NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

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August 24, 2016

Mr. Christopher DiMarzo
Pittsford Canalside Properties, LLC
301 Exchange Boulevard
Rochester, New York 14608

RE: Former Monoco Oil Site, Site ID No. C828137
Pittsford (V), Monroe (C)
Remedial Alternatives Analysis Report & Decision Document

Dear Mr. DiMarzo:

The New York State Department of Environmental Conservation (Department) and the New York State Department of Health (NYSDOH) have reviewed the Remedial Alternatives Analysis Report (RAAR) for the Former Monoco Oil Site (Site) dated May 2016 and prepared by LaBella Associates, D.P.C. on behalf of the Pittsford Canalside Properties, LLC. The RAAR is hereby deemed acceptable. Please ensure that a copy of the RAAR is placed in the document repository. The draft report should be removed.

Enclosed is a copy of the Department's Decision Document for the Site. The remedy is to be implemented in accordance with this Decision Document. Please ensure that a copy of the Decision Document is placed in the document repository within seven (7) days of the date of this letter and submit documentation to the Project Manager.

Please contact the Department's Project Manager, Charlotte Theobald, at 585-226-5354 or via e-mail at charlotte.theobald@dec.ny.gov at your earliest convenience to discuss next steps. Please recall the Department requires seven (7) days' notice prior to the start of field work.

Sincerely,

Michael J. Cruden, P.E.
Director
Remedial Bureau E
Division of Environmental Remediation

Enclosure
ec: Robert Schick/Michael Ryan, NYSDEC
Bernette Schilling/Todd Caffoe/Charlotte Theobald/Dudley Loew, NYSDEC, Region 8
Krista Anders/Justin Deming/Mark Sergott, NYSDOH
Wade Silkworth, MCHD
Kevin Kerins, Canal Corp.
Steve DiMarzo/Bryan Powers, Mark IV
Ronald Hull, Underberg & Kessler
Greg Senecal/Dan Noll/Jennifer Gillen/Ann Aquilina, LaBella

DECISION DOCUMENT

Monoco Oil Site
Brownfield Cleanup Program
Pittsford, Monroe County
Site No. C828137
August 2016

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

DECLARATION STATEMENT - DECISION DOCUMENT

Monoco Oil Site
Brownfield Cleanup Program
Pittsford, Monroe County
Site No. C828137
August 2016

Statement of Purpose and Basis

This document presents the remedy for the Monoco Oil 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 Monoco Oil Site and the public's input to the proposed remedy presented by the Department.

Description of Selected Remedy

The elements of the selected remedy are as follows:

1. Remedial Design
   A remedial design program will be implemented to provide the details necessary for the construction, operation, optimization, maintenance, and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedy as per DER-31. The major green remediation components are as follows;
   - Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
   - Reducing direct and indirect greenhouse gases and other emissions;
   - Increasing energy efficiency and minimizing use of non-renewable energy;
   - Conserving and efficiently managing resources and materials;
   - Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;
   - Maximizing habitat value and creating habitat when possible;
   - Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals; and
   - Integrating the remedy with the end use where possible and encouraging green and sustainable re-development.

2. Cover System
   A site cover will be required to allow for restricted residential 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 two feet of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). Where the soil cover is required it will be a minimum of two feet of soil placed, 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. Product Monitoring Trench
   The product monitoring trench will be monitored for non-aqueous phase liquid (NAPL) on a schedule as specified in the Site Management Plan. NAPL accumulation within the product monitoring trench will be removed from the trench as specified in the Site Management Plan. The product monitoring trench cannot be altered or removed without written consent from the NYSDEC and NYSDOH. Product monitoring data and inspection records will be provided in the periodic review report submittals as specified in the Site Management Plan.

4. Engineering and Institutional Controls
   Imposition of an institutional control in the form of an environmental easement and a Site Management Plan, as described below, will be required. The remedy will achieve a Track 4 restricted residential cleanup at a minimum and will include imposition of a site cover, the product monitoring trench, an environmental easement, and site management plan as described below.

   a) Institutional Control
      Imposition of an institutional control in the form of an environmental easement for the controlled property which will:
      - require the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
      - allow the use and development of the controlled property for restricted residential use as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
      - restrict the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH; and
      - require compliance with the Department approved Site Management Plan.

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 Environmental Easement as discussed above.
      Engineering Controls: The soil cover and product monitoring trench as discussed above.

      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 in 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 the product monitoring trench 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 occupied existing or future buildings developed on the site, as may be required by the Institutional and Engineering Control Plan discussed above.

Declaration

The remedy conforms to 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.

Michael J Cruden

Digitally signed by Michael J Cruden
DN: cn=Michael J Cruden, o=DER, ou=RBE, email=mjcruden@gw.dec.state.ny.us, c=US
Date: 2016.08.23 16:18:07 -04'00'

Date

Michael Cruden, Director
Remedial Bureau E

DECISION DOCUMENT

Monoco Oil Site
Pittsford, Monroe County
Site No. C828137
August 2016

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:

Pittsford Community Library
Attn: Rhonda Rossman
25 State Street
Pittsford, New York 14534
Phone: 585-248-6275

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 Monoco Oil Site is located at 75 Monroe Avenue, a main thoroughfare running East/West in the Town and Village of Pittsford, Monroe County. The site is located between the Erie Canal and the CSX railroad. Adjacent properties to site are: north - Erie Canal; east - Monroe Avenue; south - CSX Railroad; and west - vacant undeveloped land.

Site Features:
The site had a vacant building which was demolished in December 2012. The site has asphalt paved areas as well as open space covered with trees (sapling and mature) and scrub grass and bushes.

Current Zoning/Use(s):
The 7.386 acre site is currently vacant and has been unoccupied since 2000. The site is zoned residential. The surrounding properties are a combination of commercial, residential, and municipal. The nearest residential area is approximately 0.12 miles to the south.

Past Use(s):
The site was initially developed in the mid-1920s along the eastern portion of the site for storage and distribution of petroleum products. Petroleum storage and distribution operations occurred from the early 1930s through to about 1980. The rail lines were constructed on the southern portion of the site in the mid-1960s.The site was reconfigured for the storage and distribution of liquid asphalt and fertilizer during the mid-1980s and the handling of petroleum products ceased with the exception of fuel storage for the on-site boiler systems, machines/equipment, and vehicles. Operations at the site ceased in 2000.

The site included a variety of building structures including a main building which housed the boiler, asphalt laboratory, a storage area, and office; a garage and covered loading bay; 25 petroleum/liquid asphalt storage tanks; two tank farm buildings; an oil water separator; and boiler and equipment buildings. The storage tanks were aboveground (ASTs) and underground storage tanks (USTs). ASTs were installed from 1968 to 1980 with storage capacities ranging between 112,000 and 4.7-million gallons with total asphalt storage capacity of 12.5-million gallons. USTs were installed 1970 and consisted of a 4,000 gallon gasoline tank and a 10,000 gallon fuel oil tank.

Dismantling of the asphalt operations began in 2000 and was completed in 2003 with the exception of the main building that was demolished in 2012.

There are 16 spill numbers associated with this site ranging from an ammonium nitrate fertilizer

spill in 1985, waste oil spill in 1993, and a #6 fuel oil spill in 1999 and 2000. Numerous odor complaints were lodged against the operators of the site during the transfer of product.

In 2003, a United States Environmental Protection Agency (USEPA) Spill Response was conducted to address a 1999 spill event of approximately 6,000-8,000 gallons of fuel oil that was released to the environment. The USEPA response consisted of the excavation of approximately 1,213 tons of contaminated soil for disposal off-site and the excavation of an additional 15,000 tons of contaminated soil that were placed in an on-site bio-cell. As part of the USEPA response, numerous groundwater and soil samples were collected and analyzed that indicated impacts to the soil and groundwater at the site. A Phase I Environmental Site Assessment was conducted in August 2006.

Site Geology and Hydrogeology:
The topsoil at the site consists of dark brown medium to fine grain sand with little silt to trace fine grained gravel. The soil at the site from 2.5-32 feet consists of coarse to medium grained sand, coarse to fine grained gravel, and silt with some medium to fine grained sand. Fill material such as ash, bricks, etc. was encountered in a few locations on the site at depths that ranged from 0 to 13 feet. Bedrock was encountered at approximately 32 feet.

The site is located adjacent to the Erie Canal, which is typically drained on or around November 15th and filled on or around April 15th annually. Static water levels were collected during seasonal high (canal filled) and low (canal drained) groundwater. Groundwater flow direction was determined to be in the northerly direction towards the Erie Canal. The depth to groundwater during seasonal low conditions is approximately 15 feet and during seasonal high conditions is approximately 6 feet.

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 that restricts the use of the site to restricted-residential use (which allows for commercial use and industrial use) as described in Part 375-1.8(g) were 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 Volunteer. The Applicant does not have an obligation to address off-site contamination. However, the Department has determined that this site does not pose a significant threat to public health or the environment; accordingly, no enforcement actions are necessary.

SECTION 6: SITE CONTAMINATION

6.1: Summary of the Remedial Investigation

A remedial investigation (RI) serves as the mechanism for collecting data to:

- characterize site conditions;
- determine the nature of the contamination; and
- assess risk to human health and the environment.

The RI is intended to identify the nature (or type) of contamination which may be present at a site and the extent of that contamination in the environment on the site, or leaving the site. The RI reports on data gathered to determine if the soil, groundwater, soil vapor, indoor air, surface water or sediments may have been contaminated. Monitoring wells are installed to assess groundwater and soil borings or test pits are installed to sample soil and/or waste(s) identified. If other natural resources are present, such as surface water bodies or wetlands, the water and sediment may be sampled as well. Based on the presence of contaminants in soil and groundwater, soil vapor will also be sampled for the presence of contamination. Data collected in the RI influence the development of remedial alternatives. The RI report is available for review in the site document repository and the results are summarized in section 6.3.

The analytical data collected on this site includes data for:

- groundwater
- soil
- sediment
- 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:

1,4-dichlorobenzene	polychlorinated biphenyls (PCB)
1,2,4-trimethylbenzene	arsenic
1,3,5-trimethylbenzene	lead
xylene (mixed)	naphthalene
ethylbenzene	

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. The following IRM has been completed at this site based on conditions observed during the RI.

IRM - Soil Removal

The IRM activities were conducted from 2010 to 2015, which consisted of the excavation and off-site disposal of petroleum contaminated soil/fill material. There was some exterior infrastructure that included a former railcar loading area with sumps and various piping which was removed during the IRM.

The IRM excavation areas totaled approximately 2.58 acres of the 7.386 acre site. Approximately 52,780 tons of petroleum contaminated soil/fill material was disposed off-site at a permitted landfill facility. The excavation depths ranged from 2.5 to 20 feet below ground surface. There were 168 confirmation/documentation samples collected for laboratory analysis of which two (2) of the soil/fill material samples exceeded the arsenic soil cleanup objective (SCO) of 16 ppm. The soil/fill material samples exceeding the SCOs were collected at a depth of 14 feet (17.1 ppm) and 9 feet (56.9 ppm) on excavation sidewalls.

The IRM excavation areas were backfilled with Department approved on-site soil/fill material totaling approximately 78,720 tons meeting restricted residential SCOs based on analysis for VOCs, SVOCs, metals, pesticides, PCBs, and cyanide. Off-site backfill material consisted of approximately 1,054 tons of crushed stone used for the construction of haul roads on the site during IRM activities.

Petroleum impacts were observed along the southern property boundary adjacent to the CSX railroad tracks during the large IRM excavation activities, but could not be removed without compromising the railroad tracks stability and integrity. A product recovery monitoring trench was installed downgradient of the petroleum impacted areas to collect and monitor any petroleum contamination migrating from the area of impact adjacent to the CSX railroad tracks. An Interim

Remedial Measures Construction Completion Report dated March 23, 2016, which documents all fieldwork activities and laboratory data generated during the IRM, has been submitted to the Department for review and approval.

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:
The primary contaminants of concern are petroleum related compounds (volatile organic compounds [VOCs], semi-volatile organic compounds [SVOCs]), and metals.

The remedial investigation activities included test pits, soil borings, groundwater monitoring well installation, and soil gas investigation. Surface and subsurface soil, groundwater, sediment, and soil gas samples were collected for laboratory analysis. The soil and groundwater samples were analyzed for Target Compound List (TCL) VOCs plus Tentatively Identified Compounds (TICs), TCL SVOCs plus TICs, Target Analyte List (TAL) metals, cyanide, pesticides, and PCBs. Sediment samples were analyzed for the parameters above as well as total organic carbon. The soil gas samples were analyzed using Method TO-15 for VOCs.

Surface Soil:
Fifty-eight (58) surface/shallow soil samples (0-2", 2"-12", and 12"-24") were collected at the site. These samples were analyzed for one or more of the parameters listed above. The following compounds exceeded the restricted residential SCO:

- Benzo(a)anthracene (restricted residential SCO - 1 per million [ppm]) at 1.3 parts ppm, 9.68 ppm, and 32.8 ppm in three soil samples.
- Benzo(a)pyrene (restricted residential SCO - 1 ppm) at 1.4 ppm, 1.1 ppm, 10.7 ppm, and 27.7 ppm in four soil samples.
- Benzo(b)fluoranthene (restricted residential SCO - 1 ppm) at 1.8 ppm, 1.4 ppm, 13.7 ppm, and 32.7 ppm in four soil samples.
- Indeno(1,2,3-cd)pyrene (restricted residential SCO – 0.5 ppm) at 0.53 ppm and 11.5 ppm in two soil samples.
- Lead (restricted residential SCO - 400 ppm) at 526 ppm in one soil sample.
- Arsenic (restricted residential SCO - 16 ppm) at 18.7 to 68.2 ppm in seven soil samples.

Surface/shallow soil data does not indicate off-site impacts.

Subsurface soils:
Thirty-six (36) subsurface soil samples were collected from soil borings and test pits. The soil samples were analyzed for the same contaminants as surface soil. 1,4-dichlorobenzene at 23 ppm exceeded the restricted residential SCO (13 ppm) in one soil sample. A number of polycyclic aromatic hydrocarbons (PAHs) exceeded the restricted residential SCOs. The exceedances ranged

from 0.91 ppm to 8.6 ppm. Subsurface soil data (analytical and PID nuisance characteristics) does indicate a potential for off-site impacts.

Groundwater:
Groundwater samples were collected from groundwater monitoring wells located on-site. A total of 40 groundwater samples were collected for laboratory analysis. VOCs, SVOCs, metals, and pesticides exceeded the groundwater standards and guidance values. Groundwater data does not indicate off-site impacts.

Four (4) of the 40 groundwater samples had VOCs that exceeded the groundwater SCGs. The following VOCs exceeded the groundwater standard of 5 parts per billion (ppb): 1,2,4-trimethylbenzene (220 ppb), 1,3,5-trimethylbenzene (100 ppb), ethylbenzene (180 and 81 ppb), n-butylbenzene (11 ppb), n-propylbenzene (34 ppb), sec-butylbenzene (16 ppb), and total xylenes (530 and 260 ppb). Benzene at 3 ppb exceeded the groundwater standard of 1 ppb in one monitoring well.

Three (3) of the 40 groundwater samples had SVOCs that exceeded the groundwater SCGs. Naphthalene concentrations ranged from 27-110 ppb (groundwater standard - 10 ppb). Phenol was detected at 6.1 ppb and 26 ppb (groundwater standard - 2 ppb).

Seventeen (17) of the 40 groundwater samples had metals that exceeded the groundwater SCGs. Barium concentrations ranged from 1,360 ppb to 2,580 ppb (groundwater standard - 1,000 ppb). Lead concentrations ranged from 60.1 ppb to 915 ppb (groundwater standard - 50 ppb). Chromium concentrations ranged from 63 ppb to 193 ppb (groundwater standard - 100 ppb). Mercury was detected at 6.3 ppb (groundwater standard - 1.4 ppb). Nickel was detected at 203 ppb (groundwater standard - 200 ppb).

Ten (10) of the 40 groundwater samples had pesticides that exceeded the groundwater SCGs.). The pesticide exceedances ranged from 0.027 ppb to 2.60 ppb. 4,4'-DDT was detected at 2.60 ppb (groundwater standard – 0.2 ppb).

One of the 40 groundwater samples had PCBs that exceeded the SCGs. PCBs were detected at 0.33 ppb (groundwater standard - 0.09 ppb).

Soil Vapor:
A perimeter soil gas survey was completed that included six (6) soil gas and one (1) ambient air samples collected and analyzed for VOCs (Method TO-15). VOC concentrations ranged from non-detect at several locations to 490 ug/m^3 of trichlorofluoromethane at SG-3. Tetrachloroethene was detected at one location at 95 ug/m^3. Several petroleum related VOCs (benzene, toluene, ethylbenzene, xylenes - also known as BTEX) were detected at several sample locations. The BTEX detections ranged from 3.8 ug/m^3 to 61 ug/m^3. Soil vapor data does not indicate off-site impacts.

Sediment:
Four (4) sediment samples were collected along the front of the site and were analyzed for TCL VOCS and SVOCs, pesticides, PCBs, TAL metals, cyanide, and total organic carbon.

The NYSDEC Division of Fish, Wildlife and Marine Resources reviewed the environmental data and determined that contaminants at the site and in the sediment do not present a potential for significant fish or wildlife impacts.

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*.

People who enter the site could contact contaminants in soil by walking on the soil or digging below the ground surface. People are not drinking the contaminated groundwater because the area is served by a public water supply that is not affected by this contamination. Volatile organic compounds in the groundwater may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect 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 the site is vacant, the inhalation of site-related contaminants due to soil vapor intrusion does not represent a current concern. The potential exists for the inhalation of site contaminants due to soil vapor intrusion in any future on-site redevelopment. Environmental sampling indicates that soil vapor intrusion is not a concern for off-site buildings.

6.5: Summary of the Remediation Objectives

The objectives for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375. The goal for the remedial program is to restore the site to pre-disposal conditions to the extent feasible. At a minimum, the remedy shall eliminate or mitigate all significant threats to public health and the environment presented by the contamination identified at the site through the proper application of scientific and engineering principles.

The remedial action objectives for this site are:

Groundwater

RAOs for Public Health Protection

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of volatiles, from contaminated groundwater.

RAOs for Environmental Protection

- Restore ground water aquifer to pre-disposal/pre-release conditions, to the extent practicable.
- Prevent the discharge of contaminants to surface water.
- 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 soil.

RAOs for Environmental Protection

- Prevent migration of contaminants that would result in groundwater or surface water contamination.
- Prevent impacts to biota from ingestion/direct contact with soil causing toxicity or impacts from bioaccumulation through the terrestrial food chain.

Soil Vapor

RAOs for Public Health Protection

- Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a site.

SECTION 7: ELEMENTS OF THE SELECTED REMEDY

The alternatives developed for the site and the evaluation of the remedial criteria are presented in the Alternative Analysis. The remedy is selected pursuant to the remedy selection criteria set forth in DER-10, Technical Guidance for Site Investigation and Remediation and 6 NYCRR Part 375.

The selected remedy is a Track 4: Restricted use with site-specific soil cleanup objectives remedy. The selected remedy is referred to as the Soil Cover and Product Monitoring Trench remedy. The elements of the selected remedy, as shown in Figure 3 and 4, are as follows:

1. Remedial Design

   A remedial design program will be implemented to provide the details necessary for the construction, operation, optimization, maintenance, and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedy as per DER-31. The major green remediation components are as follows;

   - Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
   - Reducing direct and indirect greenhouse gases and other emissions;
   - Increasing energy efficiency and minimizing use of non-renewable energy;
   - Conserving and efficiently managing resources and materials;
   - Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;
   - Maximizing habitat value and creating habitat when possible;
   - Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals; and
   - Integrating the remedy with the end use where possible and encouraging green and sustainable re-development.

2. Cover System
A site cover will be required to allow for restricted residential 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 two feet of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). Where the soil cover is required it will be a minimum of two feet of soil placed, 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. Product Monitoring Trench
The product monitoring trench installed as part of the IRM, will be monitored for non-aqueous phase liquid (NAPL) on a schedule as specified in the Site Management Plan. NAPL accumulation within the product monitoring trench will be removed from the trench for off-site disposal. The product monitoring trench cannot be altered or removed without written consent from the NYSDEC and NYSDOH.

4. Engineering and Institutional Controls
Imposition of an institutional control in the form of an environmental easement and a Site Management Plan, as described below, will be required. The remedy will achieve a Track 4 restricted residential cleanup at a minimum and will include imposition of a site cover, the product monitoring trench, an environmental easement, and site management plan as described below.

a) Institutional Control
Imposition of an institutional control in the form of an environmental easement for the controlled property which will:
- require the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
- allow the use and development of the controlled property for restricted residential use as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restrict the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH; and
- require compliance with the Department approved Site Management Plan.

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:

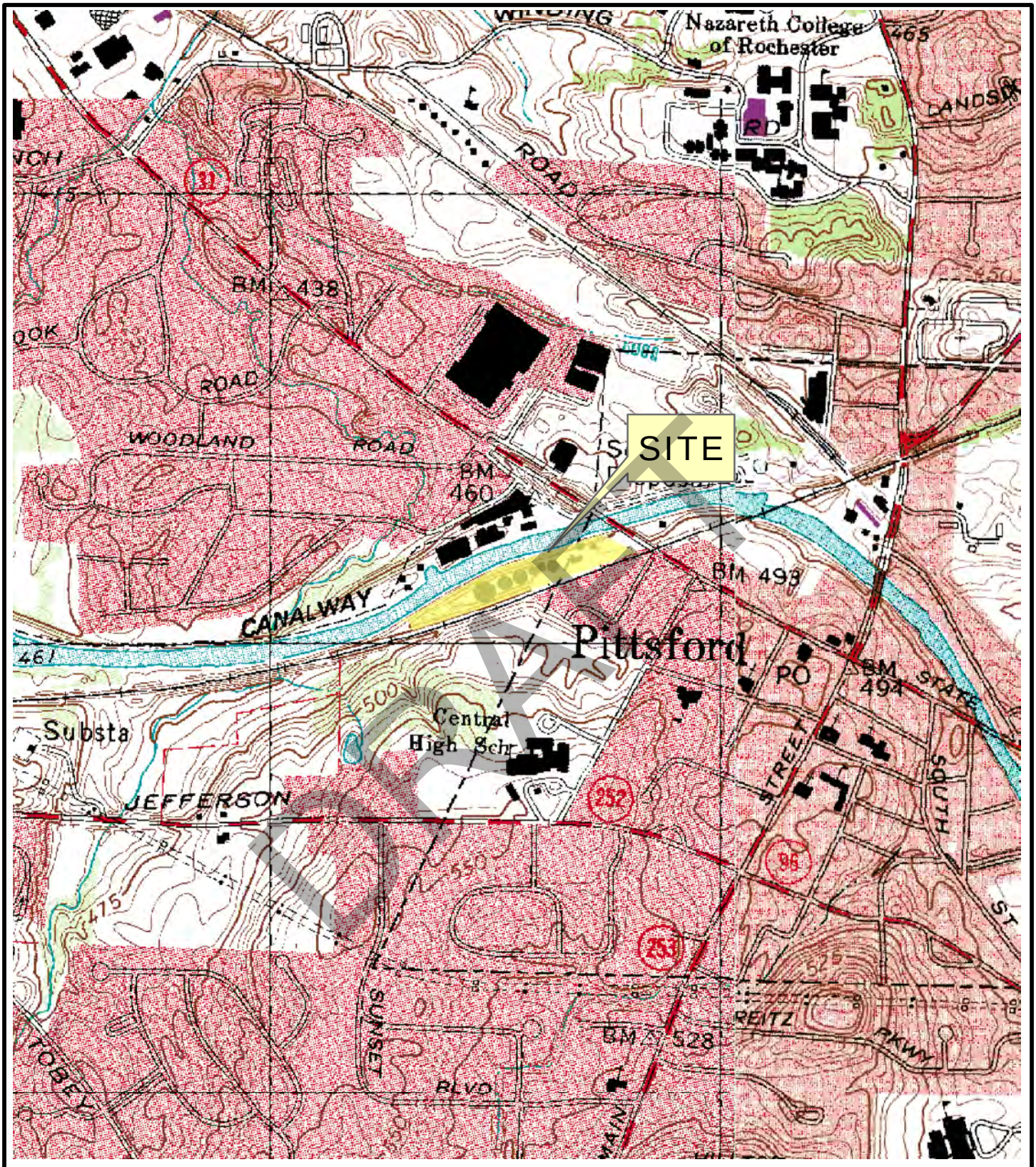
Institutional Controls: The Environmental Easement as discussed above.
Engineering Controls: The soil cover and product monitoring trench as discussed above.

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 in 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 the product monitoring trench 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 occupied existing or future buildings developed on the site, as may be required by the Institutional and Engineering Control Plan discussed above.



NORTH

1:12,000

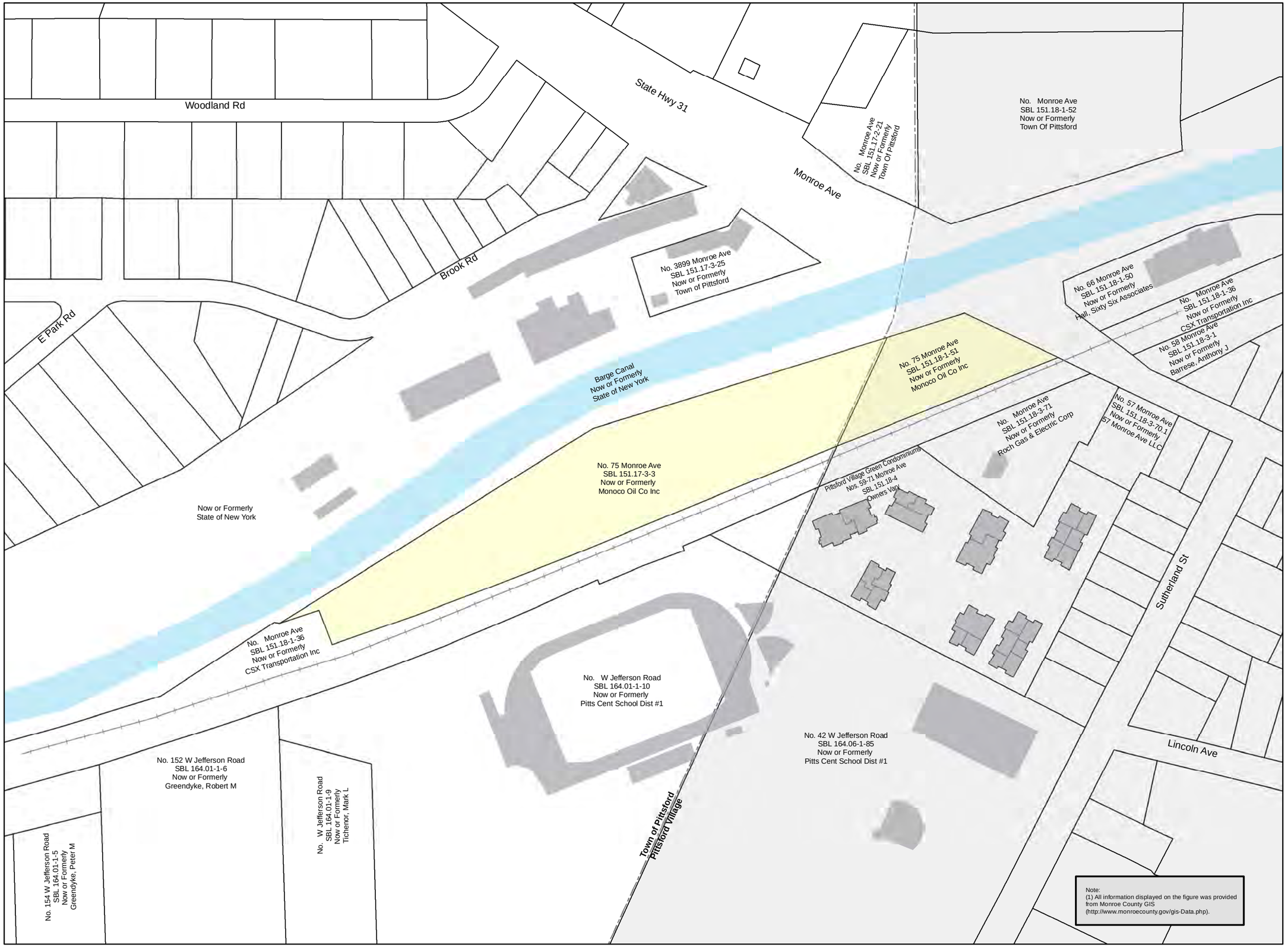
FIGURE 1
SITE LOCATION MAP

Remedial Alternatives Analysis
75 Monroe Avenue
Pittsford, New York 14534

LABELLA Associates, D.P.C.

PROJECT NO. 213647

I:\Mark IV Enterprises\213647 - 75 Monroe Ave NYSBCP Program Completion\Drawings\RAA\Figure 1.mxd



Path: I:\Mark IV Enterprises\213647 - 75 Monroe Ave NYSBCP Program Completion\Drawings\IRM Construction Completion Report\Final\Revised Based on DEC Comments June 2015\FIGURE 2.2015-03-13.Parcels.mxd

LABELLA Associates, D.P.C.

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INTERIM REMEDIAL MEASURES CONSTRUCTION COMPLETION REPORT

Former Monoco Oil
BCP Site #C828137

75 Monroe Avenue
Pittsford, New York

SITE BOUNDARY AND SURROUNDING PARCELS

N
W E
S

0 200

1 inch = 200 feet

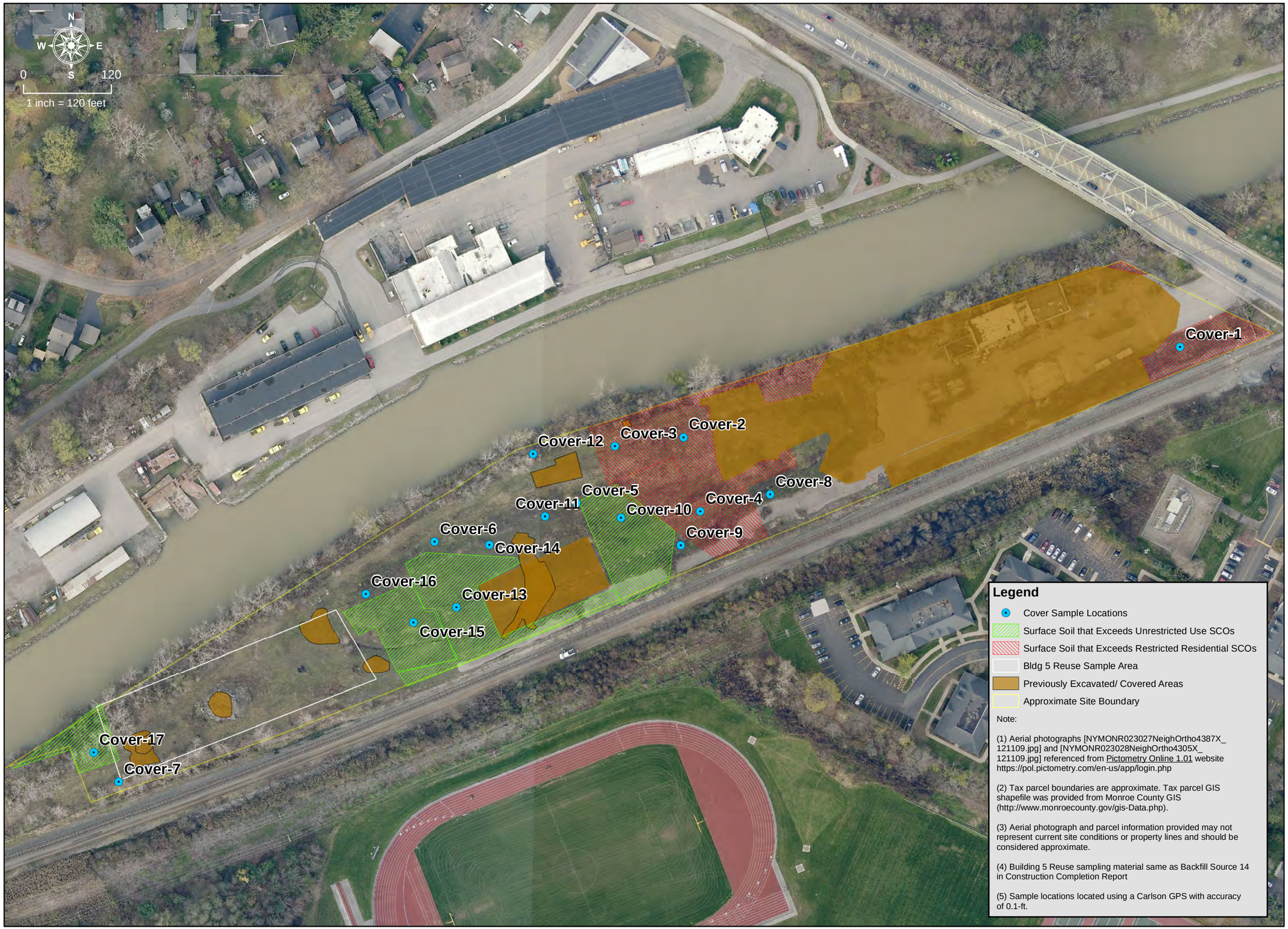
Issued For:
FINAL

Date: 2/10/2016

Drawn By:
AAQUILINA

213647

FIGURE 2



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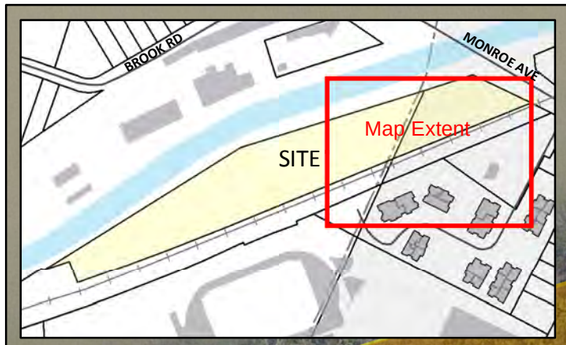
PROJECT/CLIENT
Former Monoco Oil
BCP Site #C828137
Remedial Alternatives Analysis
75 Monroe Avenue
Pittsford, New York

DRAWING TITLE
Remedial Area of Concern #2
Surface Soil Samples above Unrestricted Use SCOs or Restricted Residential Use SCOs

ISSUED FOR: FINAL
DESIGNED BY: AA
DRAWN BY: AA
REVIEWED BY: JMG
DATE: 5/26/2016
Intended to print as 11X 17

PROJECT/DRAWING NUMBER
213647
FIGURE **3**

Path: I:\Mark IV Enterprises\213647 - 75 Monroe Ave NYSBCP Program Completion\Drawings\RAA\Figure 5- RAOC 2 Alternatives.mxd

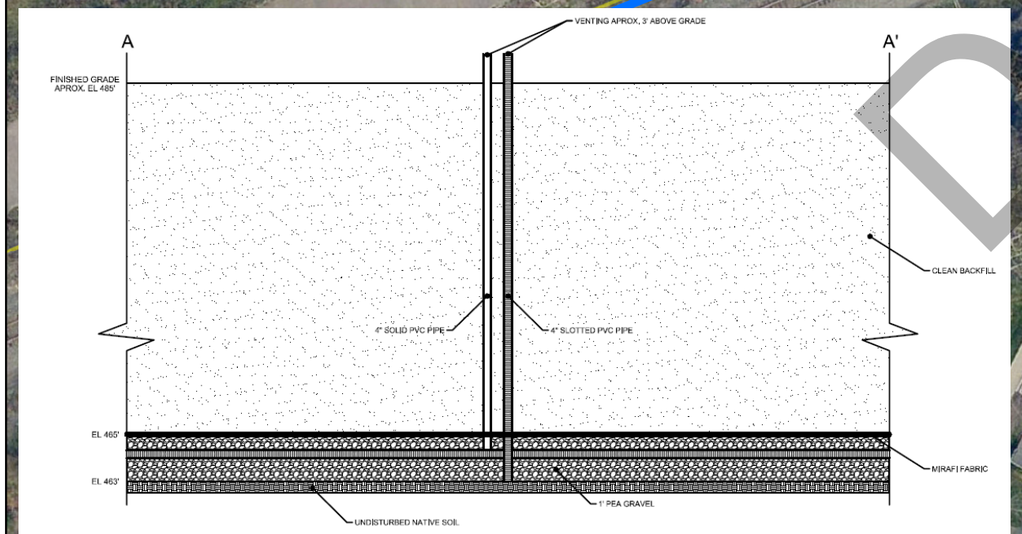


Trench Dimension:
335' L x 2' W x 2' D

A
A'
B
B'

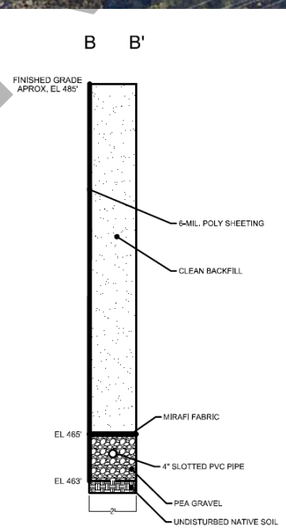
CSX Railroad Tracks

Area of NAPL observed during IRM Excavation



TRENCH DETAIL: NESTED PAIR RISER TO GAUGE LNAPL

NOTES:
1. NOT TO SCALE.
2. ELEVATIONS ARE APPROXIMATE.



SECTION THROUGH TRENCH

NOTES:
1. NOT TO SCALE.
2. ELEVATIONS ARE APPROXIMATE.

Legend

- Risers/ Monitoring Well Nested Pairs
- Shoring Required
- Product Recovery Trench
- 3 to 1 Slope Excavation Wall Left In-Place/ RAOC #1 Alternative 1 Excavation Area
- IRM Excavations
- Approximate Site Boundary

N
W E
S

Note:

(1) Aerial photographs [NYMONR023027NeighOrtho4387X_121109.jpg] and [NYMONR023028NeighOrtho4305X_121109.jpg] referenced from Pictometry Online 1.01 website https://pol.pictometry.com/en-us/app/login.php

(2) Tax parcel boundaries are approximate. Tax parcel GIS shapefile was provided from Monroe County GIS (http://www.monroecounty.gov/gis-Data.php).

(3) Aerial photograph and parcel information provided may not represent current site conditions or property lines and should be considered approximate.

0 50 Feet
1 inch = 50 feet

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PROJECT/CLIENT
Former Monoco Oil
BCP Site #C828137
Remedial Alternatives Analysis
75 Monroe Avenue
Pittsford, New York

DRAWING TITLE
Remedial Area of Concern #1
NAPL Along the
Southern Property Line

ISSUED FOR: FINAL
DESIGNED BY: AA
DRAWN BY: AA
REVIEWED BY: JMG
DATE: 5/10/2016
Intended to print as 11 X 17

PROJECT/DRAWING NUMBER
213647
FIGURE 4

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