



G. C. ENVIRONMENTAL, INC.

CONSULTANTS CONTRACTORS

BUSH TERMINAL UNITS 39/40 & 45
BROOKLYN, NEW YORK

Remedial Action Work Plan

NYC VCP Number: 14CVCP244K

Prepared for:

Tully Environmental, Inc
127-50 Northern Boulevard, Flushing, NY 11368
718-446-7000

Prepared by:

G C Environmental, Inc
22 Oak Street, Bay Shore, NY 11706
631-206-3700

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REMEDIAL ACTION WORK PLAN

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LIST OF ACRONYMS

Acronym	Definition
AOC	Area of Concern
AS/SVE	Air Sparging/Soil Vapor Extraction
BOA	Brownfield Opportunity Area
CAMP	Community Air Monitoring Plan
C/D	Construction/Demolition
COC	Certificate of Completion
CQAP	Construction Quality Assurance Plan
CSOP	Contractors Site Operation Plan
ECs/ICs	Engineering and Institutional Controls
HASP	Health and Safety Plan
IRM	Interim Remedial Measure
BCA	Brownfield Cleanup Agreement
MNA	Monitored Natural Attenuation
NYC VCP	New York City Voluntary Cleanup Program
NYC BCP	New York City Brownfield Cleanup Program
NYC DEP	New York City Department of Environmental Protection
NYC DOHMH	New York State Department of Health and Mental Hygiene
NYCRR	New York Codes Rules and Regulations
NYC OER	New York City Office of Environmental Remediation
NYS DEC	New York State Department of Environmental Conservation
NYS DEC DER	New York State Department of Environmental Conservation Division of Environmental Remediation
NYS DOH	New York State Department of Health
NYS DOT	New York State Department of Transportation
ORC	Oxygen-Release Compound
OSHA	United States Occupational Health and Safety Administration

PE	Professional Engineer
PID	Photo Ionization Detector
QEP	Qualified Environmental Professional
QHHEA	Qualitative Human Health Exposure Assessment
RAOs	Remedial Action Objectives
RAR	Remedial Action Report
RAWP	Remedial Action Work Plan or Plan
RCA	Recycled Concrete Aggregate
RD	Remedial Design
RI	Remedial Investigation
RMZ	Residual Management Zone
SCOs	Soil Cleanup Objectives
SCG	Standards, Criteria and Guidance
SMP	Site Management Plan
SPDES	State Pollutant Discharge Elimination System
SVOC	Semi-Volatile Organic Compound
USGS	United States Geological Survey
UST	Underground Storage Tank
VOC	Volatile Organic Compound



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CONSULTANTS CONTRACTORS

CERTIFICATION

I, Dean Devoe, am a Professional Engineer licensed in the State of New York. I have primary direct responsibility for implementation of the remedial action for the Bush Terminal Former Units 39/40 and 45, Site number

I certify that this Remedial Action Work Plan (RAWP) has a plan for handling, transport and disposal of soil, fill, fluids and other materials removed from the property in accordance with applicable City, State and Federal laws and regulations. Importation of all soil, fill and other material from off-Site will be in accordance with all applicable City, State and Federal laws and requirements. This RAWP has provisions to control nuisances during the remediation and all invasive work, including dust and odor suppression.

Dean Devoe

Name

072513

NYS PE License Number

Signature

Date



EXECUTIVE SUMMARY

Tully Environmental, Inc has applied to enroll in the New York City Voluntary Cleanup Program (NYC VCP) to investigate and remediate a 123,648 square feet site located at Bush Terminal Units 39/40 & 45, Brooklyn, New York (the “Site”). A remedial investigation (RI) was performed to compile and evaluate data and information necessary to develop this Remedial Action Work Plan (RAWP). The remedial action described in this document provides for the protection of public health and the environment consistent with the intended property use, complies with applicable environmental standards, criteria and guidance and conforms to applicable laws and regulations.

Site Location and Current Usage

The Site location consists of an approximately 2.84-acre urban parcel of land identified as New York City Tax Block 725, Lot 1 in Brooklyn, New York. The Site is bounded by 51st Street to the approximate south, First Avenue to the approximate east, 43rd Street to the approximate north, and Piers 3, 4 and 5 and the New York Bay to the approximate west. Located north of and adjoining the Site is the Bush Terminal Pump House Building. The New York Cross Harbor Railroad yard adjoins the Site to the east; located south of and adjoining the Site is Building G, Piers 3, 4 and 5; and New York Bay adjoins the Site to the west.

Figure 1 shows the Site location. A map of the site boundary is shown in Figure 2. Currently, the Site is used for mixed commercial and industrial uses. Unit 39 is utilized for general storage. Unit 40 is utilized as warehouse and shop for a general contracting operation. Unit 45 is split between two tenants, referred to herein as the northerly and southerly tenant. The northerly tenant utilizes the space for warehousing and fabrication of furniture. The southerly tenant utilizes its space for wholesale shipping and receiving of beverages. An open area to the north of Unit 45 is occupied by a general contracting firm, and keeps several sheds, trailers and heavy equipment within his space. The paved parking area to the south of Unit 39/40 is used by a trucking and shipping company, storing shipping containers as well as tractor units and mixed vans/box trucks, which uses the space as a transit node and parking site.

Summary of Proposed Redevelopment Plan

The proposed future use of the Site will consist of three (3) proposed, slab on grade buildings totaling 30,800 square feet, with ancillary tractor trailer parking of approximately 10,000 square feet and straight truck parking of approximately 11,600 square feet, along with employee and visitor parking of approximately 40,000 square feet and the rest is open space. Layout of the proposed site development is presented in Proposed Site Plan, Figure 2. The current zoning designation is M3-1 (M3 Heavy Manufacturing District) and the proposed use is for a grease recycling facility. The proposed use is consistent with existing zoning for the property.

No uses are proposed below grade. A total of 63 automobile parking spaces are proposed. Existing buildings onsite will be removed prior to construction of new facilities. While zoning would allow for 247,294 square feet or a 2.0 Floor Area Ratio (FAR), the proposed building of 30,800 square feet achieves an FAR of 0.25. No excavation is anticipated below the groundwater table. Demolition activities will consist of the two (2) existing buildings, designated Building 39/40 and Building 45.

Summary of the Remedy

The proposed remedial action achieves protection of public health and the environment for the intended use of the property. The proposed remedial action achieves all of the remedial action objectives established for the project and addresses applicable standards, criterion, and guidance; is effective in both the short-term and long-term and reduces mobility, toxicity and volume of contaminants; is cost effective and implementable; and uses standards methods that are well established in the industry.

The proposed remedial action will consist of:

1. Preparation of a Community Protection Statement and performance of all required NYC VCP Citizen Participation activities according to an approved Citizen Participation Plan;
2. Performance of a Community Air Monitoring Program for particulates and volatile organic carbon compounds during excavation and earth moving activities;
3. Establishment of Track 2 Restricted Residential Use Soil Cleanup Objectives (SCOs);

4. Site mobilization involving Site security setup, equipment mobilization, utility mark outs and marking & staking excavation areas;
5. Excavation and removal of soil/fill for development purposes. The perimeter foundation of the buildings will be excavated to a depth of approximately 6 feet below grade for development purposes. Approximately 2,250 tons of soil will be excavated and removed from this Site;
6. Screening of excavated soil/fill during intrusive work for indications of contamination by visual means, odor, and monitoring with a PID. Appropriate segregation of excavated media on-Site;
7. Removal of underground storage tanks (if encountered) and closure of petroleum spills (if evidence of a spill/leak is encountered during Site excavation) in compliance with applicable local, State and Federal laws and regulations;
8. Transportation and off-Site disposal of all soil/fill material at permitted facilities in accordance with applicable laws and regulations for handling, transport, and disposal, and this plan. Sampling and analysis of excavated media as required by disposal facilities;
9. Collection and analysis of post excavation end-point samples to determine the performance of the remedy with respect to attainment of SCOs;
10. Import of materials to be used for backfill and cover in compliance with this plan and in accordance with applicable laws and regulations;
11. Installation of a vapor barrier/waterproofing system below the concrete slab underneath the three building, as well as behind foundation walls of the proposed building;
12. Installation of an active sub-slab depressurization system below the slab underneath the new proposed two story metal framed/cmu faced (office) building to address issues associated with potential contaminated vapors. The process and repair shop buildings would be constructed with vapor barriers;
13. Construction and maintenance of an engineered composite cover consisting of 6" thick concrete slab across the footprint of the three new buildings, concrete/asphalt parking lots and at least two feet of clean soil in landscaped areas;
14. Performance of all activities required for the remedial action, including permitting requirements and pretreatment requirements, in compliance with applicable laws and

- regulations;
15. Implementation of storm-water pollution prevention measures in compliance with applicable laws and regulations;
 16. Recording of a Declaration of Covenants and Restrictions that includes a full listing of Engineering Controls and Institutional Controls and notice that these controls must be maintained within a Site Management Plan to prevent future exposure to any residual contamination remaining at the Site;
 17. Submission of an approved Site Management Plan (SMP) in the RAR for long-term management of residual contamination, including plans for operation, maintenance, monitoring, inspection and certification of Engineering and Institutional Controls and reporting at a specified frequency; and
 18. Establishment in a recorded Declaration of Covenants and Restrictions, a series of Engineering Controls and Institutional Controls; a requirement that management of these controls must be in compliance with an approved SMP and recorded Declaration of Covenants and Restrictions. Institutional Controls will include prohibition of the following: (1) vegetable gardening and farming; (2) use of groundwater without treatment rendering it safe for the intended use; (3) disturbance of any residual contaminated material unless it is conducted in accordance with the SMP; and (4) more restrictive land usage without OER-approval.
 19. Submission of a Remedial Action Report (RAR) that describes the remedial activities, certifies that the remedial requirements have been achieved, defines the Site boundaries, and, describes all Engineering and Institutional Controls to be implemented at the Site, and lists any changes from this RAWP.

Community Protection Statement

The Office of Environmental Remediation created the New York City Voluntary Cleanup Program (NYC VCP) to provide governmental oversight for the cleanup of contaminated property in NYC. This Remedial Action Work Plan (“cleanup plan”) describes the findings of prior environmental studies that show the location of contamination at the site, and describes the plans to clean up the site to protect public health and the environment.

This cleanup plan provides a very high level of protection for neighboring communities and also includes other elements that address common community concerns, such as community air monitoring, odor, dust and noise controls, hours of operation, good housekeeping and cleanliness and truck management and routing and opportunities for community participation. The purpose of this Community Protection Statement is to explain these community protection measures in non-technical language to simplify community review.

Remedial Investigation and Cleanup Plan. Under the NYC VCP, a thorough cleanup study of this property (called a remedial investigation) has been performed to identify past property usage, to sample and test soils, groundwater and soil vapor, and identify contaminant sources present on the property. The cleanup plan has been designed to address all contaminant sources that have been identified during the study of this property.

Identification of Sensitive Land Uses. Prior to selecting a cleanup, the neighborhood was evaluated to identify sensitive land uses nearby, such as schools, day care facilities, hospitals and residential areas. No such sensitive uses were identified in this industrial park. The cleanup program was then tailored to address the special conditions of this community.

Qualitative Human Health Exposure Assessment. An important part of the cleanup planning for the Site is the performance of a study to find all of the ways that people might come in contact with contaminants at the Site now or in the future. This study is called a Qualitative Human Health Exposure Assessment (QHHEA). A QHHEA was performed for this project. This assessment has considered all known contamination at the Site and evaluated the potential for people to come in contact with this contamination. All identified public exposures will be addressed under this cleanup plan.

Health and Safety Plan. This cleanup plan includes a Construction Health and Safety Plan (CHASP) that is designed to protect community residents and on-Site workers. The elements of this plan are in compliance with safety requirements of the United States Occupational Safety and Health Administration (OSHA). This plan includes many protective elements including those discussed below.

Site Safety Coordinator. This project has a designated Site safety coordinator to implement the Health and Safety Plan. The safety coordinator maintains an emergency contact sheet and protocol for management of emergencies. The Site safety coordinator is Mr. William Ryan and can be reached at 718-446-7000.

Worker Training. Workers participating in cleanup of any contaminated material on this project are required to be trained in a 40-hour hazardous waste operators training course and to take annual refresher training. This pertains only to workers performing specific tasks including removing hazardous material and installing cleanup systems in contaminated areas.

Community Air Monitoring Plan. Community air monitoring will be performed during this cleanup project to ensure that the community is properly protected from contaminants, dust and odors. Air samples will be tested in accordance with a detailed plan called the Community Air Monitoring Plan (CAMP). Results will be regularly reported to the NYC OER. This cleanup plan also has a plan to address any unforeseen problems that might occur during the cleanup (called a 'Contingency Plan').

Odor, Dust and Noise Control. This cleanup plan includes actions for odor and dust control. These actions are designed to prevent off-Site odor and dust nuisances and includes steps to be taken if nuisances are detected. Generally, dust is managed by application of physical covers and by water sprays. Odors are controlled by limiting the area of open excavations, physical covers, spray foams and by a series of other actions (called operational measures). The project is also required to comply with NYC noise control standards. Any such problems are to be reported to the onsite Project Manager Mr. Ravi Kumar Kolaventi at 347-418-5843 or NYC Office of Environmental Remediation Project Manager Rebecca Bub at 212-341-2073.

Quality Assurance. This cleanup plan requires that evidence be provided to illustrate that all cleanup work required under the plan has been completed properly. This evidence will be

summarized in the final report, called the Remedial Action Report. This report will be submitted to the NYC Office of Environmental Remediation and will be thoroughly reviewed.

Storm-Water Management. To limit the potential for soil erosion and discharge, this cleanup plan has provisions for storm-water management. The main elements of the storm water management include physical barriers such as tarp covers and erosion fencing, and a program for frequent inspection.

Hours of Operation. The hours for operation of cleanup will comply with the NYC Department of Buildings construction code requirements or according to specific variances issued by that agency. For this cleanup project, the hours of operation are 7:00 a.m. to 6:00 p.m. Monday through Friday.

Signage. While the cleanup is in progress, a placard will be prominently posted at the main entrance of the property with a laminated project Fact Sheet that states that the project is in the NYC Voluntary Cleanup Program, provides project contact names and numbers, and locations of project documents can be viewed.

Complaint Management. The contractor performing this cleanup is required to address all complaints. Complaints are to be submitted to the Project Manager Mr. Ravi Kumar Kolaventi at 347-418-5843, the NYC Office of Environmental Remediation Project Manager Miss Rebecca Bub at 212-341-2073, or call 311 and indicate that the Site is in the NYC Voluntary Cleanup Program.

Utility Mark-outs. To promote safety during excavation in this cleanup, the contractor is required to first identify all utilities and must perform all excavation and construction work in compliance with NYC Department of Buildings regulations.

Soil and Liquid Disposal. All soil and liquid material removed from the Site as part of the cleanup will be transported and disposed of in accordance with all applicable City, State and Federal regulations and required permits will be obtained.

Soil Chemical Testing and Screening. All excavations will be supervised by a trained and properly qualified environmental professional. In addition to sampling and chemical testing of soils on the Site, excavated soil will be screened continuously using hand-held instruments, by

sight, and by smell to ensure proper material handling and management, and community protection.

Stockpile Management. Soil stockpiles will be kept covered with tarps to prevent dust, odors and erosion. Stockpiles will be frequently inspected. Damaged tarp covers will be promptly replaced. Stockpiles will be protected with silt fences. Hay bales will be used, as needed to protect storm water catch basins and other discharge points.

Trucks and Covers. Loaded trucks leaving the Site will be covered in compliance with applicable laws and regulations to prevent dust and odor. Trucks will be properly recorded in logs and records and placarded in compliance with applicable City, State and Federal laws, including those of the New York State Department of Transportation. If loads contain wet material that can leak, truck liners will be used. All transport of materials will be performed by licensed truckers and in compliance with all laws and regulations.

Imported Material. All fill materials proposed to be brought onto the Site will comply with rules outlined in this cleanup plan and will be inspected and approved by a qualified worker located on-Site. Waste materials will not be brought onto the Site. Trucks entering the Site with imported clean materials will be covered in compliance with applicable laws and regulations.

Equipment Decontamination. All equipment used for cleanup work will be inspected and washed, if needed, before it leaves the Site. Trucks will be cleaned at a truck inspection station on the property before leaving the Site.

Housekeeping. Locations where trucks enter or leave the Site will be inspected every day and cleaned regularly to ensure that they are free of dirt and other materials from the Site.

Truck Routing. Truck routes have been selected to: (a) limit transport through residential areas and past sensitive nearby properties; (b) maximize use of city-mapped truck routes; (c) limit total distance to major highways; (d) promote safety in entry to highways; (e) promote overall safety in trucking; and (f) minimize off-Site line-ups (queuing) of trucks entering the property. Operators of loaded trucks leaving the Site will be instructed not to stop or idle in the local neighborhood.

Final Report. The results of all cleanup work will be fully documented in a final report (called a Remedial Action Report) that will be available for review in the document repositories on OER's website.

Long-Term Site Management. To provide long-term protection after the cleanup is complete, the property owner will be required to comply with an ongoing Site Management Plan that calls for continued inspection of protective controls, such as Site covers. The Site Management Plan is evaluated and approved by the NYC Office of Environmental Remediation. Requirements that the property owner must comply with will be defined in the property's deed. A certification of continued protectiveness of the cleanup will be required from time to time to show that the approved cleanup is still effective.

REMEDIAL ACTION WORK PLAN

1.0 SITE BACKGROUND

Tully Environmental, Inc has enrolled in the New York City Voluntary Cleanup Program (NYC VCP) to investigate and remediate a property located at Bush Terminal Units 39/40 & 45, Brooklyn, New York (the “Site”). A Remedial Investigation (RI) was performed to compile and evaluate data and information necessary to develop this Remedial Action Work Plan (RAWP) in a manner that will render the Site protective of public health and the environment consistent with the contemplated end use. This RAWP establishes remedial action objectives, provides remedial alternatives analysis that includes consideration of a permanent cleanup, and provides a description of the selected remedial action. The remedial action described in this document provides for the protection of public health and the environment, complies with applicable environmental standards, criteria and guidance and applicable laws and regulations.

1.1 Site Location and Current usage

The Site location consists of an approximately 2.84-acre urban parcel of land identified as New York City Tax Block 725, Lot 1 in Brooklyn, New York. The Site is bounded by 51st Street to the approximate south, First Avenue to the approximate east, 43rd Street to the approximate north, and Piers 3, 4 and 5 and the New York Bay to the approximate west. Located north of and adjoining the Site is the Bush Terminal Pump House Building. The New York Cross Harbor Railroad yard adjoins the Site to the east; located south of and adjoining the Site is Building G, Piers 3, 4 and 5; and New York Bay adjoins the Site to the west.

Figure 1 shows the Site location. The Site consists of 123,648 square feet and is bounded by asphalt paved service areas and brick shed feature to the north, service access roads to the south, a service road and abandoned RR tracks to the east, and a service road fronting the Hudson River to the west. A map of the site boundary is shown in Figure 2. Currently, the Site is used for mixed commercial and industrial uses. Unit 39 is utilized for general storage. Unit 40 is utilized as warehouse and shop for a general contracting operation. Unit 45 is split between two tenants, referred to herein as the northerly and southerly tenant. The northerly tenant utilizes the space for warehousing and fabrication of furniture. The southerly tenant utilizes its space for

wholesale shipping and receiving of beverages. An open area to the north of Unit 45 is occupied by a general contracting firm, and keeps several sheds, trailers and heavy equipment within his space. The paved parking area to the south of Unit 39/40 is used by a trucking and shipping company, storing shipping containers as well as tractor units and mixed vans/box trucks, which uses the space as a transit node and parking site.

All of the leasehold lies within, and is a part of, Lot 1 Block 725 of the tax maps of the Borough of Brooklyn, Kings County, City and State of New York. The City of New York owns the Site, the New York City Economic Development Corporation (EDC) manages the property and Turner Construction, under contract to the EDC, manages the facility. Currently, the Site is used as and contains the following:

- BTU 39 Building - Two-story, brick, concrete slab-on-grade warehouse building with an electrical room and warehouse for storing EDC chemicals, construction materials, equipment, supplies, tools, and vehicles. The building has a loading dock abutting the eastern side;
- BTU 40 Building - Two-story, brick, concrete slab-on-grade warehouse building for storing / warehousing construction equipment and materials and offices. The building has a loading dock abutting the eastern and southern sides;
- BTU 39 and 40 Lot - Asphalt-paved and concrete-covered lot for parking of automobiles / vehicles and trucks. A loading dock is located in the northeastern portion of the lot;
- BTU 45 Storage Yard - Asphalt-paved and concrete- and gravel-covered lot for storing equipment, supplies, tools, and vehicles;
- BTU 45 Northern Portion of Building - One-story, brick, concrete slab-on-grade warehouse building with an electrical room and warehouse for storing / warehousing of mattresses. The building has a loading dock abutting the eastern side;
- BTU 45 Southern Portion of Building - One-story, concrete warehouse building for storing / warehousing of beverages and equipment and consists of an electrical room, office, reception area / room, rest room, storage room, sump pump room, and warehouse. The building has a loading dock abutting the eastern side; and
- BTU 45 Lot - Asphalt-paved and concrete-covered lot for parking of automobiles / vehicles and trucks.

1.2 Proposed Redevelopment Plan

The proposed future use of the Site will consist of three (3) proposed, slab on grade, buildings totaling 30,800 square feet, with ancillary tractor trailer parking of approximately 10,000 square feet and straight truck parking of approximately 11,600 square feet, along with employee and visitor parking of approximately 40,000 square feet and the rest is open space. Layout of the proposed site development is presented in Proposed Site Plan, Figure 3. The current zoning designation is M3-1 (M3 Heavy Manufacturing District) and the proposed use is for a grease recycling facility. The proposed use is consistent with existing zoning for the property.

No uses are proposed below grade. A total of 63 automobile parking spaces are proposed. Existing buildings onsite will be removed prior to construction of new facilities. While zoning would allow for 247,294 square feet or a 2.0 Floor Area Ratio (FAR), the proposed building of 30,800 square feet achieves an FAR of 0.25. No excavation is anticipated below the groundwater table. Demolition activities will consist of the two (2) existing buildings, designated Building 39/40 and Building 45.

The remedial action contemplated under this RAWP may be implemented independently of the proposed redevelopment plan.

1.3 Description of Surrounding Property

Adjoining properties and usage consist of mixed commercial/industrial facilities. Examination of www.nyc.gov/speed shows no nearby sensitive receptors such as schools, hospitals, or day care facilities within a 250 to 500-foot radius. Figure 4 - Topographic Map shows the site and surrounding land usage.

According to the Topographic Map of Jersey City, US Geological Survey (USGS) which includes the site, dated 1981, the property elevation in immediate proximity is approximately 6 feet above mean sea level. Topographically, the area's gradient is towards the north-northwesterly direction. The topography in the vicinity of the property slopes moderately to the northwest. According to the Flood Insurance Rate Map for New York City, New York,

Community Panel No. 3604970194F, the Site is mapped within the base flood elevations. Figure 2 shows the surrounding land usage.

1.4 Remedial Investigation

A remedial investigation was performed and the results are documented in a companion document called “*Remedial Investigation Report, Bush Terminal Units 39/40 & 45*”, dated November, 2013 (RIR).

The Site was historically used for industrial/commercial purposes. Buildings 39, 40 and 45 were used as warehouses from at least 1906. Part of Building 45 was used as a garage from at least 1951 through 2007. The 1888 sanborns map show that buildings 39 and 40 are vacant and building 45 area is identified with some small dwellings and shed. The 1906 - 1951 maps show the Site as occupied with warehouse buildings. The 1965 map shows part of building 45 was constructed and occupied by a garage. The 1978 through 2011 maps show the Site with existing buildings. The 1924, 1943 and 1954 aerial photographs show the Site as used for warehouses. The 1966 aerial photograph show the existing Buildings 39, 40 and part of Building 45. The 1966 to 2011 aerial photographs show the existing buildings.

In summary, the following Areas of Concern (AOCs) were identified during completion of the Phase I Environmental Site Assessment (ESA) dated November 2013.

1. The impact from adjacent site located northeast of the Site (REC 1). The site is identified as Bush Terminal Landfill Piers 1-4, 47th to 52nd Street and 1st Avenue to Gowanus Bay. This site includes approximately 14 acres of urban land that was created by landfilling between four piers that were part of former Bush Terminal warehouse complex.
2. Impact from NYSDEC Spill Nos. 1306669, 1306670 and 0102496 issued for the Site (RECs 2, 3 & 4)
3. Impact via interior floor drains and oil water separator classified as Class V Injection wells for the Site (REC 5)
4. Impact associated with historical monitoring wells present onsite (REC 6)

5. Impact from potential suspect Underground Storage Tank (UST) present onsite (REC 7)
6. Impact from historical usages of the Site (REC 8)
7. Impact from historical usages from surrounding properties (REC 9)
8. The presence of ACM and LBP at the property (RECs 10 & 11)

The Phase I report was prepared by G. C. Environmental, Inc for Tully Environmental, Inc, dated November 2013. This Phase I indentified eleven (11) recognized environmental conditions (RECs) which were considered as Areas of Concerns.

Summary of Work Performed Under the Remedial Investigation

The proposed site Lessee retained GCE to perform the following scope of work for this Remedial Investigation Report:

1. Conducted a Site inspection to identify AOCs and physical obstructions (i.e. structures, buildings, etc.);
2. Performed Ground Penetrating Radar (GPR) investigation throughout the site to clear locations for proposed borings and identify suspect subsurface features. Prepared mapping of same.
3. Advanced nineteen (19) soil borings across the entire project Site, 18 of which were utilized for sample collection, and one strictly exploratory to determine presence or absence of underground structures. GCE collected thirty-nine (39) soil samples for chemical analysis from the soil borings, to evaluate soil quality (inclusive of two (2) samples from each of seventeen (17) borings, one (1) grab sample, and four (4) duplicate samples);
4. Advanced nine (9) temporary groundwater monitoring wells throughout the Site, and collected ten (10) groundwater samples (includes one (1) duplicate sample) for chemical analysis to evaluate groundwater quality;

5. Installed seven (7) soil vapor probes throughout the Site, and collected eight (8) samples (inclusive of four (4) soil vapor, three (3) sub-slab and one (1) outdoor air samples) for chemical analysis.

Summary of Environmental Findings

The following is to summarize the findings of this Remedial Investigation Report (RIR) regarding hydrogeology and the nature and extent of contamination at the Site.

1. Elevation of the property ranges from 6 feet to 10 feet above mean sea level based on topographic maps of the site (refer to USGS Topo Map in Figure 1).
2. Depth to groundwater ranges from 6 to 10 feet at the Site based on borings and soil logs.
3. Groundwater flow is generally to the west / northwest on the Site, based on the USGS Potentiometric Water Table on Long Island New York, March-April 1984, regional groundwater flow direction in the area of the Site, and confirmed in EDR report of 2013.
4. Depth to bedrock is unknown at the Site.
5. Soil samples collected during remedial investigation were compared to the 6NYCRR Part 375-6.8 Track 1 (Unrestricted Use SCOs) and Track 2 (Restricted Residential Use SCOs). Soil/fill samples indicated no VOCs, SVOCs, pesticides or PCBs detected above Track 1 Unrestricted Use SCOs. Three metals including lead (max. of 109 ppm), mercury (max. of 0.44 ppm), and zinc (max. of 125 ppm) exceeded Unrestricted Use SCOs. However, none of the soil samples exceeded Track 2 Restricted Residential Use or Restricted Industrial Use SCOs for VOCs, SVOCs, PCBs/pesticides or metals. Overall, soil chemistry does not indicate any historic fill or levels of contamination that would present a concern..
6. Groundwater samples collected during the RI showed no VOCs, or PCBs above New York State 6NYCRR Part 703.5 Groundwater Quality Standards (GQS). Five SVOCs including, Benz(a)anthracene (max of 0.11 ug/L), Benzo(b)fluoranthene (max of 0.08 ug/L), Benzo(k)fluoranthene(max of 0.03 ug/L), Chrysene (max of 0.09 ug/L), and Indeno(1,2,3-cd)pyrene (0.03 ug/L) were detected above the GQS. Six metals including aluminum (max of 9.72 mg/L), antimony (0.045 mg/L), iron (9.58 mg/L), magnesium

(35.6 mg/L), manganese (7.7 mg/L) and sodium (max of 279 ug/L) were detected sample above GQS. The pesticide Dieldrin (0.006 ug/L) also exceeded GQS in one sample.

7. Soil vapor samples collected during the RI showed moderate levels of petroleum related and chlorinated VOCs. Chlorinated VOCs including tetrachloroethene (PCE) was detected in two soil vapor samples at a maximum concentration of 350 $\mu\text{g}/\text{m}^3$. Trichloroethene (TCE) was detected in two soil vapor samples at a maximum concentration of 607 $\mu\text{g}/\text{m}^3$. The PCE and TCE concentrations are above the monitoring level ranges established within the State DOH soil vapor guidance matrix.

The three spills were addressed as part of a RIR/Phase II investigation performed by GCE. Two spills are being addressed by EDC. Disposal documentation enclosed in Appendices has been submitted to NYSDEC to close Spill file 1306669. The other spills 1306670 is closed since 09/30/13 and 0102496 is closed since 09/13/13. Removal of underground storage tanks (if encountered) and closure of petroleum spills (if evidence of a spill/leak is encountered during Site excavation) in compliance with applicable local, State and Federal laws and regulations is recommended.

For more detailed results, consult the RIR. Based on an evaluation of the data and information from the RIR and this RAWP, disposal of hazardous waste is not anticipated at this site.

2.0 REMEDIAL ACTION OBJECTIVES

Based on the results of the RI, the following Remedial Action Objectives (RAOs) have been identified for this Site:

Groundwater

- Prevent direct exposure to contaminated groundwater.
- Prevent exposure to contaminants volatilizing from contaminated groundwater.

Soil

- Prevent direct contact with contaminated soil.
- Prevent exposure to contaminants volatilizing from soil.
- Prevent migration of contaminants that would result in groundwater or surface water contamination.

Soil Vapor

- Prevent exposure to contaminants in soil vapor.
- Prevent migration of soil vapor into dwelling and other occupied structures.

3.0 REMEDIAL ALTERNATIVES ANALYSIS

The goal of the remedy selection process below is to select a remedy that is protective of human health and the environment taking into consideration the current, intended and reasonably anticipated future use of the property. The remedy selection process begins by establishing RAOs for media in which chemical constituents were found in exceedance of applicable standards, criteria and guidance values (SCGs). A remedy is then developed based on the following ten criteria:

- Protection of human health and the environment;
- Compliance with SCGs;
- Short-term effectiveness and impacts;
- Long-term effectiveness and permanence;
- Reduction of toxicity, mobility, or volume of contaminated material;
- Implementability;
- Cost effectiveness;
- Community Acceptance;
- Land use; and
- Sustainability.

The following is a detailed description of the alternatives analysis and remedy selection to address impacted media at the Site. As required, a minimum of two remedial alternatives are evaluated, as follows:

Alternative 1 involves:

- Establishment of Unrestricted Use (Track 1) Soil Cleanup Objectives (SCOs).
- Removal of all soil/fill exceeding Unrestricted Use SCOs throughout the Site and confirmation that Track 1 Unrestricted Use SCOs has been achieved with post-excavation endpoint sampling.

- No Engineering or Institutional Controls are required for a Track 1 cleanup, but a vapor barrier would be installed beneath the foundation and behind foundation sidewalls of the new building as a part of development to prevent any potential future exposures from off-Site soil vapor.
- Installation of an active Sub Slab Depressurization system as part of new construction.
- Placement of a final cover over the entire Site as part of new development.

Alternative 2 involves:

- Establishment of Track 2 Restricted Residential Use Soil Cleanup Objectives (SCOs).
- Removal of all soil/fill exceeding Track 2 Restricted Residential Use throughout the Site. The Site has already achieved Track 2 Restricted Residential Use Soil Cleanup Objectives (SCOs) and further soil removal is not required for remedial action to achieve this standard. Excavation for construction of the three new buildings would take place to a depth of approximately 6 feet for the perimeter foundation of the buildings. If hotspots are encountered during excavation for the footings, additional excavation will be performed to ensure attainment of SCOs.
- A vapor and waterproof barrier would be installed beneath the slab and behind the foundation sidewalls of all three (3) new buildings as a part of development to prevent any potential future exposures from off-Site soil vapor.
- An active Sub-slab Depressurization (SSD) system would be installed beneath the slab/foundation of the proposed two story office building to prevent any potential future exposures from on-site soil vapor contamination.
- Placement of a final composite cover consisting of building slab, concrete/asphalt parking areas and 1 foot of clean soil in landscaped areas over the entire Site as part of construction.
- Establishment of use restrictions including prohibitions on the use of groundwater from the Site; prohibitions of sensitive Site uses, such as farming or vegetable gardening, to prevent future exposure pathways; and prohibition of a higher level of land use without OER approval;

- Establishment of an approved Site Management Plan (SMP) to ensure long-term management of these Engineering and Institutional Controls including the performance of periodic inspections and certification that the controls are performing as they were intended. SMP will note that the property owner and property owner's successors and assigns must comply with the approved SMP; and
- Recording of a Declaration of Covenants and Restrictions.

3.1 THRESHOLD CRITERIA

Protection of Public Health and the Environment

This criterion is an evaluation of the remedy's ability to protect public health and the environment, and an assessment of how risks posed through each existing or potential pathway of exposure are eliminated, reduced or controlled through removal, treatment, and implementation of Engineering Controls or Institutional Controls. Protection of public health and the environment must be achieved for all approved remedial actions.

Alternative 1 would be protective of human health and the environment by removing all soil/fill exceeding Track 1 Unrestricted Use SCOs and groundwater protection standards, thus eliminating potential for direct contact with contaminated soil/fill once construction is complete and eliminating the risk of contamination leaching into groundwater.

Alternative 2 would achieve comparable protections of human health and the environment by excavating the historic fill at the Site and ensuring that remaining soil/fill on-Site meets Track 2 Restricted Residential Use SCOs, which is highly protective given the industrial use of the property, as well as by placement of Institutional and Engineering controls, including a composite cover system, vapor barrier and SSDS. The composite cover system would prevent direct contact with any remaining on-Site soil/fill. The SSDS system beneath the slab/foundation of the proposed two story metal framed/cmu faced (office) building, along with the vapor barrier installed beneath all three building's slabs would prevent any soil vapors from entering the new building. Implementing Institutional Controls including a Site Management Plan and recording of deed restrictions would ensure that the engineering control systems remains intact and protective.

For both Alternatives, potential exposure to contaminated soils or groundwater during construction would be minimized by implementing a Construction Health and Safety Plan, an approved Soil/Materials Management Plan and Community Air Monitoring Plan (CAMP). Potential contact with contaminated groundwater would be prevented as its use is prohibited by city laws and regulations. Potential future migration of off-Site soil vapors into the new building would be prevented by installing a vapor barrier below the three new building's basement slab and continuing the vapor barrier around foundation walls, as well as installation of an active SSDS underneath the office building.

3.2. BALANCING CRITERIA

Compliance with Standards, Criteria and Guidance (SCGs)

This evaluation criterion assesses the ability of the alternative to achieve applicable standards, criteria and guidance.

Alternative 1 would achieve compliance with the remedial goals, chemical-specific SCGs and RAOs for soil through removal of soil to achieve Unrestricted Use SCOs and Groundwater Protection Standards. Compliance with SCGs for soil vapor would also be achieved by installing a vapor barrier/waterproofing system below the three new building's slab and continuing the vapor barrier around foundation walls, as well as installation of an active SSDS underneath the office building as part of development.

Alternative 2 would achieve compliance with the remedial goals, chemical-specific SCGs and RAOs for soil through removal of soil to meet Track 2 Restricted Residential Use SCOs. Compliance with SCGs for soil vapor would also be achieved by installing a vapor barrier below all three new building's slab and continuing the vapor barrier around foundation walls as well as installation of an active SSDS underneath the office building. A Site Management Plan would ensure that these controls remained protective for the long term.

Health and safety measures contained in the CHASP and Community Air Monitoring Plan (CAMP) that comply with the applicable SCGs shall be implemented during Site redevelopment under this RAWP. For both Alternatives, focused attention on means and methods employed

during the remedial action would ensure that handling and management of contaminated material would be in compliance with applicable SCGs. These measures will protect on-site workers and the surrounding community from exposure to Site-related contaminants.

Short-term effectiveness and impacts

This evaluation criterion assesses the effects of the alternative during the construction and implementation phase until remedial action objectives are met. Under this criterion, alternatives are evaluated with respect to their effects on public health and the environment during implementation of the remedial action, including protection of the community, environmental impacts, time until remedial response objectives are achieved, and protection of workers during remedial actions.

Both alternatives 1 and 2 have similar short-term effectiveness during their respective implementations, as each requires excavation of historic fill material. Both alternatives would result in short-term dust generation impacts associated with excavation, handling, load out of materials, and truck traffic. Short term impacts would potentially be higher for Alternative 1 if excavation of greater amounts of historical fill material is encountered below the excavation depth of the proposed building. However, focused attention to means and methods during the remedial action during a Track 2 removal action, including community air monitoring and appropriate truck routing, would minimize or negate the overall impact of these activities.

An additional short-term adverse impact and risks to the community associated with both remedial alternatives is increased truck traffic. Approximately 100-150, 25-ton capacity truck trips would be necessary to transport fill and soil excavated during Site development. Truck traffic will be routed on the most direct course using major thoroughfares where possible and flaggers will be used to protect pedestrians at Site entrances and exits.

Both alternatives would employ appropriate measures to prevent short term impacts, including a Construction Health and Safety Plan, a Community Air Monitoring Plan (CAMP) and a Soil/Materials Management Plan (SMMP), during all on-Site soil disturbance activities and would minimize the release of contaminants into the environment. Both alternatives provide short term effectiveness in protecting the surrounding community by decreasing the risk of

contact with on-Site contaminants. Construction workers operating under appropriate management procedures and a Construction Health and Safety Plan (CHASP) will be protected from on-Site contaminants (personal protective equipment would be worn consistent with the documented risks within the respective work zones).

Long-term effectiveness and permanence

This evaluation criterion addresses the results of a remedial action in terms of its permanence and quantity/nature of waste or residual contamination remaining at the Site after response objectives have been met, such as permanence of the remedial alternative, magnitude of remaining contamination, adequacy of controls including the adequacy and suitability of ECs/ICs that may be used to manage contaminant residuals that remain at the Site and assessment of containment systems and ICs that are designed to eliminate exposures to contaminants, and long-term reliability of Engineering Controls.

Alternative 1 would achieve long-term effectiveness and permanence related to on-Site contamination by permanently removing all impacted soil/fill above Track 1 Unrestricted Use SCOs. Removal of on-Site contaminant sources will prevent future groundwater contamination.

Alternative 2 would provide long-term effectiveness by removing most on-Site contamination and attaining Track 2 Restricted Residential Use SCOs; a composite cover system across the Site, vapor barriers beneath all three buildings, and installation of an SSDS beneath the office building, maintaining use restrictions, establishing an SMP to ensure long-term management of Institutional and Engineering Controls (IC/ECs). The SMP would ensure long-term effectiveness of all ECs and ICs by requiring periodic inspection and certification that these controls and restrictions continue to be in place and are functioning as they were intended assuring that protections designed into the remedy will provide continued level of protection in perpetuity.

Both alternatives would result in removal of soil contamination exceeding the SCOs providing the highest level, most effective and permanent remedy over the long-term with respect to a remedy for contaminated soil, which will eliminate any migration to groundwater.

Potential sources of soil vapor and groundwater contamination will also be eliminated as part of the remedy.

Reduction of toxicity, mobility, or volume of contaminated material

This evaluation criterion assesses the remedial alternative's use of remedial technologies that permanently and significantly reduce toxicity, mobility, or volume of contaminants as their principal element. The following is the hierarchy of source removal and control measures that are to be used to remediate a Site, ranked from most preferable to least preferable: removal and/or treatment, containment, elimination of exposure and treatment of source at the point of exposure. It is preferred to use treatment or removal to eliminate contaminants at a Site, reduce the total mass of toxic contaminants, cause irreversible reduction in contaminants mobility, or reduce of total volume of contaminated media.

Alternative 1 will permanently eliminate the toxicity, mobility, and volume of contaminants from on-Site soil by removing all soil in excess of Track 1 Unrestricted Use SCOs.

Alternative 2 would remove most of the historic fill at the Site, and any remaining on-Site soil beneath the new buildings will meet Track 2 Restricted Residential Use SCOs. Alternative 1 would eliminate a greater total mass of contaminants on Site.

Implementability

This evaluation criterion addresses the technical and administrative feasibility of implementing an alternative and the availability of various services and materials required during its implementation, including technical feasibility of construction and operation, reliability of the selected technology, ease of undertaking remedial action, monitoring considerations, administrative feasibility (e.g. obtaining permits for remedial activities), and availability of services and materials.

The techniques, materials and equipment to implement both remedial Alternatives 1 and 2 are readily available and have been proven effective in remediating the contaminants associated with the Site. They use standard materials and services that are well established technology. The

reliability of each remedy is also high. There are no special difficulties associated with any of the activities proposed.

Cost effectiveness

This evaluation criterion addresses the cost of alternatives, including capital costs (such as construction costs, equipment costs, and disposal costs, engineering expenses) and site management costs (costs incurred after remedial construction is complete) necessary to ensure the continued effectiveness of a remedial action.

Since historic fill at the Site was found during the RI to only extend to a depth of up to 2 feet below grade, and the new building perimeter foundations require excavation to a depth of 6 ft, the costs associated with both Alternative 1 and Alternative 2 will likely be comparable.

The remedial plan creates an approach that combines the remedial action with the redevelopment of the Site, including the construction of the building foundation and subgrade structures. The remedial plan is also cost effective in that it will take into consideration the selection of the closest and most appropriate disposal facilities to reduce transportation and disposal costs during the excavation of historic fill and other soils during the redevelopment of the Site.

Community Acceptance

This evaluation criterion addresses community opinion and support for the remedial action. Observations here will be supplemented by public comment received on the RAWP.

Based on the overall goals of the remedial program and initial permitting associated with the proposed site development, no adverse community opinion is anticipated for either alternative. Both remedial actions provide for protection of public health and the environment and minimize potential contaminant exposures. This RAWP will be subject to a public review under the NYC VCP and will provide the opportunity for detailed public input on the remedial alternatives and the selected remedy. This public comment will be considered by OER prior to approval of this plan. The Citizen Participation Plan for the project is provided in Attachment B.

Land use

This evaluation criterion addresses the proposed use of the property. This evaluation has considered reasonably anticipated future uses of the Site and takes into account: current use and historical and/or recent development patterns; applicable zoning laws and maps; NYS Department of State's Brownfield Opportunity Areas (BOA) pursuant to section 970-r of the general municipal law; applicable land use plans; proximity to real property currently used for residential use, and to commercial, industrial, agricultural, and/or recreational areas; environmental justice impacts, Federal or State land use designations; population growth patterns and projections; accessibility to existing infrastructure; proximity of the site to important cultural resources and natural resources, potential vulnerability of groundwater to contamination that might affect from the site, proximity to flood plains, geography and geology; and current Institutional Controls applicable to the site.

The proposed redevelopment of the Site is compatible with its current zoning and is consistent with recent development patterns. Following remediation, the Site will meet Track 2 Restricted Residential Use SCOs, which is appropriate for its planned industrial use. Improvements in the current environmental condition of the property achieved by both alternatives are also consistent with the City's goals for cleanup of contaminated land and bringing such properties into productive reuse. Both alternatives are equally protective of natural resources and cultural resources.

Sustainability of the Remedial Action

This criterion evaluates the overall sustainability of the remedial action alternatives and the degree to which sustainable means are employed to implement the remedial action including those that take into consideration NYC's sustainability goals defined in *PlaNYC: A Greener, Greater New York*. Sustainability goals may include: maximizing the recycling and reuse of non-virgin materials; reducing the consumption of virgin and non-renewable resources; minimizing energy consumption and greenhouse gas emissions; improving energy efficiency; and promotion of the use of native vegetation and enhancing biodiversity during landscaping associated with Site development.

While Alternative 2 would potentially result in lower energy usage based on reducing the

volume of material transported off-Site, both remedial alternatives are comparable with respect to the opportunity to achieve sustainable remedial action. The remedial plan would take into consideration the shortest trucking routes during off-Site disposal of historic fill and other soils, which would reduce greenhouse gas emissions and conserve energy used to fuel trucks. The New York City Clean Soil Bank program may be utilized for reuse of native soils. To the extent practicable, energy efficient building materials, appliances, and equipment will be utilized to complete the development. A complete list of green remedial activities is included in the Sustainability Statement, included as Appendix C.

4.0 REMEDIAL ACTION

4.1 Summary of Preferred Remedial Action

The Site has already achieved Track 2 Restricted Residential Use objectives and further removal is not required for remedial action. A soil vapor barrier will be installed beneath the proposed repair, office and process buildings and a Sub-slab Depressurization (SSD) system would be installed for the new proposed two story office building to address onsite potential soil vapor contaminants. The preferred remedial action alternative is Track 2 Alternative which achieves protection of public health and the environment for the intended use of the property. The preferred remedial action alternative will achieve all of the remedial action objectives established for the project and addresses applicable SCGs. The preferred remedial action alternative is effective in both the short-term and long-term and reduces mobility, toxicity and volume of contaminants. The preferred remedial action alternative is cost effective and implementable and uses standards methods that are well established in the industry.

The proposed remedial action will consist of:

1. Preparation of a Community Protection Statement and performance of all required NYC VCP Citizen Participation activities according to an approved Citizen Participation Plan;
2. Performance of a Community Air Monitoring Program for particulates and volatile organic carbon compounds during excavation and earth moving activities;
3. Establishment of Track 2 Restricted Use (Industrial) Soil Cleanup Objectives (SCOs). The site already achieved Track 2 Restricted Residential Use SCOs;
4. Site mobilization involving Site security setup, equipment mobilization, utility mark outs and marking & staking excavation areas;
5. Excavation and removal of soil/fill for development purposes. The perimeter foundation of the buildings will be excavated to a depth of approximately 6 feet below grade for development purposes. Approximately 2,250 tons of soil will be excavated and removed from this Site;
6. Screening of excavated soil/fill during intrusive work for indications of contamination by visual means, odor, and monitoring with a PID. Appropriate segregation of

- excavated media on-Site;
7. Removal of underground storage tanks (if encountered) and closure of petroleum spills (if evidence of a spill/leak is encountered during Site excavation) in compliance with applicable local, State and Federal laws and regulations;
 8. Transportation and off-Site disposal of all soil/fill material at permitted facilities in accordance with applicable laws and regulations for handling, transport, and disposal, and this plan. Sampling and analysis of excavated media as required by disposal facilities;
 9. Collection and analysis of post excavation end-point samples to determine the performance of the remedy with respect to attainment of SCOs;
 10. Import of materials to be used for backfill and cover in compliance with this plan and in accordance with applicable laws and regulations;
 11. Installation of a vapor barrier/waterproofing system below the concrete slab underneath the three building, as well as behind foundation walls of the proposed building;
 12. Installation of an active sub-slab depressurization system below the slab underneath the new proposed two story office building to address issues associated with potential contaminated vapors. The process and repair shop buildings would be constructed with vapor barriers;
 13. Construction and maintenance of an engineered composite cover consisting of 6" thick concrete slab across the footprint of the three new buildings, concrete/asphalt parking lots and at least two feet of clean soil in landscaped areas;
 14. Performance of all activities required for the remedial action, including permitting requirements and pretreatment requirements, in compliance with applicable laws and regulations;
 15. Implementation of storm-water pollution prevention measures in compliance with applicable laws and regulations.
 16. Recording of a Declaration of Covenants and Restrictions that includes a full listing of Engineering Controls and Institutional Controls and notice that these controls must be maintained within a Site Management Plan to prevent future exposure to any residual contamination remaining at the Site.

17. Submission of an approved Site Management Plan (SMP) in the RAR for long-term management of residual contamination, including plans for operation, maintenance, monitoring, inspection and certification of Engineering and Institutional Controls and reporting at a specified frequency; and
18. Establishment in a recorded Declaration of Covenants and Restrictions, a series of Engineering Controls and Institutional Controls; a requirement that management of these controls must be in compliance with an approved SMP and recorded Declaration of Covenants and Restrictions. Institutional Controls will include prohibition of the following: (1) vegetable gardening and farming; (2) use of groundwater without treatment rendering it safe for the intended use; (3) disturbance of any residual contaminated material unless it is conducted in accordance with the SMP; and (4) more restrictive land usage without OER-approval.
19. Submission of a Remedial Action Report (RAR) that describes the remedial activities, certifies that the remedial requirements have been achieved, defines the Site boundaries, and, describes all Engineering and Institutional Controls to be implemented at the Site, and lists any changes from this RAWP.

4.2 Soil Cleanup Objectives and soil/Fill management

Track 2, Restricted Residential Use Soil Cleanup Objectives (SCOs) are proposed for this project. The SCOs for this Site are listed in Table 1. All soil samples that exceed the Track 2 SCOs proposed for this remedial action are highlighted in Table 1 and shown on a spider map in Figure 5.

Soil and materials management on-Site and off-Site, including excavation, handling and disposal, will be conducted in accordance with the Soil/Materials Management Plan in Attachment D. The location of the planned excavation is shown in figure 8

Soil and fill management at the Site will include impacted soil removal and disposal within the development cut. No over-excavation beyond the development cut is anticipated. If any hot-spot areas are identified during development and remediation at the site, they will be removed to

the extent practical. This information will be provided in the Remedial Action Report.

Estimated Soil/Fill Removal Quantities

The total quantity of soil/fill expected to be excavated and disposed off-Site is approximately 2,250 tons.

Disposal facilities will be submitted to OER when they are identified and prior to the start of remedial action.

End-Point Sampling

Removal actions for development purposes under this plan will be performed in conjunction with confirmatory soil sampling. Six post-excavation end-point sampling and testing will be performed promptly following removal of any contaminated materials and completed prior to Site development activities. For comparison to Track 2 SCOs, analytes will include SVOC and metals according to analytical methods described below. The approximate collection location of the endpoint soil samples will be provided at later stage.

Hot-spot removal actions, whether established under this RAWP or identified during the remedial program, will be performed in conjunction with post remedial end-point samples to ensure that any hot-spots are fully removed. Analytes for end-point sampling will be those parameters that are driving the hot-spot removal action and will be approved by OER. Frequency for hot-spot end-point sample collection is as follows:

1. For excavations less than 20 feet in total perimeter, at least one bottom sample and one sidewall sample biased in the direction of surface runoff.
2. For excavations 20 to 300 feet in perimeter:
 - For surface removals, one sample from the top of each sidewall for every 30 linear feet of sidewall and one sample from the excavation bottom for every 900 square feet of bottom area.

- For subsurface removals, one sample from each sidewall for every 30 linear feet of sidewall and one sample from the excavation bottom for every 900 square feet of bottom area.
3. For sampling of volatile organics, bottom samples should be taken within 24 hours of excavation, and should be taken from the zero to six-inch interval at the excavation floor. Samples taken after 24 hours should be taken at six to twelve inches.
4. For contaminated soil removal, post remediation soil samples for laboratory analysis should be taken immediately after contaminated soil removal. If the excavation is enlarged horizontally, additional soil samples will be taken pursuant to bullets 1-3 above.

Post-remediation end-point sample locations and depth will be biased towards the areas and depths of highest contamination identified during previous sampling episodes unless field indicators such as field instrument measurements or visual contamination identified during the remedial action indicate that other locations and depths may be more heavily contaminated. In all cases, post-remediation samples should be biased toward locations and depths of the highest expected contamination.

New York State ELAP certified labs will be used for all confirmation and end-point sample analyses. Labs performing confirmation and end-point sample analyses will be reported in the RAR. The RAR will provide a tabular and map summary of all confirmation and end-point sample results and will include all data including non-detects and applicable standards and/or guidance values. End-point samples will be analyzed as described above utilizing the following methodology:

Soil analytical methods will include:

- Volatile organic compounds by EPA Method 8260;
- Semi-volatile organic compounds by EPA Method 8270;
- Target Analyte List metals; and
- Pesticides/PCBs by EPA Method 8081/8082.

If either LNAPL and/or DNAPL are detected, appropriate samples will be collected for characterization and “finger print analysis” and required regulatory reporting (i.e. spills hotline) will be performed.

Quality Assurance/Quality Control

The fundamental QA objective with respect to accuracy, precision, and sensitivity of analysis for laboratory analytical data is to achieve the QC acceptance of the analytical protocol. The accuracy, precision and completeness requirements will be addressed by the laboratory for all data generated.

One duplicate sample for every 20 samples collected will be submitted to the approved laboratory for analysis of the same parameters. One trip blank will be submitted to the laboratory with each shipment of soil samples.

Collected samples will be appropriately packaged, placed in coolers and shipped via overnight courier or delivered directly to the analytical laboratory by field personnel. Samples will be containerized in appropriate laboratory provided glassware and shipped in plastic coolers. Samples will be preserved through the use of ice or “cold-packs” to maintain a temperature of 4°C.

Dedicated disposable sampling materials will be used for the collection endpoint samples, eliminating the need to prepare field equipment (rinse) blanks. However, if non-disposable equipment is used, (stainless steel scoop, etc.) field rinse blanks will be prepared at the rate of 1 for every eight samples collected. Decontamination of non-dedicated sampling equipment will consist of the following:

- Gently tap or scrape to remove adhered soil
- Rinse with tap water
- Wash withalconox® detergent solution and scrub
- Rinse with tap water
- Rinse with distilled or deionized water

Field blanks will be prepared by pouring distilled or deionized water over decontaminated equipment and collecting the water in laboratory provided containers. Trip blanks will be used whenever samples are transported to the laboratory for analysis of VOCs. Trip blanks will not be used for samples to be analyzed for metals, SVOCs or pesticides. One blind duplicate sample will be prepared and submitted for analysis every 20 samples.

Import and Reuse of Soils

Import of soils onto the property and reuse of soils already onsite will be performed in conformance with the Soil/Materials Management Plan in Appendix 3. The estimated quantity of soil to be imported into the Site for backfill and cover soil is 0 tons. The estimated quantity of onsite soil/fill expected to be reused/relocated on Site is to be determined.

4.3 Engineering Controls

The excavation required for the proposed Site development will achieve Track 2 Restricted Residential Use SCOs. Engineering Controls will be employed in the remedial action to address residual contamination remaining at the Site. The following three elements: cover system, SSDS and vapor barrier; will be incorporated into the foundation design and will constitute Engineering Controls that will be employed in the remedial action to address residual contamination remaining at the Site.

Composite Cover System

As part of development as shown in Figure 3, the entire property will be covered by an engineered composite cover system. This cover system will include a 6 inch thick concrete-building slab beneath the area of the proposed buildings. The parking areas will be covered by concrete/asphalt, the remainder of landscaped areas will be covered by two feet of clean soil.

Under the proposed Alternative, the composite cover system would serve as a permanent engineering control for the Site. The system will be inspected and reported at specified intervals as required by this RAWP and the SMP. A Soil Management Plan will be included in the Site Management Plan and will outline the procedures to be followed in the event that the composite

cover system and underlying residual soil/fill is disturbed after the remedial action is complete. Maintenance of this composite cover system will be described in the Site Management Plan in the RAR.

Vapor Barrier

Mitigation of potential soil vapor in the future will be achieved with a combination of building slab and vapor barrier. A high density polyethylene vapor barrier liner (HDPE) will be installed prior to pouring the buildings concrete slab. The vapor barrier will consist of Seigel Brothers Vapor Block 20 Plus, which is a seven layer co-extruded barrier made from state-of-the-art polyethylene and EVOH resins. The vapor barrier will be installed beneath all three building slabs prior to pouring the building's concrete slab. The vapor barrier will extend throughout the area occupied by the footprint of all three new buildings and up the foundation sidewalls of each building in accordance with manufacturer specifications. The specifications for installation will be provided to the construction management company and the foundation contractor or installer of the liner. The specifications state that all vapor barrier seams, penetrations, and repairs will be sealed either by the tape method or weld method, according to the manufacturer's recommendations and instructions.

The project's Professional Engineer licensed by the State of New York will have primary direct responsibility for overseeing the implementation of the vapor barrier. Installation details (penetrations, joints, etc.) with respect to the proposed building foundation, footings, slab, and sidewalls shall follow manufacturer's recommendations. Product specification sheets are provided in Attachment. The Remedial Action Report will include photographs (maximum of two photos per page) of the installation process, PE/RA certified letter (on company letterhead) from primary contractor responsible for installation oversight and field inspections, and a copy of the manufacturers certificate of warranty. Vapor barrier cut sheets are provided in Figure 6.

Active Sub-Slab Depressurization System

An active sub-slab depressurization system (SSDS) will be installed beneath the new proposed two story office building footprint underneath the slab.

Migration of soil vapor beneath the building will be mitigated with the construction of an active sub-slab depressurization system. The SSDS will consist of two separate loops installed within porous granular material beneath the foundation. The two SSDS loops will provide the correct coverage in accordance with USEPA sub-slab depressurization design specifications which recommend a separate vent loop for every designated slab area. Each loop will be outfitted with a riser that will extend to the roof of the building and finished with a blower/fan. The blower/fan exhaust will be placed at a minimum distance of 15 ft from all air intakes. The layout of the SSDS system is provided in Figure 7.

4.4 Institutional Controls

Institutional Controls (IC) listed below have been incorporated in this remedial action to manage residual soil/fill and other media and render the Site protective of public health and the environment. Long-term employment of EC/ICs will be established in a Declaration of Covenant and Restrictions (DCR) assigned to the property by the title holder and will be implemented under Site Management Plan (SMP) that will be included in the RAR.

Institutional Controls for this remedial action are:

- Recording of an OER-approved Declaration of Covenant and Restrictions (DCR) with the City Register or county clerk, if required. The DCR will include a description of all ECs and ICs, will summarize the requirements of the Site Management Plan, and will note that the property owner and property owner's successors and assigns must comply with the DCR and the approved SMP. The recorded DCR will be submitted in the Remedial Action Report. The DCR will be recorded prior to OER issuance of the Notice of Completion;
- Submittal of a Site Management Plan in the RAR for approval by OER that provides procedures for appropriate operation, maintenance, monitoring, inspection, reporting and certification of ECs. SMP will require that the property owner and property owner's

successors and assigns will submit to OER a periodic written statement that certifies that: (1) controls employed at the Site are unchanged from the previous certification or that any changes to the controls were approved by OER; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP. OER retains the right to enter the Site in order to evaluate the continued maintenance of any controls. This certification shall be submitted at a frequency to be determined by OER in the SMP and will comply with RCNY §43-1407(1)(3).

- Use of groundwater underlying the Site is prohibited without treatment rendering it safe for its intended use;
- All future activities on the Site that will disturb residual material must be conducted pursuant to the soil management provisions in an approved SMP;

4.5 Site Management Plan

Site Management is the last phase of remediation and begins with the approval of the Remedial Action Report and issuance of the Notice of Completion (NOC) for the Remedial Action.

Site Management is required for Track 2 remedial actions. The Site Management Plan (SMP) describes appropriate methods and procedures to ensure implementation of all ECs and ICs that are required by the DCR and this RAWP. The Site Management Plan is submitted as part of the RAR but will be written in a manner that allows its use as an independent document. Site Management continues until terminated in writing by OER. The property owner is responsible to ensure that all Site Management responsibilities defined in the DCR and the Site Management Plan are implemented.

The SMP will provide a detailed description of the procedures required to manage residual soil/fill left in place following completion of the remedial action in accordance with the Brownfield Cleanup Agreement with OER. This includes a plan for: (1) implementation of EC's and ICs; (2) implementation of monitoring programs; (3) operation and maintenance of EC's; (4) inspection and certification of EC's; and (5) reporting.

Site management activities, reporting, and EC/IC certification will be scheduled by OER on a periodic basis to be established in the SMP and will be subject to review and modification by OER. The Site Management Plan will be based on a calendar year and certification reports will be due for submission to OER by March 31 of the year following the reporting period.

4.6 Qualitative human health exposure assessment

The objective of the qualitative exposure assessment is to identify potential receptors and pathways for human exposure to the contaminants of concern (COC) that are present at, or migrating from, the Site. The identification of exposure pathways describes the route that the COC takes to travel from the source to the receptor. An identified pathway indicates that the potential for exposure exists; it does not imply that exposures actually occur.

Investigations reported in the Remedial Investigation Report (RIR) are sufficient to complete a Qualitative Human Health Exposure Assessment (QHHEA). As part of the VCP process, a QHHEA was performed to determine whether the Site poses an existing or future health hazard to the Site's exposed or potentially exposed population. The sampling data from the RI were evaluated to determine whether there is any health risk by characterizing the exposure setting, identifying exposure pathways, and evaluating contaminant fate and transport. This QHHEA was prepared in accordance with Appendix 3B and Section 3.3 (b) 8 of the NYSDEC Draft DER-10 Technical Guidance for Site Investigation and Remediation.

Known and Potential Sources

Soil

- No VOCs, SVOCs, Metals, PCBs or Pesticides were detected above 6 NYCRR Part 375-6.8 (b) Restricted Residential Use Soil Cleanup Objectives (SCOs) within any of the soil samples collected at the Site.

Groundwater

- Several metals were identified and of those, aluminum, antimony, iron, magnesium, manganese and sodium exceeded GQS

- SVOCs including Benz(a)anthracene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Chrysene, Indeno(1,2,3-cd)pyrene exceeded GQS
- One pesticide, Dieldrin (0.006 ug/L) exceeded GQS

Soil Vapor

- Chlorinated VOCs detected above NYS DOH monitoring thresholds including PCE and TCE;.

Nature, Extent, Fate and Transport of Contaminants

Soil/fill samples collected during the RI showed generally good quality in soils, with no exceedances of guidance for Industrial use (6NYCRR Part 375-6.8(b) NYS Industrial).

Groundwater samples collected during the RI showed that groundwater quality has been marginally impacted with SVOCs and inorganic contamination.

Soil vapor samples collected during the RI showed some evidence of vapor intrusion. Exceedances above NYS DOH guidance for Tetrachloroethene (PCE), Trichloroethene (TCE) and Methylene Chloride (MeCl) were noted. PCE was noted more generally on the south end of the site, with TCE and MeCl more generally to the north.

Receptor Populations

On-Site Receptors – The Site is currently paved and developed with buildings. Access to the portions of the Site is restricted by an 8 foot high, chained and locked, perimeter fence, building garage doors etc. Onsite receptors are limited to trespassers and site representatives and visitors granted access to the property. During development of the Site, the on-site potential receptors will include construction workers, site representatives, and visitors. Once the site is developed, the on-site potential sensitive receptors will include facility employees and visitors.

Off-Site Receptors - Potential off-Site receptors within a 0.50-mile radius of the Site include: adult and child residents, and commercial and construction workers, pedestrians, trespassers, and cyclists, based on the following. The nearest residential zone is 0.50 miles on the other side of Gowanns Expressway.

1. Commercial Businesses (up to 0.25 mile) – existing and future
2. Residential Buildings (up to 0.50 mile) – existing and future
3. Building Construction/Renovation (up to 0.25 mile) – existing and future
4. Pedestrians, Trespassers, Cyclists (up to 0.25 mile) – existing and future
5. Schools (up to 0.25 mile) – existing and future

Potential Routes of Exposure

The five elements of an exposure pathway are: (1) a contaminant source; (2) contaminant release and transport mechanisms; (3) a point of exposure; (4) a route of exposure; and (5) a receptor population. An exposure pathway is considered complete when all five elements of an exposure pathway are documented. A potential exposure pathway exists when any one or more of the five elements comprising an exposure pathway cannot be documented. An exposure pathway may be eliminated from further evaluation when any one of the five elements comprising an exposure pathway has not existed in the past, does not exist in the present, and will never exist in the future. Three potential primary routes exist by which chemicals can enter the body:

- Ingestion of water, fill, or soil;
- Inhalation of vapors and particulates; and
- Dermal contact with water, fill, soil, or building materials

Existence of Human Health Exposure

Current Conditions: The potential for exposure to surficial historic fill exists under current conditions but is limited due to the site pavement and building structures. Groundwater is marginally contaminated but is not exposed at the Site, and because the Site is served by the public water supply and groundwater use for potable supply is prohibited, groundwater is not used at the Site and there is no potential for exposure. As there are currently structures onsite, accumulation of soil vapor can pose an exposure threat.

Construction/ Remediation Activities: Once development activities begin, construction workers will come into direct contact with surface and subsurface soils and groundwater, as a result of on-site construction and excavation activities. On-site construction workers potentially could ingest, inhale or have dermal contact with any exposed impacted soil, and fill. Similarly, off-site

receptors could be exposed to dust and vapors from on-site activities. During construction, on-site and off-site exposures to contaminated dust from on-site will be addressed through the Soil/Materials Management Plan, dust controls, and through the implementation of the Community Air-Monitoring Program and a Construction Health and Safety Plan.

Proposed Future Conditions: The Site will be fully capped, limiting potential direct exposure to soil and groundwater contamination remaining in place, and a vapor barrier system will prevent any exposure to potential on site soil vapors in the future. The Site is served by a public water supply, and groundwater is not used at the Site for potable supply. There are no off-site pathways for ingestion, inhalation, or dermal exposure to contaminants derived from the Site under future conditions.

Overall Human Health Exposure Assessment

The exposure pathways for the current site condition is limited as the site is paved. There is a potential complete exposure pathway that requires mitigation during implementation of the remedy. There is no complete exposure pathway under future conditions (some areas will be landscaped and not paved) after the site is developed. This assessment takes into consideration the reasonably anticipated use of the site, which includes a residential structure, site-wide impervious surface cover cap, and a subsurface vapor barrier system for the building. Potential post-construction use of groundwater is not considered an option because groundwater in this area of New York City is not used as a potable water source. There are no surface waters in close proximity to the Site that could be impacted or threatened (Gowanus Bay is adjacent but is not at risk since no soil contamination or source exists)

Based upon this analysis, complete on-site exposure pathways appear to be present only during the current un-remediated phase and the remedial action phase. Under current conditions, on-site exposure pathways exist for those given access to the Site, or trespassers. During remedial construction, on-site and off-site exposures to contaminated dust from historic fill material will be addressed through dust controls, and through the implementation of the Community Air Monitoring Program, the Soil/Materials Management Plan, and a Construction Health and Safety Plan. After the remedial action is complete, there will be no remaining exposure pathways to on-Site soil/fill, as all soil above Track 2 Use SCOs will have been removed and a vapor barrier system will have been installed.

5.0 REMEDIAL ACTION MANAGEMENT

5.1 Project Organization and oversight

Principal personnel who will participate in the remedial action include Mr. Ravi Kumar Kolaventi, Project Manager and Mr. Kevin Straub, Field Operations Officer-GCE. The Professional Engineer (PE) and Qualified Environmental Professionals (QEP) for this project is Mr. Dean Devoe, P.E., Tully Environmental, Inc.

5.2 Site Security

Site access will be controlled by a chain link or wooden construction fence, which will surround the property.

5.3 Work Hours

The hours for operation of remedial construction will be from 7:00 a.m to 6:00 p.m . These hours conform to the New York City Department of Buildings construction code requirements.

5.4 Construction Health and Safety Plan

The Health and Safety Plan is included in Appendix 4. The Site Safety Coordinator will be Mr. Kevin Straub. Remedial work performed under this RAWP will be in full compliance with applicable health and safety laws and regulations, including Site and OSHA worker safety requirements and HAZWOPER requirements. Confined space entry, if any, will comply with OSHA requirements and industry standards and will address potential risks. The parties performing the remedial construction work will ensure that performance of work is in compliance with the HASP and applicable laws and regulations. The HASP pertains to remedial and invasive work performed at the Site until the issuance of the Notice of Completion.

All field personnel involved in remedial activities will participate in training required under 29 CFR 1910.120, including 40-hour hazardous waste operator training and annual 8-hour refresher training. The Site Safety Officer will be responsible for maintaining worker training records.

Personnel entering any exclusion zone will be trained in the provisions of the HASP and be required to sign HASP acknowledgment. Site-specific training will be provided to field personnel. Additional safety training may be added depending on the tasks performed. Emergency telephone numbers will be posted at the site location before any remedial work begins. A safety meeting will be conducted before each shift begins. Topics to be discussed include task hazards and protective measures (physical, chemical, environmental); emergency procedures; PPE levels and other relevant safety topics. Meetings will be documented in a log book or specific form.

An emergency contact sheet with names and phone numbers is included in the HASP. That document will define the specific project contacts for use in case of emergency.

5.5 Community Air Monitoring Plan

Real-time air monitoring for volatile organic compounds (VOCs) and particulate levels at the perimeter of the exclusion zone or work area will be performed. Continuous monitoring will be performed for all ground intrusive activities and during the handling of contaminated or potentially contaminated media. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pit excavation or trenching, and the installation of soil borings or monitoring wells.

Periodic monitoring for VOCs will be performed during non-intrusive activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. Periodic monitoring during sample collection, for instance, will consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. Depending upon the proximity of potentially exposed individuals, continuous monitoring may be performed during sampling activities. Exceedences of action levels observed during performance of the Community Air Monitoring Plan (CAMP) will be reported to the OER Project Manager and included in the Daily Report.

VOC Monitoring, Response Levels, and Actions

Volatile organic compounds (VOCs) will be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis during invasive work. Upwind concentrations will be measured at the start of each workday and periodically thereafter to establish background conditions. The monitoring work will be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment will be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment will be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

- If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities will be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities will resume with continued monitoring.
- If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities will be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities will resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.
- If the organic vapor level is above 25 ppm at the perimeter of the work area, activities will be shutdown.

All 15-minute readings must be recorded and be available for OER personnel to review. Instantaneous readings, if any, used for decision purposes will also be recorded.

Particulate Monitoring, Response Levels, and Actions

Particulate concentrations will be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate

monitoring will be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment will be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

- If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m^3) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques will be employed. Work will continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed $150 \text{ mcg}/\text{m}^3$ above the upwind level and provided that no visible dust is migrating from the work area.
- If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than $150 \text{ mcg}/\text{m}^3$ above the upwind level, work will be stopped and a re-evaluation of activities initiated. Work will resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within $150 \text{ mcg}/\text{m}^3$ of the upwind level and in preventing visible dust migration.

All readings will be recorded and be available for OER personnel to review.

5.6 Agency Approvals

All permits or government approvals required for remedial construction will be obtained prior to the start of remedial construction. Approval of this RAWP by OER does not constitute satisfaction of these requirements and will not be a substitute for any required permit.

5.7 Site Preparation

Pre-Construction Meeting

OER will be invited to attend the pre-construction meeting at the Site with all parties involved in the remedial process prior to the start of remedial construction activities.

Mobilization

Mobilization will be conducted as necessary for each phase of work at the Site. Mobilization includes field personnel orientation, equipment mobilization (including securing all sampling equipment needed for the field investigation), marking/staking sampling locations and utility mark-outs. Each field team member will attend an orientation meeting to become familiar with the general operation of the Site, health and safety requirements, and field procedures.

Utility Marker Layouts, Easement Layouts

The presence of utilities and easements on the Site will be fully investigated prior to the performance of invasive work such as excavation or drilling under this plan by using, at a minimum, the One-Call System (1-800-272-4480). Underground utilities may pose an electrocution, explosion, or other hazard during excavation or drilling activities. All invasive activities will be performed in compliance with applicable laws and regulations to assure safety. Utility companies and other responsible authorities will be contacted to locate and mark the locations, and a copy of the Mark out Ticket will be retained by the contractor prior to the start of drilling, excavation or other invasive subsurface operations. Overhead utilities may also be present within the anticipated work zones. Electrical hazards associated with drilling in the vicinity of overhead utilities will be prevented by maintaining a safe distance between overhead power lines and drill rig masts.

Proper safety and protective measures pertaining to utilities and easements, and compliance with all laws and regulations will be employed during invasive and other work contemplated under this RAWP. The integrity and safety of on-site and off-site structures will be maintained during all invasive, excavation or other remedial activity performed under the RAWP.

Equipment and Material Staging

Equipment and materials will be stored and staged in a manner that complies with applicable laws and regulations.

Stabilized Construction Entrance

Steps will be taken to ensure that trucks departing the site will not track soil, fill or debris off-site. Such actions may include use of cleaned asphalt or concrete roads or use of stone or other aggregate-based egress paths between the truck inspection station and the property exit. Measures will be taken to ensure that adjacent roadways will be kept clean of project related soils, fill and debris.

Truck Inspection Station

An outbound-truck inspection station will be set up close to the site exit. Before exiting the NYC VCP Site, trucks will be required to stop at the truck inspection station and will be examined for evidence of contaminated soil on the undercarriage, body, and wheels. Soil and debris will be removed. Brooms, shovels and potable water will be utilized for the removal of soil from vehicles and equipment, as necessary.

Extreme Storm Preparedness and Response Contingency Plan

Damage from flooding or storm surge can include dislocation of soil and stockpiled materials, dislocation of site structures and construction materials and equipment, and dislocation of support of excavation structures. Damage from wind during an extreme storm event can create unsafe or unstable structures, damage safety structures and cause downed power lines creating dangerous site conditions and loss of power. In the event of emergency conditions caused by an extreme storm event, the contractor will undertake the following steps for site preparedness prior to the event and response after the event.

Storm Preparedness

Preparations in advance of an extreme storm event will include the following: containerized hazardous materials and fuels will be removed from the property; loose materials will be secured to prevent dislocation and blowing by wind or water; heavy equipment such as excavators and generators will be removed from holes, trenches and depressions on the property to high ground or removed from the property; an inventory of the property with photographs will be performed to establish conditions for the site and equipment prior to the event; stockpile covers for soil and

fill will be secured by adding weights such as sandbags for added security and worn or ripped stockpile covers will be replaced with competent covers; stockpiled hazardous wastes will be removed from the property; stormwater management systems will be inspected and fortified, including, as necessary: clean and reposition silt fences, haybales; clean storm sewer filters and traps; and secure and protect pumps and hosing.

Storm Response

At the conclusion of an extreme storm event, as soon as it is safe to access the property, a complete inspection of the property will be performed. A site inspection report will be submitted to OER at the completion of site inspection and after the site security is assessed. Site conditions will be compared to the inventory of site conditions and material performed prior to the storm event and significant differences will be noted. Damage from storm conditions that result in acute public safety threats, such as downed power lines or imminent collapse of buildings, structures or equipment will be reported to public safety authorities via appropriate means such as calling 911. Petroleum spills will be reported to NYS DEC within 2 hours of identification and consistent with State regulations. Emergency and spill conditions will also be reported to OER. Public safety structures, such as construction security fences will be repaired promptly to eliminate public safety threats. Debris will be collected and removed. Dewatering will be performed in compliance with existing laws and regulations and consistent with emergency notifications, if any, from proper authorities. Eroded areas of soil including unsafe slopes will be stabilized and fortified. Dislocated materials will be collected and appropriately managed. Support of excavation structure will be inspected and fortified as necessary. Impacted stockpiles will be contained and damaged stockpile covers will be replaced. Storm-water control systems and structures will be inspected and maintained as necessary. If soil or fill materials are discharged off site to adjacent properties, property owners and OER will be notified and corrective measure plan designed to remove and clean dislocated material will be submitted to OER and implemented following approval by OER and granting of site access by the property owner. Impacted offsite areas may require characterization based on site conditions, at the discretion of OER. If onsite petroleum spills are identified, a qualified environmental professional will determine the nature and extent of the spill and report to NYS DEC's spill hotline at DEC 800-457-7362. If the source of the spill is ongoing and can be identified, it should

be stopped if this can be done safely. Potential hazards will be addressed immediately, consistent with guidance issued by NYS DEC.

Storm Response Reporting

A site inspection report will be submitted to OER at the completion of site inspection. An inspection report established by OER is available on OER's website (www.nyc.gov/oer) and will be used for this purpose. Site conditions will be compared to the inventory of site conditions and material performed prior to the storm event and significant differences will be noted. The site inspection report will be sent to the OER project manager and will include the site name, address, tax block and lot, site primary and alternate contact name and phone number. Damage and soil release assessment will include: whether the project had stockpiles; whether stockpiles were damaged; photographs of damage and notice of plan for repair; report of whether soil from the site was dislocated and whether any of the soil left the site; estimates of the volume of soil that left the site, nature of impact, and photographs; description of erosion damage; description of equipment damage; description of damage to the remedial program or the construction program, such as damage to the support of excavation; presence of onsite or offsite exposure pathways caused by the storm; presence of petroleum or other spills and status of spill reporting to NYS DEC; description of corrective actions; schedule for corrective actions. This report should be completed and submitted to OER project manager with photographs within 24 hours of the time of safe entry to the property after the storm event.

5.8 Traffic Control

Drivers of trucks leaving the NYC VCP Site with soil/fill will be instructed to proceed without stopping in the vicinity of the site to prevent neighborhood impacts. The planned route on local roads for trucks leaving the site is as follows.

- Exit via 50th Street guard post West on 1st Avenue
- Follow signs for I-278 East or West.

5.9 Demobilization

Demobilization will include:

- As necessary, restoration of temporary access areas and areas that may have been disturbed to accommodate support areas (e.g., staging areas, decontamination areas, storage areas, temporary water management areas, and access area);
- Removal of sediment from erosion control measures and disposal of materials in accordance with applicable laws and regulations;
- Equipment decontamination, and;
- General refuse disposal.

Equipment will be decontaminated and demobilized at the completion of all field activities. Investigation equipment and large equipment (e.g., soil excavators) will be washed at the truck inspection station as necessary. In addition, all investigation and remediation derived waste will be appropriately disposed.

5.10 Reporting and Record Keeping

Daily Reports

Daily reports providing a general summary of activities for each day of *active remedial work* will be emailed to the OER Project Manager by the end of the following day. Those reports will include:

- Project number and statement of the activities and an update of progress made and locations of work performed;
- Quantities of material imported and exported from the Site;
- Status of on-Site soil/fill stockpiles;
- A summary of all citizen complaints, with relevant details (basis of complaint; actions taken; etc.);
- A summary of CAMP excursions, if any;
- Photograph of notable Site conditions and activities.

The frequency of the reporting period may be revised in consultation with OER project manager based on planned project tasks. Daily email reports are not intended to be the primary mode of communication for notification to OER of emergencies (accidents, spills), requests for changes to the RAWP or other sensitive or time critical information. However, such information will be included in the daily reports. Emergency conditions and changes to the RAWP will be communicated directly to the OER project manager by personal communication. Daily reports will be included as an Appendix in the Remedial Action Report.

Record Keeping and Photo-Documentation

Job-site record keeping for all remedial work will be performed. These records will be maintained on-site during the project and will be available for inspection by OER staff. Representative photographs will be taken of the Site prior to any remedial activities and during major remedial activities to illustrate remedial program elements and contaminant source areas. Photographs will be submitted at the completion of the project in the RAR in digital format (i.e. jpeg files).

5.11 Complaint Management

All complaints from citizens will be promptly reported to OER. Complaints will be addressed and outcomes will also be reported to OER in daily reports. Notices to OER will include the nature of the complaint, the party providing the complaint, and the actions taken to resolve any problems.

5.12 Deviations from the Remedial Action Work Plan

All changes to the RAWP will be reported to the OER Project Manager and will be documented in daily reports and reported in the Remedial Action Report. The process to be followed if there are any deviations from the RAWP will include a request for approval for the change from OER noting the following:

- Reasons for deviating from the approved RAWP;
- Effect of the deviations on overall remedy; and

- Determination that the remedial action with the deviation(s) is protective of public health and the environment.

5.13 Data usability Summary report

The primary objective of a Data Usability Summary Report (DUSR) is to determine whether or not data meets the site specific criteria for data quality and data use. The DUSR provides an evaluation of analytical data without third party data validation. The DUSR for post-remedial samples collected during implementation of this RAWP will be included in the Remedial Action Report (RAR).

6.0 REMEDIAL ACTION REPORT

A Remedial Action Report (RAR) will be submitted to OER following implementation of the remedial action defined in this RAWP. The RAR will document that the remedial work required under this RAWP has been completed and has been performed in compliance with this plan. The RAR will include:

- Information required by this RAWP;
- As-built drawings for all constructed remedial elements, required certifications, manifests and other written and photographic documentation of remedial work performed under this remedy;
- Site Management Plan (if Track 2 is not achieved);
- Description of any changes in the remedial action from the elements provided in this RAWP and associated design documents;
- Tabular summary of all end point sampling results and all material characterization results, QA/QC results for end-point sampling, and other sampling and chemical analysis performed as part of the remedial action and DUSR;
- Test results or other evidence demonstrating that remedial systems are functioning properly;
- Account of the source area locations and characteristics of all contaminated material removed from the Site including a map showing source areas;
- Account of the disposal destination of all contaminated material removed from the Site. Documentation associated with disposal of all material will include transportation and disposal records, and letters approving receipt of the material.
- Account of the origin and required chemical quality testing for material imported onto the Site.
- Recorded Declaration of Covenants and Restrictions.

- Register the property with an E-Designation by the NYC Department of Buildings if applicable.
- Reports and supporting material will be submitted in digital form.

Remedial Action Report Certification

The following certification will appear in front of the Executive Summary of the Remedial Action Report. The certification will include the following statements:

I, _____, am currently a professional engineer licensed by the State of New York. I had primary direct responsibility for implementation of the remedial program for the Site name Site Site number.

I, _____, am a qualified Environmental Professional. I had primary direct responsibility for implementation remedial program for the Site name Site Site number . (Optional)

I certify that the OER-approved Remedial Action Work Plan dated month day year and Stipulations in a letter dated month day, year; if any were implemented and that all requirements in those documents have been substantively complied with. I certify that contaminated soil, fill, liquids or other material from the property were taken to facilities licensed to accept this material in full compliance with applicable laws and regulations.

7.0 SCHEDULE

The table below presents a schedule for the proposed remedial action and reporting. If the schedule for remediation and development activities changes, it will be updated and submitted to OER. Currently, a four (4) month remediation period is anticipated.

Schedule Milestone	Weeks from Remedial Action Start	Duration (weeks)
OER Approval of RAWP	0	-
Mobilization	1	1
Remedial Excavation	2	6
Demobilization	5	1
Record Declaration of Covenants and Restrictions (if applicable)	15	3
Submit Remedial Action Report	20	-

**Public Participation Plan
For Bush Terminal**

5102 1st Avenue

Brooklyn, Kings County, New York

May 2014

**Prepared by
Tully Environmental Inc.**

**As required by the
New York State
Department of Environmental Conservation**

EXECUTIVE SUMMARY

Tully Environmental, Inc. (TEI) proposes to operate a brown grease recycling facility at 5102 1st Avenue, Brooklyn, New York. Removal of illegal grease discharges is critical to maintain the essential function of the City sewers. The proposed facility will be enclosed in prefabricated structures constructed on an M3 industrially-zoned property under a 20-year lease with New York City Economic Development Corporation (NYCEDC). The proposed throughput would be approximately 35,000 gallons per day of grease trap waste from restaurants and similar establishments. The influent would be screened to remove debris then processed using gravity separation in heated 11,000 gallon tanks. Decant water comprising approximately 90 percent of the influent would be discharged to NYCDEP sewers pursuant to an industrial waste permit and the recovered grease would be shipped to a third party for recovery as biodiesel or used onsite or sold as a finished fuel product. TEI operates an identical facility at its ClearBrook facility in Deer Park NY pursuant to a New York State Department of Environmental Conservation (NYSDEC) Part 360 solid waste permit authorization. The proposed Brooklyn facility would be consistent with the City and State's objectives to encourage recycling and minimize impacts to water quality. TEI has submitted the project to the following City agencies and interested parties and has received support and no objections: Brooklyn Community Board 7, NYSDEC, New York City Department of Sanitation (DSNY), New York City Department of Environmental Protection (NYCDEP), NYCEDC, Public Design Commission (PDC) and New York City Fire Department (FDNY). The PDC has granted approval of the building structures as of March 2014 (attached). TEI is now seeking input from the community and interested parties to finalize the permitting process for the proposed Brooklyn facility.

The Environmental Justice Program as specified in NYSDEC CP-29 provides guidance for incorporating environmental justice concerns into the New York State Department of Environmental Conservation (DEC) environmental permit review process and the DEC application of the State Environmental Quality Review Act. The policy is written to assist DEC staff, the regulated community and the public in understanding the requirements and review process.

This policy amends the DEC environmental permit process by identifying potential environmental justice areas based on minority population and income level as shown in Exhibit D and enhancing public participation when projects are proposed in those communities.

This policy promotes the fair involvement of all people in the DEC environmental permit process by providing public access to DEC permit information and incorporating environmental justice concerns into DEC's permit review process. Through publication and implementation of this Public Participation Plan and associated exhibits, TEI is committed to working alongside DEC and members of the community in accordance with CP-29.

Description of Proposed Facility Operations

The recycling facility would be operated in accordance with applicable NYSDEC 6 NYCRR Part 360 and DSNY solid waste transfer station rules. These are the primary agencies and regulations that pertain to operation of solid waste management facilities in New York City. Grease trap waste would typically be delivered by seven to ten 3000 – 5000 gallon trucks owned by TEI ClearBrook and similar licensed third party vendors. It is anticipated that truck traffic would be less than half of the traffic generated from existing operations at the site. All TEI vehicles would use DOT approved truck routes to access the

facility and enter and exit the site from an existing guard booth at 50th Street. All grease waste would be contained in stationary tanks which would be vented through a scrubber and filtration system to eliminate odor impacts. Additional equipment would include an electric-powered forklift to minimize air emissions from the operation. Indoor operations take place on an impermeable concrete floor and the grease processing operation facility is fully enclosed in a negative-pressure building. Doors are required to be closed during operations. If high speed doors are operated at any time, misters will be enabled. The fully enclosed building would eliminate potential noise, odor and vector impacts in the community. The facility buildings total approximately 30,800 square feet. Grease is recovered from the trap waste and stored in finished product tanks; recycled grease is typically removed within 24 hours of completing the batch, and decant water would be discharged continuously or as needed via a permanent sewer connection.

Site Location

Tully would operate this facility in an industrially zoned (M3) area which permits heavy manufacturing and industrial uses. Adjacent uses consist of warehouses. The nearest residentially zoned area (R6B) is approximately 2000 feet to the east on the other side of the Gowanus Expressway. The Site is located in Bush Terminal which is in a mainly industrial section of Sunset Park. Bush Terminal is bounded by 41st Street to the north, 51st Street to the south, 1st Avenue to the east and Gowanus Bay to the west. The Site is identified as Block 725, part of Lot 1 on the Tax Map of the Borough of Brooklyn. A context map of the site is attached as Exhibit B.

Traffic will enter and exit the facility via 50th Street and internal Bush Terminal roads. This generates no conflict with the entrance to the planned Bush Terminal Piers Open Space at 43rd Street. The TEI facility would have its own dedicated parking in the leased parcel within the Bush Terminal campus. Landscaping and visual screening will be provided between the facility and the planned Bush Terminal Piers Open Space. The TEI facility will be a good neighbor by incorporating strict design and operational measures that eliminate potential noise, odor and vector impacts as further described in "Description of Proposed Facility Operations."

Site Description

The Site is approximately bounded by 44th Street to the north, an internal roadway (an unmapped roadway within Bush Terminal) to the east, 47th Street to the south, and a marginal street (an unmapped street along the piers) to the west. The Site is an approximately 3 acre rectangular parcel – a site plan is attached as Exhibit C. Currently, the Site is occupied by three buildings, totaling approximately 37,100 gross square feet. These buildings are occupied by tenants on a short-term basis. NYCEDC anticipates vacating and demolishing these buildings prior to the execution of the Lease.

SITE HISTORY

Bush Terminal, a water accessible industrial park (herein referenced as Campus), was constructed on the Sunset Park waterfront at the turn of the 20th century by Irving T. Bush. As the shipping industry migrated to New Jersey in the latter part of the 20th century and the manufacturing sector in Brooklyn declined, parcels of the Bush Terminal were sold and the remaining area became underutilized. The

Campus is currently owned by the City of New York (“the City”) and leased to the New York City Economic Development Corporation (“NYCEDC”), which also manages the Campus. The Campus serves as a sanctuary for industrial businesses that have been forced out of higher priced locations in Manhattan, Queens and other parts of Brooklyn, and the City and NYCEDC are committed to ensuring Bush Terminal is a vibrant hub of industrial activity.

Due to the age of the historic Bush Terminal and deferred maintenance under previous operators, Bush Terminal’s infrastructure and buildings need significant investment in order to stimulate development. In its current condition, Bush Terminal is underutilized, rents are approximately 50% below market, and operating expenses are high. In addition, provision of utilities such as sufficient power, water, sewer and gas have become unreliable as the site infrastructure is over 100 years old.

In early 2011 NYCEDC issued a Request for Proposals to develop a 123,300 square foot parcel of Bush Terminal. The parcel is underutilized – containing three small buildings which are occupied by short-term lease tenants (“Buildings 39, 40 and 45”). Subsequently NYCEDC entered into a Predevelopment Agreement with TEI to build and operate a new grease recycling facility (Facility). . The Facility would create a facility to receive grease from haulers, treat it and transport it to a proper disposal site. The Facility would be an integral step in aiding NYCDEP’s plan to reduce the amount of grease entering the City’s sewer system – a long standing issue that reduces the level of service for the effected piping.

NYCEDC was awarded a Restore New York grant in the amount of \$10,000,000 to support the development of the site. TEI’s Facility construction will commence upon NYCEDC’s demolition of Buildings 39, 40 and 45 and the upgrade of infrastructure and utility services: gas, water, electric, storm sewer and sanitary sewer (collectively, the Grant-Funded Work). ESDC Board Approval was received for the Restore NY Grant funding of \$10,000,000 to complete the Grant-Funded Work. ESDC performed an environmental analysis of the impact of the Grant-Funded Work under the State Environmental Quality Review Act (SEQRA) and issued a notice of determination of no significance on August 16, 2012 (attached):

Employment:

- TEI anticipates 30 to 40 full-time construction and 40-50 permanent jobs will be created by the Facility.

Budget:

- Construction of the Grant-Funded Work will be performed by NYCEDC.
- Construction of the Facility will be performed by Tully Construction.
 - The Facility is anticipated to cost \$10.25 to 12.5 Million.
 - Tully will self-finance the construction.

Timeline:

- The anticipated duration of the Facility permitting and construction is approximately 2.5 to 3 years.

COMMUNITY OUTREACH PLAN

Copies of permit application documents, including a one-page plain English fact sheet (attached as Exhibit A), will be made available for review at Brooklyn Public Library 5108 Fourth Ave. The public meeting will be a stand-alone session held on a weekday evening to be determined at Brooklyn

Community Board 7 offices and meeting details will be publicized in the Daily News and a local Brooklyn newspaper a minimum of three weeks prior to the publicized meeting date. The outreach meeting will not be part of a community board meeting. The meeting will present a description of the proposed facility, a description of the anticipated impacts and how these impacts would be managed. The public meeting communication format will be direct dialogue with the community in attendance, written follow-up to unanswered questions, and response to written questions from the attendees. The meeting location is to be handicap accessible to attendees. TEI will submit a progress report to NYSDEC and a final progress report at plan completion to certify that TEI has complied with the public participation plan. Notice of the meeting will also be sent to the following interested parties.

Outreach performed to date

As of the date of the preparation of the plan, TEI has met with the following community leaders to present plans for the proposed facility:

Community Board 7, Brooklyn: District Manager Jeremy Laufer, Chairman Daniel Murphy and Chair of Economic Development Committee Randy Peers

NYC Councilmember Sara Gonzalez, District 38 (former)
5601 5th Avenue S-2, Brooklyn, NY 11220

NYC Councilmember Carlos Menchaca, District 38 (current)
5601 5th Avenue S-2, Brooklyn, NY 11220

Brooklyn Borough President Marty Markowitz (former)
Brooklyn Borough Hall, Brooklyn, NY 11201

Brooklyn Chamber of Commerce
335 Adams St #2700, Brooklyn, NY 11201

Southwest Brooklyn Industrial Development Corporation
241 41st Street, Brooklyn, NY 11232

Public Design Commission of the City of New York
City Hall, Third Floor, New York, NY 10007

Local Community Contacts

Mr. Jeremy Laufer, District Manager and Chair, Daniel Murphy, Community Board 7
4201 Fourth Avenue, Brooklyn, NY 11232

Ms. Roxana Benavides, Branch Librarian, Brooklyn Public Library, Sunset Park Branch
5108 Fourth Avenue, Brooklyn, NY 11220

Local Elected Officials

The Honorable Jerrold L. Nadler, US House of Representatives, District 8
445 Neptune Avenue, Brooklyn, NY 11224

The Honorable Nydia Velazquez, US House of Representatives, District 12
16 Court Street, Suite 1006, Brooklyn, NY 11206

The Honorable Eric Adams, Brooklyn Borough President
Land Use Planning Division, Room 300, Brooklyn Borough Hall, Brooklyn, NY 11201

NYC Councilmember Carlos Menchaca, District 38 (current)
5601 5th Avenue S-2, Brooklyn, NY 11220

The Honorable Velmanette Montgomery, NYS Senate, District 51
30 Third Avenue, Room 1100, 11th Floor, Brooklyn, NY 11217

The Honorable Felix W. Ortiz, Jr., NYS Assembly, District 18
404 55th Street, Brooklyn, NY 11220

Community, Civic, Religious, and Other Educational Institutions

Brooklyn Chinese American Association, Paul P. Mak, Executive Board Chairman
5000 8th Avenue, Brooklyn, NY 11220

Center for Family Life in Sunset Park
Julie Stein Brockway, Co-Director
Julia Jean-Francois, Co-Director
345 43rd Street, Brooklyn, NY 11232

Neighbors Helping Neighbors
Julia Fitzgerald, Executive Board Chairman
443 39th Street, Suite 202, Brooklyn, NY 11232

Opportunities for a Better Tomorrow
Randolph Peers, Executive Director
783 Fourth Avenue, Brooklyn, NY 11232

United Puerto Rican Organization of Sunset Park (UPROSE)
Elizabeth Yeampierre, Executive Director
166A 22nd Street, Brooklyn, NY 11232

EXHIBIT A

Tully Environmental Inc.

Fact Sheet for Bush Terminal ClearBrook Recycling Facility

Tully Environmental Inc. has been selected by a New York City Economic Development (NYC EDC) Request for Proposals (RFP) process to develop an approximately 3 acre industrial site at the Bush Terminal Campus in Sunset Park, Brooklyn. Tully Environmental Inc. has submitted an application to NYS Department of Environmental Conservation (NYS DEC) to develop and operate a recycling facility for restaurant grease trap waste. As part of the State permit application, and in compliance with the Commissioner Policy on Environmental Justice and Permitting (CP-29), we are required to notify the public about this proposed action and give the public an opportunity to comment and ask questions about the project.

The proposed business development would:

- Create a grease recycling facility at Bush Terminal, which will then be sold for renewable energy uses
- Aid NYC Department of Environmental Protection in keeping the sewer system clear
- Create local permanent jobs
- Reduce truck traffic and truck emissions from the Bush Terminal Campus
- Will create an educational/learning opportunity for the Community regarding Sustainability and Green/Renewable Energy

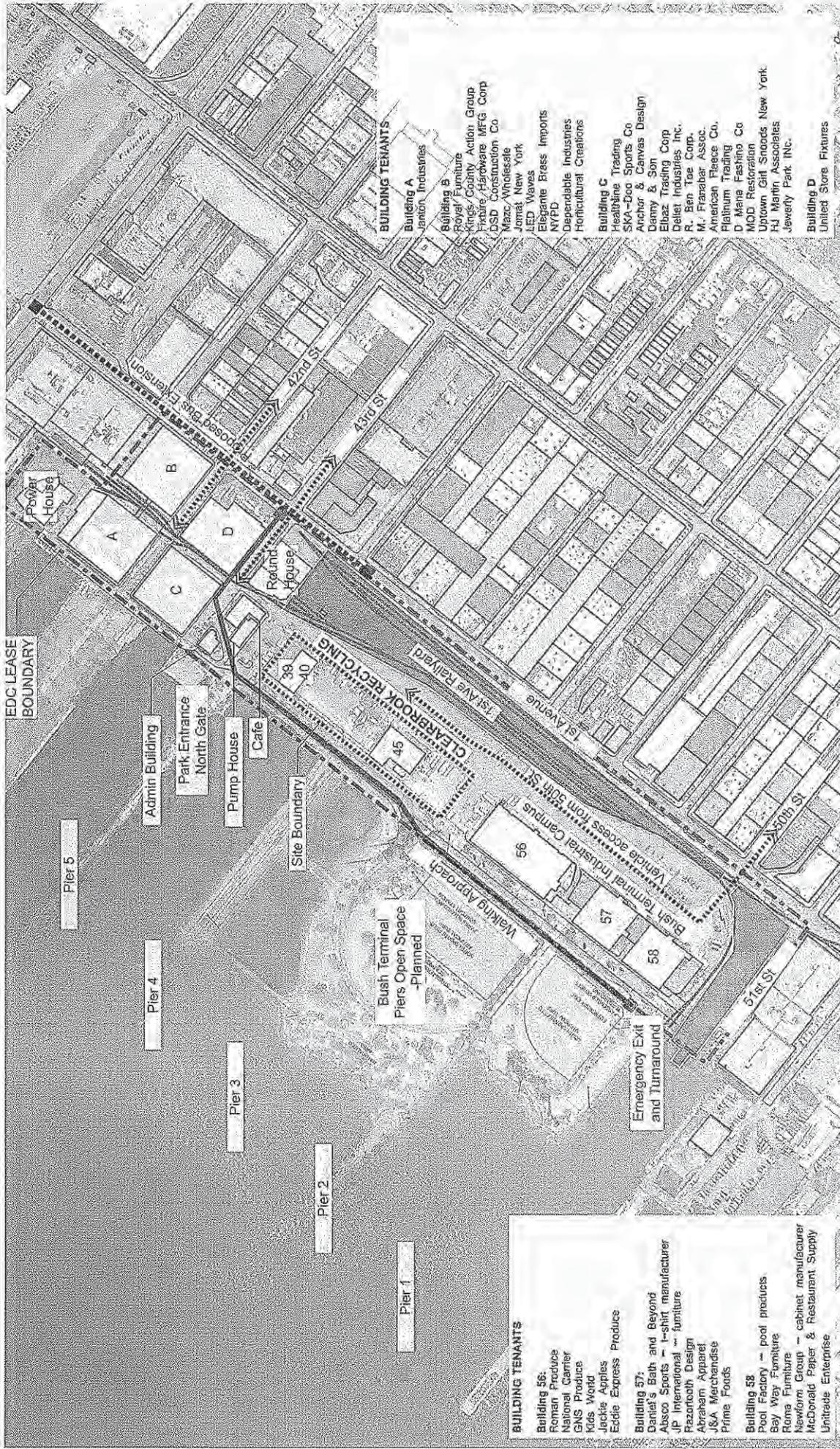
How might the project affect the surrounding community? Certain environmental impacts are generally associated with recycling facilities including, odor, truck traffic, and air pollution. Tully Environmental Inc. intends to implement state-of-the-art measures that reduce or eliminate these impacts, including air scrubber and filtration systems and using electrical equipment onsite as an alternate to diesel equipment. Tully Environmental Inc. is also incorporating storm-water mitigation best management practices into their facility design and construction. If you are concerned about potential impacts, you may wish to get more information on the meeting and comment period dates.

How can the public participate in the permit modification review process? You may provide comments to be considered in the permit review process, including comments on the development of mitigation measures, the operation and conditions of the site and any draft permits. Comments may be given at the public meeting and in writing during the public comment period. Call Tully Environmental Inc.'s contact listed below for information on meetings and comment period dates. Also check Community Board 7's website at www.brooklyncb7.org.

Where can I get additional information about the proposed project?

- Attend the public meeting about the project. For information about the meeting date and location, please email Laura Imperiale, Tully Environmental Inc.'s Director of Government & Community Affairs at LImperiale@tullyenvironmental.com. The applicant, Tully Environmental Inc. is the primary information contact. You can also contact Community Board 7 by calling (718) 854-0003 or emailing communityboard7@yahoo.com.
- Visit the repositories. Key documents relating to the proposed project will be stored at the following repositories: Community Board 7 located at 4201 Fourth Avenue, Brooklyn, NY 11232 and at the Sunset Park Branch of the Brooklyn Public Library located at 5108 Fourth Avenue, Brooklyn, NY 11232.
- Visit the NYSDEC website at <http://dec.state.ny.us/apps/envapps/index.cfm?view=wizard> and track permit progress by the Application ID No. 2-6102-00642/00001.
- Email or call Tully Environmental Inc.'s Community Liaison at: LImperiale@tullyenvironmental.com or (718) 446-7000 x288.

Note: This fact sheet will be translated into both Spanish and Chinese languages.



EDC LEASE BOUNDARY

Pier 5

Pier 4

Pier 3

Pier 2

Pier 1

Admin Building

Park Entrance North Gate

Pump House

Cafe

Site Boundary

Bush Terminal Piers Open Space - Planned

ClearBrook Recycling

Making Approach

Emergency Exit and Turnaround

BUILDING TENANTS

- Building 56: Roman Produce, National Carrier, GNS Produce, Kids World, Jackie Aples Express Produce
- Building 57: Dental Bath and Beyond, Ascoo Sports - t-shirt manufacturer, JP International - furniture, Razomoth Design, Abraham Apparel, USA Merchandise, Prime Foods
- Building 58: Pool Factory - pool products, Bay Way Furniture, Roma Furniture, Newform Group - cabinet manufacturer, McDonald Paper & Restaurant Supply, Unitrade Enterprise

BUILDING TENANTS

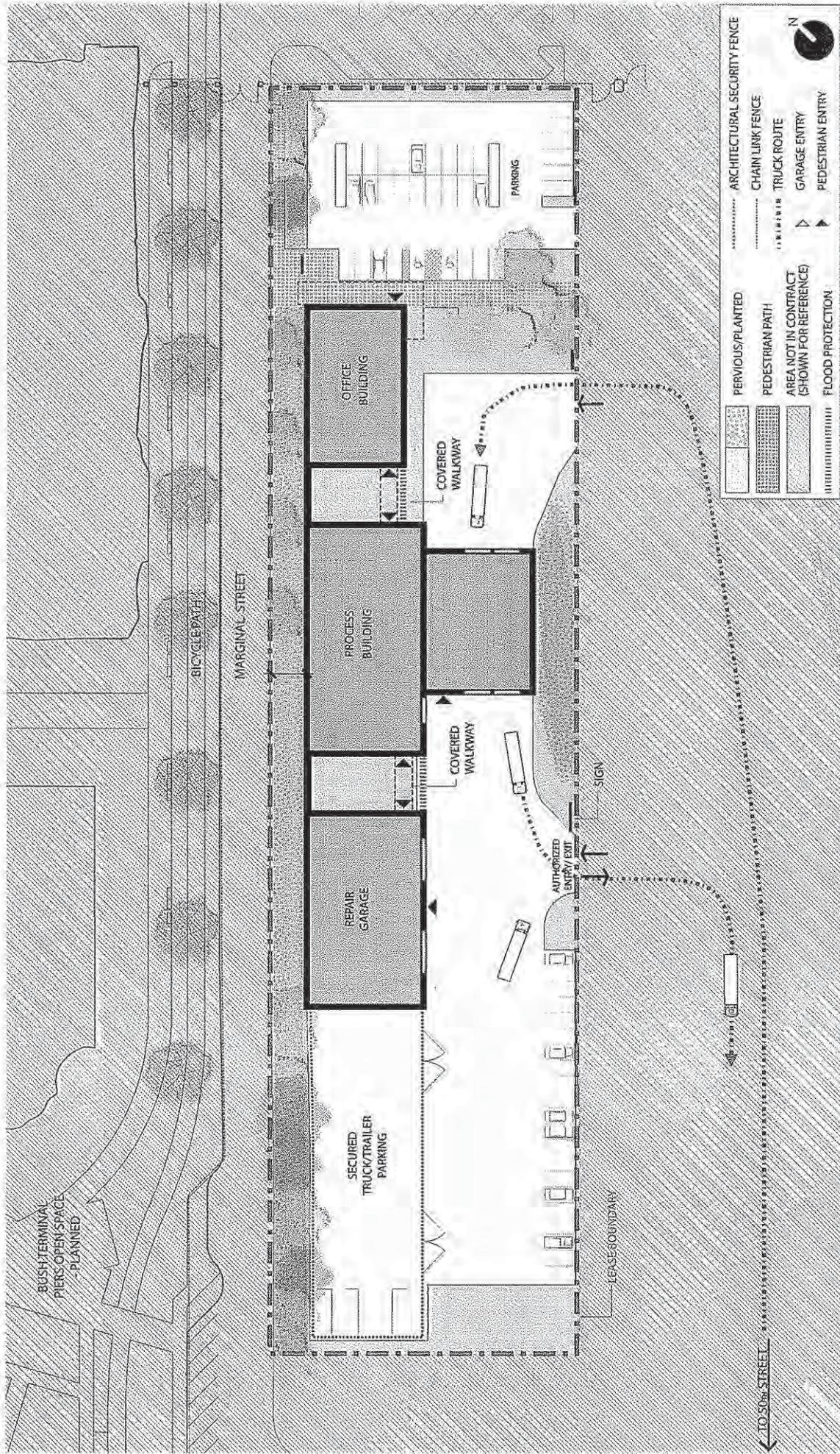
- Building A: Jamon Industries
- Building B: Royal Furniture, Kings County Action Group, Fabre Hardware MFG Corp, DSD Construction Co, Mazz Wholesale, Jorhat New York, LED Waves, Elegante Brass Imports, NYPD, Dependable Industries, Horticultural Creations
- Building C: Healthline Trading, SKA-Doo Sports Co, Archer & Canvas Design, Denny & Son, Eliaz Trading Corp, Delet Industries Inc., R. Ben Toe Corp., M. Frambar Assoc., American Fleece Co., Platinum Trading, D Mana Fashion Co, MOD Restoration, Uptown Gift Snoods New York, Jewelry Park Inc.
- Building D: United Store Fixtures



ClearBrook Recycling

March 10, 2014

EXHIBIT B:
CONTEXT PLAN



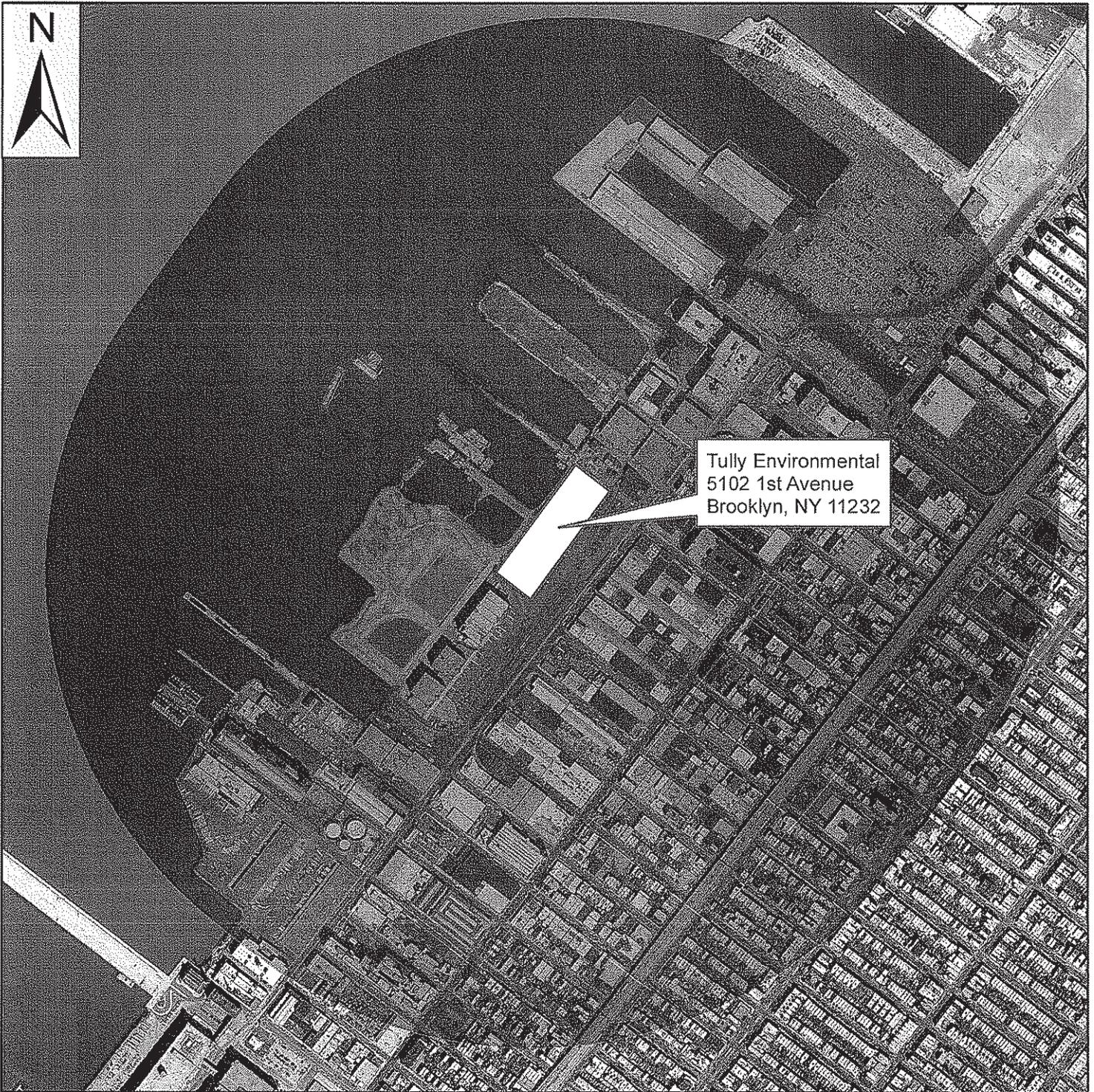
**EXHIBIT C:
SITE PLAN**

SITE
SCALE: 1"=50'

ClearBrook Recycling
March 10, 2014

Exhibit D

Potential Environmental Justice Areas within one half mile of Tully Environmental , 5102 1st Avenue, Brooklyn, NY 11232



This computer representation has been compiled from supplied data or information that has not been verified by EPA or NYSDEC. The data is offered here as a general representation only and is not to be used for commercial purposes without verification by an independent professional qualified to verify such data or information.

Neither EPA nor NYSDEC guarantee the accuracy, completeness, or timeliness of the information shown and shall not be liable for any loss or injury resulting from reliance.

Data Source for Potential Environmental Justice Areas:
U.S. Census Bureau, 2000 U.S. Census



SCALE: 1:10,000

Legend

-  Not an EJ Area
-  Potential EJ Area

For questions about this map contact:
New York State Department of
Environmental Conservation
Office of Environmental Justice
625 Broadway, 14th Floor
Albany, New York 12233-1500
(518) 402-8556
ej@gw.dec.state.ny.us

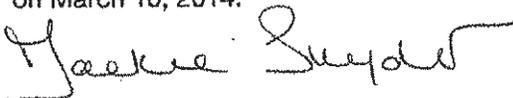
March 10, 2014

CERTIFICATE 24995

RESOLVED That the Design Commission, having considered designs for the construction of a grease recycling facility, Bush Terminal Industrial Campus, 5102 First Avenue, Brooklyn, submitted by the Economic Development Corporation, represented by exhibits 6883-P, Q, T, V & W of record in this matter, hereby gives to the same unanimous preliminary approval with the understanding that a darker green will be selected for the metal panels to differentiate them from the tensile fabric.

Preliminary approval is conditioned upon submission of this project for final review and approval before March 10, 2016.

A true copy of resolution adopted by
the Design Commission at its meeting
on March 10, 2014.



Jackie Snyder
Executive Director

August 16, 2012

**SEQR
NEGATIVE DECLARATION
NOTICE OF DETERMINATION OF NO SIGNIFICANCE**

EMPIRE STATE DEVELOPMENT

**RESTORE NY COMMUNITIES INITIATIVE – ROUND 3
BUSH TERMINAL – CAMPUS INFRASTRUCTURE AND TULLY ENVIRONMENTAL DEVELOPMENT PROJECT
BROOKLYN, KINGS COUNTY**

This notice is issued pursuant to Part 617 of the implementing regulations pertaining to Article 8 (State Environmental Quality Review Act) of the Environmental Conservation Law.

Empire State Development (ESD) has determined that the proposed action described below will not have a significant adverse effect on the environment.

ESD classified the proposed action as an Unlisted Action under SEQRA.

Description and Location of Action

The proposed action involves the provision of ESD funding under Round 3 of the RESTORE NY Communities Initiative Program to the City of New York to facilitate the Bush Terminal – Campus Infrastructure and Tully Environmental Project (the “project”) at the Bush Terminal Industrial Complex (“Bush Terminal”), located on the Sunset Park waterfront in Brooklyn, NY.

The New York City Economic Development Corporation (“NYCEDC”) proposes to develop a 130,000 square foot, underutilized parcel of Bush Terminal, approximately bounded by 44th Street to the north, the Internal Roadway (an unmapped roadway within Bush Terminal) to the east, 47th Street to the south, and Marginal Street (an unmapped street along the piers) to the west. NYCEDC will demolish three warehouse/distribution buildings on the parcel (“Buildings 39/40 and 45”) and upgrade site infrastructure and utility services, including gas, water, electric, storm sewer and sanitary sewer, to prepare the site for the construction of a grease liquid handling facility to be developed by Tully Environmental, Inc. (“TEI”).

The Restore NY funds will be used for a portion of the cost of demolition of buildings, environmental cleanup (asbestos removal) and infrastructure upgrades. Building 39/40 is a 22,800-squarefoot, one-story, mezzanine loft building constructed of brick and heavy timber. The building has a footprint of approximately 15,000 square feet. A 300-square-foot shed also exists on the premises. Building 45 is a 13,100-square-foot, one-story building.

Infrastructure improvements will include: (1) Water Service Rehabilitation and New Water Services, (2) Fire Water Services, (3) Domestic Water Services, (4) Electrical Service Work, (5) New Gas Service, (6) Site Storm Drainage System Rehabilitation, and (7) Pavement reconstruction, including excavation of existing pavement and installation of new roadway.

Following completion of demolition and infrastructure upgrade, TEI will develop an up to 60,000 square foot grease liquid handling facility to receive grease from haulers, treat it and transport it to a proper disposal site. Once TEI reaches a target volume of grease handling, the facility will be upgraded to a biodiesel plant converting grease into a clean burning fuel. The biodiesel plant will be created within the same building envelope, and would be able to convert brown grease into a clean burning fuel that will be utilized within the City's borders.

Reasons Supporting the Determination of No Significant Impact

ESD has reviewed the SEQRA Full Environmental Assessment Form (EAF), the criteria contained in 617.7(c) in making this Determination. The proposed project involves the demolition and construction of buildings and infrastructure improvements on a site in a developed area. The proposed project does not have the potential to result in significant adverse impacts related to Land Use, Zoning and Public Policy, Socioeconomic Conditions, Community Facilities and Services, Open Space, Shadows, Urban Design and Visual Resources, Transportation, Air Quality, Noise, Natural Resources, Hazardous Materials, Neighborhood Character, and Construction; and the proposed project is not unusually large such that an assessment of the project's effects is necessary for Infrastructure, Solid Waste and Sanitation Services, Energy, and Public Health. The technical areas that have the potential to be impacted including Historic Resources and Waterfront Revitalization Program are summarized below.

Historic Resources

Buildings 39/40 and 45, which are proposed to be demolished, are located within the Bush Terminal Historic District, which is eligible for listing in the National Register of Historic Places. The New York State Office of Parks, Recreation and Historic Preservation (OPRHP) has reviewed the project in accordance with Section 14.09 of the New York State Parks, Recreation and Historic Preservation Law. OPRHP found in a letter dated, July 6, 2009, that Buildings 39/40 and 45 do not contribute to the National Register of Historic Places Bush Terminal Historic District, and as such did not have any concerns with the demolition of the buildings. OPRHP further determined that the project will have No Adverse Impact upon historic resources provided that: 1) massing and façade plans are submitted for review and comment at the preliminary and pre-final stages of development; and 2) a construction protection plan is put in place for any historic buildings within 90 feet of the proposed construction. ESD will ensure that condition # 1 is met. With respect to condition #2, NYCEDC informed ESD that there are no historic buildings within 90 feet of the project. Thus, a construction protection plan is not required. As OPRHP has no concerns with the demolition and as the massing and façade plans, when prepared, would be

subject to OPRHP review and approval, no significant adverse impacts on historic resources are anticipated as a result of the proposed project.

Waterfront Revitalization Program

The project site is located within the designated New York State and New York City coastal zone boundaries, and as such is subject to review for its consistency with the New York State and New York City coastal zone management policies.

A New York State Coastal Management Program Coastal Assessment Form was completed, which indicated that no significant effect on any coastal resources, activities or services would result from the proposed action. The proposed action was also assessed for its consistency with the policies of the New York City Local Waterfront Revitalization Program (LWRP). A New York City Waterfront Revitalization Program Consistency Assessment Form was prepared, which indicated that further assessment of Policies 1, 2, 6 and 7.3 were required.

A review of the LWRP policies concluded that the proposed action is consistent with the LWRP Policy 1 to support and facilitate commercial redevelopment in an area well suited to such development and with the LWRP Policy 2 to support water-dependent and industrial uses in New York City coastal areas that are well suited to their continued operation. The development site is located within the Sunset Park Significant Maritime and Industrial Areas. The proposed development conforms with the existing zoning for manufacturing/industrial uses, and aligns with community development and policy plans, including Sunset Park 197-a Plan, sponsored by Brooklyn Community Board 7 (CB7) and NYCEDC's Sunset Park Vision Plan.

The proposed project is consistent with LWRP Policy 6 to minimize loss of life, structures and natural resources caused by flooding and erosion. The proposed development site is located within federally designated flood hazard areas: "Zone X" and "Zone AE". Construction activities will comply with all local, State and federal floodplain management statutes and regulations.

The proposed project is also consistent with LWRP Policy 7.3 to minimize potential degradation of coastal resources from the transport of solid waste and hazardous substances and site solid and hazardous waste facilities. The proposed grease liquid handling facility will receive grease from haulers, treat it and transport it to a proper disposal site. The facility will use methods of transporting waste that will protect the coastal environment and safety and general welfare of the public, and the facility will be designed so as to not adversely affect protected natural areas. The receiving building itself will be an enclosed building with a drive-through area large enough to accommodate a tractor trailer. Material will be pumped off of incoming trucks with most of the trucks delivering liquid holding 3,000 gallons or less. Grease arriving in these trucks will typically be 5% solids with the remaining volume consisting of clean water that is pumped from the grease trap during servicing. Within the building will be holding tanks that hold the 5% solids prior to dewatering. Dewatering can be accomplished through the use of a belt press, a centrifuge or with a new technology that TEI is introducing, a dewatering trailer. Once the

grease has been dewatered, effluent (remaining clean water) will be reintroduced back in the City sewer system.

The proposed action would facilitate the redevelopment of underutilized industrial land at the Bush Terminal and would support the continued growth of the industrial business sector at the site as well as promote the City's economic development and enhance the tax base. The proposed project would not alter the natural features of the shoreline and it would not increase flood hazards as no increase in the amount of impervious surface would take place. In addition, the proposed action is expected to comply with all applicable requirements and regulations for construction within flood hazard areas and for solid waste disposal.

Summary

ESD has determined, based on the foregoing analyses, that approval of the proposed action:

- would not result in a substantial adverse change in existing air quality, ground or surface water quality or quantity, traffic or noise levels; a substantial increase in solid waste production; or a substantial increase in potential for erosion, flooding, leaching or drainage problems;
- would not result in the removal or destruction of large quantities of vegetation or fauna; impacts on a significant habitat area; substantial adverse impacts on a threatened or endangered specific of animal or plant; or other significant adverse impacts to natural resources;
- would not result in the creation of a material conflict with a community's current plans or goals as officially approved or adopted;
- would not result in the impairment of the character or quality of important historical, archaeological, architectural, or aesthetic resources or of existing community or neighborhood character;
- would not result in a major change in the use of either the quantity or type of energy;
- would not result in the creation of a hazard to human health;
- would not result in a substantial change in the use or intensity of use of land, open space or recreational resources, or in its capacity to support existing uses;
- would not encourage or attract a large number of people to a place or places for more than a few days, compared to the number of people who would come to such place absent the action;

- would not result in the creation of a material demand for other actions that would result in one of the above consequence;
- would not result in changes in two or more elements of the environment, no one of which has a significant impact on the environment, but when considered together result in a substantial adverse impact on the environment;
- would not result in two or more related actions undertaken funded or approved by an agency, none of which has or would have a significant impact on the environment, but when considered cumulatively would meet one or more of the criteria in this subdivision.

Based on the foregoing, ESD has determined that the proposed action will not have any significant adverse impacts on the environment.

For Further Information:

Contact Person: Soo Kang, Senior Planner, Planning and Environmental Review
Address: Empire State Development, 633 Third Avenue, New York, NY 10017
Telephone Number: (212) 803-3253

Appendix 2

SUSTAINABILITY STATEMENT

This Sustainability Statement documents sustainable activities and green remediation efforts planned under this remedial action.

Reuse of Clean, Recyclable Materials. Reuse of clean, locally-derived recyclable materials reduces consumption of non-renewable virgin resources and can provide energy savings and greenhouse gas reduction.

This project intends to use recycled concrete aggregate wherever possible in grading and backfilling the Site. An estimate of the quantity (in tons) of clean, non-virgin materials (reported by type of material) reused under this plan will be quantified and reported in the RAR.

Reduce Consumption of Virgin and Non-Renewable Resources. Reduced consumption of virgin and non-renewable resources lowers the overall environmental impact of the project on the region by conserving these resources.

The project will reduce the consumption of virgin materials by substituting recycled concrete aggregate for mined gravel and/or sand backfill whenever possible. An estimate of the quantity (in tons) of virgin and non-renewable resources, the use of which will be avoided under this plan, will be quantified and reported in the RAR.

Reduced Energy Consumption and Promotion of Greater Energy Efficiency. Reduced energy consumption lowers greenhouse gas emissions, improves local air quality, lessens in-city power generation requirements, can lower traffic congestion, and provides substantial cost savings.

Recycled concrete materials and other backfill materials will be locally sourced reducing the energy consumption associated with transporting these materials to the Site. Best efforts will be made to quantify energy efficiencies achieved during the remediation and will be reported in the Remedial Action Report (RAR). Where energy savings cannot be easily quantified, a gross indicator of the amount of energy saved or the means by which energy savings was achieved will be reported.

Best efforts will be made to quantify energy efficiencies achieved during the remediation and will be reported in the Remedial Action Report (RAR). Where energy savings cannot be easily quantified, a gross indicator of the amount of energy saved or the means by which energy savings was achieved will be reported.

Conversion to Clean Fuels. Use of clean fuel improves NYC's air quality by reducing harmful emissions.

An estimate of the volume of clean fuels used during remedial activities will be quantified and reported in the RAR.

Recontamination Control. Recontamination after cleanup and redevelopment is completed undermines the value of work performed, may result in a property that is less protective of public health or the environment, and may necessitate additional cleanup work later or impede future redevelopment. Recontamination can arise from future releases that occur within the property or by influx of contamination from off-Site.

An estimate of the area of the Site that utilizes recontamination controls under this plan will be reported in the RAR in square feet.

Storm-water Retention. Storm-water retention improves water quality by lowering the rate of combined storm-water and sewer discharges to NYC's sewage treatment plants during periods of precipitation, and reduces the volume of untreated influent to local surface waters.

An estimate of the enhanced storm-water retention capability of the redevelopment project will be included in the RAR.

Linkage with Green Building. Green buildings provide a multitude of benefits to the city across a broad range of areas, such as reduction of energy consumption, conservation of resources, and reduction in toxic materials use.

Green Building practices that are utilized in this construction will be reported in the RAR.

Paperless Brownfield Cleanup Program. Under this program, submission of electronic documents will replace submission of hard copies for the review of project documents, communications and milestone reports.

Low-Energy Project Management Program. Under this program, whenever possible, meetings are held using remote communication technologies, such as videoconferencing and teleconferencing to reduce energy consumption and traffic congestion associated with personal transportation.

Trees and Plantings. Trees and other plantings provide habitat and add to NYC's environmental quality in a wide variety of ways. Native plant species and native habitat provide optimal support to local fauna, promote local biodiversity, and require less maintenance.

An estimate of the land area that will be vegetated, including the number of trees planted or preserved, will be reported in square feet in the RAR.

Appendix 3

SOIL/MATERIALS MANAGEMENT PLAN

1.1 Soil Screening Methods

Visual, olfactory and PID soil screening and assessment will be performed under the supervision of a Qualified Environmental Professional and will be reported in the RAR. Soil screening will be performed during invasive work performed during the remedy and development phases prior to issuance of the Notice of Completion.

1.2 Stockpile Methods

Excavated soil from suspected areas of contamination (e.g., hot spots, USTs, drains, etc.) will be stockpiled separately and will be segregated from clean soil and construction materials. Stockpiles will be used only when necessary and will be removed as soon as practicable. While stockpiles are in place, they will be inspected daily, and before and after every storm event. Results of inspections will be recorded in a logbook and maintained at the Site and available for inspection by OER. Excavated soils will be stockpiled on, at minimum, double layers of 8-mil minimum sheeting, will be kept covered at all times with appropriately anchored plastic tarps, and will be routinely inspected. Broken or ripped tarps will be promptly replaced.

All stockpile activities will be compliant with applicable laws and regulations. Soil stockpile areas will be appropriately graded to control run-off in accordance with applicable laws and regulations. Stockpiles of excavated soils and other materials shall be located at least of 50 feet from the property boundaries, where possible. Hay bales or equivalent will surround soil stockpiles except for areas where access by equipment is required. Silt fencing and hay bales will be used as needed near catch basins, surface waters and other discharge points.

1.3 Characterization of Excavated Materials

Soil/fill or other excavated media that is transported off-Site for disposal will be sampled in a manner required by the receiving facility, and in compliance with applicable laws and regulations. Soils proposed for reuse on-Site will be managed as defined in this plan.

1.4 Materials Excavation, Load-Out and Departure

The PE/QEP overseeing the remedial action will:

- oversee remedial work and the excavation and load-out of excavated material;
- ensure that there is a party responsible for the safe execution of invasive and other work performed under this work plan;
- ensure that Site development activities and development-related grading cuts will not interfere with, or otherwise impair or compromise the remedial activities proposed in this RAWP;
- ensure that the presence of utilities and easements on the Site has been investigated and that any identified risks from work proposed under this plan are properly addressed by appropriate parties;
- ensure that all loaded outbound trucks are inspected and cleaned if necessary before leaving the Site;
- ensure that all egress points for truck and equipment transport from the Site will be kept clean of Site-derived materials during Site remediation.

Locations where vehicles exit the Site shall be inspected daily for evidence of soil tracking off premises. Cleaning of the adjacent streets will be performed as needed to maintain a clean condition with respect to Site-derived materials.

Open and uncontrolled mechanical processing of historical fill and contaminated soil on-Site will not be performed without prior OER approval.

1.5 Off-Site Materials Transport

Loaded vehicles leaving the Site will comply with all applicable materials transportation requirements (including appropriate covering, manifests, and placards) in accordance with applicable laws and regulations, including use of licensed haulers in accordance with 6 NYCRR Part 364. If loads contain wet material capable of causing leakage from trucks, truck liners will

be used. Queuing of trucks will be performed on-Site, when possible in order to minimize off Site disturbance. Off-Site queuing will be minimized.

Outbound truck transport routes are described in the following:

1. Continue west on First Avenue;
2. Follow the signs for I-278 East or West

This routing takes into account the following factors: (a) limiting transport through residential areas and past sensitive sites; (b) use of mapped truck routes; (c) minimizing off-Site queuing of trucks entering the facility; (d) limiting total distance to major highways; (e) promoting safety in access to highways; and (f) overall safety in transport. To the extent possible, all trucks loaded with Site materials will travel from the Site using these truck routes. Trucks will not stop or idle in the neighborhood after leaving the project Site.

1.6 Materials Disposal Off-Site

The following documentation will be established and reported by the PE/QEP for each disposal destination used in this project to document that the disposal of regulated material exported from the Site conforms with applicable laws and regulations: (1) a letter from the PE/QEP or Enrollee to each disposal facility describing the material to be disposed and requesting written acceptance of the material. This letter will state that material to be disposed is regulated material generated at an environmental remediation Site in Brooklyn, New York under a governmental remediation program. The letter will provide the project identity and the name and phone number of the PE/QEP or Enrollee. The letter will include as an attachment a summary of all chemical data for the material being transported; and (2) a letter from each disposal facility stating it is in receipt of the correspondence (1, above) and is approved to accept the material. These documents will be included in the RAR.

The Remedial Action Report will include an itemized account of the destination of all material removed from the Site during this remedial action. Documentation associated with disposal of all material will include records and approvals for receipt of the material. This information will be presented in the RAR.

All impacted soil/fill or other waste excavated and removed from the Site will be managed as regulated material and will be disposed in accordance with applicable laws and regulations. Historic fill and contaminated soils taken off-Site will be handled as solid waste and will not be disposed at a Part 360-16 Registration Facility (also known as a Soil Recycling Facility).

Waste characterization will be performed for off-Site disposal in a manner required by the receiving facility and in conformance with its applicable permits. Waste characterization sampling and analytical methods, sampling frequency, analytical results and QA/QC will be reported in the RAR. A manifest system for off-Site transportation of exported materials will be employed. Manifest information will be reported in the RAR. Hazardous wastes derived from on-Site will be stored, transported, and disposed of in compliance with applicable laws and regulations.

If disposal of soil/fill from this Site is proposed for unregulated disposal (i.e., clean soil removed for development purposes), including transport to a Part 360-16 Registration Facility, a formal request will be made for approval by OER with an associated plan compliant with 6NYCRR Part 360-16. This request and plan will include the location, volume and a description of the material to be recycled, including verification that the material is not impacted by site uses and that the material complies with receipt requirements for recycling under 6NYCRR Part 360. This material will be appropriately handled on-Site to prevent mixing with impacted material.

1.7 Materials Reuse On-Site

Soil and fill that is derived from the property that meets the soil cleanup objectives established in this plan may be reused on-Site. The soil cleanup objectives for on-Site reuse are listed in Table 1. 'Reuse on-Site' means material that is excavated during the remedy or development, does not leave the property, and is relocated within the same property and on comparable soil/fill material, and subject to Engineering and Institutional Controls. The PE/QEP will ensure that reused materials are segregated from other materials to be exported from the Site and that procedures defined for material reuse in this RAWP are followed.

Organic matter (wood, roots, stumps, etc.) or other waste derived from clearing and grubbing of the Site will not be buried on-Site. Soil or fill excavated from the site for grading or other purposes will not be reused within a cover soil layer or within landscaping berms.

1.8 Demarcation

After completion of hotspot removal and any other invasive remedial activities, and prior to backfilling, the top of the residual soil/fill will be defined by one of three methods: (1) placement of a demarcation layer. The demarcation layer will consist of geosynthetic fencing or equivalent material to be placed on the surface of residual soil/fill to provide an observable reference layer. A description or map of the approximate depth of the demarcation layer will be provided in the SMP; or (2) a land survey of the top elevation of residual soil/fill before the placement of cover soils, pavement and associated sub-soils, or other materials or structures or, (3) all materials beneath the approved cover will be considered impacted and subject to site management after the remedy is complete. Demarcation may be established by one or any combination of these three methods. As appropriate, a map showing the method of demarcation for the Site and all associated documentation will be presented in the RAR.

This demarcation will constitute the top of the site management horizon. Materials within this horizon require adherence to special conditions during future invasive activities as defined in the Site Management Plan.

1.9 Import of Backfill Soil from Off-Site Sources

This Section presents the requirements for imported fill materials to be used below the cover layer and within the clean soil cover layer. All imported soils will meet OER-approved backfill and cover soil quality objectives for this Site. The backfill and cover soil quality objectives are listed in Table 4.

A process will be established to evaluate sources of backfill and cover soil to be imported to the Site, and will include an examination of source location, current and historical use(s), and any applicable documentation. Material from industrial sites, spill sites, environmental remediation sites or other potentially contaminated sites will not be imported to the Site.

The following potential sources may be used pending attainment of backfill and cover soil quality objectives:

- Clean soil from construction projects at non-industrial sites in compliance with applicable laws and regulations;
- Clean soil from roadway or other transportation-related projects in compliance with applicable laws and regulations;
- Clean recycled concrete aggregate (RCA) from facilities permitted or registered by the regulations of NYS DEC.

All materials received for import to the Site will be approved by a PE/QEP and will be in compliance with provisions in this RAWP. The RAR will report the source of the fill, evidence that an inspection was performed on the source, chemical sampling results, frequency of testing, and a Site map indicating the locations where backfill or soil cover was placed.

Source Screening and Testing

Inspection of imported fill material will include visual, olfactory and PID screening for evidence of contamination. Materials imported to the Site will be subject to inspection, as follows:

- Trucks with imported fill material will be in compliance with applicable laws and regulations and will enter the Site at designated locations;
- The PE/QEP is responsible to ensure that every truck load of imported material is inspected for evidence of contamination; and
- Fill material will be free of solid waste including pavement materials, debris, stumps, roots, and other organic matter, as well as ashes, oil, perishables or foreign matter.

Composite samples of imported material will be taken at a minimum frequency of one sample for every 500 cubic yards of material. Once it is determined that the fill material meets imported backfill or cover soil chemical requirements and is non-hazardous, and lacks petroleum contamination, the material will be loaded onto trucks for delivery to the Site.

Recycled concrete aggregate (RCA) will be imported from facilities permitted or registered by NYSDEC. Facilities will be identified in the RAR. A PE/QEP is responsible to ensure that the facility is compliant with 6NYCRR Part 360 registration and permitting requirements for the period of acquisition of RCA. RCA imported from compliant facilities will not require additional testing, unless required by NYSDEC under its terms for operation of the facility. RCA imported to the Site must be derived from recognizable and uncontaminated concrete. RCA material is not acceptable for, and will not be used as cover material.

1.10 Fluids Management

All liquids to be removed from the Site, including dewatering fluids, will be handled, transported and disposed in accordance with applicable laws and regulations. Liquids discharged into the New York City sewer system will receive prior approval by New York City Department of Environmental Protection (NYC DEP). The NYC DEP regulates discharges to the New York City sewers under Title 15, Rules of the City of New York Chapter 19. Discharge to the New York City sewer system will require an authorization and sampling data demonstrating that the groundwater meets the City's discharge criteria. The dewatering fluid will be pretreated as necessary to meet the NYC DEP discharge criteria. If discharge to the City sewer system is not appropriate, the dewatering fluids will be managed by transportation and disposal at an off-Site treatment facility.

Discharge of water generated during remedial construction to surface waters (i.e. a stream or river) is prohibited without a SPDES permit issued by New York State Department of Environmental Conservation.

1.11 Storm-water Pollution Prevention

Applicable laws and regulations pertaining to storm-water pollution prevention will be addressed during the remedial program. Erosion and sediment control measures identified in this RAWP (silt fences and barriers, and hay bale checks) will be installed around the entire perimeter of the remedial construction area and inspected once a week and after every storm event to ensure that they are operating appropriately. Discharge locations will be inspected to determine whether erosion control measures are effective in preventing significant impacts to

receptors. Results of inspections will be recorded in a logbook and maintained at the Site and available for inspection by OER. All necessary repairs shall be made immediately. Accumulated sediments will be removed as required to keep the barrier and hay bale check functional. Undercutting or erosion of the silt fence to anchor will be repaired immediately with appropriate backfill materials. Manufacturer's recommendations will be followed for replacing silt fencing damaged due to weathering.

1.12 Contingency Plan

This contingency plan is developed for the remedial construction to address the discovery of unknown structures or contaminated media during excavation. Identification of unknown contamination source areas during invasive Site work will be promptly communicated to OER's Project Manager. Petroleum spills will be reported to the NYS DEC Spill Hotline. These findings will be included in the daily report. If previously unidentified contaminant sources are found during on-Site remedial excavation or development-related excavation, sampling will be performed on contaminated source material and surrounding soils and reported to OER. Chemical analytical testing will be performed for TAL metals, TCL volatiles and semi-volatiles, TCL pesticides and PCBs, as appropriate.

1.13 Odor, Dust and Nuisance Control

Odor Control

All necessary means will be employed to prevent on- and off-Site odor nuisances. At a minimum, procedures will include: (a) limiting the area of open excavations; (b) shrouding open excavations with tarps and other covers; and (c) use of foams to cover exposed odorous soils. If odors develop and cannot otherwise be controlled, additional means to eliminate odor nuisances will include: (d) direct load-out of soils to trucks for off-Site disposal; and (e) use of chemical odorants in spray or misting systems.

This odor control plan is capable of controlling emissions of nuisance odors. If nuisance odors are identified, work will be halted and the source of odors will be identified and corrected. Work will not resume until all nuisance odors have been abated. OER will be notified of all odor

complaint events. Implementation of all odor controls, including halt of work, will be the responsibility of the PE/QEP's certifying the Remedial Action Report.

Dust Control

Dust management during invasive on-Site work will include, at a minimum:

- Use of a dedicated water spray methodology for roads, excavation areas and stockpiles.
- Use of properly anchored tarps to cover stockpiles.
- Exercise extra care during dry and high-wind periods.
- Use of gravel or recycled concrete aggregate on egress and other roadways to provide a clean and dust-free road surface.

This dust control plan is capable of controlling emissions of dust. If nuisance dust emissions are identified, work will be halted and the source of dusts will be identified and corrected. Work will not resume until all nuisance dust emissions have been abated. OER will be notified of all dust complaint events. Implementation of all dust controls, including halt of work, will be the responsibility of the PE/QEP's responsible for certifying the Remedial Action Report.

Other Nuisances

Noise control will be exercised during the remedial program. All remedial work will conform, at a minimum, to NYC noise control standards.

Rodent control will be provided, during Site clearing and grubbing, and during the remedial program, as necessary, to prevent nuisances.

Appendix 4

Health and Safety Plan



G. C. ENVIRONMENTAL, INC.
CONSULTANTS CONTRACTORS

22 OAK STREET
BAY SHORE, NEW YORK 11706

TEL: (631) 206-3700
FAX: (631) 206-3729

TOPO MAP

BTU 39, 40 & 45
5102 FIRST AVENUE
BROOKLYN, NEW YORK
NY 11232

GCE PROJECT NO.: 13-246-00

FIGURE 1

TOPO
MAP



G. C. ENVIRONMENTAL, INC.
CONSULTANTS CONTRACTORS

22 OAK STREET
BAY SHORE, NEW YORK 11706

TEL: (631) 206-3700
FAX: (631) 206-3729

AREA MAP

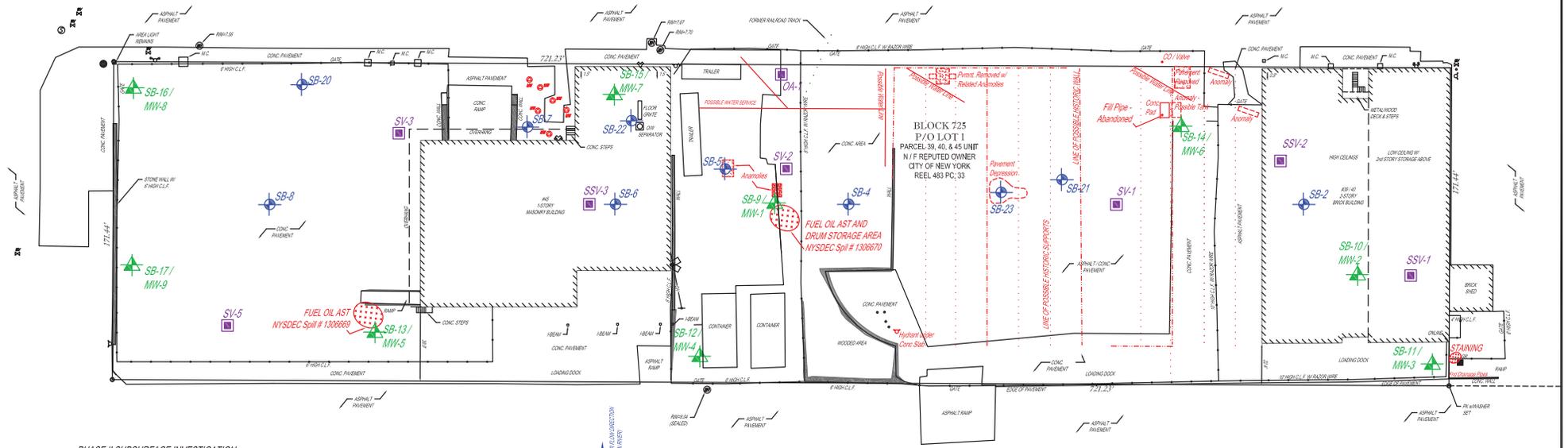
BTU 39, 40 & 45
5102 FIRST AVENUE
BROOKLYN, NEW YORK
NY 11232

GCE PROJECT NO.: 13-246-00

FIGURE 2

AREA MAP

HUDSON RIVER WATERFRONT



PHASE II SUBSURFACE INVESTIGATION

- Soil Boring
- Soil Boring and Monitoring Well
- Vapor Intrusion Sample
- SV - Soil Vapor Sampling Location*
- SSV - Sub-Slab Soil Vapor Sampling Location*
- OA - Outdoor Air Sampling Location*

- NOTES:**
- PROPERTY KNOWN AS A PORTION OF LOT 1, BLOCK 725, AS SHOWN ON THE NEW YORK CITY DIGITAL TAX MAP OF THE BOROUGH OF BROOKLYN, KINGS COUNTY, CITY AND STATE OF NEW YORK.
 - LEASE AREA = 123,848 S.F. OR 2.839 AC.
 - LOCATION OF UNDERGROUND UTILITIES ARE APPROXIMATE LOCATIONS AND DEEPS ARE BASED ON UTILITY MARKINGS ABOVE GROUND STRUCTURES THAT WERE VISIBLE & ACCESSIBLE IN THE FIELD, AND THE MARKS AS LISTED IN THE REFERENCES AVAILABLE AT THE TIME OF THE SURVEY, AVAILABLE AS-BUILT PLANS AND UTILITY MARKINGS. NO RECORD MAPS OF ALL UNDERGROUND UTILITIES AND STRUCTURES WERE AVAILABLE BEFORE ANY EXCAVATIONS TO REVEAL ALL UNDERGROUND UTILITIES SHOULD BE REFERRED TO THEIR LOCATION, SIZE AND TYPE BY THE PROPERTY UTILITY COMPANIES, CONTROL POINT ASSOCIATES, INC. DOES NOT GUARANTEE THE UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA EITHER IN SERVICE OR ABANDONED.
 - THIS PLAN IS BASED ON INFORMATION PROVIDED BY A SURVEY PREPARED IN THE FIELD BY CONTROL POINT ASSOCIATES, INC. AND OTHER REFERENCES MATERIALS AS NOTED HEREON.
 - THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT AND IS SUBJECT TO THE RESTRICTIONS, COVENANTS AND/OR EASEMENTS THAT MAY BE CONTAINED THEREIN.
 - BY GRAPING PLOTTING ON A PROPERTY LOCATED IN A FLOOD HAZARD ZONE (AE 10), BASE FLOOD ELEVATION DETERMINED (ELEVATION TO MOVE) TO BE 105.00 FEET BY NY DEC REG. 25.
 - THE EXISTENCE OF UNDERGROUND STORAGE TANKS, IF ANY, WAS NOT KNOWN AT THE TIME OF THE SURVEY.
 - ELEVATIONS ARE BASED UPON MVD 88 PER OPS OBSERVATION UTILIZING HISTORIC KENNETT METHODIC.
 - THERE WERE NO NATURAL STREAMS OR WATERCOURSES VISIBLE AT THE TIME OF THE SURVEY.
 - ENCROACHMENTS AND VAULTS, IF ANY, BEYOND SURFACE, NOT SHOWN HEREON.
 - THE OFFSETS SHOWN ARE NOT TO BE USED FOR THE CONSTRUCTION OF ANY STRUCTURE, FENCE, PERMITS, ETC.
 - LEASE LINE SHOWN PER INFORMATION PROVIDED BY CLIENT.

GROUND PENETRATING RADAR (GPR) SURVEY AND SAMPLING LOCATION NOTES:

- ALL UTILITY PLACEMENT PER GPR DATA LISTED ARE APPROXIMATE FOR PURPOSES OF PHASE II INVESTIGATION ONLY; NOT TO BE USED FOR CONSTRUCTION OR FOR INSTALLATION OF PERMANENT STRUCTURES.
- SUBSURFACE ANOMALIES APPEAR IN A REGULAR PATTERN ALONG LINES OF HISTORIC WALL REMAINS AND INFERRED FORMER SUPPORT STRUCTURES AS MAPPED ABOVE. SURFACE EVIDENCE, INCLUDING METAL DISCOPILATES, CONCRETE PILES, AND OTHER REMAINS AT SURFACE, ALSO IN A REGULAR PATTERN, WOULD FURTHER SUGGEST THE STRUCTURAL NATURE OF THESE FEATURES.
- NO SUBSURFACE EXPLORATION OTHER THAN GPR AND ELECTROMAGNETIC (EM) DETECTION WERE PERFORMED FOR THIS SURVEY.
- ELEMENTS SHOWN HEREIN WERE NOTED DURING THE SUBJECT PHASE II ASSESSMENT. COEXISTING OF GPR AND EM SURVEY AS WELL AS GENERAL SURFACE OBSERVATIONS WERE REFERRED TO CONCERN AREAS OF CONCERN AS STATED IN PHASE I REPORTS, AND TO PREPARE FOR BORNESSBY AS SHOWN.
- ADJUSTMENTS TO LOCATIONS OF SAMPLING POINTS MADE ACCORDING TO CONFERENCE CALL OF 10/31/13, BETWEEN SHAMBERG ORMA & BYCOP, DEAN DEVOE OF TULLY ENVIRONMENTAL INC. AND GORSONY COLLINS OF G. C. ENVIRONMENTAL, INC.
- REMOVED DATED 10/4/13, BORINGS SB-3, SB-4, SB-8, SB-9 AND SB-14 WERE REMOVED, AND SB-11 (M-3) WAS MOVED. NORTHWEST CORNER DOOR OF BUILDING BEING TO CONFORM TO LEASE LINE LIMITS.
- BORING LOCATIONS REVISED IN ACCORDANCE WITH FIELD ADJUSTMENTS MADE DURING SAMPLING EVENTS 10/17/13 THROUGH 10/15/13.
- MINOR DRILLING AT SB-14 WAS ENCOUNTERED REGIONAL AT 2' DEPTH AT A LOCATION DOWNWIND OF AN UNMANNED FILL LINE. SUBSEQUENT ATTEMPTS DOWNWARD WERE ALSO ENCOUNTERED AT 2' DEPTH. MINOR DRILL POINT TO THE EAST AND UPWARD BY INCLINED PENETRATION TO A DEPTH OF 15 FEET. WATER SAMPLES WERE TAKEN AT DEPTH AND LOCATION AS SHOWN.
- SB-23 WAS LOCATED IN A PAVEMENT DEPRESSION WITHIN THE PARKING LOT. PENETRATION TEST WAS FOR THE PURPOSE OF OBTAINING INFORMATION ON ANY SUBSURFACE STRUCTURES THAT MIGHT EXIST THERE. NONE WERE DISCOVERED, AND NO SOIL SAMPLES WERE TAKEN.

REFERENCES:

- THE NEW YORK CITY DIGITAL TAX MAP OF THE BOROUGH OF BROOKLYN, KINGS COUNTY, CITY AND STATE OF NEW YORK.
- MAP ENTITLED "NATIONAL FLOOD INSURANCE PROGRAM (NFIP) FLOOD INSURANCE RATE MAP, CITY OF NEW YORK, NEW YORK, BROOKLYN, MANHATTAN, WESTCHESTER, NEW YORK, QUEENS AND KINGS COUNTIES," PANEL 184 OF 47, MAP NUMBER 304878747, MAP REVISED SEPTEMBER 8, 2007.
- MAP ENTITLED "QUADRI & TOPOGRAPHIC SURVEY" PREPARED BY CONTROL POINT ASSOCIATES INC. LATEST REVISION DATED 10/25/13.

LEGEND	
	EXISTING CONTOUR
	EXISTING SPOT ELEVATION
	SUBST. TOP OF WALL ELEVATION
	SUBST. BOTTOM OF WALL ELEVATION
	SUBST. FINISHED FLOOR ELEVATION
	HYDRANT
	WATER VALVE
	OVERHEAD WIRES
	UTILITY POLE
	MONITORING WELL
	AREA LIGHT
	SOLID
	CHAIN LINK FENCE
	METAL COVER
	SANITARY SEWER MANHOLE
	TELEPHONE MANHOLE
	UNKNOWN MANHOLE
	EDGE OF PAVEMENT
	WATER LINE



FIGURE 4: SITE PLAN WITH SAMPLING LOCATIONS

G. C. ENVIRONMENTAL, INC.
CONSULTANTS CONTRACTORS

PROJECT NAME	
BUSH TERMINAL	
PARCEL 39, 40, & 45 PORTION OF LOT 1, BLOCK 725 BOROUGH OF BROOKLYN, KING COUNTY CITY AND STATE OF NEW YORK	
REVISION NOTES: 10/16/13 RELOCATED BORINGS PER SURVEY FIELD CONDITIONS. ADDED LOCATIONS RESERVATORY BORINGS SB-22 AND SB-23 10/22/13 NOTE: ADDITIONAL INCL. GIN AND REFUSAL OF SB AT SB-14	FIELD DATE: 9/25-9/24/13
FIELD BY:	
F. B. PAGE:	
DATE:	9/25/13
SCALE:	PROJECT NO: 13-285-01
DRAWING BY:	RLD
CHK BY:	
APPROVED BY:	
REVISED: 10/16/13	
10/16/13	
10/22/13	
CAD FILE NO:	PAGE NO:
	1 OF 1

HUDSON RIVER WATERFRONT

SAMPLE ID:	MW-6	NYSDEC TOGS
SAMPLE DEPTH (FBG):	10' WATER	Class G4
MATRIX:		
SAMPLING DATE:	10/15/13	
ALUMINUM (Dissolved)	0.72	0.1
ANTIMONY (Dissolved)	0.007	0.03
IRON (Dissolved)	5.1	0.3
MANGANESE (Dissolved)	1.30	0.3
SODIUM (Dissolved)	120	20

SAMPLE ID:	SV-3	NYS DOH CEH BEEF GUIDANCE
SAMPLE LOCATION:	SUBSURF AIR	
MATRIX:		
SAMPLING DATE:	10/15/13	
TETRACHLOROETHENE PCE	350	100

SAMPLE ID:	MW-7	NYSDEC TOGS
SAMPLE DEPTH (FBG):	10' WATER	Class G4
MATRIX:		
SAMPLING DATE:	10/15/13	
ALUMINUM (Dissolved)	0.78	0.1
IRON (Dissolved)	3.68	0.3
MANGANESE (Dissolved)	2.39	0.3
SODIUM (Dissolved)	221	20
DIETHYLIN	0.008	0.004

SAMPLE ID:	MW-1	NYSDEC TOGS
SAMPLE DEPTH (FBG):	10' WATER	Class G4
MATRIX:		
SAMPLING DATE:	10/14/13	
ALUMINUM (Dissolved)	2.07	0.1
IRON (Dissolved)	2.17	0.3
MANGANESE (Dissolved)	35.6	0.3
MANGANESE (Dissolved)	0.709	0.3
SODIUM (Dissolved)	279	20
Benz[a]anthracene	0.03	0.002
Chrysene	0.02	0.002

SAMPLE ID:	MW-1 dup	NYSDEC TOGS
SAMPLE DEPTH (FBG):	10' WATER	Class G4
MATRIX:		
SAMPLING DATE:	10/14/13	
ALUMINUM (Dissolved)	1.85	0.1
IRON (Dissolved)	2.4	0.3
MANGANESE (Dissolved)	0.092	0.3
SODIUM (Dissolved)	280	20

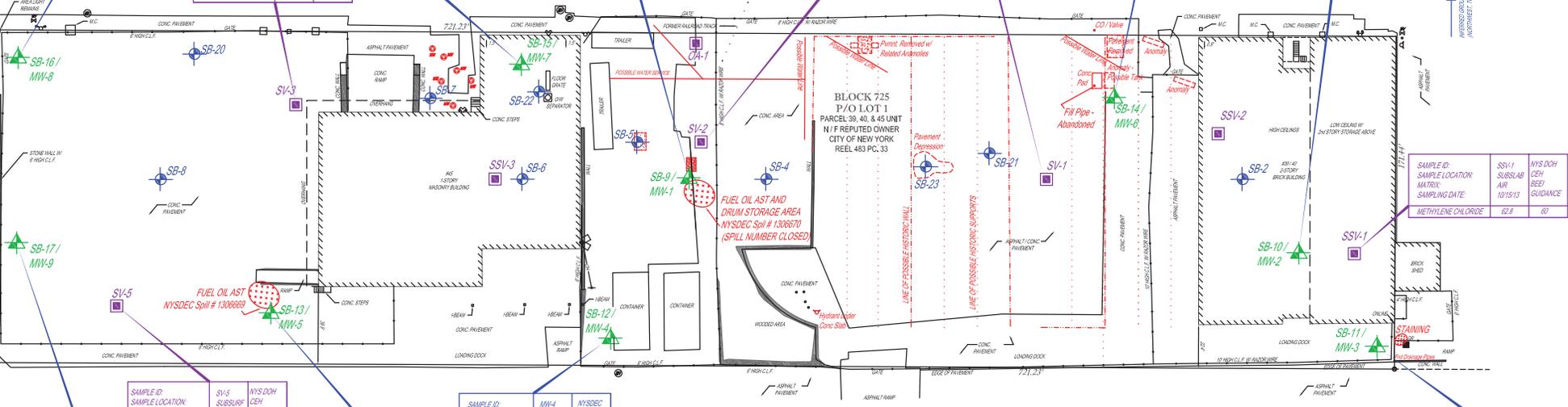
SAMPLE ID:	SV-1	NYS DOH CEH BEEF GUIDANCE
SAMPLE LOCATION:	SUBSURF AIR	
MATRIX:		
SAMPLING DATE:	10/15/13	
TRICHLOROETHENE TCE	10.5	5

SAMPLE ID:	MW-6	NYSDEC TOGS
SAMPLE DEPTH (FBG):	10' WATER	Class G4
MATRIX:		
SAMPLING DATE:	10/15/13	
ALUMINUM (Dissolved)	0.49	0.1
ANTIMONY (Dissolved)	0.045	0.03
IRON (Dissolved)	0.59	0.3
SODIUM (Dissolved)	104	20

SAMPLE ID:	MW-2	NYSDEC TOGS
SAMPLE DEPTH (FBG):	10' WATER	Class G4
MATRIX:		
SAMPLING DATE:	10/14/13	
ALUMINUM (Dissolved)	0.21	0.1
ANTIMONY (Dissolved)	0.009	0.03
MANGANESE (Dissolved)	7.7	0.3
SODIUM (Dissolved)	131	20
Benz[a]anthracene	0.03	0.002

SAMPLE ID:	SSV-1	NYS DOH CEH BEEF GUIDANCE
SAMPLE LOCATION:	SUBSLAB AIR	
MATRIX:		
SAMPLING DATE:	10/15/13	
METHYLENE CHLORIDE	62.8	60

SAMPLE ID:	MW-3	NYSDEC TOGS
SAMPLE DEPTH (FBG):	10' WATER	Class G4
MATRIX:		
SAMPLING DATE:	10/14/13	
ALUMINUM (Dissolved)	0.29	0.1
IRON (Dissolved)	0.46	0.3
MANGANESE (Dissolved)	7.47	0.3
SODIUM (Dissolved)	91.5	20



PHASE II SUBSURFACE INVESTIGATION

- Soil Boring
- Soil Boring and Monitoring Well
- Vapor Intrusion Sample
- SV - Soil Vapor Sampling Location
- SSV - Sub-Slab Soil Vapor Sampling Location
- OA - Outdoor Air Sampling Location

SAMPLE ID:	MW-5	NYSDEC TOGS
SAMPLE DEPTH (FBG):	10' WATER	Class G4
MATRIX:		
SAMPLING DATE:	10/14/13	
ALUMINUM (Dissolved)	0.19	0.1

Water Quality Exceedance

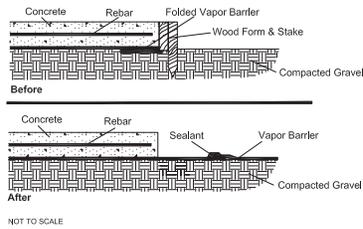
SAMPLE ID:	SV-5	NYS DOH CEH BEEF GUIDANCE
SAMPLE LOCATION:	SUBSURF AIR	
MATRIX:		
SAMPLING DATE:	10/15/13	
TETRACHLOROETHENE PCE	138	100

Soil Vapor Exceedance

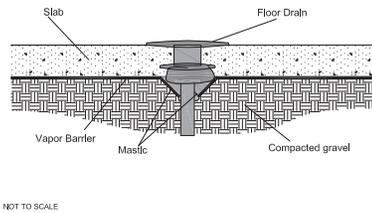
- NOTES:
- PROPERTY SHOWN AS A PORTION OF LOT 1, BLOCK 725, AS SHOWN ON THE NEW YORK CITY DEED TAX MAP OF THE BOROUGH OF BROOKLYN, KINGS COUNTY, CITY AND STATE OF NEW YORK.
 - LEASE AREA = 123,648 SF, OR 2.833 AC.
 - LOCATION OF UNDERGROUND UTILITIES ARE APPROXIMATE. LOCATIONS AND DEPTHS ARE BASED ON UTILITY MARK-OUTS ABOVE GROUND STRUCTURES THAT WERE VISIBLE & ACCESSIBLE IN THE FIELD, AND THE MAPS AS LISTED IN THE REFERENCES AVAILABLE AT THE TIME OF THE SURVEY. AVAILABLE AS-BUILT PLANS AND UTILITY MARK-OUTS CAN BE FOUND AT THE OFFICE OF THE ENGINEER. ALL UNDERGROUND UTILITIES ARE SHOWN AS LOCATED BY THE UTILITIES SHOWN ON THE AS-BUILT PLANS. ALL UNDERGROUND UTILITIES SHOULD BE RECORDED BY THE CLIENT. ALL UTILITIES SHOWN ON THE AS-BUILT PLANS SHOULD BE RECORDED BY THE CLIENT.
 - THIS PLAN IS BASED ON INFORMATION PROVIDED BY A SURVEY PREPARED IN THE FIELD BY CONTROL POINT ASSOCIATES, INC. AND OTHER REFERENCE MATERIALS AS LISTED HEREIN.
 - THIS SURVEY WAS PREPARED UNDER THE BENEFIT OF A TITLE REPORT AND IS SUBJECT TO THE RESTRICTIONS, COVENANTS AND/OR EASEMENTS THAT MAY BE CONTAINED THEREIN.
 - BY GRAPHIC PLOTTING ONLY PROPERTY IS LOCATED IN FLOOD HAZARD ZONE A-10. BASE FLOOD ELEVATION DETERMINED ELEVATION 104.00. TOWNSHIP ELEVATION 104.00 PER PER. 24.
 - THE EXISTENCE OF UNDERGROUND STORAGE TANKS, IF ANY, WAS NOT KNOWN AT THE TIME OF THE FIELD SURVEY.
 - ELEVATIONS ARE BASED UPON NAVD 83 PER GPS OBSERVATION UTILIZING KEYSTONE NETWORK NETWORK.
 - THERE WERE NO NATURAL STREAMS OR WATER COURSES MOBILE AT THE TIME OF THE FIELD SURVEY.
 - EMERGENCY SHEDS AND VAULTS TO ANY, BELOW SURFACE NOT SHOWN HEREIN.
 - THE OFFSETS SHOWN ARE NOT TO BE USED FOR THE CONSTRUCTION OF ANY STRUCTURE, FENCE, PERMANENT ADDITION, ETC.
 - LEASE LINE SHOWN FOR INFORMATION PROVIDED BY CLIENT.

- GROUND PENETRATING RADAR (GPR) SURVEY AND SAMPLING LOCATION NOTES:
- ALL FEATURE FLAGGING FOR GPR EXPLORATION IS APPROPRIATE FOR THE PURPOSES OF PHASE II INVESTIGATION ONLY; NOT TO BE USED FOR CONSTRUCTION OR FOR INSTALLATION OF PERMANENT STRUCTURES.
 - SUBSURFACE ANOMALIES APPEAR IN A REGULAR PATTERN ALONG LINES OF HISTORIC WALL REMAINS AND INFERRED FORMER SUPPORT STRUCTURES AS MAPPED ABOVE. SURFACE EVIDENCE, INCLUDING METAL FLOORING, CONCRETE PAGES, AND BRICK REMAINS AT SURFACE, ALSO IN REGULAR PATTERN WOULD FURTHER SUGGEST THE STRUCTURAL NATURE OF THESE FEATURES.
 - NO SUBSURFACE EXPLORATION OTHER THAN GPR AND ELECTROMAGNETIC (EM) DETECTION WERE PERFORMED FOR THIS SURVEY.
 - ELEMENTS SHOWN IN RED WERE NOTED DURING THE SUBJECT PHASE II ASSESSMENT CONDUCTED BY GPR AND EM SURVEY AS WELL AS OTHER SURFACE OBSERVATIONS. OBSERVATIONS RELATE PRIMARILY TO CONCRETE AREAS OF CONCERN AS STATED IN PHASE I REPORTING, AND TO PREPARE FOR BORINGS AS SHOWN.
 - ADJUSTMENTS TO LOCATIONS OF SAMPLED POINTS MADE ACCORDING TO CONFERENCE CALL OF 10/01/13, BETWEEN SHAMBER CHAWA OF RICEPEY, SENIORS OF TULLY-ENHORN/METAL, INC., AND GREGORY COLLINS OF G. C. ENVIRONMENTAL, INC.
 - REVISION DATED 10/01/13: BORNINGS SB-1, SB-2, SB-3, SB-4, SB-5, SB-6, SB-7, SB-8, SB-9, SB-10, SB-11, SB-12, SB-13, SB-14, SB-15, SB-16, SB-17, SB-18, SB-19, SB-20, SB-21, SB-22, SB-23, SB-24, SB-25, SB-26, SB-27, SB-28, SB-29, SB-30, SB-31, SB-32, SB-33, SB-34, SB-35, SB-36, SB-37, SB-38, SB-39, SB-40, SB-41, SB-42, SB-43, SB-44, SB-45, SB-46, SB-47, SB-48, SB-49, SB-50, SB-51, SB-52, SB-53, SB-54, SB-55, SB-56, SB-57, SB-58, SB-59, SB-60, SB-61, SB-62, SB-63, SB-64, SB-65, SB-66, SB-67, SB-68, SB-69, SB-70, SB-71, SB-72, SB-73, SB-74, SB-75, SB-76, SB-77, SB-78, SB-79, SB-80, SB-81, SB-82, SB-83, SB-84, SB-85, SB-86, SB-87, SB-88, SB-89, SB-90, SB-91, SB-92, SB-93, SB-94, SB-95, SB-96, SB-97, SB-98, SB-99, SB-100, SB-101, SB-102, SB-103, SB-104, SB-105, SB-106, SB-107, SB-108, SB-109, SB-110, SB-111, SB-112, SB-113, SB-114, SB-115, SB-116, SB-117, SB-118, SB-119, SB-120, SB-121, SB-122, SB-123, SB-124, SB-125, SB-126, SB-127, SB-128, SB-129, SB-130, SB-131, SB-132, SB-133, SB-134, 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SB-760, SB-761, SB-762, SB-763, SB-764, SB-765, SB-766, SB-767, SB-768, SB-769, SB-770, SB-771, SB-772, SB-773, SB-774, SB-775, SB-776, SB-777, SB-778, SB-779, SB-780, SB-781, SB-782, SB-783, SB-784, SB-785, SB-786, SB-787, SB-788, SB-789, SB-790, SB-791, SB-792, SB-793, SB-794, SB-795, SB-796, SB-797, SB-798, SB-799, SB-800, SB-801, SB-802, SB-803, SB-804, SB-805, SB-806, SB-807, SB-808, SB-809, SB-810, SB-811, SB-812, SB-813, SB-814, SB-815, SB-816, SB-817, SB-818, SB-819, SB-820, SB-821, SB-822, SB-823, SB-824, SB-825, SB-826, SB-827, SB-828, SB-829, SB-830, SB-831, SB-832, SB-833, SB-834, SB-835, SB-836, SB-837, SB-838, SB-839, SB-840, SB-841, SB-842, SB-843, SB-844, SB-845, SB-846, SB-847, SB-848, SB-849, SB-850, SB-851, SB-852, SB-853, SB-854, SB-855, SB-856, SB-857, SB-858, SB-859, SB-860, SB-861, SB-862, SB-863, SB-864, SB-865, SB-866, SB-867, SB-868, SB-869, SB-870, SB-871, SB-872, SB-873, SB-874, SB-875, SB-876, SB-877, SB-878, SB-879, SB-880, SB-881, SB-882, SB-883, SB-884, 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SB-1009, SB-1010, SB-1011, SB-1012, SB-1013, SB-1014, SB-1015, SB-1016, SB-1017, SB-1018, SB-1019, SB-1020, SB-1021, SB-1022, SB-1023, SB-1024, SB-1025, SB-1026, SB-1027, SB-1028, SB-1029, SB-1030, SB-1031, SB-1032, SB-1033, SB-1034, SB-1035, SB-1036, SB-1037, SB-1038, SB-1039, SB-1040, SB-1041, SB-1042, SB-1043, SB-1044, SB-1045, SB-1046, SB-1047, SB-1048, SB-1049, SB-1050, SB-1051, SB-1052, SB-1053, SB-1054, SB-1055, SB-1056, SB-1057, SB-1058, SB-1059, SB-1060, SB-1061, SB-1062, SB-1063, SB-1064, SB-1065, SB-1066, SB-1067, SB-1068, SB-1069, SB-1070, SB-1071, SB-1072, SB-1073, SB-1074, SB-1075, SB-1076, SB-1077, SB-1078, SB-1079, SB-1080, SB-1081, SB-1082, SB-1083, SB-1084, SB-1085, SB-1086, SB-1087, SB-1088, SB-1089, SB-1090, SB-1091, SB-1092, SB-1093, SB-1094, SB-1095, SB-1096, SB-1097, SB-1098, SB-1099, SB-1100, SB-1101, SB-1102, SB-1103, SB-1104, SB-1105, SB-1106, SB-1107, SB-1108, SB-1109, SB-1110, SB-1111, SB-1112, SB-1113, SB-1114, SB-1115, SB-1116, SB-1117, SB-1118, SB-1119, SB-1120, SB-1121, SB-1122, SB-1123, SB-1124, SB-1125, SB-1126, SB-1127, SB-1128, SB-1129, SB-1130, SB-1131, SB-1132, SB-1133, SB-1134, SB-1135, SB-1136, SB-1137, SB-1138, SB-1139, SB-1140, SB-1141, SB-1142, SB-1143, SB-1144, SB-1145, SB-1146, SB-1147, SB-1148, SB-1149, SB-1150, SB-1151, SB-1152, SB-11

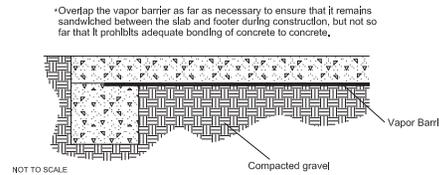
Construction Joint Application for Large Slabs Placed in Stages



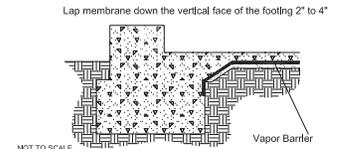
Membrane Interaction with Floor Drain



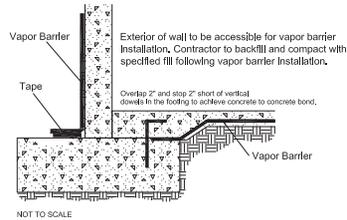
Membrane Termination Between Footer and Slab Needing Concrete Bond



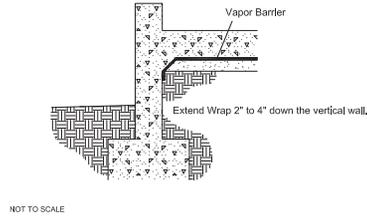
Membrane Termination Onto Exterior Wall Footing



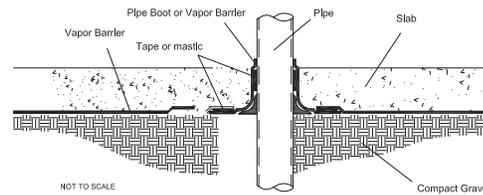
Membrane Termination Onto Footing just Short of Rebar Dowels



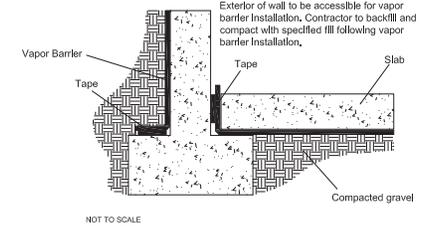
Membrane Termination Onto Below Slab Wall Footing



Membrane Interaction with Pipe Penetration



Membrane Termination Onto Outside Cellar Wall Footing



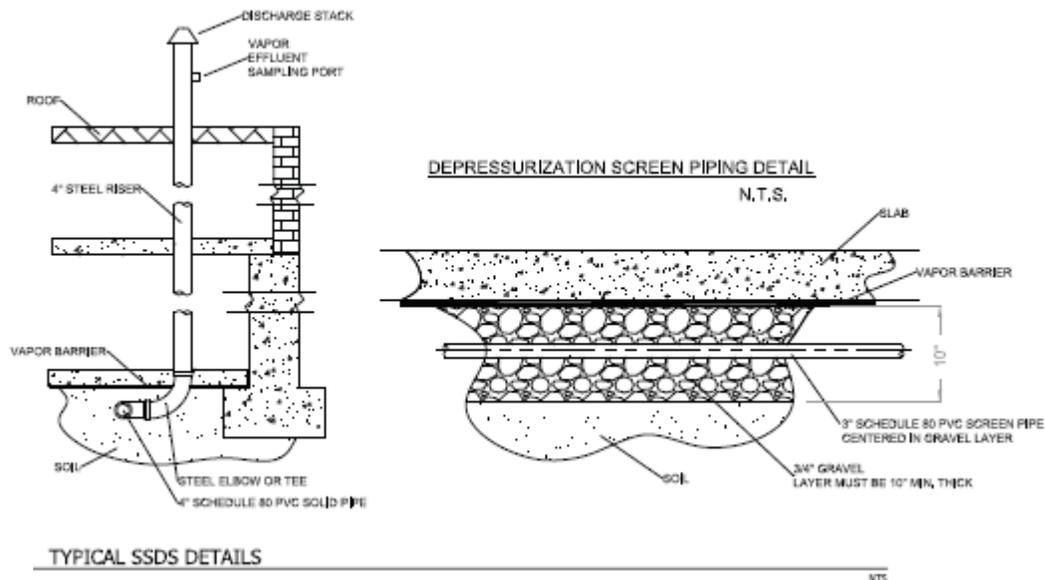
TYPICAL VAPOR BARRIER INSTALLATION DETAILS

NTS

VAPOR BARRIER CONSTRUCTION NOTES:

- Vapor barrier membrane to be approved by the project design engineer. Membrane shall at a minimum be a Class A Vapor Barrier (ASTM E 1745) and with a minimum thickness of 20 mils, unless otherwise approved by design engineer. In no case shall membrane contain recycled plastic product or have a permeance of greater than 0.04 Perms.
- Vapor barrier materials to be stored in a clean, dry area or per manufacturer's instructions. Materials to be protected during handling and installation to prevent damage.
- Prepare subsoil as specified by project architect, geotechnical engineer or structural engineer, or in accordance with ACI 302.1R-04 Section 4.1 Install vapor retarder membrane over leveled and compacted 3/4" 2B pea gravel, or an equivalent approved by design engineer. Do not begin installation until unacceptable conditions have been corrected.
- Installation shall be in accordance with manufacturer's instructions, ASTM E 1643-98 (2005), best industry practices, and all applicable federal, state, and local codes. Membrane to be unrolled with the longest dimension parallel to the direction of the pour. Succeeding sheets should be accurately positioned to overlap the adjacent sheet by a minimum of 6 inches. Lap membrane over footings and seal to foundation wall. Ensure there are no discontinuities in vapor retarder at seams and penetrations. Laps to be sealed with double-sided asphaltic tape, mastic or equivalent sealant with permeance of 0.3 perms or less approved by the design engineer. Ensure membrane surfaces to receive sealant are clean and dry.
- Protect membrane from damage during installation of reinforcing steel and utilities, and during placement of concrete slab.
- No penetrations shall be made except for reinforcing steel, foundations/pile caps, and permanent utilities. Vapor barrier to be inspected for holes or other damage. Small holes to be patched with mastic or approved equivalent, or per manufacturer's instructions. Larger holes to be patched with additional cut-out sections of membrane and sealed on all four sides, or per manufacturer's instructions. Design engineer must be allowed to inspect final installation prior to pouring slab with sufficient lead-time for the contractor to implement required changes.
- Place concrete within 30 days of vapor barrier installation.

FIGURE 6: VAPOR BARRIER TYPICAL CUT SHEETS



SUB-SLAB DEPRESSURIZATION SYSTEM CONSTRUCTION NOTES:

1. PROPOSED LOCATIONS OF DEPRESSURIZATION SYSTEM RISER PIPES TO BE VERIFIED BY ARCHITECT.
2. PREPARE SUBSOIL AS SPECIFIED BY PROJECT GEOTECHNICAL OR STRUCTURAL ENGINEER, OR IN ACCORDANCE WITH ACI 302.1R-04 SECTION 4.1. PLACE, LEVEL, AND COMPACT GRAVEL BED CONSISTING OF CLEAN 3/4-INCH PEA GRAVEL, OR AN EQUIVALENT APPROVED BY THE DESIGN ENGINEER. GRAVEL TO BE NO MORE THAN 1-INCH IN DIAMETER, WITH NO SHARP AGGREGATE. LEVEL GRAVEL BED TO ELEVATION OF BOTTOM OF PVC PIPING TO BE INSTALLED.
3. 3-INCH DIAMETER SCHEDULE 80 SLOTTED PVC SCREEN SHALL BE INSTALLED BENEATH THE BUILDING SLAB. PIPING SHALL BE PITCHED TOWARD SCREENS FOR DRAINAGE. BACKFILL AND COMPACT OVER SUPPORTED SCREEN WITH CLEAN 3/4-INCH PEA GRAVEL. TOTAL DEPTH OF COMPACTED GRAVEL SURROUNDING PIPING SHALL BE MINIMUM 10-INCHES THICK. PVC SCREENS SHALL BE CONNECTED TO 4-INCH DIAMETER SCHEDULE 80 PVC SOLID PIPE AND STEEL RISERS. VAPOR EFFLUENT SAMPLING PORTS SHALL BE INSTALLED ON THE RISERS. THE RISERS SHALL RAISE AT LEAST 3- FEET ABOVE THE ROOF. RAIN CAPS SHALL BE INSTALLED ON THE ROOF AT THE END OF THE RISERS.
4. PVC PIPING TO BE NEW, CLEAN SLOTTED SCREEN AND SOLID PIPE. 20-FOOT LENGTHS OF PIPE SHALL BE USED TO THE EXTENT PRACTICABLE. SCREEN TO BE 40-SLOT (0.040 INCH WIDE SLOTS). STEEL RISER PIPE AND FITTINGS FOR THE VERTICAL STACK TO BE PRIMED AND PAINTED WITH WEATHER RESISTENT PAINT. A MINIMUM OF TWO UNIONS SHALL BE INSTALLED ON THE STACK PIPE TO PROVIDE FOR FUTURE MODIFICATION.
5. PLUMBING, PRIMING, GLUING, PAINTING, FASTENING, AND SUPPORTING PVC AND STEEL PIPES, SCREENS, RISERS, AND FITTINGS TO BE CONDUCTED IN ACCORDANCE WITH EXISTING PROJECT PLANS AND SPECIFICATIONS, INDUSTRY STANDARDS, AND MANUFACTURERS INSTRUCTIONS, UNLESS OTHERWISE APPROVED BY THE PROJECT ENGINEER. THE INSTALLATION SHALL COMPLY WITH ALL FEDERAL, STATE, AND LOCAL CODES.
6. CONTRACTOR SHALL STORE MATERIALS IN A CLEAN AND DRY AREA, AND SHALL PROTECT MATERIALS FROM DAMAGE DURING HANDLING AND INSTALLATION.
7. SAMPLING PORTS SHALL BE INSTALLED AT EACH SEPARATE BRANCH OF THE SSDS FOR TESTING OF THE SYSTEM EFFECTIVENESS.



G. C. ENVIRONMENTAL, INC.
CONSULTANTS CONTRACTORS

22 OAK STREET
BAY SHORE, NEW YORK 11706

TEL: (631) 206-3700
FAX: (631) 206-3729

**ACTIVE SUB-SLAB
DEPRESSURISATION
SYSTEM- CUT SHEETS**

BTU 39, 40 & 45
BROOKLYN, NEW YORK
NY 11232

GCE PROJECT NO.: 13-246-00

FIGURE 7

SSD-CUT SHEET

G. C Environmental, Inc Job Address: Bush Terminal Units 38, 40 & 45 5102 First Avenue Brooklyn, New York 11232 Project Id: 13-246-00													Lab Sample Id Collection Date Client Id Matrix	6 NYCRR Part 375 Table 375-6.8 (b) Restricted Use Soil Cleanup Objectives Restricted Residential	6 NYCRR Part 375 Table 375-6.8 (b) Restricted Use Soil Cleanup Objectives Commercial	6 NYCRR Part 375 Table 375-6.8 (b) Restricted Use Soil Cleanup Objectives Industrial	BF64622 10/15/2013 SB-14 (0-2) Soil	BF64623 10/15/2013 SB-14 (5-10) Soil	BF64596 10/14/2013 SB-15 (0-2) Soil	BF64597 10/14/2013 SB-15 (5-10) Soil	BF62602 10/9/2013 SB-16 0-2 FT Soil	BF62603 10/9/2013 SB-16 7-10 FT Soil	BF62604 10/9/2013 SB-17 0-2 FT Soil	BF62605 10/9/2013 SB-17 7-10 FT Soil	BF64018 10/11/2013 SB-20 (0-2) Soil	BF64019 10/11/2013 SB-20 (5-10) Soil	BF64592 10/14/2013 SB-21 (0-2) Soil	BF64593 10/14/2013 SB-21 (5-10) Soil	BF64602 10/14/2013 SB-22 Soil		
Units													Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result			
Metals Total																															
Aluminum	mg/kg	ns	ns	ns	3,100	2,890	4,970	2,230	9,000	3,850	8,350	3,100	6,470	6,090	3,730	2,980	7,830														
Antimony	mg/kg	ns	ns	ns	ND	ND	ND	ND	1.6	ND	ND	ND	1.7	ND	ND	ND	ND														
Arsenic	mg/kg	ns	ns	ns	16	16	16	3.3	21	4.8	2.8	2	5	4.3	4.8	1.3	11.1	3.7													
Barium	mg/kg	400	400	10,000	22.6	28.2	67.4	7.6	40.9	12.2	41.2	27.2	28.8	41.1	28	15	15.9														
Beryllium	mg/kg	72	72	2700	0.21	0.21	0.28	ND	0.48	0.31	0.39	0.25	0.4	0.36	0.28	0.19	0.38														
Cadmium	mg/kg	4.3	4.3	60	0.2	0.21	0.62	ND	0.4	0.17	0.22	ND	0.24	0.23	0.16	ND	0.25														
Calcium	mg/kg	ns	ns	ns	1760	1920	641	621	7350	840	1720	1280	1,490	4,780	7,120	5,050	667														
Chromium	mg/kg	ns	ns	ns	8.18	11.6	32.1	10.41	18.5	8.93	12.5	6.84	12.7	12.3	8.48	5.3	12														
Cobalt	mg/kg	ns	ns	ns	2.6	3.39	7.12	4.78	6.47	3.38	5.42	2.55	6.01	5.87	3.55	2.19	5.45														
Copper	mg/kg	270	270	10,000	11.2	9.31	21.7	7.56	20.1	8.19	12.8	8.82	11.6	20.8	10.8	6.93	11.4														
Iron	mg/kg	ns	ns	ns	9510	9240	13,100	7,960	17,900	11,600	14,000	47,000	14,600	14,600	8,000	5,760	15,900														
Lead	mg/kg	400	400	3900	10.5	11.3	71.2	5.1	18.3	3.2	5.2	2.7	12.1	28.7	7	2.7	4.6														
Lithium	mg/kg	ns	ns	ns	1,780	1,898	2,990	6,300	3,250	1,700	3,200	1,860	1,810	3,400	3,000	2,210	4,480														
Manganese	mg/kg	2,000	2,000	10,000	163	199	340	138	282	168	289	166	244	196	202	204	230														
Mercury	mg/kg	0.81	0.81	5.7	ND	ND	0.25	ND	ND	ND	ND	ND	ND	ND	0.08	ND	ND	ND													
Nickel	mg/kg	310	310	10,000	7.7	8.21	20.5	66.81	20.8	8.81	13.4	8.68	14.1	13.6	13.3	7.29	23.8														
Potassium	mg/kg	ns	ns	ns	679	709	1,180	438	1430	722	1910	745	1,060	1,380	896	685	849														
Selenium	mg/kg	180	180	690	ND	ND	ND	ND	ND	ND																					
Silver	mg/kg	180	180	680	ND	ND	ND	ND	ND	ND																					
Sodium	mg/kg	ns	ns	ns	174	187	393	172	228	119	954	142	84	239	157	111	186														
Thallium	mg/kg	ns	ns	ns	ND	ND	ND	ND	ND	ND																					
Vanadium	mg/kg	ns	ns	ns	12.7	14.5	18.7	8.3	22.4	13.3	17.9	8.4	19.2	20.7	13.6	8.3	17.5														
Zinc	mg/kg	10,000	10,000	10,000	19.9	25.6	57.1	13.7	45.8	22.8	26.5	16	28.8	31.1	22.3	14	28.9														
SVOC TICs																															
2-Pentane, 4-hydroxy-4-methyl- (RT 3.370)	mg/kg	ns	ns	ns	ND	ND	ND	ND	2.5	ND	1.5	ND	1.5	1.7	ND	ND	ND	ND													
unknown (RT 3.280)	mg/kg	ns	ns	ns	ND	ND	ND	ND	ND	ND																					
2-Pentane, 4-hydroxy-4-methyl- (RT 5.045)	mg/kg	ns	ns	ns	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND													
2-Pentane, 4-hydroxy-4-methyl- (RT 11.370)	mg/kg	ns	ns	ns	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND													
unknown (RT 14.730)	mg/kg	ns	ns	ns	ND	ND	ND	ND	ND	ND																					
unknown (RT 17.330)	mg/kg	ns	ns	ns	ND	ND	ND	ND	ND	ND																					
unknown (RT 19.720)	mg/kg	ns	ns	ns	ND	ND	ND	ND	ND	ND																					
unknown (RT 20.050)	mg/kg	ns	ns	ns	ND	ND	ND	ND	ND	ND																					
2-Pentane, 4-hydroxy-4-methyl- (RT 5.000)	mg/kg	ns	ns	ns	ND	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND													
2-Pentane, 4-hydroxy-4-methyl- (RT 5.010)	mg/kg	ns	ns	ns	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND													
2-Pentane, 4-hydroxy-4-methyl- (RT 5.020)	mg/kg	ns	ns	ns	ND	ND	ND	ND	ND	ND																					
Benzylfluoranthene (RT 21.190)	mg/kg	ns	ns	ns	ND	ND	0.76	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND													
unknown (RT 17.260)	mg/kg	ns	ns	ns	ND	ND	ND	ND	ND	ND																					
unknown (RT 3.170)	mg/kg	ns	ns	ns	ND	ND	ND	ND	ND	ND																					
PCBs By SW 802																															
PCB-126	mg/kg	ns	ns	ns	ND	ND	ND	ND	ND	ND																					
PCB-128	mg/kg	ns	ns	ns	ND	ND	0.28	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND													
Volatiles By SW8260																															
Acetone	mg/kg	100	500	1000	0.0086	ND	ND	ND	ND	ND	ND																				
Carbon Disulfide	mg/kg	ns	ns	ns	ND	ND	ND	ND	ND	ND																					
Methyl ethyl ketone	mg/kg	100	500	1000	ND	ND	ND	ND	ND	ND																					
Methylene chloride	mg/kg	100	500	1000	0.0023	0.0029	0.002	0.0025	ND	ND	ND	0.0017	0.0021	0.0023	0.0025	0.0023															
Semivolatiles By SW 8270																															
Benzofluoranthene	mg/kg	1	5.8	11	ND	ND	ND	0.56	ND	ND																					
Benzofluoranthene	mg/kg	1	1.1	1.1	ND	ND	0.62	ND	ND	ND																					
Benzofluoranthene	mg/kg	1	5.8	11	ND	ND	0.74	ND	ND	ND																					
Benzofluoranthene	mg/kg	100	500	1000	ND	ND	0.47	ND	ND	ND																					
Benzofluoranthene	mg/kg	3.9	56	110	ND	ND	0.23	ND	ND	ND																					
Benzyl, butyl, phthalate	mg/kg	ns	ns	ns	ND	ND	ND	ND	ND	ND																					
Benzyl ethyl phthalate	mg/kg	ns	ns	ns	ND	ND	ND	ND	ND	ND																					
Chrysene	mg/kg	3.9	56	110	ND	ND	0.6	ND	ND	ND																					
Dibenzofluoranthene	mg/kg	0.33	0.56	1.1	ND	ND	0.11	ND	ND	ND																					
Dibenzofluoranthene	mg/kg	ns	ns	ns	ND	ND	0.017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND													
Fluoranthene	mg/kg	100	500	1000	ND	ND	ND	ND	ND	ND																					
Indene(1,2,3-cd)pyrene	mg/kg	0.6	5.8	11	ND	ND	0.34	ND	ND	ND																					
Phenanthrene	mg/kg	100	500	1000	ND	0.2	ND	ND	0.1	ND	ND	ND																			
Pyrene	mg/kg	100	500	1000	ND	ND	0.8	ND	ND	ND																					
Pesticides - Soil By SW881																															
Toxaphene	mg/kg	ns	ns	ns	ND	ND	ND	ND	ND	ND																					
Dieldrin	mg/kg	0.4	1.4	2.8	ND	ND	ND	ND	ND	ND																					

Notes:
 • This table shows compounds only where results were found in analyticals. For full analytical results, refer to Appendix H. Laboratory Analytical Reports.
 • This table shows results for Total Chromium.
 • Less than Reporting Level (RL) is shown as ND.

Result Exceeds Criteria (Industrial)

TABLE 2 - GROUNDWATER ANALYTICAL DATA SUMMARY

G. C Environmental, Inc Job Address: Bush Terminal Units 39, 40 & 45 5102 First Avenue Brooklyn, New York		Lab Sample ID Collection Date Client ID Matrix	NYSDEC Ambient Water Quality Guidance	BF64052 10/14/2013 MW-1/SB-9 Ground Water	BF64053 10/14/2013 MW-2/SB-10 Ground Water	BF64054 10/14/2013 MW-3/SB-11 Ground Water	BF64055 10/14/2013 MW-4/SB-12 Ground Water	BF64056 10/14/2013 MW-5/SB-13 Ground Water	BF64625 10/15/2013 MW-6/SB-14 Ground Water	BF64624 10/15/2013 MW-7/SB-15 Ground Water	BF52606 41556 MW-8/SB-16 Ground Water	BF52607 41554 MW-9/SB-17 Ground Water	BF64057 10/15/2013 MW-1/SB-9 DUP Ground Water	BF64626 10/15/2013 TRIP BLANK 1 Ground Water	BF64627 10/15/2013 TRIP BLANK 2 Water	BF64628 10/15/2013 TRIP BLANK 3 Water
Project Id : 13-246-00	Units	TOGS-WQ/GA	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Metals, Total																
Aluminum (Dissolved)	mg/L	0.1	2.07	0.21	0.28	6.2	0.19	0.49	6.76	9.72	3.26	1.85	ND	ND	ND	ND
Antimony (Dissolved)	mg/L	0.003	ND	0.009	ND	ND	ND	0.045	ND	0.007	0.006	ND	ND	ND	ND	ND
Arsenic (Dissolved)	mg/L	0.025	0.004	0.003	0.004	0.001	0.003	0.004	0.009	0.001	0.007	0.002	ND	ND	ND	ND
Barium (Dissolved)	mg/L	1	0.044	0.094	0.211	0.023	0.085	0.081	1.42	0.257	0.304	0.038	ND	ND	ND	ND
Beryllium (Dissolved)	mg/L	0.003	0.002	ND	ND	ND	ND	ND	0.002	0.002	0.001	ND	ND	ND	ND	ND
Cadmium (Dissolved)	mg/L	0.005	0.001	0.001	ND	ND	ND	0	ND	0.001	ND	ND	ND	ND	ND	ND
Calcium (Dissolved)	mg/L		506	60.3	79	37.6	27.3	73.2	53.5	392	74.5	475	ND	ND	ND	ND
Chromium (Dissolved)	mg/L	0.05	0.003	ND	ND	0.006	0.003	0.002	0.021	0.039	0.011	0.002	ND	ND	ND	ND
Cobalt (Dissolved)	mg/L		0.005	0.004	0.002	ND	ND	0.001	0.022	0.02	0.005	0.005	ND	ND	ND	ND
Copper (Dissolved)	mg/L	0.2	0.005	0.005	0.003	0.01	0.003	0.013	0.083	0.068	0.031	0.005	ND	ND	ND	ND
Iron (Dissolved)	mg/L	0.8	2.17	0.22	0.06	3.22	0.25	0.88	9.88	5.11	2.83	2.4	ND	ND	ND	ND
Lead (Dissolved)	mg/L	0.025	0.002	ND	0.001	0.009	ND	0.002	0.02	0.02	0.005	0.005	ND	ND	ND	ND
Magnesium (Dissolved)	mg/L	35	35.6	6.1	20.8	4.57	1.85	12	8.58	32.7	19.2	34.5	ND	ND	ND	ND
Manganese (Dissolved)	mg/L	0.3	0.706	7.7	7.47	1.95	0.021	0.031	2.39	1.39	1.01	0.692	ND	ND	ND	ND
Mercury (Dissolved)	mg/L	0.0007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel (Dissolved)	mg/L	0.1	0.013	0.032	0.007	0.006	0.003	0.005	0.048	0.035	0.019	0.013	ND	ND	ND	ND
Potassium (Dissolved)	mg/L		17.8	5.7	8	11.4	9.6	12.5	16.9	11.7	7.4	17.2	ND	ND	ND	ND
Selenium (Dissolved)	mg/L	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver (Dissolved)	mg/L	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sodium (Dissolved)	mg/L	20	279	131	91.5	156	290	104	221	126	152	260	ND	ND	ND	ND
Thallium (Dissolved)	mg/L	0.0005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium (Dissolved)	mg/L		0.01	ND	0.0005	0.01	0.0029	ND	0.04	0.02	0.01	0.004	ND	ND	ND	ND
Zinc (Dissolved)	mg/L	5	0.014	0.116	0.007	0.019	0.003	0.01	0.128	0.129	0.042	0.015	ND	ND	ND	ND
SVOA TICS																
unknown (RT 10.560)	ug/L	ns	ND	19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
unknown (RT 10.680)	ug/L	ns	ND	23	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
unknown (RT 12.643)	ug/L	ns	ND	ND	10,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
unknown (RT 12.930)	ug/L	ns	ND	8.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
unknown (RT 13.140)	ug/L	ns	ND	4.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
unknown (RT 13.601)	ug/L	ns	ND	ND	40,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
unknown (RT 14.290)	ug/L	ns	ND	6.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
unknown (RT 14.590)	ug/L	ns	ND	5.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
unknown (RT 14.650)	ug/L	ns	ND	16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
unknown (RT 15.340)	ug/L	ns	ND	ND	72,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
unknown (RT 16.130)	ug/L	ns	ND	ND	130,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
unknown (RT 16.411)	ug/L	ns	ND	ND	210,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
unknown (RT 17.732)	ug/L	ns	ND	ND	13,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
unknown (RT 4.960)	ug/L	ns	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.8	ND	ND	ND
unknown (RT 4.970)	ug/L	ns	ND	ND	ND	6.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
unknown (RT 6.105)	ug/L	ns	ND	ND	190,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
unknown (RT 6.770)	ug/L	ns	ND	ND	ND	13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
unknown (RT 7.000)	ug/L	ns	ND	ND	ND	12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
unknown (RT 5.997)	ug/L	ns	ND	ND	ND	ND	ND	ND	11	ND	ND	ND	ND	ND	ND	ND
unknown (RT 7.756)	ug/L	ns	ND	ND	ND	ND	ND	19	ND	ND	ND	ND	ND	ND	ND	ND
unknown (RT 8.131)	ug/L	ns	ND	ND	ND	ND	ND	13	ND	ND	ND	ND	ND	ND	ND	ND
PCBs By #082																
			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Volatiles By SW8260																
Acetone	ug/L	50	6.6	9.2	7.5	5.9	4.6	13	2.5	3.5	ND	6.1	ND	2	2.5	
Carbon Disulfide	ug/L		ND	ND	ND	ND	ND	ND	ND	0.43	ND	ND	ND	ND	ND	ND
Chloromethane	ug/L		ND	ND	ND	ND	ND	0.888	ND	ND	ND	ND	ND	ND	ND	ND
Methyl ethyl ketone	ug/L	50	ND	1.8	ND	1.8	0.97	ND	ND	0.86	ND	1.4	1.1	0.71	ND	ND
Methyl t-butyl ether (MTBE)	ug/L		ND	3.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	ug/L	5	ND	ND	ND	0.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ug/L	5	ND	ND	ND	ND	ND	ND	ND	3.3	4.6	ND	ND	ND	ND	ND
Semivolatiles By SW 8270(SIM)																
Benz(a)anthracene	ug/L	0.002	0.03	0.03	ND	0.11	ND	0.04	0.22	0.03	0.021	ND	ND	ND	ND	ND
Benzo(a)pyrene	ug/L	ND	ND	ND	ND	0.05	ND	ND	0.15	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	ug/L	0.002	ND	ND	ND	0.08	ND	0.03	0.28	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	ug/L	0.002	ND	ND	ND	0.03	ND	ND	0.07	ND	ND	ND	ND	ND	ND	ND
Chrysene	ug/L	0.002	0.02	ND	ND	0.08	ND	0.03	0.21	ND	ND	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene	ug/L		ND	ND	ND	ND	ND	ND	0.02	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	ug/L	0.002	ND	ND	ND	0.03	ND	ND	0.08	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	ug/L	50	0.16	ND	0.23	0.75	ND	ND	0.14	0.09	ND	0.18	ND	ND	ND	ND
Benzyl butyl phthalate	ug/L		ND	ND	ND	ND	ND	ND	2.6	ND	ND	ND	ND	ND	ND	ND
Pesticides By SW8081																
Dieldrin	ug/L	0.004	ND	ND	ND	ND	ND	ND	0.006	ND	ND	ND	ND	ND	ND	ND

- Notes:
- This table shows compounds only where results were found in analyticals. For full analytical results, refer to Appendix H. Laboratory Analytical Reports.
 - This table shows results for Total Chromium.
 - Less than Reporting Level (RL) is shown as ND.

Result Detected
 Result Exceeds Criteria (TOGS)

TABLE 3 - SOIL VAPOR ANALYTICAL DATA SUMMARY

G.C. Environmental, Inc Job Address: BTU 39, 40 & 45 Brooklyn, New York		NYSDOH CEH BEEI Guidance	BF64603	BF64604	BF64605	BF64607	BF64608	BF64609	BF66839	BF64610
Lab Sample Id	10/15/2013		10/15/2013	10/15/2013	10/15/2013	10/15/2013	10/15/2013	10/15/2013	10/21/2013	10/15/2013
Collection Date	SSV-3	SSV-1	SSV-2	SV-5	OA-1	SV-1	SV-2	SV-3		
Client Id	Air	Air	Air	Air	Air	Air	Air	Air		
Matrix										
Units	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Volatiles (TO15) By TO15										
1,2,4-Trimethylbenzene	ug/m3		311	23.9	94.3	22.1	ND	32.4	29.9	26.7
1,3,5-Trimethylbenzene	ug/m3		105		51.6	6.14	ND	8.84	20	7.07
2-Hexanone(MBK)	ug/m3		11.8	ND	ND	ND	ND	4.75	ND	4.71
4-Ethyltoluene	ug/m3		31.2	3.88	19.7	3.73	ND	4.22	18.2	5.11
4-Isopropyltoluene	ug/m3		17.7	2.41	5.38	2.03	ND	2.69	2.41	2.47
4-Methyl-2-pentanone(MIBK)	ug/m3		4.95	1.35	3.23	1.39	ND	6.71	ND	1.1
Acetone	ug/m3		214	223	377	498	15.5	406	256	420
Benzene	ug/m3		1.72	5.65	4.09	1.31	1.5	1.47	37.7	1.37
Bromoform	ug/m3		1.24	ND						
Carbon Disulfide	ug/m3		1.4	5.13	1.21	ND	ND	2.12	1.12	2.36
Carbon Tetrachloride	ug/m3		0.503	1.19	0.503	0.251	0.503	0.629	0.754	ND
Chloroform	ug/m3		1.22	ND	ND	ND	ND	ND	1.02	2.88
Chloromethane	ug/m3		1.03	1.16	ND	ND	ND	1.22	ND	ND
Cyclohexane	ug/m3		ND	10.4	4.58	ND	ND	ND	664	2.86
Dichlorodifluoromethane	ug/m3		2.32	2.32	2.08	2.12	2.22	2.32	ND	2.27
Ethanol	ug/m3		527	142	35	34.1	21.6	98.7	129	12.3
Ethyl acetate	ug/m3		ND	28	ND	ND	ND	1.55	ND	ND
Ethylbenzene	ug/m3		18.3	22.2	26.4	3.3	ND	3.82	127	3.12
Heptane	ug/m3		5.36	16.2	7.99	2.58	4.3	1.92	491	2.01
Hexane	ug/m3		3.52	74.7	9.93	3.49	2.82	2.46	553	6.16
Isopropylalcohol	ug/m3		21.4	7.22	21.3	3.98	4.99	6.63	ND	3.29
Isopropylbenzene	ug/m3		15	2.01	14.7	1.13	ND	1.23	31.4	1.13
m,p-Xylene	ug/m3		72	79	98.9	11.7	2.13	13.9	159	12.3
Methyl Ethyl Ketone	ug/m3		86.6	62.8	42.4	33.6	2.59	37.1	ND	15.6
Methylene Chloride	ug/m3	60	17.5	62.8	11.6	13.3	9.34	9.44	ND	8.02
n-Butylbenzene	ug/m3		117	7.02	12.4	6.03	ND	9.71	4.88	7.35
o-Xylene	ug/m3		48.2	40.2	57.3	5.9	ND	7.07	139	6.38
Propylene	ug/m3		3.65	9.58	5.54	8.26	2.37	5.44	ND	7.81
sec-Butylbenzene	ug/m3		12	1.81	13.7	2.14	ND	2.47	14.6	1.48
Styrene	ug/m3		2	ND						
Tetrachloroethene	ug/m3	100	2.37	3.12	37.5	138	4.88	1.56	75.2	350
Tetrahydrofuran	ug/m3		38.3	78.1	40.1	3.21	ND	15.6	ND	10.2
Toluene	ug/m3		14.3	91.9	29.2	9.9	5.01	11.7	190	10.2
Trichloroethene	ug/m3	5	0.322	1.4	0.644	ND	ND	10.5	607	0.537
Trichlorofluoromethane	ug/m3		1.29	1.29	1.18	1.4	1.18	1.18	1.74	1.57

• Less than Reporting Level (RL) is shown as ND.

Result Exceeds Criteria (BEEI) 60

TABLE 4

TABLE 4 Imported Backfill and Clean Soil Limits

All values are listed in parts per million (ppm)

Contaminant	Unrestricted	Residential	Restricted - Residential	Restricted - Commercial or Industrial
Metals				
Arsenic	13	16	16	16
Barium	350	350	400	400
Beryllium	7.2	14	47	47
Cadmium	2.5	2.5	4.3	7.5
Chromium, Hexavalent	1	19	19	19
Chromium, Trivalent	30	36	180	1500
Copper	50	270	270	270
Cyanide	27	27	27	27
Lead	63	400	400	450
Manganese	1600	2000	2000	2000
Mercury (total)	0.18	0.73	0.73	0.73
Nickel	30	130	130	130
Selenium	3.9	4	4	4
Silver	2	8.3	8.3	8.3
Zinc	109	2200	2480	2480
PCBs/Pesticides				
2,4,5-TP Acid (Silvex)	3.8	3.8	3.8	3.8
4,4'-DDE	0.0033	1.8	8.9	17
4,4'-DDT	0.0033	1.7	7.9	47
4,4'-DDD	0.0033	2.6	13	14
Aldrin	0.005	0.019	0.097	0.19
Alpha-BHC	0.02	0.02	0.02	0.02
Beta-BHC	0.036	0.072	0.09	0.09
Chlordane (alpha)	0.094	0.91	2.9	2.9
Delta-BHC	0.04	0.25	0.25	0.25
Dibenzofuran	7	14	59	210
Dieldrin	0.005	0.039	0.1	0.1
Endosulfan I	2.4	4.8	24	102
Endosulfan II	2.4	4.8	24	102
Endosulfan sulfate	2.4	4.8	24	200
Endrin	0.014	0.06	0.06	0.06
Heptachlor	0.042	0.38	0.38	0.38
Lindane	0.1	0.1	0.1	0.1
Polychlorinated biphenyls	0.1	1	1	1

TABLE 4

TABLE 1 - Imported Backfill and Clean Soil Limits (cont')

All values are listed in parts per million (ppm)

Contaminant	Unrestricted	Residential	Restricted - Residential	Restricted - Commercial or Industrial
Semivolatile Organic Compounds				
Acenaphthene	20	98	98	98
Acenaphthylene	100	100	100	107
Anthracene	100	100	100	500
Benzo(a)anthracene	1	1	1	1
Benzo(a)pyrene	1	1	1	1
Benzo(b)fluoranthene	1	1	1	1.7
Benzo(g,h,i)perylene	100	100	100	500
Benzo(k)fluoranthene	0.8	1	1.7	1.7
Chrysene	1	1	1	1
Dibenz(a,h)anthracene	0.33	0.33	0.33	0.56
Fluoranthene	100	100	100	500
Fluorene	30	100	100	386
Indeno(1,2,3-cd)pyrene	0.5	0.5	0.5	5.6
m-Cresol(s)	0.33	0.33	0.33	0.33
Naphthalene	12	12	12	12
o-Cresol(s)	0.33	0.33	0.33	0.33
p-Cresol(s)	0.33	0.33	0.33	0.33
Pentachlorophenol	0.8	0.8	0.8	0.8
Phenanthrene	100	100	100	500
Phenol	0.33	0.33	0.33	0.33
Pyrene	100	100	100	500
Volatile Organic Compounds				
1,1,1-Trichloroethane	0.68	0.68	0.68	0.68
1,1-Dichloroethane	0.27	0.27	0.27	0.27
1,1-Dichloroethene	0.33	0.33	0.33	0.33
1,2-Dichlorobenzene	1.1	1.1	1.1	1.1
1,2-Dichloroethane	0.02	0.02	0.02	0.02
1,2-Dichloroethene(cis)	0.25	0.25	0.25	0.25
1,2-Dichloroethene(trans)	0.19	0.19	0.19	0.19
1,3-Dichlorobenzene	2.4	2.4	2.4	2.4
1,4-Dichlorobenzene	1.8	1.8	1.8	1.8
1,4-Dioxane	0.1	0.1	0.1	0.1
Acetone	0.05	0.05	0.05	0.05
Benzene	0.06	0.06	0.06	0.06
Butylbenzene	12	12	12	12
Carbon tetrachloride	0.76	0.76	0.76	0.76
Chlorobenzene	1.1	1.1	1.1	1.1
Chloroform	0.37	0.37	0.37	0.37

Imported Backfill and Clean Soil Limits (cont')

All values are listed in parts per million (ppm)

Contaminant	Unrestricted	Residential	Restricted - Residential	Restricted - Commercial or Industrial
Volatile Organic Compounds (cont')				
Ethylbenzene	1	1	1	1
Hexachlorobenzene	0.33	0.33	1.2	3.2
Methyl ethyl ketone	0.12	0.12	0.12	0.12
Methyl tert-butyl ether	0.93	0.93	0.93	0.93
Methylene chloride	0.05	0.05	0.05	0.05
Propylbenzene-n	3.9	3.9	3.9	3.9
Sec-Butylbenzene	11	11	11	11
Tert-Butylbenzene	5.9	5.9	5.9	5.9
Tetrachloroethene	1.3	1.3	1.3	1.3
Toluene	0.7	0.7	0.7	0.7
Trichloroethene	0.47	0.47	0.47	0.47
Trimethylbenzene-1,2,4	3.6	3.6	3.6	3.6
Trimethylbenzene-1,3,5	8.4	8.4	8.4	8.4
Vinyl chloride	0.02	0.02	0.02	0.02
Xylene (mixed)	0.26	1.6	1.6	1.6

NOTES:

- 1) Allowable values for imported soils are derived from 6NYCRR Part 375 Table 6.8(b) Soil Cleanup Objectives and is determined by comparing the use-based Protection of Public Health value (based on the site's achieved cleanup track) with the Protection of Groundwater value and selecting the lower of the two (for sites with no ecological resources).
- 2) The SCO for Hexavalent or Trivalent Chromium is considered to be met if the analysis for the total species of this contaminant is below the specific SCO for Hexavalent Chromium.
- 3) The following material may be imported, without chemical testing, to be used as backfill beneath pavement or the final soil cover (i.e. the uppermost 1 or 2 feet, depending on the site's use restriction): a) - Rock or stone, consisting of virgin material from a permitted mine or quarry; b) - Recycled concrete, brick or asphalt from a NYSDEC-registered C&D processing facility which conforms to Section 304 of the New York State Department of Transportation Standard Specifications Construction and Materials Volume 1 (2002). This material must contain less than 10% (by weight) material which would pass through a size 200 sieve.



BUILDING TENANTS

Building 56:
 Roman Produce
 National Carrier
 GNS Produce
 Kids World
 Jackie Apples
 Eddie Express Produce

Building 57:
 Daniel's Bath and Beyond
 Absco Sports - t-shirt manufacturer
 JP International - furniture
 Razortooth Design
 Abraham Apparel
 J&A Merchandise
 Prime Foods

Building 58
 Pool Factory - pool products
 Bay Way Furniture
 Roma Furniture
 Newform Group - cabinet manufacturer
 McDonald Paper & Restaurant Supply
 Unitrade Enterprise

BUILDING TENANTS

Building A
 Janton Industries

Building B
 Royal Furniture
 Kings County Action Group
 Fixture Hardware MFG Corp
 DSD Construction Co
 Mazc Wholesale
 Jomat New York
 LED Waves
 Elegante Brass Imports
 NYPD
 Dependable Industries
 Horticultural Creations

Building C
 Healthline Trading
 SKA-Doo Sports Co
 Anchor & Canvas Design
 Danny & Son
 Elbaz Trading Corp
 Dellel Industries Inc.
 R. Ben Toe Corp.
 M. Franabar Assoc.
 American Fleece Co.
 Platinum Trading
 D Mana Fashino Co
 MOD Restoration
 Uptown Girl Snoods New York
 HJ Martin Associates
 Jewelry Park INC.

Building D
 United Store Fixtures

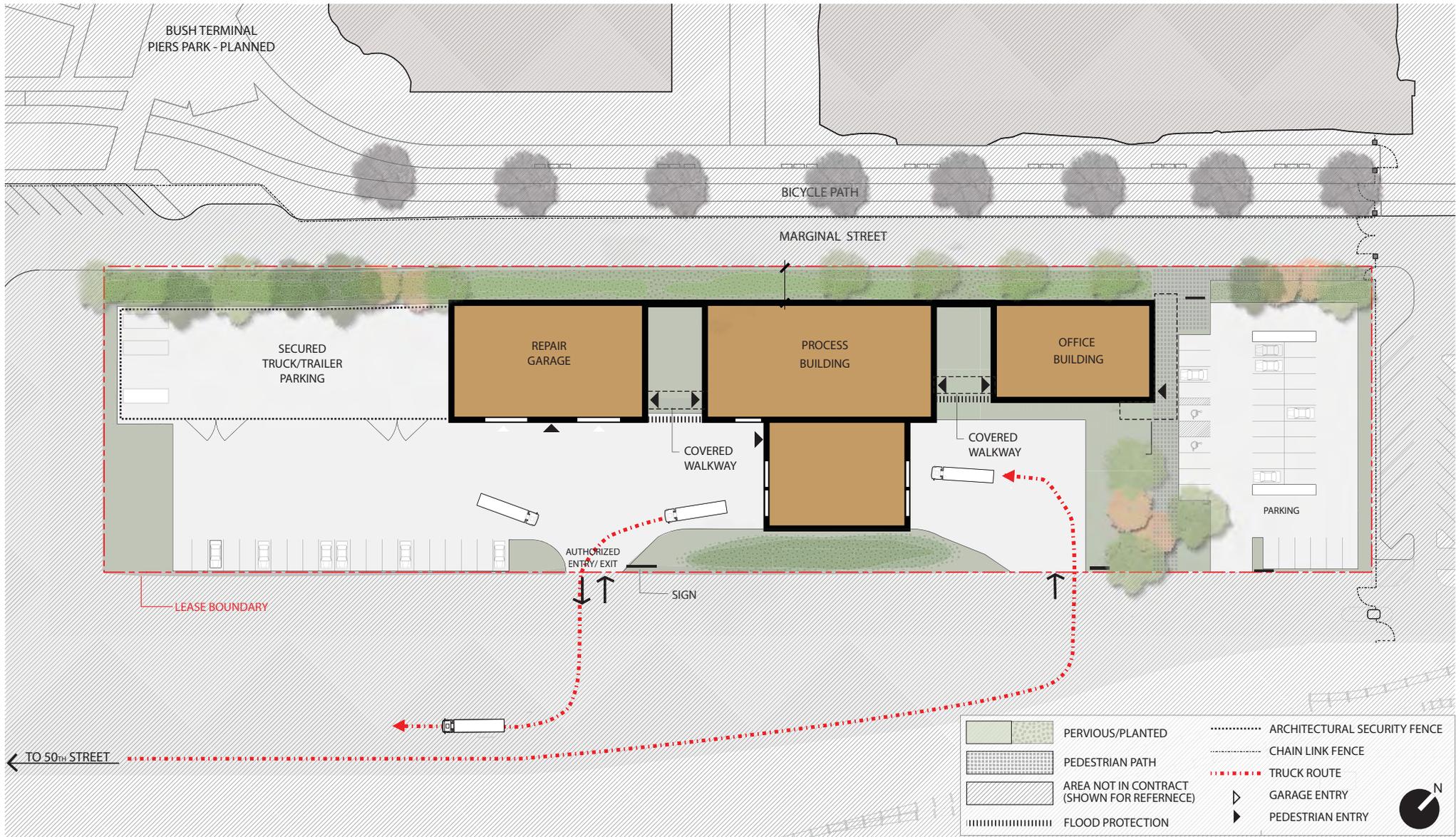
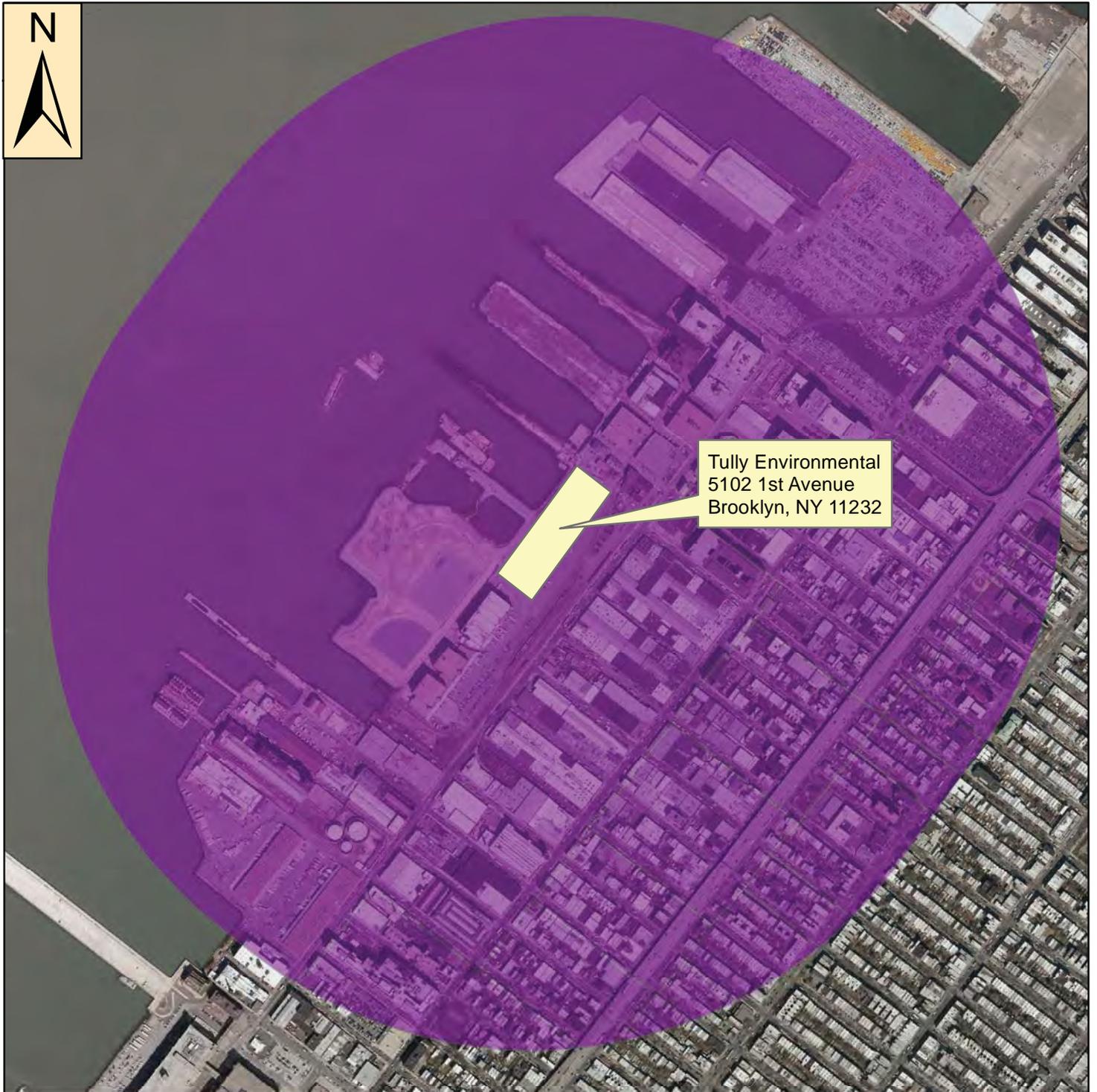


Exhibit D

Potential Environmental Justice Areas within one half mile of Tully Environmental, 5102 1st Avenue, Brooklyn, NY 11232



This computer representation has been compiled from supplied data or information that has not been verified by EPA or NYSDEC. The data is offered here as a general representation only and is not to be used for commercial purposes without verification by an independent professional qualified to verify such data or information.

Neither EPA nor NYSDEC guarantee the accuracy, completeness, or timeliness of the information shown and shall not be liable for any loss or injury resulting from reliance.

Data Source for Potential Environmental Justice Areas:
U.S. Census Bureau, 2000 U.S. Census



SCALE: 1:10,000

Legend

- Not an EJ Area
- Potential EJ Area

For questions about this map contact:
New York State Department of
Environmental Conservation
Office of Environmental Justice
625 Broadway, 14th Floor
Albany, New York 12233-1500
(518) 402-8556
ej@gw.dec.state.ny.us

Clean Earth of North Jersey
******* CERTIFICATE OF DISPOSAL *******

04/08/2014

Page 1 of 1

Site: Paul J. Scariano
1 43rd Street
Brooklyn, NY

EPA ID: NON HAZ

This is to Document the disposition of waste materials received from your facility on 11/26/2013 on manifest number D12022.

The material on manifest line number 1
Waste Type(s)
Was shipped from Clean Earth of North Jersey:

01/02/2014 to NIAGARA RECYCLING INC
on Manifest number 0925371
Disposal Method: H132

The disposition of all material is in accordance and compliance with all required and applicable federal and state laws and regulations. Clean Earth of New Jersey's EPA ID is NJD991291105.

Please be advised that those waste streams showing multiple outgoing shipments may have been comingled with other waste prior to shipment.

Thank you for the opportunity to be of service.

Very truly yours



Joe Barone,
Operations Manager
Clean Earth of North Jersey



Spill Incidents Database Search Details

Spill Record

Administrative Information

DEC Region: 2

Spill Number: 1306670

Spill Date/Time

Spill Date: 09/25/2013 **Spill Time:** 02:00:00 PM

Call Received Date: 09/25/2013 **Call Received Time:** 03:41:00 PM

Location

Spill Name: MOTOR OIL SPILLS AT NORTH CONTRACTORS YARD

Address: 4302 FIRST AVE

City: BROOKLYN **County:** KINGS

Spill Description

Material Spilled Amount Spilled Resource Affected

Motor Oil UNKNOWN Soil

Cause: Housekeeping

Source: Commercial Vehicle

Waterbody:

Record Close

Date Spill Closed: 09/30/2013

"Date Spill Closed" means the date the spill case was closed by the case manager in the Department of Environmental Conservation (the Department). The spill case was closed because either; a) the records and data submitted indicate that the necessary cleanup and removal actions have been completed and no further remedial activities are necessary, or b) the case was closed for administrative reasons (e.g., multiple reports of a single spill consolidated into a single spill number). The Department however reserves the right to require additional remedial work in relation to the spill, if in the future it determines that further action is necessary.

If you have questions about this reported incident, please contact the [Regional Office](#) where the incident occurred.

[Refine Current Search](#)



Spill Incidents Database Search Details

Spill Record

Administrative Information

DEC Region: 2

Spill Number: 0102496

Spill Date/Time

Spill Date: 06/05/2001 **Spill Time:** 12:00:00 PM

Call Received Date: 06/05/2001 **Call Received Time:** 05:35:00 PM

Location

Spill Name: BUSH TERMINAL COMPLEX

Address: FIRST AVE & 43RD ST

City: BROOKLYN **County:** KINGS

Spill Description

Material Spilled **Amount Spilled** **Resource Affected**

SOLVENTS UNKNOWN Soil

Cause: Unknown

Source: Commercial/Industrial

Waterbody:

Record Close

Date Spill Closed: 09/13/2005

"Date Spill Closed" means the date the spill case was closed by the case manager in the Department of Environmental Conservation (the Department). The spill case was closed because either; a) the records and data submitted indicate that the necessary cleanup and removal actions have been completed and no further remedial activities are necessary, or b) the case was closed for administrative reasons (e.g., multiple reports of a single spill consolidated into a single spill number). The Department however reserves the right to require additional remedial work in relation to the spill, if in the future it determines that further action is necessary.

If you have questions about this reported incident, please contact the [Regional Office](#) where the incident occurred.

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