

DECISION DOCUMENT

Former Giuffre Auto Group Site
Brownfield Cleanup Program
Brooklyn, Kings County
Site No. C224327
February 2026



**Department of
Environmental
Conservation**

Prepared by
Division of Environmental Remediation
New York State Department of Environmental Conservation

DECLARATION STATEMENT - DECISION DOCUMENT

Former Giuffre Auto Group Site
Brownfield Cleanup Program
Brooklyn, Kings County
Site No. C224327
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Statement of Purpose and Basis

This document presents the remedy for the Former Giuffre Auto Group Site, a brownfield cleanup site. The remedial program was chosen in accordance with the New York State Environmental Conservation Law and Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR) Part 375.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (NYSDEC) for the Former Giuffre Auto Group Site site and the public's input to the proposed remedy presented by NYSDEC.

Description of Selected Remedy

The elements of the selected remedy are as follows:

1. Remedial Design

A remedial design program will be implemented to provide the details necessary for the construction, operation, optimization, maintenance, and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedy as per DER-31. The major green remediation components are as follows:

- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
- Reducing direct and indirect greenhouse gases and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;
- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;
- Maximizing habitat value and creating habitat when possible;
- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals;
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development; and
- Additionally, to incorporate green remediation principles and techniques to the extent

feasible in the future development at this site, any future on-site buildings shall be constructed, at a minimum, to meet the 2020 Energy Conservation Construction Code of New York (or most recent edition) to improve energy efficiency as an element of construction.

As part of the remedial design program, to evaluate the remedy with respect to green and sustainable remediation principles, an environmental footprint analysis will be completed. The environmental footprint analysis will be completed using an accepted environmental footprint analysis calculator such as SEFA (Spreadsheets for Environmental Footprint Analysis, USEPA), SiteWise™ (available in the Sustainable Remediation Forum [SURF] library) or similar NYSDEC accepted tool. Water consumption, greenhouse gas emissions, renewable and non-renewable energy use, waste reduction and material use will be estimated, and goals for the project related to these green and sustainable remediation metrics, as well as for minimizing community impacts, protecting habitats and natural and cultural resources, and promoting environmental justice, will be incorporated into the remedial design program, as appropriate. The project design specifications will include detailed requirements to achieve the green and sustainable remediation goals. Further, progress with respect to green and sustainable remediation metrics will be tracked during implementation of the remedial action and reported in the Final Engineering Report (FER), including a comparison to the goals established during the remedial design program.

Additionally, the remedial design program will include a climate change vulnerability assessment, to evaluate the impact of climate change on the project site and the proposed remedy. Potential vulnerabilities associated with extreme weather events (e.g., hurricanes, lightning, heat stress and drought), flooding, and sea level rise will be identified, and the remedial design program will incorporate measures to minimize the impact of climate change on potential identified vulnerabilities.

2. Excavation

The existing on-site buildings will be demolished during Interim Remedial Measures. Excavation and off-site disposal of contaminant source areas, including:

- grossly contaminated soil, as defined in 6 NYCRR Part 375-1.2(u);
- any underground storage tanks (USTs), fuel dispensers, underground piping or other structures; and
- soils that create a nuisance condition, as defined in Commissioner Policy CP-51 Section G.

All soil in the upper two feet which exceed the restricted residential SCOs will be excavated and transported off-site for disposal. Approximately 2,000 cubic yards of contaminated soil will be removed from the site.

Collection and analysis of confirmation samples at the remedial excavation depth will be used to verify that SCOs for the site have been achieved. If confirmation sampling indicates that SCOs were not achieved at the stated remedial depth, the Applicant must notify NYSDEC, submit the sample results and, and in consultation with NYSDEC, determine if further remedial excavation is necessary. Further excavation for development will proceed after confirmation samples

demonstrate that SCOs for the site have been achieved.

To ensure proper handling and disposal of excavated material, waste characterization sampling will be completed for all identified contaminated site material. Waste characterization sampling will be performed exclusively for the purposes of off-site disposal in a manner suitable to receiving facilities and in conformance with applicable federal, state and local laws, rules, and regulations and facility-specific permits.

Backfill

Backfill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to replace the excavated soil or complete the backfilling of the excavation and establish the designed grades at the site.

3. Cover System

A site cover will be required in areas where the upper two feet of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs), to allow for future restricted residential (public school) use of the site. Where a soil cover is to be used it will be a minimum of two feet of soil placed over a demarcation layer, with the upper six inches of soil of sufficient quality to maintain a vegetative layer. Soil cover material, including any fill material brought to the site, will meet the SCOs for cover material for the use of the site as set forth in 6 NYCRR Part 375-6.7(d). Substitution of other materials and components may be allowed where such components already exist or are a component of the tangible property to be placed as part of site redevelopment. Such components may include, but are not necessarily limited to: pavement, concrete, paved surface parking areas, sidewalks, building foundations and building slabs.

4. Vapor Mitigation

Any on-site buildings will be required to have a sub-slab depressurization system, or other acceptable measures, to mitigate the migration of vapors into the building from soil and/or groundwater.

5. Institutional Controls

The remedy will achieve a Track 4 restricted residential cleanup at a minimum. Imposition of an institutional control in the form of an environmental easement for the controlled property which will:

- require the remedial party or site owner to complete and submit to the NYSDEC a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
- allow the use and development of the controlled property for restricted residential use as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restrict the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or NYCDOHMH; and
- require compliance with the NYSDEC approved Site Management Plan.

6. Site Management Plan

A Site Management Plan is required, which includes the following:

- a. an Institutional and Engineering Control Plan that identifies all use restrictions and

engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:

- Institutional Controls: The Environmental Easement discussed in Remedy Element 5 above.
- Engineering Controls: The cover system and the vapor mitigation system discussed in Remedy Element 3 and 4 above.

This plan includes, but may not be limited to:

- an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
 - descriptions of the provisions of the environmental easement including any land use, and/or groundwater use restrictions;
 - a provision that should a building foundation or building slab be removed in the future, a cover system consistent with that described in Remedy Element 3 above will be placed in any areas where the upper four feet of exposed surface soil exceed the applicable soil cleanup objectives (SCOs)
 - provisions for the management and inspection of the identified engineering controls;
 - maintaining site access controls and NYSDEC notification; and
 - the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.
- b. a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:
- monitoring of soil vapor to assess the performance and effectiveness of the remedy;
 - a schedule of monitoring and frequency of submittals to the NYSDEC; and
 - monitoring for vapor intrusion for any buildings on the site, as may be required by the Institutional and Engineering Control Plan discussed above.
- c. an Operation and Maintenance (O&M) Plan to ensure continued operation, maintenance, inspection, and reporting of any mechanical or physical components of the active vapor mitigation system(s). The plan includes, but is not limited to:
- procedures for operating and maintaining the system(s); and
 - compliance inspection of the system(s) to ensure proper O&M as well as providing the data for any necessary reporting.
 - maintaining site access controls and NYSDEC notification; and
 - providing NYSDEC access to the site and O&M records.

Declaration

The remedy conforms with promulgated standards and criteria that are directly applicable, or that are relevant and appropriate and takes into consideration NYSDEC guidance, as appropriate. The remedy is protective of public health and the environment.

Feb. 20, 2026

Date



Jane H. O'Connell, P.G.
Regional Remediation Engineer, Region 2

DECISION DOCUMENT

Former Giuffre Auto Group Site
Brooklyn, Kings County
Site No. C224327
February 2026

SECTION 1: SUMMARY AND PURPOSE

The New York State Department of Environmental Conservation (NYSDEC), in consultation with the New York State Department of Health (NYSDOH), has selected a remedy for the above referenced site. The disposal of contaminants at the site has resulted in threats to public health and the environment that would be addressed by the remedy. The disposal or release of contaminants at this site, as more fully described in this document, has contaminated various environmental media. Contaminants include hazardous waste and/or petroleum.

The New York State Brownfield Cleanup Program (BCP) is a voluntary program. The goal of the BCP is to enhance private-sector cleanups of brownfields and to reduce development pressure on "greenfields." A brownfield site is real property, where a contaminant is present at levels exceeding the soil cleanup objectives or other health-based or environmental standards, criteria or guidance, based on the reasonably anticipated use of the property.

NYSDEC has issued this document in accordance with the requirements of New York State Environmental Conservation Law and 6 NYCRR Part 375. This document is a summary of the information that can be found in the site-related reports and documents.

SECTION 2: CITIZEN PARTICIPATION

NYSDEC seeks input from the community on all remedies. A public comment period was held, during which the public was encouraged to submit comment on the proposed remedy. All comments on the remedy received during the comment period were considered by NYSDEC in selecting a remedy for the site. Site-related reports and documents were made available for review by the public at the following document repositories:

DECInfo Locator - Web Application
<https://gisservices.dec.ny.gov/gis/dil/index.html?rs=C224327>

Brooklyn Public Library - Fort Hamilton Branch
9424 Fourth Avenue
Brooklyn, NY 11209
Phone: (718) 748-6919

Brooklyn Community Board 10
8119 5th Avenue
Brooklyn, NY 11209
Phone: (718) 745-6827

Receive Site Citizen Participation Information By Email

Please note that NYSDEC's Division of Environmental Remediation (DER) is "going paperless" relative to citizen participation information. The ultimate goal is to distribute citizen participation information about contaminated sites electronically by way of county email listservs. Information will be distributed for all sites that are being investigated and cleaned up in a particular county under the State Superfund Program, Environmental Restoration Program, Brownfield Cleanup Program and Resource Conservation and Recovery Act Program. We encourage the public to sign up for one or more county listservs at <http://www.dec.ny.gov/chemical/61092.html>

SECTION 3: SITE DESCRIPTION AND HISTORY

Location:

The 0.73-acre (31,659 square foot) site is located in Bay Ridge, a mixed-use urban area of Brooklyn, NY, which includes residential, commercial, and institutional areas. Site Tax ID is Block 6065, Lots 28 and 39. The site is bordered to the north by 88th Street followed by a health care facility ("Langone Medical Arts"); to the east by 5th Avenue followed by institutional and commercial buildings (the United States Post Office and an automobile sales facility); to the south by 89th Street, followed by commercial buildings; and to the west by automobile showrooms with repair facilities, NYC Department of Education Superintendent Office, and a commercial building (7-Eleven) followed by 4th Avenue.

Site Features:

The site is currently improved with a vacant one-story commercial building with a basement and an asphalt-paved parking lot on Lot 28 (8802 5th Avenue), and a vacant one-story commercial building with a partial basement on Lot 39 (429 89th Street). Both buildings are currently being demolished.

Current Zoning and Land Use: According to the New York City Department of City Planning (NYCDCP) Zoning Map 22b, the site is zoned for commercial use (C8-2). Beyond the properties immediately adjacent to the Site, property uses are commercial and institutional.

Past Use of the Site: Historically, Lot 28 was occupied by several low-rise structures prior to construction of the current one-story commercial building with a basement in 1956. The building was most recently used by a bank and as real estate offices. Lot 39 was improved with the current one-story building with a partial basement since 1923, which was occupied by a garage with gasoline tank and auto repair/service station. The building on Lot 39 was most recently used by a construction company for storage of tiles and other assorted construction materials.

Site Geology and Hydrogeology:

During the remedial investigation, fill material consisting of gravel and trace building materials (i.e., red brick, asphalt, concrete) was observed from the ground surface to depths ranging between 1.0 and 15 feet below ground surface (ft bgs). Beneath the fill materials, fine to coarse sand, silt, clay, and gravel were identified to the terminal depths of the borings (30 to 90 ft bgs). Clayey silt was encountered at depths ranging from 17.2 to 29.8 ft bgs in the borings advanced to depths of 30 ft bgs.

The subsurface geology of Kings County (Brooklyn) is characterized by Cretaceous strata between Precambrian bedrock consisting of gneiss and schist and Precambrian bedrock and Pleistocene glacial deposits. Present day surface features and topography in New York City are primarily attributable to the most recent glaciation event. The area is underlain by deposits of glacial outwash sediments, which are typically comprised of sand and gravel. Soil and bedrock stratigraphy throughout Brooklyn typically consists of a layer of historical fill that overlies glacial outwash sediments, unconsolidated deposits, and bedrock. The depth to bedrock in the area is estimated to be approximately 500 ft bgs. Groundwater is located at approximately 75 feet bgs and flows to the northeast.

A site location map is attached as Figure 1 and a site layout is attached as Figure 2.

SECTION 4: LAND USE AND PHYSICAL SETTING

NYSDEC may consider the current, intended, and reasonably anticipated future land use of the site and its surroundings when evaluating a remedy for soil remediation. For this site, an alternative that restricts the use of the site to restricted-residential use as described in Part 375-1.8(g) was evaluated in addition to an alternative which would allow for unrestricted use of the site.

A comparison of the results of the Remedial Investigation (RI) to the appropriate standards, criteria and guidance values (SCGs) for the identified land use and the unrestricted use SCGs for the site contaminants is available in the RI Report.

SECTION 5: ENFORCEMENT STATUS

The Applicant under the Brownfield Cleanup Agreement is a Volunteer. The Applicant does not have an obligation to address off-site contamination. However, NYSDEC has determined that this site does not pose a significant threat to public health or the environment; accordingly, no enforcement actions are necessary.

SECTION 6: SITE CONTAMINATION

6.1: Summary of the Remedial Investigation

A remedial investigation (RI) serves as the mechanism for collecting data to:

- characterize site conditions;

- determine the nature of the contamination; and
- assess risk to human health and the environment.

The RI is intended to identify the nature (or type) of contamination which may be present at a site and the extent of that contamination in the environment on the site or leaving the site. The RI reports on data gathered to determine if the soil, groundwater, soil vapor, indoor air, surface water or sediments may have been contaminated. Monitoring wells are installed to assess groundwater and soil borings or test pits are installed to sample soil and/or waste(s) identified. If other natural resources are present, such as surface water bodies or wetlands, the water and sediment may be sampled as well. Based on the presence of contaminants in soil and groundwater, soil vapor will also be sampled for the presence of contamination. Data collected in the RI influence the development of remedial alternatives. The RI report is available for review in the site document repository, and the results are summarized in section 6.3.

The analytical data collected on this site includes data for:

- groundwater
- soil
- sub-slab vapor

6.1.1: Standards, Criteria, and Guidance (SCGs)

The remedy must conform to promulgated standards and criteria that are directly applicable or that are relevant and appropriate. The selection of a remedy must also take into consideration guidance, as appropriate. Standards, Criteria and Guidance are hereafter called SCGs.

To determine whether the contaminants identified in various media are present at levels of concern, the data from the RI were compared to media-specific SCGs. NYSDEC has developed SCGs for groundwater, surface water, sediments, and soil. The NYSDOH has developed SCGs for drinking water and soil vapor intrusion. For a full listing of all SCGs see: <http://www.dec.ny.gov/regulations/61794.html>

6.1.2: RI Results

The data have identified contaminants of concern. A "contaminant of concern" is a contaminant that is sufficiently present in frequency and concentration in the environment to require evaluation for remedial action. Not all contaminants identified on the property are contaminants of concern. The nature and extent of contamination and environmental media requiring action are summarized below. Additionally, the RI Report contains a full discussion of the data. The contaminants of concern identified at this site are:

- | | |
|------------------------|-------------------------------|
| mercury | perfluorooctane sulfonic acid |
| lead | toluene |
| benzo(b)fluoranthene | xylene (mixed) |
| indeno(1,2,3-cd)pyrene | benzene |

The contaminants of concern exceed the applicable SCGs for:

- groundwater
- soil

6.2: Interim Remedial Measures

An interim remedial measure (IRM) is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before issuance of the Decision Document.

The following IRM is underway at this site based on conditions observed during the RI.

Interim Remedial Measure

Demolition

The existing on-site buildings on Lots 28 and 39 are undergoing demolition, and materials which cannot be beneficially reused on site will be taken off-site for proper disposal to implement the remedy.

Excavation

Excavation and off-site disposal of contaminant source areas (Lot 39), including:

- grossly contaminated soil, as defined in 6 NYCRR Part 375-1.2(u);
- any underground storage tanks (USTs), fuel dispensers, underground piping or other structures; and
- soils that create a nuisance condition, as defined in Commissioner Policy CP-51 Section G.

All soils in the upper two feet which exceed the restricted residential SCOs will be excavated and transported off-site for disposal. In addition, on-site soils below the suspected UST on Lot 39 may be excavated as necessary to facilitate its removal. Approximately 3,200 cubic yards of contaminated soil will be removed from the site during the IRM.

Collection and analysis of confirmation samples at the remedial excavation depth will be used to verify that SCOs for the site have been achieved. If confirmation sampling indicates that SCOs were not achieved at the stated remedial depth, the Applicant must notify NYSDEC, submit the sample results and, in consultation with NYSDEC, determine if further remedial excavation is necessary. Further excavation for development will proceed after confirmation samples demonstrate that SCOs for the site have been achieved.

To ensure proper handling and disposal of excavated material, waste characterization sampling will be completed for all identified contaminated site material. Waste characterization sampling will be performed exclusively for the purposes of off-site disposal in a manner suitable to receiving facilities and in conformance with applicable federal, state and local laws, rules, and regulations and facility-specific permits.

Backfill

Backfill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to replace the excavated soil and establish the designed grades at the site.

The results of the IRM will be documented in the Final Engineering Report.

6.3: Summary of Environmental Assessment

This section summarizes the assessment of existing and potential future environmental impacts presented by the site. Environmental impacts may include existing and potential future exposure pathways to fish and wildlife receptors, wetlands, groundwater resources, and surface water. The RI report presents a detailed discussion of any existing and potential impacts from the site to fish and wildlife receptors.

Soil, and groundwater were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, polychlorinated biphenyls (PCBs), per- and polyfluoroalkyl substances (PFAS), and pesticides. Soil vapor samples were analyzed for VOCs. Based upon investigations conducted to date, the primary contaminants of concern for the site include petroleum VOCs in soil and groundwater, SVOCs and metals in soil, and chlorinated VOCs in soil vapor.

Soil – Petroleum VOCs were detected exceeding RRSCOs including maximum concentrations of total xylenes at 150 ppm (RRSCO is 100 ppm) and benzene at 1.3 ppm (RRSCO is 1.2). Multiple SVOCs were found in shallow soil in shallow soil (1-4 ft bgs) including maximum concentrations of indeno (1,2,3-CD) pyrene at 2.4 ppm (RRSCO is 1.4 ppm) and benzo(b)fluoranthene at 6.1 ppm (RRSCO is 1.4 ppm). For metals, lead was detected at 456 ppm (RRSCO is 400 ppm), and mercury at 319 ppm (RRSCO is 0.3 ppm). Perfluorooctane sulfonic acid (PFOS) was detected at 2.36 parts per billion, or ppb (protection of groundwater guidance value is 1 ppb).

Pesticides and PCBs were not detected in soil above RRSCOs.

Data does not indicate any off-site impacts in soil related to the site.

Groundwater – Several petroleum VOCs were detected in exceedance of Ambient Water Quality Standards and Guidance Values (AWQSGVs) in at least 1 monitoring well on Lot 39 including maximum concentrations of benzene at 1.4 ppb (AWQSGV is 1.0 ppb) and total xylenes at 9.7 ppb (AWQSGV is 5 ppb).

Several dissolved metals were detected in soil above AWQSGVs including sodium, manganese, and magnesium. These metals are naturally occurring elements and are not site-specific contaminants of concern. SVOCs, PFAS, pesticides and PCBs were not detected above AWQSGVs.

Data does not indicate any off-site impacts in groundwater related to the site.

Sub-Slab Soil Vapor – Sub-slab vapor samples collected at the site detected several chlorinated and petroleum VOCs including maximum concentrations of tetrachlorethylene at 520 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$), trichloroethylene at $72 \mu\text{g}/\text{m}^3$, toluene at $24 \mu\text{g}/\text{m}^3$, m&p xylenes at $8 \mu\text{g}/\text{m}^3$, and benzene at $2.5 \mu\text{g}/\text{m}^3$.

Data does not indicate any off-site impacts in soil vapor related to the site.

6.4: Summary of Human Exposure Pathways

This human exposure assessment identifies ways in which people may be exposed to site-related contaminants. Chemicals can enter the body through three major pathways (breathing, touching or swallowing). This is referred to as *exposure*.

Direct contact with contaminants in the soil is unlikely because the site is covered with buildings and pavement. Contaminated groundwater at the site is not used for drinking or other purposes and the site is served by public water supply that obtains water from a different source not affected by this contamination. Volatile organic compounds in soil vapor (air spaces within the soil) may move into buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. The site is vacant, so soil vapor intrusion is not a current concern on-site, however, the potential exists for people to inhale site contaminants in indoor air due to soil vapor intrusion in any future on-site building development and occupancy. Environmental sampling indicates soil vapor intrusion from site contamination is not a concern for off-site buildings.

6.5: Summary of the Remediation Objectives

The objectives for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375. The goal for the remedial program is to restore the site to pre-disposal conditions to the extent feasible. At a minimum, the remedy shall eliminate or mitigate all significant threats to public health and the environment presented by the contamination identified at the site through the proper application of scientific and engineering principles.

The remedial action objectives for this site are:

Groundwater

RAOs for Public Health Protection

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.

RAOs for Environmental Protection

- Remove the source of ground or surface water contamination.

Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.

RAOs for Environmental Protection

- Prevent migration of contaminants that would result in groundwater or surface water contamination.

Soil Vapor

RAOs for Public Health Protection

- Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a site.

SECTION 7: ELEMENTS OF THE SELECTED REMEDY

The alternatives developed for the site and the evaluation of the remedial criteria are presented in the Alternative Analysis. The remedy is selected pursuant to the remedy selection criteria set forth in DER-10, Technical Guidance for Site Investigation and Remediation and 6 NYCRR Part 375.

The selected remedy is a Track 4: Restricted use with site-specific soil cleanup objectives remedy.

The selected remedy is referred to as the Excavation, Site Cover, and Vapor Mitigation remedy.

The elements of the selected remedy, as shown in Figures 3 through 7, are as follows:

1. Remedial Design

A remedial design program will be implemented to provide the details necessary for the construction, operation, optimization, maintenance, and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedy as per DER-31. The major green remediation components are as follows:

- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
- Reducing direct and indirect greenhouse gases and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;
- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;
- Maximizing habitat value and creating habitat when possible;
- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals;
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development; and
- Additionally, to incorporate green remediation principles and techniques to the extent feasible in the future development at this site, any future on-site buildings shall be constructed, at a minimum, to meet the 2020 Energy Conservation Construction Code of New York (or most recent edition) to improve energy efficiency as an element of construction.

As part of the remedial design program, to evaluate the remedy with respect to green and sustainable remediation principles, an environmental footprint analysis will be completed. The environmental footprint analysis will be completed using an accepted environmental footprint analysis calculator such as SEFA (Spreadsheets for Environmental Footprint Analysis, USEPA), SiteWise™ (available in the Sustainable Remediation Forum [SURF] library) or similar NYSDEC accepted tool. Water consumption, greenhouse gas emissions, renewable and non-renewable energy use, waste reduction and material use will be estimated, and goals for the project related to these green and sustainable remediation metrics, as well as for minimizing community impacts, protecting habitats and natural and cultural resources, and promoting environmental justice, will be incorporated into the remedial design program, as appropriate. The project design specifications will include detailed requirements to achieve the green and sustainable remediation goals. Further, progress with respect to green and sustainable remediation metrics will be tracked during implementation of the remedial action and reported in the Final Engineering Report (FER), including a comparison to the goals established during the remedial design program.

Additionally, the remedial design program will include a climate change vulnerability assessment, to evaluate the impact of climate change on the project site and the proposed remedy. Potential vulnerabilities associated with extreme weather events (e.g., hurricanes, lightning, heat stress and drought), flooding, and sea level rise will be identified, and the remedial design program will incorporate measures to minimize the impact of climate change on potential identified vulnerabilities.

2. Excavation

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Collection and analysis of confirmation samples at the remedial excavation depth will be used to verify that SCOs for the site have been achieved. If confirmation sampling indicates that SCOs were not achieved at the stated remedial depth, the Applicant must notify NYSDEC, submit the sample results and, and in consultation with NYSDEC, determine if further remedial excavation is necessary. Further excavation for development will proceed after confirmation samples demonstrate that SCOs for the site have been achieved.

To ensure proper handling and disposal of excavated material, waste characterization sampling will be completed for all identified contaminated site material. Waste characterization sampling

will be performed exclusively for the purposes of off-site disposal in a manner suitable to receiving facilities and in conformance with applicable federal, state and local laws, rules, and regulations and facility-specific permits.

Backfill

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3. Cover System

A site cover will be required in areas where the upper two feet of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs), to allow for future restricted residential (public school) use of the site. Where a soil cover is to be used it will be a minimum of two feet of soil placed over a demarcation layer, with the upper six inches of soil of sufficient quality to maintain a vegetative layer. Soil cover material, including any fill material brought to the site, will meet the SCOs for cover material for the use of the site as set forth in 6 NYCRR Part 375-6.7(d). Substitution of other materials and components may be allowed where such components already exist or are a component of the tangible property to be placed as part of site redevelopment. Such components may include, but are not necessarily limited to: pavement, concrete, paved surface parking areas, sidewalks, building foundations and building slabs.

4. Vapor Mitigation

Any on-site buildings will be required to have a sub-slab depressurization system, or other acceptable measures, to mitigate the migration of vapors into the building from soil and/or groundwater.

5. Institutional Controls

The remedy will achieve a Track 4 restricted residential cleanup at a minimum. Imposition of an institutional control in the form of an environmental easement for the controlled property which will:

- require the remedial party or site owner to complete and submit to the NYSDEC a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
- allow the use and development of the controlled property for restricted residential use as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restrict the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or NYCDOHMH; and
- require compliance with the NYSDEC approved Site Management Plan.

6. Site Management Plan

A Site Management Plan is required, which includes the following:

- a. an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:
 - Institutional Controls: The Environmental Easement discussed in Remedy

Element 5 above.

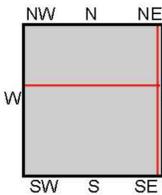
- Engineering Controls: The cover system and the vapor mitigation system discussed in Remedy Element 3 and 4 above.

This plan includes, but may not be limited to:

- an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
 - descriptions of the provisions of the environmental easement including any land use, and/or groundwater use restrictions;
 - a provision that should a building foundation or building slab be removed in the future, a cover system consistent with that described in Remedy Element 3 above will be placed in any areas where the upper four feet of exposed surface soil exceed the applicable soil cleanup objectives (SCOs)
 - provisions for the management and inspection of the identified engineering controls;
 - maintaining site access controls and NYSDEC notification; and
 - the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.
- b. a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:
- monitoring of soil vapor to assess the performance and effectiveness of the remedy;
 - a schedule of monitoring and frequency of submittals to the NYSDEC; and
 - monitoring for vapor intrusion for any buildings on the site, as may be required by the Institutional and Engineering Control Plan discussed above.
- c. an Operation and Maintenance (O&M) Plan to ensure continued operation, maintenance, inspection, and reporting of any mechanical or physical components of the active vapor mitigation system(s). The plan includes, but is not limited to:
- procedures for operating and maintaining the system(s); and
 - compliance inspection of the system(s) to ensure proper O&M as well as providing the data for any necessary reporting.
 - maintaining site access controls and NYSDEC notification; and
 - providing NYSDEC access to the site and O&M records.



This report includes information from the following map sheet(s).



TP, The Narrows, 2013, 7.5-minute
 N, Jersey City, 2014, 7.5-minute
 NE, Brooklyn, 2013, 7.5-minute
 SE, Coney Island, 2013, 7.5-minute



SITE NAME: 8802 5th Avenue
 ADDRESS: 8802 5th Avenue
 Brooklyn, NY 11209



6.6411 - ATTACHED REF: - ATTACHED IMAGES: 2013/2014 Hist. Topo; DRAWING NAME: \\nycc-tp\Projects\NYOSCA Contract C000015348\435632 - K20F 8802 5th Ave Brooklyn\RAWP\Figures\TRC.WD\Fig 1 - Site Location Map.dwg --- PLOT DATE: June 27, 2025 - 9:38AM --- LAYOUT: 8.5x11P



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PROJECT: **NEW YORK CITY SCHOOL CONSTRUCTION AUTHORITY
 REMEDIAL ACTION WORK PLAN - BCP SITE NO. C224327
 8802 5TH AVENUE AND 429 89TH STREET
 BLOCK: 6065, LOTS: 28 & 39
 BROOKLYN, NEW YORK 11209**

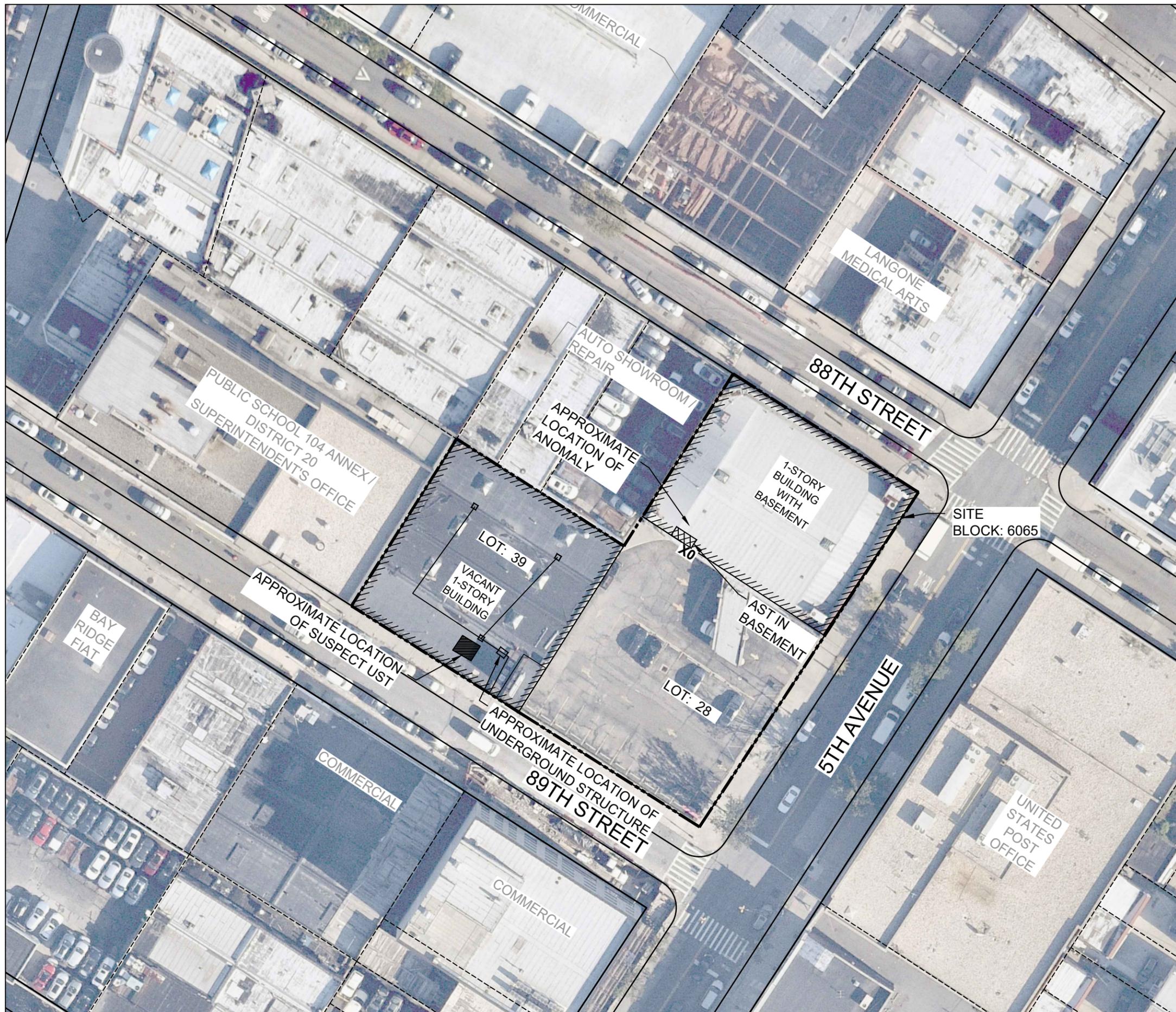
TITLE:

SITE LOCATION MAP

| | |
|--------------|-------------------------------|
| DRAWN BY: | H. DELGADO |
| CHECKED BY: | Z. SCHWARTZ |
| APPROVED BY: | J. RAUP |
| DATE: | JUNE 2025 |
| PROJ. NO.: | 630067.0000.0000 |
| FILE: | Fig 1 - Site Location Map.dwg |

FIGURE 1

11x17 - ATTACHED REFS: - ATTACHED IMAGES: EPR020283
 DRAWING NAME: \\nyc-ftp\Projects\NYSCA Contract C000015348\436632 - K20F- 8802 5th Ave Brooklyn\RAW\Figures\TRC WDI Fig 2 - Site Plan.dwg -- PLOT DATE: July 16, 2025 - 10:49AM -- LAYOUT: 11x17L

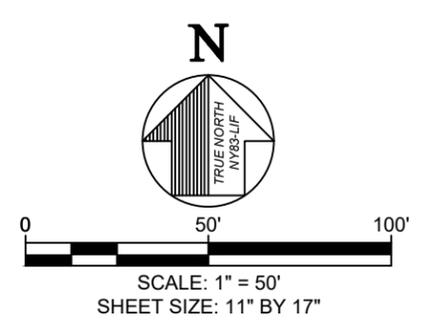


LEGEND (SYMBOLS NOT TO SCALE):

- SITE BOUNDARY
- LOT BOUNDARY
- BUILDING FOOTPRINT
- FLOOR DRAIN
- FILL PORT / VENT PIPE
- DRAINAGE PIPING

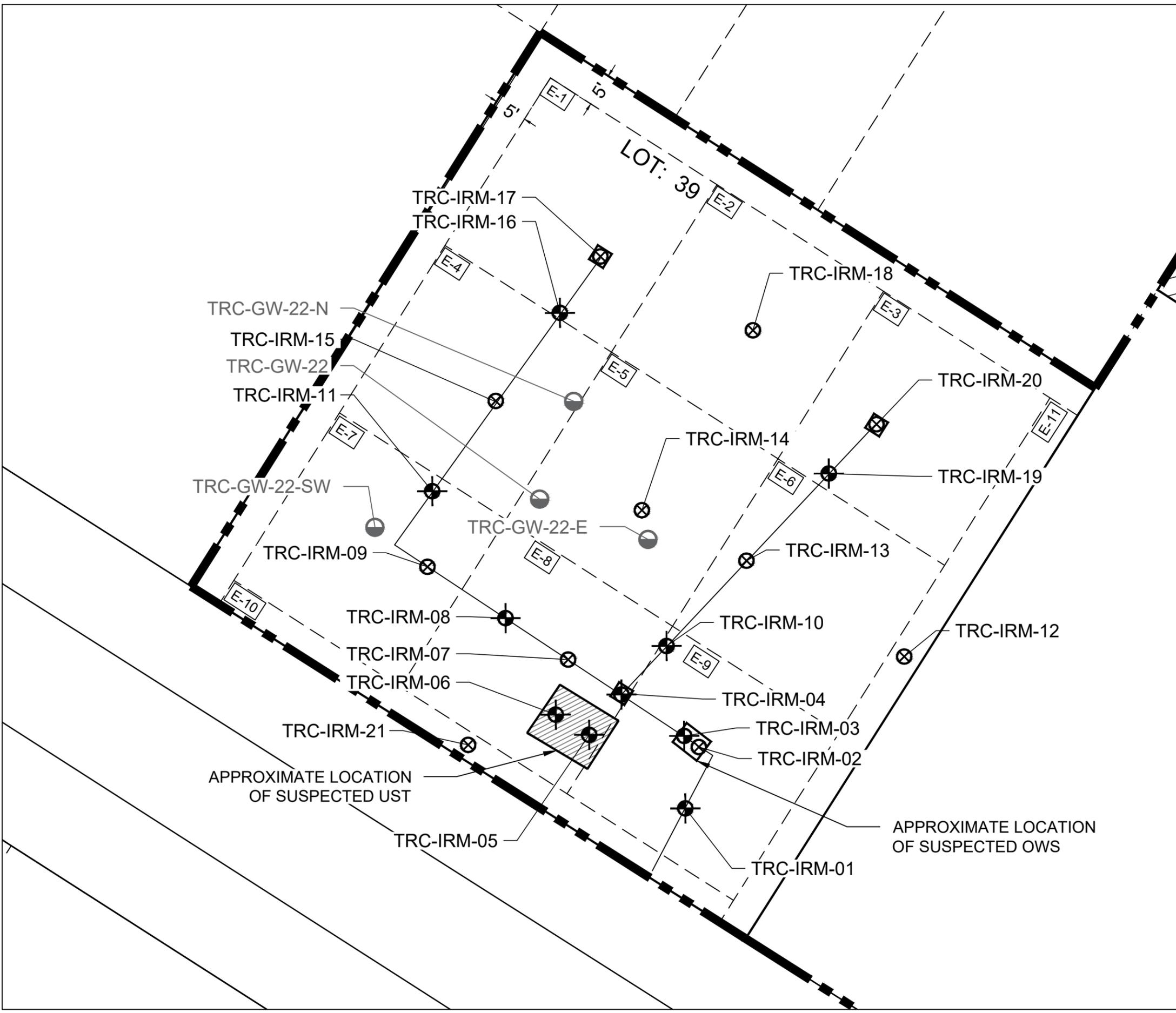
NOTES:

1. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND BOUNDARIES ARE APPROXIMATE AND REPRESENT PRE-IRM CONDITIONS.
2. AERIAL IMAGE BACKGROUND SOURCED FROM NEARMAP DATED OCTOBER 01, 2020.
3. BASEMAP SOURCE FROM NYC DEPARTMENT OF FINANCE TAX MAP.
4. AST - ABOVEGROUND STORAGE TANK
5. UST - UNDERGROUND STORAGE TANK



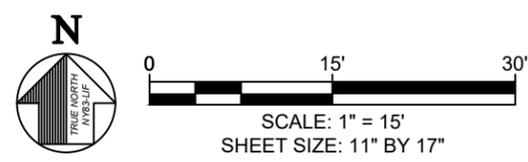
| | |
|---|--|
| PROJECT: NEW YORK CITY SCHOOL CONSTRUCTION AUTHORITY REMEDIAL ACTION WORK PLAN - BCP SITE NO. C224327 8802 5TH AVENUE AND 429 89TH STREET BLOCK: 6065, LOTS: 28 & 39 BROOKLYN, NEW YORK 11209 | |
| TITLE: SITE PLAN | |
| DRAWN BY: H. DELGADO CHECKED BY: Z. SCHWARTZ APPROVED BY: J. RAUP DATE: JUNE 2025 | PROJ NO.: 630067.0000.0000 FIGURE 2 |
| | |
| FILE NO.: | 1407 Broadway, Suite 3301 New York, NY 10018 Phone: 212.221.7822 www.TRCompanies.com Fig 2 - Site Plan.dwg |

11x17 -- ATTACHED XREFS: -- ATTACHED IMAGES: E:\PROJECTS\NYCSCA\Contract\000015348\436632 - K20F - 8802 5th Ave Brooklyn\IRM\TRC Working Drawings\ Fig 3 - Sample Location Plan (K20F).dwg -- PLOT DATE: April 28, 2025 - 11:25AM -- LAYOUT: 11x17L
 DRAWING NAME: \nycc\p\Projects\NYCSCA Contract\000015348\436632 - K20F - 8802 5th Ave Brooklyn\IRM\TRC Working Drawings\ Fig 3 - Sample Location Plan (K20F).dwg



- LEGEND (SYMBOLS NOT TO SCALE):**
- SITE BOUNDARY
 - LOT BOUNDARY
 - EXCAVATION AREA REPRESENTING APPROXIMATELY 900 SQUARE FEET
 - SUSPECT DRAINAGE SYSTEM PIPING
 - FLOOR DRAIN
 - SOIL SAMPLE LOCATION - VOCS AND SVOCS
 - SOIL SAMPLE LOCATION - VOCS, SVOCS AND METALS
 - MONITORING WELL TO BE PROTECTED

- NOTES:**
1. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND BOUNDARIES ARE APPROXIMATE.
 2. BASEMAP SOURCE FROM NYC DEPARTMENT OF FINANCE TAX MAP.
 3. SAMPLES MAY BE ADDED OR REMOVED AS NECESSARY TO COMPLY WITH DER-10 RECOMMENDATIONS.
 4. SAMPLES TO BE COLLECTED FROM THE TERMINAL DEPTH OF EXCAVATION, BENEATH THE PIPING INVERTS, UST AND OWS, FOLLOWING COMPLETION OF EXCAVATION AND REMOVAL.
 5. A GEOTEXTILE DEMARCATION LAYER WILL BE INSTALLED PRIOR TO BACKFILLING WITH VIRGIN QUARRIED #57 STONE, OR APPROVED EQUAL.
 6. UST - UNDERGROUND STORAGE TANK
 7. OWS - OIL WATER SEPARATOR



| | |
|--|---|
| PROJECT: NEW YORK CITY SCHOOL CONSTRUCTION AUTHORITY INTERIM REMEDIAL MEASURE WORK PLAN - BCP SITE NO. C224327 8802 5TH AVENUE AND 429 89TH STREET BLOCK: 6065, LOTS: 28 & 39 BROOKLYN, NEW YORK 11209 | |
| TITLE: PROPOSED POST-EXCAVATION SAMPLE LOCATION PLAN | |
| DRAWN BY: H. DELGADO CHECKED BY: Z. SCHWARTZ APPROVED BY: P. CASTELLANO DATE: APRIL 2025 | PROJ NO.: 565027.0000.0000 FIGURE 3 |
| | |
| 1407 Broadway, Suite 3301 New York, NY 10018 Phone: 212.221.7822 www.TRCompanies.com | |
| FILE NO.: | Fig 3 - Sample Location Plan (K20F).dwg |

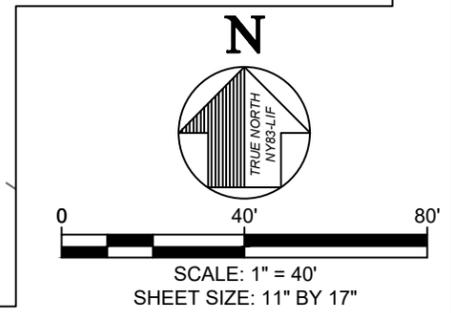
11x17 -- ATTACHED REFS: Brooklyn -- ATTACHED IMAGES: 8802.824 5th Avenue map.mxd; TRC -- DRAWING NAME: \\nyc-cp\Projects\NYSCA Contract C000015348\36632 - K20F 8802 5th Ave Brooklyn\RAW\Figures\TRC WDI Fig 20 - Prop. Excav. Areas.dwg -- PLOT DATE: November 13, 2025 - 2:14PM -- LAYOUT: 11X17L



LEGEND (SYMBOLS NOT TO SCALE):

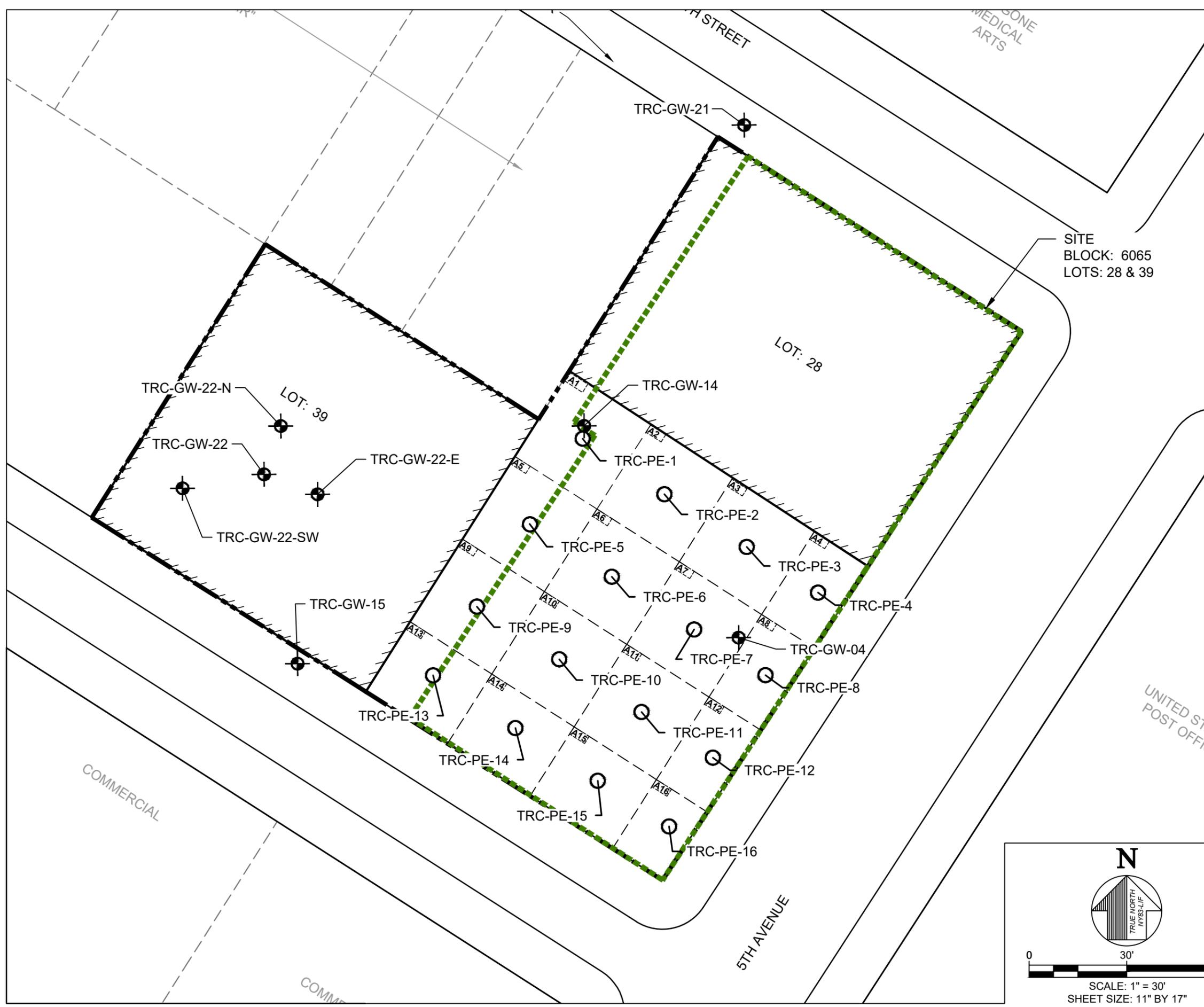
- SITE BOUNDARY
- LOT BOUNDARY
- EXISTING BUILDING FOOTPRINT TO BE DEMOLISHED
- TRC-GW-## PERMANENT MONITORING WELL (TO BE DECOMMISSIONED)
- MINIMUM OF 2 FEET OF SOIL TO BE EXCAVATED BELOW GROUND SURFACE OR EXISTING CELLAR
- AREA TO BE EXCAVATED DURING THE INTERIM REMEDIAL MEASURE
- PROPOSED MOBILE CAMP STATION

- NOTES:**
1. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND BOUNDARIES ARE APPROXIMATE.
 2. BASEMAP SOURCE FROM NYC DEPARTMENT OF FINANCE TAX MAP.
 3. REMEDIAL INVESTIGATION SAMPLING LOCATIONS INCLUDING MONITORING WELLS, SOIL BORING, AND SOIL / SUB-SLAB VAPOR SAMPLING LOCATIONS WERE SURVEYED BY PERFECT POINT LAND SURVEYING ON AUGUST 11, 2022.
 4. SUPPLEMENTAL REMEDIAL INVESTIGATION SAMPLING LOCATIONS INCLUDING SOIL BORING AND MONITORING WELL LOCATIONS WERE SURVEYED BY SAM-NY ON SEPTEMBER 12, 2024.
 5. EXCAVATION AND DEVELOPMENT PLANS ARE PRELIMINARY. CHANGES ARE LIKELY FROM THE CURRENT CONCEPT.
 6. RRUSCO - RESTRICTED RESIDENTIAL USE SOIL CLEANUP OBJECTIVE
 7. A PORTION OF THE EXISTING BASEMENT AND FOUNDATION ELEMENTS ON LOT 28 WILL REMAIN.
 8. LOCATIONS OF SITE ENTRANCES AND EXITS ARE APPROXIMATE AND SUBJECT TO CHANGE.
 9. CAMP - COMMUNITY AIR MONITORING PLAN
 10. LOCATIONS OF PROPOSED MOBILE CAMP STATIONS WILL BE UPDATED DAILY TO REFLECT SITE CONDITIONS (E.G., EXTENTS OF EXCAVATION, WIND DIRECTION). AT A MINIMUM, CAMP STATIONS WILL BE POSITIONED AT THE UPWIND AND DOWNWIND PROJECT LIMITS.



| | |
|---|---------------------------------|
| PROJECT: NEW YORK CITY SCHOOL CONSTRUCTION AUTHORITY REMEDIAL ACTION WORK PLAN - BCP SITE NO. C224327 8802 5TH AVENUE AND 429 89TH STREET BLOCK: 6065, LOTS: 28 & 39 BROOKLYN, NEW YORK 11209 | |
| TITLE: PROPOSED EXCAVATION AREAS | |
| DRAWN BY: Z. SCHWARTZ | PROJ NO.: 630067.0000.0000 |
| CHECKED BY: J. RAUP | FIGURE 4 |
| APPROVED BY: P. CASTELLANO | |
| DATE: NOVEMBER 2025 | |
| | |
| 1407 Broadway, Suite 3301 New York, NY 10018 Phone: 212.221.7822 www.TRCompanies.com | |
| FILE NO.: | Fig 20 - Prop. Excav. Areas.dwg |

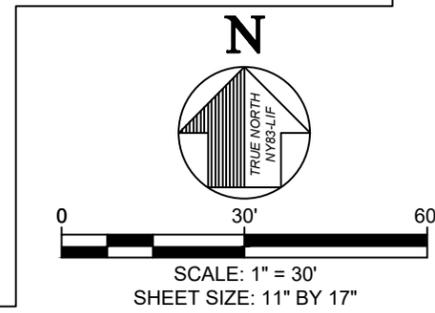
11x17 - ATTACHED REFS: Brooklyn - ATTACHED IMAGES: 8802.824 5th Avenue map.mxd; 18181 - 8802.5th Ave - Memo-2, 1st Fl Site Plan; TRC; DRAWING NAME: \\nyc-cp\Projects\NYCSCA Contract C000015348\36652 - K20F-8802 5th Ave Brooklyn\RAW\Figures\TRC WDI Fig 21 - Prop. Post-Excav. Samp. Loc. Plan.dwg -- PLOT DATE: July 16, 2025 - 11:09AM -- LAYOUT: 11X17L



LEGEND (SYMBOLS NOT TO SCALE):

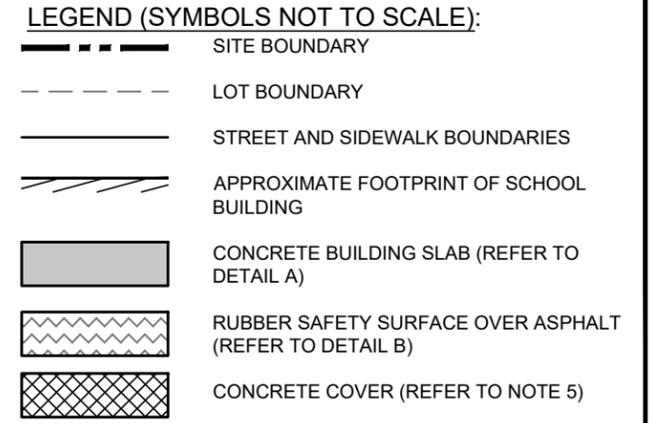
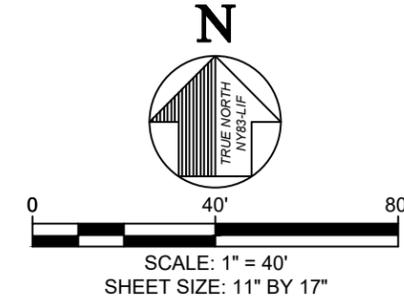
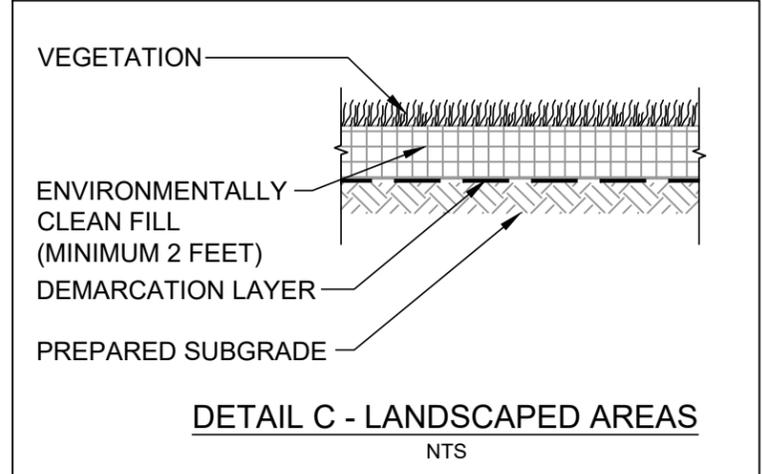
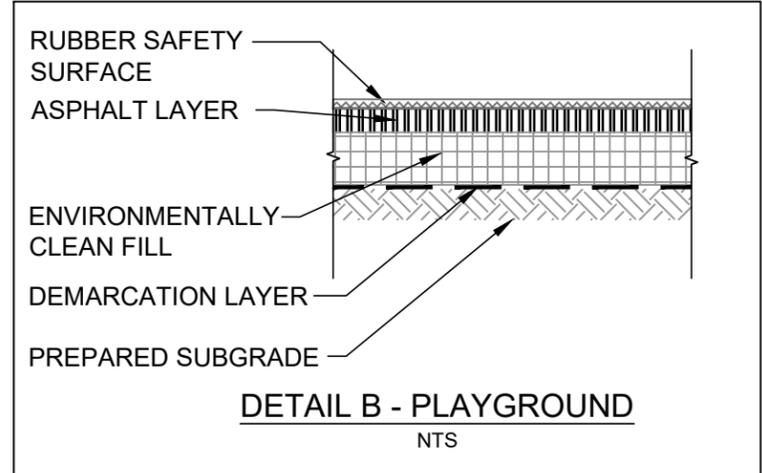
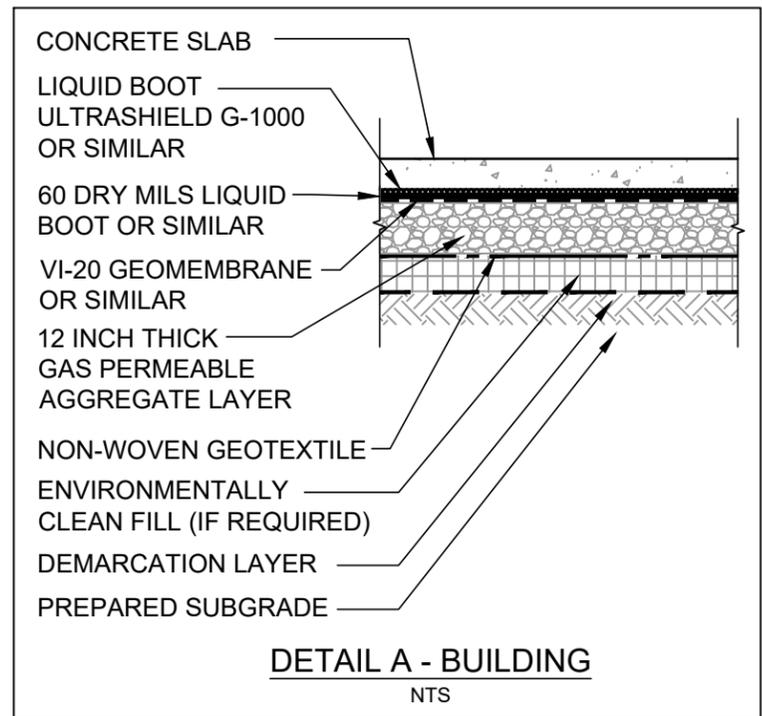
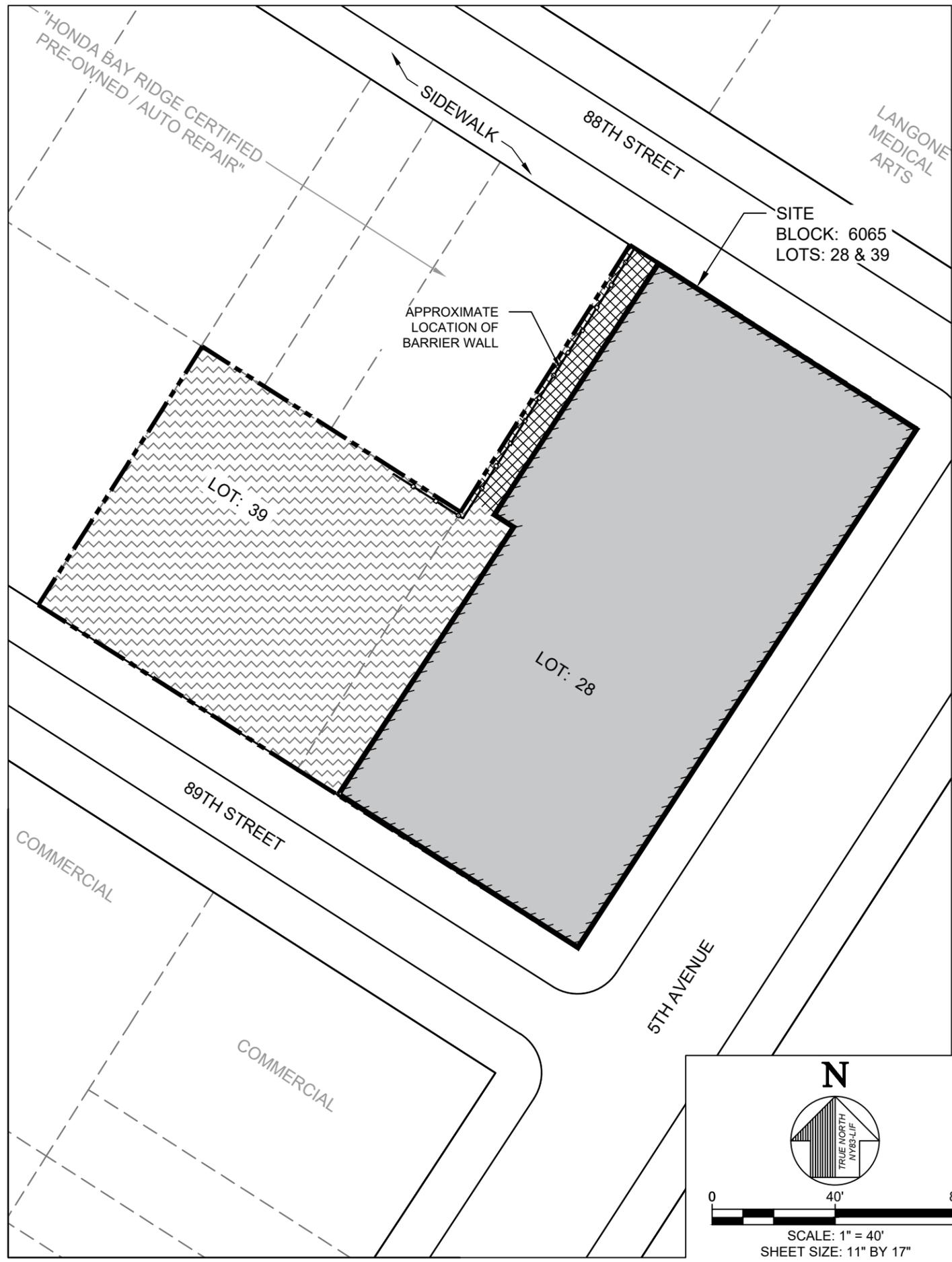
- SITE BOUNDARY
- LOT BOUNDARY
- STREET AND SIDEWALK BOUNDARIES
- EXISTING BUILDING FOOTPRINT TO BE DEMOLISHED
- APPROXIMATE FOOTPRINT OF NEW SCHOOL BUILDING
- TRC-GW-## PERMANENT MONITORING WELL (TO BE DECOMMISSIONED)
- TRC-PE-XX PROPOSED SOIL REMOVAL POST-EXCAVATION SAMPLE LOCATION
- EXCAVATION AREA REPRESENTING A MAXIMUM OF APPROXIMATELY 900 SQUARE FEET
- GRID BOX IDENTIFICATION NUMBER

- NOTES:**
1. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND BOUNDARIES ARE APPROXIMATE.
 2. BASEMAP SOURCE FROM NYC DEPARTMENT OF FINANCE TAX MAP.
 3. RRUSCO - RESTRICTED-RESIDENTIAL USE SOIL CLEANUP OBJECTIVE
 4. A MINIMUM OF 2 FEET OF SOIL WILL BE EXCAVATED WITH THE EXCAVATION AREAS.
 5. EXCAVATION AND DEVELOPMENT PLANS ARE PRELIMINARY. CHANGES ARE LIKELY FROM THE CURRENT CONCEPT.
 6. APPROXIMATE BUILDING FOOTPRINT FROM DRAWING A035 - SITE PLAN, PREPARED BY GLUCK+, DATED 6/5/2025.
 7. A PORTION OF THE EXISTING BASEMENT AND FOUNDATION ELEMENTS ON LOT 28 WILL REMAIN.



| | |
|---|--|
| PROJECT: NEW YORK CITY SCHOOL CONSTRUCTION AUTHORITY REMEDIAL ACTION WORK PLAN - BCP SITE NO. C224327 8802 5TH AVENUE AND 429 89TH STREET BLOCK: 6065, LOTS: 28 & 39 BROOKLYN, NEW YORK 11209 | |
| TITLE: PROPOSED POST-EXCAVATION SAMPLE LOCATION PLAN | |
| DRAWN BY: Z. SCHWARTZ | PROJ NO.: 630067.0000.0000 |
| CHECKED BY: J. RAUP | FIGURE 5 |
| APPROVED BY: P. CASTELLANO | |
| DATE: JUNE 2025 | |
| | |
| 1407 Broadway, Suite 3301 New York, NY 10018 Phone: 212.221.7822 www.TRCompanies.com | |
| FILE NO.: | Fig 21 - Prop. Post-Excav. Samp. Loc. Plan.dwg |

11x17 --- ATTACHED REFS: Brooklyn --- ATTACHED IMAGES: 8802.824 5th Avenue map, images: 18181, 8802.5th Ave-k-Memo-2, 1st Fl Site Plan, TRC
 DRAWING NAME: \\nyc-cip\Projects\NYCSCA Contract C000016348\36632 - K20F-8802 5th Ave Brooklyn\RAVP\Figures\TRC WDI Fig 22 - Prop. Site Covers.dwg --- PLOT DATE: June 27, 2025 - 12:17PM --- LAYOUT: 11X17L



- NOTES:**
1. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND BOUNDARIES ARE APPROXIMATE.
 2. BASEMAP SOURCE FROM NYC DEPARTMENT OF FINANCE TAX MAP.
 2. DEVELOPMENT PLANS ARE PRELIMINARY AND LIKELY TO CHANGE DURING SCHOOL DESIGN.
 3. APPROXIMATE BUILDING FOOTPRINT AND SITE COVERS FROM DRAWING A035 - SITE PLAN, PREPARED BY GLUCK+, DATED 6/5/2025.
 4. DETAIL C - LANDSCAPED AREAS IS PROVIDED IN THE EVENT THAT LANDSCAPED AREAS ARE INCORPORATED INTO THE FINAL DESIGN.
 5. ENVIRONMENTALLY CLEAN FILL WILL BE INSTALLED BENEATH THE BUILDING SLAB TO RAISE SITE ELEVATION TO THE GRADE NEEDED FOR GAS PERMEABLE AGGREGATE INSTALLATION, AS SHOWN ON DETAIL A.
 6. CONCRETE COVER DETAIL SIMILAR TO DETAIL B, EXCEPT THE RUBBER SAFETY SURFACE AND ASPHALT LAYER WILL BE REPLACED WITH A CONCRETE LAYER

| | |
|--|----------------------------|
| PROJECT: NEW YORK CITY SCHOOL CONSTRUCTION AUTHORITY REMEDIAL ACTION WORK PLAN - BCP SITE NO. C224327 8802 5TH AVENUE AND 429 89TH STREET BLOCK: 6065, LOTS: 28 & 39 BROOKLYN, NEW YORK 11209 | |
| TITLE: PROPOSED SITE COVER SYSTEM | |
| DRAWN BY: Z. SCHWARTZ | PROJ NO.: 630067.0000.0000 |
| CHECKED BY: J. RAUP | FIGURE 6 |
| APPROVED BY: P. CASTELLANO | |
| DATE: JUNE 2025 | |
| 1407 Broadway, Suite 3301 New York, NY 10018 Phone: 212.221.7822 www.TRCompanies.com | |
| FILE NO.: Fig 22 - Prop. Site Covers.dwg | |

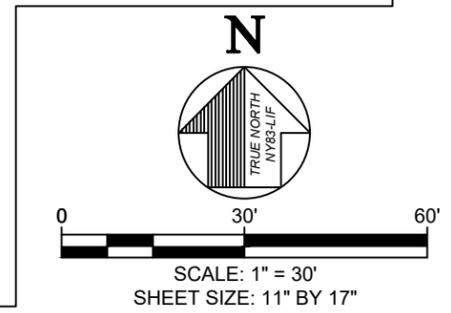
11x17 -- ATTACHED REFS: Brooklyn -- ATTACHED IMAGES: 8802.824 5th Avenue map.dwg; 1st Flr - 8802.5th Ave - k - Memo-2, 1st Flr Site Plan; TRC; DRAWING NAME: \\nyc-cp\Projects\NYSCSA Contract C000015348\36652 - K20F-8802 5th Ave Brooklyn\RAWP\Figures\TRC WDI Fig 23 - Prop. Bldg. FP to be Depress.dwg --- PLOT DATE: June 27, 2025 - 9:37AM --- LAYOUT: 11X17L



- LEGEND (SYMBOLS NOT TO SCALE):**
- SITE BOUNDARY
 - LOT BOUNDARY
 - STREET AND SIDEWALK BOUNDARIES
 - APPROXIMATE FOOTPRINT OF SCHOOL BUILDING
 - BUILDING FOOTPRINT SUBJECT TO VAPOR MITIGATION MEASURES

- NOTES:**
1. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND BOUNDARIES ARE APPROXIMATE.
 2. BASEMAP SOURCE FROM NYC DEPARTMENT OF FINANCE TAX MAP.
 3. APPROXIMATE BUILDING FOOTPRINT FROM DRAWING A035 - SITE PLAN, PREPARED BY GLUCK+, DATED 6/5/2025.

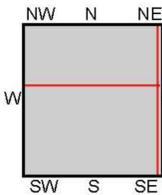
SITE BLOCK: 6065
LOTS: 28 & 39



| | |
|---|---|
| PROJECT: NEW YORK CITY SCHOOL CONSTRUCTION AUTHORITY REMEDIAL ACTION WORK PLAN - BCP SITE NO. C224327 8802 5TH AVENUE AND 429 89TH STREET BLOCK: 6065, LOTS: 28 & 39 BROOKLYN, NEW YORK 11209 | |
| TITLE: PROPOSED BUILDING FOOTPRINT SUBJECT TO VAPOR MITIGATION MEASURES | |
| DRAWN BY: Z. SCHWARTZ | PROJ NO.: 630067.0000.0000 |
| CHECKED BY: J. RAUP | FIGURE 7 |
| APPROVED BY: P. CASTELLANO | |
| DATE: JUNE 2025 | |
| | |
| 1407 Broadway, Suite 3301 New York, NY 10018 Phone: 212.221.7822 www.TRCompanies.com | |
| FILE NO.: | Fig 23 - Prop. Bldg. FP to be Depress.dwg |



This report includes information from the following map sheet(s).



TP, The Narrows, 2013, 7.5-minute
 N, Jersey City, 2014, 7.5-minute
 NE, Brooklyn, 2013, 7.5-minute
 SE, Coney Island, 2013, 7.5-minute



SITE NAME: 8802 5th Avenue
 ADDRESS: 8802 5th Avenue
 Brooklyn, NY 11209



4.6411 - ATTACHED REFERENCE: 2013/2014/His_Topo; DRAWING NAME: \\nycc-tp\Projects\NYOSCA Contract C000015348\435632 - K20F 8802 5th Ave Brooklyn\RAWP\Figures\TRC.WD\Fig 1 - Site Location Map.dwg --- PLOT DATE: June 27, 2025 - 9:38AM --- LAYOUT: 8.5x11P



1407 Broadway, Suite 3301
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 Phone: 212.221.7822
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PROJECT: **NEW YORK CITY SCHOOL CONSTRUCTION AUTHORITY
 REMEDIAL ACTION WORK PLAN - BCP SITE NO. C224327
 8802 5TH AVENUE AND 429 89TH STREET
 BLOCK: 6065, LOTS: 28 & 39
 BROOKLYN, NEW YORK 11209**

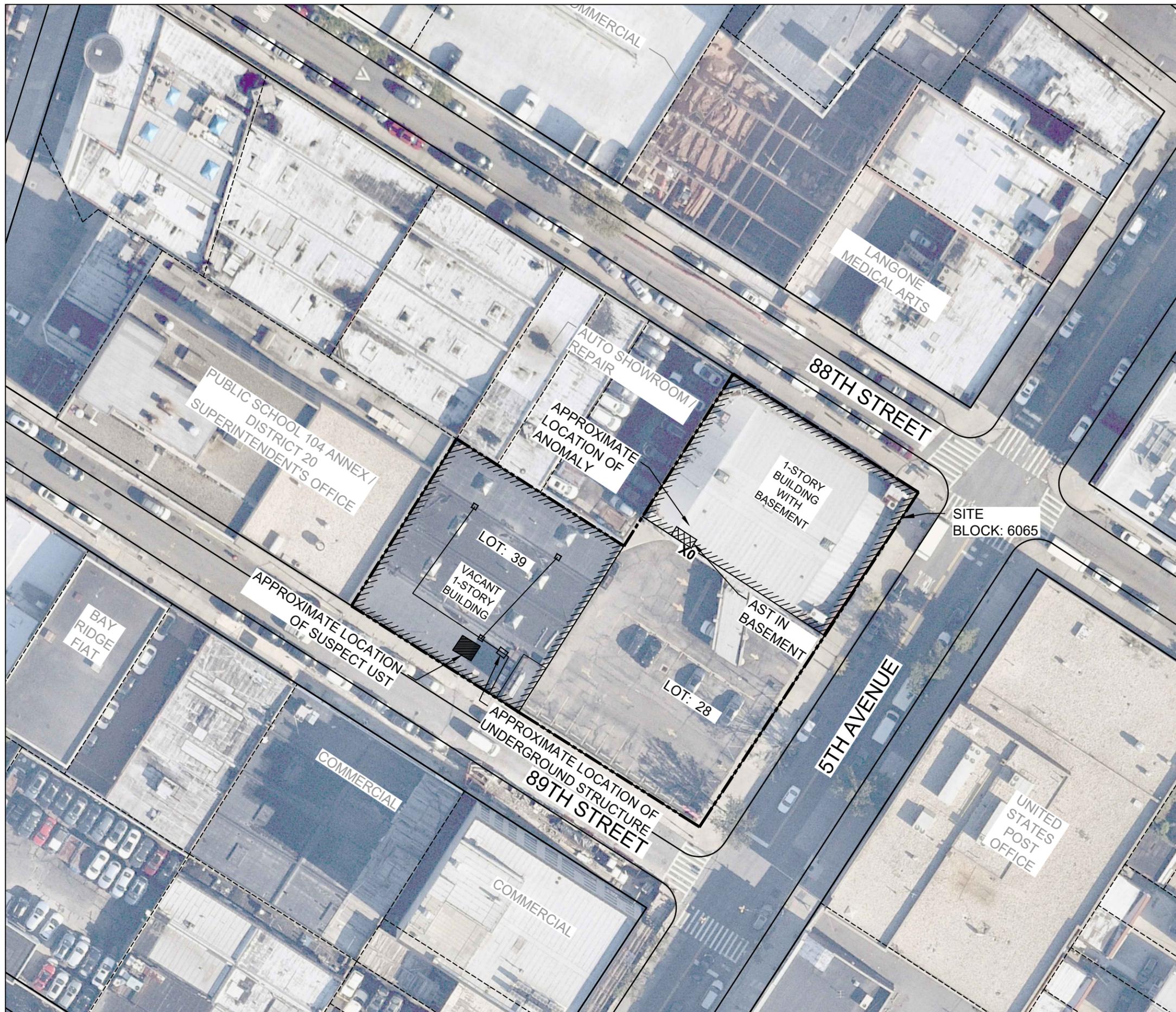
TITLE:

SITE LOCATION MAP

| | |
|--------------|-------------------------------|
| DRAWN BY: | H. DELGADO |
| CHECKED BY: | Z. SCHWARTZ |
| APPROVED BY: | J. RAUP |
| DATE: | JUNE 2025 |
| PROJ. NO.: | 630067.0000.0000 |
| FILE: | Fig 1 - Site Location Map.dwg |

FIGURE 1

11x17 - ATTACHED REFS: - ATTACHED IMAGES: EPR020283
 DRAWING NAME: \\nyc-ftp\Projects\NYSCA Contract C000016348\436632 - K20F- 8802 5th Ave Brooklyn\RAW\Figures\TRC WDI Fig 2 - Site Plan.dwg -- PLOT DATE: July 16, 2025 - 10:49AM -- LAYOUT: 11x17L

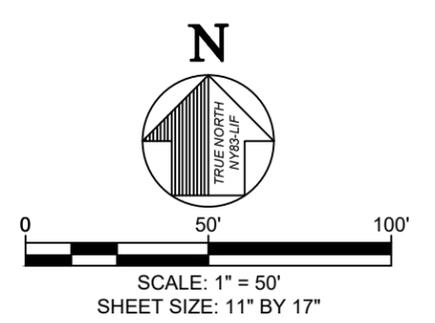


LEGEND (SYMBOLS NOT TO SCALE):

- SITE BOUNDARY
- LOT BOUNDARY
- BUILDING FOOTPRINT
- FLOOR DRAIN
- FILL PORT / VENT PIPE
- DRAINAGE PIPING

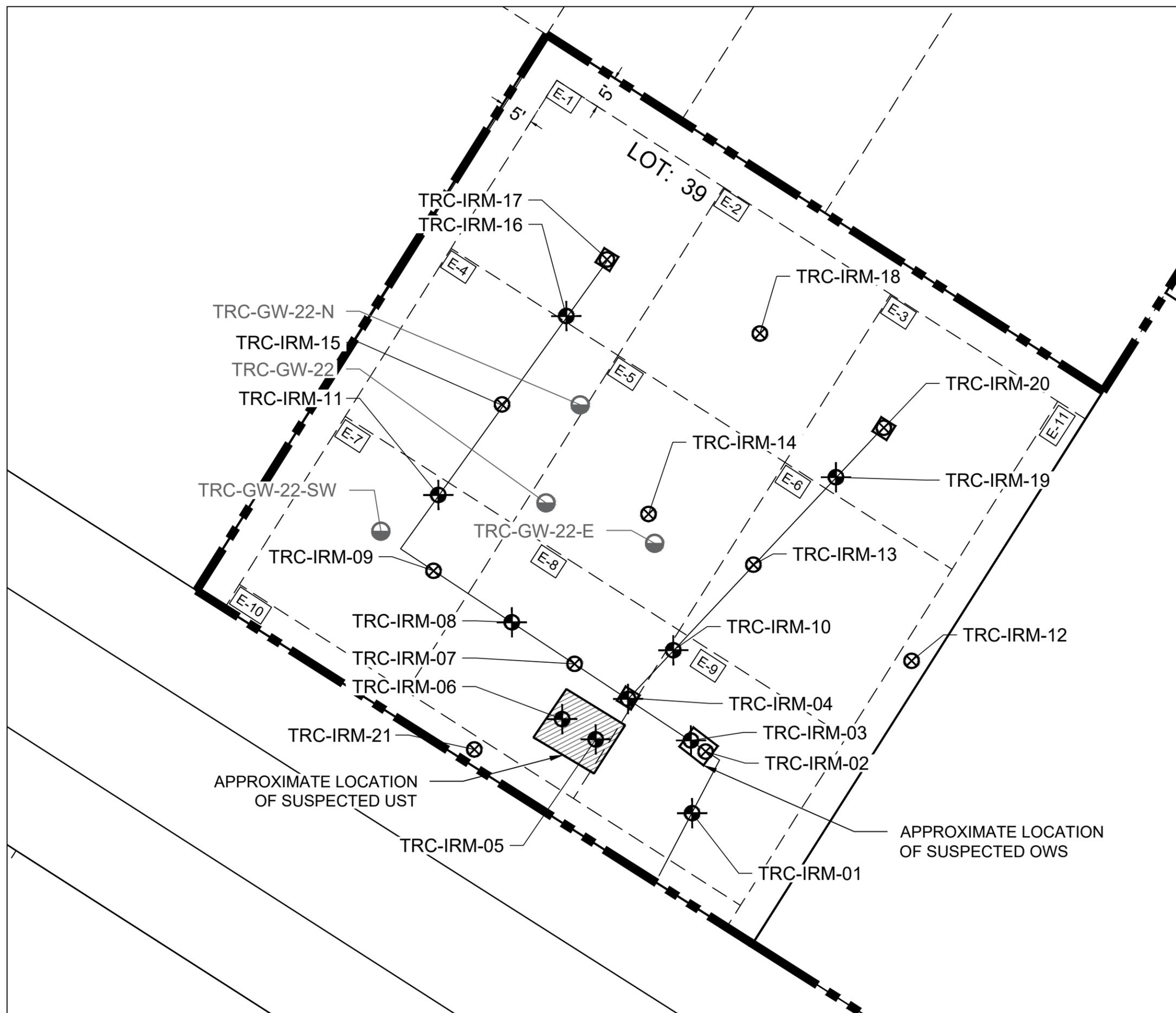
NOTES:

1. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND BOUNDARIES ARE APPROXIMATE AND REPRESENT PRE-IRM CONDITIONS.
2. AERIAL IMAGE BACKGROUND SOURCED FROM NEARMAP DATED OCTOBER 01, 2020.
3. BASEMAP SOURCE FROM NYC DEPARTMENT OF FINANCE TAX MAP.
4. AST - ABOVEGROUND STORAGE TANK
5. UST - UNDERGROUND STORAGE TANK



| | |
|---|----------------------------|
| PROJECT: NEW YORK CITY SCHOOL CONSTRUCTION AUTHORITY REMEDIAL ACTION WORK PLAN - BCP SITE NO. C224327 8802 5TH AVENUE AND 429 89TH STREET BLOCK: 6065, LOTS: 28 & 39 BROOKLYN, NEW YORK 11209 | |
| TITLE: SITE PLAN | |
| DRAWN BY: H. DELGADO | PROJ NO.: 630067.0000.0000 |
| CHECKED BY: Z. SCHWARTZ | FIGURE 2 |
| APPROVED BY: J. RAUP | |
| DATE: JUNE 2025 | |
| | |
| 1407 Broadway, Suite 3301 New York, NY 10018 Phone: 212.221.7822 www.TRCompanies.com | |
| FILE NO.: | Fig 2 - Site Plan.dwg |

11x17 -- ATTACHED XREFS: -- ATTACHED IMAGES: E:\S\2025\11\25\AM -- LAYOUT: 11x17L
 DRAWING NAME: \nyc\p\Projects\NYCSCA Contract C000015348\436632 - K20F-8802 5th Ave Brooklyn\IRM\TRC Working Drawings\ Fig 3 - Sample Location Plan (K20F).dwg -- PLOT DATE: April 28, 2025 - 11:25AM

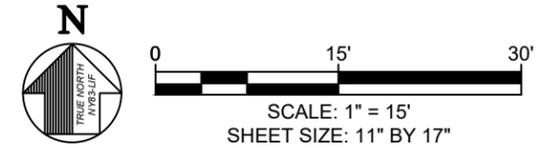


LEGEND (SYMBOLS NOT TO SCALE):

- SITE BOUNDARY
- LOT BOUNDARY
- EXCAVATION AREA REPRESENTING APPROXIMATELY 900 SQUARE FEET
- SUSPECT DRAINAGE SYSTEM PIPING
- FLOOR DRAIN
- SOIL SAMPLE LOCATION - VOCs AND SVOCs
- SOIL SAMPLE LOCATION - VOCs, SVOCs AND METALS
- MONITORING WELL TO BE PROTECTED

NOTES:

1. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND BOUNDARIES ARE APPROXIMATE.
2. BASEMAP SOURCE FROM NYC DEPARTMENT OF FINANCE TAX MAP.
3. SAMPLES MAY BE ADDED OR REMOVED AS NECESSARY TO COMPLY WITH DER-10 RECOMMENDATIONS.
4. SAMPLES TO BE COLLECTED FROM THE TERMINAL DEPTH OF EXCAVATION, BENEATH THE PIPING INVERTS, UST AND OWS, FOLLOWING COMPLETION OF EXCAVATION AND REMOVAL.
5. A GEOTEXTILE DEMARCATION LAYER WILL BE INSTALLED PRIOR TO BACKFILLING WITH VIRGIN QUARRIED #57 STONE, OR APPROVED EQUAL.
6. UST - UNDERGROUND STORAGE TANK
7. OWS - OIL WATER SEPARATOR



| | |
|--|---|
| PROJECT: NEW YORK CITY SCHOOL CONSTRUCTION AUTHORITY INTERIM REMEDIAL MEASURE WORK PLAN - BCP SITE NO. C224327 8802 5TH AVENUE AND 429 89TH STREET BLOCK: 6065, LOTS: 28 & 39 BROOKLYN, NEW YORK 11209 | |
| TITLE: PROPOSED POST-EXCAVATION SAMPLE LOCATION PLAN | |
| DRAWN BY: H. DELGADO | PROJ NO.: 565027.0000.0000 |
| CHECKED BY: Z. SCHWARTZ | FIGURE 3 |
| APPROVED BY: P. CASTELLANO | |
| DATE: APRIL 2025 | |
| | |
| FILE NO.: | Fig 3 - Sample Location Plan (K20F).dwg |

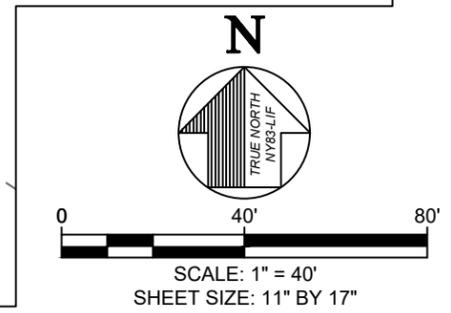
1407 Broadway, Suite 3301
 New York, NY 10018
 Phone: 212.221.7822
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11x17 -- ATTACHED REFS: Brooklyn -- ATTACHED IMAGES: 8802.824 5th Avenue map image: TRC
 DRAWING NAME: \\nyc-cp\Projects\NYSCA Contract C000015348\36632 - K20F 8802 5th Ave Brooklyn\RAW\Figures\TRC WDI Fig 20 - Prop. Excav. Areas.dwg -- PLOT DATE: November 13, 2025 - 2:14PM -- LAYOUT: 11X17L



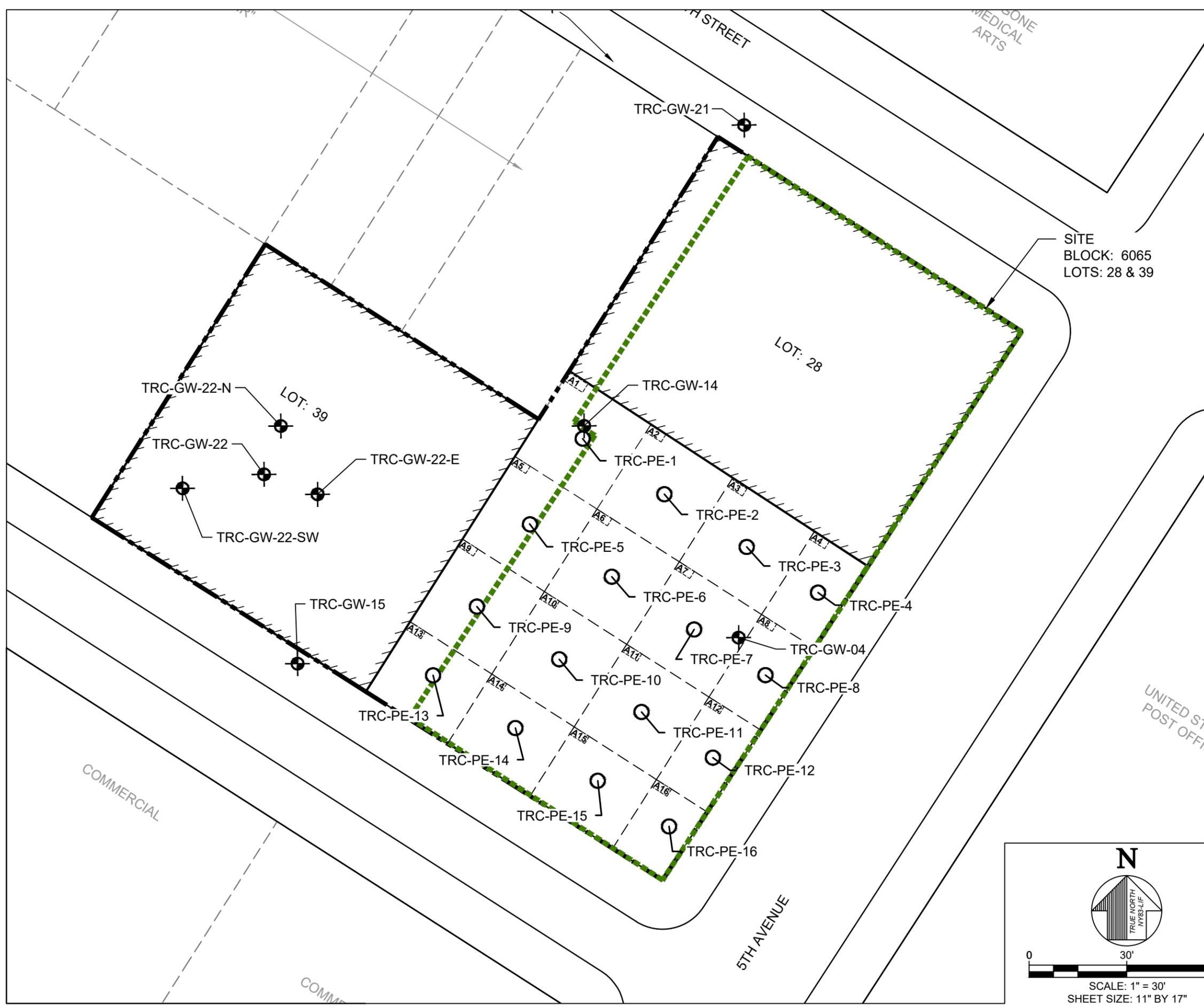
- LEGEND (SYMBOLS NOT TO SCALE):**
- SITE BOUNDARY
 - LOT BOUNDARY
 - EXISTING BUILDING FOOTPRINT TO BE DEMOLISHED
 - TRC-GW-## PERMANENT MONITORING WELL (TO BE DECOMMISSIONED)
 - MINIMUM OF 2 FEET OF SOIL TO BE EXCAVATED BELOW GROUND SURFACE OR EXISTING CELLAR
 - AREA TO BE EXCAVATED DURING THE INTERIM REMEDIAL MEASURE (REFER TO FIGURE 19)
 - PROPOSED MOBILE CAMP STATION

- NOTES:**
1. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND BOUNDARIES ARE APPROXIMATE.
 2. BASEMAP SOURCE FROM NYC DEPARTMENT OF FINANCE TAX MAP.
 3. REMEDIAL INVESTIGATION SAMPLING LOCATIONS INCLUDING MONITORING WELLS, SOIL BORING, AND SOIL / SUB-SLAB VAPOR SAMPLING LOCATIONS WERE SURVEYED BY PERFECT POINT LAND SURVEYING ON AUGUST 11, 2022.
 4. SUPPLEMENTAL REMEDIAL INVESTIGATION SAMPLING LOCATIONS INCLUDING SOIL BORING AND MONITORING WELL LOCATIONS WERE SURVEYED BY SAM-NY ON SEPTEMBER 12, 2024.
 5. EXCAVATION AND DEVELOPMENT PLANS ARE PRELIMINARY. CHANGES ARE LIKELY FROM THE CURRENT CONCEPT.
 6. RRUSCO - RESTRICTED RESIDENTIAL USE SOIL CLEANUP OBJECTIVE
 7. A PORTION OF THE EXISTING BASEMENT AND FOUNDATION ELEMENTS ON LOT 28 WILL REMAIN.
 8. LOCATIONS OF SITE ENTRANCES AND EXITS ARE APPROXIMATE AND SUBJECT TO CHANGE.
 9. CAMP - COMMUNITY AIR MONITORING PLAN
 10. LOCATIONS OF PROPOSED MOBILE CAMP STATIONS WILL BE UPDATED DAILY TO REFLECT SITE CONDITIONS (E.G., EXTENTS OF EXCAVATION, WIND DIRECTION). AT A MINIMUM, CAMP STATIONS WILL BE POSITIONED AT THE UPWIND AND DOWNWIND PROJECT LIMITS.



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| PROJECT: NEW YORK CITY SCHOOL CONSTRUCTION AUTHORITY REMEDIAL ACTION WORK PLAN - BCP SITE NO. C224327 8802 5TH AVENUE AND 429 89TH STREET BLOCK: 6065, LOTS: 28 & 39 BROOKLYN, NEW YORK 11209 | |
| TITLE: PROPOSED EXCAVATION AREAS | |
| DRAWN BY: Z. SCHWARTZ | PROJ NO.: 630067.0000.0000 |
| CHECKED BY: J. RAUP | FIGURE 4 |
| APPROVED BY: P. CASTELLANO | |
| DATE: NOVEMBER 2025 | |
| | |
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| FILE NO.: | Fig 20 - Prop. Excav. Areas.dwg |

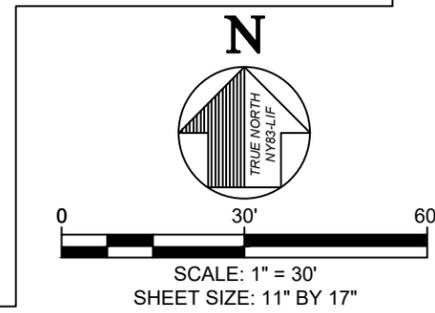
11x17 - ATTACHED REFS: Brooklyn - ATTACHED IMAGES: 8802.824 5th Avenue map.mxd; 1818.F1 - 8802.5th Ave - Memo-2, 1st Floor Plan; TRC
 DRAWING NAME: \\nyc-cp\Projects\NYCSCA Contract C000015348\36652 - K20F-8802 5th Ave Brooklyn\RAW\Figures\TRC WDI Fig 21 - Prop. Post-Excav. Samp. Loc. Plan.dwg -- PLOT DATE: July 16, 2025 - 11:09AM -- LAYOUT: 11X17L



LEGEND (SYMBOLS NOT TO SCALE):

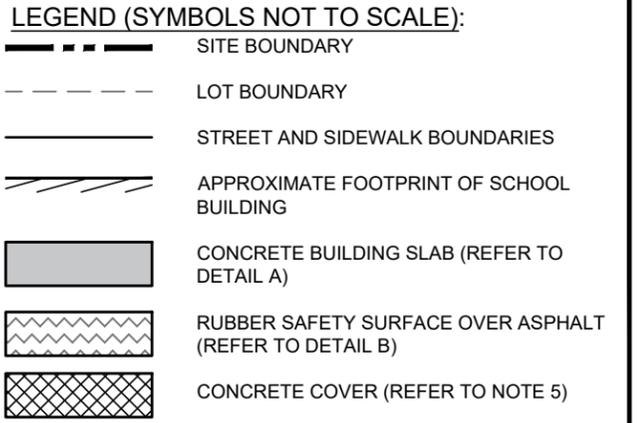
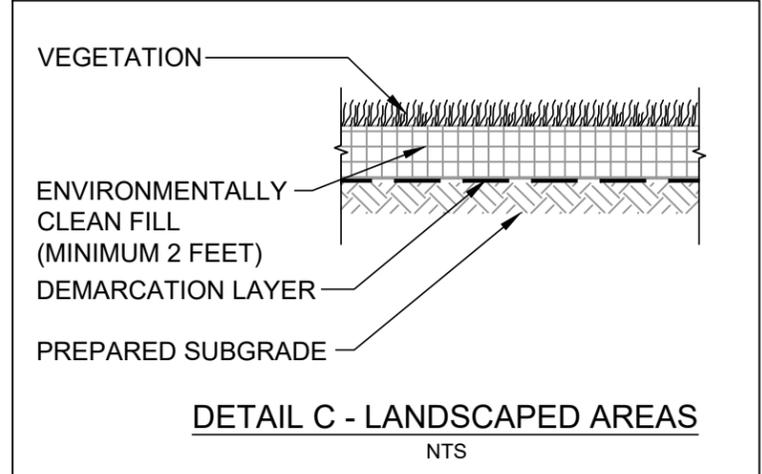
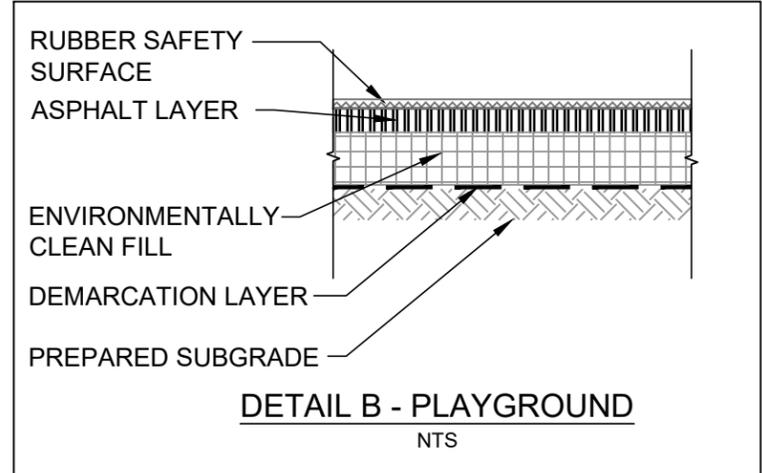
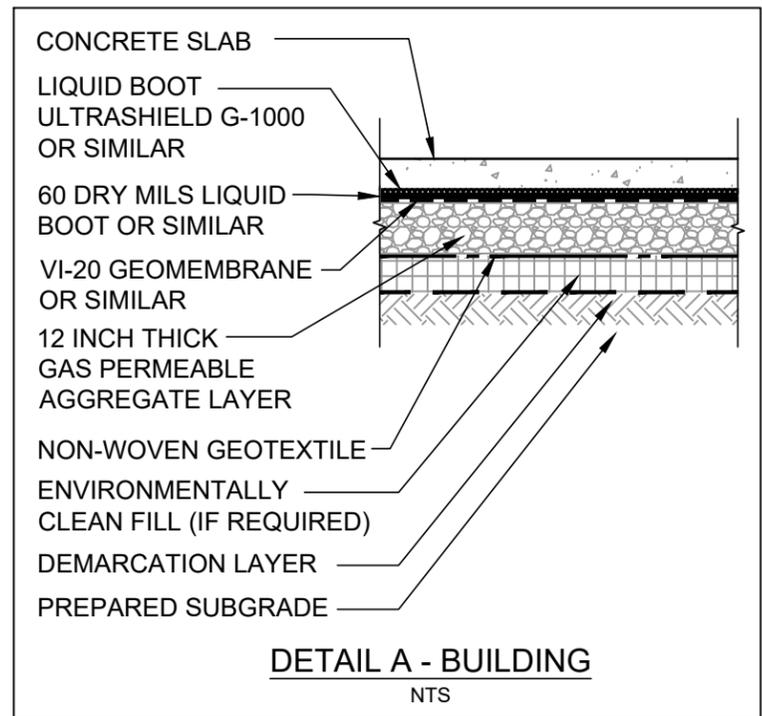
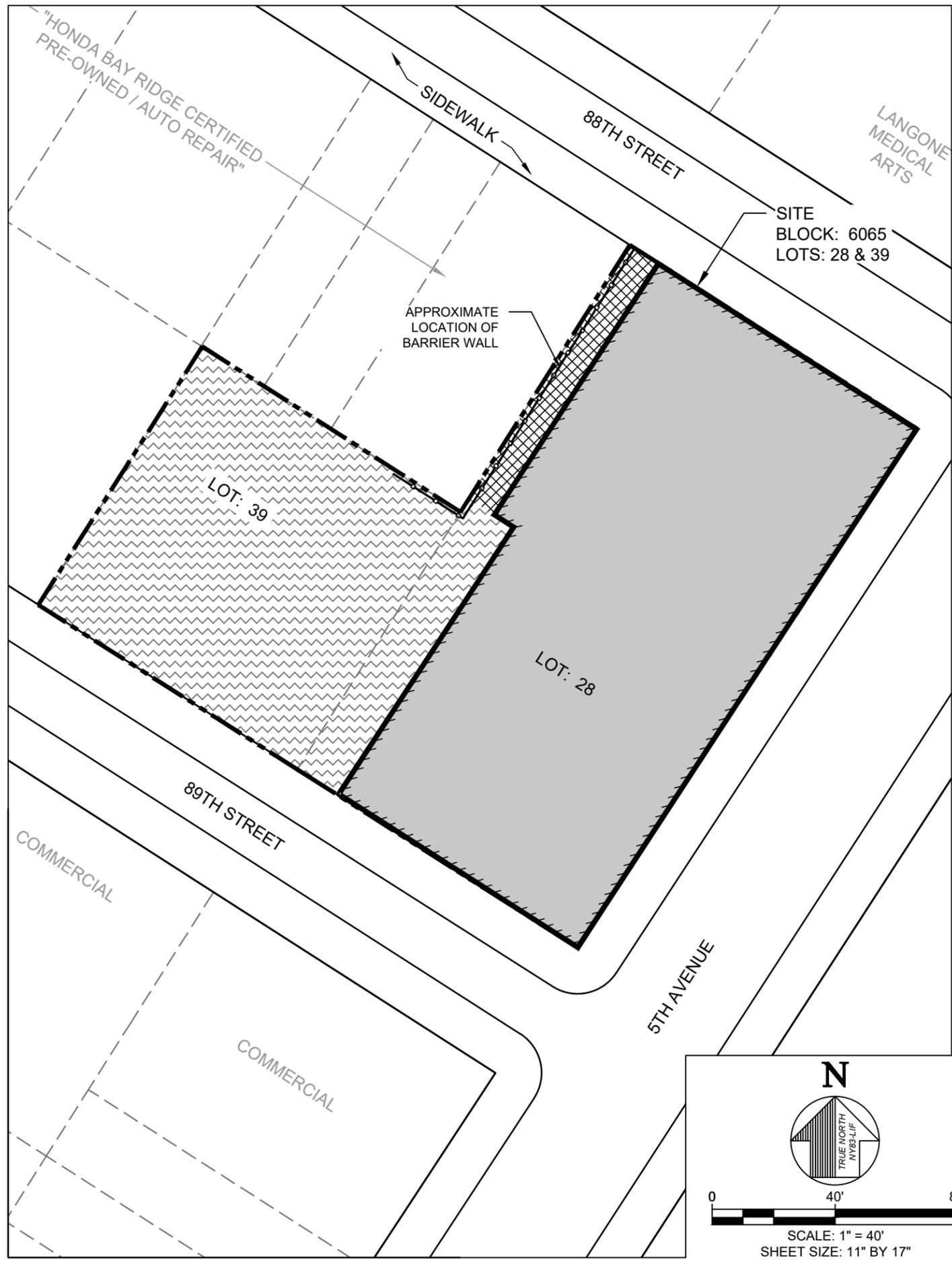
- SITE BOUNDARY
- LOT BOUNDARY
- STREET AND SIDEWALK BOUNDARIES
- EXISTING BUILDING FOOTPRINT TO BE DEMOLISHED
- APPROXIMATE FOOTPRINT OF NEW SCHOOL BUILDING
- TRC-GW-## PERMANENT MONITORING WELL (TO BE DECOMMISSIONED)
- TRC-PE-XX PROPOSED SOIL REMOVAL POST-EXCAVATION SAMPLE LOCATION
- EXCAVATION AREA REPRESENTING A MAXIMUM OF APPROXIMATELY 900 SQUARE FEET
- GRID BOX IDENTIFICATION NUMBER

- NOTES:**
1. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND BOUNDARIES ARE APPROXIMATE.
 2. BASEMAP SOURCE FROM NYC DEPARTMENT OF FINANCE TAX MAP.
 3. RRUSCO - RESTRICTED-RESIDENTIAL USE SOIL CLEANUP OBJECTIVE
 4. A MINIMUM OF 2 FEET OF SOIL WILL BE EXCAVATED WITH THE EXCAVATION AREAS.
 5. EXCAVATION AND DEVELOPMENT PLANS ARE PRELIMINARY. CHANGES ARE LIKELY FROM THE CURRENT CONCEPT.
 6. APPROXIMATE BUILDING FOOTPRINT FROM DRAWING A035 - SITE PLAN, PREPARED BY GLUCK+, DATED 6/5/2025.
 7. A PORTION OF THE EXISTING BASEMENT AND FOUNDATION ELEMENTS ON LOT 28 WILL REMAIN.



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| PROJECT: NEW YORK CITY SCHOOL CONSTRUCTION AUTHORITY REMEDIAL ACTION WORK PLAN - BCP SITE NO. C224327 8802 5TH AVENUE AND 429 89TH STREET BLOCK: 6065, LOTS: 28 & 39 BROOKLYN, NEW YORK 11209 | |
| TITLE: PROPOSED POST-EXCAVATION SAMPLE LOCATION PLAN | |
| DRAWN BY: Z. SCHWARTZ | PROJ NO.: 630067.0000.0000 |
| CHECKED BY: J. RAUP | FIGURE 5 |
| APPROVED BY: P. CASTELLANO | |
| DATE: JUNE 2025 | |
| | |
| 1407 Broadway, Suite 3301 New York, NY 10018 Phone: 212.221.7822 www.TRCompanies.com | |
| FILE NO.: | Fig 21 - Prop. Post-Excav. Samp. Loc. Plan.dwg |

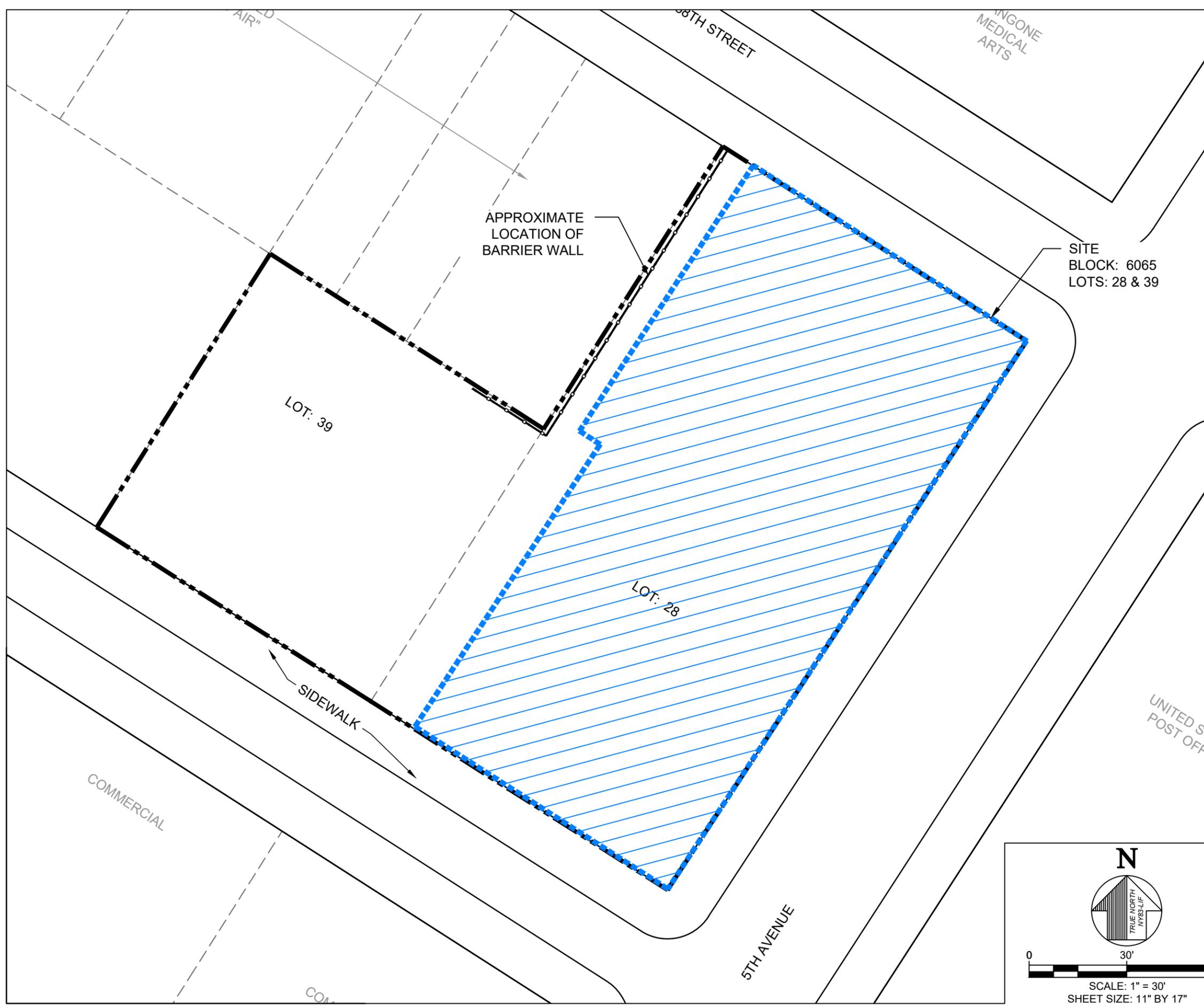
11x17 --- ATTACHED REFS: Brooklyn --- ATTACHED IMAGES: 8802.824 5th Avenue map, images: 181811 - 8802.5th Ave - k - Memo-2, 1st Fl Site Plan, TRC.
 DRAWING NAME: \\nyc-cp\Projects\NYCSCA Contract C000016348\36632 - K20F-8802 5th Ave Brooklyn\RAW\Figures\TRC WDI Fig 22 - Prop. Site Covers.dwg --- PLOT DATE: June 27, 2025 - 12:17PM --- LAYOUT: 11X17L



- NOTES:**
1. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND BOUNDARIES ARE APPROXIMATE.
 2. BASEMAP SOURCE FROM NYC DEPARTMENT OF FINANCE TAX MAP.
 2. DEVELOPMENT PLANS ARE PRELIMINARY AND LIKELY TO CHANGE DURING SCHOOL DESIGN.
 3. APPROXIMATE BUILDING FOOTPRINT AND SITE COVERS FROM DRAWING A035 - SITE PLAN, PREPARED BY GLUCK+, DATED 6/5/2025.
 4. DETAIL C - LANDSCAPED AREAS IS PROVIDED IN THE EVENT THAT LANDSCAPED AREAS ARE INCORPORATED INTO THE FINAL DESIGN.
 5. ENVIRONMENTALLY CLEAN FILL WILL BE INSTALLED BENEATH THE BUILDING SLAB TO RAISE SITE ELEVATION TO THE GRADE NEEDED FOR GAS PERMEABLE AGGREGATE INSTALLATION, AS SHOWN ON DETAIL A.
 6. CONCRETE COVER DETAIL SIMILAR TO DETAIL B, EXCEPT THE RUBBER SAFETY SURFACE AND ASPHALT LAYER WILL BE REPLACED WITH A CONCRETE LAYER

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| PROJECT: NEW YORK CITY SCHOOL CONSTRUCTION AUTHORITY REMEDIAL ACTION WORK PLAN - BCP SITE NO. C224327 8802 5TH AVENUE AND 429 89TH STREET BLOCK: 6065, LOTS: 28 & 39 BROOKLYN, NEW YORK 11209 | |
| TITLE: PROPOSED SITE COVER SYSTEM | |
| DRAWN BY: Z. SCHWARTZ | PROJ NO.: 630067.0000.0000 |
| CHECKED BY: J. RAUP | FIGURE 6 |
| APPROVED BY: P. CASTELLANO | |
| DATE: JUNE 2025 | |
| | |
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| FILE NO.: | Fig 22 - Prop. Site Covers.dwg |

11x17 -- ATTACHED REFS: Brooklyn -- ATTACHED IMAGES: 8802.824 5th Avenue map.dwg; 1st Flr - 8802.5th Ave - k - Memo-2, 1st Flr Site Plan; TRC; DRAWING NAME: \\nyc-cp\Projects\NYSCSA Contract C000015348\36652 - K20F-8802 5th Ave Brooklyn\RAW\Figures\TRC WDI Fig 23 - Prop. Bldg. FP to be Depress.dwg --- PLOT DATE: June 27, 2025 - 9:37AM --- LAYOUT: 11X17L



LEGEND (SYMBOLS NOT TO SCALE):

- SITE BOUNDARY
- LOT BOUNDARY
- STREET AND SIDEWALK BOUNDARIES
- APPROXIMATE FOOTPRINT OF SCHOOL BUILDING
- BUILDING FOOTPRINT SUBJECT TO VAPOR MITIGATION MEASURES

- NOTES:**
1. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND BOUNDARIES ARE APPROXIMATE.
 2. BASEMAP SOURCE FROM NYC DEPARTMENT OF FINANCE TAX MAP.
 3. APPROXIMATE BUILDING FOOTPRINT FROM DRAWING A035 - SITE PLAN, PREPARED BY GLUCK+, DATED 6/5/2025.

SCALE: 1" = 30'
SHEET SIZE: 11" BY 17"

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| PROJECT: NEW YORK CITY SCHOOL CONSTRUCTION AUTHORITY REMEDIAL ACTION WORK PLAN - BCP SITE NO. C224327 8802 5TH AVENUE AND 429 89TH STREET BLOCK: 6065, LOTS: 28 & 39 BROOKLYN, NEW YORK 11209 | |
| TITLE: PROPOSED BUILDING FOOTPRINT SUBJECT TO VAPOR MITIGATION MEASURES | |
| DRAWN BY: Z. SCHWARTZ | PROJ NO.: 630067.0000.0000 |
| CHECKED BY: J. RAUP | FIGURE 7 |
| APPROVED BY: P. CASTELLANO | |
| DATE: JUNE 2025 | |
| | |
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| FILE NO.: | Fig 23 - Prop. Bldg. FP to be Depress.dwg |