DECISION DOCUMENT

Hamilton Green
Brownfield Cleanup Program
White Plains, Westchester County
Site No. C360177
December 2024

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

DECLARATION STATEMENT - DECISION DOCUMENT

Hamilton Green
Brownfield Cleanup Program
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Site No. C360177
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Statement of Purpose and Basis

This document presents the remedy for the Hamilton Green 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 Hamilton Green site and the public's input to the proposed remedy presented by NYSDEC.

Description of Selected Remedy

The elements of the selected remedy, as shown in Figure 3, 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. Groundwater Monitoring

Monitoring will be required from up-gradient and down-gradient wells, as well as from within the excavation zone. Monitoring will be conducted for contaminants of concern, including volatile organic compounds, semi-volatile organic compounds, metals, and per- and polyfluoroalkyl substances.

3. Vapor Intrusion Evaluation

As part of the Conditional Track 1 remedy, a soil vapor intrusion evaluation will be completed for any future on-site buildings. The evaluation will include a provision for implementing actions recommended to address exposures related to soil vapor intrusion, as needed.

4. Conditional Remedial Elements:

Interim Remedial Measures (IRMs) were conducted at the site. Impacted soil was excavated to meet unrestricted soil cleanup objectives which meets the requirements for a Track 1 cleanup for soil. As it is yet to be determined whether the IRM influenced groundwater and soil vapor impacts, conditional remedial elements are required. Conditional remedial elements include a Site Management Plan (SMP) and Environmental Easement, along with groundwater monitoring, a provision to perform additional groundwater remediation if necessary, and a soil vapor intrusion evaluation with a provision to perform mitigation such as the installation of a sub-slab depressurization system if necessary. the event that Track 1 unrestricted use is not achieved for all media within five (5) years of the Certificate of Completion, the remedy will achieve a Track 2 residential cleanup.

A. Institutional Control

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 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 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 New York State Department of Health (NYSDOH) or Westchester County Department of Health; and
- Require compliance with the NYSDEC approved Site Management Plan.

B. Site Management Plan

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

1. 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 noted in item 4 above.

Engineering Controls: The groundwater monitoring well network noted in item 2 above.

This plan includes, but may not be limited to:

- Descriptions of the provisions of the environmental easement including any land use, and groundwater use restrictions;
- A provision for evaluation of the potential for soil vapor intrusion for any new buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
- 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.

2. a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:

- Monitoring for vapor intrusion for any buildings constructed on the site, as may be required by the Institutional Control Plan discussed above.
- Monitoring of groundwater to assess the performance and effectiveness of the remedy.
- A schedule of monitoring and frequency of submittals to NYSDEC.

3. an Operation and Maintenance (O&M) Plan to ensure continued operation, maintenance, inspection, and reporting of any mechanical or physical components of the

groundwater monitoring network. The plan includes, but is not limited to:

- Procedures for operating and maintaining the network; and
- Compliance inspection of the network 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.

December 27, 2025
Date

Sarah Saucier
Sarah Saucier, Director
Remedial Bureau C

DECISION DOCUMENT

Hamilton Green
White Plains, Westchester County
Site No. C360177
December 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 repository:

DECInfo Locator - Web Application
https://gisservices.dec.ny.gov/gis/dil/index.html?rs=C360177

White Plains Public Library
Attn: Brian Kenney
100 Martine Avenue
White Plains, NY 10601
Phone: 914-422-1400

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

Site Location:

The 1.94-acre site is located at 200 Hamilton Avenue, White Plains, Westchester County. The site is located on tax lot 125.67-5-1.2. The site is a vacant parcel, formerly the location of the White Plains Mall, located in a mixed-use commercial and residential neighborhood. Barker Avenue, a restaurant, and a hotel are located north of the site. A Brownfield Cleanup Program site (site no. C360221) abuts the east boundary of the site and has a multi-story mixed use building under construction. Hamilton Avenue and a New York Power Authority Building are located south of the site. Dr. Martin Luther King Jr. Boulevard and commercial properties, including a restaurant, are located west of the site. The site is located approximately 0.35 miles from the Bronx River.

Site Features:

The site is currently vacant. Construction of a planned multi-story mixed commercial and residential use building is currently underway.

Current Zoning and Land Use:

The site is located in a Transit Development District (TD-1), which allows for residential use above the first floor of a building and is currently being redeveloped and planned for mixed use as noted above. The surrounding properties include residential and commercial use.

Past Use and Investigation of the Site:

The site was developed with several small buildings, including dwellings and garages, prior to 1894. Between 1892 and 1902, a tributary to the Bronx River was visible on maps of the site, suggesting the area may have been elevated from its original topographic level. By 1930 multiple businesses operated on-site, including a gypsum partitions business, an electric motors building, a paint store, a plumbing shop and a candy manufacturer. The candy manufacturer, along with a gasoline station located in the south-eastern portion of the site, are estimated to have been on-site from the 1930’s through the 1970’s. By 1987, all on-site buildings were demolished and replaced by the White Plains Mall. A dry-cleaning facility is listed as a White Plains Mall occupant in 2010 and 2011. Spill Number 1706297 was reported September 28, 2017, based on evidence of petroleum contamination in soil and groundwater.

Site Geology and Hydrogeology:

Based on the United States Geological Survey and Westchester County Geographic Information System, the site lies at elevations ranging from 185 to 200 feet above the National Geodetic Vertical Datum of 1983. Regional topography slopes downward to the west. Groundwaters flows in the southwesterly direction. Groundwater depths range from approximately 9 to 24 feet below grade (ft bg). Deeper groundwater depths were found in the eastern portion of the site.

The soils at the site are characterized as Uf (Urban Land) which is covered by pavement, concrete, buildings, and other structures. A fill stratum is encountered from grade to depths of 12 ft bg. The fill layer consists of sand, silt, gravel, organics (wood/grass), brick, asphalt, and rubber. A layer of clay and silt were encountered beneath the fill between 7 and 13 ft bg. Sand is present in the layer of clay and silt, but content varies across the site. Between approximately 13 and 25.5 ft bg, a sand layer was encountered. The sand stratum consisted of brown, medium to coarse sand, little to some silt, and trace amounts of gravel. During geophysical investigations of the site, bedrock was encountered from approximately 19 to 42 ft bg. The depth of bedrock corresponded to the approximate elevations of the site.

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 residential use (which allows for restricted-residential use, 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 Volunteer. The Applicant does not have an obligation to address off-site contamination. Nevertheless, 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:

- soil
- groundwater
- soil 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:

ethylbenzene
indeno(1,2,3-cd)pyrene
benzo(a)anthracene
chrysene
benzo(a)pyrene
benzo(b)fluoranthene
dibenz(a,h)anthracene
DDD
DDE
DDT
arsenic
barium
chromium
lead
mercury
methyl tert butyl ether
selenium
perfluorooctanesulfonic acid
benzo(k)fluoranthene
beryllium
cadmium
thallium
perfluorooctanoic acid
trichloroethene
tetrachloroethene
1,1,1-Trichloroethane
methylene chloride
heptane
hexane

toluene
1,3,5-trimethylbenzene
1,2,4-trichlorobenzene
cyclohexane
naphthalene
benzene
xylene (mixed)

The contaminant(s) of concern exceed the applicable SCGs for:

- soil
- groundwater

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 has been completed at this site:

Excavation and Off-site Disposal of Soil Exceeding Unrestricted Use Soil Cleanup Objectives, Underground Storage Tank Removal and Off-site Disposal, and Groundwater Extraction and Treatment

Upon acceptance into the BCP, and prior to the IRM, the primary contaminants of concern in soil were volatile organic compounds (VOCs), semi-VOCs (SVOCs), metals, pesticides, and per- and polyfluoroalkyl substances (PFAS). Compounds that exceeded their unrestricted use soil cleanup objectives (USCOs) included (maximum concentrations given): ethylbenzene (1.1 parts per million [ppm] compared to the USCO of 1 ppm), benzo(a)anthracene (2.8 ppm compared to the USCO of 1 ppm), benzo(a)pyrene (2.4 ppm compared to the USCO of 1 ppm), benzo(b)fluoranthene (3.3 ppm compared to the USCO of 1 ppm), benzo(k)fluoranthene (0.85 ppm compared to the USCO of 0.8 ppm), chrysene (2.2 ppm compared to the USCO of 1 ppm), dibenz(a,h)anthracene (0.41 ppm compared to the USCO of 0.33 ppm), indeno(1,2,3-c,d)pyrene (1.8 ppm compared to the USCO of 0.5 ppm), arsenic (14.7 ppm compared to the USCO of 13 ppm), barium (440 ppm compared to the USCO of 350 ppm), chromium (35.6 ppm compared to the USCO of 30 ppm), lead (546 ppm compared to the USCO of 63 ppm), mercury (0.59 ppm compared to the USCO of 0.18 ppm), 4,4-DDD (0.0179 ppm compared to the USCO of 0.0033 ppm), 4,4-DDE (0.0108 ppm compared to 0.0033 ppm), 4,4-DDT (0.022 ppm compared to the USCO of 0.0033 ppm), and perfluorooctanesulfonic acid (PFOS) (26.4 parts per billion [ppb] compared to the USCO of 0.88 ppb).

Remedial investigation groundwater sampling indicated impacts of VOCs, SVOCs, metals (filtered), and PFAS in exceedance of New York Codes, Rules and Regulations Title 6 (6 NYCRR) and guidance documents found in the Division of Water Technical and Operational Guidance Series (TOGs) Standards, Criteria and Guidance Values (SCGs), including, but not limited to: methyl tertiary butyl ether (740 ppb compared to the SCG of 10 ppb) likely coming onto the site from upgradient petroleum spill 9707887, benzo(a)anthracene (0.04 ppb compared to the SCG of 0.002 ppb), benzo(a)pyrene (0.05 ppb compared to the SCG of non-detect), benzo(b)fluoranthene (0.07 ppb compared to the SCG of 0.002 ppb), benzo(k)fluoranthene (0.04 ppb compared to the SCG of 0.002 ppb), chrysene (0.07 ppb compared to the SCG of 0.002 ppb), indeno(1,2,3-cd)pyrene (0.06 ppb compared to the SCG of 0.002 ppb), arsenic (54.88 ppb compared to the SCG of 25 ppb), barium (24,510 ppb compared to the SCG of 1,000 ppb), beryllium (19.52 ppb compared to the SCG of 3 ppb), chromium (468.6 ppb compared to the SCG of 50 ppb), lead (1,162 ppb compared to the SCG of 50 ppb), mercury

(1.97 ppb compared to the SCG of 0.7 ppb), selenium (126 ppb compared to the SCG of 10 ppb), thallium (5.01 ppb compared to the SCG of 0.5 ppb), PFOS (78.5 part per trillion [ppt] compared to the SCG of 2.7 ppt) and perfluorooctanoic acid (PFOA) (57.8 ppt compared to the SCG of 6.7 ppt).

The IRM, performed between January 2023 and October 2024, included removal of all on-site soil exceeding USCOs to depths up to 34 feet below ground surface (ft bgs). The excavated material was properly disposed off-site. A total of 171,617 tons of contaminated soil was removed from the site. Post-excavation confirmatory soil samples were collected from the bottom of the excavation to demonstrate that the IRM achieved USCOs, as documented in the December 2024 Construction Completion Report (CCR). A figure indicating the site-wide IRM excavation is attached as Figure 2.

In addition, two (2) underground storage tanks (USTs) were identified and removed from the site as part of the IRM. The tanks ranged from 550 to 650 gallons capacity, both identified approximately six (6) feet below grade. These tanks were not identified during previous ground penetrating radar activities. Based upon their relative locations to historical dwellings, the presumed use for on-site consumptive use of No. 2 heating oil, and tank capacities of less than 1,000 gallons, these tanks were determined to be unregulated. Therefore, no petroleum bulk storage registration for these USTs was required. As the excavation extended well beyond the bottom depth of both tanks, end-point confirmatory soil sampling directly below the bottom of the tanks was not required. End-point confirmation sample RA-42 was collected from the bottom of the excavation cell UST-1 was identified in and analytical data confirmed the absence of impacts to soil. The excavation in the area of UST-2 extended to bedrock, therefore no end-point soil sample was collected. The tanks were properly cleaned and disposed of off-site.

During IRM excavation, groundwater was removed from the excavation and treated prior to permitted off-site discharge. A series of pumps dewatered the excavation, flowing to a settling/holding tank before processing through two in-line bag filters and two reactivated carbon vessels. Treated water was discharged to a Westchester County sanitary sewer under permit 487-22. Confirmation samples of treated water were collected as prescribed, the limits of which were set forth by the Westchester Department of Public Works, the Westchester County Department of Health, and the NYSDEC. Approximately 3,088,800 gallons of contaminated groundwater was treated and discharged from May 13, 2024 through October 3, 2024.

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.

Nature and extent of contamination: Prior to the IRM, the primary contaminants of concern included VOCs, SVOCs, metals, and PFAS in site soils and groundwater, and VOCs in soil vapor. Impacts were identified in soil across the site to depths up to 30 ft bgs.

Soil: Following completion of the on-site IRM, and as determined by post-excavation sampling, all soil above USCOs have been removed and disposed of off-site. Results of end-point confirmation soil samples indicated further excavation was required in a limited number of cells. Therefore, the excavation extended to a maximum depth of 34 ft bgs in order to remove all soil

impacted above USCOs. Bedrock was encountered at several locations. A total of approximately 172,000 tons of contaminated soil was removed. The data does not indicate site-related soil impacts have migrated off-site.

Groundwater: Impacted groundwater, as described above in Section 6.2, has been pumped, treated, and discharged throughout the IRM. Approximately 3,090,000 gallons of groundwater has been treated from May through October 2024. Groundwater sampling post IRM has yet to be conducted to confirm the results of the IRM. Data collected to date does not indicate site-related groundwater impacts have migrated off-site.

Soil Vapor: Prior to the IRM, soil vapor samples were collected. No indoor air samples were collected since the on-site building was previously demolished. Compounds listed in the NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York Decision Matrices and detected in soil vapor on-site include (maximum concentrations given): benzene (22.1 micrograms per meter cubed [$\mu g/m^3$]), cyclohexane (21.7 $\mu g/m^3$), ethylbenzene (316 $\mu g/m^3$), heptane (23.3 $\mu g/m^3$), hexane (34.6 $\mu g/m^3$), methylene chloride (11.8 $\mu g/m^3$), toluene (63.3 $\mu g/m^3$), tetrachloroethene (50.1 $\mu g/m^3$), 1,1,1-trichloroethane (8.29 $\mu g/m^3$), trichloroethene (69 $\mu g/m^3$), 1,2,4-trimethylbenzene (9.68 $\mu g/m^3$), 1,3,5-trimethylbenzene (3.89 $\mu g/m^3$), 2,2,4-trimethylpentane (7.43 $\mu g/m^3$), and xylenes (204.1 $\mu g/m^3$). Based on the soil vapor results, the extent of soil removal at the site and the intended use, a post remediation soil vapor intrusion evaluation is required. Data collected to date does not indicate site-related soil vapor impacts are likely to migrate off-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.*

Measures are in place to control the potential for coming in contact with groundwater contamination remaining on the site. 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 from a different source not affected by this contamination. Volatile organic compounds in soil vapor (air spaces within the soil), may move into overlying 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. Because there is no on-site building, inhalation of site contaminants in indoor air due to soil vapor intrusion does not represent a current concern but soil vapor intrusion should be evaluated should new construction occur. In addition, sampling indicates soil vapor intrusion 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

- Restore ground water aquifer to pre-disposal/pre-release conditions, to the extent practicable.
- Remove the source of ground 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 Remedial Action Work Plan (RAWP). 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 Conditional Track 1 remedy. The selected remedy is referred to as the Post IRM Groundwater Monitoring and Soil Vapor Intrusion Evaluation remedy. The elements of the selected remedy, as shown in Figure 3, 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. Groundwater Monitoring

Monitoring will be required from up-gradient and down-gradient wells, as well as monitoring wells from within the area of the IRM. Monitoring will be conducted for contaminants of concern, including VOCs, SVOCs, metals, and PFAS.

3. Vapor Intrusion Evaluation

As part of the Conditional Track 1 remedy, a soil vapor intrusion evaluation will be completed for any future on-site buildings. The evaluation will include a provision for implementing actions recommended to address exposures related to soil vapor intrusion, as needed.

4. Conditional Remedial Elements:

Interim Remedial Measures (IRMs) were conducted at the site. Impacted soil was excavated to meet unrestricted soil cleanup objectives which meets the requirements for a Track 1 cleanup for soil. As it is yet to be determined whether the IRM influenced groundwater and soil vapor impacts, conditional remedial elements are required. Conditional remedial elements are to include a Site Management Plan (SMP) and Environmental Easement, along with groundwater monitoring, a provision to perform additional groundwater remediation if necessary, and a soil vapor intrusion evaluation with a provision to perform mitigation such as the installation of a sub-slab depressurization system if necessary. In the event that Track 1 unrestricted use is not achieved for all media within five (5) years of the Certificate of Completion, the remedy will achieve a Track 2 residential cleanup.

A. Institutional Control

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 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 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 New York State Department of Health (NYSDOH) or Westchester County Department of Health; and
- Require compliance with the NYSDEC approved Site Management Plan.

B. Site Management Plan

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

1. 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 noted in item 4 above.

Engineering Controls: The groundwater monitoring well network noted in item 2 above.

This plan includes, but may not be limited to:

- Descriptions of the provisions of the environmental easement including any land use, and groundwater use restrictions;
- A provision for evaluation of the potential for soil vapor intrusion for any new buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
- 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.

2. a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:

- Monitoring for vapor intrusion for any buildings constructed on the site, as may be required by the Institutional Control Plan discussed above.
- Monitoring of groundwater to assess the performance and effectiveness of the remedy. A schedule of monitoring and frequency of submittals to NYSDEC.

3. an Operation and Maintenance (O&M) Plan to ensure continued operation,

maintenance, inspection, and reporting of any mechanical or physical components of the groundwater monitoring network. The plan includes, but is not limited to:

- Procedures for operating and maintaining the network; and
- Compliance inspection of the network to ensure proper O&M as well as providing the data for any necessary reporting.

QUADRANGLE LOCATION

NEW YORK STATE | Department of Environmental Conservation

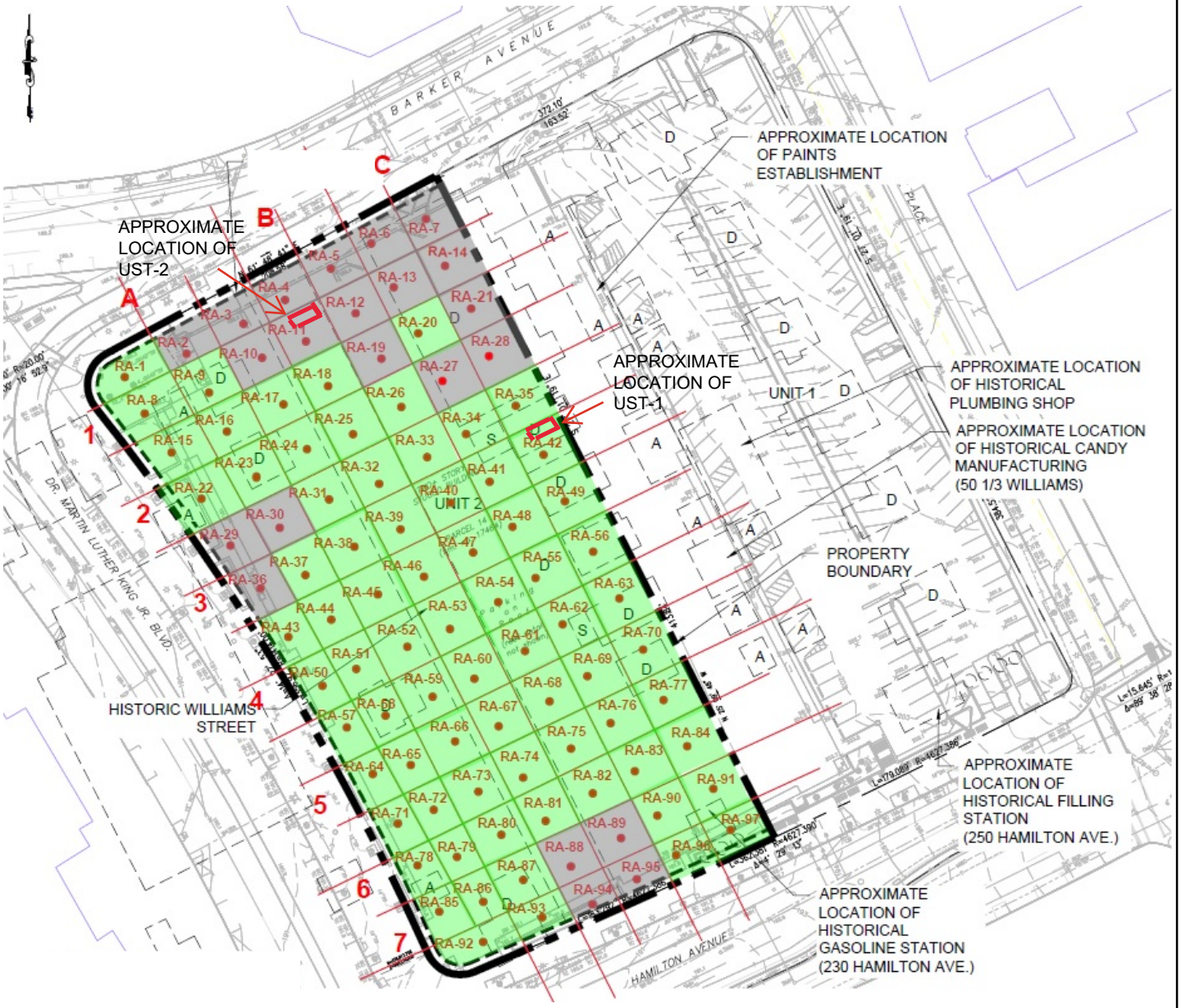
HAMILTON GREEN
WHITE PLAINS, NEW YORK

SITE LOCATION

DATE
DECEMBER 2024

SITE NO.
C360177

FIGURE
1



SITE BOUNDARY

EXCAVATION MET UNRESTRICTED SOIL CLEANUP OBJECTIVES (TO DEPTHS UP TO 34 FEET BELOW GRADE)

EXCAVATION TO BEDROCK (AS SHALLOW AS 19+ FEET BELOW GRADE)

NEW YORK STATE Department of Environmental Conservation

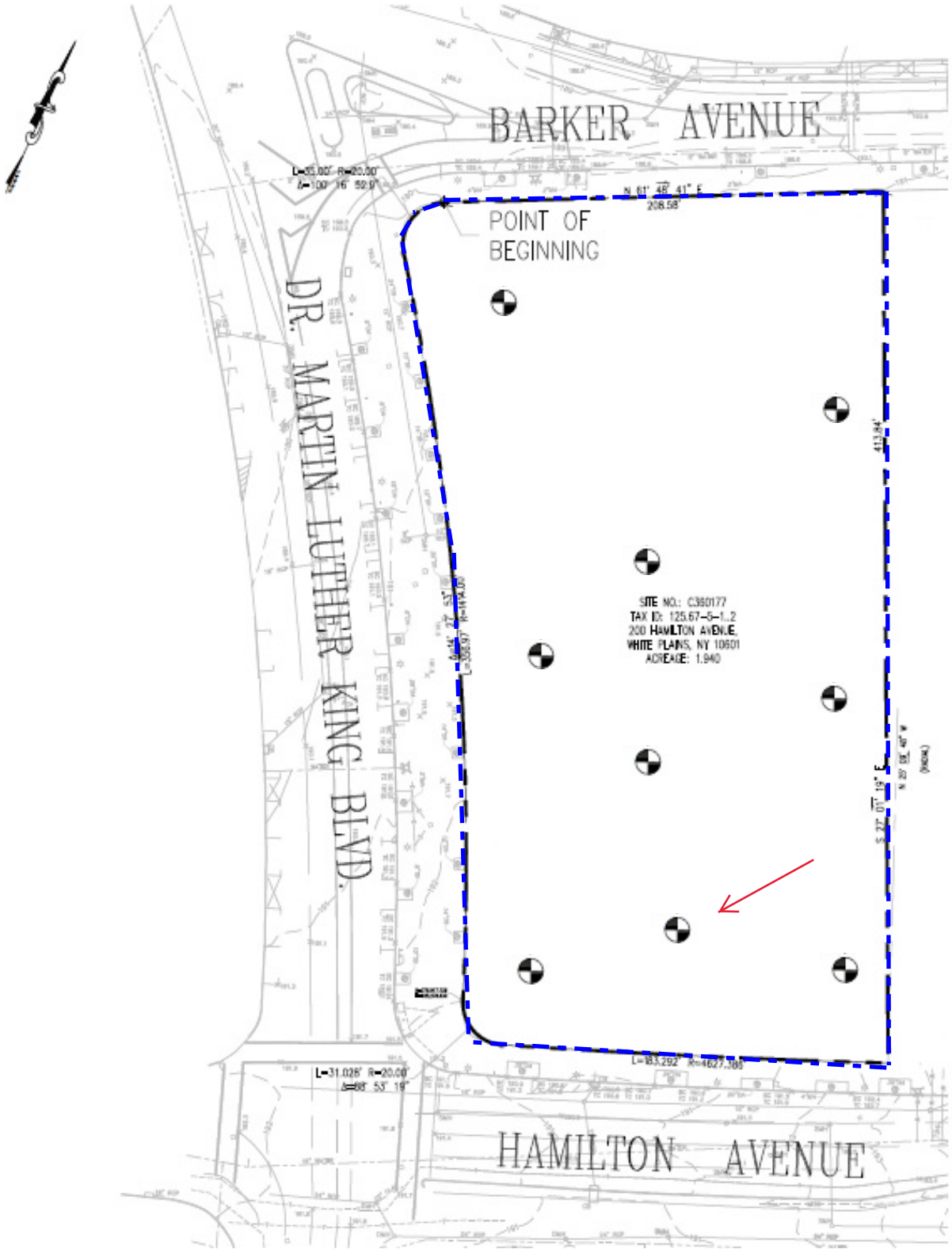
HAMILTON GREEN
WHITE PLAINS, NEW YORK

SITE PLAN & INTERIM REMEDIAL MEASURE

DATE
DECEMBER 2024

SITE NO.
C360177

FIGURE
2



LEGEND:
Brownfield Cleanup Site/Environmental Easement Area

Proposed Monitoring Well Network

Inferred Groundwater Flow

NEW YORK STATE Department of Environmental Conservation

HAMILTON GREEN
WHITE PLAINS, NEW YORK

CONDITIONAL TRACK 1/EASEMENT AREA

DATE
DECEMBER 2024

SITE NO.
C360177

FIGURE
3