DECISION DOCUMENT

301 Connecticut Street
Brownfield Cleanup Program
Buffalo, Erie County
Site No. C915345
September 2020

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

DECLARATION STATEMENT - DECISION DOCUMENT

301 Connecticut Street
Brownfield Cleanup Program
Buffalo, Erie County
Site No. C915345
September 2020

Statement of Purpose and Basis

This document presents the remedy for the 301 Connecticut 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 301 Connecticut 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 IRMs undertaken at this site are discussed in Section 6.2.

The implementation of the IRMs and the results of the RI indicate that the site no longer poses a threat to human health or the environment; therefore, No Further Action is the selected remedy.

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.

9/17/2020

Date

Michael Cruden, Director
Remedial Bureau E

DECISION DOCUMENT

301 Connecticut Street
Buffalo, Erie County
Site No. C915345
September 2020

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 IRMs, the findings of the investigation of this site indicate that the site no longer poses a threat to human health or the environment. The IRMs 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. This Decision Document identifies the IRMs 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 repositories.

Buffalo & Erie County Public Library
Isaias Gonzalez-Soto Branch

280 Porter Avenue
Buffalo, NY 14201
Phone: (716) 882-1537

DECInfo Locator - Web Application
https://gisservices.dec.ny.gov/gis/dil/index.html?rs=C915345

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 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 301 Connecticut Street site is a 0.86-acre site located in the residential and commercial area in the City of Buffalo. The site is bounded by Connecticut Street to the north, Plymouth Street to the east, West Avenue to the west, and a parking lot for D'Youville College to the south.

Site Features: The site is currently being developed with a building being constructed on-site. The future building will serve as a learning center for D'Youville College and health and wellness building for the local community.

Current Zoning and Land Use: The site is currently zoned as N-2C, mixed-use center. The category N-2C allows for residential and commercial use. The project area is planned as a mixed-use commercial development, consistent with the City of Buffalo zoning for the area.

Past Use of the Site: According to historic records, two auto repair shops and two filling stations existed at the site. One of the auto repair shop/filling stations existed along West Avenue from the 1930s to the 1960s. The other repair/filling station occupied the street address 305 Connecticut Street from the 1950s to the early 1980s. The filling station was removed in 1981 and the auto repair shop remained until 2019. Other uses of the site include a laundromat, upholstering store, and a paint shop.

Site Geology and Hydrogeology: The overburden geology below the surface of the site consists of urban fill (brick, ash, concrete, etc.) ranging in thickness from 1 to 4 feet below ground surface (fbgs), underlain by native soils consisting of moist brown silt and silty clay. Groundwater at the site is shallow and found at depths of approximately 4 to 8 fbgs. Groundwater flows to the northwest, toward Connecticut Street.

A site location map is attached as Figure 1, with a site plan attached as Figure 2.

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 Alternatives Analysis (RI-AA) Report.

SECTION 5: ENFORCEMENT STATUS

The Applicant under the Brownfield Cleanup Agreement is a Participant. The Participant has an obligation to address on-site and off-site contamination. Accordingly, no enforcement actions are necessary.

SECTION 6: SITE CONTAMINATION

6.1: Summary of the Remedial Investigation

A 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. Data collected in the RI influence the development of remedial alternatives. The RI-AA 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:

- soil
- groundwater

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-AA Report contains a full discussion of the data. The contaminants of concern (COC) identified at this site are:

1,2,4-trimethylbenzene
1,3,5-trimethylbenzene
benzene
benzo(a)anthracene
benzo(a)pyrene
benzo(b)fluoranthene
benzo(k)fluoranthene
beta-BHC
bis(2-ethylhexyl)phthalate
chromium
chrysene
DDD
DDT
dibenz[a,h]anthracene
ethylbenzene
fluoranthene
indeno(1,2,3-CD)pyrene
lead
manganese
mercury
MTBE (methyl-tert-butyl ether)
naphthalene
n-propylbenzene
phenol
toluene
xylene (mixed)

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 IRMs described in Section 6.2. More complete information can be found in the RI-AA Report.

6.2: Interim Remedial Measures

An 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 IRMs have been completed at this site based on conditions observed during the RI.

Excavation of Contaminated Soil Materials

Based upon investigations conducted prior to the IRMs, the primary COCs at the site include volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and metals at varying depths beneath the site.

To achieve unrestricted use soil cleanup objectives (UUSCOs), an IRM was implemented to remove all contaminated soil and fill material. The IRM completed at the site consisted of excavation and off-site disposal of contaminated soil/fill until UUSCOs were achieved. The site was divided into eighteen grids, each grid had an area of 50-feet by 50-feet. Prior to the excavation, native soil samples were collected from each grid to evaluate soil quality. The depths of the native soil samples ranged from 1 to 15 feet. Laboratory analysis of the eighteen grid samples confirmed the depths at which UUSCOs would be achieved. To further confirm that UUSCOs were achieved, a total of seventeen post excavation samples were collected from the sidewalls of each excavation that had a depth greater than 5 feet. Laboratory analysis of the post-excavation samples concluded that within the site boundary UUSCOs were achieved following excavation of impacted soil/fill material.

The excavation extended to the site boundaries where perimeter samples were collected. A total sixteen perimeter samples were collected along the property boundaries. Results of the perimeter samples indicated that the fill material on the northwest property boundary displayed petroleum impacts related to the site. The IRM excavation continued off-site to address the impacted material below the sidewalk. It was not feasible to address off-site impacted material that continued below Connecticut Street. Future remediation for any material encountered below Connecticut Street will be tracked under Spill 2000386. Fill material along the remaining site boundaries displayed exceedances above UUSCOs. This contamination does not appear to have migrated off-site and is likely indicative of the contamination found in the fill material in the surrounding area.

The IRM was completed between December 2019 and January 2020. Approximately 16,423 tons of urban fill and non-hazardous contaminated soil exceeding UUSCOs were removed from the site and transported off-site to a permitted disposal facility. Excavation depths varied from 1 to 15 fbgs. During the soil excavation three underground storage tanks (USTs) were encountered. Two of the tanks had an estimated capacity of 500-gallons while the third tank had a capacity of 250-gallons. All tanks appeared to be partially filled with concrete. A liquid composed of a water and petroleum product mix occupied the remaining volume within the tanks. Approximately 146 gallons of liquid was removed from the first two 500-gallon tanks and 136 gallons of liquid was removed from the 250-gallon tank, all liquids were sent off-site for disposal. The three USTs were removed from the site during IRM activities. The IRM excavations were backfilled to meet design grades using crushed stone that met the requirements outlined in the Department's technical guidance for site investigations and remediation (DER-10). Stone screenings were also used for backfilling at the site. The material was sampled to demonstrate that it did not exceed UUSCOs.

These IRM activities are documented in the RI-AA Report dated July 2020 and the Construction Completion Report (CCR) dated June 2020. The extent of the IRM excavation is depicted in the attached Figure 3.

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 prior to the BCP. A Phase I investigation was performed in 2017 and a Phase II along with a Supplemental Investigation were completed in 2018.

Under the BCP, a RI was conducted in August of 2019. The RI sampled surface soils, subsurface urban fill material/native soils, and groundwater. The RI data was used to determine the excavation limits for the IRM. The data collected during the site investigations and RI showed subsurface soil/fill impacts at varying depths and concentrations throughout the site. Perimeter samples were collected along the site boundaries and post excavation samples were collected from the sidewalls of each excavation within the site. Additionally, off-site borings were advanced along the south side of Connecticut Street, adjacent to the site. Three temporary off-site wells were installed across the street from the site, on the north side of Connecticut Street.

Nature and Extent of Contamination Prior to Completion of Remediation:

Surface Soil:

Three surface soil samples were collected from 0 to 2 inches below vegetative cover and analyzed for SVOCs, pesticides, herbicides, polychlorinated biphenyls (PCBs), metals, and per- and polyfluoroalkyl substances (PFAS). PCBs were either not detected or detected at concentrations below the UUSCOs.

Surface soils samples indicated that SVOCs, particularly polycyclic aromatic hydrocarbons (PAHs), were found above UUSCOs. Other contaminants exceeding UUSCOs included lead and pesticides.

Multiple PFAS compounds were detected in each surface soil sample, with perfluorooctanoic acid (PFOA) up to 0.38 parts per billion (ppb) and perfluorooctanesulfonic acid (PFOS) up to 1.4 ppb. Total PFAS concentrations ranged from 1.89 to 3.25 ppb. Currently there are no SCOs for PFAS.

Subsurface Soil:

Prior to the implementation of the IRM, urban fill and native soil samples were collected from depths ranging from 1 to 15 fbgs across the eighteen grids. Samples were analyzed for VOCs, SVOCs, pesticides, PCBs, metals, and PFAS. PCBs were either not detected or detected at concentrations below the UUSCOs.

Several VOCs were detected above UUSCOs. These included ethylbenzene, toluene, and xylene. SVOCs, particularly PAHs, were detected above UUSCOs. Metals including lead and mercury were detected above UUSCOs. Pesticides above UUSCOs included 4,4'-DDD and 4,4'-DDT. PFAS compounds were detected in the subsurface soil samples, with PFOA up to 0.17 ppb and PFOS up to 0.68 ppb. Total PFAS concentrations ranged from 0 to 0.94 ppb. Currently there are no SCOs for PFAS.

On-site soil exceeding the UUSCOs were excavated and transported off-site for disposal as part of a soil removal IRM described in Section 6.2, above. The final excavation depth for each grid was determined by native soil samples collected during the RI that met the UUSCOs.

While conducting the RI, ten off-site borings were advanced along the sidewalk of Connecticut Street to determine the extent of the petroleum impacts. The sample depths ranged from 5 to 10 fbgs. Samples were analyzed for VOCs and SVOCs. Acetone and 1,2,4-trimethylbeneze were the only VOCs detected above UUSCOs. Acetone was detected in 2 samples and 1,2,4-trimethylbeneze was detected in 1 sample above UUSCOs. There were no SVOC exceedances above UUSCOs.

Off-site subsurface samples indicated that petroleum impacts extended to the sidewalk of Connecticut Street. During the IRM, the excavation continued off-site below the sidewalk to address this area of petroleum contamination.

Pre-IRM Groundwater:

Prior to the IRM two separate sampling events were completed to investigate the groundwater at the site. Five monitoring wells were installed and screen from approximately 10 to 20 fbgs. The depth to groundwater across the site ranged from 4 to 8 fbgs. Samples were analyzed for VOCs, SVOCs, metals, PCBs, pesticides, PFAS, and 1,4-dioxane. PCBs were either not detected or detected at concentrations below the unrestricted use soil cleanup objectives (USCOs) or action levels.

Several VOCs were detected above GWQS, these include 1,3,5-trimethylbenezne, acetone, benzene, ethylbenzene, n-propylbenzene, xylene, and toluene. SVOCs detected above GWQS were primarily PAHs these include benzo(a)anthracene, benzo[b]fluoranthene, benzo(k)fluoranthene, bis(2-ethylhexyl) phthalate, chrysene, indeno[1,2,3-cd] pyrene, naphthalene and phenol. Metals detected above GWQS include chromium, lead, and manganese. Beta-BHC was the only pesticide contaminant detected above GWQS.

Two monitoring wells were analyzed for PFAS, with at least one PFAS compound detected in both wells. PFOA (up to 5.89 parts per trillion (ppt)) and PFOS (up to 7.14 ppt) were detected in at least one well. Total PFAS concentrations ranged from 3 to 13 ppt. Detections of PFOA or PFOS above the 10 ppt screening level was limited to MW-1. 1,4-dioxane was analyzed for at both monitoring wells. 1,4-dioxane was not detected in either monitoring well.

Additionally, during the RI three off-site monitoring wells were installed in the sidewalk across Connecticut Street. Only one of the three off-site wells produced groundwater. The off-site

monitoring well was analyzed for VOCs and SVOCs. There were no VOCs detected in the sampled monitoring well. Minor SVOC exceedances were found in the off-site groundwater.
The results of the off-site groundwater sample are consistent with contaminants in the historic fill found in the surrounding area and indicate that groundwater contamination has not migrated from the site and impacted the north side of Connecticut Street.

Nature and Extent of Contamination Post-Remediation

Post Excavation Subsurface Sidewall Samples

Following the IRM, seventeen locations were sampled to demonstrate that soils left on-site met UUSCOs. Post excavation samples were collected from the sidewalls of each excavation that had a depth greater than 5 feet. Of the seventeen post excavation samples, thirteen samples were analyzed for VOCs while four of the samples were analyzed for SVOCs, pesticides and metals. Laboratory analysis of the post-excavation samples demonstrated that within the site boundary UUSCOs were achieved.

Perimeter Samples

Perimeter samples were collected every 50 feet (sixteen sample locations) within the fill material along the property boundary. Grab samples were used to collect the perimeter samples from the excavation sidewalls. In areas where shoring was installed borings were advanced. Samples were analyzed for VOCs, SVOCS, and metals.

VOCs exceeding UUSCOs include:

- ethylbenzene up to 5.6 ppm (UUSCO 1 ppm);
- toluene up to 0.91 ppm (UUSCO 0.7 ppm); and
- 1,2,4-Trimethylbenzene up to 22 ppm (UUSCO 3.6 ppm).

SVOCs exceeding UUSCO include:

- benzo(a)anthracene up to 1.3 ppm (UUSCO 1 ppm);
- benzo(a)pyrene up to 1 ppm (UUSCO 1 ppm);
- benzo(b)fluoranthene up to 1.4 ppm (UUSCO 1 ppm);
- chrysene up to 1.3 ppm (UUSCO 1 ppm); and
- dibenzo(a,h)anthracene up to 0.77 ppm (UUSCO 0.33 ppm).

Metals exceeding UUSCOs include:

- lead up to 624 ppm (UUSCO 63 ppm); and
- mercury up to 0.722 ppm (UUSCO 0.18 ppm).

Perimeter samples indicate that fill material exceeding the UUSCOs remains present along the adjoining properties. With the exception of the northwest property boundary, the contaminants identified in the perimeter samples are indicative of the fill material found in the surrounding area and are not attributed to migration from the site. The excavation along the northwest property boundary continued off-site to address the impacted material below the sidewalk.

Post-IRM Groundwater:

Following the IRM three monitoring wells were installed to assess the groundwater conditions following the soil removal. The wells were installed on the northern corner of the site. Two rounds of post remediation groundwater sampling were completed. Post remediation groundwater samples were analyzed for VOCs, SVOCs, and Lead. No exceedances of lead above GWQS were detected.

During the second post-IRM sampling event SVOCs were not detected. Only one well (MW-2R) displayed a VOC exceedance above GWQS, methyl-tert-butyl-ether was detected at a concentration of 29 ppb (GWQS 10 ppb). The Buffalo Water Authority provides potable drinking water to the site and surrounding area.

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*.

Remedial actions taken at the site have addressed all potential contact with site contaminants in soil. Contaminated groundwater at the site is not used for drinking or other purposes and the site is served by a public water supply that obtains water from a different source not affected by this contamination.

6.5: Summary of the Remediation Objectives

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

The remedial action objectives (RAOs) for this site are:

Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.

RAOs for Environmental Protection

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

Groundwater

RAOs for Public Health Protection

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.

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 an Unrestricted Use Cleanup, Track 1 remedy.

The selected remedy is referred to as the No Further Action remedy.

The elements of the selected remedy, as shown in Figure 3, are as follows:

Based on the results of the investigations at the site, the IRM that has been performed (detailed in Section 6.2), 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. The use of groundwater as a source of potable or process water is restricted due to a requirement of the Buffalo Water Board Regulations (21 NYCRR § 10085.3) that "every dwelling, house or other building requiring the use of water must be supplied from the water mains of the water board…". As public water suppliers must also meet the requirements of 10 NYCRR Chapter I Subpart 5-2, no additional restrictions on potable water use are necessary.

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301 CONNECTICUT STREET SITE
BROWNFIELD CLEANUP PROGRAM
SITE NO. C915345
CITY OF BUFFALO, NEW YORK

MARK	DATE	DESCRIPTION
REVISIONS		

PROJECT NO:	V20.001.002
DATE:	JANUARY 7, 2019
DRAWN BY:	C. MARTIN
DESIGNED BY:	C. MARTIN
CHECKED BY:	D. RIKER

SITE LOCATION

FIGURE 1

LEGEND

BROWNFIELD CLEANUP BOUNDARY

NOTES

1) TOPOGRAPHIC SURVEY FROM NUSSBAUMER & CLARKE, INC., D'YOUVILLE PARKING LOT, OCTOBER 26, 2018 (JOB NO. 07J2-1173B).

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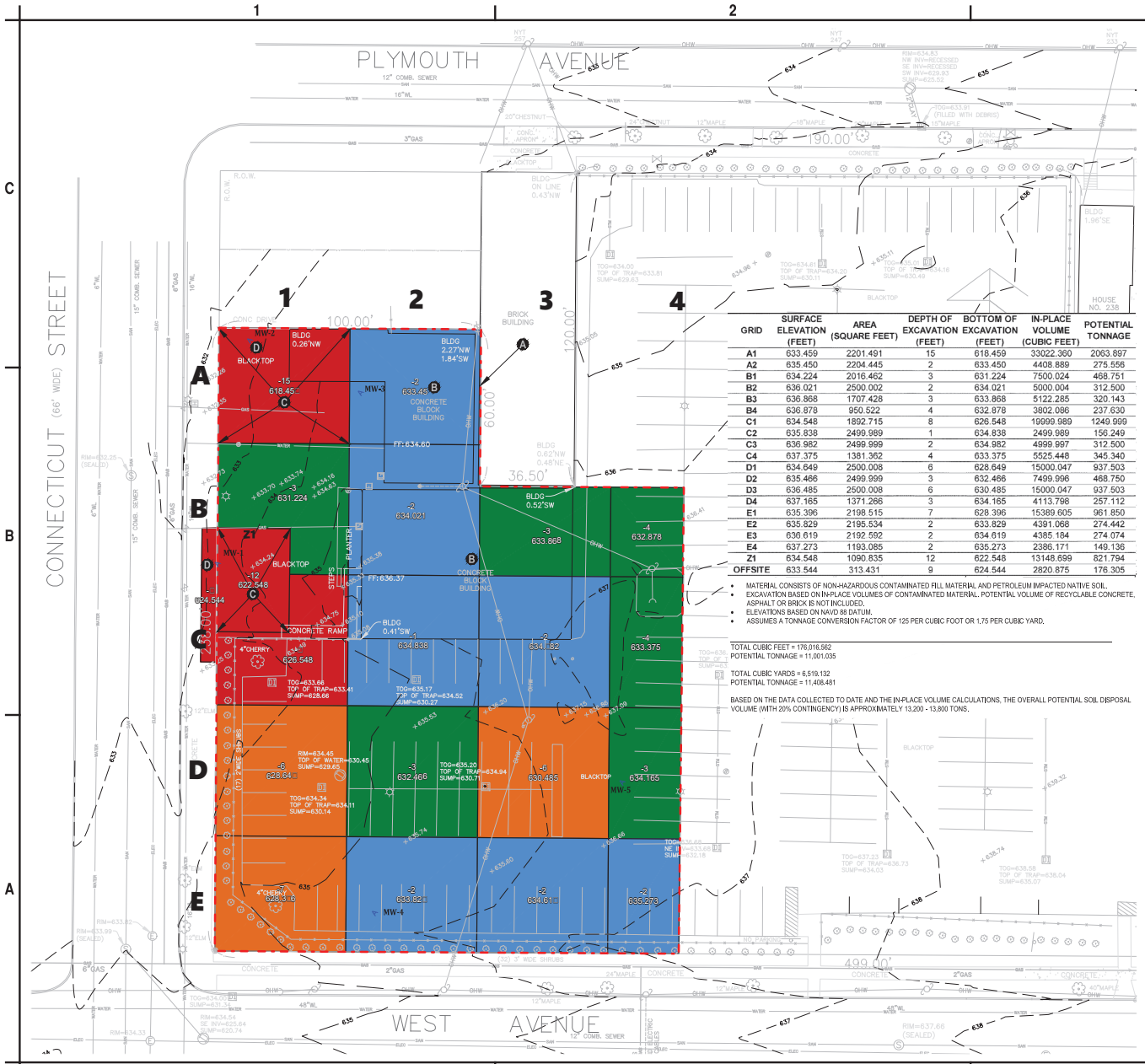
BROWNFIELD CLEANUP PROGRAM
SITE NO. C915345
CITY OF BUFFALO, NY

MARK	DATE	DESCRIPTION
		REVISIONS

PROJECT NO:	V20.001.002
DATE:	11/16/2018
DRAWN BY:	C. MARTIN
DESIGNED BY:	C. MARTIN
CHECKED BY:	D. RIKER

SITE DETAIL

FIGURE 2



GRID	SURFACE ELEVATION (FEET)	AREA (SQUARE FEET)	DEPTH OF EXCAVATION (FEET)	BOTTOM OF EXCAVATION (FEET)	IN-PLACE VOLUME (CUBIC FEET)	POTENTIAL TONNAGE
A1	633.459	2201.491	15	618.459	33022.360	2063.897
A2	635.450	2204.445	2	633.450	4408.889	275.556
B1	634.224	2016.462	3	631.224	7500.024	468.751
B2	636.021	2500.002	2	634.021	5000.004	312.500
B3	636.868	1707.428	3	633.868	5122.285	320.143
B4	636.878	950.522	4	632.878	3802.086	237.630
C1	634.548	1892.715	8	626.548	19999.989	1249.999
C2	635.838	2499.989	1	634.838	2499.989	156.249
C3	636.982	2499.999	2	634.982	4999.997	312.500
C4	637.375	1381.362	4	633.375	5525.448	345.340
D1	634.649	2500.008	6	628.649	15000.047	937.503
D2	635.466	2499.999	3	632.466	7499.996	468.750
D3	636.485	2500.008	6	630.485	15000.047	937.503
D4	637.165	1371.266	3	634.165	4113.798	257.112
E1	635.396	2198.515	7	628.396	15389.605	961.850
E2	635.829	2195.534	2	633.829	4391.068	274.442
E3	636.619	2192.592	2	634.619	4385.184	274.074
E4	637.273	1193.085	2	635.273	2386.171	149.136
Z1	634.548	1090.835	12	622.548	13148.699	821.794
OFFSITE	633.544	313.431	9	624.544	2820.875	176.305

- MATERIAL CONSISTS OF NON-HAZARDOUS CONTAMINATED FILL MATERIAL AND PETROLEUM IMPACTED NATIVE SOIL.
- EXCAVATION BASED ON IN-PLACE VOLUMES OF CONTAMINATED MATERIAL. POTENTIAL VOLUME OF RECYCLABLE CONCRETE, ASPHALT OR BRICK IS NOT INCLUDED.
- ELEVATIONS BASED ON NAVD 88 DATUM.
- ASSUMES A TONNAGE CONVERSION FACTOR OF 125 PER CUBIC FOOT OR 1.75 PER CUBIC YARD.

TOTAL CUBIC FEET = 176,016.562
POTENTIAL TONNAGE = 11,001.035

TOTAL CUBIC YARDS = 6,519.132
POTENTIAL TONNAGE = 11,408.481

BASED ON THE DATA COLLECTED TO DATE AND THE IN-PLACE VOLUME CALCULATIONS, THE OVERALL POTENTIAL SOIL DISPOSAL VOLUME (WITH 20% CONTINGENCY) IS APPROXIMATELY 13,200 - 13,800 TONS.

LEGEND

BROWNFIELD CLEANUP (BCP) BOUNDARY / AREA OF EXCAVATION

50-FT X 50-FT EXCAVATION GRID

EXCAVATION (FEET)

- 0 - 1
- 1 - 2
- 2 - 4
- 4 - 8
- 8 - 15

TOPOGRAPHIC SURVEY

- ELECTRIC MANHOLE
- STORM MANHOLE
- DRAIN INLET
- WATER VALVE
- HYDRANT
- TREE/BUSH
- SANITARY MANHOLE
- LIGHT POLE
- UTILITY POLE
- HAND HOLE
- GAS VALVE
- CLEAN OUT
- COMMUNICATIONS MANHOLE

NOTES

1) TOPOGRAPHIC SURVEY FROM NUSSBAUMER & CLARKE, INC., D'YOUVILLE PARKING LOT, OCTOBER 26, 2018 (JOB NO. 07J2-1173B).

A. TRACK 1 LEVEL CLEANUP: COMPLETE REMOVAL OF CONTAMINATED FILL AND SOIL FROM WITHIN THE BCP BOUNDARY. EXCAVATION ALONG THE BCP BOUNDARY MUST BE A VERTICAL CUT - SIDEWALLS CAN NOT BE BENCHED.

B. BUILDING DEMOLITION AND FLOOR SLAB REMOVAL COMPLETED BY OTHERS.

C. DEWATERING ACTIVITIES FROM THESE AREAS MUST INCLUDE STORAGE, SAMPLING AND POSSIBLE TREATMENT FOR PETROLEUM IMPACTS IN ACCORDANCE WITH BUFFALO SEWER AUTHORITY REQUIREMENTS PRIOR TO DISCHARGE.

D. GROUNDWATER MONITORING WELLS TO BE REMOVED AND/OR DECOMMISSIONED IN ACCORDANCE WITH NYSDEC CP-43.

0 20 40 80 FEET
SCALE: 1" = 20'

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301 CONNECTICUT STREET SITE
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SITE NO. C915345
CITY OF BUFFALO, NY

MARK	DATE	DESCRIPTION
		REVISIONS

PROJECT NO:	V20.001.002
DATE:	10/01/2019
DRAWN BY:	C. MARTIN
DESIGNED BY:	C. MARTIN
CHECKED BY:	D. RIKER

TRACK 1 CLEANUP PLAN

FIGURE 8