

DECISION DOCUMENT

1155 Main Street
Brownfield Cleanup Program
Buffalo, Erie County
Site No. C915341
December 2019



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

DECLARATION STATEMENT - DECISION DOCUMENT

1155 Main Street
Brownfield Cleanup Program
Buffalo, Erie County
Site No. C915341
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Statement of Purpose and Basis

This document presents the remedy for the 1155 Main Street 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 1155 Main Street site and the public's input to the proposed remedy presented by the Department.

Description of Selected Remedy

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

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

Declaration

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

12/13/2019

Date



Michael Cruden, Director
Remedial Bureau E

DECISION DOCUMENT

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Site No. C915341
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SECTION 1: SUMMARY AND PURPOSE

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), has selected a remedy for the above referenced site. The disposal of contaminants at the site resulted in threats to public health and the environment that were addressed by actions known as interim remedial measures (IRMs), which were undertaken at the site. An IRM is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the remedial investigation (RI) or alternative analysis (AA). The IRMs undertaken at this site are discussed in Section 6.2.

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

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

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

SECTION 2: CITIZEN PARTICIPATION

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

Buffalo & Erie County Library
Attn: April Thompkins
1 Lafayette Square
Buffalo, NY 14203
Phone: (716)858-8900

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 site is located at 1155 Main Street on the southeast corner of Main Street and Dodge Street in a highly developed mixed-use residential and commercial area of the City of Buffalo, Erie County. The site is bordered by Dodge Street to the north; Main Street to the west; a parking lot and the Summer-Best Transit Station to the south; and Osmose Utilities Services and an associated parking lot to the east.

Site Features:

The site is currently being developed, with construction of the future building being performed. The future building is intended to be used for mixed commercial and residential purposes.

Zoning and Land Use:

The current zoning for the site and the adjacent properties is N-1C, which is mixed-use core (mixed use mid-rise development at the edges of downtown). The project area is planned as a mixed-use residential and commercial development, consistent with the City of Buffalo zoning for the area.

Past Use of the Site:

Based on a historic records and previous investigations, the site was used as a gasoline filling station from approximately 1924 until approximately 1947. The site was used for pre-owned automobile sales from the 1940s to the 1960s. Most recently, the site was the location of the Buffalo Tourist Lodge Motel, from the 1950s to 2014. Other portions of the site were used for residential purposes until the 1950s. When the site buildings were demolished, the site was used as a parking lot.

Site Geology and Hydrogeology:

Investigations have identified the site geology below the surface cover (asphalt, crushed stone, or vegetation), as urban fill (brick, ash, concrete, etc.), ranging in thickness from 1.0 to 9.0 feet below ground surface (fbgs), underlain by native soils consisting of silty fine sands and silty clay. Bedrock is estimated to be present at over 50 feet below grade, and to consist of Onondaga limestone. The depth to groundwater ranges between 15.6 and 24.3 feet below grade, with flow to the northwesterly direction, towards the Niagara River.

A site location map is attached as Figure 1.

SECTION 4: LAND USE AND PHYSICAL SETTING

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

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

SECTION 5: ENFORCEMENT STATUS

The Applicant(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.

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

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:

- | | |
|------------------------|-------------------------|
| benzo(a)anthracene | DDD |
| benzo(b)fluoranthene | DDE |
| benzo(k)fluoranthene | DDT |
| benzo(a)pyrene | tetrachloroethene (PCE) |
| chrysene | iron |
| dibenz[a,h]anthracene | magnesium |
| indeno(1,2,3-CD)pyrene | manganese |
| arsenic | sodium |
| lead | aldrin |
| mercury | zinc |

Based on the investigation results, comparison to the SCGs, and the potential public health and environmental exposure routes, certain media and areas of the site required remediation. These media were addressed by the IRM(s) described in Section 6.2. More complete information can be found in the RI Report and the IRM Construction Completion Report.

6.2: Interim Remedial Measures

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

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

IRM - Excavation of impacted soil materials:

Based upon investigations conducted prior to the IRM, primary contaminants of concern (COCs) at the site included SVOCs, pesticides, and metals at varying depths beneath the site.

An IRM was implemented to remove all impacted soil and fill materials and to remediate the site to Unrestricted Use soil cleanup objectives (SCOs). The IRM completed at the site consisted of excavation and off-site disposal of contaminated soil/fill until unrestricted use SCOs were achieved. All impacted soil/fill removed from the site was properly handled and disposed of off-site at either an appropriately permitted landfill or permitted solid waste management facility.

In May 2019, a total of 26,746 tons of impacted soil/fill material was removed from the site in order to achieve unrestricted SCOs. Excavation occurred throughout the site with depths varying from 4 to 9 fbs. As the IRM excavation activities were advancing, crushed stone was imported to the site as clean backfill material.

The extent of the IRM excavation is depicted in the attached Figure 2.

IRM – Underground Storage Tanks Removal:

A single crushed underground storage tank (UST) was encountered and removed during the IRM activities. The tank was already crushed and empty. The crushed tank was estimated to have had a 250-gallon capacity. The tank was properly disposed off-site.

Confirmation Sampling:

A total of 25 post-excavation samples were collected throughout the site in order to determine if the desired SCOs were achieved. Laboratory analysis of the post-excavation samples concluded that within the site boundary, unrestricted SCOs were achieved following excavation of impacted soil/fill material. Excavation sidewall samples at the property boundary lines revealed that contamination remained present in fill on adjoining properties.

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.

Several site investigations were conducted on this site. A Phase I investigation was performed in January of 2014, and a Phase II investigation was performed in March of 2014.

Under the BCP, a Remedial Investigation (RI) was conducted in February of 2019. The RI consisted of subsurface soils/fill and groundwater investigations. The RI data was used to determine the Interim Remedial Measures (IRM) excavation limits for the site. The data collected during the site investigations and RI showed subsurface soil/fill impacts at varying depths and concentrations throughout the site.

Four groundwater monitoring wells were installed and sampled to determine groundwater flow direction and water quality conditions. The monitoring wells were sampled three times, with the initial sampling event displaying low level VOC impacts above groundwater quality standards (GWQS).

Nature and Extent of Contamination:

Soil

Surface Soil:

No surface soil sampling was performed at the site as part of the RI, due to the fact that all areas exhibiting impacts were excavated as part of the IRM activities. The majority of the site will be covered with building footprint and/or asphalt parking lot and the limited greenspace/vegetative areas will be constructed during redevelopment operations.

Subsurface Soils:

Subsurface soils were sampled from 0 to 12 feet bgs and analyzed for VOCs, SVOCs, metals, pesticides, herbicides, PCBs, and emerging contaminants (PFAS, 1,4-Dioxane). VOCs, PCBs, herbicides, and emergent contaminants, were either not detected or detected at concentrations below the unrestricted use soil cleanup objectives (USCOs) or action levels.

The concentration of SVOCs were up to: 7.4 parts per million (ppm) benzo(a)anthracene (USCO: 1 ppm); 6.8 ppm benzo(a)pyrene (USCO: 1 ppm); 15 ppm benzo(b)fluoranthene (USCO: 1 ppm); 2.7 ppm benzo[k]fluoranthene (USCO: 0.8 ppm); 6.8 ppm chrysene (USCO: 1 ppm); 0.98 ppm dibenzo(a,h)anthracene (USCO: 0.33 ppm); 4.3 ppm indeno(1,2,3-cd)pyrene (USCO: 0.5 ppm)

The concentrations of metals were up to: 14.8 ppm arsenic (USCO: 13 ppm); 2,070 ppm lead (USCO: 63 ppm); 9.3 ppm mercury (USCO: 0.18 ppm); 272 ppm zinc (USCO: 109 ppm).

The concentrations of pesticide-related compounds were up to: 0.0172 ppm 4,4'-DDD (USCO: 0.0172 ppm); 0.0445 ppm 4,4'-DDE (USCO: 00033); 1.93 ppm 4,4'-DDT (USCO: 0.0033).

Based upon the distribution of contaminants in subsurface soil no off-site migration of contaminants from subsurface soil is likely.

Groundwater

Four groundwater monitoring wells were installed throughout the site during the remedial investigation, and analyzed for VOCs, SVOCs, metals, pesticides, herbicides, PCBs, and emergent contaminants (PFOAs, 1,4-Dioxane). SVOCs, PCBs, herbicides, and emergent contaminants were either not detected or detected below their respective groundwater quality standards (GWQS) or action levels.

During the first groundwater sampling event, one VOC contaminant (PCE) was detected at concentration up to 7.9 parts per billion (ppb), slightly above its respective GWQS (GWQS: 5 ug/L). As a result, three additional groundwater sampling events were performed to evaluate the groundwater for VOC impacts. PCE concentrations during subsequent sampling events were either not detected or below its respective GWQS.

The concentration of metals were up to: 2,290 ppb iron (GWQS: 300 ppb); 87,900 ppb magnesium (GWQS: 35,000 ppb); 369 ppb manganese (GWQS: 300 ppb); and 350,000 ppb sodium (GWQS: 20,000 ppb). The detected exceedances of these analytes in the groundwater are attributable to the urban nature of the site and surrounding area and are not considered site specific contaminants.

The concentration of pesticide related compounds were up to 0.004 ppb aldrin. The GWQS for aldrin is non-detect.

Based upon the distribution of contaminants in groundwater, no off-site migration of contaminants attributable to source areas on the site is likely.

Soil Vapor

Due to the low-level detections of PCE in groundwater a soil vapor intrusion (SVI) assessment will be performed to evaluate vapor intrusion at the site. The SVI assessment cannot be completed until the site building has been constructed, therefore an environmental easement has been recorded for the site requiring compliance with a site management plan (SMP), which calls for vapor intrusion testing after the building is constructed.

6.4: Summary of Human Exposure Pathways

Actions taken at the site have eliminated the potential for exposure to contaminated soil. The area is served by a public water supply that is not affected by site contamination. Volatile organic compounds may move into the soil vapor (air spaces within the soil), which in turn may move into nearby 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. Soil vapor intrusion is not a current concern as the site is vacant.

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.

Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.

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

Based on the results of the investigations at the site, the IRM that has been performed, and the evaluation presented here, the Department has selected No Further Action as the remedy for the site. The Department believes that this remedy is protective of human health and the environment and satisfies the remediation objectives described in Section 6.5. No groundwater use restriction is needed because the area is served by public water and the City of Buffalo prohibits the use of groundwater as a potable or process.

The completed IRM met the requirements for a Track 1 Unrestricted Use cleanup but is contingent upon the performance and evaluation of a soil vapor intrusion (SVI) evaluation within the site's future building (which is currently under construction). The SVI evaluation will determine if both engineering controls and institutional controls are necessary at the site. If the SVI evaluation indicates that mitigation of the building is needed to address exposures, an SSDS will need to be fully installed, operated, and maintained.

The intent of the remedy is to achieve Track 1 unrestricted use; therefore, no environmental easement or site management plan is anticipated. However, an environmental easement has been placed on the site, until a Track 1 cleanup can be verified with the results of the SVI evaluation.

In the event that Track 1 unrestricted use is not achieved, the following contingent remedial elements will be required, and the remedy will achieve a Track 2 residential cleanup.

Engineering and Institutional Controls:

Imposition of an institutional control in the form of an environmental easement and a Site Management Plan, will be required as described below. The remedy will achieve a Track 2 restricted residential cleanup at a minimum and will include an environmental easement and site management plan. Imposition of an engineering control in the form of a sub slab depressurization system (SSDS) may be required as described below.

Institutional Control:

Imposition of an institutional control in the form of an environmental easement for the controlled property which will:

- Require the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
- Allow the use and development of the controlled property for residential, commercial and industrial use as defined by Part 375-1.8(g), although land use is subject to local zoning laws; and
- Require compliance with the Department's approved Site Management Plan (SMP).

Site Management Plan (SMP):

A SMP 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 installation and continued operation and maintenance of an SSDS if determined to be required based on the SVI evaluation.

This plan includes, but may not be limited to:

- A provision for evaluation of the potential for soil vapor intrusion for any occupied buildings 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.

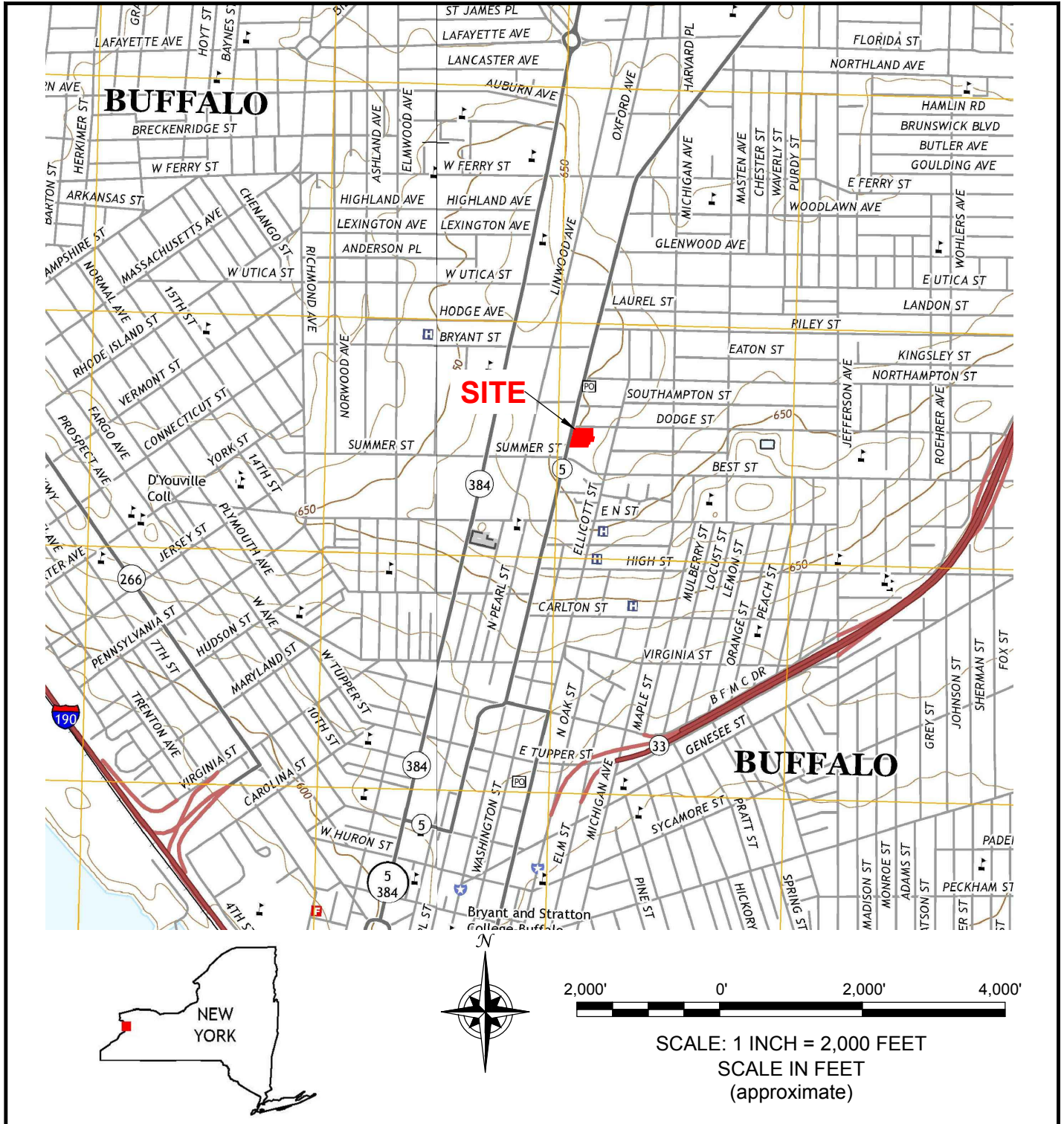
b. A Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:

- Monitoring of soil vapor 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 buildings on the site, as may be required by the Institutional and Engineering Control Plan discussed above.

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

- Procedures for operating and maintaining the system(s); and
- Compliance inspection of the system(s) to ensure proper O&M as well as providing the data for any necessary reporting.

F:\CAD\Turnkey\Cedarland Development Group\1115 Main Street\Final Engineering Report\Figure 1: Site Location and Vicinity Map.dwg



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SUITE 300
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(716) 856-0599

PROJECT NO.: 0481-019-001

DATE: SEPTEMBER 2019

DRAFTED BY: CCB

SITE LOCATION AND VICINITY MAP








FINAL ENGINEERING REPORT

1155 MAIN STREET SITE

BUFFALO, NEW YORK
PREPARED FOR
MAIN & DODGE LLC

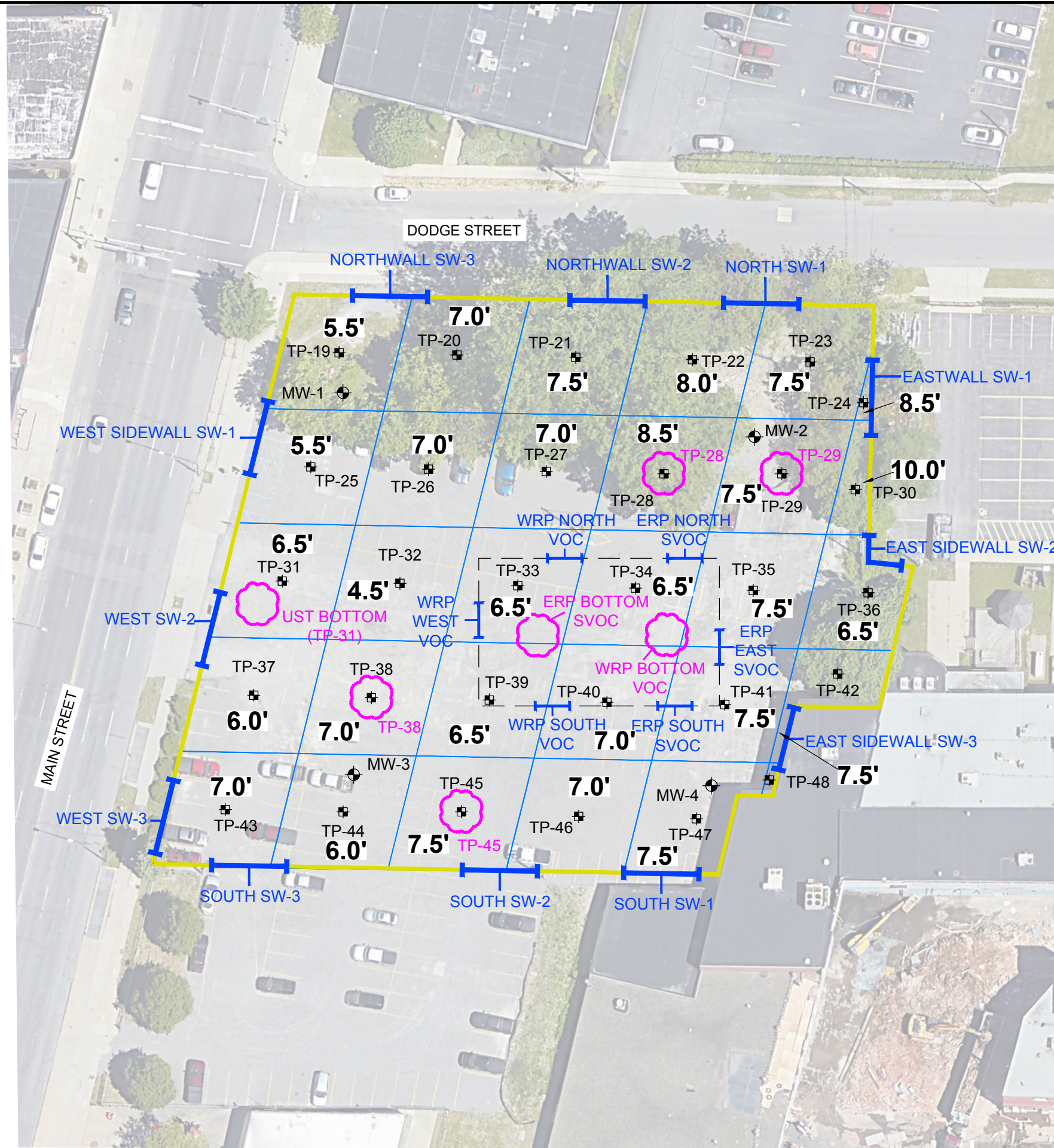
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LEGEND:

-  BCP SITE BOUNDARY
-  RI MONITORING WELL LOCATION
-  RI TEST PIT LOCATION
-  IRM POST-EXCAVATION BOTTOM SAMPLE
-  IRM POST-EXCAVATION SIDE WALL SAMPLE
-  RETENTION POND AREA
-  EXCAVATION DEPTH

DEFINITIONS:

- WRP = WESTERN RETENTION POND
- ERP = EASTERN RETENTION POND
- VOC = VOLATILE ORGANIC COMPOUND
- SVOC = SEMI-VOLATILE ORGANIC COMPOUND



SCALE: 1 INCH = 50 FEET
SCALE IN FEET
(approximate)

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JOB NO.: 0481-019-001

IRM POST-EXCAVATION SAMPLE LOCATIONS

FINAL ENGINEERING REPORT
1155 MAIN STREET SITE
BUFFALO, NEW YORK
PREPARED FOR
MAIN & DODGE LLC

FIGURE 5