

# DECISION DOCUMENT

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251 Homer Street Development  
Brownfield Cleanup Program  
Olean, Cattaraugus County  
Site No. C905037  
October 2016



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

# **DECLARATION STATEMENT - DECISION DOCUMENT**

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251 Homer Street Development  
Brownfield Cleanup Program  
Olean, Cattaraugus County  
Site No. C905037  
October 2016

## **Statement of Purpose and Basis**

This document presents the remedy for the 251 Homer Street Development 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 251 Homer Street Development 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. 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.
2. A site cover will be required to allow for commercial or industrial use of the site. The cover will consist either of the structures such as buildings, pavement, sidewalks comprising the site development or a soil cover in areas where the upper one foot of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). Where the soil cover is required it will be a minimum of one foot 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).

3. 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 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.

#### Site Management Plan

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

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

Institutional Controls: the Environmental Easement discussed above.

Engineering Controls: the soil cover discussed in Paragraph 2.

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;
  - 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 into future buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
  - provisions for the management and inspection of the identified engineering controls;
  - maintaining site access controls and Department notification; and
  - the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.
- b. a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:
    - monitoring of groundwater to assess the performance and effectiveness of the remedy;
    - a schedule of monitoring and frequency of submittals to the Department; and
    - monitoring for vapor intrusion for any future occupied buildings developed on the site, as may be required by the Institutional and Engineering Control Plan discussed above.

## **Declaration**

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

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Date

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Michael Cruden, Director  
Remedial Bureau E

# **DECISION DOCUMENT**

251 Homer Street Development  
Olean, Cattaraugus County  
Site No. C905037  
October 2016

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## **SECTION 1: SUMMARY AND PURPOSE**

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), has selected a remedy for the above referenced site. The disposal of contaminants at the site has resulted in threats to public health and the environment that would be addressed by the remedy. The disposal or release of contaminants at this site, as more fully described in this document, has contaminated various environmental media. Contaminants include hazardous waste and/or petroleum.

The New York State Brownfield Cleanup Program (BCP) is a voluntary program. The goal of the BCP is to enhance private-sector cleanups of brownfields and to reduce development pressure on "greenfields." A brownfield site is real property, 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 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:

Olean Public Library  
134 North Second Street  
Olean, NY 14760  
Phone: (716) 372-0200

### **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 251 Homer Street Development Site is approximately 16.68 acres in area and is located at 251 Homer Street in the northern part of the City of Olean. The site is situated immediately northwest of Interstate I-86.

**Site Features:** The site is currently vacant, and is covered with grass or small shrubs. A gravel driveway connects the site to Homer Street. Two Mile Creek borders the site immediately to the north and traverses the south-western portion of the site.

**Current Zoning and Land Use:** The site is currently zoned for industrial use. The surrounding parcels are currently used for a mixture of light industrial and commercial uses. The nearest residential area is located approximately 300 feet northwest of the site.

**Past Use of the Site:** The site was historically a portion of a larger petroleum refinery and petroleum bulk storage facility known as the former SOCONY Vacuum facility, which operated from the late 1800s until the 1950s. The site and surrounding area were historically developed as a petroleum refinery with numerous aboveground storage tanks (ASTs) and heavy industrial operations.

**Site Geology and Hydrogeology:** Soil at the site consists of 3 to 11 feet of sandy silt and clay interspersed with fill materials consisting of gravel, brick, concrete, cinders, etc. This material is underlain by native soils consisting of medium to coarse sand and gravel, with clay layers in some areas.

The depth to groundwater ranges between 8 to 16 feet below ground surface. Groundwater in the uppermost water bearing unit generally flows toward the southeast. A perched water table may exist in portions of the site where significant clay layers are present.

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, alternatives (or an alternative) that restrict(s) the use of the site to commercial use (which allows for industrial use) as described in Part 375-1.8(g) were/was evaluated in addition to an alternative which would allow for unrestricted use of the site.

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

contaminants is available in the RI Report.

## **SECTION 5: ENFORCEMENT STATUS**

The Applicant(s) under the Brownfield Cleanup Agreement is a/are Volunteer(s). The Applicant(s) does/do not have an obligation to address off-site contamination. However, the Department has determined that this site does not pose a significant threat to public health or the environment; accordingly, no enforcement actions are necessary.

Off-site impacts are being addressed separately under the BCP or the Spills program.

## **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
- surface water
- soil
- sediment

#### **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:

lead  
arsenic  
petroleum products

polycyclic aromatic hydrocarbons (PAHS),  
total

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

- groundwater
- soil
- sediment

### **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.

#### **IRM - Piping Removal**

This IRM removed of all known historic underground piping. The majority of this piping was associated with the former refinery works. This IRM included:

- the removal of 10,644 feet of abandoned underground piping. The piping was cleaned and sent off-site to a metals recycling facility;
- the removal, collection, and off-site disposal of pipe contents including petroleum sludge/tar, oil, and pipe scale. A total of forty-eight 55-gallon drums were sent off-site for treatment or disposal; and
- on-site treatment of 21,000 gallons of impacted groundwater/surface water from excavations to facilitate pipe removal. The water was treated with activated carbon and discharged to the City of Olean publically owned treatment works.



This IRM was completed in February 2013.

#### IRM - Mass Excavation

Excavation and off-site disposal of approximately 49,000 tons of grossly contaminated material (GCM) from three discrete areas across the site. The major components of the IRM included:

- Excavation and off-site disposal of GCM;
- Groundwater and surface water management to facilitate excavation and backfill. Approximately 250,000 gallons of collected water was treated with activated carbon and discharged to the City of Olean publically owned treatment works; and
- Backfill of excavation areas with approved soil/fill that allows for commercial use and placement of a demarcation layer between on-site soil and backfill.

During this IRM an additional area, Arsenic Area- Area 4, was excavated to remove soil impacted with elevated levels of arsenic. A total of 2,100 tons of soil were removed from this area and disposed of off-site.

The IRM and arsenic excavation were completed in March 2015. The combined excavations removed on-site soil exceeding commercial soil cleanup objectives (SCOs) and the following site specific action levels:

- arsenic exceeding 60 ppm;
- lead exceeding 3,900 ppm; and
- total PAHs exceeding 500 ppm.

#### IRM - Two Mile Creek Excavation and Restoration

Excavation and off-site disposal of approximately 3,100 tons of on-site soil/sediment from in and around Two Mile Creek. The major components of the IRM included:

- temporary damming and diversion of water around the excavation area;
- excavation and off-site disposal of soil that exceeded protection of ecological SCOs or exhibited gross contamination;
- excavation and off-site disposal of sediment that exhibited gross contamination;
- collection and treatment of excavation water with discharge to the City of Olean publically owned treatment works;
- backfill of creek bed and banks with approved soil and gravel meeting unrestricted SCOs; and
- restoration of creek riparian zone with native grasses and riparian shrubs.

The IRM was completed in April 2016.

### **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:

Based on the investigations and IRMs completed to date, the primary contaminants of concern that remain at the site are petroleum product, semivolatile organic compounds (SVOCs), arsenic and lead.

#### Soil:

On-site surface soil samples (0 to 2 inches below grade) were analyzed for semivolatile organic compounds (SVOCs), pesticides/herbicides, polychlorinated biphenyls (PCBs), and metals. The SVOCs benzo(a)pyrene (non-detect (ND) to 1.6 parts per million (ppm)) and dibenzo(a,h)anthracene (ND to 2.9 ppm) were detected, as compared to the commercial use SCOs of 1 ppm and 0.56 ppm, respectively. Two locations exceed the commercial use SCO for benzo(a)pyrene and one location exceeds the commercial use SCO for both benzo(a)pyrene and dibenzo(a,h)anthracene. The metal arsenic (9.1 to 39.6 ppm) exceeds the commercial use SCOs of 16 ppm at six locations. Pesticides/herbicides and PCBs were not detected above reporting limits in any surface soil sample.

On-site subsurface soil samples were analyzed for volatile organic compounds (VOCs), SVOCs, pesticides/herbicides, PCBs, and metals. Subsurface soil samples were collected from both test pits and soil borings at various depths ranging from 2 to 10 feet below ground surface (ft. bgs). Several VOCs were detected above reporting limits but do not exceed commercial SCOs. The SVOCs benzo(a)anthracene (ND to 30 ppm), benzo(a)pyrene (ND to 23 ppm), benzo(b)fluoranthene (ND to 23 ppm), dibenz(a,h)anthracene (ND to 11 ppm), and indeno(1,2,3-c,d)pyrene (ND to 8 ppm) were detected at levels exceeding their respective commercial SCOs of 5.6 ppm, 1 ppm, 5.6 ppm, 0.56 ppm, and 5.6 ppm at up to six locations. At fourteen locations arsenic (2.7 to 126 ppm) was detected exceeding the commercial use SCO of 16 ppm, and at four locations lead (10.4 to 1,520 ppm) was detected exceeding the commercial use SCO of 1,000 ppm. Pesticides/herbicides and PCBs were either detected at trace levels or not detected above reporting limits in any subsurface soil sample.

On-site subsurface soil was also analyzed for gasoline range organics (GRO) and diesel range organics (DRO) with concentrations ranging from ND to 940 ppm and ND to 14,000 ppm, respectively. There are no commercial use SCOs for GRO or DRO.

Off-site impacts, based on observed piping or GCM, has been identified along the southern and western site boundaries. These off-site impacts will be addressed separately under the BCP or the Spills program.

#### Groundwater:

Fourteen monitoring wells were installed during the RI. Groundwater was sampled and analyzed from all of the monitoring wells for VOCs and SVOCs, with eight of the wells also being analyzed for metals. Prior to the IRMs, the VOC benzene (ND to 20 parts per billion (ppb)) was detected

at one location exceeding the ambient groundwater standard of 1 ppb. The SVOCs benzo(b)fluoranthene (ND to 0.44J ppb) and chrysene (ND to 0.52J ppb) were detected at one location exceeding the ambient groundwater standards of 0.002 ppb. Arsenic (ND to 38 ppb) was identified at one location exceeding the ambient groundwater standard of 25 ppb. Light non-aqueous phase liquid (LNAPL) and other indicators of petroleum products were observed in eight of the fourteen monitoring wells. Elevated GRO (ND to 3,100 ppb) and DRO (ND to 49,000 ppb) were also reported in groundwater samples. Data does not indicate any off-site impacts in groundwater related to this site.

Groundwater has not been sampled since the completion of the IRMs. Groundwater monitoring will be conducted in the future as required by the site management plan.

#### Sediments:

Three sediment samples were collected from off-site in Two Mile Creek. The sediment samples were analyzed for VOCs, SVOCs, PCBs, and metals. Individual VOCs and SVOCs were detected above reporting limits but did not exceed Class A sediment guidance values. The metals arsenic (9.9 to 13 ppm), copper (16.4 to 33.4 ppm), lead (22.7 to 110), nickel (20.2 to 24.1), and zinc (70.8 to 124 ppm) were detected above the Class A sediment guidance values of 10 ppm, 32 ppm, 36 ppm, 23 ppm, and 120 ppm, respectively. No GCM or other signs of petroleum contamination were observed in off-site sediments.

All on-site sediments were removed as part of the IRMs.

#### Surface Water:

Two surface water samples were collected from both the on-site ditch and off-site in Two Mile Creek, and analyzed for VOCs, SVOCs, PCBs, and metals. The VOC acetone (ND to 3.3 ppb) was detected above reporting limits but does not exceed the Class C surface water quality standards. The metals cobalt (ND to 58 ppb), iron (380 to 2,200 ppb), and nickel (ND to 49 ppb) were detected exceeding the Class C surface water quality standards of 5 ppb, 300 ppb, and 3.3 ppb, respectively. These metals are naturally occurring, and are not attributed to the contamination at the 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*.

Information submitted with the BCP application regarding the conditions at the site are currently under review and will be revised as additional information becomes available.

### **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**

- 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 Track 4: Restricted use with site-specific soil cleanup objectives remedy.

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

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

1. 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.

2. A site cover will be required to allow for commercial or industrial use of the site. The cover will consist either of the structures such as buildings, pavement, sidewalks comprising the site development or a soil cover in areas where the upper one foot of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). Where the soil cover is required it will be a minimum of one foot 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).

3. 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 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.

#### Site Management Plan

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

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

Institutional Controls: the Environmental Easement discussed above.

Engineering Controls: the soil cover discussed in Paragraph 2.

This plan includes, but may not be limited to:

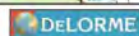
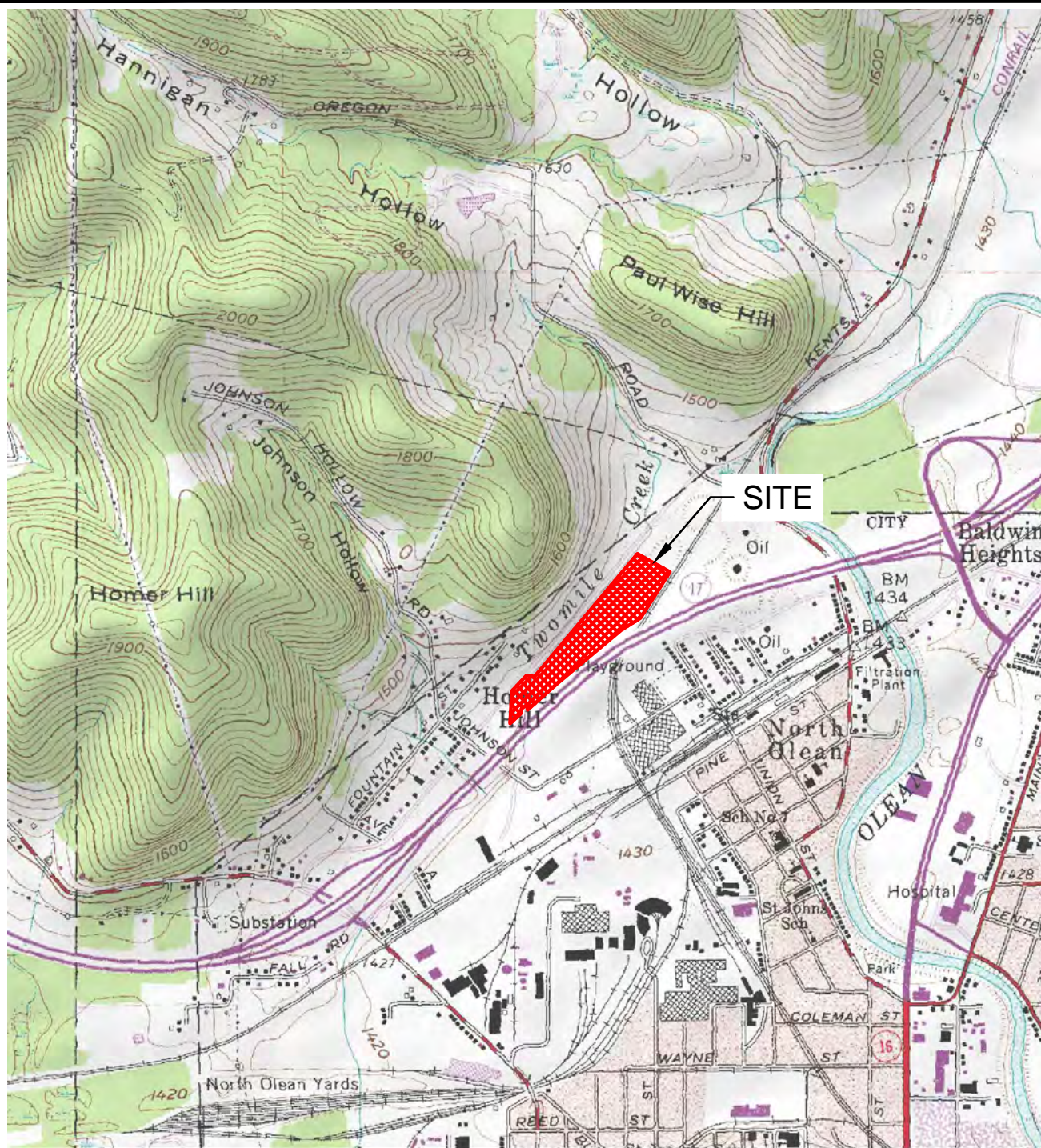
- an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
- descriptions of the provisions of the environmental easement including any land use and groundwater use restrictions;
- a provision for evaluation of the potential for soil vapor intrusion into future buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
- provisions for the management and inspection of the identified engineering controls;
- maintaining site access controls and Department notification; and
- the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.

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

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



**FIGURE 1**



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2558 HAMBURG TURNPIKE, SUITE 300, BUFFALO, NY 14218, (716) 856-0599



## SITE LOCATION AND VICINITY MAP

RI-IRM-AA REPORT

251 HOMER STREET REDEVELOPMENT SITE

BCP SITE NO. C905037

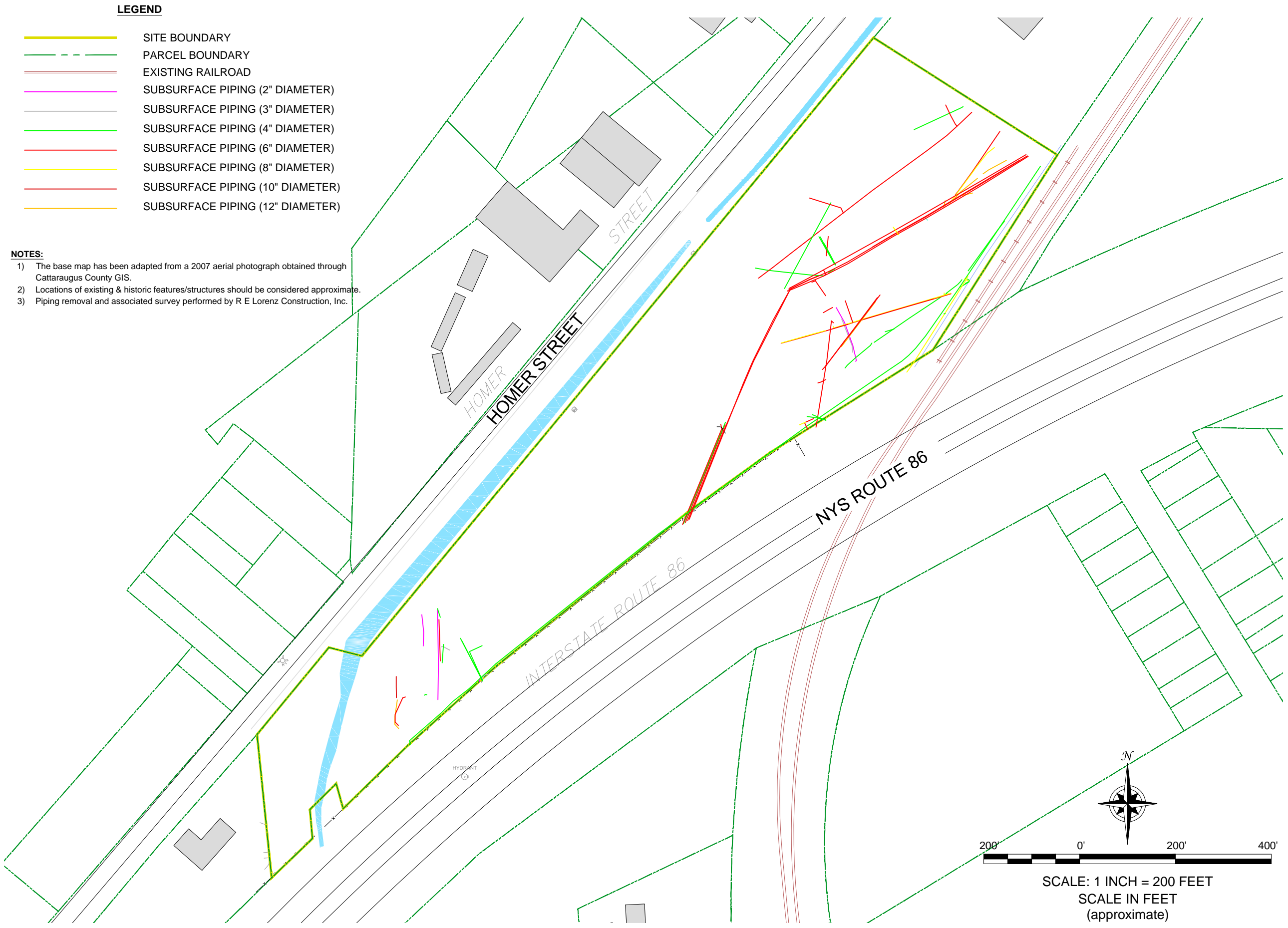
OLEAN, NEW YORK

PREPARED FOR

BENSON CONSTRUCTION AND DEVELOPMENT & HOMER STREET PROPERTIES, LLC

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EXTENT OF SUBSURFACE PIPING

RI-IRM-AA REPORT  
251 HOMER STREET REDEVELOPMENT SITE  
BCP SITE # C905037  
OLEAN, NEW YORK  
PREPARED FOR

BENSON CONSTRUCTION AND DEVELOPMENT, LLC



JOB NO.: 0311-014-001

FIGURE 2a

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**FIGURE 2b**

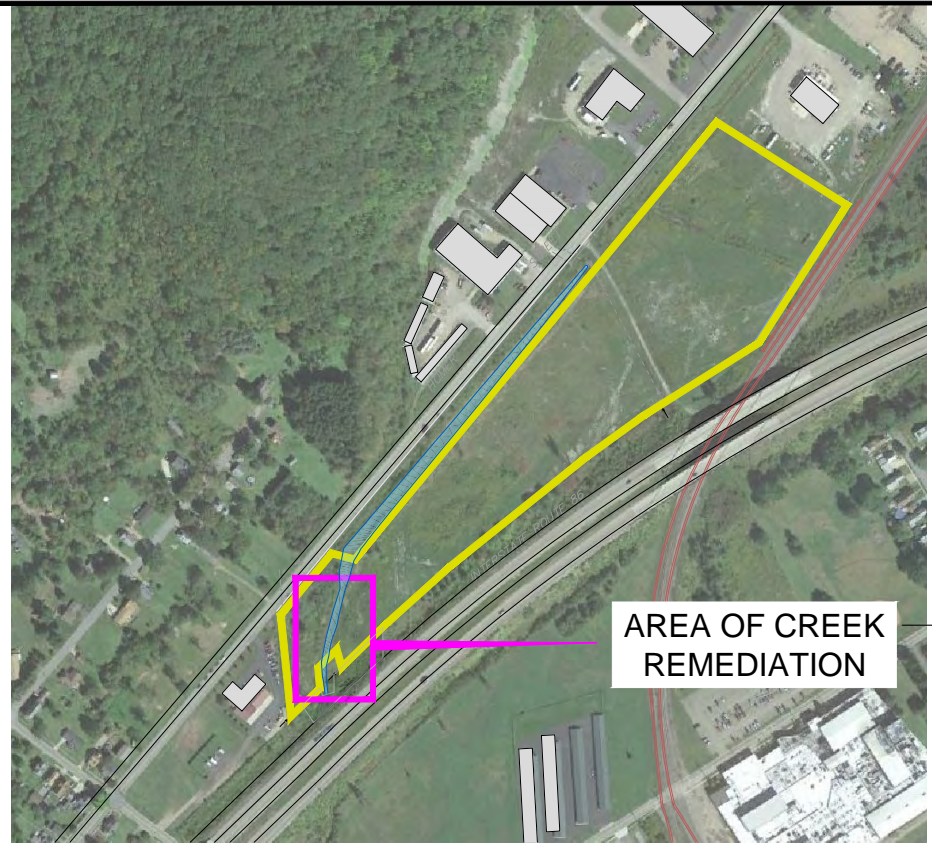
RI-IRM-AA REPORT  
251 HOMER STREET REDEVELOPMENT SITE  
BCP SITE # C905037  
OLEAN, NEW YORK  
PREPARED FOR

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BENSON CONSTRUCTION AND DEVELOPMENT & HOMER STREET PROPERTIES, LLC

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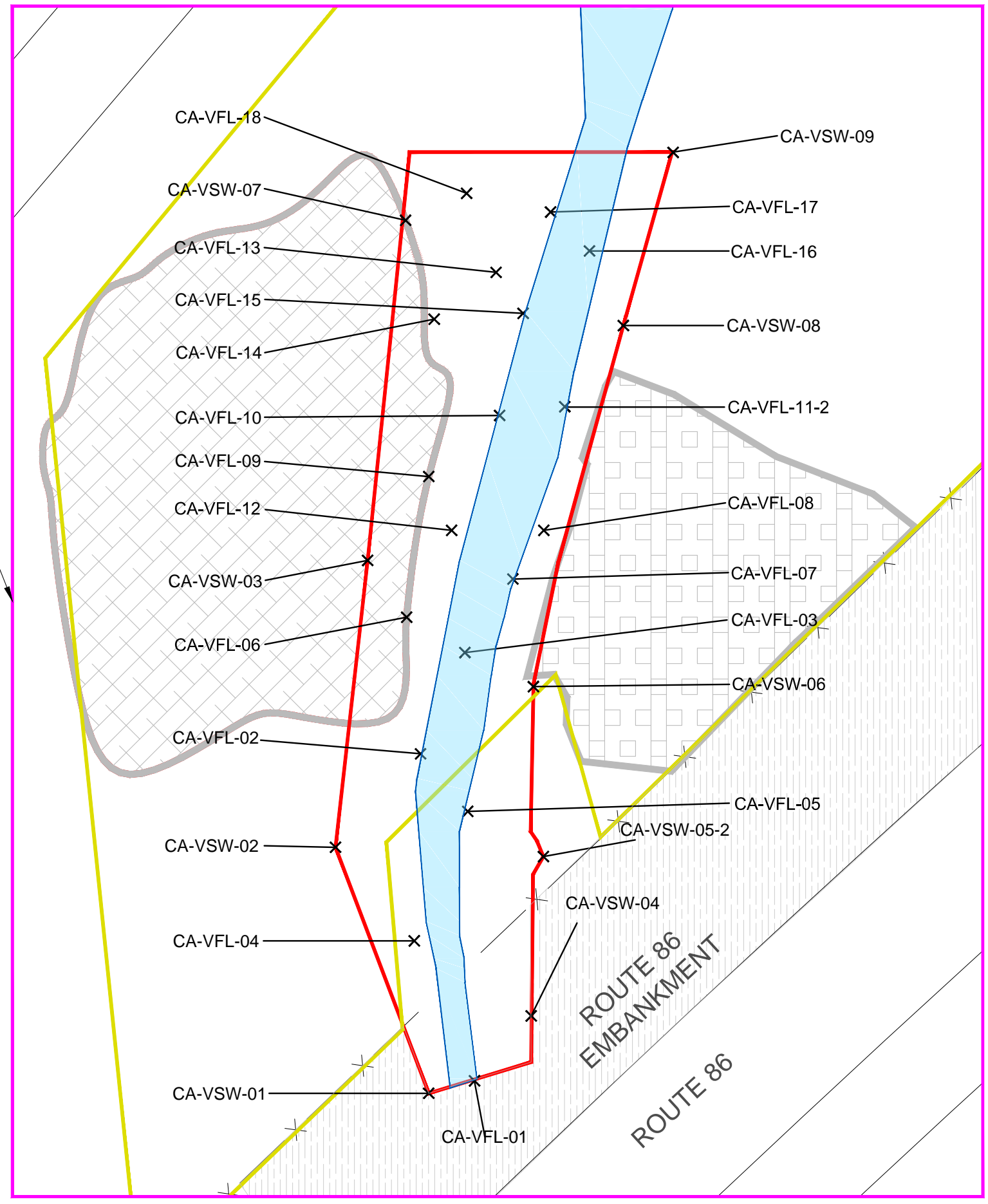
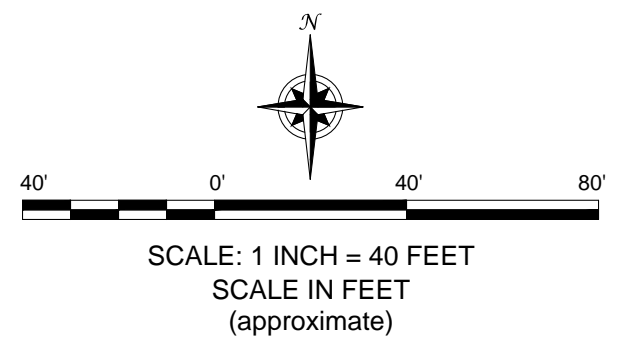
DATE: MAY 2016  
DRAFTED BY: RFL/KRR



PLAN VIEW OF SITE  
NTS

LEGEND

- PROPERTY BOUNDARY
- TWO MILE CREEK (AREA 5) EXCAVATION AND RESTORATION
- EXTENT OF GCS REMEDIAL EXCAVATION
- EXTENT OF ARSENIC REMEDIAL EXCAVATION
- CA-VSW-01 x CREEK AREA VERIFICATION SIDEWALL SAMPLE (APRIL 2016)
- CA-VFL-01 x CREEK AREA VERIFICATION FLOOR SAMPLE (APRIL 2016)



COMPLETED 2016 IRM ACTIVITIES - TWO MILE CREEK

RI-IRM-AA REPORT  
251 HOMER STREET REDEVELOPMENT SITE  
BCP SITE # C905037  
OLEAN, NEW YORK  
PREPARED FOR

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JOB NO.: 0311-014-001

FIGURE 2c

DISCLAIMER: PROPERTY OF BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC. & TURNKEY ENVIRONMENTAL RESTORATION, LLC. IMPORTANT: THIS DRAWING PRINT IS LOANED FOR MUTUAL ASSISTANCE AND AS SUCH IS SUBJECT TO RECALL AT ANY TIME. INFORMATION CONTAINED HEREON IS NOT TO BE DISCLOSED OR REPRODUCED IN ANY FORM FOR THE BENEFIT OF PARTIES OTHER THAN NECESSARY SUBCONTRACTORS & SUPPLIERS WITHOUT THE WRITTEN CONSENT OF BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC & TURNKEY ENVIRONMENTAL RESTORATION, LLC.



LEGEND

SITE BOUNDARY

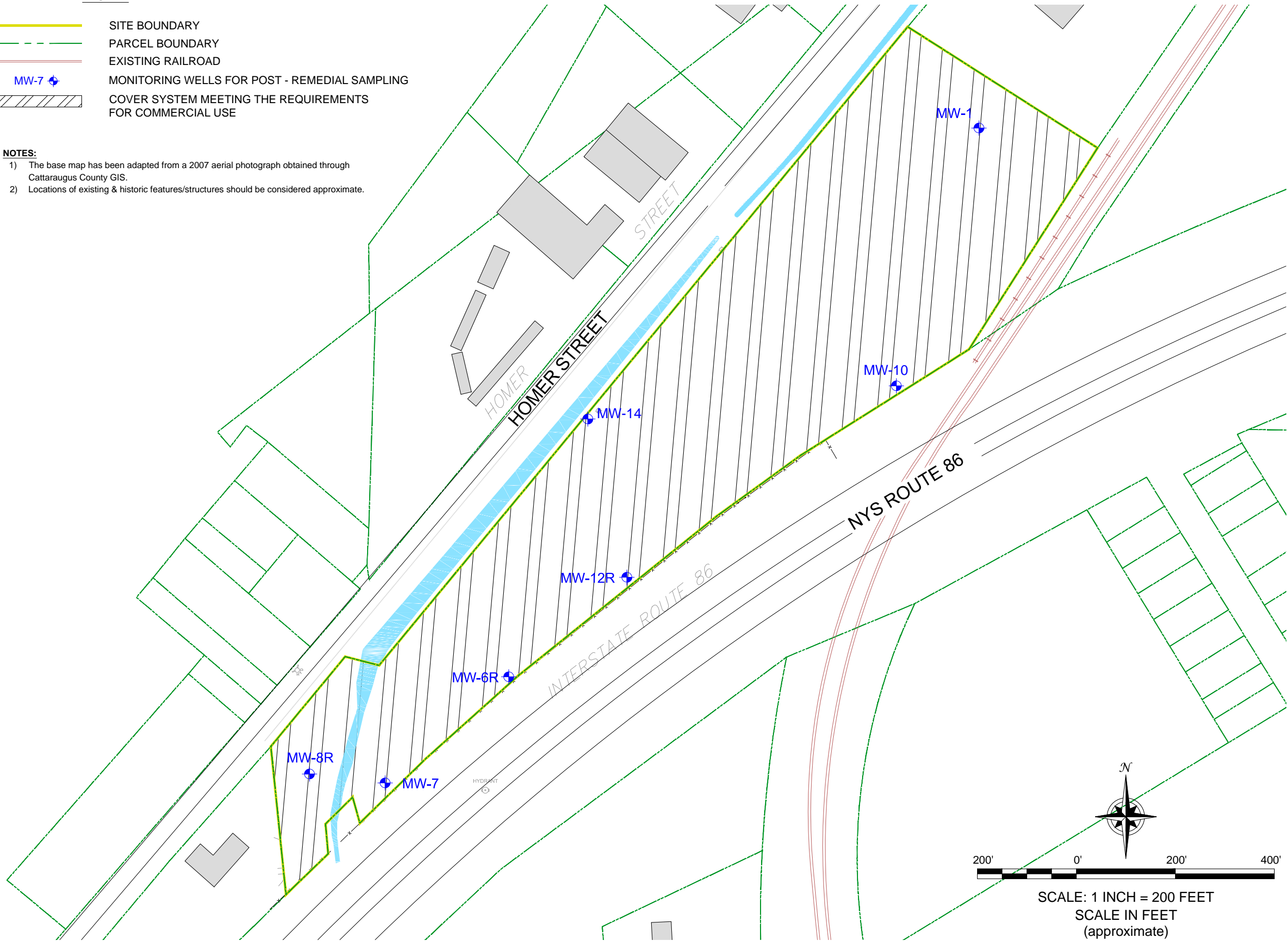
PARCEL BOUNDARY

EXISTING RAILROAD

MW-7

COVER SYSTEM MEETING THE REQUIREMENTS FOR COMMERCIAL USE

- NOTES:
- 1) The base map has been adapted from a 2007 aerial photograph obtained through Cattaraugus County GIS.
  - 2) Locations of existing & historic features/structures should be considered approximate.



COMMERCIAL USE (TRACK 4) CLEANUP ALTERNATIVE

RI-IRM-AA REPORT  
251 HOMER STREET REDEVELOPMENT SITE  
BCP SITE # C905037  
OLEAN, NEW YORK

PREPARED FOR  
BENSON CONSTRUCTION AND HOMER STREET PROPERTIES, LLC



2558 HAMBURG TURNPIKE, SUITE 300, BUFFALO, NY 14218, (716) 856-0599

JOB NO.: 0311-014-001

FIGURE 2d

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