DECISION DOCUMENT

Concourse Village West Apartments - North
Brownfield Cleanup Program
Bronx, Bronx County
Site No. C203091
October 2018

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

DECLARATION STATEMENT - DECISION DOCUMENT

Concourse Village West Apartments - North
Brownfield Cleanup Program
Bronx, Bronx County
Site No. C203091
October 2018

Statement of Purpose and Basis

This document presents the remedy for the Concourse Village West Apartments - North 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 (the Department) for the Concourse Village West Apartments - North site and the public's input to the proposed remedy presented by the Department.

Description of Selected Remedy

A significant portion of the remedial work was completed outside of a Department-approved Remedial Action Work Plan (RAWP) or Department-issued Decision Document (DD). The remedial work completed outside of the approved RAWP/DD will be documented as such in the FER

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 will include, at a minimum, a 20-mil vapor barrier/waterproofing membrane on the foundation to improve energy efficiency as an element of construction.

2. Excavation

The existing on-site building(s) will be demolished and materials which cannot be beneficially reused on site will be taken off-site for proper disposal to implement the remedy. Excavation and off-site disposal of any underground storage tanks (USTs), fuel dispensers, underground piping or other structures encountered and all on-site soils which exceed restricted-residential soil cleanup objectives (RRSCOs), as defined by 6 NYCRR Part 375-6.8 in the upper 20 feet will be performed. Approximately 11,600 cubic yards of contaminated soil will be removed to a depth of 15 feet across the site for remedial (and development) purposes. 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, as necessary. If, during excavation, petroleum-related source material is identified that cannot be removed, appropriate treatment will be designed and implemented during the remedial action phase.

3. Groundwater Investigation and Remediation (if required)

If a source of petroleum groundwater contamination is identified on-Site, or if an on-site source cannot be ruled out, during implementation of the RAWP or the proposed Supplemental Investigation Work Plan (SIWP), as potentially identified by the 2017 RI, in-situ groundwater treatment will be implemented during the remedial action phase to treat petroleum-related contaminants in groundwater. A treatment agent such as a chemical oxidant or an enhanced biodegradation product, will be applied/injected into the subsurface to break down the contaminants in Site groundwater. The treatment agent, method, depth of application/injection, and areal extent of the treatment will be determined during the remedial design. Groundwater monitoring will be performed to assess the performance and effectiveness of the overall remedy.

Engineering and Institutional Controls

Imposition of an institutional control in the form of an environmental easement and a Site Management Plan, as described below, will be required. The remedy will achieve a Track 2, restricted residential cleanup and will include an environmental easement, and site management plan as described below. If soil greater than 2 feet, bgs, but less than 15 feet bgs does not meet the restricted residential SCOs, as applicable, a site cover (see item 4 below) will be required, resulting in a Track 4 cleanup.

4. Cover System (Contingent Remedial Element)

A site cover will be required to allow for restricted residential use of the site in areas where the

upper two feet of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). 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.

5. 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 the Department 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 NYCDOH; and
- require compliance with the Department 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 Paragraph 5 above.
Engineering Controls: In-situ groundwater treatment discussed in Paragraph 3 above, and if necessary, a cover system discussed in Paragraph 4 (contingent remedial element) above.
This plan includes, but may not be limited to:

o an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
o descriptions of the provisions of the environmental easement including any land use, and groundwater use restrictions;
o a provision for evaluation of the potential for soil vapor intrusion for any buildings on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
o a provision that should a building foundation or building slab be removed in the future, a cover system consistent with that described in Paragraph 4 above will be placed in any areas where the upper two feet of exposed surface soil exceed the applicable soil cleanup objectives (SCOs);
o provisions for the management and inspection of the identified engineering controls;

o maintaining site access controls and Department notification; and
o 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:
o monitoring of groundwater to assess the performance and effectiveness of the remedy;
o a schedule of monitoring and frequency of submittals to the Department;
o 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, optimization, monitoring, inspection, and reporting of any mechanical, physical or chemical components of the remedy. The plan includes, but is not limited to:
o procedures for operating and maintaining the remedy, including procedures for additional groundwater treatment as necessary;
o compliance monitoring/inspection of treatment systems (if any) to ensure proper O&M as well as providing the data for any necessary permit or permit equivalent or other required reporting;
o maintaining site access controls and Department notification; and
o providing the Department 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 Department guidance, as appropriate. The remedy is protective of public health and the environment.

October 17, 2018
Date

Gerard Burke, Director
Remedial Bureau B

DECISION DOCUMENT

Concourse Village West Apartments - North
Bronx, Bronx County
Site No. C203091
October 2018

SECTION 1: SUMMARY AND PURPOSE

The New York State Department of Environmental Conservation (the Department), 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, the redevelopment or reuse of which may be complicated by the presence or potential presence of a contaminant.

The Department 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

The Department 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 the Department 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:

New York Public Library - Melrose Branch
910 Morris Avenue
Bronx, NY 10451
Phone: 718-588-0110

Bronx Community Board 4
Attn: Kathleen Saunders
1650 Selwyn Avenue
Suite 11A
Bronx, NY 10457

Phone: 718-299-0800

Receive Site Citizen Participation Information By Email

Please note that the Department'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, Voluntary 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 180 East 156th Street (Block 2458, Lot 35), in a commercial and residential area of the Bronx.

Site Features:
The subject property consists of a 15,597 square-foot rectangularly shaped parcel. A 2-story masonry and wood framed commercial building is located on the northwest corner of the site. The first floor of the building contains an operating five bay auto service repair garage. The second floor contains an operating retail coin operated laundromat. A small, wood framed parking attendant's kiosk is located just to the south of the building, which is occupied periodically throughout the day. The remainder of the site is occupied by a paved parking lot with aboveground, steel frame auto lifts located along the eastern and western boundaries of the site.

Current Zoning and Land Use:
The current zoning designation of the site is C8-3 (commercial and industrial uses) and current uses, as noted above, include an auto service repair garage, retail coin operated laundromat and an attendant parking lot. Surrounding property usage is primarily commercial and residential. To the north of the site is an indoor parking garage and residential apartment buildings. Adjoining the property to the east is a KIPP Academy Elementary School; adjoining to the south is Bronx Live Poultry Corporation and across the Grand Concourse to the west is Franz Sigel Park, a NYC Municipal Park.

Past Uses of the Site:
This site was occupied by two small wood frame buildings in 1891, use unknown, and an undeveloped lot from at least 1908 to 1950 at which time the existing building was constructed. Identified former uses since 1950 include a gasoline filling station (1951 to late 1960s), auto repair and auto body shops (1950 to 1990s), automobile parking, office uses, retail store, and a retail coin operated Laundromat.

Site Geology and Hydrogeology:
Subsurface conditions consist of several feet of historic fill soils, underlain by glacial outwash sand deposits; varved glacial lake deposits consisting predominately of silt and low plasticity clay; and bedrock. The fill typically consists of sand with varying amounts of ash, cinders and glass. Silts, clays and underlying clays consisted of predominantly fine grained varved glacial lake deposits below the fill layer. Bedrock is estimated be approximately 80 ft. below ground surface (bgs). No evidence of perched water was observed during the Remedial Investigation (RI). Saturated soil indicative of the regional groundwater table was observed at approximately 30 32 ft. bgs. During the RI groundwater was reported to flow to the south; during the Supplemental RI, groundwater flow was reported to flow to the southeast. Based upon regional topography, groundwater is anticipated to flow in a south/southeasterly direction. The Harlem River is located approximately 0.4 miles west of the site.

A site location map is attached as Figure 1.

SECTION 4: LAND USE AND PHYSICAL SETTING

The Department 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, alternatives (or an alternative) that restrict(s) 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) were/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(s) under the Brownfield Cleanup Agreement is a/are Volunteer(s). The Applicant(s) does/do not have an obligation to address off-site contamination. However, the Department 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
- 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. The Department 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
xylene (mixed)
barium
copper
lead
selenium
tetrachloroethene (PCE)
ethylbenzene
1,2,4-TMB
1,3,5-trimethylbenzene
chrysene

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), pesticides and metals. Soil vapor was analyzed for VOCs. Based upon investigations conducted to date, the primary contaminants of concern for the Site are petroleum-related VOCs, and metals and polycyclic aromatic hydrocarbons (PAHs) typical of historic fill.

Soil - PAHs and/or metals were found at all depths sampled across the Site (0-16 feet below ground surface [bgs]) exceeding restricted residential use soil cleanup objectives (RRSCOs), with the exception of the west corner of the site, which only had RRSCO exceedances identified to 2 feet bgs, but had historic fill down to 8 feet bgs in that corner. Several PAHs were identified, including, but not limited to: chrysene at 18.3 ppm (RRSCO is 3.9 ppm) and benzo(a)anthracene up to 27.1 ppm (RRSCO is 1 ppm) with other PAHs detected at less than 1 ppm up to approximately 6.5 ppm. Metal exceedances include, but are not limited to, barium up to 2,040 ppm (RRSCO is 400 ppm), copper up to 1,460 ppm (RRSCO is 270 ppm), and lead up to 2,790 ppm (RRSCO is 400 ppm). There were no VOCs, PCBs, or pesticide exceedances of RRSCOs. Data does not indicate off-site impacts in soil related to this site.

Groundwater - Petroleum-related VOCs were detected above groundwater standards in the North half of the Site, including, but not limited to: 1,2,4-trimethylbenzene at 180 parts per billion (ppb), 1,3,5-trimethylbenzene up to 35 ppb, ethyl benzene up to 130 ppb, and total xylenes up to 210 ppb (standard is 5 ppb for all VOCs.). Some PAHs exceeded groundwater standards across all but the southernmost portion of the Site, including, but not limited to: benzo(a)anthracene at 0.1 ppb, chrysene at 0.1 ppb (the standard for both PAHs is 0.002 ppb). Dissolved naturally-occurring metals (manganese, magnesium, sodium) exceeded groundwater standards across the entire Site; dissolved selenium was also detected in the southern half of the site at concentrations up to 30 ppb (standard is 10 ppb). There were no detections of PCBs or pesticides in groundwater. Based on data collected during the supplemental RI, petroleum-contaminated groundwater extends off-site under the adjacent sidewalk, and will be addressed under the Spills Program.

Soil Vapor - Petroleum-related VOCs were detected in soil vapor across the Site at concentrations typically less than 35 micrograms per cubic meter (ug/m^3). Tetrachloroethylene (PCE) was the only chlorinated VOC detected at maximum of 40 ug/m^3. Data does not indicate any off-site impacts in soil vapor related to this site.

Although none were encountered during the remedial investigation underground storage tanks (USTs), fuel dispensers, underground piping or other structures associated with a source of contamination may exist.

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.*

People may contact contaminants in soil if they dig below the surface. People are not drinking the contaminated groundwater because the area 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. The potential exists for the inhalation of site contaminants due to soil vapor intrusion for on-site buildings. 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

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 use with generic soil cleanup objectives remedy.

The selected remedy is referred to as the Excavation and Groundwater Treatment remedy.

A significant portion of the remedial work was completed outside of a Department-approved Remedial Action Work Plan (RAWP) or Department-issued Decision Document (DD). The remedial work completed outside of the approved RAWP/DD will be documented as such in the FER.

The elements of the selected remedy, as shown in Figure 2, 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; and
- 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 will include, at a minimum, a 20-mil vapor barrier/waterproofing membrane on the foundation to improve energy efficiency as an element of construction

2. Excavation

The existing on-site building(s) will be demolished and materials which cannot be beneficially reused on site will be taken off-site for proper disposal to implement the remedy. Excavation and off-site disposal of any underground storage tanks (USTs), fuel dispensers, underground piping or other structures encountered and all on-site soils which exceed restricted-residential soil cleanup objectives (RRSCOs), as defined by 6 NYCRR Part 375-6.8 in the upper 20 feet will be performed. Approximately 11,600 cubic yards of contaminated soil will be removed to a depth of 15 feet across the site for remedial (and development) purposes. 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, as necessary. If, during excavation, petroleum-related source material is identified that cannot be removed, appropriate treatment will be designed and implemented during the remedial action phase.

3. Groundwater Investigation and Remediation (if required)

If a source of petroleum groundwater contamination is identified on-Site, or if an on-site source cannot be ruled out, during implementation of the RAWP or the proposed Supplemental Investigation Work Plan (SIWP), as potentially identified by the 2017 RI, in-situ groundwater treatment will be implemented during the remedial action phase to treat petroleum-related contaminants in groundwater. A treatment agent such as a chemical oxidant or an enhanced biodegradation product, will be applied/injected into the subsurface to break down the contaminants in Site groundwater. The treatment agent, method, depth of application/injection, and areal extent of the treatment will be determined during the remedial design. Groundwater monitoring will be performed to assess the performance and effectiveness of the overall remedy.

Engineering and Institutional Controls

Imposition of an institutional control in the form of an environmental easement and a Site Management Plan, as described below, will be required. The remedy will achieve a Track 2, restricted residential cleanup and will include an environmental easement, and site management plan as described below. If soil greater than 2 feet, bgs, but less than 15 feet bgs does not meet the restricted residential SCOs, as applicable, a site cover (see item 4 below) will be required, resulting in a Track 4 cleanup.

4. Cover System (Contingent Remedial Element)

A site cover will be required to allow for restricted residential use of the site in areas where the upper two feet of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). 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.

5. 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 the Department 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 NYCDOH; and
- require compliance with the Department 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 Paragraph 5 above.
Engineering Controls: In-situ groundwater treatment discussed in Paragraph 3 above, and if necessary, a cover system discussed in Paragraph 4 (contingent remedial element) above.
This plan includes, but may not be limited to:

o an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
o descriptions of the provisions of the environmental easement including any land use, and groundwater use restrictions;
o a provision for evaluation of the potential for soil vapor intrusion for any buildings on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;

o a provision that should a building foundation or building slab be removed in the future, a cover system consistent with that described in Paragraph 4 above will be placed in any areas where the upper two feet of exposed surface soil exceed the applicable soil cleanup objectives (SCOs);
o provisions for the management and inspection of the identified engineering controls;
o maintaining site access controls and Department notification; and
o 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:
o monitoring of groundwater to assess the performance and effectiveness of the remedy;
o a schedule of monitoring and frequency of submittals to the Department;
o 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, optimization, monitoring, inspection, and reporting of any mechanical, physical or chemical components of the remedy. The plan includes, but is not limited to:
o procedures for operating and maintaining the remedy, including procedures for additional groundwater treatment as necessary;
o compliance monitoring/inspection of treatment systems (if any) to ensure proper O&M as well as providing the data for any necessary permit or permit equivalent or other required reporting;
o maintaining site access controls and Department notification; and
o providing the Department access to the site and O&M records.

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0 75 150

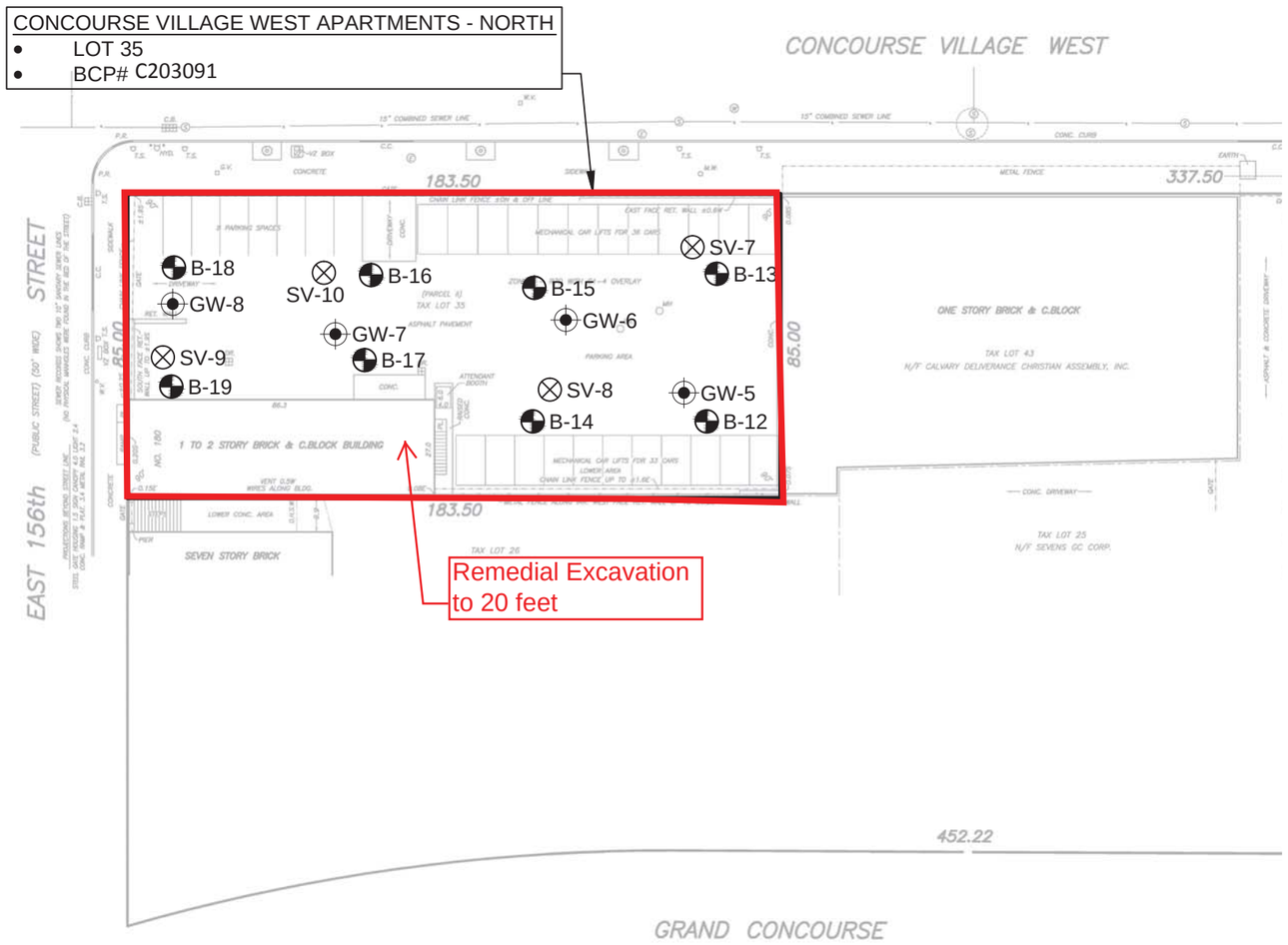
Feet

Site Location Map

Concourse Village West - North
New York City, Bronx County
Site No. C203091

DEPARTMENT OF ENVIRONMENTAL CONSERVATION • NEW YORK STATE •

FIGURE 2



Notes:

1. Excavation boundaries are based on findings in the Remedial Investigation Report (September 2017) and Supplemental Remedial Investigation Report (November 2017) performed by GEI.
2. In-situ groundwater treatment will be presented in a separate remedial design document.
3. The property boundary is coterminous with Site boundary.

LEGEND

- SOIL
- SOIL VAPOR
- GROUNDWATER

180 EAST 156TH STREET
BRONX, NEW YORK

CONCOURSE VILLAGE WEST APARTMENTS

GEI Consultants

Project 1700655

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