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GROUND INTRUSIVE WORK PLAN

Avant Gardner Site

140 Stewart Avenue & 111 Gardner Avenue
Brooklyn, New York 11237
NYSDEC Site No. C224258

Report Date

February 25, 2025

Partner Project No.

PSG 21405366

Prepared for:

Avant Gardner LLC
140 Stewart Avenue, Brooklyn, New York 11237


Building Science


Environmental Consulting


Construction & Development


Energy & Sustainability

PSG

February 25, 2025

Mandy Yau
New York State Department of Environmental Conservation
Division of Environmental Remediation, Region 2
Spill Prevention, Response and Remediation
47-40 21st Street, Long Island City, New York 11101

Subject: Ground Intrusive Work Plan
Avant Gardner Site
140 Stewart Avenue & 111 Gardner Avenue
Brooklyn, New York 11237
PSG Project Number: 21405366
NYSDEC Site Number: C224258

Dear Ms. Yau

PSG Engineering and Geology, D.P.C. (PSG) is pleased to provide this Ground Intrusive Work Plan and Change of Use Notification for the property identified as Avant Gardner and located at 140 Stewart Avenue and 111 Gardner Avenue in the City of Brooklyn, Kings County, New York.

Sincerely,

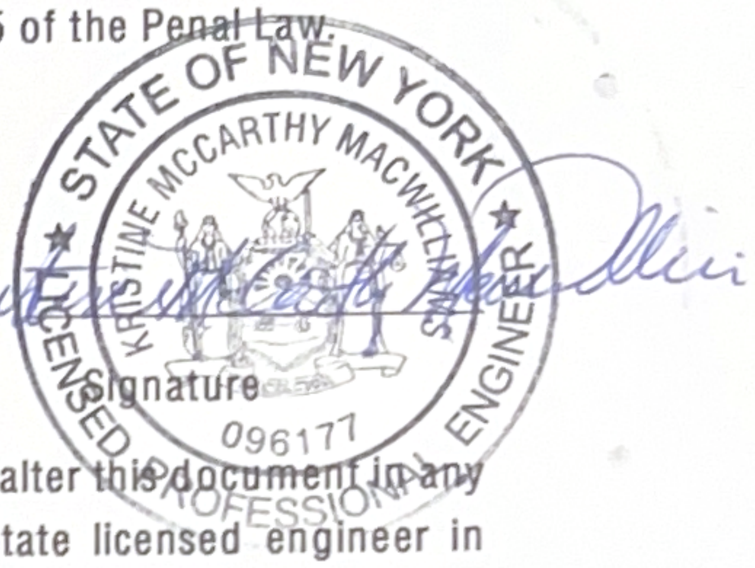
PSG Engineering and Geology, D.P.C.

David R. Lent, PG
Technical Director

CERTIFICATION

I, Kristine McCarthy MacWilliams, certify that I am currently a NYS registered professional engineer and that this Ground Intrusive Work Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10) and Green Remediation (DER-31).

I certify that all information and statements in this certification are true. I understand that a false statement made herein is punishable as Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.



Kristine McCarthy MacWilliams, P.E. — February 25, 2025

NYS Professional Engineer # 096177 — Date — Signature

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

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1.0 INTRODUCTION

1.1 Purpose

PSG Engineering & Geology, D.P.C. (PSG) is submitting this Ground Intrusive Work Plan on behalf of Avant Garner, LLC for the property located at 140 Stewart Avenue and 111 Gardner Avenue in Brooklyn, Kings County, New York (herein referred to as the Site). The Site was enrolled in the Brownfield Cleanup Program (BCP) on October 30, 2017 and was listed under Site Name Avant Gardner and New York State Department of Environmental Control (NYSDEC) Site No. C224258 on the Brownfield Cleanup Agreement. Avant Gardner, LLC is a tenant at the Site and will be erecting a temporary structure in the central courtyard, identified as the Brooklyn Mirage, and conducting a partial demolition of the existing Kings Hall structure (111 Gardner Avenue). Refer to **Appendix A** for a 60-Day Advance Notification of Site Change of Use form.

1.2 Site History

From 2000 to 2013, Filco Carting utilized a portion of the 111 Gardner Avenue building and adjacent paved area as a truck maintenance garage for routine maintenance and repair of trucks. The garage used degreasers, lubricants, hydraulic oils, and antifreeze, which were stored in tanks, 55-gallon drums and other assorted containers. on previously observed conditions, there is the potential for the related use and disposal of these hazardous materials to have impacted environmental conditions at the Site.

Other historical activities included a chemical company/liquid bleach manufacturer that operated from at least 1933 to 1992. Based upon Sanborn Maps for the Site, the manufacturing operations appear to have been conducted on the southeastern portion of this parcel. Regulatory records indicate that chemicals were stored in aboveground storage tanks and drums; however, data included in the regulatory database only date back to the 1980s. No information is known on the use, storage or disposal of hazardous materials or the chlorine manufacturing operations prior to the 1980s.

1.3 Site Description

1.3.1 Site Location and Current Usage

The Site is located in the Williamsburg section of Brooklyn, New York and is identified as Block 2977 and Lots 1, 14, 15 and 16 on the New York City Tax Map. The Site is approximately 80,000 square feet and is bound by Meserole Street to the north, railroad tracks to the south, Gardner Avenue to the east, and Stewart Avenue to the west. The Site is currently an entertainment/music venue, but previously housed steel fabrication operations and a rubbish removal service. On-Site operations consist of an entertainment/music venue, office areas, full-service bars, temporary food stands and a ticket office. The Site is currently occupied by two one-story buildings, one on the northeast corner (Kings Hall, 111 Gardner Avenue) and one on the southwest corner (Great Hall, 140 Stewart Avenue), with asphalt paved areas throughout most of the remaining areas of the Site.

The "Brooklyn Mirage" is located in the courtyard between the two buildings. This area is currently vacant and will be redeveloped with a new temporary timber structure set on concrete footings and pile caps. Upon completion, the temporary structure will contain an event stage, VIP area, three bars, restrooms, and four staircases.

Site occupation during the operating season is limited to staff occupancy for daily activities and maintenance and construction personnel. During summer months, Site occupation is limited to staff occupancy during events, staff required for setup, ticket and office areas, operation, and take-down immediately prior to, during and after the scheduled events. The ticketing area is unused during non-event hours, except for maintenance or repairs. The entire occupancy of the Site includes 15-20 staff members for daily activities and temporary occupancy of up to 4,000 guests on average for larger public events and 300 for smaller events.

Currently, the Site is closed for the winter and is scheduled to reopen on May 1, 2025. No public events will occur during the ground intrusive activities, which are the subject of this Change of Use Notification.

1.3.2 Description of Surrounding Property

According to the New York City Oasis Map, the Site and surrounding area are located in a Manufacturing District, which is currently zoned "Industrial and Manufacturing Buildings". North of the Site, and across Meserole Street is Best Choice Trading Corporation and Alexander Supply, which operate in an industrial building. Oriental Lumber is located east of the Site and across Gardner Avenue. Another industrial building, D&M Lumber Products, is located west of the Site, across Stewart Ave. The southern Site border is an active railroad line, owned by the Long Island Railroad. South of the railroad are the following industrial buildings; Caesarstone Quartz Surfaces, United Rentals, and Montebello Food Corporation. No sensitive receptors were identified within a 500-foot radius of the Site. Newtown Creek is approximately 1,400 feet(ft) northeast of the Site and 1,580 ft to the west. Residential buildings are located approximately 1,460 ft southeast of the Site. Refer to **Figure 1** for a Site Location Map showing the Site and surrounding properties.

1.3.3 Previous Site Assessments

Previous subsurface investigations were conducted at the Site between 2016 and 2021 and identified volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs) and metals above applicable NYSDEC standards in soil and groundwater at the Site. One sub-slab depressurization system (SSDS) was installed at the Great Hall in May 2016 and a second SSDS was installed at Kings Hall in June 2017. Based on the results of the previous investigations, PSG identified 10 Areas of Concern (AOCs) at the Site. Chlorinated VOC (cVOC) hotspots were identified at AOC-7 and AOC-10 and were determined to require further remedial action, which will be completed at a later date and summarized in a separate Work Plan. Future remedial actions proposed at the Site include the following:

- Excavation of cVOC hotspots at AOC-7 and AOC-10.
- Completion of in-site chemical reduction (ISCR) to address cVOC impacts in soil and groundwater within AOC-7.
- Installation of permanent groundwater monitoring wells and the completion of quarterly groundwater sampling.
- Establishment of engineering controls including a site cover system and continual operation of the existing SSDS.
- Establishment of institutional controls including an Environmental Easement (EE) and Site Management Plan (SMP).

1.3.4 Geology and Hydrogeology

Based on a review of the United States Geological Survey (USGS) Brooklyn, New York, 2016 Quadrangle topographic map, the Site is situated at an elevation approximately 14-17 feet above mean sea level, and the local topography is sloping gently to the west/southwest. Refer to **Figure 2** for a topographic map of the Site's vicinity.

The Site is situated within the Atlantic Coastal Plain Physiographic Province of the State of New York. According to the New York State Geological Survey, the Atlantic Coastal Plain Province is an extensive plain of marine sands, clays, gravels, and marls that are seaward sloping. Long Island is underlain by a mass of wedge-shaped unconsolidated geological deposits that overlie southward-sloping consolidated bedrock. According to the USGS, the bedrock underlying the Site consists of the Quaternary age Glacial and Alluvial Deposits.

2.0 GROUND INTRUSIVE WORK

2.1 Objective

The ground intrusive work will be conducted by Moncon, Inc. (Moncon) and Volk Industrial Services Inc. (Volk) under the supervision of McAlpine Contracting Co. (McAlpine), the engineer for the project, as part of the construction of one new temporary timber structure at the Brooklyn Mirage and the partial demolition of the existing Kings Hall structure. PSG will conduct field oversight of all proposed activities (documented herein) at the Site and certify that all work is completed in accordance with this Work Plan and NYSDEC guidelines. In addition, PSG will verify that all laborers and employees involved in any ground intrusive work at the Site have current Occupational Safety and Health Administration (OSHA) 40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) certifications.

2.2 Field Preparation

Prior to mobilization, the regional public utility locating service, 811 Dig Safe, will be engaged to provide preliminary markup of any utilities within the proposed ground intrusive work locations.

2.3 Proposed Ground Intrusive Activities

2.3.1 Brooklyn Mirage Scope

The new temporary Brooklyn Mirage structure will consist of a mass timber structure set on a foundation consisting of concrete footings, grade beams, and pile caps. A portion of the eastern structure will overlap with the planned remedial excavation at AOC-7; however, no concrete footings or pile caps will be installed in the location of AOC-7. No portion of the proposed Brooklyn Mirage structure will overlap with the planned remedial excavation at AOC-10. Eleven grade beams will be installed by Moncon to an approximate depth of 2 feet below ground surface (bgs) and 20 pile caps will be installed by Moncon to depths between 2 to 3 feet bgs, with 84 piles installed to 40 feet bgs. Tarps will be placed around the proposed excavation areas of the pile caps to contain displaced soil and groundwater, if encountered, and splash guards will be outfitted on the MC-22/MC28 drill rigs to limit water and soil splash. Based on measurements provided by Moncon, a total of approximately 200-250 cubic yards of soil will be generated and removed during grade beam, pile cap, and pile installation.

In addition, four stairwells will be installed to an approximate depth of 3 feet bgs. Based on measurements provided by McAlpine, approximately 53.926 cubic yards of soil will be excavated and removed during stairwell installation.

A total of approximately 300 cubic yards of soil will be generated and removed during construction of the new temporary Brooklyn Mirage structure. Excavated soil will be temporarily stockpiled then staged on-Site in roll-offs, pending disposal to an appropriate off-site disposal facility. All roll-off containers will be lined and covered at the end of each workday.

Refer to **Figure 3** for the proposed grade beam and pile cap installation locations at the Brooklyn Mirage and **Figures 3A** and **3B** for a geological cross-section.

2.3.2 Kings Hall Scope

The partial demolition of the existing Kings Hall structure will involve Volk demolishing a section of the building's western side. This work includes removing part of the exterior wall, sections of the concrete slab to accommodate new footing construction and gas line trench relocation, and portions of the roofing, metal deck, and steel framing. Existing utility features will be removed and relocated. Following demolition, a new exterior wall will be installed along the western exterior. No portion of the proposed Kings Hall demolition will overlap with the planned remedial excavations at AOC-7 or AOC-10. No concrete generated from building demolition activities will be reused.

As part of the partial demolition activities, a trench will be dug for gas line relocation. The planned trench dimensions are approximately 12 inches wide x 1'-6" deep x 24 feet long. Approximately 1.33 cubic yards of soil will be excavated during trench installation. Following gas line relocation, the trench will be topped with ¼" steel plates with joints tack welded and overlapped a minimum of three inches to restore the slab cover system at the Site.

In addition, installation of one footing is proposed for the construction of the new western exterior wall. The planned footing will be 2 feet wide x 1'-8" deep x 104 feet long and will have 2 inches of insulation on the exterior slab. The top of the footing will be set to 8 inches above the slab and the footing will be installed to 12 inches bgs. Approximately 8.345 cubic yards of soil will be excavated and removed during footing installation. The new western exterior wall be installed in the footing to restore the slab cover system at the Site.

A total of approximately 9.675 cubic yards of soil will be excavated and removed during the partial demolition of the existing Kings Hall structure. Excavated soil will be temporarily stockpiled then staged on-Site in roll-offs, pending disposal to an appropriate off-site disposal facility. All roll-off containers will be lined and covered at the end of each workday.

Refer to **Figure 4A** for the dimensions of the proposed Kings Hall first floor demolition and **Figure 4B** for the proposed Kings Hall first floor construction plans.

2.3.3 Sub-Slab Depressurization System Disturbances

During partial demolition of the Kings Hall building, operation of SSDS will be discontinued as portions of the existing SSDS may be impacted by the proposed demolition and ground intrusive activities. Specifically, the footing for the new western exterior wall is proposed to be installed directly over existing Suction Pit 1 in the Northwest Quadrant and two temporary vapor monitoring points (VMPs) and two permanent monitoring points will be outside the new building footprint in the Southwest and Northwest Quadrants. In addition, as part of the new construction, the SSDS blower fan on the roof will need to be rotated to remain a minimum of 20 feet away from all rooftop mechanical units. PSG will oversee the preparation of a SSDS redesign plan under separate cover for NYSDEC and New York State Department of Health (NYSDOH) approval and certify the system prior to building occupancy. Refer to Section 4.0 for further discussion. Refer to **Figure 5A** for the dimensions of the proposed Kings Hall roof demolition and **Figure 5B** for the proposed Kings Hall roof construction plans.

No permanent employees will be based within Kings Hall and no public events will take place within Kings Hall while construction work is on-going and the SSDS is not operational. During construction, the structure will be open, and no work is expected to be completed within the confined Kings Hall building.

2.4 Soil Management

A PSG representative will monitor and document the handling and transportation/disposal on all on-Site soil generated during proposed ground intrusive activities. Community air monitoring will be conducted during all ground intrusive activities in compliance with the Site-specific Community Air Monitoring Program.

2.4.1 Soil Screening Methods

Visual, olfactory, and photoionization detector (PID) soil screening and assessment will be performed during the scope of work for the proposed ground intrusive work at the Site. A PSG geologist/geotechnical engineer will supervise the Site work under the supervision of the Professional Engineer (PE).

Visual, olfactory and PID soil screening and assessment will be performed by a Qualified Environmental Professional (QEP) or experienced field geologist under the direction of the PE during all excavations into known or potentially contaminated material. Soil screening will be performed regardless of when the invasive work is done and will include all excavation and invasive work performed during the remedy.

Screening will be performed by QEPs. Resumes will be provided for all personnel responsible for field screening (i.e., those representing the PE) of invasive work for unknown contaminant sources during remediation and development work.

2.4.2 Stockpile Methods

Soil excavated during the ground intrusive work will be segregated (unsaturated versus saturated). Excavated soils will be temporarily stockpiled on, at minimum, double layers of 6-mil minimum poly-sheeting, will be kept covered at all times (except when material is being added or removed) with appropriately anchored polyethylene sheeting surrounded by hay bales, and will be routinely inspected. Roll-off containers will be utilized for excavated materials. For saturated materials, PSG will line the roll-off containers. Stockpile activities will be compliant with applicable laws and regulations. Stockpiles of excavated soils and other materials will be stored in a secured location on-Site.

Stockpiles will be inspected at a minimum once each week and after every storm event. Results of inspections will be recorded in the daily field logs and maintained at the Site and available for inspection by the NYSDEC.

Stockpiles will be kept covered at all times with appropriately anchored tarps. Stockpiles will be routinely inspected and damaged tarp covers will be promptly replaced.

Absorbent booms will be used as needed near catch basins, surface waters and other discharge points.

Water will be available on-Site at suitable supply and pressure for use in dust control.

PSG notes that all stockpiles will be removed and properly disposed before the Site is reopened for public events in May 2025. No stockpiles will be maintained at the Site while the venue is occupied for a public event.

2.4.3 Materials Excavation and Load-Out

The geologist/geotechnical engineer, under the supervision of the PE of record, overseeing the soil removal will:

- Oversee all soil excavation activities completed on-Site;
- Oversee the load-out of excavated material, if required;
- 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 human health or the environment;
- Ensure that utilities and easements that may be present on the Site have been investigated and that any identified risks from work proposed under this plan are properly addressed by appropriate parties;
- Ensure that any loaded outbound trucks are inspected and cleaned, if necessary, before leaving the Site; and
- Ensure that all egress points for truck and equipment transport from the Site will be kept clean of Site-derived materials during Site work.

During the excavation and loading of soil, if required, the following specific procedures shall be implemented:

- All trucks will be loaded in a manner to prevent significant dust generation and to prevent spillage of soil on and around the trucks and will be equipped with tarps to minimize dust;
- Locations where vehicles exit the Site will be inspected daily for evidence of soil tracking off premises. If significant soil tracking off-Site is observed or if soil accumulation is observed during truck inspection after loading, pressure washing of the trucks prior to exiting the loading pad shall be conducted to remove residual soil to the extent practicable.

Street sweeping is not a viable option for cleaning contaminated soil tracking on asphalt surfaces as the dust generation is too significant and will cause unnecessary air monitoring detections.

The PE or a QEP under his/her supervision will oversee all invasive work and the excavation and load-out of all excavated material.

Avant Garner, LLC and its contractors are solely responsible for safe execution of all invasive and other work performed under this Plan.

The presence of utilities and easements on the Site has been investigated by PSG. It has been determined that no risk or impediment to the planned work is posed by utilities or easements on the Site.

If necessary, loaded vehicles leaving the Site will be appropriately lined, tarped, securely covered, manifested, and placarded in accordance with appropriate Federal, State, local, and New York State Department of Transportation (NYSDOT) requirements (and all other applicable transportation requirements).

Vehicles leaving the Site will not be overloaded. The PE's representative will make reasonable efforts to ensure that vehicles are not loaded beyond their NYSDOT weight rating and that all material is secured beneath the truck bed cover.

Locations where vehicles enter or exit the Site shall be inspected daily for evidence of off-Site sediment tracking.

PSG will be responsible for ensuring that all egress points for truck and equipment transport from the Site will be clean of dirt and other materials derived from the Site during ground intrusive work and Site development. Cleaning of the adjacent streets will be performed as needed to maintain a clean condition with respect to Site -derived materials.

Avant Garner, LLC and associated parties preparing documents submitted to the State, and parties performing this work, are completely responsible for the safe performance of all invasive work, the structural integrity of excavations, and for structures that may be affected by excavations (such as building foundations and bridge footings).

PSG will ensure that Site development activities will not interfere with, or otherwise impair or compromise, proposed remedial activities.

Development-related grading cuts and fills will not be performed without NYSDEC approval and will not interfere with, or otherwise impair or compromise, the performance of ground intrusive activities required by this plan.

2.4.4 Materials Transport Off-Site

If necessary, 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 local, State, and Federal laws. 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; if needed, off-Site queuing will be completed in a safe manner, utilizing police traffic control if needed/required.

Outbound truck transport routes will be planned before loading activities with a route that 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 local neighborhoods after leaving the project Site.

All transport of materials will be performed by licensed haulers in accordance with appropriate local, State, and Federal regulations, including 6 New York Codes, Rules and Regulations (NYCRR) Part 364. Haulers will be appropriately licensed and trucks properly placarded.

Material transported by trucks exiting the Site will be secured with tight-fitting covers. Loose-fitting canvas-type truck covers will be prohibited. If loads contain wet material capable of producing free liquid, truck liners will be used.

All trucks will be washed prior to leaving the Site. Truck wash waters will be collected and disposed of off-Site in an appropriate manner.

2.4.5 Materials Disposal Off-Site

Disposal locations will be established at a later date. Prior to disposal location selection, PSG will oversee waste characterization activities to properly characterize all wastes at the Site. All disposal locations will be approved by the NYSDEC Project Manager, and PSG will ensure all wastes generated during development-related construction are properly disposed of.

The total quantity of material expected to be disposed off-Site is approximately 310 cubic yards of non-hazardous waste.

All soil excavated and removed from the Site will be treated as contaminated and regulated material and will be disposed in accordance with all local, State (including 6NYCRR Part 360) and Federal regulations. If disposal of soil from this Site is proposed for unregulated disposal (i.e., clean soil removed for development purposes), a formal request with an associated plan will be made to NYSDEC's Project Manager. Unregulated off-Site management of materials from this Site is prohibited without formal NYSDEC approval.

Material that does not meet Track 1 unrestricted soil cleanup objectives (SCOs) is prohibited from being taken to a New York State recycling facility (6NYCRR Part 360.15 Registration Facility).

The following documentation will be obtained and reported by PSG for each disposal location used in this project to fully demonstrate and document that the disposal of material derived from the Site conforms with all applicable laws: (1) a letter from the PE or Avant Garner, LLC the receiving facility describing the material to be disposed and requesting formal written acceptance of the material. This letter will state that material to be disposed is contaminated material generated at an environmental remediation Site in New York State. The letter will provide the project identity and the name and phone number of the PE. The letter will include as an attachment a summary of all chemical data for the material being transported (including RI data); and (2) a letter from all receiving facilities stating it is in receipt of the correspondence (above) and is approved to accept the material. These documents will be included in the Final Engineering Report (FER).

Non-hazardous historic fill and contaminated soils taken off-Site will be handled, at minimum, as a Municipal Solid Waste per 6NYCRR Part 360.2.

Historic fill and contaminated soils from the Site are prohibited from being disposed at Part 360.15 Registration Facilities (also known as Soil Recycling Facilities).

Soils that are contaminated but non-hazardous and are being removed from the Site are considered by the Division of Materials Management (DMM) in NYSDEC to be Construction and Demolition (C/D) materials with contamination not typical of virgin soils. These soils may be sent to a permitted Part 360 landfill. They may be sent to a permitted C/D processing facility without permit modifications only upon prior notification of NYSDEC Region 2 DMM. This material is prohibited from being sent or redirected to a Part 360-15 Registration Facility. In this case, as dictated by DMM, special procedures will include, at a minimum, a letter to the C/D facility that provides a detailed explanation that the material is derived from a Department of Environmental Conservation remediation Site, that the soil material is contaminated and that it must not be redirected to on-Site or off-Site Soil Recycling Facilities. The letter will provide the project identity and the name and phone number of the Remedial Engineer. The letter will include as an attachment a summary of all chemical data for the material being transported.

The FER will include an accounting of the destination of all material removed from the Site during this remedial action, including excavated soil, contaminated soil, historic fill, solid waste, and hazardous waste, non-regulated material, and fluids. Documentation associated with disposal of all material must also include records and approvals for receipt of the material. This information will also be presented in a tabular form in the FER.

Bill of Lading system or equivalent will be used for off-Site movement of non-hazardous wastes and contaminated soils. This information will be reported in the FER. A manifest system for off-Site transportation of exported materials will be employed.

Hazardous wastes (if any) derived from on-Site will be stored, transported, and disposed of in full compliance with applicable local, State, and Federal regulations.

Appropriately licensed haulers will be used for material removed from this Site and will be in full compliance with all applicable local, State and Federal regulations.

Waste characterization will be performed for off-Site disposal in a manner suitable to the receiving facility and in conformance with applicable permits. Sampling and analytical methods, sampling frequency, analytical results and Quality Assurance/Quality Control (QA/QC) will be reported in the FER. All data available for soil/material to be disposed at a given facility will be submitted to the disposal facility with suitable explanation prior to shipment and receipt.

2.4.6 Materials Reuse On-Site

Soil that is derived from the Site that meets the established SCOs may be reused on-Site. '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 land with comparable levels of contaminants in soil/fill material, and compliant with applicable laws and regulations. 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 Work Plan, including five-day advance notice to NYSDEC for review and approval, are followed. No soil is proposed to be reused at the Site.

2.4.7 Fluids Management

Liquids (if any) to be removed from the Site, including dewatering fluids, will be handled, transported, and disposed in accordance with applicable local, State, and Federal regulations.

The dewatering fluid will be pretreated as necessary to meet the NYSDEC and local authority discharge criteria. All liquids to be removed from the Site, including dewatering fluids, will be handled, transported, and disposed in accordance with applicable local, State, and Federal regulations. Liquids discharged into the New York City sewer system will be addressed through approval by the New York City Department of Environmental Protection.

Dewatered fluids will not be recharged back to the land surface or subsurface of the Site. Dewatering fluids will be managed off-Site.

Discharge of water generated during remedial construction to surface waters (i.e., a local pond, stream, river, and/or storm sewer) is prohibited without a State Pollutant Discharge Elimination System permit. It is not anticipated that this project will require surface discharge of water or sewer discharge.

2.4.8 Demarcation

If all impacted soil on-Site is not excavated, then the top of the impacted soil 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 the impacted soil 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. PSG notes that demarcation will not be completed as part of the proposed development-related construction summarized in this Work Plan but will be completed following remedial activities at the Site.

2.4.9 Import of Backfill Soil from Off-Site Sources

The proposed ground intrusive work does not anticipate import of backfill soil from off-Site sources. The excavation areas for the pile caps and stairs at the Brooklyn Mirage and footing at Kings Hall will be filled to grade with concrete.

In the event import is required, all imported soil/fill will meet the requirements of 6 NYCRR Party 735-6.7(d). All materials received for import to the Site will be tested in accordance with NYSDEC DER-10, be approved by the RE and NYSDEC project manager, and will be in compliance with provisions in this Work Plan. A five-day advance notice and "Request to Import/Reuse Fill Material" form will be filed with the NYSDEC project manager for review and approval prior to import of material to the Site.

2.4.10 Stormwater Pollution Prevention

Applicable laws and regulations pertaining to stormwater pollution prevention will be addressed during the excavation work. The need for erosion and sediment control measures are not anticipated during the development-related construction. However, if necessary, the following measures will be implemented:

Silt fences and barriers, and hay bale checks will be installed around the entire perimeter of the remedial action 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. 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 toe anchor will be repaired immediately with appropriate backfill materials. Manufacturer's recommendations will be followed for replacing silt fencing damaged due to weathering.

Barriers and hay bale checks will be installed and inspected once a week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the Site and available for inspection by NYSDEC. All necessary repairs shall be made immediately.

Accumulated sediments will be removed as required to keep the barrier and hay bale check functional. All undercutting or erosion of the silt fence toe anchor shall be repaired immediately with appropriate backfill materials.

Manufacturer's recommendations will be followed for replacing silt fencing damaged due to weathering.

Erosion and sediment control measures identified in the Remedial Action Work Plan shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters.

2.4.11 Contingency Plan

If underground tanks or other previously unidentified contaminant sources are found during on-Site remedial excavation or development-related construction, sampling will be performed on product, sediment and surrounding soils, etc. Chemical analytical work will be for full scan parameters (Target Analyte List metals via United States Environmental Protection Agency (EPA) Method 6010A/7470A; Target Compound List [TCL] volatiles and semi-volatiles via EPA Methods 8260 and 8270, TCL pesticides and polychlorinated biphenyls [PCBs] via EPA Method 8082, and per- and polyfluoroalkyl substances via EPA Method 1633). Analyses will not be otherwise limited without NYSDEC approval.

Identification of unknown or unexpected contaminated media identified by screening during invasive Site work will be promptly communicated by phone to NYSDEC's Project Manager. These findings will be also included in daily and periodic electronic media reports.

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 enrollee 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 excavated areas, 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, hay bales; 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 NYSDEC 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 NYSDEC within 2 hours of identification and consistent with State regulations. 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. Stormwater 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 the NYSDEC will be notified, and corrective measure plan designed to remove and clean dislocated material will be submitted to NYSDEC and implemented following approval by NYSDEC and granting of Site access by the property owner. Impacted off-Site areas may require characterization based on Site conditions, at the discretion of the NYSDEC. If on-Site petroleum spills are identified, a QEP will determine the nature and extent of the spill and report to NYSDEC's spill hotline at DEC 800-457-7362 within statutory defined timelines. 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 NYSDEC.

Storm Response Reporting

A Site inspection report will be submitted to NYSDEC at the completion of Site inspection. 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 NYSDEC 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 on-Site or off-Site exposure pathways caused by the storm; presence of petroleum or other spills and status of spill reporting to NYSDEC; description of corrective actions; schedule for corrective actions. This report should be completed and submitted to the NYSDEC Project Manager with photographs within 24 hours of the time of safe entry to the property after the storm event.

2.5 Daily Reporting

Daily reports will be submitted to NYSDEC Project Managers by the end of each day of ground intrusive activities following the reporting period and will include:

- An update of progress made during the reporting day;
- Locations of work;
- References to map for Site activities;

- A summary of any and all complaints with relevant details (names, phone numbers);
- A summary of Community Air Monitoring Plan (CAMP) finding, including excursions; and
- An explanation of notable Site conditions.

Daily reports are not intended to be the mode of communication for notification to the NYSDEC of emergencies (accident, spill), requests for changes to this Work Plan or other sensitive or time critical information. However, such conditions will also be included in the daily reports. Emergency conditions and changes to this Work Plan will be addressed directly to NYSDEC Project Manager via personal communication.

Daily Reports will include a description of daily activities keyed to an included Site that identifies work areas. These reports will include a summary of air sampling results, odor and dust problems and corrective actions, and all complaints received from the public.

The NYSDEC assigned project number will appear on all reports.

PSG notes that the NYSDEC and NYSDOH will be immediately notified of any CAMP exceedances, including measures on how the CAMP exceedances were addressed.

2.6 Construction Completion Report

After completion of the ground intrusive activities and restoration of the cover system and SSDS, a Construction Completion Report (CCR) will be prepared and submitted to NYSDEC and NYSDOH. The CCR will provide documentation that the ground intrusive work described in this Work Plan has been completed and performed in compliance with this plan. The CCR will be prepared in conformance with DER-10 and include the following information:

- Written and photographic documentation of all ground intrusive work performed under this Work Plan.
- Comprehensive account of the locations and characteristics of all material removed from the Site.
- An accounting of the destination of all material removed from the Site, including excavated contaminated soil, historic fill, solid waste, non-regulated materials, fluids, and hazardous waste (if any). Documentation associated with disposal of all material will also include records and approval for receipt of the material.
- A description of changes, if any, from the elements provided in this Work Plan and associated design documents.
- A tabular summary of all performance evaluation sampling results and all material characterization results and other sampling.
- Test results demonstrating that all mitigation and remedial systems are functioning properly.
- As-built drawings for all constructed elements.

2.7 Proposed Project Schedule

The ground intrusive work will be initiated following approval of this Work Plan by the NYSDEC and completion of a pre-construction meeting with all contractors and sub-contractors at the Site. The field

work is anticipated to require 20 business days on-Site; however, this schedule is subject to change based on Site conditions, field observations, and weather.

3.0 COMMUNITY AIR MONITORING PLAN

PSG will implement a CAMP during the course of the ground intrusive work, which will include perimeter continuous dust monitoring and monitoring for VOCs in the work area during ground intrusive work and while potentially impacted soils are being excavated or stated on-Site.

The air will be monitored for VOCs during ground intrusive activities through real-time VOC and air particulate (dust) monitoring. Continuous monitoring will be completed during all ground intrusive activities including the installation of test piles.

Wind direction will be evaluated at the start of each workday, noon of each workday, and at the end of each workday to position the monitoring equipment in appropriate locations at the downwind perimeter of the work zone (i.e., the exclusion zone). The monitoring equipment will include a DustTrak II Aerosol Monitor 8530 and portable RAE Systems® MiniRae 3000 Photo-Ionization Detector, both of which can calculate the 15-minute running average VOC concentrations.

Corrective measures will be taken in the event that 15-minute integrated VOC levels at the downwind perimeter location persist at a concentration exceeding 5 parts per million (ppm) at any point during the ground intrusive work or the integrated particulate level at the downwind perimeter exceeds the upwind level by more than 100 micrograms per cubic meter ($\mu g/m^3$) at any time during the ground intrusive work.

A Special Requirements CAMP for work within 30 feet of potentially exposed individuals or structures is provided as **Appendix B**.

4.0 SUB-SLAB DEPRESSURAIZATION SYSTEM CERTIFICATION

4.1 Sub-Slab Depressurization System Certification

The proposed ground-intrusive activities, including footing installation, gas line relocation, and roof modifications within the Kings Hall at 111 Gardner Avenue, will require modifications to the existing SSDS. These modifications will involve adjustments to suction points, piping routes, and vapor monitoring locations. **Figure 4A** provides an overlay of the existing SSDS relative to the proposed ground-intrusive activities. **Figure 5A** depicts the planned roof demolition.

To prevent construction delays while ensuring continued vapor mitigation, PSG proposes to proceed with the work outlined in this plan and will submit a detailed SSDS modification design to NYSDEC/NYSDOH for approval as a separate submittal. The modifications will be completed, and the system will be recertified before the facility is reoccupied in May 2025.

Once ground-intrusive work and restoration of the cover system and western exterior wall are complete, pressure field extension testing will evaluate system performance. After restoration, vacuum testing will confirm adequate sub-slab depressurization, followed by certification by a New York State-licensed professional engineer.

4.2 Indoor Air Sampling

Following certification of the SSDS by the professional engineer, PSG will conduct indoor air sampling. PSG will collect up to two indoor air samples within the Kings Hall building and one exterior background ambient air sample. Indoor air sampling will be conducted in accordance with the NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York dated October 2006. A NYSDOH Indoor Air Quality Questionnaire and Building Inventory form will be completed during the indoor air sampling event. PSG will additionally screen any drains located within the buildings with a calibrated photoionization detector immediately after the indoor air samples to additionally investigation the potential exposure pathway.

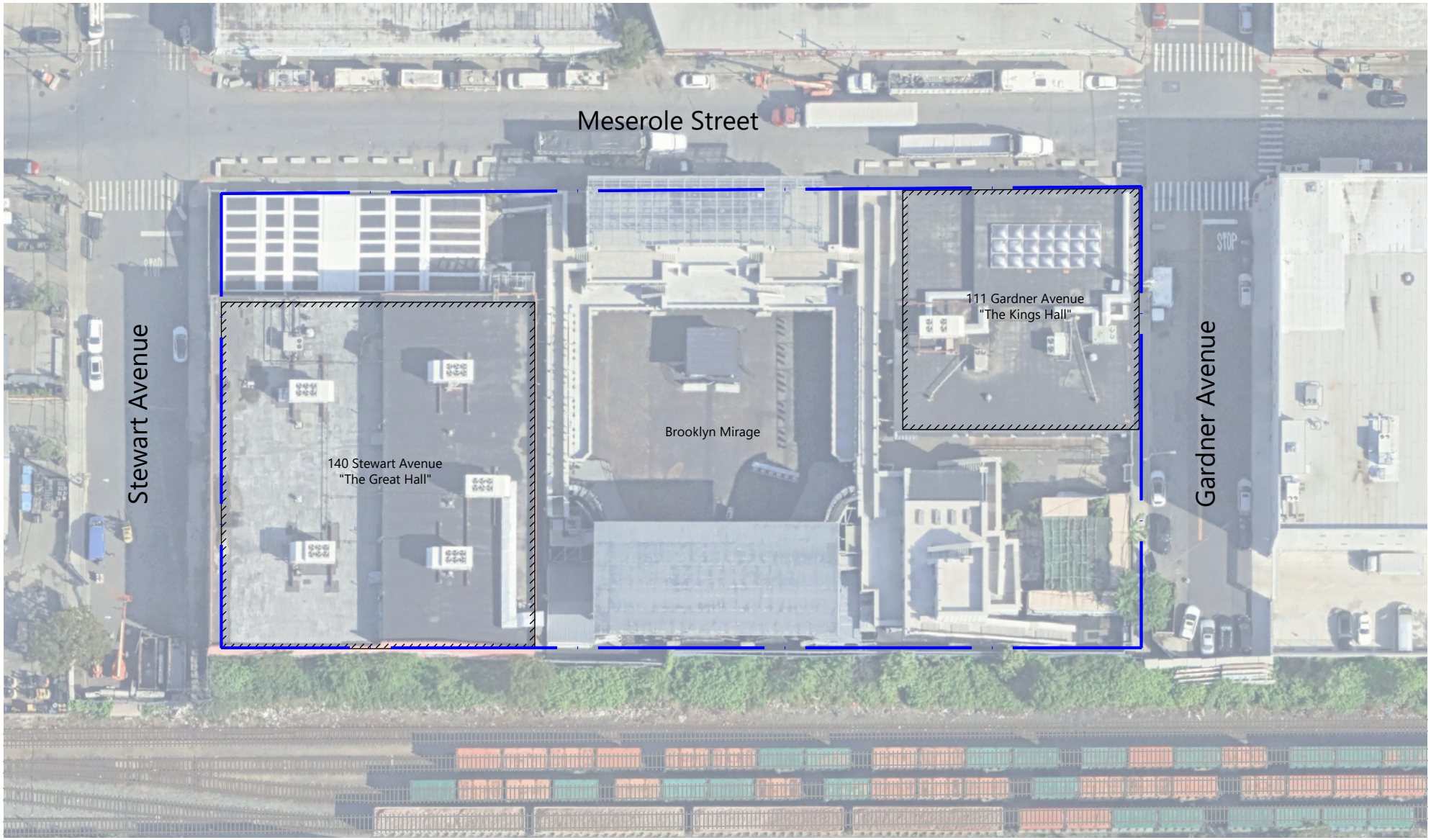
Samples will be collected in 6-liter SUMMA Canisters® over an 8-hour period. The SUMMA Canisters® will be certified clean by the laboratory and analyzed by using EPA Method TO-15 with selective ion monitoring. A table comparing all sample results will be provided along with the laboratory report in the final submission. PSG will make recommendations based on the indoor air concentrations compared to the known Site contaminants.

5.0 HEALTH AND SAFETY PLAN

5.1 Health and Safety Plan (HASP)

Ground intrusive work will be performed in full compliance with applicable health and safety laws and regulations, including Site and OSHA worker safety requirements and HAZWOPER requirements, and in accordance with the previously NYSDEC-approved HASP for the Site. The parties performing the investigation work will ensure that performance of work is in compliance with the HASP and applicable laws and regulations.

FIGURES



Legend and Notes:

Site Boundary

Site Building

N

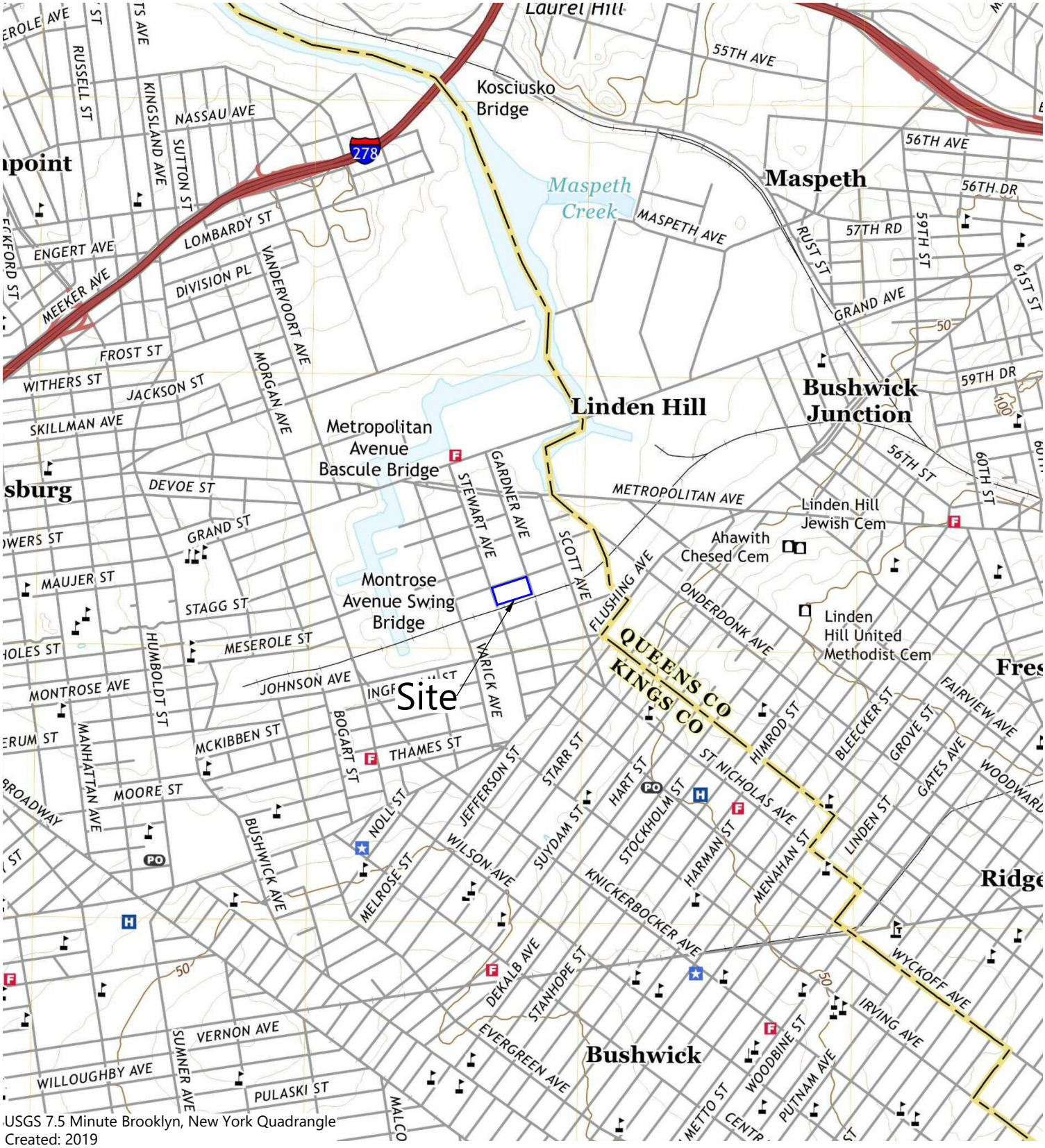
30' 0' 30' 60'

Approximate Scale

Title: **Site Location Map**			
Figure: **1**	Prepared By: **AS**	Date: **February 2025**	Project Number: **ES22-387153**

Address:
NYSDEC BCP Site #C224258
140 Stewart Avenue and 111 Gardner Avenue
Brooklyn, New York 11237

PSG Engineering and Geology, D.P.C.



USGS 7.5 Minute Brooklyn, New York Quadrangle
Created: 2019

Legend

Site Boundary

N

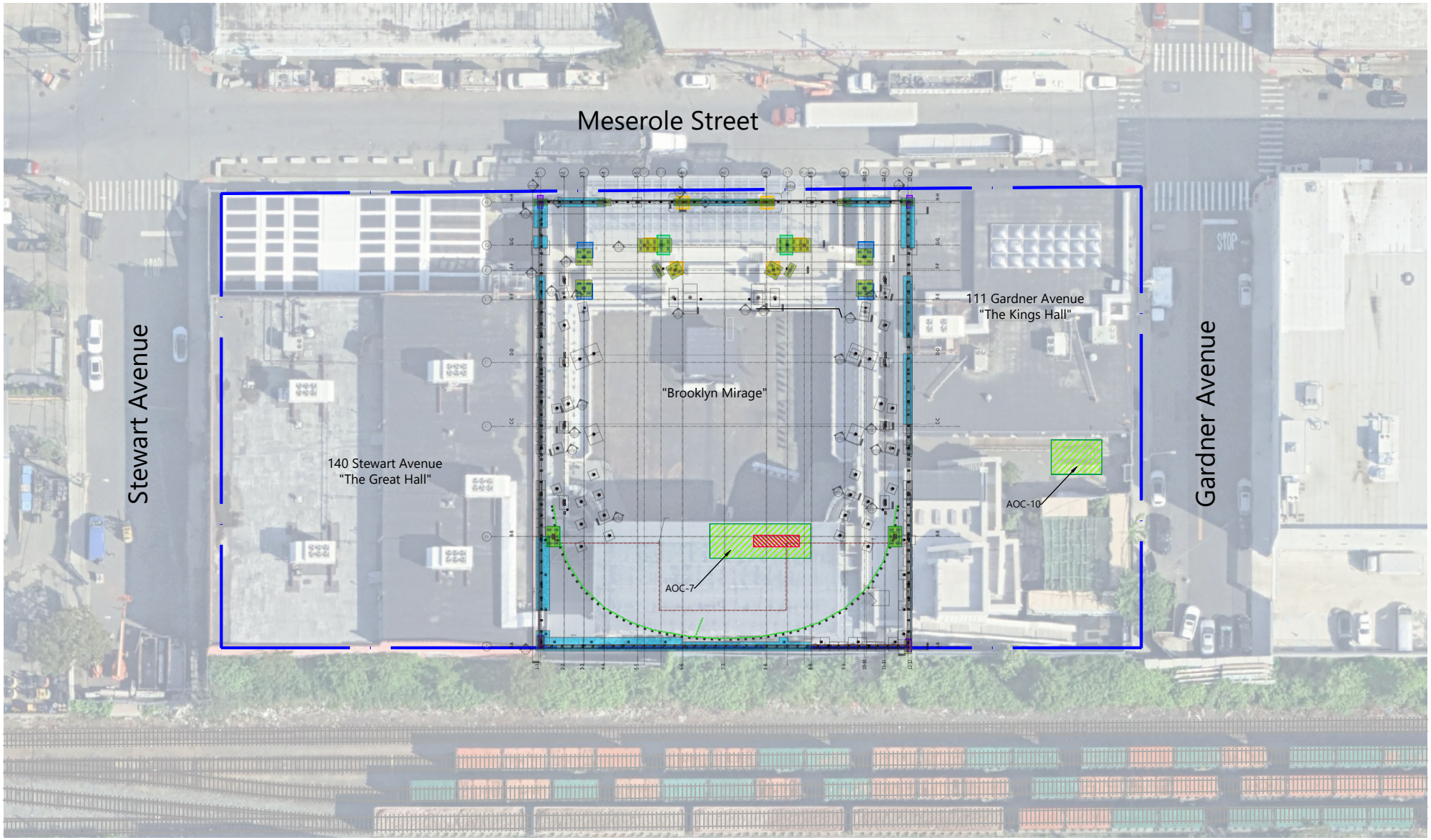
800' 0' 800' 1,600'

Approximate Scale

Title: Topographic Map			
Figure: 2	Prepared By: AS	Date: February 2025	Project Number: ES22-387153

Address:
NYSDEC BCP Site #C224258
140 Stewart Avenue and 111 Gardner Avenue
Brooklyn, New York 11237

PSG Engineering and Geology, D.P.C.



Legend and Notes:

- Site Boundary
- Pile Cap
- Grade Beam
- Approximate Limits of Proposed cVOC Soil Hot Spot Removal
- Approximate Limits of Proposed cVOC Soil Hot Spot Removal - Hazardous Material

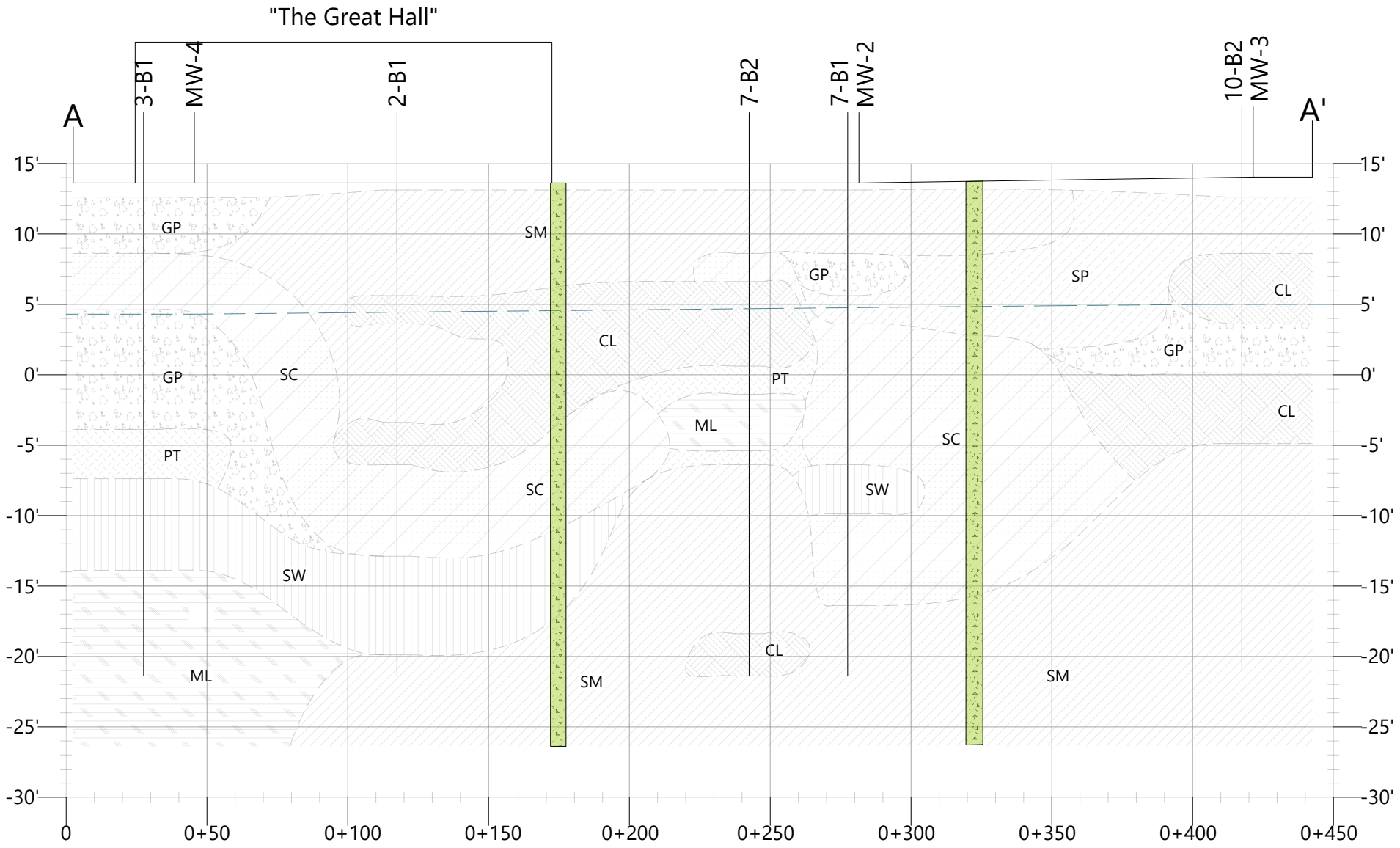
Pile summary:
- Total number of pile caps: 20
- Total number of piles: 84

N

30' 0' 30' 60'
Approximate Scale

Title: **Proposed Brooklyn Mirage Pile Cap Installation Locations**			
Figure: **3**	Prepared By: **AS**	Date: **February 2025**	Project Number: **21405366-NY**
Address: **140 Stewart Avenue and 111 Gardner Avenue Brooklyn, New York 11237**			

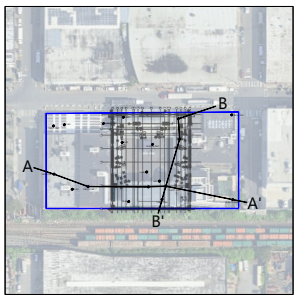
PSG Engineering and Geology, D.P.C.

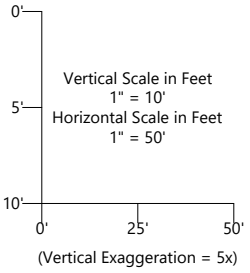


Legend and Notes:

GP	Poorly Graded Gravel	Pile
SC	Clayey Sand	
PT	Peat	
SW	Well Graded Sand	
ML	Silt	
SM	Silty Sand	
CL	Lean Clay	
	Groundwater Elevation Contour	

- Vertical axis = feet above mean sea level
- Horizontal axis = feet
- Soil layers dased where inferred



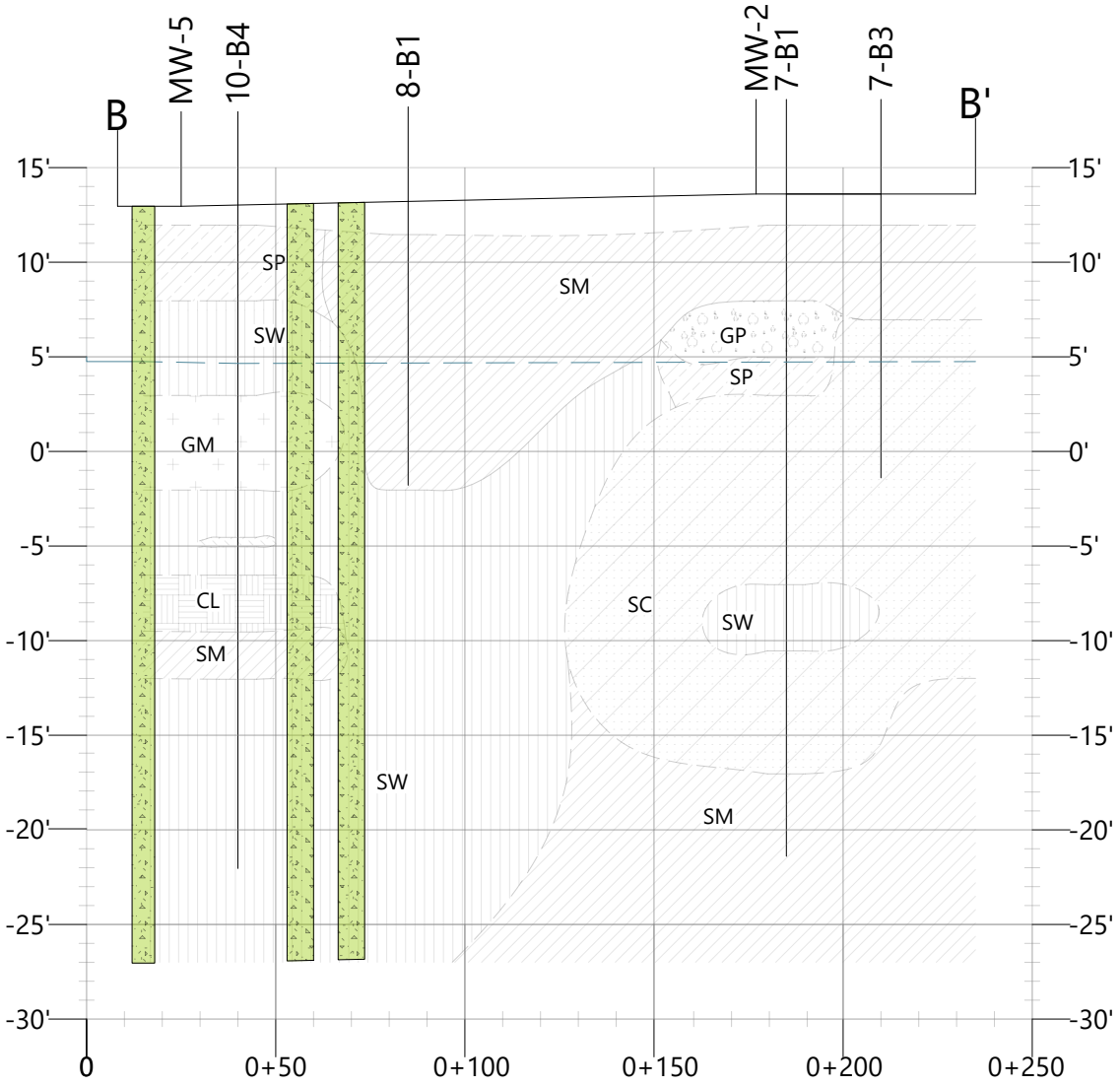


Vertical Scale in Feet
1" = 10'
Horizontal Scale in Feet
1" = 50'

(Vertical Exaggeration = 5x)

Title: **Geological Cross-Section A-A'**			
Figure: **3A**	Prepared By: **AS**	Date: **February 2025**	Project Number: **21405366-NY**
Address: **140 Stewart Avenue and 111 Gardner Avenue Brooklyn, New York 11237**			

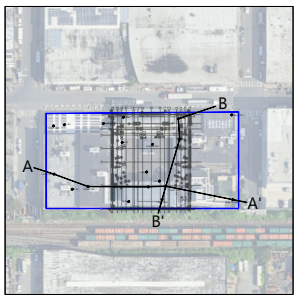
PSG Engineering and Geology, D.P.C.

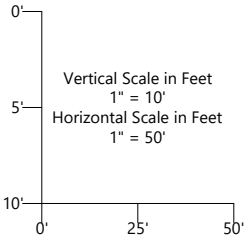


Legend and Notes:

GP	Poorly Graded Gravel	Pile
SC	Clayey Sand	
PT	Peat	
SW	Well Graded Sand	
SM	Silty Sand	
CL	Lean Clay	
GM	Silty Gravel	
	Groundwater Elevation Contour	

- Vertical axis = feet above mean sea level
- Horizontal axis = feet
- Soil layers dased where inferred





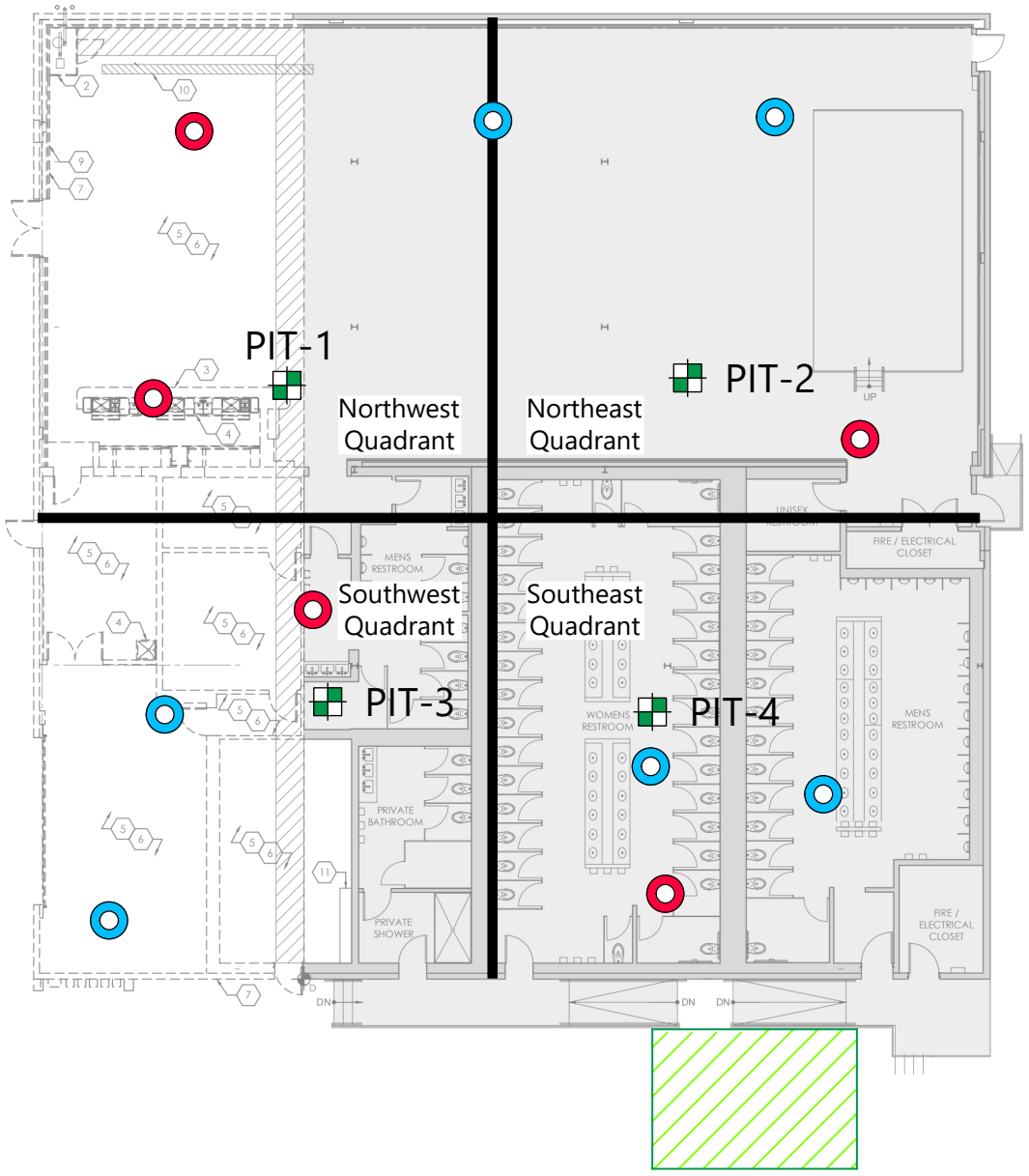
Vertical Scale in Feet
1" = 10'
Horizontal Scale in Feet
1" = 50'

(Vertical Exaggeration = 5x)

Title: **Geological Cross-Section B-B'**			
Figure: **3B**	Prepared By: **AS**	Date: **February 2025**	Project Number: **21405366-NY**
Address: **140 Stewart Avenue and 111 Gardner Avenue Brooklyn, New York 11237**			

PSG Engineering and Geology, D.P.C.

Meserole Street



Gardner Avenue

Legend and Notes:

- Temporary Vapor Monitoring Point Location
- Permanent Monitoring Point Location
- Approximate Limits of Proposed cVOC Soil Hot Spot Removal
- Area NIC
- Existing Construction to Remain/NIC
- Existing Construction to be Removed
- Portion of Existing Slab to be Removed for Gas Line Trench
- Portion of Existing Slab to be Removed for New Exterior Wall Substructure

N

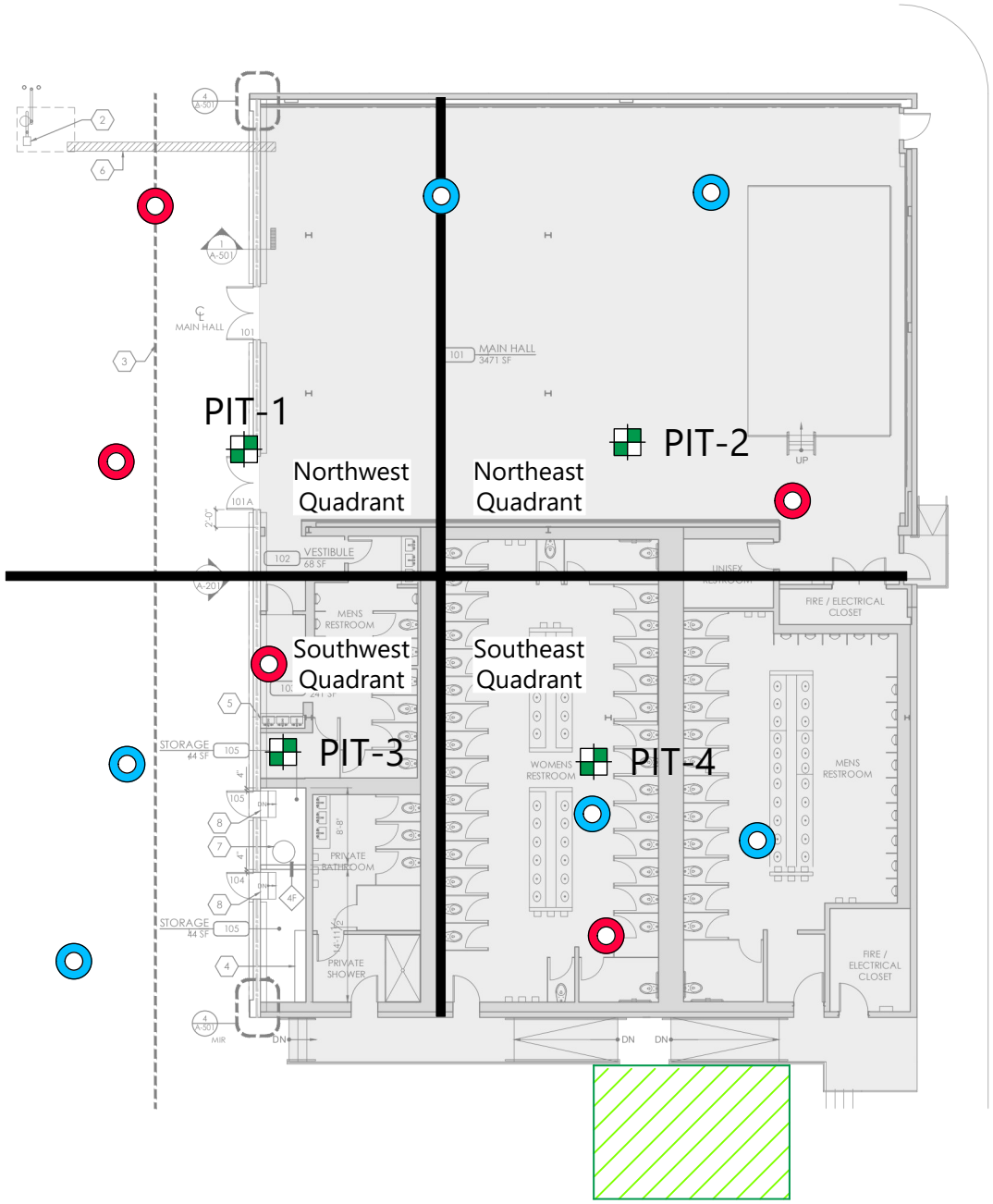
10' 0' 10' 20'

Approximate Scale

Title: **Dimensions of Proposed Kings Hall First Floor Demolition**			
Figure: **4A**	Prepared By: **AS**	Date: **February 2025**	Project Number: **21405366-NY**
Address: **140 Stewart Avenue and 111 Gardner Avenue Brooklyn, New York 11237**			

PSG Engineering and Geology, D.P.C.

Meserole Street



Legend and Notes:

- Temporary Vapor Monitoring Point Location
- Permanent Monitoring Point Location
- Approximate Limits of Proposed cVOC Soil Hot Spot Removal

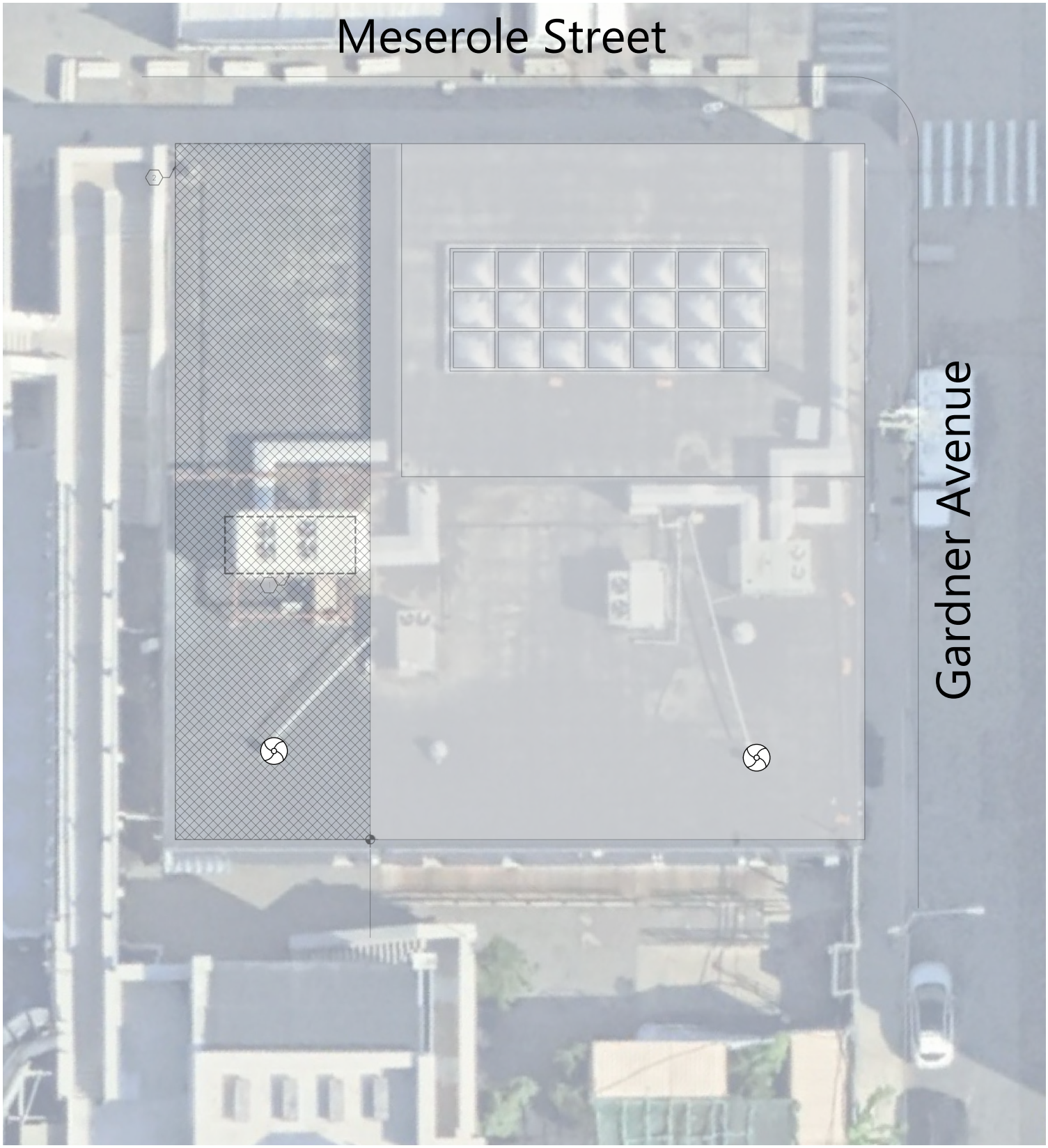
N

10' 0' 10' 20'

Approximate Scale

Title: **Proposed Kings Hall First Floor Construction**			
Figure: **4B**	Prepared By: **AS**	Date: **February 2025**	Project Number: **21405366-NY**
Address: **140 Stewart Avenue and 111 Gardner Avenue Brooklyn, New York 11237**			

PSG Engineering and Geology, D.P.C.



Legend and Notes:

- SSDS Blower Location
- Area NIC
- Existing Construction to Remain/NIC
- Existing Construction to be Removed
- Portion of Existing Roofing. Metal Deck and Steel Framing to be Removed

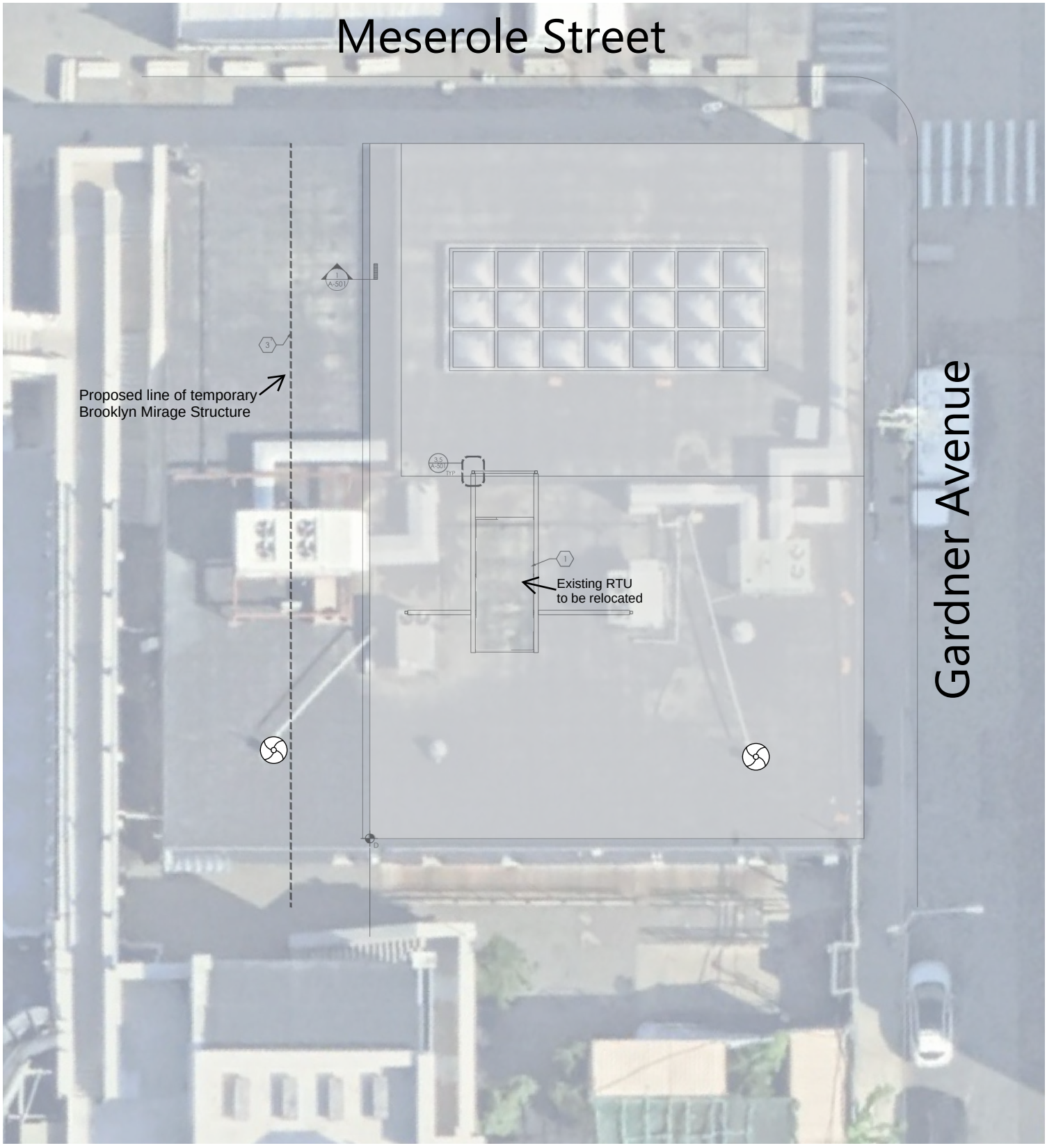
N

10' 0' 10' 20'

Approximate Scale

Title: **Dimensions of Proposed Kings Hall Roof Demolition**			
Figure: **5A**	Prepared By: **AS**	Date: **February 2025**	Project Number: **21405366-NY**
Address: **140 Stewart Avenue and 111 Gardner Avenue Brooklyn, New York 11237**			

PSG Engineering and Geology, D.P.C.



Legend and Notes:

⊗ SSDS Blower Location

N

10' 0' 10' 20'

Approximate Scale

Title: **Proposed Kings Hall Roof Construction**			
Figure: **5B**	Prepared By: **AS**	Date: **February 2025**	Project Number: **21405366-NY**
Address: **140 Stewart Avenue and 111 Gardner Avenue Brooklyn, New York 11237**			

PSG Engineering and Geology, D.P.C.

APPENDIX A:
60-DAY ADVANCE NOTIFICATION OF SITE CHANGE OF USE FORM

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

60-Day Advance Notification of Site Change of Use, Transfer of Certificate of Completion, and/or Ownership

Required by 6NYCRR Part 375-1.11(d) and 375-1.9(f)

To be submitted at least 60 days prior to change of use to:

Chief, Site Control Section
New York State Department of Environmental Conservation
Division of Environmental Remediation, 625 Broadway
Albany NY 12233-7020

I. Site Name: Avant Gardner **DEC Site ID No.** C224258

II. Contact Information of Person Submitting Notification:

Name: David Lent

Address1: 222 Bloomingdale Road

Address2: Suite 303

Phone: 914-222-8011 E-mail: dlent@partneresi.com

III. Type of Change and Date: Indicate the Type of Change(s) (check all that apply):

☐ Change in Ownership or Change in Remedial Party(ies)

☐ Transfer of Certificate of Completion (CoC)

☑ Other (e.g., any physical alteration or other change of use)

Proposed Date of Change (mm/dd/yyyy): Feb 11, 2025

IV. Description: Describe proposed change(s) indicated above and attach maps, drawings, and/or parcel information.

Proposed changes include the completion of ground intrusive work for the construction of one temporary structure at the Brooklyn Mirage and partial demolition of the existing Kings Hall structure.

If "Other," the description must explain and advise the Department how such change may or may not affect the site's proposed, ongoing, or completed remedial program (attach additional sheets if needed).

The proposed activities will impact the vapor mitigation system at Kings Hall and disturb CVOC-contaminated soil and groundwater at the the Brooklyn Mirage and Kings Hall portions of the Site.

V. Certification Statement: Where the change of use results in a change in ownership or in responsibility for the proposed, ongoing, or completed remedial program for the site, the following certification must be completed (by owner or designated representative; see §375-1.11(d)(3)(i)):

I hereby certify that the prospective purchaser and/or remedial party has been provided a copy of any order, agreement, Site Management Plan, or State Assistance Contract regarding the Site's remedial program as well as a copy of all approved remedial work plans and reports.

Name: _____ _____
(Signature) (Date)

_____
(Print Name)

Address1: _____

Address2: _____

Phone: _____ E-mail: _____

VI. Contact Information for New Owner, Remedial Party, or CoC Holder: If the site will be sold or there will be a new remedial party, identify the prospective owner(s) or party(ies) along with contact information. If the site is subject to an Environmental Easement, Deed Restriction, or Site Management Plan requiring periodic certification of institutional controls/engineering controls (IC/ECs), indicate who will be the certifying party (attach additional sheets if needed).

☐ Prospective Owner ☐ Prospective Remedial Party ☐ Prospective Owner Representative

Name: _____

Address1: _____

Address2: _____

Phone: _____ E-mail: _____

Certifying Party Name: _____

Address1: _____

Address2: _____

Phone: _____ E-mail: _____

VII. Agreement to Notify DEC after Transfer: If Section VI applies, and all or part of the site will be sold, a letter to notify the DEC of the completion of the transfer must be provided. If the current owner is also the holder of the CoC for the site, the CoC should be transferred to the new owner using DEC's form found at http://www.dec.ny.gov/chemical/54736.html. This form has its own filing requirements (see 6NYCRR Part 375-1.9(f)).

Signing below indicates that these notices will be provided to the DEC within the specified time frames. If the sale of the site also includes the transfer of a CoC, the DEC agrees to accept the notice given in VII.3 below in satisfaction of the notice required by VII.1 below (which normally must be submitted within 15 days of the sale of the site).

Within 30 days of the sale of the site, I agree to submit to the DEC:

1. the name and contact information for the new owner(s) (see §375-1.11(d)(3)(ii));
2. the name and contact information for any owner representative; and
3. a notice of transfer using the DEC's form found at http://www.dec.ny.gov/chemical/54736.html (see §375-1.9(f)).

Name: _____ _____

(Signature) (Date)

_____

(Print Name)

Address1: _____

Address2: _____

Phone: _____ E-mail: _____

Continuation Sheet

☐ Prospective Owner/Holder ☐ Prospective Remedial Party ☐ Prospective Owner Representative

Name: _____

Address1: _____

Address2: _____

Phone: _____ E-mail: _____

☐ Prospective Owner/Holder ☐ Prospective Remedial Party ☐ Prospective Owner Representative

Name: _____

Address1: _____

Address2: _____

Phone: _____ E-mail: _____

☐ Prospective Owner/Holder ☐ Prospective Remedial Party ☐ Prospective Owner Representative

Name: _____

Address1: _____

Address2: _____

Phone: _____ E-mail: _____

☐ Prospective Owner/Holder ☐ Prospective Remedial Party ☐ Prospective Owner Representative

Name: _____

Address1: _____

Address2: _____

Phone: _____ E-mail: _____

☐ Prospective Owner/Holder ☐ Prospective Remedial Party ☐ Prospective Owner Representative

Name: _____

Address1: _____

Address2: _____

Phone: _____ E-mail: _____

☐ Prospective Owner/Holder ☐ Prospective Remedial Party ☐ Prospective Owner Representative

Name: _____

Address1: _____

Address2: _____

Phone: _____ E-mail: _____

New York State Department of Environmental Conservation

Instructions for Completing the 60-Day Advance Notification of Site Change of Use, Transfer of Certificate of Completion (CoC), and/or Ownership Form

Submit to: Chief, Site Control Section, New York State Department of Environmental Conservation, Division of Environmental Remediation, 625 Broadway, Albany NY 12233-7020

Section I	**Description**
Site Name	Official DEC site name. (see http://www.dec.ny.gov/cfmx/extapps/derexternal/index.cfm?pageid=3)
DEC Site ID No.	DEC site identification number.

Section II	**Contact Information of Person Submitting Notification**
Name	Name of person submitting notification of site change of use, transfer of certificate of completion and/or ownership form.
Address1	Street address or P.O. box number of the person submitting notification.
Address2	City, state and zip code of the person submitting notification.
Phone	Phone number of the person submitting notification.
E-mail	E-mail address of the person submitting notification.

Section III	**Type of Change and Date**
Check Boxes	Check the appropriate box(s) for the type(s) of change about which you are notifying the Department. Check all that apply.
Proposed Date of Change	Date on which the change in ownership or remedial party, transfer of CoC, or other change is expected to occur.

Section IV	**Description**
Description	For each change checked in Section III, describe the proposed change. Provide all applicable maps, drawings, and/or parcel information. If "Other" is checked in Section III, explain how the change may affect the site's proposed, ongoing, or completed remedial program at the site. Please attach additional sheets, if needed.

Section V Certification Statement

This section must be filled out if the change of use results in a change of ownership or responsibility for the proposed, ongoing, or completed remedial program for the site. When completed, it provides DEC with a certification that the prospective purchaser has been provided a copy of any order, agreement, or State assistance contract as well as a copy of all approved remedial work plans and reports.

Name	The owner of the site property or their designated representative must sign and date the certification statement. Print owner or designated representative's name on the line provided below the signature.
Address1	Owner or designated representative's street address or P.O. Box number.
Address2	Owner or designated representative's city, state and zip code.
Phone	Owner or designated representative's phone number.
E-Mail	Owner or designated representative's E-mail.

Section VI Contact Information for New Owner, Remedial Party, and CoC Holder (if a CoC was issued)

Fill out this section only if the site is to be sold or there will be a new remedial party. Check the appropriate box to indicate whether the information being provided is for a Prospective Owner, CoC Holder (if site was ever issued a COC), Prospective Remedial Party, or Prospective Owner Representative. Identify the prospective owner or party and include contact information. A Continuation Sheet is provided at the end of this form for additional owner/party information.

Name	Name of Prospective Owner, Prospective Remedial Party or Prospective Owner Representative.
Address1	Street address or P.O. Box number for the Prospective Owner, Prospective Remedial Party, or Prospective Owner Representative.
Address2	City, state and zip code for the Prospective Owner, Prospective Remedial Party, or Prospective Owner Representative.
Phone	Phone number for the Prospective Owner, Prospective Remedial Party or Prospective Owner Representative.
E-Mail	E-mail address of the Prospective Owner, Prospective Remedial Party or Prospective Owner Representative.

If the site is subject to an Environmental Easement, Deed Restriction, or Site Management Plan requiring periodic certification of institutional controls/engineering controls (IC/EC), indicate who will be the certifying party(ies). Attach additional sheets, if needed.

Certifying Party	
Name	Name of Certifying Party.
Address1	Certifying Party's street address or P.O. Box number.
Address2	Certifying Party's city, state and zip code.
Phone	Certifying Party's Phone number.
E-Mail	Certifying Party's E-mail address.

Section VII Agreement to Notify DEC After Property Transfer/Sale

This section must be filled out for all property transfers of all or part of the site. If the site also has a CoC, then the CoC shall be transferred using DEC's form found at http://www.dec.ny.gov/chemical/54736.html

Filling out and signing this section of the form indicates you will comply with the post transfer notifications within the required timeframes specified on the form. If a CoC has been issued for the site, the DEC will allow 30 days for the post transfer notification so that the "Notice of CoC Transfer Form" and proof of it's filing can be included. Normally the required post transfer notification must be submitted within 15 day (per 375-1.11(d)(3)(ii)) when no CoC is involved.

Name	Current property owner must sign and date the form on the designated lines. Print owner's name on the line provided.
Address1	Current owner's street address.
Address2	Current owner's city, state and zip code.

APPENDIX B: SPECIAL REQUIREMENTS CAMP

PSG
Engineering and Geology, D.P.C.

Engineers who understand your business.

SPECIAL REQUIREMENTS COMMUNITY AIR MONITORING PLAN

Avant Gardner Site

140 Stewart Avenue & 111 Gardner Avenue
Brooklyn, New York 11237
NYSDEC Site No. C224258

Report Date

February 21, 2025

Partner Project No.

PSG 21405366

Prepared for:

Avant Gardner LLC
140 Stewart Avenue, Brooklyn, New York 11237

Building Science | Environmental Consulting | Construction & Development | Energy & Sustainability

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Appendix 1A: NYSDOH Generic CAMP

Appendix 1B: Fugitive Dust and Particulate Monitoring from DER-10 Technical Guidance for Site Investigation and Remediation

1.0 INTRODUCTION

This Special Requirements Community Air Monitoring Plan (CAMP) has been prepared by PSG Engineering and Geology, D.P.C. (PSG), on behalf of Avant Gardner, LLC for the proposed ground-intrusive work and construction at the Avant Gardner site (hereinafter, the "Site"). The Site was enrolled in the Brownfield Cleanup Program on October 30, 2017, and was listed on the Brownfield Cleanup Agreement under site name Avant Gardner, New York State Department of Environmental Conservation (NYSDEC) Site No. C224258.

This CAMP fulfills the general requirements set forth in Appendices A and B of NYSDEC's Technical Guidance for Site Investigation and Remediation (DER-10; NYSDEC 2010). Appendix A of DER-10, which is provided in **Appendix A** of this CAMP, includes general guidance and protocols for the preparation and implementation of a CAMP. Appendix B of DER-10, which is provided in **Appendix B** of this CAMP, supplements the contents of Appendix A and includes additional requirements for fugitive dust/particulate monitoring.

1.1 Site Description

The Site is located in the Williamsburg section of Brooklyn, New York and is identified as Block 2977 and Lots 1, 14, 15 and 16 on the New York City Tax Map. The Site is approximately 80,000-square feet and is bound by Meserole Street to the north, railroad tracks to the south, Gardner Avenue to the east, and Stewart Avenue to the west. The Site is currently an entertainment/music venue, but previously housed steel fabrication operations and a rubbish removal service. On-Site operations consist of an entertainment/music venue, office areas, full-service bars, temporary food stands and a ticket office. The Site is currently occupied by two (2) one-story buildings, one on the northeast corner (Kings Hall, 111 Gardner Avenue) and one on the southwest corner (Avant Gardner, 140 Stewart Avenue), with asphalt paved areas throughout most of the remaining areas of the Site.

The "Brooklyn Mirage" is located in the courtyard between the two buildings. This area is currently vacant and will be redeveloped with a new temporary timber structure set on concrete footings and pile caps. Upon completion, the temporary structure will contain an event stage, VIP area, three bars, restrooms, and four staircases.

Site occupation is currently limited to staff occupancy for daily activities and maintenance and construction personnel. During summer months, Site occupation is limited to staff occupancy during events, staff required for setup, ticket and office areas, operation, and take-down immediately prior to, during and after the scheduled events. The ticketing area is unused during non-event hours, except for maintenance or repairs. The entire occupancy of the Site includes 15-20 staff members for daily activities and temporary occupancy of up to 4,000 guests on average for larger public events and 300 for smaller events.

1.2 Objective

Community air monitoring will be performed during the proposed ground-intrusive work and construction activities to provide a measure of protection for the downwind community from: 1) potential airborne releases of Site-related constituents of concern (COCs) – specifically, volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs), and metals; and 2) nuisance Site-related odors. VOCs are more volatile (easily evaporated) than PAHs and metals and, therefore, are generally of greater concern when

monitoring air quality during the remediation of the Site. The airborne concentration of respirable dust (particulate matter less than 10 micrometers in diameter [PM_{10}]) will also be monitored due to its ability to co-transport Site-related COCs.

1.3 Camp

The community air monitoring program has been designed to:

- Establish baseline concentrations of Site-related COCs in ambient air before ground-intrusive or dust-generating activities are initiated at the Site;
- Provide an early warning system, through the use of alert levels and automated notifications, so that vapor and dust emissions can be controlled on-Site at the source before action levels are exceeded at the downwind perimeter of the Site;
- Measure and document ambient air concentrations of the Site-related COCs at the downwind perimeter of each designated work area when certain activities are in in progress for the Site to confirm compliance with the regulatory limits; and
- Evaluate the on-going effectiveness of vapor/dust controls and construction techniques to maintain or reduce airborne concentrations of the Site-related COCs below action levels at the downwind perimeter.

2.0 ODOR VAPOR AND DUST CONTROL

2.1 Community Air Monitoring Plan

Visual, olfactory, and ground-intrusive and certain non-intrusive construction activities have the potential to generate localized impacts to air quality. Such activities are anticipated to include, but are not limited to, the following:

- Excavation activities;
- Trenching;
- Any ground-intrusive activities;
- Handling (including loading and unloading) excavated material and clean fill material;
- Backfilling and grading excavation areas; and
- Cleaning/decontaminating personnel, equipment, and vehicles.

PSG will provide one OSHA 40-hour HAZWOPER trained field technician who will serve as the Environmental Health and Safety Officer on-Site during the soil excavation and soil load-out activities and who will implement and document the required CAMP. Air Monitoring will be completed in accordance with Occupational Safety and Health Administration requirements for on-Site occupational receptors and in accordance with guidance provided by the NYSDEC for the preparation and implementation of Air Monitoring for off-Site receptors.

In addition, depending upon the nature of contamination and remedial activities, other parameters (e.g., explosivity, oxygen, hydrogen sulfide, carbon monoxide) may also need to be monitored at the Site. Response levels and actions will be pre-determined, as necessary, for each site.

Expected Occupancy

During ground-intrusive activities, PSG expects less than ten personnel to be on-Site in the work area during dust-generating activities, which will include personnel from McAlpine Contracting Co., Moncon, Inc., and Volk Industrial Services Inc. under a PGS field technician, and client representatives.

PSG notes that, if total VOC concentrations opposite the walls of occupied structures or next to intake vents exceed 1 ppm, monitoring will occur within the occupied structure(s). Depending upon the nature of contamination, chemical-specific colorimetric tubes of sufficient sensitivity may be necessary for comparing the exposure point concentrations with appropriate pre-determined response levels (response actions should also be predetermined). Background readings in the occupied spaces will be taken prior to commencement of the planned work. Any unusual background readings will be discussed with NYSDOH prior to commencement of the work.

Air Monitoring Stations

PSG will maintain two air monitoring stations daily at the Site to monitor air conditions during construction work hours. Monitoring will occur during ground-intrusive construction activities on a standard 8-hour work shift allowing preparation and setup time prior to the work shift and break-down time after the work shift.

Real-time air monitoring will be conducted at the downwind perimeter of each designated work area during all ground-intrusive or dust-generating construction activities. For the purpose of this CAMP, the "perimeter of the work area" is defined as the limits of the area where ground-intrusive or dust-generating work is

being performed, or half the distance to the nearest potential receptor or occupied areas, whichever is less, but in no case less than 20 feet. The frequency of community air monitoring will be relative to the level of Site work activities being conducted and may be adjusted as the work proceeds and in consideration of the monitoring results.

Each air monitoring station will contain 1) a portable, data-logging photoionization detector (MiniRAE 3000 by RAE Systems®, Inc. or equal) for monitoring the airborne concentration of total VOCs and 2) a portable, data-logging aerosol photometer (DustTrak™ II Aerosol Monitor Model 8530 by TSI, Inc®. or equal) for monitoring the airborne concentration of PM_{10}. The monitoring equipment will be housed in portable, weather-tight enclosures, which will be mounted on surveying tripods at a height of approximately 4.5 to 5.5 feet (breathing zone height).

Air monitoring stations will be deployed at the start of each workday before any ground-intrusive or dust-generating activities are initiated. One upwind and one downwind monitoring location will be selected based on the prevailing wind direction and the nature and location of the activities anticipated to be performed that day. For ground-intrusive activities within the Site buildings one interior and one downwind exterior monitoring location will be selected.

Wind direction will be monitored throughout the day, and stations will be re-located or re-assigned, as appropriate, if the wind direction shifts more than 60 degrees from the original upwind direction. Any such changes in monitoring locations will be documented in a field logbook. Monitoring equipment will be calibrated on a daily basis or other frequency recommended by the manufacturers. Hourly or more frequent field checks of the monitoring equipment will also be performed during the workday to verify proper function. Damaged or malfunctioning equipment will be promptly removed from service and replaced. The date, time, and outcome of each equipment calibration and field check will be documented in a field logbook.

Total VOC and PM_{10} data will be downloaded from the air monitoring stations at the end of each workday. Data files will be stored on-Site in a computer database, indexed by date, station number, and station location (upwind or downwind), and will be backed-up periodically to disc or a portable hard drive.

On-Site duties for the Environmental Health and Safety Officer will include:

- Setting up CAMP equipment daily before the excavation work shift;
- Monitoring CAMP equipment throughout the day to assure levels are within acceptable ranges;
- Monitoring the breathing zone air with a Photoionization Detector (PID) to assure levels are within acceptable ranges;
- Monitoring of excavation health and safety on-Site to ensure proper procedures are being followed, including familiarizing all on-Site subcontractors with environmental health and safety requirements, overseeing proper decontamination procedures as required, and enforcing best practices on-Site; and
- CAMP equipment break-down, data uploading and daily report preparation.

Community Air Monitoring

Using a nationwide network of monitoring sites, the United States Environmental Protection Agency has developed ambient air quality trends for particle pollution, also called Particulate Matter (PM). PM_{10} describes inhalable particles, with diameters that are generally 10 micrometers and smaller.

Community Air Monitoring (CAM) Dust Monitoring Outlier Corrective Action Triggers

The Contractor shall provide a written Emergency Response Plan which includes means and methods (for example, additional dust control measures) to address any elevated fugitive dust particles and CAM dust monitoring results reported by PSG, where the following criteria apply:

- If total particulate concentrations opposite the walls of occupied structures or next to intake vents exceed 150 mcg/m^3, work activities should be suspended until controls are implemented and are successful in reducing the total particulate concentration to 150 mcg/m^3 or less at the monitoring point.

AIR SAMPLING METHOD	RANGE	ACTION REQUIRED
PID for VOCs via MultiRAE®	< 0.1 ppm (Ambient air criteria).	Normal operations will continue with breathing zone monitoring.
	>5 ppm peak above background at perimeter.	Work activities will be halted, and monitoring will be continued. If instantaneous readings steadily decrease, work may resume.
	>25 ppm above background in work area.	Work activates will be halted and the source of vapors will be identified. Corrective actions will be taken to abate emissions and monitoring will be continued.
CAM dust monitoring via DustTrak™2 Desktop Monitor 8530	<150 ug/m^3 at downwind perimeter.	Normal operations.
	>150 ug/m^3 average sustained for more than 15 minutes at downwind perimeter.	Collect upwind perimeter reading for comparison with downwind reading.
	>100 ug/m^3 above upwind background, or visible dust migrating from disturbance area beyond perimeter.	Employ dust suppression techniques.
	Dust suppression cannot control downwind levels to <100 ug/L compared with Upwind.	Work activities will be halted, and corrective actions taken.
Visible emissions	No visible emissions or accumulations on surfaces proximal to work zones or	Work activities will be halted, and corrective actions taken.

AIR SAMPLING METHOD	RANGE	ACTION REQUIRED
	playground area based on ambient baseline documentation.	

2.2 Reporting

All data from CAMP and an overall health and safety summary will be provided in a daily report to all applicable parties including the NYSDEC, construction staff, Avant Gardner, LLC staff and PSG staff.

PSG will notify the NYSDEC Project Manager by e-mail within two hours if the total VOC or PM_{10} action level is exceeded during the project. Within 24 hours after the exceedance, an exceedance report will be prepared and submitted to the NYSDEC and New York State Department of Health (NYSDOH) Project Managers. Each exceedance report will include, at a minimum, the following:

- Date, day of the week, and time/duration of exceedance;
- Air monitoring station where exceedance was recorded;
- General location and brief description of work being performed at time of exceedance;
- Weather conditions at time of exceedance;
- For each air monitoring station, 15-minute TWA concentration of total VOCs and PM_{10} at time of exceedance;
- Source or cause of exceedance;
- Corrective actions taken or to be taken in response to exceedance; and
- Date and time verbal or written notification was provided to NYSDEC.

A copy of the exceedance report will also be included in the daily air monitoring report.

Weekly air monitoring reports will be prepared and submitted to the NYSDEC and NYSDOH Project Managers on a weekly basis throughout the project to summarize the: 1) real-time air monitoring results for each air monitoring station, including exceedances, if any, of total VOC and PM_{10} action levels; and 2) periodic Site-related odor monitoring results and odor complaints received, if any. Each weekly report will also include copies of the daily air monitoring reports for the 7-day period covered in the report.

At the conclusion of the project, a comprehensive report will be prepared to summarize the scope and results of the CAM program. The report will include, at a minimum, the following:

- Brief narrative describing the following:
  - Air monitoring objectives;
  - Alert and action levels; and
  - Monitoring equipment, procedures, dates of baseline and routine monitoring, and summary of results.
- Site plan showing approximate locations of air monitoring stations;
- Log of all total VOC and PM_{10} action level exceedances;
- Equipment calibration records;

- Copies of weekly air monitoring reports;
- Raw air monitoring data for each air monitoring station; and
- Meteorological monitoring data.

2.3 Soil Screening Methods

Visual, olfactory and PID soil screening and assessment will be performed under the supervision of a Qualified Environmental Professional (QEP). Soil screening will be performed during the excavation activities at intervals deemed appropriate by the QEP and in consultation with the Project Manager for the Site, the Air Monitoring Technician and the appropriate Health & Safety professionals and management staff on Site. At a minimum, the QEP will wear and operate a PID capable of analyzing total VOCs continuously during soil excavation and loading activities.

2.4 Stockpile Methods

Excavated soils will be temporarily stockpiled on poly sheeting pending either its return to the excavation as backfill or off-Site disposal. Excavated soils will be kept wet to the extent practicable to minimize fugitive dust generation. Stockpiles will be used only when necessary and will be removed as soon as practicable. More specifically, excavated soils will be stockpiled on, at minimum, double layers of 6-mil minimum sheeting, will always be kept covered 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 common standards and practices. Soil stockpile areas will be appropriately graded to control run-off in accordance with applicable standards and practices. Stockpiles of excavated soils and other materials shall be located at least of 50 feet from the property boundaries, where possible. Catch basins located in close proximity to any soil stockpiles will be covered.

Waste materials will be segregated, handled, stockpiled, and disposed of separately as required with respect to characteristics including concrete and asphalt.

2.5 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 is in compliance with applicable laws and regulations.

2.6 Materials Excavation, Load-Out and Departure

The Project Manager and Site Safety Manager overseeing the construction will:

- Oversee 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 excavations will not interfere with, or otherwise impair or compromise human health or the environment;
- 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; and

- Ensure that all egress points for truck and equipment transport from the Site will be kept clean of Site-derived materials during Site remediation.

During the excavation and loading of soils, the following specific procedures shall be implemented:

- All trucks will be loaded in a manner to prevent significant dust plumage generation and to prevent spillage of soil on and around the trucks.
- Locations where vehicles exit the Site will be inspected daily for evidence of soil tracking off premises. If significant soil tracking off-Site is observed or if soil accumulation is observed during truck inspection after loading, pressure washing of the trucks prior to exiting the loading pad shall be conducted to removal all residual soils to the extent practicable. Street sweeping is not a viable option for cleaning contaminated soil tracking on asphalt surfaces as the dust generation is too significant and will cause unnecessary air monitoring detections.

2.7 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 local, state, and federal laws. 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; if needed, off-Site queuing will be completed in a safe manner, utilizing police traffic control, if needed/required.

Outbound truck transport routes will be planned before loading activities and have a route that 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.

2.8 Materials Disposal Off-Site

All impacted soil/fill or other waste (i.e., historic fill, etc.) excavated and removed from the Site will be managed as regulated material and will be disposed in accordance with applicable laws and regulations.

Waste characterization will be performed for off-Site disposal in a manner required by the receiving facility and in conformance with its applicable permits. A manifest system for off-Site transportation of exported materials will be employed. Hazardous wastes derived from on-Site will be stored, transported, and disposed of in compliance with applicable laws and regulations.

2.9 Demarcation

If all impacted soil on-Site is not excavated, then the top of the impacted soil 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 the impacted soil to provide an observable reference layer. A description or map of the approximate depth of the demarcation layer will be provided in the soil management plan; 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.

2.10 Import of Backfill Soil from Off-Site Sources

The proposed ground-intrusive work does not anticipate import of backfill soil from off-Site sources. In the event import is required, all imported soil/fill will meet the requirements of 6 NYCRR Part 735-6.7(d). All materials received for import to the Site will be tested in accordance with NYSDEC DER-10, be approved by the RE and NYSDEC project manager, and will be in compliance with provisions in this Work Plan. A five-day advance notice and "Request to Import/Reuse Fill Material" form will be filed with the NYSDEC project manager for review and approval prior to import of material to the Site.

2.11 Contingency Plan

This contingency plan is developed for the 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 the Project Manager, and appropriate agencies.

Petroleum spills will be reported to the New York State Spill Hotline (1-800-457-7362). These findings will be included in a daily report. If previously unidentified contaminant sources are found during on-Site excavation activities, sampling (as appropriate) will be performed on contaminated source material and surrounding soils and reported to the appropriate agencies. Chemical analytical testing may include Target Analyte List metals, TCL volatiles and semi-volatiles, TCL pesticides and Polychlorinated biphenyls, as appropriate.

2.12 Dust and Nuisance Control

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 where disturbance is occurring or is planned to occur within the day of disturbance;
- Use of properly anchored tarps to cover stockpiles;
- Exercise extra care during dry and high-wind periods; and
- 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. Implementation of all dust controls, including halt of work, will be the responsibility of a combination of the construction company conducting the excavation and loading activities.

Other Nuisances

Noise control will be exercised during the remedial program. All remedial work will conform, at a minimum, to local and state noise control standards. Rodent control will be provided, during Site clearing and grubbing, and during the remedial program, as necessary, to prevent nuisances.

EXHIBIT A
NYSDOH GENERIC CAMP

Appendix 1A
New York State Department of Health
Generic Community Air Monitoring Plan

Overview

A Community Air Monitoring Plan (CAMP) requires real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

The generic CAMP presented below will be sufficient to cover many, if not most, sites. Specific requirements should be reviewed for each situation in consultation with NYSDOH to ensure proper applicability. In some cases, a separate site-specific CAMP or supplement may be required. Depending upon the nature of contamination, chemical- specific monitoring with appropriately-sensitive methods may be required. Depending upon the proximity of potentially exposed individuals, more stringent monitoring or response levels than those presented below may be required. Special requirements will be necessary for work within 20 feet of potentially exposed individuals or structures and for indoor work with co-located residences or facilities. These requirements should be determined in consultation with NYSDOH.

Reliance on the CAMP should not preclude simple, common-sense measures to keep VOCs, dust, and odors at a minimum around the work areas.

Community Air Monitoring Plan

Depending upon the nature of known or potential contaminants at each site, real-time air monitoring for VOCs and/or particulate levels at the perimeter of the exclusion zone or work area will be necessary. Most sites will involve VOC and particulate monitoring; sites known to be contaminated with heavy metals alone may only require particulate monitoring. If radiological contamination is a concern, additional monitoring requirements may be necessary per consultation with appropriate DEC/NYSDOH staff.

Continuous monitoring will be required for all ground intrusive activities and during the demolition of contaminated or potentially contaminated structures. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells.

Periodic monitoring for VOCs will be required 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 might reasonably 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. In some instances, depending upon the proximity of potentially exposed individuals, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence.

VOC Monitoring, Response Levels, and Actions

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

1. 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 must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.

2. 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 must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can 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.

3. If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.

4. All 15-minute readings must be recorded and be available for State (DEC and NYSDOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

Particulate Monitoring, Response Levels, and Actions

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

1. 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 must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m^3 above the upwind level and provided that no visible dust is migrating from the work area.

2. If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m^3 above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m^3 of the upwind level and in preventing visible dust migration.

3. All readings must be recorded and be available for State (DEC and NYSDOH) and County Health personnel to review.

December 2009

EXHIBIT B
FUGITIVE DUST AND PARTICULATE MONITORING FROM DER-10 TECHNICAL GUIDANCE FOR SITE INVESTIGATION AND REMEDIATION

Appendix 1B
Fugitive Dust and Particulate Monitoring

A program for suppressing fugitive dust and particulate matter monitoring at hazardous waste sites is a responsibility on the remedial party performing the work. These procedures must be incorporated into appropriate intrusive work plans. The following fugitive dust suppression and particulate monitoring program should be employed at sites during construction and other intrusive activities which warrant its use:

1. Reasonable fugitive dust suppression techniques must be employed during all site activities which may generate fugitive dust.

2. Particulate monitoring must be employed during the handling of waste or contaminated soil or when activities on site may generate fugitive dust from exposed waste or contaminated soil. Remedial activities may also include the excavation, grading, or placement of clean fill. These control measures should not be considered necessary for these activities.

3. Particulate monitoring must be performed using real-time particulate monitors and shall monitor particulate matter less than ten microns (PM10) with the following minimum performance standards:

(a) Objects to be measured: Dust, mists or aerosols;
(b) Measurement Ranges: 0.001 to 400 mg/m3 (1 to 400,000 :ug/m3);
(c) Precision (2-sigma) at constant temperature: +/- 10 :g/m3 for one second averaging; and +/- 1.5 g/m3 for sixty second averaging;
(d) Accuracy: +/- 5% of reading +/- precision (Referred to gravimetric calibration with SAE fine test dust (mmd= 2 to 3 :m, g= 2.5, as aerosolized);
(e) Resolution: 0.1% of reading or 1g/m3, whichever is larger;
(f) Particle Size Range of Maximum Response: 0.1-10;
(g) Total Number of Data Points in Memory: 10,000;
(h) Logged Data: Each data point with average concentration, time/date and data point number
(i) Run Summary: overall average, maximum concentrations, time/date of maximum, total number of logged points, start time/date, total elapsed time (run duration), STEL concentration and time/date occurrence, averaging (logging) period, calibration factor, and tag number;
(j) Alarm Averaging Time (user selectable): real-time (1-60 seconds) or STEL (15 minutes), alarms required;
(k) Operating Time: 48 hours (fully charged NiCd battery); continuously with charger;
(l) Operating Temperature: -10 to 50° C (14 to 122° F);
(m) Particulate levels will be monitored upwind and immediately downwind at the working site and integrated over a period not to exceed 15 minutes.

4. In order to ensure the validity of the fugitive dust measurements performed, there must be appropriate Quality Assurance/Quality Control (QA/QC). It is the responsibility of the remedial party to adequately supplement QA/QC Plans to include the following critical features: periodic instrument calibration, operator training, daily instrument performance (span) checks, and a record keeping plan.

5. The action level will be established at 150 ug/m3 (15 minutes average). While conservative,

this short-term interval will provide a real-time assessment of on-site air quality to assure both health and safety. If particulate levels are detected in excess of 150 ug/m3, the upwind background level must be confirmed immediately. If the working site particulate measurement is greater than 100 ug/m3 above the background level, additional dust suppression techniques must be implemented to reduce the generation of fugitive dust and corrective action taken to protect site personnel and reduce the potential for contaminant migration. Corrective measures may include increasing the level of personal protection for on-site personnel and implementing additional dust suppression techniques (see paragraph 7). Should the action level of 150 ug/m3 continue to be exceeded work must stop and DER must be notified as provided in the site design or remedial work plan. The notification shall include a description of the control measures implemented to prevent further exceedances.

6. It must be recognized that the generation of dust from waste or contaminated soil that migrates off-site, has the potential for transporting contaminants off-site. There may be situations when dust is being generated and leaving the site and the monitoring equipment does not measure PM10 at or above the action level. Since this situation has the potential to allow for the migration of contaminants off-site, it is unacceptable. While it is not practical to quantify total suspended particulates on a real-time basis, it is appropriate to rely on visual observation. If dust is observed leaving the working site, additional dust suppression techniques must be employed. Activities that have a high dusting potential--such as solidification and treatment involving materials like kiln dust and lime--will require the need for special measures to be considered.

7. The following techniques have been shown to be effective for the controlling of the generation and migration of dust during construction activities:

(a) Applying water on haul roads;
(b) Wetting equipment and excavation faces;
(c) Spraying water on buckets during excavation and dumping;
(d) Hauling materials in properly tarped or watertight containers;
(e) Restricting vehicle speeds to 10 mph;
(f) Covering excavated areas and material after excavation activity ceases; and
(g) Reducing the excavation size and/or number of excavations.

Experience has shown that the chance of exceeding the 150ug/m3 action level is remote when the above-mentioned techniques are used. When techniques involving water application are used, care must be taken not to use excess water, which can result in unacceptably wet conditions. Using atomizing sprays will prevent overly wet conditions, conserve water, and provide an effective means of suppressing the fugitive dust.

8. The evaluation of weather conditions is necessary for proper fugitive dust control. When extreme wind conditions make dust control ineffective, as a last resort remedial actions may need to be suspended. There may be situations that require fugitive dust suppression and particulate monitoring requirements with action levels more stringent than those provided above. Under some circumstances, the contaminant concentration and/or toxicity may require additional monitoring to protect site personnel and the public. Additional integrated sampling and chemical analysis of the dust may also be in order. This must be evaluated when a health and safety plan is developed and when appropriate suppression and monitoring requirements are established for protection of health and the environment.