DECISION DOCUMENT

CE - Hastings Gas Works
Voluntary Cleanup Program
Hastings-on-Hudson, Westchester County
Site No. V00728
February 2018

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

DECLARATION STATEMENT - DECISION DOCUMENT

CE - Hastings Gas Works
Voluntary Cleanup Program
Hastings-on-Hudson, Westchester County
Site No. V00728
February 2018

Statement of Purpose and Basis

This document presents the remedy for the CE - Hastings Gas Works site, a voluntary cleanup site. The remedial program was chosen in accordance with the New York State Environmental Conservation Law and applicable guidance.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (the Department) for the CE - Hastings Gas Works site and the public's input to the proposed remedy presented by the Department.

Description of Selected Remedy

The elements of the remedy are as follows:

1. 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;

the environmental impacts of treatment technologies and remedy stewardship over the long term;

direct and indirect greenhouse gases and other emissions;

energy efficiency and minimizing use of non-renewable energy;

and efficiently managing resources and materials;

waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;

habitat value and creating habitat when possible;

green and healthy communities and working landscapes which balance ecological, economic and social goals; and

the remedy with the end use where possible and encouraging green and sustainable re-development.

2. Excavation

Shallow soil will be excavated to a depth of 2 feet below ground surface (bgs) over the entire level area of the site, excluding the existing hardscaped areas, to enable the placement of the site cover.

3. Site Cover

A site cover will be required to allow for restricted residential, commercial or industrial use of the site in areas where the upper two feet of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). The site cover may consist of paved surface parking areas, stone revetment, sidewalks, or a soil cover. Where a soil cover is to be used it will be a minimum of two feet of soil placed over a demarcation layer, with the upper six inches of soil of sufficient quality to maintain a vegetative layer. Soil cover material, including any fill material brought to the site, will meet the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d). In areas where building foundations or building slabs preclude contact with the soil, the requirements for a site cover will be deferred until such time that they are removed.

4. Institutional Control

Imposition of an institutional control in the form of a deed restriction for the controlled property which will:

- require the remedial party (subject to agreement with the 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 uses as defined by Part 375-1.8(g)(2)(ii), commercial uses as described in Part 375-1.8(g)(2)(iii) and industrial uses as described in Part 375-1.8(g)(2)(iv), 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.

5. 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 Deed Restriction discussed above.

Engineering Controls: The site cover discussed in Paragraph 3.

This plan includes, but may not be limited to:

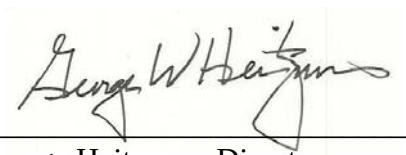
- an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
- a provision for further investigation and remediation should large scale redevelopment occur, if any of the existing structures are demolished, or if large areas of the subsurface areas otherwise made accessible, that would provide sufficient access for full investigation and remediation. The nature and extent of contamination in areas where access was previously limited or unavailable will be immediately and thoroughly investigated pursuant to a plan approved by the Department. Based on the investigation results and the Department determination of the need for a remedy, a Remedial Action Work Plan (RAWP) will be developed for the final remedy for the site, including removal and/or treatment of any source areas to the extent feasible. Citizen Participation Plan (CPP) activities will continue through this process. Any necessary remediation will be completed prior to, or in association with, redevelopment. This includes the properties at 8, 10, and 12 Washington Avenue;
- descriptions of the provisions of the deed restriction including any land use and groundwater use restrictions;
- a provision for evaluation of the potential for soil vapor intrusion buildings adjacent to the western boundary of the site, and for future buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
- 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) A Monitoring Plan to assess the current conditions at the site. The plan includes, but may not be limited to:

- monitoring of groundwater to assess any change in the current conditions;
- schedule of monitoring and frequency of submittals to the Department; and
- monitoring for vapor intrusion, as may be required by the Institutional and Engineering Control Plan discussed above.

Declaration

The remedy conforms with promulgated standards and criteria that are directly applicable, or that are relevant and appropriate and takes into consideration Department guidance, as appropriate. The remedy is protective of public health and the environment.



February 9, 2018

Date

George Heitzman, Director
Remedial Bureau C

DECISION DOCUMENT

CE - Hastings Gas Works
Hastings-on-Hudson, Westchester County
Site No. V00728
February 2018

SECTION 1: SUMMARY AND PURPOSE

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), has selected a remedy for the above referenced site. The disposal of contaminants at the site has resulted in potential 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 Voluntary Cleanup Program (VCP) is a voluntary program. The goal of the VCP is to enhance private sector cleanup of brownfields by enabling parties to remediate sites using private rather than public funds and to reduce the development pressures on "greenfields." This document is a summary of the information that can be found in the site-related reports and documents.

SECTION 2: CITIZEN PARTICIPATION

The Department seeks input from the community on all remedies. A public comment period was held, during which the public was encouraged to submit comment on the proposed remedy. All comments on the remedy received during the comment period were considered by the Department in selecting a remedy for the site. Site-related reports and documents were made available for review by the public at the following document repositories:

Hastings Public Library
7 Maple Avenue
Hastings on Hudson, NY 10533
Phone: 914-478-3307

NYSDEC Region 3
21 Putt Corners Road
New Paltz, NY 12561
Phone:

Village Clerk
7 Maple Avenue

Hastings on Hudson, NY 10706
Phone: 914-478-3400 extension 611

Receive Site Citizen Participation Information By Email

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

SECTION 3: SITE DESCRIPTION AND HISTORY

Location: The Hastings Gas Works Former MGP Site (site) is located in an urban area within the village of Hastings on Hudson, Westchester County, New York. The site consists of properties located at 8, 10, and 12 Washington Avenue.

Site Features: Three buildings are located on the site and are currently utilized as follows: 8 Washington Avenue contains a five-story residential apartment building; 10 Washington Avenue is a one-story building operated as a theatrical training studio; and 12 Washington Avenue is a two-story building that includes an antique and rare book shop at street level and a residence on the second floor. The three buildings abut one another and occupy approximately 60% of the surface area of the site. A steep tree-lined vegetated slope (approximately 15 foot elevation difference) and retaining wall separate the eastern portion of the site from Ridge Street, located east of the site.

Current Zoning and Land Use: The site is zoned multi-family residential/commercial. The site and the surrounding parcels are currently used for residential and commercial purposes.

Past Use of the Site: The Hastings Gas Works former MGP started operation in approximately 1860. The MGP appears to have initially used coal in a retort process and then converted to an oil gas process in 1875, which it used until the plant shut down sometime between 1893 and 1902. The gas works was decommissioned between 1902 and 1912. The property has been used for both commercial and residential purposes since that time.

Site Geology and Hydrogeology: The site geology includes a fill layer underlain by glacial sand and sandy till deposits and then bedrock. The fill material includes brick, tile and glass fragments; with minor amounts of slag and ash. The fill thickness ranges from approximately 3 to 17 feet. Bedrock was estimated to be 38 feet to 51 feet below the ground surface at the site. Depth to groundwater at the site ranges between 8.7 and 35.4 feet below grade and groundwater flows to the south/southwest.

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, at a minimum, alternatives (or an alternative) that restrict(s) the use of the site to restricted-residential use (which allows for commercial use and industrial use) as described in DER-10, Technical Guidance for Site Investigation and Remediation were/was evaluated.

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

SECTION 5: ENFORCEMENT STATUS

The Department and Con Edison entered into a Voluntary Cleanup Agreement (DEC Index No. D2-0003-92-08) dated August 25, 2002 and modified on September 10, 2007. The agreement obligates Con Edison to implement a full remedial program for MGP-related contamination both on and off the site. On-site and off-site contamination unrelated to former MGP activities identified during the environmental investigations will be addressed separately by the Department. The responsible party, in accordance with the Voluntary Cleanup Agreement is not responsible for non-MGP contamination.

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
- indoor air
- sub-slab 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:

benzene	benzo(b)fluoranthene
toluene	benzo[k]fluoranthene
ethylbenzene	chrysene
m-xylene	dibenz[a,h]anthracene
o-xylene	indeno(1,2,3-CD)pyrene
p-xylene	mercury
styrene	lead
naphthalene	isopropylbenzene
benzo(a)anthracene	biphenyl
benzo(a)pyrene	benzene

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

- groundwater
- soil

6.2: Interim Remedial Measures

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

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

6.3: Summary of Environmental Assessment

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

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), and pesticides. Below is a summary of the investigation findings. A detailed description can be found in the RI report.

Soil: Based on the investigations conducted to date, the primary contaminants of concern detected in soil include SVOCs and metals. VOCs, pesticides and PCBs were either not detected or were found at levels generally below the residential use SCOs. Polycyclic aromatic hydrocarbons (PAHs) or SVOCs and metals were detected in shallow soil at various locations across the site. Investigations also identified contaminated soil containing SVOCs and metals found within the former gas holder foundation at depth (16-17 feet). Soil contamination resulting from MGP operation is limited to on-site areas with exception of one adjacent off-site location on Southside Avenue showing xylene at concentrations of 1.65 parts per million (ppm).
A majority of the site was converted into residential and commercial spaces following closure of the MGP facility. The former tar well, a subsurface tank used to store coal tar for later distribution, and a large portion of the former gas holder are located beneath the footprint of the buildings and are inaccessible. To evaluate these areas, borings were drilled adjacent to the estimated location of the tar well and within the accessible portions of the former gas holder.

Surface soil samples at the site were collected at depths between 0 and 2 inches below ground surface, and contained SVOC and metal constituents at concentrations greater than the Unrestricted Use Soil Cleanup Objects (UUSCOs) as well as the Restricted Residential SCOs (RRSCOs). SVOCs detected at estimated concentrations above the RRSCOs included: benzo(a)anthracene at a maximum concentration of 1.9 ppm (RRSCO is 1 ppm), benzo(a)pyrene

up to 1.7 ppm (RRSCO is 1 ppm), benzo(b)fluoranthene up to 2.9 ppm (RRSCO is 1 ppm), chrysene up to 2 ppm (RRSCO is 1 ppm), dibenz(a,h)athracene up to 2.3 ppm (RRSCO is 0.3 ppm), and indeno(1,2,3-cd)pyrene up to 1.4 ppm (RRSCO is 0.5 ppm).

Metals were detected in four out of five surface soils collected at concentrations greater than the UUSCOs and RRSCOs. These metals include barium, cadmium, copper, lead, mercury, and zinc. Shallow soils at the site are comprised of imported fill material; therefore, these metal detections are likely related to the fill material rather than the former MGP operations. Fill materials are present immediately beneath the sod and vegetative cover of the rear yards of 8, 10, and 12 Washington Avenue at depths up to 12 feet below grade. The PAHs and metals found in surface soils are confined to the site.

Subsurface soil samples contained SVOC constituents at concentrations greater than the Unrestricted Use Soil Cleanup Objectives (UUSCOs), as well as the Restricted Residential SCOs (RRSCOs), at depths ranging from 8 to 19 feet below grade. SVOC constituents detected above the RRSCOs include: benz(a)anthracene at a maximum concentration of 7.3 ppm (RRSCO is 1 ppm), benzo(a)pyrene up to 6.9 ppm (RRSCO is 1 ppm), benzo(b)fluoranthene up to 12 ppm (RRSCO is 1 ppm), benzo(k)fluoranthene up to 3.7 ppm (RRSCO is 1 ppm), chrysene up to 11 ppm (RRSCO is 1 ppm), dibenz(a,h)anthracene up to 6.1 ppm (RRSCO is 0.3 ppm), and indeno(1,2,3-cd)pyrene up to 3.7 ppm(RRSCO is 0.5 ppm).

Subsurface samples collected in the vicinity of the crude oil tanks and former gas holder at depths ranging from 11 to 17.5 feet below grade contained metals at concentrations exceeding both the UUSCOs and the RRSCOs, as follows: lead was detected at a maximum concentration of 2,020 ppm (RRSCO of 400 ppm) and mercury was detected up to 4.9 ppm (RRSCO of 0.81 ppm).

Groundwater: VOCs and SVOCs were the primary contaminants identified in groundwater at the site. Perched groundwater samples collected within the gas holder and groundwater collected downgradient of the holder, on Southside Avenue, contained contaminants at concentrations exceeding the New York State Ambient Water Quality Standards and Guidance Values, as follows: benzene was detected at a maximum concentration of 110 parts per billion (ppb) (standard of 1 ppb), toluene up to 320 ppb (standard of 5 ppb), ethylbenzene up to 1,400 ppb (standard of 5 ppb), xylenes up to 4,200 ppb (standard of 5 ppb), isopropylbenzene up to 150 ppb (standard of 5 ppb), styrene up to 88 ppb (standard of 5 ppb), naphthalene up to 1,700 ppb (standard of 10 ppb), benzo(b)fluoranthene up to 6 ppb (standard of 0.002 ppb), indeno(1,2,3-cd)pyrene up to 9.3 ppb (standard of 0.002 ppb), and 1,1-biphenyl up to 22 ppb (standard of 5 ppb).

Groundwater contamination was generally detected at on-site locations with limited contaminants of concern detected in groundwater downgradient of the site on Southside Avenue.

Soil Vapor and Indoor Air: Sub-slab soil vapor samples were collected from beneath the basements of on-site buildings located at 8 and 10-12 Washington Avenue. Indoor air samples were collected concurrently with the soil vapor samples. Indoor data collected at both locations indicated that VOCs were present in the indoor air at levels consistent with background. MGP-

related compounds, n-heptane, 1,2,4-trimethylbenzene, and 1,3,5-trimethylbenzene, were found in sub-slab soil vapor samples at maximum concentrations of 259 micrograms per cubic meter (µg/m3), 143 µg/m3, and 58.8 µg/m3 respectively. The sampling indicated no further action is needed in on-site buildings.

The potential for off-site soil vapor intrusion concerns exists at two or three adjacent off-site properties. Elevated groundwater concentrations were detected immediately west of the property on Southside Avenue. Repeated attempts made to gain access to collect indoor air and sub-slab soil vapor samples at the property were denied. A soil vapor intrusion investigation will be conducted in the future as part of the site management plan if and when access is granted.

Based on knowledge of the site and its location in an urban residential setting with full developed surrounding property uses, no fish and wildlife resources were identified on the site, adjacent to, or downgradient from the site. Based on the site setting, a Fish and Wildlife Impact Analysis was not performed at this 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 some contaminated soils remain at the site below concrete or clean backfill, people will not come in contact with contaminated soils unless they dig below the surface material. Contaminated groundwater at the site is not used for drinking or other purposes and the site is served by a public water supply that obtains water from a different source not affected by this contamination. Contaminated soil vapor (air spaces within the soil) 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. Sampling data indicate actions are not needed to address soil vapor intrusion in the on-site buildings. NYSDOH recommends that soil vapor intrusion evaluations be completed for any new buildings developed on the site and for buildings adjacent to the west side of the site.

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.

Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.

RAOs for Environmental Protection

- Prevent migration of contaminants that would result in groundwater or surface water contamination.

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.

The selected remedy is referred to as the Monitoring with Institutional Controls remedy.

The elements of the selected remedy, as shown in Figure 2, are as follows:

1. 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;

the environmental impacts of treatment technologies and remedy stewardship over the long term;

direct and indirect greenhouse gases and other emissions;

energy efficiency and minimizing use of non-renewable energy;

and efficiently managing resources and materials;

waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;

habitat value and creating habitat when possible;

green and healthy communities and working landscapes which balance ecological, economic and social goals; and

the remedy with the end use where possible and encouraging green and sustainable re-development.

2. Excavation
Shallow soil will be excavated to a depth of 2 feet below ground surface (bgs) over the entire level area of the site, excluding the existing hardscaped areas, to enable the placement of the site cover.

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A site cover will be required to allow for restricted residential, commercial or industrial use of the site in areas where the upper two feet of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). The site cover may consist of paved surface parking areas, stone revetment, sidewalks, or a soil cover. Where a soil cover is to be used it will be a minimum of two feet of soil placed over a demarcation layer, with the upper six inches of soil of sufficient quality to maintain a vegetative layer. Soil cover material, including any fill material brought to the site, will meet the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d). In areas where building foundations or building slabs preclude contact with the soil, the requirements for a site cover will be deferred until such time that they are removed.

4. Institutional Control

Imposition of an institutional control in the form of a deed restriction for the controlled property which will:
- require the remedial party (subject to agreement with the 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 uses as defined by Part 375-1.8(g)(2)(ii), commercial uses as described in Part 375-1.8(g)(2)(iii) and industrial uses as described in Part 375-1.8(g)(2)(iv), 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.

5. 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 Deed Restriction discussed above.

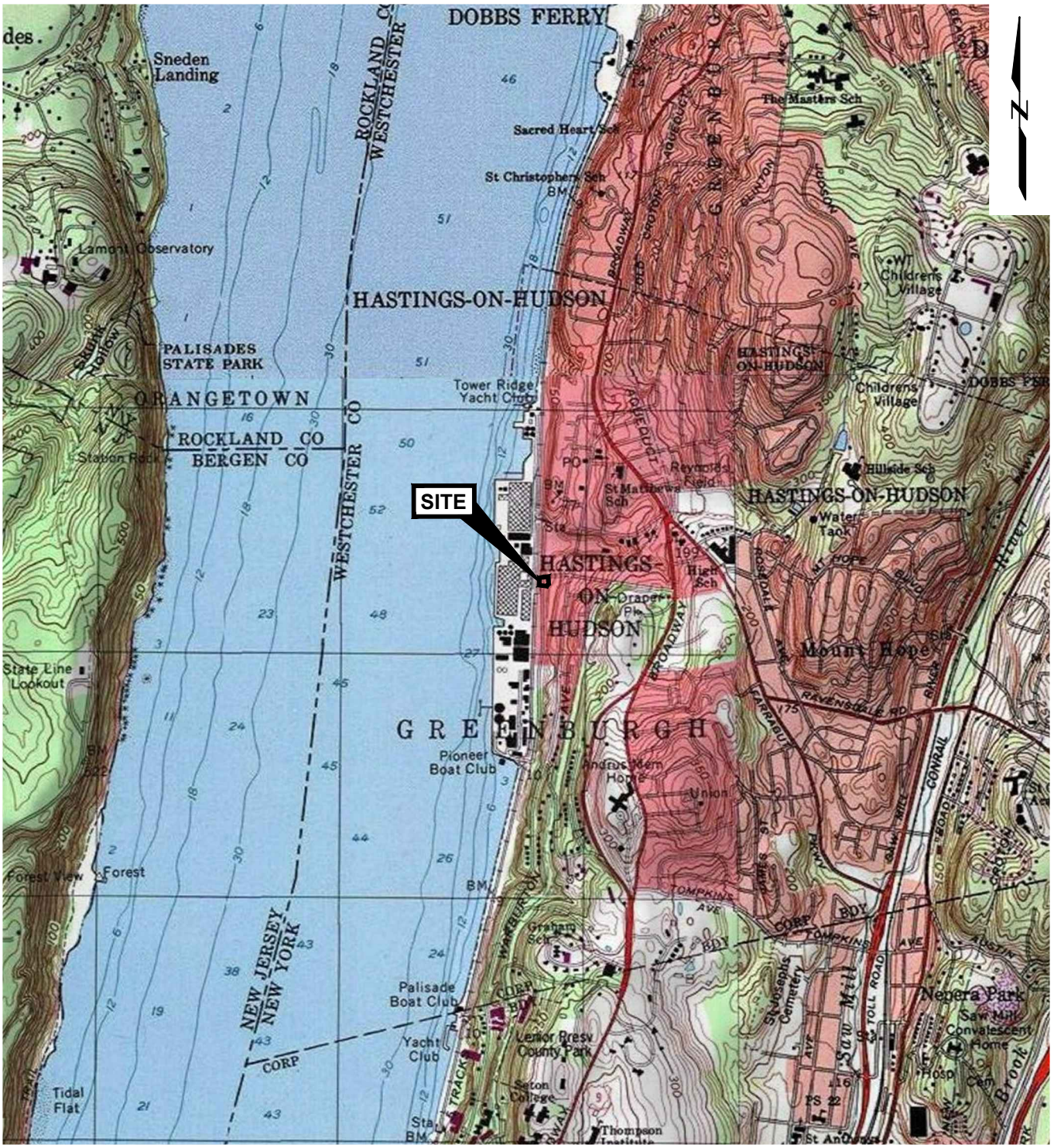
Engineering Controls: The site cover discussed in Paragraph 3.

This plan includes, but may not be limited to:

- an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
- a provision for further investigation and remediation should large scale redevelopment occur, if any of the existing structures are demolished, or if large areas of the subsurface areas otherwise made accessible, that would provide sufficient access for full investigation and remediation. The nature and extent of contamination in areas where access was previously limited or unavailable will be immediately and thoroughly investigated pursuant to a plan approved by the Department. Based on the investigation results and the Department determination of the need for a remedy, a Remedial Action Work Plan (RAWP) will be developed for the final remedy for the site, including removal and/or treatment of any source areas to the extent feasible. Citizen Participation Plan (CPP) activities will continue through this process. Any necessary remediation will be completed prior to, or in association with, redevelopment. This includes the properties at 8, 10, and 12 Washington Avenue;
- descriptions of the provisions of the deed restriction including any land use and groundwater use restrictions;
- a provision for evaluation of the potential for soil vapor intrusion for buildings adjacent to the western boundary of the site and for future buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
- 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) A Monitoring Plan to assess the current conditions at the site. The plan includes, but may not be limited to:

- monitoring of groundwater to assess any change in the current conditions;
- schedule of monitoring and frequency of submittals to the Department; and
- monitoring for vapor intrusion, as may be required by the Institutional and Engineering Control Plan discussed above.



SOURCE:
U.S.G.S 7.5 Minute Topographic Maps, accessed via ArcGIS online ©2013 National Geographic Society, i-cubed.

0 2000 4000

SCALE: 1" = 2000'

Decision Document Hastings-on-Hudson Former MGP Site Village of Hastings-On-Hudson, New York	GEI Consultants	SITE LOCATION MAP
Consolidated Edison Co. of New York, Inc. Astoria, New York	Project 070251	December 2017 Fig. 1

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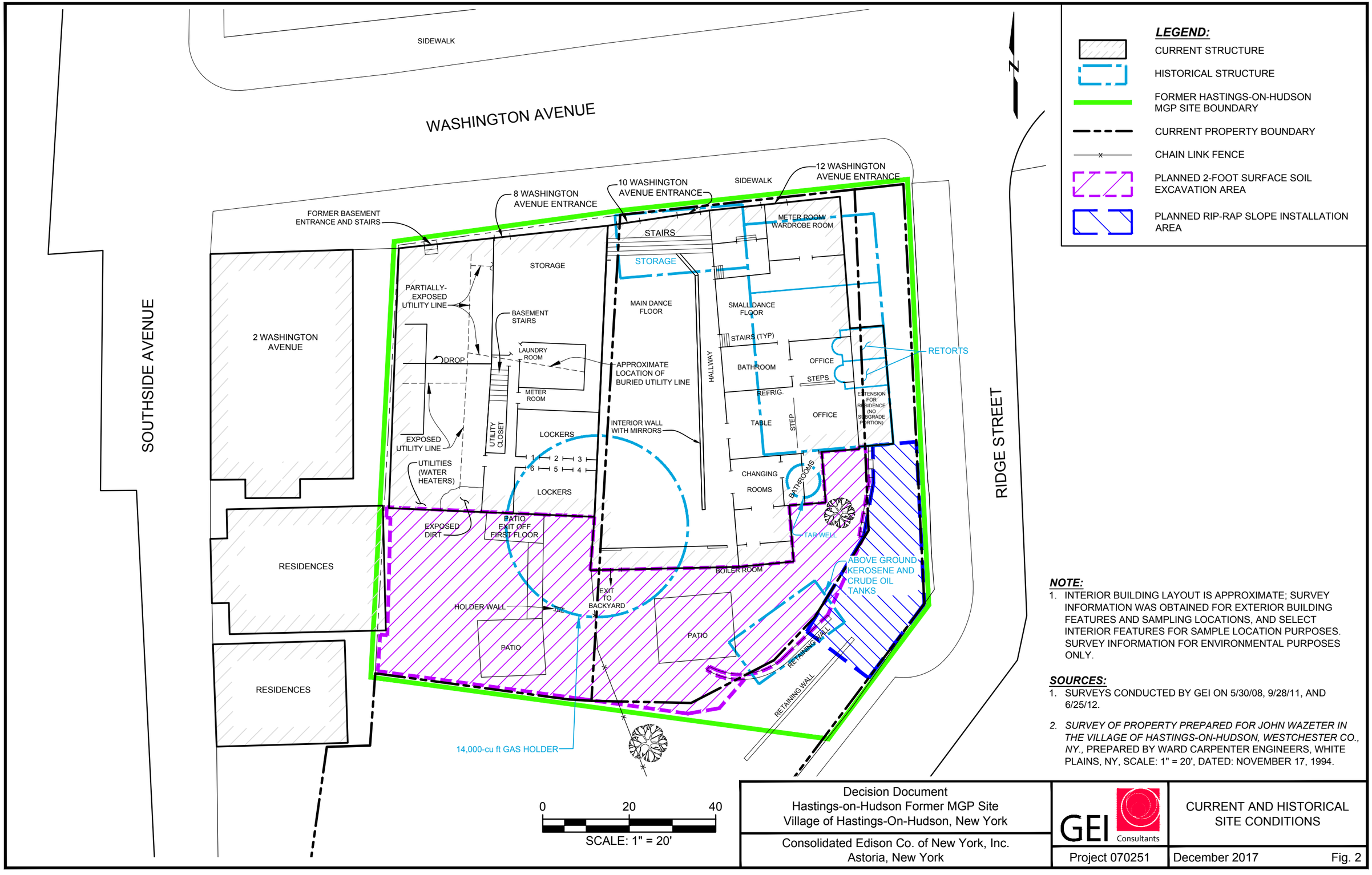

NOTE:

1. INTERIOR BUILDING LAYOUT IS APPROXIMATE; SURVEY INFORMATION WAS OBTAINED FOR EXTERIOR BUILDING FEATURES AND SAMPLING LOCATIONS, AND SELECT INTERIOR FEATURES FOR SAMPLE LOCATION PURPOSES. SURVEY INFORMATION FOR ENVIRONMENTAL PURPOSES ONLY.

SOURCES:

1. SURVEYS CONDUCTED BY GEI ON 5/30/08, 9/28/11, AND 6/25/12.
2. *SURVEY OF PROPERTY PREPARED FOR JOHN WAZETER IN THE VILLAGE OF HASTINGS-ON-HUDSON, WESTCHESTER CO., NY.*, PREPARED BY WARD CARPENTER ENGINEERS, WHITE PLAINS, NY, SCALE: 1" = 20', DATED: NOVEMBER 17, 1994.

Decision Document Hastings-on-Hudson Former MGP Site Village of Hastings-On-Hudson, New York	GEI Consultants	CURRENT AND HISTORICAL SITE CONDITIONS
Consolidated Edison Co. of New York, Inc. Astoria, New York	Project 070251	December 2017 Fig. 2

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