

# DECISION DOCUMENT

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St. Clair Hotel Dry Cleaning Site  
Brownfield Cleanup Program  
Yonkers, Westchester County  
Site No. C360220  
May 2023



**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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## **Statement of Purpose and Basis**

This document presents the remedy for the St. Clair Hotel Dry Cleaning 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 St. Clair Hotel Dry Cleaning 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 shall be constructed, at a minimum, to meet the 2020 Energy Conservation Construction Code of

New York (or most recent edition) to improve energy efficiency as an element of construction.

As part of the remedial design program, to evaluate the remedy with respect to green and sustainable remediation principles, an environmental footprint analysis will be completed. The environmental footprint analysis will be completed using an accepted environmental footprint analysis calculator such as SEFA (Spreadsheets for Environmental Footprint Analysis, USEPA), SiteWise™ (available in the Sustainable Remediation Forum [SURF] library, or similar Department 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 prompting environmental justice, will be incorporated into the remedial design program, as appropriate. The project design specifications will include detailed requirements to achieve the green and sustainable remediation goals. Further, progress with respect to green and sustainable remediation metrics will be tracked during implementation of the remedial action and reported in the Final Engineering Report (FER), including a comparison to the goals established during the remedial design program.

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

## 2. Excavation

Excavation and off-site disposal of all on-site soils which exceed unrestricted SCOs, as defined by 6 NYCRR Part 375-6.8. Approximately 6,500 cubic yards of contaminated soil will be excavated down to approximately 25 feet below ground surface (bgs) and disposed of off-site.

If a Track 1 cleanup is achieved, a Cover System will not be a required element of the remedy. Collection and analysis of confirmation and documentation samples at the remedial excavation depths (approximately to 25 feet bgs) will be used to verify SCOs for the site have been achieved. If confirmation/documentation sampling indicates SCOs were not achieved at the stated remedial depth, the Applicant must notify DEC, submit the sample results, and in consultation with DEC, determine if further remedial excavation is necessary. Further excavation for development (approximately to 35 feet bgs) will proceed after confirmation samples demonstrate SCOs for the site have been achieved.

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.

## 3. In-Situ Chemical Reduction

In-situ chemical reduction (ISCR) will be implemented to treat chlorinated volatile organic compounds (CVOCs) in onsite groundwater. Zerovalent iron (ZVI) will be injected into the

subsurface to destroy the CVOCs via injection wells. The full design of the treatment, including the location of the injection points, quantity of ZVI to be injected and the injection method, will be determined during the remedial design. The need for additional injections will be evaluated should monitoring indicate remedial action objectives are not being met.

#### 4. Vapor Intrusion Evaluation

As part of the Track 1 remedy, a soil vapor intrusion evaluation will be completed. The evaluation will include a provision for implementing actions recommended to address exposures related to soil vapor intrusion.

The intent of the remedy is to achieve Track 1 unrestricted use; therefore, no environmental easement or site management plan is anticipated. If the soil vapor intrusion (SVI) evaluation is not completed prior to completion of the Final Engineering Report, then a Site Management Plan (SMP) and Environmental Easement (EE) will be required to address the SVI evaluation and implement actions as needed. If a mitigation or monitoring action is needed, a Track 1 cleanup can only be achieved if the mitigation system or other required action is no longer needed within 5 years of the date of the Certificate of Completion.

#### 5. Local Institutional Controls

If no EE or SMP is needed to achieve soil, groundwater, or soil vapor remedial action objectives, then the following local use restriction will be relied upon to prevent ingestion of groundwater: Chapter 873, article VII of the Laws of Westchester County, which prohibits potable use of groundwater without prior approval.

#### Contingent Remedial Elements:

In the event that Track 1 unrestricted use is not achieved, including achievement of groundwater and soil vapor remedial objectives, the following contingent remedial elements will be required and the remedy will achieve a Track 2 restricted residential cleanup.

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 at a minimum.

#### 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 Paragraph 1 above.

Engineering Controls: A subslab depressurization system (SSDS) if determined to be required for mitigation following a Vapor Intrusion Evaluation as discussed in Paragraph 4.

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 occupied buildings on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
- a provision for the management and inspection of the identified engineering controls;
- maintaining site access controls and Department notification; and
- the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.

- b. If groundwater and soil vapor remedial objectives are not met, a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:

- monitoring of groundwater and/or soil vapor to assess the performance and effectiveness of the remedy;
- a schedule of monitoring and frequency of submittals to the Department;
- monitoring for vapor intrusion for any buildings on the site, as required by the I Institutional and Engineering Control Plan discussed above.

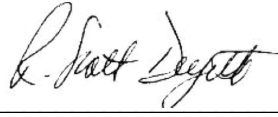
- c. If an active SSDS is a required remedial element to meet soil vapor remedial objectives, an Operation and Maintenance (O&M) Plan to ensure continued operation, maintenance, optimization, monitoring, inspection, and reporting of any mechanical or physical components of the remedy. The plan includes, but is not limited to:

- procedures for operating and maintaining the remedy;
- compliance monitoring of treatment systems to ensure proper O&M as well as providing the data for any necessary permit or permit equivalent reporting;
- maintaining site access controls and Department notification; and
- 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.

May 31, 2023  
Date



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Scott Deyette, Director  
Remedial Bureau C

# DECISION DOCUMENT

St. Clair Hotel Dry Cleaning Site  
Yonkers, Westchester County  
Site No. C360220  
May 2023

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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=C360220>

Yonkers Public Library - Riverfront Library  
Attn: Sandy Amoyaw  
1 Larkin Center  
Yonkers, NY 10701  
Phone: 914-375-7940

## 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**

**Site Location:** The 0.214-acre site is located at 34 Main Street, 36 Main Street, and 38 Main Street, Yonkers, New York, 10701 on Tax Section 1, Block 501, Lots 18, 19, and 20. The site is in an urban mixed-use downtown neighborhood area. Main Street is located north of the site. Commercial buildings are located to the west and south of the site. A residential building that is on a remediated brownfield site (Site No.: C360076) is located at 66 Main Street.

**Site Features:** The site is currently vacant. No buildings or permanent structures are currently present. The entire site has been vacant since approximately 2017, however, some portions of the site have been vacant since the late-1980s. Approximately 0.1-acre of the eastern portion of the site is improved by concrete walkways, brick walls, and various landscape elements. The western portion of the site is grassed. The site is located approximately a quarter mile from the Hudson River. The site is not located in a flood zone.

**Current Zoning and Land Use:** The site is currently located in the Downtown Mixed-Use (D-MX) District. The D-MX District encourages ground floor commercial uses to increase street level activity in the area. The designation allows for a mix of commercial, residential, and institutional developments. The surrounding property uses include restaurants, apartment buildings, parking structures, and other commercial uses. Yonkers Station is located approximately 0.156 miles from the site, and the closest rail line is approximately 0.166 miles from the site. Therefore, the planned project is a transit-oriented redevelopment as future residents will be able to readily walk to the train station.

**Past Use of the Site:** 38 Main Street, Lot 18 - Historical maps 1886 to 1917 show Lot 18 was used for various commercial purposes, including use by a plumber in 1886 and as a bakery in 1917. Maps from 1942 depict the lot as empty, but maps from 1951 until 1978 note the site was used as a store. Between 1989 and 2004 the lot appears to be vacant. Sanborn maps noted (C) on the lot, which indicates there may have been construction debris present from demolition of on-site buildings.

36 Main Street, Lot 19 - Maps from 1886 until 1917 show the lot was used as a furniture store. Maps from 1898 note an upholsterer was present on the site. An underground oven appears in maps from 1898 in the southern portion of the Lot. The oven appears to have been on the lot until approximately 1956. Lot 18 was used by various stores from 1951 until 1978. Between 1989 and 2004 the lot appears to be vacant. Sanborn maps indicated there may have been construction debris



present from demolition of on-site buildings.

34 Main Street, Lot 20 - In 2022, this lot was created by combining historic tax Lot 20 (32 Main Street), Lot 22 (1 Riverdale Avenue), and Lot 23 (3 Riverdale Ave). A portion of the new Lot 20 (known as 34 Main Street) was subdivided and subsequently dubbed new Lot 22. Past use summaries of the historic lots are included below.

32 Main Street, Historic Lot 20 - Multiple store buildings were present on Lot 20 between 1886 and 1917. Their uses included, but are not limited to, a flour & feed store, a billiards hall, a saloon, and a barber. An underground oven also appears in maps from 1898 in the northwestern portion of the Lot. Prior to 1942, the stores were replaced by a larger building. In 1942, the St. Clair Hotel occupied the lot. Maps from 1951 until 1973 show that the lot contained multiple stores, including a paint/dressmaking shop between 1971 and 1973. Historical maps from 1989 until 2004 no longer depict buildings on the lot. By 2017, all buildings were removed from the lot, and the lot was vacant.

1 Riverdale Avenue, Historic Lot 22 - Between 1886 and 1973, Lot 22 was used for various commercial purposes. This includes use by tailor in 1886 and a bootmaker in 1898. Additional store uses are unknown. The on-lot building was no longer present in maps from 1978. The lot was used as a park from approximately 1989 to 2017.

3 Riverdale Avenue, Historic Lot 23 - Between 1886 and 1973, Lot 23 was used for various commercial purposes. This includes use as a grocery store in 1886. The lot appears vacant in historical maps from 1989 until 2004.

Site Geology and Hydrogeology: The approximate elevation of the site is 30 feet above mean sea level (msl). The topography decreases to the northwest but is relatively level with regional topography. Groundwater generally flows to the north/northwest across the site and was detected between 11.1 and 17.6 ft-bgs. Groundwater is expected to flow in the northeast direction toward the Hudson River to the west and the Saw Mill River to the north. The Phase I ESA noted soils at the site are categorized as Urban Land washout substratum (UoA urban land), and the site is underlain by disturbed and natural soil material and till substratum. During the Phase II investigation, a historical fill layer was encountered between the surface materials in all borings. The fill was encounter at depths between 5 and 10 ft-bgs, and it generally consisted of predominately granular soil intermixed with construction debris containing concrete and urban brick. The fill layer is underlain by glacial deposits. The glacial deposits were observed up to depths of 35 ft-bgs and generally consisted of brown coarse to fine sand with varying amounts of silt and gravel.

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, an alternative which allows for unrestricted use of the site was evaluated.

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

## **SECTION 5: ENFORCEMENT STATUS**

The Applicant under the Brownfield Cleanup Agreement is a Volunteer. The Applicant does not have an obligation to address off-site contamination. However, 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:

- air
- 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 are:

benzo(a)anthracene	indeno(1,2,3-cd)pyrene
benzo(a)pyrene	lead
benzo(b)fluoranthene	mercury
benzo(k)fluoranthene	tetrachloroethene (PCE)
chrysene	perfluorooctanoic acid
dibenz[a,h]anthracene	perfluorooctane sulfonate

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

- groundwater
- soil
- soil vapor intrusion

### **6.2: Interim Remedial Measures**

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

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

### **6.3: Summary of Environmental Assessment**

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

Soil and groundwater were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, polychlorinated biphenyls (PCBs), per- and polyfluoroalkyl substances (PFAS), and pesticides. Soil vapor was analyzed for VOCs. Based upon investigations

conducted to date, the primary contaminants of concern for the site include SVOCs and metals in subsurface soils, chlorinated VOCs and PFAS in groundwater, and chlorinated VOCs in soil vapor.

Soil: SVOCs, including benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and chrysene, were detected in subsurface soils ranging from 0.5 foot to 25 feet bgs at concentrations maximum concentrations ranging from non-detect to 4.76 parts per million (ppm) in exceedance of their mutual unrestricted soil cleanup objective (SCO) of 1.0 ppm. Dibenz(a,h)anthracene was detected in subsurface soils up to 0.629 ppm and indeno(1,2,3-cd)pyrene up to 3.08 ppm, both exceeding their applicable unrestricted SCOs of 0.33 ppm and 0.5 ppm, respectively. Metals were also detected in subsurface soils with lead up to 558 ppm exceeding the unrestricted SCO of 63 ppm, mercury up to 1.2 ppm exceeding the unrestricted SCO of 0.18 ppm and nickel up to 35.6 exceeding the unrestricted SCO of 30 ppm. Data does not indicate any off-site impacts in soil related to this site.

Groundwater: Tetrachloroethene (PCE) was detected in groundwater in exceedance of its groundwater standard of 5 parts per billion (ppb), with a maximum detection of 31.7 ppb at the southwestern corner of the site. Data does not indicate any off-site impacts to groundwater related to this site.

For PFAS, perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) were reported at concentrations of up to 58 and 78 parts per trillion (ppt), respectively, exceeding their respective ambient water quality guidance values of 6.7 ppt and 2.7 ppt.

Soil Vapor: Onsite soil vapor detected chlorinated VOCs at elevated concentrations. PCE was detected up to 589 micrograms per cubic meter (ug/m<sup>3</sup>) and trichloroethylene (TCE) was detected up to 11 ug/m<sup>3</sup>. Supplemental soil vapor samples were collected to delineate the northeastern edge of the site where the PCE impacts had the highest detections. Analytical results indicated PCE impacts in soil vapor decrease as the sample location gets closer to the northern and eastern property boundaries.

#### **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 completely fenced, and portions are covered by asphalt or concrete. However, persons who dig below the ground surface may come into contact with contaminants in subsurface soil. People will not come into contact with site-related soil and groundwater contamination unless they dig below the surface. People are not drinking the contaminated groundwater because the area is served by a public water supply that is not contaminated by the site. 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. Because there is no on-site building, inhalation of site contaminants in indoor air due to soil vapor intrusion does not represent a concern

for the site in its current condition. However, the potential exists for the inhalation of site contaminants due to soil vapor intrusion for any future on-site development.

## **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.
- 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 Conditional Track 1 remedy.

The selected remedy is referred to as the Excavation and In-Situ Chemical Reduction 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;
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- Maximizing habitat value and creating habitat when possible;
- Fostering green and healthy communities and working landscapes which balance ecological, economic, and social goals;
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development; and
- Additionally, to incorporate green remediation principles and techniques to the extent feasible in the future development at this site, any future on-site buildings shall be constructed, at a minimum, to meet the 2020 Energy Conservation Construction Code of New York (or most recent edition) to improve energy efficiency as an element of construction.

As part of the remedial design program, to evaluate the remedy with respect to green and sustainable remediation principles, an environmental footprint analysis will be completed. The environmental footprint analysis will be completed using an accepted environmental footprint analysis calculator such as SEFA (Spreadsheets for Environmental Footprint Analysis, USEPA), SiteWise™ (available in the Sustainable Remediation Forum [SURF] library, or similar Department 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 prompting environmental justice, will be incorporated into the remedial design program, as appropriate. The project design specifications will include detailed requirements to achieve the green and sustainable remediation goals. Further, progress with respect to green and sustainable remediation metrics will be tracked during implementation of the remedial action and reported in the Final Engineering Report (FER), including a comparison to the goals established during the remedial design program.

Additionally, the remedial design program will include a climate change vulnerability assessment, to evaluate the impact of climate change on the project site and the proposed remedy. Potential

vulnerabilities associated with extreme weather events (e.g., hurricanes, lightning, heat stress and drought), flooding, and sea level rise will be identified, and the remedial design program will incorporate measures to minimize the impact of climate change on potential identified vulnerabilities.

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- 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 Paragraph 1 above.

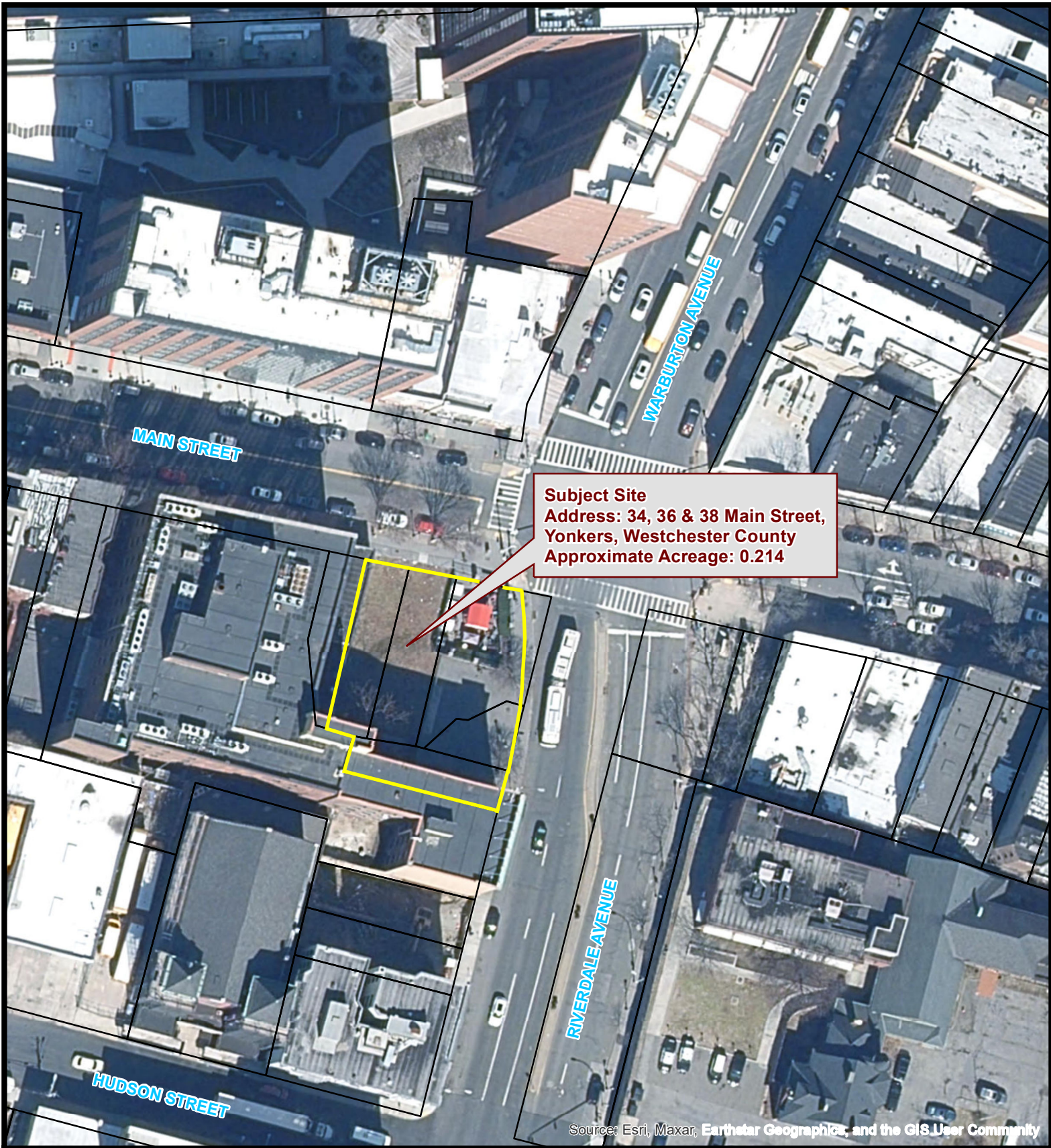
Engineering Controls: A subslab depressurization system (SSDS) if determined to be required for mitigation following a Vapor Intrusion Evaluation as discussed in Paragraph 4.

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 occupied buildings on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
- a provision for the management and inspection of the identified engineering controls;
- maintaining site access controls and Department notification; and
- the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.



- b. If groundwater and soil vapor remedial objectives are not met, a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:
- monitoring of groundwater and/or soil vapor to assess the performance and effectiveness of the remedy;
  - a schedule of monitoring and frequency of submittals to the Department;
  - monitoring for vapor intrusion for any buildings on the site, as required by the Institutional and Engineering Control Plan discussed above.
- c. If an active SSDS is a required remedial element to meet soil vapor remedial objectives, an Operation and Maintenance (O&M) Plan to ensure continued operation, maintenance, optimization, monitoring, inspection, and reporting of any mechanical or physical components of the remedy. The plan includes, but is not limited to:
- procedures for operating and maintaining the remedy;
  - compliance monitoring of treatment systems to ensure proper O&M as well as providing the data for any necessary permit or permit equivalent reporting;
  - maintaining site access controls and Department notification; and
  - providing the Department access to the site and O&M records.



**Subject Site**  
**Address: 34, 36 & 38 Main Street,**  
**Yonkers, Westchester County**  
**Approximate Acreage: 0.214**

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

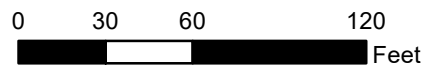


**Figure 1:**  
**Site Location Map**

Site No. C360220  
 St. Clair Hotel Dry Cleaning Site  
 Yonkers, Westchester County

**Legend**

- Approximate Site Boundary
- Westchester Co. Tax Parcels (2019-2020)



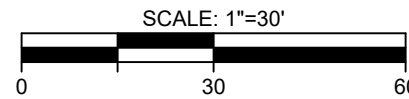


**LEGEND:**

----- - PROPERTY LINE

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REFERENCE  
AERIAL IMAGE TAKEN FROM GOOGLE MAPS, DATED 2020.



dwg by: aas  
chk by: RW  
scale: AS NOTED  
date: 11/18/2022

**SESI**  
CONSULTING  
ENGINEERS D.P.C.  
SOILS / FOUNDATIONS  
SITE DESIGN  
ENVIRONMENTAL

955 ROUTE 46E, 3RD FLOOR, PARSIPPANY, N.J. 07054 PH: 973-808-9050

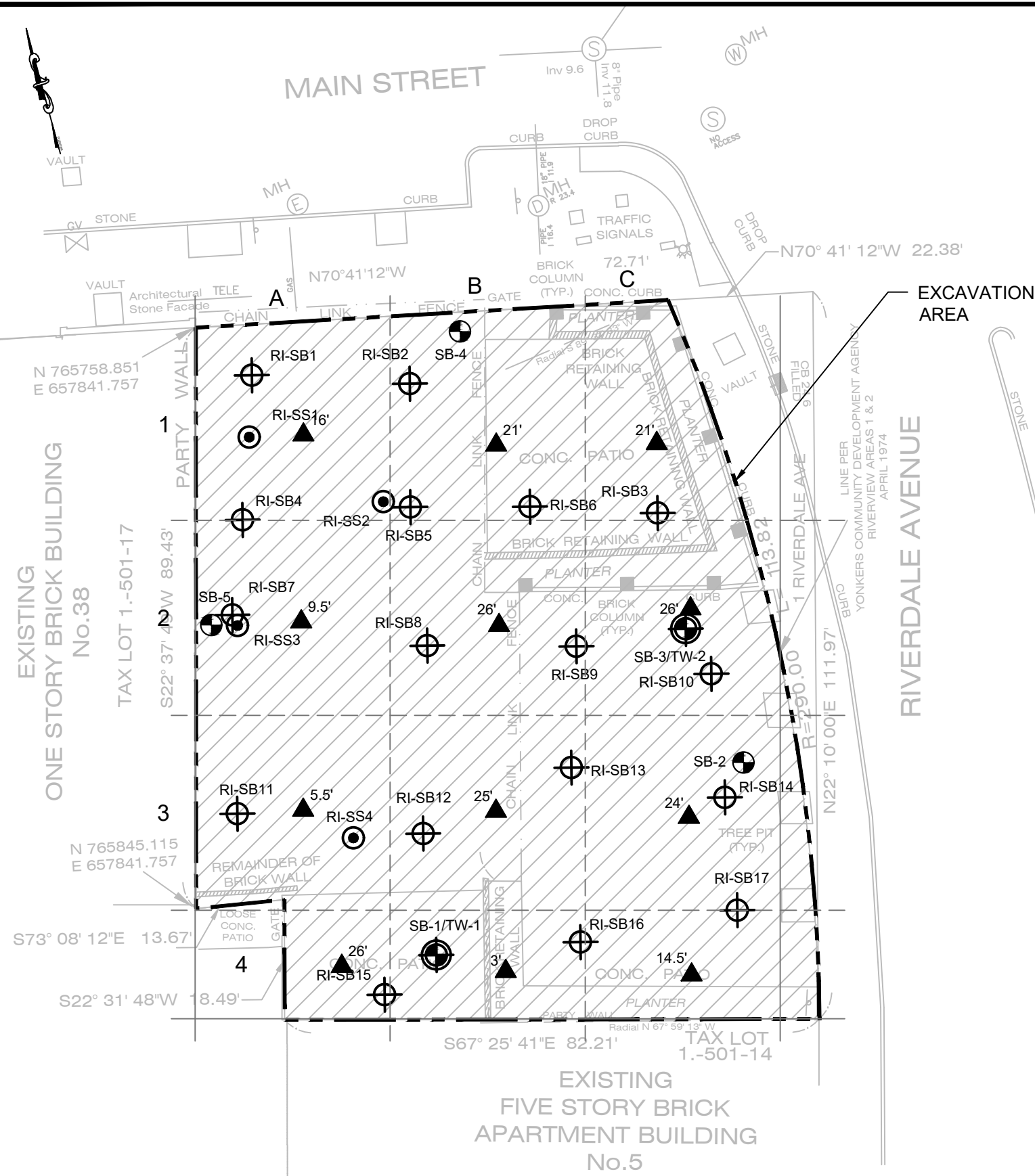
project:  
32, 36, AND 38 MAIN STREET  
& 1 AND 3 RIVERDALE AVENUE  
YONKERS, WESTCHESTER COUNTY, NEW YORK

title:  
SITE PLAN

job no: 11846  
drawing no:

**FIG-2**

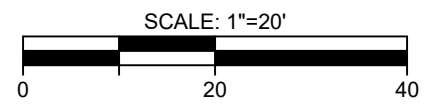
N:\ACAD\11846\CAD\ENVIRONMENTAL\PHASE II ESA REPORT\11846.DWG.SELECTED REMEDY PLAN.DWG 04/05/23 11:37:49AM, yelena.zolotova, LAYOUT:FIG-3



Grid	Area (SF)	Depth (FT)
A1	900	16
A2	900	9.5
A3	900	5.5
A4	275	26
B1	975	21
B2	900	26
B3	900	25
B4	500	3
C1	650	21
C2	850	26
C3	1000	24
C4	600	14.5

**LEGEND:**

- PROPERTY BOUNDARY
- SOIL SAMPLE NUMBER & APPROX. LOCATION (AUGUST 2022)
- SURFICIAL SOIL SAMPLE NUMBER & APPROXIMATE LOCATION (AUGUST 2022)
- SOIL BORING NUMBER & APPROX. LOCATION (MAY 2021)
- SOIL BORING & GROUNDWATER NUMBER & APPROX. LOCATION (MAY 2021)
- PROPOSED EXCAVATION DEPTH AND END-POINT SAMPLE LOCATION
- EXCAVATION AREA



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**REFERENCE**  
 SITE INFORMATION TAKEN FROM SITE SURVEY PREPARED BY GABRIEL E. SENOR, DATED JULY 5, 2022, REVISED JULY 21 2022 AND MAP OF MONITORING WELLS PREPARED BY GABRIEL E. SENOR, DATED OCTOBER 24, 2022.

dwg by: YZ  
 chk by: SG  
 scale: AS NOTED  
 date: 04/05/2023

**SESI CONSULTING ENGINEERS**  
 GEOTECHNICAL | ENVIRONMENTAL | SITE CIVIL  
 959 route 46e, 3rd floor, parsippany, nj 07054 ph: 973.808.9050

project: ST. CLAIR HOTEL DRY CLEANERS SITE (BCP C360220)  
 32, 36 AND 38 MAIN STREET  
 & 1 AND 23 RIVERDALE AVENUE  
 YONKERS, WESTCHESTER COUNTY, NEW YORK  
 title: **SELECTED REMEDY PLAN**

job no: 11846  
 drawing no:

**FIG-3**