Spill Below Connecticut Street
Erie County, New York

Excavation Work Plan

NYSDEC Spill Number: 2000386

Prepared by:
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1.0 Introduction

1.1 GENERAL

This Excavation Work Plan (EWP) is for a portion of Connecticut Street adjacent to a property with the address 301 Connecticut Street located in Buffalo, New York (hereinafter referred to as the "Site"). See **Figure 1**.

The property adjacent to the Site, 301 Connecticut Street, is currently in the New York State (NYS) Brownfield Cleanup Program (BCP) Site No. C915345 which is administered by New York State Department of Environmental Conservation (NYSDEC). This EWP was prepared to manage potentially impacted soil adjacent to 301 Connecticut Street. This plan has been approved by the NYSDEC, and compliance with this plan is required by the contractor. This EWP may only be revised with the approval of the NYSDEC.

All reports associated with the Site can be viewed by contacting the NYSDEC or its successor agency managing environmental issues in New York State. A list of contacts for persons involved with the Site is provided in **Table 3-1**.

2.0 SUMMARY OF PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

2.1 SITE LOCATION AND DESCRIPTION

The Site is located in Buffalo, Erie County, New York and is identified as 100-foot section of City of Buffalo owned street (see **Figure 1**).

2.2 PHYSICAL SETTING

2.2.1 Land Use

The Site consists of a 100-foot section of sidewalk and roadway on Connecticut Street. The properties adjoining the Site and in the neighborhood surrounding the Site primarily include commercial properties.

2.2.2 Site Geography, Geology, and Hydrogeology

The Site contains Historic Fill Material (HFM) across the Site from directly below asphalt and subbase material to depths ranging from one to four feet bgs.

HFM is defined as material coming from anthropogenic sources re-worked to build a site to a defined grade. The HFM at the Site contains:

- Crushed Rock
- Sand
- Silt
- Clay
- Plastics
- Construction Debris
- Lumber
- Ash/Cinders
- Ceramics
- Bricks
- Metals

Underlying the HFM are native soils which are comprised of primarily moist brown silty clay. Water levels were encountered at relatively shallow depths. Water levels throughout the Site ranged from four to eight feet bgs. Groundwater flow appeared to be flowing in a general northwest direction, toward Connecticut Street.

2.3 INVESTIGATION AND REMEDIAL HISTORY

Adjacent Property (301 Connecticut Street)

301 Connecticut LLC and D'Youville College entered into a Brownfield Cleanup Agreement (BCA) with the New York State Department of Environmental Conservation (NYSDEC) in April 2019, to investigate and remediate a 0.86-acre property located adjacent to the Site. The property was remediated to Unrestricted Use, and will be used for multistory, mixed-use Health Professions Hub for D'Youville College students that will include a Community Clinic, a Workforce Development Center, a Virtual Simulation Training Center, and a neighborhood pharmacy.

The 301 Connecticut Street was remediated in accordance with the remedy selected by the NYSDEC in the Remedial Investigation / Interim Remedial Measures Work Plan (RI/IRM WP) dated July 2019.

The factors considered during the selection of the remedy are those listed in 6NYCRR 375-1.8. The following are the components of the selected remedy:

- Remove and properly dispose of all impacted fill material to meet Unrestricted Use SCOs.
- Removal of any petroleum storage tanks and impacted soil around the tanks.
- Backfill the excavation with material that meets Unrestricted Use SCOs.

The IRM Work Plan called for surface soil, urban fill, and affected native soil removal via excavation, dewatering of the excavation area and treatment of captured water if necessary, and use of confirmatory soil sample results to show compliance. Specific elements of the IRM, as implemented, included:

- Removal of approximately 11,218 tons of surface soil, urban fill, and native soil with residual impacts from the overlying fill for off-site disposal at Allied Landfill.
- Use of confirmatory soil sample results generated during the RI, in conjunction with additional analytical results from post-excavation samples collected along the excavation walls for perimeter sampling, to show compliance with the Unrestricted Use Soil Cleanup Objectives.

3.0 EXCAVATION WORK PLAN

3.1 NOTIFICATION

At least 15 days prior to the start of any activity that is anticipated to encounter remaining contamination, the site owner or their representative will notify the NYSDEC. **Table 3-1** includes contact information for the above notification. The information on this table will be updated as necessary to provide accurate contact information.

Table 3-1: Notifications

NYSDEC Environmental Remediation	Joshua Vaccaro Joshua.Vaccaro@dec.ny.gov (716) 851-7220
NYSDEC Spills	(716) 851-7220
NYSDEC Site Control	derweb@dec.ny.gov

* Note: Notifications are subject to change and will be updated as necessary.

This notification will include:

- A detailed description of the work to be performed, including the location and areal extent of excavation, plans/drawings for site re-grading, intrusive elements or utilities to be installed below the soil cover, estimated volumes of contaminated soil to be excavated and any work that may impact an engineering control;
- A summary of environmental conditions anticipated to be encountered in the work areas, including the nature and concentration levels of contaminants of concern, potential presence of grossly contaminated media, and plans for any pre-construction sampling;
- A schedule for the work, detailing the start and completion of all intrusive work;
- A summary of the applicable components of this EWP;
- A statement that the work will be performed in compliance with this EWP and 29 CFR 1910.120;
- A copy of the contractor's health and safety plan (HASP), in electronic format;
- Identification of disposal facilities for potential waste streams; and
- Identification of sources of any anticipated backfill, along with all required chemical testing results.

3.2 SOIL SCREENING METHODS

Visual, olfactory and instrument-based (e.g. photoionization detector) soil screening maybe required by a qualified environmental professional during excavations into known or potentially contaminated material. Soil screening will be performed when invasive work is done and will include all excavation and invasive work performed during development, such as excavations for foundations and utility work.

3.3 SOIL STAGING METHODS

Soil stockpiles will be continuously encircled with a berm and/or silt fence. Hay bales will be used as needed near catch basins, surface waters and other discharge points.

Stockpiles will be kept covered at all times with appropriately anchored tarps. Stockpiles will be routinely inspected and damaged tarp covers will be promptly replaced.

Stockpiles will be inspected at a minimum once each week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the site and available for inspection by the NYSDEC.

3.4 MATERIALS EXCAVATION AND LOAD-OUT

Loaded vehicles leaving the Site will be appropriately lined, tarped, securely covered, manifested, and placarded in accordance with appropriate Federal, State, local, and NYSDOT requirements (and all other applicable transportation requirements).

A truck wash will be operated on-site, as appropriate. The contractor will be responsible for ensuring that all outbound trucks will be washed at the truck wash before leaving the Site until the activities performed under this section are complete truck wash waters will be collected and disposed of off-site in an appropriate manner.

Locations where vehicles enter or exit the Site shall be inspected daily for evidence of off-site soil tracking.

The contractor will be responsible for ensuring that all egress points for truck and equipment transport from the Site are clean of dirt and other materials derived from the Site during intrusive excavation activities. Cleaning of the adjacent streets will be performed as needed to maintain a clean condition with respect to site-derived materials.

3.5 MATERIALS TRANSPORT OFF-SITE

All transport of materials will be performed by licensed haulers in accordance with appropriate local, State, and Federal regulations, including 6 NYCRR Part 364. Haulers will be appropriately licensed and trucks properly placarded.

Material transported by trucks exiting the Site will be secured with tight-fitting covers. Loose-fitting canvas-type truck covers will be prohibited. If loads contain wet material capable of producing free liquid, truck liners will be used.

Trucks will be prohibited from stopping and idling in the neighborhood outside the project Site.

Egress points for truck and equipment transport from the Site will be kept clean of dirt and other materials during Site remediation and development.

Queuing of trucks will be performed on-site in order to minimize off-site disturbance. Off-site queuing will be prohibited.

3.6 MATERIALS DISPOSAL OFF-SITE

All material excavated and removed from the Site may be treated as contaminated and regulated material and will be transported and disposed in accordance with all local, State and Federal regulations. If disposal of material from this Site is proposed for unregulated off-site disposal (i.e. clean soil removed for development purposes), a formal request with an associated plan will be made to the NYSDEC. Unregulated off-site management of materials from this Site will not occur without formal NYSDEC approval.

Off-site disposal locations for excavated soils will be identified in the pre-excavation notification. This will include estimated quantities and a breakdown by class of disposal facility if appropriate, i.e. hazardous waste disposal facility, solid waste landfill, petroleum treatment facility, C&D debris recovery facility, etc. Actual disposal quantities and associated documentation will be reported to the NYSDEC. This documentation will include: waste profiles, test results, facility acceptance letters, manifests, bills of lading and facility receipts.

Non-hazardous historic fill and contaminated soils taken off-site will be handled consistent with 6NYCRR Parts 360, 361, 362, 363, 364 and 365. Material that does not meet Unrestricted SCOs is prohibited from being taken to a New York State C&D debris recovery facility (6NYCRR Subpart 361-5 registered or permitted facility).

3.7 FLUIDS MANAGEMENT

All liquids to be removed from the Site, including but not limited to, excavation dewatering, decontamination waters and groundwater monitoring well purge and development waters, will be handled, transported and disposed in accordance with applicable local, State, and Federal regulations. Dewatering, purge and development fluids will not be recharged back to the land surface or subsurface of the Site, and will be managed off-site, unless prior approval is obtained from NYSDEC.

Discharge of water generated during large-scale construction activities to surface waters (i.e. a local pond, stream or river) will be performed under a SPDES permit.

3.8 BACKFILL FROM OFF-SITE SOURCES

A Request to Import/Reuse Fill or Soil form, which can be found at http://www.dec.ny.gov/regulations/67386.html, will be prepared and submitted to the NYSDEC project manager allowing a minimum of 5 business days for review.

Material from industrial sites, spill sites, or other environmental remediation sites or potentially contaminated sites will not be imported to the Site.

All imported soils will meet the backfill and cover soil quality standards established in 6NYCRR 375-6.7(d). Soils that meet 'exempt' fill requirements under 6 NYCRR Part 360, but do not meet backfill or cover soil objectives for this Site, will not be imported onto the Site without prior approval by NYSDEC. Solid waste will not be imported onto the Site.

Trucks entering the Site with imported soils will be securely covered with tight fitting covers. Imported soils will be stockpiled separately from excavated materials and covered to prevent dust releases.

3.9 COMMUNITY AIR MONITORING PLAN

Continuous air monitoring will be conducted at upwind and downwind locations during all ground intrusive activities. A particulate monitor will be used at a downwind location on the perimeter of the Site. Another handheld detector was used in the excavation to ensure that the worker area was safe.

The action threshold for VOCs established in the CAMP is 5 ppm above background. If this value is exceeded for the 15-minute average work will be halted and work may resume

once instantaneous readings fall below 5 ppm work. The action level for dust is 100 micrograms per cubic meter over background during a 15-minute average. If this limit is exceeded, dust suppression techniques will be employed, including using water to wet the area.

Special Requirements for Work Within 20 Feet of Potentially Exposed Individuals or Structures

When work areas are within 20 feet of potentially exposed populations or occupied structures, the continuous monitoring locations for VOCs and particulates must reflect the nearest potentially exposed individuals and the location of ventilation system intakes for nearby structures. The use of engineering controls such as vapor/dust barriers, temporary negative-pressure enclosures, or special ventilation devices should be considered to prevent exposures related to the work activities and to control dust and odors. Consideration should be given to implementing the planned activities when potentially exposed populations are at a minimum, such as during weekends or evening hours in non-residential settings.

If total VOC concentrations opposite the walls of occupied structures or next to intake vents exceed 1 ppm, monitoring should occur within the occupied structure(s). Background readings in the occupied spaces must be taken prior to commencement of the planned work. Any unusual background readings should be discussed with NYSDOH prior to commencement of the work.

If total particulate concentrations opposite the walls of occupied structures or next to intake vents exceed 150 mcg/m3, work activities should be suspended until controls are implemented and are successful in reducing the total particulate concentration to 150 mcg/m3 or less at the monitoring point.Exceedances of action levels listed in the CAMP will be reported to NYSDEC and NYSDOH Project Managers.

3.10 ODOR CONTROL PLAN

This odor control plan is capable of controlling emissions of nuisance odors off-site. If nuisance odors are identified at the Site boundary, or if odor complaints are received, work will be halted and the source of odors will be identified and corrected. Work will not resume until all nuisance odors have been abated. NYSDEC and NYSDOH will be notified of all odor events and of any other complaints about the project.

All necessary means will be employed to prevent on- and off-site nuisances. At a minimum, these measures will include: (a) limiting the area of open excavations and size of soil stockpiles; (b) shrouding open excavations with tarps and other covers; and (c) using foams to cover exposed odorous soils. If odors develop and cannot be otherwise controlled, additional means to eliminate odor nuisances will include: (d) direct load-out of soils to trucks for off-site disposal; (e) use of chemical odorants in spray or misting systems; and, (f) use of staff to monitor odors in surrounding neighborhoods.

If nuisance odors develop during intrusive work that cannot be corrected, or where the control of nuisance odors cannot otherwise be achieved due to on-site conditions or close proximity to sensitive receptors, odor control will be achieved by sheltering the excavation and handling areas in a temporary containment structure equipped with appropriate air venting/filtering systems.

3.11 DUST CONTROL PLAN

A dust suppression plan that addresses dust management during invasive on-site work will include, at a minimum, the items listed below:

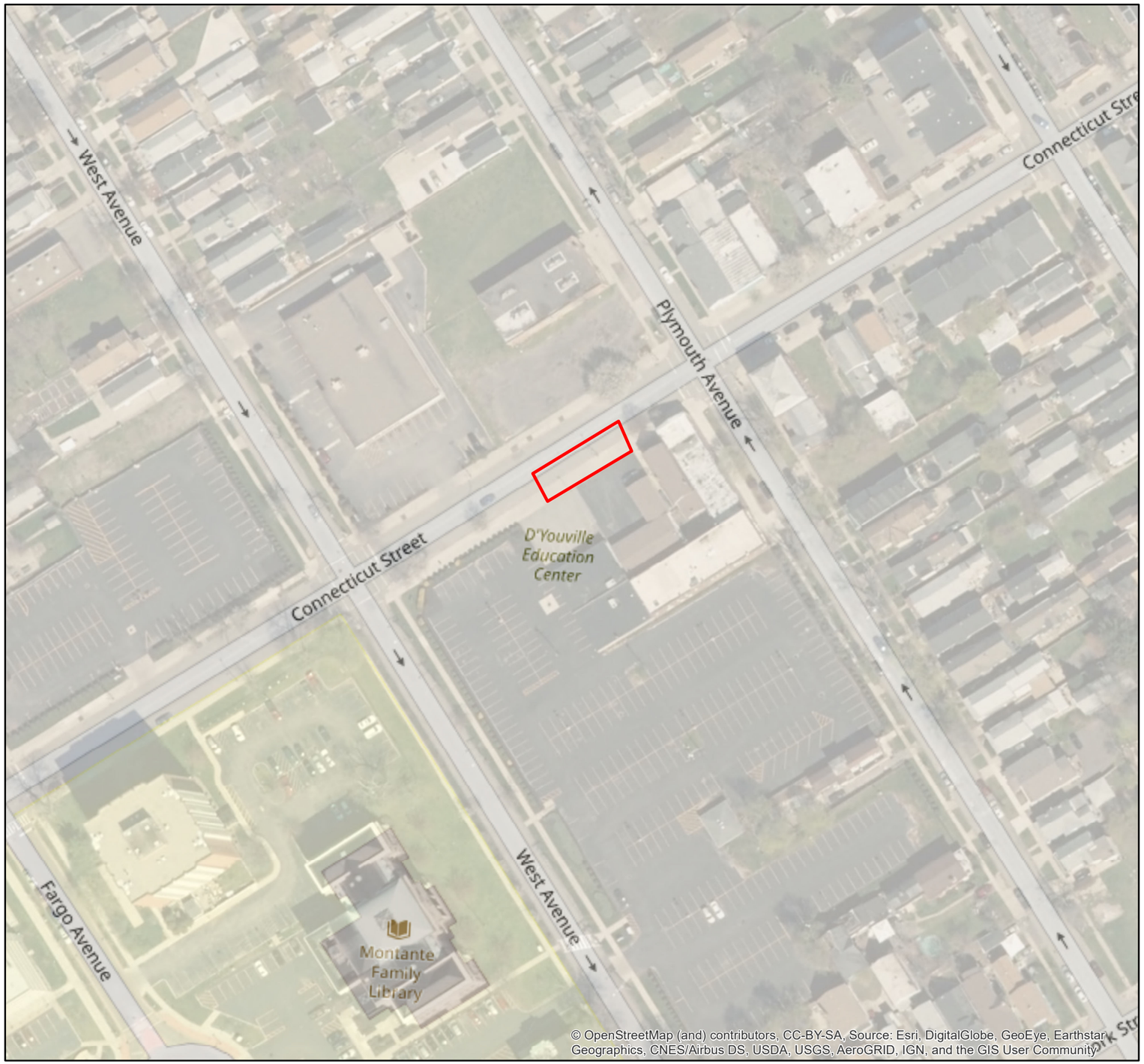
- Dust suppression will be achieved though the use of a dedicated on-site water truck for road wetting. The truck will be equipped with a water cannon capable of spraying water directly onto off-road areas including excavations and stockpiles.
- Gravel will be used on roadways to provide a clean and dust-free road surface.
- On-site roads will be limited in total area to minimize the area required for water truck sprinkling.

3.12 OTHER NUISANCES

The following items may be necessary depending on the type of wastes present, the location of the site and other site-specific concerns. These plans are generally not required for submission to the NYSDEC.

A plan for rodent control will be developed and utilized by the contractor prior to and during site clearing and site grubbing, and during all remedial work.

A plan will be developed and utilized by the contractor for all remedial work to ensure compliance with local noise control ordinances.



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SITE LOCATION

0 50 100 200 Feet

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SPILL BELOW CONNECTICUT ST.
SPILL NO. 2000386
CITY OF BUFFALO, NEW YORK

MARK	DATE	DESCRIPTION

REVISIONS

PROJECT NO:	V20.001.002
DATE:	05/01/2020
DRAWN BY:	C. MARTIN
DESIGNED BY:	C. MARTIN
CHECKED BY:	D. RIKER

SITE LOCATION

FIGURE 1