DECISION DOCUMENT

340 Myrtle Avenue
Brownfield Cleanup Program
Brooklyn, Kings County
Site No. C224340
May 2024

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

DECLARATION STATEMENT - DECISION DOCUMENT

340 Myrtle Avenue
Brownfield Cleanup Program
Brooklyn, Kings County
Site No. C224340
May 2024

Statement of Purpose and Basis

This document presents the remedy for the 340 Myrtle Avenue 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 340 Myrtle Avenue 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^{TM} (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 on-site buildings were demolished and materials which could not be beneficially reused on site were taken off-site for proper disposal in order to implement the remedy.

Excavation and off-site disposal of contaminant source areas, including soils which exceed the protection of groundwater soil cleanup objectives (PGWSCOs), as defined by 6 NYCRR Part 375-6.8 for those contaminants found in site groundwater above standards.

Excavation and off-site disposal of all on-site soils which exceed restricted residential SCOs, as defined by 6 NYCRR Part 375-6.8 in the upper 15 feet. If a Track 2 restricted residential cleanup is achieved, a Cover System will not be a required element of the remedy.

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.

3. Backfill

Clean fill 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.

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 the subsurface.

5. Monitored Natural Attenuation

Groundwater contamination remaining after active remediation will be addressed with monitored natural attenuation (MNA). Groundwater will be monitored for site related contamination and also for MNA indicators which will provide an understanding of the biological activity breaking down the contamination. Reports of the attenuation will be provided annually, and active remediation will be proposed if it appears that natural processes alone will not address the contamination. The contingency remedial action will depend on the information collected, but it is currently anticipated that in-situ chemical oxidation (ISCO) injections would be the expected contingency remedial action.

6. Institutional Controls

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.

7. 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 6.
    - Engineering Controls: The sub-slab depressurization system discussed in Remedy Element 4.

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 groundwater use restrictions;
- 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 indoor air and groundwater to assess the performance and effectiveness of the remedy; and
   - a schedule of monitoring and frequency of submittals to the NYSDEC.

c. 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. 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.

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.

May 7, 2024

Date

Jane H. O'Connell
Regional Remediation Engineer, Reg. 2

DECISION DOCUMENT

340 Myrtle Avenue
Brooklyn, Kings County
Site No. C224340
May 2024

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=C224340

Brooklyn Community Board 2
350 Jay Street, 8th Floor
Brooklyn, NY 11201
Phone: (718) 596-5410

Brooklyn Public Library-Walt Whitman Branch
93 St. Edwards Street
Brooklyn, NY 11205
Phone: (718) 935-0244

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 site is located at 340 Myrtle Avenue, Brooklyn, NY and is designated as Tax Block 2073, Lot 21. It consists of an irregularly shaped parcel located at the southeast corner of Myrtle Avenue and Carlton Avenue. The site is approximately 0.202 acres (8,800 square feet) and has approximately 106 feet of frontage along Myrtle Avenue, and 80 feet of frontage along Carlton Avenue.

Site Features:
The site is currently an empty lot, covered by a slab that was formally apart of the previous building's basement. This slab is approximately 9.5 feet below sidewalk grade.

Current Zoning and Land Use:
The site lot is zoned R7A residential, denoting a medium density apartment house district, with a C2-4 commercial overlay.

Past Use of the Site:
The site was initially developed sometime prior to 1887 with several three-story commercial buildings. By 1938, the commercial buildings were demolished and, by 1950, this portion of the site was used for parking. By 1961, the site was occupied by a one-story commercial building. Dry cleaning is depicted in the eastern portion of the building and parking is shown on the southwestern portion of the lot on Sanborn maps dated 1969-2007. City directory listings document historic residential and commercial uses of the site, with the commercial uses including dry cleaning, restaurants, grocery stores, clothing stores, a gift shop, a meat market, laundry and a barber shop.

Site Geology and Hydrogeology:
The elevation of the site is approximately 59 feet above mean sea level and is relatively flat. The site is underlain by a continuous layer of historic fill consisting of silty sand with gravel,

concrete debris, brick debris, and plastic debris to a maximum depth of 11.5 feet below grade (ft-bg). The fill layer is underlain by a native layer of fine-grained silty sand with silt lenses throughout to a depth of 20 ft-bg. The sand and silt layer is underlain by a layer of fine to coarse grained sand transitioning to clayey sand to a depth of 22.5 ft-bg. The sand layer is underlain by a layer of sandy clay to a depth of 24 ft-bg. The sandy clay layer is underlain by fine to coarse grained sand to at least 35 ft-bg.

Based on the results of the remedial investigation, groundwater at the site was measured at approximately 53 ft-bg and flows to the northwest.

A site location map is attached as Figure 1.

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 (which allows for commercial use and industrial 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 Participant. The Applicant has an obligation to address on-site and off-site contamination. 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
- soil vapor
- 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 contaminant(s) of concern identified at this site is/are:

benzo(a)anthracene
benzo(a)pyrene
benzo(b)fluoranthene
benzo(k)fluoranthene
chrysene
dibenz[a,h]anthracene
indeno(1,2,3-cd)pyrene
chromium
tetrachloroethene (PCE)
trichloroethene (TCE)
cis-1,2-dichloroethene
lead
mercury
barium
perfluorooctanoic acid (PFOA)
perfluorooctane sulfonic acid (PFOS)

The contaminant(s) 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.

There were no IRMs performed at this site during the RI.

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 was sampled for VOCs. Based on the investigations conducted to date, the primary contaminants of concern are VOCs and SVOCs in soil; VOCs, SVOCs, and metals in groundwater; and VOCs in soil vapor.

Soil - One VOC (tetrachloroethene, or PCE) was detected in one soil boring in the southern portion of the site at concentrations exceeding the applicable Protection of Groundwater soil cleanup objective (PGSCO) at a maximum concentration of 100 parts per million (ppm) (PGSCO is 1.3 ppm). SVOCs were found at maximum concentrations exceeding the applicable Restricted Residential soil cleanup objectives (RRSCOs) including benzo(a)anthracene at 4.5 ppm (RRSCO is 1 ppm), benzo(a)pyrene at 5.3 ppm (RRSCO is 1 ppm), benzo(b)fluoranthene at 6.1 ppm (RRSCO is 1 ppm), dibenz(a,h)anthracene at 0.96 ppm (RRSCO is 0.33 ppm), and indeno(1,2,3-cd)pyrene at 4.1 ppm (RRSCO is 0.5 ppm). Metals exceeding RRSCOs include maximum concentrations of barium at 2590 ppm (RRSCO is 400 ppm), lead at 638 ppm (RRSCO is 400 ppm), and mercury at 1.14 ppm (RRSCO is 0.81 ppm). These contaminants were detected in soil borings throughout the site. PCBs, pesticides, and PFAS were not found in exceedance of RRSCOs at the site. Data does not indicate potential for off-site impacts in soil related to this site.

Groundwater - One VOC (PCE) exceeded the applicable Ambient Water Quality Standards and Guidance Values (AWQSGVs) at a maximum concentration of 17 parts per billion (ppb) (AWQSGV is 5 ppb). PCE was detected in groundwater samples throughout the site. SVOCs found in exceedance include maximum concentrations of benzo(a)anthracene at 0.11 ppb (AWQSGV is 0.002 ppb), benzo(b)fluoranthene at 0.08 ppb (AWQSGV is 0.002 ppb), chrysene at 0.09 ppb (AWQSGV is 0.002 ppb), and indeno(1,2,3-cd)pyrene at 0.03 ppb (AWQSGV is 0.02 ppb). One dissolved metal (chromium) was detected at a maximum concentration of 53 ppb (AWQSGV is 50 ppb). Perfluorooctane sulfonic acid (PFOS) was detected at a maximum concentration of 12.2 parts per trillion (ppt) (AWQSGV is 2.7 ppt) and perfluorooctanoic acid

(PFOA) at 91 ppt (AWQSGV is 6.7 ppt). Data does not indicate potential off-site impacts in groundwater related to this site.

Soil Vapor and Sub-Slab Soil Vapor - VOCs were detected in the soil vapor and sub-slab soil vapor throughout the site, including maximum concentrations of PCE at 351,000 micrograms per cubic meter (ug/m3) in the sub-slab soil vapor, trichloroethene (TCE) at 1,410 ug/m3 in the sub-slab soil vapor, and cis-1,2-dichloroethane at 2,890 ug/m3 in the sub-slab soil vapor. Data indicates potential off-site impacts in soil vapor related to this site. Soil vapor intrusion testing was completed at two off-site neighboring properties. The results of this sampling indicated no further action is warranted at these properties.

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 majority of the site is covered by the former building's slab and access to the site is restricted. Contaminated groundwater at the site is not used for drinking or other purposes and the site is served by a public water supply that obtains water form a 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 inhalation of site contaminants in indoor air via the SVI pathway is not a current concern. However, the potential exists for inhalation of site contaminants due to SVI for any future on-site development. Environmental sampling indicates that SVI 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.
- Prevent contact with, or inhalation of volatiles, from contaminated groundwater.

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.
- Prevent inhalation of or exposure from contaminants volatilizing from contaminants in 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 2: Restricted Residential use with generic soil cleanup objectives remedy.

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

The elements of the selected remedy, as shown in Figure 2 - 6, 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;
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- 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.

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Excavation and off-site disposal of all on-site soils which exceed restricted residential SCOs, as defined by 6 NYCRR Part 375-6.8 in the upper 15 feet. If a Track 2 restricted residential cleanup is achieved, a Cover System will not be a required element of the remedy.

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.

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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 the subsurface.

5. Monitored Natural Attenuation

Groundwater contamination remaining after active remediation will be addressed with monitored natural attenuation (MNA). Groundwater will be monitored for site related contamination and also for MNA indicators which will provide an understanding of the biological activity breaking down the contamination. Reports of the attenuation will be provided annually, and active remediation will be proposed if it appears that natural processes alone will not address the contamination. The contingency remedial action will depend on the information collected, but it is currently anticipated that in-situ chemical oxidation (ISCO) injections would be the expected contingency remedial action.

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- 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.

7. 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 6.
- Engineering Controls: The sub-slab depressurization system discussed in Remedy Element 4.

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 groundwater use restrictions;
- 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 indoor air and groundwater to assess the performance and effectiveness of the remedy; and
   - a schedule of monitoring and frequency of submittals to the NYSDEC.

c. 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. 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.

Basemap: USGS Topographic Map, 7.5 Minute Quadrangle: Brooklyn, NY

Site Location

0 1,000 2,000 4,000 Feet

http://gis.nyc.gov/taxmap/map.htm

Department of Finance Digital Tax Map

0 100 200 400 Feet

Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community
NYC Department of City Planning, Information Technology Division

Department of City Planning MapPLUTO - 2023 v1

0 100 200 400 Feet

Site

Remedial Action Work Plan
340 Myrtle Avenue
Brooklyn, New York
Block 2073, Lots 21 & 22
BCP Site No. C224340

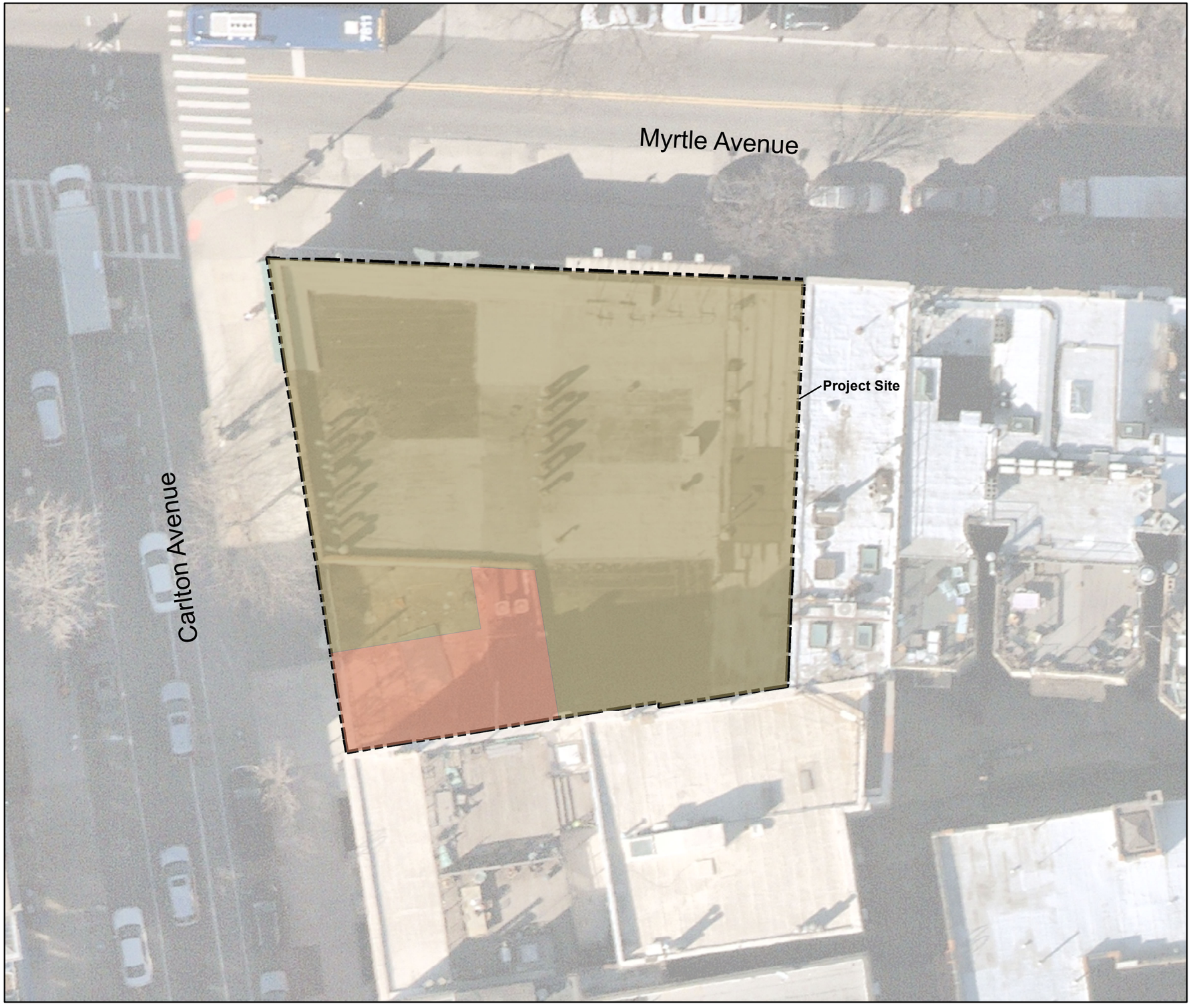
TENEN ENVIRONMENTAL

Tenen Environmental, LLC
121 West 27th Street
Suite 702
New York, NY 10001
O: (646) 606-2332
F: (646) 606-2379

Drawn By	Checked By	Date	Scale
LM	AP	September 2023	As Noted

Drawing Title: **Site Location Map**

Drawing No: **Figure 1**



Legend

- Remedial Excavation to 5.5 Feet Below Existing Grade (El. +44) (Currently 9.5 Feet Below Sidewalk Grade)
- Remedial Excavation to 15 Feet Below Existing Grade (El. +44) (Currently at Sidewalk Grade)
- Site Boundary

Notes:
Sidewalk elevation is approx. El. +59
ft-bsg = feet below sidewalk grade
The existing building basement grade is approximately 9.5 ft-bsg.
Lot 22 was excavated to approximately 9.5 ft-bsg as part of previous redevelopment efforts.

Vertical Datum: NAVD88

Nearmap Aerial 3/12/2021

0 10 20 40 Feet

Site

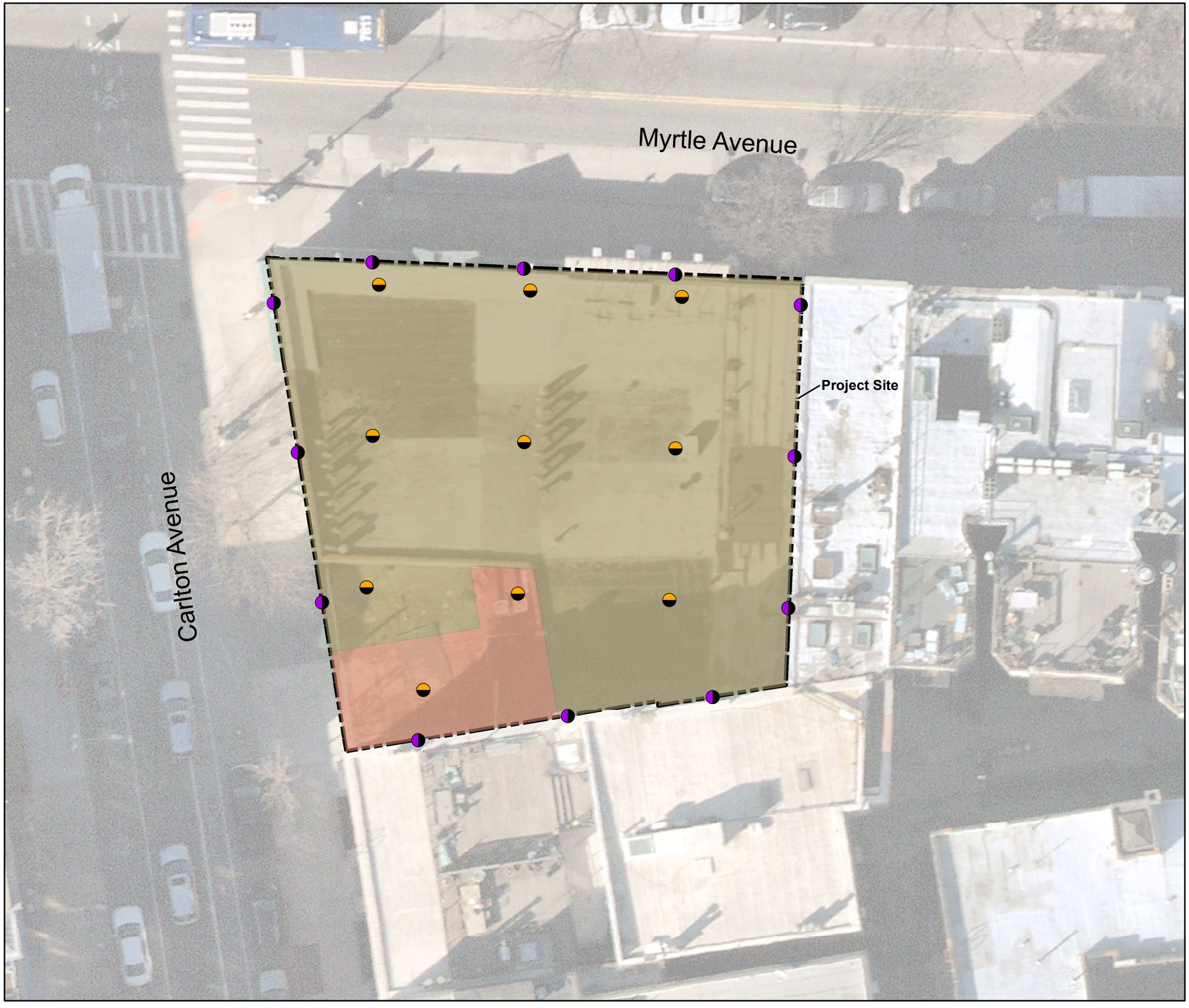
Remedial Action Work Plan
340 Myrtle Avenue
Brooklyn, New York
Block 2073, Lots 21 & 22
BCP Site No. C224340

TENEN ENVIRONMENTAL
Tenen Environmental, LLC
121 West 27th Street
Suite 702
New York, NY 10001
O: (646) 606-2332
F: (646) 606-2379

Drawn By	Checked By	Date	Scale
LM	AP	April 2024	As Noted

Drawing Title: **Excavation Extent (Alternative 1- Track 2 SCOs)**

Drawing No: **Figure 2**



Legend

- Sidewall End-Point Sample
- Bottom of Excavation End-Point Sample
- Remedial Excavation to 5.5 ft-bg (El. +44)
- Remedial Excavation to 15 ft-bg (El. +44)
- Site Boundary

Notes:
Sidewalk elevation is approx. El. +59
ft-bsg = feet below sidewalk grade and ft-bg = feet below grade
The existing building basement grade is approximately 9.5 ft-bsg.
Lot 22 was excavated to approximately 9.5 ft-bsg as part of previous redevelopment efforts.

Vertical Datum: NAVD88

Nearmap Aerial 3/12/2021

0 10 20 40 Feet

Site

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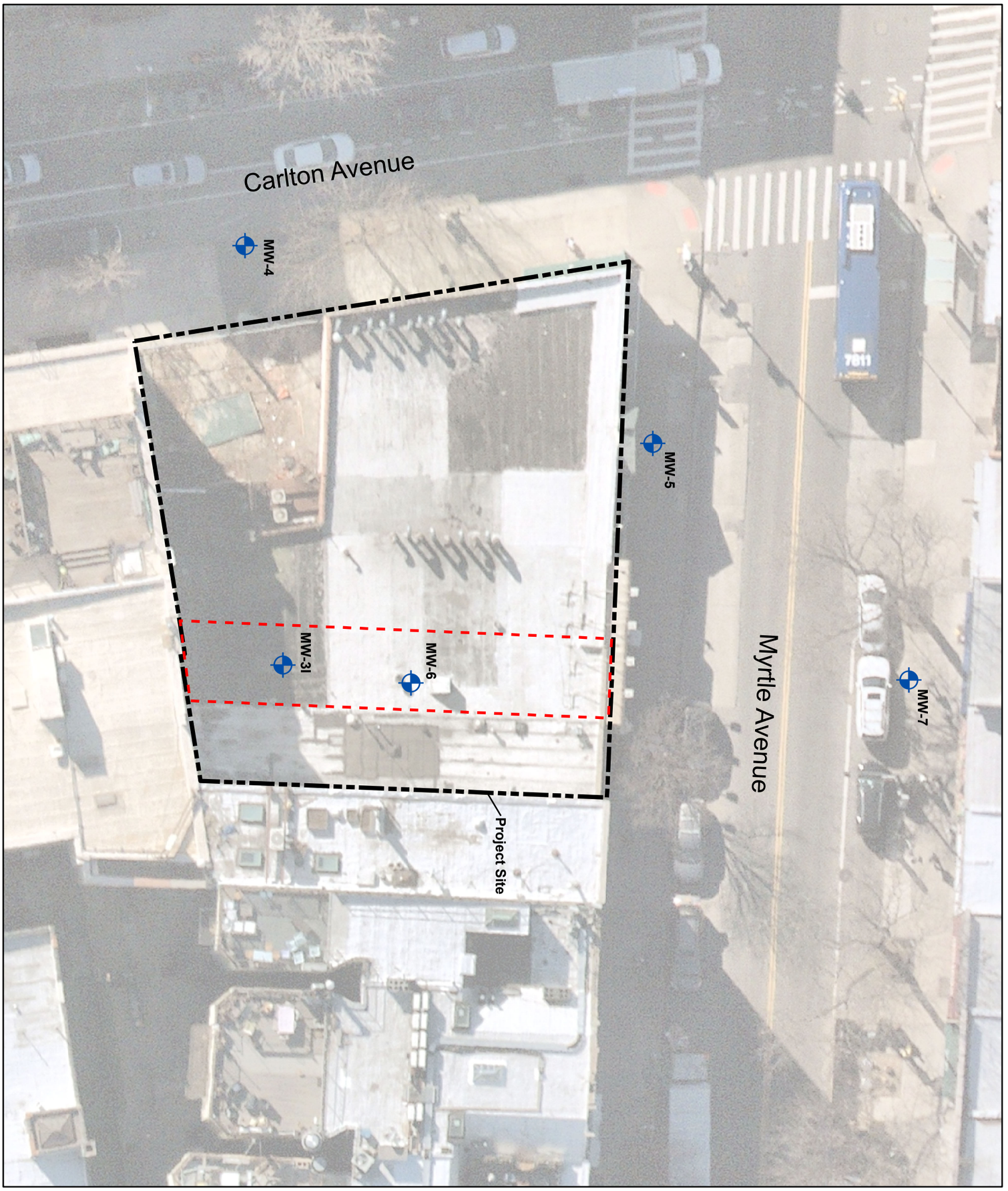
Drawn By	Checked By	Date	Scale
LM	AP	April 2024	As Noted

Drawing Title: **Documentation End-Point Sample Locations (Alternative 1 - Track 2 SCOs)**

Drawing No: **Figure 3**



Legend

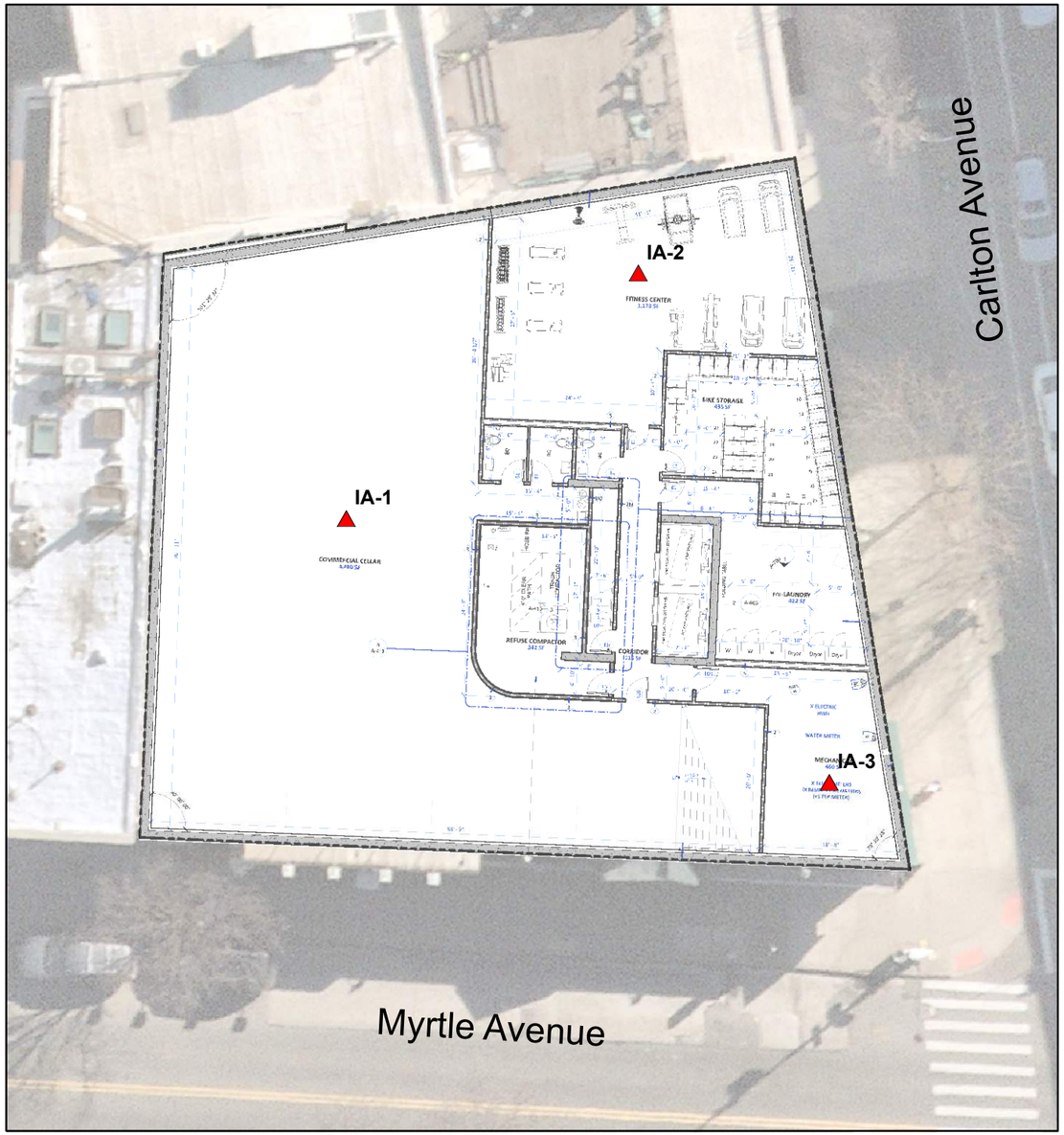
- MNA and Post-Remedial Groundwater Sample Locations
- Former Dry Cleaner
- Site Boundary

0 10 20 40 Feet

Nearmap Aerial 3/12/2021

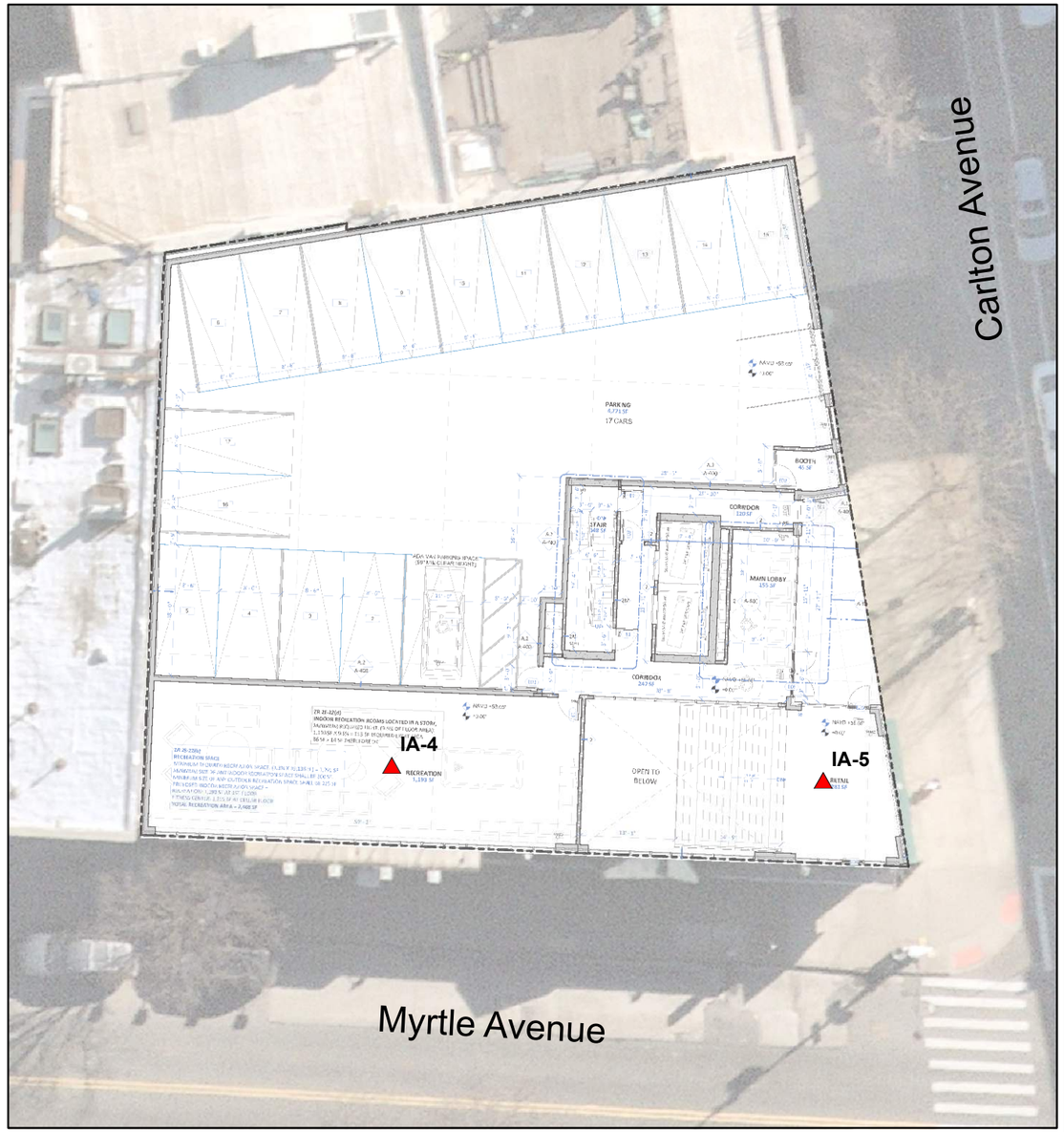
MNA = Monitored Natural Attenuation

Drawing Title: **MNA and Post-Remedial Groundwater Sample Locations**	Drawn By: LM	TENEN ENVIRONMENTAL Tenen Environmental, LLC 121 West 27th Street Suite 702 New York, NY 10001 O: (646) 606-2332 F: (646) 606-2379	Site: **Remedial Action Work Plan** **340 Myrtle Avenue** **Brooklyn, New York** **Block 2073, Lots 21 & 22** **BCP Site No. C224340**
	Checked By: AP		
Drawing No: **Figure 4**	Date: April 2024		
	Scale: As Noted		



Nearmap Aerial 3/12/2021

Cellar Plan



Nearmap Aerial 3/12/2021

First Floor Plan

Legend

▲ Post-Remedial Indoor Air Sample Location

0 10 20 40 Feet

Source: S. Wieder Architects PC, Cellar and First Floor Plans, 155 Carlton Avenue, Brooklyn, NY, A-100.00 & A-101.00, 5/12/23

Site
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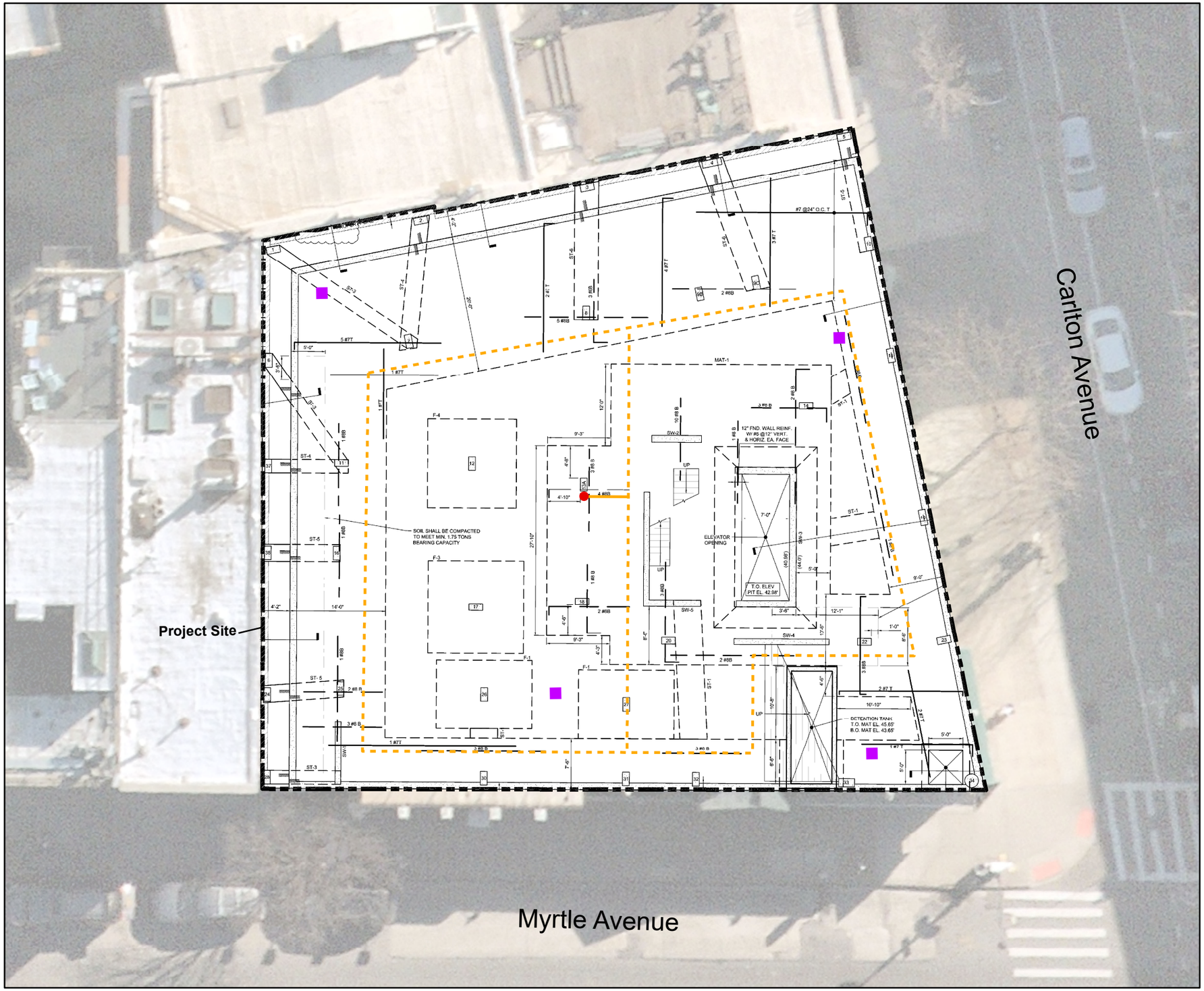
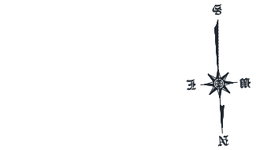
Drawn By	Checked By	Date	Scale
LM	AP	April 2024	As Noted

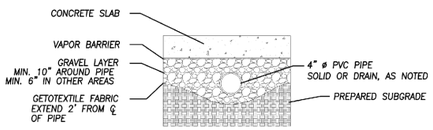
Drawing Title: **Post-Remedial Indoor Air Sample Locations**

Drawing No: **Figure 5**



Nearmap Aerial 3/12/2021
S. Wieder Architect PC, Proposed Mixed Use New Building, 340 Myrtle Ave, Brooklyn, NY, Foundation Plan, FO-101.00, 2/27/2024





Sub-Slab Depressurization Pipe – Through Slab – Side View
Not To Scale

Legend

- Riser CI
- Pressure Monitoring Point
- SSDS PVC Drain Pipe
- SSDS PVC Solid Pipe
- Site Boundary

0 15 30 Feet

Site

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Drawn By	Checked By	Date	Scale
LM	MC	April 2024	As Noted

Drawing Title: **Conceptual SSDS Layout - Sub-Grade Layout**

Drawing No: **Figure 6**