

# DECISION DOCUMENT

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52 Depew Street  
Brownfield Cleanup Program  
Pleasantville, Westchester County  
Site No. C360178  
June 2022



**Department of  
Environmental  
Conservation**

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

# DECLARATION STATEMENT - DECISION DOCUMENT

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52 Depew Street  
Brownfield Cleanup Program  
Pleasantville, Westchester County  
Site No. C360178  
June 2022

## **Statement of Purpose and Basis**

This document presents the remedy for the 52 Depew Street 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 52 Depew Street site and the public's input to the proposed remedy presented by the Department.

## **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 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

Excavation and off-site disposal of contaminant source areas, including:

- grossly contaminated soil, as defined in 6 NYCRR Part 375-1.2(u);
- concentrated solid or semi-solid hazardous substances per 6 NYCRR Part 375-1.2(au)(1);
- non-aqueous phase liquids;
- soil with visual waste material or non-aqueous phase liquid;
- soil containing total SVOCs exceeding 500 ppm; and
- soils that create a nuisance condition, as defined in Commissioner Policy CP-51 Section G.

Approximately 2,500 cubic yards of contaminated soil will be removed from the site.

## 3. Backfill

On-site soil which does not exceed the above excavation criteria may be used below the cover system described in remedy element 4 to backfill the excavation to the extent that a sufficient volume of on-site soil is available. Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to complete the backfilling of the excavation and establish the designed grades at the site.

## 4. Cover System

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. In-Situ Chemical Oxidation

In-situ chemical oxidation (ISCO) will be implemented to treat petroleum-related compounds in groundwater. A chemical oxidant will be injected into the subsurface using injection wells screened from 5 to 15 feet below grade to destroy the contaminants in two areas, totaling approximately 450 square feet, along the western portion of the site where petroleum-related compounds were elevated in the groundwater. Monitoring will be required within the treatment zone including monitoring for dissolved oxygen and oxidation/reduction potential.

## 6. 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 County DOH; and
- require compliance with the Department 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 element 6 above.

Engineering Controls: The cover system discussed in element 4 and the ISCO injections discussed in element 5 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 element 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 developed on the site, as may be required by the Institutional and Engineering Control Plan discussed above.

**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.

6/14/2022

Date



Janet Brown, Director  
Remedial Bureau C

# DECISION DOCUMENT

52 Depew Street  
Pleasantville, Westchester County  
Site No. C360178  
June 2022

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## **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, 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.

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 repository:

DECInfo Locator - Web Application  
<https://gisservices.dec.ny.gov/gis/dil/index.html?rs=C360178>

Mount Pleasant Public Library  
Attn: John Fearon  
350 Bedford Road  
Pleasantville, NY 10570  
Phone: (914) 769-0548

## 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 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 52 Depew Street Site is a 0.88 acre site located in a suburban area. The site is located immediately to the east of the Saw Mill River Parkway, just north of Grant Street.

#### Site Features:

The site previously featured an auto repair garage with an attached office building surrounded by large parking areas. The original building has since been demolished for the new mixed use residential building that is currently under construction. The site is located on a relatively flat parcel. The area to the east of the site slopes sharply upward away from the property, and the area to the west slopes gently downward toward the Saw Mill River, which is located approximately 300 feet to the west of the site, across the Saw Mill River Parkway.

#### Current Zoning and Land Use:

The site is zoned for commercial and residential use. The surrounding parcels are currently used for a combination of commercial and residential uses. The nearest residential area is approximately 50 feet south of the site.

#### Past Use of the Site:

The site was undeveloped land prior to 1910. In 1924, the site was utilized as a railroad coal yard. By 1927 the site was used as a hay, feed, and grain storehouse. From the 1940's to the 1990's, the Site was used as an auto fueling station with several petroleum underground storage tanks (USTs). From 2000 to 2018, the site was utilized as an auto repair facility. Three NYSDEC Spill reports (No. 0001843, No. 0003454, and No. 9807021) were opened for this site between 1998 and 2000 and were related to removal of eight USTs and petroleum-impacted soils. Upon removal, each spills report was closed. A fourth Spill report (NYSDEC Spill No. 1708038) is presently open and is based upon results of recent investigations.

#### Site Geology and Hydrogeology:

The site geology consists of an uppermost layer of historic fill materials at depths up to 4 feet below ground surface (bgs), followed by glacial till that consists of fine to coarse sands and clay, with varying amounts of silt and gravel. Bedrock was generally encountered between 7 feet bgs and 17 feet bgs. Groundwater is present at approximately 6 feet bgs to 7.5 feet bgs and flows toward the south/southwest.

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

#### **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 Volunteer. The Applicant(s) 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	isopropylbenzene
benzo(a)pyrene	methylene chloride
benzo(b)fluoranthene	n-propylbenzene
benzo(k)fluoranthene	o-xylene
chrysene	m-xylene
dibenz[a,h]anthracene	p-xylene
indeno(1,2,3-cd)pyrene	sec-butylbenzene
naphthalene	toluene
1,2,4-trimethylbenzene	xylene (mixed)
1,3,5-trimethylbenzene	tetrachloroethene (PCE)
benzene	cyclohexane
ethylbenzene	

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, pesticides, polychlorinated biphenyls (PCBs), and per-and polyfluoroalkyl substances (PFAS). Based upon investigations conducted to date, the primary contaminants of concern include VOCs and SVOCs.

Soil - Several SVOCs are found primarily along the southern portion of the site, within the former parking lot, and along the northern portion of the site at the rear of the former automotive building at depths ranging from 0 to 7 feet below ground surface. Specific SVOCs and their maximum concentrations include benzo(a)anthracene at 9.9 parts-per-million (ppm), benzo(a)pyrene at 10.3 ppm, benzo(b)fluoranthene at 9.33 ppm, benzo(k)fluoranthene at 7.44 ppm, chrysene at 9.04 ppm, dibenzo(a,h)anthracene at 2.85 ppm, and indeno(1,2,3-cd)pyrene at 6.31 ppm. The Restricted Residential Use SCO (RRSCO) for benzo(a)anthracene, benzo(a)pyrene, and benzo(b)fluoranthene is 1 ppm. The RRSCO for benzo(k)fluoranthene and chrysene is 3.9 ppm. The RRSCO for dibenzo(a,h)anthracene and indeno(1,2,3-cd)pyrene are 0.33 ppm and 0.5 ppm, respectively. In addition, Arsenic was found at a single boring at the rear of the property with a concentration of 44.2 ppm, which exceed its RRSCO of 16 ppm. No other metals above RRSCOs were detected in soil. A limited number of petroleum related VOCs were detected in soil but were below the restricted residential soil cleanup objective. No chlorinated VOCs were detected in soil.

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

Groundwater - VOCs were found exceeding their respective groundwater standards at two monitoring wells located in the parking lot in the southern portion the site, and in two monitoring wells located along the western portion of the site. Specific VOCs and their maximum concentrations include 1,2,4-trimethylbenzene at 1100 part-per-billion (ppb), 1,3,5-trimethylbenzene at 320 ppb, benzene at 320 ppb, ethyl benzene at 2400 ppb, isopropylbenzene at 140 ppb, methylene chloride at 21.7 ppb, n-butylbenzene at 55.6 ppb, n-propylbenzene at 350 ppb, o-xylene at 360 ppb, p- & m- xylenes at 2000 ppb, p-isopropyltoluene at 6 ppb, sec-butylbenzene at 50.7 ppb, toluene at 26 ppb, and total xylenes at 2400 ppb. Except for benzene, the groundwater quality standard for each respective compound is 5 ppb. For benzene, the groundwater quality standard is 1 ppb. SVOCs were also found in a similar distribution pattern as those highest VOC concentrations. Specific SVOCs and their maximum concentrations include benzo(a)anthracene at 0.210 ppb, benzo(a)pyrene at 0.140 ppb, benzo(b)fluoranthene 0.130 at ppb, benzo(k)flouranthene at 0.120 ppb, chrysene at 0.280 ppb, indeno(1,2,3-cd)pyrene at 0.080 ppb, and naphthalene at 520 ppb. Except for naphthalene, the groundwater quality guidance value is 0.002 ppb. For naphthalene, the guidance value is 10 ppb. Several inorganic compounds that

include magnesium, manganese, and sodium were observed exceeding their respective groundwater quality standards. However, concentrations of these metals are comparable in both upgradient and downgradient monitoring wells and are therefore considered reflective of background, naturally occurring conditions and are not considered site-related contaminants of concern. For PFAS, perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) were reported at concentrations of up to 67.4 and 27.1 parts per trillion (ppt), respectively, exceeding the Maximum Contaminant Level (drinking water standard) of 10 ppt in groundwater. Similar to the metals observations, concentrations of PFOA and PFOS at upgradient and downgradient monitoring wells are comparable and are therefore not considered a site-related contaminant of concern.

Monitoring well data located at the downgradient periphery of the site indicated non-detect or order of magnitude decreases in concentrations of the contaminants of concern. Therefore, any off-site migration of contamination via groundwater is expected to attenuate quickly.

Soil Vapor - Tetrachloroethene was detected across the site in soil vapor samples including a maximum concentration of 110 microgram per cubic meter (ug/m<sup>3</sup>) in the soil vapor sample beneath the former on-site building. In addition, elevated concentrations of petroleum-related VOCs were also observed. The contaminant with the highest concentration is cyclohexane with a concentration of 430,000 ug/m<sup>3</sup>. Based on this information, the potential for soil vapor intrusion to occur in on-site buildings needs to be considered.

Due to the Saw Mill River Parkway bordering the site and the limited detections of VOCs near the site boundary, off-site impacts from soil vapor are not likely.

#### **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*.

The site is fenced so people will not come into contact with site-related soil and groundwater contamination. People are not drinking site-related contaminants in the groundwater since the area is served by a public water supply 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 (SVI). The site is vacant so inhalation of site contaminants in indoor air via vapor intrusion is not a current concern. However, the potential exists for inhalation of site contaminants due to soil vapor intrusion for any future on-site development. 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.
- Prevent the discharge of contaminants to surface water.
- Remove the source of ground or surface water contamination.

### **Soil**

#### **RAOs for Public Health Protection**

- Prevent ingestion/direct contact with contaminated soil.

#### **RAOs for Environmental Protection**

- Prevent migration of contaminants that would result in groundwater or surface water contamination.
- Prevent impacts to biota from ingestion/direct contact with soil causing toxicity or impacts from bioaccumulation through the terrestrial food chain.

### **Soil Vapor**

#### **RAOs for Public Health Protection**

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

## **SECTION 7: ELEMENTS OF THE SELECTED REMEDY**

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

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

The selected remedy is referred to as the Source Material Removal and In-Site Chemical Oxidation 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 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

Excavation and off-site disposal of contaminant source areas, including:

- grossly contaminated soil, as defined in 6 NYCRR Part 375-1.2(u);
- concentrated solid or semi-solid hazardous substances per 6 NYCRR Part 375-1.2(au)(1);
- non-aqueous phase liquids;
- soil with visual waste material or non-aqueous phase liquid;
- soil containing total SVOCs exceeding 500 ppm; and
- soils that create a nuisance condition, as defined in Commissioner Policy CP-51 Section G.

Approximately 2,500 cubic yards of contaminated soil will be removed from the site.

## 3. Backfill

On-site soil which does not exceed the above excavation criteria may be used below the cover system described in remedy element 4 to backfill the excavation to the extent that a sufficient volume of on-site soil is available. Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to complete the backfilling of the excavation and establish the designed grades at the site.

## 4. Cover System

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. In-Situ Chemical Oxidation

In-situ chemical oxidation (ISCO) will be implemented to treat petroleum-related compounds in groundwater. A chemical oxidant will be injected into the subsurface using injection wells screened from 5 to 15 feet below grade to destroy the contaminants in two areas, totaling approximately 450 square feet, along the western portion of the site where petroleum-related compounds were elevated in the groundwater. Monitoring will be required within the treatment zone including monitoring for dissolved oxygen and oxidation/reduction potential.

#### 6. 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 County DOH; and
- require compliance with the Department 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 element 6 above.

Engineering Controls: The cover system discussed in element 4 and the ISCO injections discussed in element 5 above.

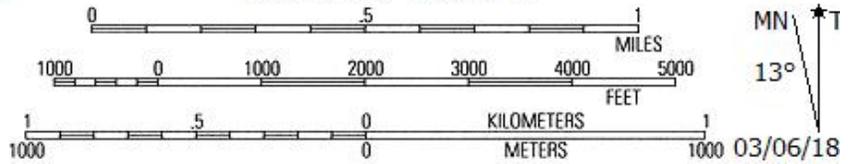
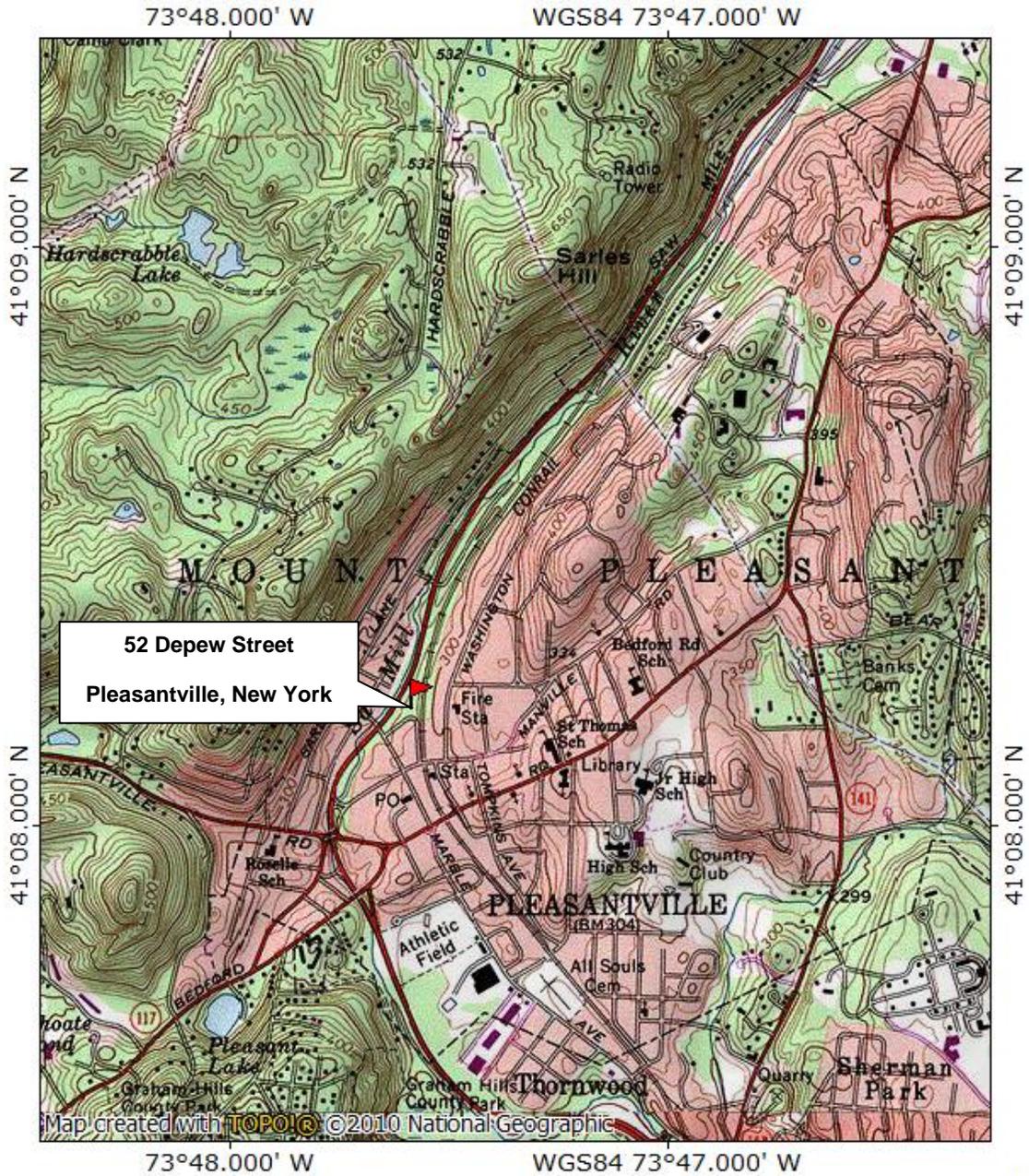
This plan includes, but may not be limited to:

- 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 element 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 developed on the site, as may be required by the Institutional and Engineering Control Plan discussed above.

# FIGURE 1

## Site Location Map

BCP#: C360178



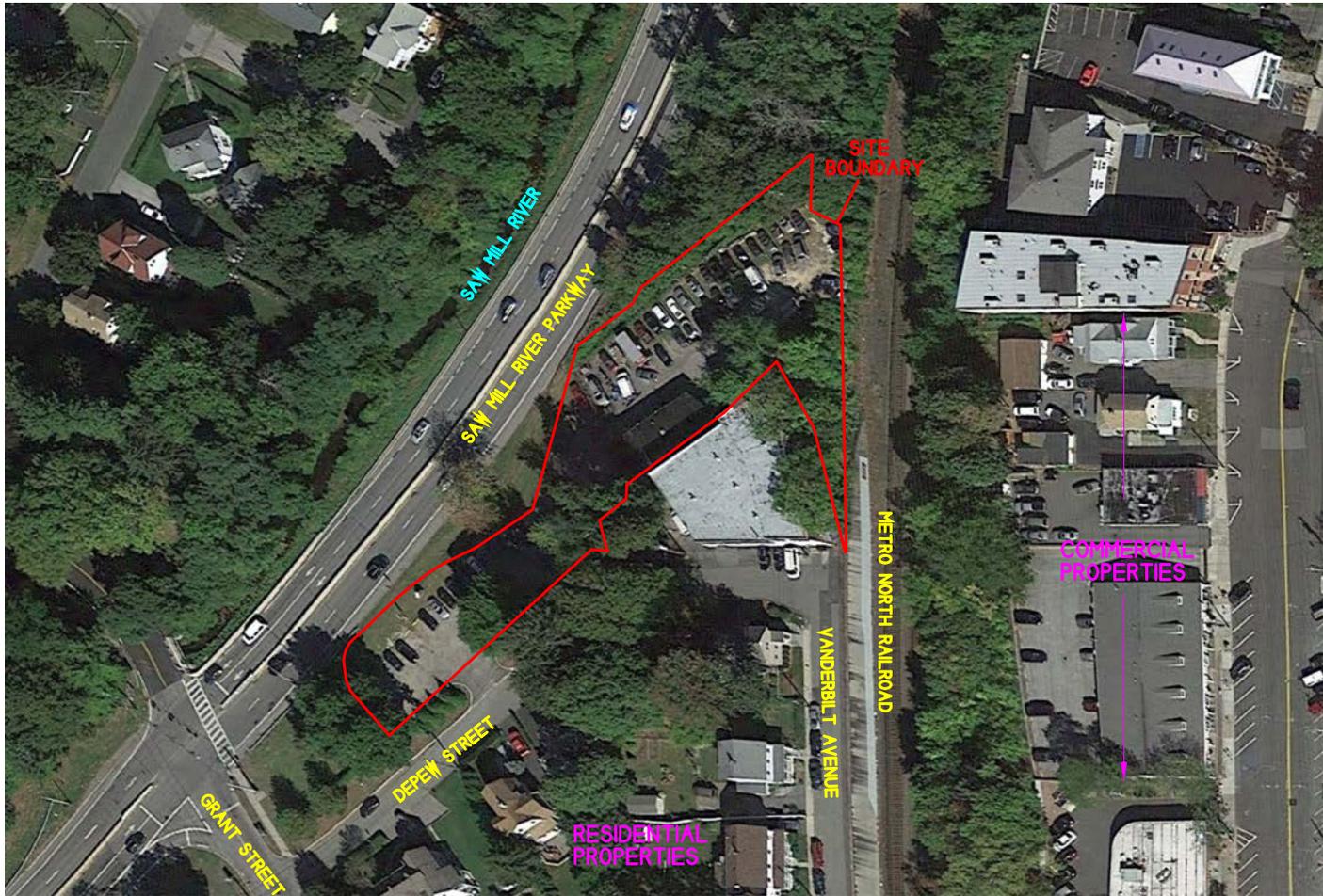


FIGURE 2

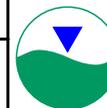
52 DEPEW STREET  
 PLEASANTVILLE, NEW YORK  
 BCP #: C360178

AERIAL PHOTOGRAPH  
 SHOWING THE SITE LOCATION  
 AND SURROUNDING LAND USE

NOT TO SCALE

JULY 2020

REMEDIAL  
 INVESTIGATION

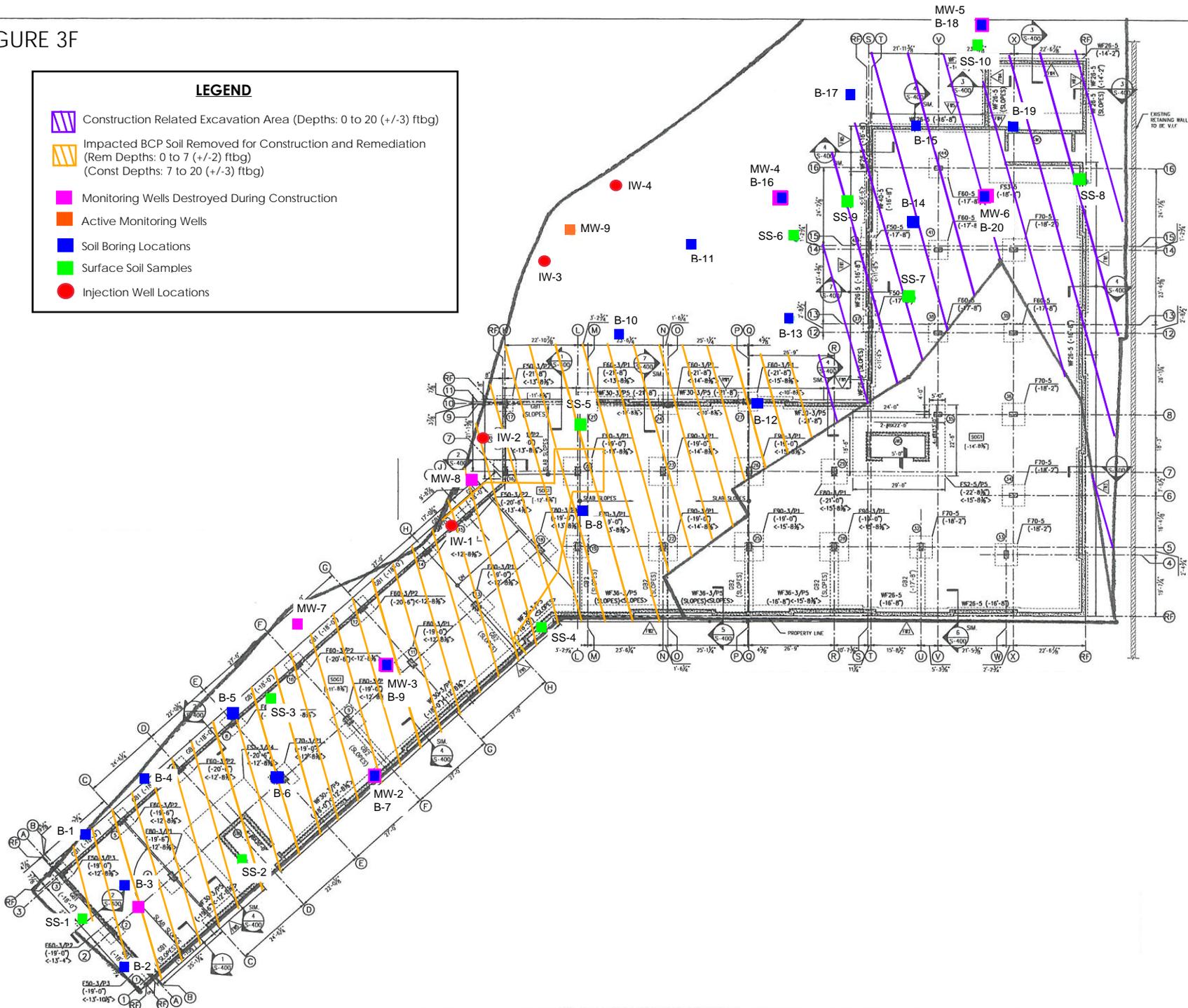


HydroEnvironmental  
 SOLUTIONS, INC.  
 One Deans Bridge Road  
 Somers, New York 10589

FIGURE 3F

**LEGEND**

-  Construction Related Excavation Area (Depths: 0 to 20 (+/-3) ftbg)
-  Impacted BCP Soil Removed for Construction and Remediation (Rem Depths: 0 to 7 (+/-2) ftbg) (Const Depths: 7 to 20 (+/-3) ftbg)
-  Monitoring Wells Destroyed During Construction
-  Active Monitoring Wells
-  Soil Boring Locations
-  Surface Soil Samples
-  Injection Well Locations



**Injone Architecture + Engineering**  
 457 Poplar Avenue  
 Columbia, SC 29202  
 803.799.1800  
 info@injone.com  
 www.injone.com

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DATE: 01/20/2024  
 DRAWN BY: J. GARON  
 CHECKED BY: J. GARON  
 APPROVED BY: J. GARON  
 SCALE: AS SHOWN



**TITAN ENGINEERS PC**  
 1 WANDERBILT AVENUE  
 PLEASANTVILLE, NY 10570

1 WANDERBILT AVENUE  
 PREPARED BY: UNLICENSED DESIGNER  
 1 WANDERBILT AVENUE  
 PLEASANTVILLE, NY 10570

OWNER:  
 HIGHWOOD PLANNING, LLC  
 SMALLER PARTS  
 WEST PLAZA W/100

DATE:  
 01/20/2024

REVISIONS:  
 1. PERMIT SET 01/20/2024  
 2. PERMIT SET 01/20/2024  
 3. REVISION 01/20/2024  
 4. REVISION 01/20/2024

TOTAL SHEETS: 10/100  
 SHEET NO.: 010  
 SHEET TITLE:  
 BASEMENT & FOUNDATION  
 FOUNDATION PLAN  
 SHEET:  
 4 OF 10 **FO-100**