PERIODIC REVIEW REPORT
CERTIFICATION PERIOD: 12/31/2019 – 12/31/2024
FONF EXPANSION/SABRE PARK BCP
TOWN OF NIAGARA, NEW YORK

NYSDEC BCP Number: C932162

Prepared for:
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March 18, 2026

214DCMC002

TABLE OF CONTENTS

1.0 INTRODUCTION 1
1.1 General 1
1.2 Site Description 1
1.3 Summary of Remedial Investigation 1
1.4 Site Summary 3
1.5 Effectiveness of the Remedial Program 4
1.6 Compliance 5
1.7 Recommendations 5
2.0 IC/EC PLAN COMPLIANCE REPORT 6
2.1 IC/EC Components 6
2.2 Summary of EC Intrusive Activities and Modifications Completed During the Certification Period 7
2.3 Goal Status and Corrective Measures 7
2.4 Conclusions and Recommendations 8
3.0 MONITORING PLAN COMPLIANCE REPORT 8
3.1 Monitoring Plan Components 9
3.2 Summary of Monitoring Completed 9
3.3 Comparisons with Remedial Objectives 11
3.4 Monitoring Deficiencies 11
3.5 Conclusions and Recommendations 11
4.0 O&M PLAN COMPLIANCE REPORT 12
4.1 O&M Plan Components 12
4.2 Completed O&M Activities 12
4.3 Evaluation of SSD Systems 12
4.4 O&M Deficiencies 13
4.5 Conclusions and Recommendations 13
5.0 OVERALL CONCLUSIONS AND RECOMMENDATIONS 14
5.1 SMP Compliance 14
5.2 Remedy Performance Evaluation 14
5.3 Future Submittals 14
6.0 CERTIFICATION OF IC/ECS 15

FIGURES

Figure 1 Site Location Map
Figure 2 Location of Engineering Controls and Cover System Types
Figure 3 Remedial Cap/Cover Cross Sections

APPENDICES

Appendix A Environmental Easement
Appendix B Intrusive Activities Summary Report dated 2022
Appendix C Annual Site Inspection and Certification Letter Reports prepared by Atlas
Appendix D Annual Site Wide Inspection Forms
Appendix E Sub-Slab Depressurization System Monitoring and Repairs letter prepared by LKB
Appendix F SSD System Inspection Checklists
Appendix G 2024/2025 Photo Log
Appendix H Institutional and Engineering Controls Certification Form

1.0 INTRODUCTION

1.1 General

This Periodic Review Report for December 2019 through December 2024 (hereafter referred to as the "certification period") was prepared by Atlas ATC Engineering, Inc. (Atlas) in accordance with the New York State Department of Environmental Conservation (NYSDEC)-approved Site Management Plan (SMP) dated November 2014, and revised January 2020. A periodic review of all institutional controls and engineering controls (IC/EC), and monitoring results is a requirement for fulfillment of the remedial action at the Fashion Outlet of Niagara Falls (FONF) Expansion/Sabre Park (hereafter referred to as the "Site") under the New York State Brownfield Cleanup Program (NYSBCP) C932162, administered by the NYSDEC.

In October 2014, the project completed construction and fulfilled its requirements under the BCP. As part of the environmental remediation for the project, ECs were implemented to prevent human exposure to subsurface impacts left in-place. Those controls included a site-wide cap consisting of asphalt paved parking, concrete structures and sidewalks, clay-lined stormwater ponds, and clean cover in landscaped areas. Locations and details of the engineering controls are provided in Figure 2. A certificate of completion was issued by the NYSDEC on December 19, 2014.

1.2 Site Description

The Site is located in the Town of Niagara, New York and includes the ±34-acres former Sabre Park Mobile Home Community located at 1705 Factory Outlet Boulevard (a/k/a Fashion Outlet Boulevard, a/k/a Third Avenue Extension, a/k/a Connection Boulevard - Assessor's Parcel Number 160.08-1-2, 160.08-1-6 and 160.08-1-7), an approximate 10.35-acre parcel located on the southern portion of the larger approximately ±41.3-acre FONF property located at 1900 Military Road, (specifically, a portion of Assessor's Parcel Numbers 145.20-1-15), and a smaller parcel encompassing approximately 3.45-acres on the western side of the Site located at 1755 Factory Outlet Boulevard (a/k/a Fashion Outlet Boulevard, a/k/a Third Avenue Extension, a/k/a Connection Boulevard - Assessor's Parcel Number 160.08-1-1). The total footprint of the Site subject to the BCP is approximately 47.8-acres. The Site is bounded by Factory Outlet Boulevard/Route 190 to the west/northwest, the existing Fashion Outlets of Niagara Falls to the north/northeast, the Benderson Development shopping plaza to the east, and National Grid power lines to the south. A Site Location Map is provided as Figure 1.

1.3 Summary of Remedial Investigation

Langan completed a Remedial Investigation (RI) of the site during July 2013 to characterize the nature and extent of contamination at the Site. The results of the RI are described in detail in the Remedial

Investigation Report, dated 16 August 2013, prepared by Langan. The remedial investigation determined that the primary contaminants of concern include volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and chromium. These contaminants were detected in soil, groundwater, and soil vapor. The following is a summary of the RI findings:

Soil

PAHs were detected in 16 of 295 soil and fill samples at concentrations exceeding the commercial soil cleanup objectives (SCOs). PCBs were detected in 5 samples at concentrations (1.07 to 23.0 ppm) exceeding the commercial SCO of 1 ppm. Total chromium was detected in 20 samples at concentrations (1,500 to 6,560 ppm) exceeding the commercial SCO of 1,500 ppm, while hexavalent chromium exceeded the commercial SCO of 400 ppm in 2 samples (486 and 506 ppm). Slag was observed in the historic fill at many locations throughout the site, but did not exhibit radioactivity during the RI; however, approximately 258.5 tons of low level radioactive waste (LLRW) was encountered along the northeast corner of the Site during remedial excavation activities.

Groundwater

Total chromium was detected in four groundwater samples at concentrations (884 to 1,260 ppb) exceeding the groundwater standard of 50 ppb, while hexavalent chromium was detected in four samples at concentrations (818 to 1,230 ppb) exceeding the groundwater standard of 50 ppb. Chlorinated solvents were detected in one groundwater sample at concentrations exceeding groundwater standards. These compounds included (cis) 1,2-dichloroethylene (59 ppb; standard 5 ppb), trichloroethylene (19 ppb; standard 5 ppb) and vinyl chloride (13 ppb; standard 2 ppb). Groundwater pH ranged from 6.29 to 12.2. Contaminated overburden groundwater is not migrating from the site.

Soil Vapor

Chlorinated and petroleum related VOCs were detected in all three of the soil gas samples collected at the Site. VOCs detected in ambient air samples were generally lower than the soil gas samples.

1.4 Site Summary

The Site was remediated in accordance with the remedy approved by the NYSDEC in the October 9, 2013 Interim Remedial Measures Work Plan (IRMWP) and April 30, 2014 Remedial Action Work Plan (RAWP). Based on the results of Langan's July 2013 RI, fill throughout the entire Site contained metals, VOCs, SVOCs, PCBs, pesticides, and herbicides at concentrations exceeding unrestricted residential SCOs, and the anticipated costs associated with additional excavation required to achieve a Track 1 cleanup were deemed to be uneconomical and unreasonable. Therefore, a Track 4 remedy was selected for the Site, and residual contaminated soil and water was left in place. Site-specific SCOs were developed for soil exceeding 6NYCRR Part 371 hazardous criteria and PCB-impacted soils that exceed 1 ppm at the surface and 10 ppm in the subsurface. A detailed account of the remedy is provided in the December 2014 Final Engineering Report (FER), and is summarized as follows:

- Excavation and off-site disposal of 164,627.17 tons of construction-related spoils exceeding the restricted commercial SCOs;
- Excavation and off-site disposal of two hot spot areas, including PCB-impacted soils with concentrations exceeding 10 mg/kg (716.6 tons), and chromium impacted soils with concentrations exceeding the RCRA Characteristically Hazardous Waste Criteria of 5 mg/L (682.1 tons);
- Excavation and disposal of approximately 258.5 tons of low-level radioactive waste (LLRW) encountered during installation of building utilities and interior piers in the northern portion of the FONF mall building pad.
- Transportation and off-site disposal of soil/fill material at permitted facilities in accordance with the RAWP, disposal facility requirements, and applicable laws and regulations for handling, transport, and disposal.
- Collection and permitted discharge of approximately 10,698,200 gallons of perched, contaminated groundwater and accumulated stormwater exceeding Part 703 GA criteria to the Niagara Falls Water Board (NFWB) wastewater treatment facility.
- Installation of vapor barriers with active sub-slab depressurization (SSD) systems beneath the mall expansion building and occupied office building of the relocated Secure Storage facility;
- Construction of a site-wide soil cap/cover system consisting of the following to prevent human exposure to remaining contaminated soil/fill remaining at the Site:
    - Placement of a minimum of 1 foot of certified clean soils meeting the Allowable Constituent Levels for Imported Fill or Soil for Commercial Uses (Appendix 5 of DER over all landscaped areas; Periodic Review

    - Placement of a combination of a minimum of 6 inches of certified clean clay and a minimum of 1 foot of certified clean soils meeting the Allowable Constituent Levels for Imported Fill or Soil for Commercial Uses (Appendix 5 of DER 10) at the stormwater detention ponds.
    - Pavement with varying depths of subbase (4 inches to 12 inches) in the parking lots and drive aisles, and concrete building foundations under all buildings;
- Backfilling of remedial excavation areas to development grade with clean virgin quarried stone or clean fill meeting the requirements of NYSDEC Division of Environmental Remediation (DER) Draft DER-10 – Technical Guidance for Site Investigation and Remediation, Section 5.4, or virgin, native imported crushed stone.
- Execution and recording of Environmental Easements that cover the entire extent of the BCP property to restrict land use and manage the engineering controls to prevent exposure to contamination remaining at the Site
- Development and implementation of a SMP for long-term management of residual contamination as required by the Environmental Easements.

Remedial activities were completed at the Site on 12 November 2014, and a certificate of completion was issued by the NYSDEC on December 19, 2014.

Langan submitted a SSD System Modification Work Plan to NYSDEC on May 22, 2018 to outline a proposed monitoring plan to be implemented with the aim of converting the active SSD system into a passive system. The SSD System Modification Work Plan was approved by the NYSDEC on May 29, 2018. On June 26, 2018 Langan completed sub-slab soil vapor sampling from 12 of the 14 existing permanent sub-slab monitoring points installed during construction of the mall expansion building. Langan submitted a Summary of Sub-Slab Soil Vapor Sampling Report to the NYSDEC and recommended the conversion of the FONF mall expansion active SSD system to a passive SSD system. The Summary of Sub-Slab Soil Vapor Sampling Report was approved by the NYSDEC on October 29, 2018. Following NYSDEC approval, Langan commenced conversion of the active SSD system at the FONF mall expansion building to a passive (wind-driven exhaust fan) system on December 27, 2018. Langan revised the SMP in January 2020 to reflect these changes.

1.5 Effectiveness of the Remedial Program

The remedial program was designed to both eliminate and mitigate environmental and potential human health exposure to adverse environmental conditions remaining in soil, groundwater, and soil vapor underlying the Site. The IC/ECs, detailed in Section 2.1, for the certification period continue to meet the remedial objectives for the Site.

1.6 Compliance

All IC/ECs have remained effective at the site for the certification period. All IC/ECs have remained fully in place for the certification period, with the exception of the following:

- NYSDEC approved/planned intrusive activities that occurred in 2020 and 2022 in accordance with the SMP Excavation Work Plan (EWP);
- The replacement of the active SSD system blower at the storage facility in 2020;
- The maintenance/repair of the active SSD system at the storage facility in 2024/2025.

A further discussion of the intrusive activities is detailed in Section 2.2 and the SSD system repair in Section 4.2.1.

1.7 Recommendations

Atlas recommends continuing monitoring procedures for the Site in accordance with the SMP.

2.0 IC/EC PLAN COMPLIANCE REPORT

2.1 IC/EC Components

A summary of the IC/ECs implemented at the Site per the RAWP, FER, and SMP are as follows:

- Maintenance of an engineered cap/cover system to prevent human exposure to residual contaminated soils remaining under the Site. The cap/cover systems consist of the following:
  - Parking and private road areas (minimum 3-inch thick asphalt cap);
  - Building slabs (4-inch concrete cap);
  - Sidewalks (5-inch concrete cap);
  - Landscaped areas (minimum 1-foot thick clean imported topsoil cover); and,
  - Detention ponds (a combination of a minimum 6-inch thick clay cap and 1-foot thick clean imported topsoil cover).
- Installation of two active SSD systems beneath the two fulltime occupied buildings of the Site (the FONF mall expansion building and the Secure Storage office building). As detailed in Section 1.5.6, the former active SSD system beneath the FONF mall expansion building was converted to a passive system in 2018 with approval from NYSDEC.
- Execution of environmental easements with ICs for the implementation, maintenance, and monitoring the ECs at the Site; prevent future exposure to residual contamination by controlling disturbances of the subsurface contamination at the Site; and, limit the use and development of the Site to commercial uses only. The environmental easements for the Site were executed by the Department on October 8, 2014, and filed with the Niagara County Clerk on October 30, 2014. The County Recording Identifier number for this filing is 2014216492 (a copy of the environmental easement is provided in Appendix A).
- A SMP for long-term management of residual contamination as required by the Environmental Easements, which includes plans for IC/ECs, monitoring, operation and maintenance, and reporting.

Refer to Figure 2 for the locations of the ECs.

2.2 Summary of EC Intrusive Activities and Modifications Completed During the Certification Period

During the certification period, intrusive activities or modifications of the EC cap/cover system were performed as follows:

- On May 28, 2020, Charter Communications uncovered a damaged communication cable located approximated 90 feet from the southwest corner of the original FONF Site building, within the existing asphalt pavement. The area was excavated approximately 2 feet by 4 feet by 30 inches below ground surface (bgs) to uncover the broken cable. The cable was repaired and a new vault was installed over the repaired line. The area surrounding the vault was backfilled with a portion of the excavation spoils and the surfaced capped with 4-inches of asphalt. A SMP EWP Implementation Report, dated July 17, 2020, was submitted to the Department in accordance with the SMP.

- In April 2022, site work for the installation of four electric vehicle (EV) charging stations and associated electrical equipment in a landscaped area in the northwest parking lot, north of the former Elks' Lodge commenced. All construction activities were completed in conformance with the NYSDEC approved EWP, dated December 1, 2021. The plan was approved by the NYSDEC on February 18, 2022. The scope of work included excavating utility trenches in the paved parking lot. During intrusive excavation activities, the soil was field screened by an Atlas geoscientist using visual and olfactory methods. In addition, the soil was field screened for volatile organic compounds (VOCs) using a photoionization detector (PID) instrument. No significantly impacted soil was encountered during excavation activities. Two stationary air monitoring stations were set up at the work zone perimeter (one upwind and one downwind) during intrusive Site work for continuous monitoring. After installation of the electric vehicle charging stations the cover system was restored in accordance with the approved EWP. The Intrusive Activities Report dated September 22, 2022 is present in Appendix B.

The Annual Inspection Reports documenting these intrusive activities can be found in Appendix C.

2.3 Goal Status and Corrective Measures

No deviations of the IC/ECs were observed during the certification period.

2.4 Conclusions and Recommendations

Langan submitted the revised SMP dated July 2020 and was subsequently approved by the NYSDEC. The IC/EC Plan remains effective and Atlas does not recommend modifications to the IC/ECs for the Site at this time.

3.0 MONITORING PLAN COMPLIANCE REPORT

3.1 The components of the Monitoring Plan are as follows:

- Annual inspection of the cap/cover system;
- Annual inspection of the fulltime occupied FONF mall expansion building passive SSD system;
- Annual inspection and pressure-field testing of the active SSD system; and,
- An annual site-wide inspection.

3.2 Summary of Monitoring Completed

3.2.1 Composite Cap/Cover System Inspections

Annual inspections of the composite cap/cover system were completed on September 28, 2020, September 28, 2021, September 29, 2022, September 26, 2023, and November 12, 2024. Conditions of the on-site building foundations/floor slabs, sidewalks, asphalt parking areas, clean cover landscaped areas, and clay lined detention ponds were inspected for quality and integrity. Damages and/or breaches to the composite cap/cover system were not identified during the annual inspections. Some minor cracking was observed in a few areas of the asphalt-paved parking areas. The annual site-wide inspection forms for the certification period are included as Appendix D.

3.2.2 SSD System Inspections and Pressure-Field Testing

Annual inspections of both SSD systems were conducted on September 28, 2020, September 28, 2021, September 29, 2022, September 26, 2023, and November 12, 2024 with a follow-up inspection on April 3, 2025. Inspection of the passive SSD system in the mall expansion building showed the passive exhaust fans were continuously operating per the manufacturers' specifications for the certification period.

The active SSD system in the occupied storage facility was inspected to confirm it was operating per the manufacturers' specifications and the intended design criteria and pressure field testing was completed below the office building concrete slab. The following table displays the field pressure range during each annual inspection conducted by Atlas:

Table 1: Active SSD System Field Pressure Readings	
Date	**Field Pressure Range – in/Hg**
September 28, 2020	-0.010 to -0.033
September 28, 2021	-0.002 to -.012
September 29, 2022	-0.002 to -0.012
September 26, 2023	-0.304 to -0.3013
*April 10, 2025 (follow-up inspection)	-0.005 to -0.019

During the November 12, 2024 annual inspection of the active SSD system in the storage facility, Atlas noted that although the SSD system blower appeared to be operational, there were no vacuum readings at the four (4) sub-grade monitoring points. In addition, the blower alarm was not functioning. This information was then shared with the current property owner, Extra Space Storage Inc. and the NYSDEC in the Notable Finding letter prepared by Atlas dated November 20, 2025.

On January 14 and 15, 2025 and March 11 and 12, 2025, Lockwood Kessler & Bartlett, Inc. (LKB) was on-Site and completed the repairs/upgrades to the SSD System. Following the upgrade of the SSDS components, LKB collected pressure field readings at the sub-slab monitoring points and system flow readings to confirm the SSD system was operational. In addition, a visual and audible alarm was installed should there be a loss of vacuum in the system. A summary of the work completed is detailed in the Sub-Slab Depressurization System Monitoring and Repairs letter prepared by LKB and dated March 31, 2025 and is included in Appendix E.

Atlas returned to the Site on April 10, 2025 to confirm the operation of the active SSD system in the storage facility. Readings are included in Table 1 above. The system inspection Checklist is included in Appendix F. In addition, a Photo log for the 2024 and 2025 follow-up inspection is included in Appendix G

Based on the inspections and weekly observations of the system alarms by the site maintenance staff at the FONF mall expansion building and the storage facility, both the mall expansion building passive SSD system and Secure Storage office building active SSD system were operational for the certification period, except as previously discussed.

The individual system inspection checklists for each calendar year are included in Appendix F.

The site-wide inspection forms were completed in accordance with the requirements outlined in the SMP and consisted of spot inspections of all ECs including the cap/cover system, and the active and passive SSD systems. All IC/EC components inspected were in compliance with the SMP. The completed site-wide inspection forms are included as Appendix D.

3.3 Comparisons with Remedial Objectives

The monitoring and inspection activities conducted in the certification period indicate that ECs remain in-place and operational and that the remedial objectives continue to be met for the site.

3.4 Monitoring Deficiencies

Monitoring activities for the certification period were completed as required by the SMP Monitoring Plan and NYSDEC's requests. The active SSDS was not operational for an unknown period of time in 2024 and 2025 but was operational at the end of the certifying period.

3.5 Conclusions and Recommendations

The procedures utilized as part of the monitoring plan to evaluate the performance and effectiveness of the NYSDEC approved remedy were conducted in accordance with the revised SMP and confirmed the ECs remained in place for this certification period. Atlas does not recommend modifications to the monitoring plan for the Site at this time.

4.0 O&M PLAN COMPLIANCE REPORT

4.1 O&M Plan Components

The components of the O&M Plan are as follows:

- SSD systems: Continuous operation and maintenance as necessary

4.2 Completed O&M Activities

4.2.1 SSD Systems

Based on inspection observations, the SSD systems in the FONF mall expansion building and the occupied office building of the relocated storage facility operated continuously, per the manufacturers' specifications and the intended design criteria for the certification period except as follows:

- The replacement of the active SSD system blower at the storage facility in 2020;
- The maintenance/repair of the active SSD system at the storage facility in 2024/2025.

Periodic inspections and general maintenance (e.g., lubrication of active vacuum blower and passive exhausts, cleaning of active blower and passive exhausts) will continue on both the storage facility active SSD system and the FONF mall expansion building passive SSD system on an as-needed basis. All work will be conducted in accordance with the manufacturer's specifications and the SMP.

4.3 Evaluation of SSD Systems

Active SSD System at Storage Office Building

The primary objective of the active SSD system is to create a negative pressure under the concrete slab-on-grade flooring and draw any adverse soil vapors to a vacuum blower system on the exterior of the building where such vapors are discharged to the atmosphere. Continuous operation of the active SSD system indicates effective performance of this system.

Passive SSD System at the FONF Mall Expansion Building

The primary objective of the passive SSD system is to create a preferential pathway, assisted by a passive wind-driven exhaust fan and atmospheric pressure, to draw any adverse soil vapor from below the concrete slab-on-grade flooring to an exhaust on the exterior of the building where such vapors are discharged to the atmosphere. A functioning wind-driven exhaust fan and unobstructed

system piping indicate effective performance of these mitigation systems.

4.4 O&M Deficiencies

Based on inspection observations, the SSD system in the FONF mall expansion building operated continuously, per the manufacturers' specifications and the intended design criteria, for the certification period. The active SSDS of the occupied office building of the relocated storage facility was not operational for an unknown period of time in 2024 and 2025 but was operational at the end of the certifying period.

4.5 Conclusions and Recommendations

The O&M Plan included in the revised SMP remains effective to operate, monitor and maintain the mechanical components of the remedy selected for the Site. Atlas recommends that general maintenance activities (e.g., lubrication, cleaning inlet filters/exhaust fans) on both the storage facility SSD system and FONF mall expansion SSD system continue on an as-needed basis.

5.0 OVERALL CONCLUSIONS AND RECOMMENDATIONS

5.1 SMP Compliance

Each component of the SMP, including the IC/EC Plan, Monitoring Plan, and O&M Plan, was in compliance for the certification period except as noted in Section 3.0.

5.2 Remedy Performance Evaluation

5.2.1 Composite Cap/Cover System

Conditions of the on-site building foundations, sidewalks, parking areas, private roads, landscaped areas, and clay lined ponds were inspected for quality and integrity. Although some cracking was observed in areas of the paved surface, the site-wide composite cap/cover system was confirmed to be intact, and continues to be effective in protecting public health and the environment.

5.2.2 SSD Systems

Both the active and passive SSD systems are operating as specified in an effort to mitigate the exposure to potential adverse soil vapor concentrations under the site for the certification period.

5.2.3 IC Components

All ICs were maintained during the certification period, and the environmental easement on the site remains in place.

5.3 Future Submittals

In accordance with the revised SMP, inspections/monitoring of the composite cap/cover system and the active and passive SSD systems will continue on an annual basis. Forms and other information generated during regular monitoring events and inspections will be included in the associated Periodic Review Report.

6.0 CERTIFICATION OF IC/ECS

6.1 IC/EC Certification Form

The completed IC/EC Certification Form is presented in Appendix H.

6.2 IC/EC Certification

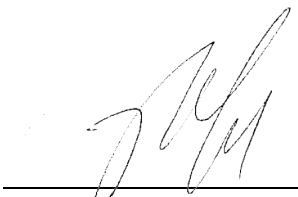
I, Gilbert Gedeon, am currently a registered professional engineer licensed by the State of New York. I had primary direct responsibility for implementation of the remedial program for the Fashion Outlets of Niagara Falls Expansion/Sabre Park Brownfield Cleanup Program site (NYSDEC BCA Site No. C932162).

I certify that the ICs/ECs are in place and effective and are performing as designed.

I certify that nothing has occurred that would impair the ability of the controls to protect the public health and environment and that nothing has occurred that would constitute a violation or failure to comply with any operation and maintenance plan for such controls.

I certify that all use restrictions, institutional controls, engineering controls, and all operation and maintenance requirements applicable to the site are contained in an environmental easement created and recorded pursuant ECL 71-3605 and that all affected local governments, as defined in ECL 71-3603, have been notified that such easement has been recorded. A site Management Plan has been submitted by the applicant for the continual and proper operation, maintenance, and monitoring of all engineering controls employed at the site, including the proper maintenance of all remaining systems, and that such plan has been approved by the Department.

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

075399	03/18/2026	
New York State Professional Engineer #	Date	Signature

It is a violation of Article 130 of New York State Education Law for any person to alter this document in any way without the express written verification of adoption by any New York State licensed engineer in accordance with Section 7209(2), Article 130, New York State Education Law.

FIGURES



Source: Esri, Vantor, Earthstar Geographics, and the GIS User Community, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community

0 0.1 0.2 0.4 mi
0 0.17 0.35 0.7 km

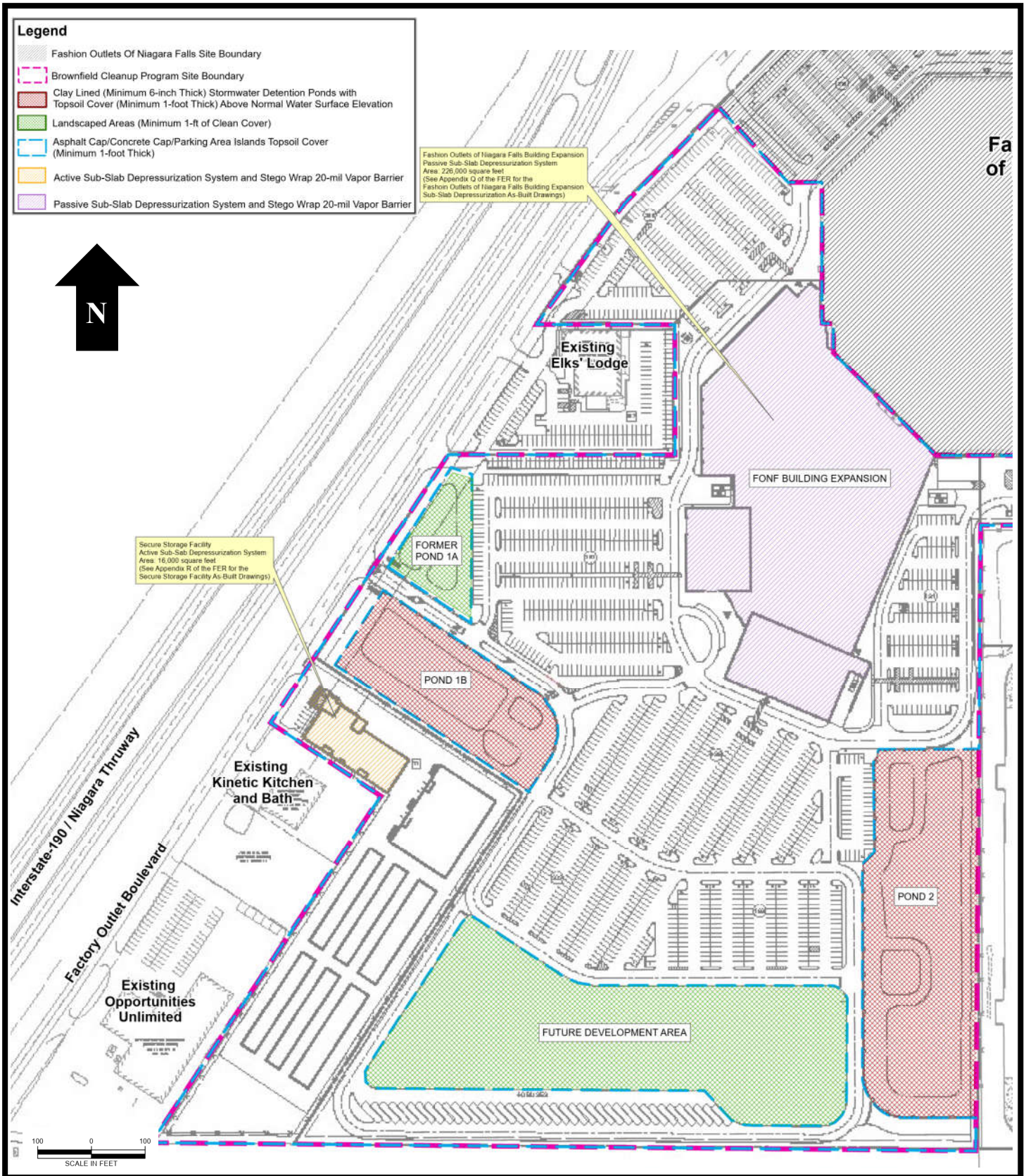
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New York, NY 10010
212-353-8280

PROJECT NO.: 214DCMC002

DATE: 03/2026 | FILE: Fig-1 | REVIEWED BY: DC

FIGURE 1 – SITE LOCATION MAP

FONF Expansion / Sabre Park BCO
Town of Niagara, New York

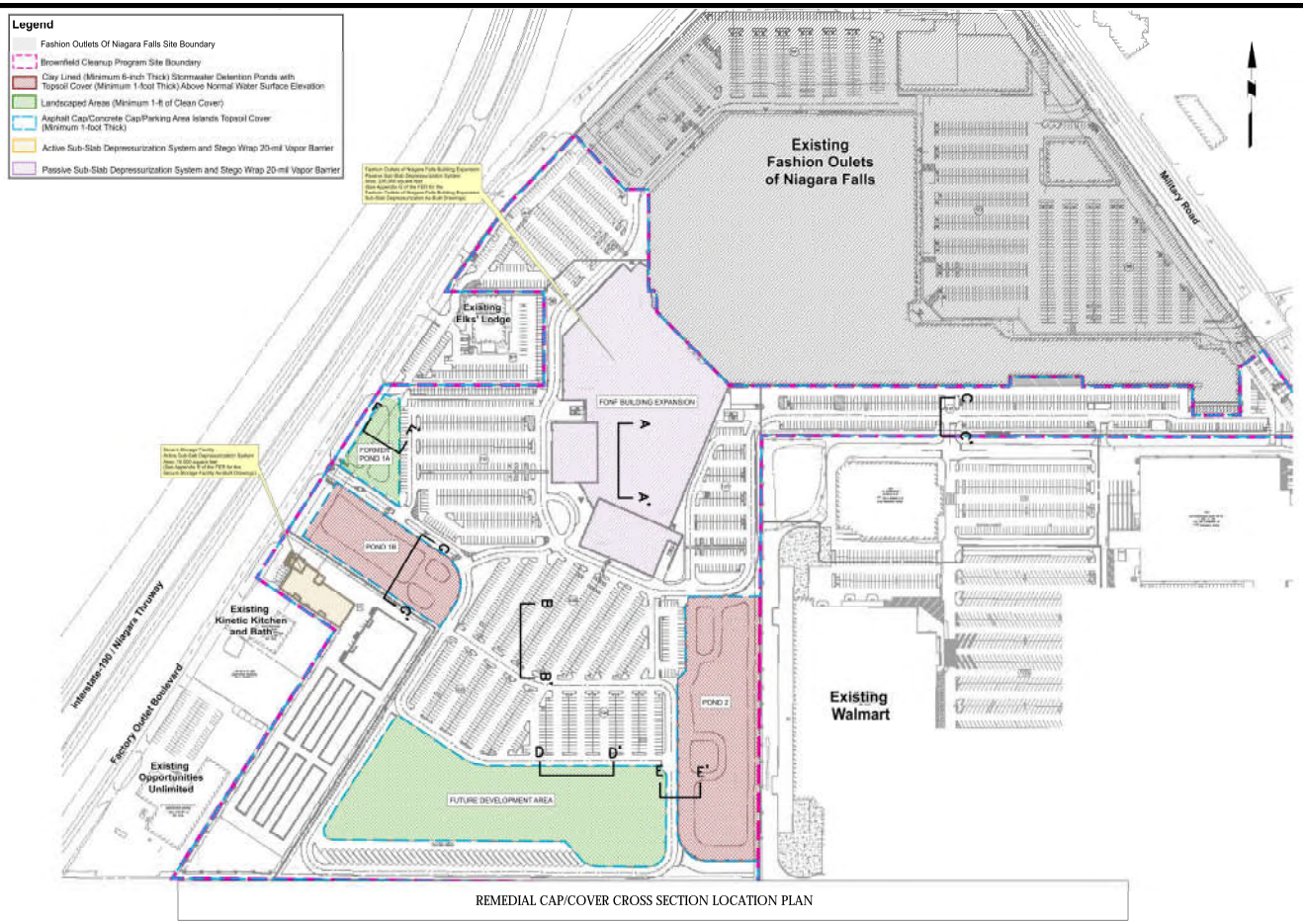


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SOURCE: Langan SMP dated 2020	PROJECT NO.: 214DCMC002	REVIEWED BY: DC
	DATE: 04/2025	FILE: Fig-2

FIGURE 2
LOCATION OF ENGINEERING CONTROLS AND COVER SYSTEM TYPES

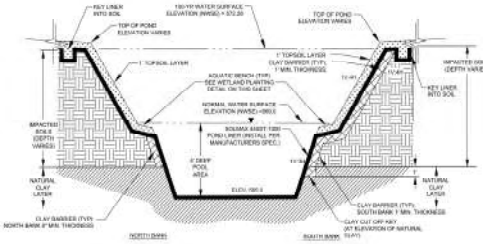
FONF Expansion / Sabre Park BCO
Town of Niagara, New York



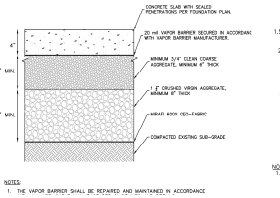
REMEDIAL CAP/COVER CROSS SECTION LOCATION PLAN

GENERAL NOTES

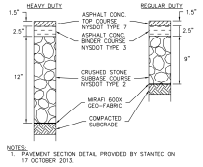
1. THE SITE BOUNDARY IS BASED ON THE TOPOGRAPHICAL SURVEY PREPARED BY STANTEC CONSULTING SERVICES, INC. LAST REVISED ON 21 MAY 2014 AND IDENTIFIED AS DRAWING NO. G-905 TITLED FASHION OUTLETS OF NIAGARA FALLS BCP ENVIRONMENTAL EASEMENT PLAN PREPARED BY STANTEC CONSULTING SERVICES, INC. DATED 27 MAY 2014.
2. BUILDING FOUNDATION CONCRETE CAP SECTIONS WERE COMPILED FROM BOTH THE LANGAN SUB SLAB DEPRESSURIZATION SYSTEM DESIGN FOUND IN APPENDIX K OF THE REMEDIAL ACTION WORK PLAN AND FOUNDATION DRAWING PROVIDED BY RTKL ASSOCIATES INC. (RTKL) ON 25 JULY 2014.
3. LANDSCAPED AREA TOPSOIL COVER DETAIL PROVIDED BY STANTEC ON 17 OCTOBER 2013.
4. POND LINING CROSS SECTIONS PROVIDED BY STANTEC ON 18 SEPTEMBER 2014.
5. EXISTING SITE SOIL COMPACTION, CLAY SOIL COMPACTION, AND ALL SUB-BASE COMPACTION WILL MEET THE REQUIREMENTS OUTLINED IN BARRON AND ASSOCIATES, P.C. (BARRON) GEOTECHNICAL REPORT DATED 31 JANUARY 2012.
6. ASPHALT DENSITIES AND CONCRETE COMPRESSIVE STRENGTH WILL MEET THE REQUIREMENTS OUTLINED IN STANTEC'S CONSTRUCTION SPECIFICATIONS.
7. ALL IMPORTED STONE SUB-BASE AND TOPSOIL WILL BE TESTED AND CERTIFIED IN ACCORDANCE WITH SECTION 5.4 OF NYSDEC'S DER-10 TECHNICAL GUIDANCE FOR SITE INVESTIGATION AND REMEDIATION DOCUMENT.
8. THE FASHION OUTLETS OF NIAGARA FALLS EXPANSION BUILDING AND THE SECURE STORAGE FACILITY SUB-SLAB DEPRESSURIZATION SYSTEM AS-BUILT DRAWINGS CAN BE FOUND IN APPENDIX AND APPENDIX R RESPECTIVELY OF THE FINAL ENGINEERING REPORT.



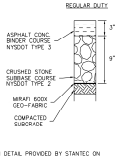
CROSS SECTION G - G'
POND 1B STORMWATER DETENTION BASIN CLAY LINER CAP
N.T.S.



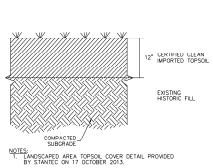
CROSS SECTION A - A'
BUILDING FOUNDATION CONCRETE CAP
N.T.S.



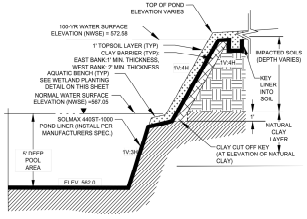
CROSS SECTION B - B'
PARKING AREA ASPHALT CAP
N.T.S.



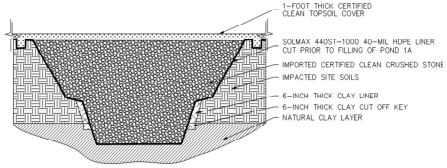
CROSS SECTION C - C'
EASTERN PARKING AREA ASPHALT CAP
N.T.S.



CROSS SECTION D - D'
LANDSCAPED AREA CLEAN FILL COVER
N.T.S.



CROSS SECTION E - E'
POND 2 STORMWATER DETENTION BASIN CLAY LINER CAP
N.T.S.



CROSS SECTION F - F'
POND 1A STORMWATER DETENTION BASIN CLAY LINER CAP
N.T.S.

ATLAS
104 East 25th Street, 8th Floor
New York, NY 10010
(212) 353-8280

SOURCE: Langan SMP dated 2020

DATE: 04/2025

ATLAS PROJECT NUMBER : 214DCMC002

FONF Expansion / Sabre Park BCO
Town of Niagara, New York

FIGURE 3
REMEDIAL CAP/COVER CROSS SECTIONS

APPENDIX A

Environmental Easement

NIAGARA COUNTY CLERK
WAYNE F. JAGOW

RECEIPT

** Reprint **
Receipt Date: 10/30/2014 11:11:26 AM
RECEIPT # 2014216492

Recording Clerk: BH
Cash Drawer: CASH3
Rec'd Frm: BOB/STEWART
Rec'd In Person

Instr#: 2014-18632
DOC: EASEMENT
DEED STAMP: 1836
OR Party: FASHION OUTLETS II LLC
EE Party: PEOPLE OF THE STATE OF NEW YORK

Recording Fees	
Cover Page	$8.00
Recording Fee	$38.00
Cultural Ed	$14.25
Records Management - County	$1.00
Records Management - State	$4.75
TP584	$5.00
Transfer Tax	
Transfer Tax	$0.00
DOCUMENT TOTAL: ---->	$71.00

Instr#: 2014-18633
DOC: EASEMENT
DEED STAMP: 1837
OR Party: MACERICH NIAGARA LLC
EE Party: PEOPLE OF THE STATE OF NEW YORK

Recording Fees	
Cover Page	$8.00
Recording Fee	$38.00
Cultural Ed	$14.25
Records Management - County	$1.00
Records Management - State	$4.75
TP584	$5.00
Transfer Tax	
Transfer Tax	$0.00
DOCUMENT TOTAL: ---->	$71.00

Instr#: 2014-18634
DOC: EASEMENT
DEED STAMP: 1838
OR Party: QUAKER DEVELOPMENT INC
EE Party: PEOPLE OF THE STATE OF NEW YORK

Recording Fees	
Cover Page	$8.00
Recording Fee	$32.00
Cultural Ed	$14.25
Records Management - County	$1.00
Records Management - State	$4.75
TP584	$5.00
Transfer Tax	
Transfer Tax	$0.00
DOCUMENT TOTAL: ---->	$65.00

Misc Fees	
Overpayment	$6.00
Receipt Summary	
TOTAL RECEIPT: ---->	$213.00
TOTAL RECEIVED: ---->	$213.00
CASH BACK: ---->	$0.00

PAYMENTS
Check # 72655 -> $213.00
HARRIS BEACH LLP

P.O. Box 461, Lockport, New York 14095-0461 Phone (716) 439-7022 FAX (716) 439-7066

ENVIRONMENTAL EASEMENT GRANTED PURSUANT TO ARTICLE 71, TITLE 36 OF THE NEW YORK STATE ENVIRONMENTAL CONSERVATION LAW

THIS INDENTURE made this ~~21st~~ 8th day of ~~August~~ October, 2014, between Quaker Development, Inc., a New York corporation, dba Secure Storage having an office at 124 Meadow Road, Orchard Park, NY 14127, County of Erie, State of New York (the "Grantor") and The People of the State of New York (the "Grantee"), acting through their Commissioner of the Department of Environmental Conservation (the "Commissioner" or "NYSDEC" or "Department" as the context requires) with its headquarters located at 625 Broadway, Albany, New York 12233,

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to encourage the remediation of abandoned and likely contaminated properties ("sites") that threaten the health and vitality of the communities they burden while at the same time ensuring the protection of public health and the environment; and

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to establish within the Department a statutory environmental remediation program that includes the use of Environmental Easements as an enforceable means of ensuring the performance of operation, maintenance, and/or monitoring requirements and the restriction of future uses of the land, when an environmental remediation project leaves residual contamination at levels that have been determined to be safe for a specific use, but not all uses, or which includes engineered structures that must be maintained or protected against damage to perform properly and be effective, or which requires groundwater use or soil management restrictions; and

WHEREAS, the Legislature of the State of New York has declared that Environmental Easement shall mean an interest in real property, created under and subject to the provisions of Article 71, Title 36 of the New York State Environmental Conservation Law ("ECL") which contains a use restriction and/or a prohibition on the use of land in a manner inconsistent with engineering controls which are intended to ensure the long term effectiveness of a site remedial program or eliminate potential exposure pathways to hazardous waste or petroleum; and

WHEREAS, Grantor is the owner of real property located at the address of 1755 Factory Outlet Boulevard in the Town of Niagara, County of Niagara and State of New York, known and designated on the tax map of the County Clerk of Niagara as tax map parcel number: Section 160.08, Block 1, Lot 1, being the same as that property conveyed to Grantor by deed dated January 31, 1997 and recorded in the Niagara County Clerk's Office in Liber 2717 of Deeds at Page 290.

WHEREAS, the property subject to this Environmental Easement (the "Controlled Property") comprises approximately 3.446+/- acres, which is a portion of the 47.815 +/acre parcel that represents the real property which is the subject of the Brownfield Cleanup Agreement Index Number C932162-06-13, and is hereinafter more fully set forth in the Land Title Survey dated May 21, 2014 , Drawing Number GI 905, prepared by Stantec Consulting Services Inc., which will be attached to the Site Management Plan. The Controlled Property description is set forth in and attached hereto as Schedule A; and

ORIGINAL FILED

OCT 30 2014

WAYNE F. JAGOW
NIAGARA COUNTY CLERK

WHEREAS, the Department accepts this Environmental Easement in order to ensure the protection of public health and the environment and to achieve the requirements for remediation established for the Controlled Property until such time as this Environmental Easement is extinguished pursuant to ECL Article 71, Title 36; and

NOW THEREFORE, in consideration of the mutual covenants contained herein and the terms and conditions of Brownfield Cleanup Agreement Index Number: C932162-06-13, Grantor conveys to Grantee a permanent Environmental Easement pursuant to ECL Article 71, Title 36 in, on, over, under, and upon the Controlled Property as more fully described herein ("Environmental Easement")

1. Purposes. Grantor and Grantee acknowledge that the Purposes of this Environmental Easement are: to convey to Grantee real property rights and interests that will run with the land in perpetuity in order to provide an effective and enforceable means of encouraging the reuse and redevelopment of this Controlled Property at a level that has been determined to be safe for a specific use while ensuring the performance of operation, maintenance, and/or monitoring requirements; and to ensure the restriction of future uses of the land that are inconsistent with the above-stated purpose.

2. Institutional and Engineering Controls. The controls and requirements listed in the Department approved Site Management Plan ("SMP") including any and all Department approved amendments to the SMP are incorporated into and made part of this Environmental Easement. These controls and requirements apply to the use of the Controlled Property, run with the land, are binding on the Grantor and the Grantor's successors and assigns, and are enforceable in law or equity against any owner of the Controlled Property, any lessees and any person using the Controlled Property.

A. (1) The Controlled Property may be used for:

Commercial as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and Industrial as described in 6 NYCRR Part 375-1.8(g)(2)(iv);

(2) All Engineering Controls must be operated and maintained as specified in the Site Management Plan (SMP);

(3) All Engineering Controls must be inspected at a frequency and in a manner defined in the SMP;

(4) The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Niagara County Department of Health to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department;

(5) Groundwater and other environmental or public health monitoring must be performed as defined in the SMP;

(6) Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in the SMP;

(7) All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;

(8) Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP;

(9) Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy shall be performed as defined in the SMP;

(10) Access to the site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by this Environmental Easement.

B. The Controlled Property shall not be used for Residential or Restricted Residential purposes as defined in 6NYCRR 375-1.8(g)(2)(i) and (ii), and the above-stated engineering controls may not be discontinued without an amendment or extinguishment of this Environmental Easement.

C. The SMP describes obligations that the Grantor assumes on behalf of Grantor, its successors and assigns. The Grantor's assumption of the obligations contained in the SMP which may include sampling, monitoring, and/or operating a treatment system, and providing certified reports to the NYSDEC, is and remains a fundamental element of the Department's determination that the Controlled Property is safe for a specific use, but not all uses. The SMP may be modified in accordance with the Department's statutory and regulatory authority. The Grantor and all successors and assigns, assume the burden of complying with the SMP and obtaining an up-to-date version of the SMP from:

Site Control Section
Division of Environmental Remediation
NYSDEC
625 Broadway
Albany, New York 12233
Phone: (518) 402-9553

D. Grantor must provide all persons who acquire any interest in the Controlled Property a true and complete copy of the SMP that the Department approves for the Controlled Property and all Department-approved amendments to that SMP.

E. Grantor covenants and agrees that until such time as the Environmental Easement is extinguished in accordance with the requirements of ECL Article 71, Title 36 of the ECL, the property deed and all subsequent instruments of conveyance relating to the Controlled Property shall state in at least fifteen-point bold-faced type:

This property is subject to an Environmental Easement held by the New York State Department of Environmental Conservation pursuant to Title 36 of Article 71 of the Environmental Conservation Law.

F. Grantor covenants and agrees that this Environmental Easement shall be incorporated in full or by reference in any leases, licenses, or other instruments granting a right to use the Controlled Property.

G. Grantor covenants and agrees that it shall, at such time as NYSDEC may require, submit to NYSDEC a written statement by an expert the NYSDEC may find acceptable certifying under penalty of perjury, in such form and manner as the Department may require, that:

(1) the inspection of the site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under the direction of the individual set forth at 6 NYCRR Part 375-1.8(h)(3).

(2) the institutional controls and/or engineering controls employed at such site:

(i) are in-place;

(ii) are unchanged from the previous certification, or that any identified changes to the controls employed were approved by the NYSDEC and that all controls are in the Department-approved format; and

(iii) that nothing has occurred that would impair the ability of such control to protect the public health and environment;

(3) the owner will continue to allow access to such real property to evaluate the continued maintenance of such controls;

(4) nothing has occurred that would constitute a violation or failure to comply with any site management plan for such controls;

(5) the report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

(6) to the best of his/her 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

(7) the information presented is accurate and complete.

3. Right to Enter and Inspect. Grantee, its agents, employees, or other representatives of the State may enter and inspect the Controlled Property in a reasonable manner and at reasonable times to assure compliance with the above-stated restrictions.

4. Reserved Grantor's Rights. Grantor reserves for itself, its assigns, representatives, and successors in interest with respect to the Property, all rights as fee owner of the Property, including:

A. Use of the Controlled Property for all purposes not inconsistent with, or limited by the terms of this Environmental Easement;

B. The right to give, sell, assign, or otherwise transfer part or all of the underlying fee interest to the Controlled Property, subject and subordinate to this Environmental Easement;

5. Enforcement

A. This Environmental Easement is enforceable in law or equity in perpetuity by Grantor, Grantee, or any affected local government, as defined in ECL Section 71-3603, against the owner of the Property, any lessees, and any person using the land. Enforcement shall not be defeated because of any subsequent adverse possession, laches, estoppel, or waiver. It is not a defense in any action to enforce this Environmental Easement that: it is not appurtenant to an interest in real property; it is not of a character that has been recognized traditionally at common law; it imposes a negative burden; it imposes affirmative obligations upon the owner of any interest in the burdened property; the benefit does not touch or concern real property; there is no privity of estate or of contract; or it imposes an unreasonable restraint on alienation.

B. If any person violates this Environmental Easement, the Grantee may revoke the Certificate of Completion with respect to the Controlled Property.

C. Grantee shall notify Grantor of a breach or suspected breach of any of the terms of this Environmental Easement. Such notice shall set forth how Grantor can cure such breach or suspected breach and give Grantor a reasonable amount of time from the date of receipt of notice in which to cure. At the expiration of such period of time to cure, or any extensions granted by Grantee, the Grantee shall notify Grantor of any failure to adequately cure the breach or suspected breach, and Grantee may take any other appropriate action reasonably necessary to remedy any breach of this Environmental Easement, including the commencement of any proceedings in accordance with applicable law.

D. The failure of Grantee to enforce any of the terms contained herein shall not be deemed a waiver of any such term nor bar any enforcement rights.

6. Notice. Whenever notice to the Grantee (other than the annual certification) or approval from the Grantee is required, the Party providing such notice or seeking such approval shall identify the Controlled Property by referencing the following information:

County, NYSDEC Site Number, NYSDEC Brownfield Cleanup Agreement, State Assistance Contract or Order Number, and the County tax map number or the Liber and Page or computerized system identification number.

Parties shall address correspondence to:

Site Number: C932162
Office of General Counsel
NYSDEC
625 Broadway
Albany New York 12233-5500

With a copy to:

Site Control Section
Division of Environmental Remediation

NYSDEC
625 Broadway
Albany, NY 12233

All notices and correspondence shall be delivered by hand, by registered mail or by Certified mail and return receipt requested. The Parties may provide for other means of receiving and communicating notices and responses to requests for approval.

7. Recordation. Grantor shall record this instrument, within thirty (30) days of execution of this instrument by the Commissioner or her/his authorized representative in the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

8. Amendment. Any amendment to this Environmental Easement may only be executed by the Commissioner of the New York State Department of Environmental Conservation or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

9. Extinguishment. This Environmental Easement may be extinguished only by a release by the Commissioner of the New York State Department of Environmental Conservation, or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

10. Joint Obligation. If there are two or more parties identified as Grantor herein, the obligations imposed by this instrument upon them shall be joint and several.

IN WITNESS WHEREOF, Grantor has caused this instrument to be signed in its name.

[SIGNATURE PAGE FOLLOWS]

QUAKER DEVELOPMENT, INC. DBA SECURE STORAGE

By: _____ 8/21/14
Print Name: Maritza B. Ruh
Title: President Date:

Quaker Development, Inc. Acknowledgment

STATE OF NEW YORK)
) ss:
COUNTY OF ERIE)

On the 21st day of August, in the year 2014, before me, the undersigned, personally appeared **Maritza B. Ruh**, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity, and that by his/her/their signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

_____
Notary Public - State of New York

FAYDA HATHAWAY
No. 01HA6210137
Notary Public, State of New York
Qualified in Erie County
My Commission Expires Aug. 10, 2017

THIS ENVIRONMENTAL EASEMENT IS HEREBY ACCEPTED BY THE PEOPLE OF THE STATE OF NEW YORK, Acting By and Through the Department of Environmental Conservation as Designee of the Commissioner,

By: _____
Robert W. Schick, Director
Division of Environmental Remediation

Grantee's Acknowledgment

STATE OF NEW YORK)
) ss:
COUNTY OF ALBANY)

On the 8th day of October, in the year 2014, before me, the undersigned, personally appeared Robert W. Schick, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his capacity as Designee of the Commissioner of the State of New York Department of Environmental Conservation, and that by his signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

_____
Notary Public - State of New York

David J. Chiusano
Notary Public, State of New York
No. 01CH5032146
Qualified in Schenectady County
Commission Expires August 22, 2018

SCHEDULE "A" PROPERTY DESCRIPTION

All that tract or parcel of land containing 3.446 acres, more or less, situate in Town Lot 13, Township 13, Range 9, in the Town of Niagara, County of Niagara, State of New York, consisting of Tax Account Parcel 160.08-1-1, and being more particularly bounded and described as follows:

Beginning at a point of intersection of the southeasterly right-of-way line of Factory Outlet Boulevard (80 feet wide) with the southerly line of lands now or formerly of Macerich Niagara LLC; thence

1. S 89°49'25" E ,along the southerly line of the said lands of Macerich Niagara LLC, a distance of 399.00 feet to a point at the northwesterly corner of a parcel of land now or formerly owned by Fashion Outlets II LLC (formerly Sabre Park Associates) and having T.A. Parcel No. 160.08-1-2; thence

2. S 00°02'36" W, along the westerly line of said lands of Fashion Outlets II LLC, a distance of 300.52 feet to a point; thence

3. N 89°57'24" W, along the northerly line of said lands of Fashion Outlets II LLC, a distance of 598.19 feet to the point of intersection with the aforementioned southeasterly right-of-way line of Factory Outlet Boulevard; thence

4. N 33°30'00" E, along said southeasterly right-of-way line, a distance of 361.31 feet to the Point or Place of Beginning.

Subject to any easements or encumbrances of record.

ENVIRONMENTAL EASEMENT GRANTED PURSUANT TO ARTICLE 71, TITLE 36 OF THE NEW YORK STATE ENVIRONMENTAL CONSERVATION LAW

THIS INDENTURE made this 6th day of ~~August~~ October, 2014, between Macerich Niagara LLC, a Delaware limited liability company, having an office at 401 Wilshire Blvd., Suite 700, Santa Monica, CA 90401, County of Los Angeles, State of California (the "Grantor") and The People of the State of New York (the "Grantee"), acting through their Commissioner of the Department of Environmental Conservation (the "Commissioner" or "NYSDEC" or "Department" as the context requires) with its headquarters located at 625 Broadway, Albany, New York 12233,

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to encourage the remediation of abandoned and likely contaminated properties ("sites") that threaten the health and vitality of the communities they burden while at the same time ensuring the protection of public health and the environment; and

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to establish within the Department a statutory environmental remediation program that includes the use of Environmental Easements as an enforceable means of ensuring the performance of operation, maintenance, and/or monitoring requirements and the restriction of future uses of the land, when an environmental remediation project leaves residual contamination at levels that have been determined to be safe for a specific use, but not all uses, or which includes engineered structures that must be maintained or protected against damage to perform properly and be effective, or which requires groundwater use or soil management restrictions; and

WHEREAS, the Legislature of the State of New York has declared that Environmental Easement shall mean an interest in real property, created under and subject to the provisions of Article 71, Title 36 of the New York State Environmental Conservation Law ("ECL") which contains a use restriction and/or a prohibition on the use of land in a manner inconsistent with engineering controls which are intended to ensure the long term effectiveness of a site remedial program or eliminate potential exposure pathways to hazardous waste or petroleum; and

WHEREAS, Grantor is the owner of real property located at the address of 1900 Military Road in the Town of Niagara, County of Niagara and State of New York, known and designated on the tax map of the County Clerk of Niagara as part of tax map parcel numbers: Section 145.20, Block 1, Lot 14 and Section 145.20, Block 1, Lot 15 being the same as that property conveyed to Grantor by deed dated as of July 22, 2011 and recorded in the Niagara County Clerk's Office as Instrument Number 2011-12845, excepting therefrom that property conveyed by Grantor to Fashion Outlets II LLC by deed dated October 31, 2013 and recorded on February 6, 2014 in the Niagara County Clerk's Office as Instrument No. 2014-01741.

WHEREAS, the property subject to this Environmental Easement (the "Controlled Property") comprises approximately 7.163+/- acres, which is a portion of the 47.815 +/acre parcel that represents the real property which is the subject of the Brownfield Cleanup Agreement Index Number C932162-06-13, and is hereinafter more fully set forth in the Land Title Survey dated May 21, 2014 , Drawing Number GI 905, prepared by Stantec Consulting Services Inc., which will

ORIGINAL FILED

OCT 30 2014

WAYNE F. JAGOW
NIAGARA COUNTY CLERK

be attached to the Site Management Plan. The Controlled Property description is set forth in and attached hereto as Schedule A; and

WHEREAS, the Department accepts this Environmental Easement in order to ensure the protection of public health and the environment and to achieve the requirements for remediation established for the Controlled Property until such time as this Environmental Easement is extinguished pursuant to ECL Article 71, Title 36; and

NOW THEREFORE, in consideration of the mutual covenants contained herein and the terms and conditions of Brownfield Cleanup Agreement Index Number: C932162-06-13, Grantor conveys to Grantee a permanent Environmental Easement pursuant to ECL Article 71, Title 36 in, on, over, under, and upon the Controlled Property as more fully described herein ("Environmental Easement")

1. Purposes. Grantor and Grantee acknowledge that the Purposes of this Environmental Easement are: to convey to Grantee real property rights and interests that will run with the land in perpetuity in order to provide an effective and enforceable means of encouraging the reuse and redevelopment of this Controlled Property at a level that has been determined to be safe for a specific use while ensuring the performance of operation, maintenance, and/or monitoring requirements; and to ensure the restriction of future uses of the land that are inconsistent with the above-stated purpose.

2. Institutional and Engineering Controls. The controls and requirements listed in the Department approved Site Management Plan ("SMP") including any and all Department approved amendments to the SMP are incorporated into and made part of this Environmental Easement. These controls and requirements apply to the use of the Controlled Property, run with the land, are binding on the Grantor and the Grantor's successors and assigns, and are enforceable in law or equity against any owner of the Controlled Property, any lessees and any person using the Controlled Property.

A. (1) The Controlled Property may be used for:

Commercial as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and Industrial as described in 6 NYCRR Part 375-1.8(g)(2)(iv);

(2) All Engineering Controls must be operated and maintained as specified in the Site Management Plan (SMP);

(3) All Engineering Controls must be inspected at a frequency and in a manner defined in the SMP;

(4) The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Niagara County Department of Health to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department;

(5) Groundwater and other environmental or public health monitoring must be performed as defined in the SMP;

(6) Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in the SMP;

(7) All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;

(8) Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP;

(9) Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy shall be performed as defined in the SMP;

(10) Access to the site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by this Environmental Easement.

B. The Controlled Property shall not be used for Residential or Restricted Residential purposes as defined in 6NYCRR 375-1.8(g)(2)(i) and (ii), and the above-stated engineering controls may not be discontinued without an amendment or extinguishment of this Environmental Easement.

C. The SMP describes obligations that the Grantor assumes on behalf of Grantor, its successors and assigns. The Grantor's assumption of the obligations contained in the SMP which may include sampling, monitoring, and/or operating a treatment system, and providing certified reports to the NYSDEC, is and remains a fundamental element of the Department's determination that the Controlled Property is safe for a specific use, but not all uses. The SMP may be modified in accordance with the Department's statutory and regulatory authority. The Grantor and all successors and assigns, assume the burden of complying with the SMP and obtaining an up-to-date version of the SMP from:

Site Control Section
Division of Environmental Remediation
NYSDEC
625 Broadway
Albany, New York 12233
Phone: (518) 402-9553

D. Grantor must provide all persons who acquire any interest in the Controlled Property a true and complete copy of the SMP that the Department approves for the Controlled Property and all Department-approved amendments to that SMP.

E. Grantor covenants and agrees that until such time as the Environmental Easement is extinguished in accordance with the requirements of ECL Article 71, Title 36 of the ECL, the property deed and all subsequent instruments of conveyance relating to the Controlled Property shall state in at least fifteen-point bold-faced type:

This property is subject to an Environmental Easement held by the New York State Department of Environmental Conservation pursuant to Title 36 of Article 71 of the Environmental Conservation Law.

F. Grantor covenants and agrees that this Environmental Easement shall be incorporated in full or by reference in any leases, licenses, or other instruments granting a right to use the Controlled Property.

G. Grantor covenants and agrees that it shall, at such time as NYSDEC may require, submit to NYSDEC a written statement by an expert the NYSDEC may find acceptable certifying under penalty of perjury, in such form and manner as the Department may require, that:

(1) the inspection of the site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under the direction of the individual set forth at 6 NYCRR Part 375-1.8(h)(3).

(2) the institutional controls and/or engineering controls employed at such site:

(i) are in-place;

(ii) are unchanged from the previous certification, or that any identified changes to the controls employed were approved by the NYSDEC and that all controls are in the Department-approved format; and

(iii) that nothing has occurred that would impair the ability of such control to protect the public health and environment;

(3) the owner will continue to allow access to such real property to evaluate the continued maintenance of such controls;

(4) nothing has occurred that would constitute a violation or failure to comply with any site management plan for such controls;

(5) the report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

(6) to the best of his/her 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

(7) the information presented is accurate and complete.

3. Right to Enter and Inspect. Grantee, its agents, employees, or other representatives of the State may enter and inspect the Controlled Property in a reasonable manner and at reasonable times to assure compliance with the above-stated restrictions.

4. Reserved Grantor's Rights. Grantor reserves for itself, its assigns, representatives, and successors in interest with respect to the Property, all rights as fee owner of the Property, including:

A. Use of the Controlled Property for all purposes not inconsistent with, or limited by the terms of this Environmental Easement;

B. The right to give, sell, assign, or otherwise transfer part or all of the underlying fee interest to the Controlled Property, subject and subordinate to this Environmental Easement;

5. Enforcement

A. This Environmental Easement is enforceable in law or equity in perpetuity by Grantor, Grantee, or any affected local government, as defined in ECL Section 71-3603, against the owner of the Property, any lessees, and any person using the land. Enforcement shall not be defeated because of any subsequent adverse possession, laches, estoppel, or waiver. It is not a defense in any action to enforce this Environmental Easement that: it is not appurtenant to an interest in real property; it is not of a character that has been recognized traditionally at common law; it imposes a negative burden; it imposes affirmative obligations upon the owner of any interest in the burdened property; the benefit does not touch or concern real property; there is no privity of estate or of contract; or it imposes an unreasonable restraint on alienation.

B. If any person violates this Environmental Easement, the Grantee may revoke the Certificate of Completion with respect to the Controlled Property.

C. Grantee shall notify Grantor of a breach or suspected breach of any of the terms of this Environmental Easement. Such notice shall set forth how Grantor can cure such breach or suspected breach and give Grantor a reasonable amount of time from the date of receipt of notice in which to cure. At the expiration of such period of time to cure, or any extensions granted by Grantee, the Grantee shall notify Grantor of any failure to adequately cure the breach or suspected breach, and Grantee may take any other appropriate action reasonably necessary to remedy any breach of this Environmental Easement, including the commencement of any proceedings in accordance with applicable law.

D. The failure of Grantee to enforce any of the terms contained herein shall not be deemed a waiver of any such term nor bar any enforcement rights.

6. Notice. Whenever notice to the Grantee (other than the annual certification) or approval from the Grantee is required, the Party providing such notice or seeking such approval shall identify the Controlled Property by referencing the following information:

County, NYSDEC Site Number, NYSDEC Brownfield Cleanup Agreement, State Assistance Contract or Order Number, and the County tax map number or the Liber and Page or computerized system identification number.

Parties shall address correspondence to:

Site Number: C932162
Office of General Counsel
NYSDEC
625 Broadway
Albany New York 12233-5500

With a copy to:

Site Control Section
Division of Environmental Remediation
NYSDEC

625 Broadway
Albany, NY 12233

All notices and correspondence shall be delivered by hand, by registered mail or by Certified mail and return receipt requested. The Parties may provide for other means of receiving and communicating notices and responses to requests for approval.

7. Recordation. Grantor shall record this instrument, within thirty (30) days of execution of this instrument by the Commissioner or her/his authorized representative in the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

8. Amendment. Any amendment to this Environmental Easement may only be executed by the Commissioner of the New York State Department of Environmental Conservation or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

9. Extinguishment. This Environmental Easement may be extinguished only by a release by the Commissioner of the New York State Department of Environmental Conservation, or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

10. Joint Obligation. If there are two or more parties identified as Grantor herein, the obligations imposed by this instrument upon them shall be joint and several.

IN WITNESS WHEREOF, Grantor has caused this instrument to be signed in its name.

[SIGNATURE PAGE FOLLOWS]

MACERICH NIAGARA LLC
BY: MACERICH SCG LIMITED PARTNERSHIP, its sole member
BY: MACERICH SCG GP LLC, its general partner

By: _____
Print Name: **Chet A. Cramin**
Title: **Senior Vice President** Date: 8/21/14
Associate General Counsel

[Macerich Niagara LLC Acknowledgment continues on following page]

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

CIVIL CODE § 1189

State of California
County of Los Angeles }

On 6/21/14 (Date) before me, Lisa Rene Pena (Here Insert Name and Title of the Officer),

personally appeared Chet A. Cramin (Name(s) of Signer(s)),

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

LISA RENE PENA
Commission # 1957263
Notary Public - California
Los Angeles County
My Comm. Expires Nov 17, 2015

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature: _____ (Signature of Notary Public)

Place Notary Seal Above

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

Description of Attached Document

Title or Type of Document: Environmental Easement

Document Date: _____ Number of Pages: _____

Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer(s)

Signer's Name: _____	Signer's Name: _____
☐ Corporate Officer — Title(s): _____	☐ Corporate Officer — Title(s): _____
☐ Individual	☐ Individual
☐ Partner — ☐ Limited ☐ General	☐ Partner — ☐ Limited ☐ General
☐ Attorney in Fact	☐ Attorney in Fact
☐ Trustee	☐ Trustee
☐ Guardian or Conservator	☐ Guardian or Conservator
☐ Other: _____	☐ Other: _____
Signer Is Representing: _____	Signer Is Representing: _____
RIGHT THUMBPRINT OF SIGNER — Top of thumb here	RIGHT THUMBPRINT OF SIGNER — Top of thumb here

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THIS ENVIRONMENTAL EASEMENT IS HEREBY ACCEPTED BY THE PEOPLE OF THE STATE OF NEW YORK, Acting By and Through the Department of Environmental Conservation as Designee of the Commissioner,

By: _____
Robert W. Schick, Director
Division of Environmental Remediation

Grantee's Acknowledgment

STATE OF NEW YORK)
) ss:
COUNTY OF ALBANY)

On the 8th day of October, in the year 2014, before me, the undersigned, personally appeared Robert W. Schick, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his capacity as Designee of the Commissioner of the State of New York Department of Environmental Conservation, and that by his signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

_____
Notary Public - State of New York

David J. Chiusano
Notary Public, State of New York
No. 01CH5032146
Qualified in Schenectady County
Commission Expires August 22, 2018

SCHEDULE "A" PROPERTY DESCRIPTION

All that tract or parcel of land containing 2.666 acres, more or less, situate in the Town of Niagara, County of Niagara, State of New York, and being more particularly bounded and described as follows:

Beginning at a point of intersection of the easterly line of Factory Outlet Blvd. a.k.a. Connecting Blvd and/or Third Avenue (80 feet wide) with the northerly line of lands now or formerly of Niagara Falls Elk Lodge No. 346 (S.B.L. No. 145.20-1-15.21) said line also being the southerly line of lands of Macerich Niagara LLC; thence the following three (3) courses along said easterly line of Factory Outlet Blvd.

1. N 34° 00' 05" E, along a distance of 64.05 feet to a point; thence
2. N 36° 40' 56" E, a distance of 220.37 feet to a point; thence
3. N 44° 40' 13" E, a distance of 237.86 feet to a point; thence the following three (3) courses through said lands of Macerich Niagara LLC
4. S 45° 03' 41" E, a distance of 201.86 feet to a point; thence
5. S 89° 48' 15" E, a distance of 64.15 feet to a point; thence
6. S 00° 11' 45" W, a distance of 174.76 feet to a point; thence
7. N 89° 48' 15" W, a distance of 193.50 feet to a point; thence
8. S 45° 59' 42" W, a distance of 119.32 feet to a point; thence
9. N 89° 49' 25" W, along the northerly line of the aforementioned lands of Niagara Falls Elk Lodge No. 346, a distance of 261.80 feet to a point of intersection with the aforementioned easterly line of Factory Outlet Blvd. said point being the Point or Place of Beginning.

Also, all that tract or parcel of land containing 4.484 acres, more or less, situate in the Town of Niagara, County of Niagara, State of New York, and being more particularly bounded and described as follows:

Beginning at a point of intersection of the southerly line of lands of Macerich Niagara LLC, with the southwesterly line of Military Road (100 feet wide); thence

1. N 89° 49' 25" W, along said southerly line, a distance of 1498.95 feet to a point of intersection with the easterly line of lands now or formerly of Fashion Outlets II LLC; thence
2. N 00° 10' 35" E, along said easterly line, a distance of 78.13 feet to a point; thence
3. N 00° 11' 20" E, continuing along said easterly line, a distance of 53.50 feet to a point; thence
4. S 89° 52' 58" E, a distance of 661.54 feet to a point; thence
5. N 00° 06' 15" E, a distance of 24.20 feet to a point; thence
6. S 89° 53' 45" E, a distance of 192.58 feet to a point; thence
7. S 00° 06' 15" W, a distance of 23.78 feet to a point; thence
8. N 89° 55' 36" E, a distance of 293.93 feet to a point; thence
9. S 00° 00' 15" E, a distance of 77.41 feet to a point; thence
10. N 89° 59' 45" E, a distance of 124.72 feet to a point; thence
11. N 00° 00' 15" W, a distance of 122.37 feet to a point; thence
12. N 54° 31' 44" E, a distance of 79.16 feet to a point of intersection with the southwesterly line of Military Road (100 feet wide); thence
13. S 35° 28' 16" E, along said southwesterly line, a distance of 277.93 feet to a point of intersection with the southerly line of the aforementioned lands of Macerich Niagara LLC, said point being the Point or Place of Beginning.

Also, all that tract or parcel of land containing 0.013 acres, more or less, situate in the Town of Niagara, County of Niagara, State of New York, and being more particularly bounded and described as follows:

Commencing at a point of intersection of the easterly line of Factory Outlet Blvd. a.k.a. Connecting Blvd and/or Third Avenue (80 feet wide) with the northerly line of lands now or formerly of Niagara Falls Elk Lodge No. 346 (S.B.L. No. 145.20-1-15.21) said line also being the southerly line of lands of Macerich Niagara LLC; thence the following three (3) courses along said easterly line of Factory Outlet Blvd.

A. N 34^0 00' 05" E, along a distance of 64.05 feet to a point; thence
B. N 36^0 40' 56" E, a distance of 220.37 feet to a point; thence
C. N 44^0 40' 13" E, a distance of 237.86 feet to a point; thence
D. S 45^0 03' 41" E, a distance of 201.86 feet to a point; thence
E. S 89^0 48' 15" E, a distance of 64.15 feet to a point; thence
F. S 00^0 11' 45" W, a distance of 253.93 feet to a point; thence
G. S 89^0 59' 04" E, a distance of 10.13 feet to a point of intersection with the westerly line of lands of Macerich Niagara LLC, said point being the Point of Beginning of the hereinafter described parcel; thence

1. S 89° 59' 04" E, a distance of 12.05 feet to a point; thence
2. S 00° 14' 25" W, a distance of 55.58 feet to a point; thence
3. N 44° 48' 50" W, a distance of 14.63 feet to a point; thence
4. N 01° 54' 02" W, a distance of 45.22 feet to the Point or Place of Beginning.

Subject to any easements or encumbrances of record.

ENVIRONMENTAL EASEMENT GRANTED PURSUANT TO ARTICLE 71, TITLE 36 OF THE NEW YORK STATE ENVIRONMENTAL CONSERVATION LAW

THIS INDENTURE made this 21st day of August, 2014 October, between Fashion Outlets II LLC, a Delaware limited liability company, having an office c/o The Macerich Company, at 401 Wilshire Blvd., Suite 700, Santa Monica, CA 90401, County of Los Angeles, State of California (the "Grantor") and The People of the State of New York (the "Grantee"), acting through their Commissioner of the Department of Environmental Conservation (the "Commissioner" or "NYSDEC" or "Department" as the context requires) with its headquarters located at 625 Broadway, Albany, New York 12233,

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to encourage the remediation of abandoned and likely contaminated properties ("sites") that threaten the health and vitality of the communities they burden while at the same time ensuring the protection of public health and the environment; and

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to establish within the Department a statutory environmental remediation program that includes the use of Environmental Easements as an enforceable means of ensuring the performance of operation, maintenance, and/or monitoring requirements and the restriction of future uses of the land, when an environmental remediation project leaves residual contamination at levels that have been determined to be safe for a specific use, but not all uses, or which includes engineered structures that must be maintained or protected against damage to perform properly and be effective, or which requires groundwater use or soil management restrictions; and

WHEREAS, the Legislature of the State of New York has declared that Environmental Easement shall mean an interest in real property, created under and subject to the provisions of Article 71, Title 36 of the New York State Environmental Conservation Law ("ECL") which contains a use restriction and/or a prohibition on the use of land in a manner inconsistent with engineering controls which are intended to ensure the long term effectiveness of a site remedial program or eliminate potential exposure pathways to hazardous waste or petroleum; and

WHEREAS, Grantor is the owner of real property located at the address of 1705 Factory Outlet Boulevard in the Town of Niagara, County of Niagara and State of New York, known and designated on the tax map of the County Clerk of Niagara as tax map parcel numbers: Section 160.08, Block 1, Lot 2 and Section 160.08, Block 1, Lot 6 being the same as that property conveyed to Grantor by deed dated October 23, 2012 and recorded in the Niagara County Clerk's Office as Instrument Number 2012-23484 and by deed dated October 31, 2103 and recorded on February 6, 2014 in the Niagara County Clerk's Office as Instrument No. 2014-01741.

WHEREAS, the property subject to this Environmental Easement (the "Controlled Property") comprises approximately 37.207+/- acres, which is a portion of the 47.815 +/acre parcel that represents the real property which is the subject of the Brownfield Cleanup Agreement Index Number C932162-06-13, and is hereinafter more fully set forth in the Land Title Survey dated May 21, 2014 , Drawing Number GI 905, prepared by Stantec Consulting Services Inc., which will

ORIGINAL FILED

OCT 30 2014

WAYNE F. JAGOW
NIAGARA COUNTY CLERK

be attached to the Site Management Plan. The Controlled Property description is set forth in and attached hereto as Schedule A; and

WHEREAS, the Department accepts this Environmental Easement in order to ensure the protection of public health and the environment and to achieve the requirements for remediation established for the Controlled Property until such time as this Environmental Easement is extinguished pursuant to ECL Article 71, Title 36; and

NOW THEREFORE, in consideration of the mutual covenants contained herein and the terms and conditions of Brownfield Cleanup Agreement Index Number: C932162-06-13, Grantor conveys to Grantee a permanent Environmental Easement pursuant to ECL Article 71, Title 36 in, on, over, under, and upon the Controlled Property as more fully described herein ("Environmental Easement")

1. Purposes. Grantor and Grantee acknowledge that the Purposes of this Environmental Easement are: to convey to Grantee real property rights and interests that will run with the land in perpetuity in order to provide an effective and enforceable means of encouraging the reuse and redevelopment of this Controlled Property at a level that has been determined to be safe for a specific use while ensuring the performance of operation, maintenance, and/or monitoring requirements; and to ensure the restriction of future uses of the land that are inconsistent with the above-stated purpose.

2. Institutional and Engineering Controls. The controls and requirements listed in the Department approved Site Management Plan ("SMP") including any and all Department approved amendments to the SMP are incorporated into and made part of this Environmental Easement. These controls and requirements apply to the use of the Controlled Property, run with the land, are binding on the Grantor and the Grantor's successors and assigns, and are enforceable in law or equity against any owner of the Controlled Property, any lessees and any person using the Controlled Property.

A. (1) The Controlled Property may be used for:

Commercial as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and Industrial as described in 6 NYCRR Part 375-1.8(g)(2)(iv);

(2) All Engineering Controls must be operated and maintained as specified in the Site Management Plan (SMP);

(3) All Engineering Controls must be inspected at a frequency and in a manner defined in the SMP;

(4) The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Niagara County Department of Health to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department;

(5) Groundwater and other environmental or public health monitoring must be performed as defined in the SMP;

(6) Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in the SMP;

(7) All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;

(8) Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP;

(9) Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy shall be performed as defined in the SMP;

(10) Access to the site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by this Environmental Easement.

B. The Controlled Property shall not be used for Residential or Restricted Residential purposes as defined in 6NYCRR 375-1.8(g)(2)(i) and (ii), and the above-stated engineering controls may not be discontinued without an amendment or extinguishment of this Environmental Easement.

C. The SMP describes obligations that the Grantor assumes on behalf of Grantor, its successors and assigns. The Grantor's assumption of the obligations contained in the SMP which may include sampling, monitoring, and/or operating a treatment system, and providing certified reports to the NYSDEC, is and remains a fundamental element of the Department's determination that the Controlled Property is safe for a specific use, but not all uses. The SMP may be modified in accordance with the Department's statutory and regulatory authority. The Grantor and all successors and assigns, assume the burden of complying with the SMP and obtaining an up-to-date version of the SMP from:

Site Control Section
Division of Environmental Remediation
NYSDEC
625 Broadway
Albany, New York 12233
Phone: (518) 402-9553

D. Grantor must provide all persons who acquire any interest in the Controlled Property a true and complete copy of the SMP that the Department approves for the Controlled Property and all Department-approved amendments to that SMP.

E. Grantor covenants and agrees that until such time as the Environmental Easement is extinguished in accordance with the requirements of ECL Article 71, Title 36 of the ECL, the property deed and all subsequent instruments of conveyance relating to the Controlled Property shall state in at least fifteen-point bold-faced type:

This property is subject to an Environmental Easement held by the New York State Department of Environmental Conservation pursuant to Title 36 of Article 71 of the Environmental Conservation Law.

F. Grantor covenants and agrees that this Environmental Easement shall be incorporated in full or by reference in any leases, licenses, or other instruments granting a right to use the Controlled Property.

G. Grantor covenants and agrees that it shall, at such time as NYSDEC may require, submit to NYSDEC a written statement by an expert the NYSDEC may find acceptable certifying under penalty of perjury, in such form and manner as the Department may require, that:

(1) the inspection of the site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under the direction of the individual set forth at 6 NYCRR Part 375-1.8(h)(3).

(2) the institutional controls and/or engineering controls employed at such site:

(i) are in-place;

(ii) are unchanged from the previous certification, or that any identified changes to the controls employed were approved by the NYSDEC and that all controls are in the Department-approved format; and

(iii) that nothing has occurred that would impair the ability of such control to protect the public health and environment;

(3) the owner will continue to allow access to such real property to evaluate the continued maintenance of such controls;

(4) nothing has occurred that would constitute a violation or failure to comply with any site management plan for such controls;

(5) the report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

(6) to the best of his/her 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

(7) the information presented is accurate and complete.

3. Right to Enter and Inspect. Grantee, its agents, employees, or other representatives of the State may enter and inspect the Controlled Property in a reasonable manner and at reasonable times to assure compliance with the above-stated restrictions.

4. Reserved Grantor's Rights. Grantor reserves for itself, its assigns, representatives, and successors in interest with respect to the Property, all rights as fee owner of the Property, including:

A. Use of the Controlled Property for all purposes not inconsistent with, or limited by the terms of this Environmental Easement;

B. The right to give, sell, assign, or otherwise transfer part or all of the underlying fee interest to the Controlled Property, subject and subordinate to this Environmental Easement;

5. Enforcement

A. This Environmental Easement is enforceable in law or equity in perpetuity by Grantor, Grantee, or any affected local government, as defined in ECL Section 71-3603, against the owner of the Property, any lessees, and any person using the land. Enforcement shall not be defeated because of any subsequent adverse possession, laches, estoppel, or waiver. It is not a defense in any action to enforce this Environmental Easement that: it is not appurtenant to an interest in real property; it is not of a character that has been recognized traditionally at common law; it imposes a negative burden; it imposes affirmative obligations upon the owner of any interest in the burdened property; the benefit does not touch or concern real property; there is no privity of estate or of contract; or it imposes an unreasonable restraint on alienation.

B. If any person violates this Environmental Easement, the Grantee may revoke the Certificate of Completion with respect to the Controlled Property.

C. Grantee shall notify Grantor of a breach or suspected breach of any of the terms of this Environmental Easement. Such notice shall set forth how Grantor can cure such breach or suspected breach and give Grantor a reasonable amount of time from the date of receipt of notice in which to cure. At the expiration of such period of time to cure, or any extensions granted by Grantee, the Grantee shall notify Grantor of any failure to adequately cure the breach or suspected breach, and Grantee may take any other appropriate action reasonably necessary to remedy any breach of this Environmental Easement, including the commencement of any proceedings in accordance with applicable law.

D. The failure of Grantee to enforce any of the terms contained herein shall not be deemed a waiver of any such term nor bar any enforcement rights.

6. Notice. Whenever notice to the Grantee (other than the annual certification) or approval from the Grantee is required, the Party providing such notice or seeking such approval shall identify the Controlled Property by referencing the following information:

County, NYSDEC Site Number, NYSDEC Brownfield Cleanup Agreement, State Assistance Contract or Order Number, and the County tax map number or the Liber and Page or computerized system identification number.

Parties shall address correspondence to:

Site Number: C932162
Office of General Counsel
NYSDEC
625 Broadway
Albany New York 12233-5500

With a copy to:

Site Control Section
Division of Environmental Remediation
NYSDEC

625 Broadway
Albany, NY 12233

All notices and correspondence shall be delivered by hand, by registered mail or by Certified mail and return receipt requested. The Parties may provide for other means of receiving and communicating notices and responses to requests for approval.

7. Recordation. Grantor shall record this instrument, within thirty (30) days of execution of this instrument by the Commissioner or her/his authorized representative in the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

8. Amendment. Any amendment to this Environmental Easement may only be executed by the Commissioner of the New York State Department of Environmental Conservation or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

9. Extinguishment. This Environmental Easement may be extinguished only by a release by the Commissioner of the New York State Department of Environmental Conservation, or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

10. Joint Obligation. If there are two or more parties identified as Grantor herein, the obligations imposed by this instrument upon them shall be joint and several.

IN WITNESS WHEREOF, Grantor has caused this instrument to be signed in its name.

[SIGNATURE PAGE FOLLOWS]

FASHION OUTLETS II LLC
BY: THE MACERICH PARTNERSHIP, L.P., its sole member
BY: THE MACERICH COMPANY, its general partner

By: _____
Print Name: Chet A. Cramin
Title: Senior Vice President Date: 8/21/14
Associate General Counsel

[Fashion Outlets II LLC Acknowledgment continues on following page]

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

CIVIL CODE § 1189

State of California

County of Los Angeles

On 8/21/14 (Date) before me, Lisa Rene Pena (Here Insert Name and Title of the Officer),

personally appeared Chet A. Cramin (Name(s) of Signer(s)),

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

LISA RENE PENA
Commission # 1957263
Notary Public - California
Los Angeles County
My Comm. Expires Nov 17, 2015

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature: _____ (Signature of Notary Public)

Place Notary Seal Above

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

Description of Attached Document

Title or Type of Document: Environmental Easement

Document Date: _____ Number of Pages: _____

Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer(s)

Signer's Name: _____	Signer's Name: _____
☐ Corporate Officer — Title(s): _____	☐ Corporate Officer — Title(s): _____
☐ Individual	☐ Individual
☐ Partner — ☐ Limited ☐ General	☐ Partner — ☐ Limited ☐ General
☐ Attorney in Fact	☐ Attorney in Fact
☐ Trustee	☐ Trustee
☐ Guardian or Conservator	☐ Guardian or Conservator
☐ Other: _____	☐ Other: _____
Signer Is Representing: _____	Signer Is Representing: _____
RIGHT THUMBPRINT OF SIGNER — Top of thumb here	RIGHT THUMBPRINT OF SIGNER — Top of thumb here

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Item #5907

THIS ENVIRONMENTAL EASEMENT IS HEREBY ACCEPTED BY THE PEOPLE OF THE STATE OF NEW YORK, Acting By and Through the Department of Environmental Conservation as Designee of the Commissioner,

By: _____
Robert W. Schick, Director
Division of Environmental Remediation

Grantee's Acknowledgment

STATE OF NEW YORK)
) ss:
COUNTY OF ALBANY)

On the 8th day of October, in the year 2014, before me, the undersigned, personally appeared Robert W. Schick, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his capacity as Designee of the Commissioner of the State of New York Department of Environmental Conservation, and that by his signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

_____
Notary Public - State of New York

David J. Chiusano
Notary Public, State of New York
No. 01CH5032146
Qualified in Schenectady County
Commission Expires August 22, 2018

SCHEDULE "A" PROPERTY DESCRIPTION

All that tract or parcel of land containing 37.207 acres, more or less, situate in the Town of Niagara, County of Niagara, State of New York, and being more particularly bounded and described as follows:

Beginning at a point of intersection of the southeasterly line of Factory Outlet Blvd. a.k.a. Connecting Blvd and/or Third Avenue (80 feet wide) with the northerly line of lands now or formerly of Quaker Development, Inc. said line also being the southerly line of lands of Macerich Niagara, LLC; thence

1. N 34°00'05" E ,along said southeasterly line of Factory Outlet Blvd., a distance of 36.00 feet to a point of intersection with the southerly line of lands now or formerly of the Niagara Falls Elks Lodge No. 346; thence

2. S 89°49'25" E, along the last mentioned southerly line, a distance of 427.53 feet to a point of intersection with the easterly line of said lands; thence

3. N 00°10'35" E, along the last mentioned easterly line a distance of 247.34 feet to the point at the northeasterly corner of said lands; thence the following eight courses through said lands of Macerich Niagara, LLC

4. N 45°59'42" E, a distance of 119.32 feet to a point; thence

5. S 89°48'15" E, a distance of 193.50 feet to a point; thence

6. S 00°11'45" W, a distance of 79.17 feet to a point; thence

7. S 89°59'04" E, a distance of 10.13 feet to a point; thence

8. S 01°54'02" E, a distance of 45.22 feet to a point; thence

9. S 44°48'50" E, a distance of 288.95 feet to a point; thence

10. S 89°48'40" E, a distance of 84.41 feet to a point; thence

11. S 00°11'20" W, a distance of 53.50 feet to a point; thence

12. S 00°10'35" W, a distance of 78.13 feet to a point, said point being the northwesterly corner of lands now or formerly of BG Robinson Stop II LLC, (T.A. Parcel 160.08-3-1.12) ; thence

13. S 00°27'17" W, along the westerly line of said lands of BG Robinson Stop II LLC, and lands of Walmart Real Estate (T.A. Parcel 160.08-3-1-1.112), a distance of 1183.23 feet to a point of intersection with the northerly line of lands of Niagara Mohawk Power Corporation (T.A. Parcel 160.08-1-3); thence

14. N 89°26'01" W, along said northerly line, a distance of 1558.85 feet to a point; thence

15. N 33°30'00" E, along the southeasterly line of lands now of formerly of Opportunities Unlimited (T.A. Parcel 160.07-1-3) and the southeasterly line of lands now of formerly of James E. McCue (T.A. Parcel 160.08-1-4) and lands now or formerly of Christopher Connelly (T.A. Parcel 160.08-1-5), a distance of 785.40 feet to a point; thence

16. N 56°30'00" W, along the northeasterly line of the said lands of Christopher Connelly, a distance of 250.00 feet to a point of intersection with the aforementioned southeasterly right-of-way line of Factory Outlet Boulevard; thence

17. N 33°30'00" E, along said southeasterly right-of-way line, a distance of 211.94 feet to a point of intersection with the southerly line of the aforementioned lands of Quaker Development, Inc.; thence

18. S 89°57'24" E, along said southerly line, a distance of 598.19 feet to a point at the southeasterly corner of said lands; thence

19. N 00°02'36" E, along the easterly line of said lands, a distance of 300.52 feet a point; thence

20. N 89°49'25" W, along the northerly line of said lands, a distance of 399.00 feet to the Point or Place of Beginning.

Subject to any easements or encumbrances of record.

APPENDIX B

Intrusive Activities Summary Report

INTRUSIVE ACTIVITIES SUMMARY REPORT

Electrify America
Installation of Vehicle Charging Stations

FASHION OULET OF NIAGARA FALLS (FONF)
FONF EXPANSION/SABRE PARK SITE
NIAGARA FALLS, NEW YORK

NYSDEC SITE # C932162

Prepared for:
Electrify America
c/o SAI Group
12 Industrial Way
Salem, New Hampshire 03079

September 22, 2022

104 East 25 Street
New York, NY 10010
O: 212-353-8280
F: 212-353-8306

General Information

Project Name	Electrify America - FONF
Project Address	1900 Military Road, Niagara Falls, NY 14304
Job Reference	Z214JMSA02
Date	September 22, 2022

Contact Information

Prepared For:
Electrify America
c/o SAI Group
12 Industrial Way
Salem, NH 03074

Prepared By:
Atlas ATC Engineering, Inc.
104 East 25th Street, 8th Floor
New York, NY 10010
Telephone:212-353-8280
Facsimile: 212-353-8306

Contact Person:	Jed. A. Myers
Telephone:	631-451-0617
Email address:	jed.myers@oneatlas.com
Website:	www.oneatlas.com

Signatures



Jed A. Myers, Ph.D., NYPG
Senior Project Manager



Christopher Tomasello, NYPG
Division Manager

TABLE OF CONTENTS

1.0 INTRODUCTION 1
1.1 Background 1
1.2 Property Location and Description 1
2.0 DESCRIPTION OF WORK 2
3.0 SOIL SCREENING 2
4.0 STOCKPILE METHODS 2
5.0 MATERIALS EXCAVATION 2
6.0 MATERIALS TRANSPORT AND DISPOSAL OFF-SITE 2
7.0 MATERIALS REUSE ON-SITE 3
8.0 FLUIDS MANAGEMENT 3
9.0 COVER SYSTEM RESTORATION 3
10.0 BACKFILL FROM OFF-SITE SOURCES 3
11.0 STORMWATER POLLUTION PREVENTION 3
12.0 CONTINGENCY PLAN 3
13.0 DUST, ORDOR, AND VAPOR CONTROL/MONITORING PLAN 4

FIGURES

Figure 1: Location of Work Zone

APPENDICES:

Appendix A Construction Layout Drawings
Appendix B Daily Field Reports
Appendix C Waste Characterization and Disposal Manifests
Appendix D Sub-base Material Certification
Appendix E Air Monitoring Results

1.0 INTRODUCTION

This Intrusive Activities Summary Report summarizes the installation of electric vehicle (EV) charging stations at the Fashion Outlet of Niagara Falls (FONF) Expansion/Sabre Park BCP Site #C932162 (hereafter referred to as the "Site"). All construction activities were completed in conformance with the New York State Department of Environmental Conservation (NYSDEC) approved Excavation Work Plan (EWP), dated December 1, 2021.

1.1 Background

The Site was remediated in accordance with Brownfield Cleanup Agreement (BCA) Index #C932162-06-13, Site #C932162, which was executed on June 18, 2013. Remedial activities were completed at the Site in November 2014, and a certificate of completion was issued by the NYSDEC in December 2014. A Site Management Plan (SMP) was a required element of the remedial program at the Site, and was prepared by Lagan Engineering, dated November 2014, and revised January 2020 (Site Management Plan, FONF Expansion/Sabre Park BCP, Town of Niagara, New York, NYSDEC BCP Number C932162). This document has been prepared to address the requirements in Appendix A (Excavation Work Plan) of the revised Site Management Plan (SMP), dated January 2020.

1.2 Property Location and Description

The Site is located at 1900 Military Road, Niagara County, Niagara Falls New York 14304. The Site is approximately 47.8 acres and is currently improved with a new 225,000 square-foot expansion including 175,000 square feet of new enclosed gross leasable area to the existing FONF mall, which includes 50 new stores and dedicated public common space, an additional 1,720,000 square feet of asphalt paved parking areas, 225,000 square feet of stormwater detention ponds, and 273,750 square feet of landscaped areas. Also, a new Secure Storage facility has been constructed in the southwest corner of the Site to replace the former Secure Storage facility.

Based on the SMP, there is no grossly contaminated soil in the work area. The soil in the work area is anticipated to be potentially impacted with trivalent chromium, nickel and zinc. To prevent human exposure to remaining impacted soil at the Site, the remedy included the following cover system that was installed on the Site:

- minimum 4-inch thick asphalt cap at parking areas, a concrete cap at building locations and concrete cap at sidewalks; and

- minimum 1-foot thick clean imported topsoil cover at all landscaped areas.

The installation of the EV charging stations required the disturbance of the Site cover system and a EWP was submitted to the NYSDEC on December 17, 2021. The plan was approved by the NYSDEC on February 18, 2022.

2.0 DESCRIPTION OF WORK

On April 4, 2022, a contractor for Electrify America, CNB Contracting Corporation, began Site work for the installation of four EV charging stations and associated electrical equipment in a landscaped area in the northwest parking lot, north of the former Elks' Lodge. The scope of work included excavating a utility trench across the parking lot from an existing utility pole to a transformer that was installed within the landscaped area. Another utility trench was run from the transformer to switchgear and four EV charging dispensers on concrete foundations. See **Figure 1** for the work zone at the Site and **Appendix A** for detailed construction layout drawings.

For the utility work the asphalt cap and topsoil was removed where necessary and the topsoil temporarily stockpiled for final restoration. Any excess material excavated below the cap that could not be reused on-Site, was stockpiled pending final disposal. The asphalt material was disposed of as C&D debris. Daily field reports and photo logs are present in **Appendix B**.

3.0 SOIL SCREENING

During intrusive excavation activities, the soil was field screened by an Atlas geoscientist using visual and olfactory methods. In addition, the soil was field screened for volatile organic compounds (VOCs) using a photoionization detector (PID) instrument. No significantly impacted soil was encountered during excavation activities.

4.0 STOCKPILE METHODS

Material excavated beneath the cap was stockpiled onto two layers of 8-mil plastic sheeting and covered with a minimum 8-mil plastic sheeting that was securely anchored to the stockpile. The stockpile was covered at the end of each work day and inspected daily by the Atlas geoscientist.

5.0 MATERIALS EXCAVATION

An Atlas geoscientist oversaw all invasive work and the soil excavation as describe in Section 2.0. All vehicles entering and exiting the work zone were inspected to prevent off-Site soil tracking.

6.0 MATERIALS TRANSPORT AND DISPOSAL OFF-SITE

On May 9, 2022, Mawhiney Trucking, Inc. of Wilson, New York transported 250.9 tons of excavated soil off-site for proper disposal. The soil was disposed of at Republic Services Niagara Falls Landfill, 5600 Niagara Falls Boulevard, Niagara Falls, New York 14304. A copy of the waste characterization soil analyses and disposal manifest is present in **Appendix C**.

7.0 MATERIALS REUSE ON-SITE

Topsoil, which was part of the existing 1-foot CAP, was removed and stockpiled. Subsequent to the installation of the EV charging stations, this topsoil material was reused on-Site to restore CAP within the remaining landscaped areas as necessary.

8.0 FLUIDS MANAGEMENT

No groundwater was encountered during excavation activities. Therefore, dewatering was not required and no liquids were generated as a result of excavation activities. In addition, no standing water was observed in the work zone resulting from measurable precipitation.

9.0 COVER SYSTEM RESTORATION

After installation of the electric vehicle charging stations the cover system was restored in accordance the approved EWP. The restored cover system consisted of a minimum of 4-inches of asphalt pavement, a new 1-foot thick concrete pad within a portion of the former landscaped area, and 1-foot thick clean topsoil within disturbed landscaped areas. Since the type of cover system changed from that which existed prior to the excavation (i.e., a soil cover is replaced by concrete), this constitutes a modification of the cover element of the remedy and the upper surface of the Remaining Contamination. A figure showing the modified surface will be included in the subsequent Periodic Review Report and in any updates to the SMP.

10.0 BACKFILL FROM OFF-SITE SOURCES

Only virgin crushed stone from the Lafarge Lockport quarry was used as backfill material at the Site. A copy of the material certification is present in **Appendix D**.

11.0 STORMWATER POLLUTION PREVENTION

The contractor implemented Site-specific measures to minimize erosion and sedimentation, and consequently stormwater pollution, during soil excavation activities. The erosion and sediment controls were in general conformance with the requirements presented in New York State Guidelines for Urban Erosion and Sediment Control and the Stormwater Pollution Prevention Plan that can be found in Appendix E of the SMP.

12.0 CONTINGENCY PLAN

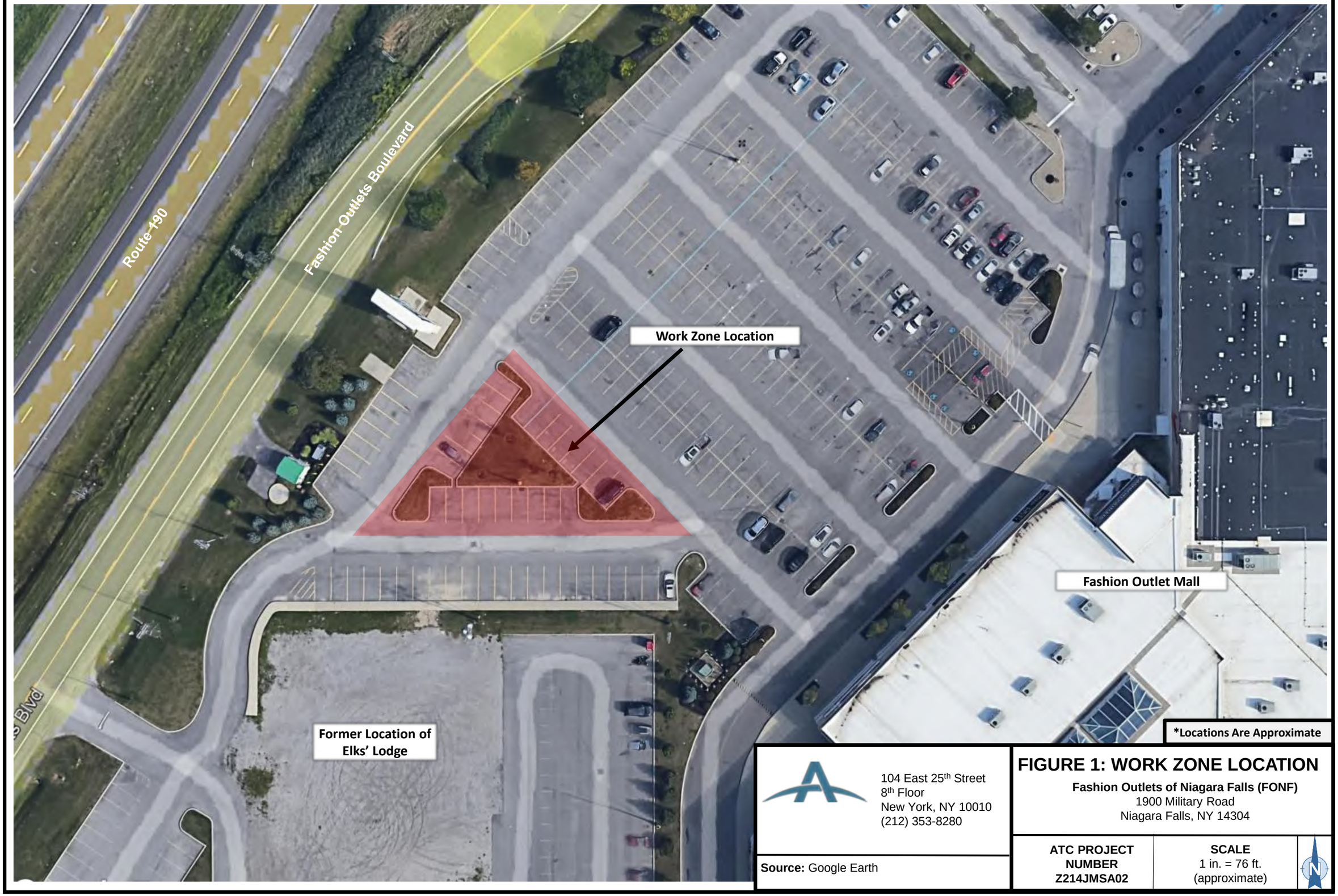
No underground tanks or previously unidentified contaminant sources were found during subsurface excavation activities.

13.0 DUST, ORDOR, AND VAPOR CONTROL/MONITORING PLAN

The dust, odor, and organic vapor control and monitoring was accordance with the New York State Department of Health (NYSDOH) Generic Community Air Monitoring Plan (CAMP) and OSHA standards for construction (29 CFR 1926). Continuous monitoring on the perimeter of the work zones for odor, VOCs, and dust were conducted during all ground intrusive activities and soil handling activities.

Two stationary air-monitoring stations were set up at the work zone perimeter (one upwind and one downwind) at the start of each work day during which intrusive Site work was being conducted. Each station included a Photoionization Detector (PID) and a DustTrak II aerosol monitor. In addition, a portable PID was used to monitor the work zone and for periodic monitoring for VOCs during activities such as soil stockpiling. Minor exceedances of the particulate action levels were identified on April 4th and April 15th. The exceedance on April 15th was likely to do the high winds present (60 mph winds) on that day, and on both days the exceedances rapidly decreased to below action levels. No PID exceedances were identified in the field; however, due to a software malfunction the 15-minute average PID data was not available to download from the remote server. The results from the roving PID meter did not exceed 1 ppmv within the work zone during intrusive activities at the Site. The air monitoring results are present in **Appendix E**.

FIGURES



104 East 25th Street
8th Floor
New York, NY 10010
(212) 353-8280

Source: Google Earth

FIGURE 1: WORK ZONE LOCATION

Fashion Outlets of Niagara Falls (FONF)
1900 Military Road
Niagara Falls, NY 14304

ATC PROJECT NUMBER	SCALE
Z214JMSA02	1 in. = 76 ft. (approximate)

APPENDIX A

Construction Layout Drawings

PROJECT INFORMATION

ELECTRIC VEHICLE CHARGING STATIONS

FASHION OUTLETS OF NIAGARA FALLS

EA PROJECT #: 110072
SAI PROJECT #: NY-275-21001
1900 MILITARY ROAD, NIAGARA FALLS, NY 14304

SITE INFORMATION

SITE NAME:	FASHION OUTLETS OF NIAGARA FALLS
SAI PROJECT NUMBER:	NY-275-21001
SITE ADDRESS:	1900 MILITARY ROAD NIAGARA FALLS, NY 14304
JURISDICTION:	TOWN OF NIAGARA
ZONING	B-1, GENERAL COMMERCIAL DISTRICT
PARCEL ID:	145-020-0001-015-000
SITE COORDINATES:	N43° 05' 51.20" N43.097556° (NAD83) W78° 58' 56.42" W78.982339° (NAD83)
GROUND ELEVATION:	574'± (NAVD88)
PROPERTY OWNER NAME:	MACERICH NIAGARA LLC
PROPERTY OWNER ADDRESS:	401 WILSHIRE BOULEVARD, SUITE 700 SANTA MONICA, CA 90401
EQUIPMENT SUPPLIER:	ELECTRIFY AMERICA 2003 EDMUND HALLEY DRIVE, SUITE 200 RESTON, VIRGINIA 20191
POWER COMPANY:	NATIONAL GRID DAVE STEWARD O: (716) 831-7597 David.Stewart@nationalgrid.com
PROJECT MANAGER:	SAI 12 INDUSTRIAL WAY SALEM, NEW HAMPSHIRE 03079
ENGINEER CONTACT:	Daniel Hamm, PE 978.557.5553 daniel.hamm@hudsondesigngroupllc.com NY LICENSE NO. 082152-1

CODE REVIEW

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THE LATEST EDITIONS OF THE FOLLOWING CODES:

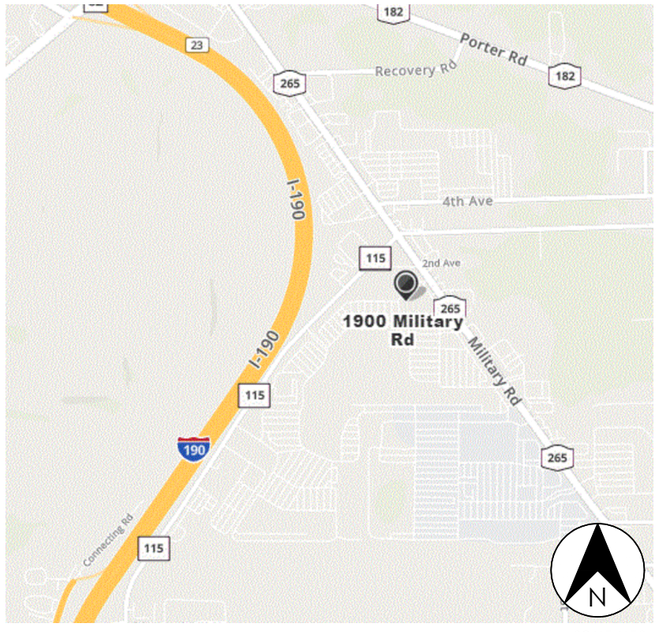
BUILDING CODE:	INTERNATIONAL BUILDING CODE 2018
ELECTRICAL CODE:	NATIONAL ELECTRICAL CODE 2020 (NFPA 70)
FIRE SAFETY CODE:	INTERNATIONAL FIRE CODE 2021
USE GROUP:	U (UTILITY)
CONSTRUCTION TYPE:	IIB

VICINITY MAP



SCALE: N.T.S.

AERIAL MAP



SCALE: N.T.S.

PROJECT DESCRIPTION

1. INSTALL (1) UTILITY TRANSFORMER
2. INSTALL (1) SWITCHGEAR ASSEMBLY
3. INSTALL (6) SIGNET POWER UNITS
4. INSTALL (4) SIGNET EV CHARGING DISPENSERS
5. INSTALL (1) LED LIGHT

DRAWING INDEX

SHEET NO.	SHEET TITLE
CS-1	COVER SHEET
GN-1	GENERAL NOTES
GN-2	GENERAL NOTES
GN-3	GENERAL NOTES
A-1	OVERALL SITE PLAN
A-2	DEMOLITION PLAN
A-3	PROPOSED LAYOUT
A-4	EQUIPMENT PAD LAYOUT
A-5	ELEVATION
A-6	STAGING PLAN
D-1	CONSTRUCTION DETAILS
D-2	CONSTRUCTION DETAILS
D-3	CONSTRUCTION DETAILS
D-4	CONSTRUCTION DETAILS
E-1	UTILITY PLAN
E-2	ELECTRICAL PLAN
E-3	ONE-LINE DIAGRAM
E-4	ELECTRICAL DETAILS
E-5	SWITCHGEAR
E-6	GROUNDING DETAILS
E-7	UTILITY DETAILS
E-8	UTILITY DETAILS (2)

CONTRACTOR NOTE

1. CONTRACTOR IS RESPONSIBLE FOR ANY NECESSARY REPAIRS OR REPLACEMENT DUE TO NEW CONSTRUCTION, OF EXISTING ELECTRICAL, PAVING, PVC CONDUITS, AND LIGHTS.

FLOOD HAZARD AREA NOTE

1. THIS SITE IS LOCATED IN FLOOD ZONE "X" PER FEMA FLOOD MAP FIRM 36063C0326E EFFECTIVE DATE SEPTEMBER 17, 2010. THE SUBJECT PROPERTY IS NOT IN A SPECIAL FLOOD HAZARD AREA.

CALL BEFORE YOU DIG

Dig Safely. New York
Call 811 before you dig

CALL TOLL FREE 1-800-962-7962 OR DIAL 811

UNDERGROUND SERVICE ALERT

DO NOT SCALE DRAWINGS

THESE DRAWINGS ARE FORMATTED TO BE FULL SIZE AT 22"x34". CONTRACTOR SHALL VERIFY ALL PLANS & EXISTING DIMENSIONS & CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

REFERENCE DRAWING

SURVEY

electrify america

ELECTRIFY AMERICA, LLC
2003 EDMUND HALLEY DRIVE
SUITE 200
RESTON, VA 20191

SAI
12 INDUSTRIAL WAY
SALEM, NEW HAMPSHIRE 03079

HUDSON Design Group LLC
45 BEECHWOOD DRIVE
N. ANDOVER, MA 01845
TEL: (978) 557-5553
FAX: (978) 336-5586

STATE OF NEW YORK
DANIEL P HAMM
082152-1
LICENSED PROFESSIONAL ENGINEER

NY-275-21001
FASHION OUTLETS OF NIAGARA FALLS

1900 MILITARY ROAD
NIAGARA FALLS, NY 14304

SHEET TITLE

COVER SHEET

REV	DATE	DESCRIPTION
2	03-09-22	SS (CD100)
1	08-23-21	SS (CD100)
1	07-22-21	PRELIMINARY (CD90)
A	07-08-21	PRELIMINARY (CD50)

PROJECT NUMBER:	110072
DRAWN BY:	HC
CHECKED BY:	DPH

CS-1

GENERAL CONSTRUCTION NOTES

FOR THE PURPOSE OF CONSTRUCTION DRAWINGS, THE FOLLOWING DEFINITIONS SHALL APPLY

GENERAL CONTRACTOR: SAI CONSTRUCTION

OWNER: ELECTRIFY AMERICA

1. ALL SITE WORK SHALL BE COMPLETED AS INDICATED ON THE DRAWINGS.
2. THE GENERAL CONTRACTOR SHALL VISIT THE SITE AND SHALL FAMILIARIZE THEMSELVES WITH ALL CONDITIONS AFFECTING THE PROPOSED WORK AND SHALL MAKE PROVISIONS. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING THEMSELVES WITH ALL CONTRACT DOCUMENTS, FIELD CONDITIONS, DIMENSIONS, AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.
3. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. GENERAL CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF WORK.
4. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES, AND APPLICABLE REGULATIONS.
5. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
6. PLANS ARE NOT TO BE SCALED. THESE PLANS ARE INTENDED TO BE A DIAGRAMMATIC OUTLINE ONLY UNLESS OTHERWISE NOTED. DIMENSIONS SHOWN ARE TO FINISH SURFACES UNLESS OTHERWISE NOTED. SPACING BETWEEN EQUIPMENT IS THE MINIMUM REQUIRED CLEARANCE. THEREFORE, IT IS CRITICAL TO FIELD VERIFY DIMENSIONS, SHOULD THERE BE ANY QUESTIONS REGARDING THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A CLARIFICATION FROM THE ENGINEER PRIOR TO PROCEEDING WITH THE WORK. DETAILS ARE INTENDED TO SHOW DESIGN INTENT. MODIFICATIONS MAY BE REQUIRED TO SUIT JOB DIMENSIONS OR CONDITIONS AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF WORK AND PREPARED BY THE ENGINEER PRIOR TO PROCEEDING WITH WORK.
7. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
8. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION SPACE FOR APPROVAL BY THE ENGINEER PRIOR TO PROCEEDING.
9. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF WORK AREA, ADJACENT AREAS AND BUILDING OCCUPANTS THAT ARE LIKELY TO BE AFFECTED BY THE WORK UNDER THIS CONTRACT. WORK SHALL CONFORM TO ALL OSHA REQUIREMENTS AND THE LOCAL JURISDICTION.
10. THE GENERAL CONTRACTOR SHALL COORDINATE WORK AND SCHEDULE WORK ACTIVITIES WITH OTHER DISCIPLINES.
11. CONSTRUCTION SHALL BE DONE IN A WORKMANLIKE MANNER BY COMPETENT EXPERIENCED WORKMAN IN ACCORDANCE WITH APPLICABLE CODES AND THE BEST ACCEPTED PRACTICE.
12. WORK PREVIOUSLY COMPLETED IS REPRESENTED BY LIGHT SHADED LINES AND NOTES. THE SCOPE OF WORK FOR THIS PROJECT IS REPRESENTED BY DARK SHADED LINES AND NOTES. CONTRACTOR SHALL NOTIFY THE GENERAL CONTRACTOR OF ANY EXISTING CONDITIONS THAT DEVIATE FROM THE DRAWINGS PRIOR TO BEGINNING CONSTRUCTION.
13. THE CONTRACTOR SHALL PROVIDE WRITTEN NOTICE TO THE CONSTRUCTION MANAGER 48 HOURS PRIOR TO COMMENCEMENT OF WORK.
14. THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.
15. THE CONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.
16. THE GENERAL CONTRACTOR SHALL COORDINATE AND MAINTAIN ACCESS FOR ALL TRADES AND CONTRACTORS TO THE SITE AND/OR BUILDING.
17. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR SECURITY OF THE SITE FOR THE DURATION OF CONSTRUCTION UNTIL JOB COMPLETION.
18. THE GENERAL CONTRACTOR SHALL MAINTAIN IN GOOD CONDITION ONE COMPLETE SET OF PLANS WITH ALL REVISIONS, ADDENDA, AND CHANGE ORDERS ON THE PREMISES AT ALL TIMES.
19. THE CONTRACTOR SHALL PROVIDE PORTABLE FIRE EXTINGUISHERS WITH A RATING OF NOT LESS THAN 2–A:10–B:C AND SHALL BE WITHIN 25 FEET OF TRAVEL DISTANCE TO ALL PORTIONS OF WHERE THE WORK IS BEING COMPLETED DURING CONSTRUCTION.
20. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY THE ENGINEER. EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. THE CONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS SHALL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION, B) CONFINED SPACE, C) ELECTRICAL SAFETY, AND D) TRENCHING & EXCAVATION.
22. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED, CAPPED, PLUGGED OR OTHERWISE DISCONNECTED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, AS DIRECTED BY THE ENGINEER, AND SUBJECT TO THE APPROVAL OF THE OWNER AND/OR LOCAL UTILITIES.
23. THE AREAS OF THE OWNER'S PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE, AND STABILIZED TO PREVENT EROSION.
24. CONTRACTOR SHALL MINIMIZE DISTURBANCE TO THE EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE FEDERAL AND LOCAL JURISDICTION FOR EROSION AND SEDIMENT CONTROL.
25. NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.
26. THE SUBGRADE SHALL BE BROUGHT TO A SMOOTH UNIFORM GRADE AND COMPACTED TO 95 PERCENT STANDARD PROCTOR DENSITY UNDER PAVEMENT AND STRUCTURES AND 80 PERCENT STANDARD PROCTOR DENSITY IN OPEN SPACE. ALL TRENCHES IN PUBLIC RIGHT OF WAY SHALL BE BACKFILLED WITH FLOWABLE FILL OR OTHER MATERIAL PRE–APPROVED BY THE LOCAL JURISDICTION.
27. ALL NECESSARY RUBBISH, STUMPS, DEBRIS, STICKS, STONES, AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN A LAWFUL MANNER.
28. ALL BROCHURES, OPERATING AND MAINTENANCE MANUALS, CATALOGS, SHOP DRAWINGS, AND OTHER DOCUMENTS SHALL BE TURNED OVER TO THE GENERAL CONTRACTOR AT COMPLETION OF CONSTRUCTION AND PRIOR TO PAYMENT.
29. THE CONTRACTOR SHALL SUBMIT A COMPLETE SET OF AS–BUILT REDLINES TO THE GENERAL CONTRACTOR UPON COMPLETION OF PROJECT AND PRIOR TO FINAL PAYMENT.
30. THE CONTRACTOR SHALL LEAVE PREMISES IN A CLEAN CONDITION.
31. THE PROPOSED FACILITY WILL BE UNMANNED AND DOES NOT REQUIRE POTABLE WATER OR SEWER SERVICE, AND IS NOT FOR HUMAN HABITATION (NO HANDICAP ACCESS REQUIRED).
32. NO OUTDOOR STORAGE OR SOLID WASTE CONTAINERS ARE PROPOSED.

GENERAL CONSTRUCTION NOTES CONTINUED

33. CONTRACTORS SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS REQUIRED FOR CONSTRUCTION. IF CONTRACTOR CANNOT OBTAIN A PERMIT, THEY MUST NOTIFY THE GENERAL CONTRACTOR IMMEDIATELY.
34. THE CONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE ON A DAILY BASIS.
35. INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FROM SITE VISITS AND/OR DRAWINGS PROVIDED BY THE SITE OWNER. CONTRACTORS SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.

ELECTRICAL NOTES

1. THE ELECTRICAL CONTRACTOR SHALL SUPPLY AND INSTALL ANY/ALL ELECTRICAL WORK INDICATED. ANY/ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH DRAWINGS AND ANY/ALL APPLICABLE SPECIFICATIONS. IF ANY PROBLEMS ARE ENCOUNTERED BY COMPLYING WITH THESE REQUIREMENTS, CONTRACTOR SHALL NOTIFY 'CONSTRUCTION MANAGER' AS SOON AS POSSIBLE, AFTER THE DISCOVERY OF THE PROBLEMS, AND SHALL NOT PROCEED WITH THAT PORTION OF WORK, UNTIL THE 'CONSTRUCTION MANAGER' HAS DIRECTED THE CORRECTIVE ACTIONS TO BE TAKEN.
2. THE ELECTRICAL CONTRACTOR SHALL VISIT THE JOB SITE AND FAMILIARIZE THEMSELVES WITH ANY/ALL CONDITIONS AFFECTING ELECTRICAL AND COMMUNICATION INSTALLATION AND MAKE PROVISIONS AS TO THE COST THEREOF. THE CONDITION OF EXISTING ELECTRICAL EQUIP., LIGHT FIXTURES, ETC., THAT ARE PART OF THE FINAL SYSTEM, SHALL BE VERIFIED BY THE CONTRACTOR, PRIOR TO THE SUBMITTAL OF HIS BID. FAILURE TO COMPLY WITH THIS PARAGRAPH WILL IN NO WAY RELIEVE CONTRACTOR OF PERFORMING ALL WORK NECESSARY FOR A COMPLETE AND WORKING SYSTEM. 3. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF THE NEC AND ALL CODES AND LOCAL ORDINANCES OF THE LOCAL POWER COMPANIES HAVING JURISDICTION AND SHALL INCLUDE BUT NOT BE LIMITED TO:

   A. UL – UNDERWRITERS LABORATORIES
   B. NEC – NATIONAL ELECTRICAL CODE
   C. NEMA – NATIONAL ELECTRICAL MANUFACTURERS ASSOC.
   D. OSHA – OCCUPATIONAL SAFETY AND HEALTH ACT
   E. SBC – STANDARD BUILDING CODE
   F. NFPA – NATIONAL FIRE PROTECTION ASSOCIATION
4. DO NOT SCALE ELECTRICAL DRAWINGS, REFER TO SITE PLANS AND ELEVATIONS FOR EXACT LOCATIONS OF ALL EQUIPMENT, BUT CONFIRM WITH 'CONSTRUCTION MANAGER' ANY SIZES AND LOCATIONS WHEN NEEDED.
5. EXISTING SERVICES: THE CONTRACTOR SHALL NOT INTERRUPT EXISTING SERVICES WITHOUT WRITTEN PERMISSION OF THE OWNER.
6. THE CONTRACTOR SHALL PAY FOR ANY/ALL PERMITS, FEES, INSPECTIONS AND TESTING. THE CONTRACTOR IS TO OBTAIN PERMITS AND APPROVED SUBMITTALS PRIOR TO THE WORK BEGINNING OR ORDERING THE EQUIPMENT.
7. THE TERM "PROVIDE" USED IN CONSTRUCTION DOCUMENTS AND SPECIFICATIONS, INDICATES THAT THE CONTRACTOR SHALL FURNISH AND INSTALL.
8. THE CONTRACTOR SHALL CONFIRM WITH LOCAL UTILITY COMPANY ANY/ALL REQUIREMENTS SUCH AS THE: LUG SIZE RESTRICTIONS, CONDUIT ENTRY, SIZE OF TRANSFORMERS, SCHEDULED DOWNTIME FOR THE OWNERS' CONFIRMATION, ETC. ANY/ALL CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE CONSTRUCTION MANAGER, PRIOR TO BEGINNING ANY WORK.
9. CONDUCTORS: CONTRACTOR SHALL USE 98% CONDUCTIVITY COPPER OR ALUMINUM WITH TYPE (THWN–2) INSULATION, 600 VOLT, COLOR CODED UNLESS SPECIFIED DIFFERENTLY ON DRAWINGS.
10. ALL (THWN–2) WIRING INSTALLATIONS TO FOLLOW MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS.
11. OUTLET BOXES SHALL BE PRESSED STEEL IN DRY LOCATIONS, CAST ALLOY WITH THREADED HUBS IN WET/DAMP LOCATIONS AND SPECIAL ENCLOSURES FOR OTHER CLASSIFIED AREAS.
12. IT IS NOT THE INTENT OF THESE PLANS TO SHOW EVERY MINOR DETAIL OF THE CONSTRUCTION. CONTRACTOR IS EXPECTED TO FURNISH AND INSTALL ALL ITEMS FOR A COMPLETE ELECTRICAL SYSTEM AND PROVIDE ALL REQUIREMENTS FOR THE EQUIPMENT TO BE PLACED IN PROPER WORKING ORDER. CONTRACTOR IS TO PROVIDE ALL ELECTRICAL EQUIPMENT UNLESS OTHERWISE DIRECTED.
13. ALL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICAL CONTRACTOR IN A FIRST CLASS, WORKMANLIKE MANNER. THE COMPLETED SYSTEM SHALL BE FULLY OPERATIONAL AND SUBJECT TO REGULATORY INSPECTION AND APPROVAL BY CONSTRUCTION MANAGER.
14. ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCE WITH THE PROGRESS OF CONSTRUCTION.
15. CONTRACTOR SHALL GUARANTEE ANY/ALL MATERIALS AND WORK FREE FROM DEFECTS FOR A PERIOD OF NOT LESS THAN ONE YEAR FROM DATE OF ACCEPTANCE.
16. THE CORRECTION OF ANY DEFECTS SHALL BE COMPLETED WITHOUT ANY ADDITIONAL CHARGE AND SHALL INCLUDE THE REPLACEMENT OR THE REPAIR OF ANY OTHER PHASE OF THE INSTALLATION, WHICH MAY HAVE BEEN DAMAGED THEREIN.
17. ADEQUATE AND REQUIRED LIABILITY INSURANCE SHALL BE PROVIDED FOR PROTECTION AGAINST PUBLIC LOSS AND ANY/ALL PROPERTY DAMAGE FOR THE DURATION OF WORK.
18. PROVIDE AND INSTALL CONDUIT, CONDUCTORS, PULL WIRES, BOXES, COVER PLATES AND DEVICES FOR ALL OUTLETS AS INDICATED.
19. TRENCHING AND BACKFILL: THE CONTRACTOR SHALL PROVIDE FOR ALL UNDERGROUND INSTALLED CONDUIT AND/OR CABLES INCLUDING EXCAVATION AND BACKFILLING AND COMPACTION. REFER TO GENERAL SITE WORK NOTES.
20. MATERIALS, PRODUCTS AND EQUIPMENT, INCLUDING ALL COMPONENTS THEREOF, SHALL BE NEW AND SHALL APPEAR ON THE LIST OF U.L. APPROVED ITEMS AND SHALL MEET OR EXCEED THE REQUIREMENTS OF THE NEC, NEMA AND IEEE.
21. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OR MANUFACTURES CATALOG INFORMATION OF ANY/ALL LIGHTING FIXTURES, SWITCHES AND ALL OTHER ELECTRICAL ITEMS FOR APPROVAL BY THE CONSTRUCTION MANAGER PRIOR TO INSTALLATION.
22. ANY CUTTING OR PATCHING DEEMED NECESSARY FOR ELECTRICAL WORK IS THE ELECTRICAL CONTRACTORS RESPONSIBILITY AND SHALL BE INCLUDED IN THE COST FOR WORK AND PERFORMED TO THE SATISFACTION OF THE 'CONSTRUCTION MANAGER' UPON FINAL ACCEPTANCE.
23. THE ELECTRICAL CONTRACTOR SHALL LABEL ALL PANELS WITH ONLY TYPEWRITTEN DIRECTORIES.
24. DISCONNECT SWITCHES SHALL BE H.P. RATED HEAVY–DUTY, QUICK–MAKE AND QUICK–BREAK ENCLOSURES, AS REQUIRED BY EXPOSURE TYPE.
25. ALL CONNECTIONS EXCEPT THE EV CHARGE CABLE TERMINATION IN THE CHARGE POST SHALL BE MADE WITH A PROTECTIVE COATING OF AN ANTI–OXIDE COMPOUND SUCH AS "NOALOX" BY IDEAL INDUSTRIAL INC., COAT ALL WIRE SURFACES BEFORE CONNECTING. EXPOSED ALUMINUM & COPPER SURFACES, INCLUDING GROUND BARS, SHALL BE TREATED – NO SUBSTITUTIONS.
26. ALL EXTERIOR AND INTERIOR ABOVE GROUND CONDUIT SHALL BE RIGID UNLESS SPECIFIED OTHERWISE. ALL BURIED CONDUITS SHALL BE SCH 40 PVC UNLESS SPECIFIED OTHERWISE.

ELECTRICAL NOTES CONTINUED

27. RACEWAYS: CONDUIT SHALL BE SCHEDULE 40 PVC, MEETING OR EXCEEDING NEMA TC2 – 1990. THE CONTRACTOR SHALL PLUG AND CAP EACH END OF SPARE AND EMPTY CONDUITS AND PROVIDE TWO SEPARATE PULL STRINGS – 200 LBS TEST POLYETHYLENE CORD. ALL CONDUIT BENDS SHALL BE A MINIMUM OF 3 FT. RADIUS. RGS CONDUITS WHEN SPECIFIED, SHALL MEET UL–6 FOR GALVANIZED STEEL. ALL FITTINGS SHALL BE SUITABLE FOR USE WITH THREADED RIGID CONDUIT. COAT ALL THREADS WITH 'BRITE ZINC' OR 'GOLD GALV'.
28. SUPPORT OF ALL ELECTRICAL WORK SHALL BE AS REQUIRED BY NEC.
29. CONNECTORS FOR POWER CONDUCTORS: CONTRACTOR SHALL USE PRESSURE TYPE INSULATED TWIST–ON CONNECTORS FOR NO. 10 AWG AND SMALLER. USE SOLDERLESS MECHANICAL TERMINAL LUGS FOR NO. 8 AWG AND LARGER.
30. THE CONTRACTOR SHALL PLACE WARNING TAPE AT A DEPTH OF 12" BELOW GROUND AND DIRECTLY ABOVE ELECTRICAL SERVICE CONDUITS. CAUTION TAPE TO READ "CAUTION BURIED ELECTRIC".
31. WHEN DIRECTIONAL BORING IS REQUIRED, CONTRACTOR SHALL INSTALL A LOOSE TONING WIRE WITHIN INSTALLED CONDUIT TO ALLOW FOR IDENTIFICATION OF UNDERGROUND CONDUITS.
32. ALL BOLTS SHALL BE STAINLESS STEEL.
33. ALL MATERIALS AND EQUIPMENT SUPPLIED AND INSTALLED BY THE CONTRACTOR SHOULD BE NEW AND UNUSED.

GENERAL SITE NOTES

PART 1 – GENERAL

CLEARING, GRUBBING, STRIPPING, EROSION CONTROL, SURVEY, LAYOUT, SUBGRADE PREPARATION AND FINISH GRADING AS REQUIRED TO COMPLETE THE PROPOSED WORK SHOWN IN THESE PLANS.

1. REFERENCES:
   A. LOCAL DOT TRANPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION)
   B. ASTM (AMERICAN SOCIETY FOR TESTING AND MATERIALS).
   C. OSHA (OCCUPATION SAFETY AND HEALTH ADMINISTRATION).
2. INSPECTION AND TESTING:
   A. GENERAL CONTRACTOR SHALL PERFORM ALL WORK IN CONFORMANCE WITH THE PLANS AND SPECIFICATIONS. PERFORM INSPECTIONS BEFORE CONCEALING WORK WITH FOLLOW–ON ACTIVITIES (BACKFILL, CONCRETE POUR, ETC).
3. SITE MAINTENANCE AND PROTECTION:
   A. PROVIDE ALL NECESSARY JOB SITE MAINTENANCE FROM COMMENCEMENT OF WORK UNTIL COMPLETION OF THE CONTRACT.

   B. AVOID DAMAGE TO THE SITE AND TO EXISTING FACILITIES, STRUCTURES, TREES, AND SHRUBS DESIGNATED TO REMAIN. TAKE PROTECTIVE MEASURES TO PREVENT EXISTING FACILITIES THAT ARE NOT DESIGNATED FOR REMOVAL FROM BEING DAMAGED BY THE WORK.

   C. KEEP SITE FREE OF ALL PONDING WATER.

   D. PROVIDE EROSION CONTROL MEASURES IN ACCORDANCE WITH STATE DOT, LOCAL PERMITTING AGENCY AND EPA REQUIREMENTS.

   E. PROVIDE AND MAINTAIN ALL TEMPORARY FENCING, BARRICADES, WARNING SIGNALS AND SIMILAR DEVICES NECESSARY TO PROTECT AGAINST THEFT FROM PROPERTY DURING THE ENTIRE PERIOD OF CONSTRUCTION. REMOVE ALL SUCH DEVICES UPON COMPLETION OF THE WORK.

   F. EXISTING UTILITIES: DO NOT INTERRUPT EXISTING UTILITIES SERVING FACILITIES OCCUPIED BY THE OWNER OR OTHERS, EXCEPT WHEN PERMITTED IN WRITING BY THE CONSTRUCTION MANAGER AND THEN ONLY AFTER ACCEPTABLE TEMPORARY UTILITY SERVICES HAVE BEEN PROVIDED.

   G. PROVIDE A MINIMUM 48–HOUR NOTICE TO THE CONSTRUCTION MANAGER AND RECEIVE WRITTEN NOTICE TO PROCEED BEFORE INTERRUPTING ANY UTILITY SERVICE.

   H. SOD PLANTED IN THE FALL MUST ESTABLISH ITS ROOTS BEFORE THE FIRST WINTER FROST. DETERMINE WHEN THE FIRST FROST USUALLY OCCURS, AND PLANT THE SOD NO LATER THAN ONE MONTH BEFORE THE FIRST FROST. IF THE CONSTRUCTION IS FINISHED LATER THAN ONE MONTH BEFORE THE FIRST FROST, USE STRAW UNTIL SOD CAN BE INSTALLED.

PART 2 – PRODUCTS

1. SUITABLE MATERIAL – SUITABLE MATERIAL ARE TO BE USED FOR GRADING AND BACKFILL. SUITABLE MATERIALS ARE ON SITE SOILS REMOVED FROM EXCAVATIONS THAT EXCLUDE FROZEN SOIL, ROOTS OR ORGANIC MATERIAL, DEBRIS, TRASH, REFUSE, OR PARTICLES SIZE GREATER THAN 3–INCH. SUITABLE SOILS HAVE MOISTURE CONTENTS THAT ALLOW THEM TO BE COMPACTED TO THE SAME DENSITY AS THE NATIVE SOILS.
2. UNSUITABLE MATERIAL – SOILS THAT ARE FROZEN, CONTAIN ROOTS OR ORGANIC MATERIAL, DEBRIS, TRASH, REFUSE, OR PARTICLES SIZES GREATER THAN 3–INCH. SOILS THAT ARE TOO WET OR TOO DRY TO BE COMPACTED TO THE SAME DENSITY AS THE NATIVE SOILS ARE UNSUITABLE.
3. GRANULAR BACKFILL – SHALL MEET THE FOLLOWING GRADATION

SIEVE SIZE	TOTAL PERCENT PASSING
1 1/2 INCH (37.5 MM)	100
NO. 4 (4.75 MM)	30 TO 60
NO 200 (0.075 MM)	3 TO 15

4. GRANULAR BEDDING – WELL–GRADED SAND MEETING THE GRADATION REQUIREMENT OF ASTM C 33 FINE AGGREGATE.
5. CONTROLLED LOW STRENGTH MATERIAL (CLSM)– A SELF LEVELING AND SELF COMPACTING CEMENTITIOUS MATERIAL COMPOSED OF SAND, COARSE AGGREGATE, CEMENT, FLY ASH, WATER AND ADMIXTURES. CLSM SHALL BE EXCAVATABLE AND SHALL HAVE A DESIGNED UNCONFINED COMPRESSIVE STRENGTH OF BETWEEN 50 TO 100 PSI.
6. BACKFILL – PRODUCTS MEETING THE REQUIREMENTS OF SUITABLE MATERIAL, GRANULAR BEDDING, GRANULAR BACKFILL OR CLSM.
7. TOPSOIL – SOIL WITH AN ORGANIC CONTENT SUFFICIENT TO ALLOW VEGETATIVE GROWTH.

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LICENSED PROFESSIONAL ENGINEER

NY-22-2-1006
FASHION OUTLETS OF NIAGARA FALLS

1900 MILITARY ROAD
NIAGARA FALLS, NY 14304

SHEET TITLE

GENERAL NOTES

REV	DATE	DESCRIPTION
2	03-09-22	SS (CD100)
1	08-23-21	SS (CD100)
1	07-22-21	PRELIMINARY (CD90)
A	07-08-21	PRELIMINARY (CD50)

PROJECT NUMBER:	110072
DRAWN BY:	HC
CHECKED BY:	DPH

GN-1

GENERAL SITE WORK NOTES CONT.

PART 3 – EXECUTION

1. GENERAL:

A. BEFORE STARTING GENERAL SITE PREPARATION ACTIVITIES, INSTALL EROSION AND SEDIMENT CONTROL MEASURES. THE WORK AREA SHALL BE CONSTRUCTED AND MAINTAINED IN SUCH CONDITION THAT IN THE EVENT OF RAIN THE SITE WILL BE DRAINED AT ALL TIMES.

B. BEFORE ALL SURVEY, LAYOUT, STAKING, AND MARKING, ESTABLISH AND MAINTAIN ALL LINES, GRADES, ELEVATIONS AND BENCHMARKS NEEDED FOR EXECUTION OF THE WORK. CONDUCT UTILITY LOCATE IN ACCORDANCE WITH THE ONE–CALL NOTIFICATION

C. CLEAR AND GRUB THE AREA WITHIN THE LIMITS OF THE SITE. REMOVE TREES, BRUSH, STUMPS, RUBBISH AND OTHER DEBRIS AND VEGETATION RESTING ON OR PROTRUDING THROUGH THE SURFACE OF THE SITE AREA TO BE CLEARED.

D. REMOVE THE FOLLOWING MATERIALS TO A DEPTH OF NO LESS THAN 12 INCHES BELOW THE ORIGINAL GROUND SURFACE: ROOTS, STUMPS, AND OTHER DEBRIS, BRUSH, AND REFUSE EMBEDDED IN OR PROTRUDING THROUGH THE GROUND SURFACE, RAKE, DISK OR PLOW THE AREA TO A DEPTH OF NO LESS THAN 6 INCHES, AND REMOVE TO A DEPTH OF 12 INCHES ALL ROOTS AND OTHER DEBRIS THEREBY EXPOSED.

E. REMOVE TOPSOIL MATERIAL COMPLETELY FROM THE SURFACE UNTIL THE SOIL NO LONGER MEETS THE DEFINITION OF TOPSOIL. AVOID MIXING TOPSOIL WITH SUBSOIL OR OTHER UNDESIRABLE MATERIALS. SUFFICIENT TOPSOIL MAY BE STOCKPILED ON SITE FOR USE DURING FINAL SITE GRADING.

F. EXCEPT WHERE EXCAVATION TO GREATER DEPTH IS INDICATED, FILL DEPRESSIONS RESULTING FROM CLEARING, GRUBBING AND DEMOLITION WORK COMPLETELY WITH SUITABLE MATERIAL.

G. REMOVE FROM THE SITE AND DISPOSE IN AN AUTHORIZED LANDFILL ALL DEBRIS RESULTING FROM CLEARING AND GRUBBING OPERATIONS. BURNING WILL NOT BE PERMITTED.

H. PRIOR TO EXCAVATING, THOROUGHLY EXAMINE THE AREA TO BE EXCAVATED AND/OR TRENCHED TO VERIFY THE LOCATIONS OF FEATURES INDICATED ON THE DRAWINGS AND TO ASCERTAIN THE EXISTENCE AND LOCATION OF ANY STRUCTURE, UNDERGROUND STRUCTURE, OR OTHER ITEM NOT SHOWN THAT MIGHT INTERFERE WITH THE PROPOSED CONSTRUCTION. NOTIFY THE CONSTRUCTION MANAGER OF ANY OBSTRUCTIONS THAT WILL PREVENT ACCOMPLISHMENT OF THE WORK AS INDICATED ON THE DRAWINGS.

I. SEPARATE AND STOCK PILE ALL EXCAVATED MATERIALS SUITABLE FOR BACKFILL. ALL EXCESS EXCAVATED AND UNSUITABLE MATERIALS SHALL BE DISPOSED OF OFF–SITE IN A LEGAL MANNER.

J. DURING EXCAVATION, THE CONTRACTOR SHALL PROVIDE SHORING, SHEETING, AND BRACING AS REQUIRED TO PREVENT CAVING OR SLOUGHING OF EXCAVATION.

2. BACKFILL:

A. AS SOON AS PRACTICAL, AFTER COMPLETING CONSTRUCTION OF THE RELATED STRUCTURE, INCLUDING EXPIRATION OF THE SPECIFIED MINIMUM CURING PERIOD FOR CAST–IN–PLACE CONCRETE, BACKFILL THE EXCAVATION WITH APPROVED MATERIAL TO RESTORE THE REQUIRED FINISHED GRADE.

B. PRIOR TO PLACING BACKFILL AROUND STRUCTURES, ALL FORMS SHALL BE REMOVED AND THE EXCAVATION CLEANED OF ALL TRASH, DEBRIS, AND UNSUITABLE MATERIALS.

C. DO NOT PLACE FROZEN MATERIAL IN AS BACKFILL.

D. PLACE BACKFILL MATERIAL OR SELECT GRANULAR BACKFILL MATERIAL WHEN REQUIRED IN UNIFORM HORIZONTAL LAYERS OF NO GREATER THAN 8–INCHES LOOSE THICKNESS AND COMPACT TO THE SAME DENSITY AS NATIVE SOIL. WHERE HAND OPERATED COMPACTORS ARE USED, THE FILL MATERIAL SHALL BE PLACED IN LIFTS NOT TO EXCEED 4 INCHES IN LOOSE DEPTH AND COMPACTED.

E. WHENEVER TESTING INDICATES THAT THE CONTRACTOR HAS NOT OBTAINED THE SPECIFIED DENSITY, THE SUCCEEDING LAYER SHALL NOT BE PLACED UNTIL THE REQUIREMENTS ARE MET UNLESS OTHERWISE AUTHORIZED BY THE CONSTRUCTION MANAGER. THE CONTRACTOR SHALL TAKE WHATEVER APPROPRIATE ACTION IS NECESSARY, SUCH AS DRYING, ADDING WATER, OR INCREASING THE COMPACTIVE EFFORT TO MEET THE COMPACTION REQUIREMENTS.

3. TRENCH EXCAVATION:

A. UTILITY TRENCHES SHALL BE EXCAVATED TO THE LINES AND GRADES SHOWN ON THE DRAWINGS OR AS DIRECTED BY THE GENERAL CONTRACTOR. PROVIDE SHORING, SHEETING AND BRACING AS REQUIRED TO PREVENT CAVING OR SLOUGHING OF THE TRENCH WALLS.

B. EXTEND THE TRENCH WIDTH A MINIMUM OF 6 INCHES BEYOND THE OUTSIDE EDGE OF THE OUTERMOST CONDUIT.

C. WHEN SOFT YIELDING, OR OTHERWISE UNSTABLE SOIL CONDITIONS ARE ENCOUNTERED, EXCAVATE THE REQUIRED TRENCH TO A DEPTH OF NO LESS THAN 12 INCHES BELOW THE REQUIRED ELEVATION, THEN BACKFILL WITH 12" OF GRANULAR BEDDING MATERIAL.

4. TRENCH BACKFILL:

A. PROVIDE GRANULAR BEDDING MATERIAL OR FLOWABLE FILL IN ACCORDANCE WITH THE DRAWINGS AND THE UTILITY REQUIREMENTS.

B. NOTIFY THE GENERAL CONTRACTOR 24 HOURS IN ADVANCE OF BACKFILLING.

C. CONDUCT UTILITY CHECK TESTS BEFORE BACKFILLING. BACKFILL AND COMPACT TRENCH BEFORE ACCEPTANCE TESTING.

D. PLACE GRANULAR TRENCH BACKFILL UNIFORMLY ON BOTH SIDES OF THE CONDUITS IN 6–INCH UNCOMPACTED LIFTS UNTIL 12 INCHES OVER THE CONDUITS. SOLIDLY RAM AND TAMP BACKFILL INTO SPACE AROUND CONDUITS.

E. PROTECT CONDUIT FROM LATERAL MOVEMENT, IMPACT DAMAGE, OR UNBALANCED LOADING.

F. ABOVE THE CONDUIT EMBEDMENT ZONE, PLACE AND COMPACT SATISFACTORY BACKFILL MATERIAL IN 8–INCH MAXIMUM LOOSE THICKNESS LIFTS TO RESTORE THE REQUIRED FINISHED SURFACE GRADE.

G. COMPACT FINAL TRENCH BACKFILL TO A DENSITY EQUAL TO OR GREATER THAN THAT OF THE EXISTING UNDISTURBED MATERIAL IMMEDIATELY ADJACENT TO THE TRENCH.

5. FINISH GRADING:

A. PERFORM ALL GRADING TO PROVIDE POSITIVE DRAINAGE AWAY FROM STRUCTURES AND SMOOTH, EVEN SURFACE DRAINAGE OF THE ENTIRE AREA WITHIN THE LIMITS OF CONSTRUCTION. GRADING SHALL BE COMPATIBLE WITH ALL SURROUNDING TOPOGRAPHY AND STRUCTURES.

B. UTILIZE SATISFACTORY FILL MATERIAL RESULTING FROM THE EXCAVATION WORK IN THE CONSTRUCTION OF FILLS, EMBANKMENTS AND FOR REPLACEMENT OF REMOVED UNSUITABLE MATERIALS.

C. REPAIR ALL ACCESS ROADS AND SURROUNDING AREAS USED DURING THE COURSE OF THIS WORK TO THEIR ORIGINAL CONDITION.

6. ASPHALT PAVING ROAD:

A. CONTRACTOR RESPONSIBLE FOR RE–STRIPING AND APPLYING SEALCOATING, UNLESS OTHERWISE NOTED.

B. APPLICABLE PER NEW YORK DOT STANDARD SPECIFICATIONS, CURRENT EDITION.

7. STAGING:

A. WORK / STAGING AREA TO BE CONFIRMED AT PRE–CONSTRUCTION SITE MEETING AND SURROUNDED BY TEMPORARY FENCE (SEE DETAIL BELOW) DURING CONSTRUCTION.

B. POSSIBLE LOCATION FOR TEMPORARY DRIVE AISLE CLOSURE DURING CONSTRUCTION.

C. CONTRACTOR TO PROVIDE TEMPORARY SIGNS TO DIRECT TRAFFIC FLOW.

D. SHORT TERM FENCING TO BE PROVIDED OUTSIDE OF TEMPORARY FENCE FOR ANY OPEN TRENCHES LEFT OVER NIGHT OR UNATTENDED.

E. TEMPORARY FENCE SHALL BE CLOSED AND LOCKED AT ALL TIMES. IF GATE MUST BE OPEN FOR MOVING EQUIPMENT OR MATERIALS, A SPOTTER SHALL BE PROVIDED TO TO PREVENT UNAUTHORIZED ENTRY.

F. NO EQUIPMENT OR MATERIALS SHALL BE STORED OUTSIDE THE TEMPORARY FENCE FOR ANY AMOUNT OF TIME.

FIBER OPTIC NOTES

USE CABLE WITH THE FOLLOWING MINIMUM PROPERTIES:

1. HIGH TENSILE STRENGTH >150 LB
2. TIGHT BUFFERED
3. INDOOR / OUTDOOR UV AND MOISTURE RESISTANT "RISER" CABLE
4. CONNECTOR TYPE: ST–ST
5. FIBER TYPE: MULTI–MODE 6–FIBER (3 PAIR) 62.5UM. 6 CONNECTORS ON BOTH ENDS.
6. JACKET: INDOOR/OUTDOOR RISER, BLACK
7. BREAKOUT: SIDE A: INNER END – 24 INCHES WITH 2MM FURCATION

7.A. SIDE B: OUTER END – 24 INCHES – 2MM FURCATION – STAGGERED EVERY 1"

8. WITH PULLING EYE ON SIDE B (OUTER END) AND SPOOL REEL

STRUCTURAL STEEL NOTES

1. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING REQUIREMENTS, UNLESS NOTED OTHERWISE: WIDE FLANGE SHAPE: A992, 50KSI ANGLE AND CHANNEL SHAPE: ASTM A36, 36 KSI PLATE: ASTM A36, 36KSI PIPE: ASTM A53 GRADE B, 35 KSI HSS: ASTM A500 GRADE B, 46KSI.
2. HIGH–STRENGTH BOLTS SHALL CONFORM TO ASTM A325: ONE HIGH–STRENGTH BOLT ASSEMBLY SHALL CONSIST OF A HEAVY HEX STRUCTURAL BOLT, A HEAVY NUT, A HARDENED WASHER CONFORMING TO ASTM F436. THE HARDENED WASHER SHALL BE INSTALLED AGAINST ELEMENT TURNED IN TIGHTENING. UNLESS NOTED OTHERWISE ON THE DRAWINGS, ALL CONNECTIONS SHALL BE BEARING TYPE CONNECTIONS. WELDING ELECTRODES SHALL COMPLY WITH AWS D1.1 USING A5.1 OR A5.5 E70XX AND SHALL BE COMPATIBLE WITH THE WELDING PROCESS SELECTED. WELDERS SHALL BE QUALIFIED AS PRESCRIBED IN AWS D1.1.
4. UNLESS NOTED OTHERWISE ON THE DRAWING, ALL ANCHOR BOLTS SHALL CONFORM TO ASTM F1554 WITH HEAVY HEXAGONAL NUT.
5. FABRICATE ITEMS OF STRUCTURAL STEEL IN ACCORDANCE WITH AISC SPECIFICATION.
6. ALL EXPOSED STRUCTURAL STEEL AND BOLTS SHALL BE HOT DIP GALVANIZED PER ASTM A123.
7. SUBMIT FABRICATION AND ERECTION DRAWINGS SHOWING ALL DETAILS, CONNECTIONS, MATERIAL DESIGNATIONS, AND TOP STEEL ELEVATIONS FOR APPROVAL. THE SHOP DRAWINGS WILL BE REVIEWED FOR GENERAL CONFORMANCE TO THE CONTRACT DRAWINGS. SUCH APPROVAL SHALL NOT RELIEVE THE FABRICATOR/CONTRACTOR OF THE RESPONSIBILITY FOR EITHER THE ACCURACY OF THE DETAILED DIMENSIONS IN THE SHOP AND ERECTION DRAWINGS OR THE GENERAL FIT–UP OF PARTS THAT ARE TO BE ASSEMBLED IN THE FIELD.
8. PRIMER SHALL BE RED OXIDE–CHROMATE PRIME COMPLYING WITH STEEL STRUCTURES PAINTING COUNCIL (SSPC) PAINT SPECIFICATION NUMBER 11.

ANCHORAGE INSTALLATION NOTES

1. DRILLING THROUGH EXISTING SLAB REBAR DURING POST–INSTALLED ANCHOR BOLTS INSTALLATION IS NOT PERMITTED.
2. POST–INSTALLED ANCHOR BOLT INSTALLATION SHALL BE PERFORMED BY PERSONNEL TRAINED TO INSTALL THE SYSTEM PER THE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS (MPII), AS INCLUDED IN THE ANCHOR PACKAGING.
3. EXPANSION AND ADHESIVE ANCHORS SHALL BE INSTALLED PER THE MANUFACTURER'S INSTRUCTIONS USING STANDARD EMBEDMENTS AND EDGE DISTANCES UNLESS NOTED OTHERWISE ON THE DRAWINGS.

REINFORCED CONCRETE NOTES

1. DESIGN AND CONSTRUCTION OF ALL CONCRETE ELEMENTS SHALL CONFORM TO THE LATEST EDITIONS OF THE FOLLOWING APPLICABLE CODES: ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS"; ACI 318, "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE".
2. DO NOT USE RETEMPERED CONCRETE, OR ADD WATER TO READY–MIX CONCRETE AT THE JOB SITE. MIX DESIGN SHALL BE APPROVED BY OWNER'S REPRESENTATIVE PRIOR TO PLACING CONCRETE.
3. ANY NEW CONCRETE NEEDED FOR THE CONSTRUCTION SHALL BE AIR–ENTRAINED AND SHALL HAVE 3000 PSI STRENGTH AT 28 DAYS. ALL CONCRETE WORK SHALL BE DONE IN ACCORDANCE WITH ACI 318 CODE REQUIREMENTS.
4. MAXIMUM AGGREGATE SIZE SHALL BE 3/4".
5. THE FOLLOWING MATERIALS SHALL BE USED:

PORTLAND CEMENT:	ASTM C 150, TYPE I
REINFORCEMENT:	ASTM A 615, GRADE 60
NORMAL WEIGHT AGGREGATE:	ASTM C 33
WATER:	DRINKABLE
ADMIXTURES:	NON–CHLORIDE CONTAINING

6. REINFORCING DETAILS SHALL BE IN ACCORDANCE WITH "DETAILING MANUAL–2004 PUBLICATION SP–66" AND "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE", ACI–318–08.
7. REINFORCING STEEL SHALL CONFORM TO ASTM A 615, GRADE 60, DEFORMED UNLESS NOTED OTHERWISE. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 185 WELDED STEEL WIRE FABRIC UNLESS NOTED OTHERWISE. SPLICES SHALL BE CLASS "B"; ALL HOOKS SHALL BE STANDARD, UNO.
8. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:

CONCRETE CAST AGAINST EARTH:	3 IN.	
CONCRETE EXPOSED TO EARTH OR WEATHER:	#6 AND LARGER	2 IN.
	#5 AND SMALLER & WWF	1–1/2 IN.
CONCRETE NOT EXPOSED TO EARTH OR	SLAB AND WALL	3/4 IN.
WEATHER OR NOT CAST AGAINST THE GROUND:	BEAMS AND COLUMNS	1–1/2 IN.

9. A CHAMFER 3/4" SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.
10. INSTALLATION OF CONCRETE ANCHOR, SHALL BE PER MANUFACTURERS WRITTEN RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL OR ROD SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR ENGINEERING APPROVAL WHEN DRILLING HOLES IN CONCRETE.
11. CURING COMPOUNDS SHALL CONFORM TO ASTM C–309.
12. ADMIXTURES SHALL CONFORM TO THE APPROPRIATE ASTM STANDARD AS REFERENCED IN ACI–301.
13. DO NOT WELD OR TACKWELD REINFORCING STEEL.
14. ALL DOWELS, ANCHOR BOLTS, EMBEDDED STEEL, ELECTRICAL CONDUITS, PIPE SLEEVES, GROUNDS AND ALL OTHER EMBEDDED ITEMS AND FORMED DETAILS SHALL BE IN PLACE BEFORE START OF CONCRETE PLACEMENT.
15. LOCATE ADDITIONAL EXPANSION JOINTS REQUIRED TO FACILITATE CONSTRUCTION AS ACCEPTABLE TO ENGINEER. PLACE REINFORCEMENT CONTINUOUSLY THROUGH JOINT.
16. REINFORCEMENT SHALL BE COLD BENT WHENEVER BENDING IS REQUIRED.
17. PLACE CONCRETE IN A UNIFORM MANNER TO PREVENT THE FORMATION OF COLD JOINTS AND OTHER PLANES OF WEAKNESS. VIBRATE THE CONCRETE TO FULLY EMBED REINFORCING. DO NOT USE VIBRATORS TO TRANSPORT CONCRETE THROUGH CHUTES OR FORMWORK.
18. DO NOT PLACE CONCRETE IN WATER, ICE, OR ON FROZEN GROUND.
19. DO NOT ALLOW CONCRETE SUBBASE TO FREEZE DURING CONCRETE CURING AND SETTING PERIOD, OR FOR A MINIMUM OF 14 DAYS AFTER PLACEMENT.
20. MAINTAIN TEMPERATURE OF CAST IN PLACE CONCRETE BETWEEN 50 DEGREES AND 90 DEGREES FARENHEIT. FOR COLD–WEATHER AND HOT–WEATHER CONCRETE PLACEMENT, CONFORM TO APPLICABLE ACI CODES AND RECOMMENDATIONS. IN EITHER CASE, MATERIALS CONTAINING CHLORIDE, CALCIUM, SALTS, ETC. SHALL NOT BE USED. PROTECT FRESH CONCRETE FROM WEATHER FOR 7 DAYS MINIMUM.
21. UNLESS INDICATED OTHERWISE ON THE DRAWINGS, REINFORCEMENT SPLICES SHALL MEET CLASS B, TENSION LAP REQUIREMENTS IN ACCORDANCE WITH ALL PROVISIONS OF ACI 318 LATEST EDITION, UNLESS NOTED OTHERWISE.
22. PROVIDE ACCESSORIES NECESSARY TO PROPERLY SUPPORT REINFORCING.

GROUNDING NOTES

1. COAT ALL SURFACES WITH AN ANTI–OXIDANT COMPOUND BEFORE MATING.
2. FOR GROUND BOND TO STEEL ONLY: INSERT A CADMIUM FLAT WASHER BETWEEN LUG AND STEEL, COAT ALL SURFACES WITH AN ANTI–OXIDANT COMPOUND BEFORE MATING.
3. ENSURE THE WIRE INSULATION TERMINATION IS WITHIN 1/8" OF THE BARREL (NO SHINERS).
4. ALL BELOW GRADE BONDS TO BE EXOTHERMIC WELDS OR IRREVERSIBLE COMPRESSION–TYPE CONNECTIONS LISTED FOR USE IN THE APPLICATION WHICH THEY ARE INSTALLED.
5. ALL HARDWARE SHALL BE STAINLESS STEEL 3/8" DIAMETER OR LARGER. ALL HARDWARE 18–8 STAINLESS STEEL INCLUDING LOCK WASHERS, COAT ALL SURFACES WITH AN ANTI–OXIDANT COMPOUND BEFORE MATING.

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STATE OF NEW YORK
DANIEL P HAMM
082152-1
LICENSED PROFESSIONAL ENGINEER

CHRISTA
NY 2XXXXXX
FASHION OUTLETS OF NIAGARA FALLS

1900 MILITARY ROAD
NIAGARA FALLS, NY 14304

SHEET TITLE

GENERAL NOTES

REV	DATE	DESCRIPTION
2	03-09-22	SS (CD100)
1	08-23-21	SS (CD100)
1	07-22-21	PRELIMINARY (CD90)
A	07-08-21	PRELIMINARY (CD50)

PROJECT NUMBER:	110072
DRAWN BY:	HC
CHECKED BY:	DPH

GN-2

CONSTRUCTION NOTES

1. CONTRACTOR SHALL REVIEW AND BE FAMILIAR WITH THE SMP EXCAVATION WORK PLAN BY ATLAS ATC ENGINEERING AND HEALTH AND SAFETY PLAN PRIOR TO THE COMMENCEMENT OF WORK.
2. EXISTING AND PRE–CONSTRUCTION SITE COVER SYSTEM CONSISTS OF: MINIMUM 4–INCH THICK ASPHALT CAP AT PARKING AREAS, A CONCRETE CAP AT BUILDING LOCATIONS AND CONCRETE CAP AT SIDEWALKS; AND A MINIMUM 1–FOOT THICK CLEAN IMPORTED TOPSOIL COVER AT ALL LANDSCAPED AREAS.
3. ALL WORK SHALL BE PERFORMED IN COMPLIANCE WITH THE EXCAVATION WORK PLAN (APPENDIX A OF THE SMP) AND 29 CFR 1910.120.
4. A HEALTH AND SAFETY PLAN (HASP) APPENDIX F OF THE SMP WILL ACT AS THE CONSTRUCTION HASP FOR THIS PROJECT.
5. NO "HOT SPOT" AREAS AS DEFINED IN THE SMP ARE ANTICIPATED WITHIN THE EXCAVATION AREA. IF GROSSLY CONTAMINATED SOIL IS ENCOUNTERED, IT SHALL BE SEPARATED, AND CONTAINERIZED FOR PROPER DISPOSAL OFF–SITE.
6. ASPHALT CAP MATERIAL SHALL BE REMOVED AND BE DISPOSED OF AS CONSTRUCTION AND DEMOLITION (C&D) DEBRIS.
7. TOPSOIL CAP MATERIAL THAT IS PART OF THE COVER SYSTEM SHALL BE SEPARATED AND SHOULD BE TEMPORARILY STOCKPILED FOR FINAL RESTORATION.
8. ANY TOPSOIL IMPORTED TO THE SITE MUST BE TESTED PRIOR TO BEING IMPORTED TO THE SITE.
9. MATERIAL EXCAVATED BENEATH THE CAP WILL BE TEMPORARILY PLACED INTO 55–GALLON DRUMS OR STOCKPILED ONTO A MINIMUM OF TWO LAYERS OF 8–MIL PLASTIC SHEETING AND COVERED WITH A MINIMUM 8–MIL PLASTIC SHEETING OR TRAP WHICH WILL BE SECURELY ANCHORED TO THE GROUND. THE STOCKPILE SHALL BE COVERED AT THE END OF EACH WORKDAY AND ENCIRCLED WITH A BERM OR SILT FENCE. HAY BALES ARE TO BE USED AS NEEDED NEAR CATCH BASINS. THE STOCKPILE WILL BE INSPECTED BY OTHERS AT A MINIMUM OF ONCE PER WEEK AND FOLLOWING EACH STORM EVENT.
10. ANY EXCESS MATERIAL EXCAVATED BELOW THE CAP THAT CANNOT BE REUSED ON–SITE, SHALL BE CONTAINERIZED INTO 55–GALLON DRUMS OR STOCKPILED FOR PROPER DISPOSAL.
11. EXCESS MATERIAL BELOW THE CAP SHALL BE TRANSPORTED AND DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS, INCLUDING 6NYCRR PART 360. THE DISPOSAL FACILITY MUST BE APPROVED BY MACERICH AND THE NYSDEC PRIOR TO TRANSPORT OFF–SITE.
12. ATLAS ATC ENGINEERING SHALL ENSURE THAT ALL MATERIALS REUSED ON–SITE WILL BE IN ACCORDANCE WITH THE SMP. IMPACTED MATERIALS SHALL BE COVERED BY ASPHALT, CONCRETE, BUILDING, OR A MINIMUM OF 1 FOOT OF SOILS MEETING THE ALLOWABLE CONSTITUENT LEVELS FOR IMPORTED FILL OR SOIL FOR COMMERCIAL USES AT A MINIMUM.
13. EXCAVATED SOIL/FILL OTHER THAN THE HOTSPOTS CAN BE REUSED FOR BACKFILL, UNLESS IDENTIFIED TO BE GROSSLY CONTAMINATED.
14. ORGANIC MATERIAL (WOOD, ROOTS, STUMPS, ETC.) OR OTHER SOLID WASTE DERIVED FROM CLEARING AND GRUBBING OF THE SITE IS PROHIBITED FOR REUSE ON–SITE.
15. SURFACE STORM WATER, GROUND WATER SEEPAGE, OR OTHER WATER ENCOUNTERED AND/OR GENERATED ON–SITE DURING EXCAVATION ACTIVITIES IS PRESUMED TO BE CONTAMINATED AND SHALL NOT BE DISCHARGED BACK TO THE GROUND OR SURFACE WATERS ON–SITE.
16. IF REQUIRED (DETERMINED BY ATLAS ATC ENGINEERING), FLUIDS SHALL BE PUMPED INTO AND STORED ON–SITE WITHIN 55–GALLON, STEEL, DRUMS OR OTHER SUITABLE CONTAINER PENDING SAMPLING.
17. IF REQUIRED (DETERMINED BY ATLAS ATC ENGINEERING), FOLLOWING SAMPLING, THE FLUIDS WILL BE DISPOSED OF OFF–SITE IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.
18. SAMPLING, IF REQUIRED (DETERMINED BY ATLAS ATC ENGINEERING), CAN BE PROVIDED BY ATLAS ATC ENGINEERING AND TRANSPORT OFF–SITE MUST BE PERFORMED BY A LICENSED HAULER. SAMPLING CAN BE AT THE DISCRETION OF THE CONTRACTOR'S SUB–CONSULTANT FOR THE DISPOSAL OF WATER OFF–SITE. THE DISPOSAL FACILITY MUST BE APPROVED BY THE SITE HOST MACERICH AND THE NYSDEC.
19. ANY IMPORTED BACKFILL IS TO BE VIRGIN STONE OR RECYCLED CONCRETE AGGREGATE (RCA) FROM A NYSDEC REGISTERED OR PERMITTED CONSTRUCTION AND DEMOLITION (C&D) FACILITY AS SPECIFIED IN SECTION 360–15 OF 6 NYCRR PART 360.
20. ANY MATERIALS PROPOSED FOR IMPORT ONTO THE SITE SHALL BE APPROVED BY ATLAS ATC ENGINEERING PRIOR TO RECEIPT AT THE SITE. SOILS THAT MEET "EXEMPT" FILL REQUIREMENTS UNDER 6 NYCRR PART 360, BUT DO NOT MEET BACKFILL OR COVER SOIL OBJECTIVES FOR THIS SITE, SHALL NOT BE IMPORTED ONTO THE SITE WITHOUT PRIOR APPROVAL BY NYSDEC.
21. SOLID WASTE SHALL NOT BE IMPORTED ONTO THE SITE.
22. ANY SOIL OR STONE BROUGHT ONTO THE SITE MUST BE CERTIFIED CLEAN FROM A VIRGIN QUARRY OR RCA FROM A NYSDEC REGISTERED OR PERMITTED C&D FACILITY.
23. MATERIAL FROM INDUSTRIAL SITES, SPILL SITES, OR OTHER ENVIRONMENTAL REMEDIATION SITES OR POTENTIALLY CONTAMINATED SITES SHALL NOT BE IMPORTED TO THE SITE.
24. TRUCKS ENTERING THE SITE WITH IMPORTED SOILS WILL BE SECURELY COVERED WITH TIGHT FITTING COVERS.
25. IMPORTED SOILS SHALL BE STOCKPILED SEPARATELY FROM EXCAVATED MATERIALS AND IN ACCORDANCE WITH THE STOCKPILING PROCEDURES DESCRIBED IN SECTION 4.0 OF THE EXCAVATION WORK PLAN (EWP).
26. LOCATIONS WHERE VEHICLES ENTER AND EXIT THE WORK ZONE SHALL BE INSPECTED FOR EVIDENCE OF OFF–SITE SOIL TRACKING.
27. TRANSPORTATION OF IMPACTED SOIL OFF–SITE MUST BE PERFORMED BY A LICENSED HAULER IN ACCORDANCE WITH LOCAL STATE AND FEDERAL REGULATIONS, INCLUDING 6 NEW YORK STATE RULES AND REGULATIONS (NYCRR) PART 364. THE VEHICLE MUST BE PROPERLY LABELED, MANIFESTED, AND PLACARDED IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS BY ATLAS ATC ENGINEERING. ATLAS ATC ENGINEERING WILL PROVIDE OVERSIGHT FOR THE TRANSPORTATION AND DISPOSAL OF EXCESS MATERIAL FROM BENEATH THE CAP AND SIGN THE NON–HAZARDOUS MANIFEST ON BEHALF OF THE PROPERTY OWNER.
28. CONTRACTOR TO INSTALL FILTER SOCKS AROUND PERIMETER OF CONSTRUCTION FENCING AREA. FILTER SOCKS SHALL ALSO BE INSTALLED AROUND PERIMETER OF ANY AND ALL SOIL STOCKPILES. COMMERCIALLY AVAILABLE CATCH BASIN FILTER BAGS SHALL BE INSTALLED IN ALL CATCH BASINS AND INLET GRATES DOWNGRADIENT OF THE EXCAVATION SITE.
29. UNREGULATED OFF–SITE MANAGEMENT OF MATERIALS FROM THIS SITE SHALL NOT OCCUR WITHOUT FORMAL NYSDEC APPROVAL.
30. IF PREVIOUSLY UNIDENTIFIED CONTAMINANT SOURCES ARE FOUND DURING SUBSURFACE EXCAVATION ACTIVITIES OR DEVELOPMENT RELATED CONSTRUCTION, EXCAVATION ACTIVITIES WILL BE SUSPENDED UNTIL SUFFICIENT EQUIPMENT IS MOBILIZED TO ADDRESS THE CONDITION.
31. CONTACTOR SHALL SELECT DISPOSAL FACILITY AND INFORM CONSTRUCTION MANAGER AS SOON AS POSSIBLE PRIOR TO CONSTRUCTION.

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NY-22-2 000

FASHION OUTLETS OF NIAGARA FALLS

1900 MILITARY ROAD
NIAGARA FALLS, NY 14304

SHEET TITLE

GENERAL NOTES

REV	DATE	DESCRIPTION
2	03-09-22	SS (CD100)
1	08-23-21	SS (CD100)
1	07-22-21	PRELIMINARY (CD90)
A	07-08-21	PRELIMINARY (CD50)

PROJECT NUMBER:	110072
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CHECKED BY:	DPH

GN-3

FASHION OUTLET BOULEVARD

TOWN OF NIAGARA EASEMENT INST. 2014-13699

EDGE ASPHALT PAVEMENT

S 36°41'21" W 220.37' (M)

CONC. PAD

ALTERNATE NEW RESTRICTED PARKING PARCEL (149 SPACES) PER INST. 2014-01738

NEW YORK STATE ENVIRONMENTAL EASEMENT PER INST. 2014-18633

GENERATOR

UTILITY BUILDING

ASPHALT DRIVE

UTIL. VAULT

MH. -.80).80 I-S

S 34°00'30" W 64.05' (M)

CMP

INLET
RIM=573.54
INV=569.04
15" PVC-E

ASPHALT DRIVEWAY

REBAR FOUND

TEMPORARY EASEMENT INST. 2014-13699

6" CONC. CURB

6 SPACES

ASPHALT PAVEMENT

60' ZONING SETBACK

PROPOSED UNDERGROUND UTILITY RUN

PROPOSED SWITCHGEAR

PROPOSED SIGNET DISPENSERS

PROPOSED TRANSFORMER

TBM#1
SQUARE CUT ON TOP OF CURB
ELEV.=573.98

6" CONC. CURB

9 EXISTING SPACES

EV CHARGING ONLY

8 SPACES

23 SPACES

PARKING SPACES

15" PVC

24" CPP

6" CPP

ASPHALT PAVEMENT

22 SPACES

PROPOSED ELECTRIC RUN TO BE COORDINATED WITH NATIONAL GRID

15' ZONING SETBACK

6" CONC. CURB

CONCRETE WALK

CONCRETE WALK

REBAR FOUND

S 89°49'00" E 261.80' (M)

INLET
RIM=572.81
INV=568.61-W

6" CONC. CURB

EXISTING UTILITY POLE (POWER SOURCE)

10° 43'

TRUE NORTH

MAGNETIC NORTH

NOTES:

1. SURVEY AND TOPOGRAPHICAL FEATURES SHOWN FOR REFERENCE ONLY. SEE INCLUDED SURVEY (BY OTHERS) PERFORMED FOR THIS PROJECT.

OVERALL SITE PLAN (1 / A-1)
22x34 SCALE: 1"=10'
11x17 SCALE: 1"=20'

GRAPHIC SCALE
0 5 10 20 30 FEET

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FASHION OUTLETS OF NIAGARA FALLS

1900 MILITARY ROAD
NIAGARA FALLS, NY 14304

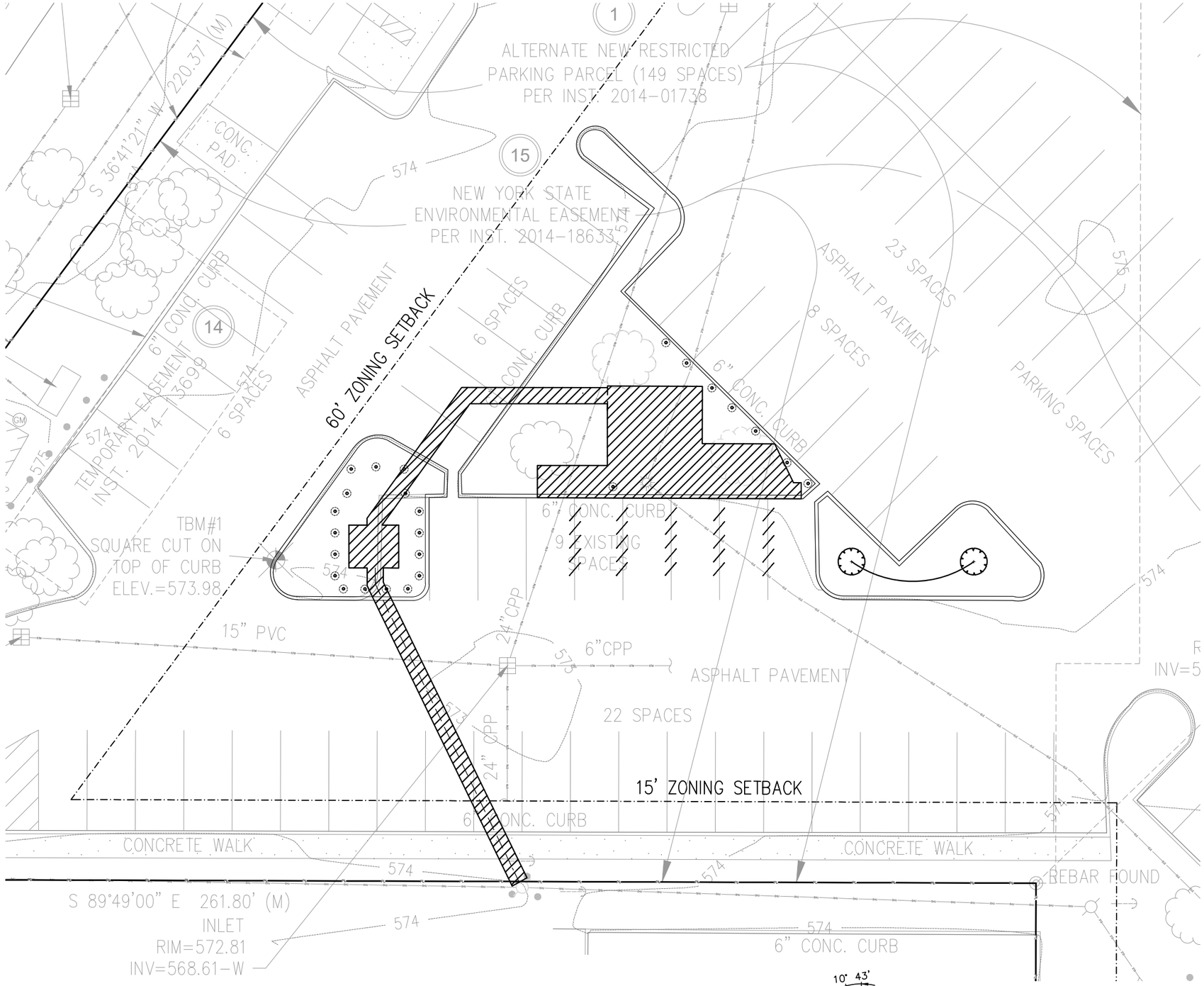
SHEET TITLE

OVERALL SITE PLAN

REV	DATE	DESCRIPTION
2	03-09-22	SS (CD100)
1	08-23-21	SS (CD100)
1	07-22-21	PRELIMINARY (CD90)
A	07-08-21	PRELIMINARY (CD50)

PROJECT NUMBER:	110072
DRAWN BY:	HC
CHECKED BY:	DPH

A-1



DEMOLITION PLAN (1 / A-2)
22x34 SCALE: 1"=10'
11x17 SCALE: 1"=20'

DEMO QUANTITIES TABLE

	ASPHALT	250	± SQ FT
	PARKING LINES	45	± LINEAR FT
	CURB/GUTTER	61	± SQ FT
	LANDSCAPING	816	± SQ FT
	LANDSCAPING SHRUB REMOVAL AND REPLANTING	1	
	CONCRETE	NA	± SQ FT
N/A	BORING	NA	± LINEAR FT
	TRENCHING	390	± SQ FT

NOTES

DEMOLITION NOTES:

1. SURVEY AND TOPOGRAPHICAL FEATURES SHOWN FOR REFERENCE ONLY. SEE INCLUDED SURVEY (BY OTHERS) PERFORMED FOR THIS PROJECT.
2. CONTRACTOR SHALL PROTECT EXISTING INFRASTRUCTURE IN PLACE WITHIN THE AREA OF IMPROVEMENTS, AND RETURN SIDEWALKS, CURBING, ASPHALT, LANDSCAPING, PLANTERS, IRRIGATION SYSTEMS, AND ANY OTHER FACILITIES DISTURBED BY THE WORK TO THE SAME OR BETTER CONDITIONS PRIOR TO THE COMMENCEMENT OF WORK.
3. CONTRACTOR SHALL PROTECT EXISTING LANDSCAPING, TREES, GROUND COVER AND ROOT SYSTEMS TO THE MAXIMUM EXTENT POSSIBLE.
4. CONTRACTOR TO NOTIFY ARCHITECT/ENGINEER OF ANY DISCREPANCIES PRIOR TO PERFORMING WORK.
5. QUANTITIES LISTED ARE ONLY APPROXIMATIONS. CONTRACTOR SHALL VERIFY ALL QUANTITIES PRIOR TO BIDDING.
6. TRENCHING IS TO BE USED EXCEPT IN HEAVY TRAFFIC AREAS, MAIN DRIVE AISLES, AND ACROSS STORE ENTRANCES.

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SITE #
NY-245-2100
FASHION OUTLETS OF NIAGARA FALLS

1900 MILITARY ROAD
NIAGARA FALLS, NY 14304

SHEET TITLE

DEMOLITION PLAN

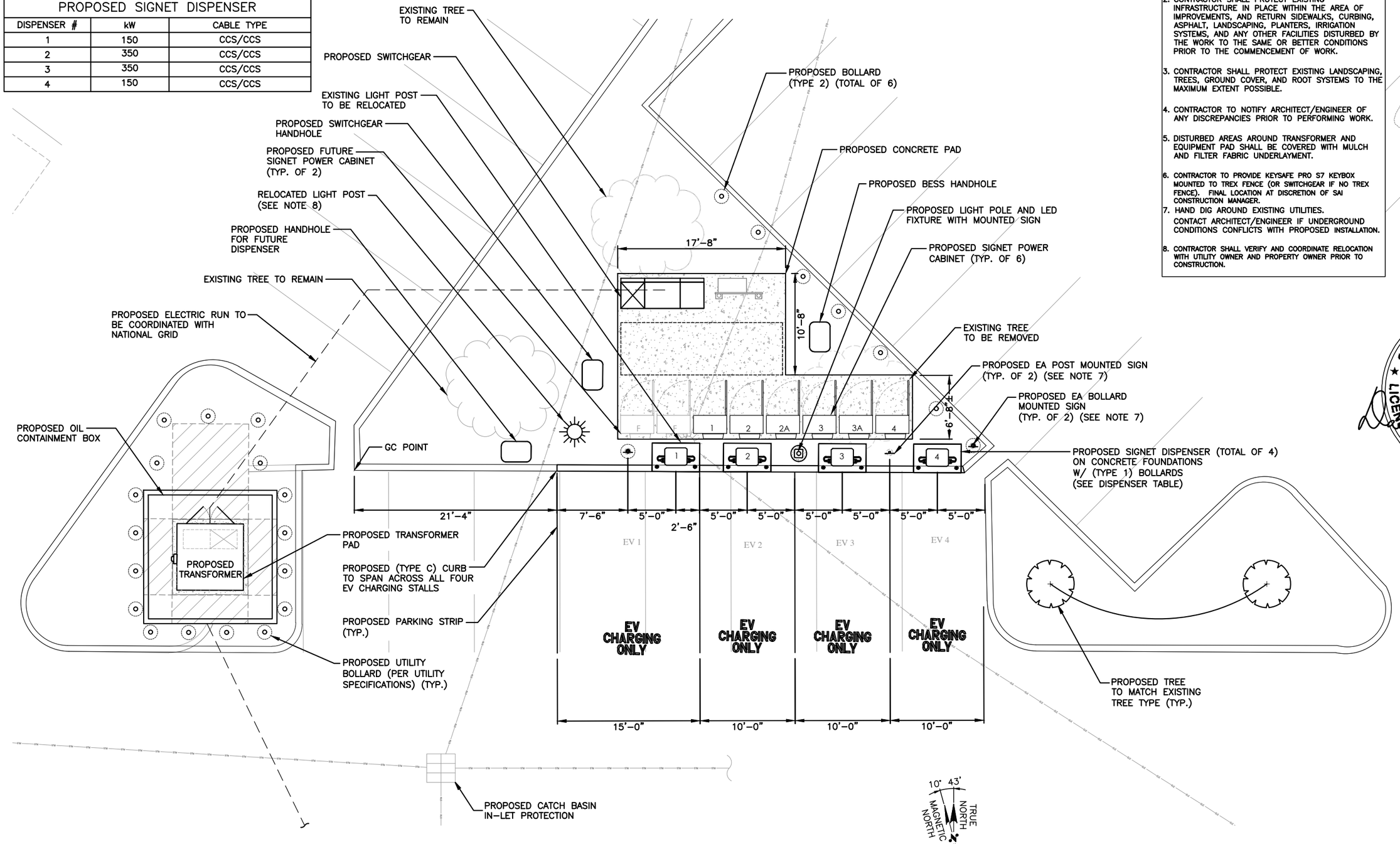
REV	DATE	DESCRIPTION
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A	07-08-21	PRELIMINARY (CD50)

PROJECT NUMBER:	110072
DRAWN BY:	HC
CHECKED BY:	DPH

A-2

PROJECT AREA STALL COUNT	
EXISTING STALL COUNT	6
PROPOSED STALL COUNT	4
HOST APPROVED STALL COUNT	6

PROPOSED SIGNET DISPENSER		
DISPENSER #	kW	CABLE TYPE
1	150	CCS/CCS
2	350	CCS/CCS
3	350	CCS/CCS
4	150	CCS/CCS



PROPOSED LAYOUT (1 / A-3)
22x34 SCALE: 1"=5'
11x17 SCALE: 1"=10'

NOTES:

1. SURVEY AND TOPOGRAPHICAL FEATURES SHOWN FOR REFERENCE ONLY. SEE INCLUDED SURVEY (BY OTHERS) PERFORMED FOR THIS PROJECT.
2. CONTRACTOR SHALL PROTECT EXISTING INFRASTRUCTURE IN PLACE WITHIN THE AREA OF IMPROVEMENTS, AND RETURN SIDEWALKS, CURBING, ASPHALT, LANDSCAPING, PLANTERS, IRRIGATION SYSTEMS, AND ANY OTHER FACILITIES DISTURBED BY THE WORK TO THE SAME OR BETTER CONDITIONS PRIOR TO THE COMMENCEMENT OF WORK.
3. CONTRACTOR SHALL PROTECT EXISTING LANDSCAPING, TREES, GROUND COVER, AND ROOT SYSTEMS TO THE MAXIMUM EXTENT POSSIBLE.
4. CONTRACTOR TO NOTIFY ARCHITECT/ENGINEER OF ANY DISCREPANCIES PRIOR TO PERFORMING WORK.
5. DISTURBED AREAS AROUND TRANSFORMER AND EQUIPMENT PAD SHALL BE COVERED WITH MULCH AND FILTER FABRIC UNDERLAYMENT.
6. CONTRACTOR TO PROVIDE KEYSAFE PRO S7 KEYBOX MOUNTED TO TREX FENCE (OR SWITCHGEAR IF NO TREX FENCE). FINAL LOCATION AT DISCRETION OF SAI CONSTRUCTION MANAGER.
7. HAND DIG AROUND EXISTING UTILITIES. CONTACT ARCHITECT/ENGINEER IF UNDERGROUND CONDITIONS CONFLICTS WITH PROPOSED INSTALLATION.
8. CONTRACTOR SHALL VERIFY AND COORDINATE RELOCATION WITH UTILITY OWNER AND PROPERTY OWNER PRIOR TO CONSTRUCTION.

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SITE ID:
NY-276-A-006
FASHION OUTLETS OF NIAGARA FALLS

1900 MILITARY ROAD
NIAGARA FALLS, NY 14304

SHEET TITLE

ENLARGED SITE PLAN

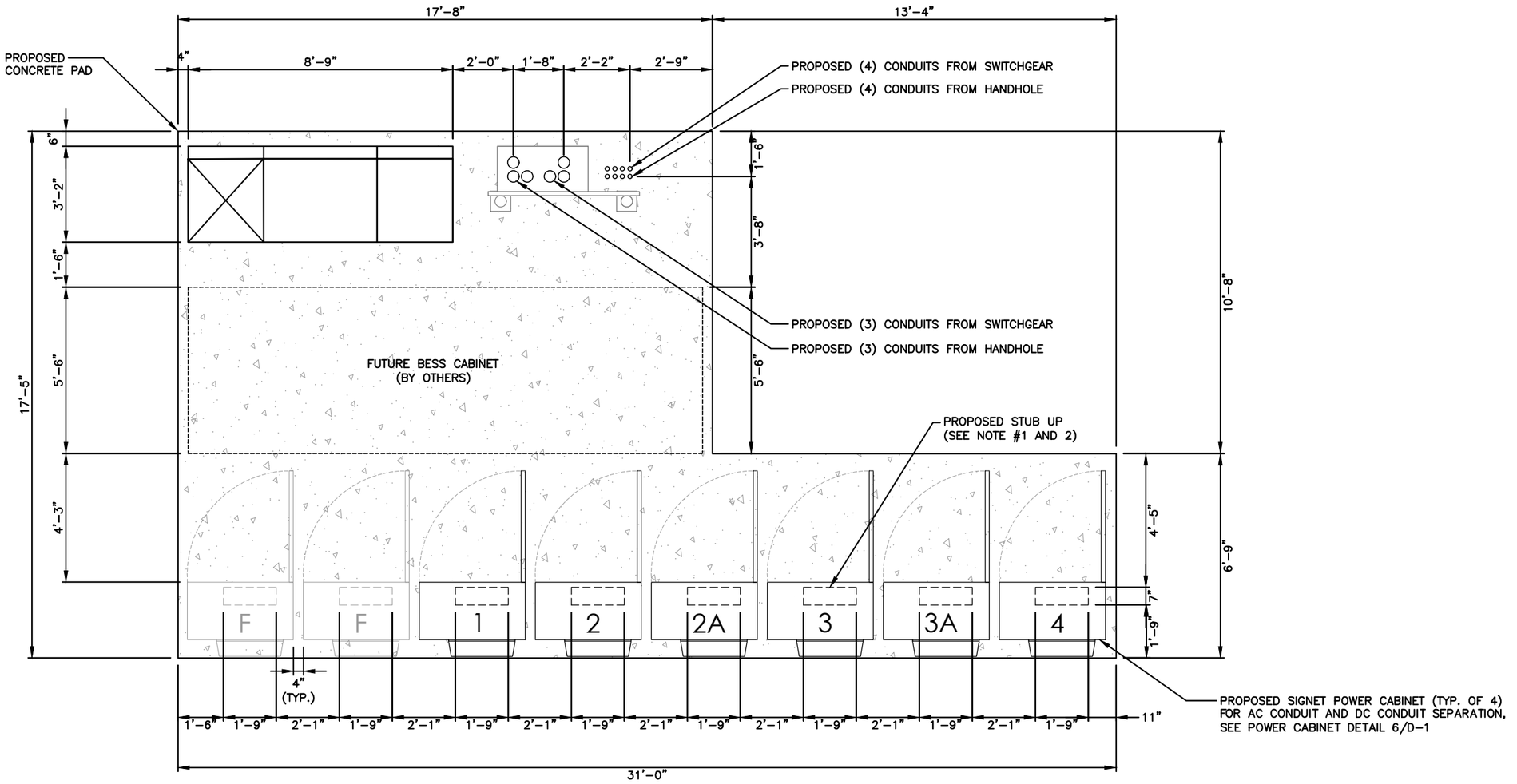
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1	07-22-21	PRELIMINARY (CD90)
A	07-08-21	PRELIMINARY (CD50)

PROJECT NUMBER:	110072
DRAWN BY:	HC
CHECKED BY:	DPH

A-3

NOTES:

1. CONDUIT STUBS FOR FUTURE POWER CABINETS SHALL BE CAPPED.
2. ALL CONDUIT STUBS FOR (FUTURE AND PROPOSED) SHALL HAVE ENOUGH SEPARATION TO INSTALL BELL ENDS ON ALL CONDUITS.





GRAPHIC SCALE
0 1 2 4 6 FEET

EQUIPMENT PAD LAYOUT (1 / A–4)
22x34 SCALE: 1/2"=1'–0"
11x17 SCALE: 1/4"=1'–0"

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SITE NAME
NY-275-9100
FASHION OUTLETS OF NIAGARA FALLS

1900 MILITARY ROAD
NIAGARA FALLS, NY 14304

SHEET TITLE

EQUIPMENT PAD LAYOUT

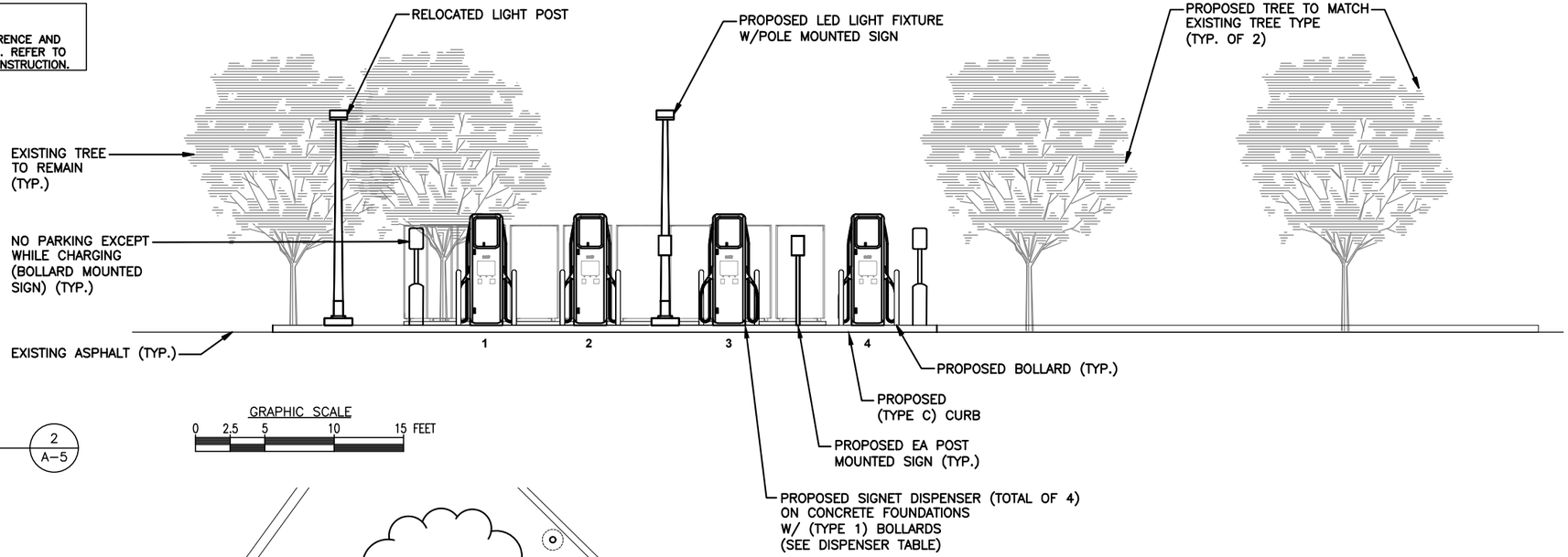
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A-4

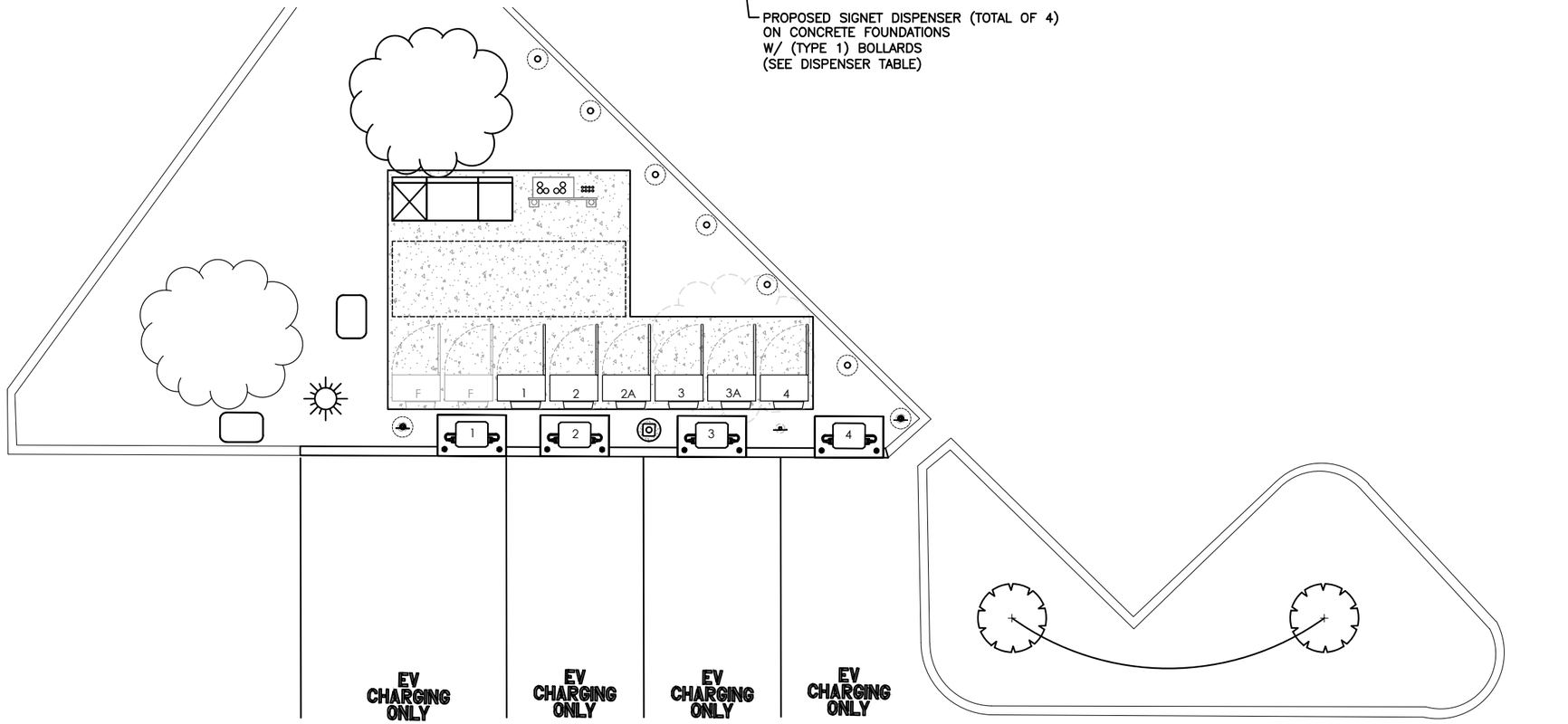
NOTES:

1. ELEVATION VIEW IS FOR REVIEW REFERENCE AND NOT TO BE USED FOR CONSTRUCTION. REFER TO LAYOUTS AND DETAIL SHEETS FOR CONSTRUCTION.



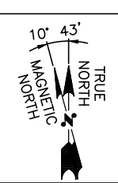
ELEVATION (2 / A–5)
22x34 SCALE: 1"=5'
11x17 SCALE: 1"=10'

GRAPHIC SCALE
0 2.5 5 10 15 FEET



PLAN VIEW (1 / A–5)
22x34 SCALE: 1"=5'
11x17 SCALE: 1"=10'

GRAPHIC SCALE
0 2.5 5 10 15 FEET



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TEL: (978) 557-5553
FAX: (978) 336-5586

STATE OF NEW YORK
DANIEL P HAMM
082152-1
LICENSED PROFESSIONAL ENGINEER

NY-242-2.000
FASHION OUTLETS OF NIAGARA FALLS

1900 MILITARY ROAD
NIAGARA FALLS, NY 14304

SHEET TITLE

ELEVATION

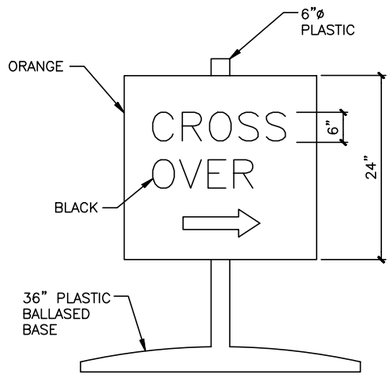
REV	DATE	DESCRIPTION
2	03-09-22	SS (CD100)
1	08-23-21	SS (CD100)
1	07-22-21	PRELIMINARY (CD90)
A	07-08-21	PRELIMINARY (CD50)

PROJECT NUMBER: 110072
DRAWN BY: HC
CHECKED BY: DPH

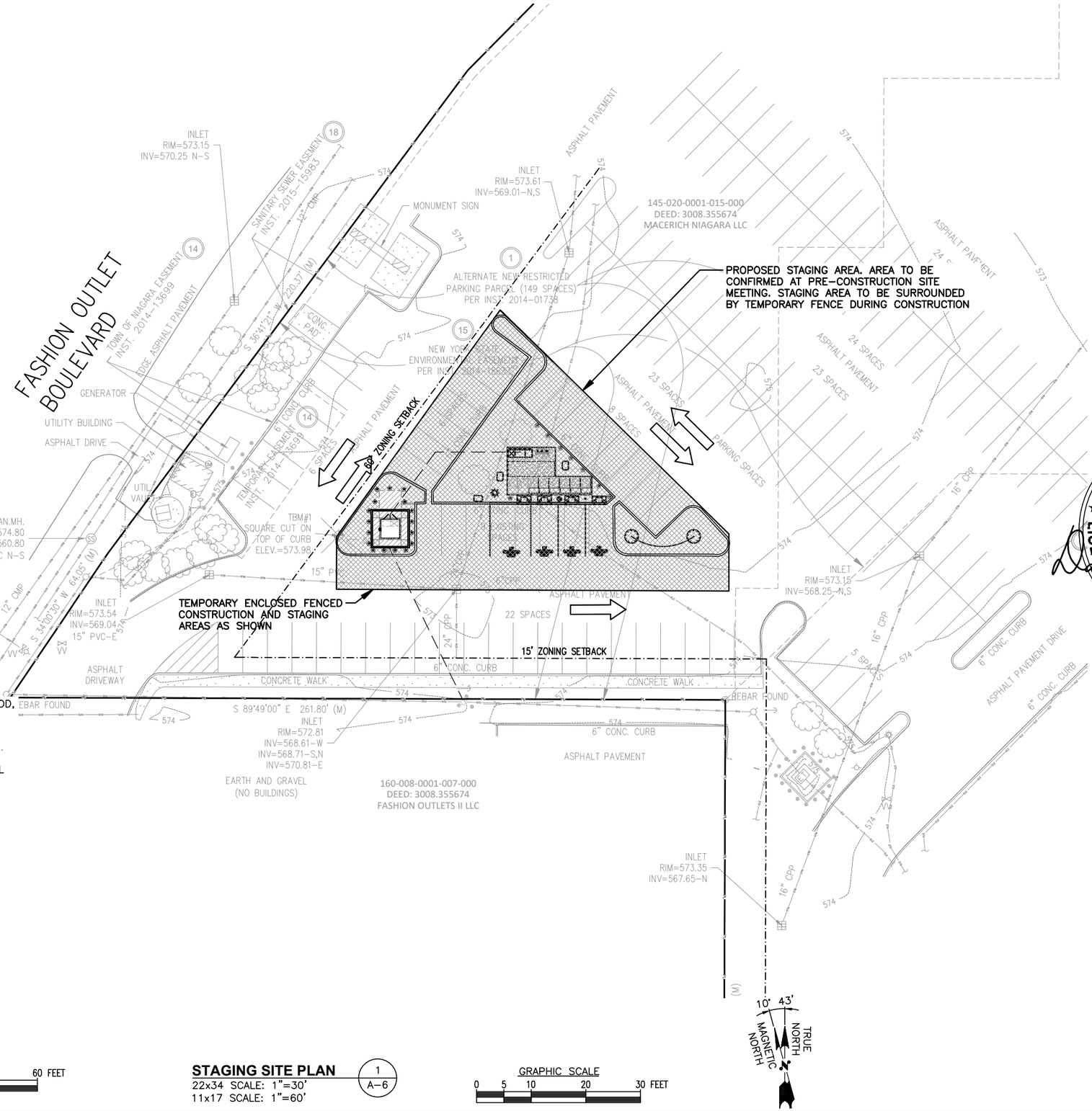
A-5

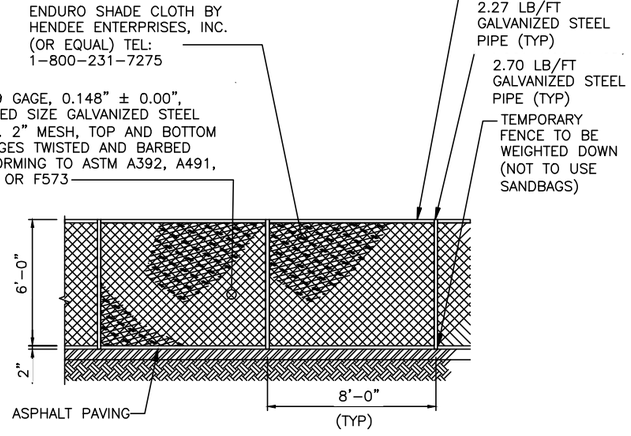
LEGEND

	WORK/STAGING AREA
	DRIVE AISLE CLOSURE
	UTILITY LINE TO BE BORED
	UTILITY LINE TO BE TRENCHED



SIGN





TEMPORARY FENCE DETAIL 2/A-6
22x34 SCALE: 1"=20'
11x17 SCALE: 1"=40'

GRAPHIC SCALE
0 10 20 40 60 FEET

STAGING SITE PLAN 1/A-6
22x34 SCALE: 1"=30'
11x17 SCALE: 1"=60'

GRAPHIC SCALE
0 5 10 20 30 FEET

electrify america

ELECTRIFY AMERICA, LLC
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SUITE 200
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NY-2452000
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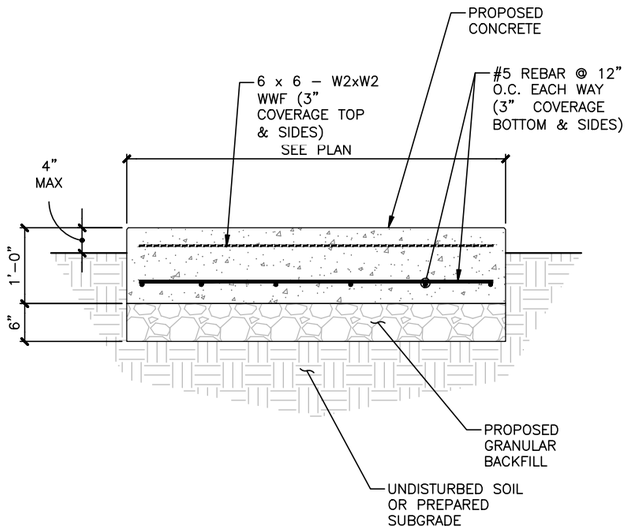
SHEET TITLE

STAGING PLAN

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A-6



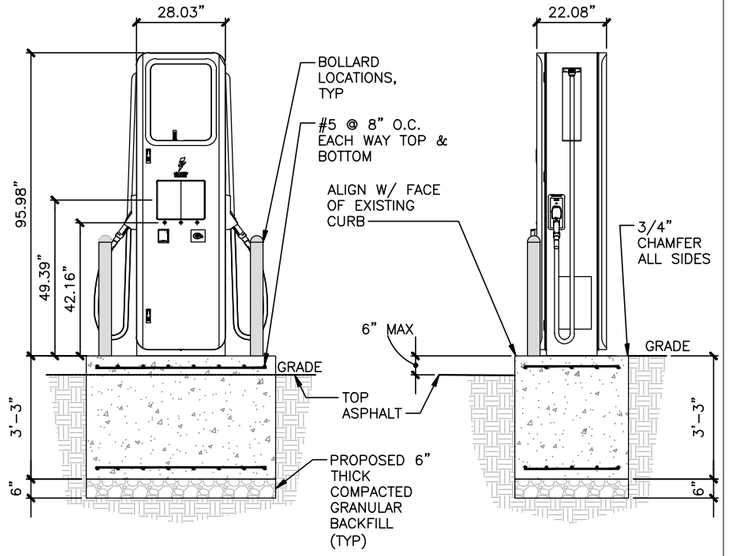
S.

EQUPMENT PAD DETAIL

SCALE: N.T.S

1 / D-1

NOTE:
1. OPERABLE PARTS OF DISPENSER TO FRONT OF CURB SHALL BE 10" MAX.
2. OPERABLE PARTS OF DISPENSER SHALL NOT EXCEED 54" ABOVE PARKING SURFACE WHEN DISPENSER IS ON A CURB.
3. BOLLARDS ARE FOR WARNING PURPOSE ONLY.



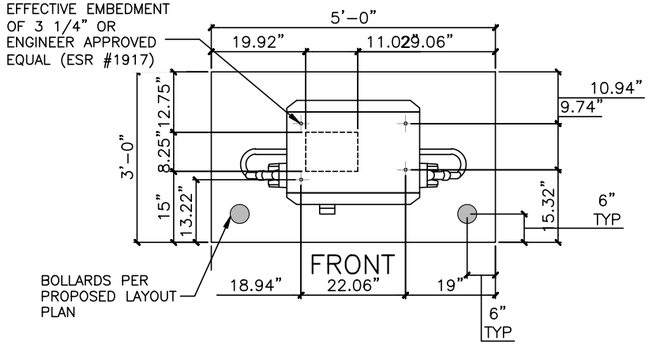
DISPENSER PAD SECTION/ELEVATION DETAIL

SCALE: N.T.S

2 / D-1

NOTE:
1. MINIMUM CONCRETE EDGE DISTANCE FOR PROPOSED ANCHORS SHALL BE 6".
2. MINIMUM CLEAR SPACING BETWEEN ANCHOR AND CONDUIT SHALL BE 3 INCHES.
3. CONTRACTOR TO FIELD VERIFY THE ANCHOR SPACING PER MANUFACTURER'S INSTALLATION MANUAL.

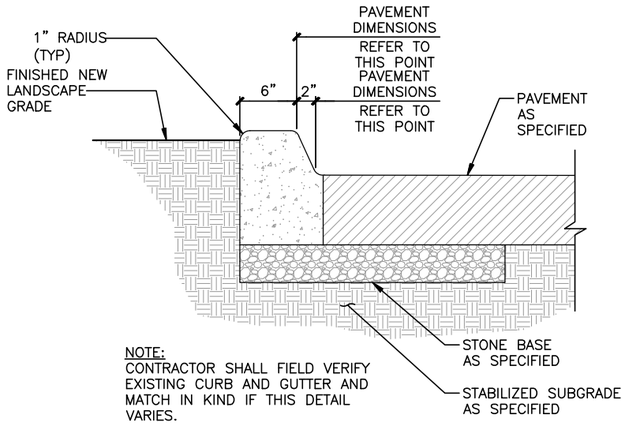
(4) 1/2" DIA. HILTI KWIK BOLT TZ SS 304/316 MECHANICAL ANCHOR WITH MINIMUM EFFECTIVE EMBEDMENT OF 3 1/4" OR ENGINEER APPROVED EQUAL (ESR #1917)



DISPENSER ANCHORAGE AND CONDUIT ENTRY DETAIL

SCALE: N.T.S

3 / D-1

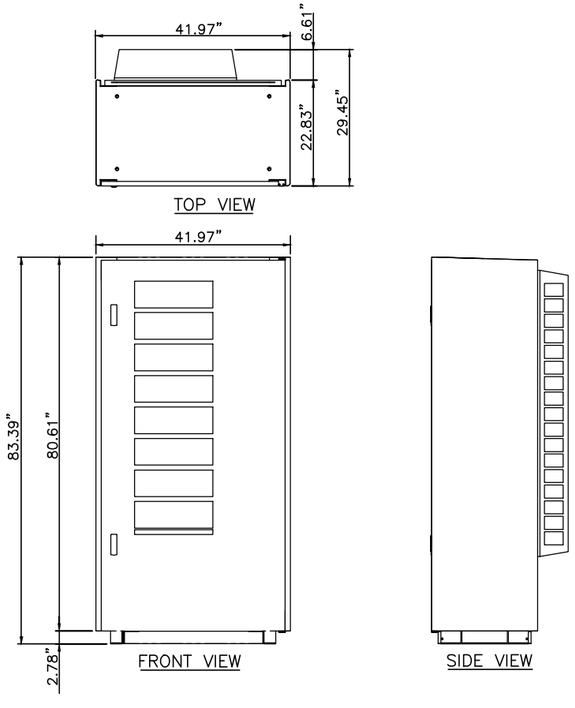


NOTE:
CONTRACTOR SHALL FIELD VERIFY EXISTING CURB AND GUTTER AND MATCH IN KIND IF THIS DETAIL VARIES.

PROPOSED CURB DETAIL

SCALE: N.T.S

4 / D-1

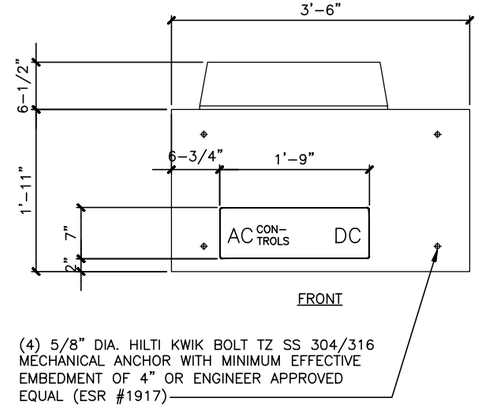


POWER UNIT DETAIL

SCALE: N.T.S

5 / D-1

NOTES:
1. MINIMUM CONCRETE EDGE DISTANCE FOR PROPOSED ANCHORS SHALL BE 6".
2. MINIMUM CLEAR SPACING BETWEEN ANCHOR AND CONDUIT SHALL BE 3 INCHES.
3. CONTRACTOR TO FIELD VERIFY THE ANCHOR SPACING PER MANUFACTURER'S INSTALLATION MANUAL.



POWER UNIT ANCHORAGE AND CONDUIT ENTRY DETAIL

SCALE: N.T.S

6 / D-1

electrify america

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NY-2022-100
FASHION OUTLETS OF NIAGARA FALLS

1900 MILITARY ROAD
NIAGARA FALLS, NY 14304

SHEET TITLE

CONSTRUCTION DETAILS

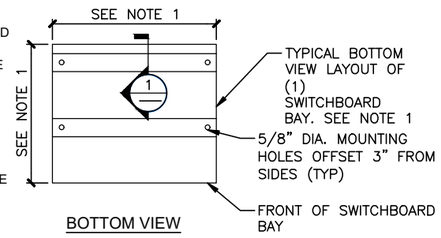
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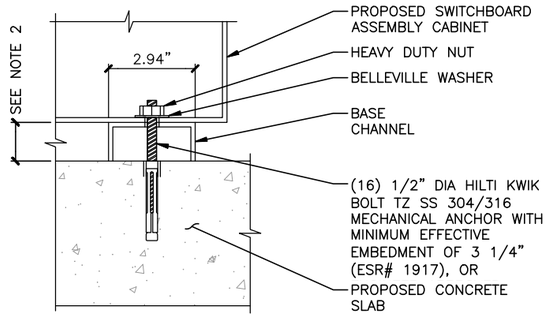
D-1

NOTES

1. SEE FLOOR PLAN IN REFERENCED SWITCHBOARD ASSEMBLY DRAWINGS FOR MOUNTING HOLE LOCATION AND SWITCHBOARD BAY DIMENSIONS.
2. SEE ELEVATION IN REFERENCED SWITCHBOARD ASSEMBLY DRAWINGS FOR BASE CHANNEL DIMENSION.
3. MINIMUM 10 1/2" CONCRETE EDGE DISTANCE REQUIRED FOR PROPOSED ANCHORAGE.
4. CONTRACTOR TO MOUNT THE KEYSAFE BOX ON THE SWITCHGEAR WHEN THERE IS NO FENCE



BOTTOM VIEW



SECTION 1

SWITCHGEAR MOUNTING DETAIL

SCALE: N.T.S

1 / D-2

NOT USED

SCALE: N.T.S

2 / D-2

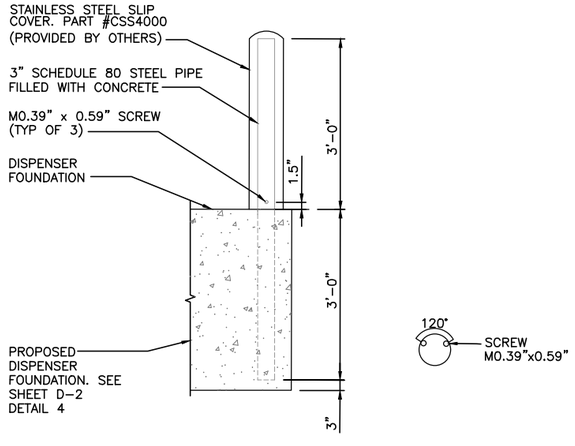
NOT USED

SCALE: N.T.S

3 / D-2

NOTES:

1. BOLLARD IS FOR WARNING PURPOSES ONLY.
2. BOLLARD DETAIL FOR BOLLARDS AROUND ELECTRIFY AMERICA EQUIPMENT.
3. CONTRACTOR TO PROVIDE (2) 6' LONG, 1/2" THICK FOAM STRIPS CROSSED OVER TOP OF STEEL PIPE TO STABILIZE SLIP COVER.



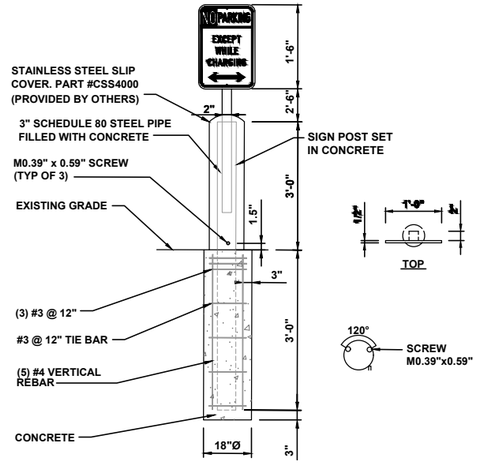
DISPENSER BOLLARD (TYPE 1) DETAIL

SCALE: N.T.S

4 / D-2

NOTES:

1. BOLLARD IS FOR WARNING PURPOSES ONLY.
2. BOLLARD DETAIL FOR BOLLARDS AROUND ELECTRIFY AMERICA EQUIPMENT.
3. CONTRACTOR TO PROVIDE (2) 6' LONG, 1/2" THICK FOAM STRIPS CROSSED OVER TOP OF STEEL PIPE TO STABILIZE SLIP COVER.



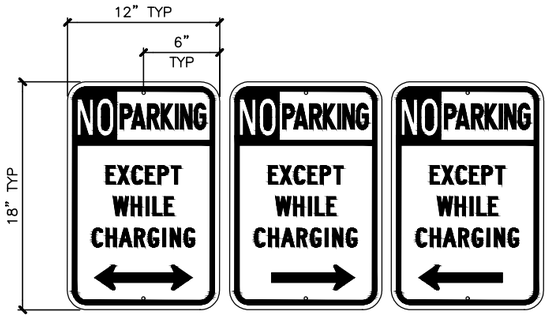
BOLLARD MOUNTED NO PARKING SIGN

SCALE: N.T.S

5 / D-2

NOTE:

1. BOTTOM OF LOWEST SIGN SHALL BE INSTALLED 66" ABOVE GRADE.
2. TO CONFORM WITH MUTCD SIGNS R-113, R-111-L AND R-111-R.
3. SIGNS ARE TO HAVE A WHITE RETROREFLECTIVE BACKGROUND WITH RED RETROREFLECTIVE LETTERS, ARROW, AND BORDER.



NO PARKING SIGN

SCALE: N.T.S

6 / D-2

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NY-2764-100

FASHION OUTLETS OF NIAGARA FALLS

1900 MILITARY ROAD
NIAGARA FALLS, NY 14304

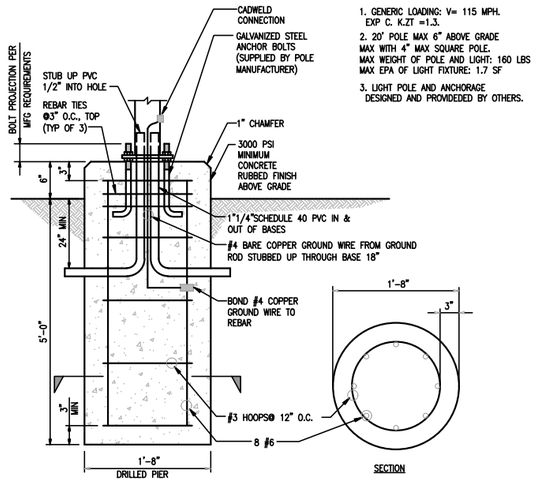
SHEET TITLE

CONSTRUCTION DETAILS

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CHECKED BY:	DPH

D-2

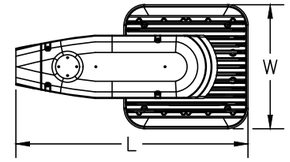


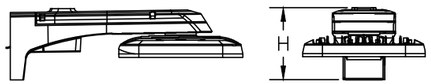
1. GENERIC LOADING: V= 115 MPH. EXP C. K.ZT =1.3.
2. 20' POLE MAX 6" ABOVE GRADE MAX WITH 4" MAX SQUARE POLE. MAX WEIGHT OF POLE AND LIGHT: 160 LBS MAX EPA OF LIGHT FIXTURE: 1.7 SF
3. LIGHT POLE AND ANCHORAGE DESIGNED AND PROVIDEDED BY OTHERS.

LIGHTING FIXTURE, POST, PHOTOCELL DETAIL (1)

SCALE: N.T.S

D-3





SPECIFICATIONS

EPA:	0.7 FT² (0.07M²)
LENGTH:	25'' (64CM)
WIDTH:	13-1/4" (34CM)
HEIGHT	7-3/4" (20CM)
WEIGHT (MAX):	26 LBS (11.8KG)

FIXTURE:	KAX1 LED P1 50K R3 MVOLT RPA PER DBLXD
POLE:	RSS 15 4-5B DM19AS FDL11-6B DBLXD
PHOTOCELL:	DLL 127F 1.5 JU

NOTES:
1. FIXTURE TO BE LED, FULL CUT-OFF, SINGLE FIXTURE AS MANUFACTURED BY LITHONIA LIGHTING.
2. POLE TO BE 15 FOOT, ROUND STRAIGHT STEEL AS MANUFACTURED BY LITHONIA LIGHTING.
3. PHOTOCELL TO BE DLL ELITE AS MANUFACTURED BY ACUITY CONTROLS.

LIGHTING FIXTURE, POST, PHOTOCELL DETAIL (2)

SCALE: N.T.S

D-3

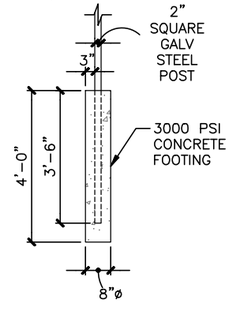
NOT USED (3)

SCALE: N.T.S

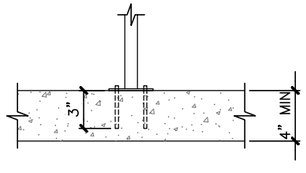
D-3

NOTES:
1. CONTRACTOR TO SELECT CONCRETE FOOTING OR BOLT DOWN BASED ON EXISTING CONDITIONS.
2. SEE PROPOSED LAYOUT SHEET FOR PLACEMENT.
3. BOTTOM OF LOWEST SIGN TO BE INSTALLED 66" ABOVE GRADE.
4. ADDITIONAL PARKING SIGNS TO BE INSTALLED 2" ABOVE TOP OF SIGN SPECIFIED IN NOTE #3.
5. SIGN, SIGN POST, AND SIGN FASTENERS TO BE PROVIDED BY CONTRACTOR (CONTRACTOR TO PROVIDE SIGN POST FASTENERS IF REQUIRED AND PAINTED TO MATCH).
6. IF PAINT FINISH IS DAMAGED DURING INSTALLATION, CONTRACTOR SHALL REPAINT AS REQUIRED.
7. CONTRACTOR SHALL COORDINATE WITH CITY WHEN SPECIAL JURISDICTIONAL/CITY REQUESTS ARE NECESSARY FOR ANY SIGN POST INSTALLATION, I.E. POST MATERIAL, PAINT COLORS, HARDWARE, ETC. CONTRACTOR IS RESPONSIBLE FOR ENSURING CITY APPROVES ALL MATERIALS PRIOR TO INSTALLATION.

BOLT DOWN BASE PLATE NOTES:
1. CONTRACTOR TO PROVIDE AND INSTALL SIGN POST, BASE PLATE ASSEMBLY, EXPANSION ANCHORS, AND 1/2"ø A307 BOLT.
2. BASE PLATE ASSEMBLY TO BE HOT DIPPED GALVANIZED. PAINT TO MATCH SIGN POST.
3. PROVIDE 1/4"ø DRAIN HOLE TO PREVENT WATER FROM COLLECTING IN HSS.



BEHIND CURB

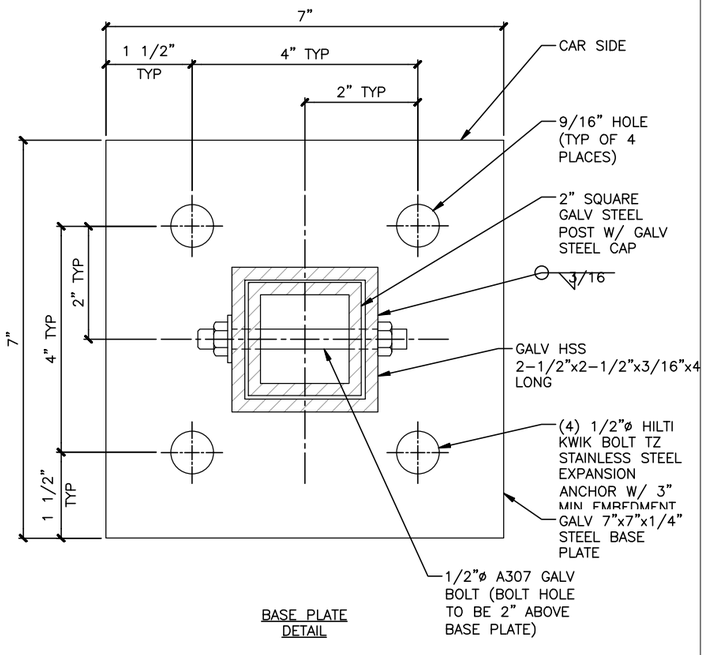


EXISTING CONCRETE SIDEWALK/SLAB OR NEW 3000 PSI SLAB ON GRADE

SIGNAGE POST INSTALLATION DETAIL (4)

SCALE: N.T.S

D-3



BASE PLATE DETAIL

NOT USED (5)

SCALE: N.T.S

D-3

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DANIEL P HAMM
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Daniel P. Hamm

Site #:
NY-2263-100
FASHION OUTLETS OF NIAGARA FALLS

1900 MILITARY ROAD
NIAGARA FALLS, NY 14304

SHEET TITLE

CONSTRUCTION DETAILS

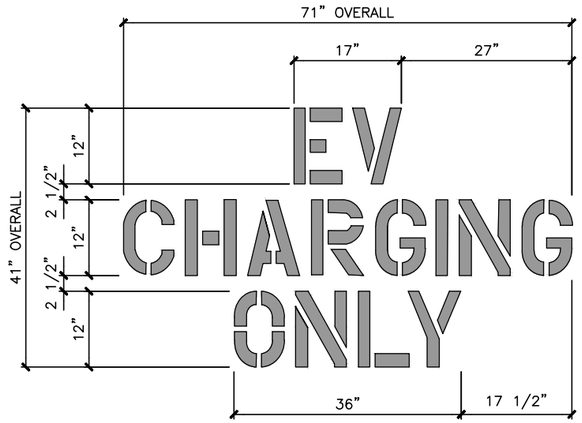
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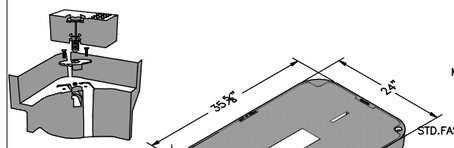
D-3

NOTES
1. BOTTOM OF STENCIL TO BE PLACED AT THE LEADING EDGE OF THE PARKING STALL
2. STENCIL TO FIT WITHIN DIMENSIONS SHOWN
3. PAVEMENT MARKING TO BE PAINTED WHITE
4. STENCIL TO BE CENTERED LATERALLY WITHIN PARKING STALL

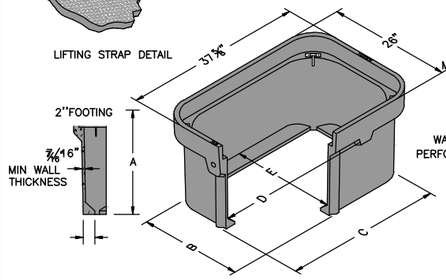
PAINT SPECIFICATIONS
1. PAINT SHALL BE WATERBORNE OR SOLVENT BORNE, COLORS AS SHOWN OR SPECIFIED HEREIN. PAVEMENT MARKING PAINTS SHALL COMPLY WITH APPLICABLE STATE AND LOCAL LAWS ENACTED TO ENSURE COMPLIANCE WITH FEDERAL CLEAN AIR STANDARDS. PAINT MATERIALS SHALL CONFORM TO THE RESTRICTIONS OF THE LOCAL AIR POLLUTION CONTROL DISTRICT.
2. WATERBORNE PAINT: PAINTS SHALL CONFORM TO FS TT–P–1952.
3. SOLVENT BORNE PAINT: PAINT SHALL CONFORM TO FS A–A–2886 OR AASHTO M248. PAINT SHALL BE NON_BLEEDING, QUICK_DRYING, AND ALKYD PETROLEUM BASE PAINT SUITABLE FOR TRAFFIC_BEARING SURFACE AND BE MIXED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS BEFORE APPLICATION .



EV PAVEMENT MARKING DETAIL — 1 / D–4
SCALE: N.T.S







	A	B	C	D	E
➡ 2436–18	18	23–5/8	35–1/4	33–3/15	21–9/16

COVER:
STYLE: FLUSH SOILD
MATERIAL: POLYMER CONCRETE
MODEL: 24"X30"
WEIGHT: TIER 15:150 LBS
TIER 22:204 LBS
STD.FASTENERS: 1/2–13 STAINLESS STEEL HEX HEAD BOLT,WASHER AND FLOATING NUT
OPTIONS: LOGOS AND SPECIAL MARKINGS
SURFACE: SLIP RESISTANT & MARKED*
COEFFICIENT OF FRICTION: >0.6ASTM 1028
PERFORMANCE: ANSI/SCTE–77 TIER 15,WUC 3.6
ASTM C857A–12
ANSI/SCTE–77 TIER22,WUC3.6,
ASTM C857A–16

BODY:
MATERIAL: POLYMER CONCRETE
MODEL: 24"X36"
WEIGHT: 18"DEPTH:142LBS
24"DEPTH:175LBS
36"DEPTH:242LBS
WALL TYPE: STRAIGHT
PERFORMANCE: ANSI/SCTE–77 TIER22,WUC3.6,
ASTM C857A–16

MEDIUM DUTY:
NON–DELIBERATE TRAFFIC
HEAVY DUTY:INCIDENTA,
NON–DELIBERATE TRAFFIC
FOR USE IN NON–VEHICULAR TRAFFIC

HANDHOLE DETAIL — 2 / D–4
SCALE: N.T.S

NOT USED — 3 / D–4
SCALE: N.T.S

NOT USED — 4 / D–4
SCALE: N.T.S

NOT USED — 5 / D–4
SCALE: N.T.S

NOT USED — 6 / D–4
SCALE: N.T.S

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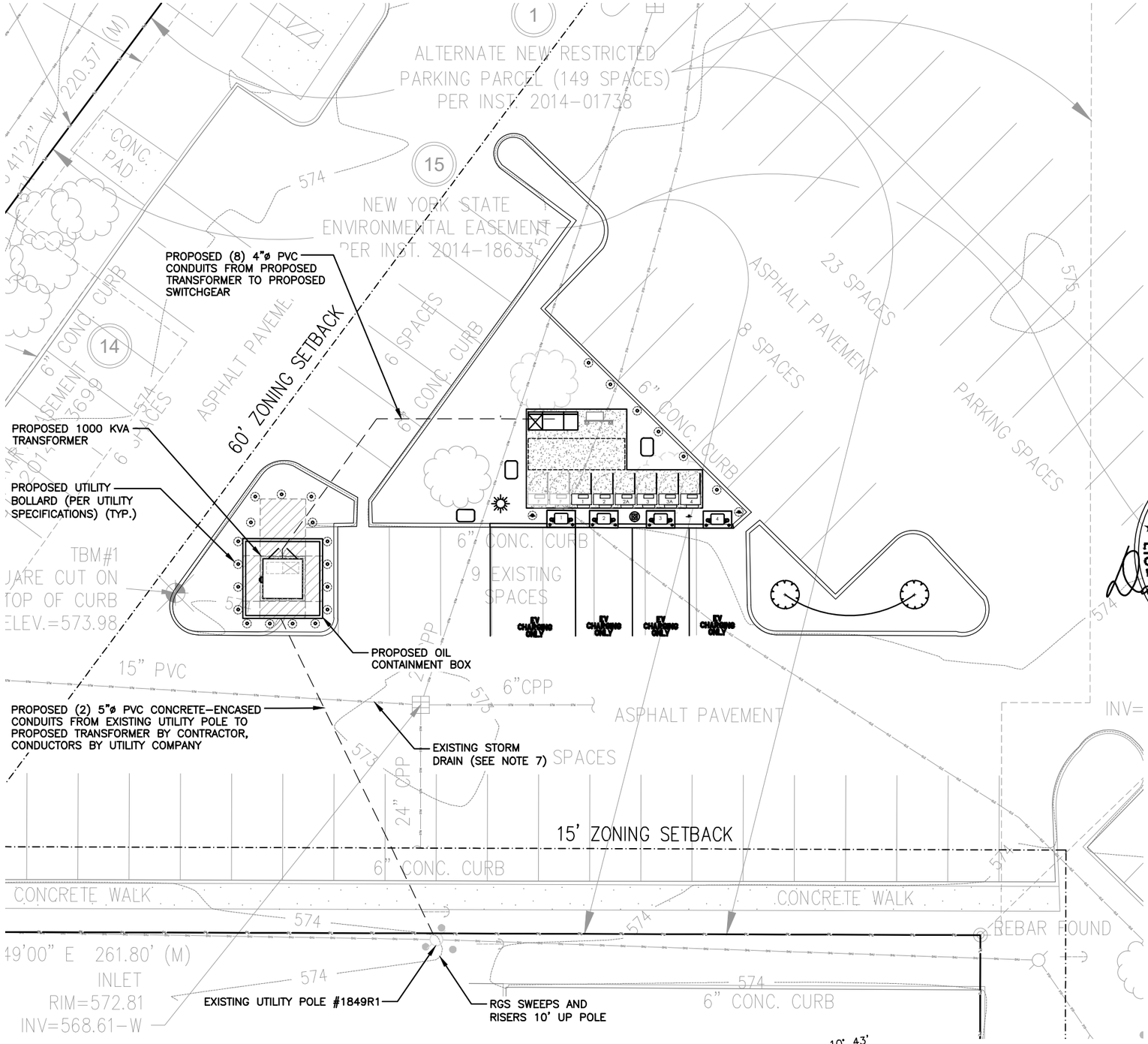
PROJECT NUMBER:	110072
DRAWN BY:	HC
CHECKED BY:	DPH

D-4

NOTES:

1. ALL ELECTRICAL WORK AND RELATED ACTIVITIES ON-SITE SHALL BE PERFORMED IN ACCORDANCE WITH NATIONAL ELECTRIC CODE (NEC) STANDARDS AND ENFORCED BY ALL APPLICABLE JURISDICTIONAL REQUIREMENTS AT THE TIME OF CONSTRUCTION.
2. ALL ALUMINUM CONDUCTORS TO RECEIVE ANTI-OXIDATIVE COATING DURING INSTALLATION.
3. ALL PVC CONDUIT SHALL HAVE BELL-ENDS AND SEALED WITH DUCT SEAL.
4. ALL TERMINATION LUGS SHALL BE CRIMPED WITH APPROVED LUG CRIMPER WITH UL CERTIFICATION.
5. UTILITY EQUIPMENT, PREP WORK, INSTALLATION, AND SCOPE OF WORK RESPONSIBILITIES SHALL BE COORDINATED WITH UTILITY ENGINEER AT TIME OF PRECONSTRUCTION MEETING OR BEFORE THE COMMENCEMENT OF CONSTRUCTION.
6. TRANSFORMER BOLLARD PROTECTION TO BE INSTALLED PER UTILITY SPECIFICATIONS. EXACT QUANTITY, LOCATION, AND SPACING MAY BE AT THE DISCRETION OF THE UTILITY FIELD ENGINEER/INSPECTOR.
7. HAND DIG AROUND UTILITIES.
   CONTACT ARCHITECT/ENGINEER IF UNDERGROUND CONDITIONS CONFLICTS WITH PROPOSED INSTALLATION.

	PROVIDED BY	INSTALLED BY	NOTES
BORE – PRIMARY	N/A	N/A	
TRENCH – PRIMARY	C	C	3' FROM TOP TO GRADE.
CONDUITS – PRIMARY	C	C	CONCRETE ENCASED (2) 5" – 1 IS A SPARE
CONDUCTORS – PRIMARY	U	U	
UTILITY POLE RISER CONDUITS	C	C	SWEEP AND RISER TO BE GALVANIZED STEEL (10' RISER)
PULL BOXES	N/A	N/A	
TRANSFORMER	U	U	
VAULT / PAD	C	C	
TERMINATIONS – PRIMARY	U	U	
TERMINATIONS – SECONDARY	C	C	
TRANSFORMER BOLLARDS	C	C	
METER	U	U	METER TO BE MOUNTED TO SIDE OF XFMR
METER MOUNT	N/A	N/A	
CURRENT TRANSFORMERS (CTS)	U	G	UTILITY TO SUPPLY AND GC TO INSTALL IN XFMR
TRENCH – SECONDARY	C	C	
CONDUITS – SECONDARY	C	C	
CONDUCTORS – SECONDARY	C	C	
SEPARATE OR DEDICATED CT CABINET	N/A	N/A	CT's LOCATED IN XFMR
SEPARATE OR DEDICATED CT CABINET TERMINATIONS	U	C	GC TO INSTALL IN XFMR



UTILITY PLAN 1 / E-1
22x34 SCALE: 1"=10'
11x17 SCALE: 1"=20'

GRAPHIC SCALE
0 5 10 20 30 FEET

electrify america

ELECTRIFY AMERICA, LLC
2003 EDMUND HALLEY DRIVE
SUITE 200
RESTON, VA 20191

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STATE OF NEW YORK
DANIEL P HAMM
082152-1
LICENSED PROFESSIONAL ENGINEER

NY-274-2.000
FASHION OUTLETS OF NIAGARA FALLS

1900 MILITARY ROAD
NIAGARA FALLS, NY 14304

SHEET TITLE

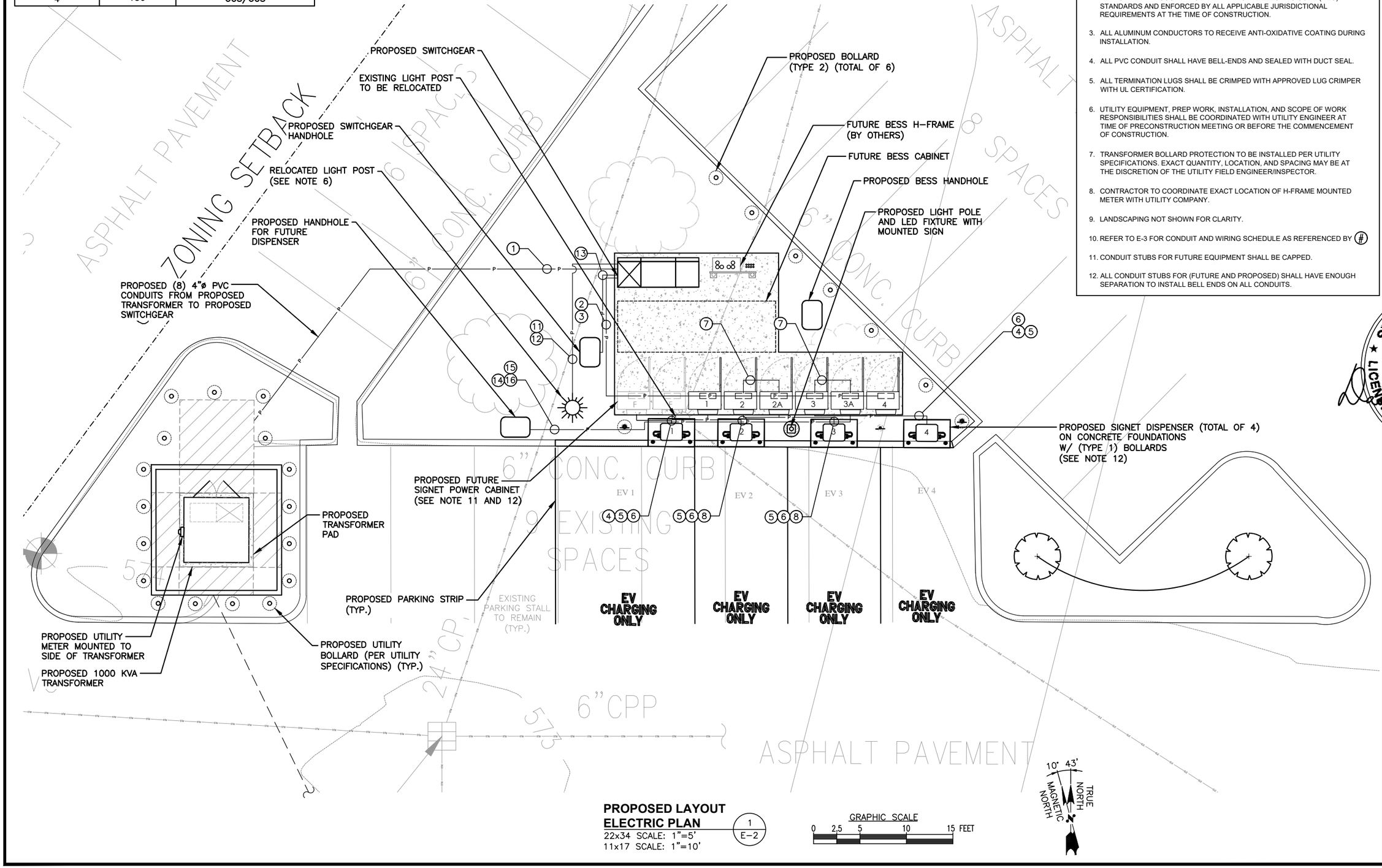
UTILITY PLAN

REV	DATE	DESCRIPTION
2	03-09-22	SS (CD100)
1	08-23-21	SS (CD100)
1	07-22-21	PRELIMINARY (CD90)
A	07-08-21	PRELIMINARY (CD50)

PROJECT NUMBER:	110072
DRAWN BY:	HC
CHECKED BY:	DPH

E-1

PROPOSED SIGNET DISPENSER		
DISPENSER #	kW	CABLE TYPE
1	150	CCS/CCS
2	350	CCS/CCS
3	350	CCS/CCS
4	150	CCS/CCS



PROPOSED LAYOUT
ELECTRIC PLAN (1 / E-2)
22x34 SCALE: 1"=5'
11x17 SCALE: 1"=10'

GRAPHIC SCALE
0 2.5 5 10 15 FEET

10° 43' TRUE NORTH / MAGNETIC NORTH

NOTES:

1. CONDUCTOR LENGTHS ARE ESTIMATES ONLY. LENGTHS ARE BASED ON DIAGRAMMATICAL MEASUREMENTS AND APPROXIMATED BURIED DEPTHS. THE EXACT ROUTING PATH AND CONDUCTOR RUN LENGTHS SHALL BE DETERMINED BY THE CONTRACTOR IN THE FIELD BASED ON PHYSICAL MEASUREMENTS. CONTRACTOR TO ORDER CONDUCTORS BASED ON FIELD MEASUREMENTS.
2. ALL ELECTRICAL WORK AND RELATED ACTIVITIES ON-SITE SHALL BE PERFORMED IN ACCORDANCE WITH NATIONAL ELECTRIC CODE (NEC) STANDARDS AND ENFORCED BY ALL APPLICABLE JURISDICTIONAL REQUIREMENTS AT THE TIME OF CONSTRUCTION.
3. ALL ALUMINUM CONDUCTORS TO RECEIVE ANTI-OXIDATIVE COATING DURING INSTALLATION.
4. ALL PVC CONDUIT SHALL HAVE BELL-ENDS AND SEALED WITH DUCT SEAL.
5. ALL TERMINATION LUGS SHALL BE CRIMPED WITH APPROVED LUG CRIMPER WITH UL CERTIFICATION.
6. UTILITY EQUIPMENT, PREP WORK, INSTALLATION, AND SCOPE OF WORK RESPONSIBILITIES SHALL BE COORDINATED WITH UTILITY ENGINEER AT TIME OF PRECONSTRUCTION MEETING OR BEFORE THE COMMENCEMENT OF CONSTRUCTION.
7. TRANSFORMER BOLLARD PROTECTION TO BE INSTALLED PER UTILITY SPECIFICATIONS. EXACT QUANTITY, LOCATION, AND SPACING MAY BE AT THE DISCRETION OF THE UTILITY FIELD ENGINEER/INSPECTOR.
8. CONTRACTOR TO COORDINATE EXACT LOCATION OF H-FRAME MOUNTED METER WITH UTILITY COMPANY.
9. LANDSCAPING NOT SHOWN FOR CLARITY.
10. REFER TO E-3 FOR CONDUIT AND WIRING SCHEDULE AS REFERENCED BY (#)
11. CONDUIT STUBS FOR FUTURE EQUIPMENT SHALL BE CAPPED.
12. ALL CONDUIT STUBS FOR (FUTURE AND PROPOSED) SHALL HAVE ENOUGH SEPARATION TO INSTALL BELL ENDS ON ALL CONDUITS.

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SITE #:
NY-2703-100
FASHION OUTLETS OF NIAGARA FALLS

1900 MILITARY ROAD
NIAGARA FALLS, NY 14304

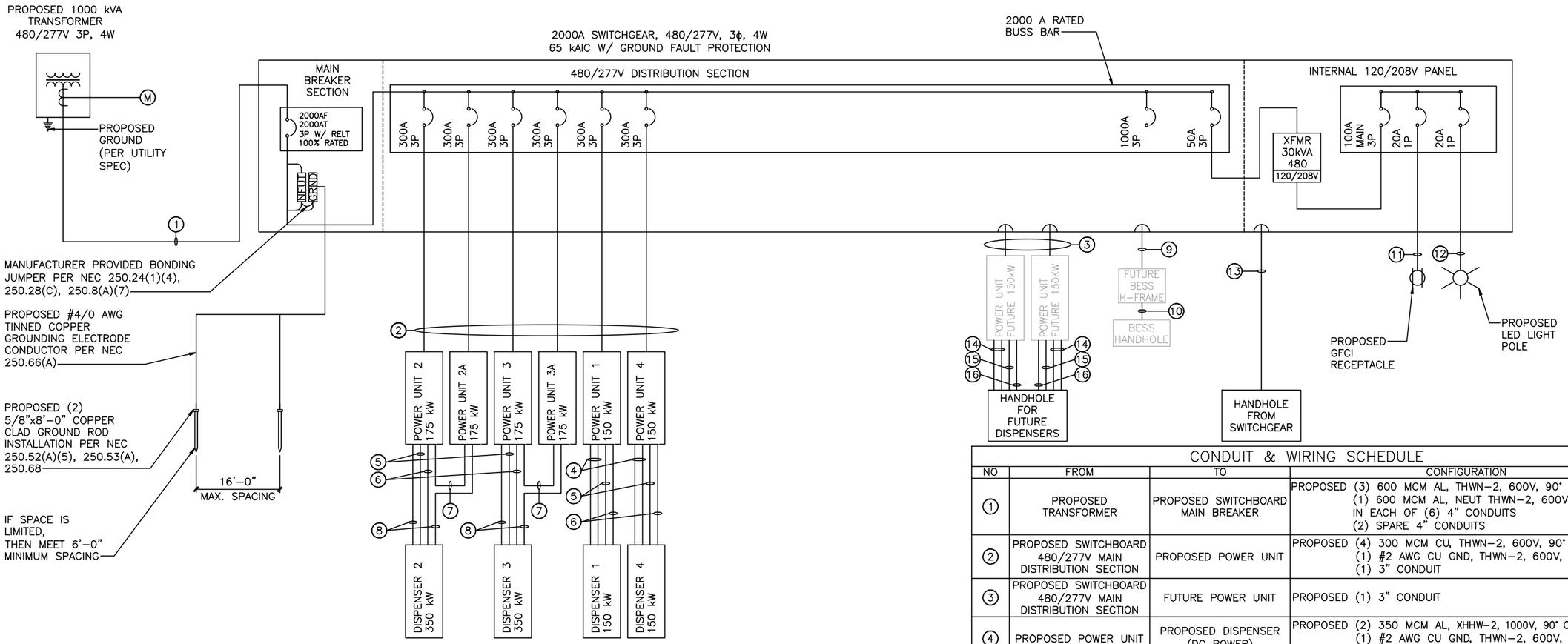
SHEET TITLE

ELECTRIC PLAN

REV	DATE	DESCRIPTION
2	03-09-22	SS (CD100)
1	08-23-21	SS (CD100)
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A	07-08-21	PRELIMINARY (CD50)

PROJECT NUMBER: 110072
DRAWN BY: HC
CHECKED BY: DPH

E-2



CONDUIT & WIRING SCHEDULE

NO	FROM	TO	CONFIGURATION
①	PROPOSED TRANSFORMER	PROPOSED SWITCHBOARD MAIN BREAKER	PROPOSED (3) 600 MCM AL, THWN-2, 600V, 90° C (1) 600 MCM AL, NEUT THWN-2, 600V, 90° C IN EACH OF (6) 4" CONDUITS (2) SPARE 4" CONDUITS
②	PROPOSED SWITCHBOARD 480/277V MAIN DISTRIBUTION SECTION	PROPOSED POWER UNIT	PROPOSED (4) 300 MCM CU, THWN-2, 600V, 90° C (1) #2 AWG CU GND, THWN-2, 600V, 90° C (1) 3" CONDUIT
③	PROPOSED SWITCHBOARD 480/277V MAIN DISTRIBUTION SECTION	FUTURE POWER UNIT	PROPOSED (1) 3" CONDUIT
④	PROPOSED POWER UNIT	PROPOSED DISPENSER (DC POWER)	PROPOSED (2) 350 MCM AL, XHHW-2, 1000V, 90° C (1) #2 AWG CU GND, THWN-2, 600V, 90° C (2) 3" CONDUIT
⑤	PROPOSED POWER UNIT	PROPOSED DISPENSER (AUX POWER)	PROPOSED (2) #12 AWG CU (1) #12 AWG CU GND (1) 3/4" CONDUIT
⑥	PROPOSED POWER UNIT	PROPOSED DISPENSER (COMM)	PROPOSED (1) BUFFERED I/O MM FIBER (ST/ST CONN) (1) 1-1/2" CONDUIT
⑦	PROPOSED POWER UNIT	PROPOSED POWER UNIT (COMM)	PROPOSED (1) 2-CONDUCTOR #16 AWG (TW/SH PAIR) (1) 1-1/2" CONDUIT
⑧	PROPOSED POWER UNIT	PROPOSED DISPENSER (DC POWER)	PROPOSED (2) 500 MCM CU, XHHW-2, 1000V, 90° C (1) #2 AWG CU GND, THWN-2, 600V, 90° C (1) 3" CONDUIT
⑨	PROPOSED SWITCHBOARD 480/277V MAIN DISTRIBUTION SECTION	FUTURE BESS H-FRAME	PROPOSED (3) 4" CONDUIT (4) 1-1/4" CONDUIT
⑩	FUTURE BESS H-FRAME	HANDHOLE FROM SWITCHBOARD	PROPOSED (3) 4" CONDUIT (4) 1-1/4" CONDUIT
⑪	PROPOSED SWITCHBOARD 120/208V SECTION	PROPOSED GFCI RECEPTACLE	PROPOSED (1) #12 AWG CU & (1) #12 AWG CU NEUT (1) #12 AWG CU GND (1) 3/4" CONDUIT
⑫	PROPOSED SWITCHBOARD 120/208V SECTION	PROPOSED LED LIGHT	PROPOSED (2) #10 AWG CU (1) #10 AWG CU GND (1) 3/4" CONDUIT
⑬	PROPOSED SWITCHBOARD 120/208V SECTION	HANDHOLE FROM SWITCHBOARD	PROPOSED (1) 3" CONDUIT
⑭	FUTURE POWER UNIT	HANDHOLE FUTURE DISPENSERS	PROPOSED (2) 3" CONDUIT
⑮	FUTURE POWER UNIT	HANDHOLE FUTURE DISPENSERS	PROPOSED (1) 1-1/2" CONDUIT
⑯	FUTURE POWER UNIT	HANDHOLE FUTURE DISPENSERS	PROPOSED (1) 3/4" CONDUIT
	NOT USED		

NOTES:
1. POWER UNITS AND DISPENSERS MANUFACTURED BY SIGNET.
2. PROPOSED CTs/PTs SHALL BE LOCATED AS APPROVED BY THE UTILITY COMPANY.
3. MAIN BREAKER IS EQUIPPED WITH REDUCED ENERGY LET THROUGH (RELT) MAINTENANCE SWITCH WITH LOCAL STATUS INDICATION.
4. CONTRACTOR TO PROVIDE WEATHER PROOF "WHILE IN USE" COVER

LOAD SUMMARY

kVA		QTY	TOTAL kVA
POWER CABINET	150 kVA	2	300
POWER CABINET	175 kVA	4	700
FUTURE CABINET	150 kVA	2	300
	25% CONTINUOUS DUTY		325
	30 kVA TRANSFORMER		30
	TOTAL		1,655
	AMPS (480V, 3-PH)		1,993A

ONE-LINE DIAGRAM (1 / E-3)
SCALE: N.T.S

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DANIEL P HAMM
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LICENSED PROFESSIONAL ENGINEER

NY-247-2.00
FASHION OUTLETS OF NIAGARA FALLS

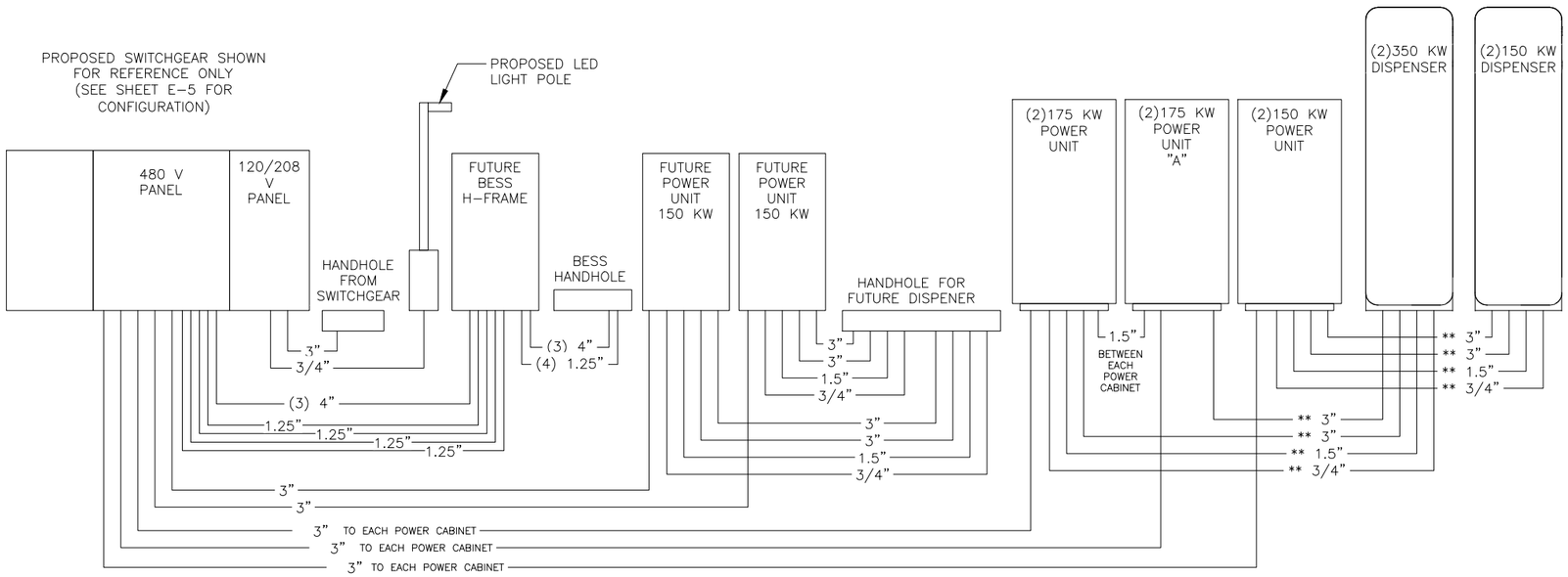
1900 MILITARY ROAD
NIAGARA FALLS, NY 14304

SHEET TITLE
ONE-LINE ELECTRIC DIAGRAM

REV	DATE	DESCRIPTION
2	03-09-22	SS (CD100)
1	08-23-21	SS (CD100)
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A	07-08-21	PRELIMINARY (CD50)

PROJECT NUMBER: 110072
DRAWN BY: HC
CHECKED BY: DPH

E-3



ELECTRICAL CONDUIT DETAILS

SCALE: N.T.S

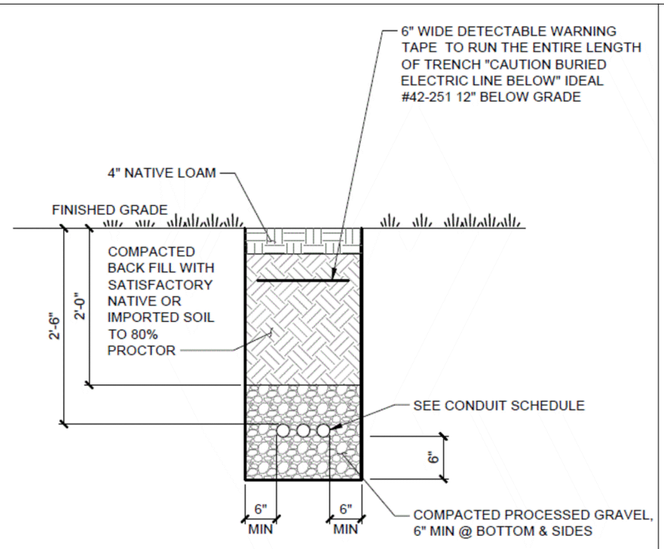
1 E-4

NOTES:
** = TO EACH DISPENSER.

NOT USED

SCALE: N.T.S

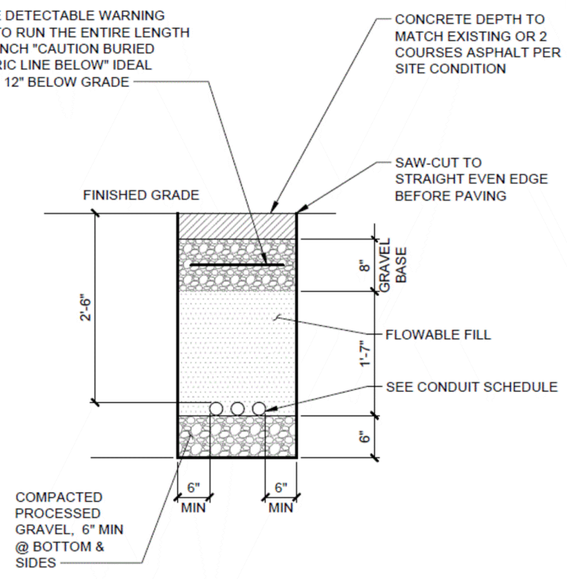
2 E-4



NON-UTILITY TRENCHING UNDER SOIL DETAIL

SCALE: N.T.S

3 E-4



NON-UTILITY TRENCHING UNDER ASPHALT DETAIL

SCALE: N.T.S

4 E-4

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NY-2202100

FASHION OUTLETS OF NIAGARA FALLS

1900 MILITARY ROAD
NIAGARA FALLS, NY 14304

SHEET TITLE

ELECTRICAL DETAILS

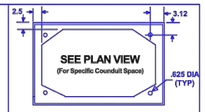
REV	DATE	DESCRIPTION
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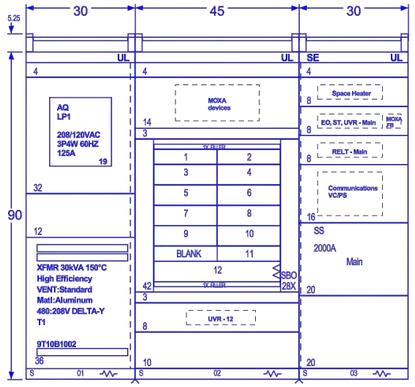
PROJECT NUMBER: 110072
DRAWN BY: HC
CHECKED BY: DPH

E-4

ACCESS TO: Front Only	PHASE: 3P4W
CLASS: 2	AMPERE: 2000
LABEL: UL SE	BUS MTL: Al 750A / in²
VOLTAGE: 480Y/277V	PLATE: Tin Plate
STYLE: Bolt-On	RATING: Fully
BUS BRACING (RMS SYM)	65000 A
DEV. MIN. INT. RATING (RMS SYM)	65000 A
Total Line Up Width: 105	

Spectra Series™ Switchboard





Front View

Bussing Diagram

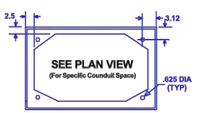
JOB NAME: EA 110072	CUSTOMER: ELECTRIFY AMERICA			PLANT: MONTERREY	MARK: NY110072 NIAGARA FAL
MADE BY: Avendaño D ISSUED: 01/14/2020	CUST. ORDER NO:				
REL BY: DA	REQN. NO: 0902173615	R	10/20/21	Release for manufacturing DA	152228377
	ORDER NO: 152228377	NO	DATE	REVISIONS INITIALS	SHEET 10-FV1 ITEM 10

HiRes 7.0.2007

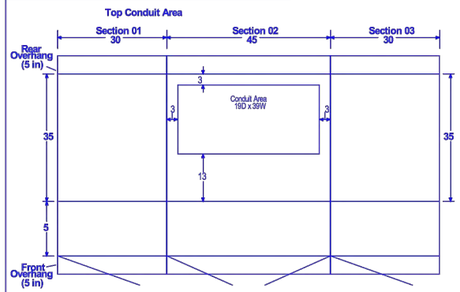
Spectra Series™ Switchboard

Total Line Up Width: 105

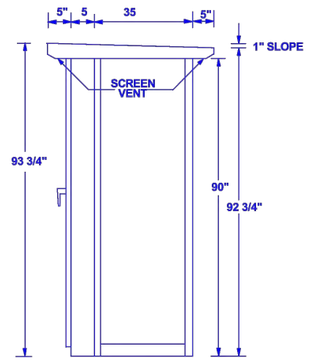
Conduit Detail



Top Conduit Area

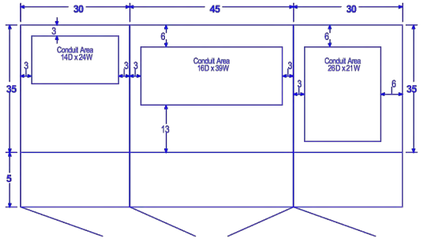


Front Plan View



SIDE VIEW

Bottom Conduit Area



Front Plan View

JOB NAME: EA 110072	CUSTOMER: ELECTRIFY AMERICA			PLANT: MONTERREY	MARK: NY110072 NIAGARA FAL
MADE BY: Avendaño D ISSUED: 01/14/2020	CUST. ORDER NO:				
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HiRes 7.0.2007

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STATE OF NEW YORK
DANIEL P HAMM
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LICENSED PROFESSIONAL ENGINEER

NY-242-21000

FASHION OUTLETS OF NIAGARA FALLS

1900 MILITARY ROAD
NIAGARA FALLS, NY 14304

SHEET TITLE

SWITCHGEAR

REV	DATE	DESCRIPTION
2	03-09-22	SS (CD100)
1	08-23-21	SS (CD100)
1	07-22-21	PRELIMINARY (CD90)
A	07-08-21	PRELIMINARY (CD50)

PROJECT NUMBER: 110072
DRAWN BY: HC
CHECKED BY: DPH

E-5

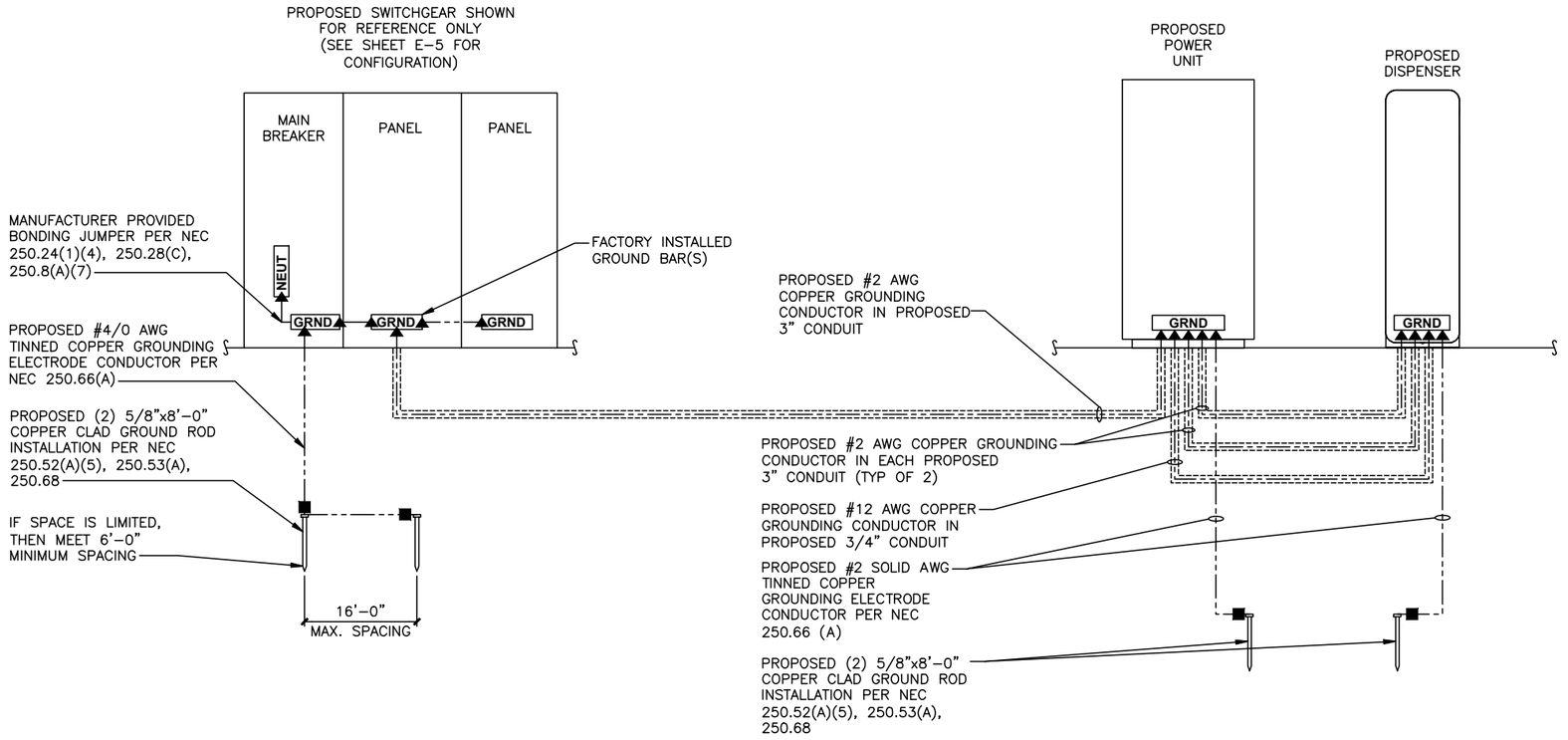
LEGEND

▲ MECHANICAL CONNECTION

■ CADWELD CONNECTION

NOTES:

1. ALL HARDWARE SHALL BE STAINLESS STEEL 3/8" DIAMETER OR LARGER. ALL HARDWARE 18–8 STAINLESS STEEL INCLUDING LOCK WASHERS, COAT ALL SURFACES WITH AN ANTI–OXIDANT COMPOUND BEFORE MATING.
2. FOR GROUND BOND TO STEEL ONLY: INSERT A CADMIUM FLAT WASHER BETWEEN LUG AND STEEL, COAT ALL SURFACES WITH AN ANTI–OXIDANT COMPOUND BEFORE MATING.
3. ALL TERMINATION LUGS SHALL BE CRIMPED WITH APPROVED LUG CRIMPER WITH UL CERTIFICATION.



GROUNDING SCHEMATIC 1 / E–6
SCALE: N.T.S

CADWELD CONNECTIONS (OR APPROVED EQUAL)



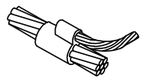
CABLE TO REBAR
TEE CONNECTION
HORIZONTAL CABLE TAP TO VERTICAL REBAR
TYPE RJ



PARALLEL HORIZONTAL CONDUCTORS
PARALLEL THROUGH CONNECTION OF HORIZONTAL TYPE PT



VERTICAL STEEL SURFACE
CABLE DOWN AT 45° TO VERTICAL STEEL SURFACE INCLUDING PIPE TYPE VS



PARALLEL HORIZONTAL CONDUCTORS
PARALLEL DEAD END TAP OR HORIZONTAL THRU CONDUCTOR
TYPE PC



THROUGH CABLE TO GROUND ROD
THROUGH CABLE TO TOP OF GROUND ROD
TYPE GT



VERTICAL PIPE
CABLE DOWN AT 45° TO RANGE OF VERTICAL PIPES TYPE VS



HORIZONTAL STEEL SURFACE
TO FLAT STEEL SURFACE OR HORIZONTAL PIPE TYPE HS



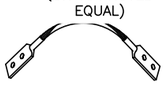
HORIZONTAL SPLICE
SPLICE OF HORIZONTAL CABLES

CADWELD CONNECTION DETAIL 2 / E–6
SCALE: N.T.S

BURNDY CONNECTIONS (OR APPROVED EQUAL)



"C" CONNECTOR
HYPRESS TYPE YGHC



BOND JUMPER
FIELD FABRICATED GREEN STRANDED INSULATED TYPE 2–YA–2



COPPER LUGS
TWO HOLE – LONG BARREL LENGTH TYPE YA–2

MECHANICAL CONNECTION DETAIL 3 / E–6
SCALE: N.T.S

NOT USED 4 / E–6
SCALE: N.T.S

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SITE #
NY-242-2.00
FASHION OUTLETS OF NIAGARA FALLS

1900 MILITARY ROAD
NIAGARA FALLS, NY 14304

SHEET TITLE

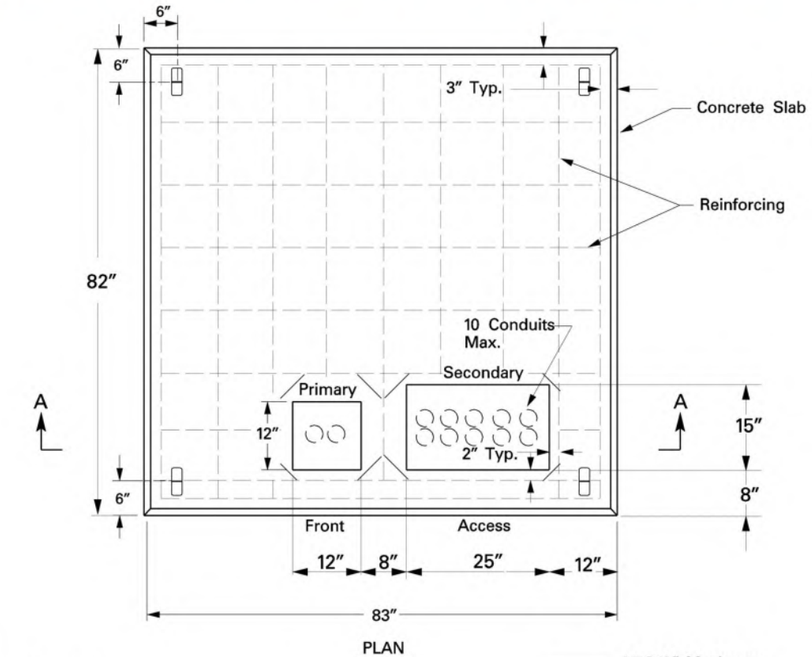
GROUNDING DETAILS

REV	DATE	DESCRIPTION
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1	08-23-21	SS (CD100)
1	07-22-21	PRELIMINARY (CD90)
A	07-08-21	PRELIMINARY (CD50)

PROJECT NUMBER:	110072
DRAWN BY:	HC
CHECKED BY:	DPH

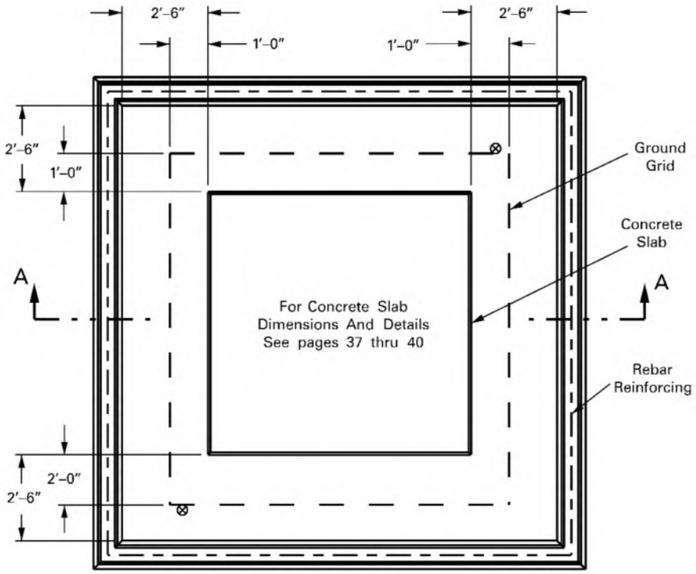
E-6

Figure 27.0-2 15kV Transformer Pad 750- 2500kVA 44-114 (ref-44-114/UF8B)

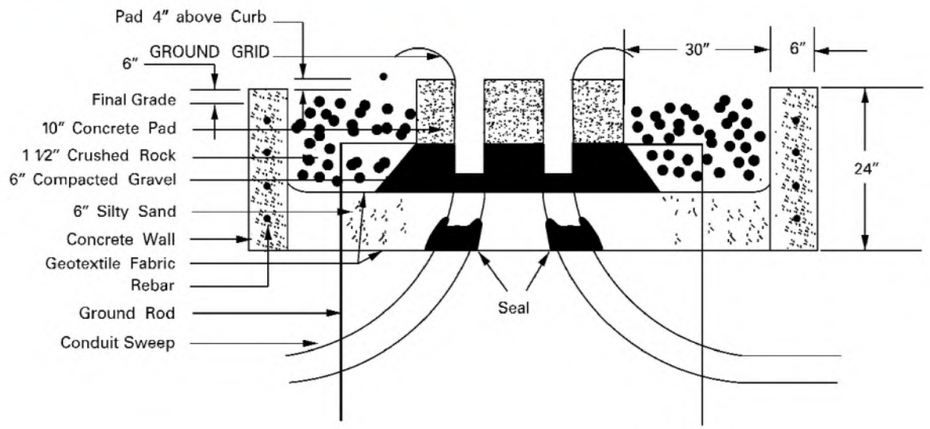


TRANSFORMER CONCRETE PAD 1/E–7
SCALE: N.T.S

Containment Area Plan View



Typical Cross Section of Containment Pad A-A



OIL CONTAINMENT DETAIL 2/E–7
SCALE: N.T.S

electrify america

ELECTRIFY AMERICA, LLC
2003 EDMUND HALLEY DRIVE
SUITE 200
RESTON, VA 20191

SAI
12 INDUSTRIAL WAY
SALEM, NEW HAMPSHIRE 03079

HDG HUDSON Design Group LLC
45 BEECHWOOD DRIVE
N. ANDOVER, MA 01845
TEL: (978) 557-5553
FAX: (978) 336-5586

STATE OF NEW YORK ★ DANIEL P HAMM ★ 082152-1 LICENSED PROFESSIONAL ENGINEER

NY-240-2100

FASHION OUTLETS OF NIAGARA FALLS

1900 MILITARY ROAD
NIAGARA FALLS, NY 14304

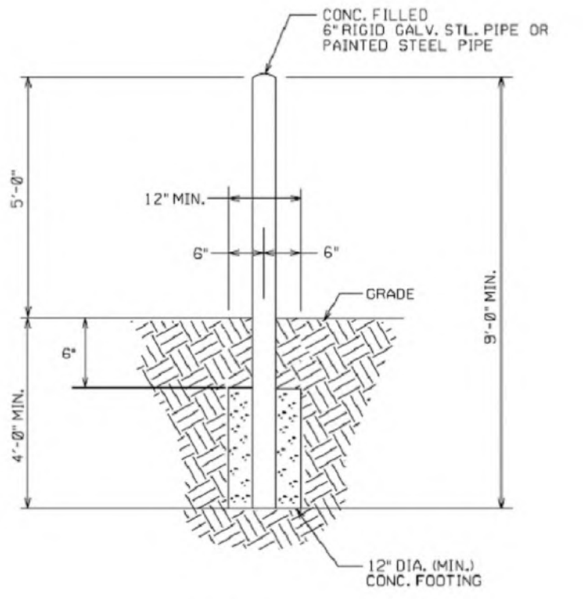
SHEET TITLE

UTILITY DETAIL

REV	DATE	DESCRIPTION
2	03-09-22	SS (CD100)
1	08-23-21	SS (CD100)
1	07-22-21	PRELIMINARY (CD90)
A	07-08-21	PRELIMINARY (CD50)

PROJECT NUMBER:	110072
DRAWN BY:	HC
CHECKED BY:	DPH

E-7



TYPICAL
BOLLARD DETAIL

TYPICAL BOLLARD DETAIL 1 / E-8
SCALE: N.T.S

NOT USED 2 / E-8
SCALE: N.T.S

electrify america

ELECTRIFY AMERICA, LLC
2003 EDMUND HALLEY
DRIVE
SUITE 200
RESTON, VA 20191

12 INDUSTRIAL WAY
SALEM, NEW HAMPSHIRE 03079

HUDSON
Design Group LLC
45 BEECHWOOD DRIVE
N. ANDOVER, MA 01845
TEL: (978) 557-5553
FAX: (978) 336-5586

STATE OF NEW YORK
DANIEL P HAMM
082152-1
LICENSED PROFESSIONAL ENGINEER

NY-274-100

FASHION OUTLETS OF NIAGARA FALLS

1900 MILITARY ROAD
NIAGARA FALLS, NY 14304

SHEET TITLE

UTILITY DETAIL

REV	DATE	DESCRIPTION
2	03-09-22	SS (CD100)
1	08-23-21	SS (CD100)
1	07-22-21	PRELIMINARY (CD90)
A	07-08-21	PRELIMINARY (CD50)

PROJECT NUMBER:	110072
DRAWN BY:	HC
CHECKED BY:	DPH

E-8

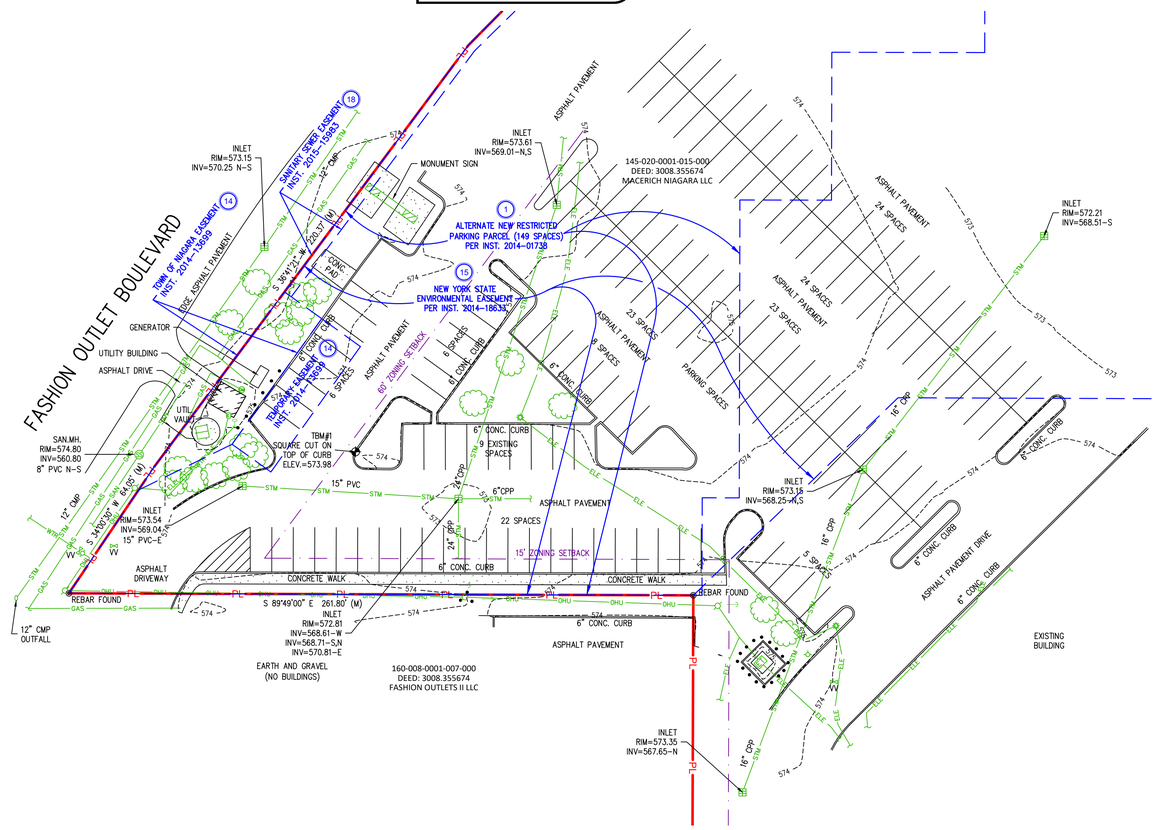
COVENANT, RESTRICTIONS AND EASEMENTS

1. Covenants and restrictions contained in Indenture recorded on 11/01/1993 in (as) **Liber 2477 Cp 204**, as modified by Agreement Modifying Deed Restriction and Easement Agreement made by and between Macerich Niagara LLC and Niagara Falls Lodge No. 346 of the Benevolent and Protective Order of Elks of the United States of America recorded 2/6/2014 as Instrument No. **2014-01738**. **(DOES AFFECT, PLOTTED ON SURVEY.)**
2. Covenants and restrictions, together with easements and a provision for maintenance contained in Agreement recorded on 11/01/1993 in (as) **Liber 2477 Cp 266**. **(DOES NOT AFFECT THE SURVEY AREA, NOT PLOTTED. AFFECTS ELK'S LODGE)**
3. Covenants and restrictions contained in Declaration made by Fashion Outlets of Niagara LLC dated as of 07/21/2011 and recorded on 08/04/2011 in (as) Instrument No. **2011-12844**. **(DOES AFFECT THE SURVEY AREA, BLANKET IN NATURE, NO PLOTTABLE ITEMS.)**
4. Pipe Line Easement contained in Agreement recorded on 11/22/1961 in (as) **Liber 1382 Cp 490**. **(DOES AFFECT THE SURVEY AREA, BLANKET IN NATURE, NO PLOTTABLE ITEMS.)**
5. Telephone Easement contained in Agreement recorded on 07/12/1963 in (as) **Liber 1415 Cp 449**. **(DOES NOT AFFECT THE SURVEY AREA, NOT PLOTTED ON THE SURVEY.)**
6. Right of Way for Gas Pipe Line contained in Agreement recorded on 12/03/1970 in (as) **Liber 1512 Cp 521**. **(DOES AFFECT THE SURVEY AREA, BLANKET IN NATURE, NO PLOTTABLE ITEMS. EASEMENT APPEARS TO BE IN ADJACENT R.O.W.)**
7. Reservation of Ingress Egress Easement contained in deed recorded on 12/16/1975 in (as) **Liber 1578 Cp 590**. **(DOES NOT AFFECT THE SURVEY AREA, NOT PLOTTED ON THE SURVEY.)**
8. Cross Easement contained in Agreement together with a provision for maintenance recorded on 09/05/1984 in (as) **Liber 1907 Cp 246**. **(DOES NOT AFFECT THE SURVEY AREA, NOT PLOTTED ON THE SURVEY.)**
9. Right of Way Easement contained in Agreement recorded on 04/16/1987 in (as) **Liber 2055 Cp 59**. **(DOES NOT AFFECT THE SURVEY AREA, NOT PLOTTED ON THE SURVEY.)**
10. Electric Easement contained in Agreement recorded on 05/28/1987 in (as) **Liber 2061 Cp 227**. **(DOES NOT AFFECT THE SURVEY AREA, NOT PLOTTED ON THE SURVEY.)**
11. Gas Easement contained in Agreement recorded on 03/03/1995 in (as) **Liber 2570 Cp 30**, as modified by Gas Easement Agreement recorded on 03/03/1995 in **Liber 2570 Cp 32**. **(DOES NOT AFFECT THE SURVEY AREA, NOT PLOTTED ON THE SURVEY.)**
12. Easement contained in Agreement recorded on 05/27/1988 in (as) **Liber 2831 Cp 248**. Operation and Reciprocal Easement contained in Agreement recorded on 02/06/2014 in (as) Instrument No. **2014-01744**. **(DOES NOT AFFECT THE SURVEY AREA, NOT PLOTTED ON THE SURVEY.)**
13. (Affects Lot 15) Grant of Easement contained in Instrument recorded on 08/18/2014 in (as) Instrument No. **2014-13661**. **(DOES NOT AFFECT THE SURVEY AREA, NOT PLOTTED ON THE SURVEY.)**
14. Grant of Easement in Gross and Declaration of Covenants contained in Instrument recorded on 08/19/2014 in (as) Instrument No. **2014-13699**. **(DOES AFFECT, PLOTTED ON SURVEY.)**
15. Environmental Easement Granted Pursuant to Article 71, Title 36 of the New York State Environmental Conservation Law contained in Indenture recorded on 10/30/2014 in (as) Instrument No. **2014-18633**. **(DOES AFFECT, PLOTTED ON SURVEY.)**
16. Right of Way Easement contained in Agreement recorded on 04/13/2015 in (as) Instrument No. **2015-05384**. **(DOES NOT AFFECT THE SURVEY AREA, NOT PLOTTED ON THE SURVEY.)**
17. Right of Way Easement contained in Agreement recorded on 05/07/2015 in (as) Instrument No. **2015-06913**. **(DOES NOT AFFECT THE SURVEY AREA, NOT PLOTTED ON THE SURVEY.)**
18. Sanitary Sewer Easement contained in Instrument recorded on 09/17/2015 in (as) Instrument No. **2015-15983**. **(DOES AFFECT, PLOTTED ON SURVEY.)**
19. Terms, covenants, conditions and agreements contained in a lease made by and between Benderson Development Company Inc., Ronald Benderson, Randall Benderson and David H. Baldauf as Trustees U/TA dated 10/14/1985 known as the Benderson 85-1 Trust, Lessor, and Saks & Company, Lessee, a memorandum of which dated as of 06/29/1994 was recorded on 09/08/1994 in **Liber 2536 Cp 116**. **(AFFECT UNDETERMINED, NO DESCRIPTION OR LOCATION IN DOCUMENT.)**
20. Terms, covenants, conditions and agreements contained in an unrecorded lease made by and between Fashion Outlets of Niagara LLC, Lessor, and Retail Brand Alliance Inc. d/b/a Brooks Brothers Factory Store, Lessee, dated 06/30/1992, as set forth in Subordination, Non-Disturbance and Attornment Agreement, recorded on 06/27/2006 in **Liber 3362 Cp 964**. **(DOES AFFECT THE SURVEY AREA, BLANKET IN NATURE, NO PLOTTABLE ITEMS.)**
21. Terms, covenants, conditions and agreements contained in a lease made by and between Fashion Outlets of Niagara LLC, Lessor, and Town of Niagara Industrial Development Agency, Lessee, a memorandum of which dated as of 09/01/2006 was recorded on 02/21/2007 in **Liber 3390 Cp 426**. WITH REGARD THERETO:
    (a) First Amendment of Lease made by and between Fashion Outlets of Niagara LLC and Town of Niagara Industrial Development Agency dated as of 11/01/2010 and recorded on 11/12/2010 as Instrument No. **2010-19010**.

    {SEE CONTINUATION OF ITEMS AT TOP RIGHT.}

    (b) Assignment and Assumption of Lease Agreement made by Fashion Outlets of Niagara, LLC, to Macerich Niagara LLC dated as of 06/01/2011 and recorded 08/4/2011 as Instrument No. **2011-12846**.
    (c) Amended and Restated Lease Agreement made by and between Macerich Niagara LLC, as Landlord, and the Town of Niagara Industrial Development Agency, as Tenant, dated as of 07/01/2011, a Memorandum of which is dated as of 07/01/2011 and recorded 08/04/2011 as Instrument No. **2011-12848**.
    (d) First Amendment to Memorandum of Amended and Restated Lease Pursuant to Section 291-c of the Real Property Law made by and between the Town of Niagara Industrial Development Agency, and Macerich Niagara LLC, dated as of 10/31/2013 and recorded 02/06/2014 as Instrument No. **2014-01742**. **(DOES AFFECT THE SURVEY AREA, BLANKET IN NATURE, NO PLOTTABLE ITEMS.)**
22. Terms, covenants, conditions and agreements contained in a leaseback made by and between Town of Niagara Industrial Development Agency, Lessor, and Fashion Outlets of Niagara LLC, Lessee, a memorandum of which dated as of 09/01/2006 was recorded on 02/21/2007 in **Liber 3390 Cp 431**. WITH REGARD THERETO:
    (a) First Amendment of Leaseback made by and between Town of Niagara Industrial Development Agency and Fashion Outlets of Niagara LLC dated as of 11/01/2010 and recorded on 11/12/2010 as Instrument No. **2010-19011**.
    (b) Assignment and Assumption of Leaseback Agreement made by Fashion Outlets of Niagara, LLC, to Macerich Niagara LLC dated as of 07/01/2011 and recorded 08/04/2011 as Instrument No. **2011-12847**.
    (c) Amended and Restated Leaseback Agreement made by and between the Town of Niagara Industrial Development Agency, as Landlord, and Macerich Niagara LLC, as Tenant, dated as of 07/01/2011, a Memorandum of which is dated as of 07/01/2011 and recorded 08/04/2011 as Instrument No. **2011-12849**.
    (d) First Amendment to Memorandum of Amended and Restated Leaseback Agreement Pursuant to Section 291-c of the Real Property Law made by and between the Town of Niagara Industrial Development Agency, and Macerich Niagara LLC, dated as of 10/31/2013 and recorded 02/06/2014 as Instrument No. **2014-01743**. **(DOES AFFECT THE SURVEY AREA, BLANKET IN NATURE, NO PLOTTABLE ITEMS.)**
23. Terms, covenants, conditions and agreements contained in a lease made by and between Fashion Outlets of Niagara LLC, Lessor, and Polo New York LLC, Lessee, a memorandum of which dated as of 09/11/2007 was recorded on 06/03/2008 as **Liber 3439 Cp 759**. **(DOES AFFECT THE SURVEY AREA, BLANKET IN NATURE, NO PLOTTABLE ITEMS.)**
24. Terms, covenants, conditions and agreements contained in a lease made by and between Fashion Outlets of Niagara LLC, Lessor, and Hugo Boss Retail Inc., Lessee, a memorandum of which dated as of 03/14/2008 was recorded on 10/01/2008 in **Liber 3450 Cp 740**.
    a) Fee and Leasehold Assignment of Leases and Rents made from Fashion Outlets of Niagara LLC and Town of Niagara Industrial Development Agency, Assignor, to German American Capital Corporation, Assignee, dated as of 09/15/2010 and recorded on 09/30/2010 as Instrument No. **2010-16050**.
    b) Assignment of Assignment of Leases and Rents to U.S. Bank National Association, as Trustee for the Registered Holders of Comm 2010-C1 Commercial Mortgage Pass-Through Certificates, recorded 01/18/2011 as Instrument No. **2011-01369**.
    c) First Amendment to Fee and Leasehold Assignment of Leases and Rents made by Macerich Niagara LLC and the Town of Niagara Industrial Development Agency to U.S. Bank National Association, as Trustee for the Registered Holders of Comm 2010-C1 Commercial Mortgage Pass-Through Certificates, dated as of 07/22/2011 and recorded 08/04/2011 as Instrument No. **2011-12851**.
    d) Partial Release and Second Amendment to Fee and Leasehold Assignment of Leases and Rents made by Macerich Niagara LLC and the Town of Niagara Industrial Development Agency to U.S. Bank National Association, as Trustee for the Registered Holders of Comm 2010-C1 Commercial Mortgage Pass-Through Certificates, dated as of 10/31/2013 and recorded 02/06/2014 as Instrument No. **2014-01740**. **(DOES AFFECT THE SURVEY AREA, BLANKET IN NATURE, NO PLOTTABLE ITEMS.)**
25. Notice of Certificate of Completion Brownfield Cleanup Program 6 NYCRR Part 375-1.9(d) recorded 1/9/2015 as Instrument No. **2015-00272**. **(DOES AFFECT THE SURVEY AREA, BLANKET IN NATURE, NO PLOTTABLE ITEMS.)**
26. Operation and Reciprocal Easement Agreement Mortgage, Assignment of Leases and Rents and Security Agreement by Macerich Niagara LLC ("Borrower") and U.S. Bank National Association, as Trustee for the Registered Holders of Comm 2010-C1 Commercial Mortgage Pass-Through Certificates ("Lender"), dated as of 10/31/2013 and recorded 02/06/2014 as Instrument No. **2014-01746**. **(DOES AFFECT THE SURVEY AREA, BLANKET IN NATURE, NO PLOTTABLE ITEMS.)**
27. Notice of Transfer of Certificate of Completion Brownfield Cleanup Program Pursuant to 6 NYCRR Part 375-1.9(f) recorded 10/01/2015 as Instrument No. **2015-17105**. **(DOES AFFECT THE SURVEY AREA, BLANKET IN NATURE, NO PLOTTABLE ITEMS.)**
28. Notice of Appropriation dated 10/24/2016 and recorded on 10/24/2016 as Instrument No. **2016-19187** and Amendment Notice of Appropriation dated 10/24/2016 and recorded on 10/24/2016 as Instrument No. **2016-19298 (DOES NOT AFFECT, NOT PLOTTED ON THE SURVEY.)**
29. Amendment to Lease Agreement made by and between Macerich Niagara LLC and Town of Niagara Industrial Development Agency dated as of 4/1/2020 recorded 8/31/2020 as Instrument No. **2020-13561**. **(DOES AFFECT THE SURVEY AREA, BLANKET IN NATURE, NO PLOTTABLE ITEMS.)**
30. Amendment to Leaseback Agreement made by and between Macerich Niagara LLC and Town of Niagara Industrial Development Agency dated as of 4/1/2020 recorded 8/31/2020 as Instrument No. **2020-13562**. **(DOES AFFECT THE SURVEY AREA, BLANKET IN NATURE, NO PLOTTABLE ITEMS.)**
31. Second Amendment to Fee and Leasehold Assignment of Leases and Rents made by and between Macerich Niagara LLC and Niagara County Industrial Development Agency and U.S. Bank National Association, as Trustee for the Registered Holders of Comm 2010-C1 Commercial Mortgage Pass-Through Certificates dated as of 4/1/2020 recorded 8/31/202 as Instrument No. **2020-13564**. **(DOES AFFECT THE SURVEY AREA, BLANKET IN NATURE, NO PLOTTABLE ITEMS.)**
32. Second Amendment to Amended, Restated and Consolidated Fee and Leasehold Mortgage, Assignment of Leases and Rents and Security Agreement made by and between Macerich Niagara LLC and Niagara County Industrial Development Agency and U.S. Bank National Association, as Trustee for the Registered Holders of Comm 2010-C1 Commercial Mortgage Pass-Through Certificates dated as of 4/1/2020 recorded 8/31/202 as Instrument No. **2020-13563**. **(DOES AFFECT THE SURVEY AREA, BLANKET IN NATURE, NO PLOTTABLE ITEMS.)**

SURVEY DRAWING



LEGEND

- ZONING SETBACK LINE
- EASEMENT LINE
- PROPERTY LINE
- ADJOINER
- BUILDING
- ASPHALT
- EXISTING CONTOUR
- OHU — OVERHEAD UTILITY
- ELE — UNDERGROUND ELECTRIC
- GAS — UNDERGROUND GAS
- SAN — UNDERGROUND SANITARY
- STM — UNDERGROUND STORM
- WTR — UNDERGROUND WATER
- ELECTRIC METER
- GUARD POST BOLLARD
- TEMPORARY BENCHMARK
- UTILITY POLE
- FOUND MONUMENTATION
- WATER VALVE
- LIGHT POLE
- SANITARY MANHOLE
- HYDRANT
- INLET
- GAS METER
- TRANSFORMER
- GUY ANCHOR
- WATER SPIGOT
- LINE CONTINUES
- TREES

CONCRETE = CONCRETE

(D) = PER RECORDED DEED
(M) = MEASURED VALUE
CONC. = CONCRETE
T.B.M. = TEMPORARY BENCHMARK
ELE = ELECTRIC
OHE = OVERHEAD UTILITIES
SAN = SANITARY SEWER
WTR = WATER
GAS = GAS
CPP = CORRUGATED PLASTIC PIPE
PVC = POLYVINYL CHORIDE
CMP = CORRUGATED METAL PIPE

SURVEYOR NOTES

1. This is a topographic map. This is not a boundary survey and is only intended to depict those topographic features or improvements shown. The property lines shown are record lines only and are shown for graphical reference only.
2. Any underground utilities shown have been located from field survey information based on paint markings and/or flags by others. The surveyor makes no guarantee that the underground utilities shown comprise all such utilities in the area, either in service or abandoned. The surveyor further does not warrant that the underground utilities shown are in the exact location indicated although he does certify that they are located as accurately as possible from the information available.
3. FEDERAL EMERGENCY MANAGEMENT AGENCY, FEMA FIRMette published 6/18/2021 referencing Flood Insurance Rate Map, Map Number 36063C0326E effective date 9/17/2010, indicates this parcel of land is located in Zone(s) "X".
4. This survey does not constitute a title search by FA Commercial Due Diligence Services to determine ownership or easements of record. For all information regarding easements, rights of way and title of record, CDS relied upon an Enclosure Letter prepared by First American Title Insurance Company, Title Number 1071662, Dated: June 21, 2021.
5. Elevations are based on NAVD 88 datum.
6. SITE BENCHMARK: TBM #1, Cut Square on Top of Curb. Elevation: 573.98 (NAVD 88)
7. BASIS OF BEARINGS: GRID NORTH, STATE PLANE COORDINATE SYSTEM, NAD83, NEW YORK WEST ZONE.
8. Field work for this survey was completed on 6/17/2021.
9. The owner names and tax parcel data shown hereon are based upon the public works records available at the original date of this survey. Current ownership and tax parcel data should be verified for accuracy.
10. Per the Zoning Information Report prepared by FA-CDS (888) 322.7371 - cds.solutions@firstam.com; Order No.: 21-06-0167, Dated: 5/10/2021; this site is zoned: B-1, General Business.

    REQUIREMENTS
    Minimum Front Setback: 60' minimum
    Minimum Side Setbacks: 10' minimum
    Minimum Rear Setback: 15' minimum
    Maximum Height: 30' maximum
    Minimum Lot Area: 10,000 sq. ft. minimum
    Minimum Lot Width: 70' minimum
    Minimum Lot Depth: No requirement noted
    Maximum Floor Area Ratio: No requirement noted
    Maximum Coverage: 40% maximum
    Minimum Parking:
    Retail and service stores in any commercial zone: one parking space for every 140 square feet of gross floor area or major fraction thereof.

TITLE DESCRIPTION

REAL PROPERTY IN THE TOWN OF NIAGARA, COUNTY OF NIAGARA, STATE OF NEW YORK, DESCRIBED AS FOLLOWS:

ALL THAT TRACT OR PARCEL OF LAND, SITUATE IN THE TOWN OF NIAGARA AND STATE OF NEW YORK, BEING PART OF LOT 13, TOWNSHIP 9 OF THE HOLLAND LAND COMPANY'S SURVEY BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT THE POINT OF INTERSECTION OF THE SOUTHEAST LINE OF CONNECTING BOULEVARD (100 FEET WIDE) AND THE NORTHWEST CORNER OF THE LANDS OF QUAKER DEVELOPMENT INC.;

THENCE EASTERLY AT AN ASSUMED BEARING OF NORTH 89°36'50" EAST A DISTANCE 937.81 FEET TO A POINT;

THENCE SOUTH 00°23'10" EAST A DISTANCE OF 21.87 FEET TO A POINT;

THENCE NORTH 89°36'520" EAST A DISTANCE OF 89.25 FEET;

THENCE SOUTH 00°23'10" EAST A DISTANCE OF 78.13 FEET TO A POINT;

THENCE NORTH 89°36'50" EAST A DISTANCE OF 1498.95 TO A POINT IN THE SOUTHWEST LINE OF MILITARY ROAD (100 FEET WIDE);

THENCE NORTH 36°02'01" WEST AND ALONG THE SOUTHWEST LINE OF MILITARY ROAD A DISTANCE OF 1379.63 FEET TO A POINT;

THENCE SOUTH 89°55'17" WEST A DISTANCE OF 860.38 FEET TO A POINT IN THE SOUTHEAST LINE OF CONNECTING BOULEVARD;

THENCE SOUTH 44°06'28" WEST AND ALONG THE SOUTHWEST LINE OF CONNECTING BOULEVARD A DISTANCE OF 726.37 FEET TO AN ANGLE POINT;

THENCE SOUTH 36°07'11" WEST A DISTANCE OF 220.37 FEET TO AN ANGLE POINT;

THENCE SOUTH 33°26'20" WEST A DISTANCE OF 64.05 FEET TO A POINT;

THENCE NORTH 89°36'50" EAST A DISTANCE OF 261.80 FEET TO A POINT;

THENCE SOUTH 00°23'10" EAST A DISTANCE OF 247.34 FEET TO A POINT;

THENCE SOUTH 89°36'50" WEST A DISTANCE OF 427.53 FEET TO A POINT IN THE SOUTHEAST LINE OF CONNECTING BOULEVARD;

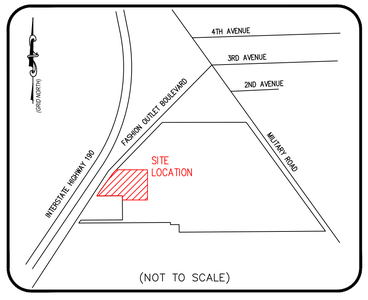
THENCE SOUTH 33°26'20" WEST AND ALONG THE SOUTHEAST SIDE OF CONNECTING BOULEVARD A DISTANCE OF 36.00 FEET TO THE POINT OR PLACE OF BEGINNING.

TOGETHER WITH BENEFICIAL EASEMENTS RECORDED IN LIBER 1907, PAGE 246; LIBER 2831, PAGE 248 AND LIBER 2477, PAGE 266.

Section 145.20, Block 1, Lots 14 and 15.

This survey depicts the same property described above from the Enclosure Letter prepared by First American Title Insurance Company, Title Number 1071662, Dated: June 21, 2021.

VICINITY MAP



SURVEYOR CERTIFICATION

On the basis of my knowledge, information and belief, I hereby state and declare that this drawing was prepared under my direct supervision to the standard of care of surveyors practicing in the State of New York and that the information shown hereon is true and correct to the best of my knowledge and belief.

This statement is neither a warranty nor a guarantee, either expressed or implied.

Date of Plat or Map: 6/25/2021

Douglas R. Lehr
NYSLS 49223

LICENSED LAND SURVEYOR — DOUGLAS R. LEHR — No. 49223 — STATE OF NEW YORK

GRID NORTH

NORTH ARROW / SCALE

0' 15' 30' 45' 60'

SCALE: 1" = 30'

Sheet 1 of 1

Topographic Survey

This Work Coordinated By:

CDS COMMERCIAL DUE DILIGENCE SERVICES
3550 W. Robinson Street, Third Floor
Norman, Oklahoma 73072
Main Office Phone No.: 405-253-2444

Toll Free: 888.457.7878

Drawn By: KPH	Date: --
Surveyor Ref. No: 21-06-0167:1	Revision: --
	Date: --
Approved By: JWA	Revision: --
	Date: --
Field Date: 6-17-2021	Revision: --
Scale: 1" = 30'	Date: --
	Revision: --

Prepared For:

FASHION OUTLETS
OF NIAGARA FALLS
SITE ID: 110072

PROJECT ADDRESS

1900 Military Road
Niagara Falls, New York 14304

Project Name:
C2 - 110072 - Niagara Falls NY

CDS Project Number:
21-06-0167:1

The surveying company: Commercial Due Diligence Services certifies to the accuracy and sufficiency of the survey provided hereon.

CDS COMMERCIAL DUE DILIGENCE SERVICES
3550 W. Robinson Street, Third Floor
Norman, Oklahoma 73072
Main Office Phone No.: 405-253-2444

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APPENDIX B

Daily Field Report

Fashion Outlets of Niagara Falls
DAILY FIELD REPORT

ATC Project No.	Z214JMSA02	**NYSDEC BCP No.**	C932162	**Date:**	4/4/2022

ATC Technician: Donavin Armour

Site Name: Electrify America EV Charging Stations, Fashion Outlets of Niagara Falls, NY

Site Address: 1900 Military Road, Niagara Falls, NY 14304

Contractor/Subcontractors:
CNB Contracting

Weather Conditions:
Light Wind
Light Rain

Work Activities Performed:
Site Mapping
Light pole base relocation
re-establish light pole

Samples Collected:
None

Air Monitoring:
Two air monitoring stations were estabilished at the permeter of the work zone, one upwind and one downwind, and included monitoring for particular matter less than 10 µm in size (PM-10) and total volatile organic compounds (VOCs).

- The 15-minute average concentrations of particulates (PM-10) exceeded the action level at 8:30 am (184 µg/m^3) and 8.45 am (294 µg/m^3). By 9:00 am the particulate level decreased to 9 µg/m^3 and remained below action levels for the remaining work day.

Problems Encountered:
None

Planned Activties for Next Day:
Resume Digging

Soil/Waste Generated
Pictures for volume removed, nothing to be re-used.

Attachments:
Daily Photo Log



Photo 1: View of work zone and construction fencing, looking southwest from parking lot.



Photo 2: Excavation of eastern portion of work area, looking west from parking lot.



Photo 3: View of excavated soil stockpile.



Photo 4: Soil stockpile covered at end of the work day.

Fashion Outlets of Niagara Falls
DAILY FIELD REPORT

ATC Project No.	Z214JMSA02	**NYSDEC BCP No.**	C932162	**Date:**	4/5/2022

ATC Technician: Donavin Armour

Site Name: Electrify America EV Charging Stations, Fashion Outlets of Niagara Falls, NY

Site Address: 1900 Military Road, Niagara Falls, NY 14304

Contractor/Subcontractors:
CNB Contracting

Weather Conditions:
Light Wind
Light Rain

Work Activities Performed:
Digging
Wooden framework construction

Samples Collected:
None

Air Monitoring:

Problems Encountered:
Two air monitoring stations were estabilished at the permeter of the work zone, one upwind and one downwind, and included monitoring for particular matter less than 10 µm in size (PM-10) and total volatile organic compounds (VOCs).
- The 15-minute average concentrations of particulates (PM-10) and VOCs did not exceed action levels.

Planned Activties for Next Day:
Resume Digging

Soil/Waste Generated
Pictures for volume removed, nothing to be re-used.

Attachments:
Daily Photo Log



Photo 1: View of work zone looking east from parking lot. Note air monitoring station In foreground.



Photo 2: Excavation to remove light pole footing.



Photo 3: View of excavation of the eastern portion of work zone, looking west.



Photo 4: Eastern portion of work zone. Soil stockpile in background.

Fashion Outlets of Niagara Falls
DAILY FIELD REPORT

ATC Project No.	Z214JMSA02	**NYSDEC BCP No.**	C932162	**Date:**	4/6/2022

ATC Technician: Donavin Armour

Site Name: Electrify America EV Charging Stations, Fashion Outlets of Niagara Falls, NY

Site Address: 1900 Military Road, Niagara Falls, NY 14304

Contractor/Subcontractors:

CNB Contracting

Weather Conditions:

Light Wind

Clear Sky

Work Activities Performed:

Digging

Wooden frame work development

Samples Collected:

None

Air Monitoring:

Two air monitoring stations were estabilished at the permeter of the work zone, one upwind and one downwind, and included monitoring for particular matter less than 10 µm in size (PM-10) and total volatile organic compounds (VOCs).

- The 15-minute average concentrations of particulates (PM-10) and VOCs did not exceed action levels.

Problems Encountered:

None

Planned Activties for Next Day:

Resume Digging

Soil/Waste Generated

Pictures for volume removed, nothing to be re-used.

Attachments:

Daily Photo Log



Photo 1: View of work zone excavation looking east.



Photo 2: View of work zone excavation looking west.



Photo 3: View of excavation in the northeast portion of work zone.



Photo 4: View of northern portion of work zone, looking east.

Fashion Outlets of Niagara Falls
DAILY FIELD REPORT

ATC Project No.	Z214JMSA02	**NYSDEC BCP No.**	C932162	**Date:**	4/7/2022

ATC Technician: Donavin Armour

Site Name: Electrify America EV Charging Stations, Fashion Outlets of Niagara Falls, NY

Site Address: 1900 Military Road, Niagara Falls, NY 14304

Contractor/Subcontractors:

CNB Contracting

Weather Conditions:

Light Wind

Light Rain

Work Activities Performed:

Digging

Piping development

Samples Collected:

None

Air Monitoring:

Two air monitoring stations were estabilished at the permeter of the work zone, one upwind and one downwind, and included monitoring for particular matter less than 10 µm in size (PM-10) and total volatile organic compounds (VOCs).

- The 15-minute average concentrations of particulates (PM-10) and VOCs did not exceed action levels.
- Error with downwind station. Restarted CAMP station at 8:45 .

Problems Encountered:

See above.

Planned Activties for Next Day:

Resume Digging

Soil/Waste Generated

Pictures for volume removed, nothing to be re-used.

Attachments:

Daily Photo Log



Photo 1: View of work zone excavation looking southeast. Note concrete forms along south portion of excavation.



Photo 2: View of work zone excavation looking west.



Photo 3: View of work zone looking east from parking lot.



Photo 4: Looking south from work zone. Note excavated soil stockpile in background.

Fashion Outlets of Niagara Falls
DAILY FIELD REPORT

ATC Project No.	Z214JMSA02	**NYSDEC BCP No.**	C932162	**Date:**	4/8/2022

ATC Technician: Donavin Armour

Site Name: Electrify America EV Charging Stations, Fashion Outlets of Niagara Falls, NY

Site Address: 1900 Military Road, Niagara Falls, NY 14304

Contractor/Subcontractors:

CNB Contracting

Weather Conditions:

Light Wind

Clear Sky

Work Activities Performed:

Excavation

Wooden framework expansion

Piping expansion

Samples Collected:

None

Air Monitoring:

Two air monitoring stations were estabilished at the permeter of the work zone, one upwind and one downwind, and included monitoring for particular matter less than 10 µm in size (PM-10) and total volatile organic compounds (VOCs).

- The 15-minute average concentrations of particulates (PM-10) and VOCs did not exceed action levels.
- Error with upwind station. Restarted CAMP station at 16:02 .
- Error with upwind station. Restarted CAMP station at 18:03 .

Problems Encountered:

See above

Planned Activties for Next Day:

Resume Digging and setting forms.

Soil/Waste Generated

Pictures for volume removed, nothing to be re-used.

Attachments:

Daily Photo Log



Photo 1: View of work zone looking west.



Photo 2: View of trench in the western portion of work zone, looking west.



Photo 3: Eastern portion of work zone looking southeast from parking lot.



Photo 4: Work zone, looking east. Note excavated soil stockpile to the right.

Fashion Outlets of Niagara Falls
DAILY FIELD REPORT

ATC Project No.	Z214JMSA02	**NYSDEC BCP No.**	C932162	**Date:**	4/9/2022

ATC Technician: Donavin Armour

Site Name: Electrify America EV Charging Stations, Fashion Outlets of Niagara Falls, NY

Site Address: 1900 Military Road, Niagara Falls, NY 14304

Contractor/Subcontractors:

CNB Contracting

Weather Conditions:

Light Wind
Clear Sky

Work Activities Performed:

Clean up work for the weekend, on site for only three hours.

Samples Collected:

None

Air Monitoring:

Two air monitoring stations were estabilished at the permeter of the work zone, one upwind and one downwind, and included monitoring for particular matter less than 10 µm in size (PM-10) and total volatile organic compounds (VOCs).

- The 15-minute average concentrations of particulates (PM-10) and VOCs did not exceed action levels.

Problems Encountered:

None

Planned Activties for Next Day:

Resume excavation and setting forms.

Soil/Waste Generated

None

Attachments:

Daily Photo Log



Photo 1: View of work zone looking southwest.



Photo 2: View of covered excavated soil stockpile.

Fashion Outlets of Niagara Falls
DAILY FIELD REPORT

ATC Project No.	Z214JMSA02	**NYSDEC BCP No.**	C932162	**Date:**	4/11/2022

ATC Technician: Donavin Armour

Site Name: Electrify America EV Charging Stations, Fashion Outlets of Niagara Falls, NY

Site Address: 1900 Military Road, Niagara Falls, NY 14304

Contractor/Subcontractors:

CNB Contracting

Weather Conditions:

Light Wind

Clear Sky

Work Activities Performed:

Crew did not arrive, Atlas Tech uninformed about no Monday work.

Samples Collected:

None

Air Monitoring:

None

None

Problems Encountered:

None

Planned Activties for Next Day:

Resume excavation and setting forms.

Soil/Waste Generated

None

Attachments:

Fashion Outlets of Niagara Falls
DAILY FIELD REPORT

ATC Project No.	Z214JMSA02	**NYSDEC BCP No.**	C932162	**Date:**	4/12/2022

ATC Technician: Donavin Armour

Site Name: Electrify America EV Charging Stations, Fashion Outlets of Niagara Falls, NY

Site Address: 1900 Military Road, Niagara Falls, NY 14304

Contractor/Subcontractors:

CNB Contracting

Weather Conditions:

Moderate Wind

Clear Sky

Work Activities Performed:

Excavation

Backfilling with stone subbase material

Compacting subbase material

Rebar placement

Samples Collected:

None

Air Monitoring:

Two air monitoring stations were estabilished at the permeter of the work zone, one upwind and one downwind, and included monitoring for particular matter less than 10 µm in size (PM-10) and total volatile organic compounds (VOCs).

- The 15-minute average concentrations of particulates (PM-10) and VOCs did not exceed action levels.

Problems Encountered:

None

Planned Activties for Next Day:

Resume Digging

Lay concrete

Soil/Waste Generated

Pictures for volume removed, nothing to be re-used.

Attachments:

Daily Photo Log



Photo 1: Trenching for conduit in the western portion of the work zone.



Photo 2: Installation of footers in the western portion of work zone, looking east from parking lot.



Photo 3: View of work zone, looking southwest from parking lot.



Photo 4: Installation of footers, curb forms, and sub-base material in the western portion of work zone, looking southwest.

Fashion Outlets of Niagara Falls
DAILY FIELD REPORT

ATC Project No.	Z214JMSA02	**NYSDEC BCP No.**	C932162	**Date:**	4/13/2022

ATC Technician: Donavin Armour

Site Name: Electrify America EV Charging Stations, Fashion Outlets of Niagara Falls, NY

Site Address: 1900 Military Road, Niagara Falls, NY 14304

Contractor/Subcontractors:

CNB Contracting

Weather Conditions:

Light Wind

Clear Sky

Work Activities Performed:

Excavation

Concrete Work

Samples Collected:

None

Air Monitoring:

Two air monitoring stations were estabilished at the permeter of the work zone, one upwind and one downwind, and included monitoring for particular matter less than 10 µm in size (PM-10) and total volatile organic compounds (VOCs).

- The 15-minute average concentrations of particulates (PM-10) and VOCs did not exceed action levels.

Problems Encountered:

None.

Planned Activties for Next Day:

Resume Digging

Concrete Work

Soil/Waste Generated

Pictures for volume removed, nothing to be re-used.

Attachments:

Daily Photo Log



Photo 1: View of virgin stone sub-base material.



Photo 2: View of work zone, looking east.



Photo 3: View of work zone, looking southwest showing rebar for concrete placement.



Photo 4: View of excavated soil stockpile in background of photograph.

Fashion Outlets of Niagara Falls
DAILY FIELD REPORT

ATC Project No.	Z214JMSA02	**NYSDEC BCP No.**	C932162	**Date:**	4/14/2022

ATC Technician: Donavin Armour

Site Name: Electrify America EV Charging Stations, Fashion Outlets of Niagara Falls, NY

Site Address: 1900 Military Road, Niagara Falls, NY 14304

Contractor/Subcontractors:
CNB Contracting

Weather Conditions:
Moderate
Light Rain

Work Activities Performed:
Excavation
Concrete Work

Samples Collected:
None

Air Monitoring:
Two air monitoring stations were estabilished at the permeter of the work zone, one upwind and one downwind, and included monitoring for particular matter less than 10 µm in size (PM-10) and total volatile organic compounds (VOCs).
- The 15-minute average concentrations of particulates (PM-10) and VOCs did not exceed action levels.

Problems Encountered:
None.

Planned Activties for Next Day:
Resume Digging
Concrete Work

Soil/Waste Generated
Pictures for volume removed, nothing to be re-used.

Attachments:
Daily Photo Log



Photo 1: Excavating for electric service connection in southern portion of work zone.



Photo 2: Pouring concrete for EV charging station footers.

Fashion Outlets of Niagara Falls
DAILY FIELD REPORT

ATC Project No.	Z214JMSA02	**NYSDEC BCP No.**	C932162	**Date:**	4/15/2022

ATC Technician: Donavin Armour

Site Name: Electrify America EV Charging Stations, Fashion Outlets of Niagara Falls, NY

Site Address: 1900 Military Road, Niagara Falls, NY 14304

Contractor/Subcontractors:
CNB Contracting

Weather Conditions:
Heavy Wind
Heavy Rain

Work Activities Performed:
Excavation
Terminal Setup

Samples Collected:
None

Air Monitoring:
Two air monitoring stations were estabilished at the permeter of the work zone, one upwind and one downwind, and included monitoring for particular matter less than 10 µm in size (PM-10) and total volatile organic compounds (VOCs).

- The 15-minute average concentrations of particulates (PM-10) exceeded the action level at 7:30 am (523 µg/m^3) and 7.45 am (413 µg/m^3). By 8:00 am the particulate level decreased to 47 µg/m^3 and remained below action levels for the remaining work day.

Problems Encountered:
60 MPH Wind gusts
Camp 1 Restart at 9:11
Camp 1 fell over and restart at 13:10
Unable to work, Stop Work at 14:14

Planned Activties for Next Day:
Excavation
Terminal Setup

Soil/Waste Generated
Pictures for volume removed, nothing to be re-used.

Attachments:
Photo Log



Photo 1: View of excavated soil stockpile in background.



Photo 2: View of poured concrete pad.



Photo 3: View of installed bollards for future transformer in western portion of work zone.



Photo 4: View of cut in asphalt for installation of electric service.

Fashion Outlets of Niagara Falls
DAILY FIELD REPORT

ATC Project No.	Z214JMSA02	**NYSDEC BCP No.**	C932162	**Date:**	4/18/2022

ATC Technician: Donavin Armour

Site Name: Electrify America EV Charging Stations, Fashion Outlets of Niagara Falls, NY

Site Address: 1900 Military Road, Niagara Falls, NY 14304

Contractor/Subcontractors:

CNB Contracting

Weather Conditions:

Light Wind

Clear Sky

Work Activities Performed:

Upon arrival of the site at the scheduled time, crew was not present.

No work done.

Samples Collected:

None

Air Monitoring:

None.

Problems Encountered:

None

Planned Activties for Next Day:

Terminal Setup

Soil/Waste Generated

None.

Attachments:

Fashion Outlets of Niagara Falls
DAILY FIELD REPORT

ATC Project No.	Z214JMSA02	**NYSDEC BCP No.**	C932162	**Date:**	4/19/2022

ATC Technician: Donavin Armour

Site Name: Electrify America EV Charging Stations, Fashion Outlets of Niagara Falls, NY

Site Address: 1900 Military Road, Niagara Falls, NY 14304

Contractor/Subcontractors:

CNB Contracting

Weather Conditions:

Light Wind
Light Rain

Work Activities Performed:

Terminal Setup

Samples Collected:

None

Air Monitoring:

Two air monitoring stations were estabilished at the permeter of the work zone, one upwind and one downwind, and included monitoring for particular matter less than 10 µm in size (PM-10) and total volatile organic compounds (VOCs).

- The 15-minute average concentrations of particulates (PM-10) and VOCs did not exceed action levels.

Problems Encountered:

Downwind CAMP 2 loose wire from battery to camp.
Downwind CAMP restarted at: 9:05, 13:13, 13:52, 14:42, 15:01

Planned Activties for Next Day:

Terminal Setup

Soil/Waste Generated

None.

Attachments:

Daily Photo Log



Photo 1: View of trenching for electric service in southwestern portion of work zone.

Fashion Outlets of Niagara Falls
DAILY FIELD REPORT

ATC Project No.	Z214JMSA02	**NYSDEC BCP No.**	C932162	**Date:**	4/20/2022

ATC Technician: Donavin Armour

Site Name: Electrify America EV Charging Stations, Fashion Outlets of Niagara Falls, NY

Site Address: 1900 Military Road, Niagara Falls, NY 14304

Contractor/Subcontractors:
CNB Contracting

Weather Conditions:
Light Wind
Clear Sky

Work Activities Performed:
Terminal Setup

Samples Collected:
None

Air Monitoring:
Two air monitoring stations were estabilished at the permeter of the work zone, one upwind and one downwind, and included monitoring for particular matter less than 10 µm in size (PM-10) and total volatile organic compounds (VOCs).
- The 15-minute average concentrations of particulates (PM-10) and VOCs did not exceed action levels.

Problems Encountered:
None.

Planned Activties for Next Day:
Terminal Setup

Soil/Waste Generated
None.

Attachments:
Daily Photo Log



Photo 1: View of EV charging stations installed.



Photo 2: View of concrete forms and bollards for future transformer area.

APPENDIX C

Waste Characterization Soil Results and Disposal Manifests

eurofins | Environment Testing America



ANALYTICAL REPORT

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

Laboratory Job ID: 180-106354-1
Client Project/Site: Waste Characterization

For:
ATC Group Services LLC.
270 William Pitt Way
Pittsburgh, Pennsylvania 15238

Attn: Elizabeth Sanguinito

Authorized for release by:
6/12/2020 2:02:27 PM

Jill Colussy, Project Manager I
(412)963-2444
jill.colussy@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

PA Lab ID: 02-00416

Table of Contents

Cover Page 1
Table of Contents 2
Case Narrative 3
Definitions/Glossary 4
Certification Summary 5
Sample Summary 6
Method Summary 7
Lab Chronicle 8
Client Sample Results 10
QC Sample Results 13
QC Association Summary 22
Chain of Custody 24
Receipt Checklists 26

Job ID: 180-106354-1

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative
180-106354-1

Receipt
The samples were received on 5/29/2020 8:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.2º C.

Receipt Exceptions
A trip blank was submitted for analysis with these samples; however, it was not listed on the Chain of Custody (COC). This sample was logged in for VOA analysis.

GC/MS VOA
Internal standard (ISTD) response for TBA-d9 for the following sample was outside acceptance criteria: TRIP BLANK (180-106354-2). This ISTD does not correspond to any of the requested target compounds; therefore, the data have been reported.

The laboratory control sample (LCS) for analytical batch 180-317360 recovered outside control limits for the following analyte: Carbon disulfide. A low-level LCS (LLCS), spiked at the reporting limit (RL), was prepared with this batch. The affected target analytes recovered within acceptance limits; therefore, the LLCS demonstrates the analytical system had sufficient sensitivity to detect the compound had it been present. Since the affected target compound was not detected in the samples, the data have been reported and qualified.

The continuing calibration verification (CCV) analyzed in batch 180-317360 was outside the method criteria for the following analyte: Trichlorofluoromethane & 1,2-Dichloroethane. (HIGH). As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

The continuing calibration verification (CCV) analyzed in batch 180-317360 was outside the method criteria for the following analyte(s): Carbon disulfide, Cyclohexane, 1,2-Dibromo-3-Chloropropane and Methyl tert-butyl ether. (LOW). A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

GC/MS Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

PCBs
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Geotechnical
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Client: ATC Group Services LLC.
Project/Site: Waste Characterization

Job ID: 180-106354-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: ATC Group Services LLC.
Job ID: 180-106354-1
Project/Site: Waste Characterization

Laboratory: Eurofins TestAmerica, Pittsburgh

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	11182	04-01-21

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
2540G		Solid	Percent Moisture
2540G		Solid	Percent Solids

Sample Summary

Client: ATC Group Services LLC.
Project/Site: Waste Characterization

Job ID: 180-106354-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
180-106354-1	VAULT AREA 1	Solid	05/28/20 10:25	05/29/20 08:45	
180-106354-2	TRIP BLANK	Water	05/28/20 00:00	05/29/20 08:45	

Method Summary

Client: ATC Group Services LLC.
Project/Site: Waste Characterization

Job ID: 180-106354-1

Method	Method Description	Protocol	Laboratory
EPA 8260D	Volatile Organic Compounds by GC/MS	SW846	TAL PIT
EPA 8270E	Semivolatile Organic Compounds (GC/MS)	SW846	TAL PIT
EPA 8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL PIT
EPA 6010D	Metals (ICP)	SW846	TAL PIT
EPA 7470A	Mercury (CVAA)	SW846	TAL PIT
2540G	SM 2540G	SM22	TAL PIT
3010A	Preparation, Total Metals	SW846	TAL PIT
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL PIT
3541	Automated Soxhlet Extraction	SW846	TAL PIT
5030C	Purge and Trap	SW846	TAL PIT
7470A	Preparation, Mercury	SW846	TAL PIT
EPA 1311	TCLP Extraction	SW846	TAL PIT

Protocol References:

SM22 = Standard Methods For The Examination Of Water And Wastewater, 22nd Edition

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: ATC Group Services LLC.
Project/Site: Waste Characterization

Job ID: 180-106354-1

Client Sample ID: VAULT AREA 1

Lab Sample ID: 180-106354-1

Date Collected: 05/28/20 10:25

Matrix: Solid

Date Received: 05/29/20 08:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	EPA 1311			25.01 g	500 mL	317007	05/29/20 22:00	JAS	TAL PIT
TCLP	Analysis	EPA 8260D		1	0.125 mL	5 mL	317036	06/01/20 10:59	KLG	TAL PIT
	Instrument ID: CHHP9									
TCLP	Leach	EPA 1311			99.98 g	2000 mL	316975	05/29/20 21:00	JAS	TAL PIT
TCLP	Prep	3510C			200 mL	10.0 mL	317530	06/04/20 16:10	CBY	TAL PIT
TCLP	Analysis	EPA 8270E		1	1 mL	1 mL	317568	06/05/20 17:25	VVP	TAL PIT
	Instrument ID: CH732									
TCLP	Leach	EPA 1311			99.98 g	2000 mL	316975	05/29/20 21:00	JAS	TAL PIT
TCLP	Prep	3010A			5 mL	50 mL	317307	06/03/20 08:28	KEM	TAL PIT
TCLP	Analysis	EPA 6010D		1			317481	06/04/20 09:30	RJG	TAL PIT
	Instrument ID: C									
TCLP	Leach	EPA 1311			99.98 g	2000 mL	316975	05/29/20 21:00	JAS	TAL PIT
TCLP	Prep	7470A			50 mL	50 mL	317216	06/03/20 17:40	NAM	TAL PIT
TCLP	Analysis	EPA 7470A		1			317405	06/03/20 21:54	NAM	TAL PIT
	Instrument ID: HGZ									
Total/NA	Analysis	2540G		1			317049	06/01/20 08:26	MM1	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: VAULT AREA 1

Lab Sample ID: 180-106354-1

Date Collected: 05/28/20 10:25

Matrix: Solid

Date Received: 05/29/20 08:45

Percent Solids: 95.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.3 g	20.0 mL	317107	06/01/20 16:17	CSC	TAL PIT
Total/NA	Analysis	EPA 8082A		1			317264	06/03/20 08:28	JMO	TAL PIT
	Instrument ID: CHGC8									

Client Sample ID: TRIP BLANK

Lab Sample ID: 180-106354-2

Date Collected: 05/28/20 00:00

Matrix: Water

Date Received: 05/29/20 08:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 8260D		1	5 mL	5 mL	317360	06/03/20 18:11	PJJ	TAL PIT
	Instrument ID: CHHP4									

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: ATC Group Services LLC.
Project/Site: Waste Characterization

Job ID: 180-106354-1

Analyst References:

Lab: TAL PIT

- Batch Type: Leach
  - JAS = Jeremy Stundon
- Batch Type: Prep
  - CBY = Charles Yushinski
  - CSC = Chayce Cockroft
  - KEM = Kimberly Mahoney
  - NAM = Nicole Marfisi
- Batch Type: Analysis
  - JMO = John Oravec
  - KLG = Kathy Gordon
  - MM1 = Mary Beth Miller
  - NAM = Nicole Marfisi
  - PJJ = Patrick Journet
  - RJG = Rob Good
  - VVP = Vincent Piccolino

Client Sample ID: VAULT AREA 1

Date Collected: 05/28/20 10:25
Date Received: 05/29/20 08:45

Lab Sample ID: 180-106354-1

Matrix: Solid

Method: EPA 8260D - Volatile Organic Compounds by GC/MS - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		0.20	0.058	mg/L			06/01/20 10:59	1
2-Butanone (MEK)	ND		0.20	0.12	mg/L			06/01/20 10:59	1
Benzene	ND		0.20	0.079	mg/L			06/01/20 10:59	1
Carbon tetrachloride	ND		0.20	0.13	mg/L			06/01/20 10:59	1
Chlorobenzene	ND		0.20	0.063	mg/L			06/01/20 10:59	1
Chloroform	ND		0.20	0.085	mg/L			06/01/20 10:59	1
Tetrachloroethene	ND		0.20	0.080	mg/L			06/01/20 10:59	1
Trichloroethene	ND		0.20	0.060	mg/L			06/01/20 10:59	1
Vinyl chloride	ND		0.20	0.15	mg/L			06/01/20 10:59	1
1,1-Dichloroethene	ND		0.20	0.11	mg/L			06/01/20 10:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*53 - 150*		*06/01/20 10:59*	*1*
4-Bromofluorobenzene (Surr)	*78*		*54 - 125*		*06/01/20 10:59*	*1*
Dibromofluoromethane (Surr)	*110*		*55 - 150*		*06/01/20 10:59*	*1*
Toluene-d8 (Surr)	*77*		*63 - 127*		*06/01/20 10:59*	*1*

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.050	0.0045	mg/L		06/04/20 16:10	06/05/20 17:25	1
2,4-Dinitrotoluene	ND		0.050	0.0079	mg/L		06/04/20 16:10	06/05/20 17:25	1
Hexachlorobenzene	ND		0.050	0.0055	mg/L		06/04/20 16:10	06/05/20 17:25	1
Hexachlorobutadiene	ND		0.050	0.0084	mg/L		06/04/20 16:10	06/05/20 17:25	1
Hexachloroethane	ND		0.050	0.0040	mg/L		06/04/20 16:10	06/05/20 17:25	1
2-Methylphenol	ND		0.050	0.0040	mg/L		06/04/20 16:10	06/05/20 17:25	1
Methylphenol, 3 & 4	ND		0.050	0.0079	mg/L		06/04/20 16:10	06/05/20 17:25	1
Nitrobenzene	ND		0.050	0.012	mg/L		06/04/20 16:10	06/05/20 17:25	1
Pentachlorophenol	ND		0.25	0.0075	mg/L		06/04/20 16:10	06/05/20 17:25	1
Pyridine	ND		0.10	0.0082	mg/L		06/04/20 16:10	06/05/20 17:25	1
2,4,5-Trichlorophenol	ND		0.050	0.0079	mg/L		06/04/20 16:10	06/05/20 17:25	1
2,4,6-Trichlorophenol	ND		0.050	0.0095	mg/L		06/04/20 16:10	06/05/20 17:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*70*		*55 - 107*	*06/04/20 16:10*	*06/05/20 17:25*	*1*
2-Fluorophenol (Surr)	*73*		*60 - 108*	*06/04/20 16:10*	*06/05/20 17:25*	*1*
2,4,6-Tribromophenol (Surr)	*68*		*24 - 113*	*06/04/20 16:10*	*06/05/20 17:25*	*1*
Nitrobenzene-d5 (Surr)	*67*		*62 - 115*	*06/04/20 16:10*	*06/05/20 17:25*	*1*
Phenol-d5 (Surr)	*66*		*52 - 107*	*06/04/20 16:10*	*06/05/20 17:25*	*1*
Terphenyl-d14 (Surr)	*70*		*44 - 116*	*06/04/20 16:10*	*06/05/20 17:25*	*1*

Method: EPA 6010D - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.50	0.0085	mg/L		06/03/20 08:28	06/04/20 09:30	1
Barium	**0.10**	**J**	2.0	0.026	mg/L		06/03/20 08:28	06/04/20 09:30	1
Cadmium	ND		0.50	0.0028	mg/L		06/03/20 08:28	06/04/20 09:30	1
Chromium	ND		0.50	0.0078	mg/L		06/03/20 08:28	06/04/20 09:30	1
Lead	ND		0.50	0.029	mg/L		06/03/20 08:28	06/04/20 09:30	1
Selenium	ND		0.50	0.036	mg/L		06/03/20 08:28	06/04/20 09:30	1
Arsenic	**0.045**	**J**	0.50	0.041	mg/L		06/03/20 08:28	06/04/20 09:30	1

Client Sample ID: VAULT AREA 1

Lab Sample ID: 180-106354-1

Date Collected: 05/28/20 10:25

Matrix: Solid

Date Received: 05/29/20 08:45

Method: EPA 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		06/03/20 17:40	06/03/20 21:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**5.0**		0.1	0.1	%			06/01/20 08:26	1
Percent Solids	**95.0**		0.1	0.1	%			06/01/20 08:26	1

Client Sample ID: VAULT AREA 1

Lab Sample ID: 180-106354-1

Date Collected: 05/28/20 10:25

Matrix: Solid

Date Received: 05/29/20 08:45

Percent Solids: 95.0

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		17	5.6	ug/Kg	☼	06/01/20 16:17	06/03/20 08:28	1
PCB-1221	ND		17	6.1	ug/Kg	☼	06/01/20 16:17	06/03/20 08:28	1
PCB-1232	ND		17	4.2	ug/Kg	☼	06/01/20 16:17	06/03/20 08:28	1
PCB-1242	ND		17	2.5	ug/Kg	☼	06/01/20 16:17	06/03/20 08:28	1
PCB-1248	ND		17	4.1	ug/Kg	☼	06/01/20 16:17	06/03/20 08:28	1
PCB-1254	ND		17	5.2	ug/Kg	☼	06/01/20 16:17	06/03/20 08:28	1
PCB-1260	ND		17	4.9	ug/Kg	☼	06/01/20 16:17	06/03/20 08:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene (Surr)	*80*		*51 - 112*	*06/01/20 16:17*	*06/03/20 08:28*	*1*
Tetrachloro-m-xylene (Surr)	*81*		*51 - 112*	*06/01/20 16:17*	*06/03/20 08:28*	*1*
DCB Decachlorobiphenyl (Surr)	*86*		*61 - 132*	*06/01/20 16:17*	*06/03/20 08:28*	*1*
DCB Decachlorobiphenyl (Surr)	*89*		*61 - 132*	*06/01/20 16:17*	*06/03/20 08:28*	*1*

Client Sample ID: TRIP BLANK

Lab Sample ID: 180-106354-2

Date Collected: 05/28/20 00:00

Matrix: Water

Date Received: 05/29/20 08:45

Method: EPA 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	2.5	ug/L			06/03/20 18:11	1
1,1,2,2-Tetrachloroethane	ND		5.0	3.0	ug/L			06/03/20 18:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.9	ug/L			06/03/20 18:11	1
1,1,2-Trichloroethane	ND		5.0	2.4	ug/L			06/03/20 18:11	1
1,1-Dichloroethane	ND		5.0	1.8	ug/L			06/03/20 18:11	1
1,1-Dichloroethene	ND		5.0	2.9	ug/L			06/03/20 18:11	1
1,2,4-Trichlorobenzene	ND		5.0	3.7	ug/L			06/03/20 18:11	1
1,2-Dibromo-3-Chloropropane	ND		5.0	3.1	ug/L			06/03/20 18:11	1
1,2-Dichlorobenzene	ND		5.0	2.0	ug/L			06/03/20 18:11	1
1,2-Dichloroethane	ND		5.0	1.5	ug/L			06/03/20 18:11	1
1,2-Dichloropropane	ND		5.0	2.5	ug/L			06/03/20 18:11	1
1,3-Dichlorobenzene	ND		5.0	1.6	ug/L			06/03/20 18:11	1
1,4-Dichlorobenzene	ND		5.0	1.0	ug/L			06/03/20 18:11	1
2-Butanone (MEK)	ND		5.0	2.9	ug/L			06/03/20 18:11	1
2-Hexanone	ND		5.0	4.2	ug/L			06/03/20 18:11	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.9	ug/L			06/03/20 18:11	1
Acetone	ND		20	3.2	ug/L			06/03/20 18:11	1
Benzene	ND		5.0	2.0	ug/L			06/03/20 18:11	1

Client: ATC Group Services LLC.
Project/Site: Waste Characterization

Job ID: 180-106354-1

Client Sample ID: TRIP BLANK
Date Collected: 05/28/20 00:00
Date Received: 05/29/20 08:45

Lab Sample ID: 180-106354-2
Matrix: Water

Method: EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	ND		5.0	2.6	ug/L			06/03/20 18:11	1
Bromomethane	ND		5.0	4.5	ug/L			06/03/20 18:11	1
Carbon disulfide	ND	*	5.0	3.0	ug/L			06/03/20 18:11	1
Carbon tetrachloride	ND		5.0	3.3	ug/L			06/03/20 18:11	1
Chlorobenzene	ND		5.0	1.6	ug/L			06/03/20 18:11	1
Chlorodibromomethane	ND		5.0	2.4	ug/L			06/03/20 18:11	1
Chloroethane	ND		5.0	2.6	ug/L			06/03/20 18:11	1
Chloroform	ND		5.0	2.1	ug/L			06/03/20 18:11	1
Chloromethane	ND		5.0	3.9	ug/L			06/03/20 18:11	1
cis-1,2-Dichloroethene	ND		5.0	1.6	ug/L			06/03/20 18:11	1
cis-1,3-Dichloropropene	ND		5.0	1.6	ug/L			06/03/20 18:11	1
Cyclohexane	ND		5.0	1.2	ug/L			06/03/20 18:11	1
Dichlorobromomethane	ND		5.0	2.4	ug/L			06/03/20 18:11	1
Dichlorodifluoromethane	ND		5.0	2.9	ug/L			06/03/20 18:11	1
Ethylbenzene	ND		5.0	2.2	ug/L			06/03/20 18:11	1
1,2-Dibromoethane	ND		5.0	2.7	ug/L			06/03/20 18:11	1
Isopropylbenzene	ND		5.0	2.3	ug/L			06/03/20 18:11	1
Methyl acetate	ND		25	5.9	ug/L			06/03/20 18:11	1
Methyl tert-butyl ether	ND		5.0	3.7	ug/L			06/03/20 18:11	1
Methylcyclohexane	ND		5.0	2.1	ug/L			06/03/20 18:11	1
Methylene Chloride	ND		5.0	3.9	ug/L			06/03/20 18:11	1
Styrene	ND		5.0	1.3	ug/L			06/03/20 18:11	1
Tetrachloroethene	ND		5.0	2.0	ug/L			06/03/20 18:11	1
Toluene	ND		5.0	1.7	ug/L			06/03/20 18:11	1
trans-1,2-Dichloroethene	ND		5.0	2.5	ug/L			06/03/20 18:11	1
trans-1,3-Dichloropropene	ND		5.0	1.7	ug/L			06/03/20 18:11	1
Trichloroethene	ND		5.0	1.5	ug/L			06/03/20 18:11	1
Trichlorofluoromethane	ND		5.0	1.5	ug/L			06/03/20 18:11	1
Vinyl chloride	ND		5.0	3.7	ug/L			06/03/20 18:11	1
Xylenes, Total	ND		10	4.3	ug/L			06/03/20 18:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*53 - 150*		*06/03/20 18:11*	*1*
4-Bromofluorobenzene (Surr)	*89*		*54 - 125*		*06/03/20 18:11*	*1*
Dibromofluoromethane (Surr)	*89*		*55 - 150*		*06/03/20 18:11*	*1*
Toluene-d8 (Surr)	*78*		*63 - 127*		*06/03/20 18:11*	*1*

Method: EPA 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: LCS 180-317036/3
Matrix: Solid
Analysis Batch: 317036

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2-Dichloroethane			0.0100	0.00840		mg/L		84	62 - 129		
1,1-Dichloroethene			0.0100	0.00833		mg/L		83	60 - 131		
2-Butanone (MEK)			0.0100	0.0105		mg/L		105	33 - 133		
Benzene			0.0100	0.00865		mg/L		86	72 - 118		
Carbon tetrachloride			0.0100	0.00974		mg/L		97	69 - 137		
Chlorobenzene			0.0100	0.00943		mg/L		94	77 - 122		
Chloroform			0.0100	0.00936		mg/L		94	78 - 119		
Tetrachloroethene			0.0100	0.00948		mg/L		95	75 - 125		
Trichloroethene			0.0100	0.00885		mg/L		89	76 - 120		
Vinyl chloride			0.0100	0.00821		mg/L		82	52 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*79*		*53 - 150*
4-Bromofluorobenzene (Surr)	*93*		*54 - 125*
Dibromofluoromethane (Surr)	*99*		*55 - 150*
Toluene-d8 (Surr)	*94*		*63 - 127*

Lab Sample ID: MB 180-317360/5
Matrix: Water
Analysis Batch: 317360

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	2.5	ug/L			06/03/20 17:42	1
1,1,2,2-Tetrachloroethane	ND		5.0	3.0	ug/L			06/03/20 17:42	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.9	ug/L			06/03/20 17:42	1
1,1,2-Trichloroethane	ND		5.0	2.4	ug/L			06/03/20 17:42	1
1,1-Dichloroethane	ND		5.0	1.8	ug/L			06/03/20 17:42	1
1,2,4-Trichlorobenzene	ND		5.0	3.7	ug/L			06/03/20 17:42	1
1,2-Dibromo-3-Chloropropane	ND		5.0	3.1	ug/L			06/03/20 17:42	1
1,2-Dichlorobenzene	ND		5.0	2.0	ug/L			06/03/20 17:42	1
1,2-Dichloroethane	ND		5.0	1.5	ug/L			06/03/20 17:42	1
1,2-Dichloropropane	ND		5.0	2.5	ug/L			06/03/20 17:42	1
1,3-Dichlorobenzene	ND		5.0	1.6	ug/L			06/03/20 17:42	1
1,1-Dichloroethene	ND		5.0	2.9	ug/L			06/03/20 17:42	1
1,4-Dichlorobenzene	ND		5.0	1.0	ug/L			06/03/20 17:42	1
2-Butanone (MEK)	ND		5.0	2.9	ug/L			06/03/20 17:42	1
2-Hexanone	ND		5.0	4.2	ug/L			06/03/20 17:42	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.9	ug/L			06/03/20 17:42	1
Acetone	ND		20	3.2	ug/L			06/03/20 17:42	1
Benzene	ND		5.0	2.0	ug/L			06/03/20 17:42	1
Bromoform	ND		5.0	2.6	ug/L			06/03/20 17:42	1
Bromomethane	ND		5.0	4.5	ug/L			06/03/20 17:42	1
Carbon disulfide	ND		5.0	3.0	ug/L			06/03/20 17:42	1
Carbon tetrachloride	ND		5.0	3.3	ug/L			06/03/20 17:42	1
Chlorobenzene	ND		5.0	1.6	ug/L			06/03/20 17:42	1
Chlorodibromomethane	ND		5.0	2.4	ug/L			06/03/20 17:42	1
Chloroethane	ND		5.0	2.6	ug/L			06/03/20 17:42	1
Chloroform	ND		5.0	2.1	ug/L			06/03/20 17:42	1

Method: EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 180-317360/5
Matrix: Water
Analysis Batch: 317360

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		5.0	3.9	ug/L			06/03/20 17:42	1
cis-1,2-Dichloroethene	ND		5.0	1.6	ug/L			06/03/20 17:42	1
cis-1,3-Dichloropropene	ND		5.0	1.6	ug/L			06/03/20 17:42	1
Cyclohexane	ND		5.0	1.2	ug/L			06/03/20 17:42	1
Dichlorobromomethane	ND		5.0	2.4	ug/L			06/03/20 17:42	1
Dichlorodifluoromethane	ND		5.0	2.9	ug/L			06/03/20 17:42	1
Ethylbenzene	ND		5.0	2.2	ug/L			06/03/20 17:42	1
1,2-Dibromoethane	ND		5.0	2.7	ug/L			06/03/20 17:42	1
Isopropylbenzene	ND		5.0	2.3	ug/L			06/03/20 17:42	1
Methyl acetate	ND		25	5.9	ug/L			06/03/20 17:42	1
Methyl tert-butyl ether	ND		5.0	3.7	ug/L			06/03/20 17:42	1
Methylcyclohexane	ND		5.0	2.1	ug/L			06/03/20 17:42	1
Methylene Chloride	ND		5.0	3.9	ug/L			06/03/20 17:42	1
Styrene	ND		5.0	1.3	ug/L			06/03/20 17:42	1
Tetrachloroethene	ND		5.0	2.0	ug/L			06/03/20 17:42	1
Toluene	ND		5.0	1.7	ug/L			06/03/20 17:42	1
trans-1,2-Dichloroethene	ND		5.0	2.5	ug/L			06/03/20 17:42	1
trans-1,3-Dichloropropene	ND		5.0	1.7	ug/L			06/03/20 17:42	1
Trichloroethene	ND		5.0	1.5	ug/L			06/03/20 17:42	1
Trichlorofluoromethane	ND		5.0	1.5	ug/L			06/03/20 17:42	1
Vinyl chloride	ND		5.0	3.7	ug/L			06/03/20 17:42	1
Xylenes, Total	ND		10	4.3	ug/L			06/03/20 17:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*53 - 150*		*06/03/20 17:42*	*1*
4-Bromofluorobenzene (Surr)	*92*		*54 - 125*		*06/03/20 17:42*	*1*
Dibromofluoromethane (Surr)	*91*		*55 - 150*		*06/03/20 17:42*	*1*
Toluene-d8 (Surr)	*84*		*63 - 127*		*06/03/20 17:42*	*1*

Lab Sample ID: LCS 180-317360/3
Matrix: Water
Analysis Batch: 317360

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	40.0	44.1		ug/L		110	77 - 130
1,1,2,2-Tetrachloroethane	40.0	37.3		ug/L		93	61 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	40.0	39.4		ug/L		99	65 - 129
1,1,2-Trichloroethane	40.0	40.0		ug/L		100	75 - 119
1,1-Dichloroethane	40.0	31.5		ug/L		79	73 - 118
1,2,4-Trichlorobenzene	40.0	45.3		ug/L		113	15 - 150
1,2-Dibromo-3-Chloropropane	40.0	38.8		ug/L		97	37 - 150
1,2-Dichlorobenzene	40.0	38.9		ug/L		97	72 - 121
1,2-Dichloroethane	40.0	48.9		ug/L		122	62 - 129
1,2-Dichloropropane	40.0	32.1		ug/L		80	66 - 121
1,3-Dichlorobenzene	40.0	39.2		ug/L		98	78 - 120
1,1-Dichloroethene	40.0	39.2		ug/L		98	60 - 131
1,4-Dichlorobenzene	40.0	40.1		ug/L		100	76 - 119
2-Butanone (MEK)	40.0	36.2		ug/L		91	33 - 133

Method: EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 180-317360/3
Matrix: Water
Analysis Batch: 317360

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Hexanone	40.0	34.9		ug/L		87	39 - 130
4-Methyl-2-pentanone (MIBK)	40.0	37.7		ug/L		94	36 - 138
Acetone	40.0	45.8		ug/L		115	13 - 150
Benzene	40.0	38.6		ug/L		97	72 - 118
Bromoform	40.0	43.9		ug/L		110	61 - 149
Bromomethane	40.0	39.4		ug/L		98	30 - 150
Carbon disulfide	40.0	21.3	*	ug/L		53	54 - 150
Carbon tetrachloride	40.0	38.2		ug/L		96	69 - 137
Chlorobenzene	40.0	43.8		ug/L		110	77 - 122
Chlorodibromomethane	40.0	43.5		ug/L		109	70 - 132
Chloroethane	40.0	29.6		ug/L		74	20 - 150
Chloroform	40.0	38.7		ug/L		97	78 - 119
Chloromethane	40.0	36.6		ug/L		91	30 - 131
cis-1,2-Dichloroethene	40.0	37.3		ug/L		93	78 - 116
cis-1,3-Dichloropropene	40.0	39.5		ug/L		99	70 - 124
Cyclohexane	40.0	28.5		ug/L		71	49 - 127
Dichlorobromomethane	40.0	41.9		ug/L		105	79 - 119
Dichlorodifluoromethane	40.0	40.4		ug/L		101	33 - 150
Ethylbenzene	40.0	39.6		ug/L		99	73 - 127
1,2-Dibromoethane	40.0	43.8		ug/L		110	75 - 118
Isopropylbenzene	40.0	44.2		ug/L		110	68 - 127
Methyl acetate	80.0	72.1		ug/L		90	38 - 131
Methyl tert-butyl ether	40.0	41.8		ug/L		105	74 - 122
Methylcyclohexane	40.0	30.2		ug/L		75	69 - 125
Methylene Chloride	40.0	46.1		ug/L		115	63 - 124
m-Xylene & p-Xylene	40.0	39.5		ug/L		99	73 - 125
o-Xylene	40.0	41.0		ug/L		102	72 - 124
Styrene	40.0	44.6		ug/L		111	76 - 125
Tetrachloroethene	40.0	42.6		ug/L		107	75 - 125
Toluene	40.0	40.3		ug/L		101	69 - 125
trans-1,2-Dichloroethene	40.0	35.4		ug/L		88	71 - 121
trans-1,3-Dichloropropene	40.0	46.3		ug/L		116	65 - 130
Trichloroethene	40.0	41.8		ug/L		105	76 - 120
Trichlorofluoromethane	40.0	58.7		ug/L		147	45 - 150
Vinyl chloride	40.0	37.0		ug/L		92	52 - 130
Xylenes, Total	80.0	80.5		ug/L		101	73 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*88*		*53 - 150*
4-Bromofluorobenzene (Surr)	*91*		*54 - 125*
Dibromofluoromethane (Surr)	*81*		*55 - 150*
Toluene-d8 (Surr)	*82*		*63 - 127*

Method: EPA 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LB 180-317007/1-A
Matrix: Solid
Analysis Batch: 317036

Client Sample ID: Method Blank
Prep Type: TCLP

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		0.050	0.015	mg/L			06/01/20 10:16	1
1,1-Dichloroethene	ND		0.050	0.029	mg/L			06/01/20 10:16	1
2-Butanone (MEK)	ND		0.050	0.029	mg/L			06/01/20 10:16	1
Benzene	ND		0.050	0.020	mg/L			06/01/20 10:16	1
Carbon tetrachloride	ND		0.050	0.033	mg/L			06/01/20 10:16	1
Chlorobenzene	ND		0.050	0.016	mg/L			06/01/20 10:16	1
Chloroform	ND		0.050	0.021	mg/L			06/01/20 10:16	1
Tetrachloroethene	ND		0.050	0.020	mg/L			06/01/20 10:16	1
Trichloroethene	ND		0.050	0.015	mg/L			06/01/20 10:16	1
Vinyl chloride	ND		0.050	0.037	mg/L			06/01/20 10:16	1

Surrogate	*LB %Recovery*	*LB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*126*		*53 - 150*		*06/01/20 10:16*	*1*
4-Bromofluorobenzene (Surr)	*83*		*54 - 125*		*06/01/20 10:16*	*1*
Dibromofluoromethane (Surr)	*110*		*55 - 150*		*06/01/20 10:16*	*1*
Toluene-d8 (Surr)	*93*		*63 - 127*		*06/01/20 10:16*	*1*

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 180-317530/1-A
Matrix: Solid
Analysis Batch: 317568

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 317530

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.050	0.0045	mg/L		06/04/20 16:10	06/05/20 09:06	1
2,4-Dinitrotoluene	ND		0.050	0.0079	mg/L		06/04/20 16:10	06/05/20 09:06	1
Hexachlorobenzene	ND		0.050	0.0055	mg/L		06/04/20 16:10	06/05/20 09:06	1
Hexachlorobutadiene	ND		0.050	0.0084	mg/L		06/04/20 16:10	06/05/20 09:06	1
Hexachloroethane	ND		0.050	0.0040	mg/L		06/04/20 16:10	06/05/20 09:06	1
2-Methylphenol	ND		0.050	0.0040	mg/L		06/04/20 16:10	06/05/20 09:06	1
Methylphenol, 3 & 4	ND		0.050	0.0079	mg/L		06/04/20 16:10	06/05/20 09:06	1
Nitrobenzene	ND		0.050	0.012	mg/L		06/04/20 16:10	06/05/20 09:06	1
Pentachlorophenol	ND		0.25	0.0075	mg/L		06/04/20 16:10	06/05/20 09:06	1
Pyridine	ND		0.10	0.0082	mg/L		06/04/20 16:10	06/05/20 09:06	1
2,4,5-Trichlorophenol	ND		0.050	0.0079	mg/L		06/04/20 16:10	06/05/20 09:06	1
2,4,6-Trichlorophenol	ND		0.050	0.0095	mg/L		06/04/20 16:10	06/05/20 09:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*84*		*55 - 107*	*06/04/20 16:10*	*06/05/20 09:06*	*1*
2-Fluorophenol (Surr)	*87*		*60 - 108*	*06/04/20 16:10*	*06/05/20 09:06*	*1*
2,4,6-Tribromophenol (Surr)	*86*		*24 - 113*	*06/04/20 16:10*	*06/05/20 09:06*	*1*
Nitrobenzene-d5 (Surr)	*78*		*62 - 115*	*06/04/20 16:10*	*06/05/20 09:06*	*1*
Phenol-d5 (Surr)	*78*		*52 - 107*	*06/04/20 16:10*	*06/05/20 09:06*	*1*
Terphenyl-d14 (Surr)	*88*		*44 - 116*	*06/04/20 16:10*	*06/05/20 09:06*	*1*

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 180-317530/2-A
Matrix: Solid
Analysis Batch: 317568

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 317530

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dichlorobenzene			0.250	0.211		mg/L		84	60 - 100		
2,4-Dinitrotoluene			0.250	0.186		mg/L		74	42 - 100		
Hexachlorobenzene			0.250	0.153		mg/L		61	37 - 100		
Hexachlorobutadiene			0.250	0.243		mg/L		97	50 - 103		
Hexachloroethane			0.250	0.179		mg/L		72	59 - 104		
2-Methylphenol			0.250	0.183		mg/L		73	60 - 101		
Methylphenol, 3 & 4			0.500	0.390		mg/L		78	62 - 106		
Nitrobenzene			0.250	0.192		mg/L		77	58 - 113		
Pentachlorophenol			0.250	0.148	J	mg/L		59	18 - 100		
Pyridine			0.250	0.227		mg/L		91	54 - 119		
2,4,5-Trichlorophenol			0.250	0.213		mg/L		85	54 - 100		
2,4,6-Trichlorophenol			0.250	0.235		mg/L		94	56 - 100		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*85*		*55 - 107*
2-Fluorophenol (Surr)	*90*		*60 - 108*
2,4,6-Tribromophenol (Surr)	*92*		*24 - 113*
Nitrobenzene-d5 (Surr)	*79*		*62 - 115*
Phenol-d5 (Surr)	*80*		*52 - 107*
Terphenyl-d14 (Surr)	*93*		*44 - 116*

Lab Sample ID: LCSD 180-317530/3-A
Matrix: Solid
Analysis Batch: 317568

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 317530

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dichlorobenzene			0.250	0.214		mg/L		86	60 - 100	2	15
2,4-Dinitrotoluene			0.250	0.188		mg/L		75	42 - 100	1	17
Hexachlorobenzene			0.250	0.154		mg/L		61	37 - 100	0	15
Hexachlorobutadiene			0.250	0.255		mg/L		102	50 - 103	5	15
Hexachloroethane			0.250	0.189		mg/L		75	59 - 104	5	16
2-Methylphenol			0.250	0.187		mg/L		75	60 - 101	2	15
Methylphenol, 3 & 4			0.500	0.386		mg/L		77	62 - 106	1	15
Nitrobenzene			0.250	0.194		mg/L		78	58 - 113	1	15
Pentachlorophenol			0.250	0.166	J	mg/L		67	18 - 100	12	16
Pyridine			0.250	0.227		mg/L		91	54 - 119	0	16
2,4,5-Trichlorophenol			0.250	0.211		mg/L		85	54 - 100	1	16
2,4,6-Trichlorophenol			0.250	0.245		mg/L		98	56 - 100	4	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*89*		*55 - 107*
2-Fluorophenol (Surr)	*89*		*60 - 108*
2,4,6-Tribromophenol (Surr)	*94*		*24 - 113*
Nitrobenzene-d5 (Surr)	*79*		*62 - 115*
Phenol-d5 (Surr)	*81*		*52 - 107*
Terphenyl-d14 (Surr)	*94*		*44 - 116*

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LB 180-316975/1-D
Matrix: Solid
Analysis Batch: 317568

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 317530

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.050	0.0045	mg/L		06/04/20 16:10	06/05/20 10:51	1
2,4-Dinitrotoluene	ND		0.050	0.0079	mg/L		06/04/20 16:10	06/05/20 10:51	1
Hexachlorobenzene	ND		0.050	0.0055	mg/L		06/04/20 16:10	06/05/20 10:51	1
Hexachlorobutadiene	ND		0.050	0.0084	mg/L		06/04/20 16:10	06/05/20 10:51	1
Hexachloroethane	ND		0.050	0.0040	mg/L		06/04/20 16:10	06/05/20 10:51	1
2-Methylphenol	ND		0.050	0.0040	mg/L		06/04/20 16:10	06/05/20 10:51	1
Methylphenol, 3 & 4	ND		0.050	0.0079	mg/L		06/04/20 16:10	06/05/20 10:51	1
Nitrobenzene	ND		0.050	0.012	mg/L		06/04/20 16:10	06/05/20 10:51	1
Pentachlorophenol	ND		0.25	0.0075	mg/L		06/04/20 16:10	06/05/20 10:51	1
Pyridine	ND		0.10	0.0082	mg/L		06/04/20 16:10	06/05/20 10:51	1
2,4,5-Trichlorophenol	ND		0.050	0.0079	mg/L		06/04/20 16:10	06/05/20 10:51	1
2,4,6-Trichlorophenol	ND		0.050	0.0095	mg/L		06/04/20 16:10	06/05/20 10:51	1

Surrogate	*LB %Recovery*	*LB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*87*		*55 - 107*	*06/04/20 16:10*	*06/05/20 10:51*	*1*
2-Fluorophenol (Surr)	*86*		*60 - 108*	*06/04/20 16:10*	*06/05/20 10:51*	*1*
2,4,6-Tribromophenol (Surr)	*85*		*24 - 113*	*06/04/20 16:10*	*06/05/20 10:51*	*1*
Nitrobenzene-d5 (Surr)	*79*		*62 - 115*	*06/04/20 16:10*	*06/05/20 10:51*	*1*
Phenol-d5 (Surr)	*76*		*52 - 107*	*06/04/20 16:10*	*06/05/20 10:51*	*1*
Terphenyl-d14 (Surr)	*90*		*44 - 116*	*06/04/20 16:10*	*06/05/20 10:51*	*1*

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 180-317107/1-A
Matrix: Solid
Analysis Batch: 317264

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 317107

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		17	5.4	ug/Kg		06/01/20 16:17	06/03/20 07:31	1
PCB-1221	ND		17	5.9	ug/Kg		06/01/20 16:17	06/03/20 07:31	1
PCB-1232	ND		17	4.1	ug/Kg		06/01/20 16:17	06/03/20 07:31	1
PCB-1242	ND		17	2.4	ug/Kg		06/01/20 16:17	06/03/20 07:31	1
PCB-1248	ND		17	4.0	ug/Kg		06/01/20 16:17	06/03/20 07:31	1
PCB-1254	ND		17	5.0	ug/Kg		06/01/20 16:17	06/03/20 07:31	1
PCB-1260	ND		17	4.7	ug/Kg		06/01/20 16:17	06/03/20 07:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene (Surr)	*107*		*51 - 112*	*06/01/20 16:17*	*06/03/20 07:31*	*1*
Tetrachloro-m-xylene (Surr)	*109*		*51 - 112*	*06/01/20 16:17*	*06/03/20 07:31*	*1*
DCB Decachlorobiphenyl (Surr)	*120*		*61 - 132*	*06/01/20 16:17*	*06/03/20 07:31*	*1*
DCB Decachlorobiphenyl (Surr)	*122*		*61 - 132*	*06/01/20 16:17*	*06/03/20 07:31*	*1*

Lab Sample ID: LCS 180-317107/2-A
Matrix: Solid
Analysis Batch: 317264

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 317107

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	1330	1210		ug/Kg		90	48 - 122

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCS 180-317107/2-A
Matrix: Solid
Analysis Batch: 317264

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 317107

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1260			1330	1140		ug/Kg		86	47 - 127		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*94*		*51 - 112*
Tetrachloro-m-xylene (Surr)	*96*		*51 - 112*
DCB Decachlorobiphenyl (Surr)	*104*		*61 - 132*
DCB Decachlorobiphenyl (Surr)	*103*		*61 - 132*

Lab Sample ID: 180-106354-1 MS
Matrix: Solid
Analysis Batch: 317264

Client Sample ID: VAULT AREA 1
Prep Type: Total/NA
Prep Batch: 317107

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016	ND		1400	1310		ug/Kg	☼	94	48 - 122		
PCB-1260	ND		1400	1180		ug/Kg	☼	84	47 - 127		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*94*		*51 - 112*
Tetrachloro-m-xylene (Surr)	*92*		*51 - 112*
DCB Decachlorobiphenyl (Surr)	*98*		*61 - 132*
DCB Decachlorobiphenyl (Surr)	*100*		*61 - 132*

Lab Sample ID: 180-106354-1 MSD
Matrix: Solid
Analysis Batch: 317264

Client Sample ID: VAULT AREA 1
Prep Type: Total/NA
Prep Batch: 317107

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	ND		1400	1260		ug/Kg	☼	90	48 - 122	4	40
PCB-1260	ND		1400	1140		ug/Kg	☼	81	47 - 127	3	40

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*91*		*51 - 112*
Tetrachloro-m-xylene (Surr)	*91*		*51 - 112*
DCB Decachlorobiphenyl (Surr)	*96*		*61 - 132*
DCB Decachlorobiphenyl (Surr)	*101*		*61 - 132*

Method: EPA 6010D - Metals (ICP)

Lab Sample ID: MB 180-317307/1-A
Matrix: Solid
Analysis Batch: 317481

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 317307

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.050	0.00085	mg/L		06/03/20 08:28	06/04/20 08:18	1
Barium	ND		0.20	0.0026	mg/L		06/03/20 08:28	06/04/20 08:18	1
Cadmium	ND		0.050	0.00028	mg/L		06/03/20 08:28	06/04/20 08:18	1
Chromium	ND		0.050	0.00078	mg/L		06/03/20 08:28	06/04/20 08:18	1
Lead	ND		0.050	0.0029	mg/L		06/03/20 08:28	06/04/20 08:18	1

Method: EPA 6010D - Metals (ICP) (Continued)

Lab Sample ID: MB 180-317307/1-A
Matrix: Solid
Analysis Batch: 317481

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 317307

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		0.050	0.0036	mg/L		06/03/20 08:28	06/04/20 08:18	1
Arsenic	ND		0.050	0.0041	mg/L		06/03/20 08:28	06/04/20 08:18	1

Lab Sample ID: LCS 180-317307/2-A
Matrix: Solid
Analysis Batch: 317481

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 317307

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.250	0.250		mg/L		100	80 - 120
Barium	1.00	0.971		mg/L		97	80 - 120
Cadmium	0.500	0.497		mg/L		99	80 - 120
Chromium	0.500	0.485		mg/L		97	80 - 120
Lead	0.500	0.489		mg/L		98	80 - 120
Selenium	1.00	0.999		mg/L		100	80 - 120
Arsenic	1.00	1.01		mg/L		101	80 - 120

Lab Sample ID: LB 180-316975/1-C
Matrix: Solid
Analysis Batch: 317481

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 317307

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.50	0.0085	mg/L		06/03/20 08:28	06/04/20 08:27	1
Barium	ND		2.0	0.026	mg/L		06/03/20 08:28	06/04/20 08:27	1
Cadmium	ND		0.50	0.0028	mg/L		06/03/20 08:28	06/04/20 08:27	1
Chromium	ND		0.50	0.0078	mg/L		06/03/20 08:28	06/04/20 08:27	1
Lead	ND		0.50	0.029	mg/L		06/03/20 08:28	06/04/20 08:27	1
Selenium	ND		0.50	0.036	mg/L		06/03/20 08:28	06/04/20 08:27	1
Arsenic	ND		0.50	0.041	mg/L		06/03/20 08:28	06/04/20 08:27	1

Method: EPA 7470A - Mercury (CVAA)

Lab Sample ID: MB 180-317216/1-A
Matrix: Solid
Analysis Batch: 317405

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 317216

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		06/03/20 17:40	06/03/20 21:31	1

Lab Sample ID: LCS 180-317216/2-A
Matrix: Solid
Analysis Batch: 317405

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 317216

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00250	0.00251		mg/L		100	80 - 120

Method: EPA 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LB 180-316975/1-B
Matrix: Solid
Analysis Batch: 317405

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 317216

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		06/03/20 17:40	06/03/20 21:43	1

Lab Sample ID: LB 180-316975/24-B
Matrix: Solid
Analysis Batch: 317405

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 317216

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00013	mg/L		06/03/20 17:40	06/03/20 21:33	1

GC/MS VOA

Leach Batch: 317007

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-106354-1	VAULT AREA 1	TCLP	Solid	EPA 1311	
LB 180-317007/1-A	Method Blank	TCLP	Solid	EPA 1311	

Analysis Batch: 317036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-106354-1	VAULT AREA 1	TCLP	Solid	EPA 8260D	317007
LB 180-317007/1-A	Method Blank	TCLP	Solid	EPA 8260D	317007
LCS 180-317036/3	Lab Control Sample	Total/NA	Solid	EPA 8260D	

Analysis Batch: 317360

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-106354-2	TRIP BLANK	Total/NA	Water	EPA 8260D	
MB 180-317360/5	Method Blank	Total/NA	Water	EPA 8260D	
LCS 180-317360/3	Lab Control Sample	Total/NA	Water	EPA 8260D	

GC/MS Semi VOA

Leach Batch: 316975

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-106354-1	VAULT AREA 1	TCLP	Solid	EPA 1311	
LB 180-316975/1-D	Method Blank	TCLP	Solid	EPA 1311	

Prep Batch: 317530

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-106354-1	VAULT AREA 1	TCLP	Solid	3510C	316975
LB 180-316975/1-D	Method Blank	TCLP	Solid	3510C	316975
MB 180-317530/1-A	Method Blank	Total/NA	Solid	3510C	
LCS 180-317530/2-A	Lab Control Sample	Total/NA	Solid	3510C	
LCSD 180-317530/3-A	Lab Control Sample Dup	Total/NA	Solid	3510C	

Analysis Batch: 317568

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-106354-1	VAULT AREA 1	TCLP	Solid	EPA 8270E	317530
LB 180-316975/1-D	Method Blank	TCLP	Solid	EPA 8270E	317530
MB 180-317530/1-A	Method Blank	Total/NA	Solid	EPA 8270E	317530
LCS 180-317530/2-A	Lab Control Sample	Total/NA	Solid	EPA 8270E	317530
LCSD 180-317530/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 8270E	317530

GC Semi VOA

Prep Batch: 317107

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-106354-1	VAULT AREA 1	Total/NA	Solid	3541	
MB 180-317107/1-A	Method Blank	Total/NA	Solid	3541	
LCS 180-317107/2-A	Lab Control Sample	Total/NA	Solid	3541	
180-106354-1 MS	VAULT AREA 1	Total/NA	Solid	3541	
180-106354-1 MSD	VAULT AREA 1	Total/NA	Solid	3541	

Analysis Batch: 317264

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-106354-1	VAULT AREA 1	Total/NA	Solid	EPA 8082A	317107
MB 180-317107/1-A	Method Blank	Total/NA	Solid	EPA 8082A	317107

GC Semi VOA (Continued)

Analysis Batch: 317264 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 180-317107/2-A	Lab Control Sample	Total/NA	Solid	EPA 8082A	317107
180-106354-1 MS	VAULT AREA 1	Total/NA	Solid	EPA 8082A	317107
180-106354-1 MSD	VAULT AREA 1	Total/NA	Solid	EPA 8082A	317107

Metals

Leach Batch: 316975

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-106354-1	VAULT AREA 1	TCLP	Solid	EPA 1311	
LB 180-316975/1-B	Method Blank	TCLP	Solid	EPA 1311	
LB 180-316975/1-C	Method Blank	TCLP	Solid	EPA 1311	
LB 180-316975/24-B	Method Blank	TCLP	Solid	EPA 1311	

Prep Batch: 317216

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-106354-1	VAULT AREA 1	TCLP	Solid	7470A	316975
LB 180-316975/1-B	Method Blank	TCLP	Solid	7470A	316975
LB 180-316975/24-B	Method Blank	TCLP	Solid	7470A	316975
MB 180-317216/1-A	Method Blank	Total/NA	Solid	7470A	
LCS 180-317216/2-A	Lab Control Sample	Total/NA	Solid	7470A	

Prep Batch: 317307

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-106354-1	VAULT AREA 1	TCLP	Solid	3010A	316975
LB 180-316975/1-C	Method Blank	TCLP	Solid	3010A	316975
MB 180-317307/1-A	Method Blank	Total/NA	Solid	3010A	
LCS 180-317307/2-A	Lab Control Sample	Total/NA	Solid	3010A	

Analysis Batch: 317405

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-106354-1	VAULT AREA 1	TCLP	Solid	EPA 7470A	317216
LB 180-316975/1-B	Method Blank	TCLP	Solid	EPA 7470A	317216
LB 180-316975/24-B	Method Blank	TCLP	Solid	EPA 7470A	317216
MB 180-317216/1-A	Method Blank	Total/NA	Solid	EPA 7470A	317216
LCS 180-317216/2-A	Lab Control Sample	Total/NA	Solid	EPA 7470A	317216

Analysis Batch: 317481

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-106354-1	VAULT AREA 1	TCLP	Solid	EPA 6010D	317307
LB 180-316975/1-C	Method Blank	TCLP	Solid	EPA 6010D	317307
MB 180-317307/1-A	Method Blank	Total/NA	Solid	EPA 6010D	317307
LCS 180-317307/2-A	Lab Control Sample	Total/NA	Solid	EPA 6010D	317307

General Chemistry

Analysis Batch: 317049

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-106354-1	VAULT AREA 1	Total/NA	Solid	2540G	

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: Jeff Sturm	Lab PM: Colussy, Jill L	Carrier Tracking No(s):	COC No: 180-60828-12383.1
Client Contact: Elizabeth Sanguinito	Phone: (814)790-2241	E-Mail: jill.colussy@testamericainc.com		Page: Page 1 of 1
Company: ATC Group Services LLC.				Job #:
Address: 270 William Pitt Way	Due Date Requested: Standard			
City: Pittsburgh	TAT Requested (days):			
State, Zip: PA, 15238				
Phone:	PO #: Purchase Order not required			
Email: elizabeth.sanguinito@atcassociates.com	WO #:			
Project Name: Waste Characterization	Project #: 18022423			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PCB's	TCLP metals	TCLP VOC's	TCLP SVOC's	Total Number of containers	Special Instructions/Note:
			Preservation Code:									
VAULT Area 1	5-28-20	10:25	C	S	N		X	X	X	X		



Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify)	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		5-29-20 15:00		Dellie Watson	5-29-20	ETAPH
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 8:45	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

ATC
—AN ATLAS COMPANY—

Fashion Outlets of Niagara Falls
DAILY FIELD REPORT

ATC Project No. Z214JMCC01 **NYSDEC BCP No.** C932162 **Date:**

ATC Technician: JEFF STURM

Site Name: Charter Communications, Fashion Outlets of Niagara Falls, NY

Site Address: 1900 Military Road, Niagara Falls, NY 14304

Contractor/Subcontractors: PERFORMANCE CABLE CONTRACTOR INC

Weather Conditions:
71° OVERCAST

Work Activities Performed: CUTTING BLACK TOP, DEBRIS COLLECTED IN DRUM, EXCAVATING SITE

Samples Collected: (1) SOIL SAMPLE

Air Monitoring: DUST TRAK ENVIRONMENTAL ENCLOSURE Model 8535 SETUP UP AND DOWN WIND OF EXCAVATION

Problems Encountered: NONE

Planned Activties for Next Day:
N/A

Soil/Waste Generated

Attachments: Air Montoring Location Map
Daily Photo Log

Login Sample Receipt Checklist

Client: ATC Group Services LLC.

Job Number: 180-106354-1

Login Number: 106354
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	Received Trip Blank(s) not listed on COC.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

SITE NIAGARA FALLS LANDFILL 716-282-6381
5600 Niagara Falls Blvd -Niagara Falls, NY 14304

CUSTOMER 392105
CNB CONTRACTING CORPORATION
PO BOX 97
NEW ROCHELLE, NY 10804
Contract:4215225766
Generator:Atlas ATC Engineering-Charter Communicat

SITE 5B	TICKET # 1210105	CELL	
WEIGHMASTER	Pam S.		
DATE/TIME IN	5/9/22 8:40 am	DATE/TIME OUT	5/9/22 9:02 am
VEHICLE	MAW20	CONTAINER	
REFERENCE			
BILL OF LADING	N/A		

SCALE IN GROSS WEIGHT 76,200 NET TONS 23.89
SCALE OUT TARE WEIGHT 28,420 NET WEIGHT 47,780

INBOUND
INVOICE

QTY	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
50.00	YD	Tracking QTY				
23.89	tn	SW-CONT SOIL Origin:NY-NIAGARA 100%				
1.00		ENVIRONMENTAL FEE 1				

Have a nice day. Thank you for your business!

NET AMOUNT
TENDERED
CHANGE
CHECK#

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

RS-F042UPR (04/19)

SIGNATURE

SITE NIAGARA FALLS LANDFILL 716-282-6381
5600 Niagara Falls Blvd -Niagara Falls, NY 14304

CUSTOMER 392105
CNB CONTRACTING CORPORATION
PO BOX 97
NEW ROCHELLE, NY 10804
Contract:4215225766
Generator:Atlas ATC Engineering-Charter Communicat

SITE 5B	TICKET # 1210112	CELL	
WEIGHMASTER	Pam S.		
DATE/TIME IN	5/9/22 9:48 am	DATE/TIME OUT	5/9/22 9:48 am
VEHICLE	MAW20	CONTAINER	
REFERENCE			
BILL OF LADING	N/A		

SCALE IN GROSS WEIGHT 77,360 NET TONS 24.48
TARE OUT TARE WEIGHT 28,400 NET WEIGHT 48,960

INBOUND
INVOICE

QTY	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
50.00	YD	Tracking QTY				
24.48	tn	SW-CONT SOIL Origin:NY-NIAGARA 100%				
1.00		ENVIRONMENTAL FEE 1				

Have a nice day. Thank you for your business!

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USTOMER 392105
CNB CONTRACTING CORPORATION
PO BOX 97
NEW ROCHELLE, NY 10804
Contract:4215225766
Generator:Atlas ATC Engineering-Charter Communicat

SITE 5B	TICKET # 1210130	CELL	
WEIGHMASTER	Pam S.		
DATE/TIME IN	5/9/22 10:38 am	DATE/TIME OUT	5/9/22 10:38 am
VEHICLE	MAW20	CONTAINER	
REFERENCE			
BILL OF LADING	N/A		

SCALE IN GROSS WEIGHT 71,560 NET TONS 21.58
TARE OUT TARE WEIGHT 28,400 NET WEIGHT 43,160

INBOUND
INVOICE

QTY	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
~~20.00~~	~~YD~~	~~Tracking QTY~~				
21.58	tn	SW-CONT SOIL Origin:NY-NIAGARA 100%				
1.00		ENVIRONMENTAL FEE 1				

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5600 Niagara Falls Blvd -Niagara Falls, NY 14304

USTOMER 392105
CNB CONTRACTING CORPORATION
PO BOX 97
NEW ROCHELLE, NY 10804
Contract:4215225766
Generator:Atlas ATC Engineering-Charter Communicat

SITE 5B	TICKET # 1210143	CELL	
WEIGHMASTER	Pam S.		
DATE/TIME IN	5/9/22 11:28 am	DATE/TIME OUT	5/9/22 11:28 am
VEHICLE	MAW20	CONTAINER	
REFERENCE			
BILL OF LADING	N/A		

SCALE IN GROSS WEIGHT 71,860 NET TONS 21.73
TARE OUT TARE WEIGHT 28,400 NET WEIGHT 43,460

INBOUND
INVOICE

QTY	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
~~20.00~~	~~YD~~	~~Tracking QTY~~				
21.73	tn	SW-CONT SOIL Origin:NY-NIAGARA 100%				
1.00		ENVIRONMENTAL FEE 1				

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5600 Niagara Falls Blvd -Niagara Falls, NY 14304

CUSTOMER 392105
CNB CONTRACTING CORPORATION
PO BOX 97
NEW ROCHELLE, NY 10804
Contract:4215225766
Generator:Atlas ATC Engineering-Charter Communicat

SITE 5B | TICKET # 1210157 | CELL
WEIGHMASTER Pam S.
DATE/TIME IN 5/9/22 12:21 pm | DATE/TIME OUT 5/9/22 12:21 pm
VEHICLE MAW20 | CONTAINER
REFERENCE
BILL OF LADING N/A

SCALE IN GROSS WEIGHT 69,480 NET TONS 20.54
TARE OUT TARE WEIGHT 28,400 NET WEIGHT 41,080

INBOUND
INVOICE

QTY	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
~~20.00~~	~~YD~~	~~Tracking QTY~~				
20.54	tn	SW-CONT SOIL Origin:NY-NIAGARA 100%				
1.00		ENVIRONMENTAL FEE 1				

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5600 Niagara Falls Blvd -Niagara Falls, NY 14304

CUSTOMER 392105
CNB CONTRACTING CORPORATION
PO BOX 97
NEW ROCHELLE, NY 10804
Contract:4215225766
Generator:Atlas ATC Engineering-Charter Communicat

SITE 5B | TICKET # 1210171 | CELL
WEIGHMASTER Pam S.
DATE/TIME IN 5/9/22 1:16 pm | DATE/TIME OUT 5/9/22 1:16 pm
VEHICLE MAW20 | CONTAINER
REFERENCE
BILL OF LADING N/A

SCALE IN GROSS WEIGHT 43,960 NET TONS 7.78
TARE OUT TARE WEIGHT 28,400 NET WEIGHT 15,560

INBOUND
INVOICE

QTY	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
~~8.00~~	~~YD~~	~~Tracking QTY~~				
7.78	tn	SW-CONT SOIL Origin:NY-NIAGARA 100%				
1.00		ENVIRONMENTAL FEE 1				

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MAWHINEY TRUCKING, INC.

425 Lake St.
Wilson, NY 14172
(716) 751-6418 (716) 523-0454

DRIVER L. MEYERS TRUCK NO. M-22 DATE 5/9/22

CUSTOMER CMB CONSTR.

JOB

LOAD LOCATION KLINE OUTLETS

DUMP LOCATION REPUBLIC

MATERIAL DIRT

SUB TICKET #

JOB START 8:00

JOB FINISH 1:30

TRAVEL TIME N/C

☐ LUNCH ☒ ~~NO LUNCH~~

TOTAL 6 1/2

LD #	LOAD TICKET #	DESCRIPTION	LOAD AMOUNT
1		6 - LOADS	
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			

OUR RESPONSIBILITY ENDS AT THE CURB

RECEIVED BY: 37414

Ref No: G09050047-1

ITE NIAGARA FALLS LANDFILL 716-282-6381
5600 Niagara Falls Blvd -Niagara Falls, NY 14304

USTOMER 392105
CNB CONTRACTING CORPORATION
PO BOX 97
NEW ROCHELLE, NY 10804
Contract:4215225766
Generator:Atlas ATC Engineering-Charter Communicat

SITE 5B	TICKET # 1210103	CELL
WEIGHMASTER	Pam S.	
DATE/TIME IN 5/9/22 8:38 am		DATE/TIME OUT 5/9/22 8:56 am
VEHICLE MAW12		CONTAINER
REFERENCE		
BILL OF LADING N/A		

SCALE IN GROSS WEIGHT 61,620 NET TONS 17.30
SCALE OUT TARE WEIGHT 27,020 NET WEIGHT 34,600

INBOUND
INVOICE

QTY	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.00	YD	Tracking QTY				
17.30	tn	SW-CONT SOIL Origin:NY-NIAGARA 100%				
1.00		ENVIRONMENTAL FEE 1				

Have a nice day. Thank you for your business!

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5600 Niagara Falls Blvd -Niagara Falls, NY 14304

USTOMER 392105
CNB CONTRACTING CORPORATION
PO BOX 97
NEW ROCHELLE, NY 10804
Contract:4215225766
Generator:Atlas ATC Engineering-Charter Communicat

SITE 5B	TICKET # 1210110	CELL
WEIGHMASTER	Pam S.	
DATE/TIME IN 5/9/22 9:33 am		DATE/TIME OUT 5/9/22 9:33 am
VEHICLE MAW-22		CONTAINER 12CY
REFERENCE		
BILL OF LADING N/A		

SCALE IN GROSS WEIGHT 83,440 NET TONS 28.22
TARE OUT TARE WEIGHT 27,000 NET WEIGHT 56,440

INBOUND
INVOICE

QTY	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
12.00	YD	Tracking QTY				
28.22	tn	SW-CONT SOIL Origin:NY-NIAGARA 100%				
1.00		ENVIRONMENTAL FEE 1				

Have a nice day. Thank you for your business!

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CUSTOMER 392105
CNB CONTRACTING CORPORATION
PO BOX 97
NEW ROCHELLE, NY 10804
Contract:4215225766
Generator:Atlas ATC Engineering-Charter Communicat

SITE 5B	TICKET # 1210126	CELL
WEIGHMASTER	Pam S.	
DATE/TIME IN 5/9/22 10:23 am		DATE/TIME OUT 5/9/22 10:23 am
VEHICLE MAW-22		CONTAINER 12OT
REFERENCE		
BILL OF LADING N/A		

SCALE IN GROSS WEIGHT 75,680 NET TONS 24.34
TARE OUT TARE WEIGHT 27,000 NET WEIGHT 48,680

INBOUND
INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
1.00	YD	Tracking QTY				
21.34	tn	SW-CONT SOIL Origin:NY-NIAGARA 100%				
1.00		ENVIRONMENTAL FEE 1				

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CUSTOMER 392105
CNB CONTRACTING CORPORATION
PO BOX 97
NEW ROCHELLE, NY 10804
Contract:4215225766
Generator:Atlas ATC Engineering-Charter Communicat

SITE 5B	TICKET # 1210138	CELL
WEIGHMASTER	Pam S.	
DATE/TIME IN 5/9/22 11:15 am		DATE/TIME OUT 5/9/22 11:15 am
VEHICLE MAW-22		CONTAINER 12OT
REFERENCE		
BILL OF LADING N/A		

SCALE IN GROSS WEIGHT 70,500 NET TONS 21.75
TARE OUT TARE WEIGHT 27,000 NET WEIGHT 43,500

INBOUND
INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
1.00	YD	Tracking QTY				
21.75	tn	SW-CONT SOIL Origin:NY-NIAGARA 100%				
1.00		ENVIRONMENTAL FEE 1				

Have a nice day. Thank you for your business!

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5600 Niagara Falls Blvd -Niagara Falls, NY 14304

CUSTOMER 392105
CNB CONTRACTING CORPORATION
PO BOX 97
NEW ROCHELLE, NY 10804
Contract:4215225766
Generator:Atlas ATC Engineering-Charter Communicat

SITE 5B | TICKET # 1210155 | CELL
WEIGHMASTER Pam S.
DATE/TIME IN 5/9/22 12:04 pm | DATE/TIME OUT 5/9/22 12:04 pm
VEHICLE MAW-22 | CONTAINER 12OT
REFERENCE
BILL OF LADING N/A

SCALE IN GROSS WEIGHT 73,060 NET TONS 23.03
TARE OUT TARE WEIGHT 27,000 NET WEIGHT 46,060

INBOUND
INVOICE

QTY	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
12.00	YD	Tracking QTY				
23.03	tn	SW-CONT SOIL Origin:NY-NIAGARA 100%				
1.00		ENVIRONMENTAL FEE 1				

Have a nice day. Thank you for your business!

NET AMOUNT
TENDERED
CHANGE
CHECK#

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

RS-F042UPR (04/19)

SIGNATURE _____

SITE NIAGARA FALLS LANDFILL 716-282-6381
5600 Niagara Falls Blvd -Niagara Falls, NY 14304

CUSTOMER 392105
CNB CONTRACTING CORPORATION
PO BOX 97
NEW ROCHELLE, NY 10804
Contract:4215225766
Generator:Atlas ATC Engineering-Charter Communicat

SITE 5B | TICKET # 1210167 | CELL
WEIGHMASTER Pam S.
DATE/TIME IN 5/9/22 12:58 pm | DATE/TIME OUT 5/9/22 12:58 pm
VEHICLE MAW-22 | CONTAINER 12OT
REFERENCE
BILL OF LADING N/A

SCALE IN GROSS WEIGHT 59,520 NET TONS 16.26
TARE OUT TARE WEIGHT 27,000 NET WEIGHT 32,520

INBOUND
INVOICE

QTY	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
13.00	YD	Tracking QTY				
16.26	tn	SW-CONT SOIL Origin:NY-NIAGARA 100%				
1.00		ENVIRONMENTAL FEE 1				

Have a nice day. Thank you for your business!

NET AMOUNT
TENDERED
CHANGE
CHECK#

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

APPENDIX D

Sub-Base Material Certification

LAFARGE

Daniel Thomas
400 Hinman Rd.
Lockport, NY 14094
716-260-6017 (cell)

4/12/2022

CNB Corp

Att: Bill
Re: Town of Niagara Falls Project
Email:Bill@cnbcorp.net

To whom it may concern:

This is to certify that the material being supplied to the above project conforms to the outlined NYSDOT requirements for Section 304.11 Subbase. Below is a gradation for 2" ROC NYSDOT Type 1 Subbase.

Location: Lockport
Material Type: 2" ROC

Source No. 5-5R
Test No. 21AR087

Sieve Size	Weight	% Ret	% Pass	Spec
3"	0.0	0.0	100.0	100
2"	0.0	0.0	100.0	90-100
1 1/2"	247.3	2.3	97.7	
1"	1870.9	17.4	80.3	
3/4"	1096.7	10.2	70.1	
1/2"	1774.1	16.5	53.6	
1/4"	1774.1	16.5	37.1	30-65
1/8"	999.9	9.3	27.8	
#20	1193.5	11.1	16.7	
#40	322.6	3.0	13.7	5-40
#80	451.6	4.2	9.5	
#200	419.3	3.9	5.6	0-10
pan	602.1	5.6		
Total	10752.1			

Sincerely,

Daniel Thomas
Quality Control
Lafarge A&C

LAFARGE

4/12/2022

Daniel Thomas
400 Hinman Rd.
Lockport, NY 14094
716-260-6017 (cell)

To Whom It May Concern:

This letter is to confirm that the crushed stone material provided out of our Lockport quarry to the above stated project is virgin material, and is from an approved DEC source. Our DEC permit number is 9-2999-00002/00015. Our quarry is compiled of a dolomitic limestone material, and contains no hazardous or deleterious materials. Our Source number from New York State DOT is 5-5R and the most recent Test number is 21AR087.

Please feel free to contact me at the number above with any questions and I would be happy to assist in any way possible. Thank you.

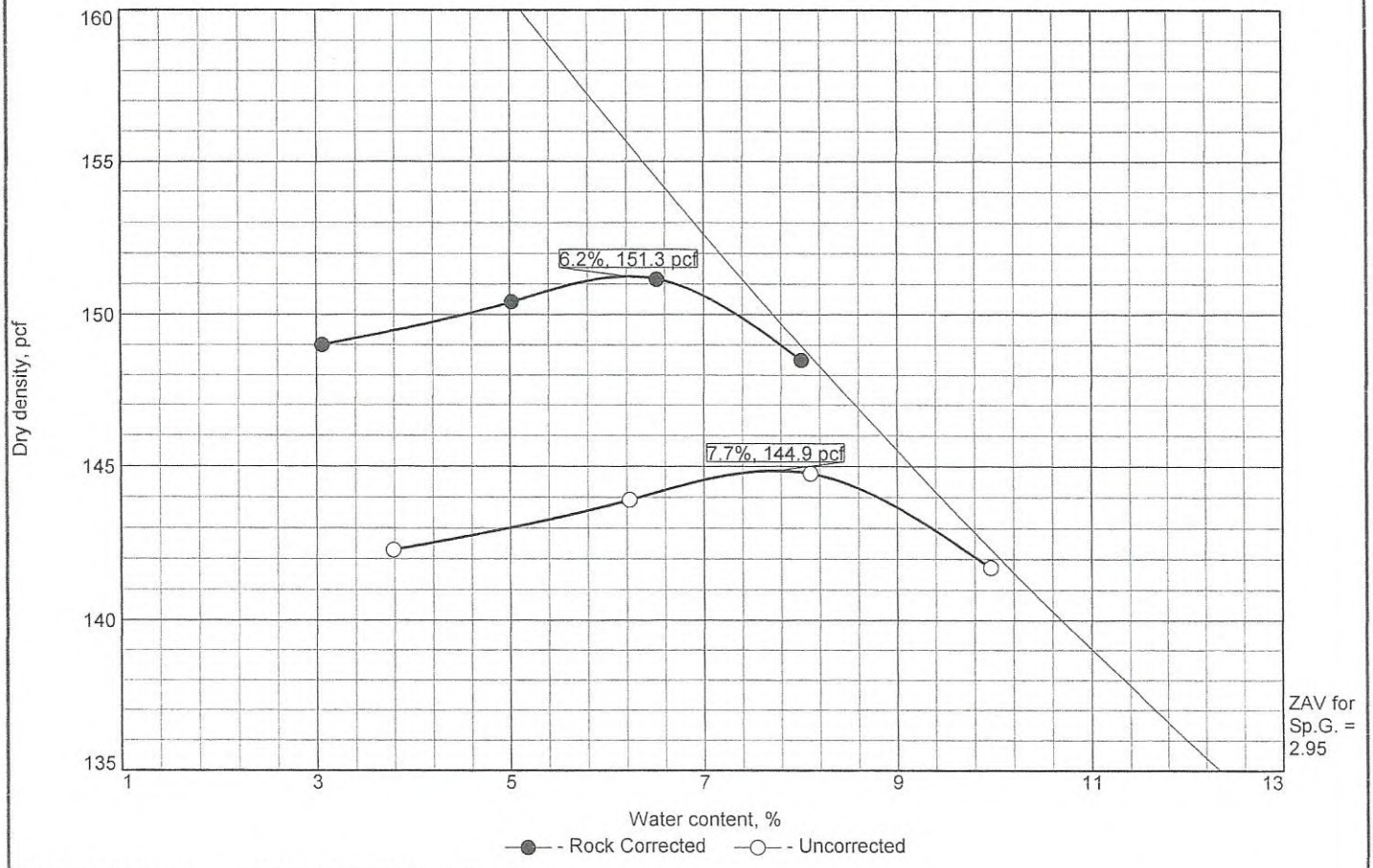
Regards,

Daniel Thomas
Quality Control

GLYNN GROUP
ENGINEERING & ARCHITECTURE, PLLC

Civil • Geotechnical
Structural • Architecture
Material Testing • Consulting

COMPACTION TEST REPORT



Test specification: ASTM D 1557-07 Method C Modified
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/4 in.	% < No.200
	USCS	AASHTO						
Stockpile	GW-GM	A-1-a		2.95	NV	NP	19.8	5.9

ROCK CORRECTED TEST RESULTS	UNCORRECTED	MATERIAL DESCRIPTION
Maximum dry density = 151.3 pcf	144.9 pcf	2" Crusher Run
Optimum moisture = 6.2 %	7.7 %	

Project No. 21-1181 **Client:** Lafarge
Project: Various Testing
○ **Location:** Lockport Quarry **Sample Number:** 21-02

Remarks:
08.25.2021

GLYNN GEOTECHNICAL ENGINEERING
Lockport, New York
Figure

Tested By: MJT **Checked By:** GEL

GLYNN GROUP ENGINEERING & ARCHITECTURE, PLLC
415 South Transit Street, Lockport, New York 14094
voice 716.625.6933 / fax 716.625.6983
www.glynngroup.com

APPENDIX E

Air Monitoring Results

FASHION OUTLET OF NIAGARA FALLS
UPWIND PARTICULATE MONITORING
Date: April 4, 2022
Unit: TSI 8530 DustTrak II

Deployment Label	Date	Time	PM-10 Particulate Level (mg/m^3) 15-min. Average
CAMP 01 - Dust	4/4/2022	7:15	-0.005
CAMP 01 - Dust	4/4/2022	7:30	-0.011
CAMP 01 - Dust	4/4/2022	7:45	-0.013
CAMP 01 - Dust	4/4/2022	8:00	-0.014
CAMP 01 - Dust	4/4/2022	8:15	-0.014
CAMP 01 - Dust	4/4/2022	8:30	-0.014
CAMP 01 - Dust	4/4/2022	8:45	-0.015
CAMP 01 - Dust	4/4/2022	9:00	-0.016
CAMP 01 - Dust	4/4/2022	9:15	-0.011
CAMP 01 - Dust	4/4/2022	9:30	-0.006
CAMP 01 - Dust	4/4/2022	9:45	-0.006
CAMP 01 - Dust	4/4/2022	10:00	-0.006
CAMP 01 - Dust	4/4/2022	10:15	-0.006
CAMP 01 - Dust	4/4/2022	10:30	-0.006
CAMP 01 - Dust	4/4/2022	10:45	-0.006
CAMP 01 - Dust	4/4/2022	11:00	-0.006
CAMP 01 - Dust	4/4/2022	11:15	-0.01
CAMP 01 - Dust	4/4/2022	11:30	-0.019
CAMP 01 - Dust	4/4/2022	11:45	-0.019
CAMP 01 - Dust	4/4/2022	12:00	-0.019
CAMP 01 - Dust	4/4/2022	12:15	-0.019
CAMP 01 - Dust	4/4/2022	12:30	-0.019
CAMP 01 - Dust	4/4/2022	12:45	-0.018
CAMP 01 - Dust	4/4/2022	13:00	-0.01
CAMP 01 - Dust	4/4/2022	13:15	-0.008
CAMP 01 - Dust	4/4/2022	13:30	-0.003
CAMP 01 - Dust	4/4/2022	13:45	0.001
CAMP 01 - Dust	4/4/2022	14:00	0.001
CAMP 01 - Dust	4/4/2022	14:15	0
CAMP 01 - Dust	4/4/2022	14:30	
Maximum Value			0.001
Minimum Value			-0.019
Average Value			-0.010

FASHION OUTLET OF NIAGARA FALLS
UPWIND PARTICULATE MONITORING
Date: April 5, 2022
Unit: TSI - DustTrak II

Deployment Label	Date	Time	PM-10 Particulate Level (mg/m^3) 15-min. Average
CAMP 01 - Dust	4/5/2022	5:00	0.005
CAMP 01 - Dust	4/5/2022	5:15	0.005
CAMP 01 - Dust	4/5/2022	5:30	0.005
CAMP 01 - Dust	4/5/2022	5:45	0.005
CAMP 01 - Dust	4/5/2022	6:00	0.005
CAMP 01 - Dust	4/5/2022	6:15	0.005
CAMP 01 - Dust	4/5/2022	6:30	0.005
CAMP 01 - Dust	4/5/2022	6:45	0.004
CAMP 01 - Dust	4/5/2022	7:00	0.004
CAMP 01 - Dust	4/5/2022	7:15	0.003
CAMP 01 - Dust	4/5/2022	7:30	0.003
CAMP 01 - Dust	4/5/2022	7:45	0.003
CAMP 01 - Dust	4/5/2022	8:00	0.003
CAMP 01 - Dust	4/5/2022	8:15	0.002
CAMP 01 - Dust	4/5/2022	8:30	0.002
CAMP 01 - Dust	4/5/2022	8:45	0.001
CAMP 01 - Dust	4/5/2022	9:00	0.001
CAMP 01 - Dust	4/5/2022	9:15	0.001
CAMP 01 - Dust	4/5/2022	9:30	0
CAMP 01 - Dust	4/5/2022	9:45	0.001
CAMP 01 - Dust	4/5/2022	10:00	0
CAMP 01 - Dust	4/5/2022	10:15	0
CAMP 01 - Dust	4/5/2022	10:30	0
CAMP 01 - Dust	4/5/2022	10:45	0
CAMP 01 - Dust	4/5/2022	11:00	0.001
CAMP 01 - Dust	4/5/2022	11:15	0.002
CAMP 01 - Dust	4/5/2022	11:30	0.001
CAMP 01 - Dust	4/5/2022	11:45	0.001
CAMP 01 - Dust	4/5/2022	12:00	0.001
CAMP 01 - Dust	4/5/2022	12:15	0.001
CAMP 01 - Dust	4/5/2022	12:30	0
CAMP 01 - Dust	4/5/2022	12:45	0
CAMP 01 - Dust	4/5/2022	13:00	0
CAMP 01 - Dust	4/5/2022	13:15	0.001
CAMP 01 - Dust	4/5/2022	13:30	0
Maximum Value			0.005
Minimum Value			0
Average Value			0.002

FASHION OUTLET OF NIAGARA FALLS
UPWIND PARTICULATE MONITORING
Date: April 6, 2022
Unit: TSI - DustTrak II

Deployment Label	Date	Time	PM-10 Particulate Level (mg/m^3) 15-min. Average
CAMP 01 - Dust	4/6/2022	5:00	0.016
CAMP 01 - Dust	4/6/2022	5:15	0.016
CAMP 01 - Dust	4/6/2022	5:30	0.014
CAMP 01 - Dust	4/6/2022	5:45	0.013
CAMP 01 - Dust	4/6/2022	6:00	0.012
CAMP 01 - Dust	4/6/2022	6:15	0.012
CAMP 01 - Dust	4/6/2022	6:30	0.011
CAMP 01 - Dust	4/6/2022	6:45	0.009
CAMP 01 - Dust	4/6/2022	7:00	0.008
CAMP 01 - Dust	4/6/2022	7:15	0.007
CAMP 01 - Dust	4/6/2022	7:30	0.007
CAMP 01 - Dust	4/6/2022	7:45	0.009
CAMP 01 - Dust	4/6/2022	8:00	0.008
CAMP 01 - Dust	4/6/2022	8:15	0.007
CAMP 01 - Dust	4/6/2022	8:30	0.008
CAMP 01 - Dust	4/6/2022	8:45	0.007
CAMP 01 - Dust	4/6/2022	9:00	0.008
CAMP 01 - Dust	4/6/2022	9:15	0.005
CAMP 01 - Dust	4/6/2022	9:30	0.005
CAMP 01 - Dust	4/6/2022	9:45	0.003
CAMP 01 - Dust	4/6/2022	10:00	0.003
CAMP 01 - Dust	4/6/2022	10:15	0.003
CAMP 01 - Dust	4/6/2022	10:30	0.002
CAMP 01 - Dust	4/6/2022	10:45	0.003
CAMP 01 - Dust	4/6/2022	11:00	0
CAMP 01 - Dust	4/6/2022	11:15	0
CAMP 01 - Dust	4/6/2022	11:30	0.001
CAMP 01 - Dust	4/6/2022	11:45	0
CAMP 01 - Dust	4/6/2022	12:00	0
CAMP 01 - Dust	4/6/2022	12:15	0
CAMP 01 - Dust	4/6/2022	12:30	0
CAMP 01 - Dust	4/6/2022	12:45	0
CAMP 01 - Dust	4/6/2022	13:00	0.001
CAMP 01 - Dust	4/6/2022	13:15	0.001
CAMP 01 - Dust	4/6/2022	13:30	0.001
CAMP 01 - Dust	4/6/2022	13:45	0.001
CAMP 01 - Dust	4/6/2022	14:00	0
Maximum Value			0.016
Minimum Value			0
Average Value			0.005

FASHION OUTLET OF NIAGARA FALLS
UPWIND PARTICULATE MONITORING
Date: April 7, 2022
Unit: TSI - DustTrak II

Deployment Label	Date	Time	PM-10 Particulate Level (mg/m^3) 15-min. Average
CAMP 01 - Dust	4/7/2022	5:00	0.004
CAMP 01 - Dust	4/7/2022	5:15	0.004
CAMP 01 - Dust	4/7/2022	5:30	0.003
CAMP 01 - Dust	4/7/2022	5:45	0.002
CAMP 01 - Dust	4/7/2022	6:00	0.001
CAMP 01 - Dust	4/7/2022	6:15	0.001
CAMP 01 - Dust	4/7/2022	6:30	0.001
CAMP 01 - Dust	4/7/2022	6:45	0.001
CAMP 01 - Dust	4/7/2022	7:00	0.001
CAMP 01 - Dust	4/7/2022	7:15	0.001
CAMP 01 - Dust	4/7/2022	7:30	0.001
CAMP 01 - Dust	4/7/2022	7:45	0.001
CAMP 01 - Dust	4/7/2022	8:00	0
CAMP 01 - Dust	4/7/2022	8:15	0.001
CAMP 01 - Dust	4/7/2022	8:30	0.001
CAMP 01 - Dust	4/7/2022	8:45	0.001
CAMP 01 - Dust	4/7/2022	9:00	0.001
CAMP 01 - Dust	4/7/2022	9:15	0.001
CAMP 01 - Dust	4/7/2022	9:30	0.001
CAMP 01 - Dust	4/7/2022	9:45	0.001
CAMP 01 - Dust	4/7/2022	10:00	0.001
CAMP 01 - Dust	4/7/2022	10:15	0.001
CAMP 01 - Dust	4/7/2022	10:30	0.001
CAMP 01 - Dust	4/7/2022	10:45	0.002
CAMP 01 - Dust	4/7/2022	11:00	0.001
CAMP 01 - Dust	4/7/2022	11:15	0.002
CAMP 01 - Dust	4/7/2022	11:30	0.002
CAMP 01 - Dust	4/7/2022	11:45	0.002
CAMP 01 - Dust	4/7/2022	12:00	0.002
CAMP 01 - Dust	4/7/2022	12:15	0.003
CAMP 01 - Dust	4/7/2022	12:30	0.003
CAMP 01 - Dust	4/7/2022	12:45	0.002
CAMP 01 - Dust	4/7/2022	13:00	0.002
CAMP 01 - Dust	4/7/2022	13:15	0.002
CAMP 01 - Dust	4/7/2022	13:30	0.002
CAMP 01 - Dust	4/7/2022	13:45	0.002
CAMP 01 - Dust	4/7/2022	14:00	0.002
CAMP 01 - Dust	4/7/2022	14:15	0.001
Maximum Value			0.004
Minimum Value			0
Average Value			0.002

FASHION OUTLET OF NIAGARA FALLS
UPWIND PARTICULATE MONITORING
Date: April 8, 2022
Unit: TSI - DustTrak II

Deployment Label	Date	Time	PM-10 Particulate Level (mg/m^3) 15-min. Average
CAMP 01 - Dust	4/8/2022	5:00	0.004
CAMP 01 - Dust	4/8/2022	5:15	0.003
CAMP 01 - Dust	4/8/2022	5:30	0.003
CAMP 01 - Dust	4/8/2022	5:45	0.003
CAMP 01 - Dust	4/8/2022	6:00	0.002
CAMP 01 - Dust	4/8/2022	6:15	0.002
CAMP 01 - Dust	4/8/2022	6:30	0.002
CAMP 01 - Dust	4/8/2022	6:45	0.001
CAMP 01 - Dust	4/8/2022	7:00	0.002
CAMP 01 - Dust	4/8/2022	7:15	0.002
CAMP 01 - Dust	4/8/2022	7:30	0.003
CAMP 01 - Dust	4/8/2022	7:45	0.002
CAMP 01 - Dust	4/8/2022	8:00	0.002
CAMP 01 - Dust	4/8/2022	8:15	0.001
CAMP 01 - Dust	4/8/2022	8:30	0.001
CAMP 01 - Dust	4/8/2022	8:45	0.001
CAMP 01 - Dust	4/8/2022	9:00	0.001
CAMP 01 - Dust	4/8/2022	9:15	0.001
CAMP 01 - Dust	4/8/2022	9:30	0.001
CAMP 01 - Dust	4/8/2022	9:45	0.001
CAMP 01 - Dust	4/8/2022	10:00	0.001
CAMP 01 - Dust	4/8/2022	10:15	0.002
CAMP 01 - Dust	4/8/2022	10:30	0
CAMP 01 - Dust	4/8/2022	10:45	0
CAMP 01 - Dust	4/8/2022	11:00	0
CAMP 01 - Dust	4/8/2022	11:15	0
CAMP 01 - Dust	4/8/2022	11:30	0
CAMP 01 - Dust	4/8/2022	11:45	0
CAMP 01 - Dust	4/8/2022	12:00	0.001
CAMP 01 - Dust	4/8/2022	12:15	0.001
CAMP 01 - Dust	4/8/2022	12:30	0
CAMP 01 - Dust	4/8/2022	12:45	0
CAMP 01 - Dust	4/8/2022	13:00	0
CAMP 01 - Dust	4/8/2022	13:15	0
CAMP 01 - Dust	4/8/2022	13:30	0
CAMP 01 - Dust	4/8/2022	13:45	0
CAMP 01 - Dust	4/8/2022	14:00	0
CAMP 01 - Dust	4/8/2022	14:15	0
CAMP 01 - Dust	4/8/2022	14:30	0
CAMP 01 - Dust	4/8/2022	14:45	0
CAMP 01 - Dust	4/8/2022	15:00	0
CAMP 01 - Dust	4/8/2022	15:15	0
Maximum Value			0.004
Minimum Value			0
Average Value			0.001

FASHION OUTLET OF NIAGARA FALLS
UPWIND PARTICULATE MONITORING
Date: April 9, 2022
Unit: TSI - DustTrak II

Deployment Label	Date	Time	PM-10 Particulate Level (mg/m^3) 15-min. Average
CAMP 01 - Dust	4/9/2022	4:15	0.006
CAMP 01 - Dust	4/9/2022	4:30	0.006
CAMP 01 - Dust	4/9/2022	4:45	0.005
CAMP 01 - Dust	4/9/2022	5:00	0.004
CAMP 01 - Dust	4/9/2022	5:15	0.004
CAMP 01 - Dust	4/9/2022	5:30	0.004
CAMP 01 - Dust	4/9/2022	5:45	0.004
CAMP 01 - Dust	4/9/2022	6:00	0.003
CAMP 01 - Dust	4/9/2022	6:15	0.003
CAMP 01 - Dust	4/9/2022	6:30	0.003
Maximum Value			0.006
Minimum Value			0.003
Average Value			0.004

FASHION OUTLET OF NIAGARA FALLS
UPWIND PARTICULATE MONITORING
Date: April 12, 2022
Unit: TSI - DustTrak II

Deployment Label	Date	Time	PM-10 Particulate Level (mg/m^3) 15-min. Average
CAMP 01 - Dust	4/12/2022	5:00	0.013
CAMP 01 - Dust	4/12/2022	5:15	0.01
CAMP 01 - Dust	4/12/2022	5:30	0.006
CAMP 01 - Dust	4/12/2022	5:45	0.006
CAMP 01 - Dust	4/12/2022	6:00	0.008
CAMP 01 - Dust	4/12/2022	6:15	0.004
CAMP 01 - Dust	4/12/2022	6:30	0.001
CAMP 01 - Dust	4/12/2022	6:45	0.001
CAMP 01 - Dust	4/12/2022	7:00	0.001
CAMP 01 - Dust	4/12/2022	7:15	0
CAMP 01 - Dust	4/12/2022	7:30	0
CAMP 01 - Dust	4/12/2022	7:45	0
CAMP 01 - Dust	4/12/2022	8:00	0
CAMP 01 - Dust	4/12/2022	8:15	0
CAMP 01 - Dust	4/12/2022	8:30	0.001
CAMP 01 - Dust	4/12/2022	8:45	0.003
CAMP 01 - Dust	4/12/2022	9:00	0
CAMP 01 - Dust	4/12/2022	9:15	0
CAMP 01 - Dust	4/12/2022	9:30	0
CAMP 01 - Dust	4/12/2022	9:45	0.001
CAMP 01 - Dust	4/12/2022	10:00	0.001
CAMP 01 - Dust	4/12/2022	10:15	0.01
CAMP 01 - Dust	4/12/2022	10:30	0.001
CAMP 01 - Dust	4/12/2022	10:45	0.001
CAMP 01 - Dust	4/12/2022	11:00	0.006
CAMP 01 - Dust	4/12/2022	11:15	0
CAMP 01 - Dust	4/12/2022	11:30	0
CAMP 01 - Dust	4/12/2022	11:45	0
CAMP 01 - Dust	4/12/2022	12:00	0
CAMP 01 - Dust	4/12/2022	12:15	0
CAMP 01 - Dust	4/12/2022	12:30	0
CAMP 01 - Dust	4/12/2022	12:45	0
CAMP 01 - Dust	4/12/2022	13:00	0
CAMP 01 - Dust	4/12/2022	13:15	0
CAMP 01 - Dust	4/12/2022	13:30	0
CAMP 01 - Dust	4/12/2022	13:45	0
CAMP 01 - Dust	4/12/2022	14:00	0.001
CAMP 01 - Dust	4/12/2022	14:15	0.001
CAMP 01 - Dust	4/12/2022	14:30	0.001
CAMP 01 - Dust	4/12/2022	14:45	0.002
Maximum Value			0.013
Minimum Value			0
Average Value			0.002

FASHION OUTLET OF NIAGARA FALLS
UPWIND PARTICULATE MONITORING
Date: April 13, 2022
Unit: TSI - DustTrak II

Deployment Label	Date	Time	PM-10 Particulate Level (mg/m^3) 15-min. Average
CAMP 01 - Dust	4/13/2022	5:00	0.005
CAMP 01 - Dust	4/13/2022	5:15	0.004
CAMP 01 - Dust	4/13/2022	5:30	0.004
CAMP 01 - Dust	4/13/2022	5:45	0.004
CAMP 01 - Dust	4/13/2022	6:00	0.003
CAMP 01 - Dust	4/13/2022	6:15	0.003
CAMP 01 - Dust	4/13/2022	6:30	0.003
CAMP 01 - Dust	4/13/2022	6:45	0.003
CAMP 01 - Dust	4/13/2022	7:00	0.003
CAMP 01 - Dust	4/13/2022	7:15	0.002
CAMP 01 - Dust	4/13/2022	7:30	0.003
CAMP 01 - Dust	4/13/2022	7:45	0.002
CAMP 01 - Dust	4/13/2022	8:00	0.002
CAMP 01 - Dust	4/13/2022	8:15	0.003
CAMP 01 - Dust	4/13/2022	8:30	0.003
CAMP 01 - Dust	4/13/2022	8:45	0.002
CAMP 01 - Dust	4/13/2022	9:00	0.003
CAMP 01 - Dust	4/13/2022	9:15	0.003
CAMP 01 - Dust	4/13/2022	9:30	0.002
CAMP 01 - Dust	4/13/2022	9:45	0.003
CAMP 01 - Dust	4/13/2022	10:00	0.004
CAMP 01 - Dust	4/13/2022	10:15	0.003
CAMP 01 - Dust	4/13/2022	10:30	0.003
CAMP 01 - Dust	4/13/2022	10:45	0.003
CAMP 01 - Dust	4/13/2022	11:00	0.003
CAMP 01 - Dust	4/13/2022	11:15	0.002
CAMP 01 - Dust	4/13/2022	11:30	0.002
CAMP 01 - Dust	4/13/2022	11:45	0.002
CAMP 01 - Dust	4/13/2022	12:00	0.002
CAMP 01 - Dust	4/13/2022	12:15	0.003
CAMP 01 - Dust	4/13/2022	12:30	0.003
CAMP 01 - Dust	4/13/2022	12:45	0.003
CAMP 01 - Dust	4/13/2022	13:00	0.004
CAMP 01 - Dust	4/13/2022	13:15	0.004
CAMP 01 - Dust	4/13/2022	13:30	0.004
CAMP 01 - Dust	4/13/2022	13:45	0.004
CAMP 01 - Dust	4/13/2022	14:00	0.004
CAMP 01 - Dust	4/13/2022	14:15	0.005
CAMP 01 - Dust	4/13/2022	14:30	0.005
Maximum Value			0.005
Minimum Value			0.002
Average Value			0.003

FASHION OUTLET OF NIAGARA FALLS
UPWIND PARTICULATE MONITORING
Date: April 14, 2022
Unit: TSI - DustTrak II

Deployment Label	Date	Time	PM-10 Particulate Level (mg/m^3) 15-min. Average
CAMP 01 - Dust	4/14/2022	5:00	0.002
CAMP 01 - Dust	4/14/2022	5:15	0.002
CAMP 01 - Dust	4/14/2022	5:30	0.001
CAMP 01 - Dust	4/14/2022	5:45	0.001
CAMP 01 - Dust	4/14/2022	6:00	0.001
CAMP 01 - Dust	4/14/2022	6:15	0
CAMP 01 - Dust	4/14/2022	6:30	0
CAMP 01 - Dust	4/14/2022	6:45	0
CAMP 01 - Dust	4/14/2022	7:00	0.001
CAMP 01 - Dust	4/14/2022	7:15	0.001
CAMP 01 - Dust	4/14/2022	7:30	0.001
CAMP 01 - Dust	4/14/2022	7:45	0.001
CAMP 01 - Dust	4/14/2022	8:00	0.001
CAMP 01 - Dust	4/14/2022	8:15	0.001
CAMP 01 - Dust	4/14/2022	8:30	0
CAMP 01 - Dust	4/14/2022	8:45	0.001
CAMP 01 - Dust	4/14/2022	9:00	0
CAMP 01 - Dust	4/14/2022	9:15	0.001
CAMP 01 - Dust	4/14/2022	9:30	0.001
CAMP 01 - Dust	4/14/2022	9:45	0.002
CAMP 01 - Dust	4/14/2022	10:00	0
CAMP 01 - Dust	4/14/2022	10:15	0.001
CAMP 01 - Dust	4/14/2022	10:30	0.002
CAMP 01 - Dust	4/14/2022	10:45	0.002
CAMP 01 - Dust	4/14/2022	11:00	0.001
CAMP 01 - Dust	4/14/2022	11:15	0.001
CAMP 01 - Dust	4/14/2022	11:30	0.001
CAMP 01 - Dust	4/14/2022	11:45	0.002
CAMP 01 - Dust	4/14/2022	12:00	0.001
CAMP 01 - Dust	4/14/2022	12:15	0.002
CAMP 01 - Dust	4/14/2022	12:30	0.002
CAMP 01 - Dust	4/14/2022	12:45	0.001
CAMP 01 - Dust	4/14/2022	13:00	0.002
CAMP 01 - Dust	4/14/2022	13:15	0.002
CAMP 01 - Dust	4/14/2022	13:30	0.002
CAMP 01 - Dust	4/14/2022	13:45	0.002
CAMP 01 - Dust	4/14/2022	14:00	0.003
Maximum Value			0.003
Minimum Value			0
Average Value			0.001

FASHION OUTLET OF NIAGARA FALLS
UPWIND PARTICULATE MONITORING
Date: April 15, 2022
Unit: TSI - DustTrak II

Deployment Label	Date	Time	PM-10 Particulate Level (mg/m^3) 15-min. Average
CAMP 01 - Dust	4/15/2022	5:00	0
CAMP 01 - Dust	4/15/2022	5:15	0
CAMP 01 - Dust	4/15/2022	5:30	0
CAMP 01 - Dust	4/15/2022	5:45	0
CAMP 01 - Dust	4/15/2022	6:00	0
CAMP 01 - Dust	4/15/2022	6:15	0.001
CAMP 01 - Dust	4/15/2022	6:30	0.001
CAMP 01 - Dust	4/15/2022	6:45	0.001
CAMP 01 - Dust	4/15/2022	7:00	0.002
CAMP 01 - Dust	4/15/2022	7:15	0
CAMP 01 - Dust	4/15/2022	7:30	0
CAMP 01 - Dust	4/15/2022	7:45	0
CAMP 01 - Dust	4/15/2022	8:00	0.002
CAMP 01 - Dust	4/15/2022	8:15	0.002
CAMP 01 - Dust	4/15/2022	8:30	0.002
CAMP 01 - Dust	4/15/2022	8:45	0.004
CAMP 01 - Dust	4/15/2022	9:00	0.009
CAMP 01 - Dust	4/15/2022	9:15	0.018
CAMP 01 - Dust	4/15/2022	9:30	0.006
CAMP 01 - Dust	4/15/2022	9:45	0.003
CAMP 01 - Dust	4/15/2022	10:00	0.002
CAMP 01 - Dust	4/15/2022	10:15	0
CAMP 01 - Dust	4/15/2022	10:30	0
CAMP 01 - Dust	4/15/2022	10:45	0.001
CAMP 01 - Dust	4/15/2022	11:00	0.001
CAMP 01 - Dust	4/15/2022	11:15	0.002
Maximum Value			0.018
Minimum Value			0
Average Value			0.002

FASHION OUTLET OF NIAGARA FALLS
UPWIND PARTICULATE MONITORING
Date: April 19, 2022
Unit: TSI - DustTrak II

Deployment Label	Date	Time	PM-10 Particulate Level (mg/m^3) 15-min. Average
CAMP 01 - Dust	4/19/2022	5:00	0.005
CAMP 01 - Dust	4/19/2022	5:15	0.005
CAMP 01 - Dust	4/19/2022	5:30	0.004
CAMP 01 - Dust	4/19/2022	5:45	0.003
CAMP 01 - Dust	4/19/2022	6:00	0.002
CAMP 01 - Dust	4/19/2022	6:15	0.002
CAMP 01 - Dust	4/19/2022	6:30	0.002
CAMP 01 - Dust	4/19/2022	6:45	0.002
CAMP 01 - Dust	4/19/2022	7:00	0
CAMP 01 - Dust	4/19/2022	7:15	0
CAMP 01 - Dust	4/19/2022	7:30	0
CAMP 01 - Dust	4/19/2022	7:45	0
CAMP 01 - Dust	4/19/2022	8:00	0
CAMP 01 - Dust	4/19/2022	8:15	0
CAMP 01 - Dust	4/19/2022	8:30	0
CAMP 01 - Dust	4/19/2022	8:45	0
CAMP 01 - Dust	4/19/2022	9:00	0
CAMP 01 - Dust	4/19/2022	9:15	0
CAMP 01 - Dust	4/19/2022	9:30	0
CAMP 01 - Dust	4/19/2022	9:45	0
CAMP 01 - Dust	4/19/2022	10:00	0
CAMP 01 - Dust	4/19/2022	10:15	0
CAMP 01 - Dust	4/19/2022	10:30	0
CAMP 01 - Dust	4/19/2022	10:45	0
CAMP 01 - Dust	4/19/2022	11:00	0
CAMP 01 - Dust	4/19/2022	11:15	0
CAMP 01 - Dust	4/19/2022	11:30	0
Maximum Value			0.005
Minimum Value			0
Average Value			0.001

FASHION OUTLET OF NIAGARA FALLS
UPWIND PARTICULATE MONITORING
Date: April 20, 2022
Unit: TSI - DustTrak II

Deployment Label	Date	Time	PM-10 Particulate Level (mg/m^3) 15-min. Average
CAMP 01 - Dust	4/20/2022	5:00	0.002
CAMP 01 - Dust	4/20/2022	5:15	0.001
CAMP 01 - Dust	4/20/2022	5:30	0
CAMP 01 - Dust	4/20/2022	5:45	0
CAMP 01 - Dust	4/20/2022	6:00	0.001
CAMP 01 - Dust	4/20/2022	6:15	0
CAMP 01 - Dust	4/20/2022	6:30	0
CAMP 01 - Dust	4/20/2022	6:45	0.001
CAMP 01 - Dust	4/20/2022	7:00	0
CAMP 01 - Dust	4/20/2022	7:15	0.001
CAMP 01 - Dust	4/20/2022	7:30	0
CAMP 01 - Dust	4/20/2022	7:45	0
CAMP 01 - Dust	4/20/2022	8:00	0.001
CAMP 01 - Dust	4/20/2022	8:15	0.005
CAMP 01 - Dust	4/20/2022	8:30	0.015
CAMP 01 - Dust	4/20/2022	8:45	0
CAMP 01 - Dust	4/20/2022	9:00	0.001
CAMP 01 - Dust	4/20/2022	9:15	0
CAMP 01 - Dust	4/20/2022	9:30	0.001
CAMP 01 - Dust	4/20/2022	9:45	0
CAMP 01 - Dust	4/20/2022	10:00	0
CAMP 01 - Dust	4/20/2022	10:15	0
CAMP 01 - Dust	4/20/2022	10:30	0
CAMP 01 - Dust	4/20/2022	10:45	0
CAMP 01 - Dust	4/20/2022	11:00	0
CAMP 01 - Dust	4/20/2022	11:15	0
CAMP 01 - Dust	4/20/2022	11:30	0.001
CAMP 01 - Dust	4/20/2022	11:45	0
CAMP 01 - Dust	4/20/2022	12:00	0
CAMP 01 - Dust	4/20/2022	12:15	0
CAMP 01 - Dust	4/20/2022	12:30	0.001
CAMP 01 - Dust	4/20/2022	12:45	0
CAMP 01 - Dust	4/20/2022	13:00	0
CAMP 01 - Dust	4/20/2022	13:15	0
CAMP 01 - Dust	4/20/2022	13:30	0
CAMP 01 - Dust	4/20/2022	13:45	0
CAMP 01 - Dust	4/20/2022	14:00	0
Maximum Value			0.015
Minimum Value			0
Average Value			0.001

FASHION OUTLET OF NIAGARA FALLS
DOWNWIND PARTICULATE MONITORING
Date: April 4, 2022
Unit: TSI 8530 DustTrak II

Deployment Label	Date	Time	PM-10 Particulate Level (mg/m^3) 15-min. Average
CAMP 02 - Dust	4/4/2022	7:30	0.031
CAMP 02 - Dust	4/4/2022	7:45	0.007
CAMP 02 - Dust	4/4/2022	8:00	0.008
CAMP 02 - Dust	4/4/2022	8:15	0.006
CAMP 02 - Dust	4/4/2022	8:30	0.184
CAMP 02 - Dust	4/4/2022	8:45	0.294
CAMP 02 - Dust	4/4/2022	9:00	0.009
CAMP 02 - Dust	4/4/2022	9:15	0.005
CAMP 02 - Dust	4/4/2022	9:30	0.004
CAMP 02 - Dust	4/4/2022	9:45	0.004
CAMP 02 - Dust	4/4/2022	10:00	0.004
CAMP 02 - Dust	4/4/2022	10:15	0.004
CAMP 02 - Dust	4/4/2022	10:30	0.004
CAMP 02 - Dust	4/4/2022	10:45	0.004
CAMP 02 - Dust	4/4/2022	11:00	0.004
CAMP 02 - Dust	4/4/2022	11:15	0.003
CAMP 02 - Dust	4/4/2022	11:30	0.004
CAMP 02 - Dust	4/4/2022	11:45	0.012
CAMP 02 - Dust	4/4/2022	12:00	0.003
CAMP 02 - Dust	4/4/2022	12:15	0.004
CAMP 02 - Dust	4/4/2022	12:30	0.005
CAMP 02 - Dust	4/4/2022	12:45	0.006
CAMP 02 - Dust	4/4/2022	13:00	0.005
CAMP 02 - Dust	4/4/2022	13:15	0.003
CAMP 02 - Dust	4/4/2022	13:30	0.003
CAMP 02 - Dust	4/4/2022	13:45	0.004
CAMP 02 - Dust	4/4/2022	14:00	0.06
CAMP 02 - Dust	4/4/2022	14:15	0.002
Maximum Value			0.294
Minimum Value			0.002
Average Value			0.025

FASHION OUTLET OF NIAGARA FALLS
DOWNWIND PARTICULATE MONITORING
Date: April 5, 2022
Unit: TSI - DustTrak II

Deployment Label	Date	Time	PM-10 Particulate Level (mg/m^3) 15-min. Average
CAMP 02 - Dust	4/5/2022	5:00	0.007
CAMP 02 - Dust	4/5/2022	5:15	0.006
CAMP 02 - Dust	4/5/2022	5:30	0.012
CAMP 02 - Dust	4/5/2022	5:45	0.012
CAMP 02 - Dust	4/5/2022	6:00	0.009
CAMP 02 - Dust	4/5/2022	6:15	0.008
CAMP 02 - Dust	4/5/2022	6:30	0.01
CAMP 02 - Dust	4/5/2022	6:45	0.007
CAMP 02 - Dust	4/5/2022	7:00	0.006
CAMP 02 - Dust	4/5/2022	7:15	0.006
CAMP 02 - Dust	4/5/2022	7:30	0.005
CAMP 02 - Dust	4/5/2022	7:45	0.006
CAMP 02 - Dust	4/5/2022	8:00	0.006
CAMP 02 - Dust	4/5/2022	8:15	0.006
CAMP 02 - Dust	4/5/2022	8:30	0.005
CAMP 02 - Dust	4/5/2022	8:45	0.005
CAMP 02 - Dust	4/5/2022	9:00	0.004
CAMP 02 - Dust	4/5/2022	9:15	0.004
CAMP 02 - Dust	4/5/2022	9:30	0.004
CAMP 02 - Dust	4/5/2022	9:45	0.006
CAMP 02 - Dust	4/5/2022	10:00	0.005
CAMP 02 - Dust	4/5/2022	10:15	0.004
CAMP 02 - Dust	4/5/2022	10:30	0.007
CAMP 02 - Dust	4/5/2022	10:45	0.004
CAMP 02 - Dust	4/5/2022	11:00	0.005
CAMP 02 - Dust	4/5/2022	11:15	0.006
CAMP 02 - Dust	4/5/2022	11:30	0.005
CAMP 02 - Dust	4/5/2022	11:45	0.005
CAMP 02 - Dust	4/5/2022	12:00	0.005
CAMP 02 - Dust	4/5/2022	12:15	0.005
CAMP 02 - Dust	4/5/2022	12:30	0.005
CAMP 02 - Dust	4/5/2022	12:45	0.004
CAMP 02 - Dust	4/5/2022	13:00	0.004
CAMP 02 - Dust	4/5/2022	13:15	0.004
CAMP 02 - Dust	4/5/2022	13:30	0.022
Maximum Value			0.022
Minimum Value			0.004
Average Value			0.006

FASHION OUTLET OF NIAGARA FALLS
DOWNWIND PARTICULATE MONITORING
Date: April 6, 2022
Unit: TSI - DustTrak II

Deployment Label	Date	Time	PM-10 Particulate Level (mg/m^3) 15-min. Average
CAMP 02 - Dust	4/6/2022	5:00	0.016
CAMP 02 - Dust	4/6/2022	5:15	0.016
CAMP 02 - Dust	4/6/2022	5:30	0.016
CAMP 02 - Dust	4/6/2022	5:45	0.015
CAMP 02 - Dust	4/6/2022	6:00	0.014
CAMP 02 - Dust	4/6/2022	6:15	0.014
CAMP 02 - Dust	4/6/2022	6:30	0.013
CAMP 02 - Dust	4/6/2022	6:45	0.012
CAMP 02 - Dust	4/6/2022	7:00	0.011
CAMP 02 - Dust	4/6/2022	7:15	0.01
CAMP 02 - Dust	4/6/2022	7:30	0.01
CAMP 02 - Dust	4/6/2022	7:45	0.012
CAMP 02 - Dust	4/6/2022	8:00	0.01
CAMP 02 - Dust	4/6/2022	8:15	0.01
CAMP 02 - Dust	4/6/2022	8:30	0.01
CAMP 02 - Dust	4/6/2022	8:45	0.011
CAMP 02 - Dust	4/6/2022	9:00	0.019
CAMP 02 - Dust	4/6/2022	9:15	0.012
CAMP 02 - Dust	4/6/2022	9:30	0.009
CAMP 02 - Dust	4/6/2022	9:45	0.006
CAMP 02 - Dust	4/6/2022	10:00	0.007
CAMP 02 - Dust	4/6/2022	10:15	0.007
CAMP 02 - Dust	4/6/2022	10:30	0.011
CAMP 02 - Dust	4/6/2022	10:45	0.007
CAMP 02 - Dust	4/6/2022	11:00	0.004
CAMP 02 - Dust	4/6/2022	11:15	0.002
CAMP 02 - Dust	4/6/2022	11:30	0.012
CAMP 02 - Dust	4/6/2022	11:45	0.003
CAMP 02 - Dust	4/6/2022	12:00	0.003
CAMP 02 - Dust	4/6/2022	12:15	0.002
CAMP 02 - Dust	4/6/2022	12:30	0.004
CAMP 02 - Dust	4/6/2022	12:45	0.003
CAMP 02 - Dust	4/6/2022	13:00	0.005
CAMP 02 - Dust	4/6/2022	13:15	0.003
CAMP 02 - Dust	4/6/2022	13:30	0.004
CAMP 02 - Dust	4/6/2022	13:45	0.003
CAMP 02 - Dust	4/6/2022	14:00	0.018
Maximum Value			0.019
Minimum Value			0.002
Average Value			0.009

FASHION OUTLET OF NIAGARA FALLS
DOWNWIND PARTICULATE MONITORING
Date: April 7, 2022
Unit: TSI - DustTrak II

Deployment Label	Date	Time	PM-10 Particulate Level (mg/m^3) 15-min. Average
CAMP 02 - Dust	4/7/2022	5:00	0
CAMP 02 - Dust	4/7/2022	5:15	0
CAMP 02 - Dust	4/7/2022	5:30	0
CAMP 02 - Dust	4/7/2022	5:45	0.001
CAMP 02 - Dust	4/7/2022	6:00	0.002
CAMP 02 - Dust	4/7/2022	6:15	0.003
CAMP 02 - Dust	4/7/2022	6:30	0.003
CAMP 02 - Dust	4/7/2022	6:45	0.002
CAMP 02 - Dust	4/7/2022	7:00	0.002
CAMP 02 - Dust	4/7/2022	7:15	0.002
CAMP 02 - Dust	4/7/2022	7:30	0.002
CAMP 02 - Dust	4/7/2022	7:45	0.002
CAMP 02 - Dust	4/7/2022	8:00	0.002
CAMP 02 - Dust	4/7/2022	8:15	0.003
CAMP 02 - Dust	4/7/2022	8:30	0.003
CAMP 02 - Dust	4/7/2022	8:45	0.003
CAMP 02 - Dust	4/7/2022	9:00	0.003
CAMP 02 - Dust	4/7/2022	9:15	0.003
CAMP 02 - Dust	4/7/2022	9:30	0.003
CAMP 02 - Dust	4/7/2022	9:45	0.003
CAMP 02 - Dust	4/7/2022	10:00	0.004
CAMP 02 - Dust	4/7/2022	10:15	0.004
CAMP 02 - Dust	4/7/2022	10:30	0.009
CAMP 02 - Dust	4/7/2022	10:45	0.004
CAMP 02 - Dust	4/7/2022	11:00	0.006
CAMP 02 - Dust	4/7/2022	11:15	0.005
CAMP 02 - Dust	4/7/2022	11:30	0.005
CAMP 02 - Dust	4/7/2022	11:45	0.007
CAMP 02 - Dust	4/7/2022	12:00	0.005
CAMP 02 - Dust	4/7/2022	12:15	0.006
CAMP 02 - Dust	4/7/2022	12:30	0.005
CAMP 02 - Dust	4/7/2022	12:45	0.005
CAMP 02 - Dust	4/7/2022	13:00	0.005
CAMP 02 - Dust	4/7/2022	13:15	0.005
CAMP 02 - Dust	4/7/2022	13:30	0.005
CAMP 02 - Dust	4/7/2022	13:45	0.006
CAMP 02 - Dust	4/7/2022	14:00	0.008
Maximum Value			0.009
Minimum Value			0
Average Value			0.004

FASHION OUTLET OF NIAGARA FALLS
DOWNWIND PARTICULATE MONITORING
Date: April 8, 2022
Unit: TSI - DustTrak II

Deployment Label	Date	Time	PM-10 Particulate Level (mg/m^3) 15-min. Average
CAMP 02 - Dust	4/8/2022	5:00	0.006
CAMP 02 - Dust	4/8/2022	5:15	0.006
CAMP 02 - Dust	4/8/2022	5:30	0.006
CAMP 02 - Dust	4/8/2022	5:45	0.006
CAMP 02 - Dust	4/8/2022	6:00	0.007
CAMP 02 - Dust	4/8/2022	6:15	0.006
CAMP 02 - Dust	4/8/2022	6:30	0.005
CAMP 02 - Dust	4/8/2022	6:45	0.007
CAMP 02 - Dust	4/8/2022	7:00	0.004
CAMP 02 - Dust	4/8/2022	7:15	0.005
CAMP 02 - Dust	4/8/2022	7:30	0.007
CAMP 02 - Dust	4/8/2022	7:45	0.025
CAMP 02 - Dust	4/8/2022	8:00	0.005
CAMP 02 - Dust	4/8/2022	8:15	0.004
CAMP 02 - Dust	4/8/2022	8:30	0.005
CAMP 02 - Dust	4/8/2022	8:45	0.003
CAMP 02 - Dust	4/8/2022	9:00	0.004
CAMP 02 - Dust	4/8/2022	9:15	0.005
CAMP 02 - Dust	4/8/2022	9:30	0.005
CAMP 02 - Dust	4/8/2022	9:45	0.004
CAMP 02 - Dust	4/8/2022	10:00	0.015
CAMP 02 - Dust	4/8/2022	10:15	0.006
CAMP 02 - Dust	4/8/2022	10:30	0.009
CAMP 02 - Dust	4/8/2022	10:45	0.003
CAMP 02 - Dust	4/8/2022	11:00	0.004
CAMP 02 - Dust	4/8/2022	11:15	0.004
CAMP 02 - Dust	4/8/2022	11:30	0.023
CAMP 02 - Dust	4/8/2022	11:45	0.018
CAMP 02 - Dust	4/8/2022	12:00	0.012
CAMP 02 - Dust	4/8/2022	12:15	0.027
CAMP 02 - Dust	4/8/2022	12:30	0.007
CAMP 02 - Dust	4/8/2022	12:45	0.037
CAMP 02 - Dust	4/8/2022	13:00	0.068
CAMP 02 - Dust	4/8/2022	13:15	0.011
CAMP 02 - Dust	4/8/2022	13:30	0.01
CAMP 02 - Dust	4/8/2022	13:45	0.008
CAMP 02 - Dust	4/8/2022	14:00	0.005
CAMP 02 - Dust	4/8/2022	14:15	0.007
CAMP 02 - Dust	4/8/2022	14:30	0.007
CAMP 02 - Dust	4/8/2022	14:45	0.035
CAMP 02 - Dust	4/8/2022	15:00	0.009
Maximum Value			0.068
Minimum Value			0.003
Average Value			0.011

FASHION OUTLET OF NIAGARA FALLS
DOWNWIND PARTICULATE MONITORING
Date: April 9, 2022
Unit: TSI - DustTrak II

Deployment Label	Date	Time	PM-10 Particulate Level (mg/m^3) 15-min. Average
CAMP 02 - Dust	4/9/2022	4:30	0.007
CAMP 02 - Dust	4/9/2022	4:45	0.006
CAMP 02 - Dust	4/9/2022	5:00	0.006
CAMP 02 - Dust	4/9/2022	5:15	0.007
CAMP 02 - Dust	4/9/2022	5:30	0.006
CAMP 02 - Dust	4/9/2022	5:45	0.005
CAMP 02 - Dust	4/9/2022	6:00	0.007
CAMP 02 - Dust	4/9/2022	6:15	0.007
Maximum Value			0.007
Minimum Value			0.005
Average Value			0.006

FASHION OUTLET OF NIAGARA FALLS
DOWNWIND PARTICULATE MONITORING
Date: April 12, 2022
Unit: TSI - DustTrak II

Deployment Label	Date	Time	PM-10 Particulate Level (mg/m^3) 15-min. Average
CAMP 02 - Dust	4/12/2022	5:00	0.012
CAMP 02 - Dust	4/12/2022	5:15	0.012
CAMP 02 - Dust	4/12/2022	5:30	0.008
CAMP 02 - Dust	4/12/2022	5:45	0.007
CAMP 02 - Dust	4/12/2022	6:00	0.009
CAMP 02 - Dust	4/12/2022	6:15	0.005
CAMP 02 - Dust	4/12/2022	6:30	0.003
CAMP 02 - Dust	4/12/2022	6:45	0.014
CAMP 02 - Dust	4/12/2022	7:00	0.003
CAMP 02 - Dust	4/12/2022	7:15	0.002
CAMP 02 - Dust	4/12/2022	7:30	0.002
CAMP 02 - Dust	4/12/2022	7:45	0.002
CAMP 02 - Dust	4/12/2022	8:00	0.003
CAMP 02 - Dust	4/12/2022	8:15	0.002
CAMP 02 - Dust	4/12/2022	8:30	0.002
CAMP 02 - Dust	4/12/2022	8:45	0.002
CAMP 02 - Dust	4/12/2022	9:00	0.002
CAMP 02 - Dust	4/12/2022	9:15	0.001
CAMP 02 - Dust	4/12/2022	9:30	0.001
CAMP 02 - Dust	4/12/2022	9:45	0.002
CAMP 02 - Dust	4/12/2022	10:00	0.002
CAMP 02 - Dust	4/12/2022	10:15	0.002
CAMP 02 - Dust	4/12/2022	10:30	0.002
CAMP 02 - Dust	4/12/2022	10:45	0.002
CAMP 02 - Dust	4/12/2022	11:00	0.007
CAMP 02 - Dust	4/12/2022	11:15	0.003
CAMP 02 - Dust	4/12/2022	11:30	0.003
CAMP 02 - Dust	4/12/2022	11:45	0.003
CAMP 02 - Dust	4/12/2022	12:00	0.003
CAMP 02 - Dust	4/12/2022	12:15	0.003
CAMP 02 - Dust	4/12/2022	12:30	0.003
CAMP 02 - Dust	4/12/2022	12:45	0.01
CAMP 02 - Dust	4/12/2022	13:00	0.004
CAMP 02 - Dust	4/12/2022	13:15	0.005
CAMP 02 - Dust	4/12/2022	13:30	0.003
CAMP 02 - Dust	4/12/2022	13:45	0.004
CAMP 02 - Dust	4/12/2022	14:00	0.01
CAMP 02 - Dust	4/12/2022	14:15	0.004
CAMP 02 - Dust	4/12/2022	14:30	0.004
Maximum Value			0.014
Minimum Value			0.001
Average Value			0.004

FASHION OUTLET OF NIAGARA FALLS
DOWNWIND PARTICULATE MONITORING
Date: April 13, 2022
Unit: TSI - DustTrak II

Deployment Label	Date	Time	PM-10 Particulate Level (mg/m^3) 15-min. Average
CAMP 02 - Dust	4/13/2022	5:00	0.005
CAMP 02 - Dust	4/13/2022	5:15	0.018
CAMP 02 - Dust	4/13/2022	5:30	0.006
CAMP 02 - Dust	4/13/2022	5:45	0.005
CAMP 02 - Dust	4/13/2022	6:00	0.006
CAMP 02 - Dust	4/13/2022	6:15	0.004
CAMP 02 - Dust	4/13/2022	6:30	0.004
CAMP 02 - Dust	4/13/2022	6:45	0.004
CAMP 02 - Dust	4/13/2022	7:00	0.005
CAMP 02 - Dust	4/13/2022	7:15	0.005
CAMP 02 - Dust	4/13/2022	7:30	0.005
CAMP 02 - Dust	4/13/2022	7:45	0.007
CAMP 02 - Dust	4/13/2022	8:00	0.005
CAMP 02 - Dust	4/13/2022	8:15	0.006
CAMP 02 - Dust	4/13/2022	8:30	0.013
CAMP 02 - Dust	4/13/2022	8:45	0.006
CAMP 02 - Dust	4/13/2022	9:00	0.007
CAMP 02 - Dust	4/13/2022	9:15	0.007
CAMP 02 - Dust	4/13/2022	9:30	0.006
CAMP 02 - Dust	4/13/2022	9:45	0.007
CAMP 02 - Dust	4/13/2022	10:00	0.009
CAMP 02 - Dust	4/13/2022	10:15	0.006
CAMP 02 - Dust	4/13/2022	10:30	0.006
CAMP 02 - Dust	4/13/2022	10:45	0.007
CAMP 02 - Dust	4/13/2022	11:00	0.006
CAMP 02 - Dust	4/13/2022	11:15	0.005
CAMP 02 - Dust	4/13/2022	11:30	0.006
CAMP 02 - Dust	4/13/2022	11:45	0.006
CAMP 02 - Dust	4/13/2022	12:00	0.007
CAMP 02 - Dust	4/13/2022	12:15	0.006
CAMP 02 - Dust	4/13/2022	12:30	0.005
CAMP 02 - Dust	4/13/2022	12:45	0.007
CAMP 02 - Dust	4/13/2022	13:00	0.006
CAMP 02 - Dust	4/13/2022	13:15	0.008
CAMP 02 - Dust	4/13/2022	13:30	0.006
CAMP 02 - Dust	4/13/2022	13:45	0.016
CAMP 02 - Dust	4/13/2022	14:00	0.083
CAMP 02 - Dust	4/13/2022	14:15	0.051
CAMP 02 - Dust	4/13/2022	14:30	0.011
Maximum Value			0.083
Minimum Value			0.004
Average Value			0.010

FASHION OUTLET OF NIAGARA FALLS
DOWNWIND PARTICULATE MONITORING
Date: April 14, 2022
Unit: TSI - DustTrak II

Deployment Label	Date	Time	PM-10 Particulate Level (mg/m^3) 15-min. Average
CAMP 02 - Dust	4/14/2022	5:00	0.003
CAMP 02 - Dust	4/14/2022	5:15	0.003
CAMP 02 - Dust	4/14/2022	5:30	0.003
CAMP 02 - Dust	4/14/2022	5:45	0.003
CAMP 02 - Dust	4/14/2022	6:00	0.003
CAMP 02 - Dust	4/14/2022	6:15	0.002
CAMP 02 - Dust	4/14/2022	6:30	0.002
CAMP 02 - Dust	4/14/2022	6:45	0.002
CAMP 02 - Dust	4/14/2022	7:00	0.003
CAMP 02 - Dust	4/14/2022	7:15	0.002
CAMP 02 - Dust	4/14/2022	7:30	0.003
CAMP 02 - Dust	4/14/2022	7:45	0.002
CAMP 02 - Dust	4/14/2022	8:00	0.004
CAMP 02 - Dust	4/14/2022	8:15	0.002
CAMP 02 - Dust	4/14/2022	8:30	0.002
CAMP 02 - Dust	4/14/2022	8:45	0.002
CAMP 02 - Dust	4/14/2022	9:00	0.002
CAMP 02 - Dust	4/14/2022	9:15	0.002
CAMP 02 - Dust	4/14/2022	9:30	0.002
CAMP 02 - Dust	4/14/2022	9:45	0.003
CAMP 02 - Dust	4/14/2022	10:00	0.002
CAMP 02 - Dust	4/14/2022	10:15	0.003
CAMP 02 - Dust	4/14/2022	10:30	0.004
CAMP 02 - Dust	4/14/2022	10:45	0.003
CAMP 02 - Dust	4/14/2022	11:00	0.003
CAMP 02 - Dust	4/14/2022	11:15	0.004
CAMP 02 - Dust	4/14/2022	11:30	0.003
CAMP 02 - Dust	4/14/2022	11:45	0.003
CAMP 02 - Dust	4/14/2022	12:00	0.003
CAMP 02 - Dust	4/14/2022	12:15	0.003
CAMP 02 - Dust	4/14/2022	12:30	0.003
CAMP 02 - Dust	4/14/2022	12:45	0.003
CAMP 02 - Dust	4/14/2022	13:00	0.004
CAMP 02 - Dust	4/14/2022	13:15	0.003
CAMP 02 - Dust	4/14/2022	13:30	0.003
CAMP 02 - Dust	4/14/2022	13:45	0.004
CAMP 02 - Dust	4/14/2022	14:00	0.005
CAMP 02 - Dust	4/14/2022	14:15	0.004
Maximum Value			0.005
Minimum Value			0.002
Average Value			0.003

FASHION OUTLET OF NIAGARA FALLS
DOWNWIND PARTICULATE MONITORING
Date: April 15, 2022
Unit: TSI - DustTrak II

Deployment Label	Date	Time	PM-10 Particulate Level (mg/m^3) 15-min. Average
CAMP 02 - Dust	4/15/2022	5:00	0.004
CAMP 02 - Dust	4/15/2022	5:15	0.007
CAMP 02 - Dust	4/15/2022	5:30	0.017
CAMP 02 - Dust	4/15/2022	5:45	0.008
CAMP 02 - Dust	4/15/2022	6:00	0.012
CAMP 02 - Dust	4/15/2022	6:15	0.007
CAMP 02 - Dust	4/15/2022	6:30	0.007
CAMP 02 - Dust	4/15/2022	6:45	0.009
CAMP 02 - Dust	4/15/2022	7:00	0.015
CAMP 02 - Dust	4/15/2022	7:15	0.007
CAMP 02 - Dust	4/15/2022	7:30	0.523
CAMP 02 - Dust	4/15/2022	7:45	0.418
CAMP 02 - Dust	4/15/2022	8:00	0.047
CAMP 02 - Dust	4/15/2022	8:15	0.023
CAMP 02 - Dust	4/15/2022	8:30	0.024
CAMP 02 - Dust	4/15/2022	8:45	0.031
CAMP 02 - Dust	4/15/2022	9:00	0.054
CAMP 02 - Dust	4/15/2022	9:15	0.064
CAMP 02 - Dust	4/15/2022	9:30	0.023
CAMP 02 - Dust	4/15/2022	9:45	0.01
CAMP 02 - Dust	4/15/2022	10:00	0.005
CAMP 02 - Dust	4/15/2022	10:15	0.002
CAMP 02 - Dust	4/15/2022	10:30	0.003
CAMP 02 - Dust	4/15/2022	10:45	0.003
CAMP 02 - Dust	4/15/2022	11:00	0.004
CAMP 02 - Dust	4/15/2022	11:15	0.004
Maximum Value			0.523
Minimum Value			0.002
Average Value			0.051

FASHION OUTLET OF NIAGARA FALLS
DOWNWIND PARTICULATE MONITORING
Date: April 19, 2022
Unit: TSI - DustTrak II

Deployment Label	Date	Time	PM-10 Particulate Level (mg/m^3) 15-min. Average
CAMP 02 - Dust	4/19/2022	5:00	0.008
CAMP 02 - Dust	4/19/2022	5:15	0.009
CAMP 02 - Dust	4/19/2022	5:30	0.009
CAMP 02 - Dust	4/19/2022	5:45	0.009
CAMP 02 - Dust	4/19/2022	6:00	0.006
CAMP 02 - Dust	4/19/2022	6:15	0.008
CAMP 02 - Dust	4/19/2022	6:30	0.008
CAMP 02 - Dust	4/19/2022	6:45	0.008
CAMP 02 - Dust	4/19/2022	7:00	0.008
CAMP 02 - Dust	4/19/2022	7:15	0.008
CAMP 02 - Dust	4/19/2022	7:30	0.008
CAMP 02 - Dust	4/19/2022	7:45	0.008
CAMP 02 - Dust	4/19/2022	8:00	0.008
CAMP 02 - Dust	4/19/2022	8:15	0.008
CAMP 02 - Dust	4/19/2022	8:30	0.008
CAMP 02 - Dust	4/19/2022	8:45	0.008
CAMP 02 - Dust	4/19/2022	9:00	0.008
CAMP 02 - Dust	4/19/2022	9:15	0.008
CAMP 02 - Dust	4/19/2022	9:30	0.008
CAMP 02 - Dust	4/19/2022	9:45	0.008
CAMP 02 - Dust	4/19/2022	10:00	0.007
CAMP 02 - Dust	4/19/2022	10:15	0.003
CAMP 02 - Dust	4/19/2022	10:30	0.005
CAMP 02 - Dust	4/19/2022	10:45	0.005
CAMP 02 - Dust	4/19/2022	11:00	0.002
CAMP 02 - Dust	4/19/2022	11:15	0.001
CAMP 02 - Dust	4/19/2022	11:30	0.001
CAMP 02 - Dust	4/19/2022	11:45	0.002
CAMP 02 - Dust	4/19/2022	12:00	0.003
Maximum Value			0.009
Minimum Value			0.001
Average Value			0.007

FASHION OUTLET OF NIAGARA FALLS
DOWNWIND PARTICULATE MONITORING
Date: April 20, 2022
Unit: TSI - DustTrak II

Deployment Label	Date	Time	PM-10 Particulate Level (mg/m^3) 15-min. Average
CAMP 02 - Dust	4/20/2022	5:00	0.019
CAMP 02 - Dust	4/20/2022	5:15	0.006
CAMP 02 - Dust	4/20/2022	5:30	0.006
CAMP 02 - Dust	4/20/2022	5:45	0.003
CAMP 02 - Dust	4/20/2022	6:00	0.002
CAMP 02 - Dust	4/20/2022	6:15	0.002
CAMP 02 - Dust	4/20/2022	6:30	0.003
CAMP 02 - Dust	4/20/2022	6:45	0.002
CAMP 02 - Dust	4/20/2022	7:00	0.003
CAMP 02 - Dust	4/20/2022	7:15	0.003
CAMP 02 - Dust	4/20/2022	7:30	0.003
CAMP 02 - Dust	4/20/2022	7:45	0.007
CAMP 02 - Dust	4/20/2022	8:00	0.004
CAMP 02 - Dust	4/20/2022	8:15	0.006
CAMP 02 - Dust	4/20/2022	8:30	0.008
CAMP 02 - Dust	4/20/2022	8:45	0.003
CAMP 02 - Dust	4/20/2022	9:00	0.003
CAMP 02 - Dust	4/20/2022	9:15	0.003
CAMP 02 - Dust	4/20/2022	9:30	0.002
CAMP 02 - Dust	4/20/2022	9:45	0.002
CAMP 02 - Dust	4/20/2022	10:00	0.002
CAMP 02 - Dust	4/20/2022	10:15	0.001
CAMP 02 - Dust	4/20/2022	10:30	0.002
CAMP 02 - Dust	4/20/2022	10:45	0.002
CAMP 02 - Dust	4/20/2022	11:00	0.003
CAMP 02 - Dust	4/20/2022	11:15	0.002
CAMP 02 - Dust	4/20/2022	11:30	0.002
CAMP 02 - Dust	4/20/2022	11:45	0.004
CAMP 02 - Dust	4/20/2022	12:00	0.002
CAMP 02 - Dust	4/20/2022	12:15	0.001
CAMP 02 - Dust	4/20/2022	12:30	0.001
CAMP 02 - Dust	4/20/2022	12:45	0.001
CAMP 02 - Dust	4/20/2022	13:00	0.001
CAMP 02 - Dust	4/20/2022	13:15	0.001
CAMP 02 - Dust	4/20/2022	13:30	0.001
CAMP 02 - Dust	4/20/2022	13:45	0.001
Maximum Value			0.019
Minimum Value			0.001
Average Value			0.003

APPENDIX C

Annual Site Wide Inspection and Certification Letter Reports

104 East 25th Strret, 8th Floor
New York, NY 10010
Telephone 212-353-8280
Fax 212-353-8306
www.atcgroupservices.com

February 16, 2021

Mr. Glenn May, PG
Engineering Geologist II
New York State Department of Environmental Conservation
Region 9
270 Michigan Avenue
Buffalo, New York 14203-2999

Subject: Annual 2020 Site Inspection and Certification Letter Report
FONF Expansion/Sabre Park BCP Site No. C932162

Dear Mr. May:

ATC Group Services LLC, on behalf of Macerich Management Company, hereby submits this Site Management Inspection Report for the Fashion Outlet Niagara Falls (FONF) / Sabre Park Brownfield Cleanup Program (BCP), Site No. C932162, located at 1900 Military Road, Niagara County, Niagara Falls, New York 14304 (hereafter referred to as Site). The inspection was completed in accordance with the Revised Site Management Plan (SMP), dated January 2020, prepared by Langan Engineering.

ENGINEERING CONTROLS

Composite Cover System

Exposure to residual soil/fill is prevented by the construction of an engineered composite cover system that is constructed at the Site. The composite cover system is comprised of the following four items: (1) minimum 4-inch thick asphalt cap at parking areas, (2) concrete cap at building slabs and sidewalks, (3) minimum 1-foot thick clean imported topsoil cover at all landscaped area, and (4) combination of a minimum 6-inch thick clay cap and 1-foot thick clean imported topsoil cover at detention ponds.

Vapor Barrier System

Exposure to soil vapor is prevented by a Vapor Barrier System that has been built on the Site. The vapor barrier was installed beneath the Secure Self Storage building and FONF mall expansion building. This Vapor Barrier System was constructed on-Site and consisted of a 20-mil Stego Wrap Vapor Barrier, manufactured by Stego Industries LLC. The vapor barrier was installed underneath the building concrete slab-on-grade. All vapor barrier seams, penetrations, and repairs were sealed in accordance with the manufacturer's recommendations and

instructions. The proposed design/layout and oversight of the vapor barrier installation was performed by the consultant of record, Langan Engineering.

Sub-Slab Depressurization System

Exposure to soil vapor is prevented by a Sub-Slab Depressurization System (SSDS) that has been built on the Site. An active SSDS is present beneath the Secure Self Storage building and a passive SSDS is present beneath the FONF mall expansion.

The active SSDS at the Secure Self Storage building consists of a 24-inch diameter suction pit containing 1 to 1-1/4 inch coarse aggregate placed in a central location beneath the concrete slab and within the ¾ inch coarse aggregate subbase material. Vapors are conveyed via a 4-inch Schedule 40 PVC pipe to an Airtech regenerative blower, model 3BA1400-7AT06 producing a minimum of 75 cfm at 24-inches water column. The air exhaust extends to the roof line, a minimum of 25-feet from any air intake ports.

The passive SSDS at the FONF Expansion building consists of six (6) 24-inch diameter suction pits containing 1 to 1-1/4 inch coarse aggregate placed beneath the concrete slab and within the ¾ inch coarse aggregate subbase material. Vapors are conveyed via 4-inch Schedule 40 PVC piping to three (3) wind driven exhaust fans located on the roof.

INSTITUTIONAL CONTROLS

A series of Institutional Controls are required under the Remedial Action to assure permanent protection of public health by eliminating human exposure to residual materials remaining at the site. The Institutional Controls (ICs) for the Remedial Action are:

- Compliance with the Environmental Easements and this SMP by the Grantor and the Grantor's successors and assigns;
- All Engineering Controls (ECs) must be operated and maintained as specified in the SMP;
- All ECs on the Site must be inspected at a frequency and in a manner defined in the SMP.
- Sub-slab pressure field monitoring and other environmental or public health monitoring must be performed as defined in the SMP;
- Data and information pertinent to management of the Site must be reported at the frequency and in a manner defined in the SMP;
- On-site and off-site environmental monitoring devices must be protected and replaced as necessary to ensure the devices function in the manner specified in the SMP; and
- Institutional Controls identified in the Environmental Easements may not be discontinued without an amendment to or extinguishment of the Environmental Easements.

INSPECTION NARRATIVE

The site inspection was performed by Jeff Strum, with ATC Group Service LLC (ATC), and the date of the inspection was September 28, 2020.

During the site inspection, Mr. Strum was escorted by Jennifer Miller, Operations Manager, FONF and Mary Mendetta, with Secure Self Storage. ATC inspected the composite cover system including the asphalt parking area and landscape areas, which was found to be undisturbed with no evidence of prior excavation. The building concrete slab-on-grade and sidewalks were found to be intact with no evidence of physical damage or cracks equal to or greater than 1/8-inch in diameter.

ATC inspected the operation of both the passive SSDS at the FONF expansion and the active SSDS at the Secure Self Storage Building. The passive SSDS was found to be operating properly at the time of the inspection and free of any obstructions. In addition, no HVAC air intakes or supply registers were found within 25 feet of the exhaust vents. The active SSDS blower at the Secure Self Storage Building was observed to be operating properly with no unusual or excessive noise. No air leaks were observed in accessible air conveyance piping and fittings. Proper operation of the blower alarm was verified. In addition, communication beneath the building floor was demonstrated by measured negative pressures readings ranging from 0.010 to 0.033 inches water. However, per communication with the property owner of the Secure Self Storage, Jack Ruh, the SSDS was off-line from August 31, 2020 to September 21, 2020 due to a failure of the blower motor, which required replacement.

On May 28, 2020, Charter Communications uncovered a damaged communication cable located approximated 90 feet from the southwest corner of the original FONF Site building, within the existing asphalt pavement. The area was excavated approximately 2 feet by 4 feet by 30 inches below ground surface (bgs) to uncover the broken cable. The cable was repaired and a new vault was installed over the repaired line. The area surrounding the vault was backfilled with a portion of the excavation spoils and the surfaced capped with 4-inches of asphalt. A SMP Excavation Work Plan Implementation Report, dated July 17, 2020, was submitted to the Department in accordance with the SMP.

Inspection Checklists are present in Attachment A.

This report will be included with the Periodic Review Report to be submitted to the Department in the 1st Quarter of 2025.

DEVIATIONS IN PERFORMANCE OF ENGINEERING AND INSTITUTIONAL CONTROLS

No deviations in the performance of the engineering and institutional controls were identified.

NEXT INSPECTION

The next Site Management inspection will be performed in September 2021.

CERTIFICATION

I, Jed Myers certify the following:

- I am a Qualified Environmental Professional;
- I oversaw and prepared this Site Inspection and Certification Letter Report;
- Engineering Controls or Institutional Controls employed at the Site continue to be in place and perform as designed and continue to be protective of human health and the environment;
- Activities on the Site that have disturbed residual soil/fill material have been in accordance with the Soil/Materials Management Plan in the SMP;
- Nothing has occurred on the Site that impairs the ability of Engineering Controls or Institutional Controls to protect public health and the environment;
- Compliance with the Site Management Plan has been maintained;
- Vegetable gardening and farming in residual soils has been prevented;
- Groundwater underlying the Site is not being utilized without treatment rendering it safe for the intended purpose has been prevented; and
- The Site has not been used for a higher level of use other than the commercial and industrial use addressed by the long term IC/ECs included in the SMP.

If you have any questions or need any additional information, please do not hesitate to contact me at 631-451-0617 or email at jed.myers@atcgsc.om.

Sincerely,
ATC Group Services LLC



Jed A. Myers, PhD, PG
Senior Project Manager

ATTACHEMENT A

INPSECTION CHECKLISTS

SITE WIDE INSPECTION CHECKLIST

Site Name: FONF/Sabra Park B6A Location: Niagara Falls, NY Project Number: 2214JMMC02

Inspector Name: Jess Strum Date: 9/28/2020 Weather Conditions: 69°F, Sunny

Reason for Inspection (i.e., routine, severe condition, etc.): _____ Annual Inspection 2020 Annual Inspection

Check one of the following: **Y:** Yes **N:** No **NA:** Not Applicable

		Y	N	NA	Normal Situation	Remarks
	General					
1	What are the current site conditions?	--	--	--	X --	
2	Are all applicable site records (e.g., documentation of construction activity, most current easement, etc.) complete and up to date?	X			Y	
	Easement					
3	Has site use (commerical) remained the same?	X			Y	
4	Does it appear that all environmental easement restrictions have been followed?	X			Y	
	Impermeable Cap					
5	Are there any indications of a breach in the capping system at the time of this inspection?		X		N	
6	Are there any cracks in the building slabs?		X		N	small <1/8" only
7	Are there any cracks in the building walls?		X		N	
8	Is there any construction activity, or indication of any construction activity within the past certification year (including any tenant improvements), that included the breaching of the capping system, on-site at the time of this inspection?	X			N	Utility communication cable repair at FONF Building
9	If YES to number 8, is there documentation that the Soil Management Plan, HASP, and CAMP for the site was/is being followed?	X			--	Excavation Implementation report dated 7/17/2020

*** **If the answer to any of the above questions indicate non-compliance with any IC/ECs for the site, additional remarks must be provided and, where applicable, documentation attached to this checklist detailing additional inspection and repair activities.**

Additional remarks _____

Minimum Inspection Schedule: Site-wide inspections will be conducted annually, per certification year, at a minimum. Additional inspections will also be conducted at times of severe condition events. All inspection events will utilize this checklist.

FONF MALL PASSIVE SSD SYSTEM INSPECTION CHECKLIST

Site Name: FONF/Sabre Park BCP Location: Niagara Falls, NY Project Number: 321457MMC02

Inspector Name: Jeff Strum Date: 9/28/2020 Weather Conditions: Sunny, 69°F

Reason for Inspection (i.e., routine, maintenance, severe condition, etc.): 2020 Annual

Check one of the following: **Y:** Yes **N:** No **NA**: Not Applicable

		Y	N	NA	Normal Situation	Remarks
	Records					
1	Is the Operations & Maintenance Plan readily available on-site?	X			Y	
2	Based on site records, when was the last inspection, maintenance, or repair event?				Date not to exceed minimum schedule	9/12/2019 - Annual Inspection
3	Based on site records, was the system inoperational for any amount of time since the last inspection, maintenance, or repair event? For how long? Provide details.		X		N	
	General System					
4	Is there any construction activity, or indication of any construction activity within the past certification year (including any tenant improvements), that included the breaching of the floor slab, on-site at the time of this inspection?		X		N	
5	If YES to number 6, is there documentation that the Site Management Plan, HASP, and CAMP for the site was/is being followed?			X	NA if N to 6/ Y if Y to 6	
6	If YES to number 6, is there documentation that all breaches in the floor slab have been sealed, with vapor barrier repaired?			X	NA if N to 6/ Y if Y to 6	
7	Does all visible SSD piping appear intact and undamaged?	X			Y	
8	Have any intake points been constructed at the roof near (less than 10 feet) the passive SSD exhaust fans discharge points?		X		N	

FONF MALL PASSIVE SSD SYSTEM INSPECTION CHECKLIST

Check one of the following: **Y:** Yes **N:** No **NA:** Not Applicable

		Y	N	NA	Normal Situation	Remarks
	Passive SSD Exhaust Fans					
9	Are the passive SSD exhaust fans active at the time of inspection?	X			Y	
10	Are they operating per design, free of obstructions, and spinning/rotating under the power of the wind?	X			Y	
11	Are the passive SSD exhaust fans expelling air at the discharge points?	X			Y	

If the answer to any of the above questions indicate the SSD system is non-operational or malfunctioning, or that this EC is in non-compliance,additional remarks must be provided and, where applicable, documentation attached to this checklist detailing additional inspection and repair activities.

Additional remarks _____

Minimum Inspection Schedule: Inspection of blowers and other SSD equipment will be conducted on an annual basis to establish that the system is operational and performing within the design specifications. Unscheduled inspections and/or sampling may take place when a suspected failure of the SSD system has been reported or an emergency occurs that is deemed likely to affect the operation of the system. The minimum schedule may be revised, as necessary, following the first certification year. All inspection events will utilize this checklist.

SECURE STORAGE ACTIVE SSD SYSTEM INSPECTION CHECKLIST

Site Name: FONF/Sabre Park BCP Location: Niagara Falls, NY Project Number: 3214JMMC02

Inspector Name: Jess Straub Date: 9/28/2020 Weather Conditions: Sunny, 69°F

Reason for Inspection (i.e., routine, maintenance, severe condition, etc.): 2020 Annual Inspection

Check one of the following: **Y:** Yes **N:** No **NA:** Not Applicable

		Y	N	NA	Normal Situation	Remarks
	Records					
1	Is the Operations & Maintenance Plan readily available on-site?	X			Y	
2	Based on site records, when was the last inspection, maintenance, or repair event?				Date not to exceed minimum schedule	9/12/19 - Annual Inspection
3	Based on site records, was the system inoperational for any amount of time since the last inspection, maintenance, or repair event? For how long? Provide details.	X			N	
	Alarm System					
4	Do the alarm lights indicate that the system is operational?	X			Y	
5	Did manual tripping of alarm system indicate that the alarm is functional?	X			Y	
	General System					
6	Is there any construction activity, or indication of any construction activity within the past certification year (including any tenant improvements), that included the breaching of the floor slab, on-site at the time of this inspection?		X		N	
7	If YES to number 6, is there documentation that the Site Management Plan, HASP, and CAMP for the site was/is being followed?			X	NA if N to 6/ Y if Y to 6	
8	If YES to number 6, is there documentation that all breaches in the floor slab have been sealed, with vapor barrier repaired?			X	NA if N to 6/ Y if Y to 6	
9	Does all visible SSD piping appear intact and undamaged?	X			Y	
10	Have any intake points been constructed at the roof near (less than 10 feet) the SSD blower discharge point?		X		N	

SECURE STORAGE ACTIVE SSD SYSTEM INSPECTION CHECKLIST

Check one of the following: **Y:** Yes **N:** No **NA:** Not Applicable

		Y	N	NA	Normal Situation	Remarks
	SSD Blower Unit					
11	Is the SSD blower operational at the time of the inspection?	X			Y	
12	What are the micro-manometer readings at each monitoring point?				< 0 in/H20 (in/Hg)	Southwest Monitoring Point: 0.010" Northeast Monitoring Point: 0.013" Southeast Monitoring Point: 0.033"
13	Is the SSD blower expelling air at the discharge point?	X			Y	

If the answer to any of the above questions indicate the SSD system is non-operational or malfunctioning, or that this EC is in non-compliance,additional remarks must be provided and, where applicable, documentation attached to this checklist detailing additional inspection and repair activities.

Additional remarks _____

Minimum Inspection Schedule: Inspection of blowers and other SSD equipment will be conducted on an annual basis to establish that the system is operational and performing within the design specifications. Unscheduled inspections and/or sampling may take place when a suspected failure of the SSD system has been reported or an emergency occurs that is deemed likely to affect the operation of the system. The minimum schedule may be revised, as necessary, following the first certification year. All inspection events will utilize this checklist.

— ATLAS ATC ENGINEERING, INC —

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January 10, 2022

Mr. Glenn May, PG
Engineering Geologist II
New York State Department of Environmental Conservation
Region 9
270 Michigan Avenue
Buffalo, New York 14203-2999

Subject: Annual 2021 Site Inspection and Certification Letter Report
FONF Expansion/Sabre Park BCP Site No. C932162

Dear Mr. May:

Atlas ATC Engineering Inc. (Atlas), on behalf of Macerich Management Company, hereby submits this Site Management Inspection Report for the Fashion Outlet Niagara Falls (FONF) / Sabre Park Brownfield Cleanup Program (BCP), Site No. C932162, located at 1900 Military Road, Niagara County, Niagara Falls, New York 14304 (hereafter referred to as Site). The inspection was completed in accordance with the Revised Site Management Plan (SMP), dated January 2020, prepared by Langan Engineering. In accordance with the New York State Department of Environmental Conservation (NYSDEC) approval of the Annual 2020 Site Inspection and Certification Letter, dated November 22, 2021, this letter represents the Annual 2021 Site Inspection and Certification Letter Report. The next Periodic Review Report is scheduled to submitted to the NYSDEC in the 1st Quarter of 2025.

ENGINEERING CONTROLS

Composite Cover System

Exposure to residual soil/fill is prevented by the construction of an engineered composite cover system that is constructed at the Site. The composite cover system is comprised of the following four items: (1) minimum 4-inch thick asphalt cap at parking areas, (2) concrete cap at building slabs and sidewalks, (3) minimum 1-foot thick clean imported topsoil cover at all landscaped areas, and (4) combination of a minimum 6-inch thick clay cap and 1-foot thick clean imported topsoil cover at detention ponds.

Vapor Barrier System

Exposure to soil vapor is prevented by a Vapor Barrier System that has been built on the Site. The vapor barrier was installed beneath the Secure Self Storage building and FONF mall expansion building. This Vapor Barrier System was constructed on-Site and consisted of a 20-mil Stego Wrap Vapor Barrier, manufactured by Stego Industries LLC. The vapor barrier was installed underneath the building concrete slab-on-grade. All vapor barrier seams, penetrations, and repairs were sealed in accordance with the manufacturer's

recommendations and instructions. The proposed design/layout and oversight of the vapor barrier installation was performed by the consultant of record, Langan Engineering.

Sub-Slab Depressurization System

Exposure to soil vapor is prevented by a Sub-Slab Depressurization System (SSDS) that has been built on the Site. An active SSDS is present beneath the Secure Self Storage building and a passive SSDS is present beneath the FONF mall expansion.

The active SSDS at the Secure Self Storage building consists of a 24-inch diameter suction pit containing 1 to 1-1/4 inch coarse aggregate placed in a central location beneath the concrete slab and within the ¾ inch coarse aggregate subbase material. Vapors are conveyed via a 4-inch Schedule 40 PVC pipe to an Airtech regenerative blower, model 3BA1400-7AT06 producing a minimum of 75 cfm at 24-inches water column. The air exhaust extends to the roof line, a minimum of 25-feet from any air intake ports.

The passive SSDS at the FONF Expansion building consists of six (6) 24-inch diameter suction pits containing 1 to 1-1/4 inch coarse aggregate placed beneath the concrete slab and within the ¾ inch coarse aggregate subbase material. Vapors are conveyed via 4-inch Schedule 40 PVC piping to three (3) wind driven exhaust fans located on the roof.

INSTITUTIONAL CONTROLS

A series of Institutional Controls are required under the Remedial Action to assure permanent protection of public health by eliminating human exposure to residual materials remaining at the site. The Institutional Controls (ICs) for the Remedial Action are:

- Compliance with the Environmental Easements and this SMP by the Grantor and the Grantor's successors and assigns;
- All Engineering Controls (ECs) must be operated and maintained as specified in the SMP;
- All ECs on the Site must be inspected at a frequency and in a manner defined in the SMP.
- Sub-slab pressure field monitoring and other environmental or public health monitoring must be performed as defined in the SMP;
- Data and information pertinent to management of the Site must be reported at the frequency and in a manner defined in the SMP;
- On-site and off-site environmental monitoring devices must be protected and replaced as necessary to ensure the devices function in the manner specified in the SMP; and
- Institutional Controls identified in the Environmental Easements may not be discontinued without an amendment to or extinguishment of the Environmental Easements.

INSPECTION NARRATIVE

The site inspection was performed by Jeff Strum, with Atlas, and the date of the inspection was September 28, 2021.

During the site inspection, Mr. Strum was escorted by Joe Schultz, with FONF and Mary Mendetta, with Secure Self Storage. ATC inspected the composite cover system including the asphalt parking area and landscape areas, which was found to be undisturbed with no evidence of prior excavation. The building concrete slab-on-grade and sidewalks were found to be intact with no evidence of physical damage or cracks equal to or greater than 1/4-inch in diameter.

ATC inspected the operation of both the passive SSDS at the FONF expansion and the active SSDS at the Secure Self Storage Building. The passive SSDS was found to be operating properly at the time of the inspection and free of any obstructions. In addition, no HVAC air intakes or supply registers were found within 25 feet of the exhaust vents. The active SSDS blower at the Secure Self Storage Building was observed to be non-operational at the time of the inspection on September 28th. At 6 PM on September 28, 2021, the maintenance manager notified Mr. Strum, with Atlas, that the system was operational.

On November 19, 2021, Jeff Strum, with Atlas, re-inspected the active SSDS at the Secure Self Storage Building. The active SSDS blower was observed to be operating properly with no unusual or excessive noise. No air leaks were observed in accessible air conveyance piping and fittings. In addition, communication beneath the building floor was demonstrated by measured negative pressures readings ranging from 0.002 to 0.012 inches water. However, the blower alarm was observed not to be functioning properly.

Inspection Checklists are present in Attachment A, and Inspection Photographic Log is present in Attachment B.

This report will be included with the Periodic Review Report to be submitted to the Department in the 1st Quarter of 2025.

DEVIATIONS IN PERFORMANCE OF ENGINEERING AND INSTITUTIONAL CONTROLS

No deviations in the performance of the engineering and institutional controls were identified, except for the non-operational alarm at the Secure Self Storage SSDS. The maintenance manager for the Secure Self Storage was notified of the deficiency.

NEXT INSPECTION

The next Site Management inspection will be performed in September 2022.

CERTIFICATION

I, Jed Myers certify the following:

- **I am a Qualified Environmental Professional;**
- **I oversaw and prepared this Site Inspection and Certification Letter Report;**
- **Engineering Controls or Institutional Controls employed at the Site continue to be in place and perform as designed and continue to be protective of human health and the environment;**
- **Activities on the Site that have disturbed residual soil/fill material have been in accordance with the Soil/Materials Management Plan in the SMP;**
- **Nothing has occurred on the Site that impairs the ability of Engineering Controls or Institutional Controls to protect public health and the environment;**
- **Compliance with the Site Management Plan has been maintained;**
- **Vegetable gardening and farming in residual soils has been prevented;**
- **Groundwater underlying the Site is not being utilized without treatment rendering it safe for the intended purpose has been prevented; and**
- **The Site has not been used for a higher level of use other than the commercial and industrial use addressed by the long term IC/ECs included in the SMP.**

If you have any questions or need any additional information, please do not hesitate to contact me at 631-451-0617 or email at jed.myers@oneatlas.com.

Sincerely,
ATC Group Services LLC

Jed Myers
Senior Project Manager
Direct Line: 631-451-0617
Email: jed.myers@oneatlas.com

Chris Tomasello
Environmental Division Manager
Direct Line: 516-861-5033
Email: Chris.tomasello@atcgs.com

Attachments: Inspection Checklists
Inspection Photographs, September 28, 2021

ATTACHMENT A

INSPECTION CHECKLISTS

SIDE WIDE INSPECTION CHECKLIST

Site Name: FONF/Sabre Park BCP Location: Niagara Falls, NY Project Numbe Z214JMMC08

Inspector Name: Jeff Strum Date: September 28, 2021 Weather Conditions: Sunny, 60s °F

Reason for Inspection (i.e., routine, maintenance, severe condition, etc.): Routine: 2021 Annual Inspection

Check one of the following: **Y:** Yes **N:** No **NA**: Not Applicable

	Inspection Items	Y	N	NA	Normal Situation	Remarks
	General					
1	What are the current site conditions?	--	--	--	--	Good, Normal site operations as a shopping center.
2	Are all applicable site records (e.g. documentation of construction activity, most current easement, etc.) complete and up to date?	**X**			Y	
	Easement					
3	Has site use (commercial) remained the same?	**X**			Y	
4	Does it appear that all environmental easement restrictions have been followed?	**X**			Y	
	Impermeable Cap					
5	Are there any indications of a breach in the capping system at the time of this inspection?		**X**		N	
6	Are there any cracks in the building slabs?		**X**		N	
7	Are there any cracks in the building walls?		**X**		N	
8	Is there any construction activity, or indication of any construction activity within the past certification year (including any tenant improvements), that included the breaching of the capping system, on-site at the time of this inspection?		**X**		N	
9	If YES to number 8, is there documentation that the Soil Management Plan, HASP, and CAMP for the site was/is being followed?			**X**	NA if N to 8/ Y if Y to 8	

*** **If the answer to any of the above questions indicate non-compliance with ECs for the site, additional remarks must be provided and, where applicable, documentation attached to this checklist detailing additional inspection and repair activities.**

Additional Remarks

Minimum Inspection Schedule: Site-wide inspections will be conducted annually, per certification year, at a minimum. Additional inspections will also be conducted at times of severe condition events. All inspection events will utilize this checklist.

ATLAS

FONF PASSIVE SSD SYSTEM INSPECTION CHECKLIST

Site Name: FONF/Sabre Park BCP Location: Niagara Falls, NY Project Number: Z214JMMC08

Inspector Name: Jeff Strum Date: September 28, 2021 Weather Conditions: Sunny 60s °F

Reason for Inspection (i.e., routine, maintenance, severe condition, etc.): Annual Inspection 2021

Check one of the following: **Y:** Yes **N:** No **NA**: Not Applicable

	General Inspection	Y	N	NA	Normal Situation	Remarks
Records						
1	Is the Operations and Maintenance Plan readily available on-site?	**X**			Y	
2	Based on site records, when was the last inspection, mainentance or repair event?				exceed mininum schedule	9/28/2020
3	Based on site records, was the system inoperational for any amount of time since the last inspection, maintenance, or reprair event? For how long? Provide details		**X**		N	
General System						
4	Is there any construction activity, or indication of construction activity within the past certification year (including tenant improvements), that included the breaching of the floor slab, on-site at the time of this inspection?		**X**		N	
5	If Yes to number 4, is there documentation that the Site Management Plan, HASP, and CAMP for the site was/is being followed?			**X**	NA if N to 4/ Y if Y to 4	
6	If Yes to number 4, is there documentation that all breaches in the floor slab have been sealed, with vapor barrier repaired?			**X**	NA if N to 4/ Y if Y to 4	
7	Does all visible SSD piping appear intact and undamaged?	**X**			Y	
8	Have any intake points been constructed at the roof near (less than 10 feet) the passive SSD exhaust fans discharge points?		**X**		N	
9	Are the passive SSD exhaust fans active at the time of inspection?	**X**			Y	

FONF PASSIVE SSD SYSTEM INSPECTION CHECKLIST

Check one of the following: **Y:** Yes **N:** No **NA**: Not Applicable

	General Inspection	Y	N	NA	Normal Situation	Remarks
Records						
10	Are the SSD exhaust fans operating per design, free of obstructions, and spinning/rotating under the power of wind?	**X**			Y	
11	Are the passive SSD exhaust fans expelling air at the discharge points?	**X**			Y	

If the answer to any of the above questions indicate the SSD system is non-operational or malfunctioning, or that this EC is in non-compliance, additional remarks must be provided and, where applicable, documentation attached to this checklist detailing additional inspection and repair activities.

Additional Remarks

Minimum Inspection Schedule: Inspection of blowers and other SSD equipment will be conducted on an annual basis to estabilish that the system is operational and performing within design specfications. Unscheduled inspections and/or sampling may take place when a suspected failure of the SSD system has been reported or an emergency occurs that is deemed likely to affect the operation of the system. The minimum schedule may be revised, as necessary, following the first certification year. All inspection events will utilize this checklist.

SECURE STORAGE ACTIVE SSD SYSTEM INSPECTION CHECKLIST

Site Name: FONF/Sabre Park BCP Location: Niagara Falls, NY Project Number: Z214JMMC08

Inspector Name: Jeff Strum Date: September 28, 2021 Weather Conditions: Overcast 42 °F

Reason for Inspection (i.e., routine, maintenance, severe condition, etc.): Annual Inspection 2021

Check one of the following: **Y:** Yes **N:** No **NA**: Not Applicable

	General Inspection	Y	N	NA	Normal Situation	Remarks
Records						
1	Is the Operations and Maintenance Plan readily available on-site?	**X**			Y	
2	Based on site records, when was the last inspection, mainentance or repair event?				Date not to exceed mininum schedule	9/28/2020
3	Based on site records, was the system inoperational for any amount of time since the last inspection, maintenance, or reprair event? For how long? Provide details	**X**			N	System was not operational during inspection on 9/28/21. Maintenance Manager reported system operational that day by 6 PM.
Alarm System						
4	Did the alarm lights indicate that the system is operational?		**X**		Y	
5	Did manual tripping of alarm system indicate that the alarm is functional?		**X**		Y	
General System						
6	Is there any construction activity, or indication of construction activity within the past certification year (including tenant improvements), that included the breaching of the floor slab, on-site at the time of this inspection?		**X**		N	
7	If Yes to number 6, is there documentation that the Site Management Plan, HASP, and CAMP for the site was/is being followed?			**X**	NA if N to 4/ Y if Y to 4	
8	If Yes to number 6, is there documentation that all breaches in the floor slab have been sealed, with vapor barrier repaired?			**X**	NA if N to 4/ Y if Y to 4	
9	Does all visible SSD piping appear intact and undamaged?	**X**			Y	
10	Have any intake points been constructed at the roof near (less than 10 feet) the passive SSD exhaust fans discharge points?		**X**		N	

SECURE STORAGE ACTIVE SSD SYSTEM INSPECTION CHECKLIST

Check one of the following: **Y:** Yes **N:** No **NA**: Not Applicable

	General Inspection	Y	N	NA	Normal Situation	Remarks
Records						
11	Is the SSD blower operational at the time of the inspection?		**X**		Y	
12	What are the micro-manometer readings at each monitoring point?				< 0 in/H20 (in/Hg)	Northeast Monitoring Point: 0.000 in. Hg Northwest Monitoring Point: 0.000 in. Hg Southeast Monitoring Point: 0.000 in. Hg Southwest Monitoring Point: 0.000 in. Hg
13	Is the SSD blower expelling air at the discharge point?		**X**		Y	

If the answer to any of the above questions indicate the SSD system is non-operational or malfunctioning, or that this EC is in non-compliance, additional remarks must be provided and, where applicable, documentation attached to this checklist detailing additional inspection and repair activities.

Additional Remarks

System was not operational at time of inspection. At 6.00 PM on 9/28/21 the maintenance manager at the facility called and stated the system is up and running.

Minimum Inspection Schedule: Inspection of blowers and other SSD equipment will be conducted on an annual basis to estabilish that the system is operational and performing within design specfications. Unscheduled inspections and/or sampling may take place when a suspected failure of the SSD system has been reported or an emergency occurs that is deemed likely to affect the operation of the system. The minimum schedule may be revised, as necessary, following the first certification year. All inspection events will utilize this checklist.

SECURE STORAGE ACTIVE SSD SYSTEM INSPECTION CHECKLIST

Site Name: FONF/Sabre Park BCP Location: Niagara Falls, NY Project Number: Z214JMMC08

Inspector Name: Jeff Strum Date: November 19, 2021 Weather Conditions: Overcast 42 °F

Reason for Inspection (i.e., routine, maintenance, severe condition, etc.): Annual Inspection 2021

Check one of the following: **Y:** Yes **N:** No **NA**: Not Applicable

	General Inspection	Y	N	NA	Normal Situation	Remarks
Records						
1	Is the Operations and Maintenance Plan readily available on-site?	X			Y	
2	Based on site records, when was the last inspection, mainentance or repair event?				Date not to exceed mininum schedule	9/28/2021
3	Based on site records, was the system inoperational for any amount of time since the last inspection, maintenance, or reprair event? For how long? Provide details	X			N	System was not operational during inspection on 9/28/21. Operational that same day by 6 PM.
Alarm System						
4	Did the alarm lights indicate that the system is operational?	X			Y	Site maintenace manager notified of the issue with the non-operational alarm
5	Did manual tripping of alarm system indicate that the alarm is functional?	X			Y	
General System						
6	Is there any construction activity, or indication of construction activity within the past certification year (including tenant improvements), that included the breaching of the floor slab, on-site at the time of this inspection?		X		N	
7	If Yes to number 6, is there documentation that the Site Management Plan, HASP, and CAMP for the site was/is being followed?			X	NA if N to 4/ Y if Y to 4	
8	If Yes to number 6, is there documentation that all breaches in the floor slab have been sealed, with vapor barrier repaired?			X	NA if N to 4/ Y if Y to 4	
9	Does all visible SSD piping appear intact and undamaged?	X			Y	
10	Have any intake points been constructed at the roof near (less than 10 feet) the passive SSD exhaust fans discharge points?		X		N	

SECURE STORAGE ACTIVE SSD SYSTEM INSPECTION CHECKLIST

Check one of the following: **Y:** Yes **N:** No **NA**: Not Applicable

	General Inspection	Y	N	NA	Normal Situation	Remarks
Records						
11	Is the SSD blower operational at the time of the inspection?	**X**			Y	
12	What are the micro-manometer readings at each monitoring point?				< 0 in/H20 (in/Hg)	Northeast Monitoring Point: 0.006 in. H_2O Northwest Monitoring Point: 0.005 in. H_2O Southeast Monitoring Point: 0.002 in. H_2O Southwest Monitoring Point: 0.012 in. H_2O
13	Is the SSD blower expelling air at the discharge point?	**X**			Y	

If the answer to any of the above questions indicate the SSD system is non-operational or malfunctioning, or that this EC is in non-compliance, additional remarks must be provided and, where applicable, documentation attached to this checklist detailing additional inspection and repair activities.

Additional Remarks

Maintenance manager at the facility notified of the issue with the non-operation alarm light.

Minimum Inspection Schedule: Inspection of blowers and other SSD equipment will be conducted on an annual basis to estabilish that the system is operational and performing within design specfications. Unscheduled inspections and/or sampling may take place when a suspected failure of the SSD system has been reported or an emergency occurs that is deemed likely to affect the operation of the system. The minimum schedule may be revised, as necessary, following the first certification year. All inspection events will utilize this checklist.

ATTACHMENT B

INSPECTION PHOTOGRAPHIC LOG
SEPTEMBER 28, 2021

Photo Log
FONF Mall & Secure Storage
Niagara Falls, NY
Annual Inspection – September 28, 2021



Photo 1: First vapor point in FONF Expansion hallway.

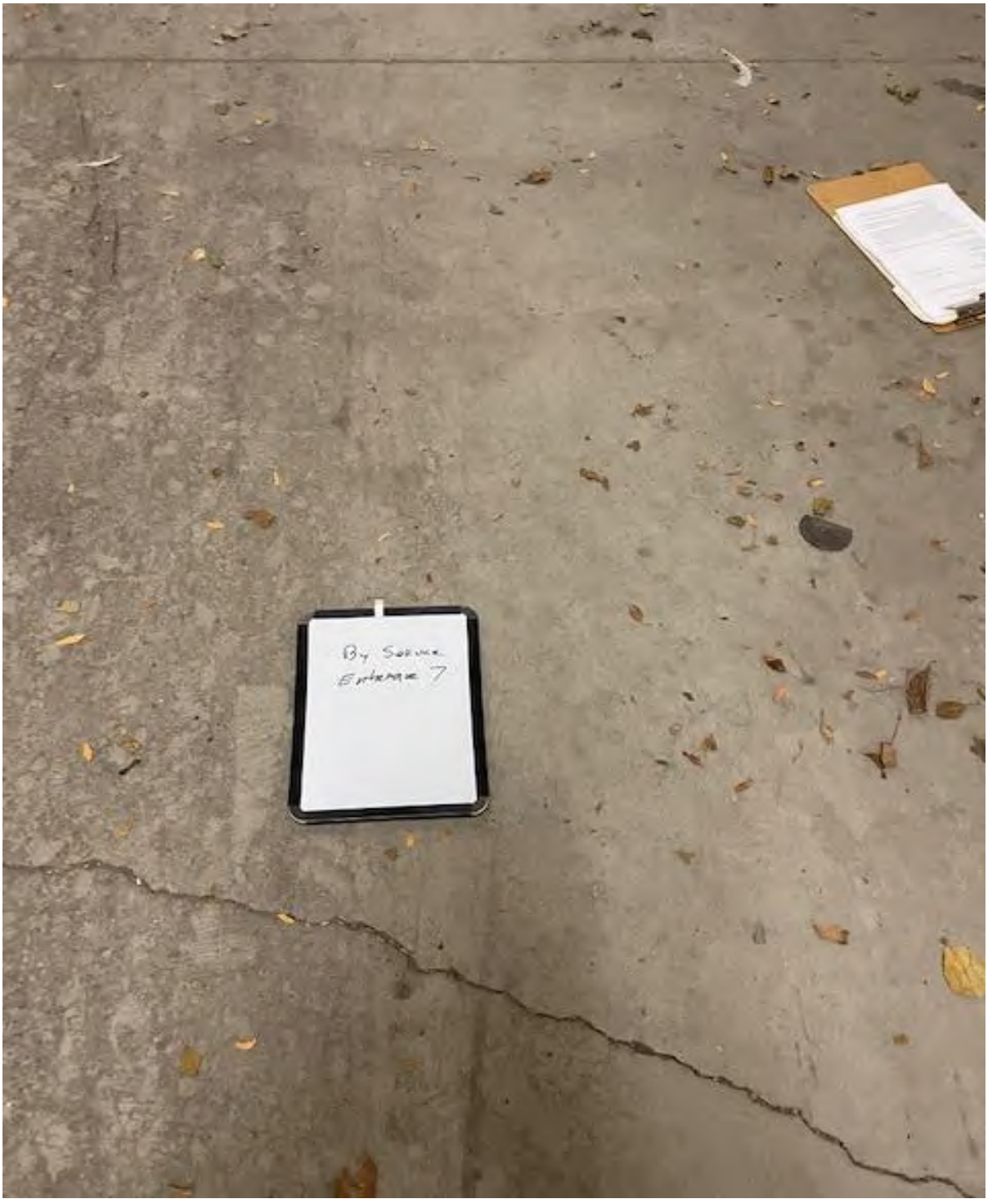


Photo 2: Crack in concrete by service entrance 7 of FONF Expansion.



Photo 3: Vapor point #2 within corridor near service entrance 7 of FONF Expansion.



Photo 4: Vapor point #3 within FONF Expansion.



Photo 5: Vapor point #4, within FONF Expansion, by 1893 FOB.

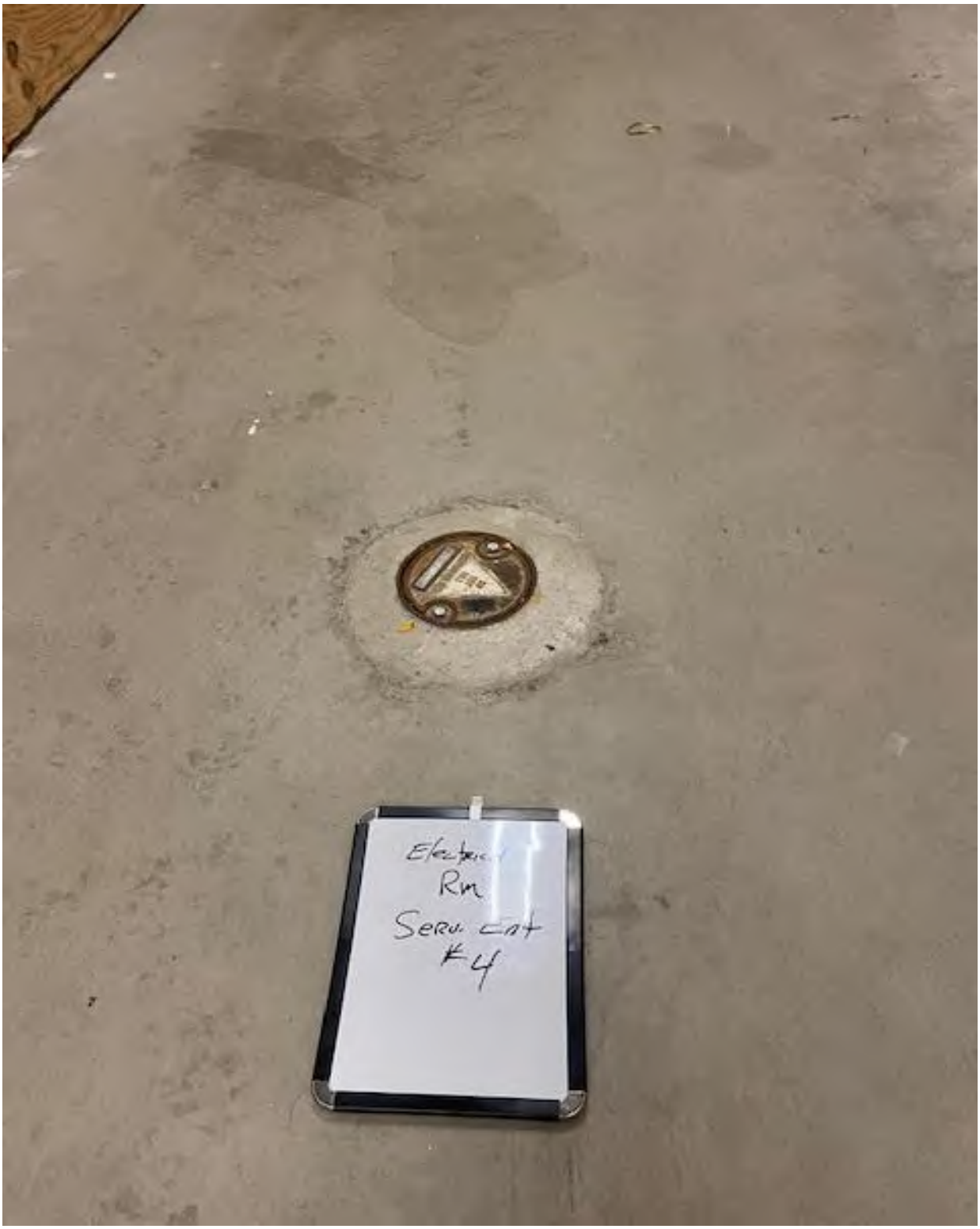


Photo 7: Vapor point #5 by Electrical Room and Service Entrance #4 of FONF Expansion.



Photo 8: Passive Exhaust Fan #1 on roof of FONF Expansion, above Paint Room.



Photo 9: Exhaust Fan #2 on roof of FONF Expansion, above Service Entrance #4 Paint Room.



Photo 10: Exhaust Fan #3 on roof of FONF Expansion, above Beef Jerky Store.



Photo 11: Exhaust Fan #4 on roof of FONF Expansion, across from H&M.



Photo 12: Vapor Point #6 by service entrance #5 of FONF Expansion.



Photo 13: Vapor Point #7 near service entrance #6 of FONF Expansion.



Photo 14: SSD system at Secure Self Storage facility.



Photo 15: Vent pipe for SSD System at Secure Self Storage.



Photo 16: Close look at pump motor for Secure Self Storage SSD system.



Photo 17: Piping for Secure Self Storage SSD System.



Photo 18: Piping for Secure Self Storage SSD System.



Photo 19: Electrical relay box for Secure Self Storage SSD System.



Photo 20: View of SSD System enclosure at the Secure Self Storage building.

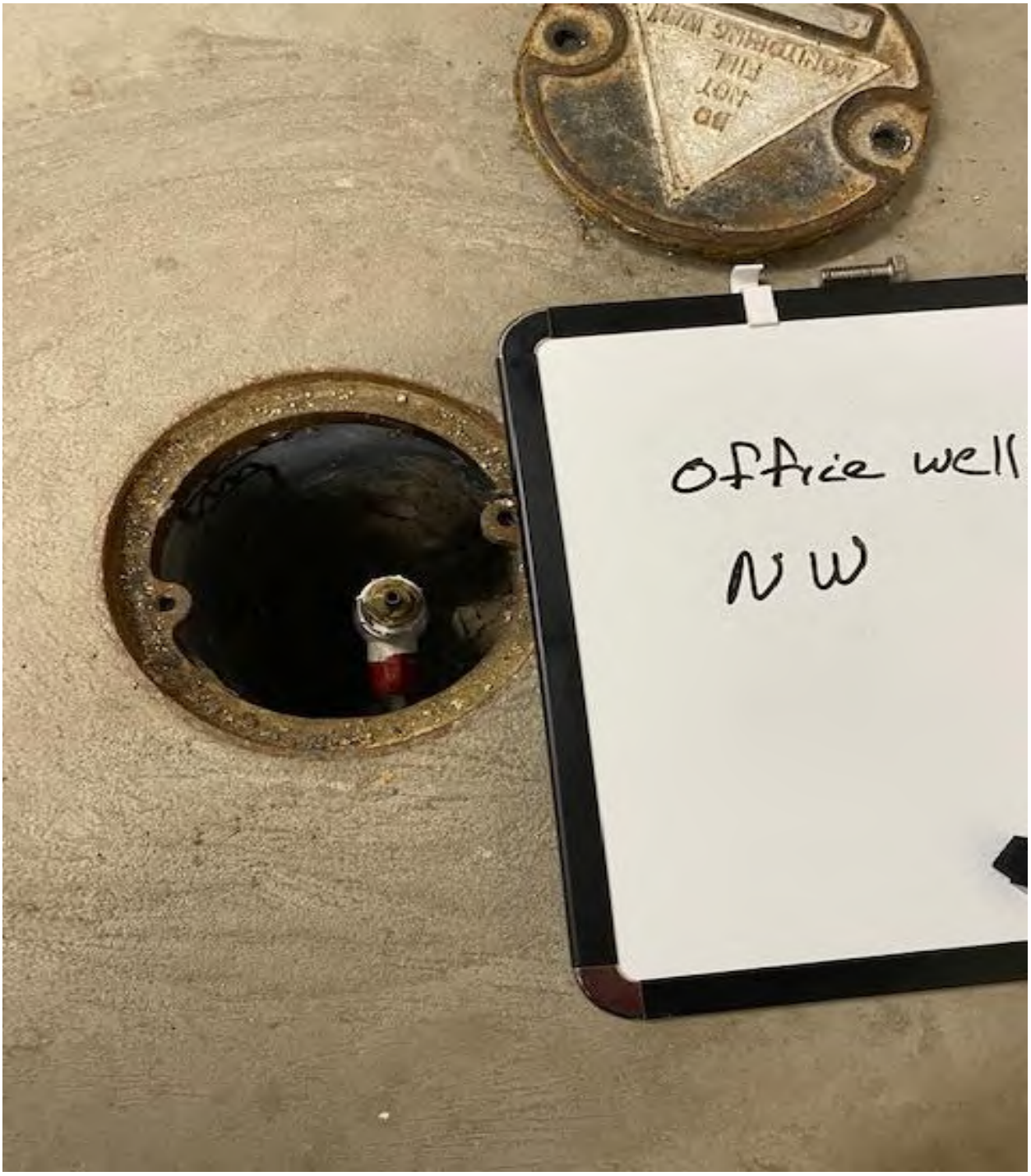


Photo 21: Northwest vapor sampling point in office of the Secure Self Storage building.

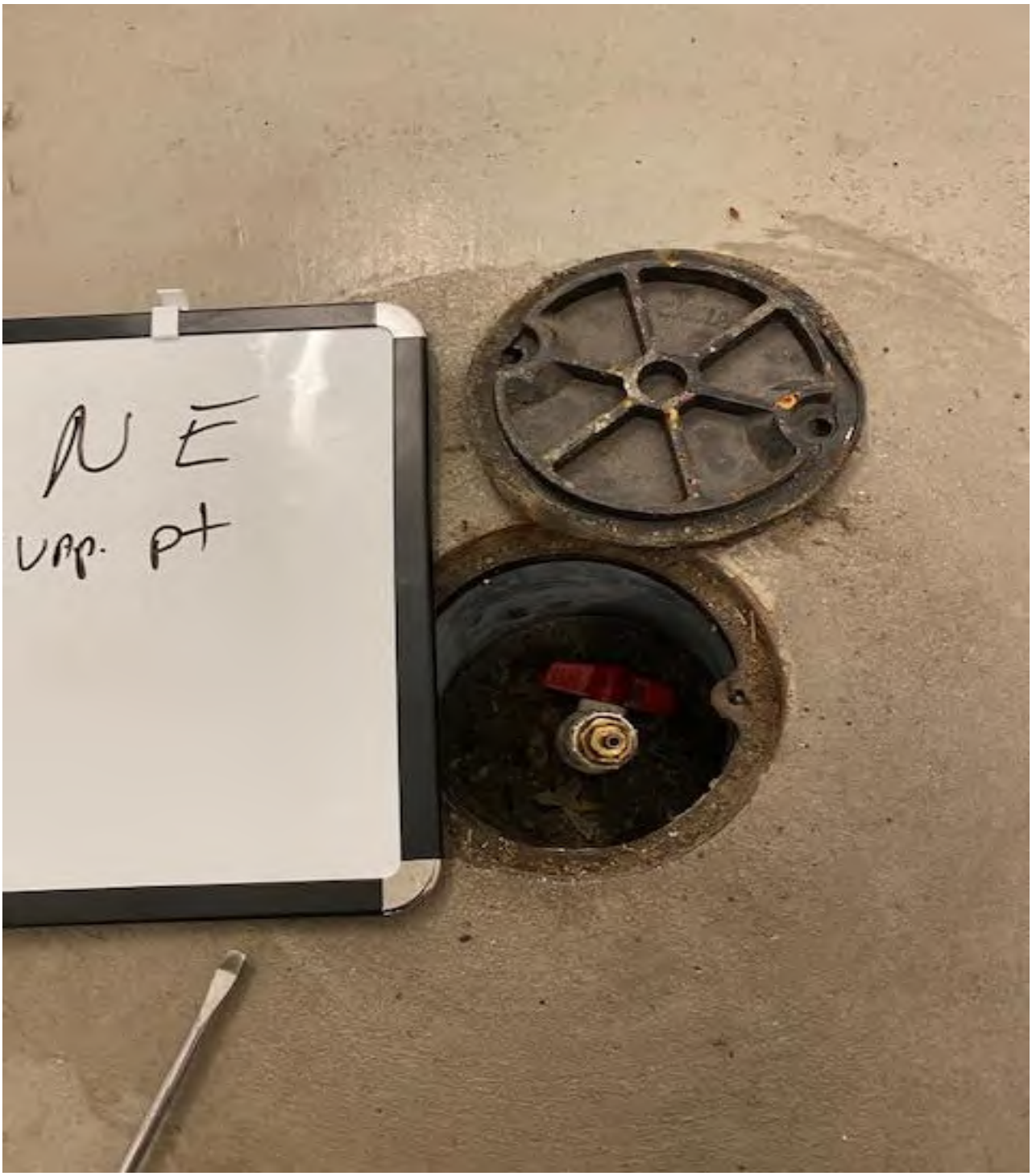


Photo 22: Northeast vapor sampling point in Secure Self Storage building.

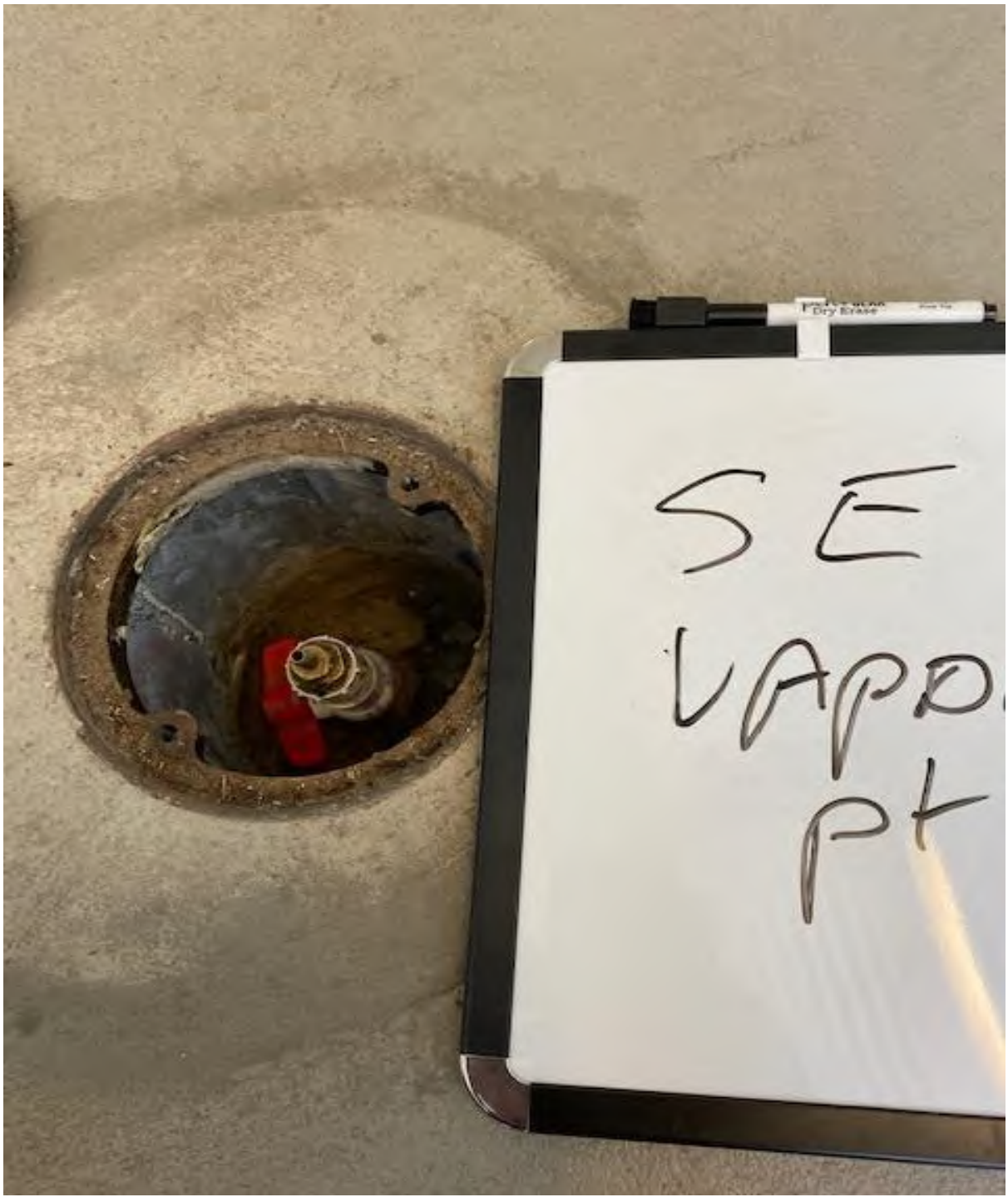


Photo 23: Southeast vapor sampling point in the Secure Self Storage building.

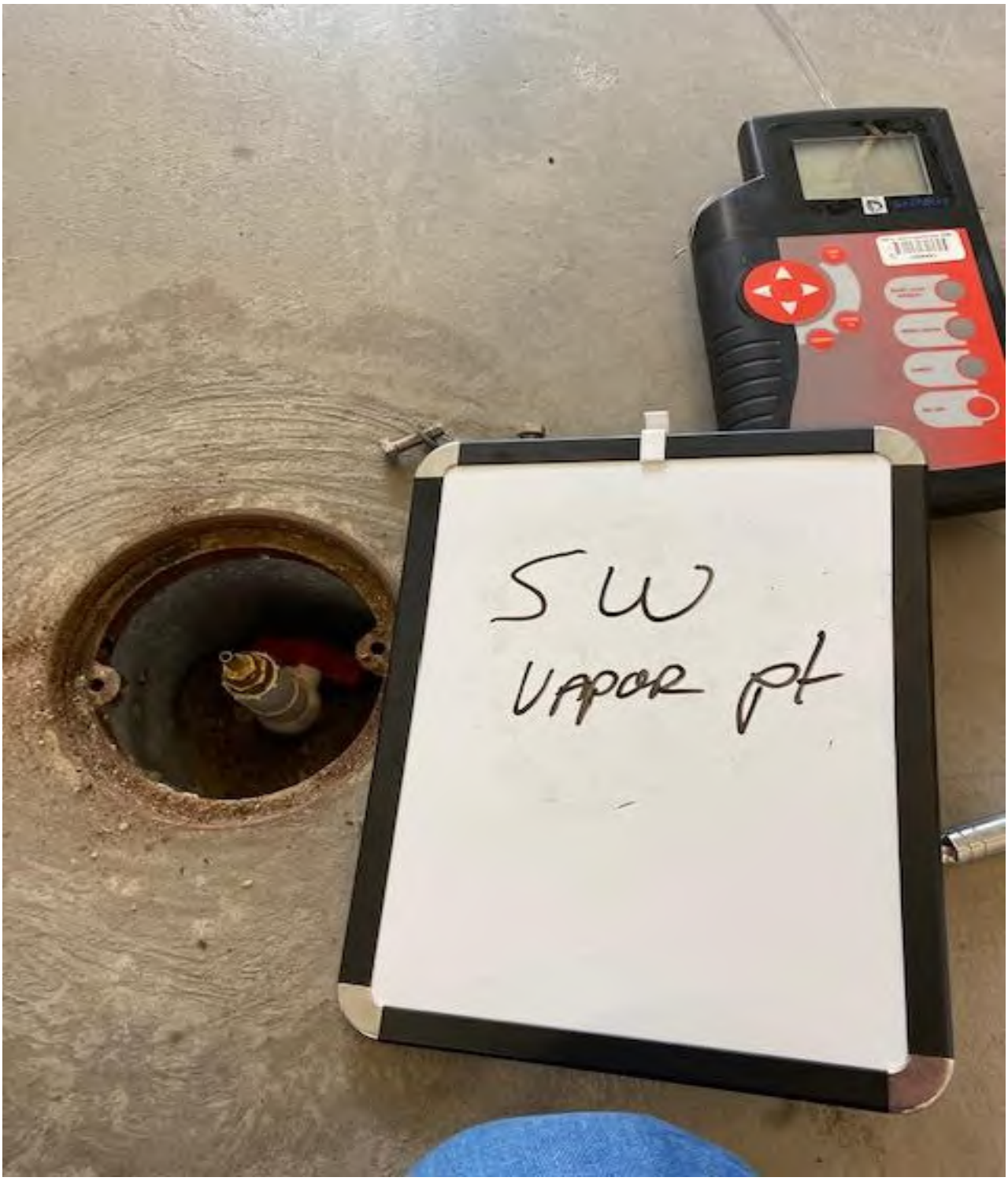


Photo 24: Southwest vapor sampling point in the Secure Self Storage building.



Photo 25: Checked SSD System to determine if air was being discharged from top exhaust vent. Strong air flow was observed at this roof vent.

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December 7, 2022

Mr. Glenn May, PG
Engineering Geologist II
New York State Department of Environmental Conservation
Region 9
270 Michigan Avenue
Buffalo, New York 14203-2999

Subject: Annual 2022 Site Inspection and Certification Letter Report
FONF Expansion/Sabre Park BCP Site No. C932162

Dear Mr. May:

Atlas ATC Engineering Inc. (Atlas), on behalf of Macerich Management Company, hereby submits this Site Management Inspection Report for the Fashion Outlet Niagara Falls (FONF) / Sabre Park Brownfield Cleanup Program (BCP), Site No. C932162, located at 1900 Military Road, Niagara County, Niagara Falls, New York 14304 (hereafter referred to as Site). The inspection was completed in accordance with the Revised Site Management Plan (SMP), dated January 2020, prepared by Langan Engineering. In accordance with the New York State Department of Environmental Conservation (NYSDEC) approval of the Annual 2020 Site Inspection and Certification Letter, dated November 22, 2021, this letter represents the Annual 2022 Site Inspection and Certification Letter Report. The next Periodic Review Report is scheduled to submitted to the NYSDEC in the 1st Quarter of 2025.

ENGINEERING CONTROLS

Composite Cover System

Exposure to residual soil/fill is prevented by the construction of an engineered composite cover system that is constructed at the Site. The composite cover system is comprised of the following four items: (1) minimum 4-inch thick asphalt cap at parking areas, (2) concrete cap at building slabs and sidewalks, (3) minimum 1-foot thick clean imported topsoil cover at all landscaped areas, and (4) combination of a minimum 6-inch thick clay cap and 1-foot thick clean imported topsoil cover at detention ponds.

Vapor Barrier System

Exposure to soil vapor is prevented by a Vapor Barrier System that has been built on the Site. The vapor barrier was installed beneath the Life Storage building and FONF mall expansion building. This Vapor Barrier System was constructed on-Site and consisted of a 20-mil Stego Wrap Vapor Barrier, manufactured by Stego Industries LLC. The vapor barrier was installed underneath the building concrete slab-on-grade. All vapor barrier seams, penetrations, and repairs were sealed in accordance with the manufacturer's recommendations

and instructions. The proposed design/layout and oversight of the vapor barrier installation was performed by the consultant of record, Langan Engineering.

Sub-Slab Depressurization System

Exposure to soil vapor is prevented by a Sub-Slab Depressurization System (SSDS) that has been built on the Site. An active SSDS is present beneath the Life Storage building and a passive SSDS is present beneath the FONF mall expansion.

The active SSDS at the Life Storage building consists of a 24-inch diameter suction pit containing 1 to 1-1/4 inch coarse aggregate placed in a central location beneath the concrete slab and within the ¾ inch coarse aggregate subbase material. Vapors are conveyed via a 4-inch Schedule 40 PVC pipe to an Airtech regenerative blower, model 3BA1400-7AT06 producing a minimum of 75 cfm at 24-inches water column. The air exhaust extends to the roof line, a minimum of 25-feet from any air intake ports.

The passive SSDS at the FONF Expansion building consists of six (6) 24-inch diameter suction pits containing 1 to 1-1/4 inch coarse aggregate placed beneath the concrete slab and within the ¾ inch coarse aggregate subbase material. Vapors are conveyed via 4-inch Schedule 40 PVC piping to three (3) wind driven exhaust fans located on the roof.

INSTITUTIONAL CONTROLS

A series of Institutional Controls are required under the Remedial Action to assure permanent protection of public health by eliminating human exposure to residual materials remaining at the site. The Institutional Controls (ICs) for the Remedial Action are:

- Compliance with the Environmental Easements and this SMP by the Grantor and the Grantor's successors and assigns;
- All Engineering Controls (ECs) must be operated and maintained as specified in the SMP;
- All ECs on the Site must be inspected at a frequency and in a manner defined in the SMP.
- Sub-slab pressure field monitoring and other environmental or public health monitoring must be performed as defined in the SMP;
- Data and information pertinent to management of the Site must be reported at the frequency and in a manner defined in the SMP;
- On-site and off-site environmental monitoring devices must be protected and replaced as necessary to ensure the devices function in the manner specified in the SMP; and
- Institutional Controls identified in the Environmental Easements may not be discontinued without an amendment to or extinguishment of the Environmental Easements.

INSPECTION NARRATIVE

The site inspection was performed by Jeff Strum, with Atlas, and the date of the inspection was September 29, 2022.

During the site inspection, Mr. Strum was escorted by Joe Schultz, with FONF and Angela (last name withheld), with Life Storage. ATC inspected the composite cover system including the asphalt parking area and landscape areas, which was found to be undisturbed with no evidence of prior excavation. The building concrete slab-on-grade and sidewalks were found to be intact with no evidence of physical damage or cracks equal to or greater than 1/4-inch in diameter.

ATC inspected the operation of both the passive SSDS at the FONF expansion and the active SSDS at the Life Storage Building. The passive SSDS was found to be operating properly at the time of the inspection and free of any obstructions. In addition, no HVAC air intakes or supply registers were found within 25 feet of the exhaust vents. The active SSDS blower at the Life Storage Building was observed to be operational at the time of the inspection on September 29th. The active SSDS blower was observed to be operating properly with no unusual or excessive noise. No air leaks were observed in accessible air conveyance piping and fittings. In addition, communication beneath the building floor was demonstrated by measured negative pressures readings ranging from 0.002 to 0.012 inches water. However, the blower alarm was observed not to be functioning properly.

Inspection Checklists are present in Attachment A, and Inspection Photographic Log is present in Attachment B.

This report will be included with the Periodic Review Report to be submitted to the Department in the 1st Quarter of 2025.

DEVIATIONS IN PERFORMANCE OF ENGINEERING AND INSTITUTIONAL CONTROLS

The following deviations in the performance of the engineering and institutional controls were identified.

- In April 2022, site work for the installation of four electric vehicle (EV) charging stations and associated electrical equipment in a landscaped area in the northwest parking lot, north of the former Elks' Lodge commenced. All construction activities were completed in conformance with the NYSDEC approved Excavation Work Plan (EWP), dated December 1, 2021. The plan was approved by the NYSDEC on February 18, 2022. The scope of work included excavating utility trenches in the paved parking lot. During intrusive excavation activities, the soil was field screened by an Atlas geoscientist using visual and olfactory methods. In addition, the soil was field screened for volatile organic compounds (VOCs) using a photoionization detector (PID) instrument. No significantly impacted soil was encountered during excavation activities. Two stationary air-monitoring stations were set up at the work zone perimeter (one upwind and one downwind) during intrusive Site work for continuous monitoring. After installation of the electric vehicle charging stations the cover system was restored in accordance the approved EWP. The Intrusive Activities Report dated September 22, 2022 is present in Attachment C.

- The non-operational alarm at the Life Storage SSDS. The maintenance manager for the Life Storage was notified of the deficiency.

NEXT INSPECTION

The next Site Management inspection will be performed in September 2023.

CERTIFICATION

I, Denise Cosenza certify the following:

- **I am a Qualified Environmental Professional;**
- **I oversaw and prepared this Site Inspection and Certification Letter Report;**
- **Engineering Controls or Institutional Controls employed at the Site continue to be in place and perform as designed and continue to be protective of human health and the environment;**
- **Activities on the Site that have disturbed residual soil/fill material have been in accordance with the Soil/Materials Management Plan in the SMP;**
- **Nothing has occurred on the Site that impairs the ability of Engineering Controls or Institutional Controls to protect public health and the environment;**
- **Compliance with the Site Management Plan has been maintained;**
- **Vegetable gardening and farming in residual soils has been prevented;**
- **Groundwater underlying the Site is not being utilized without treatment rendering it safe for the intended purpose has been prevented; and**
- **The Site has not been used for a higher level of use other than the commercial and industrial use addressed by the long term IC/ECs included in the SMP.**

If you have any questions or need any additional information, please do not hesitate to contact me at 212-284-0613 or email at denise.cosenza@oneatlas.com.

Sincerely,
ATC Group Services LLC



Denise Cosenza
Project Manager
Direct Line: 212-284-0613
Email: denise.cosenza@oneatlas.com



Chris Tomasello. P.G.
Environmental Division Manager
Direct Line: 516-861-5033
Email: Chris.tomasello@atcgs.com

Attachments: Inspection Checklists
Inspection Photographs, September 29, 2022

ATTACHMENT A

INSPECTION CHECKLISTS

SITE WIDE INSPECTION CHECKLIST

Site Name: FONF/Sabre Park BCP Location: Niagara Falls, NY Project Numbe Z214JMMC08

Inspector Name: Jeff Strum Date: September 29, 2022 Weather Conditions: Partly Cloudy

Reason for Inspection (i.e., routine, maintenance, severe condition, etc.): Routine: 2022 Annual Inspection

Check one of the following: **Y:** Yes **N:** No **NA**: Not Applicable

	Inspection Items	Y	N	NA	Normal Situation	Remarks
	General					
1	What are the current site conditions?	--	--	--	--	Good, Normal site operations as a shopping center.
2	Are all applicable site records (e.g. documentation of construction activity, most current easement, etc.) complete and up to date?	**X**			Y	
	Easement					
3	Has site use (commercial) remained the same?	**X**			Y	
4	Does it appear that all environmental easement restrictions have been followed?	**X**			Y	
	Impermeable Cap					
5	Are there any indications of a breach in the capping system at the time of this inspection?		**X**		N	
6	Are there any cracks in the building slabs?		**X**		N	
7	Are there any cracks in the building walls?		**X**		N	
8	Is there any construction activity, or indication of any construction activity within the past certification year (including any tenant improvements), that included the breaching of the capping system, on-site at the time of this inspection?		**X**		N	
9	If YES to number 8, is there documentation that the Soil Management Plan, HASP, and CAMP for the site was/is being followed?			**X**	NA if N to 8/ Y if Y to 8	

*** **If the answer to any of the above questions indicate non-compliance with ECs for the site, additional remarks must be provided and, where applicable, documentation attached to this checklist detailing additional inspection and repair activities.**

Additional Remarks

Minimum Inspection Schedule: Site-wide inspections will be conducted annually, per certification year, at a minimum. Additional inspections will also be conducted at times of severe condition events. All inspection events will utilize this checklist.

ATLAS

FONF PASSIVE SSD SYSTEM INSPECTION CHECKLIST

Site Name: FONF/Sabre Park BCP Location: Niagara Falls, NY Project Number: Z214JMMC08

Inspector Name: Jeff Strum Date: September 29, 2022 Weather Conditions: Partly cloudy

Reason for Inspection (i.e., routine, maintenance, severe condition, etc.): Annual Inspection 2022

Check one of the following: **Y:** Yes **N:** No **NA**: Not Applicable

	General Inspection	Y	N	NA	Normal Situation	Remarks
Records						
1	Is the Operations and Maintenance Plan readily available on-site?	X			Y	
2	Based on site records, when was the last inspection, mainentance or repair event?				exceed mininum schedule	9/28/2021
3	Based on site records, was the system inoperational for any amount of time since the last inspection, maintenance, or reprair event? For how long? Provide details		X		N	
General System						
4	Is there any construction activity, or indication of construction activity within the past certification year (including tenant improvements), that included the breaching of the floor slab, on-site at the time of this inspection?		X		N	
5	If Yes to number 4, is there documentation that the Site Management Plan, HASP, and CAMP for the site was/is being followed?			X	NA if N to 4/ Y if Y to 4	
6	If Yes to number 4, is there documentation that all breaches in the floor slab have been sealed, with vapor barrier repaired?			X	NA if N to 4/ Y if Y to 4	
7	Does all visible SSD piping appear intact and undamaged?	X			Y	
8	Have any intake points been constructed at the roof near (less than 10 feet) the passive SSD exhaust fans discharge points?		X		N	
9	Are the passive SSD exhaust fans active at the time of inspection?	X			Y	

FONF PASSIVE SSD SYSTEM INSPECTION CHECKLIST

Check one of the following: **Y:** Yes **N:** No **NA**: Not Applicable

	General Inspection	Y	N	NA	Normal Situation	Remarks
Records						
10	Are the SSD exhaust fans operating per design, free of obstructions, and spinning/rotating under the power of wind?	**X**			Y	
11	Are the passive SSD exhaust fans expelling air at the discharge points?	**X**			Y	

If the answer to any of the above questions indicate the SSD system is non-operational or malfunctioning, or that this EC is in non-compliance, additional remarks must be provided and, where applicable, documentation attached to this checklist detailing additional inspection and repair activities.

Additional Remarks

Minimum Inspection Schedule: Inspection of blowers and other SSD equipment will be conducted on an annual basis to estabilish that the system is operational and performing within design specfications. Unscheduled inspections and/or sampling may take place when a suspected failure of the SSD system has been reported or an emergency occurs that is deemed likely to affect the operation of the system. The minimum schedule may be revised, as necessary, following the first certification year. All inspection events will utilize this checklist.

SECURE STORAGE ACTIVE SSD SYSTEM INSPECTION CHECKLIST

Site Name: FONF/Sabre Park BCP Location: Niagara Falls, NY Project Number: Z214JMMC08

Inspector Name: Jeff Strum Date: September 29, 2022 Weather Conditions: Partly Cloudy

Reason for Inspection (i.e., routine, maintenance, severe condition, etc.): Annual Inspection 2022

Check one of the following: **Y:** Yes **N:** No **NA**: Not Applicable

	General Inspection	Y	N	NA	Normal Situation	Remarks
Records						
1	Is the Operations and Maintenance Plan readily available on-site?	X			Y	
2	Based on site records, when was the last inspection, mainentance or repair event?				Date not to exceed mininum schedule	9/28/2021
3	Based on site records, was the system inoperational for any amount of time since the last inspection, maintenance, or reprair event? For how long? Provide details		X		N	
Alarm System						
4	Did the alarm lights indicate that the system is operational?		X		Y	
5	Did manual tripping of alarm system indicate that the alarm is functional?		X		Y	
General System						
6	Is there any construction activity, or indication of construction activity within the past certification year (including tenant improvements), that included the breaching of the floor slab, on-site at the time of this inspection?		X		N	
7	If Yes to number 6, is there documentation that the Site Management Plan, HASP, and CAMP for the site was/is being followed?			X	NA if N to 4/ Y if Y to 4	
8	If Yes to number 6, is there documentation that all breaches in the floor slab have been sealed, with vapor barrier repaired?			X	NA if N to 4/ Y if Y to 4	
9	Does all visible SSD piping appear intact and undamaged?	X			Y	
10	Have any intake points been constructed at the roof near (less than 10 feet) the passive SSD exhaust fans discharge points?		X		N	

SECURE STORAGE ACTIVE SSD SYSTEM INSPECTION CHECKLIST

Check one of the following: **Y:** Yes **N:** No **NA**: Not Applicable

	General Inspection	Y	N	NA	Normal Situation	Remarks
Records						
11	Is the SSD blower operational at the time of the inspection?	**X**			Y	
12	What are the micro-manometer readings at each monitoring point?				< 0 in/H20 (in/Hg)	Northeast Monitoring Point: .001 Northwest Monitoring Point: .002 Southeast Monitoring Point: .001 Southwest Monitoring Point: .001
13	Is the SSD blower expelling air at the discharge point?	**X**			Y	

If the answer to any of the above questions indicate the SSD system is non-operational or malfunctioning, or that this EC is in non-compliance, additional remarks must be provided and, where applicable, documentation attached to this checklist detailing additional inspection and repair activities.

Additional Remarks

Maintenance manager at the facility notified of the issue with the non-operational alarm light

Minimum Inspection Schedule: Inspection of blowers and other SSD equipment will be conducted on an annual basis to estabilish that the system is operational and performing within design specfications. Unscheduled inspections and/or sampling may take place when a suspected failure of the SSD system has been reported or an emergency occurs that is deemed likely to affect the operation of the system. The minimum schedule may be revised, as necessary, following the first certification year. All inspection events will utilize this checklist.

ATTACHMENT B

INSPECTION PHOTOGRAPHIC LOG
SEPTEMBER 29, 2022

Photo Log
FONF Mall & Secure Storage
Niagara Falls, NY
Annual Inspection – September 29, 2022



Photo 1: First vapor point in FONF Expansion hallway.



Photo 2: Crack in concrete by service entrance 7 of FONF Expansion.

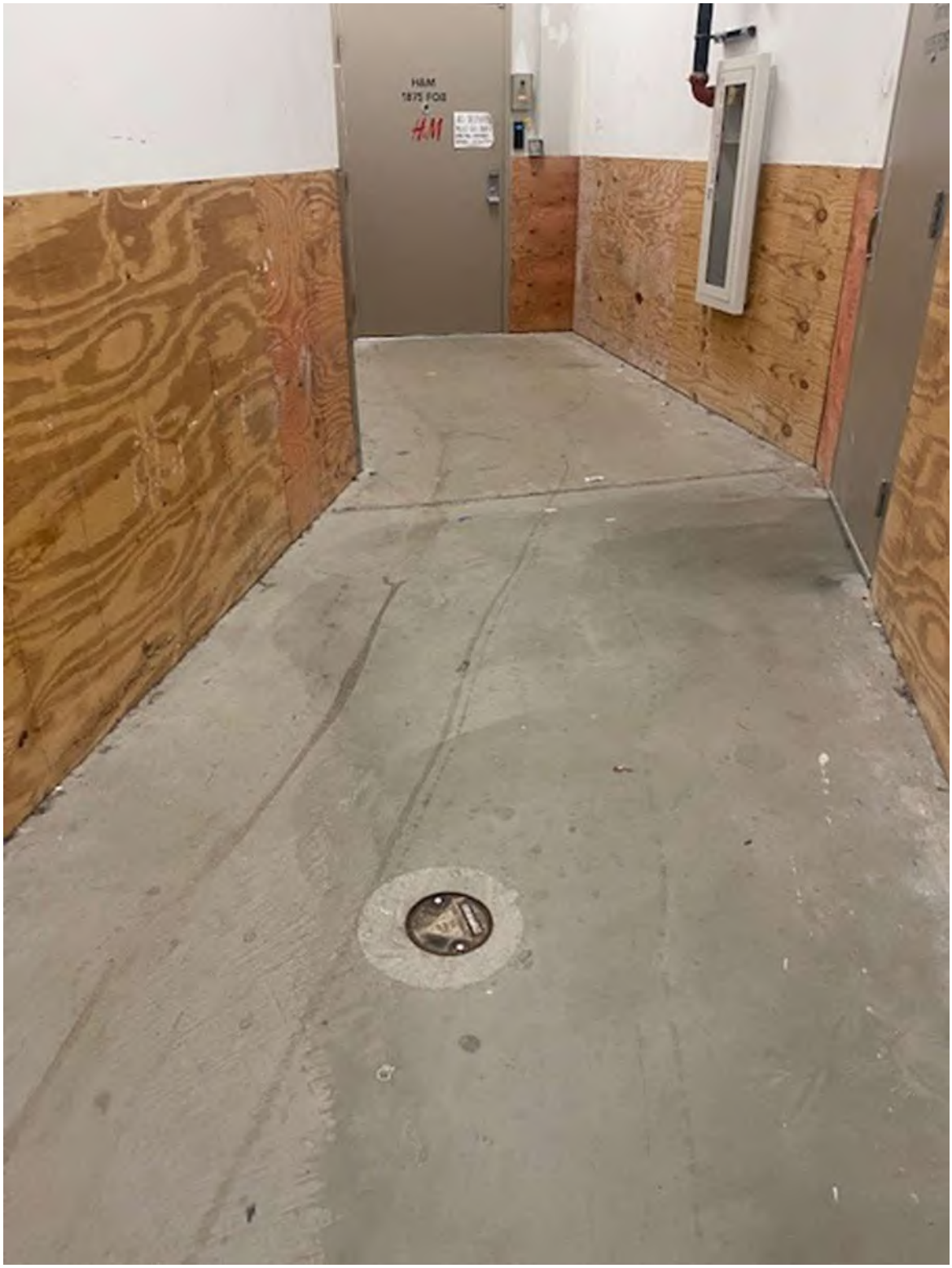


Photo 3: Vapor point #3 within FONF Expansion.

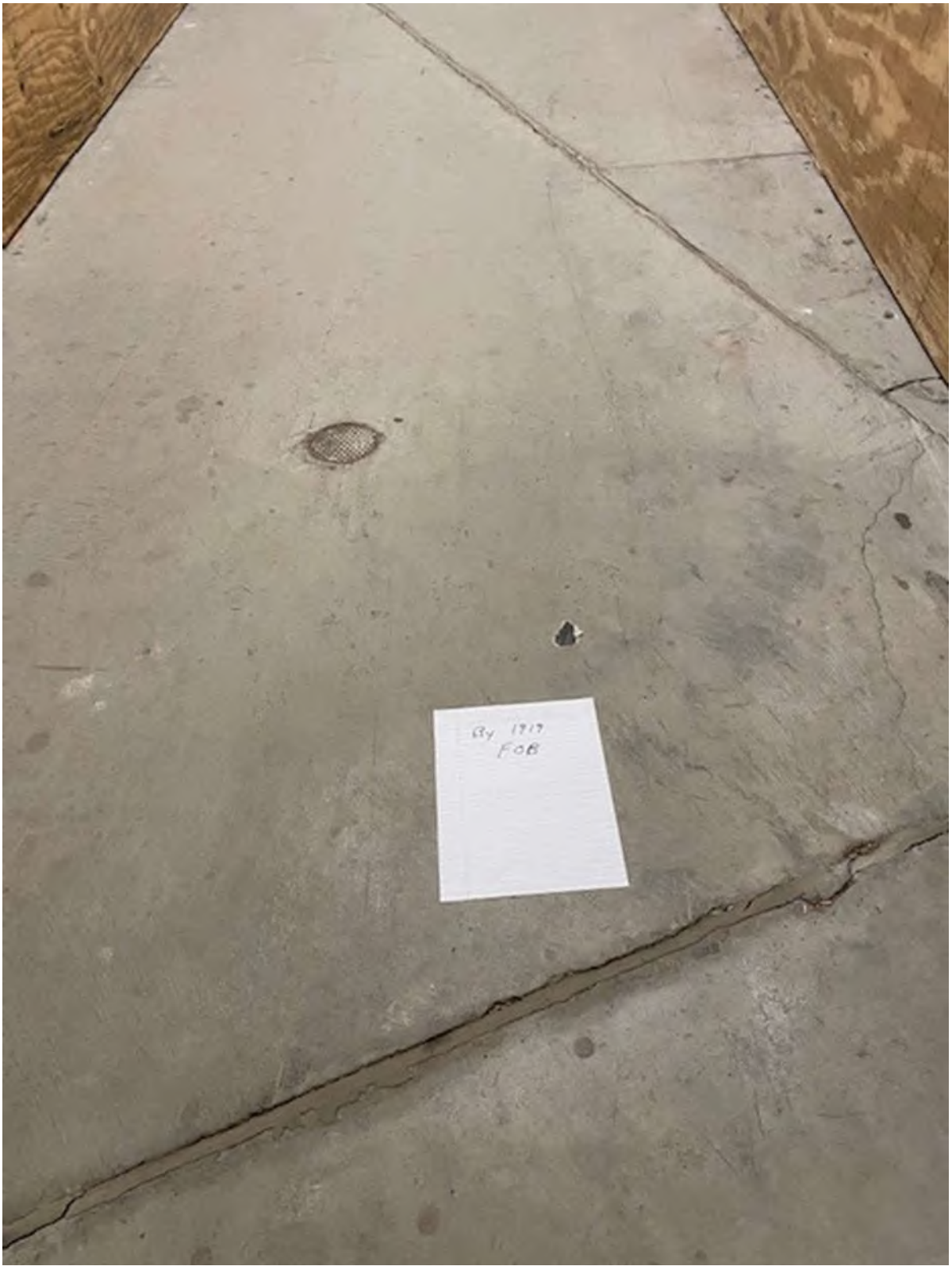


Photo 4: Crack in concrete by 1919 FOB.



Photo 5: Vapor point #5 by Electrical Room and Service Entrance #4 of FONF Expansion.



Photo 6: Passive Exhaust Fan #1 on roof of FONF Expansion, above Paint Room.



Photo 7: *Passive* Exhaust Fan #2 on roof of FONF Expansion, above Service Entrance #4 Paint Room.



Photo 8: Exhaust Fan #3 on roof of FONF Expansion, above Beef Jerky Store.



Photo 9: Exhaust Fan #4 on roof of FONF Expansion, across from H&M.



Photo 10: SSD system at Secure Self Storage facility.



Photo 11: Vent pipe for SSD System at Secure Self Storage.



Photo 12: Close look at pump motor for Secure Self Storage SSD system.



Photo 13: Piping for Secure Self Storage SSD System.



Photo 14: View of SSD System enclosure at the Secure Self Storage building.



Photo 15: Northeast vapor sampling point in Secure Self Storage building.



Photo 16: Southeast vapor sampling point in the Secure Self Storage building.



Photo 17: Southwest vapor sampling point in the Secure Self Storage building.

ATTACHMENT C

INTRUSIVE ACTIVITIES REPORT SUMMARY

Electrify America Installation of Vehicle Charging Stations
FASHION OUTLET OF NIAGARA FALLS (FONF)
FONF EXPANSION/SABRE PARK SITE
NIAGARA FALLS, NEW YORK

SEPTEMBER 22, 2022

104 East 25th Street, 8th Floor
New York, NY 10010
Telephone 212-353-8280
Fax 212-353-8306
www.oneatlas.com

October 24, 2023

Mr. Glenn May, PG
Engineering Geologist II
New York State Department of Environmental Conservation
Region 9
270 Michigan Avenue
Buffalo, New York 14203-2999

Subject: Annual 2023 Site Inspection and Certification Letter Report
FONF Expansion/Sabre Park BCP Site No. C932162

Dear Mr. May:

Atlas ATC Engineering Inc. (Atlas), on behalf of Macerich Management Company, hereby submits this Site Management Inspection Report for the Fashion Outlet Niagara Falls (FONF) / Sabre Park Brownfield Cleanup Program (BCP), Site No. C932162, located at 1900 Military Road, Niagara County, Niagara Falls, New York 14304 (hereafter referred to as Site). The inspection was completed in accordance with the Revised Site Management Plan (SMP), dated January 2020, prepared by Langan Engineering. In accordance with the New York State Department of Environmental Conservation (NYSDEC) approval of the Annual 2020 Site Inspection and Certification Letter, dated November 22, 2021, this letter represents the Annual 2023 Site Inspection and Certification Letter Report. The next Periodic Review Report is scheduled to be submitted to the NYSDEC in the 1st Quarter of 2025.

ENGINEERING CONTROLS

Composite Cover System

Exposure to residual soil/fill is prevented by the construction of an engineered composite cover system that is constructed at the Site. The composite cover system is comprised of the following four items: (1) minimum 4-inch thick asphalt cap at parking areas, (2) concrete cap at building slabs and sidewalks, (3) minimum 1-foot thick clean imported topsoil cover at all landscaped areas, and (4) combination of a minimum 6-inch thick clay cap and 1-foot thick clean imported topsoil cover at detention ponds.

Vapor Barrier System

Exposure to soil vapor is prevented by a Vapor Barrier System that has been built on the Site. The Vapor Barrier was installed beneath the Extra Space Storage (former Life Storage) building and FONF mall expansion building. This Vapor Barrier System was constructed on-Site and consisted of a 20-mil Stego Wrap Vapor Barrier, manufactured by Stego Industries LLC. The Vapor Barrier was installed underneath the building concrete slab-on-grade. All vapor barrier seams, penetrations, and repairs were sealed in accordance with the manufacturer's recommendations and instructions. The proposed design/layout and oversight of the vapor barrier installation was performed by the consultant of record, Langan Engineering.

Sub-Slab Depressurization System

Exposure to soil vapor is prevented by a Sub-Slab Depressurization System (SSDS) that has been built on the Site. An active SSDS is present beneath the Extra Space Storage building and a passive SSDS is present beneath the FONF mall expansion.

The active SSDS at the Extra Space Storage (former Life Storage) building consists of a 24-inch diameter suction pit containing 1 to 1-1/4 inch coarse aggregate placed in a central location beneath the concrete slab and within the ¾ inch coarse aggregate subbase material. Vapors are conveyed via a 4-inch Schedule 40 PVC pipe to an Airtech regenerative blower, model 3BA1400-7AT06 producing a minimum of 75 cfm at 24-inches water column. The air exhaust extends to the roof line, a minimum of 25-feet from any air intake ports.

The passive SSDS at the FONF Expansion building consists of six (6) 24-inch diameter suction pits containing 1 to 1-1/4 inch coarse aggregate placed beneath the concrete slab and within the ¾ inch coarse aggregate subbase material. Vapors are conveyed via 4-inch Schedule 40 PVC piping to three (3) wind driven exhaust fans located on the roof.

INSTITUTIONAL CONTROLS

A series of Institutional Controls are required under the Remedial Action to assure permanent protection of public health by eliminating human exposure to residual materials remaining at the site. The Institutional Controls (ICs) for the Remedial Action are:

- Compliance with the Environmental Easements and this SMP by the Grantor and the Grantor's successors and assigns;
- All Engineering Controls (ECs) must be operated and maintained as specified in the SMP;
- All ECs on the Site must be inspected at a frequency and in a manner defined in the SMP.
- Sub-slab pressure field monitoring and other environmental or public health monitoring must be performed as defined in the SMP;
- Data and information pertinent to management of the Site must be reported at the frequency and in a manner defined in the SMP;
- On-site and off-site environmental monitoring devices must be protected and replaced as necessary to ensure the devices function in the manner specified in the SMP; and
- Institutional Controls identified in the Environmental Easements may not be discontinued without an amendment to or extinguishment of the Environmental Easements.

INSPECTION NARRATIVE

The site inspection was performed by Jeff Strum, an Atlas employee, and the date of the inspection was September 26, 2023.

During the site inspection, Mr. Strum was escorted by Joe Schultz, with FONF and was unaccompanied at the Extra Space Storage (former Life Storage) facility. ATC inspected the composite cover system including the asphalt parking area and landscape areas, which was found to be undisturbed with no evidence of prior excavation. The building concrete slab-on-grade and sidewalks were found to be intact with no evidence of physical damage or cracks equal to or greater than 1/4-inch in diameter.

ATC inspected the operation of both the passive SSDS at the FONF expansion and the active SSDS at the Extra Space Storage Building. The passive SSDS was found to be operating properly at the time of the inspection and free of any obstructions. In addition, no HVAC air intakes or supply registers were found within 25 feet of the exhaust vents. The active SSDS blower at the Extra Space Storage Building was observed to be operational at the time of the inspection on September 26th. The active SSDS blower was observed to be operating properly with no unusual or excessive noise. No air leaks were observed in accessible air conveyance piping and fittings. In addition, communication beneath the building floor was demonstrated by measured negative pressures readings ranging from 0.304 to 0.313 inches water. However, the blower alarm was observed not to be functioning properly.

Inspection Checklists are present in Attachment A, and Inspection Photographic Log is present in Attachment B.

This report will be included with the Periodic Review Report to be submitted to the Department in the 1st Quarter of 2025.

DEVIATIONS IN PERFORMANCE OF ENGINEERING AND INSTITUTIONAL CONTROLS

No deviations in the performance of the engineering and institutional controls were identified, except for the non-operational alarm at the Extra Space Storage SSDS. The maintenance manager for the Secure Self Storage was notified of the deficiency.

NEXT INSPECTION

The next Site Management inspection will be performed in September 2024.

CERTIFICATION

I, Denise Cosenza certify the following:

- **I am a Qualified Environmental Professional;**
- **I oversaw and prepared this Site Inspection and Certification Letter Report;**

- **Engineering Controls or Institutional Controls employed at the Site continue to be in place and perform as designed and continue to be protective of human health and the environment;**
- **Activities on the Site that have disturbed residual soil/fill material have been in accordance with the Soil/Materials Management Plan in the SMP;**
- **Nothing has occurred on the Site that impairs the ability of Engineering Controls or Institutional Controls to protect public health and the environment;**
- **Compliance with the Site Management Plan has been maintained;**
- **Vegetable gardening and farming in residual soils has been prevented;**
- **Groundwater underlying the Site is not being utilized without treatment rendering it safe for the intended purpose has been prevented; and**
- **The Site has not been used for a higher level of use other than the commercial and industrial use addressed by the long term IC/ECs included in the SMP.**

If you have any questions or need any additional information, please do not hesitate to contact me at 212-284-0613 or email at denise.cosenza@oneatlas.com.

Sincerely,
ATC Group Services LLC



Denise Cosenza
Project Manager
Direct Line: 212-284-0613
Email: denise.cosenza@oneatlas.com



Chris Tomasello. P.G.
Environmental Division Manager
Direct Line: 516-861-5033
Email: Chris.tomasello@atcgs.com

Attachments: Inspection Checklists
Inspection Photographs, September 26, 2023

ATTACHMENT A

INSPECTION CHECKLISTS

APPENDIX I

Site-Wide Inspection Checklist

SITE WIDE INSPECTION CHECKLIST

Site Name: FONF/Sabre Park BCP Location: Niagara Falls, NY Project Numbe Z214JMMC08

Inspector Name: James Storm Date: 9/26/23 Weather Conditions: Partly cloudy / Sc ny

Reason for Inspection (i.e., routine, maintenance, severe condition, etc.): Routine: 2023 Inspection

Check one of the following: Y: Yes N: No NA: Not Applicable

	Inspection Items	Y	N	NA	Normal Situation	Remarks
	General					
1	What are the current site conditions?	--	--	--	--	Good, Normal site operations as a shopping center.
2	Are all applicable site records (e.g. documentation of construction activity, most current easement, etc.) complete and up to date?				Y	Don't Know of Any
	Easement					
3	Has site use (commercial) remained the same?				(Y)	
4	Does it appear that all environmental easement restrictions have been followed?				(Y)	
	Impermeable Cap					
5	Are there any indications of a breach in the capping system at the time of this inspection?				(N)	
6	Are there any cracks in the building slabs?				N	some minor ones but filled
7	Are there any cracks in the building walls?				(N)	
8	Is there any construction activity, or indication of any construction activity within the past certification year (including any tenant improvements), that included the breaching of the capping system, on-site at the time of this inspection?				N	One patch of Asphalt in the past yr. near SE-2. Refer to Picture
9	If YES to number 8, is there documentation that the Soil Management Plan, HASP, and CAMP for the site was/is being followed?				NA if N to 8/ Y if Y to 8	Dont Know

*** **If the answer to any of the above questions indicate non-compliance with ECs for the site, additional remarks must be provided and, where applicable, documentation attached to this checklist detailing additional inspection and repair activities.**

Additional Remarks

Minimum Inspection Schedule: Site-wide inspections will be conducted annually, per certification year, at a minimum. Additional inspections will also be conducted at times of severe condition events. All inspection events will utilize this checklist.

ATLAS

APPENDIX J-2

FONF Mall Passive SSD System Inspection Form

FONF PASSIVE SSD SYSTEM INSPECTION CHECKLIST

Site Name: FONF/Sabre Park BCP Location: Niagara Falls, NY Project Number: Z214JMMC08

Inspector Name: James Sturgeon Date: 9/26/23 Weather Conditions: Partly cloudy/sunny

Reason for Inspection (i.e., routine, maintenance, severe condition, etc.): Annual Inspection 2023

Check one of the following: Y: Yes N: No NA: Not Applicable

	General Inspection	Y	N	NA	Normal Situation	Remarks
Records						
1	Is the Operations and Maintenance Plan readily available on-site?				Y	Not that I know of
2	Based on site records, when was the last inspection, mainentance or repair event?				exceed minimum schedule	9/29/22
3	Based on site records, was the system inoperational for any amount of time since the last inspection, maintenance, or reprair event? For how long? Provide details				(N)	
General System						
4	Is there any construction activity, or indication of construction activity within the past certification year (including tenant improvements), that included the breaching of the floor slab, on-site at the time of this inspection?				(N)	
5	If Yes to number 4, is there documentation that the Site Management Plan, HASP, and CAMP for the site was/is being followed?				NA if N to 4/ Y if Y to 4	
6	If Yes to number 4, is there documentation that all breaches in the floor slab have been sealed, with vapor barrier repaired?				NA if N to 4/ Y if Y to 4	
7	Does all visible SSD piping appear intact and undamaged?				(Y)	
8	Have any intake points been constructed at the roof near (less than 10 feet) the passive SSD exhaust fans discharge points?				(N)	
9	Are the passive SSD exhaust fans active at the time of inspection?				(Y)	Yes it was a windy day

FONF PASSIVE SSD SYSTEM INSPECTION CHECKLIST

Check one of the following: **Y**: Yes **N**: No **NA**: Not Applicable

	General Inspection	Y	N	NA	Normal Situation	Remarks
Records						
10	Are the SSD exhaust fans operating per design, free of obstructions, and spinning/rotating under the power of wind?				Y	
11	Are the passive SSD exhaust fans expelling air at the discharge points?				Y	

If the answer to any of the above questions indicate the SSD system is non-operational or malfunctioning, or that this EC is in non-compliance, additional remarks must be provided and, where applicable, documentation attached to this checklist detailing additional inspection and repair activities.

Additional Remarks

Minimum Inspection Schedule: Inspection of blowers and other SSD equipment will be conducted on an annual basis to estabilish that the system is operational and performing within design specfications. Unscheduled inspections and/or sampling may take place when a suspected failure of the SSD system has been reported or an emergency occurs that is deemed likely to affect the operation of the system. The minimum schedule may be revised, as necessary, following the first certification year. All inspection events will utilize this checklist.

Extra Space

APPENDIX J-1

~~Secure~~ Storage Active SSD System Inspection Form

~~SECURE~~ STORAGE ACTIVE SSD SYSTEM INSPECTION CHECKLIST

Extra Space

Site Name: FONF/Sabre Park BCP Location: Niagara Falls, NY Project Number: Z214JMMC08

Inspector Name: James Sturm Date: 9/26/23 Weather Conditions: Partly cloudy/Sunny

Reason for Inspection (i.e., routine, maintenance, severe condition, etc.): Annual Inspection 2023

Check one of the following: Y: Yes N: No NA: Not Applicable

	General Inspection	Y	N	NA	Normal Situation	Remarks
Records						
1	Is the Operations and Maintenance Plan readily available on-site?		X		Y	Doesn't seem so
2	Based on site records, when was the last inspection, mainentance or repair event?				Date not to exceed mininum schedule	9/29/22
3	Based on site records, was the system inoperational for any amount of time since the last inspection, maintenance, or reprair event? For how long? Provide details				N	Dont Know
Alarm System						
4	Did the alarm lights indicate that the system is operational?				Y	Alarm light not working
5	Did manual tripping of alarm system indicate that the alarm is functional?				Y	No Alarm went off when tripping
General System						
6	Is there any construction activity, or indication of construction activity within the past certification year (including tenant improvements), that included the breaching of the floor slab, on-site at the time of this inspection?				(N)	
7	If Yes to number 6, is there documentation that the Site Management Plan, HASP, and CAMP for the site was/is being followed?				NA if N to 4/ Y if Y to 4	
8	If Yes to number 6, is there documentation that all breaches in the floor slab have been sealed, with vapor barrier repaired?				NA if N to 4/ Y if Y to 4	
9	Does all visible SSD piping appear intact and undamaged?				(Y)	
10	Have any intake points been constructed at the roof near (less than 10 feet) the passive SSD exhaust fans discharge points?				(N)	

~~SECURE~~ STORAGE ACTIVE SSD SYSTEM INSPECTION CHECKLIST

Extra Space

Check one of the following: Y: Yes N: No NA: Not Applicable

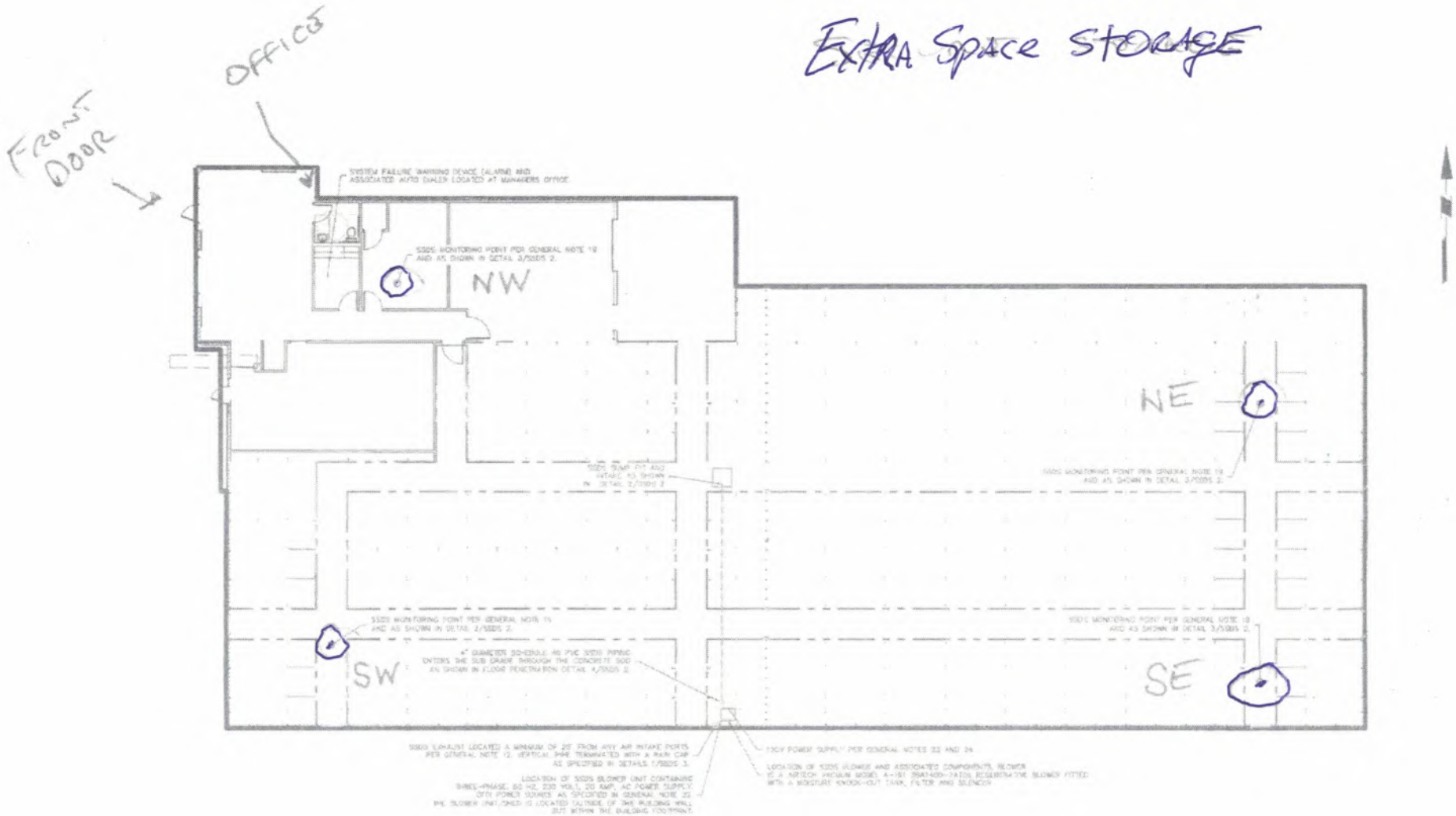
	General Inspection	Y	N	NA	Normal Situation	Remarks
Records						
11	Is the SSD blower operational at the time of the inspection?				(Y)	
12	What are the micro-manometer readings at each monitoring point?				< 0 in/H20 / (in/Hg)	Northeast Monitoring Point: -.304 in H_2O Northwest Monitoring Point: -.318 " " Southeast Monitoring Point: -.310 " " Southwest Monitoring Point: -.313 " "
13	Is the SSD blower expelling air at the discharge point?				(Y)	

If the answer to any of the above questions indicate the SSD system is non-operational or malfunctioning, or that this EC is in non-compliance, additional remarks must be provided and, where applicable, documentation attached to this checklist detailing additional inspection and repair activities.

Additional Remarks

- No leaks noticed
- Blower #2 was on & good flow at discharge pt
- Alarm light & sound not working
- Tripping Alarm did nothing

Minimum Inspection Schedule: Inspection of blowers and other SSD equipment will be conducted on an annual basis to establish that the system is operational and performing within design specfications. Unscheduled inspections and/or sampling may take place when a suspected failure of the SSD system has been reported or an emergency occurs that is deemed likely to affect the operation of the system. The minimum schedule may be revised, as necessary, following the first certification year. All inspection events will utilize this checklist.



(3) – MONITORING POINTS

ATTACHMENT B

INSPECTION PHOTOGRAPHIC LOG
SEPTEMBER 29, 2023

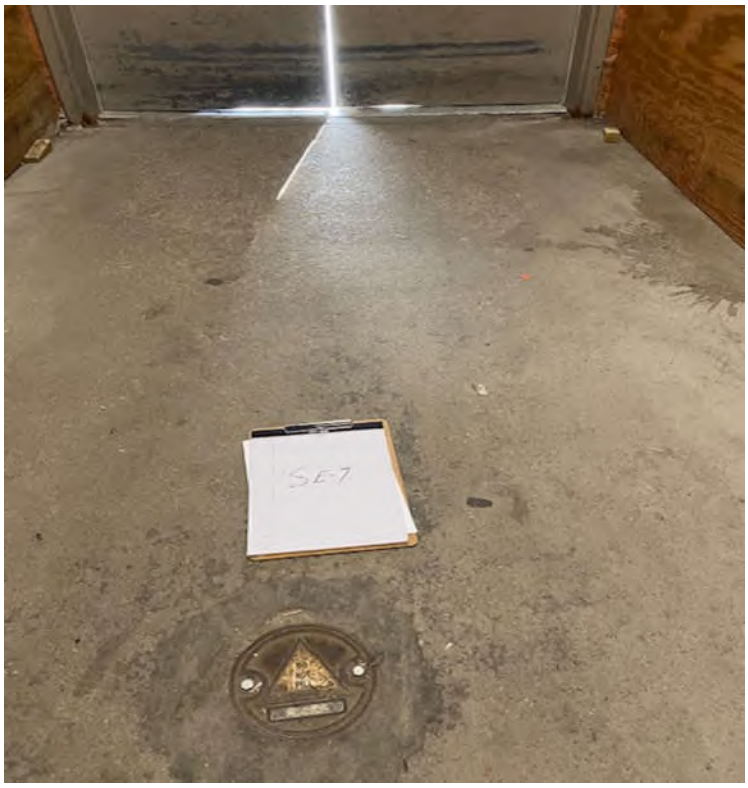


Photo 1: Vapor point near Service Entrance (SE) #7.



Photo 2: Vapor Point near SE-7 and RMU Storage Hall.



Photo 3: Back Hall of RMU Storage (1893 FOB).

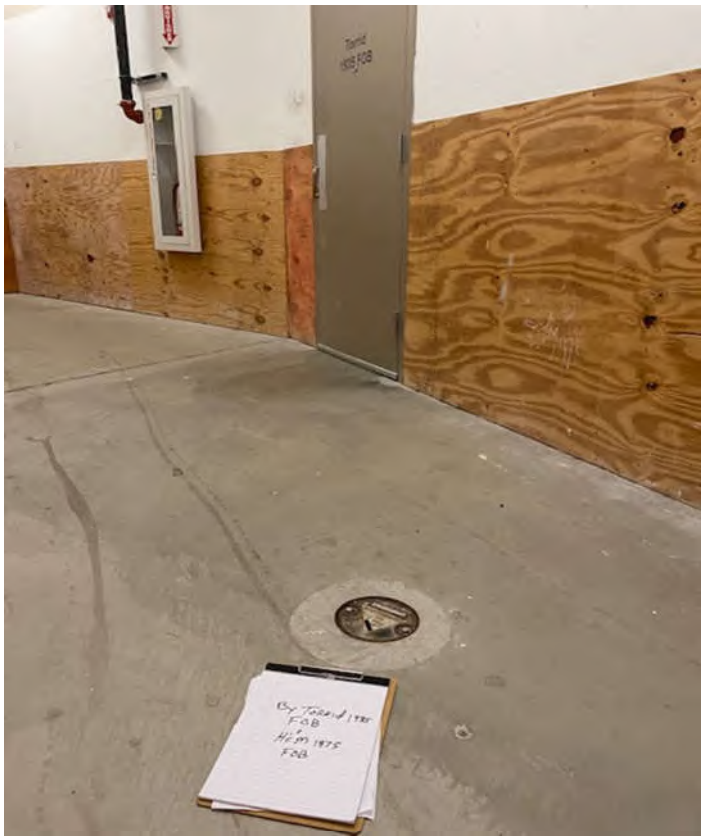


Photo 4: By Torrid 1935 FOB and H&M 1875 FOB.

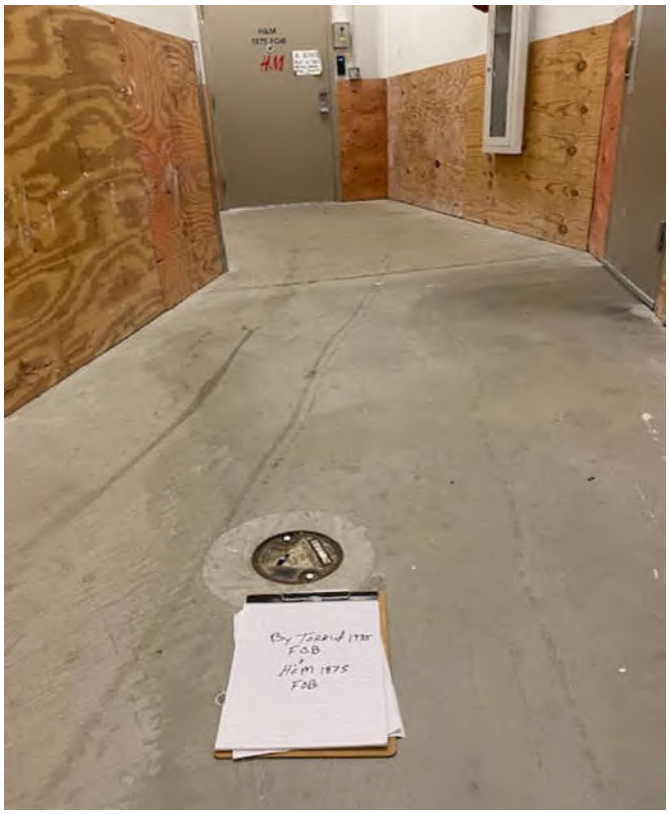


Photo 5: By Torrid 1935 FOB & H&M 1875 FOB.



Photo 6: Outlet fan on roof near Service Hatch #4.



Photo 7: Second outlet fan near Service Hatch #4.



Photo 8: Outlet fan near Hatch above RMU Storage.



Photo 9: Outlet fan above Windsor.



Photo 10: This is the SVE pump above SE-7 on roof. It was not operating.



Photo 11: Parking lot on the back side of FONF looking north. All blacktop looked good.

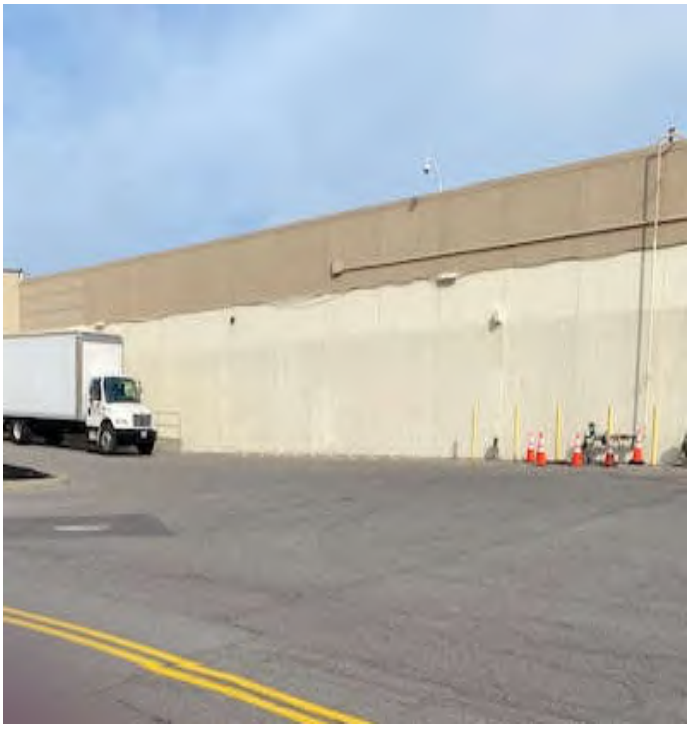


Photo 12: Blacktop in back of mall looking SW. All blacktop looked good.



Photo 13: Blacktop in the back of the mall looking SE. All blacktop looked good.

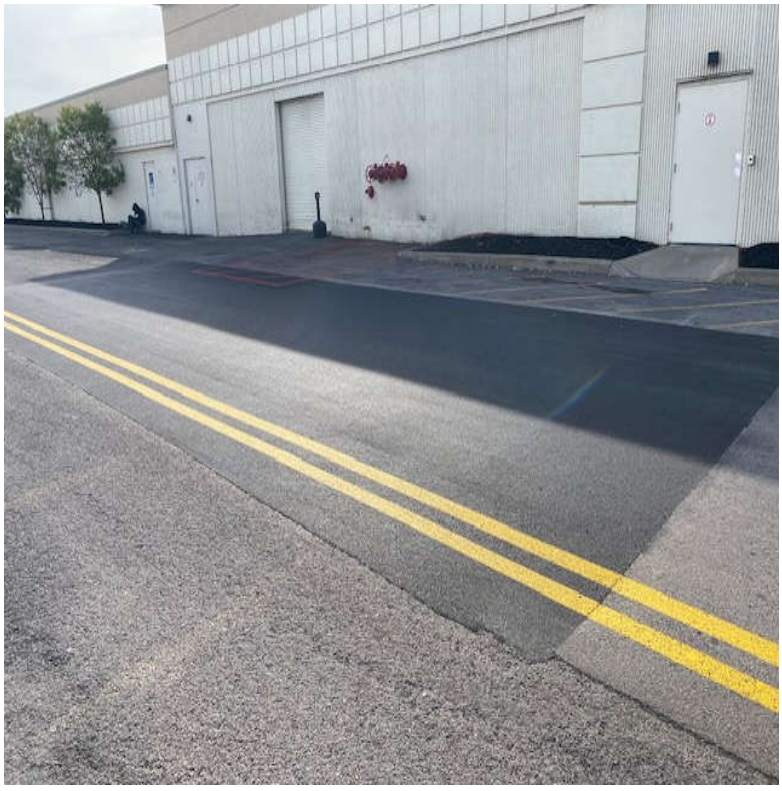


Photo 14: The only new patch of blacktop this current year in front side of mall.



Photo 15: SVE system at the Extra Space Storage Building.



Photo 19: Control panel of the SVE system at the Extra Space Storage Building.



Photo 20: Soil Vapor Point (NW) in the Extra Space Storage Building.



Photo 21: Soil Vapor Point (NE) in the Extra Space Storage Building.

APPENDIX D

Annual Site wide inspection Forms

SITE WIDE INSPECTION CHECKLIST

Site Name: FONF/Sabra Park B6A Location: Niagara Falls, NY Project Number: 2214JMMC02

Inspector Name: Jess Strum Date: 9/28/2020 Weather Conditions: 69°F, Sunny

Reason for Inspection (i.e., routine, severe condition, etc.): _____ Annual Inspection 2020 Annual Inspection

Check one of the following: **Y:** Yes **N:** No **NA:** Not Applicable

		Y	N	NA	Normal Situation	Remarks
	General					
1	What are the current site conditions?	--	--	--	X --	
2	Are all applicable site records (e.g., documentation of construction activity, most current easement, etc.) complete and up to date?	X			Y	
	Easement					
3	Has site use (commerical) remained the same?	X			Y	
4	Does it appear that all environmental easement restrictions have been followed?	X			Y	
	Impermeable Cap					
5	Are there any indications of a breach in the capping system at the time of this inspection?		X		N	
6	Are there any cracks in the building slabs?		X		N	small <1/8" only
7	Are there any cracks in the building walls?		X		N	
8	Is there any construction activity, or indication of any construction activity within the past certification year (including any tenant improvements), that included the breaching of the capping system, on-site at the time of this inspection?	X			N	Utility communication cable repair at FONF Building
9	If YES to number 8, is there documentation that the Soil Management Plan, HASP, and CAMP for the site was/is being followed?	X			--	Excavation Implementation report dated 7/17/2020

*** **If the answer to any of the above questions indicate non-compliance with any IC/ECs for the site, additional remarks must be provided and, where applicable, documentation attached to this checklist detailing additional inspection and repair activities.**

Additional remarks _____

Minimum Inspection Schedule: Site-wide inspections will be conducted annually, per certification year, at a minimum. Additional inspections will also be conducted at times of severe condition events. All inspection events will utilize this checklist.

SIDE WIDE INSPECTION CHECKLIST

Site Name: FONF/Sabre Park BCP Location: Niagara Falls, NY Project Numbe Z214JMMC08

Inspector Name: Jeff Strum Date: September 28, 2021 Weather Conditions: Sunny, 60s °F

Reason for Inspection (i.e., routine, maintenance, severe condition, etc.): Routine: 2021 Annual Inspection

Check one of the following: **Y:** Yes **N:** No **NA**: Not Applicable

	Inspection Items	Y	N	NA	Normal Situation	Remarks
	General					
1	What are the current site conditions?	--	--	--	--	Good, Normal site operations as a shopping center.
2	Are all applicable site records (e.g. documentation of construction activity, most current easement, etc.) complete and up to date?	**X**			Y	
	Easement					
3	Has site use (commercial) remained the same?	**X**			Y	
4	Does it appear that all environmental easement restrictions have been followed?	**X**			Y	
	Impermeable Cap					
5	Are there any indications of a breach in the capping system at the time of this inspection?		**X**		N	
6	Are there any cracks in the building slabs?		**X**		N	
7	Are there any cracks in the building walls?		**X**		N	
8	Is there any construction activity, or indication of any construction activity within the past certification year (including any tenant improvements), that included the breaching of the capping system, on-site at the time of this inspection?		**X**		N	
9	If YES to number 8, is there documentation that the Soil Management Plan, HASP, and CAMP for the site was/is being followed?			**X**	NA if N to 8/ Y if Y to 8	

*** **If the answer to any of the above questions indicate non-compliance with ECs for the site, additional remarks must be provided and, where applicable, documentation attached to this checklist detailing additional inspection and repair activities.**

Additional Remarks

Minimum Inspection Schedule: Site-wide inspections will be conducted annually, per certification year, at a minimum. Additional inspections will also be conducted at times of severe condition events. All inspection events will utilize this checklist.

ATLAS

SITE WIDE INSPECTION CHECKLIST

Site Name: FONF/Sabre Park BCP Location: Niagara Falls, NY Project Numbe Z214JMMC08

Inspector Name: Jeff Strum Date: September 29, 2022 Weather Conditions: Partly Cloudy

Reason for Inspection (i.e., routine, maintenance, severe condition, etc.): Routine: 2022 Annual Inspection

Check one of the following: **Y:** Yes **N:** No **NA**: Not Applicable

	Inspection Items	Y	N	NA	Normal Situation	Remarks
	General					
1	What are the current site conditions?	--	--	--	--	Good, Normal site operations as a shopping center.
2	Are all applicable site records (e.g. documentation of construction activity, most current easement, etc.) complete and up to date?	**X**			Y	
	Easement					
3	Has site use (commercial) remained the same?	**X**			Y	
4	Does it appear that all environmental easement restrictions have been followed?	**X**			Y	
	Impermeable Cap					
5	Are there any indications of a breach in the capping system at the time of this inspection?		**X**		N	
6	Are there any cracks in the building slabs?		**X**		N	
7	Are there any cracks in the building walls?		**X**		N	
8	Is there any construction activity, or indication of any construction activity within the past certification year (including any tenant improvements), that included the breaching of the capping system, on-site at the time of this inspection?		**X**		N	
9	If YES to number 8, is there documentation that the Soil Management Plan, HASP, and CAMP for the site was/is being followed?			**X**	NA if N to 8/ Y if Y to 8	

*** **If the answer to any of the above questions indicate non-compliance with ECs for the site, additional remarks must be provided and, where applicable, documentation attached to this checklist detailing additional inspection and repair activities.**

Additional Remarks

Minimum Inspection Schedule: Site-wide inspections will be conducted annually, per certification year, at a minimum. Additional inspections will also be conducted at times of severe condition events. All inspection events will utilize this checklist.

ATLAS

SITE WIDE INSPECTION CHECKLIST

Site Name: FONF/Sabre Park BCP Location: Niagara Falls, NY Project Numbe Z214JMMC08

Inspector Name: James Storm Date: 9/26/23 Weather Conditions: Partly cloudy / Sc ny

Reason for Inspection (i.e., routine, maintenance, severe condition, etc.): Routine: 2023 Inspection

Check one of the following: Y: Yes N: No NA: Not Applicable

	Inspection Items	Y	N	NA	Normal Situation	Remarks
	General					
1	What are the current site conditions?	--	--	--	--	Good, Normal site operations as a shopping center.
2	Are all applicable site records (e.g. documentation of construction activity, most current easement, etc.) complete and up to date?				Y	Don't Know of Any
	Easement					
3	Has site use (commercial) remained the same?				(Y)	
4	Does it appear that all environmental easement restrictions have been followed?				(Y)	
	Impermeable Cap					
5	Are there any indications of a breach in the capping system at the time of this inspection?				(N)	
6	Are there any cracks in the building slabs?				N	some minor ones but filled
7	Are there any cracks in the building walls?				(N)	
8	Is there any construction activity, or indication of any construction activity within the past certification year (including any tenant improvements), that included the breaching of the capping system, on-site at the time of this inspection?				N	One patch of Asphalt in the past yr. near SE-2. Refer to Picture
9	If YES to number 8, is there documentation that the Soil Management Plan, HASP, and CAMP for the site was/is being followed?				NA if N to 8/ Y if Y to 8	Dont Know

*** **If the answer to any of the above questions indicate non-compliance with ECs for the site, additional remarks must be provided and, where applicable, documentation attached to this checklist detailing additional inspection and repair activities.**

Additional Remarks

Minimum Inspection Schedule: Site-wide inspections will be conducted annually, per certification year, at a minimum. Additional inspections will also be conducted at times of severe condition events. All inspection events will utilize this checklist.

ATLAS

SIDE WIDE INSPECTION CHECKLIST

Site Name: FONF/Sabre Park BCP Location: Niagara Falls, NY Project Numbe Z214JMMC08

Inspector Name: James Stuem Date: 11/12/24 Weather Conditions: Partly sunny & cloudy

Reason for Inspection (i.e., routine, maintenance, severe condition, etc.): Routine: ~~2022~~ 2024 Annual Inspection

Check one of the following: **Y:** Yes **N:** No **NA**: Not Applicable

	Inspection Items	Y	N	NA	Normal Situation	Remarks
	General					
1	What are the current site conditions?	--	--	--	--	Good, Normal site operations as a shopping center.
2	Are all applicable site records (e.g. documentation of construction activity, most current easement, etc.) complete and up to date?				Y	Don't Know of Any
	Easement					
3	Has site use (commercial) remained the same?				(Y)	
4	Does it appear that all environmental easement restrictions have been followed?				(Y)	
	Impermeable Cap					
5	Are there any indications of a breach in the capping system at the time of this inspection?				(N)	
6	Are there any cracks in the building slabs?				N	Some minor ones but filled
7	Are there any cracks in the building walls?				(N)	
8	Is there any construction activity, or indication of any construction activity within the past certification year (including any tenant improvements), that included the breaching of the capping system, on-site at the time of this inspection?				N	Not that I Am aware of.
9	If YES to number 8, is there documentation that the Soil Management Plan, HASP, and CAMP for the site was/is being followed?				NA if N to 8/ Y if Y to 8	Don't Know

*** **If the answer to any of the above questions indicate non-compliance with ECs for the site, additional remarks must be provided and, where applicable, documentation attached to this checklist detailing additional inspection and repair activities.**

Additional Remarks

Minimum Inspection Schedule: Site-wide inspections will be conducted annually, per certification year, at a minimum. Additional inspections will also be conducted at times of severe condition events. All inspection events will utilize this checklist.

ATLAS

APPENDIX E

Sub-Slab Depressurization System Monitoring and Repairs letter prepared by LKB

LKB A VERTEX COMPANY ENGINEERING EXCELLENCE SINCE 1889

Lockwood, Kessler & Bartlett, Inc.
2 Grand Central, 140 East 45th Street, 15th Floor
New York, NY 10017
781.952.6000 · www.vertexeng.com

March 31, 2025

Extra Space Storage LLC
2795 East Cottonwood Parkway, Suite 300
Salt Lake City, UT 84121
Attn: Ms. Gwyn Goodson McNeal

Re: Sub-Slab Depressurization System Monitoring and Repairs
Extra Space Storage #3726
1755 Fashion Outlets Boulevard
Niagara Falls, NY
NYSDEC BCP Site Number C932162
LKB Project No. 102281.LK

Dear Ms. McNeal:

Lockwood Kessler & Bartlett, Inc. (LKB), a wholly owned subsidiary of The Vertex Companies, LLC (VERTEX), has prepared this summary report to document the Sub-Slab Depressurization System (SSDS) repairs, operation and maintenance (O&M), and system monitoring performed in January and March 2025 at the above-referenced property (the "Site"). The Site is a portion of a larger State of New York Brownfield Cleanup Program (BCP) site identified by the New York State Department of Environmental Conservation (NYSDEC) as FONF Expansion/Sabre Park BCP Site No. C932162.

A SSDS was installed within the Site office/storage building to prevent vapor intrusion. The SSDS operation began in 2014 and as per the Revised Site Management Plan (SMP) for the property dated January 2020, requires continuous operation and annual inspections. On November 12, 2024, the consultant performing the annual Site inspection on behalf of the Responsible Party for the BCP Site, Atlas Engineering, Inc. (Atlas), noted issues that "constituted a failure of the system." The reported failures were that there was no vacuum reading at the four (4) sub-grade monitoring points and the regenerative blower alarm did not function when tested. It was noted by Atlas; however, that the SSDS blower was observed to be operational and expelling air at the discharge point. Atlas stated that "repairs are required immediately to protect human health and the environment."

On January 14 and 15, 2025, LKB performed an inspection of the SSDS. Deficiencies were noted; however, the SSDS was observed to be operating and some of the issues noted by Atlas were partially resolved during the Site inspection.

During the inspection, LKB checked the system components against the system design drawings (Attachment 1) and system operation. Deficiencies identified during the January 2025 inspection

included improper sizing of the piping and air filter leading into the blower, the deterioration of the air filter housing, the piping exiting the blower was undersized, and the system insulation was either degraded or missing. It was noted that the lack of insulation lead to a buildup of condensation and ice within the blower intake air filter, reducing efficiency of the SSDS. Airflow was restricted as a result of the condensation and ice and the filter was partly clogged with debris and required cleaning. Additionally, LKB tested the blower alarms and confirmed that the audible and visual alarms were not triggered when the blower was turned off at the blower control panel, indicating that the alarms were not providing an alert when the blower was not functioning.

During the Site visit, LKB removed ice and water from the air filter housing and cleaned the air filter at the blower intake and performed a general inspection of the SSDS. The blower was confirmed to be functioning properly and within manufacturer specifications. Vacuum response readings were measured and recorded at the sub-grade monitoring points. The vacuum readings were greater than those reported by Atlas and greater than the minimum outlined in the Revised SMP. The vacuum readings recorded on January 14, 2025 by LKB ranged from 0.013 to 0.089 inches of water column (WC) vacuum (throughout the building footprint), which is greater than the minimum vacuum response requirement of 0.001 inches of WC reported in the Revised SMP and greater than those reported in 2014.

Following the January 2025 site inspection, LKB provided recommendations for upgrades to portions of the SSDS. These recommendations are discussed in Attachment 2.

On March 11 and 12, 2025, LKB returned to the Site and completed the recommended repairs/upgrades with a plumbing subcontractor. Following the upgrade of the SSDS components, LKB collected pressure field readings at the sub-slab monitoring points and system flow readings. LKB's vacuum and flow readings are presented in Table 1. The system was left fully operational and replacement air filters were left at the facility. LKB is working with the facility to remove the non-functioning alarm from the fire panel as a separate alarm was installed by LKB for the SSDS.

A summary of the work performed is as follows:

- The blower inlet piping was upgraded from 1.5-inch to 2-inch PVC.
- The inlet air filter housing was replaced with a new larger housing and filter element.
- All discharge piping was upgraded from 1.5-inch to 2-inch PVC per the original SSDS design.
- All system piping and the new air filter housing were insulated.
- An access port for airflow measurements was installed.
- An audible and visual loss of vacuum alarm was installed and mounted indoors.
- A vacuum gauge was installed and mounted indoors.

Additional details of the SSDS modification are provided in the Attachments, Figures and Tables included with this summary letter.

LKB has updated the Annual Inspection Form/Checklist to be used for future annual inspections at the Site (Attachment 3).

The SSDS Operation and Maintenance (O&M) Plan for the Site was most recently updated in the Revised SMP (January 2020). None of the changes that LKB made to the SSDS are significant that would require an update to the O&M Plan. As per the Revised SMP, a copy of the complete SMP is to be maintained at the site. LKB will provide the facility manager with a hard copy of the Revised SMP for onsite use. Additionally, LKB will compile a Logbook to be maintained at the facility.

Please feel to contact us should you have any questions.

Sincerely,
Lockwood, Kessler & Bartlett, Inc.

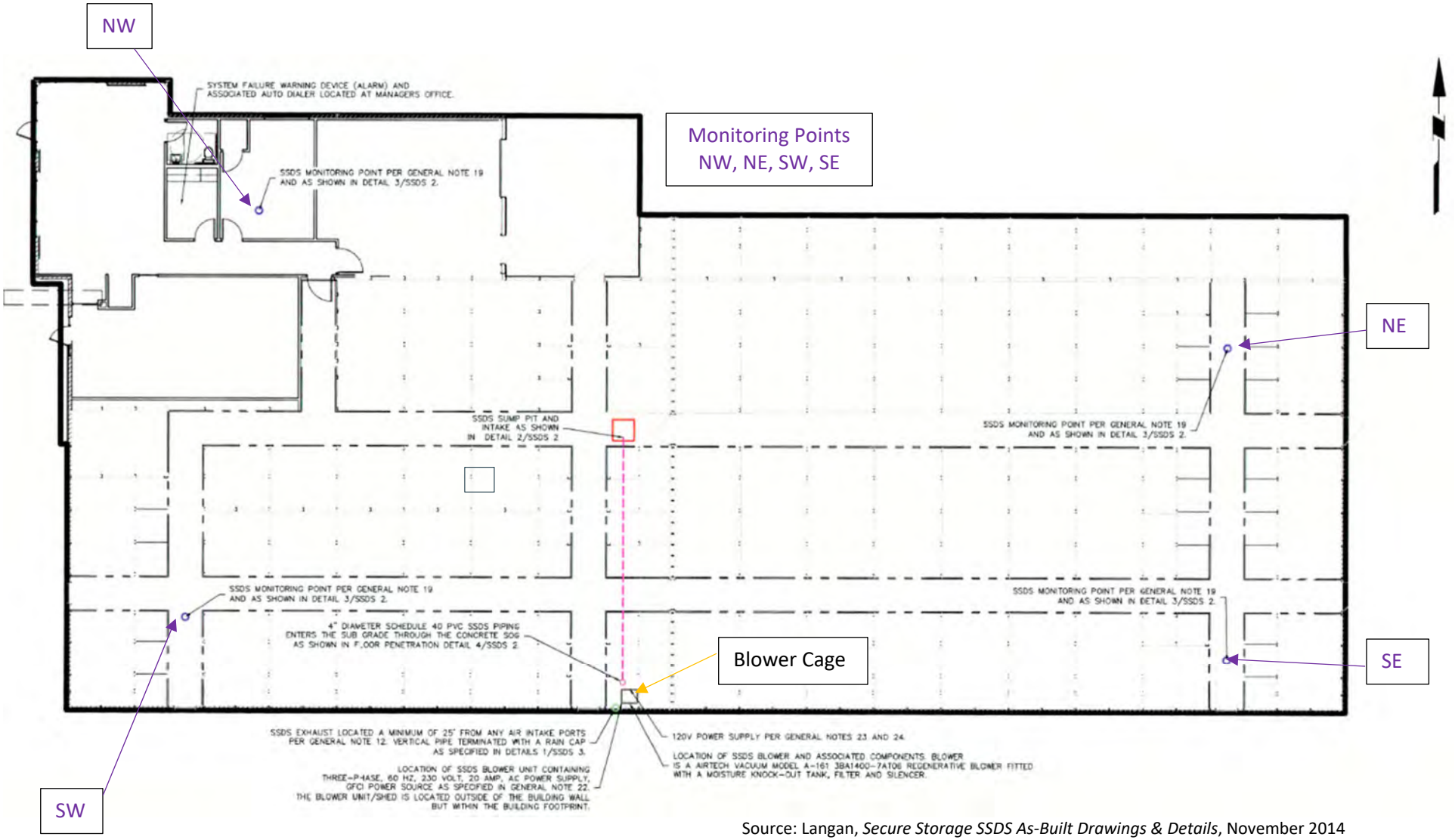
Matthew Urm
Project Manager

Richard J. Tobia, PE
Technical Expert

Attachments

Figure 1 – Site Plan
Table 1 – Monitoring Point and Blower - Vacuum and Flow Readings
Attachment 1 - As-Built Copy of SSDS
Attachment 2 – January 2025 System Recommendations, SSDS Operation and Components
Attachment 3 - Updated Active Sub-Slab Depressurization System Inspection Checklist
Attachment 4 – Photolog of Components January 2025 (Prior to Repairs)
Attachment 5 – Photolog of Components March 2025 (Following Repairs)
Attachment 6 – Equipment Specification Sheets

Site Plan
Extra Space Storage – 1755 Fashion Outlets Boulevard
Niagara Falls, NY
March 2025
VERTEX Project 102281



Source: Langan, *Secure Storage SSDS As-Built Drawings & Details*, November 2014

Table 1

Monitoring Point and Blower - Vacuum and Flow Readings

Sub-Slab Depressurization System

Extra Space Storage – 1755 Fashion Outlets Boulevard

Niagara Falls, NY

VERTEX Project 102281

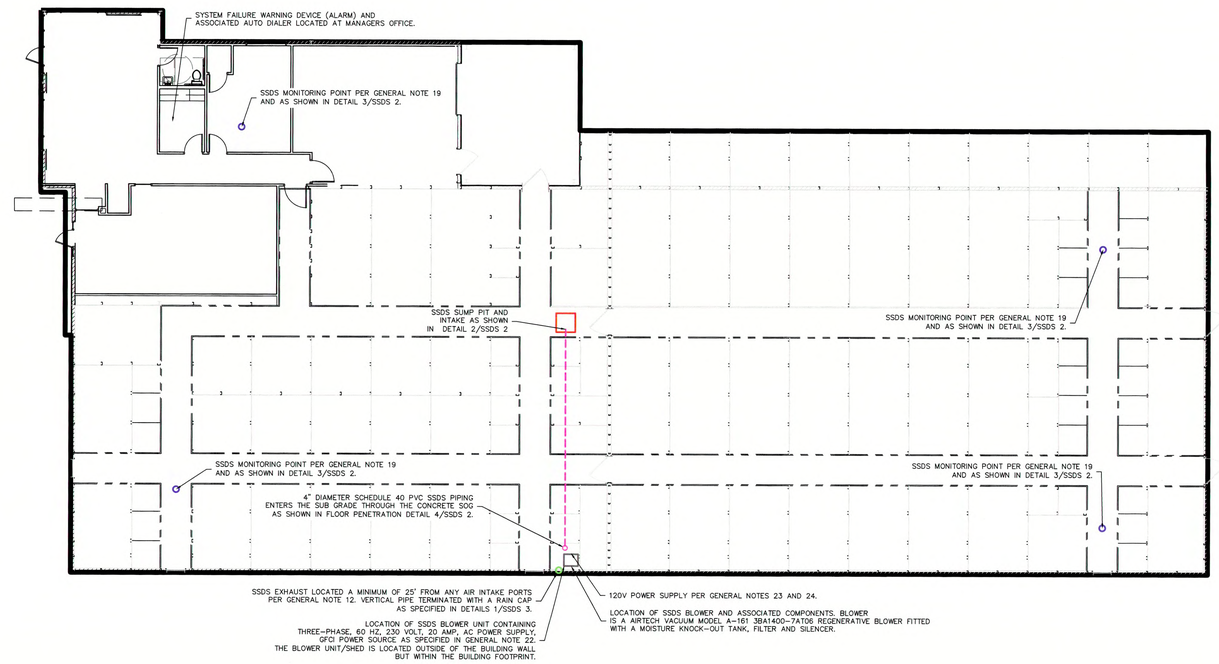
		Monitoring Point Vacuum Reading Location				Remote Vacuum Gauge	Regenerative Blower		Consultant	Staff
		Northwest (NW)	Southwest (SW)	Southeast (SE)	Northeast (NE)		Vacuum Measurement at Blower	SSDS Flow (cubic feet per minute)		
Date	9/28/2020	*not measured*	0.010	0.033	0.013	NA	*not measured*	*not measured*	ATC/Atlas	
Date	9/26/2023	0.318	0.313	0.310	0.304	NA	*not measured*	*not measured*	Atlas	
Date	11/12/2024	0.000	0.000	0.000	0.000	NA	*not measured*	*not measured*	Atlas	
Date	1/14/2025	0.013	0.089	0.013	0.016	NA	10	97	VERTEX	MU
Date	3/11/2025	0.013	0.012	0.016	0.019	3.5	5.5	100-110	VERTEX	MU
Date	3/12/2025	0.054	0.005	0.013	0.022	3.5	5.5	100-110	VERTEX	MU
Date										
Date										
Date										
Date										
Date										
Date										

All Vacuum Readings in inches of water column

As per the *Site Management Plan – Revision 01* (January 2020/Langan), "the minimum required vacuum response required is 0.001 in water column (WC) throughout the building footprint." Industry typical minimum is 0.003 in WC.

Attachment 1

As-Built Drawing (November 2014)



LEGEND

- SSDS SUMP PIT
- SSDS BLOWER UNIT
- SSDS PIPING AND WATER PIPING INTERSECTION
- SSDS MONITORING POINT
- SSDS EXHAUST PIPE
- SSDS PIPING
- BUILDING LINE

GENERAL NOTES

1. BASE MAP TAKEN FROM THE FOUNDATION PLAN, PREPARED BY STEPHEN P. BOURASSA, P.E., TRANSMITTED TO LANGAN ON 26 JULY 2013.
2. DESIGN DETAILS AND DRAWINGS ARE ADAPTED FROM EPA DOCUMENT EPA/625/R-92/016.
3. THE SSDS SYSTEM WAS INSTALLED IN ACCORDANCE WITH THE NEW YORK STATE PLUMBING CODE, INCLUDING, BUT NOT LIMITED TO, THOSE REQUIREMENTS PERTAINING TO:
   - PROTECTION OF SYSTEM COMPONENTS
   - TRENCHING, EXCAVATION, AND BACKFILL
   - STRUCTURAL SAFETY
   - PIPING SUPPORT
   - JOINTS
4. INSTALLATION OF THE SSDS WAS COORDINATED WITH THE INSTALLATION OF OTHER UTILITIES AND STRUCTURAL COMPONENTS.
5. ALL CONNECTIONS AT PIPE FITTINGS AND JOINTS ARE LEAK FREE. THIS WAS DEMONSTRATED BY THE PERFORMANCE OF A 3 PSI (MIN.) AIR PRESSURE TEST FOLLOWING PIPE/FITTINGS ASSEMBLY.
6. ALL PIPE CONNECTIONS AND SYSTEM COMPONENTS WERE CONNECTED WITH A NON-VOLATILE ORGANIC COMPOUND (VOC) CONTAINING GLUE (APPROVED BY DESIGN ENGINEER PRIOR TO USE).
7. ALL SSDS PIPING IS CONSTRUCTED OF 4-INCH DIAMETER SCHEDULE 40 PVC PIPE (UNLESS OTHERWISE NOTED) OR OTHER APPROVED MATERIAL, IN ACCORDANCE WITH THE NEW YORK STATE PLUMBING CODE.
8. ALL HORIZONTAL PIPE RUNS ARE PITCHED A MINIMUM OF 1/8" PER FOOT TO ALLOW CONDENSATION TO DRAIN BACK TO THE SUB-GRADE.
9. RISER PIPES ARE CLEARLY LABELED "CAUTION: DO NOT ALTER SUB SLAB VAPOR VENT PIPE" IN EACH ACCESSIBLE AREA (A MINIMUM OF EVERY 10 LINEAR FEET OF RISER PIPE RUN).
10. CONTRACTOR PROVIDED AS-BUILT DRAWINGS OF COMPLETE SSDS TO ENGINEER FOLLOWING INSTALLATION.
11. VACUUM GAUGES HAVE A RANGE OF 0 TO 100 INCHES OF WATER WITH MINOR DIVISIONS OF 10.0 INCHES OF WATER IF NEEDED.
12. TO AVOID ENTRY OF SUBSURFACE VAPORS INTO THE BUILDING, THE VENT PIPES ARE AT LEAST 10 FEET ABOVE GROUND LEVEL, AT LEAST 25 FEET AWAY FROM ANY OPENING THAT IS LESS THAN 2 FEET BELOW THE EXHAUST POINT, AND 25 FEET FROM ANY ADJOINING OR ADJACENT BUILDING, OR HVAC INTAKES OR SUPPLY REGISTERS. RAIN CAP/GOOSE NECK IS PLACED ON THE EXHAUST POINT SO AS NOT TO INCREASE THE POTENTIAL FOR SUBSURFACE VAPORS TO ENTER THE BUILDING.
13. CONTINUOUSLY SEALED STEGO WRAP 20-mil VAPOR BARRIER WAS INSTALLED BELOW THE BUILDINGS CONCRETE SLAB-ON-GRADE. ANY PENETRATION OF THE STEGO WRAP 20-mil VAPOR BARRIER WAS REPAIRED, SEALED, AND APPROVED BY OWNERS ENGINEER.
14. THE STEGO WRAP 20-mil VAPOR BARRIER WAS INSTALLED IN ACCORDANCE WITH ALL APPLICABLE MANUFACTURER GUIDELINES AND DETAILS.
15. THE STEGO WRAP 20-mil VAPOR BARRIER WAS INSTALLED BY A MANUFACTURER CERTIFIED INSTALLER.
16. THE STEGO WRAP 20-mil VAPOR BARRIER WAS INSPECTED IMMEDIATELY BEFORE CONCRETE WAS PLACED. ALL PENETRATIONS, HOLES, OR TEARS, WERE SEALED BEFORE CONCRETE WAS PLACED.
17. SSDS MONITORING PIPING WAS CONSTRUCTED OF 1/2-INCH SCHEDULE 40 PVC PIPE AND EACH PIPE IS CAPPED AND FITTED WITH A BARBED BALL VALVE. ALL MONITORING PORTS ARE PROTECTED BY LOCKING CURB BOXES AS SHOWN IN DETAIL 3.
18. ¾" CLEAN COARSE AGGREGATE MET THE FOLLOWING GRADATION SPECIFICATION:

SIEVE SIZE	% PASSING BY WEIGHT
1 ½ - INCH	100
1 - INCH	90-100
¾ - INCH	0-5
200	< 1

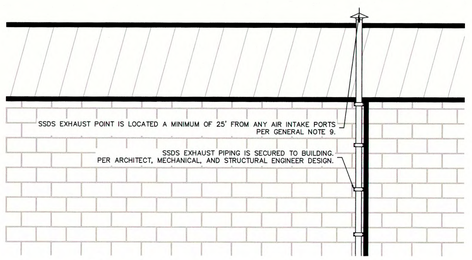
19. THE LOCATION OF INTERIOR MONITORING POINTS WERE COORDINATED WITH ARCHITECT, STRUCTURAL, AND MECHANICAL ENGINEERS TO MINIMIZE CONFLICTS WITH WALKWAYS AND STORAGE UNITS.

BLOWER NOTES:

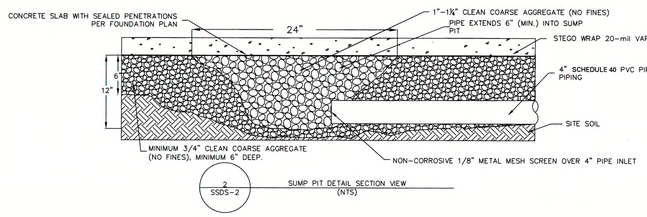
20. REGENERATIVE BLOWER UNIT IS AN AIRTECH VACUUM A-161 3BA1400-7AT06.
21. THE VACUUM ASSEMBLY PROVIDES, AT CONTINUOUS OPERATION, A MINIMUM OF 75 CFM FLOW RATE AT A MINIMUM OF 25-INCHES OF WATER COLUMN VACUUM.
22. THE BLOWER MOTOR ELECTRICAL PANEL CONTAINES A STANDARD THREE-PHASE, 60 HZ, 230 VOLT, 20 AMP AC POWER SUPPLY.
25. THE ELECTRICAL PANEL FOR THE BLOWER INCLUDES AN AUXILIARY CONTACT FOR THE REMOTE ALARM. THE REMOTE ALARM IS LOCATED WITHIN THE BUILDING MANAGERS OFFICE. THE ALARMS CONSIST OF A WARNING LIGHT AND AUTO DIALER RELAY. THE REMOTE ALARM AND BLOWER CONTROL PANEL ARE CONFIGURED SUCH THAT IF THE BLOWER STOPS OPERATING, THE REMOTE ALARM WILL BE ACTIVATED. A 120V ELECTRICAL SUPPLY IS PROVIDED TO THE REMOTE PANEL.
26. THE REMOTE VISUAL ALARM IS LABELED AS FOLLOWS:
    - SUB-SLAB VAPOR VENTING SYSTEM ALARM
    - BLOWER MALFUNCTION IF LIT
    - SERVICE BLOWER IMMEDIATELY

REFERENCES:

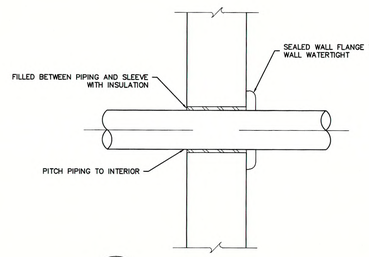
27. BASEMAP, UTILITY AND STRUCTURAL DRAWINGS PREPARED BY STEPHEN P. BOURASSA P.E., AND DATED 6/11/13, AND PROVIDED ON 7/26/13.
28. SPECIFICATION SECTION 026126 – SUB-SLAB DEPRESSURIZATION SYSTEM.
29. NYSDOH GUIDANCE FOR EVALUATING SOIL VAPOR INTRUSION IN THE STATE OF NEW YORK (OCTOBER 2006).



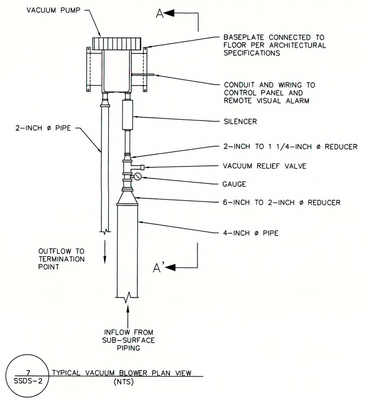
1 / SSDS-2 BLOWER EXHAUST RUNNING FROM SSDS STORAGE SHED TO BUILDING ROOF (NTS)



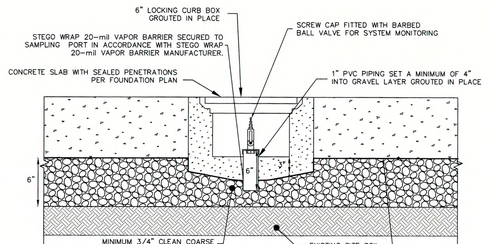
2 / SSDS-2 SUMP PIT DETAIL SECTION VIEW (NTS)



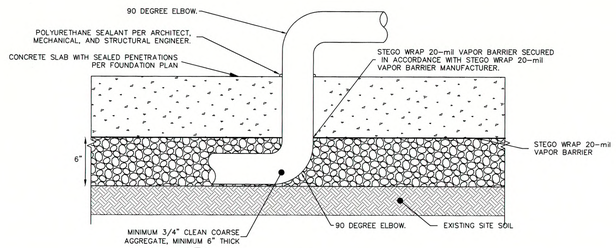
5 / SSDS-2 TYPICAL CONCRETE SLAB PENETRATION (NTS)



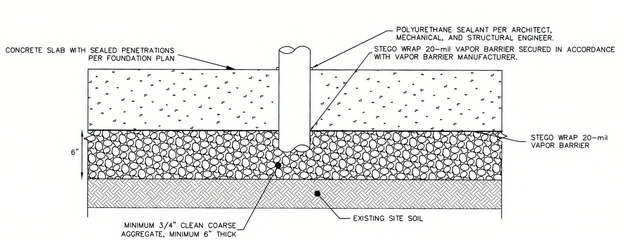
7 / SSDS-2 TYPICAL VACUUM BLOWER PLAN VIEW (NTS)



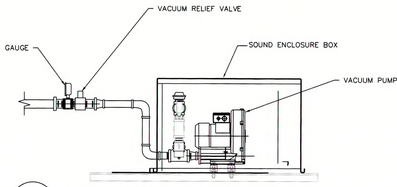
3 / SSDS-2 SECTION – SYSTEM MONITORING POINT (NTS)



4 / SSDS-2 SSDS CONCRETE SLAB PENETRATION (NTS)



6 / SSDS-2 TYPICAL CONCRETE SLAB PENETRATION (NTS)



8 / SSDS-2 TYPICAL VACUUM BLOWER SECTION VIEW (A-A') (NTS)

10 0 2 4 10
SCALE IN FEET

WARNING: IT IS A VIOLATION OF THE NYS EDUCATION LAW ARTICLE 145 FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS ITEM IN ANY WAY.

Date	Description	No.
REVISIONS		

STATE OF NEW YORK JOEL B. LANDES 076348 LICENSED PROFESSIONAL ENGINEER

SIGNATURE 11/13/14 DATE SIGNED

JOEL B. LANDES
NEW YORK STATE PROFESSIONAL ENGINEER
STATE LIC. No. 076348

LANGAN
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ABU DHABI ATHENS DOHA
DUBAI ISTANBUL
Langan Engineering, Environmental, Surveying and Landscape Architecture, D.P.C.
Langan Engineering and Environmental Services, Inc.
Langan International, LLC
Collectively known as Langan

Project
FONF EXPANSION/SABRE PARK BCP
TOWN OF NIAGARA
NIAGARA COUNTY NEW YORK

Drawing Title
SECURE STORAGE SSDS AS-BUILT DRAWING & DETAILS

Project No.	140091401
Date	10 NOVEMBER 2014
Scale	1"=10'
Drawn By	JPH
Checked By	RJW
Submission Date	15 NOVEMBER 2014

SSDS - 2
Sheet 2 of 2

Filename: \\langan.com\data\NY\data4\140091401\Cadd Data - 140091401\2D-DesignFiles\SSDS\Storage Locker\AS BUILT_Secure Storage SSDS.dwg Date: 11/13/2014 Time: 13:26 User: jhall Style Table: Langan.stb Layout: FOUNDATION & DETAILS

© 2013 Langan

Attachment 2

January 2025 System Recommendations, SSDS Operation and Components

Sub-Slab Depressurization System (SSDS) Details
January and March 2025 System Inspection Findings and Upgrades

The active SSDS at the Extra Space Storage building was constructed by Langan Engineering, Environmental, Surveying, and Landscape Architecture, D.P.C. (Langan) in 2014. Langan prepared a Site Management Plan (SMP) in November 2014 and in January 2020 issued a Revised SMP. As per the SMP, the SSDS is reported to consist of a 24-inch diameter suction pit containing 1 to 1 ¼-inch coarse aggregate placed in a central location beneath the concrete slab and within the ¾-inch coarse aggregate subbase material. Vapors are conveyed via a 4-inch schedule 40 poly-vinyl chloride (PVC) pipe to an Airtech regenerative blower, Model 3BA1400-7AT06, producing a minimum of 75 cubic feet per minute (CFM) of airflow at 24-inches of water column (WC) vacuum. The system-related equipment is located outdoors and the blower is protected by a ventilated and insulated removable weather and noise-reduction enclosure.

The exhaust air from the blower is routed through PVC pipe where it is discharged above the roofline, a minimum of 25 feet from any intake ports. A site plan showing the location of the suction pit and the regenerative blower is included as Figure 1, and an as-built depiction of the SSDS is included in Attachment 1 (source of both documents: Langan *Final Engineering Report FONF Expansion/Sabre Park BCP, Town of Niagara, New York*, November 14, 2014).

Photographs of the equipment at the time of LKB's January 2025 inspection are included in Attachment 4. Photographs of the equipment following system upgrades performed by LKB in March 2025 are included in Attachment 5.

Summaries of the observed SSDS equipment conditions and modifications performed in March 2025 are presented below.

Suction Piping

January 2025 Inspection

The piping below the building slab is reported by Langan as 4-inch PVC from the suction pit to the location that the piping is stubbed above the slab outside the building for connection to the regenerative blower. As the suction pit and 4-inch piping are beneath the concrete slab floor of the facility, inspection of the sub-grade piping was not possible by LKB. LKB confirmed that the piping above the slab near the blower is 4-inch PVC. LKB identified that the suction piping was reduced from 4-inch PVC to 1.5-inch PVC into the air filter. The suction piping was routed though an intake air filter then into the regenerative blower. Portions of the PVC suction piping had no or minimal insulation. Where insulation was present it was degraded and required replacement.

March 2025 Upgrades

To improve the airflow entering the regenerative blower, LKB replaced the 1.5-inch PVC piping with 2-inch PVC piping from the 4-inch piping stub to the intake air filter and blower. To reduce condensation within the air filter, all 4-inch and 2-inch intake/suction piping was insulated.

Air Filter

January 2025 Inspection

Original Filter Housing: Solberg Manufacturing Model 848S2
Piping Connections: 1.5-inch

At the time of LKB's January 2025 inspection, an intake air filter was present inline prior to the regenerative blower. The air filter is not shown on Langan's As-Built drawing of the SSDS. The filter housing was functional yet degraded. The interior of the air filter was dirty from lack of maintenance, and was saturated with water and ice due to condensation and below freezing outdoor temperatures. The condition of the air filter restricted airflow. LKB removed and cleaned

debris from the filter and housing and removed the ice and water. Based on our field observations, the air filter and housing were in need of replacement.

March 2025 Upgrades
New Filter Housing: Solberg Manufacturing Model CSL-851-200HC
Piping Connections: 2 inch
Replacement Filters: Solberg Manufacturing Model 851

LKB installed a new larger air filter housing with a new larger air filter element. The new housing is constructed to accommodate 2-inch National Pipe Thread (NPT) fittings, and the housing was insulated to reduce condensation. Extra filters were purchased and provided to the facility for future replacement. The new housing and filter equipment specification sheets are included in Attachment 6.

Vacuum Gauge
A Vacuum Gauge is present inline after the air filter and is mounted directly onto the regenerative blower, within the removable weather and noise reduction enclosure. The vacuum gauge reads within the range from 1 inch to 100 inches of WC. The expected vacuum for the regenerative blower is between 0 and 50 inches of WC; therefore, the installed vacuum gauge is appropriate for use at the regenerative blower location. LKB observed the vacuum gauge to read between 5 and 10 inches of WC, which is reasonable for this application and was consistent with the reading observed on an independent vacuum gauge; therefore, LKB considers this vacuum gauge fully operational, and replacement was not necessary.

Makeup Air Valve
A makeup air valve is present inline after the air filter and is mounted directly onto the regenerative blower, within the removable weather and noise reduction enclosure. If needed, the valve could be opened to allow makeup air into the blower, which would reduce the vacuum and flow within the SSDS. LKB tested the operation of the makeup air gate valve, which functioned properly. LKB closed the valve following testing. LKB considers this valve to be fully operational and replacement was not necessary.

Vacuum Relief Valve
Manufacturer: Vacuforce LLC
Model: VC61-Z
Vacuum Relief Setting: 4 inches of mercury (Hg)

A vacuum relief valve is present near the vacuum gauge and is also mounted directly to the regenerative blower, within the removable weather and noise reduction enclosure. The vacuum relief valve functions to protect the blower motor from excessive system vacuum that can result from line restriction. The vacuum relief valve is labeled 4-inches Hg, indicating that the relief valve is set to open if vacuum at the blower exceeds 4-inches of Hg vacuum (54 inches WC). LKB did not restrict the flow of the blower while operating; therefore, operation of the vacuum relief was not tested. The equipment specification sheet is included in Attachment 6. LKB considers this valve to be fully operational and replacement was not necessary.

Regenerative Blower

Airtech regenerative blower, Model 3BA1400-7AT06
3-phase
Horsepower: 0.84
Volts: 230
FLA: 2.34/1.35
System Manufacture Date: 9/11/14
Blower Motor Replacement as per Atlas 2/16/2021 SMP Inspection Report: September 2020
Piping connections: 1.5-inch NPT

The regenerative blower is mounted outside the building, on a metal frame with the blower protected by a removable weather and noise reduction enclosure. The blower and all SSDS components are installed within a protected portion of the exterior of the building.

Blower Power

Outside near the blower an electrical panel with a knife switch feeds power to a control panel mounted at the blower. The control panel has a functioning On/Off switch for the blower. Inside the building office, one of the electrical load center panels has a three-pole circuit breaker labeled for the blower fan, which controls power to the outside breaker and controls.

As per the manufacturer's specifications, this blower can produce a maximum of 50 inches of vacuum in WC at ~50 CFM, and the maximum flow rate is reported at an estimated 105 CFM at 0.0 inches of WC. This system was designed for a minimum of 75 CFM of airflow at 25-inches of WC. During LKB's January 2025 inspection, the blower was operating at a vacuum of 10 inches of WC and the flow rate was measured at approximately 95 CFM upon cleaning of the filter element and housing. During LKB's March 2025 inspection, following installation of the larger PVC piping and a new air filter and housing, the blower was operating at a vacuum of 5.5 inches of WC and the flow rate was measured at approximately 100-110 CFM. The increased airflow and decreased vacuum are a result of the system improvements. Other than cleaning the blower where debris had lodged within the motor ventilation screens, no changes were made to the blower. LKB considers the blower to be fully operational and replacement was not necessary.

A performance curve for the regenerative blower vacuum pump, and the equipment specification sheets and Operating and Maintenance Instructions are included in Attachment 6.

Discharge Piping

January 2025 Inspection

The blower exhaust piping was all constructed with 1.5-inch PVC, despite the As-Built drawings indicating that 2-inch PVC was installed. The undersized piping restricted the blower airflow.

March 2025 Upgrades

All blower exhaust piping was removed and replaced with 2-inch PVC. The piping was supported with brackets fastened to the building in the same location that it was previously mounted, the pipe was extended greater than 36 inches above the roofline, and the discharge piping was inverted at the top.

Blower Alarm System

As per the January 2020 Langan Revised SMP: "The active SSD system at the Secure Storage office building includes a warning device that indicates when the system is not operating properly. The warning device will have an alarm in the site manager or maintenance personnel office. In the event the warning device is activated for the active SSD system, applicable maintenance and repairs will be conducted, as specified in the Operation and Maintenance Plan, and the SSD system restarted. System monitoring devices and alarms for the active SSD system at the Secure Storage office building will be tested as part of the annual monitoring event."

Recent reports (9/26/23, 11/12/24) by Atlas ATC Engineering, Inc. (Atlas) indicated that they "tripped" the alarm but it did not go off, and that the blower alarm was not working.

January and March 2025 Inspections

LKB and the facility manager could not locate any documentation indicating how the alarm system functions; however, LKB's evaluation determined that the warning system is comprised of a notification light, a timer delay currently set at 50 minutes, and a wired connection directly into the local fire alarm control panel.

Prior to troubleshooting the alarm system and activation, LKB worked with the facility manager and notified the facility alarm company and local fire department of the potential for an alarm during testing.

Following notifications, LKB shut off the power outside at the electrical panel knife switch. The power to the blower turned off; however, the alarm did not trigger. LKB turned the power back on, the blower resumed running, and then LKB turned off the power to the blower at the control panel On/Off switch. The blower turned off and LKB left the power off for over 3 hours during work on the blower piping. During that time, the alarm did not trigger. Following piping repairs LKB turned the blower back on at the On/Off switch.

LKB subsequently turned off the power to the blower from the load center using the three-pole circuit breaker labeled for the blower, and LKB reduced the time on the delay to 1 minute. The alarms throughout the building sounded, which confirmed that the alarm system for the building was tied into the SSDS. LKB turned the timer back to 50 minutes and turned the three-pole circuit breaker back on, and the building alarms silenced. LKB noted that the red light on the alarm did not illuminate when the alarm system triggered.

The SSDS alarm only triggered when the circuit breaker to the blower controls was shut off, not when the blower was turned off or lost power at the outside controls, indicating that the alarm would not trigger if the blower were to malfunction or lose vacuum. This mode of operation is not consistent with the SSDS design.

LKB installed a new stand-alone battery-powered audible alarm inside the building in the hallway near the SSDS (discussed in more detail below) to replace the current alarm. The new alarm will trigger when there is a loss of system vacuum, regardless of the reason (i.e., loss of power, blower failure, etc.).

The original SSDS alarm is still connected to the fire alarm system and the fire alarm system remains active. LKB recommends that the SSDS alarm components be disconnected from the fire alarm system. LKB has contacted the alarm company and they are reviewing the system design to determine the best course of action for removing the alarm system as described.

New Remote Blower Alarm

Manufacturer: AprilAire
Model: ARNALM
LKB installed a loss of vacuum alarm (audible and visual) within the building in the hallway adjacent to the SSDS enclosure. This model was selected since it monitors vacuum continually and is battery-operated with alarm controls. The alarm is connected to the SSDS extraction pipe outside the building via small diameter tubing through the exterior wall. The tubing is secured to the walls, and the wall penetrations were sealed with silicone.

The equipment specification sheets and operating instructions are included in Attachment 6.

New Label on Old SSDS Blower Alarm

The old blower alarm system in the building office was labeled "Methane Venting System Alarm." LKB covered the label with a new label: "Sub-Slab Ventilation System Alarm."

New Remote Vacuum Gauge

Vacuum Gauge Manufacturer: Dwyer Instruments, Inc
Model: 2040
Vacuum Housing Manufacturer: OBAR Systems, Inc

LKB installed a remote vacuum gauge within the building in the hallway adjacent to the SSDS enclosure, for building and maintenance personnel to read and record the readings and confirm system operation. The gauge reads vacuum continually and requires no power. The gauge is connected to the SSDS extraction pipe outside the building via small diameter tubing through the exterior wall. The tubing is secured to the walls, and the was penetration was sealed with silicone. The equipment specification sheets are included in Attachment 6.

Sub-Slab Monitoring Points

Four monitoring points are present within the facility, at the northwest corner (within the building office), and at the southwest, southeast and northeast corners of the building. All monitoring points are in good condition and modification or replacement was not required.

END

Attachment 3

Updated Active SSDS Inspection Checklist

Active Sub-Slab Depressurization System Inspection Checklist
1755 Fashion Outlets Boulevard, Niagara Falls, New York
NYSDEC BCP Site No.: C932162

Inspector Name:_____Project Number:_____ Date:_____

Weather Conditions:_____Reason for Inspection: (i.e. routine, maintenance, severe condition, etc.): _____

		Check one of the following: **Y**: Yes **N**: No **NA**: Not Applicable				
		Y	**N**	**NA**	**Normal Situation**	**Remarks**
Records						
1	Is the Operations & Maintenance Plan readily available on- site? *Note: The O&M Plan is a component of the Site Management Plan, which must be kept onsite.*				Y	
2	Is the SSDS Equipment and Maintenance Logbook readily available onsite?				Y	
3	Based on site records, when was the last inspection, maintenance, or repair event?				Date not to exceed minimum schedule	
4	Based on site records, was the system inoperational for any amount of time since the last inspection, maintenance, or repair event? For how long? Provide details.				N	
Alarm System						
5	Do the alarm lights indicate that the system is operational? (Sensing Light flashes green every 60 seconds)				Y	
6	Did manual test of vacuum alarm indicate that the alarm is functional?				Y	
7	Were Alarm Light, Low Battery Light or Service Light on? Were any issues noted resolved, and how?				N	
General System						
8	Is there any construction activity, or indication of any construction activity within the past certification year (including any tenant improvements), that included the breaching of the floor slab, on-site at the time of this inspection?				N	
9	If YES to number 6, is there documentation that the Site Management Plan, HASP, and CAMP for the site was/is being followed?				NA if N to 6 Y if Y to 6	
10	If YES to number 6, is there documentation that all breaches in the floor slab have been sealed, with vapor barrier repaired?				NA if N to 6 Y if Y to 6	
11	Does all visible SSD piping appear intact and undamaged?				Y	
12	Have any intake points been constructed at the roof near (less than 10 feet) the SSD blower discharge point?				N	
SSD Blower Unit						
13	Is the SSD blower operational at the time of the inspection?				Y	
14	Is the SSDS blower expelling air at the discharge point?				Y	
15	Visual Observations of the Regenerative Blower - Are any issues evident?				N	
16	Audible Observations of the Regenerative Blower - Does it sound like there may be any issues with the blower?				N	
17	Intake Air Filter - Air Filter Condition at Arrival (Good/Bad)					
18	Intake Air Filter -Was the Air Filter Changed?					
19	Is water present within the Filter Housing?					
20	How many extra air filters are available onsite stored by the facility manager?					

Active Sub-Slab Depressurization System Inspection Checklist
1755 Fashion Outlets Boulevard, Niagara Falls, New York
NYSDEC BCP Site No.: C932162

		Check one of the following: **Y**: Yes **N**: No **NA**: Not Applicable				
		Y	**N**	**NA**	**Normal Situation**	**Remarks**
	System Monitoring at Blower					
21	Vacuum Gauge Reading at Blower:				90-110 CFM	
22	Flow Reading at Blower: *(Access hole at bolt threaded into Blower Discharge Pipe)*				2-10" H2O	
	Indoor Monitoring					
23	What are the micro-manometer readings at each monitoring point? *					
24	Northwest Monitoring Point:				> 0.001 inches H2O	
25	Southwest Monitoring Point:				> 0.001 inches H2O	
26	Southeast Monitoring Point:				> 0.001 inches H2O	
27	Northeast Monitoring Point:				> 0.001 inches H2O	
28	Vacuum Gauge Reading at Indoor Monitoring Location:				2-10" H2O	

*As per the Site Management Plan – Revision 01 (January 2020/Langan), "the minimum required vacuum response required is 0.001 in water column (WC) throughout the building footprint."

If the answer to any of the above questions indicate the SSD system is non-operational or malfunctioning, or that this Engineering Control is in non-compliance,additional remarks must be provided and, where applicable, documentation attached to this checklist detailing additional inspection and repair activities.

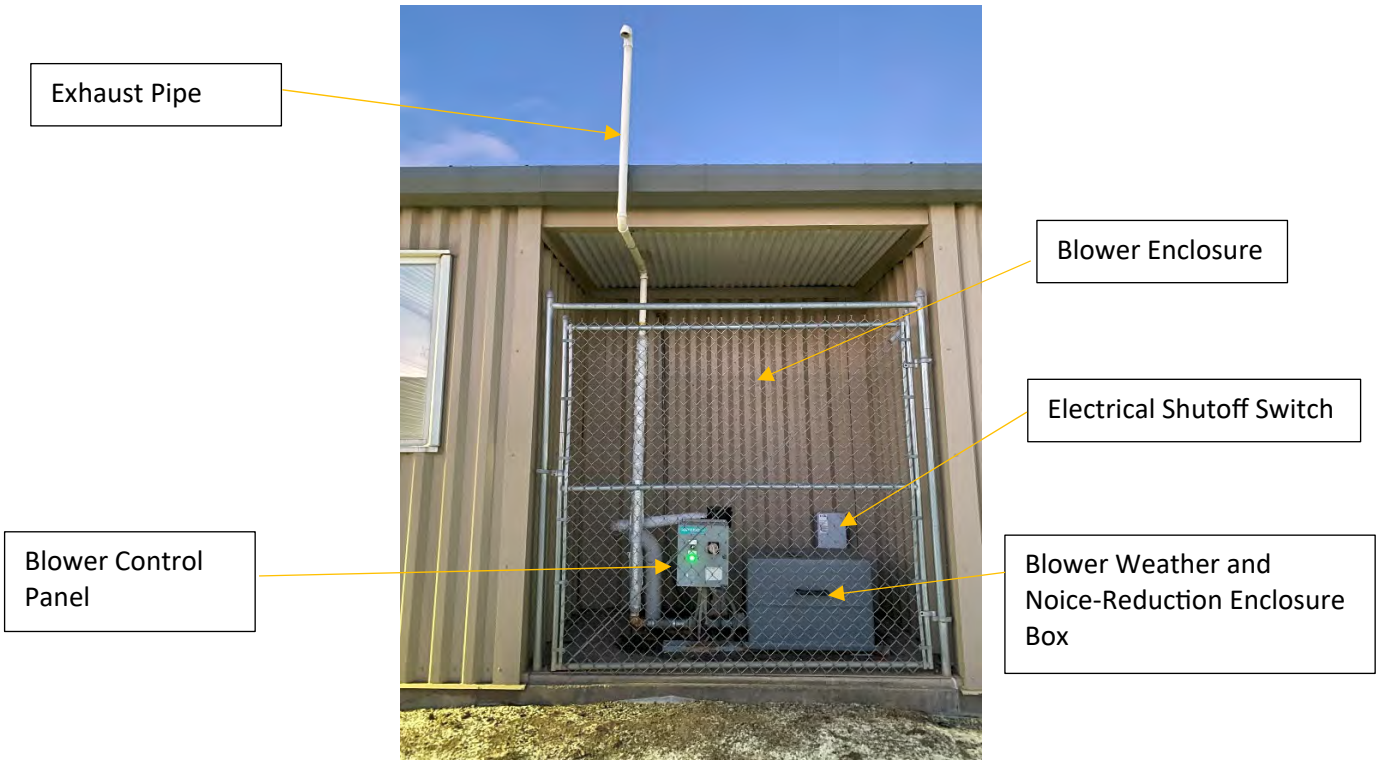
Additional Remarks:

Minimum Inspection Schedule: Inspection of blowers and other SSD equipment will be conducted on an annual basis to establish that the system is operational and performing within the design specifications. Unscheduled inspections and/or sampling may take place when a suspected failure of the SSD system has been reported or an emergency occurs that is deemed likely to affect the operation of the system. The minimum schedule may be revised, as necessary, following the first certification year. All inspection events will utilize this checklist.

Attachment 4

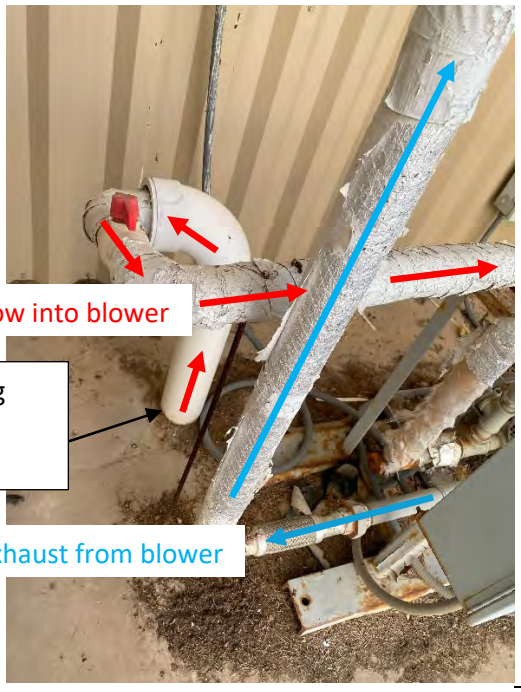
Photolog of Components January 2025 (Prior to Repairs)

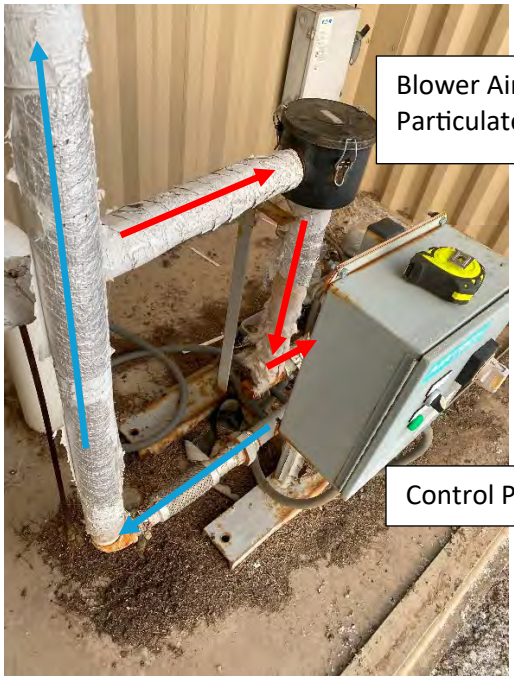
Sub-Slab Depressurization System and Appurtenances





Vacuum System





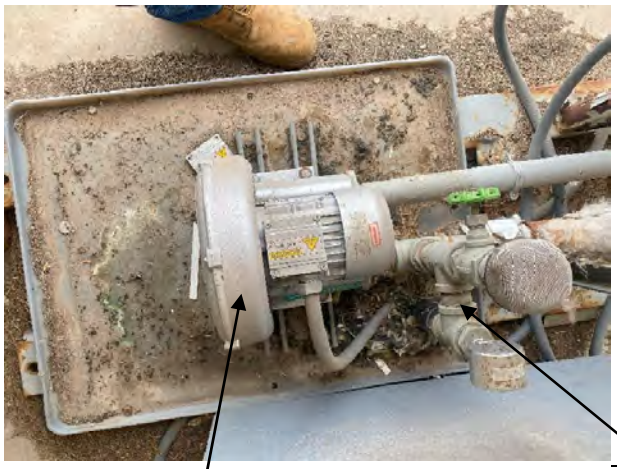


Original Air Filter Housing and Existing Filter





Blower



Airtech regenerative blower



Vacuum gauge, makeup air valve, negative pressure-relief valve















Blower Alarm System

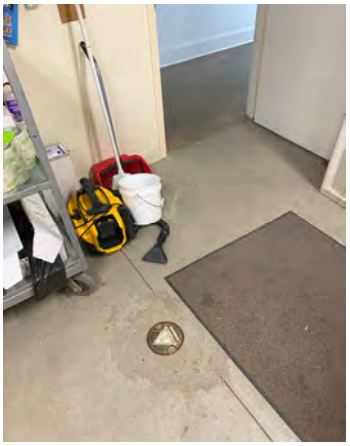






Previous reports by Atlas indicated that they "tripped" the alarm but it did not go off. Based on VERTEX's assessment it appeared that if the blower loses power, after 50 minutes the warning light will illuminate and will send a signal to the alarm panel.

Vacuum-Monitoring Points





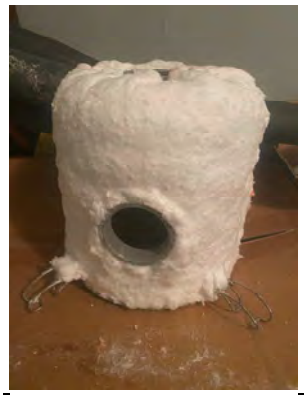
Four vacuum-monitoring points are located beneath flush-mounted bolt-down lids within the floors of the subject building.

Attachment 5

Photolog of Components March 2025 (Following Repairs)

Sub-Slab Depressurization System Renovations







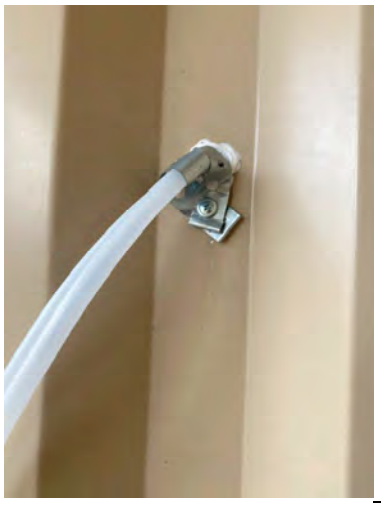
A new air intake filter was purchased and insulated.

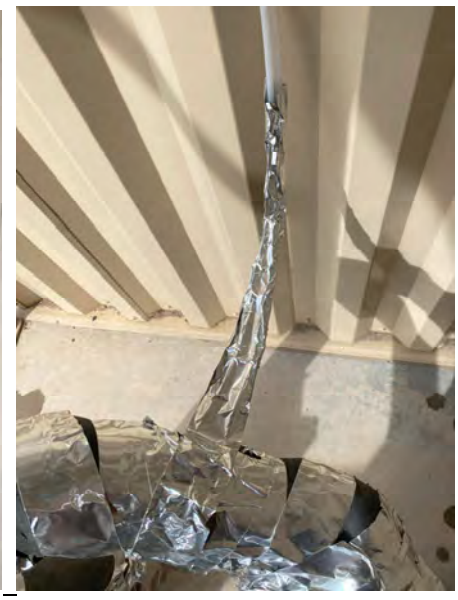




Original 1 ½" PVC piping being removed, areas of piping were not insulated at all or insulation was degraded.





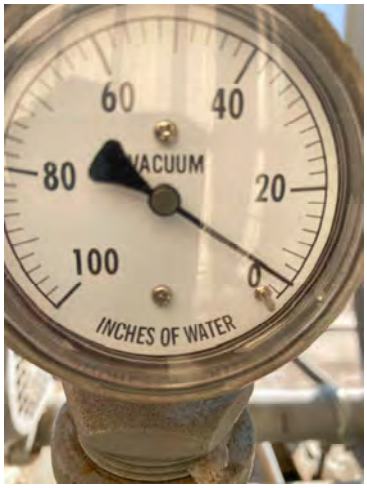


Installation of tubing through building exterior wall for new vacuum gauge and alarm that were installed inside facility.



Bolt threaded into 2” PVC for flow measurements





Blower-mounted vacuum gauge and vacuum relief valve.





Air intake filter - insulating complete and filter installed.









Views of installed and insulated new piping and components.



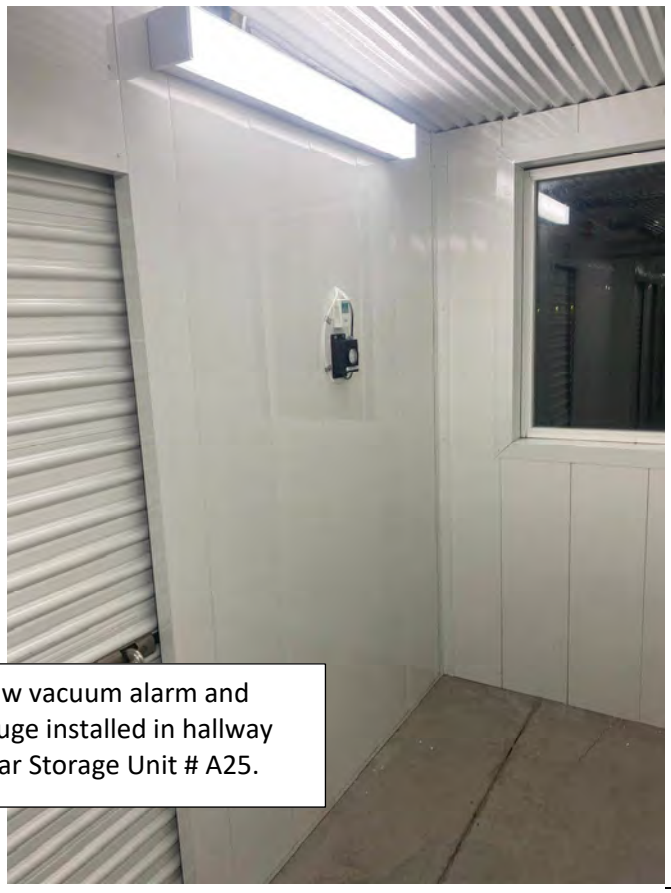
Exhaust piping.



Renovated system with sound enclosure installed.



Renovated system with sound enclosure removed.



New vacuum alarm and gauge installed in hallway near Storage Unit # A25.





New battery-powered vacuum alarm



Newly installed SSDS Vacuum Alarm and Vacuum Gauge



"Trouble Relay and Pump Light Relay" Display on Fire Alarm when SSDS Circuit Breaker was turned off.





Building Fire Alarm System and Existing SSDS Alarm Connection

Attachment 6 – Specification Sheets

New Air Intake Filter

New Filter Housing: Solberg Manufacturing Model CSL-851-200HC
Replacement Filters: Solberg Manufacturing Model 851

Existing Vacuum Relief Valve

Manufacturer: Vacuforce LLC
Model: VC61-Z

Existing Regenerative Blower

Airtech regenerative blower, Model 3BA1400-7AT06
performance curve for the regenerative blower vacuum pump

New Remote AprilAire Blower Alarm

Manufacturer: AprilAire
Model: ARNALM

New Remote Vacuum Gauge

Vacuum Gauge Manufacturer: Dwyer Instruments, Inc
Model: 2040
Vacuum Housing Manufacturer: OBAR Systems, Inc

New Air Intake Filter

New Filter Housing: Solberg Manufacturing Model CSL-851-200HC

Replacement Filters: Solberg Manufacturing Model 851

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Technical Data

Inlet Vacuum Filters

Applications & Equipment

- Industrial & Severe Duty
- Vacuum Pumps & Systems: Roots, Rotary Vane, Screw, Piston
- Vacuum Packaging Equipment
- Vacuum Furnace
- Blowers: Side Channel & P.D.
- Vacuum Lifters
- Intake Suction Filters
- Food Industry
- Woodworking/Routers
- Ash Handling
- Printing Industry
- Medical/Hospital
- Sterilization
- Remote Installations for Piston & Screw Compressors
- Paper Processing
- Waste Water Aeration
- Cement Processing
- Bag House Systems
- Vacuum Vent Breathers
- Chemical Processing
- Factory Automation Equipment
- Leak Detection Systems
- Semiconductor / Solar

Identification

Standard Solberg assemblies should have an identification label/nameplate that gives the following information:

- Assembly Model #
- Replacement Element #

The part number designates the filter type, the element configuration and housing connection size. For example, the following part number identifies the filter as being a "CSL" design filter with a "235™" element, "P" prefilter and 4" flange connection size.

CSL-235P-400F

- Connection Size and Type
- Replacement Element Part Number
- Filter Type

Vacuum Service Rating Chart

Threaded vacuum filter connections must be free of defect and properly sealed to achieve deeper vacuum levels. Vacuum service levels are given for reference only and serve as a guideline for product selection. Product certification and alternative designs are available for applications requiring deeper vacuum levels and specific leak rates. Please contact factory for details.

Vacuum Level	Pressure (mbar)	Pressure (Torr)	Pressure (Pa)
Atmospheric Pressure	1013	760	$1.013x10^{+5}$
Rough Vacuum	1013 to 33	760 to 25	$1x10^{+5}$ to $3x10^{+3}$
Medium Vacuum	33 to $1.3x10^{-3}$	25 to $1x10^{-3}$	$3x10^{+3}$ to $1x10^{-1}$
High Vacuum	$1.3x10^{-3}$ to $1.3x10^{-9}$	$1x10^{-3}$ to $1x10^{-9}$	$1x10^{-1}$ to $1x10^{-7}$

Rev: US0621K

All model offerings and design parameters are subject to change without prior notice.
Contact your representative or visit www.solbergmfg.com for the most current information.

Choosing the Best Filter for Your Equipment

A. When the connection & airflow is known:

1. Select the appropriate connection style. (i.e.: MPT, Flange, NPSC etc.)

a. Verify assembly SCFM (flow) rating. Compare with your required airflow. (Note: Assembly flow ratings are based on 6,000 FPM or 30m/sec for a given connection size to achieve low pressure drop performance. When required flow exceeds assembly flow rating, the pressure drop through the outlet connection will increase. In such cases select by element SCFM (flow) rating.)

b. Verify that the flow rating matches connection size; skip to "C. Selecting Elements".

B. When the connection size is unknown, flexible, or the required flow rating exceeds assembly flow rating:

1. Match required flow rating with the element flow rating.
2. Choose related connection size.

C. Selecting Elements: The filter performance is influenced by the actual application duty and the equipment it is installed on. Regular maintenance checks and proper servicing is required.

Application Duty Descriptions:

Industrial Duty: clean workshop or clean outdoor environment - small element sizing is sufficient.

Severe Duty: dirty workshop, wastewater – medium to large element is recommended.

Extreme Duty: cement, steel making, plastics or dusty material conveying – largest element sizing is recommended.

1. Select media required by your application. Options include:

a. Standard media

1. Polyester: all purpose; withstands pulses, moisture, and oily air
2. Paper: mostly dry, smooth flow applications

b. Special Media: for a variety of micron levels and media types, see the "Filter Media Specifications" in the Replacement Element Section or contact Solberg.

2. Select element size by matching the element with the anticipated duty and upsize accordingly.

Filter Assembly Maintenance

Request the appropriate maintenance manual for more in-depth information from your Solberg representative or on our website: www.solbergmfg.com.

Element Maintenance

Solberg elements should be replaced once the pressure drop reaches 15-20" H_2O above the initial pressure drop of the installation. Cleaning the element is also an option.

Solberg recommends replacing dirty elements for optimal performance. Any damage which results from by-pass or additional pressure drop created by element cleaning is the sole responsibility of the operator.

Note: The overall performance of a filter element is altered once cleaned. The initial pressure drop after subsequent cleanings will be greater than the original, clean pressure drop of the element. After each cleaning, the pressure drop will continue to increase. Under all circumstances, the initial pressure drop of the element needs to be maintained at less than 15" H_2O.

If the pressure drop exceeds 20" H_2O at start-up; it should be replaced with a new element. With many types of equipment, the maximum pressure drop allowed will be dictated by the ability of the equipment to perform to its rated capacity. Under all circumstances, the operator should avoid exceeding the manufacturer's recommended maximum pressure drop for their specific equipment.

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Inline Right Angle Vacuum Filters

CSL Series 3/8 - 4”

Overview

Solberg’s CSL Series is designed to protect equipment from contaminants carried over from a variety of industrial processes. Ideal for rough-medium vacuum service, the CSL can be utilized in systems where standard duty flanges and threaded connections are acceptable. Multiple filter element media options offer superior protection and longevity for the vacuum system.



Benefits

- Large holding capacity and easy field cleaning, especially when mounted horizontally or inverted
- Low pressure design

Features

- Seamless drawn housings
- O-ring seal
- Corrosive resistant black powder coat carbon steel
- Stainless steel torsion clips for durability

Technical Specifications

- Vacuum Rating: medium vacuum service*
- Temp (continuous): min -15°F (-26°C) max 220°F (104°C)
- Filter change out differential: 15-20” H_2O over initial ΔP
- Polyester: 99%+ removal efficiency standard to 5 micron
- Paper: 99%+ removal efficiency standard to 2 micron

Options

ATEX Available

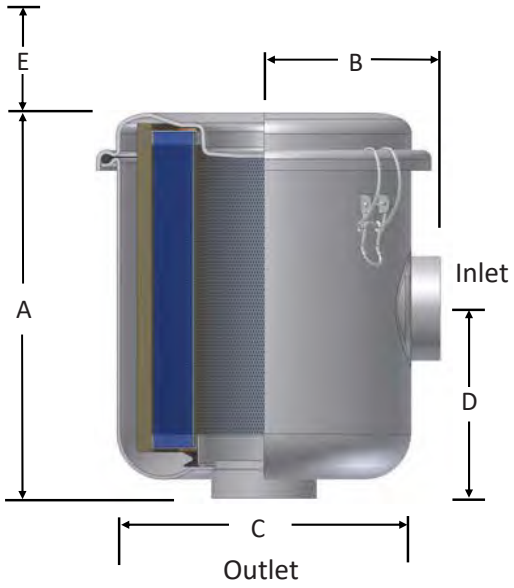
- Vacuum gauge
- Higher holding capacity configurations available (select models)
- Material/Finishes: stainless steel, epoxy coating
- Support brackets
- Alternative top-to-canister fastening system for low pressure or pulsating systems
- Stainless steel (select models)



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www.solbergmfg.com

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Inlet/Outlet Size	Type	Assembly SCFM Rating	Assembly Part Number Polyester	Paper	Dimensions - inches A	B	C	D	Suggested Service Ht. E	Approx. Weight lbs.	Replacement Element Part No. Polyester	Paper	Element SCFM Rating
⅜"	BSPP	18	CSL-825-039HCB	CSL-824-039HCB	3 ⅛	2 ⅛	3 ¾	1 13/16	3"	0.88	825	824	25
½"	NPSC	18	CSL-825-050HCB	CSL-824-050HCB	3 ½	2 ¼	3 ¾	2	3"	0.88	825	824	25
½"	NPSC	20	CSL-843-050HC	CSL-842-050HC	4	3	5 ¾	2 ½	3"	3	843	842	55
¾"	NPSC	24	CSL-825-075HCB	CSL-824-075HCB	3 ½	2 5/16	3 ¾	2	3"	0.88	825	824	25
¾"	NPSC	25	CSL-843-075HC	CSL-842-075HC	4	3	5 ¾	2 ½	3"	3	843	842	55
1"	NPSC	35	CSL-843-100HC	CSL-842-100HC	4 ¼	3 ¼	5 ¾	2 ⅝	3"	3	843	842	55
1"	NPSC	40	CSL-849-100HC	CSL-848-100HC	6 11/16	4 ⅛	7 ⅜	4 ½	5"	5	849	848	115
1 ¼"	NPSC	55	CSL-843-125HC	CSL-842-125HC	4 ¼	3 ¼	5 ¾	2 ⅝	3"	3	843	842	55
1 ¼"	NPSC	60	CSL-849-125HC	CSL-848-125HC	6 11/16	4 ⅛	7 ⅜	4 ½	5"	5	849	848	115
1 ½"	NPSC	80	CSL-849-150HC	CSL-848-150HC	6 ¾	4 ⅛	7 ⅜	4 ½	5"	5	849	848	115
2"	NPSC	175	CSL-851-200HC	CSL-850-200HC	10 ¼	4 ½	8 ¾	5	9"	15	851	850	290
2 ½"	FPT	210	CSL-851-250HC	CSL-850-250HC	10 11/16	5 ⅛	8 ¾	5 ½	9"	15	851	850	290
3"	FPT	300	CSL-239-300C	CSL-238-300C	15 ¾	8 13/16	13 ¼	8 11/16	11"	33	239™	238™	570
3"	MPT	300	CSL-2541-300B	CSL-2540-300B	15 ¾	9	13 ¼	8 ⅞	12"	30	2541	2540	800
4"	MPT	520	CSL-2541-400B	CSL-2540-400B	16 ¼	9 ½	13 ¼	9 ½	12"	32	2541	2540	800

*See Vacuum Filter Technical Data for Vacuum Service Data.

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Inline Right Angle Vacuum Filters

CSL Series 3” - 12”

Overview

Solberg’s CSL Series is designed to protect equipment from contaminants carried over from a variety of industrial processes. Ideal for rough-medium vacuum service, the CSL can be utilized in systems where standard duty flanges and threaded connections are acceptable. Multiple filter element media options offer superior protection and longevity for the vacuum system.



Benefits

- Reduce piping costs with multiple mounting configurations (mount horizontal or inverted)
- Minimize equipment pressure-drop change with low pressure-drop filter design

Features

- Heavy duty T-bolts for easy maintenance
- Corrosive resistant black powder coat carbon steel
- O-ring stays in place with unique U-channel groove
- Inlet & outlet ¼” gauge taps
- Lifting lugs
- Brackets for optional support legs
- Nameplate bracket

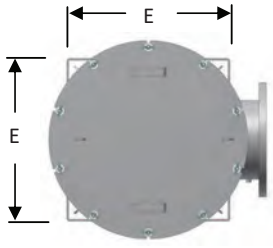
Technical Specifications

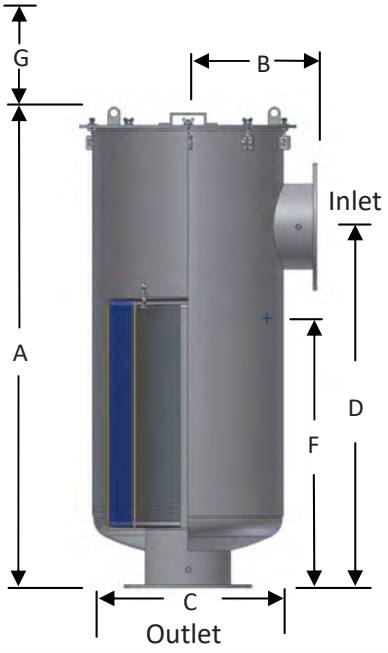
- Vacuum Rating: medium vacuum service*
- Filter change out differential: 15-20” H_2O over initial ΔP
- Polyester: 99%+ removal efficiency standard to 5 micron
- Paper: 99%+ removal efficiency standard to 2 micron

Options

ATEX Available

- Straight-through configurations
- Specialty filter media
- Stainless steel
- Various nonstandard finishes and connection styles
- ISO flange
- PN6, PN16 flange patterns
- Flange faces and internal surfaces free of paint
- Mounting housing bands





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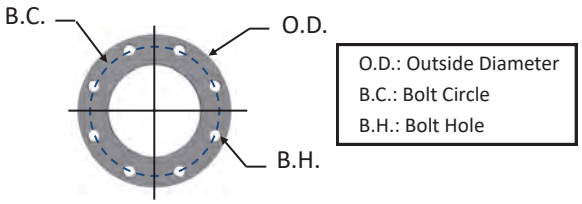
All model offerings and design parameters are subject to change without prior notice.
Contact your representative or visit www.solbergmfg.com for the most current information.

Flanged Assemblies

Flange Inlet & Outlet	Assembly SCFM Rating	Assembly Part Number		Dimensions - inches				Suggested Service ht. E	Approx. Weight lbs	Replacement Element Part No.		Element SCFM Rating
		Polyester	Paper	A	B	C	D			Polyester	Paper	
4”	520	**CSL-235P-400F**	**CSL-234P-400F**	27 ⅜	9	14	18 ½	15”	62	235P™	234P™	570
4”	520	**CSL-335P-400F**	**CSL-334P-400F**	27 ⅜	9	14	18 ½	20”	64	335P™	334P™	800
5”	800	**CSL-245P-500F**	**CSL-244P-500F**	28 ¼	11	18 ½	19 ½	15”	88	245P™	244P™	880
5”	800	**CSL-345P-500F**	**CSL-344P-500F**	28 ¼	11	18 ½	19 ½	20”	90	345P™	344P™	1100
6”	1100	**CSL-275P-600F**	**CSL-274P-600F**	29 ¼	12	18 ½	20 ½	15”	110	275P™	274P™	1100
6”	1100	**CSL-375P-600F**	**CSL-374P-600F**	29 ¼	12	18 ½	20 ½	20”	113	375P™	374P™	1500
8”	1800	**CSL-377P-800F**	**CSL-376P-800F**	39 ⅛	14	22 ½	25 ½	20”	185	377P™	376P™	1825
10”	2900	**CSL-685P-1000F**	**CSL-384P(2)-1000F+**	57 ½	16	27	45	33”	380	685P™	384P™(2)+	6600
12”	4950	**CSL-485P(2)-1200F+**	**CSL-484P(2)-1200F+**	70 ¼	16	27	57	25”	465	485P™(2)+	484P™(2)+	9410

+Denotes 2 elements stacked in housing.

125/150# Pattern Flange	Dimensions - inches			No. of Holes	Flange Thickness inches
	O.D.	B.C.	B.H.		
4”	9	7 ½	¾	8	0.38
5”	10	8 ½	⅞	8	0.38
6”	11	9 ½	⅞	8	0.38
8”	13 ½	11 ¾	⅞	8	0.38
10”	16	14 ¼	1	12	0.38
12”	19	17	1	12	0.50



All flanges are oriented “split center”.

MPT Assemblies

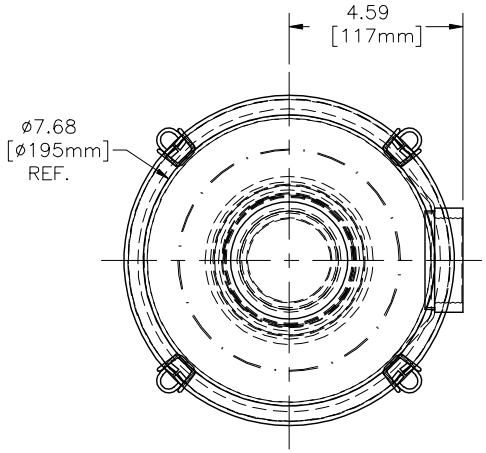
MPT Inlet & Outlet	Assembly SCFM Rating	Assembly Part Number		Dimensions - inches				Suggested Service ht. E	Approx. Weight lbs	Replacement Element Part No.		Element SCFM Rating
		Polyester	Paper	A	B	C	D			Polyester	Paper	
3”	300	**CSL-235P-300**	**CSL-234P-300**	27 ⅜	9	14	18 ½	10”	47	235P™	234P™	570
3”	300	**CSL-335P-300**	**CSL-334P-300**	27 ⅜	9	14	18 ½	15”	50	335P™	334P™	800
4”	520	**CSL-235P-400**	**CSL-234P-400**	27 ⅜	9	14	18 ½	10”	52	235P™	234P™	570
4”	520	**CSL-335P-400**	**CSL-334P-400**	27 ⅜	9	14	18 ½	15”	55	335P™	334P™	800
5”	800	**CSL-245P-500**	**CSL-244P-500**	28 ¼	11	18 ½	19 ½	10”	82	245P™	244P™	880
5”	800	**CSL-345P-500**	**CSL-344P-500**	28 ¼	11	18 ½	19 ½	15”	88	345P™	344P™	1100
6”	1100	**CSL-275P-600**	**CSL-274P-600**	29 ¼	12	18 ½	20 ½	10”	95	275P™	274P™	1100
6”	1100	**CSL-375P-600**	**CSL-374P-600**	29 ¼	12	18 ½	20 ½	15”	97	375P™	374P™	1500

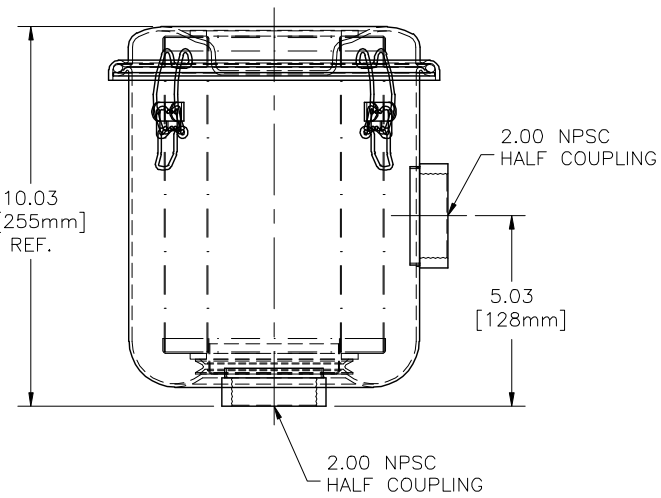
*See Vacuum Filter Technical Data for vacuum service data and sizing guidelines.

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REVISIONS						
ZONE	REV	DESCRIPTION	ECN #	CHG BY	DATE	APP'D





REPLACEMENT ELEMENT# 851	
MATERIAL	POLYESTER
CFM FLOW	290
SURFACE AREA	4.5 SQ. FT.
I.D.	3.50
O.D.	5.88
HEIGHT	8.63

MODEL#	HOUSING MATERIAL	FINISH
CSL-851-200HC	CARBON STEEL	BAKED ENAMEL GREY

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-REF: APPROXIMATE DIMENSIONS, NO TOLERANCES APPLY
-TOLERANCES ARE:
DECIMALS: .XX ±.25, .XXX ±.125
ANGLES ±2°

CUSTOMER APPROVAL:

SOLBERG MANUFACTURING INC.
1151 W. ARDMORE AVE.
ITASCA, IL 60143
630/773-1363

DESCRIPTION:
CSL-851-200HC

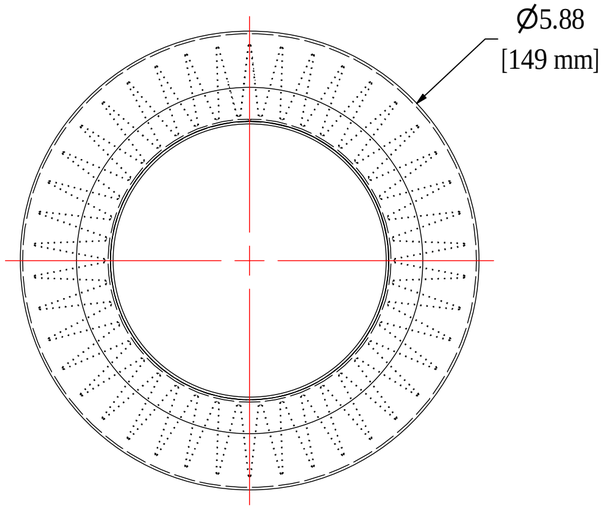
SALES REP.: E.NYSTROM

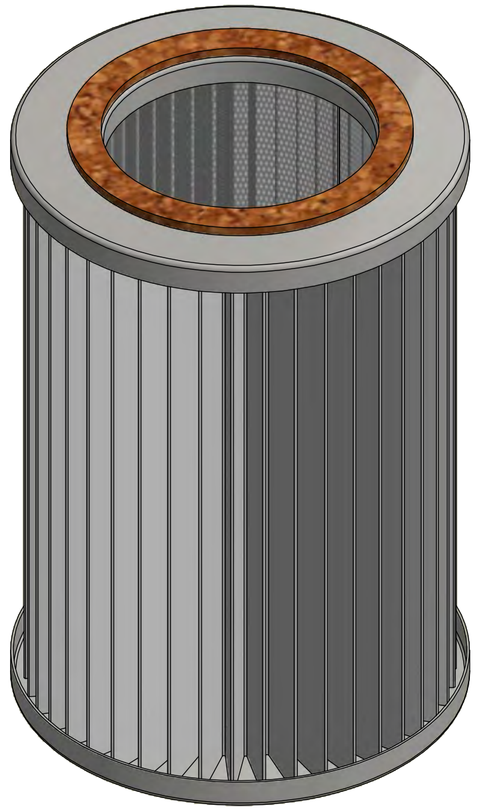
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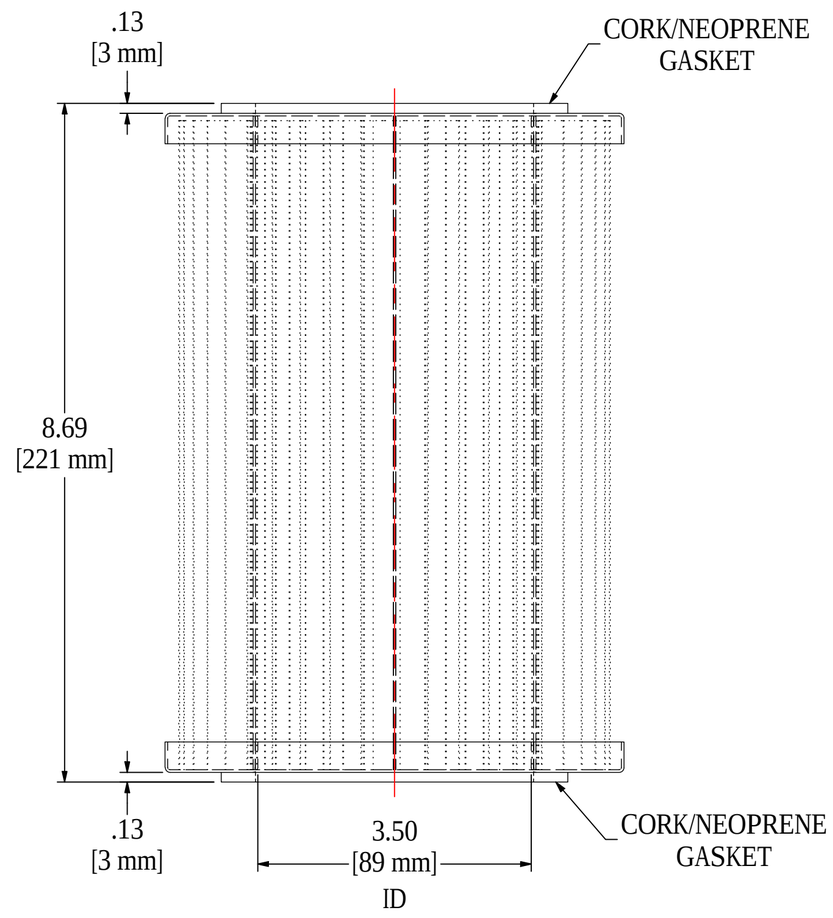
SHEET: 1 of 1 | SHEET SIZE: C | SCALE: NTS

DRAWING NUMBER: SD10221 | REV: —

REV	DESCRIPTION	ECN #	CHG BY	DATE	APP'D
A	CONVERTED TO 3D	PER MJC	NAD	07/14/16	EZR
B	UPDATED STANDARD LAYOUT	17839	TAS	12/04/19	NAD







ELEMENT SPECS		
PART NUMBER	851	
MATERIAL	POLYESTER	
FLOW RATE	290 CFM	493 m^3/hr
SURFACE AREA	4.8 ft^2	0.4 m^2
I.D.	3.50"	89mm
O.D.	5.88"	149mm
HEIGHT	8.69"	221mm

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-REF: APPROXIMATE DIMENSIONS, NO TOLERANCES APPLY
-FINISH: BREAK EDGES TO .005-.020 RADIUS/CHAMFER

MODEL NUMBER: 851

SHEET: 1 OF 1

DESCRIPTION: 851, POLY

PROJECT: SD13603

DRAWN BY: CWJ
DATE: 5/20/2008

APPROVED BY:
DATE:

REV: B

Existing Vacuum Relief Valve

Manufacturer: Vacuforce LLC

Model: VC61-Z

Relief Valves Pressure/ Vacuum

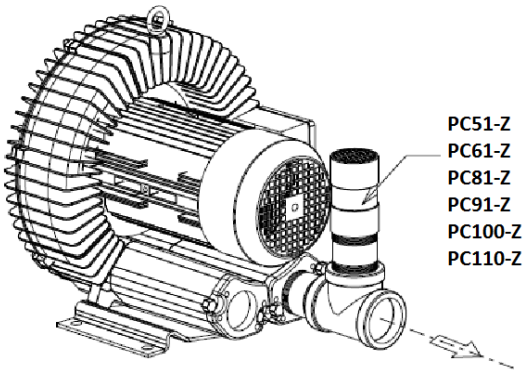


PC / VC SERIES:

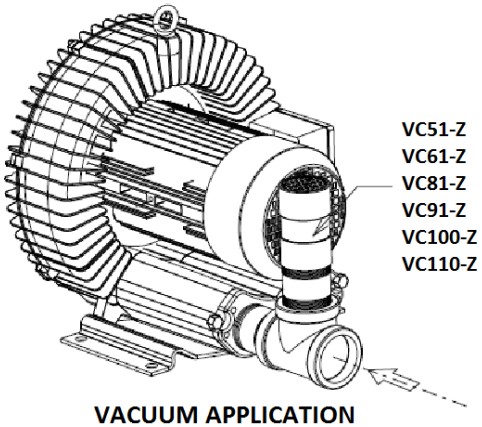
A relief valve functions to protect the blower motor from excessive system pressure that can result from line restriction. Positioning is at the blower outlet for use in pressure systems and blower inlet for vacuum service.

The design features a stainless steel spring that is tensioned to set actuation. Valves can be factory set or customer field adjusted based on the maximum operating pressure or vacuum level of the selected blower.

Material of construction is durable carbon steel with protective zinc plated finish. These valves are suitable for air and other non-corrosive services.



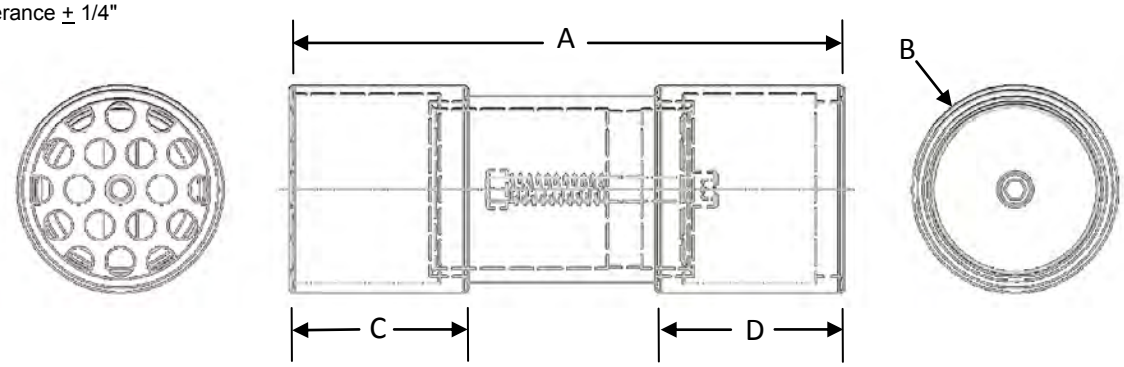
PRESSURE APPLICATION



VACUUM APPLICATION

Model No. (Pressure)	Model No. (Vacuum)	Connection FNPT	Dimensions - inches A	B	C	D	Blower Model Reference	Capacity SCFM
PC51-Z	VC51-Z	1 1/4"	6 1/8	2 1/8	2	2 1/16	3BA7, 3BA1200/1300/1310/1330	0-60
PC61-Z	VC61-Z	1 1/2"	6 1/8	2 1/8	2	2 1/16	3BA1400/1410/1430/1500/1510/1530	60-200
PC81-Z	VC81-Z	2"	7 3/8	2 3/4	2 3/8	2 1/2	3BA1600/1610/1630	200-350
PC91-Z	VC91-Z	3”	7 3/8	3 1/4	2 1/2	2 1/2	3BA1800/1810/1830	350-750
PC100-Z	VC100-Z	4”	6 1/2	3 11/16	2 7/16	2 1/2	3BA1900/1910/1930	750-1500
PC110-Z	VC110-Z	5”	6 1/2	3 11/16	2 7/16	2 1/2	3BA1943	750-1500

Dimension tolerance ± 1/4"



Existing Regenerative Blower

Airtech regenerative blower, Model 3BA1400-7AT06

Performance curve for the regenerative blower vacuum pump

AIRTECH® VACUUM

3BA1400

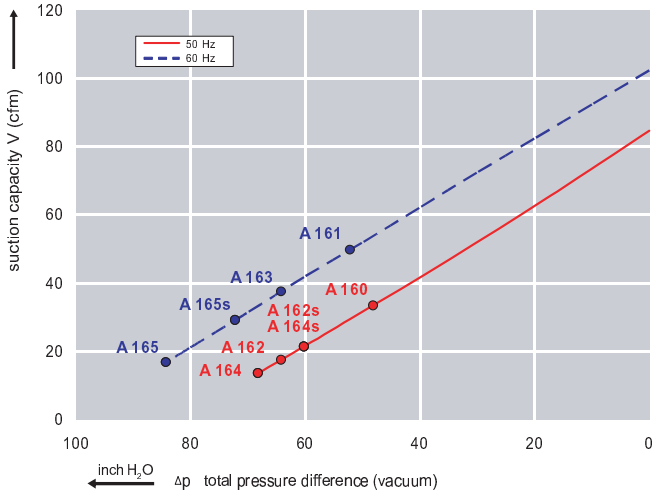
Vacuum/Pressure Regenerative Blower



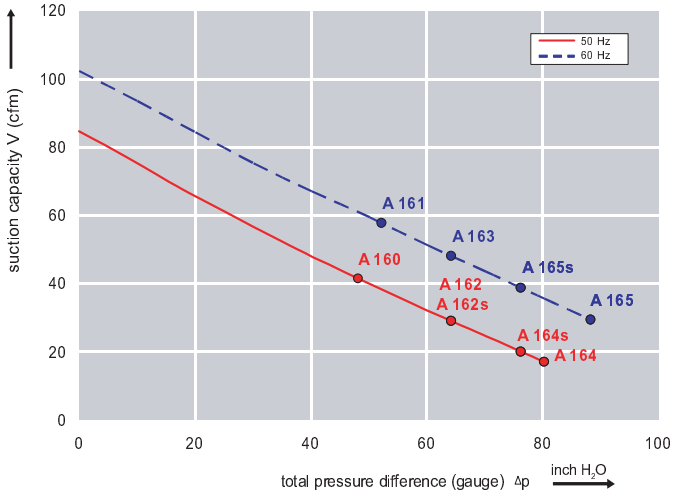
Features:

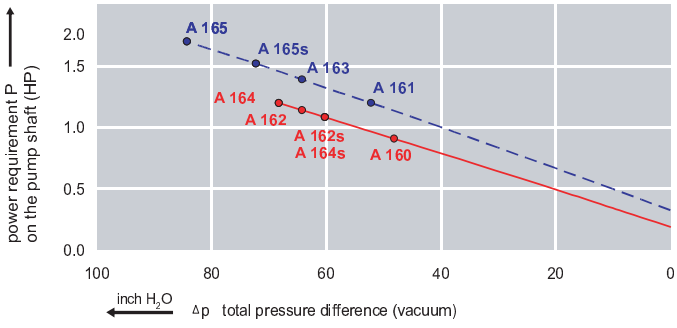
- Cooler running, outboard bearing provides maintenance-free operation
- Environmentally friendly oil-free technology
- Extremely quiet operation
- All motors are standard TEFC with Class F insulation, UL recognized, CE Compliant
  Explosion-Proof motors available
- Custom construction blowers are available
- Rugged die cast aluminum construction

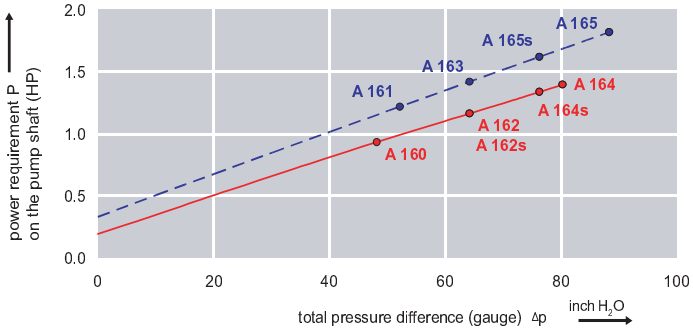
Performance curve for Vacuum pump

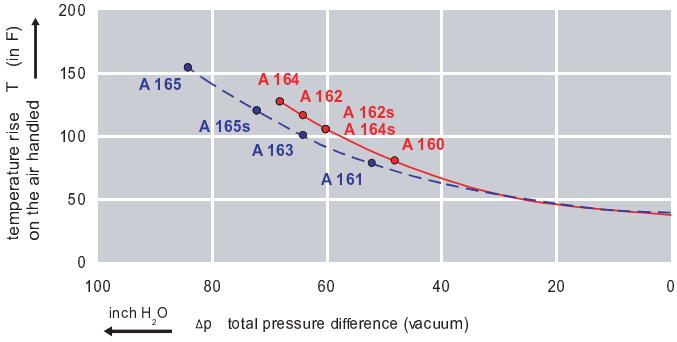


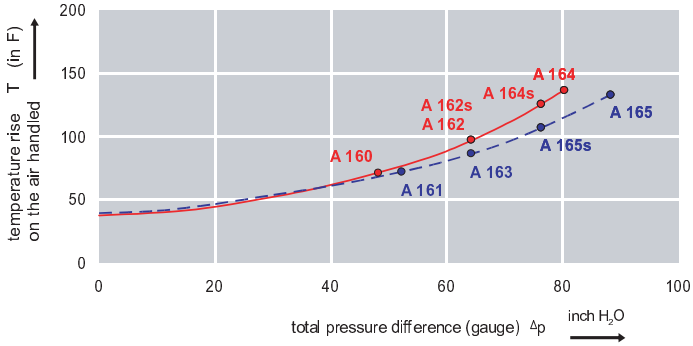
Performance curve for Compressor









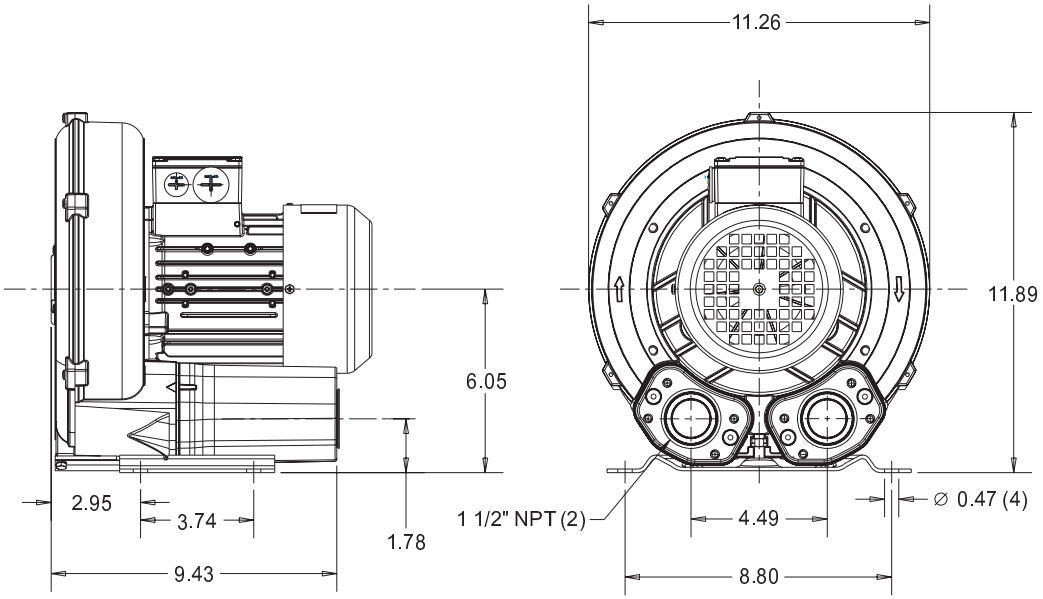


AIRTECH® VACUUM

3BA1400

Vacuum/Pressure Regenerative Blower

Dimensions: (inches)



Recommended Accessories:

Relief valve:

VC51Z (Vacuum)

PC51Z (Pressure)

Filter:

ATF-150-1337 (Vacuum)

AFS-20-150-10 (Pressure)

Specifications subject to change without notice. Please contact factory for specification updates.

Selection & Ordering Data - Type 3BA1400

Curve No.	Order No.	Frequency Hz	Rated power HP	Input voltage V		Input current A		Permissible total differential pressure Vacuum inch H2O	Permissible total differential pressure Compressor inch H2O	Sound pressure level dB(A)	Weight lbs
3~ 50/60 Hz IP55 insulation material class F											
A 160	3BA1400-7AT06	50	0.94	200D ... 240D	345Y ... 415Y	3.8 D	2.2 Y	-48	48	63	29
A 161	3BA1400-7AT06	60	1.11	220D ... 250D	415Y ... 460Y	3.75D	2.15Y	-52	52	64	29
A 162	3BA1400-7AT16	50	1.14	200D ... 240D	345Y ... 415Y	4.2 D	2.4 Y	-64	64	63	33
A 163	3BA1400-7AT16	60	1.27	220D ... 250D	415Y ... 460Y	4.0 D	2.3 Y	-64	64	64	33
A 164	3BA1400-7AT26	50	1.74	200D ... 240D	345Y ... 415Y	5.7 D	3.3 Y	-68	80	63	35
A 165	3BA1400-7AT26	60	2.01	220D ... 250D	415Y ... 460Y	5.5 D	3.2 Y	-84	88	64	35
1~ 50/60 Hz IP55 with capacitor for continuous operation											
A 164s	3BA1400-7AS25	50	1.47	115	230	13	6.5	-60	76	63	35
A 165s	3BA1400-7AS25	60	1.74	115	230	14	7.0	-72	76	64	35

Suitable for 208 Volt Operation

All curves are rated at 14.7 psia and 68° F ambient conditions and are reported in SCFM referenced to 68° F and 14.696 psia sea level conditions. Curve values are nominal, actual performance may vary by up to 10% of the values indicated. For inlet temperatures above approximately 80 °F or for handling gases other than air, please contact your Airtech sales representative for assistance.

AIRTECH®
VACUUM

Operating and Maintenance Instructions

3BA Regenerative Blowers



INSTALLATION & OPERATING MANUAL
3BA REGENERATIVE BLOWERS

Table of Contents

Section:	Page Number:
1. Safety	4
1.1 General Safety Precautions	4
1.2 Clothing and Protective Gear	4
1.3 Electrical Safety	4
1.4 Vacuum and Gauge Pressure Safety	5
1.5 Installation/Start-up	5
1.6 Maintenance Procedures	6
1.7 Hot Surfaces	6
1.8 Hearing Protection	6
1.9 Safety Guidelines for Transport of the unit	7
2. Technical Data	8
Table 1: 3 Phase, Single Stage, 50 Hertz	10
Table 2: 3 Phase, Single Stage, 60 Hertz	11
Table 3: 3 Phase, Two/Three Stage, 50 Hertz	12
Table 4: 3 Phase, Two/Three Stage, 60 Hertz	13
Table 5: Single-phase, 50 Hz	14
Table 6: Single-phase, 60 Hz	14
Table 7: Single Stage – Approx. Temperature Rise	16
Table 8: Two/Three Stage – Approx. Temperature Rise	17
Table 9: Tightening Torque Specifications	18
3. Installation	20
3.1 Installation Procedure	21
4. Start-up	23
4.1 Start-up Procedure	23
4.2 Potential Risks For Operators	23
5. Maintenance and Servicing	24
5.1 Troubleshooting Chart	25
5.2 Lifting	27
5.3 Storage	28
5.4 Disposal	28
6. Exploded-View Drawings	29
3BA1 Single-Stage	29
3BA1 Two-Stage	30
3BA1943 Two-Stage	31
3BA7 Single-Stage	32
3BA7 Two-Stage	33
Warranty Statement	34

1. Safety

1.1 General Safety Precautions

WARNING: Improper operation of 3BA units can result in serious or even fatal injuries. Please make sure all personnel have read and understood this manual before operating the unit.

All personnel should familiarize themselves with the units' specifications and be careful not to exceed the unit's capacity.

Transport, installation, operation, shut-down, maintenance and disposal of 3BA units should be carried out by qualified professionals.

Do not attempt to start or run the unit unless it has been completely assembled. Particular attention should be paid to: the vacuum pump/compressor cover, the muffler on the inlet and discharge connections, and the fan guard.

The standard 3BA unit must never come into contact with flammable substances.

1.2 Clothing and Protective Gear

It is recommended that all personnel wear proper protective gear while operating the unit. This may include eye protection, gloves and helmets.

Please be aware that it is possible for hair and clothing to be pulled into the unit. Avoid wearing loose-fitting clothing near the unit while it is operating and wear a hairnet if necessary.

1.3 Electrical Safety

Electrical installation should only be done by qualified electricians. Before doing any electrical work on a 3BA unit, please ensure that **power to the unit has been disconnected.** Do not attempt to open the unit's terminal box until you have made certain that the unit is not connected to a power source.

The terminal box must be kept free of dirt and moisture at all times. Make sure the terminal box cover and cable entries are tightly sealed so they remain dustproof and waterproof. Check the terminal box regularly to make sure it is sealed and free of debris and moisture.

1.4 Vacuum and Gauge Pressure Safety

In order to avoid dangerous situations associated with vacuum and gauge pressure, please utilize secure mounting elements, connections, lines, fittings, and containers. Pipes/hoses must be securely connected to the inlet and discharge connections. The inlet and discharge connections and the pipes/hoses connected to them must not be closed, clogged, or soiled. Check regularly to ensure that these connections and mountings are not becoming unseated. If necessary, support pipes and hoses to ensure that there is no tension on the connections. **Failure to observe these precautions can lead to sudden evacuation of hazardous fluids or dangerous suction that can pull hair or clothing into the unit.**

1.5 Installation/Start-up

The unit and any lines connected to it must be securely installed. In particular, the feed pipes must be securely routed, e.g. in cable ducts, in the floor, etc.

If a separate control panel or other such interface will be used to start and stop the unit, it should be installed in an area with an unobstructed view of the unit to ensure that it is not switched on while being serviced.

Excess vibration can cause damage to the unit and/or unsafe conditions. Install the unit on a solid foundation or a solid mounting surface. Check screw glands/unions for strength and firm seating.

Cables and pipes should be installed in a recess in the floor or duct so they do not present a tripping hazard.

To ensure sufficient cooling of the unit, ventilation screens and openings must remain clear. Ensure that discharge air from other units cannot be pulled into the unit.

Make sure that the inlet and pressure lines are clearly marked to avoid confusion. **Interchanged inlet and pressure lines can lead to damage to the unit and/or serious injury.**

Install a filter in the inlet pipe and replace it regularly. If particulates or debris enter the unit, the blades of the impellers can be damaged and blades could potentially break off, potentially creating a hazardous situation.

If re-starting the unit after it has been idle for a long period of time, measure the insulation resistance of the motor. If values are less than 1 k Ω per volt of nominal voltage, the winding may be too dry.

If the unit is installed or stored in an environment with a temperature of over 104°F (40°C) be aware that the winding may be damaged and the grease might need to be changed more often.

1.6 Maintenance Procedures

Before beginning work on the pump-motor unit, please take the following precautions:

- Make sure power has been completely disconnected
- Wait for the unit to come to a complete stop.
- Allow the unit time to cool.
- Shut off lines and release pressure
- Make certain that no vacuum or gauge pressure is present in the lines/tanks to be opened.
- Make sure that no fluids can escape

Please note that the rotating impeller is accessible when the inlet and discharge connections are open. Do not reach into the unit through open connections or insert objects into the unit through any openings. Serious injury could occur. If the unit is running without piping or tubing, provide the inlet and discharge of the unit with either additional mufflers or piping of a sufficient length to prevent access to the impeller.

Check regularly to ensure the terminal box is free of any dirt or foreign substances and there is no moisture or humidity present. Make certain the terminal box cover and cable entries are tightly closed.

1.7 Hot Surfaces

During operation, the surface of the unit can reach temperatures of 320° F (160° C). It is advisable to cover the unit with suitable touch protection (e.g. a perforated plate or wire cover). Do not touch the unit during operation, and allow time to cool after shut-down. Temperature-sensitive parts such as lines or electronic components should not come into contact with the surface of the unit.

1.8 Hearing Protection

Make certain any missing or defective silencers are replaced. Noise emitted by the unit can cause serious hearing damage. Conduct a noise measurement test while the unit is running. If the unit operates over 90 dB(A), please place a warning sign in the area where the unit has been installed and make certain that

any personnel working in the vicinity wear ear protection at all times while the unit is running.

1.9 Safety Guidelines for Transport of the unit:

Prior to transport and handling, please make sure that all components are properly assembled and secure. Any machinery used to transport these units must have the proper lifting capacity. Please consult the table on page 27 to find the weight of the unit being handled. Do not stand or walk under suspended loads.

If a 3BA unit has come in contact with any dangerous substances, it must be decontaminated before being sent to Airtech for repair evaluation.

2 Technical Data

These operating instructions cover the Airtech 3BA side channel vacuum pumps and compressors supplied with standard TEFC motors. Other configurations are available including V-belt driven units, units with explosion proof motors, mechanical seals, magnetic drives, coatings and modifications for high pressure service. Airtech can provide any combination of modifications to meet your application requirements. Such blowers, however, are outside the scope of this manual.

Description

All regenerative blowers are dynamic compression devices and utilize a non-contacting impeller to accelerate the gas and a specially designed housing to compress the gas. Cooling is accomplished by using the motor fan to blow air over the housing. In larger models, the housing is specially designed with cooling fins to allow a wider range of operation. Both the inlet and outlet ports have built-in silencers and mesh screens. Both the inlet and outlet have an inside connection thread corresponding to DIN ISO 228. On larger units, multiple suction and discharge connection configurations may be available.

The wetted parts are constructed of Aluminum on all models. The blower shares a bearing with the motor. The seal between the bearing and the motor is not gas tight in most models, therefore these blowers are not recommended for handling of toxic or explosive gases. (Contact Airtech Vacuum, Inc. for additional options if explosive or toxic gases will be handled.)

A full range of accessory items are available, including vacuum or pressure relief valves, check valves, suction filters, motor starters, vacuum/pressure cross-over valves, and in-line filters.

Application/Installation Environment

CAUTION! These blowers are designed for use in general industry. Suitable personnel protection according to OSHA requirements is provided, but the equipment should not be operated in residential settings.

Airtech blowers can be operated as either vacuum pumps or compressors. They are suitable for use with air having a relative humidity up to 90 percent, but not generally suitable for handling corrosive or erosive gases. Special versions for toxic or aggressive gases may be available. Use of the standard blower in aggressive environments may cause damage to the blower or exposure to gases being handled in the local environment.

CAUTION! Dangerous (flammable or explosive) or aggressive (corrosive) gases should not be handled by the standard blower.

Handling of flammable or aggressive gases and vapors may be possible by using a specially configured or modified blower. Contact factory for additional information. The standard blower is not suitable for operation in explosive environments as defined by NFPA 70. Contact factory for assistance.

CAUTION! The ambient and suction temperatures should be between 40 and 105 F. For temperatures outside this region, please contact the factory.

The maximum permissible pressure difference for vacuum or pressure is dependent on the motor rating (See Tables 1 to 4 for detailed information by model number.) and power supply frequency. The figures in Tables 1 to 4 are computed assuming an ambient temperature of 77 F (25 C) and a local barometric pressure of 1013 mbar (sea level). Operation at an ambient temperature of 104 F (40C) is the maximum permissible, and will result in a reduction of 10 percent on maximum vacuum or pressure attainable by the unit. For temperatures between 77 F and 104 F, reduce the maximum pressure reduction is a linear function of temperature.

Table 1. Three-phase, Single Stage, 50 Hertz

Model	Rated Power HP/kW	Voltage	Motor Current (Amps)	Open Flow Capacity CFM/m3/hr	Maximum Pressure (mbar)	Sound Pressure Level (dBA)
3BA1300-7AT06	.33/.25	200-240/345-415	2.1/1.2	48/82	-100/100	53
2BA1300-7AT16	.54/.4	200-240/345-415	2.6/1.5	48/82	-120/130	53
3BA1400-7AT06	.94/.7	200-240/345-415	3.8/2.2	84/142	-120/120	63
2BA1400-7AT16	1.15/.85	200-240/345-415	4.2/2.4	84/142	-160/160	63
3BA1400-7AT26	1.75/1.3	200-240/345-415	5.7/3.3	84/142	-170/200	63
3BA1500-7AT06	1.15/.85	200-240/345-415	4.2/2.4	120/204	-100/100	64
3BA1500-7AT16	1.75/1.3	200-240/345-415	5.7/3.3	120/204	-170/170	64
3BA1500-7AT26	2.15/1.6	220-250/415-460	7.5/4.3	120/204	-200/190	64
3BA1500-7AT36	2.96/2.2	200-240/345-415	9.7/5.6	120/204	-220/270	64
3BA1530-7AT16	1.75/1.3	200-240/345-415	5.7/3.3	165/280	-120/110	65
3BA1530-7AT26	2.15/1.6	200-240/345-415	7.5/4.3	165/280	-160/150	65
3BA1530-7AT36	2.96/2.2	200-240/345-415	9.7/5.6	165/280	-220/230	65
3BA1600-7AT06	2.15/1.6	200-240/345-415	8.5/4.9	188/320	-160/150	69
3BA1600-7AT16	2.96/2.2	200-240/345-415	9.7/5.6	188/320	-190/190	69
3BA1600-7AT26	4.04/3.0	200-240/345-415	12.5/7.2	188/320	-260/270	69
3BA1600-7AT36	5.4/4.0	200-240/345-415	13.0/7.5	188/320	-290/360	69
3BA1630-7AT06	2.15/1.6	200-240/345-415	8.5/4.9	240/408	-160/150	69
3BA1630-7AT16	2.96/2.2	200-240/345-415	9.7/5.6	240/408	-190/190	69
3BA1630-7AT26	4.04/3.0	200-240/345-415	12.5/7.2	240/408	-260/270	69
3BA1630-7AT36	5.4/4.0	200-240/345-415	15.6/9.0	240/408	-260/290	69
3BA1800-7AT06	5.4/4.0	200-240/345-415	15.6/9.0	280/476	-200/200	70
3BA1800-7AT16	7.4/5.5	200-240/345-415	23/13.3	280/476	-300/300	70
3BA1800-7AT26	10/7.5	200-240/345-415	29/16.7	280/476	-320/430	70
3BA1830-7AT06	5.4/4	200-240/345-415	15.6/9	400/680	-150/140	76
3BA1830-7AT16	7.4/5.5	200-240/345-415	23/13.3	400/680	-200/190	76
3BA1830-7AT26	10/7.5	200-240/345-415	29/16.7	400/680	-270/260	76
3BA1900-7AT06	10.8/8	200-240/345-415	31.5/18.2	568/965	-190/190	74
3BA1900-7AT16	16.8/12.5	200-240/345-415	48.5/28	568/965	-290/280	74
3BA1900-7AT36	25/18.5	200-240/345-415	64.5/37	568/965	-362/462	74
3BA1930-7AT16	16.8/12.5	200-240/345-415	48.5/28	744/1264	-290/280	71
3BA1930-7AT36	25/18.5	200-240/345-415	64.5/37	744/1264	-310/310	71
3BA1930-7AT36	25/18.5	200-240/345-415	64.5/37	744/1264	-310/310	71
3BA7310-0AT167	.75/.55	200-240/345-415	2.8/1.6	40/68	-250/250	57
3BA7410-0AT167	1.5/1.1	200-240/345-415	5.4/3.1	50/84	-300/380	58
3BA7510-0AT168	2/1.5	200-240/345-415	7.5/4.3	70/120	-370/650	64
3BA7510-0AT268	3/2.2	200-240/345-415	9.7/5.6	70/120	-310/430	64
3BA7610-0AT168	3/2.2	200-240/345-415	9.7/5.6	96/163	-310/430	65
3BA7610-0AT368	4.4/3.3	200-240/345-415	13/7.5	96/163	-500/750	65

Table 2. Three-phase, Single-stage, 60 Hz

Model	Rated Power HP/kW	Voltage	Motor Current (Amps)	Open Flow Capacity CFM/m3/hr	Maximum Pressure (mbar)	Sound Pressure Level (dBA)
3BA1300-7AT06	.39/.29	220-250/415-460	1.74/1.0	60/102	-100/100	56
2BA1300-7AT16	.67/.5	220-250/415-460	2.6/1.5	60/102	-150/160	56
3BA1400-7AT06	1.12/.83	220-250/415-460	3.75/2.15	105/179	-130/130	64
3BA1400-7AT16	1.28/.95	220-250/415-460	4.35/2.5	105/179	-160/160	64
3BA1400-7AT26	2/1.5	220-250/415-460	5.5/3.2	105/179	-210/200	64
3BA1500-7AT06	1.28/.95	220-250/415-460	4.35/2.5	150/255	-80/70	70
3BA1500-7AT16	2/1.5	220-250/415-460	5.5/3.2	150/255	-150/140	70
3BA1500-7AT26	2.7/2.05	220-250/415-460	7.5/4.4	150/255	-220/210	70
3BA1500-7AT36	3.4/2.55	220-250/415-460	9.0/5.3	150/255	-260/290	70
3BA1530-7AT16	2/1.5	220-250/415-460	5.7/3.3	200/340	-90/80	71
3BA1530-7AT26	2.7/2.05	220-250/415-460	7.6/4.4	200/340	-260/270	70
3BA1530-7AT36	3.4/2.55	220-250/415-460	10.3/6.0	200/340	-260/250	70
3BA1600-7AT06	2.7/2.05	220-250/415-460	7.5/4.4	235/400	-160/150	72
3BA1600-7AT16	3.4/2.55	220-250/415-460	9.0/5.3	235/400	-190/190	72
3BA1600-7AT26	4.6/3.45	220-250/415-460	12.0/6.5	235/400	-240/230	72
3BA1600-7AT36	6.1/4.6	220-250/415-460	15.2/8.5	235/400	-320/310	72
3BA1630-7AT06	2.7/2.05	220-250/415-460	7.5/4.4	300/510	-160/150	72
3BA1630-7AT16	3.4/2.55	220-250/415-460	9.0/5.3	300/510	-190/190	72
3BA1630-7AT26	4.6/3.45	220-250/415-460	12.0/6.5	300/510	-240/230	72
3BA1630-7AT36	6.1/4.6	220-250/415-460	15.2/8.5	300/510	-260/260	72
3BA1800-7AT06	6.1/4.6	220-250/415-460	15.2/8.5	350/595	-160/160	74
3BA1800-7AT16	8.4/6.3	220-250/415-460	20/11.2	350/595	-300/280	74
3BA1800-7AT26	11.5/8.6	220-250/415-460	27.5/15	350/595	-350/400	74
3BA1830-7AT06	6.2/4.6	220-250/415-460	15.2/8.5	500/850	-90/90	79
3BA1830-7AT16	8.4/6.3	220-250/415-460	20/11.2	500/850	-180/180	79
3BA1830-7AT26	11.5/8.6	220-250/415-460	27.5/15	500/850	-270/260	79
3BA1900-7AT06	12.1/9	220-250/415-460	31.5/18.2	710/1207	-150/140	79
3BA1900-7AT16	19.5/14.5	220-250/415-460	50/29	710/1207	-270/260	79
3BA1900-7AT36	28.7/21.3	220-250/415-460	68/39	710/1207	-382/422	79
3BA1930-7AT16	19.5/14.5	220-250/415-460	50/29	930/1581	-270/260	75
3BA1930-7AT36	28.7/21.3	220-250/415-460	68/39	930/1581	-300/280	75
3BA7210-0AT167	1.1/.83	220-250/415-460	3.75/2.15	35/60	-270/320	62
3BA7310-0AT167	1.1/.83	220-250/415-460	3.75/2.15	48/82	-260/250	62
3BA7410-0AT167	2/1.5	220-250/415-460	5.5/3.2	60/102	-340/370	62

When operating at altitudes above 3280 feet (1000 m) above mean sea level, contact Airtech Inc.

CAUTION! Operation of the unit outside the recommended range of pressures and ambient conditions will result in shorted operating life.

Table 3. 3 Phase, Two/Three Stage, 50 Hertz

Model	Rated Power HP/kW	Voltage	Motor Current (Amps)	Open Flow Capacity CFM/m3/hr	Maximum Pressure (mbar)	Sound Pressure Level (dBA)
3BA1310-7AT26	.94/.7	200-240/345-415	3.8/2.2	48/81.6	-120/120	55
3BA1410-7AT36	2.15/1.6	200-240/345-415	7.5/4.3	84/142.8	-200/190	66
3BA1410-7AT46	2.96/2.2	200-240/345-415	9.7/5.6	84/142.8	-320/420	66
3BA1510-7AT46	4.04/3.0	200-240/345-415	12.5/7.2	121.6/206.7	-340/410	72
3BA1510-7AT56	5.39/4.0	200-240/345-415	17.4/10	121.6/206.7	-390/440	72
3BA1610-7AT36	2.9/2.2	200-240/345-415	9.7/5.6	188/319.6	-190/190	73
3BA1610-7AT26	4.04/3.0	200-240/345-415	12.5/7.2	188/319.6	-260/270	73
3BA1610-7AT36	5.39/4.0	200-240/345-415	13.0/7.5	188/319.6	-290/360	73
3BA1610-7AT46	7.41/5.5	200-240/345-415	23/13.3	188/319.6	-420/500	73
3BA1610-7AT56	10.1/7.5	200-240/345-415	29/16.7	188/319.6	-420/610	73
3BA1640-7AT36	5.39/4.0	200-240/345-415	13.0/7.5	280/476	-290/360	74
3BA1640-7AT46	7.41/5.5	200-240/345-415	23/13.3	280/476	-420/500	74
3BA1640-7AT56	10.1/7.5	200-240/345-415	29/16.7	280/476	-420/610	74
3BA1810-7AT16	7.4/5.5	200-240/345-415	23/13.3	280/476	-420/500	74
3BA1810-7AT26	10.1/7.5	200-240/345-415	29/16.7	280/476	-320/430	74
3BA1810-7AT36	14.8/11	200-240/345-415	29/16.7	280/476	-430/600	74
3BA1810-7AT46	20.2/15	200-240/345-415	56.5/32.5	280/476	-460/670	74
3BA1840-7AT26	10.1/7.5	200-240/345-415	29.0/16.7	280/476	-320/430	74
3BA1840-7AT36	14.8/11.0	200-240/345-415	48.5/28.0	280/476	-430/600	74
3BA1910-7AT16	16.8/12.5	200-240/345-415	48.5/28	624/1061	-290/280	74
3BA1910-7AT36	26.95/20.0	200-240/345-415	69/40	624/1061	-443/502	74
3BA1910-7AT46	33.51/24.98	200-240/345-415	90/52	624/1061	-443/592	84
3BA19437AT26	20.1/15	200-240/345-415	59/34	1200/2040	-160/170	75
3BA19437AT36	26.8/20	200-240/345-415	69/40	1200/2040	-250/230	75
3BA19437AT46	33.5/25	200-240/345-415	90/52	1200/2040	-310/280	75
3BA7220-0AT567	2/1.5	200-240/345-415	7.5/4.3	28/48	-370/650	58
3BA7320-0AT467	1.5/1.1	200-240/345-415	5.4/3.1	40/68	-300/380	58
3BA7320-0AT567	2/1.5	200-240/345-415	7.5/4.3	40/68	-480/450	59
3BA7420-0AT267	2/1.5	200-240/345-415	7.5/4.3	50/84	-480/450	61
3BA7420-0AT567	4.4/3.3	200-240/345-415	13/7.5	50/84	-500/750	61
3BA7520-0AT268	3/2.2	200-240/345-415	9.7/5.6	70/120	-470/460	64
3BA7620-0AT368	4.4/3.3	200-240/345-415	13/7.5	96/163	-500/750	68
3BA7620-0AT468	5.4/4	200-240/345-415	14/8.1	96/163	-370/650	67
3BA7620-0AT568	7.5/5.5	200-240/345-415	19.9/11.5	96/163	-520/750	68
3BA7630-0AT668	10.1/7.5	200-240/345-415	29/16.7	96/163	-420/610	77

Table 4. 3 Phase, Two/Three Stage, 60 Hertz

Model	Rated Power HP/kW	Voltage	Motor Current (Amps)	Open Flow Capacity CFM/m3/hr	Maximum Pressure (mbar)	Sound Pressure Level (dBA)
3BA1310-7AT26	1.11/.83	220-250/415-460	3.75/2.15	60/102	-130/130	61
3BA1410-7AT36	2.7/2.05	220-250/415-460	7.5/4.4	105/179	-220/210	69
3BA1410-7AT46	3.4/2.55	220-250/415-460	9.0/5.3	105/179	-350/440	69
3BA1510-7AT46	4.6/3.45	220-250/415-460	12.0/6.5	152/258	-380/360	74
3BA1510-7AT56	6.1/4.6	220-250/415-460	15.2/8.5	152/258	-410/480	74
3BA1610-7AT36	3.4/2.55	220-250/415-460	9.0/5.3	235/400	-190/190	76
3BA1610-7AT26	4.6/3.45	220-250/415-460	12.0/6.5	235/400	-240/230	76
3BA1610-7AT36	6.4/4.8	220-250/415-460	16.5/9.8	235/400	-320/310	76
3BA1610-7AT46	8.4/6.3	220-250/415-460	20/11.2	235/400	-440/440	76
3BA1610-7AT56	11.5/8.6	220-250/415-460	27.5/15.0	235/400	-440/670	76
3BA1640-7AT36	6.1/4.6	220-250/415-460	15.2/8.5	350/595	-320/310	78
3BA1640-7AT46	8.4/6.3	220-250/415-460	20.0/11.2	350/595	-440/440	78
3BA1640-7AT56	11.5/8.6	220-250/415-460	27.5/15.0	350/595	-440/670	78
3BA1810-7AT16	8.4/6.3	220-250/415-460	20.0/11.2	350/595	-440/440	78
3BA1810-7AT26	11.5/8.6	220-250/415-460	27.5/15.0	350/595	-350/400	78
3BA1810-7AT36	17/12.6	220-250/415-460	50.2/29.0	350/595	-460/600	78
3BA1810-7AT46	23.3/17.3	220-250/415-460	60.0/34.5	350/595	-490/750	78
3BA1840-7AT26	11.5/8.6	220-250/415-460	27.5/15.0	350/595	-350/400	78
3BA1840-7AT36	17/12.6	220-250/415-460	50.2/29.0	350/595	-460/600	78
3BA1910-7AT16	19.5/14.5	220-250/415-460	50.0/29.0	780/1326	-270/260	84
3BA1910-7AT36	31/23	220-250/415-460	72 /42	780/1326	-443/433	84
3BA1910-7AT46	38.9/28.9	220-250/415-460	90/52	780/1326	-443/542	84
3BA19437AT26	23.4/17.5	220-250/415-460	63/36.5	1440/2447	-120/110	84
3BA19437AT36	30.8/23	220-250/415-460	72/42	1440/2447	-190/180	84
3BA19437AT46	38.8/28.9	220-250/415-460	90/52	1440/2447	-265/230	84
3BA7220-0AT567	2.7/2.05	220-250/415-460	7.5/4.4	35/60	-500/740	62
3BA7320-0AT467	2/1.5	220-250/415-460	5.5/3.2	48/82	-340/370	63
3BA7320-0AT567	2.7/2.05	220-250/415-460	7.5/4.4	48/82	-430/410	63
3BA7420-0AT267	2.7/2.05	220-250/415-460	7.5/4.4	60/102	-430/410	66
3BA7420-0AT567	5.1/3.8	220-250/415-460	13.5/7.8	60/102	-510/850	66
3BA7520-0AT268	3.4/2.55	220-250/415-460	9/5.3	84/143	-500/450	70
3BA7620-0AT368	5.1/3.8	220-250/415-460	13.5/7.8	115/196	-510/850	71
3BA7620-0AT468	6.1/4.6	220-250/415-460	15.2/8.5	115/196	-480/500	71
3BA7620-0AT568	8.4/6.6	220-250/415-460	22.5/12.6	115/196	-520/820	72
3BA7630-0AT668	11.5/8.6	220-250/415-460	27.5/15	115/196	-440/670	80

3BA7530-7AT76	6.2/4.6	220-250/415-460	16.3/9.5	82/139	-639/729	73

Table 5. Single Phase, 50 Hertz

Model	Rated Power HP/kW	Voltage	Motor Current (Amps)	Open Flow Capacity CFM/m3/hr	Maximum Pressure (mbar)	Sound Pressure Level (dBA)
3BA1100-7AS05	0.27/0.2	230	1.45	24/40	-60/70	50
3BA1200-7AS05	0.33/0.25	115/230	3.5/1.7	35/60	-100/100	50
3BA1300-7AS15	0.5/0.37	115/230	5.4/2.7	48/82	-110/110	53
3BA1330-7AS15	0.5/0.37	115/230	5.4/2.7	60/102	-110/110	54
3BA1400-7AS25	1.47/1.09	115/230	13/6.5	84/142	-149/189	64
3BA1410-7AS25	2/1.49	115/230	22/11	84/142.8	-279/259	66
3BA1500-7AS35	2/1.49	115/230	22/11	120/204	-189/199	64
3BA7210-0AS75	0.74/0.55	115/230	13/6.5	28/48	-229/289	57
3BA7220-0AS75	2/1.49	115/230	19.4/9.7	29/49	-371/600	57
3BA7310-0AS75	1.26/0.93	115/230	15.2/7.6	40/68	-249/351	58
3BA7320-0AS75	2/1.49	115/230	19.4/9.7	40/68	-401/550	59
3BA7410-OAS45	1.47/1.09	115/230	13/6.5	50/84	-299/381	59

Table 6. Single Phase, 60 Hertz

Model	Rated Power HP/kW	Voltage	Motor Current (Amps)	Open Flow Capacity CFM/m3/hr	Maximum Pressure (mbar)	Sound Pressure Level (dBA)
3BA1100-7AS05	0.31/0.23	230	1.3	30/51	-75/80	53
3BA1200-7AS05	0.38/0.28	115/230	5/2.8	48/82	-112/112	53
3BA1300-7AS15	0.6/0.44	115/230	6.0/3.0	60/102	-130/139	56
3BA1330-7AS15	0.6/0.44	115/230	6.0/3.0	74/126	-130/139	57
3BA1400-7AS25	1.74/1.29	115/230	14.0/7.0	105/179	-179/189	64
3BA1410-7AS25	2.35/1.75	115/230	24.0/12.0	105/179	-249/229	69
3BA1500-7AS35	2.35/1.75	115/230	24.0/12.0	150/255	-179/179	70
3BA7210-0AS75	0.84/0.63	115/230	14.2/7.1	35/60	-259/309	62
3BA7220-0AS75	2.35/1.75	115/230	20.6/10.3	35/60	-421/660	62
3BA7310-0AS75	1.47/1.09	115/230	18.0/9.0	48/82	-279/391	62
3BA7320-0AS75	2.35/1.75	115/230	20.6/10.3	48/82	-391/541	63
3BA7410-OAS45	1.74/1.29	115/230	14.0/7.0	60/102	-338/391	62

Operation of any blower is possible at 87 Hertz without modification in most cases. When using a VFD to operate the blower at this frequency, refer to the nameplate for limits on vacuum and pressure, current draw and motor performance.

If your specific model number is not listed above, please consult the nameplate on the unit for electrical data. If the model you are installing is listed above, please confirm the data on the nameplate. Data in Tables 1 through 4 is subject to change and is approximate. Be sure to confirm necessary operating data what that on the nameplate before commissioning the unit.

CAUTION! Do not operate any 3BA blower above 87 Hz without consultation with the factory. Failure of the blower motor is possible when operating out of range. Consult with the factory for assistance.

Expected temperature rise of the handled gas at maximum allowable pressure differential and when operating at sea level is indicated below:

Table 7: Single Stage – Approximate Temperature Rise

Blower Model	Maximum Rise at 50 Hz speed		Maximum Rise at 60 Hz speed	
	Degrees F	Degrees C	Degrees F	Degrees C
3BA1100-7..0.	115	64	136	76
3BA1200-7..0.	65	36	101	56
3BA1300-7..0.	90	50	77	43
3BA1300-7..1.	90	50	140	78
3BA1300-7..2.	90	50	158	88
3BA1400-7..0.	99	55	86	48
3BA1400-7..1.	129	72	122	68
3BA1400-7..2.	149	83	167	93
3BA1500-7..0.	86	48	72	40
3BA1500-7..1.	115	64	97	54
3BA1500-7..2.	138	77	122	68
3BA1500-7..3.	203	113	180	100
3BA1500-7..6.	248	138	248	138
3BA1600-7..0.	81	45	68	38
3BA1600-7..1.	145	81	104	58
3BA1600-7..2.	171	95	176	98
3BA1600-7..3.	225	125	185	103
3BA1600-7..6.	248	138	194	108
3BA1600-7..7.	248	138	248	138
3BA1800-7..0.	104	58	104	58
3BA1800-7..1.	153	85	185	103
3BA1800-7..2.	248	138	221	123
3BA1900-7..0.	97	54	95	53
3BA1900-7..1.	182	101	155	86
3BA1900-7..3.	230	128	212	118
3BA1943-7..2.	85	47	75	42
3BA1943-7..3.	130	72	100	56
3BA1943-7..4.	180	100	140	78
3BA7210-0..1..	126	70	142	79
3BA7310-0..1..	142	79	142	79
3BA7310-0..2..	178	99	187	104
3BA7410-0..1..	194	108	214	119
3BA7510-0..1..	199	111	232	129
3BA7510-0..2..	248	138	234	130
3BA7610-0..1..	244	136	255	142
3BA7610-0..3..	244	136	255	142

Table 8: Two/Three Stage – Approximate Temperature Rise

Blower Model	Maximum Rise at 50 Hz speed		Maximum Rise at 60 Hz speed	
	Degrees F	Degrees C	Degrees F	Degrees C
3BA1310-7..2.	127	71	165	92
3BA1410-7..3.	154	86	149	83
3BA1410-7..4.	181	101	180	100
3BA1510-7..4.	190	106	176	98
3BA1510-7..5.	194	108	201	112
3BA1610-7..1.	92	51	86	48
3BA1610-7..2.	129	72	118	66
3BA1610-7..3.	176	98	167	93
3BA1610-7..4.	221	123	190	106
3BA1610-7..5.	246	137	266	148
3BA1610-7..7.	176	98	167	93
3BA1610-7..8.	176	98	248	138
3BA1810-7..1.	113	63	80	45
3BA1810-7..2.	185	103	140	78
3BA1810-7..3.	248	138	248	138
3BA1910-7..1.	119	66	115	64
3BA1910-7..2.	203	113	169	94
3BA1910-7..3.	248	138	274	152
3BA1910-7..4.	248	138	274	152
3BA7220-0..2..	131	73	171	95
3BA7220-0..5..	165	92	230	128
3BA7320-0..5..	178	99	255	142
3BA7420-0..2..	192	107	176	98
3BA7420-0..5..	250	139	243	135
3BA7520-0..2..	192	107	216	120
3BA7520-0..7..	257	143	262	128
3BA7530-0..7..	250	121	250	121
3BA7620-0..3..	255	142	259	144
3BA7620-0..5..	255	142	262	146
3BA7630-0..6..	248	138	248	138

Table 9: Tightening Torque Specifications

For non-electrical connections

Thread	Ft-lbs maximum torque	Nm maximum torque
M4	2.43	3.3
M5	3.25	4.4
M6	6.49	8.8
M8	19.47	26.4
M10	34.10	46.2
M12	56.76	77

For electrical connections

Thread	Ft-lbs torque	Nm torque
M4	0.6 to 0.9	0.8 to 1.2
M5	1.3 to 1.8	1.3 to 1.8

For metal threaded glands/unions

Thread	Ft-lbs maximum torque	Nm maximum torque
M12x1.5	3 to 4.5	4 to 6
M16x1.5	3.7 to 5.5	5 to 7.5
M20x1.5	4.4 to 6.6	6 to 9
M32x1.5	5.9 to 8.9	8 to 12
M40x1.5	5.9 to 8.9	8 to 12

For plastic threaded glands/unions

Thread	Ft-lbs maximum torque	Nm maximum torque
M12x1.5	1.5 to 2.6	2 to 3.5
M16x1.5	2.2 to 3	3 to 4
M20x1.5	3 to 3.7	4 to 5
M32x1.5	3.7 to 5.2	5 to 7
M40x1.5	3.7 to 5.2	5 to 7

Operating above the indicated maximum pressure or vacuum would overload the motor and/or overheat the unit. In addition to the maximum allowable pressure difference, careful consideration should be given to matching the motor protection devices (provided by others) to the expected current draw. In no case should the blower be operated with inadequate motor overload protection.

Since regenerative blowers are dynamic compression devices, the performance limits shown in Tables 1 to 4 are applicable only for a gas with the same specific gravity, dynamic viscosity and chemical characteristics as air. For gases with different physical properties than air, the limits will be different from those shown in the tables. Please contact Airtech for assistance in determining the proper blower size and configuration if handling gases other than air.

A vacuum relief valve or pressure relief valve should always be installed at the suction or discharge of the regenerative blower. This will prevent operation outside the applicable ranges shown in Tables 1 to 4. If the relief valves were not specified in the ordering process, please contact Airtech for details, price and availability of the needed valves before commissioning the unit. Failure to use the proper relief valve may result in failure of the blower due to operation outside the applicable limits; any such failure is outside the scope of Airtech's standard warranty.

WARNING! Be sure to install the necessary personnel protection devices if unexpected shut-down of the unit presents danger of death or injury.

3. Installation

As illustrated in Figure 1, the Airtech 3BA blower can be installed in any physical configuration.

CAUTION! Regenerative blowers can have surface temperatures in excess of 320° F. To avoid burns or other physical injury, take care to avoid contact with the surfaces of the blower during and immediately after operation.

To ensure adequate cooling of the blower during operation, install the blower with the minimum clearance as indicated in the table below.

Minimum installation clearances, 3BA blowers

Range	Distance from fan guard to closest obstruction. (inches/mm)	Distance from cover (opposite of fan) to closest obstruction. (inches/mm)
3BA11 through 3BA14	1.4/34	0.79/20
3BA15 through 3BA19	2.1/53	1.57/40
3BA72 and 3BA73	1.3/34	1.18/30
3BA74 through 3BA76	2.1/54	1.18/30

Please note that it may be desirable, where possible, to allow for larger clearances to allow access for maintenance or repair personnel. The noted clearances are to ensure adequate air flow for cooling only and are a minimum requirement.

Failure to allow for the noted clearances may result in premature failure of the blower due to lack of cooling, even if all other precautions are taken as recommended. For specific advice about installations requiring closer clearances, please contact Airtech, Inc. for recommendations.

Airtech regenerative blowers can be mounted in any configuration, either horizontally or vertically mounted. It is not usually necessary to bolt the smaller blowers to a rigid surface during operation, though this may be desirable to reduce pipe vibration, movement and noise. Larger models should be bolted in place, especially when installed vertically, to prevent possible rotation, damage or injury due to start-up torque.

CAUTION! For installations at altitudes greater than 3250 Feet above sea level there will be a loss in capacity. Please contact your factory representative for assistance in determining the extent of the loss of capacity likely at your specific location.

WARNING! Be sure to follow all local codes and regulations with respect to installation and operation of the blower. The blower motor should be wired to a branch circuit disconnect and all other safety devices recommended by the relevant sections of NFPA 70, National Electrical Code, and in accordance with all applicable state and local regulations and requirements.

3.1 Installation Procedure

Perform the installation exactly in accordance with the following steps:

1. For vacuum operation, connect the suction pipe to connection A, and for pressure operation connect the pressure pipe to connection B (See Figure 1). Install startup screens before startup to protect pump from debris.

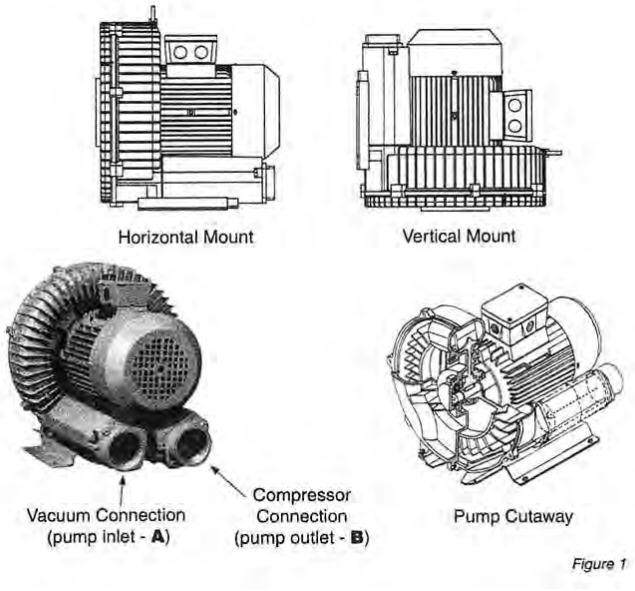


Figure 1

CAUTION! Design your piping system to avoid unnecessary pressure loss, which may significantly affect the operation of any regenerative blower. Contact your Airtech representative for assistance in designing and configuring an appropriate piping system for your application.

For alternation between vacuum and pressure in any application, changeover valves are available. Use of the changeover valve allows the same connection to be used for both vacuum and pressure.

2. The electrical data shown in Tables 1 to 4 (pages 10-14) should be confirmed by examination of the motor data plate on your 3BA blower. The standard motor features Class F insulation as a standard and are UL recognized for applications in both Canada and the United States (CUL). Motors are IEC design IP55, equal to a NEMA TEFC motor design. The connection diagram for the motors can be found in the inside of the terminal box cover. Be sure to confirm that your electrical supply has sufficient capacity to operate the blower according to the nameplate requirements.

3. A magnetic motor starter should always be used to connect the motor to the power supply. It is advisable to use thermal overload motor starters to provide maximum protection for the motor and wiring. All cabling used on starters should be secured with good quality cable clamps.

We recommend that the motor starters used feature a time delay trip on high amperage to avoid nuisance trips on start-up. When the unit is started cold, over amperage may be experienced for a short time due to the higher resistance of the windings at lower temperatures.

If using a change over or solenoid valve, ensure that the voltage connected to the valve matches that shown on the valve instructions or nameplate. Most valves are rated for 110 Volts 60Hz or 220 Volts 50 Hz. Connection of these valves to higher voltages may result in immediate valve failure.

WARNING! The electrical installation should be made by a qualified electrician and in complete compliance with all NFPA 70 (National Electrical Code) requirements along with all state and local code requirements. The main disconnect and motors starters are assumed to be provided by others.

4. Install the necessary relief valves and confirm their proper operation.

4. Start-up

CAUTION! Do not start the blower motor more than 10 times in one hour. If multiple and frequent start-ups are required by your application, install a minimum run timer in the motor control circuit to avoid decreased motor life and possible fire due to over-starting of the motor.

1.1 Start-up Procedure

1. Before operation, confirm the correct direction of rotation by jogging (switching rapidly on and off) the motor and observing the motor fan rotation in the same direction as the arrow. If the direction of rotation is incorrect, lock out the power and switch two leads (three phase) or rewire (single phase) to effect the opposite rotation direction. Recheck the direction of rotation before proceeding.

2. Do not operate the blower at pressure or vacuum ranges that exceed those shown in Tables one through four for the model being installed. This can be achieved by use of the recommended relief valve shown in Table 5.

Note: Relief valves that have been factory pre-set have a label indicating the set pressure and an arrow indicating the direction of flow. The arrow will point into the pipe when installed in vacuum applications and out of the pipe when installed in pressure applications. Do not re-set the relief valve if it has been pre-set from the factory.

In the event the relief valve setting needs to be reset, adjust the set screw to increase or decrease the tension on the spring. Place the blower in operation and note the current draw of the motor. When the current draw of the motor is near the maximum noted on the motor nameplate, tighten the locking nut on the valve and proceed.

3. When checking the current draw of the motor with an ammeter, be sure to confirm the voltage at the motor junction box. Low voltage conditions may result in difficulty starting or in unexpected motor failure or motor starter trips.

1.2 Potential Risks For Operators

Noise emission: Free field noise limits are indicated in Tables 1-4 (pages 10-14). Hearing protection is not normally required at the expected noise generation levels in the table; however, local conditions may result in higher ambient noise. If this is the case and local noise exceeds OSHA recommended levels for expected exposure time (typically 85 dBA for eight hours), hearing protection should be used.

5. Maintenance and Servicing

WARNING! Be sure the power supply is disconnected and locked out before attempting to do any maintenance on the unit. It is critical that the unit be locked out from starting during maintenance as severe injury or death could result from exposure to high voltage or rotating parts.

CAUTION! Allow the blower to cool to a surface temperature of less than 100 F before attempting maintenance. Prolonged exposure to temperatures above 120F can cause severe burns.

Clean the blower surfaces periodically to avoid build up of dust or other debris. Build up of debris can cause overheating and premature failure of the blower.

If an inlet filter is being use, ensure that it remains clean during operation by examining the filter cartridge for debris build up. Replace dirty or clogged filter cartridges.

On pressure units, periodically clean the inlet mesh screen to avoid loss of capacity. If an external inlet filter is used, the filter element should be cleaned monthly or as frequently as required by local conditions. Excessive pressure drop will develop from use of clogged or dirty filters. This pressure drop will degrade blower performance and increase operating temperatures, leading possibly to premature pump failure.

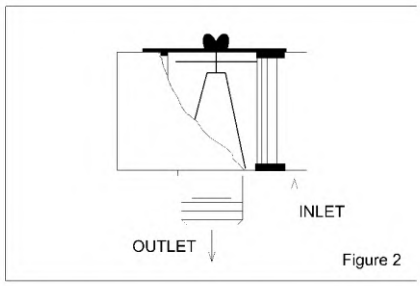


Figure 2

To replace the filter, remove the wing nut and cover. Remove the element and either clean with compressed air or replace. Reassemble in reverse order.

For vacuum applications, the optional in-line vacuum filter must be cleaned regularly, depending on local conditions. Cleaning can be achieved by blowing out with compressed air. If cleaning is not possible, replace the cartridge. Access the cartridge by unhooking the relevant clips and removing the cover.

CAUTION! Do not attempt to check the filter cartridge during operation of the blower. Only check the cartridge after disconnecting the power from the blower and locking out the power to prevent an unexpected start.

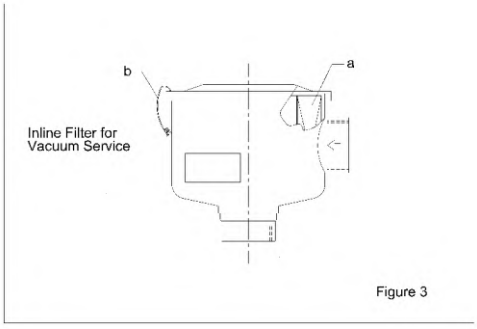


Figure 3

Bearings are grease-packed for life.

5.1 Troubleshooting Chart

Fault	Cause	Remedy	Responsible Party
Motor does not start, no noise.	Two or more power legs interrupted	Check fuses, terminals, etc.. for source of interruption and correct.	Electrician
Motor does not start, humming noise.	One power supply lead interrupted	Check fuses, terminals, etc.. for source of interruption and correct.	Electrician
	Impeller is jammed.	Open blower cover, remove debris, clean.	Service Technician
		Check impeller clearance and reset if necessary.	
	Defective Impeller	Replace impeller.	Service Technician
	Defective Bearing	Replace defective bearing.	Service Technician
Trip of motor starter at start-up	Incorrect starter setting	Ensure starter setting is correct (check current on nameplate)	Electrician
	Winding short-circuit	Megger motor	Electrician
	Motor overloaded due to operation of pump at excessive differential pressures.	Inspect filters, mufflers and connection pipes and clean as required. Check relief valve operation. Reset or replace as necessary.	Operator
	Impeller Jammed	See above fault Motor does not start, humming noise, cause jammed impeller.	Operator
Excessive Power Consumption	Lime or other deposits	Decalcify or clean unit as required (see Maintenance Chart)	Operator
No Vacuum or Pressure.	Severe leak in system	Close off pump and run deadheaded to confirm pump is operating properly. If so, find and fix leak in the system.	Operator
	Wrong direction of rotation	Check air flow direction and change direction of rotation if necessary.	Operator Electrician

Fault	Cause	Remedy	Responsible Party
Insufficient Vacuum	System too small	Use larger system	Operator
	Inlet piping too long or too small.	Increase pipe diameter to reduce pressure loss in inlet piping. Contact Airtech for assistance in determining correct pipe size.	Operator
	Leak at connection to vacuum system.	Check for leaks and repair if necessary.	Operator
	Density of gas handles different from air.	Consider increased limits on operation due to density differences. Consult Airtech, Inc. for assistance.	Airtech Engineering
	Change in impeller geometry due to erosion	Clean impeller and examine for wear. Replace if necessary.	Service Technician
	Inlet filter clogged.	Change filter element; remove clog.	Operator
	Vacuum relief valve incorrectly set.	Reset or replace vacuum relief valve. Contact Airtech for assistance.	Operator
	Seal defective.	Replace seal.	Service Technician
Abnormal flow noises.	Flow speed too high.	Clean pipes or use larger pipes to connect unit to process.	Operator
	Muffler soiled.	Clean muffler inserts, replace if necessary.	Operator
Abnormal running noise	Ball bearing defective or insufficient lubrication on bearing.	Replace bearing if required.	Service Technician
Compressor leaky	Seals on muffler defective.	Tighten muffler connection. Replace gasket if necessary.	Operator
	Seals in motor area defective	Replace as necessary.	Service Technician

WARNING! Before attempting an on-site repair, ensure that a qualified electrician has disconnected the motor from the power supply so that accidental starting of the motor is impossible.

After repairing the unit, be sure to follow the instructions noted in this manual in the **Installation** section (page 20).

5.2 Lifting

For smaller units (less than 65 lbs/ 30 kgs), it may be possible to lift the units manually. When doing so, be sure to understand the weight of the unit being lifted and to follow good lifting safety procedures.

Model	Weight Lbs/kgs	Model	Weight Lbs/kgs
3BA1300-7AT06	20/9	3BA1310-7AT26	33/15
2BA1300-7AT16	22/10	3BA1410-7AT36	55/25
3BA1400-7AT06	29/13	3BA1410-7AT46	59.5/29
3BA1400-7AT26	37.5/17	3BA1510-7AT46	86/39
3BA1500-7AT06	40/18	3BA1510-7AT56	97/44
3BA1500-7AT16	46.5/21	3BA1610-7AT26	104/47
3BA1500-7AT26	51/23	3BA1610-7AT36	119/54
3BA1500-7AT36	55/25	3BA1610-7AT46	163/74
3BA1600-7AT06	57.5/26	3BA1610-7AT56	172/78
3BA1600-7AT16	64/29	3BA1640-7AT36	128/58
3BA1600-7AT26	75/34	3BA1640-7AT46	172/78
3BA1600-7AT36	90.5/41	3BA1640-7AT56	181/82
3BA1800-7AT06	128/58	3BA1810-7AT16	250/113
3BA1800-7AT16	143/65	3BA1810-7AT26	260/118
3BA1800-7AT26	150/68	3BA1810-7AT36	316/143
3BA1900-7AT06	265/120	3BA1810-7AT46	341/155
3BA1900-7AT16	314/142	3BA1840-7AT26	260/118
3BA19437AT26	417/190	3BA1840-7AT36	316/143
3BA19437AT36	463/210	3BA1910-7AT16	409/186
3BA19437AT46	509/231	3BA1910-7AT36	455/206
3BA7210-0AT167	35.3/16	3BA1910-7AT46	500/226
3BA7310-0AT167	35.3/16	3BA7220-0AT567	61.7/28
3BA7410-0AT167	50.7/23	3BA7320-0AT567	66.1/30
3BA7510-0AT168	57.3/26	3BA7420-0AT267	72.7/33
3BA7510-0AT268	63.9/29	3BA7420-0AT567	86/39
3BA7610-0AT168	70.5/32	3BA7520-0AT268	88.2/40
3BA7610-0AT368	77.2/35	3BA7620-0AT368	106/48
3BA7530-0AT768	200/91	3BA7620-0AT568	143/65
		3BA7630-0AT668	207/94

When lifting 3BA15 through 3BA19 (but not 3BA1943 units) or the 3BA75 through the 3BA76, use the eye bolt provided (eye bolts are not included on smaller units). One attachment point should be sufficient. Ensure that the crane is rated for the weight being lifted.

For the 3BA1943, use the eye bolt and the holes in the feet of the blower to lift and maintain a balanced load.

5.3 Storage

The 3BA units should be stored in a clean, dry environment. If stored in an area with a humidity of greater than 80 percent, store in a closed container with desiccant drying agents to avoid damage.

5.4 Disposal

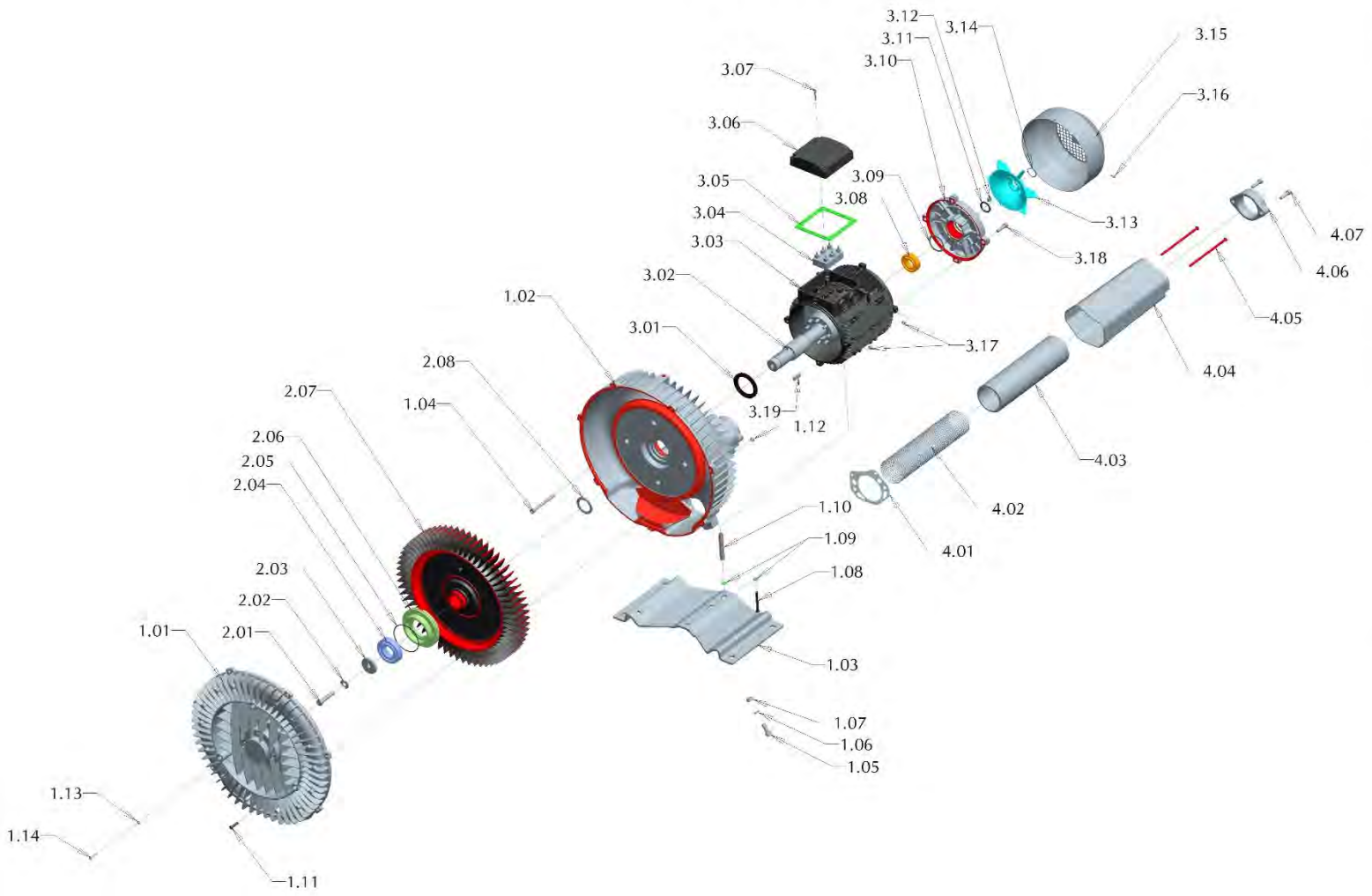
Dispose in accordance with all local health and safety regulations.

Spare parts list are available from your local Airtech service center. Please contact your local Airtech representative for assistance.

For additional assistance, please contact:

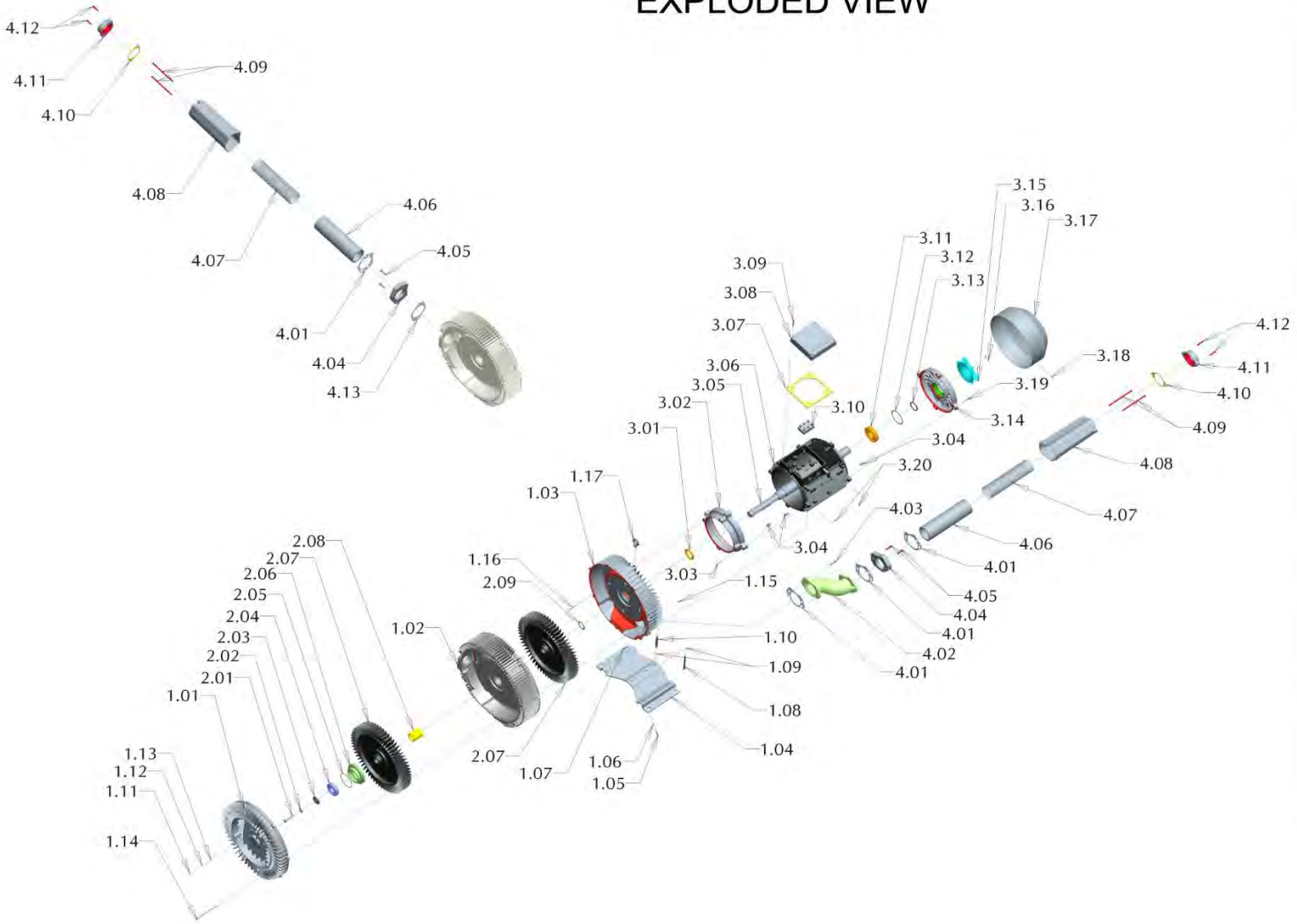
Airtech, Inc.,
301 Veterans Boulevard
Rutherford, NJ, 07070
Phone: 1-201-569-1173
Fax: 201-569-1696.

3BA1 SINGLE STAGE
EXPLODED VIEW



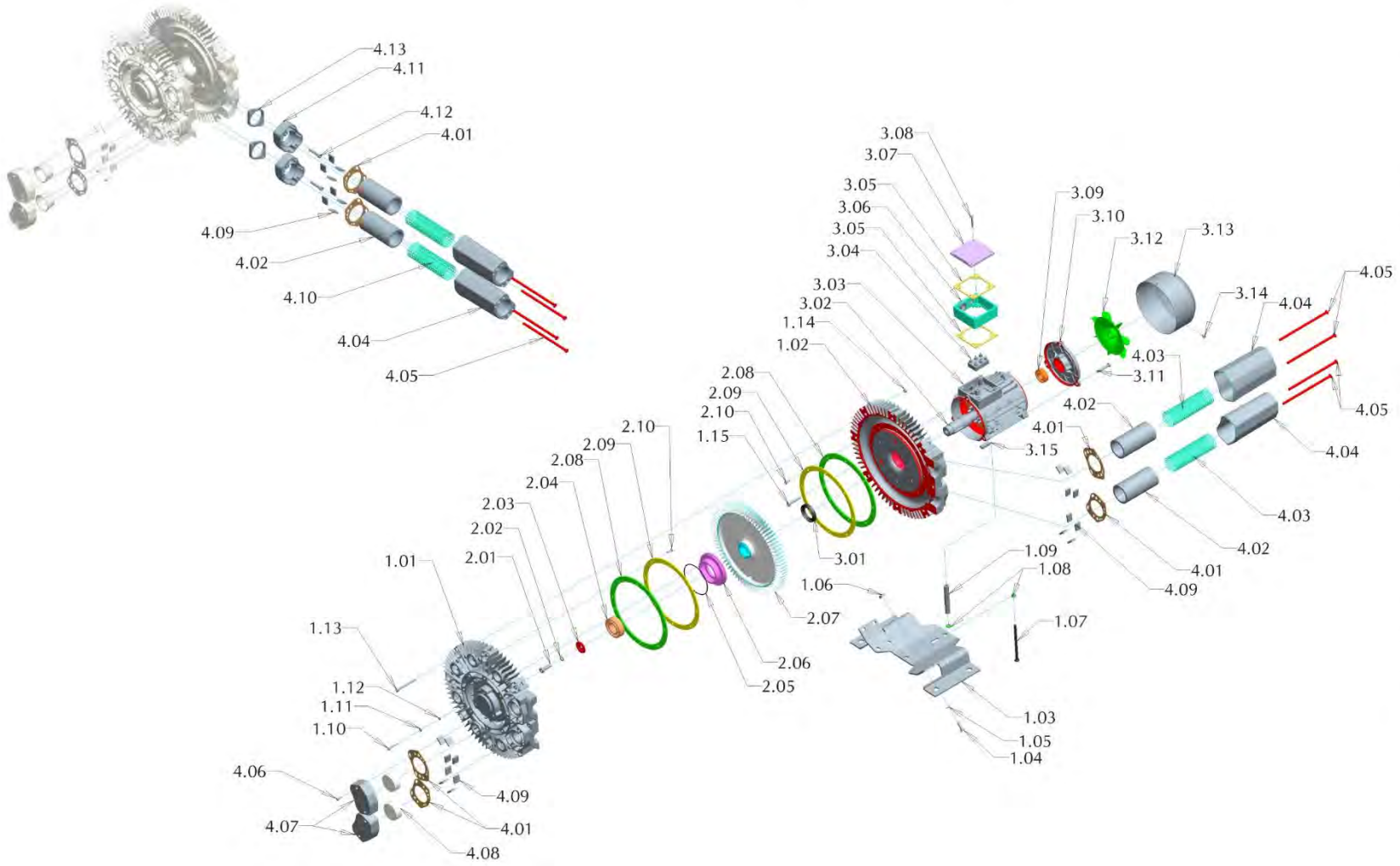
No.	Qty.	Description
1.01	1	Cover
1.02	1	Housing
1.03	1	Mounting Plate
1.04	4	Motor Mounting Screw
1.05	2	Mouting Plate Screw
1.06	2	Mounting Plate Washer
1.07	2	Mouting Plate Nut
1.08	1	Stator Support Screw
1.09	2	Stator Support Washer
1.10	1	Stator Support Sleeve
1.11	8	Cover Mounting Screw
1.12	8	Cover Mounting Nut
1.13	4	Bearing Cover Washer
1.14	4	Bearing Cover Screw
2.01	1	Shaft Screw
2.02	1	Shaft Lock Washer
2.03	1	Disc
2.04	1	Bearing
2.05	1	Bearing Cover O-Ring
2.06	1	Bearing Cover
2.07	1	Impeller
2.08	1	Disc
3.01	1	Seal
3.02	1	Motor Rotor
3.03	1	Stator
3.04	1	Terminal Block
3.05	1	Motor Terminal Box Gasket
3.06	1	Cover For Terminal Box
3.07	4	Terminal Box Cover Screw
3.08	1	Rear Bearing
3.09	1	Bearing Preloading Ring
3.10	1	End Shield
3.11	1	Tolerance Ring
3.12	1	Shaft Key
3.13	1	External Fan
3.14	1	Retaining Ring
3.15	1	Fan Cowl
3.16	4	Fan Cowl Screw
3.17	8	Stator Nut
3.18	4	End Shield Screw
3.19	1	Parallel Key
4.01	2	Silencer Gasket
4.02	2	Silencer Insert
4.03	2	Silencer Insert Filler
4.04	2	Silencer Casing
4.05	4	Silencer Screw
4.06	2	Flange
4.07	4	Flange Screw

3BA1 TWO STAGE
EXPLODED VIEW



No.	Qty.	Description
1.01	1	Cover
1.02	1	Center Section
1.03	1	Blower Housing
1.04	1	Mounting Plate
1.05	2	Plate Mounting Screw
1.06	2	Mouting Plate Washer
1.07	2	Mounting Plate Nut
1.08	1	Stator Support Screw
1.09	2	Stator Support Washer
1.10	1	Stator Support Sleeve
1.11	4	Bearing Cover Screw
1.12	4	Bearing Screw Washer
1.13	4	Bearing Ring Seal
1.14	8	Cover Mounting Screw
1.15	8	Cover Mounting Nut
1.16	4	Motor Mounting Screw
1.17	1	Lifting Ring
2.01	1	Shaft Screw
2.02	1	Shaft Lock Washer
2.03	1	Disc
2.04	1	Bearing
2.05	1	Bearing Cover O-Ring
2.06	1	Bearing Cover
2.07	2	Impeller
2.08	1	Sleeve
2.09	1	Disk
3.01	1	Shaft Seal Ring
3.02	1	Motor Attachment
3.03	4	Motor Attachment Screw
3.04	3	Parallel Key
3.05	1	Motor Rotor
3.06	1	Stator
3.07	1	Motor Terminal Box Gasket
3.08	1	Cover For Terminal Box
3.09	4	Terminal Box Cover Screw
3.10	1	Terminal Block
3.11	1	Rear Bearing
3.12	1	End Shield Seal
3.13	1	Rotary Shaft Lip Seal
3.14	1	End Shield
3.15	1	External Fan
3.16	1	Retaining Ring
3.17	1	Fan Cowl
3.18	4	Fan Cowl Screw
3.19	4	End Shield Screw
3.20	8	Stator Nut
4.01	4	Silencer Gasket
4.02	1	Silencer Attachment
4.03	2	Silencer Attachment Screw
4.04	2	Silencer Flange
4.05	4	Silencer Flange Screw
4.06	2	Silencer Insert Filler
4.07	2	Silencer Insert
4.08	2	Silencer Casing
4.09	4	Silencer Screw
4.10	2	Flange Gasket
4.11	2	Flnage
4.12	4	Flange Screw
4.13	1	Side Silencer Gasket

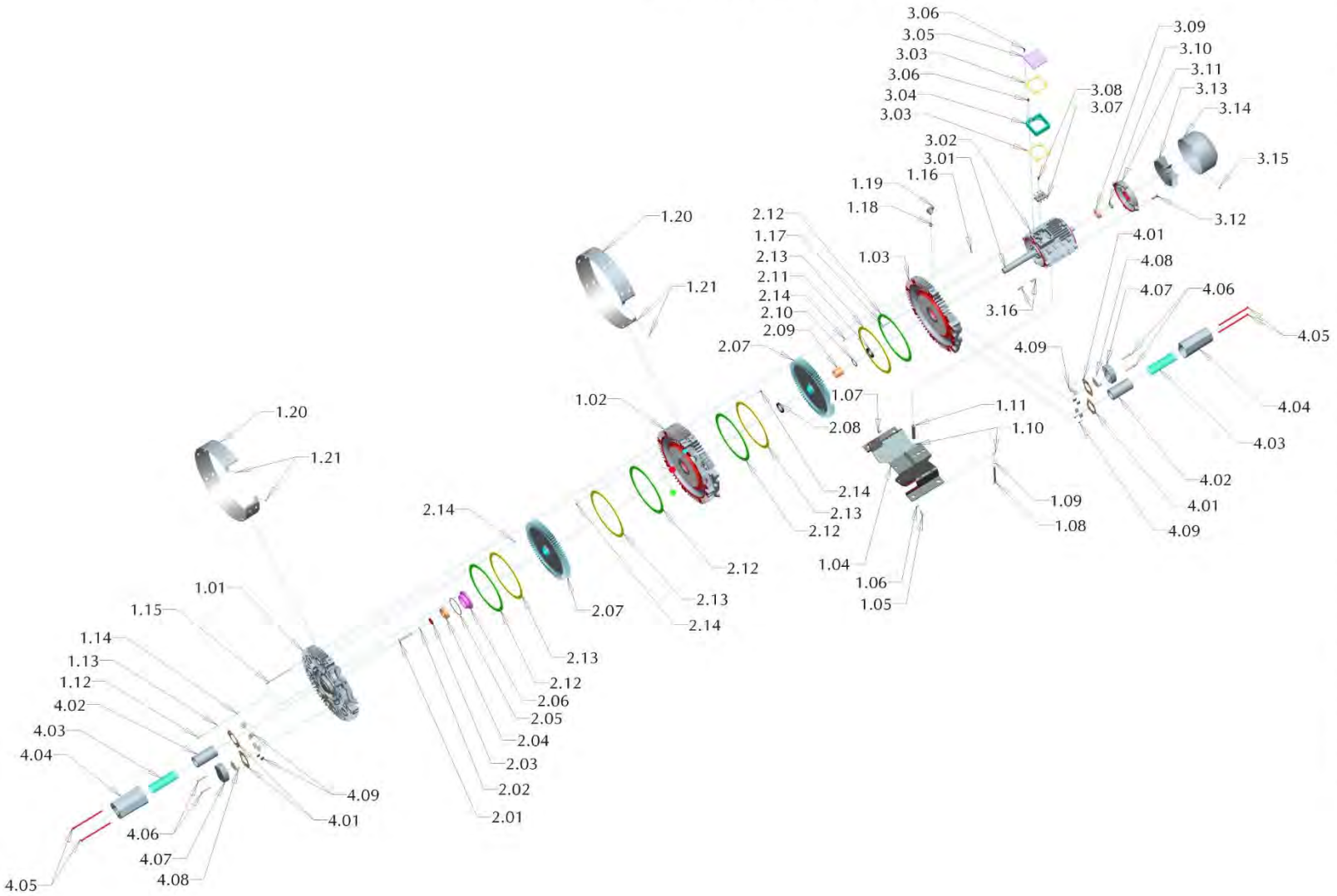
3BA7 SINGLE STAGE
EXPLODED VIEW



No	Qty.	Description
1.01	1	Cover
1.02	1	Housing
1.03	1	Mounting Plate
1.04	4	Plate Mounting Screw
1.05	4	Mouting Plate Washer
1.06	4	Mounting Plate Nut
1.07	1	Stator Support Screw
1.08	2	Stator Support Washer
1.09	1	Stator Support Sleeve
1.10	3	Bearing Cover Screw
1.11	3	Bearing Screw Washer
1.12	3	Bearing Ring Seal
1.13	8	Cover Mounting Screw
1.14	8	Cover Mounting Nut
1.15	3	Motor Mounting Screw
2.01	1	Shaft Screw
2.02	1	Shaft Lock Washer
2.03	1	Disc
2.04	1	Bearing
2.05	1	Bearing Cover O-Ring
2.06	1	Bearing Cover
2.07	1	Impeller
2.08	2	Teflon Seal
2.09	2	Retaining Ring
2.10	16	Inner Seal Screw
3.01	1	Shaft Seal Ring
3.02	1	Motor Rotor
3.03	1	Stator
3.04	1	Terminal Block
3.05	2	Motor Terminal Box Gasket
3.06	1	Terminal Box
3.07	1	Cover For Terminal Box
3.08	4	Terminal Box Cover Screw
3.09	1	Rear Bearing
3.10	1	End Shield
3.11	3	End Shield Screw
3.12	1	External Fan
3.13	1	Fan Cowl
3.14	4	Fan Cowl Screw
3.15	1	Parallel Key
4.01	4	Silencer Gasket
4.02	2	Silencer Insert Filler
4.03	2	Silencer Insert
4.04	2	Silencer Casing
4.05	4	Silencer Screw
4.06	4	Flange Screw
4.07	2	Flange Cap
4.08	2	Flange Filler
4.09	16	Filler
4.10	2	Silencer Insert
4.11	2	Flange
4.12	4	Flange Screw
4.13	2	Flange Gasket

*Does not apply for 3BA76XX Blowers

3BA7 TWO STAGE
EXPLODED VIEW



No.	Qty.	Description
1.01	1	Cover
1.02	1	Center Section
1.03	1	Housing
1.04	1	Mounting Plate
1.05	4	Plate Mounting Screw
1.06	4	Mouting Plate Washer
1.07	4	Mounting Plate Nut
1.08	1	Stator Support Screw
1.09	1	Stator Support Lock Washer
1.10	2	Stator Support Washer
1.11	1	Stator Support Sleeve
1.12	3	Bearing Cover Screw
1.13	3	Bearing Screw Washer
1.14	3	Bearing Ring Seal
1.15	8	Cover Mounting Screw
1.16	8	Cover Mounting Nut
1.17	4	Motor Mounting Screw
1.18	1	Lifting Ring Nut
1.19	1	Lifting Ring
1.20	2	Blower Cowl
1.21	4	Blower Cowl Screw
2.01	1	Shaft Screw
2.02	1	Shaft Lock Washer
2.03	1	Disc
2.04	1	Bearing
2.05	1	Bearing Cover O-Ring
2.06	1	Bearing Cover
2.07	2	Impeller
2.08	1	Rotary Shaft Seal
2.09	1	Sleeve
2.10	1	Disk
2.11	1	Shaft Seal Ring
2.12	4	Teflon Seal*
2.13	4	Retaining Ring
2.14	32	Inner Seal Screw
3.01	1	Motor Rotor
3.02	1	Stator
3.03	2	Motor Terminal Box Gasket
3.04	1	Terminal Box
3.05	1	Cover For Terminal Box
3.06	8	Terminal Box Screw
3.07	1	Terminal Block
3.08	1	Terminal Block Screw
3.09	1	Rear Bearing
3.10	1	End Shield Disk
3.11	1	End Shield
3.12	4	End Shield Screw
3.13	1	External Fan
3.14	1	Fan Cowl
3.15	4	Fan Cowl Screw
3.16	2	Parallel Key
4.01	4	Silencer Gasket
4.02	2	Silencer Insert Filler
4.03	2	Silencer Insert
4.04	2	Silencer Casing
4.05	4	Silencer Screw
4.06	4	Flange Screw
4.07	2	Flange Cap
4.08	2	Flange Filler
4.09	16	Filler

*Does not apply for 3BA76XX Blowers

Airtech, Inc. (“Company”) Warranty Statement

Company warrants that on the date of shipment to Purchaser the goods will be of the kind and quality described herein, merchantable, and free of all defects in workmanship and materials.

If within one year from the date of initial operation, but not more than eighteen months from date of shipment by the Company, of any item of the goods, Purchaser discovers that such item was not as warranted above and promptly notifies Company in writing thereof, Company shall remedy such defect by, at the Company’s option, adjustment, repair or replacement of the item and any affected part of the good. Purchaser shall assume all responsibility and expense for removal, reinstallation and freight in connection with the foregoing remedy. The same obligations and conditions shall extend to replacement items furnished by the Company hereunder. Company shall have the right of disposal of items replaced by it. Purchaser shall grant Company access to the goods at all reasonable times in order for Company to determine any defect in the goods. In the event that adjustment, repair or replacement does not remedy the defect, the Company and Purchaser shall negotiate in good faith an equitable adjustment in the contract price.

The Company’s responsibility does not extend to any item of the goods which has not been manufactured and sold by the Company. Such item shall be covered only by the express warranty, if any, by the manufacturer thereof. The Company and its suppliers shall also have no responsibility if the goods have been improperly stored, handled or installed, or if the goods have not been operated or maintained according to their ratings or according to the instructions in Company or supplier furnished manuals, or if unauthorized repairs or modifications have been made to the goods.

THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES (EXCEPT TITLE) INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS, AND CONSTITUTES THE ONLY WARRANTY OF COMPANY WITH RESPECT TO THE GOODS.

The forgoing states Purchaser’s exclusive remedy against Company and its suppliers for any defect in the good or for failure of the goods to be as warranted, whether Purchaser’s remedy is based on contract, warranty, failure of such remedy to achieve its essential purpose, tort (including negligence), strict liability, indemnity, or any other legal theory, and whether arising out of warranties, representations, instructions, installations, or defects from any cause.

Neither Company nor its suppliers shall be liable, whether in contract, warranty, failure of a remedy to meet its essential purpose, tort (including negligence), strict liability, indemnity or any other legal theory, for loss of use, revenue or profit or for cost of capital or of substitute use or performance or for indirect, liquidated, incidental or consequential damages or for any other loss or cost of a similar type, or for claims by Purchaser for damages of Purchaser’s customers.

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www.airtechchina.com

AIRTECH® EUROPE

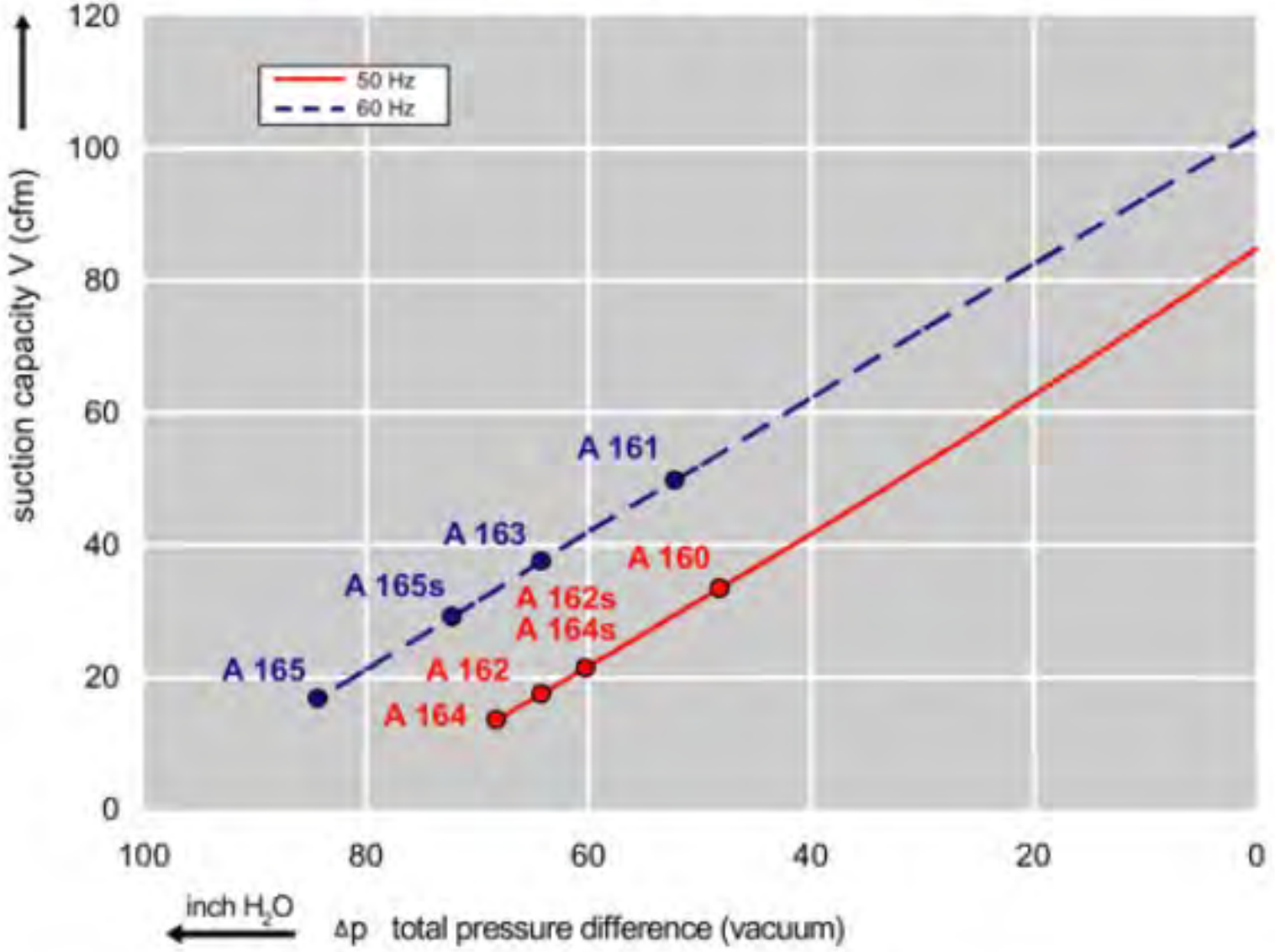
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Fax: +34 93 797 17 54
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www.airtechusa.com

PERFORMANCE CURVE FOR VACUUM PUMP



New Remote AprilAire Blower Alarm

Manufacturer: AprilAire

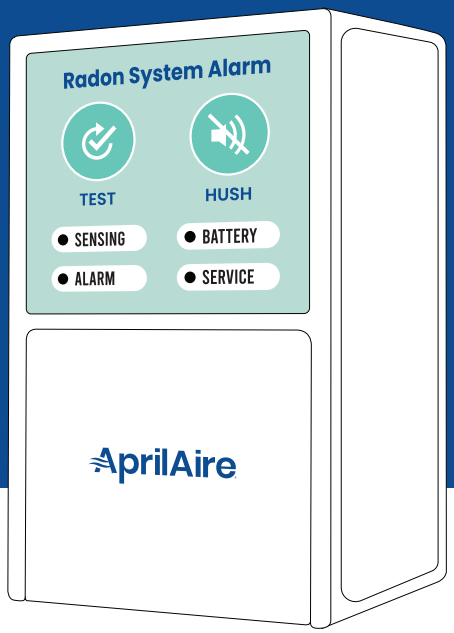
Model: ARNALM

AprilAire

Radon

System Alarm

ARNALM



RADON SYSTEM ALARM

The AprilAire Radon System Alarm is an advanced vacuum monitoring device utilizing piezoresistive pressure sensor (PPS) technology. It provides homeowners with an easy-to-read, easy-to-use system alarm that requires no interpretation. Audible and visual indicators alert the homeowners to low radon system vacuum pressure in compliance with the latest ANSI/AARST Soil Gas Mitigation Standards system monitor requirements.

This alarm does not measure radon levels.

FEATURES

- Easy Installation
- Pipe or Wall Mount (2" - 6" Pipe)
- Battery Operated (No Wiring Required)
- Modern, Compact Design
- Vacuum Sensing
- Visual and Audible Indicators
- Alarm* and Service Delay Functions
- Hush and Test Buttons

*Visual alert only during first 48 hours

RADON SYSTEM ALARM BENEFITS

- **Audible System Failure Notification**
  At a low additional cost, homeowners can be assured that they will be alerted if their radon system is not operating properly with this audible system alarm. Without this, homeowners must rely on visual inspections of a manometer to ensure their radon mitigation system is functioning properly.

- **Return Business**
  As part of a radon system service program, your one-time system installation customer becomes a long-term customer.

- **Mitigation Standard Compliance**
  Soil Gas Mitigation Standards for Existing Homes (ANSI/AARST SGM-SF-2017) includes "Active Notification Monitors Required" (section 9.2.2), which states that "capacity for active visual and/or audible notification in the event of ASD (Active Soil Depressurization) fan or other mechanical failure shall be provided to actively warn occupants or other individuals responsible for monitoring." Installing the AprilAire Alarm with all your systems ensures that you are in compliance with this Radon Standard requirement.

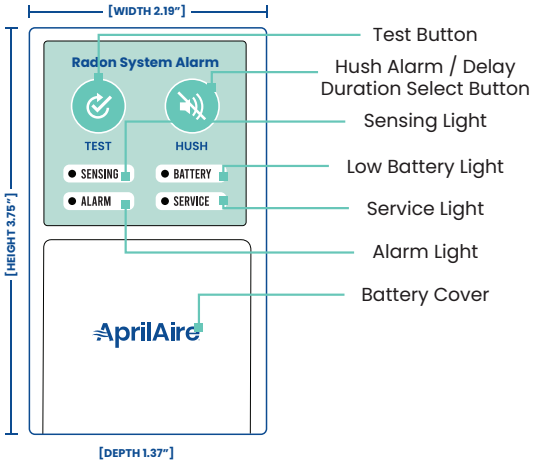
AprilAire

Radon

System Alarm

ARNALM





PACKAGE INCLUDES

- Radon System Alarm
- Wall Mount Adapter
- Pipe Mount Adapter
- Tubing insert
- Battery
- Product Instructions

Sensing Light
Normal Operation @:
-0.1" WC to -20" WC

Alarm Light:
Illuminates @ ≥90%
reduction in baseline pressure

Service Light:
Illuminates upon 3+ Alarm activations within 48 hours

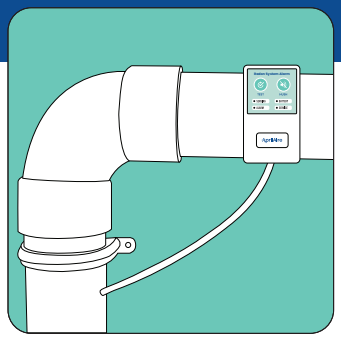
Low Battery Light:
Illuminates @ <3.35 Volts
(uses 3.6V 1/2 AA Battery)

Hush Button:
When depressed silences Alarm for 7 days

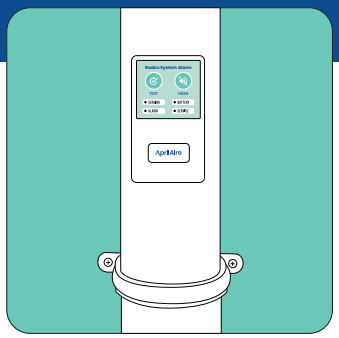
Test Button:
When depressed activates audible alarm and illuminates lights

Alarm Dimensions:
2.19" x 3.75" x 1.37"
(W x H x D)

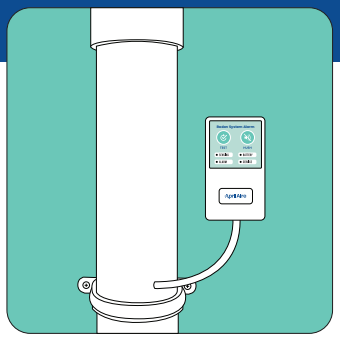
Overpressure Condition:
+/- 20" WC
(piezoresistive pressure sensor)



Remote horizontal pipe mount



Direct vertical pipe mount



Remote wall mount

Form No. 8611 • 309981 • 10.21
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AprilAire reserves the right to change specifications without notice.

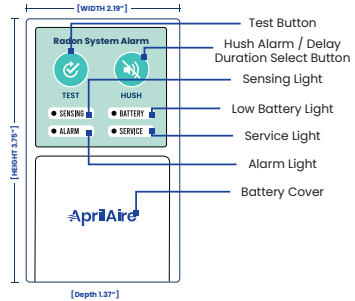
AprilAire
Radon

System Alarm

with PPS Technology

PATENT-PENDING

Model ARNALM



ABOUT THE ALARM

The Radon System Alarm is a vacuum monitoring product utilizing piezoresistive pressure sensor (PPS) technology. This product provides audible and visual indication when the Radon System's vacuum pressure has dropped below the preset operating limit, resulting in insufficient pressure to be effective.

BOX CONTENTS

- ARNALM Radon System Alarm
- Wall Mount Adapter (flat)
- Pipe Mount Adapter (curved)
- Silicone Alarm/Pipe Connector Elbow
- Battery
- Product Instructions
- Two Adapter Mounting Screws

FEATURES

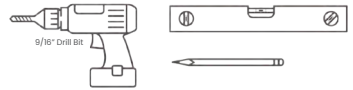
- Battery Operated (No Wiring Required)
- Vacuum Sensing
- Visual and Audible Indicators
- Selectable Alarm & Service Delay Functions (48 Hours / 7 Days / 30 Days)
- Hush and Test Buttons
- Mounts on 2", 3", 4" or 6" Pipe, or Flat Surfaces

INSTALLATION INSTRUCTIONS

This alarm is for conditioned* indoor installations only and should be located in an area where it will be readily observed by the occupants. Outdoor installation will void the warranty!

*Conditioned living space that is temperature and humidity controlled.

TOOLS NEEDED



DIRECT PIPE MOUNTING - HORIZONTAL & VERTICAL PIPE

1. Choose a location on the suction side of the radon fan (a minimum of 12 inches from fan) in an area readily observable by building occupants.
2. Drill a hole using a 9/16" drill bit. Clean hole of drill debris and make sure the pipe surrounding the hole is clean and free of dirt, oils and grease.
3. Without removing the protective film on the pipe mount adapter, test the fit by placing the adapter into the hole in the pipe and adjust hole if necessary.
4. Connect one end of the silicone pipe connector elbow to the alarm housing port located inside the battery compartment by pushing it onto the port barb.
5. Slide the pipe mounting bracket into the back of the alarm housing, making note of the curvature and how it relates to the orientation of the pipe at the place of installation. Connect the open end of the silicone pipe connector elbow to the pipe mounting bracket port by pushing it onto the port barb.
6. Peel back the protective film on the mounting tape and insert the assembled alarm/bracket assembly into the drilled hole, making sure it is level, and firmly press in place to seat mounting tap (See ACTIVATION section for alarm activation instructions). When attaching the pipe adapter for the alarm, first make sure the pipe is clean, dry and free of any debris.

NOTE: ADAPTER MUST BE PRESSED FIRMLY AGAINST PIPE FOR 30 SECONDS TO ENSURE THAT THE 3M TAPE BONDS TO THE PIPE AND BRACKET SURFACES.

Alternative Pipe Adapter Mounting: Once the selected adapter is installed **(Note: make sure that the connector elbow is NOT installed)**, slide off alarm body from adapter and attach the adapter plate using two of the four adapter plate holes and two screws provided with the ARNALM (a 1/16" drill bit can be used to drill pilot holes in the pipe). **NOTE:** regardless of adapter orientation (horizontal or vertical in relation to the alarm), use the two screw holes located at 9 and 3 o'clock so that the screws do not interfere with sliding the ARNALM onto the adapter.

REMOTE - WALL MOUNTING

1. Mount the ARNALM Alarm within 50' of where the radon system piping will be monitored. Wall surface must be clean and free of dirt, oils and grease.
2. Using a liquid level and pencil, mark a line on the wall surface where the edge of the ARNALM housing will be located.
3. Mount the pipe adapter (at a minimum distance of 12 inches from the fan) on the suction side of the radon fan. Drill a hole using a 9/16" drill bit. Clean hole of drill debris and make sure the pipe surrounding the hole is clean and free of dirt, oils and grease.
4. Without removing the protective film on the pipe mount adapter, test the fit by placing the adapter into the hole in the pipe and adjust hole if necessary.
5. Peel back the protective film on the mounting tape and insert the pipe mounting bracket onto the radon system pipe.
6. Connect one end of the tubing (50' max; sold separately) to the pipe mount adapter by pushing the tubing onto the port barb. Route the tubing to the location where the ARNALM alarm will be mounted, avoiding pinching or kinking the tubing along the way.
7. Insert the tubing into the hole located at the bottom of the alarm housing until it reaches into the battery compartment.
8. Connect the tubing to the alarm housing by pushing the tubing onto the port barb. Slide the wall mounting bracket into the back of the alarm housing.
9. Peel back the protective film on the mounting tape and firmly press the assembled alarm/bracket assembly onto the wall to seat mounting tape, making sure it is aligned with the pencil mark previously placed on the wall.

NOTE: ARNALM uses a permanent tape that may cause damage if removed. If you must remove the mounted device, use a piece of dental floss or wire held tautly between two hands. Pull back and forth to split the tape, and release the mounted object. (See ACTIVATION section for alarm activation instructions)

ACTIVATION

Prior to alarm activation, make sure both ends of the silicone pipe connector are connected and the radon fan is running. Remove the battery isolator installed for shipping from the positive pole end of the battery. The battery may have been shipped separate from the alarm box and in that case, the battery must be installed to activate. Ensure battery is properly seated. Alarm is now powered on and will begin the activation sequence automatically.



Battery Isolator

CALIBRATION

The ARNALM self-calibrates automatically upon installation of the battery. After the alarm is powered on, the system will run a 20-second initialization to measure baseline system operating pressure. The green sensing LED will flash during this time. A single beep of the buzzer will indicate the initialization is complete and the alarm is now active. No additional calibration is necessary.

AUDIBLE ALARM DELAY SELECTION

The ARNALM comes equipped with three optional audible & service alarm delays. To select the desired alarm delay duration complete the following steps:

Step 1: Press and hold "Hush" button for a minimum of 5 seconds to start the time delay selection mode.
Step 2: Keep "Hush" button held down until the desired time delay appears (every 5 seconds) as shown below:

LED States	Descriptions	Delay durations	Note
SENSING ALARM	Both the "SENSING" and the "ALARM" LED's are lighted up.	48 hours	Default
SENSING	Only the "SENSING" LED is lighted up.	7 days	Selected by holding down Hush button for 5 Seconds
ALARM	Only the "ALARM" LED is lighted up.	30 days	Selected by holding "Hush" button down for 10 seconds

Step 3: Stop depressing "Hush" button when desired time delay appears as indicated by the LEDs. Time delay selection mode will cycle in a continual loop until the "Hush" button is no longer depressed. Once the "Hush" button is no longer depressed the time delay mode will no longer be activated.

FUNCTIONAL MODES

Sensing Mode (Visual Only) - Sensing light blinks @ 60-second intervals (3 flashes).

Pre-Alarm Mode (Visual Only) - Alarm light blinks @ 60-second intervals when low or no pressure is sensed. Pre-alarm ends when the pressure is restored within the selected delay duration or it enters Alarm Mode.

Alarm Mode - After selected delay duration, buzzer beeps and Red alarm light flashes, then no light or beep for 60 seconds, then repeat until "Hush" is pressed or system is serviced.

Service Mode - After 3 pre-alarm conditions occur within the selected delay duration, buzzer beeps and blue Service light flashes, then no light or beeps for 60 seconds, then repeat until "Hush" is pressed or system is serviced.

Hush Mode - Silences audible sound for 7 days but visual remains as programmed; after 7 days goes back to sensing mode, alarm mode (with sound) or service mode (with sound).

Low Battery Mode - 1 "chirp" and simultaneous flash @ 5-minute intervals.

Test Mode - Audible "beep" sounds and all lights illuminate when "Test" button pressed.

FUNCTIONAL SPECIFICATIONS

Sensing Range:	-0.1"WC to -20"WC
Alarm Range:	≥90% reduction of baseline pressure
Service Condition:	3+ Pre-Alarm Trig. @ 48 Hrs After 48 Hours, 7 Days or 30 Days
Low Battery Condition:	<3.35 V
Hush Button:	Silences alarm sound for 7 days
Test Button:	Sounds alarm / activates lights
Dimensions:	W x H x D (2.19" x 3.75" x 1.37")
Overpressure:	±20"WC
Audible Alarm:	≈85 dba

INDICATOR LIGHT EXPLANATION

Sensing, Green Light (Flashing)
= Operating / Sensing
Alarm, Red Light (Flashing)
= Low / No Pressure (Vacuum)
Service, Blue Light (Flashing)
= Service Mode
Battery, Yellow Light (Flashing)
= Low Battery



BATTERY REPLACEMENT

1. Remove existing battery.
2. Be sure fan is operating and alarm tubing is still connected.
3. Install new battery and make sure it is properly seated.
4. 20-Second self-calibration operation will then begin (refer to CALIBRATION section for additional information).

WARRANTY INFORMATION

Subject to applicable consumer protection legislation, AprilAire warrants that the Alarm (model ARNALM) will be free from defective material and workmanship for a period of (2) years from the date of purchase. Warranty is contingent on installation in accordance with the instructions provided. This warranty does not apply where repairs or alterations have been made or attempted by others; or the unit has been abused or misused. Warranty does not include damage in shipment unless the damage is due to the negligence of AprilAire. All other warranties, expressed or written, are not valid. To make a claim under these limited warranties, you must return the defective item to AprilAire with a copy of the purchase receipt. AprilAire is not responsible for installation or removal cost associated with this warranty.

In no case is AprilAire liable beyond the repair or replacement of the defective product FOB AprilAire.

THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. THERE IS NO WARRANTY OF MERCHANTIBILITY. ALL OTHER WARRANTIES, EXPRESSED OR WRITTEN, ARE NOT VALID.

For service under these warranties, contact AprilAire for a Return Material Authorization (RMA) number and shipping information. No returns can be accepted without an RMA. If factory return is required, the customer assumes all shipping costs to and from factory.

P/N: B2209690A 61002032 • 4.22
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1015 East Washington Ave, Madison, WI 53703

New Remote Vacuum Gauge

Vacuum Gauge Manufacturer: Dwyer Instruments, Inc

Model: 2040

Vacuum Housing Manufacturer: OBAR Systems, Inc

SERIES 2000 | MAGNEHELIC® DIFFERENTIAL PRESSURE GAGES



Standard Magnehelic® gage



High Accuracy Magnehelic® gage
Shown with optional -SS bezel

BENEFITS/FEATURES

- **Easy to read gage through undistorted plastic face permits viewing from far away**
- **Patented design provides quick response to pressure changes means no delay in assessing critical situations**
- **Durable and rugged housing and high-quality components combine to provide long service life and minimized down-time**

APPLICATIONS

- Filter monitoring
- Air velocity with Dwyer® pitot tube
- Blower vacuum monitoring
- Fan pressure indication
- Duct, room, or building pressures
- Clean room positive pressure indication

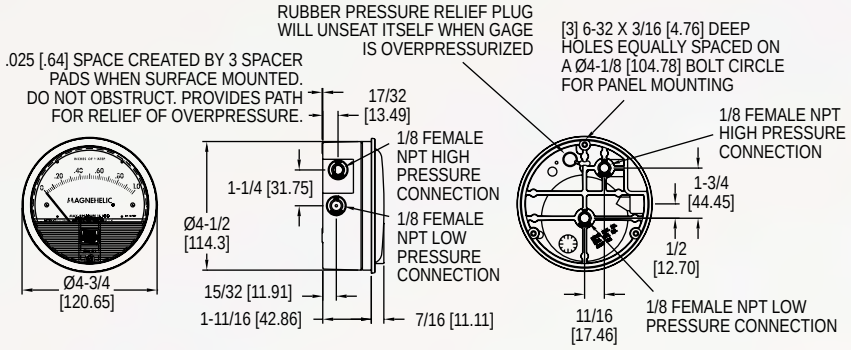
DESCRIPTION

Select the **Series 2000 Magnehelic® Differential Pressure Gages** for a versatile low differential pressure gauge with a wide choice of 81 models and 27 options to choose from. Using Dwyer's simple, frictionless Magnehelic® gage movement, it quickly indicates air or noncorrosive gas pressures - either positive, negative (vacuum) or differential. The design resists shock, vibration, over-pressures and is weatherproof to IP67.

GAGE SPECIFICATIONS

Service	Air and non-combustible, compatible gases (natural gas option available). **Note:** May be used with hydrogen. Order a Buna-N diaphragm. Pressures must be less than 35 psi.
Wetted Materials	Consult factory.
Housing	Die cast aluminum case and bezel, with acrylic cover, exterior finish is coated gray to withstand 168 hour salt spray corrosion test.
Accuracy	±2% of FS (±3% on -0, -100 Pa, -125 PA, -10 mm and ±4% on -00, -60 Pa, -6 mm ranges), throughout range at 70°F (21.1°C).
Pressure Limits	20 in Hg to 15 psig (-0.677 bar to 1.034 bar); MP option; 35 psig (2.41 bar), HP option; 80 psig (5.52 bar).
Enclosure Rating	IP67.
Overpressure	Relief plug opens at approximately 25 psig (1.72 bar), standard gages only. See Overpressure Protection note on catalog page.
Temperature Limits	20 to 140°F (-6.67 to 60°C). -20°F (-28°C) with low temperature option.
Size	4″ (101.6 mm) diameter dial face.
Mounting Orientation	Diaphragm in vertical position. Consult factory for other position orientations.
Process Connections	1/8″ female NPT duplicate high and low pressure taps - one pair side and one pair back.
Weight	1 lb 2 oz (510 g); MP and HP 2 lb 2 oz (963 g).
Standard Accessories	Two 1/8″ NPT plugs for duplicate pressure taps, two 1/8″ pipe thread to rubber tubing adapters and three flush mounting adapters with screws. (Mounting and snap ring retainer substituted for three adapters in MP and HP gage accessories).
Compliance	Meets the technical requirements of EU Directive 2011/65/EU (RoHS II). **Note:** -SP models not RoHS approved.
Note: For applications with high cycle rate within gage total pressure rating, next higher rating is recommended. See Options page.	

DIMENSIONS



HOW TO ORDER

Use the **bold** characters from the chart below to construct a product code.

2002 **-ASF**

SERIES

(in w.c./mm w.c.)
2000-00: 0-0.25 in w.c.
2000-00N: 0.5-0-0.2 in w.c.
2000-0: 0-0.5 in w.c.
2001: 0-1 in w.c.
2002: 0-2 in w.c.
2003: 0-3 in w.c.
2004: 0-4 in w.c.
2006: 0-6 in w.c.
2010: 0-10 in w.c.
2000-6MM: 0-6 mm w.c.
2000-50MM: 0-50 mm w.c.
2300-12MM: 6-0-6 mm w.c.

(Pa)
2000-60NPA: 10-0-50 Pa
2000-60PA: 0-60 Pa
2000-100PA: 0-100 Pa
2000-125PA: 0-125 Pa
2000-250PA: 0-250 Pa
2000-300PA: 0-300 Pa
2000-500PA: 0-500 Pa
2300-60PA: 30-0-30 Pa
2300-100PA: 50-0-50 Pa
2300-120PA: 60-0-60 Pa

(kPa)
2000-1KPA: 0-1 kPa
2000-1.5KPA: 0-1.5 kPa
2000-2KPA: 0-2 kPa
2000-3KPA: 0-3 kPa

OPTIONS

-ASF: Adjustable signal flag
-AHU1: Mounting plate
-AHU2: Mounting plate with A-481 accessory kit
-BUNA: Buna-N elastomers
-CB: Chrome bezel
-FC: Factory calibration
-HA: High accuracy
-M: Mirrored scale overlay
-SB: 304 SS bezel
-SS: Brushed 304 SS bezel

Note: Only our most popular models and options are listed. For additional available models, please visit:
https://www.dwyer-inst.com/Product/Pressure/DifferentialPressure/Gages/Series2000

ACCESSORIES

Model	Description
A-320-A	Enclosure for Series 2000 Magnehelic® gages, DM-2000 differential pressure transmitter, 4-9/16″ (115.89 mm)
A-464	Flush Mount kit for Magnehelic® gages
A-610	Pipe mounting kit for 1-1/4″ to 2″ pipe. 5.6″ x 4.6″ x 1.4″, 1.0 lb
A-300	Flat aluminum bracket for flush mounting Magnehelic® gage. 6.8″ x 6.0″ x .1″, .35 lb
A-299	Mounting bracket flush mount Magnehelic® gage in bracket. Bracket is then surface mounted. Steel with gray hammertone epoxy finish. 6.3″ x 7.7″ x 4.0″, 1.30 lb

ORDER ONLINE TODAY!

dwyer-inst.com

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DS-2000 Rev. 2

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GBR M Gauge System Differential Pressure Gauge

System alarms and monitoring made simple and affordable.

Perfect for systems with no accessible interior pipe or to set your system apart form the crowd.





Call or email for details.

OBAR Systems, Inc. 800-949-OBAR wholesale@obarsystems.com

APPENDIX F

SSD System Inspection Checklists

FONF MALL PASSIVE SSD SYSTEM INSPECTION CHECKLIST

Site Name: FONF/Sabre Park BCP Location: Niagara Falls, NY Project Number: 321457MMC02

Inspector Name: Jeff Strum Date: 9/28/2020 Weather Conditions: Sunny, 69°F

Reason for Inspection (i.e., routine, maintenance, severe condition, etc.): 2020 Annual

Check one of the following: **Y:** Yes **N:** No **NA**: Not Applicable

		Y	N	NA	Normal Situation	Remarks
	Records					
1	Is the Operations & Maintenance Plan readily available on-site?	X			Y	
2	Based on site records, when was the last inspection, maintenance, or repair event?				Date not to exceed minimum schedule	9/12/2019 - Annual Inspection
3	Based on site records, was the system inoperational for any amount of time since the last inspection, maintenance, or repair event? For how long? Provide details.		X		N	
	General System					
4	Is there any construction activity, or indication of any construction activity within the past certification year (including any tenant improvements), that included the breaching of the floor slab, on-site at the time of this inspection?		X		N	
5	If YES to number 6, is there documentation that the Site Management Plan, HASP, and CAMP for the site was/is being followed?			X	NA if N to 6/ Y if Y to 6	
6	If YES to number 6, is there documentation that all breaches in the floor slab have been sealed, with vapor barrier repaired?			X	NA if N to 6/ Y if Y to 6	
7	Does all visible SSD piping appear intact and undamaged?	X			Y	
8	Have any intake points been constructed at the roof near (less than 10 feet) the passive SSD exhaust fans discharge points?		X		N	

FONF MALL PASSIVE SSD SYSTEM INSPECTION CHECKLIST

Check one of the following: **Y:** Yes **N:** No **NA:** Not Applicable

		Y	N	NA	Normal Situation	Remarks
	Passive SSD Exhaust Fans					
9	Are the passive SSD exhaust fans active at the time of inspection?	X			Y	
10	Are they operating per design, free of obstructions, and spinning/rotating under the power of the wind?	X			Y	
11	Are the passive SSD exhaust fans expelling air at the discharge points?	X			Y	

If the answer to any of the above questions indicate the SSD system is non-operational or malfunctioning, or that this EC is in non-compliance,additional remarks must be provided and, where applicable, documentation attached to this checklist detailing additional inspection and repair activities.

Additional remarks _____

Minimum Inspection Schedule: Inspection of blowers and other SSD equipment will be conducted on an annual basis to establish that the system is operational and performing within the design specifications. Unscheduled inspections and/or sampling may take place when a suspected failure of the SSD system has been reported or an emergency occurs that is deemed likely to affect the operation of the system. The minimum schedule may be revised, as necessary, following the first certification year. All inspection events will utilize this checklist.

SECURE STORAGE ACTIVE SSD SYSTEM INSPECTION CHECKLIST

Site Name: FONF/Sabre Park BCP Location: Niagara Falls, NY Project Number: 3214JMMC02

Inspector Name: Jess Straub Date: 9/28/2020 Weather Conditions: Sunny, 69°F

Reason for Inspection (i.e., routine, maintenance, severe condition, etc.): 2020 Annual Inspection

Check one of the following: **Y:** Yes **N:** No **NA:** Not Applicable

		Y	N	NA	Normal Situation	Remarks
	Records					
1	Is the Operations & Maintenance Plan readily available on-site?	X			Y	
2	Based on site records, when was the last inspection, maintenance, or repair event?				Date not to exceed minimum schedule	9/12/19 - Annual Inspection
3	Based on site records, was the system inoperational for any amount of time since the last inspection, maintenance, or repair event? For how long? Provide details.	X			N	
	Alarm System					
4	Do the alarm lights indicate that the system is operational?	X			Y	
5	Did manual tripping of alarm system indicate that the alarm is functional?	X			Y	
	General System					
6	Is there any construction activity, or indication of any construction activity within the past certification year (including any tenant improvements), that included the breaching of the floor slab, on-site at the time of this inspection?		X		N	
7	If YES to number 6, is there documentation that the Site Management Plan, HASP, and CAMP for the site was/is being followed?			X	NA if N to 6/ Y if Y to 6	
8	If YES to number 6, is there documentation that all breaches in the floor slab have been sealed, with vapor barrier repaired?			X	NA if N to 6/ Y if Y to 6	
9	Does all visible SSD piping appear intact and undamaged?	X			Y	
10	Have any intake points been constructed at the roof near (less than 10 feet) the SSD blower discharge point?		X		N	

SECURE STORAGE ACTIVE SSD SYSTEM INSPECTION CHECKLIST

Check one of the following: **Y:** Yes **N:** No **NA:** Not Applicable

		Y	N	NA	Normal Situation	Remarks
	SSD Blower Unit					
11	Is the SSD blower operational at the time of the inspection?	X			Y	
12	What are the micro-manometer readings at each monitoring point?				< 0 in/H20 (in/Hg)	Southwest Monitoring Point: 0.010" Northeast Monitoring Point: 0.013" Southeast Monitoring Point: 0.033"
13	Is the SSD blower expelling air at the discharge point?	X			Y	

If the answer to any of the above questions indicate the SSD system is non-operational or malfunctioning, or that this EC is in non-compliance,additional remarks must be provided and, where applicable, documentation attached to this checklist detailing additional inspection and repair activities.

Additional remarks _____

Minimum Inspection Schedule: Inspection of blowers and other SSD equipment will be conducted on an annual basis to establish that the system is operational and performing within the design specifications. Unscheduled inspections and/or sampling may take place when a suspected failure of the SSD system has been reported or an emergency occurs that is deemed likely to affect the operation of the system. The minimum schedule may be revised, as necessary, following the first certification year. All inspection events will utilize this checklist.

FONF PASSIVE SSD SYSTEM INSPECTION CHECKLIST

Site Name: FONF/Sabre Park BCP Location: Niagara Falls, NY Project Number: Z214JMMC08

Inspector Name: Jeff Strum Date: September 28, 2021 Weather Conditions: Sunny 60s °F

Reason for Inspection (i.e., routine, maintenance, severe condition, etc.): Annual Inspection 2021

Check one of the following: **Y:** Yes **N:** No **NA**: Not Applicable

	General Inspection	Y	N	NA	Normal Situation	Remarks
Records						
1	Is the Operations and Maintenance Plan readily available on-site?	**X**			Y	
2	Based on site records, when was the last inspection, mainentance or repair event?				exceed mininum schedule	9/28/2020
3	Based on site records, was the system inoperational for any amount of time since the last inspection, maintenance, or reprair event? For how long? Provide details		**X**		N	
General System						
4	Is there any construction activity, or indication of construction activity within the past certification year (including tenant improvements), that included the breaching of the floor slab, on-site at the time of this inspection?		**X**		N	
5	If Yes to number 4, is there documentation that the Site Management Plan, HASP, and CAMP for the site was/is being followed?			**X**	NA if N to 4/ Y if Y to 4	
6	If Yes to number 4, is there documentation that all breaches in the floor slab have been sealed, with vapor barrier repaired?			**X**	NA if N to 4/ Y if Y to 4	
7	Does all visible SSD piping appear intact and undamaged?	**X**			Y	
8	Have any intake points been constructed at the roof near (less than 10 feet) the passive SSD exhaust fans discharge points?		**X**		N	
9	Are the passive SSD exhaust fans active at the time of inspection?	**X**			Y	

FONF PASSIVE SSD SYSTEM INSPECTION CHECKLIST

Check one of the following: **Y:** Yes **N:** No **NA**: Not Applicable

	General Inspection	Y	N	NA	Normal Situation	Remarks
Records						
10	Are the SSD exhaust fans operating per design, free of obstructions, and spinning/rotating under the power of wind?	**X**			Y	
11	Are the passive SSD exhaust fans expelling air at the discharge points?	**X**			Y	

If the answer to any of the above questions indicate the SSD system is non-operational or malfunctioning, or that this EC is in non-compliance, additional remarks must be provided and, where applicable, documentation attached to this checklist detailing additional inspection and repair activities.

Additional Remarks

Minimum Inspection Schedule: Inspection of blowers and other SSD equipment will be conducted on an annual basis to estabilish that the system is operational and performing within design specfications. Unscheduled inspections and/or sampling may take place when a suspected failure of the SSD system has been reported or an emergency occurs that is deemed likely to affect the operation of the system. The minimum schedule may be revised, as necessary, following the first certification year. All inspection events will utilize this checklist.

SECURE STORAGE ACTIVE SSD SYSTEM INSPECTION CHECKLIST

Site Name: FONF/Sabre Park BCP Location: Niagara Falls, NY Project Number: Z214JMMC08

Inspector Name: Jeff Strum Date: September 28, 2021 Weather Conditions: Overcast 42 °F

Reason for Inspection (i.e., routine, maintenance, severe condition, etc.): Annual Inspection 2021

Check one of the following: **Y:** Yes **N:** No **NA**: Not Applicable

	General Inspection	Y	N	NA	Normal Situation	Remarks
Records						
1	Is the Operations and Maintenance Plan readily available on-site?	**X**			Y	
2	Based on site records, when was the last inspection, mainentance or repair event?				Date not to exceed mininum schedule	9/28/2020
3	Based on site records, was the system inoperational for any amount of time since the last inspection, maintenance, or reprair event? For how long? Provide details	**X**			N	System was not operational during inspection on 9/28/21. Maintenance Manager reported system operational that day by 6 PM.
Alarm System						
4	Did the alarm lights indicate that the system is operational?		**X**		Y	
5	Did manual tripping of alarm system indicate that the alarm is functional?		**X**		Y	
General System						
6	Is there any construction activity, or indication of construction activity within the past certification year (including tenant improvements), that included the breaching of the floor slab, on-site at the time of this inspection?		**X**		N	
7	If Yes to number 6, is there documentation that the Site Management Plan, HASP, and CAMP for the site was/is being followed?			**X**	NA if N to 4/ Y if Y to 4	
8	If Yes to number 6, is there documentation that all breaches in the floor slab have been sealed, with vapor barrier repaired?			**X**	NA if N to 4/ Y if Y to 4	
9	Does all visible SSD piping appear intact and undamaged?	**X**			Y	
10	Have any intake points been constructed at the roof near (less than 10 feet) the passive SSD exhaust fans discharge points?		**X**		N	

SECURE STORAGE ACTIVE SSD SYSTEM INSPECTION CHECKLIST

Check one of the following: **Y:** Yes **N:** No **NA**: Not Applicable

	General Inspection	Y	N	NA	Normal Situation	Remarks
Records						
11	Is the SSD blower operational at the time of the inspection?		**X**		Y	
12	What are the micro-manometer readings at each monitoring point?				< 0 in/H20 (in/Hg)	Northeast Monitoring Point: 0.000 in. Hg Northwest Monitoring Point: 0.000 in. Hg Southeast Monitoring Point: 0.000 in. Hg Southwest Monitoring Point: 0.000 in. Hg
13	Is the SSD blower expelling air at the discharge point?		**X**		Y	

If the answer to any of the above questions indicate the SSD system is non-operational or malfunctioning, or that this EC is in non-compliance, additional remarks must be provided and, where applicable, documentation attached to this checklist detailing additional inspection and repair activities.

Additional Remarks

System was not operational at time of inspection. At 6.00 PM on 9/28/21 the maintenance manager at the facility called and stated the system is up and running.

Minimum Inspection Schedule: Inspection of blowers and other SSD equipment will be conducted on an annual basis to estabilish that the system is operational and performing within design specfications. Unscheduled inspections and/or sampling may take place when a suspected failure of the SSD system has been reported or an emergency occurs that is deemed likely to affect the operation of the system. The minimum schedule may be revised, as necessary, following the first certification year. All inspection events will utilize this checklist.

FONF PASSIVE SSD SYSTEM INSPECTION CHECKLIST

Site Name: FONF/Sabre Park BCP Location: Niagara Falls, NY Project Number: Z214JMMC08

Inspector Name: Jeff Strum Date: September 29, 2022 Weather Conditions: Partly cloudy

Reason for Inspection (i.e., routine, maintenance, severe condition, etc.): Annual Inspection 2022

Check one of the following: **Y:** Yes **N:** No **NA**: Not Applicable

	General Inspection	Y	N	NA	Normal Situation	Remarks
Records						
1	Is the Operations and Maintenance Plan readily available on-site?	X			Y	
2	Based on site records, when was the last inspection, mainentance or repair event?				exceed mininum schedule	9/28/2021
3	Based on site records, was the system inoperational for any amount of time since the last inspection, maintenance, or reprair event? For how long? Provide details		X		N	
General System						
4	Is there any construction activity, or indication of construction activity within the past certification year (including tenant improvements), that included the breaching of the floor slab, on-site at the time of this inspection?		X		N	
5	If Yes to number 4, is there documentation that the Site Management Plan, HASP, and CAMP for the site was/is being followed?			X	NA if N to 4/ Y if Y to 4	
6	If Yes to number 4, is there documentation that all breaches in the floor slab have been sealed, with vapor barrier repaired?			X	NA if N to 4/ Y if Y to 4	
7	Does all visible SSD piping appear intact and undamaged?	X			Y	
8	Have any intake points been constructed at the roof near (less than 10 feet) the passive SSD exhaust fans discharge points?		X		N	
9	Are the passive SSD exhaust fans active at the time of inspection?	X			Y	

FONF PASSIVE SSD SYSTEM INSPECTION CHECKLIST

Check one of the following: **Y:** Yes **N:** No **NA**: Not Applicable

	General Inspection	Y	N	NA	Normal Situation	Remarks
Records						
10	Are the SSD exhaust fans operating per design, free of obstructions, and spinning/rotating under the power of wind?	**X**			Y	
11	Are the passive SSD exhaust fans expelling air at the discharge points?	**X**			Y	

If the answer to any of the above questions indicate the SSD system is non-operational or malfunctioning, or that this EC is in non-compliance, additional remarks must be provided and, where applicable, documentation attached to this checklist detailing additional inspection and repair activities.

Additional Remarks

Minimum Inspection Schedule: Inspection of blowers and other SSD equipment will be conducted on an annual basis to estabilish that the system is operational and performing within design specfications. Unscheduled inspections and/or sampling may take place when a suspected failure of the SSD system has been reported or an emergency occurs that is deemed likely to affect the operation of the system. The minimum schedule may be revised, as necessary, following the first certification year. All inspection events will utilize this checklist.

SECURE STORAGE ACTIVE SSD SYSTEM INSPECTION CHECKLIST

Site Name: FONF/Sabre Park BCP Location: Niagara Falls, NY Project Number: Z214JMMC08

Inspector Name: Jeff Strum Date: September 29, 2022 Weather Conditions: Partly Cloudy

Reason for Inspection (i.e., routine, maintenance, severe condition, etc.): Annual Inspection 2022

Check one of the following: **Y:** Yes **N:** No **NA**: Not Applicable

	General Inspection	Y	N	NA	Normal Situation	Remarks
Records						
1	Is the Operations and Maintenance Plan readily available on-site?	X			Y	
2	Based on site records, when was the last inspection, mainentance or repair event?				Date not to exceed mininum schedule	9/28/2021
3	Based on site records, was the system inoperational for any amount of time since the last inspection, maintenance, or reprair event? For how long? Provide details		X		N	
Alarm System						
4	Did the alarm lights indicate that the system is operational?		X		Y	
5	Did manual tripping of alarm system indicate that the alarm is functional?		X		Y	
General System						
6	Is there any construction activity, or indication of construction activity within the past certification year (including tenant improvements), that included the breaching of the floor slab, on-site at the time of this inspection?		X		N	
7	If Yes to number 6, is there documentation that the Site Management Plan, HASP, and CAMP for the site was/is being followed?			X	NA if N to 4/ Y if Y to 4	
8	If Yes to number 6, is there documentation that all breaches in the floor slab have been sealed, with vapor barrier repaired?			X	NA if N to 4/ Y if Y to 4	
9	Does all visible SSD piping appear intact and undamaged?	X			Y	
10	Have any intake points been constructed at the roof near (less than 10 feet) the passive SSD exhaust fans discharge points?		X		N	

SECURE STORAGE ACTIVE SSD SYSTEM INSPECTION CHECKLIST

Check one of the following: **Y:** Yes **N:** No **NA**: Not Applicable

	General Inspection	Y	N	NA	Normal Situation	Remarks
Records						
11	Is the SSD blower operational at the time of the inspection?	**X**			Y	
12	What are the micro-manometer readings at each monitoring point?				< 0 in/H20 (in/Hg)	Northeast Monitoring Point: .001 Northwest Monitoring Point: .002 Southeast Monitoring Point: .001 Southwest Monitoring Point: .001
13	Is the SSD blower expelling air at the discharge point?	**X**			Y	

If the answer to any of the above questions indicate the SSD system is non-operational or malfunctioning, or that this EC is in non-compliance, additional remarks must be provided and, where applicable, documentation attached to this checklist detailing additional inspection and repair activities.

Additional Remarks

Maintenance manager at the facility notified of the issue with the non-operational alarm light

Minimum Inspection Schedule: Inspection of blowers and other SSD equipment will be conducted on an annual basis to estabilish that the system is operational and performing within design specfications. Unscheduled inspections and/or sampling may take place when a suspected failure of the SSD system has been reported or an emergency occurs that is deemed likely to affect the operation of the system. The minimum schedule may be revised, as necessary, following the first certification year. All inspection events will utilize this checklist.

FONF PASSIVE SSD SYSTEM INSPECTION CHECKLIST

Site Name: FONF/Sabre Park BCP Location: Niagara Falls, NY Project Number: Z214JMMC08

Inspector Name: James Sturgeon Date: 9/26/23 Weather Conditions: Partly cloudy/sunny

Reason for Inspection (i.e., routine, maintenance, severe condition, etc.): Annual Inspection 2023

Check one of the following: Y: Yes N: No NA: Not Applicable

	General Inspection	Y	N	NA	Normal Situation	Remarks
Records						
1	Is the Operations and Maintenance Plan readily available on-site?				Y	Not that I know of
2	Based on site records, when was the last inspection, mainentance or repair event?				exceed minimum schedule	9/29/22
3	Based on site records, was the system inoperational for any amount of time since the last inspection, maintenance, or reprair event? For how long? Provide details				(N)	
General System						
4	Is there any construction activity, or indication of construction activity within the past certification year (including tenant improvements), that included the breaching of the floor slab, on-site at the time of this inspection?				(N)	
5	If Yes to number 4, is there documentation that the Site Management Plan, HASP, and CAMP for the site was/is being followed?				NA if N to 4/ Y if Y to 4	
6	If Yes to number 4, is there documentation that all breaches in the floor slab have been sealed, with vapor barrier repaired?				NA if N to 4/ Y if Y to 4	
7	Does all visible SSD piping appear intact and undamaged?				(Y)	
8	Have any intake points been constructed at the roof near (less than 10 feet) the passive SSD exhaust fans discharge points?				(N)	
9	Are the passive SSD exhaust fans active at the time of inspection?				(Y)	Yes it was a windy day

FONF PASSIVE SSD SYSTEM INSPECTION CHECKLIST

Check one of the following: **Y**: Yes **N**: No **NA**: Not Applicable

	General Inspection	Y	N	NA	Normal Situation	Remarks
Records						
10	Are the SSD exhaust fans operating per design, free of obstructions, and spinning/rotating under the power of wind?				Y	
11	Are the passive SSD exhaust fans expelling air at the discharge points?				Y	

If the answer to any of the above questions indicate the SSD system is non-operational or malfunctioning, or that this EC is in non-compliance, additional remarks must be provided and, where applicable, documentation attached to this checklist detailing additional inspection and repair activities.

Additional Remarks

Minimum Inspection Schedule: Inspection of blowers and other SSD equipment will be conducted on an annual basis to estabilish that the system is operational and performing within design specfications. Unscheduled inspections and/or sampling may take place when a suspected failure of the SSD system has been reported or an emergency occurs that is deemed likely to affect the operation of the system. The minimum schedule may be revised, as necessary, following the first certification year. All inspection events will utilize this checklist.

~~SECURE~~ STORAGE ACTIVE SSD SYSTEM INSPECTION CHECKLIST

Extra Space

Site Name: FONF/Sabre Park BCP Location: Niagara Falls, NY Project Number: Z214JMMC08

Inspector Name: James Sturm Date: 9/26/23 Weather Conditions: Partly cloudy/Sunny

Reason for Inspection (i.e., routine, maintenance, severe condition, etc.): Annual Inspection 2023

Check one of the following: Y: Yes N: No NA: Not Applicable

	General Inspection	Y	N	NA	Normal Situation	Remarks
Records						
1	Is the Operations and Maintenance Plan readily available on-site?		X		Y	Doesn't seem so
2	Based on site records, when was the last inspection, mainentance or repair event?				Date not to exceed mininum schedule	9/29/22
3	Based on site records, was the system inoperational for any amount of time since the last inspection, maintenance, or reprair event? For how long? Provide details				N	Dont Know
Alarm System						
4	Did the alarm lights indicate that the system is operational?				Y	Alarm light not working
5	Did manual tripping of alarm system indicate that the alarm is functional?				Y	No Alarm went off when tripping
General System						
6	Is there any construction activity, or indication of construction activity within the past certification year (including tenant improvements), that included the breaching of the floor slab, on-site at the time of this inspection?				(N)	
7	If Yes to number 6, is there documentation that the Site Management Plan, HASP, and CAMP for the site was/is being followed?				NA if N to 4/ Y if Y to 4	
8	If Yes to number 6, is there documentation that all breaches in the floor slab have been sealed, with vapor barrier repaired?				NA if N to 4/ Y if Y to 4	
9	Does all visible SSD piping appear intact and undamaged?				(Y)	
10	Have any intake points been constructed at the roof near (less than 10 feet) the passive SSD exhaust fans discharge points?				(N)	

~~SECURE~~ STORAGE ACTIVE SSD SYSTEM INSPECTION CHECKLIST

Extra Space

Check one of the following: Y: Yes N: No NA: Not Applicable

	General Inspection	Y	N	NA	Normal Situation	Remarks
Records						
11	Is the SSD blower operational at the time of the inspection?				(Y)	
12	What are the micro-manometer readings at each monitoring point?				< 0 in/H20 / (in/Hg)	Northeast Monitoring Point: -.304 in H_2O Northwest Monitoring Point: -.318 " " Southeast Monitoring Point: -.310 " " Southwest Monitoring Point: -.313 " "
13	Is the SSD blower expelling air at the discharge point?				(Y)	

If the answer to any of the above questions indicate the SSD system is non-operational or malfunctioning, or that this EC is in non-compliance, additional remarks must be provided and, where applicable, documentation attached to this checklist detailing additional inspection and repair activities.

Additional Remarks

- No leaks noticed
- Blower #2 was on & good flow at discharge pt
- Alarm light & sound not working
- Tripping Alarm did nothing

Minimum Inspection Schedule: Inspection of blowers and other SSD equipment will be conducted on an annual basis to establish that the system is operational and performing within design specfications. Unscheduled inspections and/or sampling may take place when a suspected failure of the SSD system has been reported or an emergency occurs that is deemed likely to affect the operation of the system. The minimum schedule may be revised, as necessary, following the first certification year. All inspection events will utilize this checklist.

FONF PASSIVE SSD SYSTEM INSPECTION CHECKLIST

Site Name: FONF/Sabre Park BCP Location: Niagara Falls, NY Project Number: Z214JMMC08

Inspector Name: James Sturm Date: 11/12/24 Weather Conditions: Partly sunny & cloudy

Reason for Inspection (i.e. routine, maintenance, severe condition, etc.): Annual Inspection ~~2022~~ 2024

Check one of the following: **Y:** Yes **N:** No **NA**: Not Applicable

	General Inspection	Y	N	NA	Normal Situation	Remarks
Records						
1	Is the Operations and Maintenance Plan readily available on-site?				Y	Not that I know of
2	Based on site records, when was the last inspection, mainentance or repair event?				exceed mininum schedule	~~9/28/2021~~ 9/26/23
3	Based on site records, was the system inoperational for any amount of time since the last inspection, maintenance, or reprair event? For how long? Provide details				N	
General System						
4	Is there any construction activity, or indication of construction activity within the past certification year (including tenant improvements), that included the breaching of the floor slab, on-site at the time of this inspection?				N	
5	If Yes to number 4, is there documentation that the Site Management Plan, HASP, and CAMP for the site was/is being followed?				NA if N to 4/ Y if Y to 4	
6	If Yes to number 4, is there documentation that all breaches in the floor slab have been sealed, with vapor barrier repaired?				NA if N to 4/ Y if Y to 4	
7	Does all visible SSD piping appear intact and undamaged?				Y	
8	Have any intake points been constructed at the roof near (less than 10 feet) the passive SSD exhaust fans discharge points?				N	
9	Are the passive SSD exhaust fans active at the time of inspection?				Y	Yes, it was windy

FONF PASSIVE SSD SYSTEM INSPECTION CHECKLIST

Check one of the following: **Y:** Yes **N:** No **NA**: Not Applicable

	General Inspection	Y	N	NA	Normal Situation	Remarks
Records						
10	Are the SSD exhaust fans operating per design, free of obstructions, and spinning/rotating under the power of wind?					No exhaust fans are operating
11	Are the passive SSD exhaust fans expelling air at the discharge points?				Y	

If the answer to any of the above questions indicate the SSD system is non-operational or malfunctioning, or that this EC is in non-compliance, additional remarks must be provided and, where applicable, documentation attached to this checklist detailing additional inspection and repair activities.

Additional Remarks

Minimum Inspection Schedule: Inspection of blowers and other SSD equipment will be conducted on an annual basis to estabilish that the system is operational and performing within design specfications. Unscheduled inspections and/or sampling may take place when a suspected failure of the SSD system has been reported or an emergency occurs that is deemed likely to affect the operation of the system. The minimum schedule may be revised, as necessary, following the first certification year. All inspection events will utilize this checklist.

Active Sub-Slab Depressurization System Inspection Checklist
1755 Fashion Outlets Boulevard, Niagara Falls, New York
NYSDEC BCP Site No.: C932162

Inspector Name: James Sturm Project Number: _____ Date: 4/10/25

Weather Conditions: Overcast cold Reason for Inspection: (i.e. routine, maintenance, severe condition, etc.): yearly

		Check one of the following: Y: Yes N: No NA: Not Applicable				
		Y	N	NA	Normal Situation	Remarks
	Records					
1	Is the Operations & Maintenance Plan readily available on- site? *Note: The O&M Plan is a component of the Site Management Plan, which must be kept onsite.*		X		Y	
2	Is the SSDS Equipment and Maintenance Logbook readily available onsite?		X		Y	
3	Based on site records, when was the last inspection, maintenance, or repair event?				Date not to exceed minimum schedule	unknown
4	Based on site records, was the system inoperational for any amount of time since the last inspection, maintenance, or repair event? For how long? Provide details.	X			N	Repairs done in April 2025
	Alarm System					
5	Do the alarm lights indicate that the system is operational? (Sensing Light flashes green every 60 seconds)		X		Y	
6	Did manual test of vacuum alarm indicate that the alarm is functional?				Y	No Alarm sounded
7	Were Alarm Light, Low Battery Light or Service Light on? Were any issues noted resolved, and how?				N	
	General System					
8	Is there any construction activity, or indication of any construction activity within the past certification year (including any tenant improvements), that included the breaching of the floor slab, on-site at the time of this inspection?				N	
9	If YES to number 6, is there documentation that the Site Management Plan, HASP, and CAMP for the site was/is being followed?				NA if N to 6 Y if Y to 6	
10	If YES to number 6, is there documentation that all breaches in the floor slab have been sealed, with vapor barrier repaired?				NA if N to 6 Y if Y to 6	
11	Does all visible SSD piping appear intact and undamaged?				Y	
12	Have any intake points been constructed at the roof near (less than 10 feet) the SSD blower discharge point?				N	
	SSD Blower Unit					
13	Is the SSD blower operational at the time of the inspection?				Y	
14	Is the SSDS blower expelling air at the discharge point?				Y	
15	Visual Observations of the Regenerative Blower - Are any issues evident?				N	
16	Audible Observations of the Regenerative Blower - Does it sound like there may be any issues with the blower?				N	
17	Intake Air Filter - Air Filter Condition at Arrival (Good/Bad)					Good
18	Intake Air Filter -Was the Air Filter Changed?	X				
19	Is water present within the Filter Housing?		X			
20	How many extra air filters are available onsite stored by the facility manager?					Dont Know, Probably None

Active Sub-Slab Depressurization System Inspection Checklist
1755 Fashion Outlets Boulevard, Niagara Falls, New York
NYSDEC BCP Site No.: C932162

		Check one of the following: Y: Yes N: No NA: Not Applicable				
		Y	N	NA	Normal Situation	Remarks
	System Monitoring at Blower					
21	Vacuum Gauge Reading at Blower:				90-110 CFM	No gauge present
22	Flow Reading at Blower: *(Access hole at bolt threaded into Blower Discharge Pipe)*				2-10" H2O	22
	Indoor Monitoring					
23	What are the micro-manometer readings at each monitoring point? *					
24	Northwest Monitoring Point:				> 0.001 inches H2O	0.014
25	Southwest Monitoring Point:				> 0.001 inches H2O	0.005
26	Southeast Monitoring Point:				> 0.001 inches H2O	0.019
27	Northeast Monitoring Point:				> 0.001 inches H2O	0.018
28	Vacuum Gauge Reading at Indoor Monitoring Location:				2-10" H2O	22 in of H_2O

*As per the Site Management Plan – Revision 01 (January 2020/Langan), "the minimum required vacuum response required is 0.001 in water column (WC) throughout the building footprint."

If the answer to any of the above questions indicate the SSD system is non-operational or malfunctioning, or that this Engineering Control is in non-compliance,additional remarks must be provided and, where applicable, documentation attached to this checklist detailing additional inspection and repair activities.

Additional Remarks: System was just repaired prior to me getting there

System Sealed

Minimum Inspection Schedule: Inspection of blowers and other SSD equipment will be conducted on an annual basis to establish that the system is operational and performing within the design specifications. Unscheduled inspections and/or sampling may take place when a suspected failure of the SSD system has been reported or an emergency occurs that is deemed likely to affect the operation of the system. The minimum schedule may be revised, as necessary, following the first certification year. All inspection events will utilize this checklist.

APPENDIX G

2024/2025 Photo Log

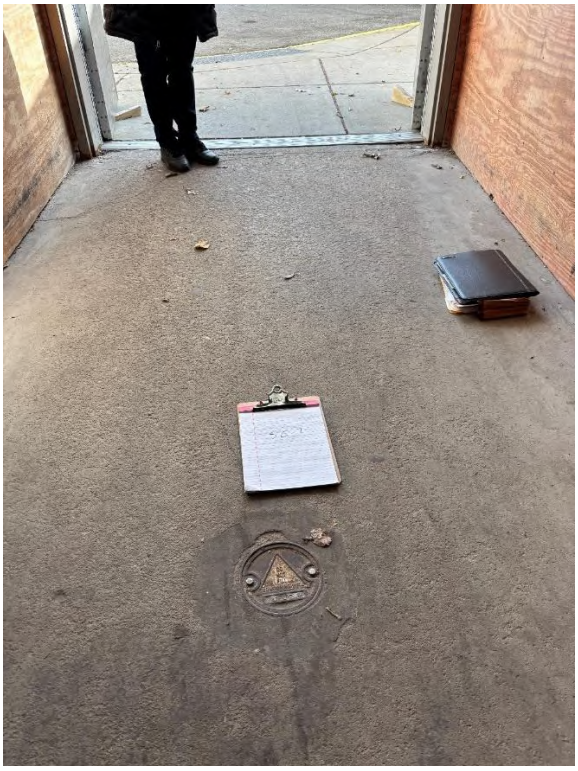


Photo 1: Well # SE-7 in back hallway of the mall.



Photo 2: Well # SE-4 in back hallways of the mall.

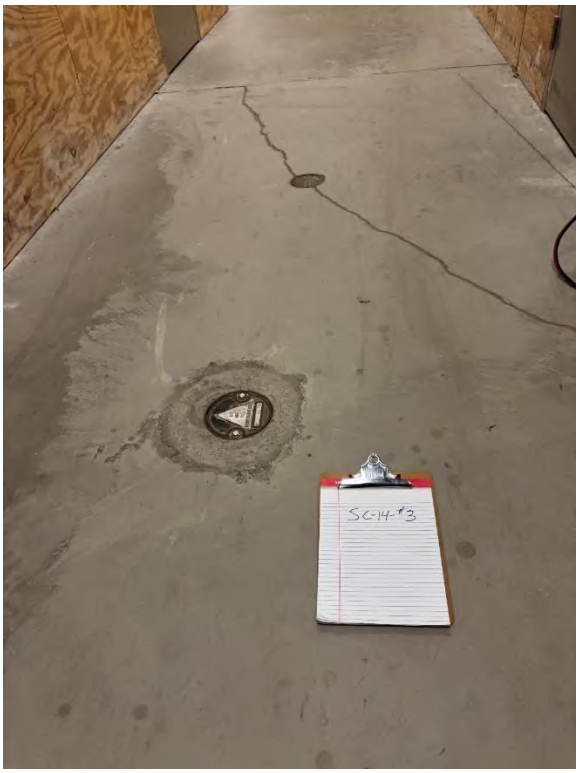


Photo 3: Well# SC-14 #3 in the back hallways of the mall.



Photo 4: Well # SC-14 in the back hallways of the mall

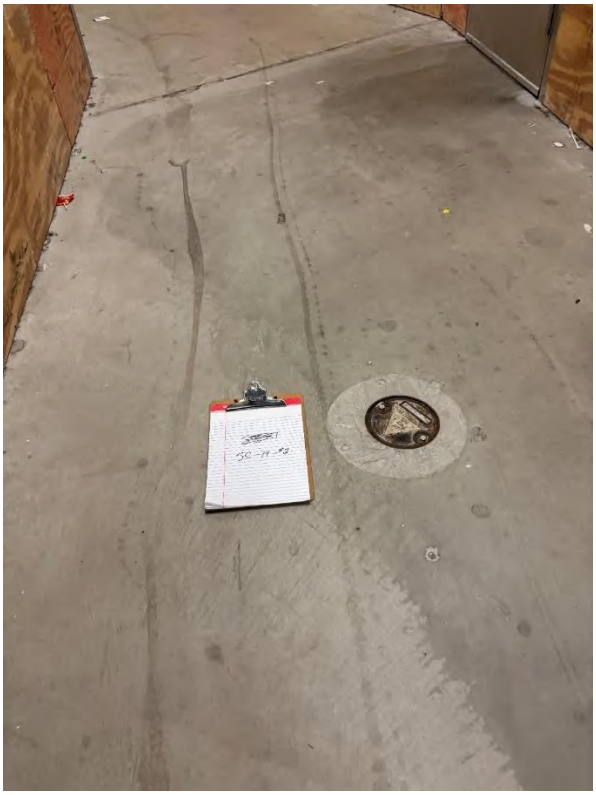


Photo 5: Well #SC-14 #2 in the back hallways of the mall.



Photo 6: Passive vent on mall roof near Clarks.



Photo 7: Passive vent on mall roof near American Eagle.



Photo 8: Passive vent on roof of the mall near Spencer's.



Photo 9: Well # SC-6 in the back hallways of the mall.

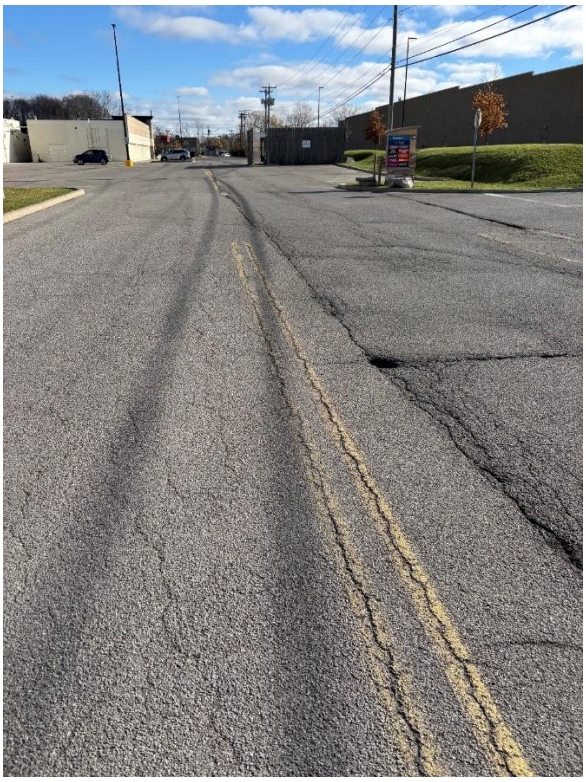


Photo 10: Minor cracking in the blacktop road behind the mall.



Photo 11: Cracks in the blacktop road behind the mall.



Photo 12: Pitting and cracks in the blacktop road near the north end of the mall.



Photo 13: Pitting and cracks in the blacktop road alongside the mall.



Photo 14: Newly installed vacuum gauge on the wall inside the storage building.

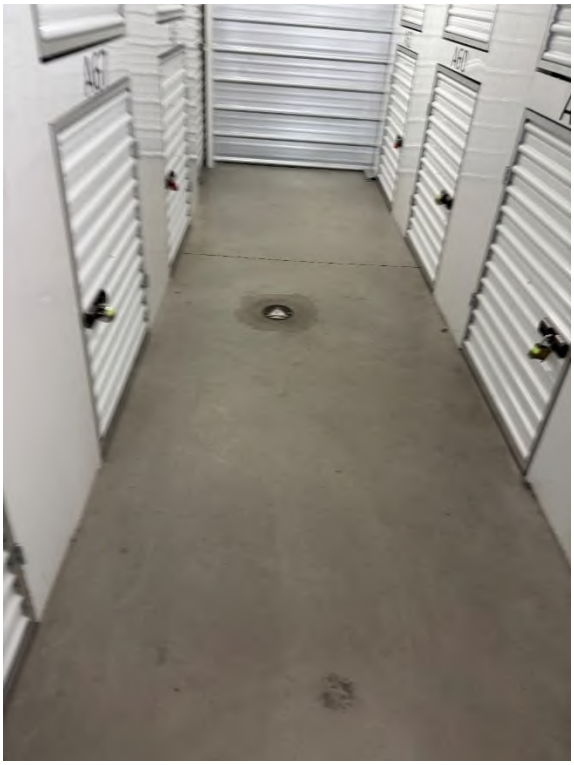


Photo 15: This is the northeast vapor well in the storage building.



Photo 16: Southeast vapor point inside the storage building.



Photo 17: Southwest vapor point inside the storage building.



Photo 18: Vacuum gauge connected to the vapor extraction pump in the treatment area.



Photo 19: Vapor extraction system in the back end of the storage building.



Photo 20: Vapor extraction system in the back of the storage building.

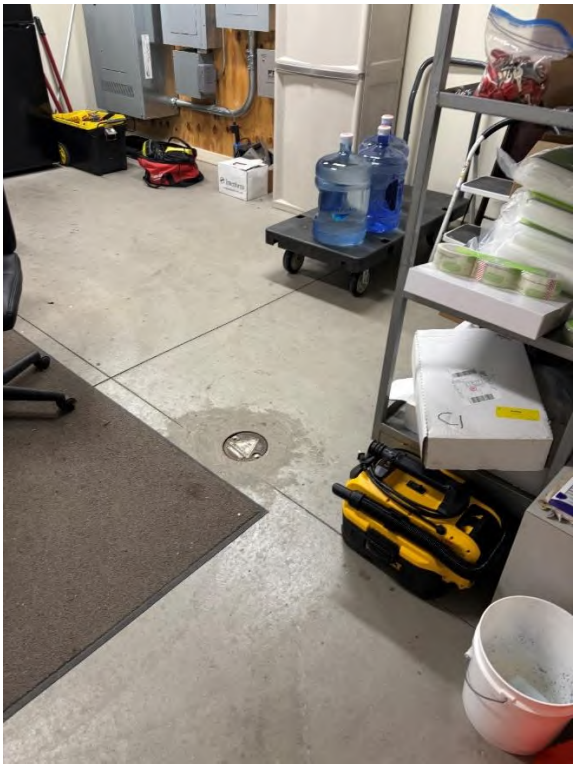


Photo 21: Vapor point in the northwest portion of the storage building.



Photo 22: Cracks and hole in parking lot near the main entrance of the mall.

APPENDIX H

Institutional and Engineering Controls 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. **C932162**

Site Name Fashion Outlets of Niagara Falls Expansion

Site Address: 1705 Factory Outlet Boulevard Zip Code: 14304
City/Town: Niagara
County: Niagara
Site Acreage: 47.815
Reporting Period: December 31, ~~2021~~ 2019 to December 31, 2024

	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. C932162 **Box 3**

Description of Institutional Controls

Parcel	Owner	Institutional Control
145.20-1-15	Macerich Niagara LLC	Ground Water Use Restriction Soil Management Plan Landuse Restriction Site Management Plan IC/EC Plan

An Environmental Easement was filed with the Niagara County Clerk's Office on October 30, 2014. The Controlled Property may be used for commercial and industrial use as long as all engineering controls are operated and maintained as described in the Site Management Plan. The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the New York State Department of Health or the Niagara County Department of Health.

160.08-1-1	Quaker Development, Inc.	Ground Water Use Restriction Soil Management Plan Landuse Restriction Site Management Plan IC/EC Plan

An Environmental Easement was filed with the Niagara County Clerk's Office on October 30, 2014. The Controlled Property may be used for commercial and industrial use as long as all engineering controls are operated and maintained as described in the Site Management Plan. The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the New York State Department of Health or the Niagara County Department of Health.

160.08-1-2	Fashion Outlets II LLC	Ground Water Use Restriction Soil Management Plan Landuse Restriction Site Management Plan IC/EC Plan

An Environmental Easement was filed with the Niagara County Clerk's Office on October 30, 2014. The Controlled Property may be used for commercial and industrial use as long as all engineering controls are operated and maintained as described in the Site Management Plan. The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the New York State Department of Health or the Niagara County Department of Health.

160.08-1-6	Fashion Outlets II LLC	Ground Water Use Restriction Soil Management Plan Landuse Restriction Site Management Plan IC/EC Plan

An Environmental Easement was filed with the Niagara County Clerk's Office on October 30, 2014. The Controlled Property may be used for commercial and industrial use as long as all engineering controls are operated and maintained as described in the Site Management Plan. The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the New York State Department of Health or the Niagara County Department of Health.

160.08-1-7	Fashion Outlets II LLC	Ground Water Use Restriction Soil Management Plan Landuse Restriction Site Management Plan IC/EC Plan

An Environmental Easement was filed with the Niagara County Clerk's Office on October 30, 2014. The Controlled Property may be used for commercial and industrial use as long as all engineering controls are operated and maintained as described in the Site Management Plan. The use of groundwater underlying

the property is prohibited without necessary water quality treatment as determined by the New York State Department of Health or the Niagara County Department of Health.

Box 4

Description of Engineering Controls

Parcel — Engineering Control

145.20-1-15

Vapor Mitigation
Cover System

Exposure to remaining contamination in soil/fill at the Controlled Property is prevented by a cap/cover system comprised of a minimum 4-inch thick asphalt cap at parking areas, a concrete cap at building slabs, a concrete cap at sidewalks, a minimum six-inch thick clean clay cap at detention ponds, and a minimum 1-foot thick clean imported topsoil cover at all landscaped areas. Exposure to soil vapor infiltration into the FONF mall expansion building is prevented by a sub-slab depressurization (SSD) system that include a 20-mil vapor barrier and an active sub-slab depressurization system beneath the building foundation slab.

160.08-1-1

Cover System

Exposure to remaining contamination in soil/fill at the Controlled Property is prevented by a cap/cover system comprised of a minimum 4-inch thick asphalt cap at parking areas, a concrete cap at sidewalks, a minimum six-inch thick clean clay cap at detention ponds, and a minimum 1-foot thick clean imported topsoil cover at all landscaped areas.

160.08-1-2

Vapor Mitigation
Cover System

Exposure to remaining contamination in soil/fill at the Controlled Property is prevented by a cap/cover system comprised of a minimum 4-inch thick asphalt cap at parking areas, a concrete cap at building slabs, a concrete cap at sidewalks, a minimum six-inch thick clean clay cap at detention ponds, and a minimum 1-foot thick clean imported topsoil cover at all landscaped areas. Exposure to soil vapor infiltration into the FONF mall expansion building is prevented by a sub-slab depressurization (SSD) system that include a 20-mil vapor barrier and an active sub-slab depressurization system beneath the building foundation slab.

160.08-1-6

Vapor Mitigation
Cover System

Exposure to remaining contamination in soil/fill at the Controlled Property is prevented by a cap/cover system comprised of a minimum 4-inch thick asphalt cap at parking areas, a concrete cap at the building slab, a concrete cap at sidewalks, and a minimum 1-foot thick clean imported topsoil cover at all landscaped areas. Exposure to soil vapor infiltration into the Secure Storage office building is prevented by a sub-slab depressurization (SSD) system that include a 20-mil vapor barrier and an active sub-slab depressurization system beneath the building foundation slab.

160.08-1-7

Cover System

Exposure to remaining contamination in soil/fill at the Controlled Property is prevented by a cap/cover system comprised of a minimum 4-inch thick asphalt cap at parking areas, a concrete cap at sidewalks, a minimum six-inch thick clean clay cap at detention ponds, and a minimum 1-foot thick clean imported topsoil cover at all landscaped areas.

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. C932162

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 Aladdin Ghafoori at 11411 N. Tatum BLVD. PHX AZ,
print name print business address

am certifying as Owner (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

3.18.2026
Date

EC CERTIFICATIONS

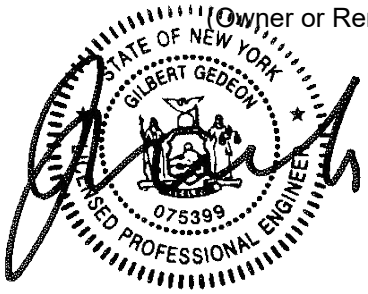
Box 7

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 Gilbert Gedeon (print name) at 104 E25th Street, NY, NY 10010 (print business address),

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



Signature of , for the Owner or Remedial Party, Rendering Certification	Stamp (Required for PE)	Date
		03/18/2026

Box 1 / Question 2

On July 28, 2021, Tax Parcel No. 160.08-1-2 was conveyed to Quaker from Fashion Outlets in a deed recorded on August 18, 2015. During the current certification period (12/2019 to 12/2024), Fashion Outlets understands that this parcel changed ownership on two separate occasions. Fashion Outlets had no knowledge of this change and was not a party to either transaction.

Atlas



Denise Cosenza
Project Manager
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