DECISION DOCUMENT

Former Grossingers Resort
Brownfield Cleanup Program
Liberty, Sullivan County
Site No. C353015
December 2019

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

DECLARATION STATEMENT - DECISION DOCUMENT

Former Grossingers Resort
Brownfield Cleanup Program
Liberty, Sullivan County
Site No. C353015
December 2019

Statement of Purpose and Basis

This document presents the remedy for the Former Grossingers Resort 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 Former Grossingers Resort site and the public's input to the proposed remedy presented by the Department.

Description of Selected Remedy

During the course of the investigation certain actions, known as interim remedial measures (IRMs), were undertaken at the above referenced site. An IRM is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the remedial investigation (RI) or alternatives analysis (AA). The IRM(s) undertaken at this site are discussed in Section 6.2.

Based on the implementation of the IRM(s), the findings of the investigation of this site indicate that the site no longer poses a threat to human health or the environment; therefore, No Further Action is the selected remedy. The remedy may include continued operation of a remedial system if one was installed during the IRM and the implementation of any prescribed institutional controls/engineering controls (ICs/ECs) that have been identified as being part of the proposed remedy for the site.

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.

12/20/2019

Janet E Brown

Date

Janet Brown, Director
Remedial Bureau C

DECISION DOCUMENT

Former Grossingers Resort
Liberty, Sullivan County
Site No. C353015
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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 resulted in threats to public health and the environment that were addressed by actions known as interim remedial measures (IRMs), which were undertaken at the site. An IRM is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the remedial investigation (RI) or alternative analysis (AA). The IRMs undertaken at this site are discussed in Section 6.2.

Based on the implementation of the IRM(s), the findings of the investigation of this site indicate that the site no longer poses a threat to human health or the environment. The IRM(s) conducted at the site attained the remediation objectives identified for this site, which are presented in Section 6.5, for the protection of public health and the environment. No Further Action is the selected remedy. A No Further Action remedy may include continued operation of any remedial system installed during the IRM and the implementation of any prescribed controls that have been identified as being part of the remedy for the site. This decision document (DD) identifies the IRM(s) conducted and discusses the basis for No Further Action.

The New York State Brownfield Cleanup Program (BCP) is a voluntary program. The goal of the BCP is to enhance private-sector cleanups of brownfields and to reduce development pressure on "greenfields." A brownfield site is real property, the redevelopment or reuse of which may be complicated by the presence or potential presence of a contaminant.

The Department has issued this document in accordance with the requirements of New York State Environmental Conservation Law and 6 NYCRR Part 375. This document is a summary of the information that can be found in the site-related reports and documents.

SECTION 2: CITIZEN PARTICIPATION

The Department seeks input from the community on all remedies. A public comment period was held, during which the public was encouraged to submit comments 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:

Liberty Public Library
189 N. Main St.
Liberty, NY 12754
Phone: (845) 292-6070

Select documents may also be found at:

DEC Info Locator: https://www.dec.ny.gov/data/DecDocs/C353015/

Receive Site Citizen Participation Information By Email

Please note that the Department's Division of Environmental Remediation (DER) is "going paperless" relative to citizen participation information. The ultimate goal is to distribute citizen participation information about contaminated sites electronically by way of county email listservs. Information will be distributed for all sites that are being investigated and cleaned up in a particular county under the State Superfund Program, Environmental Restoration Program, Brownfield Cleanup Program, Voluntary Cleanup Program, and Resource Conservation and Recovery Act Program. We encourage the public to sign up for one or more county listservs at http://www.dec.ny.gov/chemical/61092.html

SECTION 3: SITE DESCRIPTION AND HISTORY

Site Location: The site is located in a village suburban setting on Clements Road and Grossingers Road in the Town of Liberty. The site is split into two sections, a 0.87-acre square area near the intersection of Clements Road and the Route 52 to 17 ramp and a 17.30-acre irregularly shaped area near Grossingers Road. The site is approximately one mile southeast of Liberty, New York.

Site Features: The site was used as a hotel and resort from 1916 until 1986. The hotel was comprised of more than three dozen buildings with a total floor area of approximately 700,000 square feet. Since its closure almost thirty years ago, all structures have been demolished. The larger (17.30 acre) section of the site was the location of the former hotel and majority of other buildings. The smaller (0.87 acre) section was the location of the former ski area maintenance building. The site is currently vacant.

Current Zoning and Land Use: The site is located within the R-1 zoning district, which permits low-density residential uses. According to Liberty Zoning Code 147, the purpose of the R-1 residential district is to provide areas adjacent to the village with neighborhoods of single-family and two-family dwellings of low to moderate density.

Past Use of the Site: The site was previously the Grossingers Resort, which was developed by the Grossinger family in 1916. The portion of the resort that comprises the Brownfield site included the main hotel complex, a skating rink, and a ski area maintenance building.

Site Geology and Hydrogeology: The site is generally underlain by dark orange/reddish brown, fine to medium grain loamy sand with pebbles and rock fragments. This soil generally grades into a weathered and fractured bedrock. Due to the varied topography of the subject property, depth to

bedrock varies from exposed at/above the ground surface to depths greater than 10 feet below grade. Shallow groundwater is present at depths between 0 and 10 ft below grade. The groundwater flow direction generally follows the topography of the land surface, resulting in a southwesterly-westerly flow across the site.

A site location map is attached as Figure 1.

SECTION 4: LAND USE AND PHYSICAL SETTING

The Department may consider the current, intended, and reasonably anticipated future land use of the site and its surroundings when evaluating a remedy for soil remediation. For this site, an alternative which allows for unrestricted use of the site was evaluated.

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

Trichloromonofluoromethane (Freon 11)
Dichlorodifluoromethane (Freon 12)
Petroleum
Perfluorooctanesulfonic Acid
Perfluorooctanoic acid
Acetone
Benzene
Ethylbenzene
Isopropylbenzene
Xylene
2-Methylnapthalene
Acenaphthene
Anthracene
Benzo(a)anthracene
Benzo(a)pyrene
Benzo(b)fluoranthene
Benko(k)fluoranthene
Chrysene
Dibenzo(a,h)anthracene
Fluoranthene
Fluorene
Indeno(1,2,3-cd)pyrene
Phenol
Pyrene
Arsenic
Lead
Mercury
Zinc
4,4’-DDD
4,4’-DDE
4,4’-DDT

Based on the investigation results, comparison to the SCGs, and the potential public health and environmental exposure routes, certain media and areas of the site required remediation. These

media were addressed by the IRM(s) described in Section 6.2. More complete information can be found in the RI Report and the IRM Construction Completion Report.

6.2: Interim Remedial Measures

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

The following IRM(s) has/have been completed at this site based on conditions observed during the RI.

Building Demolition, Underground Storage Tank (UST) and Soil Removal

All existing on-site buildings (including basement structures and slabs) were demolished, and all building materials (including crushed concrete) were taken off-site for proper disposal. Two 10,000-gallon underground storage tanks (USTs) and associated underground piping located near the eastern boundary of the site were removed from the site and disposed of at a permitted facility. The USTs had been used historically for fuel oil storage. The UST removal included excavation and off-site disposal of soil impacted by petroleum. On-site soils on both the larger (17.30 acre) and smaller (0.87 acre) portions of the site which exceeded unrestricted soil cleanup objectives (USCOs) for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, and pesticides, as defined by 6 NYCRR Part 375-6.8, were excavated and transported off-site for disposal. Approximately 10,000 cubic yards of contaminated soil was removed from the site.

6.3: Summary of Environmental Assessment

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

Nature and Extent of Contamination:

Soil and groundwater were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, polychlorinated biphenyls (PCBs), pesticides, and per- and polyfluoroalkyl substances (PFAS). Soil vapor was sampled for VOCs. Based upon investigations conducted to date, the primary contaminants of concern include VOCs and PFAS in groundwater, and VOCs in soil vapor.

Soil: Surface and subsurface soil samples were collected and analyzed during the RI at locations throughout the site on both the larger (17.30 acre) and smaller portions of the site (0.87 acres) in order to document soil conditions in all areas of the site. Surface soil samples were collected at 33 locations from a depth of 0-2” and subsurface soils samples were collected from 24 soil borings to depths of up to 15 feet. During the RI, prior to the completion of the interim remedial measure,

the following compounds were found in site soils exceeding unrestricted use soil cleanup objectives (USCOs): acetone, benzene, ethylbenzene, isopropylbenzene, xylene, acenaphthene, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, phenol, pyrene, arsenic, lead, mercury, zinc, 4,4'-DDD, 4,4'-DDE, and 4,4'-DDT.

On-site soils which exceeded unrestricted soil cleanup objectives (USCOs) were excavated and transported off-site for disposal as part of a soil removal IRM. Following the soil removal IRM, confirmation soil samples indicated endpoint samples sufficiently met the USCOs. Therefore, following the IRM, there are no identified soils exceeding the USCOs. There is no indication that site-related soil contamination extends off-site.

Groundwater: Groundwater samples were collected from 14monitoring wells on the larger (17.30 acre) portion of the site and 1 monitoring well on the smaller (0.87 acre) portion of the site. The VOCs trichloromonofluoromethane (Freon-11) and dichlorodifluoromethane (Freon-12) were detected in site groundwater in exceedance of groundwater standards. Freon-11 was detected in four on-site monitoring wells downgradient (to the west) of the former ice-skating rink area at concentrations ranging from 12 parts per billion (ppb) to 120 ppb, compared to the groundwater quality standard of 5 ppb. Freon-12 was detected in three on-site monitoring wells downgradient (to the west) of the former ice-skating rink area at concentrations ranging from 13 ppb to 48 ppb (standard of 5 ppb). Per/polyfluorinated alkyl substances (PFAS) were detected in groundwater samples collected from the central portion of the site, downgradient (to the west) of an area of the site which historically contained buildings used for food preparation and cleaning activities associated with hotel operations. The maximum concentration of perfluorooctanesulfonic acid (PFOS) detected at the site in groundwater was 91 parts per trillion (ppt) and the maximum concentration of perfluorooctanoic acid (PFOA) detected at the site in groundwater was 107 ppt. Both PFOA and PFOS exceed the current US Environmental Protection Agency's Health Advisory Limit (HAL) for PFOA + PFOS of 70 ppt in two wells near the downgradient (western) site boundary, and in two wells near the center of the site. Concentrations of Freon 11 and 12 also exceed their groundwater standard of 5 parts per billion near the downgradient site boundary. Concentrations of contaminants exceeding their respective HAL/groundwater standard may extend off-site. However, the surrounding area is served by a public water supply not affected by this contamination and no drinking water wells were identified near the site in the downgradient flow direction from the site. Therefore, the off-site migration of these contaminants in groundwater does not represent an exposure concern.

Floating petroleum was encountered in five monitoring wells immediately following IRM activities. These five monitoring wells were observed again several months after completion of the IRMs, at which time no petroleum was observed. These wells were in the vicinity of the former fuel oil underground storage tanks.

Soil Vapor: Soil vapor samples were collected at ten locations on the larger (17.30 acre) portion of the site where VOCs were encountered in groundwater. Soil vapor samples were analyzed for VOCs. The VOCs 1,3-butadiene, benzene, Freon-11, and Freon-12 were detected at elevated levels in soil vapor samples. No other VOCs, including chlorinated VOCs, were detected in soil vapor samples. 1,3-Butadiene was detected in five soil vapor samples with a maximum concentration of 66 micrograms per cubic meter (ug/m^3). Benzene was detected in three soil

vapor samples with a maximum concentration of 40 ug/m^3. Freon-11 was detected in six soil vapor samples with a maximum concentration of 660,000 ug/m^3. Freon-12 was detected in two soil vapor samples with a maximum concentration of 680,000 ug/m^3. Both Freons were detected in soil vapor beneath the former ice-skating rink area and near the southern and western boundaries of the site. There are no NYSDOH soil vapor matrices for these compounds.

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 contaminated soil was removed from the site, direct contact with any residual contaminants in soil is unlikely. 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 soil vapor (air spaces within the soil) can move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. Because there are no buildings on-site, inhalation of site contaminants in indoor air from soil vapor intrusion does not represent a health concern for the site in its current condition. However, the potential exists for people to inhale contaminants in indoor air due to soil vapor intrusion in any future onsite development. Sampling indicates soil vapor intrusion is not a concern for offsite 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 (RAOs) 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 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 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

1. No Further Action

Based on the results of the investigations at the site, the IRM that has been performed, and the evaluation presented here, the Department has selected No Further Action as the remedy for the site. This No Further Action remedy includes the following:

- groundwater monitoring, with an in-situ groundwater treatment contingency, should the concentrations of contaminants in groundwater fail to sufficiently naturally attenuate to an acceptable level;
- a provision for evaluation for soil vapor intrusion for any future buildings on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion; and
- the implementation of an institutional control in the form of an environmental easement.

Should future monitoring results indicate that monitoring is no longer required, the BCP Volunteer may petition the Department to have the easement and the Site Management Plan extinguished. The Department believes that this remedy is protective of human health and the environment and satisfies the remediation objectives described in Section 6.5.

The elements of the IRM already completed are listed below:

1a. Excavation

All existing on-site buildings (including basement structures and slabs) were demolished, and all building materials (including crushed concrete) were taken off-site for proper disposal. Two 10,000-gallon underground storage tanks (USTs) and associated underground piping located near the eastern boundary of the site were removed from the site and disposed of at a permitted facility. The USTs had been used historically for fuel oil storage. UST removal included excavation and off-site disposal of soil impacted by petroleum. On-site soils which exceeded unrestricted soil

cleanup objectives (USCOs) for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, and pesticides, as defined by 6 NYCRR Part 375-6.8, were excavated and transported off-site for disposal. Approximately 10,000 cubic yards of contaminated soil was removed from the site.

2. Green Remediation

Green remediation principals and techniques will be implemented to the extent feasible in the 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 gas 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; 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 beneath any floor which is in contact with the ground to improve energy efficiency as an element of construction.

3. Conditional Track 1

The intent of the remedy is to achieve a Track 1 unrestricted use. A Site Management Plan (SMP) has been developed and an Environmental Easement has been recorded to address residual groundwater impacts and soil vapor intrusion (SVI) evaluation on the larger 17.30-acre portion of the site, and to implement actions as needed. 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 on future buildings and groundwater 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, the site may still be eligible for a Track 1 cleanup, however, a groundwater use restriction and associated easement will still be required.

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.

3a. Engineering and Institutional Controls

The Environmental Easement and Site Management Plan will continue to be required. The remedy will achieve a Track 2 residential cleanup at a minimum and will include an environmental easement, and site management plan as described below.

3b. 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 use or restricted-residential use or commercial use 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.

3c. 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 3b above.

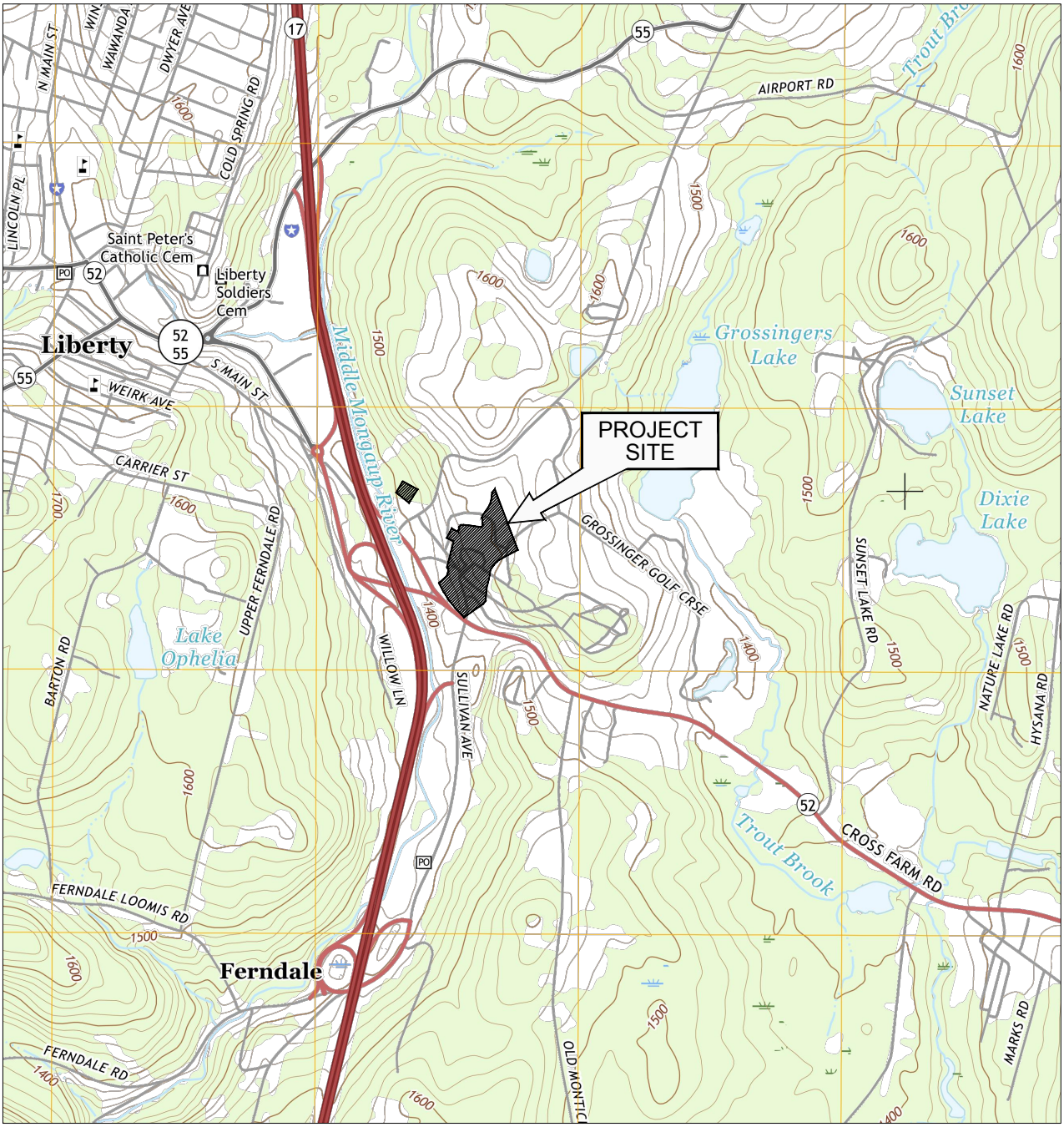
Engineering Controls: Groundwater Monitoring and any engineering controls that may be required following the five-year conditional Track 1 evaluation period (e.g., sub-slab depressurization system, active groundwater treatment).

This Site Management Plan (SMP) includes, but may not be limited to:

- 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 prior to occupancy of for any future buildings on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
- o a provision for in-situ groundwater treatment if concentrations of constituents in groundwater do not naturally attenuate to acceptable levels;
- o provisions for the management and inspection of the identified engineering controls, if any;
- 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.

2. a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:
   - o monitoring groundwater to assess the performance and effectiveness and subsequent natural attenuation, and to inform the need for a contingent groundwater remedy;
   - o a schedule of monitoring and frequency of submittals to the Department; and
   - o monitoring for vapor intrusion for any buildings on the site, as may be required by the Institutional and Engineering Control Plan discussed above.

3. 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:
   - o procedures for operating and maintaining the system(s)/contingent groundwater remedy, if any; and
   - o compliance inspection of the system(s) to ensure proper O&M as well as providing the data for any necessary reporting;
   - o maintaining site access controls and Department notification; and
   - o providing the Department access to the site and O&M records.



Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and 1 000-meter grid: Universal Transverse Mercator, Zone 18T
10 000-foot ticks: New York Coordinate System of 1983 (east zone)

This map is not a legal document. Boundaries may be generalized for this map scale. Private lands within government reservations may not be shown. Obtain permission before entering private lands.

Imagery.....NAIP, July 2013
Roads..... U.S. Census Bureau, 2015 - 2016
Names.....GNIS, 2016
Hydrography.....National Hydrography Dataset, 2013
Contours.....National Elevation Dataset, 1999
Boundaries.....Multiple sources; see metadata file 1972 - 2016

Wetlands.....FWS National Wetlands Inventory 1977 - 2014

UTM GRID AND 2016 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

U.S. National Grid
100,000-m Square ID
WM
Grid Zone Designation
18T

SCALE 1:24 000

KILOMETERS 0 0.5 1 2
METERS 0 1000 2000
MILES 0 0.5 1
FEET 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000

CONTOUR INTERVAL 20 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

This map was produced to conform with the National Geospatial Program US Topo Product Standard, 2011. A metadata file associated with this product is draft version 0.6.19

QUADRANGLE LOCATION

ADJOINING QUADRANGLES
1 Livingston Manor
2 Willowemoc
3 Claryville
4 Liberty West
5 Grahamsville
6 White Lake
7 Monticello
8 Woodridge

ROUTE 17 & ROUTE 52 EAST
LIBERTY, NEW YORK 12754
NYSDEC BCP SITE NO. C353015

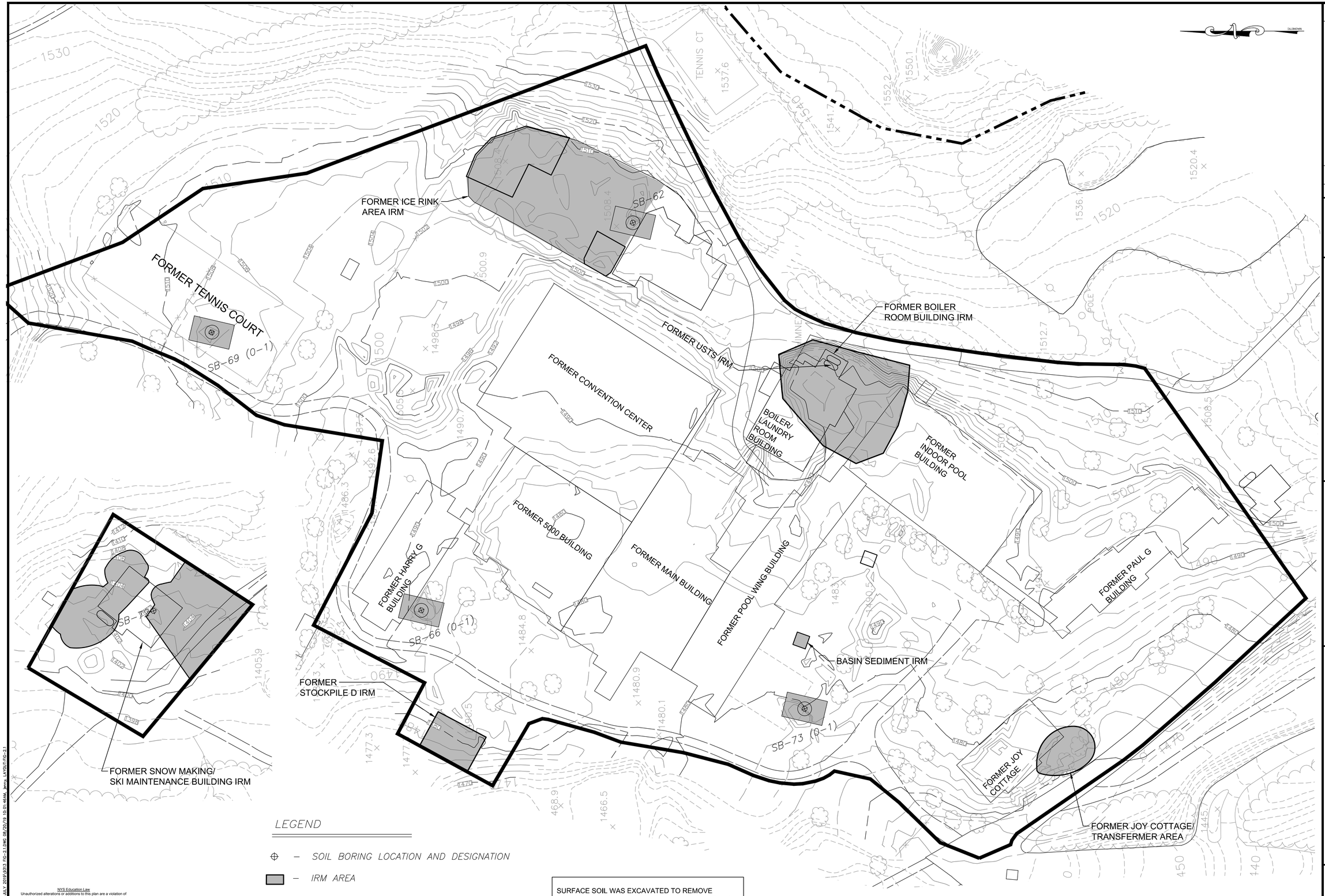
SITE PLAN

SESI CONSULTING ENGINEERS D.P.C.
SOILS / FOUNDATIONS
SITE DESIGN
ENVIRONMENTAL
12A MAPLE AVE. PINE BROOK, N.J. 07058 PH: 973-808-9050

FIG-1.1

DRAWN BY: yy
CHECKED BY: FD
SCALE: N.T.S.
DATE: 01/29/19
JOB NO.: 9313

N:\ACAD\9313\FER\9313 SITE PLAN FIG-1.1.DWG 01/29/19 10:33:59AM, jenny, LAYOUT:FIG-1.1



LEGEND

⊕ – *SOIL BORING LOCATION AND DESIGNATION*

▭ – *IRM AREA*

SURFACE SOIL WAS EXCAVATED TO REMOVE PESTICIDE EXCEEDANCES TO THE UNRESTRICTED SCOs THROUGHOUT THE BCP AREA - SEE FIGURE 3.8

REFERENCE
SITE INFORMATION TAKEN FROM "PRELIMINARY MAP". DATED FEBRUARY 1993. LAST UPDATED ON DECEMBER 2009.

Scale: 1"= 50'
0 25 50 100 150 200

N:\CAD\9313\FIGS JULY 2019\9313 FIG-2.1.DWG 08/20/19 16:01:46 AM jerry LAYOUT:FIG-2.1

no.	date	description	by

dwg by: yy
chk by: FD
scale: 1" = 50'
date: 8/20/19

SESI CONSULTING ENGINEERS D.P.C.
SOILS / FOUNDATIONS
SITE DESIGN
ENVIRONMENTAL
12A MAPLE AVE., PINE BROOK, NJ., 07058 PH: 973-808-9050

ROUTE 17 & ROUTE 52 EAST
LIBERTY, NEW YORK 12754

drawing title: IRM LOCATION PLAN

job no. 9313
drawing no.

FIG-2.1