

DECISION DOCUMENT

Firestone Tire and Auto Repair Site
Brownfield Cleanup Program
New Rochelle, Westchester County
Site No. C360215
January 2023



**Department of
Environmental
Conservation**

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

DECLARATION STATEMENT - DECISION DOCUMENT

Firestone Tire and Auto Repair Site
Brownfield Cleanup Program
New Rochelle, Westchester County
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Statement of Purpose and Basis

This document presents the remedy for the Firestone Tire and Auto Repair 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 Firestone Tire and Auto Repair Site 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 remedial design program will include:

- 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 all on-site soils which exceed unrestricted use soil cleanup objectives (USCOs) as defined by 6 NYCRR Part 375-6.8. Approximately 7,000 cubic yards of contaminated soil will be removed and properly disposed offsite. 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 (13 to 18 feet) will be used to verify that SCOs for the site have been achieved. If confirmation/documentation sampling indicates that 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 will proceed after confirmation samples demonstrate that SCOs for the site have been achieved.

3. Backfill

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. Conditional Track 1

The intent of the remedy is to achieve a Track 1 unrestricted use. If Track 1 cannot be obtained, a Site Management Plan (SMP) will be developed, and an Environmental Easement will be recorded to monitor residual groundwater concentrations, to provide for a soil vapor intrusion (SVI) evaluation of the site. The SMP requires groundwater monitoring until contaminant concentrations are below groundwater standards, or there is a bulk reduction to asymptotic levels acceptable to the Department. A Track 1 cleanup can only be achieved if any SVI mitigation systems that may be needed on future buildings and groundwater treatment/monitoring are no longer needed within 5 years of the date of the Certificate of Completion. Upon a demonstration that these components of the remedy are no longer necessary, the SMP and Environmental Easement will be extinguished. If the bulk reduction in groundwater concentrations to asymptotic levels acceptable to the Department are reached but the concentrations remain above groundwater standards, and depending on the need for SVI mitigation, the site may still be eligible for a Track 1 cleanup, however, a groundwater use restriction and associated easement would still be required. 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.

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 remain, and the remedy will achieve a Track 2 residential cleanup.

5a. 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 residential cleanup at a minimum.

5b. 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 residential, restricted-residential, commercial, or industrial 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.

5c. Site Management Plan

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

1. an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:

Institutional Controls: The Environmental Easement discussed in Paragraph 5b above.

Engineering Controls: Any engineering controls that may be required following the five-year conditional Track 1 evaluation period (e.g., sub-slab depressurization system, if needed).

This Site Management Plan (SMP) 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 of any buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion, if needed;
- provisions for the management and inspection of the identified engineering controls, if any;
- maintaining site access controls and Department notification; and
- the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.

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

- Monitoring groundwater and soil vapor to assess the performance and effectiveness of the remedy, and to inform the need for potential future groundwater treatment;
- a schedule of monitoring and frequency of submittals to the Department; and
- monitoring for vapor intrusion for any buildings on the site, as may be required by the Institutional and Engineering Control Plan discussed above.

b. an Operation and Maintenance (O&M) Plan to ensure continued operation, maintenance, inspection, and reporting of any mechanical or physical components of vapor mitigation system(s), if any. The plan includes, but is not limited to:

- procedures for operating and maintaining the system(s)/contingent groundwater remedy, if any; and
- compliance inspection of the system(s) to ensure proper O&M as well as providing the data for any necessary 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.

1/31/2023



Date

For Janet Brown, Director
Remedial Bureau C

DECISION DOCUMENT

Firestone Tire and Auto Repair Site
New Rochelle, Westchester County
Site No. C360215
January 2023

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://www.dec.ny.gov/data/DecDocs/C360215/>

New Rochelle Public Library
1 library plaza
New Rochelle, NY 10801
Phone: (914) 632-7878

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 0.281-acre site is located at 316 Huguenot Street, New Rochelle, New York 10801 on Tax Parcel 2-415-13. The site is located in an urban mixed-use area in downtown New Rochelle. The surrounding properties include retail businesses, retail/commercial store fronts, a multi-story apartment structure, commercial businesses, and mixed-use properties. The site is located north of Centre Avenue and east of Huguenot Street. The site is walking distance from the New Rochelle Metro-North train station.

Site Features: The 316 Huguenot Street Parcel is currently under construction for redevelopment. The closest surface water body is an inlet of the Long Island Sound located approximately 0.8 miles east of the site. The Metro North Train Station is located within walking distance of the site.

Current Zoning and Land Use: The 316 Huguenot Street Parcel is currently located in the Downtown Business (DB) District. The parcel is currently or was previously considered commercial/retail space uses. The surrounding properties include retail businesses, retail/commercial store fronts, a multi-story apartment structure, commercial businesses, and mixed-use properties. The closest residential area is a condominium building that is located about 50 feet away from the subject property. The site is also 0.07 miles from the Metro-North rail line, which is northwest of the site. The site is not located in a flood zone.

Past Uses of the Site: Based on aerial photographs, historical Sanborn maps, and information obtained from the City of New Rochelle Tax Assessor's Office, the site accommodated several historical uses through a series of owners. Historical Sanborn maps identified the property as undeveloped from 1887-1911. Between 1911 and 1951, the site was improved with a retail filling station and an automotive repair garage. Maps of the subject property from 1931 and 1951 show the "filling station" and three gasoline tanks within the northern most section of the parcel. In 1957, a building permit was issued for the existing commercial structure for Firestone Tire and Auto Repair Shop. The T-shaped building contained a vehicle service area and storage/sales rooms. A 1990 fire insurance map noted that the building was vacant. The building operated as a retail home improvement business prior to being used by Kent Supply Company. Prior to 2002, the City of New Rochelle is listed as the owner of the site. McCosker Equities Ltd. purchased the site in 2002. Vinek Holding Corp. purchased the property from McCosker Equities Ltd. in 2009. Allstate Ventures LLC purchased the property in July 2018 from Vinek Holding Corp. and then finally the Requestor purchased the site in October 2019.

Site Geology and Hydrogeology

According to the 1970 Geologic Map of New York - Lower Hudson Sheet published by the University of the State of New York, the bedrock underlying the Site is of the Hartland Formation and is composed primarily of basal amphibolite gneiss overlain by pelitic schists. Surficial soils are composed of dark brown and gray coarse to fine grained sand, gravel and clay to depths of 6 to 15 feet below ground surface (ft-bgs) where refusal was encountered on weathered bedrock during the 2020 investigation. Fill material is generally present at the site from beneath the asphalt layer to depths between 3.5 and 12 ft-bgs. Refusal during the remedial investigation was encountered between 9 and 19 ft-bgs, despite previously reported refusal at depths ranging from 6 to 15 ft-bgs.

Groundwater was encountered at depths ranging from approximately 7.5 to 10.5 ft-bgs. The groundwater flows north.

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:

- 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 contaminants of concern identified at this site are:

benzo(a)anthracene	zinc
benzo(a)pyrene	chromium
benzo(b)fluoranthene	arsenic
benzo(k)fluoranthene	phenol
chrysene	benzene
indeno(1,2,3-cd)pyrene	sec-butylbenzene
copper	isopropylbenzene
lead	n-propylbenzene
mercury	1,2,4,5-tetrachlorobenzene
nickel	

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 Remedial Investigation (RI) report presents a detailed discussion of any existing and potential impacts from the site to fish and wildlife receptors.

Soil and groundwater samples were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), pesticides, metals, cyanide, and the emerging contaminants per-and poly fluoroalkyl substances (PFAS) and 1,4-dioxane. Soil vapor samples were analyzed for VOCs. The primary contaminants of concern included SVOCs and metals in soil, VOCs in the groundwater, and VOCs in soil vapor.

Soil - A total of 52 soil samples were collected during the remedial investigation from 25 borings across the site. Several constituents were identified at concentrations that exceeded their Unrestricted Soil Cleanup Objectives (USCOs). The following is a list of those compounds and the maximum exceedance: benzo(a)anthracene 6.1 parts per million (ppm) vs USCO of 1 ppm, benzo(a)pyrene 5.3 ppm vs USCO of 1 ppm, benzo(k)fluoranthene 3.4 ppm vs USCO of 0.8 ppm, benzo(b)fluoranthene 5.7 ppm vs USCO of 1 ppm, chrysene 6.0 ppm vs USCO of 1 ppm, dibenzo(a,h)anthracene 1.0 ppm vs USCO of 0.33 ppm, indeno(1,2,3-cd)pyrene 3.2 ppm vs USCO of 0.5 ppm, copper 93.6 ppm vs USCO of 50 ppm, lead 847 ppm vs USCO of 63 ppm, mercury 0.768 ppm vs USCO of 0.18 ppm, nickel 67.2 ppm vs USCO of 30 ppm, zinc 185 ppm vs USCO of 109 ppm, chromium 46.5 ppm vs USCO of 30, arsenic 16.9 ppm vs USCO of 13 ppm, 4,4'-DDE 0.00368 ppm vs USCO of 0.0033 ppm, PCBs 115 parts per billion (ppb) vs USCO of 100 ppb.

There was only one minimal USCO exceedance each for pesticides and PCBs and thus these compounds are not considered contaminants of concern for this site.

Perfluorooctanesulfonic acid (PFOS), Perfluorooctanoic acid (PFOA), and 1,4-dioxane were either not detected in any samples or below their respective USCO. There is no indication that soil contamination extends off-site.

Groundwater - A total of eight groundwater wells were installed in the site, with four of the eight wells set into bedrock. All groundwater samples collected at the site were analyzed for VOCs, SVOCs, PCBs, pesticides, metals and cyanide as well as the emerging contaminants PFAS and 1,4-dioxane.

The following metals were detected in at least one unfiltered groundwater sample in exceedance of groundwater standards (ambient water quality standards (AWQS)): iron 37,100 ppb vs AWQS of 300 ppb, manganese 3518 ppb vs AWQS 300 ppb, sodium 90,200 ppb vs AWQS of 20,000 ppb, antimony 3.79 ppb vs AWQS of 3 ppb, and thallium 0.53 ppb vs AWQS 0.5 ppb. Iron, manganese, and sodium appear to be background levels with no distinction between upgradient and downgradient monitoring wells. These compounds are typically naturally occurring or related to road salt application. Antimony and thallium were only detected in one monitoring well each in unfiltered samples just above the AWQS standard and likely due to suspended solids in the sample.

The following SVOCs were detected in at least one unfiltered groundwater sample in exceedance of groundwater standards (AWQS): Phenol 15 ppb vs AWQS of 1 ppb, benzo(a)anthracene 0.04 ppb vs AWQS of 0.002 ppb, benzo(a)pyrene 0.03 ppb vs AWQS of 0 ppb, benzo(b)fluoranthene 0.06 ppb vs AWQS of 0.002, benzo(k)fluoranthene 0.02 ppb vs AWQS of 0.002 ppb, chrysene 0.05 ppb vs AWQS of 0.002, indeno(1,2,3-cd)pyrene 0.04 ppb vs AWQS of 0.002 AWQS. The polycyclic aromatic hydrocarbons (PAHs) aside from phenol were found in unfiltered samples and likely due to suspended solids. Phenol, also a PAH, has historically been added to fuels and is potentially from historic site operations which have included numerous underground storage tank removals under the spills program (1802819).

The following low levels of VOCs were detected in at least one groundwater sample in exceedance of groundwater standards (AWQS): benzene 2.1 ppb vs AWQS of 1 ppb, sec-butylbenzene 15 ppb vs AWQS of 5 ppb, isopropylbenzene 16 ppb vs AWQS of 5 ppb, n-propylbenzene 16 pb vs AWQS of 5 ppb, 1,2,4,5-tetramethylbenzene 19 ppb vs AWQS of 5 ppb. It is likely that these VOCs are related to historic site operations which have included numerous underground storage tank removals under the spills program (1802819).

For PFAS, perfluorooctanesulfonic acid (PFOS) was reported in one of the bedrock groundwater samples at 10.1 parts per trillion (ppt), exceeding the 10 ppt screening level.

PCBs, pesticides, and 1,4-dioxane were not detected in the on-site overburden or bedrock groundwater. There is a potential for contaminated groundwater to flow off-site.

Soil Vapor - A total of five soil vapor samples were collected from locations throughout the site. Primarily petroleum related contaminants were detected in all six soil vapor samples and the following are the max concentrations: benzene 315 micrograms per cubic meter (ug/m³), n-hexane 1180 ug/m³, o-xylene 361p/m xylene, ug/m³ and toluene 1730 ug/m³ There is the potential for these vapors to migrate off-site.

6.4: Summary of Human Exposure Pathways

This human exposure assessment identifies ways in which people may be exposed to site-related contaminants. Chemicals can enter the body through three major pathways (breathing, touching or swallowing). This is referred to as *exposure*.

Since the site is fenced and covered by asphalt and concrete, 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 affected by this contamination. Volatile organic compounds in the groundwater may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect 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 the site building is vacant, the inhalation of site-related contaminants due to soil vapor intrusion does not represent a current concern. Furthermore, environmental 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 Conditional Track 1 remedy.

The selected remedy is referred to as the Soil Excavation with Groundwater Monitoring remedy.

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 remedial design program will include:

- 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 all on-site soils which exceed unrestricted use soil cleanup

objectives (USCOs) as defined by 6 NYCRR Part 375-6.8. Approximately 7,000 cubic yards of contaminated soil will be removed and properly disposed offsite. 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 (13 to 18 feet) will be used to verify that SCOs for the site have been achieved. If confirmation/documentation sampling indicates that 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 will proceed after confirmation samples demonstrate that SCOs for the site have been achieved.

3. Backfill

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. Conditional Track 1

The intent of the remedy is to achieve a Track 1 unrestricted use. If Track 1 cannot be obtained, a Site Management Plan (SMP) will be developed, and an Environmental Easement will be recorded to monitor residual groundwater concentrations, to provide for a soil vapor intrusion (SVI) evaluation of the site. The SMP requires groundwater monitoring until contaminant concentrations are below groundwater standards, or there is a bulk reduction to asymptotic levels acceptable to the Department. A Track 1 cleanup can only be achieved if any SVI mitigation systems that may be needed on future buildings and groundwater treatment/monitoring are no longer needed within 5 years of the date of the Certificate of Completion. Upon a demonstration that these components of the remedy are no longer necessary, the SMP and Environmental Easement will be extinguished. If the bulk reduction in groundwater concentrations to asymptotic levels acceptable to the Department are reached but the concentrations remain above groundwater standards, and depending on the need for SVI mitigation, the site may still be eligible for a Track 1 cleanup, however, a groundwater use restriction and associated easement would still be required. 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.

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 remain, and the remedy will achieve a Track 2 residential cleanup.

5a. Engineering and Institutional Controls

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5b. 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 residential, restricted-residential, commercial, or industrial 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.

5c. Site Management Plan

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

1. an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:

Institutional Controls: The Environmental Easement discussed in Paragraph 5b above.

Engineering Controls: Any engineering controls that may be required following the five-year conditional Track 1 evaluation period (e.g., sub-slab depressurization system, if needed).

This Site Management Plan (SMP) 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 of any buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion, if needed;
- provisions for the management and inspection of the identified engineering controls, if any;
- maintaining site access controls and Department notification; and
- the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.

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

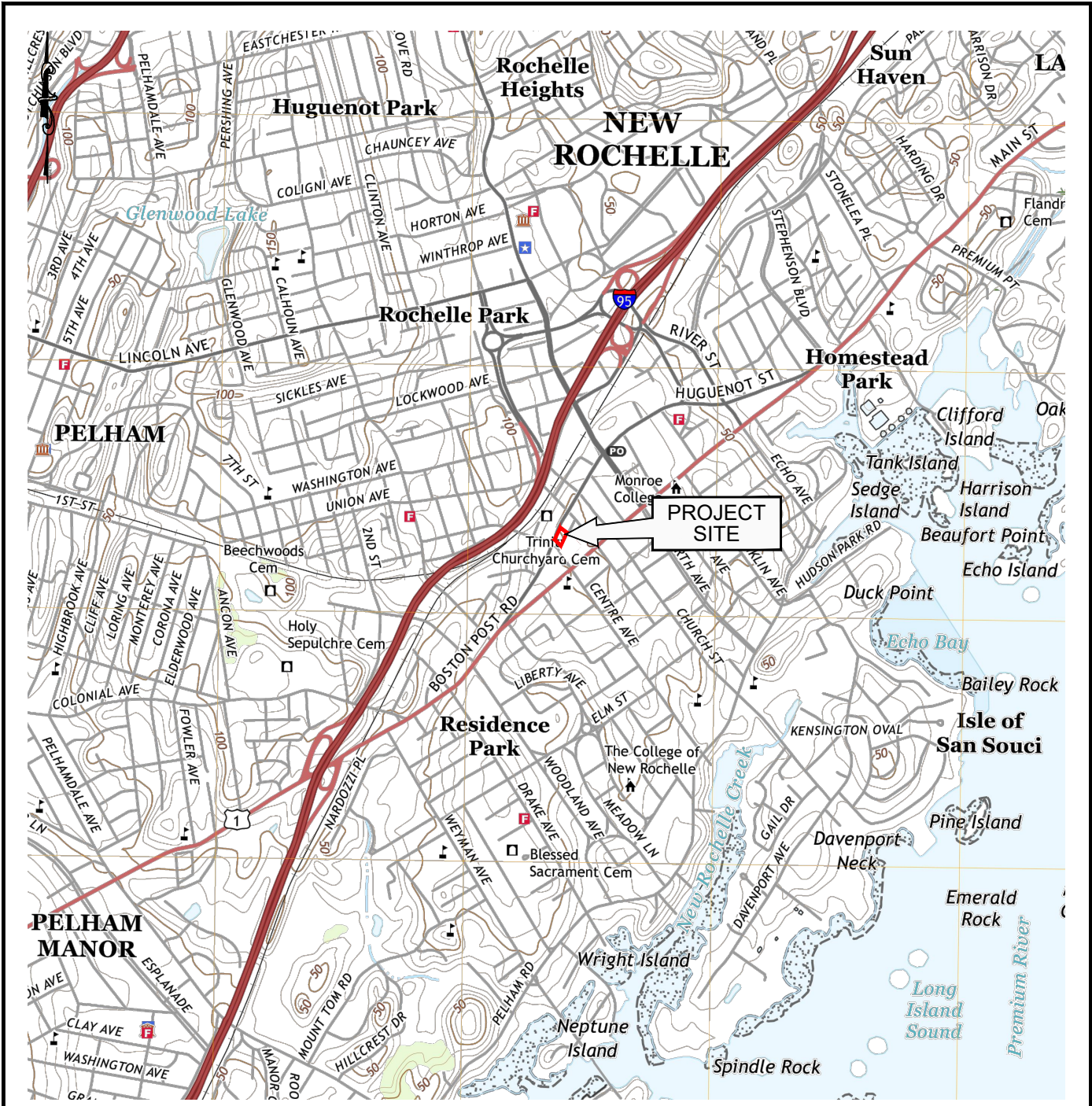
- Monitoring groundwater and soil vapor to assess the performance and effectiveness of the remedy, and to inform the need for potential future groundwater treatment;
- a schedule of monitoring and frequency of submittals to the Department; and

- monitoring for vapor intrusion for any buildings on the site, as may be required by the Institutional and Engineering Control Plan discussed above.

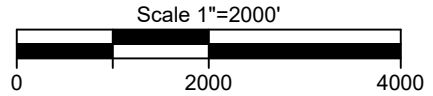
b. an Operation and Maintenance (O&M) Plan to ensure continued operation, maintenance, inspection, and reporting of any mechanical or physical components of vapor mitigation system(s), if any. The plan includes, but is not limited to:

- procedures for operating and maintaining the system(s)/contingent groundwater remedy, if any; and
- compliance inspection of the system(s) to ensure proper O&M as well as providing the data for any necessary reporting;
- maintaining site access controls and Department notification; and
- providing the Department access to the site and O&M records.

N:\ACAD\11513\BCP\316 HUGUENOT\11513 - FIG-1 - SITE LOCATION TOPOGRAPHIC MAP.DWG 02/09/21 03:10:57PM, jenny, LAYOUT:FIG-1



REFERENCE:
 HISTORICAL TOPOGRAPHICAL MAP PREPARED BY USGS, DATED 2019
 MOUNT VERNON QUADRANGLE



316 HUGUENOT STREET
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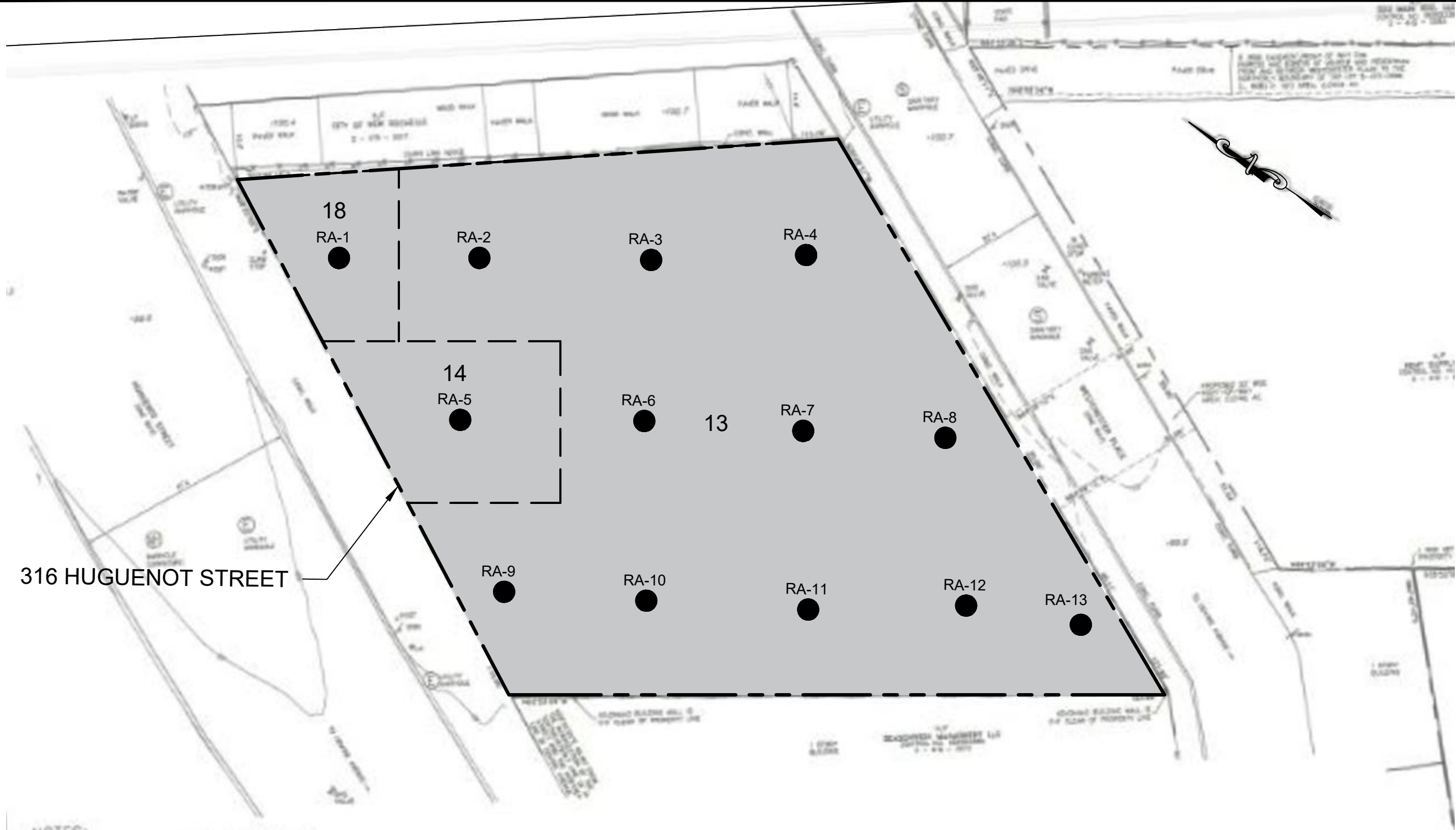
SOILS / FOUNDATIONS
 SITE DESIGN
 ENVIRONMENTAL

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**SITE LOCATION
 TOPOGRAPHICAL MAP**

FIG-1.1	
DRAWN BY:	aas
CHECKED BY:	AA
SCALE:	AS NOTED
DATE:	02/09/2021
JOB NO.:	11513

N:\ACAD\11513\RAWP\11513 - FIG-3.1 SOIL EXCAVATION PLAN - 2021-02-10.DWG 09/07/22 01:13:54PM, alan.ward, LAYOUT:FIG-3.1



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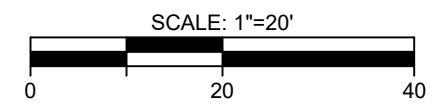
LEGEND:

- - - - - PROPERTY LINE
- RA-11 ● - PROPOSED BOTTOM ENDPOINT SAMPLE (1 PER 900 SF)
- - - - - EXCAVATION AREAS
- 13 - APPROXIMATE EXCAVATION DEPTH (FEET BELOW GROUND SURFACE)

NYS Education Law
 Unauthorized alterations or additions to this plan are a violation of section 7209 (2) of the New York State Education Law. Copies of this map not having the seal of the engineer shall not be valid.

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REFERENCE
 SITE INFORMATION AND EXISTING CONDITIONS TAKEN FROM "SURVEY PREPARED FOR ALLSTATE VENTURES" PREPARED BY LANC & TULLY ENGINEERING AND SURVEYING, LAST REVISED FEBRUARY 28, 2020.



dwg by: aas
 chk by: AA
 scale: AS NOTED
 date: 02/10/2021

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project: 316 HUGUENOT STREET
 CITY OF NEW ROCHELLE
 WESTCHESTER COUNTY, NEW YORK

title: SOIL EXCAVATION AND CONFIRMATORY SAMPLING PLAN

job no: 11513
 drawing no:

FIG-3.1