WESTERN NEW YORK WORKFORCE TRAINING CENTER

ERIE COUNTY

BUFFALO, NEW YORK

PERIODIC REVIEW REPORT

April 27, 2022 – April 27, 2023

NYSDEC Site Number: C915310

Prepared for:

683 Northland, LLC

95 Perry Street, Suite 404

Buffalo, New York 14203

Prepared by:

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MAY 26, 2023 (Revised October 4, 2023)

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1.0 Introduction

1.1 Background Information

The Western New York Workforce Training Center Site (C915310) is located in the City of Buffalo, Erie County, New York at 683 Northland Avenue (see Figure 1). The Site is an approximately 8.548-acre area and is bound by Northland Avenue to the north, a CSX rail line to the south, a commercial property to the east, and an industrial property to the west (Figure 2).

The Site is owned by 683 Northland, LLC and consists of: a four-story office area on the north side along Northland Avenue; a series of connecting training/manufacturing spaces; a detached one-story shed; and, parking areas. The Site is zoned industrial and is currently being used for job training and manufacturing.

Site remedial activities were performed between 2017 and 2018 in accordance with two New York State Department of Environmental Conservation (NYSDEC)-approved Interim Remedial Measure (IRM) Work Plans and a Remedial Action Work Plan (RAWP).

The first IRM addressed contamination within the building and included: removal of contaminated solid and liquid residuals from the many pits and sumps that were present in the building; removal and off-site disposal of contaminated wooden block flooring; removal and off-site disposal of polychlorinated biphenyl (PCB)-contaminated concrete flooring in the northern portion of the former manufacturing area; cleaning and inspection of the pits and sumps; and, removal of hydraulic oil tanks within the building. The work also included extensive asbestos abatement and cleaning of contaminated building materials.

The second IRM involved mitigation of contaminated soils at the Site to the extent required to install new utilities. The mitigation activities included the excavation and off-site disposal of soils excavated during the installation of utilities and the construction of a stormwater detention system. Mitigation of contaminated soils during IRM-2 was limited to the soils excavated during construction activities.

The final remedy included excavation of PCB and oil-contaminated soil, removal of underground storage tanks (USTs), construction of a cover system, and installation of a sub-slab depressurization system in the Phase I (Workforce Training Center) construction area.

Groundwater monitoring wells installed during the Site Remedial Investigation (RI) showed little contamination; however, localized groundwater seeps containing oil or oily sheen, were observed during the soil excavation work. The locations of the seeps were recorded and observation wells were installed in September 2019 to further evaluate groundwater impacts at the Site.

In as much as the Site remedial actions generally were focused on the removal and disposal of contaminated soil and building materials, the remedy was successful. However, residual soil contamination is present under the cover system in portions of the Site. A sub-slab depressurization system and vapor intrusion mitigation measures were installed.

The Site Management Plan (SMP), designed to serve as a work plan for Site monitoring and maintenance, was approved by the NYSDEC in December 2018. As of December 2018, construction work had largely been completed in the northern portion of the facility where the Western New York Workforce Training

Center (WTC) is located. For the purposes of this project, this portion of the site is termed the Phase I construction area. Work continued in the southern portion of the facility (Phase II construction area) in 2019 and LiRo conducted periodic inspections for any intrusive work related to Phase II construction area sub-slab utilities installation and floor/foundation improvements. Work related to the Phase III construction area (detached building on the west side of the facility) was completed in 2020. Sub-slab infrastructure (slotted collection pipe) was installed in the Phase II and Phase III construction areas to avoid tearing up new flooring if a later need for depressurization is identified.

2.0 Engineering and Institutional Controls

Engineering controls are required to protect human health and the environment because impacted vapor, groundwater and soils are present at the Site. Figure 2 shows the Site layout/monitoring locations and Figure 3 shows the Site cover system and sub-slab depressurization (SSD) system layout.

2.1 Engineering Controls (ECs)

The purpose of the Site cover system is to eliminate the potential for human contact with soils exceeding commercial use soil cleanup objectives (SCOs), minimize percolation of precipitation through the impacted fill, and minimize the potential for contaminated runoff from the Site. The ECs in place at the Site consist of the following:

- Cover System: Existing buildings, pavement, and clean soil placed at the Site form the Site cover, preventing exposure to soil exceeding commercial levels. The Site is largely covered with buildings or pavement with some relatively small landscaped areas. Landscaped areas are covered with at least one foot of clean soil.
- SSD and vapor intrusion mitigation: A SSD system has been installed within the Phase I construction area to mitigate potential vapor intrusion. The entire building (Phase I and Phase II) and the detached building to the west (Phase III) were completed with vapor barriers and new concrete which also mitigate potential vapor intrusion.

2.2 Institutional Controls (ICs)

The purpose of the ICs are to:

- Implement, maintain, and monitor the ECs;
- Prevent future exposure to remaining on-site contamination by controlling disturbance of the subsurface contamination and prohibiting groundwater use; and,
- Limit the use and development of portions of the Site to commercial uses only.

The ICs that have been established for the Site must be:

- In compliance with the Environmental Easement and the SMP;
- Operated and maintained as specified in the SMP; and,
- Inspected at a frequency and in a manner defined in the SMP.

Data and information pertinent to the management of the Site must be reported at the frequency and in a manner defined in the SMP.

Adherence to the ICs is required by the Environmental Easement. The ICs may not be discontinued without an amendment to or extinguishment of the Environmental Easement.

The Site has a series of ICs in the form of Site restrictions. Site restrictions that apply to the Controlled Property are:

- Property Use: The easement restricts the use of the site to commercial or industrial uses, provided that the long-term ECs and ICs included in the SMP are adhered to. The property may not be used for a higher level of use, such as unrestricted or restricted residential use without additional evaluation (including possible additional remediation) and amendment of the Environmental Easement, as approved by the NYSDEC.
- Prohibition of Groundwater Use: The easement prohibits the use of the groundwater at the site for potable or process uses without approval of the state or local Department of Health.
- Annual Certification: The Site owner or remedial party will submit to the NYSDEC a written statement that certifies, under penalty of perjury, that:

    a. Controls employed at the Site are unchanged from previous certification or that any changes to the controls were approved by the NYSDEC; and,
    b. Nothing has occurred that impairs the ability of the controls to protect public health and the environment or that constitutes a violation or failure to comply with the SMP. The NYSDEC retains the right to access the Site at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that the NYSDEC may allow and will be made by an expert that the NYSDEC finds acceptable.

3.0 Inspections and Maintenance Activities

A comprehensive Site-wide inspection is required to be conducted annually, as specified in the SMP. The intent of the annual inspection is to determine whether:

- The ECs continue to perform as designed;
- The ECs continue to be protective of human health and the environment;
- The Site is operated and maintained in compliance with the SMP and Environmental Easement;
- The remedial performance criteria have been achieved;
- Sampling and analysis of appropriate media were conducted;
- Site records are complete and current; and,
- Changes to the remedial systems or monitoring are needed.

During the current reporting period, LiRo completed supplemental investigation work stipulated in the SMP which included the gauging and sampling of observation wells.

LiRo conducted requisite pressure monitoring of the SSDS on December 9, 2022, and conducted the annual comprehensive Site inspection on March 22, 2023. The following sections discuss the findings of the supplemental investigations, pressure monitoring and inspection. The completed Site Inspection and Hydraulic Monitoring Forms are provided as Appendix A to this report.

3.1 Cover System

The cover systems to be maintained are shown on Figure 3. These areas were examined for damage, erosion, or deterioration. No deficiencies were observed in the Site cover systems.

3.1.1 Corrective Action

No damage or deterioration was noted during the inspection. No corrective action is necessary for the cover systems at this time.

3.2 SSD System

The SSD system operated normally through the 2022-2023 reporting period. SSD system inspection forms are provided in Appendix A. One monitoring point (VMP-1) was inaccessible because the building tenant covered it when remodeling. The system operation and monitoring results are discussed in Section 4.3.

3.2.1 Corrective Action

Based on pressure readings (see Section 4.3) there was no need to adjust the blower speed. Although VMP-1 is inaccessible, prior pressure monitoring has demonstrated that the system generates ample (>0.04 inches water) vacuum measurements at that location. After discussion with the owner and NYSDEC, the monitoring point was replaced with VMP-1R located in a common area (hallway) outside of the tenant space (Figure 2). No further corrective action is recommended for the SSD system at this time.

3.3 Monitoring Well Inspections

Monitoring well inspections were conducted in conjunction with the quarterly hydraulic and product monitoring events. Hydraulic monitoring report forms are provided in Appendix A. The locations of the groundwater monitoring wells and observation wells are shown on Figure 2.

One monitoring well, MW-01 was identified as being obstructed at a depth of approximately 6.8 feet below the top of the well casing (ft. BTOC). When the groundwater table elevation dropped below the obstruction, the water level could not be measured in the well.

3.3.1 Corrective Action

A vacuum extraction system was used remove the obstruction and rehabilitate the monitoring well. On April 20, 2023 the vacuum extraction system was used to remove approximately 5.5 feet of gravel, sand, and silt from within the well. The material may have collected in the well as result of bedrock formation collapse or it could have accidentally entered the well during parking lot subbase construction (however, LiRo did not observe any well condition such as a missing cover suggestive of a construction problem). Following the cleanout, the bottom of the well is approximately 12.5 feet BTOC and the water level in MW-01 was measured to be 6.3 feet BTOC. Static water level in the well has historically been in the range of approximately 6 feet to 8 feet BTOC at MW-1 so no additional well rehabilitation is required at this time.

4.0 Operations and Maintenance

4.1 Groundwater Observation Well Monitoring

The groundwater observation well network stipulated in the SMP was installed in September 2019. The well network includes Remedial Investigation monitoring well locations and additional observation wells that were installed at locations where oil seepage was noted in the site remedial excavations. Monitoring results are summarized below.

4.2 Groundwater Monitoring

4.2.1 Hydraulic and Product Monitoring

As part of the monitoring activities described in the SMP, monitoring wells and observation wells were gauged for water level and the presence of free product using an oil-water interface probe. Wells were gauged in July 2022, September 2022, November 2022, and March 2023 during the reporting period as discussed below. Well gauging records and groundwater level contour maps are provided in Appendix A.

July 2022: All wells listed in the SMP were gauged on July 7 and 8, 2022. This gauging event was intended for June but was delayed to the first week of July due to a scheduling conflict. Each well was opened and depth to water was measured using an electronic oil/water interface probe. All wells were accessible. An oil absorbent sock is installed in LW-05 as a result of a previous oil observation. The absorbent sock was removed from well LW-05 to record the water level and then replaced in the well. An oily sheen was observed on the probe at LW-05 after the measurement. No oil was observed in the observation wells.

September 2022: All wells listed in the SMP were gauged on September 8, 2022. Each well was opened and depth to water was measured using an electronic oil/water interface probe. The oil absorbent sock was removed from well LW-05 to record the water level and then replaced in the well. No oil was observed in the observation wells.

November 2022: All wells listed in the SMP were gauged on November 28, 2022. Well MW-01 was not accessible on November 8, 2022 due to a large snow pile (from winter parking lot clearing) over the well. Well MW-01 was gauged on December 9, 2022 after snow melt/removal. Each well was opened and depth to water was measured using an electronic oil/water interface probe. The oil absorbent sock was removed from well LMW-05 to record the water level and then replaced in the well. A petroleum odor and greasy feel was noted on the probe at well LW-05. No oil was observed in the observation wells.

March 2023: All wells listed in the SMP except MW-01 were gauged on March 22, 2023. MW-01 was not accessible on March 22, 2023, due to a large snow pile (from winter parking lot plowing) over the well. Each well was opened and depth to water was measured using an electronic oil/water interface probe. As noted in Section 3.3.1, well MW-01 was gauged on April 20, 2023. The oil absorbent sock was removed from well LW-05 to record the water level and then replaced in the well. A sheen was noted on the probe at well LW-05. No oil was observed in the observation wells.

Because an oil sheen is typically observed at monitoring well LW-05, a petroleum absorbent sock is installed in the well. LiRo proposes to change the sock whenever quarterly monitoring observations indicate that the sock is saturated with oil or, at a minimum, annually.

4.2.2 Groundwater Sampling

As per the NYSDEC letter dated October 28, 2021, biennial groundwater sampling of select monitoring wells is required.

Groundwater samples were not collected during this reporting period. The next scheduled groundwater sampling event will be performed during the 2023-2024 reporting period.

4.2.3 Groundwater Data Evaluation

The most recent groundwater analytical data were generated during the 2021-2022 reporting period (March 2022) and were reported in the 2022 PRR and are summarized in the following subsections. The next round of groundwater sampling is to be completed in March 2024.

VOCs in Groundwater

Cyclohexane was detected in one of the seven bedrock wells sampled, OW-04. The detected concentration of the cyclohexane was 0.27 micrograms per liter (µg/L). Cyclohexane does not have an AWQSGV. Trichloroethene was detected in well LW-04 at a concentration of 0.94 µg/L which is below the AWQSGV of 5 µg/L.

Phenols in Groundwater

Phenols were not detected in any of the seven bedrock wells sampled.

Total Phenol was detected in groundwater samples collected during the 2021 PRR reporting period. The current results and results from the remedial investigation suggest that the 2021 results were anomalous.

PCBs in Groundwater

PCBs were not detected in any of the seven bedrock wells sampled.

4.3 Sub-Slab Depressurization System

4.3.1 Pressure Monitoring

Vacuum measurements were collected on December 9, 2022 at Vapor Monitoring Points VMP-2 through VMP-8 within the Phase I area of the site. Vacuum measurements were collected at each location over a period of at least 60 seconds using an Omniguard V micro-manometer capable of measuring differential pressures with a resolution of 0.001 inches of water. The micro-manometer was zeroed between measurements at each location. Vapor Monitoring Point VMP-1 was not measured during this event, because it was inaccessible. VMP-1 had been initially located in the corner of office, however, the portion

of the building where VMP-1 is located was converted to a Bank on Buffalo branch and an ATM was placed over VMP-1.

All measured locations (VMP-2 through VMP-8) were found to be achieving the SMP specified negative pressure of at least -0.004 inches water. Vacuum measurements are presented in Table 1.

5.0 Conclusions and Recommendations

Groundwater sampling at the Site during the 2021-2022 reporting period indicated that there is no significant VOC contamination and that phenol and PCBs were not detected in groundwater. Groundwater use is prohibited at the site. Groundwater will be sampled next during the 2023-2024 Reporting Period.

A product sheen is evident in LW-05 and an oil absorbent sock is in place in the well. Product was not detected in any of the observation wells that were installed to detect oil seepage from the bedrock formation. Quarterly gauging of the wells should be continued as specified in the SMP.

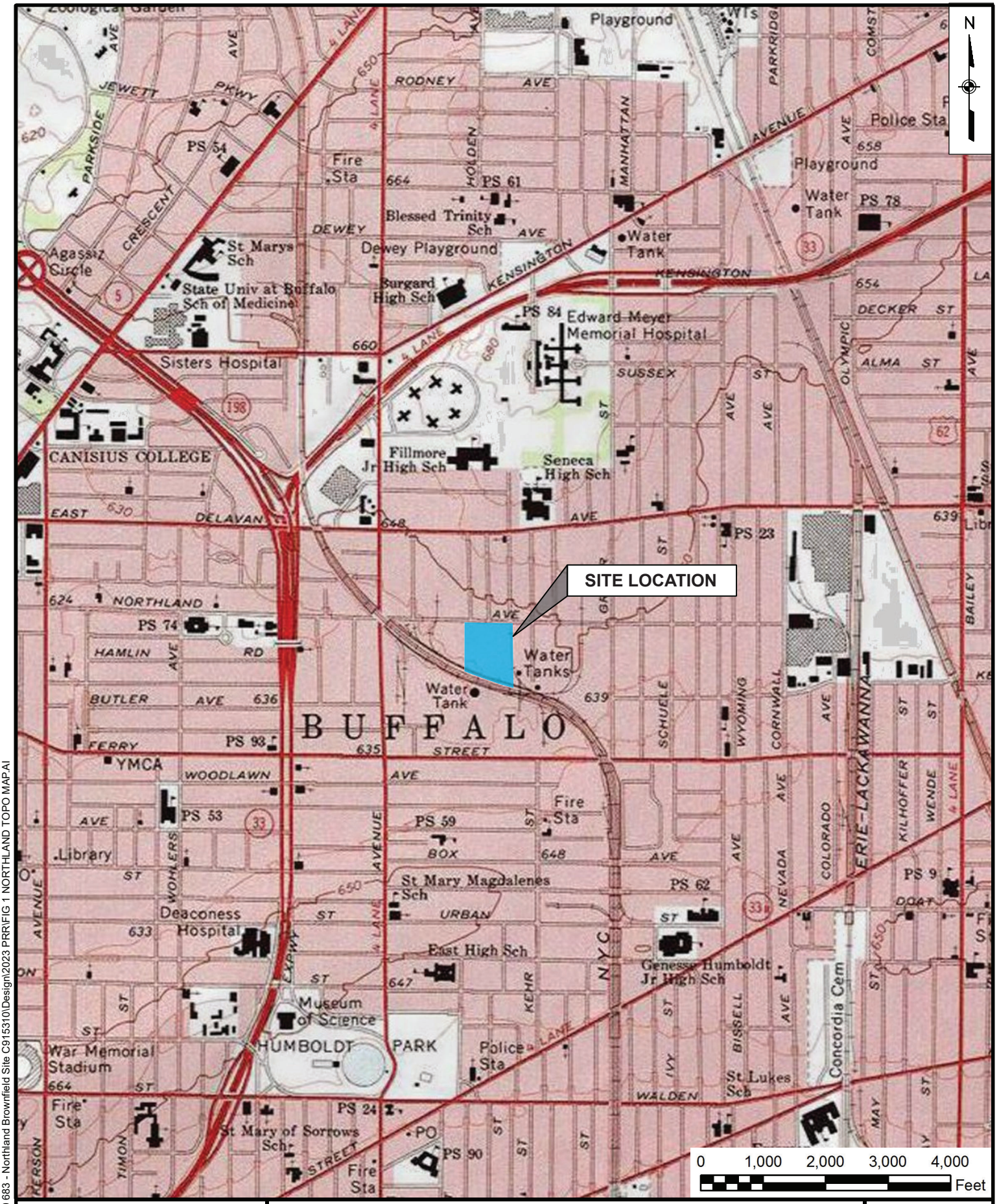
The SSD system operated consistently throughout the reporting period. The Phase I area SSD system should continue to be operated, monitored, and maintained as specified in the SMP. Pressure readings should be recorded annually as specified in the SMP. LiRo recommends that vacuum measurements should be collected at the beginning of the 2023-24 heating season to ensure that the system is maintaining adequate sub-slab depressurization.

The annual inspection and monitoring activities performed during this reporting period found that the Site cover system is in good condition. As of the date of this report, the Site ECs and ICs are performing as intended.

6.0 Certification

The PRR Certification Form is attached as Appendix B.

Figures



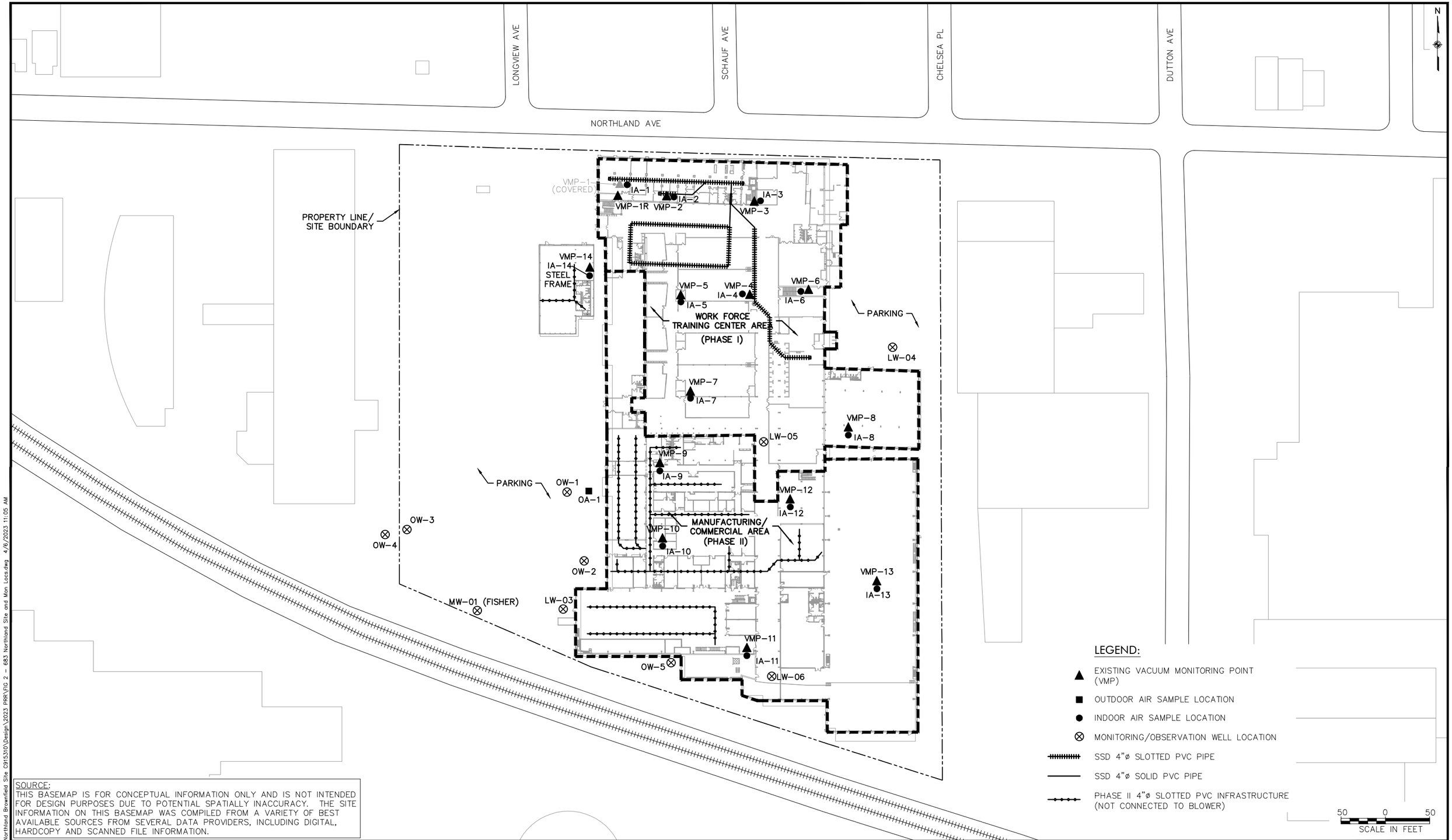
V:\BUDC\21-089-2400 683 - Northland Brownfield Site C915310\Design\2023 PRR\FIG 1 NORTHLAND TOPO MAP.AI

LiRo-Engineers, Inc.
690 Delaware Ave.
Buffalo, New York

WESTERN NEW YORK WORKFORCE TRAINING CENTER SITE (C915310)
683 Northland Ave, Buffalo, NY

FIGURE NO.

1



LEGEND:

- EXISTING VACUUM MONITORING POINT (VMP)
- OUTDOOR AIR SAMPLE LOCATION
- INDOOR AIR SAMPLE LOCATION
- MONITORING/OBSERVATION WELL LOCATION
- SSD 4"ø SLOTTED PVC PIPE
- SSD 4"ø SOLID PVC PIPE
- PHASE II 4"ø SLOTTED PVC INFRASTRUCTURE (NOT CONNECTED TO BLOWER)

50 0 50
SCALE IN FEET

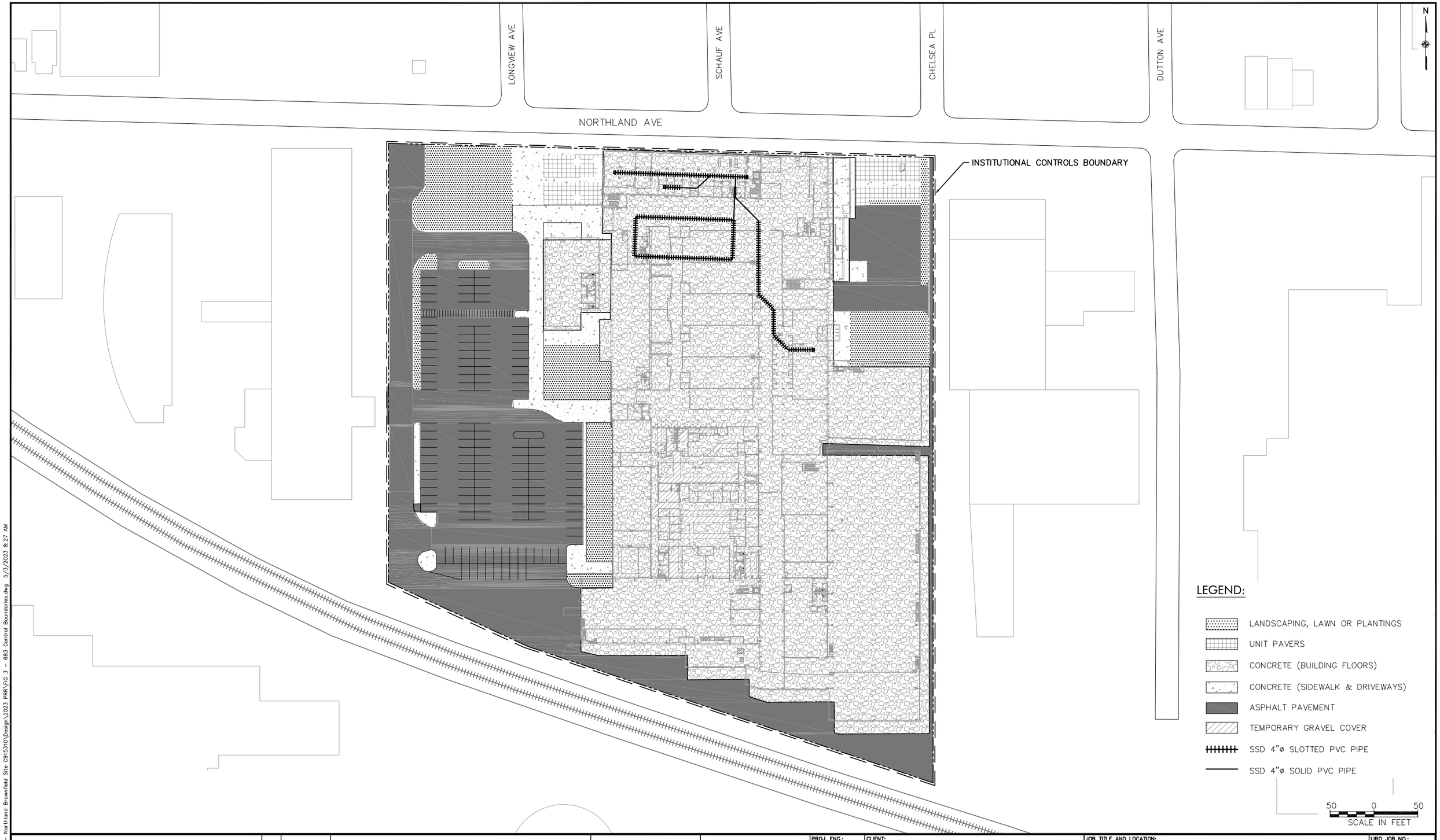
SOURCE:
THIS BASEMAP IS FOR CONCEPTUAL INFORMATION ONLY AND IS NOT INTENDED FOR DESIGN PURPOSES DUE TO POTENTIAL SPATIALLY INACCURACY. THE SITE INFORMATION ON THIS BASEMAP WAS COMPILED FROM A VARIETY OF BEST AVAILABLE SOURCES FROM SEVERAL DATA PROVIDERS, INCLUDING DIGITAL, HARDCOPY AND SCANNED FILE INFORMATION.

NO.	DATE	DESCRIPTION
REVISIONS		

LiRo Engineers, Inc.
690 Delaware Avenue
Buffalo, New York

PROJ. ENG.:	
DESIGNED BY:	
CHECKED BY:	
DRAWN BY:	A.M.K.
CLIENT:	683 NORTHLAND, LLC
DATE:	APRIL 2023
SCALE:	AS SHOWN
JOB TITLE AND LOCATION:	WESTERN NEW YORK WORKFORCE TRAINING CENTER FINAL ENGINEERING REPORT
LIRO JOB NO.:	20-131-2400
SHEET	OF
DRAWING TITLE:	SITE PLAN AND MONITORING LOCATIONS
FIGURE NO.	2

V:\BUDC\21-089-2400 683 - Northland Brownfield Site 0915310\Design\2023 PRR\FIG 2 - 683 Northland Site and Mon Locs.dwg 4/6/2023 11:05 AM



NO.	DATE	DESCRIPTION
REVISIONS		

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Buffalo, New York

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CHECKED BY:	
DRAWN BY:	A.M.K.
CLIENT:	BUFFALO URBAN DEVELOPMENT CORPORATION
DATE:	APRIL 2023
SCALE:	AS SHOWN
JOB TITLE AND LOCATION:	WESTERN NEW YORK WORKFORCE TRAINING CENTER SITE NYSDEC SITE No. C915310
DRAWING TITLE:	INSTITUTIONAL CONTROLS BOUNDARY AND ENGINEERING CONTROL LOCATIONS
LIRO JOB NO.:	20-131-2400
SHEET OF	
FIGURE NO.	3

Tables

TABLE 1

SUMMARY OF DIFFERENTIAL PRESSURE MEASUREMENTS
December 2022
Western New York Workforce Training Center
683 Northland Avenue
Buffalo, New York
(Site No. C915310)

Location ID	Date	Time	Differential Pressure (inches H2O)
VMP-1	12/9/2022	9:25	NM(1)
VMP-2	12/9/2022	9:30	-0.018
VMP-3	12/9/2022	9:36	-0.008
VMP-4	12/9/2022	9:19	-0.014
VMP-5	12/9/2022	9:15	-0.068
VMP-6	12/9/2022	9:42	-0.014
VMP-7	12/9/2022	9:07	-0.009
VMP-8	12/9/2022	9:58	-0.008

Notes:
All pressure measurements collected with the sub-slab depressurization sytem operating.
(1) - Bank On Buffalo ATM installed over VMP location.
NM - Not measured.

Appendix A
Site Inspection and Hydraulic Monitoring Forms

SITE COVER INSPECTION FORM
WESTERN NEW YORK WORKFORCE TRAINING CENTER
683 NORTHLAND AVENUE, BUFFALO, NEW YORK
NYSDEC SITE NO. C915310

Inspector: Jon Williams - LiRo

Date: 3/22/2023

1. Landscaped Areas

Adequate topsoil cover present? Yes

Signs of Erosion? No

Recommended corrective action, if needed. No action required

2. Outdoor Paving/Sidewalks

Note any signs of cracking or other damage None

Note any areas where greater than 25% of surface is cracked/damaged None

Recommended corrective action, if needed No action required

3. Building Interior Floors

Note any signs of cracking or other damage None

Note any areas where greater than 25% of surface is cracked/damaged None

Recommended corrective action, if needed No action required

SSD SYSTEM INSPECTION FORM
WESTERN NEW YORK WORKFORCE TRAINING CENTER
683 NORTHLAND AVENUE, BUFFALO, NEW YORK
NYSDEC SITE NO. C915310

INSPECTION DATE: 12/9/2022

INSPECTED BY: J. Williams / N. Yo

Visual Inspection of System

System Component	*Condition (Circle one)*			*Comments/Reading*
Vent fan	(Good)	Fair	Needs Repair	
Piping	(Good)	Fair	Needs Repair	
Manometer reading	(Good)	Fair	Needs Repair	-0.276 in. H_2O

Visual Inspection of Flooring

Flooring Condition	*Present (Circle one)*		*Location (Attach Figure If Present)*
Cracks	Yes	(No)	
Penetrations with Void/Annular Space	Yes	(No)	

Pressure Monitoring Point Measurements

Monitoring Equipment Used

Monitoring Point ID	*Vacuum (inches H2O)*	*Monitoring Point Condition*
VMP-1	Not measured	Below ATM
VMP-2	-0.018	Good
VMP-3	-0.008	Good
VMP-4	-0.014	Good
VMP-5	-0.068	Good
VMP-6	-0.014	Good
VMP-7	-0.009	Good
VMP-8	-0.008	Good

TABLE 1

SUMMARY OF FREE PRODUCT MEASUREMENTS AND GROUNDWATER ELEVATIONS

July 2022
Western New York Workforce Training Center
683 Northland Avenue
Buffalo, New York
(Site No. C915310)

Well ID	Date	Top of Casing Elevation (ft. AMSL)	Depth to Water (ft. BTOC)	Depth to Free Product (ft. BTOC)	Free Product Thickness (ft.)	Groundwater Elevation (ft. AMSL)	Notes
MW-01	7/7/2022	642.31	Dry	none observed	0	NA	bottom = 6.8 ft. BTOC
LW-03	7/8/2022	644.29	9.65	none observed	0	634.64	
LW-04	7/7/2022	644.47	10.72	none observed	0	633.75	
LW-05	7/7/2022	644.28	9.35	Sheen on probe	0	634.93	Oil absorbent sock/sheen on probe
LW-06	7/7/2022	644.40	18.45	none observed	0	625.95	
OW-01	7/8/2022	644.21	8.53	none observed	0	635.68	
OW-02	7/8/2022	645.82	9.78	none observed	0	636.04	
OW-03	7/8/2022	643.61	Dry	none observed	0	NA	
OW-04	7/8/2022	643.77	12.17	none observed	0	631.6	
OW-05	7/8/2022	640.54	11.5	none observed	0	629.04	

Notes:
ft. - feet
ft. AMSL - feet above mean sea level.
ft. BTOC - feet below top of casing.
NA = not available
Dry = Water not present in well.

N

NORTHLAND AVE

LW-04
(633.75)

LW-05
(634.93)

LW-06
(625.95)

OW-1
(635.68)

OW-2
(636.04)

OW-3
(DRY)

OW-4
(631.60)

OW-5
(629.04)

LW-03
(634.64)

MW-01 (FISHER)
(DRY)

633
634
635
632
631
630
629
628
627

STAIRWELL
ELEVATOR
MED DEPT
ELEVATOR
STAIRWELL
STEEL FRAME BUILDING
DETENTION BASIN AREA
SEEP LOCATION
12" PVC STORM OUTFALL
ST MH4A
SITE BOUNDARY FOR 683 NORTHLAND

631 NORTHLAND AVENUE

NOTE:
FLOOR PLANS DERIVED FROM HISTORICAL DRAWINGS AND FIELD OBSERVATIONS OF CURRENT CONDITIONS. THE FLOOR PLANS ARE PROVIDED FOR PLANNING PURPOSES. INTERIOR WALLS AND PARTITIONS WERE NOT SURVEYED AND LOCATIONS ARE APPROXIMATED BASED ON FIELD MEASUREMENTS.

LEGEND:

- MONITORING WELL
- SEEP LOCATION
- SITE BOUNDARY FOR 683 NORTHLAND
- (8.70) GROUNDWATER ELEVATION (FT. MSL)
- (NA) NOT ACCESSIBLE
- (NM) NOT MEASURED
- (NU) NOT USED
- 628 GROUNDWATER CONTOUR (FT. MSL)
- INTERPRETED GROUNDWATER FLOW DIRECTION

40 0 40
SCALE IN FEET

NO.	DATE	DESCRIPTION
REVISIONS		

LiRo Engineers, Inc.
690 Delaware Avenue
Buffalo, New York

PROJ. ENG.:	
DESIGNED BY:	
CHECKED BY:	
DRAWN BY:	A.M.K.
CLIENT:	683 NORTHLAND, LLC
DATE:	APRIL 2023
SCALE:	AS SHOWN
JOB TITLE AND LOCATION:	WESTERN NEW YORK WORKFORCE TRAINING CENTER
LIRO JOB NO.:	21-089-2400
SHEET	OF
DRAWING TITLE:	GROUNDWATER CONTOUR MAP JULY 8, 2022
FIGURE NO.	A1

V:\BUDO\21-089-2400 683 - Northland Brownfield Site 0915310\Design\2023 PRR\FIG A1- 683 Northland Ave GW Map.dwg 5/3/2023 8:42 AM

TABLE 1

SUMMARY OF FREE PRODUCT MEASUREMENTS AND GROUNDWATER ELEVATIONS

September 2022
Western New York Workforce Training Center
683 Northland Avenue
Buffalo, New York
(Site No. C915310)

Well ID	Date	Top of Casing Elevation (ft. AMSL)	Depth to Water (ft. BTOC)	Depth to Free Product (ft. BTOC)	Free Product Thickness (ft.)	Groundwater Elevation (ft. AMSL)	Notes
MW-01	9/8/2022	642.08	Dry	none observed	0	NA	bottom = 6.8 ft. BTOC
LW-03	9/8/2022	644.29	5.59	none observed	0	638.7	
LW-04	9/8/2022	644.47	10.56	none observed	0	633.91	
LW-05	9/8/2022	644.28	9.61	none observed	0	634.67	
LW-06	9/8/2022	644.40	18.19	none observed	0	626.21	
OW-01	9/8/2022	644.21	7.8	none observed	0	636.41	
OW-02	9/8/2022	645.82	5.22	none observed	0	640.6	
OW-03	9/8/2022	643.61	7	none observed	0	636.61	
OW-04	9/8/2022	643.77	12.63	none observed	0	631.14	
OW-05	9/8/2022	640.54	11.47	none observed	0	629.07	

Notes:
ft. - feet
ft. AMSL - feet above mean sea level.
ft. BTOC - feet below top of casing.
NA = not available
Dry = Water not present in well.

N

NORTHLAND AVE

LW-04
(633.91)

LW-05
(634.67)

LW-06
(626.21)

OW-1
(636.41)

OW-2
(640.60)

LW-03
(638.70)

OW-3
(NU)

OW-4
(631.14)

OW-5
(629.07)

MW-01 (FISHER)
(DRY)

633
632
631
630
629
628
627
634
635
636
637
638
639
640

STAIRWELL
ELEVATOR
MED DEPT
ELEVATOR
STAIRWELL
STEEL FRAME BUILDING
DETENTION BASIN AREA
SEEP LOCATION
12" PVC STORM OUTFALL
ST MH4A
SITE BOUNDARY FOR 683 NORTHLAND

631 NORTHLAND AVENUE

NOTE:
FLOOR PLANS DERIVED FROM HISTORICAL DRAWINGS AND FIELD OBSERVATIONS OF CURRENT CONDITIONS. THE FLOOR PLANS ARE PROVIDED FOR PLANNING PURPOSES. INTERIOR WALLS AND PARTITIONS WERE NOT SURVEYED AND LOCATIONS ARE APPROXIMATED BASED ON FIELD MEASUREMENTS.

LEGEND:

- MONITORING WELL
- SEEP LOCATION
- SITE BOUNDARY FOR 683 NORTHLAND
- (8.70) GROUNDWATER ELEVATION (FT. MSL)
- (NA) NOT ACCESSIBLE
- (NU) NOT USED
- 628 GROUNDWATER CONTOUR (FT. MSL)
- INTERPRETED GROUNDWATER FLOW DIRECTION

40 0 40
SCALE IN FEET

NO.	DATE	DESCRIPTION
REVISIONS		

LiRo Engineers, Inc.
690 Delaware Avenue
Buffalo, New York

PROJ. ENG.:	CLIENT: 683 NORTHLAND, LLC	JOB TITLE AND LOCATION: WESTERN NEW YORK WORKFORCE TRAINING CENTER	LIRO JOB NO.: 21-089-2400
DESIGNED BY:			SHEET OF
CHECKED BY:		DRAWING TITLE: GROUNDWATER CONTOUR MAP SEPTEMBER 8, 2022	FIGURE NO. A2
DRAWN BY: A.M.K.	DATE: APRIL 2023	SCALE: AS SHOWN	

V:\BUDO\21-089-2400 683 - Northland Brownfield Site 0915310\Design\2023 PRR\FIG A2- 683 Northland Ave GW Map.dwg 5/3/2023 8:42 AM

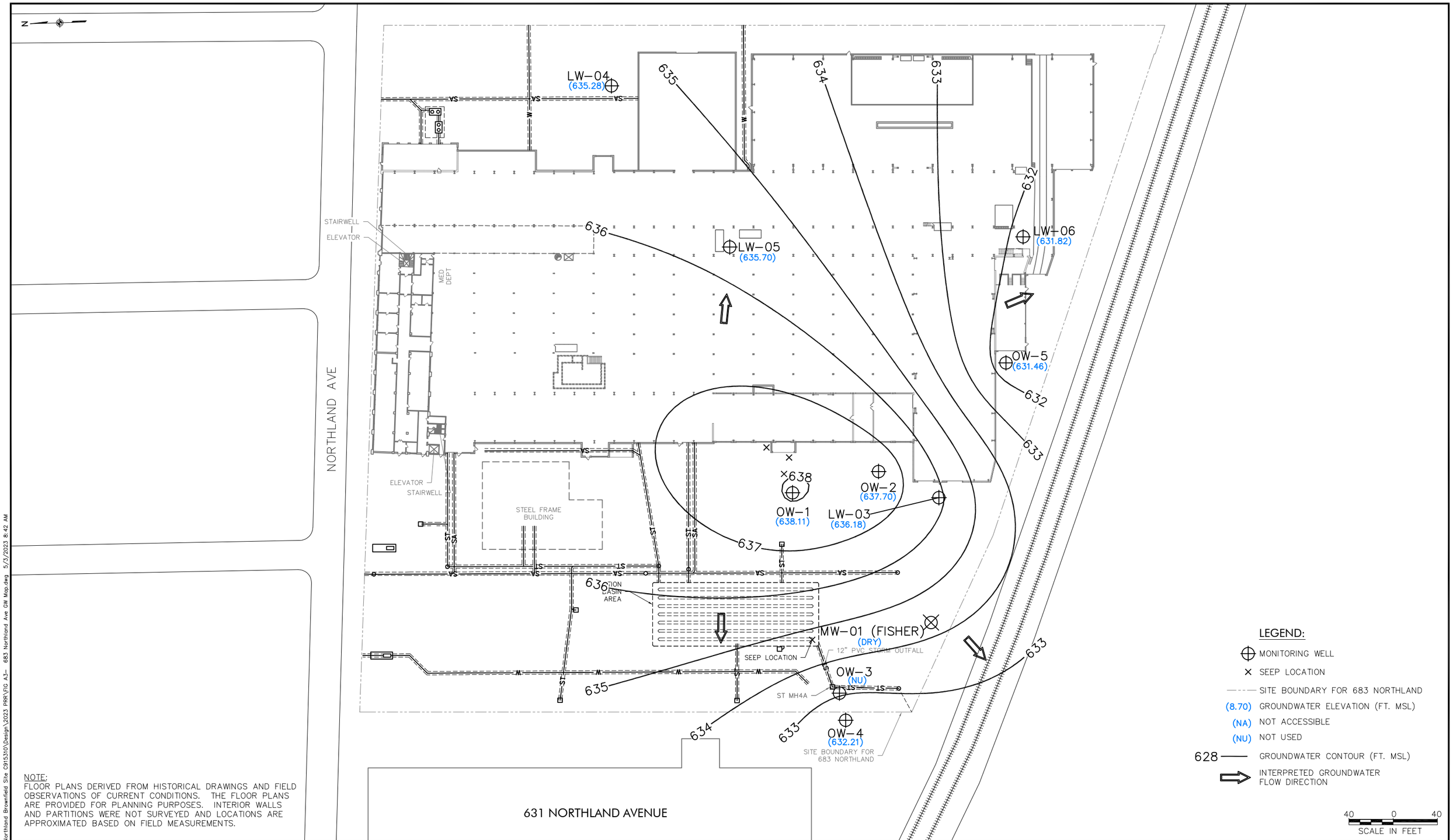
TABLE 1

SUMMARY OF FREE PRODUCT MEASUREMENTS AND GROUNDWATER ELEVATIONS

November 2022
Western New York Workforce Training Center
683 Northland Avenue
Buffalo, New York
(Site No. C915310)

Well ID	Date	Top of Casing Elevation (ft. AMSL)	Depth to Water (ft. BTOC)	Depth to Free Product (ft. BTOC)	Free Product Thickness (ft.)	Groundwater Elevation (ft. AMSL)	Notes
MW-01	12/9/2022[(1)]	642.08	Dry	none observed	0	NA	bottom = 6.8 ft. BTOC
LW-03	11/28/2022	644.29	8.11	none observed	0	636.18	
LW-04	11/28/2022	644.47	9.19	none observed	0	635.28	
LW-05	11/28/2022	644.28	8.58	none observed	0	635.70	Petroleum odor, sheen on probe
LW-06	11/28/2022	644.40	12.58	none observed	0	631.82	
OW-01	11/28/2022	644.21	6.10	none observed	0	638.11	
OW-02	11/28/2022	645.82	8.12	none observed	0	637.7	
OW-03	11/28/2022	643.61	6.99	none observed	0	636.62	
OW-04	11/28/2022	643.77	11.56	none observed	0	632.21	
OW-05	11/28/2022	640.54	9.08	none observed	0	631.46	

Notes:
[(1)] - Well buried in snowbank during November measurements.
ft. - feet
ft. AMSL - feet above mean sea level.
ft. BTOC - feet below top of casing.
NA = not available
Dry = Water not present in well.



NOTE:
FLOOR PLANS DERIVED FROM HISTORICAL DRAWINGS AND FIELD OBSERVATIONS OF CURRENT CONDITIONS. THE FLOOR PLANS ARE PROVIDED FOR PLANNING PURPOSES. INTERIOR WALLS AND PARTITIONS WERE NOT SURVEYED AND LOCATIONS ARE APPROXIMATED BASED ON FIELD MEASUREMENTS.

V:\BUDO\21-089-2400 683 - Northland Brownfield Site C915310\Design\2023 PRR\FIG A3- 683 Northland Ave GW Map.dwg 5/3/2023 8:42 AM

WARNING
IT IS A VIOLATION OF SECTION 7209, SUBDIVISION 2, OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, OTHER THAN THOSE WHOSE SEAL APPEARS ON THIS DRAWING, TO ALTER IN ANY WAY AN ITEM ON THIS DRAWING. IF AN ITEM IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NO.	DATE	DESCRIPTION
REVISIONS		

LiRo Engineers, Inc.
690 Delaware Avenue
Buffalo, New York

PROJ. ENG.:	
DESIGNED BY:	
CHECKED BY:	
DRAWN BY:	A.M.K.
CLIENT:	683 NORTHLAND, LLC
DATE:	APRIL 2023
SCALE:	AS SHOWN
JOB TITLE AND LOCATION:	WESTERN NEW YORK WORKFORCE TRAINING CENTER
LIRO JOB NO.:	21-089-2400
SHEET	OF
DRAWING TITLE:	GROUNDWATER CONTOUR MAP NOVEMBER 28, 2022
FIGURE NO.	A3

TABLE 1

SUMMARY OF FREE PRODUCT MEASUREMENTS AND GROUNDWATER ELEVATIONS

March 2023
Western New York Workforce Training Center
683 Northland Avenue
Buffalo, New York
(Site No. C915310)

Well ID	Date	Top of Casing Elevation (ft. AMSL)	Depth to Water (ft. BTOC)	Depth to Free Product (ft. BTOC)	Free Product Thickness (ft.)	Groundwater Elevation (ft. AMSL)	Notes
MW-01	3/22/2023	642.31	NM[(1)]	none observed	0	NM[(1)]	Buried under snowpile.
LW-03	3/22/2023	644.29	8.92	none observed	0	635.37	
LW-04	3/22/2023	644.47	9.06	none observed	0	635.41	
LW-05	3/22/2023	644.28	9.18	Sheen on probe	0	635.1	Sheen on probe, oil sock in well.
LW-06	3/22/2023	644.40	12.06	none observed	0	632.34	
OW-01	3/22/2023	644.21	7.11	none observed	0	637.1	
OW-02	3/22/2023	645.82	8.95	none observed	0	636.87	
OW-03	3/22/2023	643.61	Dry	none observed	0	Dry	
OW-04	3/22/2023	643.77	11.49	none observed	0	632.28	
OW-05	3/22/2023	640.54	10.68	none observed	0	629.86	

Notes:
ft. - feet
ft. AMSL - feet above mean sea level.
ft. BTOC - feet below top of casing.
NA = not available
NM[(1)] - Not measured, location buried under snowpile.

N

NORTHLAND AVE

LW-04
(635.41)

LW-05
(635.10)

LW-06
(632.34)

OW-1
(637.10)

OW-2
(636.87)

OW-3
(NU)

OW-4
(632.28)

OW-5
(629.86)

LW-03
(635.37)

MW-01 (FISHER)
(NM)

635

634

633

632

631

636

637

STAIRWELL

ELEVATOR

MED DEPT

ELEVATOR
STAIRWELL

STEEL FRAME
BUILDING

DETENTION
BASIN
AREA

SEEP LOCATION

12" PVC STORM OUTFALL

ST MH4A

SITE BOUNDARY FOR
683 NORTHLAND

631 NORTHLAND AVENUE

NOTE:
FLOOR PLANS DERIVED FROM HISTORICAL DRAWINGS AND FIELD OBSERVATIONS OF CURRENT CONDITIONS. THE FLOOR PLANS ARE PROVIDED FOR PLANNING PURPOSES. INTERIOR WALLS AND PARTITIONS WERE NOT SURVEYED AND LOCATIONS ARE APPROXIMATED BASED ON FIELD MEASUREMENTS.

LEGEND:

- MONITORING WELL
- SEEP LOCATION
- SITE BOUNDARY FOR 683 NORTHLAND
- (8.70) GROUNDWATER ELEVATION (FT. MSL)
- (NA) NOT ACCESSIBLE
- (NM) NOT MEASURED
- (NU) NOT USED
- 628 GROUNDWATER CONTOUR (FT. MSL)
- INTERPRETED GROUNDWATER FLOW DIRECTION

40 0 40
SCALE IN FEET

NO.	DATE	DESCRIPTION
REVISIONS		

LiRo Engineers, Inc.
690 Delaware Avenue
Buffalo, New York

PROJ. ENG.:	
DESIGNED BY:	
CHECKED BY:	
DRAWN BY:	A.M.K.
CLIENT:	683 NORTHLAND, LLC
DATE:	APRIL 2023
SCALE:	AS SHOWN
JOB TITLE AND LOCATION:	WESTERN NEW YORK WORKFORCE TRAINING CENTER
DRAWING TITLE:	GROUNDWATER CONTOUR MAP MARCH 22, 2023
LIRO JOB NO.:	21-089-2400
SHEET	OF
FIGURE NO.	A4

V:\BUDC\21-089-2400 683 - Northland Brownfield Site C915310\Design\2023 PRR\FIG A4- 683 Northland Ave GW Map.dwg 5/3/2023 8:42 AM

Appendix B
IC/EC Certification Form

Enclosure 2

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form

Site Details **Box 1**

Site No. **C915310**

Site Name Western New York Workforce Training Center

Site Address: 665 and 683 Northland Avenue Zip Code: 14211
City/Town: Buffalo
County: Erie
Site Acreage: 8.548

Reporting Period: April 27, 2022 to April 27, 2023

	YES	NO
1. Is the information above correct?	X	☐
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	☐	X
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	X
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☐	X
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?	☐	X

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Commercial and Industrial	X	☐
7. Are all ICs in place and functioning as designed?	X	☐

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative Date

Box 2A

	YES	NO
8. Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?	☐	☒
If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.		
9. Are the assumptions in the Qualitative Exposure Assessment still valid? (The Qualitative Exposure Assessment must be certified every five years)	☒	☐
If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.		

SITE NO. C915310

Box 3

Description of Institutional Controls

Parcel	Owner	Institutional Control
101.21-5-1.1	683 Northland, LLC	Ground Water Use Restriction Soil Management Plan Landuse Restriction Monitoring Plan Site Management Plan O&M Plan IC/EC Plan

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

101.21-5-1.22	683 Northland, LLC	Ground Water Use Restriction Soil Management Plan Landuse Restriction Monitoring Plan Site Management Plan O&M Plan IC/EC Plan

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

Box 4

Description of Engineering Controls

Parcel	Engineering Control
101.21-5-1.1	Vapor Mitigation Cover System Monitoring Wells

• A site cover will be required to allow for commercial use of the site in areas where the upper one foot of exposed surface soil will exceed the applicable SCOs. Where a soil cover is to be used it will be a minimum of one foot of soil placed over a demarcation layer, with the upper six inches of soil of sufficient quality to maintain a vegetative layer. Soil cover material, including any fill material brought to the site, will meet the SCOs for cover material for the use of the site as set forth in 6 NYCRR Part 375-6.7(d);
• on-site buildings will be required to have a sub-slab depressurization system, or other acceptable measures, to mitigate the migration of vapors into the building; and
• monitoring for the presence oil in groundwater to assess the performance and effectiveness of the remedy. Observation of oil during monitoring may require additional investigation and/or remedial actions to remove oil from bedrock groundwater.

101.21-5-1.22	Vapor Mitigation Cover System Monitoring Wells

• A site cover will be required to allow for commercial use of the site in areas where the upper one foot of exposed surface soil will exceed the applicable SCOs. Where a soil cover is to be used it will be a minimum of one foot of soil placed over a demarcation layer, with the upper six inches of soil of sufficient quality to maintain a vegetative layer. Soil cover material, including any fill material brought to the site, will meet the SCOs for cover material for the use of the site as set forth in 6 NYCRR Part 375-6.7(d);
• on-site buildings will be required to have a sub-slab depressurization system, or other acceptable measures, to mitigate the migration of vapors into the building; and
• monitoring for the presence oil in groundwater to assess the performance and effectiveness of the remedy. Observation of oil during monitoring may require additional investigation and/or remedial actions to remove oil from bedrock groundwater.

Box 5

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

   a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the Engineering Control certification;

   b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.

YES	NO
X	☐

2. For each Engineering control listed in Box 4, I certify by checking "YES" below that all of the following statements are true:

   (a) The Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

   (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

   (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

   (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

   (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES	NO
X	☐

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

IC CERTIFICATIONS
SITE NO. C915310

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Stephen Frank (print name) at 690 Delaware Ave, Buffalo, NY (print business address),

am certifying as Remedial Party (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

Signature of Owner, Remedial Party, or Designated Representative Rendering Certification

5/23/23
Date

EC CERTIFICATIONS

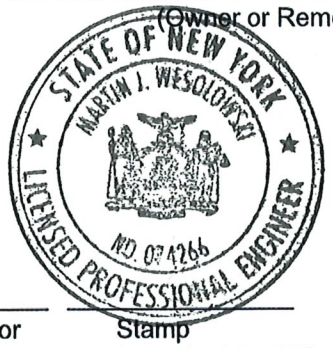
Box 7

Professional Engineer Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Martin Wesolowski at 680 Delaware Ave, Buffalo, NY 14209,
print name print business address

am certifying as a Professional Engineer for the Remedial Party
(Owner or Remedial Party)



Signature of Professional Engineer, for the Owner or Remedial Party, Rendering Certification

Stamp (Required for PE)

5/22/2023
Date

Appendix C
MW-1 Boring Log

NATURE'S WAY
ENVIRONMENTAL CONSULTANTS & CONTRACTORS, INC
3553 Crittenden Road
Alden, NY 14004
(716) 937- 6527
www.natureswayenvironmental.com

HOLE NUMBER: MW 1

DATE: 5/22/15 ELEVATION:

PROJECT: Subsurface Investigation
Northland Avenue, Buffalo, NY

PREPARED FOR: Fisher Associates

BORING LOCATION:

SN	0/6	6/12	12/18	18/24	N	LITH	DESCRIPTION AND CLASSIFICATION	REC	MONITORING WELL	REMARKS	COMMENTS
1	8				33		Moist, dark gray, gravelly (SILTY-SAND) fill with 20 to 40% gravel, very fine to fine size sand, dense in place	1.2'			Sandy fill with some gravel to 5.0 feet over coarse silty lake sediment to 6.0 feet over clayey lake sediment to 8.0 feet over loamy glacial till to 9.6 feet over onondaga limestone bedrock to end of coring
		12						1.3'		4" PVC Riser Pipe Grouted in Place	
			21								
				19	48						
2	39										
		21						1.7'			
			27								
				13							
3	3										
		11									
			8		19		5.0				
				3			Extremely moist to wet, brown (SANDY-SILT) with some very fine size sand, compact, weakly thinly bedded	1.5'		Cement / Bentonite Grout	
4	3						6.0				
		4									
			7		11		Moist, brown (CLAYEY-SILT) with some clay, stiff, thinly laminated with very thin coarse silt lenses				
				11			8.0	1.2'			
5	6										
		9					Moist, brownish gray (SAND-SILT-CLAY) with 5 to 15% gravel, little clay and very fine size sand, compact, massive soil structure				
			14		23		9.6		9.6		
				50/1"						NX Size Open Rock Hole	Note: Lost water returns below 11.1', lost approximately 1,000 gallons
		RUN					Onondaga Limestone bedrock, gray, very hard, very thin to thinly bedded, ½" to 4" thick, with layers of dark gray chert, lost water return at 11.1' BGS, small void between 11.5' and 11.7', occasional vertical fractures noted between 12.1' and 12.3'				▼ Water Level at 11.5' BGS at Completion of Coring
			# 1								
		RUN									
			# 2								
							16.0		16.0		
							Coring Completed at 16.0' BGS				

CORE DATA

Run #	Interval (ft)	Length (ft)	Rec (ft)	Rec %	RQD %
1	9.6 to 11.6	2.0	1.3	65	0
2	11.6 to 16.0	4.4	4.1	93	15

LOGGED BY: Dale M. Gramza / Senior Geologist PAGE 1 of 1