenized during sample collection. The length of sample core to homogenize should typically be 6", but no more than a foot.

> In general, four soil samples were collected from each boring at the following depth intervals:
>
> - 2 inches to 2 feet bgs,
> - 2 to 4 feet bgs,
> - 4 to 6 feet bgs, and
> - 6 to 8 feet bgs.

Soil samples were collected from a discrete 6 to 8-inch length interval within each 2-foot sample run for analysis of PCBs. The remaining soil within the 2-foot interval was then composited to collect samples for the remaining soil characterization analyses.

Also, no analysis date was provided for the samples. Please provide analysis date pursuant to 761.61(a)(3)(i)(B). The summary must include sample collection and analysis date.

The analysis dates for the samples were added to their respective tables. Updated tables are attached.

5. In section 4.3 Bulk Concrete Sample Results, Concrete Samples were mentioned.

> "Five bulk concrete samples were collected of the sub-floor slab within the footprint of former Building 297."

Please provide the sample results, if available, for the floor immediately above the sub-floor. If samples of the floor were not collected, they should be collected during implementation of the cleanup.

The floor above the subfloor of former Building 297 could not be identified as a distinct first floor rubble zone during drilling activities. The subfloor was sampled due to the fact that it remains intact in the subsurface and could be identified for sampling purposes. The building floor and walls were rubblized, mixed, and used to backfill the former Building 297 footprint.

6. In section 5.0 Proposed Cleanup Action Plan, an Environmental Easement was mentioned.

> "In addition, the NYSDEC-required Soil Cleanup Objectives (SCOs) are more conservative than the USEPA-required 25 mg/kg of PCBs for a self-implementing cleanup in a low-occupancy area. Institutional and engineering controls (ICs/ECs) limiting access to subsurface soils consistent with the BNYIP Site remedy will be implemented following remediation. These include an Environmental Easement and protective cover.

Please confirm that the Environmental Easement will contain the information required for a deed restriction and comply with 40 CFR 761.1 (a) (8).

The Environmental Easement for the Site will comply with the Deed Restriction requirements of 40 CFR 761.61(a)(8).

7. In Section 5.4 General Excavation, the collection of Post Excavation End Point Samples was mentioned.

> "Post-excavation endpoint samples will be collected to verify that all subsurface soils containing concentrations of PCBs greater than 10 mg/kg have been removed. Post-excavation endpoint samples will be collected in excavations to 1 foot bgs to verify that remaining soil below the excavation does not exceed the applicable 10 mg/kg in subsurface soil SCO."

We recommend that Post-excavation endpoint samples be collected at a depth of 6" instead of 1 foot.

Post-excavation samples will be collected to 6 inches below the bottom of the excavation.

Additionally, you mentioned additional excavation may be required.

> "Additional excavation may be required north of the B37 area in Wallabout Road as delineation borings were not drilled in that area."

Please confirm the scope of the delineation and effort in the B-37 area in Wallabout Road.

The area in the vicinity of B-37 will be excavated as part of remediation activities. Due to the presence of several utilities in Wallabout Road, it is preferable to deal with potential delineation via post-excavation confirmation sampling. If post-excavation samples in the area of B-37 indicate that further excavation is required, it will be performed at that time.

8. In Section 5.5 Manifesting and Disposal

> "Prior to remediation activities, analytical data generated during the Site investigation will be used to characterize soil in accordance with disposal facility-specific requirements and 40 CFR 761 Subpart D. Soil with concentrations of PCBs between 1 and 50 mg/kg will be disposed of as non-hazardous in a lined, solid waste landfill. Soil containing PCBs at concentrations greater than 50 mg/kg will be transported to a hazardous waste landfill permitted under 40 CFR 761. Surface soil excavations in the areas of soil borings B-4, B-6, B-9, and B-34 contain concentrations of PCBs less than 50 mg/kg and can be managed as non TSCA-regulated. The entire depth of excavation at B-33 (2 feet) will be managed as non-TSCA regulated. The remaining subsurface soil will be treated as TSCA regulated waste. BNYDC will sign all shipping manifests and will be responsible and liable for the hazardous waste being disposed of."

Please confirm that all soil with PCBs less than 50 mg/kg will be disposed of in accordance 40 CFR 761.61(a)(5)(i)(B)(2)(ii), while PCBs at or above 50 mg/kg will be disposed in accordance with 40 CFR 761.61(a)(5)(i)(B)(2)(iii).

All soil containing concentrations of PCBs less than 50 mg/kg will be disposed of in accordance 40 CFR 761.61(a)(5)(i)(B)(2)(ii). Soil containing concentrations of PCBs at or above 50 mg/kg will be disposed of in accordance with 40 CFR 761.61(a)(5)(i)(B)(2)(iii).

9. In Section 5.7 Backfilling and Site Restoration

Please confirm that imported soil will have PCB less than or equal to 1mg/kg.

All soil imported to the Site will contain concentrations of PCBs less than or equal to 1 mg/kg.

If you have any questions, please feel free to contact me at (716) 204-8054.

Sincerely,
CORE Environmental Consultants, Inc.

A. Cruikshank

Alyssa Cruikshank
Geologist

ec: Shani Leibowitz, BNYDC
Jonathan Greco, NYSDEC
James Haklar, USEPA
Ronald Tramposch, CORE

CERTIFICATION

The undersigned owner of the property where the cleanup Site is located and the party conducting the cleanup certify that all sampling plans, sampling collection procedures, sample preparation procedures, extraction procedures and instrumental/chemical analysis procedures used to assess or characterize the PCB contamination at the cleanup site are on file at the location indicated below and are available for EPA inspection, as set forth below

Document Location

Brooklyn Navy Yard Development Corporation
Building 297
63 Flushing Avenue
Brooklyn, New York 11205

Party Conducting the Cleanup:

Brooklyn Navy Yard Development Corp.
By: David Kelly
Authorized Signature

3-1-2018.
Date

David Kelly
Name of Authorized Representative (print)

Secretary, EVP, General Counsel
Title

Table 1
Polychlorinated Biphenyls in Surficial Soil (0 to 2 inches)
Brooklyn Navy Yard Industrial Park
Drum Storage Area C/Substation H

Sample ID	Sample Date	Date of Analysis	Surficial VCP Decision Document* (mg/kg)	Polychlorinated Biphenyls (mg/kg)									Total PCBs
				Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Aroclor 1262	Aroclor 1268	
SS-B-1	12/11/2017	12/13/2017	1	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	ND
SS-B-2	12/11/2017	12/13/2017	1	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	**0.0438**	**0.0603**	<0.0189	<0.0189	**0.1041**
SS-B-3	12/11/2017	12/13/2017	1	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	**0.0637**	**0.0737**	<0.0189	<0.0189	**0.1374**
SS-B-4	12/11/2017	12/13/2017	1	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	**0.494**	<0.0188	**0.714**	<0.0188	**1.208**
SS-B-5	12/11/2017	12/13/2017	1	<0.0190	<0.0190	<0.0190	<0.0190	<0.0190	<0.0190	**0.0222**	<0.0190	<0.0190	**0.0222**
SS-B-6	12/11/2017	12/13/2017	1	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	**0.0440**	<0.0186	<0.0186	**0.044**
SS-B-7	12/11/2017	12/13/2017	1	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	ND
SS-B-8	12/11/2017	12/13/2017	1	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	ND
SS-B-9	12/11/2017	12/13/2017	1	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	ND
SS-B-10	12/11/2017	12/13/2017	1	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	ND
SS-DUP-1		12/13/2017	1	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	ND
SS-B-11	12/11/2017	12/13/2017	1	<0.0190	<0.0190	<0.0190	<0.0190	<0.0190	<0.0190	<0.0190	<0.0190	<0.0190	ND
SS-B-12	12/11/2017	12/13/2017	1	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	**0.0196**	<0.0184	<0.0184	**0.0196**
SS-B-13	12/11/2017	12/13/2017	1	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	ND
SS-B-14	12/11/2017	12/13/2017	1	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	**0.0386**	<0.0188	<0.0188	**0.0386**
SS-B-15	12/11/2017	12/13/2017	1	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	**0.0460**	<0.0183	<0.0183	**0.0460**
SS-B-16	12/11/2017	12/13/2017	1	<0.0190	<0.0190	<0.0190	<0.0190	<0.0190	<0.0190	**0.0470**	<0.0190	<0.0190	**0.0470**
SS-B-17	12/11/2017	12/13/2017	1	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	**0.255**	<0.0192	<0.0192	**0.2550**
SS-B-18	12/11/2017	12/13/2017	1	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	ND
SS-B-19	12/11/2017	12/13/2017	1	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	ND
SS-B-21	12/11/2017	12/13/2017	1	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	**0.0649**	<0.0194	<0.0194	**0.0649**
SS-B-22	12/11/2017	12/13/2017	1	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	**0.0687**	<0.0195	<0.0195	**0.0687**
SS-B-23	12/11/2017	12/13/2017	1	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	**0.0452**	<0.0189	<0.0189	**0.0452**
SS-B-24	12/11/2017	12/13/2017	1	<0.0212	<0.0212	<0.0212	<0.0212	<0.0212	<0.0212	**0.0461**	<0.0212	<0.0212	**0.0461**
SS-B-25	12/11/2017	12/13/2017	1	<0.0197	<0.0197	<0.0197	<0.0197	<0.0197	<0.0197	**0.0686**	<0.0197	<0.0197	**0.0686**
SS-B-26	12/11/2017	12/13/2017	1	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	**0.0814**	<0.0188	<0.0188	**0.0814**
SS-B-27	12/11/2017	12/13/2017	1	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	ND
SS-B-28	12/11/2017	12/13/2017	1	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	**0.0228**	<0.0181	<0.0181	**0.0228**
SS-B-29	12/11/2017	12/13/2017	1	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	ND
SS-B-32	12/11/2017	12/13/2017	1	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	**0.116**	<0.0200	<0.0200	**0.116**
SS-DUP-2		12/13/2017	1	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	**0.0979**	<0.0195	<0.0195	**0.0979**
SS-B-33	12/11/2017	12/13/2017	1	<0.0201	<0.0201	<0.0201	<0.0201	<0.0201	<0.0201	**0.0657**	<0.0201	<0.0201	**0.0657**
SS-B-34	12/11/2017	12/13/2017	1	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	**0.0367**	<0.0193	<0.0193	**0.0367**
SS-B-35	12/11/2017	12/13/2017	1	<0.0190	<0.0190	<0.0190	<0.0190	<0.0190	<0.0190	**0.737**	<0.0190	<0.0190	**0.737**
SS-B-36	12/11/2017	12/13/2017	1	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	**0.209**	<0.0198	<0.0198	**0.209**
SS-B-37	12/11/2017	12/13/2017	1	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	**0.0516**	<0.0183	<0.0183	**0.0516**
SS-B-38	12/11/2017	12/13/2017	1	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	**0.0854**	<0.0183	<0.0183	**0.0854**
SS-B-39	12/11/2017	12/13/2017	1	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	ND
SS-B-40	12/11/2017	12/13/2017	1	<0.0178	<0.0178	<0.0178	<0.0178	<0.0178	<0.0178	<0.0178	<0.0178	<0.0178	ND

NOTES:
mg/kg = milligrams per kilogram
Bold value indicates analyte detected above laboratory method detection limit
<# = analyte not detected at concentrations greater than the Reporting Limit shown
* Soil Cleanup Objectives from VCP Site No. V00120 Decision Document, February 2011.

= exceeds VCP DD SCO - Surficial (1 ppm)

Table 2A
Polychlorinated Biphenyls in Subsurface Soil (2 inches to 2 feet)
Brooklyn Navy Yard Industrial Park
Drum Storage Area C/Substation H

Sample ID	Sample Date	Date of Analysis	Surficial	Subsurface	Polychlorinated Biphenyls (mg/kg)									
			VCP Decision Document* (mg/kg)		Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Aroclor 1262	Aroclor 1268	Total PCBs
B-1-1	12/12/2017	12/14/2017	1	10	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	**0.752**	<0.0182	<0.0182	**0.752**
B-2-1	12/12/2017	12/14/2017	1	10	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	**0.0183**	<0.0182	<0.0182	**0.0183**
B-DUP-1		12/14/2017	1	10	<0.0270	<0.0270	<0.0270	<0.0270	<0.0270	<0.0270	<0.0270	<0.0270	<0.0270	ND
B-3-1	12/14/2017	12/16/2017	1	10	<0.0190	<0.0190	<0.0190	<0.0190	<0.0190	<0.0190	**0.144**	<0.0190	<0.0190	**0.144**
B-4-1	12/14/2017	12/16/2017	1	10	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	**0.471**	<0.0185	<0.0185	**0.471**
B-5-1	12/12/2017	12/14/2017	1	10	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	**0.0385**	<0.0194	<0.0194	**0.0385**
B-6-1	12/14/2017	12/18/2017	1	10	<0.0908	<0.0908	<0.0908	<0.0908	<0.0908	<0.0908	**1.79**	<0.0908	<0.0908	**1.79**
B-7-1	12/14/2017	12/16/2017	1	10	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	ND
B-8-1	12/12/2017	12/14/2017	1	10	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	**0.0251**	<0.0185	<0.0185	**0.0251**
B-9-1	12/14/2017	12/18/2017	1	10	<0.0922	<0.0922	<0.0922	<0.0922	<0.0922	<0.0922	**2.97**	<0.0922	<0.0922	**2.97**
B-10-1	12/14/2017	12/15/2017	1	10	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	**0.175**	<0.0183	<0.0183	**0.175**
B-DUP-3		12/16/2017	1	10	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	**0.0998**	<0.0192	<0.0192	**0.0998**
B-11-1	12/12/2017	12/14/2017	1	10	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	ND
B-12-1	12/14/2017	12/16/2017	1	10	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	**0.231**	<0.0182	<0.0182	**0.231**
B-13-1	12/12/2017	12/13/2017	1	10	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	**0.0587**	**0.0598**	<0.0189	<0.0189	**0.1185**
B-14-1	12/14/2017	12/16/2017	1	10	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	**0.659**	<0.0195	<0.0195	**0.659**
B-15-1	12/14/2017	12/15/2017	1	10	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	**0.0310**	<0.0191	<0.0191	**0.0310**
B-16-1	12/14/2017	12/15/2017	1	10	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	ND
B-17-1	12/14/2017	12/16/2017	1	10	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	ND
B-18-1	12/13/2017	12/16/2017	1	10	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	**0.0543**	<0.0189	<0.0189	**0.0543**
B-19-1	12/13/2017	12/16/2017	1	10	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	**0.0738**	**0.247**	<0.0182	<0.0182	**0.3208**
B-21-1	12/12/2017	12/14/2017	1	10	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	0.0678	**0.0544**	**<0.0187**	<0.0187	**0.1222**
B-22-1	12/13/2017	12/16/2017	1	10	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	**0.154**	<0.0186	<0.0186	**0.154**
B-23-1	12/13/2017	12/15/2017	1	10	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	**0.549**	<0.0192	<0.0192	**0.549**
B-24-1	12/13/2017	12/15/2017	1	10	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	**0.756**	<0.0187	**0.756**
B-25-1	12/13/2017	12/15/2017	1	10	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	**0.565**	<0.0180	<0.0180	**0.565**
B-26-1	12/13/2017	12/15/2017	1	10	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	**0.853**	<0.0196	<0.0196	**0.853**
B-27-1	12/13/2017	12/18/2017	1	10	<92.5	<92.5	<92.5	<92.5	<92.5	<92.5	**3790**	<92.5	<92.5	**3790**
B-29-1	12/13/2017	12/15/2017	1	10	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	ND
B-32-1	12/13/2017	12/15/2017	1	10	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	**0.884**	<0.0183	<0.0183	**0.884**
B-33-1	12/13/2017	12/19/2017	1	10	<0.909	<0.909	<0.909	<0.909	<0.909	<0.909	**30.8**	<0.909	<0.909	**30.8**
B-34-1	12/13/2017	12/18/2017	1	10	<0.198	<0.198	<0.198	<0.198	<0.198	<0.198	**3.39**	<0.198	<0.198	**3.39**
B-35-1	12/13/2017	12/16/2017	1	10	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	**0.132**	<0.0183	<0.0183	**0.132**
B-36-1	12/13/2017	12/16/2017	1	10	<0.0202	<0.0202	<0.0202	<0.0202	<0.0202	<0.0202	**0.443**	<0.0202	<0.0202	**0.443**
B-37-1	12/13/2017	12/15/2017	1	10	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	**0.0585**	<0.0182	<0.0182	**0.0585**
B-38-1	12/12/2017	12/14/2017	1	10	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	ND
B-39-1	12/12/2017	12/14/2017	1	10	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	ND
B-40-1	12/12/2017	12/14/2017	1	10	<0.0176	<0.0176	<0.0176	<0.0176	<0.0176	<0.0176	<0.0176	<0.0176	<0.0176	ND

NOTES:
mg/kg = milligrams per kilogram
Bold value indicates analyte detected above laboratory method detection limit
<# = analyte not detected at concentrations greater than the Reporting Limit shown
* Soil Cleanup Objectives from VCP Site No. V00120 Decision Document, February 2011.

= exceeds VCP DD SCO - Surficial (1 ppm)
= exceeds VCP DD SCO - Subsurface (10 ppm)

Table 2B
Polychlorinated Biphenyls in Subsurface Soil (2 to 4 feet)
Brooklyn Navy Yard Industrial Park
Drum Storage Area C/Substation H

Sample ID	Sample Date	Date of Analysis	Subsurface VCP Decision Document* (mg/kg)	Polychlorinated Biphenyls (mg/kg)									Total PCBs
				Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Aroclor 1262	Aroclor 1268	
B-1-2	12/12/2017	12/14/2017	10	<0.0171	<0.0171	<0.0171	<0.0171	<0.0171	<0.0171	<0.0171	<0.0171	<0.0171	ND
B-2-2	12/12/2017	12/14/2017	10	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	**0.0407**	**0.0809**	<0.0189	<0.0189	**0.1216**
B-3-2	12/14/2017	12/16/2017	10	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	**0.109**	<0.0191	<0.0191	**0.109**
B-4-2	12/14/2017	12/18/2017	10	<0.0932	<0.0932	<0.0932	<0.0932	<0.0932	<0.0932	**2.61**	<0.0932	<0.0932	**2.61**
B-5-2	12/12/2017	12/14/2017	10	<0.0203	<0.0203	<0.0203	<0.0203	<0.0203	<0.0203	**0.0499**	<0.0203	<0.0203	**0.0499**
B-6-2	12/14/2017	12/16/2017	10	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	**0.0418**	<0.0185	<0.0185	**0.0418**
B-7-2	12/14/2017	12/16/2017	10	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	ND
B-8-2	12/12/2017	12/14/2017	10	<0.0178	<0.0178	<0.0178	<0.0178	<0.0178	<0.0178	<0.0178	<0.0178	<0.0178	ND
B-9-2	12/14/2017	12/18/2017	10	<0.0183	<0.0183	<0.0183	<0.0183	0.189	<0.0183	**0.0587**	<0.0183	<0.0183	**0.2477**
B-10-2	12/14/2017	12/15/2017	10	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	**0.0325**	<0.0179	<0.0179	**0.0325**
B-11-2	12/12/2017	12/14/2017	10	<0.0967	<0.0967	<0.0967	<0.0967	<0.0967	**0.584**	**1.65**	<0.0967	<0.0967	**2.234**
B-12-2	12/14/2017	12/16/2017	10	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	ND
B-13-2	12/12/2017	12/13/2017	10	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	**0.104**	**0.0858**	<0.0191	<0.0191	**0.1898**
B-14-2	12/14/2017	12/16/2017	10	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	**0.111**	<0.0179	<0.0179	**0.111**
B-15-2	12/14/2017	12/15/2017	10	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	**0.0896**	<0.0188	<0.0188	**0.0896**
B-16-2	12/14/2017	12/15/2017	10	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	**0.0765**	<0.0184	<0.0184	**0.0765**
B-17-2	12/14/2017	12/16/2017	10	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	**0.0490**	<0.0187	<0.0187	**0.0490**
B-18-2	12/13/2017	12/16/2017	10	<0.0203	<0.0203	<0.0203	<0.0203	<0.0203	<0.0203	**0.675**	<0.0203	<0.0203	**0.675**
B-19-2	12/13/2017	12/16/2017	10	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	**0.197**	**0.408**	<0.0182	<0.0182	**0.605**
B-21-2	12/12/2017	12/14/2017	10	<0.0174	<0.0174	<0.0174	<0.0174	<0.0174	<0.0174	<0.0174	<0.0174	<0.0174	ND
B-DUP-5		12/14/2017	10	<0.0169	<0.0169	<0.0169	<0.0169	<0.0169	<0.0169	<0.0169	<0.0169	<0.0169	ND
B-22-2	12/13/2017	12/16/2017	10	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	**0.114**	<0.0192	<0.0192	**0.114**
B-23-2	21/13/17	12/15/2017	10	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	**0.0776**	<0.0184	<0.0184	**0.0776**
B-24-2	12/13/2017	12/18/2017	10	<0.0938	<0.0938	<0.0938	<0.0938	**0.682**	<0.0938	**1.39**	<0.0938	<0.0938	**2.072**
B-25-2	12/13/2017	12/15/2017	10	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	**0.0955**	**0.203**	<0.0181	<0.0181	**0.2985**
B-26-2	12/13/2017	12/18/2017	10	<0.0922	<0.0922	<0.0922	<0.0922	<0.0922	**1.33**	**2.33**	<0.0922	<0.0922	**3.66**
B-27-2	12/13/2017	12/15/2017	10	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	**0.462**	<0.0184	<0.0184	**0.462**
B-29-2	12/13/2017	12/15/2017	10	<0.0176	<0.0176	<0.0176	<0.0176	<0.0176	<0.0176	<0.0176	<0.0176	<0.0176	ND
B-32-2	12/13/2017	12/15/2017	10	<0.0207	<0.0207	<0.0207	<0.0207	<0.0207	<0.0207	<0.0207	<0.0207	<0.0207	ND
B-33-2	12/13/2017	12/18/2017	10	<0.188	<0.188	<0.188	<0.188	<0.188	<0.188	**3.88**	<0.188	<0.188	**3.88**
B-34-2	12/13/2017	12/18/2017	10	<0.183	<0.183	<0.183	<0.183	<0.183	<0.183	**2.17**	<0.183	<0.183	**2.17**
B-35-2	12/13/2017	12/16/2017	10	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	**0.049**	<0.0184	<0.0184	0.049
B-36-2	12/13/2017	12/18/2017	10	<0.185	<0.185	<0.185	<0.185	<0.185	<0.185	**5.33**	<0.185	<0.185	**5.33**
B-37-2	12/13/2017	12/18/2017	10	<92.6	<92.6	<92.6	<92.6	<92.6	<92.6	**2430**	<92.6	<92.6	**2430**
B-38-2	12/12/2017	12/14/2017	10	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	ND
B-DUP-8		12/14/2017	10	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	**1.01**	<0.0194	<0.0194	**1.01**
B-39-2	12/12/2017	12/14/2017	10	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	ND
B-40-2	12/12/2017	12/14/2017	10	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	ND

NOTES:
mg/kg = milligrams per kilogram
Bold value indicates analyte detected above laboratory method detection limit
<# = analyte not detected at concentrations greater than the Reporting Limit shown
* Soil Cleanup Objectives from VCP Site No. V00120 Decision Document, February 2011.

= exceeds VCP DD SCO - Subsurface (10 ppm)

Table 2C
Polychlorinated Biphenyls in Subsurface Soil (4 to 6 feet)
Brooklyn Navy Yard Industrial Park
Drum Storage Area C/Substation H

Sample ID	Sample Date	Date of Analysis	Subsurface VCP Decision Document* (mg/kg)	Polychlorinated Biphenyls (mg/kg)									Total PCBs
				Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Aroclor 1262	Aroclor 1268	
B-1-3	12/12/2017	12/14/2017	10	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	**0.0785**	<0.0204	<0.0204	**0.0785**
B-2-3	12/12/2017	12/14/2017	10	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	ND
B-3-3	12/14/2017	12/16/2017	10	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	ND
B-4-3	12/14/2017	12/18/2017	10	<0.0879	<0.0879	<0.0879	<0.0879	<0.0879	<0.0879	**2.12**	<0.0879	<0.0879	**2.12**
B-5-3	12/12/2017	12/14/2017	10	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	**0.0215**	<0.0196	<0.0196	**0.0215**
B-7-3	12/14/2017	12/16/2017	10	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	ND
B-8-3	12/12/2017	12/14/2017	10	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	**0.0422**	<0.0194	<0.0194	**0.0422**
B-9-3	12/14/2017	12/18/2017	10	<0.0915	<0.0915	<0.0915	<0.0915	<0.0915	<0.0915	**1.84**	<0.0915	<0.0915	**1.84**
B-10-3	12/14/2017	12/15/2017	10	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	ND
B-11-3	12/12/2017	12/14/2017	10	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	**0.215**	<0.0183	<0.0183	**0.215**
B-12-3	12/14/2017	12/16/2017	10	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	**0.536**	<0.0182	<0.0182	**0.536**
B-13-3	12/12/2017	12/13/2017	10	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	**0.0704**	<0.0184	<0.0184	**0.0704**
B-14-3	12/14/2017	12/16/2017	10	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	**0.614**	<0.0189	<0.0189	**0.614**
B-15-3	12/14/2017	12/16/2017	10	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	ND
B-16-3	12/14/2017	12/15/2017	10	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	**0.0677**	<0.0194	<0.0194	**0.0677**
B-17-3	12/14/2017	12/15/2017	10	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	ND
B-18-3	12/13/2017	12/16/2017	10	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	**0.0525**	<0.0187	<0.0187	**0.0525**
B-19-3	12/13/2017	12/16/2017	10	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	**0.0432**	<0.0192	<0.0192	**0.0432**
B-21-3	12/12/2017	12/14/2017	10	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	**0.0265**	<0.0181	<0.0181	**0.0265**
B-22-3	12/13/2017	12/16/2017	10	<0.0177	<0.0177	<0.0177	<0.0177	<0.0177	<0.0177	<0.0177	<0.0177	<0.0177	ND
B-23-3	12/13/2017	12/15/2017	10	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	**0.0534**	<0.0192	<0.0192	**0.0534**
B-24-3	12/13/2017	12/15/2017	10	<0.0194	<0.0194	<0.0194	<0.0194	**0.267**	<0.0194	**0.159**	<0.0194	<0.0194	**0.426**
B-25-3	12/13/2017	12/15/2017	10	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	**0.0193**	<0.0179	<0.0179	**0.0193**
B-26-3	12/13/2017	12/15/2017	10	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	**0.0817**	<0.0186	<0.0186	**0.0817**
B-27-3	12/13/2017	12/18/2017	10	<18.9	<18.9	<18.9	<18.9	<18.9	<18.9	**356**	<18.9	<18.9	**356**
B-29-3	12/13/2017	12/15/2017	10	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	ND
B-32-3	12/13/2017	12/15/2017	10	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	ND
B-33-3	12/13/2017	12/18/2017	10	<0.0177	<0.0177	<0.0177	<0.0177	<0.0177	<0.0177	**0.326**	<0.0177	<0.0177	**0.326**
B-34-3	12/13/2017	12/18/2017	10	<0.0174	<0.0174	<0.0174	<0.0174	<0.0174	<0.0174	**0.884**	<0.0174	<0.0174	**0.884**
B-35-3	12/13/2017	12/19/2017	10	<0.931	<0.931	<0.931	<0.931	<0.931	<0.931	**14.6**	<0.931	<0.931	**14.6**
B-36-3	12/13/2017	12/18/2017	10	<0.907	<0.907	<0.907	<0.907	<0.907	<0.907	**20.6**	<0.907	<0.907	**20.6**
B-37-3	12/13/2017	12/18/2017	10	<0.385	<0.385	<0.385	<0.385	<0.385	<0.385	**13.2**	<0.385	<0.385	**13.2**
B-38-3	12/12/2017	12/14/2017	10	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	**0.0365**	<0.0181	<0.0181	**0.0365**
B-39-3	12/12/2017	12/14/2017	10	<.0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	**0.0334**	<0.0185	<0.0185	**0.0334**
B-40-3	12/12/2017	12/14/2017	10	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	ND

NOTES:
mg/kg = milligrams per kilogram
Bold value indicates analyte detected above laboratory method detection limit
<# = analyte not detected at concentrations greater than the Reporting Limit shown
* Soil Cleanup Objectives from VCP Site No. V00120 Decision Document, February 2011.

= exceeds VCP DD SCO - Subsurface (10 ppm)

Table 2D
Polychlorinated Biphenyls in Subsurface Soil (6 to 8 feet)
Brooklyn Navy Yard Industrial Park
Drum Storage Area C/Substation H

Sample ID	Sample Date	Date of Analysis	Subsurface VCP Decision Document* (mg/kg)	Polychlorinated Biphenyls (mg/kg)									Total PCBs
				Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Aroclor 1262	Aroclor 1268	
B-1-4	12/12/2017	12/14/2017	10	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	**0.0817**	<0.0185	<0.0185	**0.0817**
B-2-4	12/12/2017	12/14/2017	10	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	**0.0590**	<0.0183	<0.0183	**0.0590**
B-3-4	12/14/2017	12/16/2017	10	<0.0190	<0.0190	<0.0190	<0.0190	<0.0190	<0.0190	<0.0190	<0.0190	<0.0190	ND
B-4-4	12/14/2017	12/16/2017	10	<0.0303	<0.0303	<0.0303	<0.0303	<0.0303	<0.0303	<0.0303	<0.0303	<0.0303	ND
B-5-4	12/12/2017	12/14/2017	10	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	**0.0198**	<0.0192	<0.0192	**0.0198**
B-7-4	12/14/2017	12/16/2017	10	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	ND
B-9-4	12/14/2017	12/16/2017	10	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	ND
B-10-4	12/14/2017	12/15/2017	10	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	ND
B-11-4	12/12/2017	12/14/2017	10	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	ND
B-12-4	12/14/2017	12/16/2017	10	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	ND
B-13-4	12/12/2017	12/14/2017	10	<0.0197	<0.0197	<0.0197	<0.0197	<0.0197	<0.0197	**0.0424**	<0.0197	<0.0197	**0.0424**
B-14-4	12/14/2017	12/18/2017	10	<0.0943	<0.0943	<0.0943	<0.0943	<0.0943	<0.0943	**2.07**	<0.0943	<0.0943	**2.07**
B-15-4	12/14/2017	12/16/2017	10	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	ND
B-DUP-4		12/16/2017	10	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	**0.0868**	<0.0185	<0.0185	**0.0868**
B-16-4	12/14/2017	12/15/2017	10	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	**0.0600**	<0.0183	<0.0183	**0.0600**
B-17-4	12/14/2017	12/15/2017	10	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	**0.0419**	<0.0181	<0.0181	**0.0419**
B-18-4	12/13/2017	12/18/2017	10	<0.0973	<0.0973	<0.0973	<0.0973	<0.0973	<0.0973	**2.53**	<0.0973	<0.0973	**2.53**
B-19-4	12/13/2017	12/16/2017	10	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	ND
B-21-4	12/12/2017	12/14/2017	10	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	**0.0240**	**0.0536**	<0.0185	<0.0185	**0.0776**
B-22-4	12/13/2017	12/16/2017	10	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	ND
B-23-4	12/13/2017	12/15/2017	10	<0.0190	<0.0190	<0.0190	<0.0190	<0.0190	<0.0190	**0.211**	<0.0190	<0.0190	**0.211**
B-24-4	12/13/2017	12/15/2017	10	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	**0.0584**	<0.0180	<0.0180	**0.0584**
B-25-4	12/13/2017	12/15/2017	10	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	**0.296**	<0.0180	<0.0180	**0.296**
B-26-4	12/13/2017	12/18/2017	10	<0.0972	<0.0972	<0.0972	<0.0972	<0.0972	<0.0972	**1.96**	<0.0972	<0.0972	**1.96**
B-27-4	12/13/2017	12/18/2017	10	<38.0	<38.0	<38.0	<38.0	<38.0	<38.0	**978**	<38.0	<38.0	**978**
B-29-4	12/13/2017	12/15/2017	10	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	ND
B-32-4	12/13/2017	12/15/2017	10	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	ND
B-33-4	12/13/2017	12/18/2017	10	<0.0175	<0.0175	<0.0175	<0.0175	<0.0175	<0.0175	**0.129**	<0.0175	<0.0175	**0.129**
B-34-4	12/13/2017	12/18/2017	10	<0.177	<0.177	<0.177	<0.177	<0.177	<0.177	**1.61**	<0.177	<0.177	**1.61**
B-35-4	12/13/2017	12/18/2017	10	<0.185	<0.185	<0.185	<0.185	<0.185	<0.185	**3.02**	<0.185	<0.185	**3.02**
B-36-4	12/13/2017	12/16/2017	10	<0.185	<0.185	<0.185	<0.185	<0.185	<0.185	<0.185	<0.185	<0.185	ND
B-37-4	12/13/2017	12/18/2017	10	<18.5	<18.5	<18.5	<18.5	<18.5	<18.5	**525**	<18.5	<18.5	**525**
B-38-4	12/12/2017	12/14/2017	10	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	ND
B-39-4	12/12/2017	12/14/2017	10	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	ND
B-40-4	12/12/2017	12/14/2017	10	<0.0175	<0.0175	<0.0175	<0.0175	<0.0175	<0.0175	<0.0175	<0.0175	<0.0175	ND

NOTES:
mg/kg = milligrams per kilogram
Bold value indicates analyte detected above laboratory method detection limit
<# = analyte not detected at concentrations greater than the Reporting Limit shown
* Soil Cleanup Objectives from VCP Site No. V00120 Decision Document, February 2011.

= exceeds VCP DD SCO - Subsurface (10 ppm)

Table 2E
Polychlorinated Biphenyls in Subsurface Soil (Below 8 feet)
Brooklyn Navy Yard Industrial Park
Drum Storage Area C/Substation H

Sample ID	Sample Date	Date of Analysis	Subsurface VCP Decision Document* (mg/kg)	Polychlorinated Biphenyls (mg/kg)									Total PCBs
				Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Aroclor 1262	Aroclor 1268	
B-29-5	12/13/2017	12/15/2017	10	<0.0176	<0.0176	<0.0176	<0.0176	<0.0176	<0.0176	<0.0176	<0.0176	<0.0176	ND
B-29-6	12/13/2017	12/15/2017	10	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	**0.142**	<0.0179	<0.0179	**0.142**
B-37-5	12/13/2017	12/15/2017	10	<0.0199	<0.0199	<0.0199	<0.0199	<0.0199	<0.0199	**0.110**	<0.0199	<0.0199	**0.110**

NOTES:
mg/kg = milligrams per kilogram
Bold value indicates analyte detected above laboratory method detection limit
<# = analyte not detected at concentrations greater than the Reporting Limit shown
* Soil Cleanup Objectives from VCP Site No. V00120 Decision Document, February 2011.

= exceeds VCP DD SCO - Subsurface (10 ppm)

Table 2F
Polychlorinated Biphenyls in Subsurface Soil (Building 297 Sub-slab)
Brooklyn Navy Yard Industrial Park
Drum Storage Area C/Substation H

Sample ID	Sample Date	Date of Analysis	Subsurface VCP Decision Document* (mg/kg)	Polychlorinated Biphenyls (mg/kg)									Total PCBs
				Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Aroclor 1262	Aroclor 1268	
Sub Slab 1	12/21/2017	12/26/2017	10	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	ND
Sub Slab 2	12/21/2017	12/26/2017	10	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	ND
Sub Slab 3	12/21/2017	12/26/2017	10	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	**0.0897**	<0.0183	<0.0183	**0.0897**
Sub Slab 4	12/21/2017	12/26/2017	10	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	ND
Sub Slab 5	12/21/2017	12/26/2017	10	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	ND

NOTES:
mg/kg = milligrams per kilogram
Bold value indicates analyte detected above laboratory method detection limit
<# = analyte not detected at concentrations greater than the Reporting Limit shown
* Soil Cleanup Objectives from VCP Site No. V00120 Decision Document, February 2011.

= exceeds VCP DD SCO - Subsurface (10 ppm)

Table 3
Polychlorinated Biphenyls in Bulk Samples (Building 297)
Brooklyn Navy Yard Industrial Park
Drum Storage Area C/Substation H

Sample ID	Sample Depth (ft bgs)	Sample Date	Date of Analysis	VCP Decision Document* (mg/kg)	Polychlorinated Biphenyls (mg/kg)									Total PCBs
					Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Aroclor 1262	Aroclor 1268	
Bldg 297 - Slab 1	7 - 7.4	12/21/2017	1/3/2018	10	<0.350	<0.720	<0.350	<0.350	<0.350	<0.350	<0.350	<0.350	<0.350	ND
Bldg 297 - Slab 2	7 - 7.4	12/21/2017	1/3/2018	10	<0.036	<0.073	<0.036	<0.036	<0.036	<0.036	**0.050**	<0.036	<0.036	**0.050**
Bldg 297 - Slab 3	7 - 7.4	12/21/2017	1/3/2018	10	<0.036	<0.072	<0.036	<0.036	<0.036	<0.036	**0.170**	<0.036	<0.036	**0.170**
Bldg 297 - Slab 4	8 - 8.4	12/21/2017	1/3/2018	10	<0.350	<0.720	<0.350	<0.350	<0.350	<0.350	<0.350	<0.350	<0.350	ND
Bldg 297 - Slab 5	8 - 8.4	12/21/2017	1/3/2018	10	<0.350	<0.710	<0.350	<0.350	<0.350	<0.350	<0.350	<0.350	<0.350	ND
Bldg 297-6-1	1.5	2/1/2018	2/4/2018	10	<0.102	<0.102	<0.102	<0.102	<0.102	<0.102	**0.0852 J**	<0.102	<0.102	**0.0852**
Bldg 297-6-2	3.0	2/1/2018	2/4/2018	10	<0.0941	<0.0941	<0.0941	<0.0941	<0.0941	<0.0941	<0.0941	<0.0941	<0.0941	ND
Bldg 297-6-3	5.5	2/1/2018	2/4/2018	10	<0.103	<0.103	<0.103	<0.103	<0.103	<0.103	**0.0249 J**	<0.103	<0.103	**0.0249**
Bldg 297-6-4	7.0	2/1/2018	2/4/2018	10	<0.0933	<0.0933	<0.0933	<0.0933	<0.0933	<0.0933	<0.0933	<0.0933	<0.0933	ND
Bldg 297-7-1	1.0	2/1/2018	2/4/2018	10	<0.105	<0.105	<0.105	<0.105	<0.105	<0.105	**0.0605 J**	<0.105	<0.105	**0.0605**
Bldg 297-7-2	3.5	2/1/2018	2/4/2018	10	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109	**0.0794 J**	<0.109	<0.109	**0.0794**
Bldg 297-7-3	4.5	2/1/2018	2/4/2018	10	<0.0978	<0.0978	<0.0978	<0.0978	<0.0978	<0.0978	**0.0270 J**	<0.0978	<0.0978	**0.0270**
Bldg 297-7-4	6.5	2/1/2018	2/4/2018	10	<0.101	<0.101	<0.101	<0.101	<0.101	<0.101	**0.124**	<0.101	<0.101	**0.124**
Bldg 297-8-1	1.5	2/1/2018	2/4/2018	10	<0.110	<0.110	<0.110	<0.110	<0.110	<0.110	**0.0183 J**	<0.110	<0.110	**0.0183**
Bldg 297-8-2	2.5	2/1/2018	2/4/2018	10	<0.104	<0.104	<0.104	<0.104	<0.104	<0.104	**0.0435 J**	<0.104	<0.104	**0.0435**
Bldg 297-8-3	5.0	2/1/2018	2/4/2018	10	<0.101	<0.101	<0.101	<0.101	<0.101	<0.101	**0.0255 J**	<0.101	<0.101	**0.0255**
Bldg 297-8-4	6.5	2/1/2018	2/4/2018	10	<0.111	<0.111	<0.111	<0.111	<0.111	<0.111	**0.0319 J**	<0.111	<0.111	**0.0319**
Bldg 297-9-1	1.0	2/1/2018	2/4/2018	10	<0.108	<0.108	<0.108	<0.108	<0.108	<0.108	**0.0196 J**	<0.108	<0.108	**0.0196**
Bldg 297-9-2	3.0	2/1/2018	2/4/2018	10	<0.102	<0.102	<0.102	<0.102	<0.102	<0.102	**0.0231 J**	<0.102	<0.102	**0.0231**
Bldg 297-9-3	5.5	2/1/2018	2/4/2018	10	<0.0988	<0.0988	<0.0988	<0.0988	<0.0988	<0.0988	**0.256**	<0.0988	<0.0988	**0.256**
Bldg 297-9-4	7.0	2/1/2018	2/4/2018	10	<0.112	<0.112	<0.112	<0.112	<0.112	<0.112	**0.0486 J**	<0.112	<0.112	**0.0486**
Bldg 297-10-1	1.5	2/1/2018	2/4/2018	10	<0.0961	<0.0961	<0.0961	<0.0961	<0.0961	<0.0961	**0.190**	<0.0961	<0.0961	**0.190**
Bldg 297-10-2	2.5	2/1/2018	2/4/2018	10	<0.108	<0.108	<0.108	<0.108	<0.108	<0.108	**0.0456 J**	<0.108	<0.108	**0.0456**
Bldg 297-10-3	5.5	2/1/2018	2/4/2018	10	<0.111	<0.111	<0.111	<0.111	<0.111	<0.111	**0.0432 J**	<0.111	<0.111	**0.0432**
Bldg 297-10-4	7.0	2/1/2018	2/4/2018	10	<0.101	<0.101	<0.101	<0.101	<0.101	<0.101	**0.0307 J**	<0.101	<0.101	**0.0307**
Bldg 297-11-1	1.0	2/1/2018	2/5/2018	10	<0.107	<0.107	<0.107	<0.107	<0.107	<0.107	**0.0415 J**	<0.107	<0.107	**0.0415**
Bldg 297-11-2	3.5	2/1/2018	2/5/2018	10	<0.0972	<0.0972	<0.0972	<0.0972	<0.0972	<0.0972	<0.0972	<0.0972	<0.0972	ND
Bldg 297-11-3	5.0	2/1/2018	2/5/2018	10	<0.105	<0.105	<0.105	<0.105	<0.105	<0.105	**0.103 J**	<0.105	<0.105	**0.103**
Bldg 297-11-4	6.0	2/1/2018	2/5/2018	10	<0.0956	<0.0956	<0.0956	<0.0956	<0.0956	<0.0956	**0.143**	<0.0956	<0.0956	**0.143**
Bldg 297-12-1	1.0	2/1/2018	2/5/2018	10	<0.117	<0.117	<0.117	<0.117	<0.117	<0.117	**0.0768 J**	<0.117	<0.117	**0.0768**
Bldg 297-12-2	2.5	2/1/2018	2/5/2018	10	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109	**0.0917 J**	<0.109	<0.109	**0.0917**
Bldg 297-12-3	4.0	2/1/2018	2/5/2018	10	<0.107	<0.107	<0.107	<0.107	<0.107	<0.107	**0.0337 J**	<0.107	<0.107	**0.0337**
Bldg 297-12-4	6.5	2/1/2018	2/5/2018	10	<0.107	<0.107	<0.107	<0.107	<0.107	<0.107	**0.0495 J**	<0.107	<0.107	**0.0495**
Bldg 297-13-1	1.5	2/1/2018	2/5/2018	10	<0.104	<0.104	<0.104	**0.260**	<0.104	<0.104	**0.109**	<0.104	<0.104	**0.369**
Bldg 297-13-2	3.0	2/1/2018	2/5/2018	10	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	**0.0540 J**	<0.100	<0.100	**0.0540**
Bldg 297-13-3	5.0	2/1/2018	2/5/2018	10	<0.108	<0.108	<0.108	<0.108	<0.108	<0.108	<0.108	<0.108	<0.108	ND
Bldg 297-13-4	6.0	2/1/2018	2/5/2018	10	<0.105	<0.105	<0.105	<0.105	<0.105	<0.105	**0.666 J**	<0.105	<0.105	**0.666**
Bldg 297-14-1	1.0	2/1/2018	2/5/2018	10	<0.111	<0.111	<0.111	<0.111	<0.111	<0.111	**0.541**	<0.111	<0.111	**0.541**
Bldg 297-14-2	2.0	2/1/2018	2/5/2018	10	<0.0955	<0.0955	<0.0955	<0.0955	<0.0955	<0.0955	**0.206**	<0.0955	<0.0955	**0.206**
Bldg 297-14-3	4.5	2/1/2018	2/5/2018	10	<0.104	<0.104	<0.104	<0.104	<0.104	<0.104	**0.134**	<0.104	<0.104	**0.134**
Bldg 297-14-4	6.5	2/1/2018	2/6/2018	10	<1.110	<1.110	<1.110	<1.110	<1.110	<1.110	**6.020**	<1.110	<1.110	**6.020**
Bldg 297-15-1	1.5	2/1/2018	2/5/2018	10	<0.0981	<0.0981	<0.0981	<0.0981	<0.0981	<0.0981	**0.139**	<0.0981	<0.0981	**0.139**
Bldg 297-15-2	3.0	2/1/2018	2/5/2018	10	<0.109	<0.109	<0.109	<0.109	<0.109	<0.109	**0.158**	<0.109	<0.109	**0.158**
Bldg 297-15-3	5.0	2/1/2018	2/5/2018	10	<0.0978	<0.0978	<0.0978	<0.0978	<0.0978	<0.0978	**0.0463 J**	<0.0978	<0.0978	**0.0463**
Bldg 297-15-4	6.5	2/1/2018	2/5/2018	10	<0.111	<0.111	<0.111	<0.111	<0.111	<0.111	**0.0534 J**	<0.111	<0.111	**0.0534**

NOTES:
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<# = analyte not detected at concentrations greater than the Reporting Limit shown
J = estimated value
* Soil Cleanup Objectives from VCP Site No. V00120 Decision Document, February 2011.

= exceeds VCP DD SCO - Subsurface (10 ppm)