



SITE MANAGEMENT PLAN (SMP)

89 LaSalle Avenue Site Site No. C915283

Submitted To: Mr. David P. Locey, Project Manager

New York State Department of Environmental Conservation
Division of Environmental Remediation
270 Michigan Ave.
Buffalo, NY 14203

Submitted By: Golder Associates Inc.
2430 N. Forest Road, Suite 100
Getzville, NY 14068 USA

Distribution:

1 copy	NYSDEC – Region 9
1 copy	NYSDOH - Region 5
1 copy	Public Repository – Buffalo Public Library (East Delevan Branch)
1 copy	Legacy LaSalle LLC
1 copy	Phillips Lytle, LLP
1 copy	Golder Associates Inc.

December 2015

1400657

A world of
capabilities
delivered locally



Revisions to Final Approved Site Management Plan:

Revision No.	Date Submitted	Summary of Revision	NYSDEC Approval Date

DECEMBER 2015



Table of Contents

1.0	Introduction and Description of Remedial Program	1
1.1	Introduction.....	1
1.1.1	General	1
1.1.2	Purpose.....	1
1.1.3	Revisions.....	2
1.2	Site Background	3
1.2.1	Site Location and Description	3
1.2.2	Site History.....	3
1.2.3	Geologic History.....	3
1.3	Summary of Previous Environmental Investigation Findings.....	4
1.3.1	Soil	5
1.3.2	Site-Related Groundwater	5
1.4	Summary of Remedial Actions.....	5
1.4.1	Removal of Contaminated Materials from the Site	6
1.4.2	Remaining Contamination.....	6
2.0	Engineering and Institutional Control Plan.....	8
2.1	Introduction.....	8
2.1.1	General	8
2.1.2	Purpose.....	8
2.2	Engineering Controls.....	8
2.2.1	Engineering Control System	8
2.2.1.1	Soil Cover and Cap	8
2.2.2	Criteria for Completion of Remediation/Termination of Remedial Systems	8
2.2.2.1	Composite Cover System	9
2.3	Institutional Controls.....	9
2.3.1	Special Considerations Related to Obligations Under SMP and City of Buffalo Environmental Easement	10
2.3.2	Excavation Work Plan.....	10
2.4	Inspections and Notification	11
2.4.1	Inspections	11
2.4.2	Notifications.....	11
2.5	Contingency Plan	12
2.5.1	Emergency Telephone Numbers	12
2.5.2	Directions to Nearest Health Facility.....	13
2.5.3	Response Procedures	13
3.0	Site Monitoring Plan	15
3.1	Introduction.....	15



3.1.1	General	15
3.1.2	Purpose and Schedule.....	15
3.2	Cover System Monitoring.....	16
3.3	Media Monitoring Program.....	17
3.3.1	Surface Water and Sediment Monitoring.....	17
3.4	Monitoring Quality Assurance/Quality Control	17
3.5	Monitoring Reporting Requirements	18
4.0	Operation and Maintenance Plan.....	19
4.1	Introduction.....	19
5.0	Inspection, Reporting, and Certifications	20
5.1	Site Inspections.....	20
5.1.1	Inspection Frequency.....	20
5.1.2	Inspection Forms, Sampling Data, and Maintenance Reports	20
5.1.3	Evaluation of Records and Reporting	20
5.2	Certification of Engineering and Inspection Controls	20
5.3	Periodic Review Report.....	21
5.4	Corrective Measures Plan.....	22
6.0	References	23

List of Tables

Table 1	Remedial Investigation Soil Contamination Summary
Table 2	Remedial Investigation Groundwater Contamination Summary
Table 3	Soil Cleanup Objectives for the Site
Table 4	Summary of Remaining Contamination
Table 5	Criteria for Imported Soils
Table 6	Emergency Contact Numbers
Table 7	Site Contact Numbers
Table 8	Monitoring/Inspection Schedule
Table 9	Schedule of Monitoring/Inspection Reports

List of Figures

Figure 1	Site Plan
Figure 2	Bedrock Monitoring Well Isopotential Map
Figure 3	Remedial Investigation Soil Contamination Summary
Figure 4	Remedial Investigation Groundwater Contamination Summary
Figure 5	Extent of Remedial Excavation Performed
Figure 6	Location of Remaining Soil Contamination Above Site-Specific Action Levels
Figure 7	Locations of Cover System Types
Figure 8	Map of Route from Site to Hospital

List of Appendices

Appendix A	Site Survey and Environmental Easements with Metes and Bounds
Appendix B	Excavation Work Plan
Appendix C	Health and Safety Plan with Community Air Monitoring Plan
Appendix D	Site Wide Inspection Form
Appendix E	Quality Assurance/Quality Control Plan



CERTIFICATION STATEMENT

I Patrick T. Martin certify that I am currently a NYS registered professional engineer as in defined in 6 NYCRR Part 375 and that this Site Management Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).

Patrick T. Martin P.E.

12/16/15 DATE





List of Acronyms

AS	Air Sparging
ASP	Analytical Services Protocol
BCA	Brownfield Cleanup Agreement
BCP	Brownfield Cleanup Program
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CAMP	Community Air Monitoring Plan
C/D	Construction and Demolition
CFR	Code of Federal Regulation
CLP	Contract Laboratory Program
COC	Certificate of Completion
CO2	Carbon Dioxide
CP	Commissioner Policy
DER	Division of Environmental Remediation
EC	Engineering Control
ECL	Environmental Conservation Law
ELAP	Environmental Laboratory Approval Program
ERP	Environmental Restoration Program
EWP	Excavation Work Plan
GHG	Green House Gas
GWE&T	Groundwater Extraction and Treatment
HASP	Health and Safety Plan
IC	Institutional Control
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
NYCRR	New York Codes, Rules and Regulations
O&M	Operation and Maintenance
OM&M	Operation, Maintenance and Monitoring
OSHA	Occupational Safety and Health Administration
OU	Operable Unit
PID	Photoionization Detector
PRP	Potentially Responsible Party
PRR	Periodic Review Report
QA/QC	Quality Assurance/Quality Control
QAPP	Quality Assurance Project Plan
RAO	Remedial Action Objective
RAWP	Remedial Action Work Plan
RCRA	Resource Conservation and Recovery Act
RI/FS	Remedial Investigation/Feasibility Study
ROD	Record of Decision
RP	Remedial Party
RSO	Remedial System Optimization
SAC	State Assistance Contract
SCG	Standards, Criteria and Guidelines



SCO	Soil Cleanup Objective
SMP	Site Management Plan
SOP	Standard Operating Procedures
SOW	Statement of Work
SPDES	State Pollutant Discharge Elimination System
SSD	Sub-slab Depressurization
SVE	Soil Vapor Extraction
SVI	Soil Vapor Intrusion
TAL	Target Analyte List
TCL	Target Compound List
TCLP	Toxicity Characteristic Leachate Procedure
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank
VCA	Voluntary Cleanup Agreement
VCP	Voluntary Cleanup Program



ES EXECUTIVE SUMMARY

The following provides a brief summary of the controls implemented for the Site, as well as the inspections, monitoring, maintenance and reporting activities required by this Site Management Plan:

Site Identification: C915283 89 LaSalle Avenue Site

Institutional Controls:	1. The property may be used for restricted residential, commercial or industrial use.	
	2. Institutional Controls (IC) include: ■ Compliance with the Environmental Easements and this SMP by the Grantor and the Grantor's successors and assigns; ■ All Engineering Controls must be maintained as specified in this SMP; ■ All Engineering Controls on the Controlled Property must be inspected at a frequency and in a manner defined in the SMP. ■ Stormwater, sediment and other environmental or public health monitoring must be performed as defined in this SMP; ■ Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in this SMP;	
	3. All ECs must be inspected at a frequency and in a manner defined in the SMP.	
Engineering Controls:	1. Cover system	
Inspections:		Frequency
1. Cover inspection		Semi- Annually
Monitoring:		
1. Storm water & Sediment (when present)		Semi- Annually
Reporting:		
1. Periodic Review Report		Annually

Further descriptions of the above requirements are provided in detail in the latter sections of this Site Management Plan.



1.0 INTRODUCTION AND DESCRIPTION OF REMEDIAL PROGRAM

1.1 Introduction

This document is required as an element of the remedial program at Legacy LaSalle BCP Site (hereinafter referred to as the "Site") under the New York State (NYS) Brownfield Cleanup Program (BCP) administered by New York State Department of Environmental Conservation (NYSDEC). The Site was remediated in accordance with a Brownfield Cleanup Agreement (BCA), Site # C915283, which was executed on June 6, 2014 (Ref 1). This Site Management Plan was prepared using the NYSDEC template where all text in blue font is standard language provided by the NYSDEC and has not been modified unless required to fit grammatical context. All text in black was added to the template to provide Site specific information or address Site requirements.

1.1.1 General

Legacy LaSalle LLC (Legacy) entered into a BCA with the NYSDEC to remediate an approximate 9.2 acre property located in the City of Buffalo, Erie County, New York. This BCA required the Remedial Party, Legacy, to investigate and remediate contaminated media at the site. A figure showing the site location and boundaries of this 9.2 acre "Site" is provided in Figure 1. The boundaries of the Site are more fully described in the metes and bounds site description that is part of the Environmental Easements. Refer to Appendix A.

After completion of the remedial work described in the Remedial Action Work Plan, some contamination was left in the subsurface at this Site, which is hereafter referred to as "remaining contamination." This Site Management Plan (SMP) was prepared to manage remaining contamination at the site until the Environmental Easements are extinguished in accordance with ECL Article 71, Title 36. All reports associated with the Site can be viewed by contacting the NYSDEC or its successor agency managing environmental issues in New York State.

This SMP was prepared by Golder Associates Inc. (Golder), on behalf of Legacy, in accordance with the requirements in NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation, dated May 3, 2010, and the guidelines provided by NYSDEC. This SMP addresses the means for implementing the Institutional Controls (ICs) and Engineering Controls (ECs) that are required by the Environmental Easements for the site.

1.1.2 Purpose

The Site contains contamination left after completion of the remedial action. Engineering Controls have been incorporated into the Site remedy to control exposure to remaining contamination during the use of the Site to ensure protection of public health and the environment. The Site consists of three parcels, two owned by Legacy LaSalle and the other owned by the City of Buffalo. Two Environmental Easements



have been granted to the NYSDEC and recorded with the Erie County Clerk; one Environmental Easement granted by Legacy LaSalle (the “Legacy LaSalle Environmental Easement”) and one Environmental Easement granted by the City of Buffalo (the “City of Buffalo Environmental Easement”). Each Environmental Easement will require compliance with this SMP and all ECs and ICs placed on the Site. The ICs place restrictions on Site use, and mandate operation, maintenance, monitoring and reporting measures for all ECs and ICs. This SMP specifies the methods necessary to ensure compliance with all ECs and ICs required by the Environmental Easements for remaining contamination. This plan has been approved by the NYSDEC, and compliance with this plan is required by the grantors of the Environmental Easements and the grantors’ successors and assigns. This SMP may only be revised with the approval of the NYSDEC.

This SMP provides a detailed description of all procedures required to manage remaining contamination at the Site after completion of the Remedial Action, including:

(1) implementation and management of all Engineering and Institutional Controls; (2) media monitoring; (3) operation and maintenance of containment systems; (4) performance of periodic inspections, certification of results, and submittal of Periodic Review Reports; and (5) defining criteria for termination of treatment system operations.

To address these needs, this SMP includes two plans: (1) an Engineering and Institutional Control Plan; and (2) a Monitoring Plan for implementation of Site Monitoring. The Site remedy does not include any mechanical components or systems, therefore, an Operation and Maintenance Plan for the Site was not required or prepared as part of this SMP.

The SMP also includes a description of Periodic Review Reports for the periodic submittal of data, information, recommendations, and certifications to NYSDEC.

It is important to note that:

- This SMP details the site-specific implementation procedures that are required by the Environmental Easements. Failure to properly implement the SMP is a violation of the environmental easements, which is grounds for revocation of the Certificate of Completion (COC);
- Failure to comply with this SMP is also a violation of Environmental Conservation Law, 6NYCRR Part 375 and the BCA (Site # C915283) for the site, and such failure would therefore subject the Remedial Party to applicable penalties.

1.1.3 Revisions

Revisions to this plan will be proposed in writing to the NYSDEC’s project manager. In accordance with the Environmental Easements for the Site, the NYSDEC will provide notice of any approved changes to the SMP, and append these notices to the SMP that is retained in its files.



1.2 Site Background

1.2.1 Site Location and Description

The site, comprised of three (3) separate parcels, is addressed at 67 LaSalle Ave, 89 LaSalle Ave, and portions of 71 NY L&W RR (71 Cordova Ave.) and located in the City of Buffalo County of Erie, New York and is identified as Section 79.7, Block 2 and Lots 1.1, 11, and 16.11 on the Erie County Tax Map. The site is an approximately 9.2-acre area bounded by commercial properties and LaSalle Avenue to the north, McCarthy Park to the south, Cordova Avenue to the east, and residential properties located on the east side of William Price Parkway to the west (see Figure 1). The boundaries of the site are more fully described in Appendix A – Environmental Easements with Metes and Bounds.

1.2.2 Site History

The 89 LaSalle Avenue Site, based on its historic use as a stone quarry and subsequent use as a landfill in the quarried areas, was remediated under the NYSDEC BCP.

The south and southeastern portions of the 89 LaSalle parcel and associated unaddressed parcels to the south, including the City of Buffalo parcel, were used as a stone quarry from approximately 1915 through 1950 by the Buffalo Crushed Stone company. Subsequently the quarried areas were used by the City of Buffalo as a landfill in the 1950s and 1960s for the disposal of a variety of demolition debris, ash, railroad ballast and reportedly some municipal waste. A building located on the northern portion of 89 LaSalle (proximate to LaSalle Ave.) was apparently constructed in the 1950's and at various times has housed a residential heating contractor, catering service and most recently, a local radio station. Several towers and antennas associated with the radio station are located to the south and southwest of the building on the 89 LaSalle Avenue parcel.

The 67 LaSalle parcel was historically used as a lumber yard since the early 1900s, more recently some of the structures on the parcel were used for automotive storage after lumber yard operations ceased. These vacant buildings were demolished as part of Site preparation for redevelopment.

Portions of the 71 Cordova parcel associated with the parking lot and tennis courts, prior to development, have been excluded from BCP Site metes and bounds definition (i.e., they are ineligible under the BCP program) (see Figure 1). The acreages associated with each parcel described above include 89 LaSalle parcel - 4.67 acres; 67 LaSalle - 1.23 acres; and 71 Cordova – 4.71 acres. The Site is bordered by: commercial properties and LaSalle Avenue to the north, McCarthy Park to the south, Cordova Avenue to the east, and residential properties and William Price Parkway to the west.

1.2.3 Geologic History

Remedial Investigation activities conducted on the Site as preparation for remedial efforts included the installation of four (4) wells, the advancement of fifteen (15) borings, the excavation of nineteen (19) test



pits, and the collection of four (4) surface soil samples. Previous investigations had been conducted on portions of the BCP Site referenced as the LaSalle Reservoir Site, which generally encompassed the southeastern half of the Site (the former Buffalo Crushed Stone quarry area). The findings of geologic investigations on the Site are summarized below.

Observations of soil and subsurface fill are consistent with both the findings from the RI and historical investigations of the Site. Soil borings confirmed the location of the Site referred to as the “High Bedrock Area” as comprising the majority of the western and northern sections of the Site. Soil/fill is shallower on the northern portion of the High Bedrock Area and increases in thickness to the south from approximately 1.25 to 13 feet thick. The remaining, south/southeast portion of the site located in the “Former Quarry Area” where soil/fill thickness to top of bedrock varies from approximately 19.5 to 45.5 feet thick. Fill material generally extends to the top of bedrock with little or no presence of native soils due to the documented historical rock quarrying and landfilling practices.

A groundwater flow figure is shown in Figure 3.

1.3 Summary of Previous Environmental Investigation Findings

A Remedial Investigation (RI) was performed to characterize the nature and extent of contamination at the site. The results of the RI are described in detail in the following report:

- 89 LaSalle RI-IRM-AA Report – January 2015 (Ref. 2)

Generally, the RI determined that the historic use of the Site as a landfill is evident in analytical results from the initial RI identifying the widespread presence of low levels of heavy metals and Polycyclic Aromatic Hydrocarbons (PAHs) as the Constituents of Primary Concern (COPCs) in soil/fill across the Site, and specifically at several locations identified across the central portion of the Site where the COPC concentrations were elevated relative the rest of the Site.

Four (4) impacted locations identified during the initial RI were subject to a supplemental remedial investigation delineating the elevated COPC impacts detected in these areas of concern. Findings from the supplemental test pit investigation of the four impacted areas of interest confirmed that there was no evidence of significant lateral or vertical contamination surrounding the original soil boring locations. Levels of COPCs detected in the supplemental test pits indicated that concentrations of COPCs, where detected, were below site specific soil cleanup objectives as proposed in the Final RI Report and consistent with observations of RI analytical results across the site. The heterogeneous nature of the soil/fill across the Site, and analytical results indicating widespread low level concentrations of COPCs above the Restricted Residential SCOs throughout Site overburden, demonstrated that a source or sources of contamination found at the four original areas of concern was not present.



Below is a summary of site conditions when the RI and a supplemental RI were performed in 2014:

1.3.1 Soil

As described above, low level concentrations of COPCs in soil/fill across the Site exceeded Part 375 Restricted Residential Use SCOs including: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrenenaphthalene, phenanthrene, pyrene, arsenic, barium, copper, lead, and mercury.

SVOC PAHs tend to be ubiquitous in the environment, as they are produced from incomplete combustion of fossil fuels and other organic fuel sources, and based on extensive brownfield, inactive hazardous waste site and other publicly available remedial investigation data are often found at similar concentrations in historic fill throughout the City of Buffalo. Similarly, elevated metals concentrations are common in historic fill associated with foundry sands, sandblasting activities, combustion residuals, etc. Soil/fill samples collected from the majority of locations within the former landfill areas of the Site were observed to contain ash, cinders, foundry sands and other common fill materials that typically contain PAH and metals residuals.

1.3.2 Site-Related Groundwater

Groundwater analytical results from the initial RI indicated that no detected concentrations of VOCs, cyanide, and PCBs exceeded GWQS in MW-1. However, five SVOCs, six metals and two pesticide compounds were detected in MW-1 at concentrations above the New York State GWQS. The sample collected from this well was not filtered and was high in turbidity (despite repeated efforts to develop and stabilize the well) It is suspected that the presence of elevated suspended solids in this sample may have influenced the resulting elevated concentrations of many of the compounds (i.e., metals and SVOCs) that exceeded GWQS.

Three supplemental groundwater monitoring wells were installed into the upper bedrock and sampled and analytical results indicated that there were no detected concentrations of VOCs, SVOCs, and pesticides at sample locations RW-1, RW-2, and RW-3 exceeding the GWQS. Two metals were detected in samples at concentrations above the New York State GWQS, including antimony at RW- 1 and sodium at all three supplemental locations. The results indicate that Site bedrock groundwater has not been impacted by elevated concentrations of metals or PAHs that were detected at limited locations in the soil/fill overburden samples. The one localized overburden groundwater sample is not considered a potential source of off-site groundwater contamination.

1.4 Summary of Remedial Actions

The site was remediated in accordance with the NYSDEC-approved 89 LaSalle RI-IRM-AA Report dated January 2015.



The following is a summary of the Remedial Actions performed at the site:

- **Excavation of soil/fill** identified at four RI boring locations as significantly **exceeding** restricted residential **SCOs listed in Table 3**, to a minimum depth of 5 feet or bedrock where applicable;
- **Construction and maintenance of a soil cover system consisting of** two feet of clean imported material, and/or impervious material (i.e, asphalt pavement, concrete sidewalks and buildings) differentiated by a demarcation layer **to prevent human exposure to remaining contaminated soil/fill remaining at the site;**
- **Execution and recording of an Environmental Easement** to restrict land use and prevent future exposure to any contamination remaining at the site.
- **Development and implementation of a Site Management Plan** for long term management of remaining contamination as required by the Environmental Easement, which includes plans for: (1) Institutional and Engineering Controls, (2) monitoring, (3) maintenance and (4) reporting;

Remedial activities were completed at the site in February 2015 (hotspot soil/fill excavations) and between April and October 2015 installation of the Site's cover system was incrementally installed as the Site's development progressed through construction and final site restoration.

1.4.1 Removal of Contaminated Materials from the Site

The Restricted Residential soil cleanup objectives (SCOs) for the primary contaminants of concern (COCs) and applicable land use (residential) for this site is provided in Table 3.

A total of 350 tons of contaminated soil/fill was excavated and removed from the four hotspot locations identified in the RI Report (Boring locations B-5, B-7, B-8 and B-9) and illustrated on Figure 5. The excavated hotspot locations were subsequently backfilled with excess soils excavated and stockpiled from other uncontaminated locations on the Site, primarily storm sewer and water line utility trenching locations. In addition, approximately 1300 tons of topsoil mixed with vegetative material was also stripped from the upper 3-6 inches of portions of the site and disposed of off-site. This material was not identified as exceeding the applicable SCOs, however it was not suitable for reuse on the Site as part of the final cover system.

1.4.2 Remaining Contamination

A layer of geotextile fabric has been installed as demarcation layer in those areas of the Site where two feet of clean soil cover is the component of the cover system. This geotextile was placed on top of the subgrade soil/fill prior to placement of clean soil. At other locations on the Site where the cover system consists of impervious asphalt or concrete, a layer of geotextile has also been placed between the remaining soil/fill and clean structural gravel or crushed stone fill. In areas where buildings or structures act as the final cover system, a minimum of two feet, and in most areas four feet, of clean imported material was placed prior to placement of concrete pads and the erection of structures. In the case of Building 1, the sub base materials have been placed, covered with clean topsoil and seeded in the same manner as



other green space on the Site. The building foundations and concrete pad will be poured in 2016 during the next phase of site development at which time the topsoil and vegetative cover will be removed down to the clean clay subbase material,

Table 4 and Figure 6 summarize the results of all soil samples remaining at the site after completion of Remedial Action that exceed the Restricted Residential, and Site Specific SCOs. Upon completion of the hotspot removal under the IRM, there are no areas of the Site where the levels of remaining contamination in the subgrade soils are higher than other areas of the Site.

Figure 6 summarizes the results of all soil and groundwater samples remaining at the site following completion of Remedial Actions that include the installation of a cover system complete with demarcation between the Site subsurface and clean imported material. Analytical results shown on Figure 6 exceed Site Specific SCOs or Groundwater Quality Standards for the Restricted Residential use of the site. Post remedial contamination remaining on the Site is wide spread and ubiquitous. However Engineering Controls (ECs) implemented as part of the Remedial Actions on the Site have isolated these impacts in place and prevents exposure to any potential human receptor.



2.0 ENGINEERING AND INSTITUTIONAL CONTROL PLAN

2.1 Introduction

2.1.1 General

Since remaining contaminated soil and groundwater exists beneath the site, Engineering Controls and Institutional Controls (EC/ICs) are required to protect human health and the environment. This Engineering and Institutional Control Plan describes the procedures for the implementation and management of all EC/ICs at the site. The EC/IC Plan is one component of the SMP and is subject to revision by NYSDEC.

2.1.2 Purpose

This plan provides:

- A description of all EC/ICs on the site;
- The basic implementation and intended role of each EC/IC;
- A description of the key components of the ICs set forth in the Environmental Easement;
- A description of the features to be evaluated during each required inspection and periodic review;
- A description of plans and procedures to be followed for implementation of EC/ICs, such as the implementation of the Excavation Work Plan for the proper handling of remaining contamination that may be disturbed during maintenance or redevelopment work on the site; and
- Any other provisions necessary to identify or establish methods for implementing the EC/ICs required by the site remedy, as determined by the NYSDEC.

2.2 Engineering Controls

2.2.1 Engineering Control System

2.2.1.1 Soil Cover and Cap

Exposure to remaining contamination in soil/fill at the site is prevented by a composite cover system consisting of a combination of soil cover and impervious materials placed over the site. This cover system is comprised of a minimum of 24 inches of clean soil, asphalt pavement, concrete-covered sidewalks, and concrete building slabs. The Excavation Work Plan that appears in Appendix B outlines the procedures required to be implemented in the event the cover system is breached, penetrated or temporarily removed, and any underlying remaining contamination is disturbed. Procedures for the inspection and maintenance of this cover are provided in the Monitoring Plan included in Section 4 of this SMP.

2.2.2 Criteria for Completion of Remediation/Termination of Remedial Systems

Generally, remedial processes are considered completed when effectiveness monitoring indicates that the remedy has achieved the remedial action objectives identified by the decision document. The



framework for determining when remedial processes are complete is provided in Section 6.6 of NYSDEC DER-10.

2.2.2.1 Composite Cover System

The composite cover system is a permanent control and the quality and integrity of this system will be inspected at defined, regular intervals in perpetuity.

2.3 Institutional Controls

A series of Institutional Controls is required by the Decision Document to: (1) implement, maintain and monitor Engineering Control systems; (2) prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination; and, (3) limit the use and development of the site to Restricted Residential uses only. Adherence to these Institutional Controls on the site is required by the Environmental Easement and will be implemented under this Site Management Plan. These Institutional Controls are:

- Compliance with the Environmental Easements and this SMP by the Grantor and the Grantor's successors and assigns;
- All Engineering Controls must be maintained as specified in this SMP;
- All Engineering Controls on the Controlled Property must be inspected at a frequency and in a manner defined in the SMP.
- Stormwater, sediment and other environmental or public health monitoring must be performed as defined in this SMP;
- Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in this SMP;

Institutional Controls identified in the Environmental Easement may not be discontinued without an amendment to or extinguishment of the Environmental Easement.

The site has a series of Institutional Controls in the form of site restrictions. Adherence to these Institutional Controls is required by the Environmental Easement. Site restrictions that apply to the Controlled Property are:

- The property may only be used for restricted residential use provided that the long-term Engineering and Institutional Controls included in this SMP are employed.
- The property may not be used for a higher level of use, such as unrestricted residential use without additional remediation and amendment of the Environmental Easement, as approved by the NYSDEC;
- All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with this SMP;
- The use of the groundwater underlying the property is prohibited without treatment rendering it safe for intended use;



- Vegetable gardens and farming on the property are prohibited; and
- The site owner or remedial party will submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP. NYSDEC retains the right to access such Controlled Property at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow and will be made by an expert that the NYSDEC finds acceptable.

2.3.1 Special Considerations Related to Obligations Under SMP and City of Buffalo Environmental Easement

The City of Buffalo's sole limited purpose for the granting of an Environmental Easement to NYSDEC is for conveyance of the Environmental Easement as fee title owner of the Cordova Avenue Extension Parcel and for the purpose of receiving notice. All affirmative obligations thereunder, including, but not limited to, all periodic reporting obligations as well as any and all maintenance, monitoring and other operational matters under the Site Management Plan, and any related documents associated with such Environmental Easement, will be the sole responsibility and obligation of Legacy LaSalle, its agents, successors and assigns. Under the City of Buffalo Environmental Easement, the Site Management Plan, and the Excavation Work Plan, the City of Buffalo shall remain responsible only for ordinary notice requirements incidental to the City of Buffalo's current ownership and operation of that portion of the Site commonly known as the public right of way of Cordova Avenue Extension.

2.3.2 Excavation Work Plan

The site has been remediated for restricted residential use. Any future intrusive work that will penetrate the soil cover or cap, or encounter or disturb the remaining contamination, including any modifications or repairs to the existing cover system will be performed in compliance with the Excavation Work Plan (EWP) that is attached as Appendix B to this SMP. Any work conducted pursuant to the EWP must also be conducted in accordance with the procedures defined in a Health and Safety Plan (HASP) and Community Air Monitoring Plan (CAMP) prepared for the site. A sample HASP and the Community Air Monitoring Plan (Appendix A in the HASP) are attached as Appendix C to this SMP that is in current compliance with DER-10, and 29 CFR 1910, 29 CFR 1926, and all other applicable Federal, State and local regulations. Based on future changes to State and federal health and safety requirements, and specific methods employed by future contractors, the HASP and CAMP will be updated and re-submitted with the notification provided in Section B-1 of the EWP. Any intrusive construction work will be performed in compliance with the EWP, HASP and CAMP, and will be included in the periodic inspection and certification reports submitted under the Site Management Reporting Plan (See Section 5).

The site owner and associated parties preparing the remedial documents submitted to the State, and parties performing this work, are completely responsible for the safe performance of all intrusive work, the



structural integrity of excavations, proper disposal of excavation de-water, control of runoff from open excavations into remaining contamination, and for structures that may be affected by excavations (such as building foundations and paved areas). The site owner will ensure that site development activities will not interfere with, or otherwise impair or compromise, the engineering controls described in this SMP.

2.4 Inspections and Notification

2.4.1 Inspections

Inspections of all remedial components installed at the site will be conducted at the frequency specified in the SMP Monitoring Plan schedule, as described in Table 8. A comprehensive site-wide inspection will be conducted annually, regardless of the frequency of the Periodic Review Report. The inspections will determine and document the following:

- Whether Engineering Controls continue to perform as designed;
- If these controls continue to be protective of human health and the environment;
- Compliance with requirements of this SMP and the Environmental Easements;
- Achievement of remedial performance criteria;
- Sampling and analysis of appropriate media during monitoring events;
- If site records are complete and up to date; and
- Changes, or needed changes, to the remedial or monitoring system;

Inspections will be conducted in accordance with the procedures set forth in the Monitoring Plan of this SMP (Section 3). The reporting requirements are outlined in the Periodic Review Reporting section of this plan (Section 5).

If an emergency, such as a natural disaster or an unforeseen failure of any of the ECs occurs, an inspection of the site will be conducted within 5 days of the event to verify the effectiveness of the EC/ICs implemented at the site by a qualified environmental professional as determined by NYSDEC.

2.4.2 Notifications

Notifications will be submitted by the property owner to the NYSDEC as needed for the following reasons:

- 60-day advance notice of any proposed changes in site use that are required under the terms of the Brownfield Cleanup Agreement (BCA), 6NYCRR Part 375, and/or Environmental Conservation Law.
- 7-day advance notice of any proposed ground-intrusive activities pursuant to the Excavation Work Plan.
- Notice within 48-hours of any damage or defect to the foundation, structures or engineering control that reduces or has the potential to reduce the effectiveness of an Engineering Control and likewise any action to be taken to mitigate the damage or defect.



- Verbal notice by noon of the following day of any emergency, such as a fire, flood, or earthquake that reduces or has the potential to reduce the effectiveness of Engineering Controls in place at the site, with written confirmation within 7 days that includes a summary of actions taken, or to be taken, and the potential impact to the environment and the public.
- Follow-up status reports on actions taken to respond to any emergency event requiring ongoing responsive action shall be submitted to the NYSDEC within 45 days and shall describe and document actions taken to restore the effectiveness of the ECs.

Any change in the ownership of the site or the responsibility for implementing this SMP will include the following notifications:

- At least 60 days prior to the change, the NYSDEC will be notified in writing of the proposed change. This will include a certification that the prospective purchaser has been provided with a copy of the Brownfield Cleanup Agreement (BCA), and all approved work plans and reports, including this SMP; and
- Within 15 days after the transfer of all or part of the site, the new owner's name, contact representative, and contact information will be confirmed in writing.

2.5 Contingency Plan

Emergencies may include injury to personnel, fire or explosion, environmental release, or serious weather conditions.

2.5.1 Emergency Telephone Numbers

In the event of any environmentally related situation or unplanned occurrence requiring assistance the Owner or Owner's representative(s) should contact the appropriate party from the contact list below. For emergencies, appropriate emergency response personnel should be contacted. Prompt contact should also be made to Mr. Patrick Martin, P.E, Golder Associates. These emergency contact lists must be maintained in an easily accessible location at the site.

Table 6: Emergency Contact Numbers

Contact Name	Telephone Number
Medical, Fire, and Police:	911
One Call Center:	(800) 272-4480 (3 day notice required for utility markout)
Poison Control Center:	(800) 222-1222
Pollution Toxic Chemical Oil Spills:	(800) 424-8802
NYSDEC Spills Hotline	(800) 457-7362

**Table 7: Site Contact Numbers**

Contact Name	Telephone Number
Mr. Wes Souder	716-548-7539
Mr. Frank Chinnici	716-689-3300
Mr. Patrick Martin	716-867-2860

Notes: Contact numbers subject to change and should be updated as necessary.

2.5.2 Directions to Nearest Health Facility

Site Location: 89 LaSalle Avenue, Buffalo, NY 14214

Nearest Hospital Name: Erie County Medical Center (ECMC)

Hospital Location: 462 Grider Street, Buffalo, NY 14215

Hospital Telephone: (716) 898-3000

Directions to the Hospital:

1. Head northwest on LaSalle Avenue toward William Price
2. Turn left onto Main Street
3. Turn left onto Fillmore Avenue
4. Left onto Leroy Avenue
5. Turn right onto Grider Street
6. Hospital on right
6. Erie County Medical Center; 462 Grider Street, Buffalo, NY 14215

Total Distance: 2.4 miles

Total Estimated Time: 7 minutes

2.5.3 Response Procedures

As appropriate, the fire department and other emergency response group will be notified immediately by telephone of the emergency. The emergency telephone number list is found at the beginning of this Contingency Plan (Table 6). The list will also be posted prominently at the site and made readily available to all personnel at all times.



It is assumed that future activities at the Site will be consistent with the future use designation as a restricted residential development, designated for apartment housing. Potential spills therefore would be limited to vehicles and maintenance equipment on the Site.

Evacuation routes for the Site are generally described as egressing from the main site access road located on LaSalle Ave. A more detailed plan including congregation points and evacuation procedures is included in the HASP attached as Appendix C.

Amendments to the Contingency Plan will be made as warranted by changes to the Site or related Plans.



3.0 SITE MONITORING PLAN

3.1 Introduction

3.1.1 General

The Monitoring Plan describes the measures for evaluating the performance and effectiveness of the remedy to reduce or mitigate contamination at the site, the soil cover system, and all affected site media identified below. This Monitoring Plan may only be revised with the approval of NYSDEC.

3.1.2 Purpose and Schedule

This Monitoring Plan describes the methods to be used for:

- Sampling and analysis of all appropriate media (e.g., groundwater, indoor air, soil vapor, soils);
- Assessing compliance with applicable NYSDEC standards, criteria and guidance, particularly ambient groundwater standards and Part 375 SCOs for soil;
- Assessing achievement of the remedial performance criteria.
- Evaluating site information periodically to confirm that the remedy continues to be effective in protecting public health and the environment; and
- Preparing the necessary reports for the various monitoring activities. To adequately address these issues, this Monitoring Plan provides information on:
 - Sampling locations, protocol, and frequency;
 - Information on all designed monitoring systems (e.g., well logs);
 - Analytical sampling program requirements;
 - Reporting requirements;
 - Quality Assurance/Quality Control (QA/QC) requirements; and,
 - Annual inspection and periodic certification.

Semi-Annual monitoring and inspection of the performance of the remedy and overall reduction in contamination on-site will be conducted for the first 5 years. The frequency thereafter will be determined by NYSDEC.

Characterizations of stormwater and sediment quality, generated as runoff from the Site's engineered cover system have been selected as representative Site monitoring media. Trends in contaminant levels in stormwater and sediment in the affected areas will be evaluated to determine if the remedy continues to be effective in achieving remedial goals. The monitoring and inspection program are summarized in Table 8 and outlined in detail in Sections 3.2 and 3.3 below.

**Table 8: Monitoring/Inspection Schedule**

Inspection Program	Frequency*	Matrix	Analysis/Comments
Stormwater Discharge to City of Buffalo Storm Sewer System	Semi-annually	Stormwater runoff and sediment (when present)	TAL Metals, Semi-volatile compounds (Method 8270)
Semiannual Site Inspection	Semi-annually	Visually inspect entire site for cover system integrity and signs of unacceptable deterioration or other damage to cover system components that may result in exposure to contaminated soil	Prepare a detailed written description of the condition of all cover system components. Include a photographic record of inspection areas

Notes:* The frequency of events will be conducted as specified until otherwise approved by NYSDEC and NYSDOH

To adequately address these issues, this Monitoring Plan provides information on:

- Semiannual inspection and periodic certification; and,
- Reporting requirements.

Semiannual stormwater monitoring and inspections of the Site wide cover system will be conducted to assess the performance and effectiveness of the remedy and the overall reduction in contamination on-site. Inspections include evaluation of all surfaces across the entire 9.2-acre property (refer to Figure 1) within the Site as specified in Table 8 and outlined in detail in Sections 3.2 and 3.3 below.

3.2 Cover System Monitoring

A detailed inspection of all components of the cover system will be performed on a semi-annual basis to assess and document the integrity of the cover system. The inspection will assess and note whether any deterioration or damage may have occurred to any of the cover system components and the corrective measures recommended to address and restore the cover system integrity. During these inspections, an inspection form will be completed (Appendix D). The form will compile sufficient information to assess the following:

- Compliance with all ICs, including Site usage;
- Confirm the integrity of ECs across the Site; and
- General site conditions at the time of the inspection.
- The site management activities being conducted including, where appropriate, confirmation sampling and a health and safety inspection; and
- Confirm that site records are up to date.



3.3 Media Monitoring Program

3.3.1 Surface Water and Sediment Monitoring

Stormwater and associated sediment (when present in the outfall) samples will be collected from the discharge of Stormwater Manhole 3 located at the northwest corner of the BCP Site that subsequently discharges to the City of Buffalo storm sewer system in LaSalle Ave. A grab sample will be collected from the manhole within 6 hours of a precipitation event exceeding 0.5 inches. Sediment (when present) grab samples will be collected from the bottom of the manhole at the same time the stormwater sample is collected. As noted in Table 7 above, the sampling frequency will be semi-annually for the first 5 years following completion of site redevelopment activities. A reduction in frequency will be requested from the Department if after the initial 5 year monitoring period if the data demonstrates that the contaminants of concern are not being detected at concentrations that would be indicative of potential impact from the BCP Site.

3.4 Monitoring Quality Assurance/Quality Control

All sampling and analyses will be performed in accordance with the requirements of the Quality Assurance Project Plan (QAPP) prepared for the site (Appendix E). Main Components of the QAPP include:

- QA/QC Objectives for Data Measurement;
- Sampling Program:
 - Sample containers will be properly washed, decontaminated, and appropriate preservative will be added (if applicable) prior to their use by the analytical laboratory. Containers with preservative will be tagged as such.
 - Sample holding times will be in accordance with the NYSDEC ASP requirements.
 - Field QC samples (e.g., trip blanks, coded field duplicates, and matrix spike/matrix spike duplicates) will be collected as necessary.
- Sample Tracking and Custody;
- Calibration Procedures:
 - All field analytical equipment will be calibrated immediately prior to each day's use. Calibration procedures will conform to manufacturer's standard instructions.
 - The laboratory will follow all calibration procedures and schedules as specified in USEPA SW-846 and subsequent updates that apply to the instruments used for the analytical methods.
- Analytical Procedures;
- Preparation of a Data Usability Summary Report (DUSR), which will present the results of data validation, including a summary assessment of laboratory data packages, sample preservation and chain of custody procedures, and a summary assessment of precision, accuracy, representativeness, comparability, and completeness for each analytical method.
- Internal QC and Checks;



- QA Performance and System Audits;
- Preventative Maintenance Procedures and Schedules;
- Corrective Action Measures

3.5 Monitoring Reporting Requirements

Forms and any other information generated during regular monitoring events and inspections will be kept on file on-site. All forms, and other relevant reporting formats used during the monitoring/inspection events, will be (1) subject to approval by NYSDEC and (2) submitted at the time of the Periodic Review Report, as specified in the Reporting Plan of this SMP.

All monitoring results will be reported to NYSDEC on a periodic basis in the Periodic Review Report. A letter report will also be prepared, annually. The report will include, at a minimum:

- Date of event;
- Personnel conducting sampling;
- Description of the activities performed;
- Type of samples collected (e.g., sub-slab vapor, indoor air, outdoor air, etc);
- Copies of all field forms completed (e.g., well sampling logs, chain-of-custody documentation, etc.);
- Sampling results in comparison to appropriate standards/criteria;
- A figure illustrating sample type and sampling locations;
- Copies of all laboratory data sheets and the required laboratory data deliverables required for all points sampled (to be submitted electronically in the NYSDEC-identified format);
- Any observations, conclusions, or recommendations; and
- A determination as to whether groundwater conditions have changed since the last reporting event.

Data will be reported in hard copy or digital format as determined by NYSDEC. A summary of the monitoring program deliverables are summarized in Table 9 below.

Table 9: Schedule of Monitoring/Inspection Reports

Task	Reporting Frequency*
Site Monitoring & Inspection Report (included as part of PRR submittal)	Annual

Notes: * The frequency of events will be conducted as specified until otherwise approved by NYSDEC

All monitoring results will be included in the annual report prepared as part of the annual Periodic Review Report.



4.0 OPERATION AND MAINTENANCE PLAN

4.1 Introduction

The site remedy does not rely on any mechanical systems, such as sub-slab depressurization systems or air sparge/ soil vapor extraction systems to protect public health and the environment. Therefore, the operation and maintenance of such components is not included in this SMP.



5.0 INSPECTION, REPORTING, AND CERTIFICATIONS

5.1 Site Inspections

5.1.1 Inspection Frequency

All inspections will be conducted at the frequency specified in the schedules provided in Section 3 Monitoring Plan of this SMP. At a minimum, a site-wide inspection will be conducted annually. Inspections of remedial components will also be conducted whenever a severe condition has taken place, such as an erosion or flooding event that may affect the ECs.

5.1.2 Inspection Forms, Sampling Data, and Maintenance Reports

A general site-wide inspection form will be completed during the site-wide inspection (refer to Appendix D). These forms are subject to NYSDEC revision.

All applicable inspection forms and other records, including all media sampling data generated for the site during the reporting period will be provided in electronic format in the Periodic Review Report.

5.1.3 Evaluation of Records and Reporting

The results of the inspection and site monitoring data will be evaluated as part of the EC/IC certification to confirm that the:

- EC/ICs are in place, are performing properly, and remain effective;
- The Monitoring Plan is being implemented;
- Operation and maintenance activities are being conducted properly; and, based on the above items,
- The site remedy continues to be protective of public health and the environment and is performing as designed in the RAWP and FER.

5.2 Certification of Engineering and Inspection Controls

After the last inspection of the reporting period, a Professional Engineer licensed to practice in New York State will prepare the following certification:

For each institutional or engineering control identified for the site, I certify that all of the following statements are true:

- The inspection of the site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under my direction;
- The institutional control employed at this site is unchanged from the date the control was put in place, or last approved by the Department;
- Nothing has occurred that would impair the ability of the control to protect the public health and environment;



- Nothing has occurred that would constitute a violation or failure to comply with any site management plan for this control;
- 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;
- If a financial assurance mechanism is required under the oversight document for the site, the mechanism remains valid and sufficient for the intended purpose under the document;
- Use of the site is compliant with the environmental easements.
- The engineering control systems are performing as designed and are effective;
- 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 in this report is accurate and complete.
- I certify that all information and statements in this certification form 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, Patrick T. Martin PE, of Golder Associates, am certifying as Owner's Designated Site Representative have been authorized and designated by all site owners to sign this certification for the site. The signed certification will be included in the Periodic Review Report described below.

5.3 Periodic Review Report

A Periodic Review Report will be submitted to the Department every year, beginning fifteen months after the Certificate of Completion is issued. In the event that the site is subdivided into separate parcels with different ownership, a single Periodic Review Report will be prepared that addresses the site described in Appendix A (Metes and Bounds). The report will be prepared in accordance with NYSDEC DER-10 and submitted within 30 days of the end of each certification period. Media sampling results will also be incorporated into the Periodic Review Report. The report will include:

- Identification, assessment and certification of all ECs/ICs required by the remedy for the site;
- Results of the required annual site inspections and severe condition inspections, if applicable;
- All applicable inspection forms and other records generated for the site during the reporting period in electronic format;
- A summary of any discharge monitoring data and/or information generated during the reporting period with comments and conclusions;
- Data summary tables and graphical representations of contaminants of concern by media (groundwater, soil vapor), which include a listing of all compounds analyzed, along with the applicable standards, with all exceedances highlighted. These will include a presentation of past data as part of an evaluation of contaminant concentration trends;
- Results of all analyses, copies of all laboratory data sheets, and the required laboratory data deliverables for all samples collected during the reporting period will be submitted electronically in a NYSDEC-approved format;



- A site evaluation, which includes the following:
 - The compliance of the remedy with the requirements of the site-specific RAWP, ROD or Decision Document;
 - The operation and the effectiveness of all treatment units, etc., including identification of any needed repairs or modifications;
 - Any new conclusions or observations regarding site contamination based on inspections or data generated by the Monitoring Plan for the media being monitored;
 - Recommendations regarding any necessary changes to the remedy and/or Monitoring Plan; and
 - The overall performance and effectiveness of the remedy.

The Periodic Review Report will be submitted, in hard-copy format, to the NYSDEC Central Office and Regional Office in which the site is located, and in electronic format to NYSDEC Central Office, Regional Office and the NYSDOH Bureau of Environmental Exposure Investigation.

5.4 Corrective Measures Plan

If any component of the remedy is found to have failed, or if the periodic certification cannot be provided due to the failure of an institutional or engineering control, a corrective measures plan will be submitted to the NYSDEC for approval. This plan will explain the failure and provide the details and schedule for performing work necessary to correct the failure. Unless an emergency condition exists, no work will be performed pursuant to the corrective measures plan until it is approved by the NYSDEC.



6.0 REFERENCES

1. June 6, 2014 Brownfield Cleanup Agreement (BCA), Index No.: C915283-05-14 executed between Legacy LaSalle, LLC and the New York State Department of Environmental Conservation
2. 89 LaSalle Remedial Investigation- Interim Remedial Measure- Alternatives Analysis (RI-IRM-AA) Report, January 2015, Golder Associates, Inc.

At Golder Associates we strive to be the most respected global group of companies specializing in ground engineering and environmental services. Employee owned since our formation in 1960, we have created a unique culture with pride in ownership, resulting in long-term organizational stability. Golder professionals take the time to build an understanding of client needs and of the specific environments in which they operate. We continue to expand our technical capabilities and have experienced steady growth with employees now operating from offices located throughout Africa, Asia, Australasia, Europe, North America and South America.

Africa	+ 27 11 254 4800
Asia	+ 852 2562 3658
Australasia	+ 61 3 8862 3500
Europe	+ 356 21 42 30 20
North America	+ 1 800 275 3281
South America	+ 55 21 3095 9500

solutions@golder.com
www.golder.com

Golder Associates Inc.
2430 N. Forest Road, Suite 100
Getzville, NY 14068 USA
Tel: (716) 204-5880
Fax: (716) 204-5878



TABLES

TABLE 1
SITE MANAGEMENT PLAN
REMEDIAL INVESTIGATION SOIL CONTAMINATION SUMMARY
COMPARISON TO NYSDEC PART 375 SOIL CLEANUP OBJECTIVES

89 LASALLE AVENUE
BCP SITE # C915283
LEGACY LASALLE, LLC.
BUFFALO, NY

Lab ID	Restricted Residential SCOs Table 375-6.8(b) (PPM)	Residential SCOs Table 375-6.8(b) (PPM)	Soil Cleanup Objectives for the Protection of Groundwater Subpart 375-6.5	480-60957-2 - Solid		480-60957-1 - Solid		480-60957-3 - Solid		480-60957-4 - Solid		480-60957-5 - Solid		480-60957-6 - Solid		480-60957-9 - Solid		480-60957-7 - Solid		480-60957-8 - Solid		480-61167-1 - Solid		480-61167-2 - Solid		480-61544-9 - Solid		480-61544-7 - Solid		480-61544-6 - Solid	
Sample ID				R1TP-1		R1TP-2		R1TP-3		R1TP-Dup		SS-1		SS-2		SS-3		SS-4		SS-DUP		B-1A		B-1A (18-20')		B-2 (0-12')		B-3 (0-9')		B-4 (4-12')	
Sample Date				6/2/2014		6/2/2014		6/2/2014		6/2/2014		6/2/2014		6/2/2014		6/2/2014		6/2/2014		6/2/2014		6/4/2014		6/4/2014		6/9/2014		6/9/2014		6/9/2014	
Sample Depth				0-2.5 ft		2-2.5 ft		0-2 ft		0-2.5 ft		0-2 in		0-2 in		0-2 in		0-2 in		0-2 in		18-20 ft		18-20 ft		0-12 ft		0-9 ft		4-12 ft	
Units				PPM		PPM		PPM		PPM		PPM		PPM		PPM		PPM		PPM		PPM		PPM		PPM		PPM		PPM	
Volatile Organics (8260B)																															
2-Butanone (MEK)	100	100	0.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.014	
Acetone	100	100	0.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0098	J	--	--	--	--	--	0.062	
Benzene	4.8	2.9	0.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0066	J	--	--	--	--	--	--		
Cyclohexane	NA	NA	NA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0013	J	--	--	--	--	--	--		
Methylcyclohexane	NA	NA	NA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0025	J	--	--	--	--	--	--		
Methylene Chloride	100	51	0.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
Toluene	100	100	0.7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0038	J	--	--	--	--	--	--		
Vinyl Chloride	0.9	0.21	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
Xylenes, total	100	100	1.6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0068	J	--	--	--	--	--	--		
Semivolatile Organics (GC/MS)																															
2-Methylnaphthalene	NA	NA	NA			0.036	J	0.014	J					0.084	J							--	--						0.077	J	
2-Methylphenol	NA	NA	NA																			--	--								
Acenaphthene	100	100	98					0.028	J*			0.22	J	0.24				0.075	J	0.1	J		--	--			0.025	J	0.17	J	
Acenaphthylene	100	100	107									0.15	J	0.079	J							--	--		0.48	J			0.046	J	
Anthracene	100	100	1000			0.077	J	0.077	J			0.62	J	0.78				0.28	J	0.34	J	0.27	J	--	--	1.1	J	0.1	J	0.41	
Benzo[a]anthracene	1	1	1			0.38		0.27		0.25	J	1.8	2		0.078	J	0.99	J	1.2		1	J	--	--			0.54	J	1.1	J	
Benzo[a]pyrene	1	1	22			0.4		0.26		0.23	J	1.7	1.9		0.086	J	0.97	J	1.2		0.98	J	--	--	2.6	J	0.46	J	0.96	J	
Benzo[b]fluoranthene	1	1	1.7			0.58		0.38		0.39	J	2.2	3.1		0.12	J	1.4		1.9		1.3	J	--	--	2.8	J	0.45	J	0.97	J	
Benzo[g,h,i]perylene	100	100	1000			0.14	J	0.11	J			1.2	0.58				0.34	J	0.44	J	0.65	J	--	--			0.16	J	0.68	J	
Benzo[k]fluoranthene	3.9	1	1.7			0.21	J	0.13	J	0.1	J	1.1	1.2		0.058	J	0.43	J	0.54	J	0.49	J	--	--	2.3	J	0.34	J	0.92	J	
Biphenyl	1	1	3.2											0.023	J							--	--								
Bis(2-ethylhexyl) phthalate	NA	NA	NA																			--	--								
Carbazole	NA	NA	NA					0.041	J			0.31	J	0.35						0.15	J		--	--			0.029	J	0.21	J	
Chrysene	3.9	1	1			0.48		0.32		0.28	J	2.1	2.1		0.093	J	0.98	J	1.3		1.1	J	--	--	3.6	J	0.61	J	1.1	J	
Dibenz[a,h]anthracene	0.33	0.33	1000																			--	--				0.13	J	0.15	J	
Dibenzofuran	NA	NA	NA											0.2	J							--	--						0.12	J	
Fluoranthene	100	100	1000			0.88		0.58		0.58	J	4.2		4.7		0.17	J			2.5		2	--	--	3.6	J	0.67	J	2.1		
Fluorene	100	100	386									0.28	J	0.38								--	--				0.04	J	0.22	J	
Indeno[1,2,3-cd]pyrene	0.5	0.5	8.2			0.15	J	0.11	J	0.085	J	1.1		0.58		0.33	J	0.35	J	0.42	J	0.59	J	--	--	3.4	J	0.55	J	0.79	J
Naphthalene	100	100	12											0.11	J							--	--					0.19	JB		
Phenanthrene	100	100	1000			0.4		0.35		0.4	J	3.1		3.2		0.091	J	1.2		1.5		1.3	J	--	--	2.8	J	0.43	J	1.7	
Pyrene	100	100	1000			0.56		0.4		0.35	J	3		2.8		0.12	J	1.4		1.7		1.5	J	--	--	6.5	J	1.3	J	2.7	J
Total Metals (SW 846 Series)																															
Aluminum	NA	NA	NA	7150		11800		6330		5530		5450		6420		5710		5090		5440		5670		--	--	7640		7070		6590	J
Antimony	NA	NA	NA			0.65	J					2.3		1.1	J				0.71	J	1.5	J	--	--		1.3	J	1.2	J		
Arsenic	16	16	16	3.4		16		9.6		9		14.9		14.8		3.2		4.3		4.1		13.5		--	--	5.7		9.4		11.2	
Barium	400	350	820	35.7		108		82.3		61.4		198		184		32.1		63.6		62.7		422		--	--	84.3		138		144	
Beryllium	72	14	47	0.32		1.2		0.52		0.47		0.63		0.75		0.27		0.28		0.29		0.39		--	--	0.48		0.61		0.38	
Cadmium	4.3	2.5	7.5	0.37		0.7		0.6		0.58		1.6		1.6		0.51		0.83		0.72		0.95		--	--	0.46		0.93		1.3	
Calcium	NA	NA	NA	3100	B	26300	B	28200	J	9310	J	11900	B	18700	B	17800	B	23500	B	24200	B	45700	B	--	--	37800	B	22200	B	31900	B
Chromium	180	36	NS	7.7	J	13.7	J	12	J	12.4	J	18.2	J	14.5	J	6.6	J	8.4	J	9	J	16.9		--	--	14.6		11.8		18.2	
Cobalt	NA	NA	NA	3.9		6.3		5.7		5.6		6.1		5.6		3.1		3.8		3.7		5.1	B	--	--	5.4		6		5.8	
Copper	270	270	1720	5.4		25.5		18.5		16.2		108		114		11		26		25.1		348		--	--	34.5		51.6		63.1	
Iron	NA	NA	NA	10300	B	31000	B																								

TABLE 1
SITE MANAGEMENT PLAN
REMEDIAL INVESTIGATION SOIL CONTAMINATION SUMMARY
COMPARISON TO NYSDEC PART 375 SOIL CLEANUP OBJECTIVES

89 LASALLE AVENUE
BCP SITE # C915283
LEGACY LASALLE, LLC.
BUFFALO, NY

Lab ID	Restricted Residential SCOs Table 375-6.8(b) (PPM)	Residential SCOs Table 375-6.8(b) (PPM)	Soil Cleanup Objectives for the Protection of Groundwater Subpart 375-6.5	480-61544-8 - Solid		480-61544-10 - Solid		480-61544-4 - Solid		480-61544-5 - Solid		480-61544-3		480-61544-11 - Solid		480-61544-1 - Solid		480-61544-12 - Solid		480-61544-2 - Solid		480-61411-1		480-61411-2		480-70547-1		480-70547-2		480-70547-3	
Sample ID				B-5 (1-12')		B-6 (0-12')		B-7 (0-7.5')		B-8 (0-5.3')		B-9 (0-12')		B-10A (0-12')		B-12 (0-10.7')		B-13 (4-8')		B-14 (0-12')		B-15 (0-12')		B-15 (0-12') Dup		TP-B7-S (0-2)		TP-B7-S (2-4)		TP-B9-N (0-2')	
Sample Date				6/9/2014		6/9/2014		6/9/2014		6/9/2014		6/9/2014		6/9/2014		6/9/2014		6/8/2014		6/9/2014		6/6/2014		6/6/2014		10/30/2014		10/30/2014		10/30/2014	
Sample Depth				1-12 ft		0-12 ft		0-7.5 ft		0-5.3 ft		0-12 ft		0-12 ft		0-10.7 ft		4-8 ft		0-12 ft		0-12 ft		0-12 ft		0-2 ft		2-4 ft		0-2 ft	
Units				PPM		PPM		PPM		PPM		PPM		PPM		PPM		PPM		PPM		PPM		PPM		PPM		PPM		PPM	
Volatile Organics (8260B)																															
2-Butanone (MEK)	100	100	0.12	0.038		--	--	--	--	--	--	--	--	--	--	--	--								--	--	--	--	--	--	
Acetone	100	100	0.05	0.17		--	--	--	--	--	--	--	--	--	--	--	0.044				0.012				--	--	--	--	--	--	
Benzene	4.8	2.9	0.06			--	--	--	--	--	--	--	--	--	--	--									--	--	--	--	--	--	
Cyclohexane	NA	NA	NA			--	--	--	--	--	--	--	--	--	--	--	0.0013	J							--	--	--	--	--	--	
Methylcyclohexane	NA	NA	NA			--	--	--	--	--	--	--	--	--	--	--	0.0026	J							--	--	--	--	--	--	
Methylene Chloride	100	51	0.05	0.0032	J	--	--	--	--	--	--	--	--	--	--	--									--	--	--	--	--	--	
Toluene	100	100	0.7	0.00057	J	--	--	--	--	--	--	--	--	--	--	--									--	--	--	--	--	--	
Vinyl Chloride	0.9	0.21	0.02			--	--	--	--	--	--	--	--	--	--	--	0.0012	J							--	--	--	--	--	--	
Xylenes, total	100	100	1.6			--	--	--	--	--	--	--	--	--	--	--									--	--	--	--	--	--	
Semivolatile Organics (GC/MS)																															
2-Methylnaphthalene	NA	NA	NA	7.6	J	0.043	J	0.031	J	42				0.025	J	0.063	J	0.18	J	0.031	J	0.54	J	0.34	J	--	--	--	--	--	--
2-Methylphenol	NA	NA	NA							0.87	J														--	--	--	--	--	--	
Acenaphthene	100	100	98	20	J	0.049	J	0.059	J	61		0.11	J	0.087	J	0.026		0.68	J	0.023	J				--	--	--	--	--	--	
Acenaphthylene	100	100	107	5	J	0.022	J	0.049	J	0.83	J	0.067	J	0.08	J	0.044	J	0.094	J	0.01	J	1	J	0.45	J	--	--	--	--	--	--
Anthracene	100	100	1000	62		0.11	J	0.19	J	120		0.38	J	0.34	J	0.56		0.91	J	0.065	J	6.8	J	4	J	--	--	--	--	--	--
Benzo[a]anthracene	1	1	1	93	J	0.27	J	0.6	J	110	J	0.89	J	1.1		1.3	J	1.8	J	0.19	J	12		8.3	J	--	--	--	--	--	--
Benzo[a]pyrene	1	1	22	20	J	0.27	J	0.51	J	24	J	0.77	J	0.91	J	0.36	J	1.5	J	0.16	J	8.5		6.1	J	--	--	--	--	--	--
Benzo[b]fluoranthene	1	1	1.7	85	J	0.27	J	0.56	J	91	J	0.83	J	0.9	J	1.2	J	1.4	J	0.19	J	11		8.2	J	--	--	--	--	--	--
Benzo[g,h,i]perylene	100	100	1000	16	J	0.082	J	0.082	J	22	J			0.45	J	0.21	J					4.1	J	4.3	J	--	--	--	--	--	--
Benzo[k]fluoranthene	3.9	1	1.7	74	J	0.25	J	0.53	J	66	J	0.66	J	0.9	J	1.1	J			0.16	J	5.7	J	3.8	J	--	--	--	--	--	--
Biphenyl	1	1	3.2	3.3	J					12	J					0.02	J								--	--	--	--	--	--	
Bis(2-ethylhexyl) phthalate	NA	NA	NA					0.97								0.11	J								--	--	--	--	--	--	
Carbazole	NA	NA	NA	48		0.056	J	0.1	J	58		0.16	J	0.083	J	0.36		0.29	J	0.036	J	1.6	J	1.7	J	--	--	--	--	--	--
Chrysene	3.9	1	1	110	J	0.31	J	0.67	J	100	J	0.93	J	1.2		1.5	J	1.9	J	0.21	J	12		8	J	--	--	--	--	--	--
Dibenz[a,h]anthracene	0.33	0.33	1000	11	J	0.98	J	0.22	J	13	J	0.15	J*	0.21	J	0.16	J	0.59	J	0.075	J	1.4	J	1.3	J	--	--	--	--	--	--
Dibenzofuran	NA	NA	NA	28		0.046	J	0.049	J	63		0.08	J	0.06	J	0.18	J	0.33	J	0.018	J	1.7	J	1.1	J	--	--	--	--	--	--
Fluoranthene	100	100	1000	230		0.5		1.2		220		2		2		2.6		3.5	J	0.36	J	29		20		--	--	--	--	--	--
Fluorene	100	100	386	60		0.056	J	0.073	J	87		0.15	J	0.11	J	0.27		0.78	J	0.23	J	0.97	J			--	--	--	--	--	--
Indeno[1,2,3-cd]pyrene	0.5	0.5	8.2	61	J	0.22	J	0.45	J	63	J	0.66	J	0.77	J	1	J	1.3	J	0.17	J	4.5	J	3.7	J	--	--	--	--	--	--
Naphthalene	100	100	12	14	JB	0.18	JB	0.043	JB	140	B	0.048	JB	0.053	JB	0.14	JB	0.35	JB						--	--	--	--	--	--	
Phenanthrene	100	100	1000	250		0.43		0.82	J	300		1.5	J	1.2		2.4		2.9	J	0.26	J	23		15		--	--	--	--	--	--
Pyrene	100	100	1000	270	J	0.62	J	1.3	J	280	J	1.9	J	2.8	J	3.6	J	4.6	J	0.38	J	27		19	J	--	--	--	--	--	--
Total Metals (SW 846 Series)																															
Aluminum	NA	NA	NA	5020		5430		4780		2500		5260		7740		5900		6340		6280		5540		5720		--	--	--	--	--	--
Antimony	NA	NA	NA	2.5	J	2.3	J	4.6	J			5.8	J					2.6	J	1.8	J	3.3	J	2.5	J	--	--	--	--	--	--
Arsenic	16	16	16	20.5		21.4		10.1		2.5		104		5.1		7.3		10.3		9.5		10.7		7.3		--	--	--	--	10	
Barium	400	350	820	105		99.7		231		23.7		134		92.4		31.9		302		172		1730		1420		--	--	--	--	--	--
Beryllium	72	14	47	0.56		0.55		0.35		0.16	J	0.6		0.37		0.5		0.38		0.42		0.49		0.45		--	--	--	--	--	--
Cadmium	4.3	2.5	7.5	3.4		0.84		1.8		0.26		1.4		0.47		0.53		2.8		1.9		1.5		0.91		--	--	--	--	--	--
Calcium	NA	NA	NA	44300	B	32600	B	68800	B	80500	B	12000	B	61100	B	5530	B	64500	B	88700	B										

89 LASALLE AVENUE
BCP SITE # C915283
LEGACY LASALLE, LLC.
BUFFALO, NY

[illegible]

TABLE 1
SITE MANAGEMENT PLAN
REMEDIAL INVESTIGATION SOIL CONTAMINATION SUMMARY
COMPARISON TO NYSDEC PART375 SOIL CLEANUP OBJECTIVES

89 LASALLE AVENUE
BCP SITE # C915283
LEGACY LASALLE, LLC.
BUFFALO, NY

Data Qualifiers:

- B = Analyte was detected in associated method blank.
J = Analyte detected at a level less than the reporting limit (RL) and greater than or equal to the Method Detection Limit (MDL).
Concentrations within this range are estimated.
J = Qualified per DUSR included as Appendix D.

Footnotes:

- All values are in Parts per Million (PPM).
blank = Not detected above the practical quantitation limits (PQL), lower limit of quantitation (LLQ), or reporting limit (RL).
0.34 = Sample concentration exceeds NYSDEC Part 375 Restricted Residential Use Soil Cleanup Objectives (SCOs)
0.35 = Sample concentration exceeds NYSDEC Part 375 Residential Use Soil Cleanup Objectives (SCOs)
0.34 = Sample concentration exceeds NYSDEC Part 375 Protection of Groundwater Soil Cleanup Objectives (SCOs)
0.35 = Sample concentration exceeds NYSDEC Part 375 Restrictive Use SCOs, but not Protection of Groundwater Soil Cleanup Objectives (SCOs)
NA = Not Applicable
NS = Not Specified.

TABLE 2
SITE MANGEMENT PLAN
REMEDIAL INVESTIGATION GRUNDWATER CONTAMINATION SUMMARY
COMPARISON TO 6 NYCRR PART 703 WATER QUALITY STANDARDS

89 LASALLE AVENUE
BCP SITE # C915283
LEGACY LASALLE, LLC.
BUFFALO, NY

Lab ID	Water Quality Standards Surface Waters and Groundwater (6 NYCRR Part 703) (PPM)	480-61568-1 - Water		480-61568-2 - Water		480-71096-1 - Water		480-71096-2 - Water		480-71096-3 - Water		480-71096-5 - Water	
Sample ID		MW-1		MW-1 DUP		RW-1		RW-2		RW-3		Blind Dup	
Sample Date		6/10/14		6/10/14		11/10/14		11/10/14		11/10/14		11/10/14	
Units		PPM		PPM		PPM		PPM		PPM		PPM	
Volatile Organics (GC/MS)													
Acetone	0.05	0.0084	J	0.0093	J	0.0094	J			0.052		0.0041	J
Carbon disulfide	NA	0.0013				0.0014							
Cyclohexane	NA	0.00031	J			0.00089	J			0.00092	J		
Methylcyclohexane	NA	0.00031	J	0.00031	J	0.0011				0.0012			
Toluene	0.005									0.00097	J		
Trichloroethene	0.005											0.00074	J
Total Xylenes	0.005									0.00099	J		
Semivolatile Organics (GC/MS)													
2-Methylphenol	NA										U		
Benzaldehyde	NA	0.00061	JB	0.00056	JB	0.00094	UJ		UJ		UJ		UJ
Bis(2-ethylhexyl) phthalate	0.005						U	0.0034	JB		U		
Total Metals (SW 846 Series)													
Aluminum	NA	28.5		47.6		0.11	J		UJ	0.12	J		UJ
Antimony	0.003					0.0098	J		UJ		UJ		UJ
Arsenic	0.025	0.019		0.027		0.017	J		UJ		UJ		UJ
Barium	NA	0.25		0.4		0.032	J	0.083	U	0.095	J	0.077	J
Calcium	NA	172		191		107	J	0.0031	J	96.4	J	169	J
Chromium	0.05	0.039		0.065			UJ		UJ	0.0041	UJ		UJ
Copper	0.2	0.068		0.12			UJ	0.0085	J		UJ	0.009	J
Iron	0.3	45.8	J	78.1	J		UJ		UJ	0.25	J	0.022	J
Magnesium	NA	33.9		45.5		30.9	J	105	J	43.7	J	101	J
Manganese	0.3	1.3		1.9	B	0.0088	J	0.019	J	0.0067	J	0.011	J
Nickel	0.1	0.039		0.059		0.0021	J	0.008	J	0.0026	J	0.0089	J
Potassium	NA	17		16.4		8.2	J	21	J	20.3	J	21.5	J
Sodium	20	97.8		103		63.6	J	89.2	J	107	J	90.8	J
Zinc	NA	0.41		0.65		0.0072	J	0.041	J	0.0099	J	0.041	J

TABLE 2
SITE MANAGEMENT PLAN
REMEDIAL INVESTIGATION GROUNDWATER CONTAMINATION SUMMARY
COMPARISON TO 6 NYCRR PART 703 WATER QUALITY STANDARDS

89 LASALLE AVENUE
BCP SITE # C915283
LEGACY LASALLE, LLC.
BUFFALO, NY

Data Qualifiers:

B = Analyte was detected in associated method blank.

J = Analyte detected at a level less than the reporting limit (RL) and greater than or equal to the Method Detection Limit (MDL). Concentrations within this range are estimated.

J = The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.

U = The analyte was analyzed for, but was not detected above the level of the associated reported quantitation limit.

UJ = The analyte was analyzed for, but was not detected. The associated reported quantitation limit is approximate and may be inaccurate or imprecise.

Footnotes:

1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.

2. All results are in Parts per Million (PPM) unless stated otherwise.

3. Blind Dup sample taken from RW-2 location.

0.79 = Sample concentration exceeds the respective Water Quality Standards from 6 NYCRR Part 703.

NA = Not applicable

ND = Non detectable concentration by approved analytical methods; water quality standard.

NJ = The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value.

TABLE 3
SITE MANAGEMENT PLAN
SOIL CLEANUP OBJECTIVES FOR THE SITE

89 LASALLE AVENUE
BCP SITE # C915283
LEGACY LASALLE, LLC
BUFFALO, NY

Parameter	Sample Size (n)	Statistical Mean (M)	Standard Deviation (σ)	95% Confidence Interval	Site Specific SCOs [95% CI + 2 σ] (ppm)	Restricted Residential SCOs (ppm)
Semivolatile Organics						
Benzo[a]anthracene	33	7.7	11.7	4.0	27.4	1
Benzo[a]pyrene	33	2.7	3.2	1.1	7.4	1
Benzo[b]fluoranthene	33	7.0	10.2	3.5	24.0	1
Benzo[k]fluoranthene	33	5.1	7.9	2.7	18.5	3.9
Biphenyl	24	0.8	1.2	0.5	2.9	1
Chrysene	33	8.0	12.0	4.1	28.1	3.9
Dibenz[a,h]anthracene	33	1.0	1.4	0.5	3.3	0.33
Indeno[1,2,3-cd]pyrene	33	4.8	7.0	2.4	16.4	0.5
Metals						
Arsenic	29	13.3	7.7	2.8	18.3	16
Barium	24	248.2	240.1	96.1	576.2	400
Lead	31	533.5	430.1	151.4	1011.6	400

89 LASALLE AVENUE
BCP SITE # C915283
LEGACY LASALLE, LLC
BUFFALO, NY

F/N: Table 4; Summary of Remaining Contamination.xlsx

TABLE 4
SITE MANAGEMENT PLAN
REMEDIAL INVESTIGATION SOIL CONTAMINATION SUMMARY
COMPARISON TO NYSDEC PART 375 SOIL CLEANUP OBJECTIVES

89 LASALLE AVENUE
BCP SITE # C915283
LEGACY LASALLE, LLC.
BUFFALO, NY

Lab ID	Site Specific SCOs (PPM)	Restricted Residential SCOs Table 375-6.8(b) (PPM)	480-75530-1 - Solid		480-75530-2 - Solid		480-75530-3 - Solid		480-75530-4 - Solid		480-75530-11 - Solid		480-75530-12 - Solid		480-75530-13 - Solid		480-75530-14 - Solid		480-75530-16 - Solid		480-75530-17 - Solid		480-75530-18 - Solid		480-75530-20 - Solid	
Sample ID			B5-SW-N		B5-SW-S		B5-SW-E		B5-SW-W		B8-SW-N		B8-SW-S		B8-SW-E		B8-SW-W		B9-SW-N		B9-SW-S		B9-SW-E		B9-Flor	
Sample Date			2/17/15		2/17/15		2/17/15		2/17/15		2/17/15		2/17/15		2/17/15		2/17/15		2/17/15		2/17/15		2/17/15		2/17/15	
Sample Depth			0-5 ft		0-5 ft		0-5 ft		0-5 ft		0-5 ft		0-5 ft		0-5 ft		0-5 ft		0-5 ft		0-5 ft		0-5 ft		5 ft	
Units			PPM		PPM		PPM		PPM		PPM		PPM		PPM		PPM		PPM		PPM		PPM		PPM	
Volatile Organics (8260B)																										
2-Butanone (MEK)	--	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetone	--	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyclohexane	--	NA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylcyclohexane	--	NA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl Chloride	--	0.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Semivolatile Organics (GC/MS)																										
2-Methylnaphthalene	--	NA																								
Acenaphthene	--	100	0.64						0.8	J	2.5		0.41	J			0.31	J			0.82	J				
Acenaphthylene	--	100									4						0.45	J			0.36	J				
Anthracene	--	100	1.9		0.65	J	0.75	J	2.8		8.8		1.3	J			2.6				2.4					
Benzo[a]anthracene	27.4	1	2.8		1.9		3.5		5.5		19		3.9		4.4	J	5.9		0.96	J	6.5		0.82	J	0.43	J
Benzo[a]pyrene	7.4	1	2		1.8	J	3.3		4.5		16		3.4		3.7	J	4.7		1.3	J	5.9		0.7	J	0.47	J
Benzo[b]fluoranthene	24	1	2.4		2.2		3.6		5.9		26		5.6		6.2	J	7.9		2.1		9		1.5	J	0.57	J
Benzo[g,h,i]perylene	--	100	0.84	J	0.47	J	0.87	J	1.1		3.6		0.8	J	1	J	1.1	J	0.4	J	1.4	J	0.25	J	0.32	J
Benzo[k]fluoranthene	18.5	3.9	1.4	J	1.3	J	1.6	J	3.1		13		2.6		2.8	J	4.2		0.85	J	4.4		0.59	J	0.31	J
Biphenyl	2.9	1																								
Bis(2-ethylhexyl) phthalate	--	NA																								
Carbazole	--	NA																								
Chrysene	28.1	3.9	2.8		1.9		3.5		5.4		19		3.8		4.3	J	5.7		1.1	J	6.4		0.96	J		
Dibenz[a,h]anthracene	3.3	0.33																								
Dibenzofuran	--	NA																								
Fluoranthene	--	100	5.7		3.7		5.3		12		39		8.8		7.2	J	12		1.5	J	14		1.8	J	0.83	J
Fluorene	--	100	0.92	J	0.26	J			1.1	J	7.3		0.54	J			0.82	J			0.98	J				
Indeno[1,2,3-cd]pyrene	16.4	0.5	0.76	J	0.47	J	0.78	J	1.3	J	3.6		0.77	J			1.1	J	0.37	J	1.5	J			0.31	J
Naphthalene	--	100	0.42	J					0.29	J	4.4		0.45	J							0.37	J				
Phenanthrene	--	100	6.1		2.8		2.7		9.8		40		5.1		3.4	J	8.1		0.68	J	9.1		1.2	J	0.47	J
Pyrene	--	100	4.9		3.2		6.2		9		27		5.9		5	J	8.2		1.2	J	10		1.3	J	0.78	J
Total Metals (SW 846 Series)																										
Aluminum	--	NA																								
Antimony	--	NA																								
Arsenic	18.3	16	8.4		6.6		4.9		6.6		9.1		13.2		8.9		15		12.7		7.1		12.8		9.7	
Barium	576.2	400																								
Beryllium	--	72																								
Cadmium	--	4.3																								
Calcium	--	NA																								
Chromium	--	180																								
Cobalt	--	NA																								
Copper	--	270																								
Iron	--	NA																								
Lead	1011.6	400	253		287		256		284		437		658		335		512		542		275		302		580	
Magnesium	--	NA																								
Manganese	--	2000																								
Mercury	--	0.81																								
Nickel	--	310																								
Potassium	--	NA																								
Selenium	--	180																								
Silver	--	180																								
Sodium	--	NA																								
Vanadium	--	NA																								
Zinc	--	10000																								
General Chemistry Parameters																										
Cyanide	--	27																								
Percent Solids	--	NA																								

TABLE 4
SITE MANAGEMENT PLAN
REMEDIAL INVESTIGATION SOIL CONTAMINATION SUMMARY
COMPARISON TO NYSDEC PART375 SOIL CLEANUP OBJECTIVES

89 LASALLE AVENUE
BCP SITE # C915283
LEGACY LASALLE, LLC.
BUFFALO, NY

Data Qualifiers:

B = Analyte was detected in associated method blank.

J = Analyte detected at a level less than the reporting limit (RL) and greater than or equal to the Method Detection Limit (MDL).
Concentrations within this range are estimated.

J = Qualified per DUSR included as Appendix D.

Footnotes:

All values are in Parts per Million (PPM).

blank = Not detected above the practical quantitation limits (PQL), lower limit of quantitation (LLQ), or reporting limit (RL).

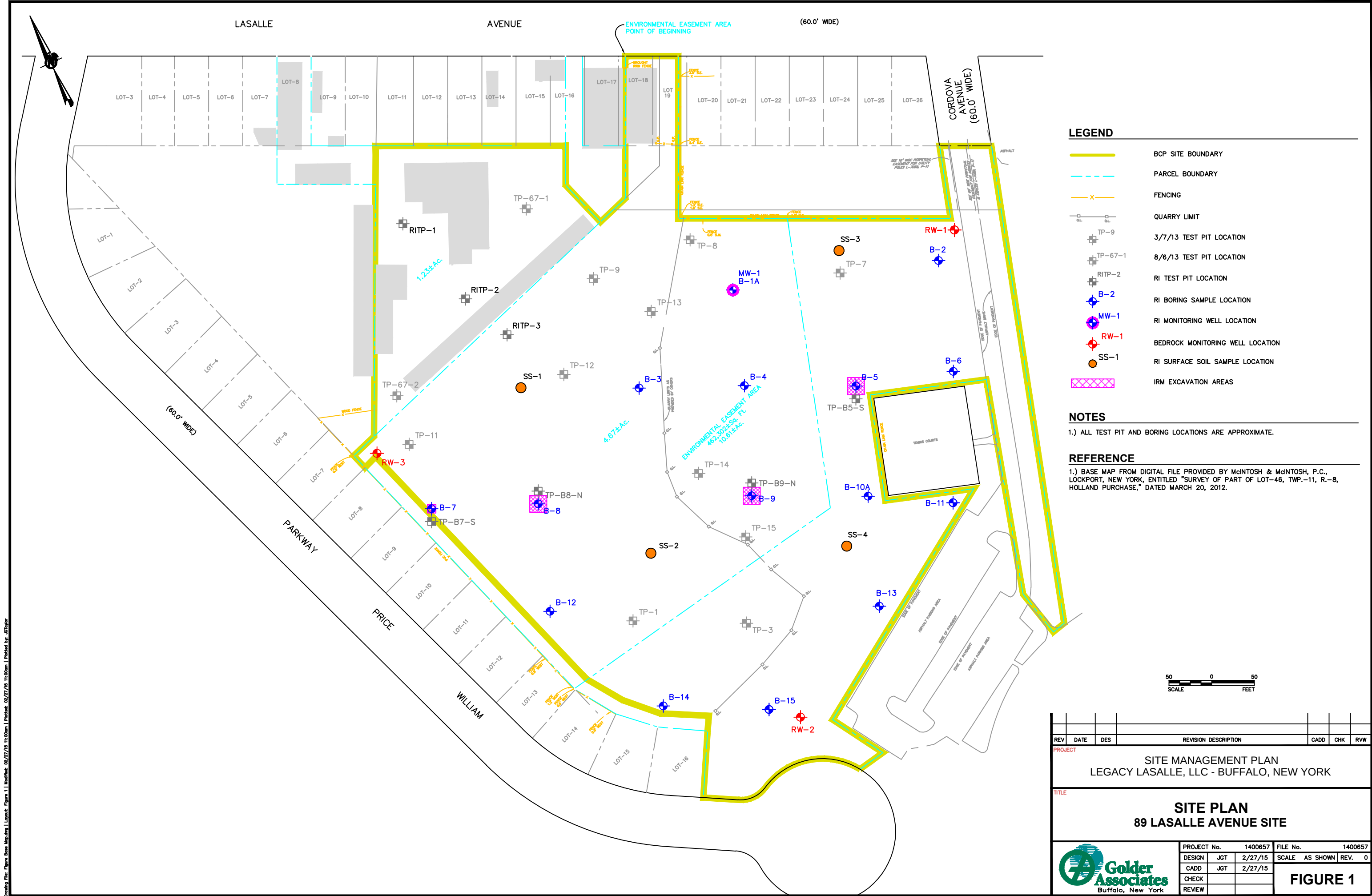
0.34 = Sample concentration exceeds NYSDEC Part 375 Restricted Residential Use Soil Cleanup Objectives (SCOs)

0.34 = Sample concentration exceeds Site Specific Soil Cleanup Objectives (SCOs)

NA = Not Applicable

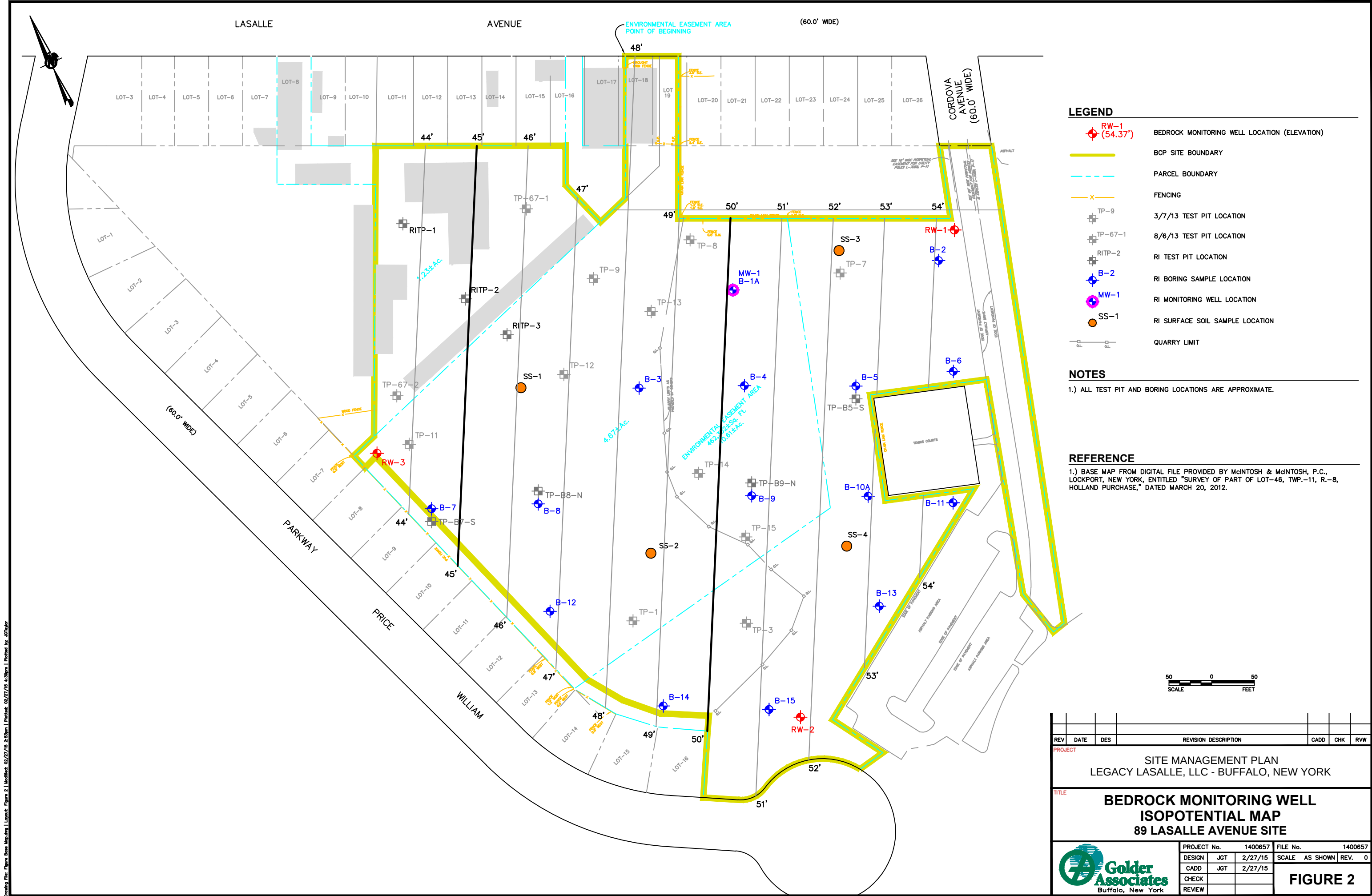
NS = Not Specified.

FIGURES

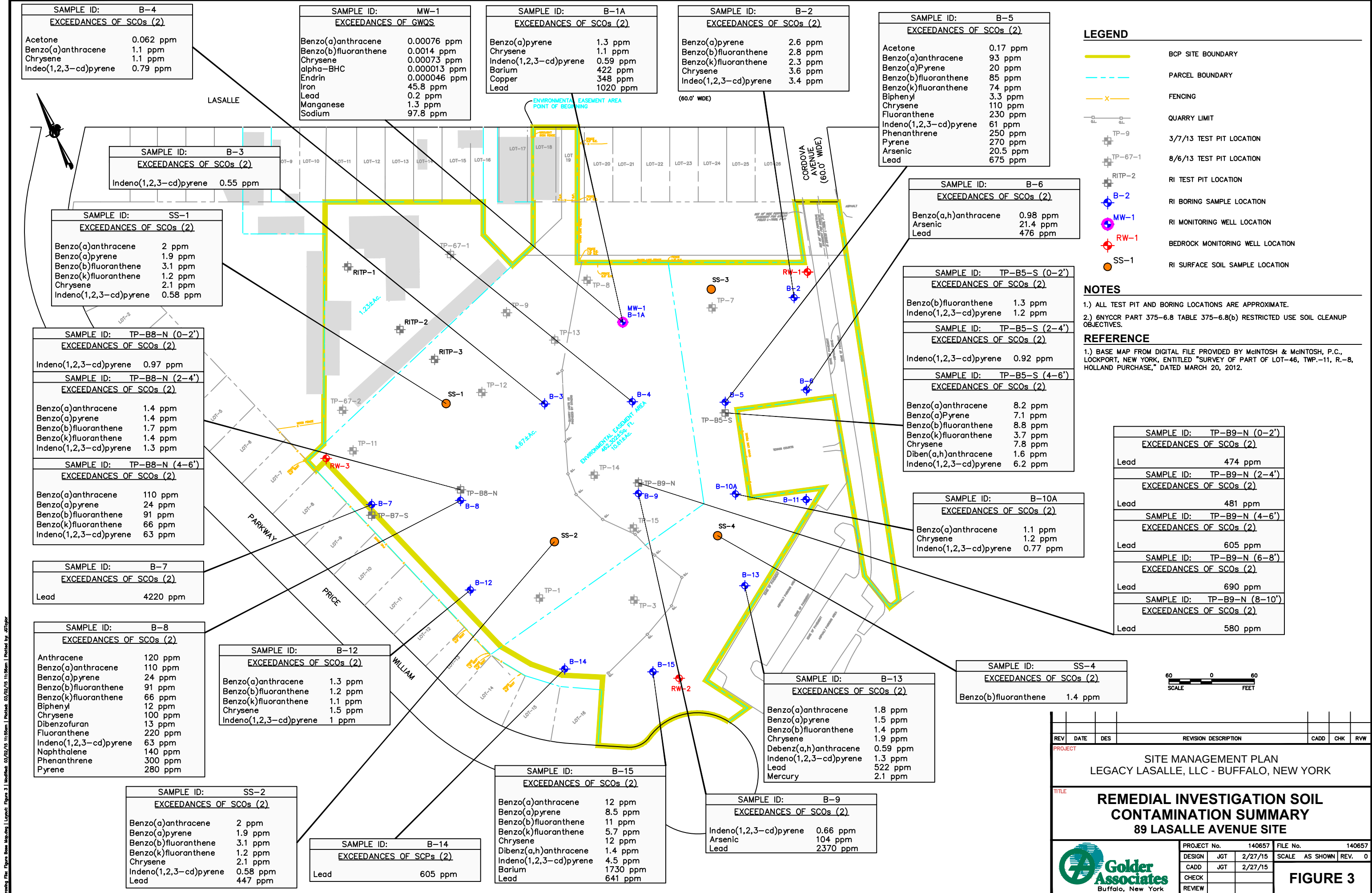


REV	DATE	DES	REVISION DESCRIPTION	CADD	CHK	RVW
PROJECT						
SITE MANAGEMENT PLAN LEGACY LASALLE, LLC - BUFFALO, NEW YORK						
TITLE						
SITE PLAN 89 LASALLE AVENUE SITE						
PROJECT No.		1400657		FILE No.		1400657
DESIGN	JGT	2/27/15		SCALE	AS SHOWN	REV. 0
CADD	JGT	2/27/15		FIGURE 1		
CHECK						
REVIEW						

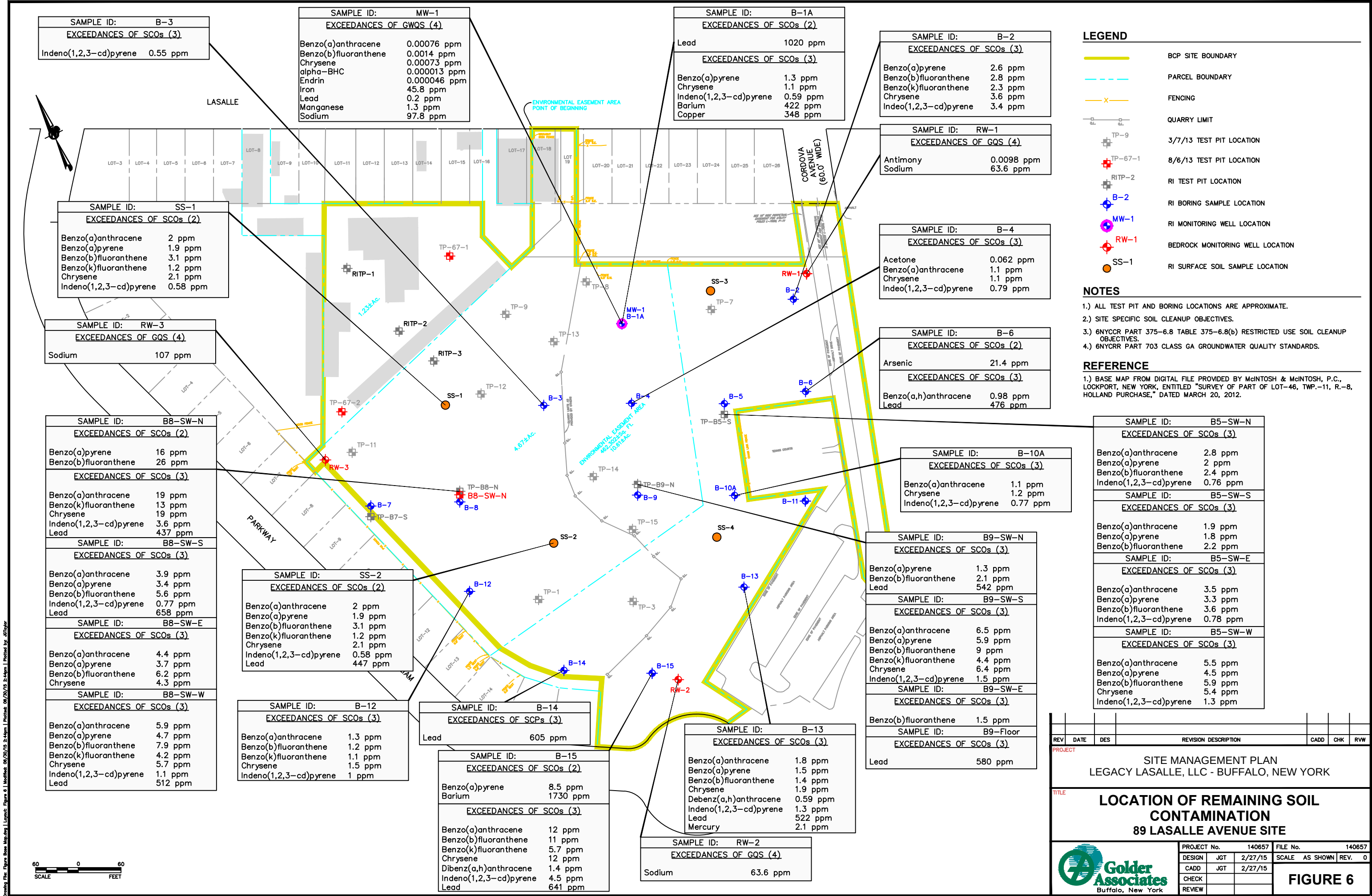




Drawing File: Figure Base Map.dwg | Layout: Figure 2 | Modified: 02/27/15 2:53pm | Plotted: 02/27/15 4:30pm | Plotted by: JGTaylor

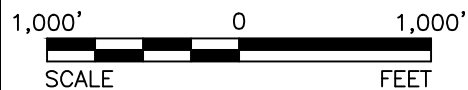
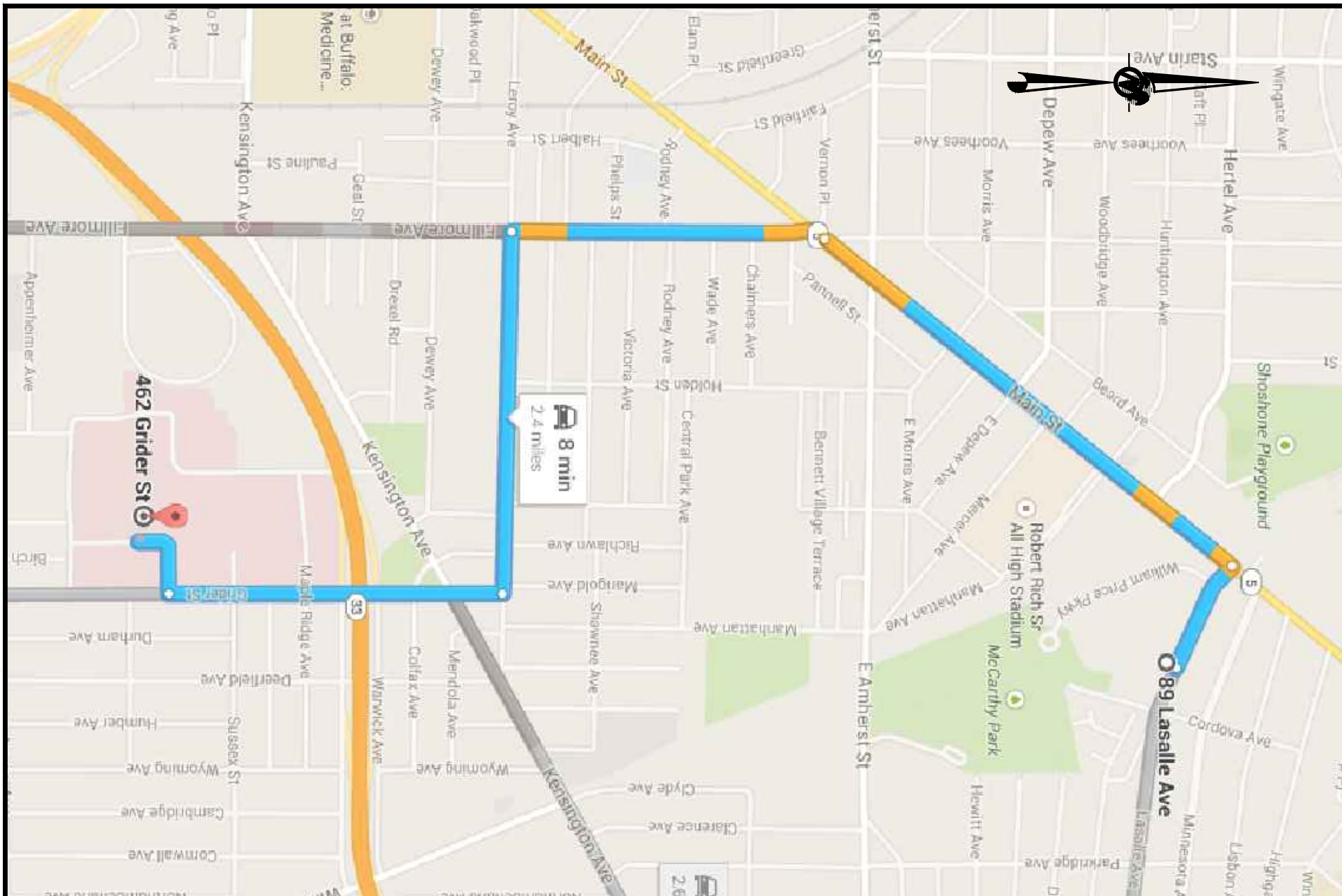


Drawing File: Figure Base Map.dwg | Layout: Figure 3 | Modified: 03/02/15 11:58am | Plotted: 03/02/15 11:58am | Plotted by: JGT/gar





Drawing File: Figure Base Map.dwg | Layout: Figure 7 | Modified: 03/09/15 10:55am | Plotted: 03/09/15 10:56am | Plotted by: J.Taylor



FILE No.	1400657
PROJECT No.	1400657 REV. 0

SCALE	AS SHOWN
DATE	3/2/15
DESIGN	JGT
CADD	JGT
CHECK	
REVIEW	

TITLE	SITE MANAGEMENT PLAN - LEGACY LASALLE, LLC
	MAP OF ROUTE FROM SITE TO HOSPITAL
	89 LASALLE AVENUE SITE - BUFFALO, NEW YORK
PROJECT - REPORT CODE	FIGURE 8

APPENDIX A

SITE SURVEY & ENVIRONMENTAL EASEMENTS WITH METES AND BOUNDS

CHRISTOPHER L. JACOBS, ERIE COUNTY CLERK
REF:

DATE: 12/15/2015
TIME: 3:36:07 PM
RECEIPT: 15204393

PHILLIPS LYTLE - ATT LINDA MORGAN
ACCOUNT #: 1732

ITEM - 01 VRD
RECD: 12/15/2015 3:40:08 PM
FILE: 2015257756 BK/PG V 107/3037
CITY OF BUFFALO
PEOPLE OF THE STATE OF NEW YORK (THE)
Recording Fees 95.00
Subtotal 95.00

ITEM - 02 VRD
RECD: 12/15/2015 3:40:08 PM
FILE: 2015257757 BK/PG V 107/3048
LEGACY LASALLE LLC
PEOPLE OF THE STATE OF NEW YORK (THE)
Recording Fees 95.00
Subtotal 95.00

TOTAL DUE	\$190.00
PAID TOTAL	\$190.00
PAID ESCROW	\$190.00

REC BY: Nancy
COUNTY RECORDER

FILED
DEC 15 2015
ERIE COUNTY
CLERK'S OFFICE

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

THIS INDENTURE made this 14th day of December, 2015, between Owner(s) City of Buffalo, having an office at 65 Niagara Square, 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 71 NY L&W RR in the City of Buffalo, County of Erie and State of New York, known and designated on the tax map of the County Clerk of Erie as tax map parcel numbers: Section 79.70 Block 2 and Part of Lot 16.11, being the same as that property conveyed to Grantor by deed dated December 17, 1975 and recorded in the Erie County Clerk's Office in Liber 8352 and Page 479. The property subject to this Environmental Easement (the "Controlled Property") comprises approximately 0.73 +/- acres, and is hereinafter more fully described in the Land Title Survey dated March 20, 2012 and last revised on December 9, 2015 prepared by John E. McIntosh, III, which will be attached to the Site Management Plan. The Controlled Property description is set forth in and attached hereto as Schedule A; and

WHEREAS, the construction activities associated with the remedial action at the Site have been completed at the site by Legacy LaSalle, LLC having an office at 250 Ramsdell Avenue, Buffalo, County of Erie, State of New York ("Legacy") and groundwater remediation and long-

term monitoring activities are ongoing;

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: C915283-05-14, 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:

**Restricted Residential as described in 6 NYCRR Part 375-1.8(g)(2)(ii),
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);

(i) Grantor and subsequent Site owners shall ensure that the Environmental Easement remains in place and effect.

(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 Erie 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;

- (i) Grantor shall adhere to the institutional controls required by the Environmental Easement, including the prohibition of the use of groundwater underlying the property without treatment rendering it safe for intended use and the prohibition of vegetable gardens and farming; and
- (ii) Legacy shall undertake periodic groundwater sampling.

(5) Grantor shall provide access to the Department and Legacy in order to collect data and information pertinent to Site Management of the Controlled Property at the frequency and in a manner defined in the SMP;

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

- (i) To the extent that Grantor is responsible for any controls in the SMP, Grantor and subsequent Site owners shall submit a written statement certifying that the controls at the property are unchanged from the previous certification;
- (ii) Grantor and subsequent Site owners shall notify the Department of changes of Site use and/or ownership; and
- (iii) Grantor and subsequent Site owners shall report emergencies to the Department and other appropriate authorities.

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

- (i) Legacy shall prepare periodic review reports evaluating institutional and engineering controls; and
- (ii) Legacy shall prepare and implement a corrective measures plan, if necessary.

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

- (i) Legacy shall operate, maintain, monitor, inspect, and prepare reports evaluating mechanical or physical components of the remedy; and
- (ii) Legacy shall decommission Site monitoring wells at an appropriate time to be determined by the Department.

(9) 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 purposes as defined in 6NYCRR 375-1.8(g)(2)(i), 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 assumes the obligations identified in Paragraphs 2(A)(1), 2(A)(2), 2(A)(4)(i), 2(A)(5), 2(A)(6) and 2(A)(9) above. 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 as identified in Paragraphs 2(A)(1), 2(A)(2), 2(A)(4)(i), 2(A)(5), 2(A)(6) and 2(A)(9) above 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 annually, or at such time as NYSDEC may require, submit to NYSDEC a written statement certifying under penalty of perjury, in such form and manner as the Department may require, that:

- (1) 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;

(2) the owner will continue to allow the Department and Legacy access to such real property to evaluate such controls;

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

(4) 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: C915283
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.

City of Buffalo:

By: Byron W. Brown

Print Name: Byron W. Brown

Title: Mayor Date: 8.5.15

Grantor's Acknowledgment

STATE OF NEW YORK)
) ss:
COUNTY OF)

On the 5th day of August, in the year 2015, before me, the undersigned, personally appeared Byron W. Brown, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

Tim A. Ball
Notary Public - State of New York

TIMOTHY A. BALL
Notary Public State of New York
Qualified in Erie County
No. 02BA6125043
My Commission Expires: Apr. 4, 2009

IN WITNESS WHEREOF, Legacy LaSalle, LLC hereby acknowledges this instrument and the terms and conditions hereof.

Legacy LaSalle, LLC:

By: 

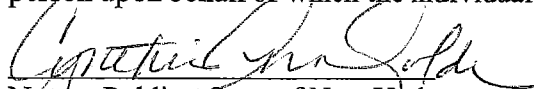
Print Name: Frank A. Chinnici

Title: Member Date: 8/7/15

Grantor's Acknowledgment

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

On the 7th day of August, in the year 20 15, before me, the undersigned, personally appeared Frank A. Chinnici, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.


Notary Public - State of New York

CYNTHIA ANN GOLDE
NOTARY PUBLIC STATE OF NEW YORK
QUALIFIED IN ERIE COUNTY
MY COMMISSION EXPIRES NOV 30, 20 18

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

[illegible]

On the 1st day of December, in the year 2015, 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(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/ executed the same in his/her/ capacity as Designee of the Commissioner of the State of New York Department of Environmental Conservation, and that by his/her/ 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

Mr. J. L. Loomis
 Factory Building, State of New York
 No. 621 Broadway
 New York City
 My Commitment expires January 17, 2019

SCHEDULE "A" PROPERTY DESCRIPTION

ALL THAT TRACT OR PARCEL OF LAND situate in the City of Buffalo, County of Erie, State of New York, and being part of Lot 46, Township 11, Range 8 of the Holland Land Company Survey (so-called), bounded and described as follows:

BEGINNING AT the southerly terminus of Cordova Avenue;

RUNNING THENCE: S-65°-43'-59"-E, along the southerly terminus of Cordova Avenue, a distance of 60.69 feet to the east line of Cordova Avenue;

RUNNING THENCE: S-15°-36'-01"-W, along the east line of Cordova Avenue extended southerly, a distance of 565.50 feet to a point on the north line of lands conveyed to the City of Buffalo by deed recorded in the Erie County Clerk's Office in Liber 6613 of Deeds at Page 431;

RUNNING THENCE: S-78°-42'-03"-W, along the north line of said City of Buffalo lands, a distance of 13.03 feet to a point;

RUNNING THENCE: N-13°-13'-16"-W, a distance of 73.44 feet to a point;

RUNNING THENCE: N-15°-19'-21"-E, a distance of 239.40 feet to a point;

RUNNING THENCE: N-74°-02'-42"-W, a distance of 31.33 feet to a point;

RUNNING THENCE: N-15°-36'-01"-W, a distance of 122.36 feet to a point;

RUNNING THENCE: S-74°-23'-59"-E, a distance of 19.54 feet to a point;

RUNNING THENCE: N-15°-36'-01"-E, a distance of 154.24 feet to the POINT OR PLACE OF BEGINNING, containing 0.73 Acres, be the same, more or less.

SUBJECT to easements, rights-of-way and restrictions of record.

BEING and intended to be a portion of lands conveyed to the City of Buffalo by deed recorded in the Erie County Clerk's Office in Liber 8352 of Deeds at Page 479.



Recording Office Time Stamp

**Real Estate Transfer Tax Return
For Public Utility Companies'
and Governmental Agencies'
Easements and Licenses**

This form may only be used by public utility companies regulated by the Public Service Commission and governmental agencies for the recording of easements and licenses where the consideration for the grant of such easement or license is \$500.00 or less.

Name of grantee (public utility company or governmental agency)

New York State Department of Environmental Conservation

Federal employer identification number
(if applicable)

Address of grantee

625 Broadway, Albany, New York 12233-1500

Name and telephone number of person to contact

Name(s) of Grantor
Of Easement or License

Address of Property

Consideration Given
For Easement or License

1. City of Buffalo

Part of 71 NY L&W RR, Buffalo

0

2.

3.

4.

5.

6.

7.

8.

9.

10.

11.

12.

13.

14.

15.

If more than fifteen conveyances are to be recorded, attach a schedule of such other conveyances.

Signature of Grantee

I certify that the grantee is a public utility regulated by the Public Service Commission or is a governmental agency and the grantee of the easements and/or licenses above; that it is true to the best knowledge of the grantee that the granting of each such easement and/or license is exempt from Real Estate Transfer Tax imposed by Article 31 of the Tax Law by reason that each such conveyance is for a consideration of five hundred dollars or less and/or the conveyance is being made to a governmental agency.

New York State Department of Environmental Conservation

Name of grantee

Signature of partner, officer of corporation, governmental official, etc.

Andrew Guglielmi
Andrew Guglielmi, Attorney
NY SDEC

FILED
DEC 15 2015

ERIE COUNTY
CLERK'S OFFICE

ENVIRONMENTAL EASEMENT GRANTED PURSUANT TO ARTICLE 71, TITLE 36

OF THE NEW YORK STATE ENVIRONMENTAL CONSERVATION LAW

THIS INDENTURE made this 14th day of December, 2015, between Owner(s) Legacy LaSalle, LLC, having an office at 250 Ramsdell Avenue, Buffalo, New York 14216, 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 addresses of 67, 71, 87 and 89 LaSalle Avenue in the City of Buffalo, County of Erie and State of New York, known and designated on the tax map of the County Clerk of Erie as tax map parcel numbers: Section 79.70 Block 2 Lots 11, 16.11, 17.1, 17.2 and 18, being the same as that property conveyed to Grantor by deeds dated July 26, 2012, July 31, 2012 and December 3, 2015 and recorded in the Erie County Clerk's Office in Liber and Page 11227/2530, 11227/7082 and 11288/9414, respectively. The property subject to this Environmental Easement (the "Controlled Property") comprises approximately 8.5 +/- acres, and is hereinafter more fully described in the Land Title Survey dated March 20, 2012 and last revised December 9, 2015 prepared by John E. McIntosh, III, NYSLLS, which will 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: C915283-05-14, 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:

**Restricted Residential as described in 6 NYCRR Part 375-1.8(g)(2)(ii),
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 Erie 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 purposes as defined in 6NYCRR 375-1.8(g)(2)(i), 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: C915283
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.

Remainder of Page Intentionally Left Blank

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

Legacy LaSalle, LLC:

By: _____

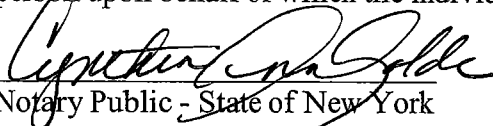
Print Name: Frank A. Chinnici

Title: Member Date: 12/1/15

Grantor's Acknowledgment

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

On the 1st day of December, in the year 20 15, before me, the undersigned, personally appeared Frank A Chinnici, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.


Notary Public - State of New York

CYNTHIA ANN GOLDE
NOTARY PUBLIC STATE OF NEW YORK
QUALIFIED IN ERIE COUNTY
MY COMMISSION EXPIRES NOV 30, 20 18

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

[illegible]

On the 14th day of December, in the year 2025, 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(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/ executed the same in his/her/ capacity as Designee of the Commissioner of the State of New York Department of Environmental Conservation, and that by his/her/ 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

MAIL ROOM
 Federal Bureau of Investigation
 New York
 100-360307
 100-360307-100
 RE: COMMUNIST - as per January 17, 2015

SCHEDULE "A" PROPERTY DESCRIPTION

8.50+ Acres

ALL THAT TRACT OR PARCEL OF LAND situate in the City of Buffalo, County of Erie, State of New York, and being part of Lot 46, Township 11, Range 8 of the Holland Land Company Survey (so-called), bounded and described as follows:

BEGINNING AT A POINT on the southwest line of Lasalle Avenue at a distance of 807.23 feet southeasterly measured along the southwest line of Lasalle Avenue from its intersection with the southeast line of Main Street;

RUNNING THENCE: S-65°-43'-59"-E, along the southwest line of Lasalle Avenue, a distance of 62.0 feet to a point;

RUNNING THENCE: S-24°-16'-01"-W, at right angles to the last described line, a distance of 190.0 feet to the southwest corner of Parcel 4 of lands conveyed to Cap Exchange I, LLC by deed recorded in the Erie County Clerk's Office in Liber 11122 of Deeds at Page 7094;

RUNNING THENCE: S-65°-43'-59"-E, parallel with the southwest line of Lasalle Avenue and along the southwest line of Parcel 4 of said Cap Exchange 1, LLC lands, a distance of 318.96 feet to a point on the west line of Cordova Avenue extended southerly;

RUNNING THENCE: S-15°-36'-01"-W, along the southerly extension of the west line of Cordova Avenue, a distance of 68.26 feet to a point;

RUNNING THENCE: N-74°-23'-59"-W, a distance of 19.54 feet to a point;

RUNNING THENCE: S-15°-36'-01"-W, a distance of 122.36 feet to a point;

RUNNING THENCE: N-74°-02'-42"-W, a distance of 102.89 feet to a point;

RUNNING THENCE: S-15°-41'-20"-W, a distance of 121.87 feet to a point;

RUNNING THENCE: S-74°-34'-11"-E, a distance of 103.08 feet to a point;

RUNNING THENCE: S-15°-36'-01"-W, a distance of 10.50 feet to a point;

RUNNING THENCE: S-55°-42'-51"-W, a distance of 310.58 feet to a point;

RUNNING THENCE: S-32°-36'-39"-E, a distance of 67.91 feet to a point on the north line of lands conveyed to the City of Buffalo by deed recorded in the Erie County Clerk's Office in Liber 6613 of Deeds at Page 431;

RUNNING THENCE: S-78°-42'-03"-W, along the north line of said City of Buffalo lands, a distance of 36.35 feet to a point on a non-tangent curve, said non tangent curve being also the east line of William Price Parkway;

RUNNING THENCE: Northerly and westerly, along a curve to the left having a radius of 85.00 feet and along the east line of William Price Parkway, a distance of 125.11 feet to a point of reverse curvature;

RUNNING THENCE: Westerly, along a curve to the right having a radius of 35.00 feet, and along the east line of William Price Parkway, a distance of 34.94 feet to a point of tangency;

RUNNING THENCE: N-61°-59'-59"-W, along the east line of William Price Parkway, a distance of 41.95 feet to a point on the east line of Main-Lasalle Place, Ph. 1 Subdivision as shown on a map filed in the Erie County Clerk's Office under Map Cover No. 3051;

RUNNING THENCE: N-28°-00'-01"-E, a distance of 96.0 feet to a point;

RUNNING THENCE: N-60°-59'-45"-W, a distance of 56.49 feet to a point;

RUNNING THENCE: N-48°-25'-21"-W, a distance of 46.91 feet to a point;

RUNNING THENCE: N-34°-43'-47"-W, a distance of 50.96 feet to a point;

RUNNING THENCE: N-19°-11'-13"-W, a distance of 356.19 feet to a point on the easterly extension of the north line of Subdivision Lot 8 as shown on said map of Main-Lasalle Place, Ph. 1 Subdivision;

RUNNING THENCE: S-69°-04'-38"-W, along the easterly extension of the north line of said Subdivision Lot 8, a distance of 18.01 feet to the east line of said Main-Lasalle Place, Ph. 1 Subdivision;

RUNNING THENCE: N-19°-11'-13"-W, along the east line of said Main-Lasalle Place, Ph. 1 Subdivision, a distance of 19.21 feet to a point on the northwest line of Parcel 1 of lands conveyed to Houdaille Industries, Inc. by deed recorded in the Erie County Clerk's Office in Liber 6579 of deeds at Page 136;

RUNNING THENCE: N-70°-48'-47"-E, along the northwest line of Parcel 1 of said Houdaille Industries,

Inc. lands, a distance of 32.72 feet to the southeast corner of lands conveyed to North Main Lumber Products Corporation by deed recorded in the Erie County Clerk's Office in Liber 7659 of Deeds at Page 47;

RUNNING THENCE: N-24°-36'-16"-E, along the east line of said North Main Lumber Products Corporation lands a distance of 340.36 feet to a point on the south line of Summit Park Subdivision as shown on a map recorded in the Erie County Clerk's Office in Liber 599 of Deeds at Page 58;

RUNNING THENCE: S-65°-43'-59"-E, parallel with the south line of Lasalle Avenue and along the south line of said Summit Park Subdivision, a distance of 222.32 feet to a point on the west

line of lands conveyed to Beach Lasalle Properties, LLC by deed recorded in the Erie County Clerk's Office in Liber 11139 of Deeds at Page 952;

RUNNING THENCE: S-24°-16'-01"-W, along the west line of said Beach Lasalle Properties, LLC lands, a distance of 46.00 feet to an angle point therein;

RUNNING THENCE: S-19°-11'-13"-E, along the westerly line of said Beach Lasalle Properties, LLC lands, a distance of 59.40 feet to a point on the northwest line of Parcel 1 of said Houdaille Industries, Inc. lands;

RUNNING THENCE: N-70°-48'-47"-E, along the south line of said Beach Lasalle Properties, LLC lands, a distance of 40.15 feet to the southeast corner of said Beach Lasalle Properties, LLC lands;

RUNNING THENCE: N-24°-16'-01"-E, along the east line of said Beach Lasalle Properties, LLC lands, a distance of 166.50 feet to the POINT OR PLACE OF BEGINNING, containing 8.50 Acres, be the same, more or less.

SUBJECT to easements, rights-of-way and restrictions of record.

BEING and intended to be a portion of lands conveyed to Legacy Lasalle, LLC by deed recorded in the Erie County Clerk's Office in Liber 11288 of Deeds at Page 9414, a portion of lands conveyed to Legacy Lasalle, LLC by deed recorded in the Erie County Clerk's Office in Liber 11227 of Deeds at Page 7082 and a portion of lands conveyed to Legacy Lasalle, LLC by deed recorded in the Erie County Clerk's Office in Liber 11227 of Deeds at Page 2530.



Recording Office Time Stamp

**Real Estate Transfer Tax Return
For Public Utility Companies'
and Governmental Agencies'
Easements and Licenses**

This form may only be used by public utility companies regulated by the Public Service Commission and governmental agencies for the recording of easements and licenses where the consideration for the grant of such easement or license is \$500.00 or less.

Name of grantee (public utility company or governmental agency)

New York State Department of Environmental Conservation

Federal employer identification number
(if applicable)

Address of grantee

625 Broadway, Albany, New York 12233-1500

Name and telephone number of person to contact

Name(s) of Grantor
Of Easement or License

Address of Property

Consideration Given
For Easement or License

1. Legacy LaSalle, LLC

89 LaSalle Avenue, Buffalo

0

2. Legacy LaSalle, LLC

67 LaSalle Avenue, Buffalo

0

3.

4.

5.

6.

7.

8.

9.

10.

11.

12.

13.

14.

15.

If more than fifteen conveyances are to be recorded, attach a schedule of such other conveyances.

Signature of Grantee

I certify that the grantee is a public utility regulated by the Public Service Commission or is a governmental agency and the grantee of the easements and/or licenses above; that it is true to the best knowledge of the grantee that the granting of each such easement and/or license is exempt from Real Estate Transfer Tax imposed by Article 31 of the Tax Law by reason that each such conveyance is for a consideration of five hundred dollars or less and/or the conveyance is being made to a governmental agency.

New York State Department of Environmental Conservation

Name of grantee

Signature of partner, officer of corporation, governmental official, etc.

Andrew Guglielmi
Andrew Guglielmi, Attorney
NYSDCE



Recording Office Time Stamp

**Real Estate Transfer Tax Return
For Public Utility Companies'
and Governmental Agencies'
Easements and Licenses**

This form may only be used by public utility companies regulated by the Public Service Commission and governmental agencies for the recording of easements and licenses where the consideration for the grant of such easement or license is \$500.00 or less.

Name of grantee (public utility company or governmental agency)

New York State Department of Environmental Conservation

Federal employer identification number
(if applicable)

Address of grantee

625 Broadway, Albany, New York 12233-1500

Name and telephone number of person to contact

Name(s) of Grantor Of Easement or License	Address of Property	Consideration Given For Easement or License
1. Legacy LaSalle, LLC	89 LaSalle Avenue, Buffalo	0
2. Legacy LaSalle, LLC	67 LaSalle Avenue, Buffalo	0
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		

If more than fifteen conveyances are to be recorded, attach a schedule of such other conveyances.

Signature of Grantee

I certify that the grantee is a public utility regulated by the Public Service Commission or is a governmental agency and the grantee of the easements and/or licenses above; that it is true to the best knowledge of the grantee that the granting of each such easement and/or license is exempt from Real Estate Transfer Tax imposed by Article 31 of the Tax Law by reason that each such conveyance is for a consideration of five hundred dollars or less and/or the conveyance is being made to a governmental agency.

New York State Department of Environmental Conservation

Name of grantee

Signature of partner, officer of corporation, governmental official, etc.

Andrew Guglielmi
Andrew Guglielmi, Attorney
 NYSDCE

APPENDIX B
EXCAVATION WORK PLAN

SITE MANAGEMENT PLAN

APPENDIX B – EXCAVATION WORK PLAN

B-1 NOTIFICATION

At least 15 days prior to the start of any activity that is anticipated to encounter known or potentially contaminated material (remaining contamination) the site owner or their representative will notify the Department. Currently, this notification will be made to:

Chad Staniszewski, P. E.

Acting Regional Hazardous Waste Remediation Engineer

Region 9, NYSDEC, 270 Michigan Ave., Buffalo, NY 142

This notification will include:

- A detailed description of the work to be performed, including the location and areal extent, plans for site re-grading, intrusive elements or utilities to be installed below the soil cover, estimated volumes of contaminated soil to be excavated and any work that may impact an engineering control,
- A summary of environmental conditions anticipated in the work areas, including the nature and concentration levels of contaminants of concern, potential presence of grossly contaminated media, and plans for any pre-construction sampling;
- A schedule for the work, detailing the start and completion of all intrusive work,
- A summary of the applicable components of this EWP,
- A statement that the work will be performed in compliance with this EWP and 29 CFR 1910.120,
- A copy of the contractor's health and safety plan, in electronic format, if it differs from the HASP provided in the SMP,

- Identification of disposal facilities for potential waste streams,
- Identification of sources of any anticipated backfill, along with all required chemical testing results.

B-2 SOIL SCREENING METHODS

Visual, olfactory, and instrument-based soil screening will be performed by a qualified environmental professional during all remedial and development excavations into any remaining contamination. Soil screening will be performed regardless of when the invasive work is done and will include all excavation and invasive work performed during development, such as excavations for foundations and utility work, after issuance of the COC. The environmental data and screening results will determine if the excavated material can be returned to the subsurface, be used as cover soil, or require off-site disposal.

Site owner will analyze all soil/fill excavated for Target Analyte List (TAL) metals and Target Compound List (TCL) semi-volatile organic compounds (SVOCs) based on historical impacts. One representative composite sample will be collected for each 250 cubic yards of soil/fill designated for excavation. In general, soil/fill that have residual concentrations of metals and SVOCs will be managed and disposed of in accordance with the applicable requirements of 6NYCRR Part 360 for the management and disposal of non-hazardous solid waste and debris.

B-3 STOCKPILE METHODS

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

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

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

B-4 MATERIALS EXCAVATION AND LOAD OUT

A qualified environmental professional or person under their supervision will oversee all invasive work and the excavation and load-out of all excavated material.

The owner of the property and its contractors are solely responsible for safe execution of all invasive and other work performed under this Plan.

The presence of utilities and easements on the site will be investigated by the qualified environmental professional. It will be determined whether a risk or impediment to the planned work under this SMP is posed by utilities or easements on the site.

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

The qualified environmental professional will be responsible for ensuring that all outbound trucks will be free of loose soil/fill or mud prior to leaving the site until the activities performed under this section are complete. Locations where vehicles enter or exit the site shall be inspected daily for evidence of off-site soil tracking.

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

B-5 MATERIALS TRANSPORT OFF-SITE

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

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

All trucks will be inspected for the presence of loose soil/fill or mud prior to leaving the site. These materials will be manually removed and disposed of off-site in an appropriate manner.

It is anticipated that any soil/fill requiring off-site disposal would be taken to WM Chaffee Landfill Facility and the require trucks to take the following transport route:

1. Head west on LaSalle Ave.
2. Turn left (south) onto Main Street
3. Turn left onto Route 33 West entrance ramp
4. Merge right onto Interstate 90 W
5. Take Route 400 South exit and take to end of highway
6. Continue on Route 16 South
7. Turn right at Chaffee Landfill entrance approx. 5 miles south of Holland.

All trucks loaded with site materials will exit the vicinity of the site using only these approved truck routes. This is the most appropriate route and takes into account: (a) limiting transport through residential areas and past sensitive sites; (b) use of city mapped truck routes; (c) prohibiting off-site queuing of trucks entering the facility; (d) limiting total distance to major highways; (e) promoting safety in access to highways; and (f) overall safety in transport.

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

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

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

B-6 MATERIALS DISPOSAL OFF-SITE

All soil/fill/solid waste excavated and removed from the site would be treated as contaminated and regulated material and will be transported and disposed in accordance with all local, State (including 6NYCRR Part 360) and Federal regulations. If disposal of soil/fill from this site is proposed for unregulated off-site disposal (i.e. clean soil removed for development purposes), a formal request with an associated plan will be made to the NYSDEC. Unregulated off-site management of materials from this site will not occur without formal NYSDEC approval.

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

Non-hazardous historic fill and contaminated soils taken off-site will be handled, at minimum, as a Municipal Solid Waste per 6NYCRR Part 360-1.2. Material that does not meet Track 1 unrestricted SCOs is prohibited from being taken to a New York State recycling facility (6NYCRR Part 360-16 Registration Facility).

B-7 MATERIALS REUSE ON-SITE

The qualified environmental professional will ensure that procedures defined for materials reuse in this SMP are followed and that unacceptable material does not remain on-site. Contaminated on-site material, including historic fill and contaminated soil, that is acceptable for re-use on-site will be placed below the demarcation layer and two feet of clean soil cover or impervious surface (pavement, etc.), and will not be reused within a cover soil layer, within landscaping berms, or as backfill for subsurface utility lines.

Organic matter (wood, roots, stumps, etc.) or other solid waste derived from clearing and grubbing of the site will not be reused on-site.

B-8 FLUIDS MANAGEMENT

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

B-9 BACKFILL FROM OFF-SITE SOURCES

All materials proposed for import onto the site will be approved by the qualified environmental professional and will be in compliance with provisions in this SMP prior to receipt at the site.

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

All imported soils will meet the backfill and cover soil quality standards established in 6NYCRR 375-6.7(d). For this site where restricted residential use is the planned and anticipated future use, imported backfill will meet the protection of groundwater or protection of public health restricted residential soil cleanup objectives as set forth in Table 375-6.8(b) [6NYCRR Part 375-6.7]. Soils that meet 'exempt' fill requirements under 6 NYCRR Part 360, but do not meet backfill or cover soil objectives for this site, will not be imported onto the site without prior approval by NYSDEC. Solid waste as defined in 6NYCRR Part 360 will not be imported onto the site.

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

B-10 STORMWATER POLLUTION PREVENTION

If the site redevelopment activities will disturb greater than 1 acre, a construction Stormwater Pollution Prevention Plan (SWPPP) that conforms to the requirements of NYSDEC Division of Water guidelines and NYS regulations will be prepared in advance of intrusive Site work and a Notice of Intent or Termination (NOIT) will be filed with the Division of Water. The final SWPPP will be included as an Attachment to the Excavation Plan upon its preparation. At a minimum the SWPPP will incorporate the following provisions.

Silt fence barriers and hay bale checks will be installed around excavation areas or at the Site perimeter depending on the extent of intrusive work and inspected once a week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the site and available for inspection by NYSDEC. All necessary repairs shall be made immediately.

Accumulated sediments will be removed as required to keep the silt fence barrier and hay bale check functional.

All undercutting or erosion of the silt fence toe anchor shall be repaired immediately with appropriate backfill materials.

Manufacturer's recommendations will be followed for replacing silt fencing damaged due to weathering.

Erosion and sediment control measures identified in the SMP shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters.

B-11 CONTINGENCY PLAN

If underground tanks or other previously unidentified contaminant sources are found during subsurface excavations, site activity will be suspended until sufficient equipment is mobilized to address the condition.

Sampling will be performed on product, sediment and surrounding soils, etc. as necessary to determine the nature of the material and proper disposal method. Chemical analysis will be performed for fill, a full list of analytes (TAL metals; TCL volatile and semi-volatiles, TCL pesticides and PCBs), unless the site history and previous sampling results provide a sufficient justification to limit the list of analytes. In this case, a reduced list of analytes will be proposed to the NYSDEC for approval prior to sampling.

Identification of unknown or unexpected contaminated media identified by screening during invasive site work will be promptly communicated by phone to NYSDEC's Project Manager. Reportable quantities of petroleum product will also be reported to the NYSDEC spills hotline. These findings will be also included in the periodic reports prepared pursuant to Section 5.3 of the SMP.

B-12 COMMUNITY AIR MONITORING PLAN

Prior to any excavation of contaminated materials onsite, a Community Air Monitoring Plan (CAMP) that describes required particulate and vapor monitoring to protect the neighboring community during intrusive site investigation activities will be prepared and attached to this Excavation Work Plan. The CAMP must be consistent with the requirements for community air monitoring at remediation sites as established by the New York State Department of Health (NYSDOH) and NYSDEC. Accordingly, it will follow procedures and practices outlined under NYSDOH's Generic Community Air Monitoring Plan (dated May 2010) and NYSDEC Technical Assistance and Guidance Memorandum (TAGM) 4031: Fugitive Dust Suppression and Particulate Monitoring Program at Inactive Hazardous Waste Sites.

A figure showing the location of air sampling stations based on generally prevailing wind conditions will be developed. These locations will be adjusted on a daily or more frequent basis based on actual wind directions to provide an upwind and at least two downwind monitoring stations.

Exceedances of action levels listed in the CAMP will be reported to NYSDEC and NYSDOH Project Managers.

B-13 ODOR CONTROL PLAN

This odor control plan is capable of controlling emissions of nuisance odors offsite. If nuisance odors are identified at the site boundary, or if odor complaints are received, work will be halted and the source of odors will be identified and corrected. Work will not resume until all nuisance odors have been abated. NYSDEC and NYSDOH will be notified of all odor events and of any other complaints about the project. Implementation of all odor controls, including the halt of work, is the responsibility of the property owner's Remediation Engineer, and any measures that are implemented will be discussed in the Periodic Review Report.

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

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

B-14 DUST CONTROL PLAN

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

- Dust suppression will be achieved through the use of a dedicated on-Site water truck for road wetting. The truck will be equipped with equipment capable of spraying water directly onto off-road areas including excavations and stockpiles.

- Clearing and grubbing of larger sites will be done in stages to limit the area of exposed, unvegetated soils vulnerable to dust production.
- Gravel will be used on roadways to provide a clean and dust-free road surface.
- On-site roads will be limited in total area to minimize the area required for water truck sprinkling.

B-15 OTHER NUISANCES

A plan will be developed and utilized by the contractor for all remedial work to ensure compliance with local noise control ordinances which includes the limitation of daily working hours if requested or required by the City's code enforcement department.

APPENDIX C

HEALTH AND SAFETY PLAN WITH COMMUNITY AIR MONITORING PLAN



Health Safety And Environment Plan

A world of
capabilities
delivered locally

LEGACY LASALLE BCP

Site Address: 89 LaSalle Ave BCP Site
89 LaSalle Ave., Buffalo, NY

Submitted By: Patrick Martin

Revision #0

Date: March 11, 2015

Project No.1400657



HEALTH AND SAFETY ENVIRONMENT PLAN (HASEP)

1.0 CONTACTS LIST SUMMARY

1.1 Emergency Contacts

Contact	Number
Ambulance	911
Fire	911
Police	911
Golder National Health and Safety Leader (Jane Mills)	206-295-7002
WorkCare	888-449-7787

Hospital name	Address	Phone	Level of Care Available
ECMC	462 Grider Street, Buffalo, NY 14215	716-898-3000	ER

1.2 Golder contacts

Contacts	Name	Office	Cell	Home
Project Manager	Patrick Martin	(716) 204-5880	(716) 867-2860	
Project Director	Dave Wehn	(716) 204-5880	716 713-6394	
Client	Legacy LaSalle			

1.3 Missed Check-in Contacts

Contacts	Name	Phone	Cell
Project Manager	Patrick Martin	(716) 204-5880	(716) 867-2860
Project Director	Dave Wehn	(716) 204-5880	(716) 713-6394
Other	Russell Marchese	(716) 204-5880	(585) 281-9366

You have the right to refuse any work you feel is unsafe, or that you are not trained to do. No job is so urgent that we cannot do it without meeting our HSE obligations



HEALTH AND SAFETY ENVIRONMENT PLAN (HASEP)

1.4 Client and Site Contacts

Contacts	Number
Site field cell phone	(585) 281-9366

Contacts	Name	Number
Contact person on site	Roger Rusch	(716) 570-8775
Client safety contact	Frank Chinnici	(716) 689-3300
Company Golder reports to	Legacy LaSalle	(716) 689-3300
Golder overall site supervisor and alternate:	Patrick Martin	Office: (716) 204-5880 Cell: (716) 867-2860
	Russ Marchese	Office: (716) 204-5880 Cell: (585) 281-9366

You have the right to refuse any work you feel is unsafe, or that you are not trained to do. No job is so urgent that we cannot do it without meeting our HSE obligations



HEALTH AND SAFETY ENVIRONMENT PLAN (HASEP)

It is company policy to complete a HaSEP form including a task-based Health, Safety and Environment (HSE) risk assessment for every project that includes site work, working alone or international travel.

To get an updated table of contents, please right-click the table of contents below and choose 'Update Field'

Table of Contents

1.0	CONTACTS LIST SUMMARY	2
2.0	Project Proposal Details	5
3.0	Golder Team	5
4.0	Client/Site Details	6
5.0	Check-in System.....	7
6.0	Chemicals and Contaminants.....	9
7.0	Risk Register.....	10
8.0	Personal Protective Equipment	15
9.0	Incident and Emergency Management.....	15
10.0	HSE Plan Control.....	16
11.0	Onsite Changes and Review	17
12.0	Inspections and Site Visits.....	17
13.0	Revision History	18
Appendix A	Community Air Monitoring Plan (CAMP).....	19
Appendix B	Standard Work Procedures (SWPs)	20

You have the right to refuse any work you feel is unsafe, or that you are not trained to do. No job is so urgent that we cannot do it without meeting our HSE obligations



HEALTH AND SAFETY ENVIRONMENT PLAN (HASEP)

2.0 PROJECT PROPOSAL DETAILS

Project/Proposal Number	1400657	Start Date	6/02/14	End Date	6/13/14
Project Title	Legacy LaSalle BCP RI				
Project Manager (PM)	Patrick Martin				
PM's phone - Office	(716) 204-5880	Home	716-655-5700	Cell	716 867-2860
Project Director	Dave Wehn				
PD's phone - Office	(716) 204-5880	Home		Cell	716 713-6394
Client name	Legacy LaSalle				

Brief description of project and scope of works (include any hazardous activities, if known)

Remedial Investigation activities on an approx. 10.5 acre Site that requires oversight of direct push and/or drill rig for completion of 15 soil boring locations. 3 shallow test pits, 4 surface soil samples and possible completion of three of the borings as groundwater monitoring wells and associated groundwater sampling. The site includes land and a former lumber yard that has been vacant for several years and a former city landfill. Previous soil investigations indicate minor soil contamination (RCRA Metals and PAHs) on the properties.

3.0 GOLDER TEAM

Name	Office	Contact number (cell phone)	Role
Patrick Martin	Buffalo	(716) 867-2860	PM
Russell Marchese	Buffalo	+1 585 281-9366	Site Supervisor/ Geologist
Russell Marchese	Buffalo	(716) 430-2885	Field Staff

Project Manager (PM)

- Appoint a competent site supervisor and alternate. For sites with multiple Golder projects/disciplines at work, coordinate with the overall site supervisor
- Oversee/develop hazard controls including work instructions and
- Assign only adequately trained and competent employees to the project

You have the right to refuse any work you feel is unsafe, or that you are not trained to do. No job is so urgent that we cannot do it without meeting our HSE obligations



HEALTH AND SAFETY ENVIRONMENT PLAN (HASEP)

Site Supervisor

- The site supervisor is responsible for the safety of all Golder employees, subcontractors, visitors and public on the parts of the site under Golder control.
- Communicate all site hazards to affected parties, in real time, as hazards, conditions and employees change.
- Ensure that work is undertaken in accordance with the hazard controls included in this HaSEP.

Contractor

- All plant and equipment is maintained in a safe working condition
- All plant and equipment are to be registered/licensed and electrical equipment tagged and tested
- Potential hazards are to be controlled (e.g., cage over rotating parts)
- You will report any identified hazards to the Golder Associates field staff member

Field Staff

- Inspect your worksite and equipment before starting work
- Apply the controls outlined in this HaSEP
- Look out for the safety of yourself and others
- Report unsafe acts, conditions and incidents to the site supervisor

4.0 CLIENT/SITE DETAILS

4.1 Client/Site Details

Project location map (paste URL here)	http://goo.gl/maps/emd5p
---------------------------------------	---

4.1.1 Site Hierarchy

Role	Name	Phone
Contact person on site	Roger Rusch	(716) 570-8775
Client safety contact	Frank Chinnici	(716) 689-3300
Company Golder reports to	Legacy LaSalle	(716) 689-3300
Golder overall site supervisor and alternate:	Patrick Martin	Office: (716) 204-5880 Cell: (716) 867-2860
	Russell Marchese	Office: (716) 204-5880 Cell: (585) 281-9366

You have the right to refuse any work you feel is unsafe, or that you are not trained to do. No job is so urgent that we cannot do it without meeting our HSE obligations



HEALTH AND SAFETY ENVIRONMENT PLAN (HASEP)

4.1.2 Site description

If the project is near another Golder Office, has the local Office been notified of the work? ☒ Yes ☐ No

Site Name	89 LaSalle Ave BCP Site	Address	89 LaSalle Ave., Buffalo, NY		
Coordinates	Lat: 42.9462 Long: -78.8277				
Description	3 adjacent parcels containing a vacant lumber yard, misc. buildings and vacant land				
Access info	Enter from LaSalle Ave.				
Previous land uses	Lumber Yard, radio station and landfill				
HSE Induction / orientation provider	☒ Golder		☐ Client		☐ Contractor
Site Contact Numbers	Field cell phone	585 281-9366	Satellite phone		Other
Nearest Golder office	USA - Buffalo	Address	2430 North Forest Road, Suite 100, Getzville, New York, USA 14068		Phone +1 (716) 204-5880

4.2 Underground Services

Investigation involves ground penetration or intrusive works (e.g. drilling, auguring and excavation).

The following controls will be implemented prior to commencing work:

Underground Services	Yes	No	If yes, provide details:
Service locator engaged?	☒	☐	811 will be called prior to any ground penetration.
Plans detailing location of services obtained?	☒	☐	Survey drawing provided by client. Overhead lines are onsite.
Client provided service locator?	☐	☒	

5.0 CHECK-IN SYSTEM

5.1 Check-in contacts

	Name	Phone/Email	Check-in frequency*	By phone	By email	By SMS	On site
Primary	Patrick Martin	Office: (716) 204-5880 Cell: +1 (716) 867-2860	On departure from the Site each day	☒	☐	☒	☐
Secondary	Russell Marchese	Office: (716) 204-5880 Cell: +1 (585) 281-9366	If Patrick cannot be reached	☒	☐	☒	☐

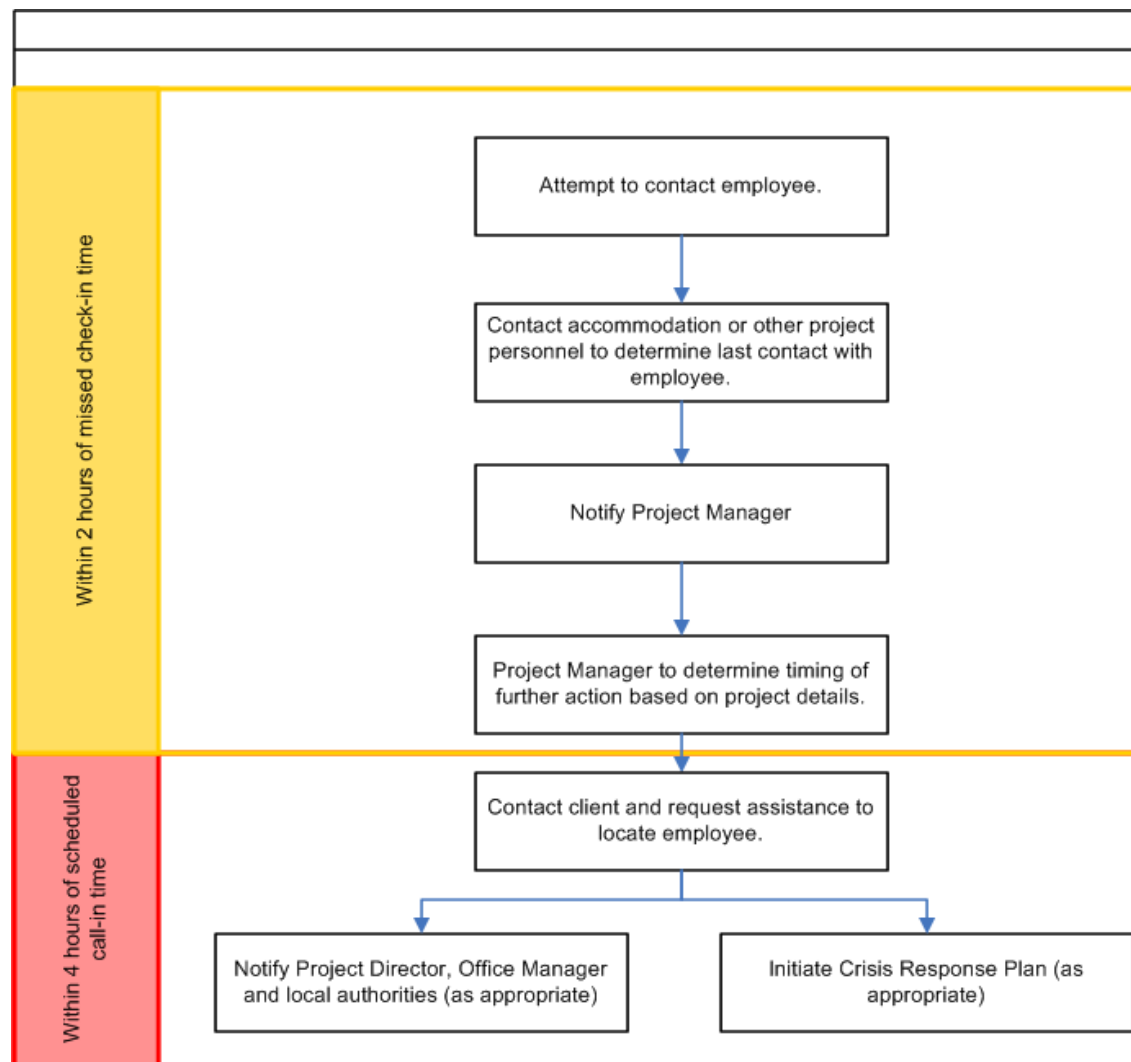
You have the right to refuse any work you feel is unsafe, or that you are not trained to do. No job is so urgent that we cannot do it without meeting our HSE obligations



HEALTH AND SAFETY ENVIRONMENT PLAN (HASEP)

5.2 Missed Check-in Procedure

Missed check-in procedure flowchart:



☐ Does missed check-in procedure for this project deviate from the flowchart?

Missed check-in contact information:

	Name	Phone	Cell/Mobile
Project Manager	Patrick Martin	(716) 204-5880	(716) 867-2860
Project Director	Dave Wehn	(716) 204-5880	(716) 713-6394
Other	Russell Marchese	(716) 204-5880	(585) 281-9366
Other			

You have the right to refuse any work you feel is unsafe, or that you are not trained to do. No job is so urgent that we cannot do it without meeting our HSE obligations



HEALTH AND SAFETY ENVIRONMENT PLAN (HASEP)

6.0 CHEMICALS AND CONTAMINANTS

6.1 Possible Contaminants or Chemical Exposures

☒ Are any contaminants likely to be encountered during this project (consider previous land uses)

Contaminant Name	Arsenic, Cadmium
Exposure routes	Dermal, Inhalation
Risk controls	Nitrile Gloves when handling soils, groundwater
Additional Info	Previous investigations indicate relatively low (Restricted Residential SCO) concentrations.

Contaminant Name	PAHs
Exposure routes	Dermal, Inhalation
Risk controls	Nitrile Gloves when handling soils, groundwater
Additional Info	Previous investigations indicate relatively low (Restricted Residential SCO) concentrations.

You have the right to refuse any work you feel is unsafe, or that you are not trained to do. No job is so urgent that we cannot do it without meeting our HSE obligations



HEALTH AND SAFETY ENVIRONMENT PLAN (HASEP)

7.0 RISK REGISTER

7.1 Risk Definition

Health & Safety Consequence or Impact Description:

Catastrophic	5	Death, toxic release off-site with detrimental effect, very high financial loss
Major	4	Extensive injuries, loss of production capability, off-site release with no detrimental effects, major financial loss
Moderate	3	Medical treatment required, on-site release contained with outside assistance, high financial loss
Minor	2	First aid treatment, on-site release immediately contained, limited financial loss
Insignificant	1	No injuries, low financial loss

Environmental Consequence or Impact Description:

Catastrophic	5	Release to air, water or land with life threatening impacts on or off site. e.g.: human death(s); destruction of endangered species; habitat destruction; human water supply or food destruction; localized extinction of a species; Protracted or extensive clean up requiring external resources.
Major	4	Release to air, water or land with destructive impacts on or off site. e.g.: destruction of animal / fish life; habitat damage; making air, water or land unfit for use by living things; destruction of known or unknown indigenous people's / heritage sites; irreversible alteration of the natural environment or its aesthetics; dust or noise affecting a region; large volumes of contaminated or hazardous waste. Requires clean up using external resources.
Significant	3	Release to air, water or land with impacts requiring long term recovery. e.g.: habitat disturbance; damage to indigenous people's / heritage sites; alteration of the natural environment or its aesthetics; generation of contaminated or hazardous waste, or large volumes of solid waste; dust or noise affecting the immediate area. Clean-up can be managed by internal resources.
Minor	2	Release to air, water or land with resulting in localised damage to worksite requiring short term recovery. e.g.: readily repairable impacts (physical or aesthetic) to the natural environment, indigenous people's / heritage items, property, or business operations; public nuisance (noise, dust, odours); generation of small quantities of waste. Clean up can be completed by internal resources.
Insignificant	1	Release to or disturbance of air, water or land resulting in no impact or localised (i.e. isolated to worksite) impacts within authorized limits. Short term impact with complete recovery. Clean up can be completed by person(s) involved.

Likelihood Description:

Almost certain	5	Incident will occur in every circumstance (e.g. every time).
Likely	4	Incident will probably occur (e.g. 1 in 10 times).
Possible	3	Incident may occur at sometime (e.g. 1 in 100 times).
Unlikely	2	Incident not expected to occur, but conceivable (e.g. 1 in 1,000 times).
Rare	1	Incident would only occur in exceptional circumstances (e.g. 1 in 10,000 times).

Risk Analysis Matrix:

Likelihood:		Consequence:				
		Catastrophic	Major	Moderate	Minor	Insignificant
		5	4	3	2	1
Almost certain	5	25 (VH)	20	15	10	5
Likely	4	20	16 (H)	12	8	4
Possible	3	15	12	9 (M)	6	3
Unlikely	2	10	8	6	4 (L)	2
Rare	1	5	4	3	2	1 (VL)

0-3 (VL) Very Low Risk	No additional controls necessary. Continue to monitor risk.
4-6 (L) Low Risk	Consider additional controls to further reduce risk.
8-12 (M) Moderate Risk	Controls must be implemented to reduce risk.
15-16 (H) High Risk	Risk Unacceptable, do not proceed without controls, minimum of 'engineering controls'.
20-25 (VH) Very High Risk	Risk Unacceptable, do not proceed without controls, elimination or substitution controls required.

You have the right to refuse any work you feel is unsafe, or that you are not trained to do. No job is so urgent that we cannot do it without meeting our HSE obligations



HEALTH AND SAFETY ENVIRONMENT PLAN (HASEP)

7.2 Risk Register

Header Key:

- PA: Persons Affected
- IC: Initial Consequence
- IL: Initial Likelihood
- IR: Initial Risk
- RC: Residual Consequence
- RL: Residual Likelihood
- RR: Residual Risk
- AC: Additional controls

Initial Risk	Hazard	PA	IC	IL	IR	Controls	RC	RL	RR	AC
Driving vehicle (Personal)	Driving vehicle (Personal)	Golder employee	4	2	8	Drivers will have a current driving license. Maintain vehicle in a roadworthy condition. The driver should be fit to drive. Adhere to highway regulations and follow speed limits. Do not drive in adverse weather or when excessively tired. Check weather and routes before departure. In poor weather delay departure. When arranging transport request suitable vehicle that is equipped with seatbelts, spare tire, winter tires & ice scraper (if needed), and bring along a first aid kit & fire extinguisher if applicable. Conduct a pre-use inspection of the vehicle including fluid levels.	2	2	4	
Ground penetrating work	Contaminants - Ground penetrating work	Golder employee	3	4	12	Create an exclusion zone to ensure non-essential staff and members of the public do not enter the area. Avoid excessive vehicle movements as this can disperse and spread potential contamination. Where water restrictions permit, dampen the soil during earthworks to reduce dust and odor generation. Where possible, stand and work upwind from earthworks.	3	2	6	

You have the right to refuse any work you feel is unsafe, or that you are not trained to do. No job is so urgent that we cannot do it without meeting our HSE obligations.



HEALTH AND SAFETY ENVIRONMENT PLAN (HASEP)

Initial Risk	Hazard	PA	IC	IL	IR	Controls	RC	RL	RR	AC
High Noise Environments	Noise	Golder employee	4	4	16	Follow the Hearing Protection SWP 21. Evaluate the noise level. If it is difficult to maintain a normal conversation at a distance of 3 feet, institute controls to manage the hazard. Install insulation or other noise damping techniques where possible. Establish task rotation to decrease exposure times to hazardous noise. Wear hearing protection with a sufficient protection factor to mitigate the noise hazard. This could be properly fitted ear plugs or a combination of both ear plugs and ear muffs.	2	2	4	
Positioning the Rig	Stability of the drill rig	Golder Employee	3	2	6	Choose a site that allows for safe access of the drill rig. LOOK UP FOR OVERHEAD LINES THAT MAY LIMIT ACCESS AND OPERATIONS. Ask the drill rig operator to stabilize the rig using the stabilizing arms. Slope stability and soil conditions should be considered.	2	2	4	
Working Near the Rig	Entanglement and falling objects	Golder Employee	5	2	10	Golder employees will stand clear of the drill rig when in operation. No loose clothing will be worn when working near a rig. Long hair will be tied back. Consider wearing break-away safety vests.	3	2	6	

You have the right to refuse any work you feel is unsafe, or that you are not trained to do. No job is so urgent that we cannot do it without meeting our HSE obligations.



HEALTH AND SAFETY ENVIRONMENT PLAN (HASEP)

Initial Risk	Hazard	PA	IC	IL	IR	Controls	RC	RL	RR	AC
Managing the excavated area	Managing the excavated area	Golder Employee	4	4	16	Any excavation greater than 4 ft deep must comply with regulatory requirements. NO ONE SHOULD ENTER THE EXCAVATION. Monitor the excavation for signs of instability such as slumping of side walls, tension cracks, and water ingress. Keep traffic, equipment, and the edge of temporary spoil piles at least 2 feet from the edge of the excavation. Permanent spoil piles should be placed further from the excavation. People working in an excavation should not work in isolation. Another person should be present in the immediate area to manage nearby hazards and provide assistance if needed.	3	2	6	
Groundwater - General (SWP 15)	General Procedure	Golder Employee	3	3	9	Follow the Groundwater Sampling SWP 15. When using a bailer to sample groundwater or conducting a slug test, position yourself to minimize back strain. When sampling groundwater with a bailer, take care when handling the bailer cord, as it can cause a tripping hazard. Before sampling, become familiar with the contaminants of concern and establish the appropriate action levels and response action for each potential contaminant.	3	2	6	

You have the right to refuse any work you feel is unsafe, or that you are not trained to do. No job is so urgent that we cannot do it without meeting our HSE obligations.



HEALTH AND SAFETY ENVIRONMENT PLAN (HASEP)

Initial Risk	Hazard	PA	IC	IL	IR	Controls	RC	RL	RR	AC
Sampling - Contaminated Media	Sampling - Contaminated Media	Golder Employee	3	4	12	Review available data about chemical of concerns (SDS) and potential concentrations to be encountered. Understand the exposure routes. Select necessary PPE for the potential chemical hazards. Avoid direct contact between contaminated media and skin surface and eyes. When handling containers of sample preservatives, appropriate gloves and eye protection are required. When sampling groundwater with a bailer, keep bailed water away from yourself and avoid splashing onto equipment.	2	2	4	
Soil- General (SWP 20)	General Procedure	Golder Employee	3	3	9	Follow the Soil Sampling SWP 20. Before sampling, become familiar with the contaminants of concern and establish the appropriate action levels and response action for each potential contaminant. Prior to breaking ground, make sure an underground utilities clearance has been conducted. If collecting a sample from a split-spoon sampler with an acetate liner, exercise caution as the edges of the acetate liner are extremely sharp. Wear gloves and use a tool to scoop out the sample, if possible. Do not leave boreholes unattended. Be cautious around heavy equipment such as drill rigs and excavators.	3	2	6	

You have the right to refuse any work you feel is unsafe, or that you are not trained to do. No job is so urgent that we cannot do it without meeting our HSE obligations.



HEALTH AND SAFETY ENVIRONMENT PLAN (HASEP)

8.0 PERSONAL PROTECTIVE EQUIPMENT

Item	Required	Provided by Golder	Provided by Client	Specific Requirement
Cold Weather Gear	☒	☒	☐	As needed
Wet Weather Gear	☒	☒	☐	As needed
Gloves				
Disposable	☒	☒	☐	When Sampling Soils and groundwater
Head Protection				
Hard Hat	☒	☒	☐	At all times
Hearing Protection				
Disposable foam ear plugs	☒	☒	☐	When near drilling rig
High Visibility Clothing				
Orange	☒	☒	☐	At all times
Safety Footwear				
Safety boots	☒	☒	☐	At all times
Eye Protection				
Impact resistant safety goggles or glasses	☒	☒	☐	When sampling and near drill rig

9.0 INCIDENT AND EMERGENCY MANAGEMENT

9.1 Emergency contacts

Contact	Number
Ambulance	911
Fire	911
Police	911
Golder National Health and Safety Leader (Jane Mills)	206-295-7002
WorkCare	888-449-7787

9.2 Hospital

Hospital name	Address	Phone	Level of Care Available
ECMC	462 Grider Street, Buffalo, NY 14215	716-898-3000	ER

You have the right to refuse any work you feel is unsafe, or that you are not trained to do. No job is so urgent that we cannot do it without meeting our HSE obligations



HEALTH AND SAFETY ENVIRONMENT PLAN (HASEP)

9.3 Site emergency

- ☒ Site emergency procedures available
- ☐ Site owner will provide emergency procedures induction/site induction
- ☐ Medivac procedures in place (medivac arrangements must be confirmed on site)

10.0 HSE PLAN CONTROL

It is the responsibility of the Project Manager to ensure that this HaSEP is prepared and the contents communicated at the pre-start / toolbox meeting to all project staff, Golder or subcontractor, with a copy held on site. The HaSEP has been reviewed or prepared by the Project Manager.

If the project site is remote from the home office, this HaSEP is to be reviewed and approved by the local Golder office whether in another country, province or city.

Role	Name (printed)	Date	Signature
Prepared by	Russell Marchese	11-7-13	
Reviewed by	Patrick Martin	05-30-14	
Approved by	Dave Wehn		
Other			

10.1 Golder sign-off

Signing below indicates you have read and agree to comply with the information contained in this document.

Date	Name	Company	Signature

You have the right to refuse any work you feel is unsafe, or that you are not trained to do. No job is so urgent that we cannot do it without meeting our HSE obligations

[illegible]

11.0 ONSITE CHANGES AND REVIEW

[illegible]

12.0 INSPECTIONS AND SITE VISITS

12.1 Inspections

Nature	Frequency	Person Responsible
On-site HaSEP verification with call to PM	Before work begins	Site Supervisor

You have the right to refuse any work you feel is unsafe, or that you are not trained to do. No job is so urgent that we cannot do it without meeting our HSE obligations



HEALTH AND SAFETY ENVIRONMENT PLAN (HASEP)

12.2 Inspections and Site Visits

Date	Area	Name

13.0 REVISION HISTORY

Version	Author	Date	Amendments, hazards associated with amendments & controls	Reviewed and communicated to all parties	Approved by
V1					

You have the right to refuse any work you feel is unsafe, or that you are not trained to do. No job is so urgent that we cannot do it without meeting our HSE obligations



APPENDIX A

Community Air Monitoring Plan (CAMP)

You have the right to refuse any work you feel is unsafe, or that you are not trained to do. No job is so urgent that we cannot do it without meeting our HSE obligations

Appendix 1A

New York State Department of Health Generic Community Air Monitoring Plan

Overview

A Community Air Monitoring Plan (CAMP) requires real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

The generic CAMP presented below will be sufficient to cover many, if not most, sites. Specific requirements should be reviewed for each situation in consultation with NYSDOH to ensure proper applicability. In some cases, a separate site-specific CAMP or supplement may be required. Depending upon the nature of contamination, chemical- specific monitoring with appropriately-sensitive methods may be required. Depending upon the proximity of potentially exposed individuals, more stringent monitoring or response levels than those presented below may be required. Special requirements will be necessary for work within 20 feet of potentially exposed individuals or structures and for indoor work with co-located residences or facilities. These requirements should be determined in consultation with NYSDOH.

Reliance on the CAMP should not preclude simple, common-sense measures to keep VOCs, dust, and odors at a minimum around the work areas.

Community Air Monitoring Plan

Depending upon the nature of known or potential contaminants at each site, real-time air monitoring for VOCs and/or particulate levels at the perimeter of the exclusion zone or work area will be necessary. Most sites will involve VOC and particulate monitoring; sites known to be contaminated with heavy metals alone may only require particulate monitoring. If radiological contamination is a concern, additional monitoring requirements may be necessary per consultation with appropriate DEC/NYSDOH staff.

Continuous monitoring will be required for all ground intrusive activities and during the demolition of contaminated or potentially contaminated structures. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells.

Periodic monitoring for VOCs will be required during non-intrusive activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. “Periodic” monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or

overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence.

VOC Monitoring, Response Levels, and Actions

Volatile organic compounds (VOCs) must be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis or as otherwise specified. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions, particularly if wind direction changes. The monitoring work should be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment should be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment should be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

1. If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.
2. If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.
3. If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.
4. All 15-minute readings must be recorded and be available for State (DEC and NYSDOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

Particulate Monitoring, Response Levels, and Actions

Particulate concentrations should be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring should be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment must be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

1. If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m^3) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed $150 \text{ mcg}/\text{m}^3$ above the upwind level and provided that no visible dust is migrating from the work area.

2. If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than $150 \text{ mcg}/\text{m}^3$ above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within $150 \text{ mcg}/\text{m}^3$ of the upwind level and in preventing visible dust migration.

3. All readings must be recorded and be available for State (DEC and NYSDOH) and County Health personnel to review.

December 2009



APPENDIX B

Standard Work Procedures (SWPs)

- HSE_200.014_SWP_Slips_Trips_and_Falls.pdf
- HSE_200.015_SWP_Groundwater_Sampling.pdf
- HSE_200.017_SWP_Underground_Uilities.pdf
- HSE_200.024_SWP_Motor_Vehicles_and_Driving_on_Company_Business.pdf
- HSE_200.039_SWP_Cadmium_Exposure.pdf
- HSE_200.001_SWP_Drilling.pdf
- HSE_200.005_SWP_Cold_Environment_Cold_Stress.pdf
- HSE_200.010_SWP_Soil_Sampling.pdf

You have the right to refuse any work you feel is unsafe, or that you are not trained to do. No job is so urgent that we cannot do it without meeting our HSE obligations

APPENDIX D
SITE WIDE INSPECTION FORM

89 LaSalle Avenue
BUFFALO, NEW YORK
Site Management Plan

NYSDEC Site Number: C915283

SEMI-ANNUAL INSPECTION FORM

Inspection Item Description	Frequency	Comments	Corrective Action (If Required)
Site Cover Systems: - Soil Cover - Asphalt Paved Areas - Concrete Sidewalks and other concrete structures - Other (if applicable) Document specific locations and nature of condition issue if any observed.	Semi-Annually		
Stormwater – Manhole Discharge Sampling Location General Condition	Semi-Annually		
Excavation Work Locations – General Conditions	Per Occurrence		

APPENDIX E

QUALITY ASSURANCE/QUALITY CONTROL PLAN

APPENDIX E

QUALITY ASSURANCE/QUALITY CONTROL (QA/QC) PLAN

SITE MANAGEMENT PLAN

1.0 INTRODUCTION

This Quality Assurance/Quality Control Plan is designed to provide an overview of QA/QC procedures. It will give specific methods and QA/QC procedures for chemical testing of environmental samples obtained from the site. In addition, it will ensure the quality of the data produced.

The Site Management Plan (SMP) Project Manager will be responsible for verifying that QA procedures are followed in the field. This will provide for the valid collection of representative samples. The Project Manager will be in direct contact with the analytical laboratory to monitor laboratory activities to help ensure that holding times and other QA/QC requirements are met. The estimated annual number of stormwater and sediment samples and corresponding analytical parameters/methods are provided in Table 1. These sample quantities may vary depending on media availability and adjustments to routine media monitoring requirements under the SMP monitoring program.

In addition to overall project coordination, the Project Manager will be responsible for overseeing both the analytical and field QA/QC activities. The ultimate responsibility for maintaining quality throughout the project rests with the Project Manager.

Table 1: Analytical Summary Table – Groundwater & Surface Water

Parameter	EPA Method	Stormwater/Sediment Samples ¹
Semi-volatile Compounds	8270	8
Metals	6010	8
pH	9040	8

Notes: 1. Includes 1 MS/MSD and 1 duplicate sample

The analytical laboratory proposed for use for the analysis of samples will be a certified NYSDOH ELAP laboratory for the appropriate categories. The QA Manager of the laboratory will be responsible for performing project-specific audits and for overseeing the quality control data generated.

2.0 DATA QUALITY OBJECTIVES

2.1 Background

Data Quality Objectives (DQOs) are qualitative and quantitative statements, which specify the quality of data required to support the investigation of the Site. DQOs focus on the identification of the

end use of the data to be collected. The project DQOs will be achieved utilizing the definitive data category, as outlined in *Guidance for the Data Quality Objectives Process*, EPA QA/G-4 (September 1994). All sample analyses will provide definitive data, which are generated using rigorous analytical methods, such as the reference methods approved by the United States Environmental Protection Agency (USEPA). The purpose of this investigation is to assess the performance and effectiveness of the remedy and the overall reduction in contamination at the site.

Within the context of the purpose stated above, the project DQOs for data collected during this investigation are:

- To assess the nature/extent of contamination in groundwater.
- To maintain the highest possible scientific/professional standards for each procedure.
- To develop enough information to assess if the levels of contaminants identified in the media sampled are increasing or decreasing.

2.2 QA Objectives for Chemical Data Measurement

Sample analytical methodology for the media sampled and data deliverables will meet the requirements in the most recent NYSDEC Analytical Services Protocol (ASP). Laboratories will be instructed that completed **Sample Preparation and Analysis Summary forms** are to be submitted with the analytical data packages. The laboratory also will be instructed that matrix interferences must be cleaned up, to the extent practicable. Data usability summary reports (DUSRs) will be generated. In order to achieve the definitive data category described above, the data quality indicators of precision, accuracy, representativeness, comparability, and completeness will be measured during offsite chemical analysis.

2.2.1 Precision

Precision examines the distribution of the reported values about their mean. The distribution of reported values refers to how different the individual reported values are from the average reported value. Precision may be affected by the natural variation of the matrix or contamination within that matrix, as well as by errors made in field and/or laboratory handling procedures. Precision is evaluated using analyses of a laboratory matrix spike/matrix spike duplicate (for organics) and matrix duplicates (for inorganics), which not only exhibit sampling and analytical precision, but indicate analytical precision through the reproducibility of the analytical results. Relative Percent Difference (RPD) is used to evaluate precision. RPD criteria must meet the method requirements identified in Table B-1.

2.2.2 Accuracy

Accuracy measures the analytical bias in a measurement system. Sources of error are the sampling process, field contamination, preservation, handling, sample matrix, sample preparation, and analysis techniques. These data help to assess the potential concentration contribution from various

outside sources. The laboratory objective for accuracy is to equal or exceeds the accuracy demonstrated for the applied analytical methods on samples of the same matrix. The percent recovery criterion is used to estimate accuracy based on recovery in the matrix spike/matrix spike duplicate and matrix spike blank samples. The spike and spike duplicate, which will give an indication of matrix effects that may be affecting target compounds is also a good gauge of method efficiency.

2.2.3 Representativeness

Representativeness expresses the degree to which the sample data accurately and precisely represent the characteristics of a population of samples, parameter variations at a sampling point, or environmental conditions. Representativeness is a qualitative parameter, which is most concerned with the proper design of the sampling program or sub-sampling of a given sample. Objectives for representativeness are defined for sampling and analysis tasks and are a function of the investigative objectives. The sampling procedures have been selected with the goal of obtaining representative samples for the media of concern.

2.2.4 Comparability

Comparability is a qualitative parameter expressing the confidence with which one data set can be compared with another. A DQO for this program is to produce data with the greatest possible degree of comparability. This goal is achieved through using standard techniques to collect and analyze representative samples and reporting analytical results in appropriate units. Complete field documentation will support the assessment of comparability. Comparability is limited by the other parameters (e.g., precision, accuracy, representative-ness, completeness, comparability), because only when precision and accuracy are known can data sets be compared with confidence. In order for data sets may be comparable, it is imperative that contract-required methods and procedures be explicitly followed.

2.2.5 Completeness

Completeness is defined as a measure of the amount of valid data obtainable from a measurement system compared to the amount that was expected to be obtained under normal conditions. It is important that appropriate QA procedures be maintained to verify that valid data are obtained in order to meet project needs. For the data generated, a goal of 90% is required for completeness (or usability) of the analytical data. If this goal is not met, then NYSDEC and GOLDER project personnel will determine whether the deviations might cause the data to be rejected.

3.0 SAMPLING LOCATIONS, CUSTODY, HOLDING TIMES, & ANALYSIS

Sampling locations and procedures are discussed in Section 3.3.1 and Appendix B of the SMP. Procedures for chain of custody, holding times, and laboratory analyses shall be followed as per SW-846 and as per the laboratory's Quality Assurance Plan. All holding times begin with validated time of sample

receipt (VTSR) at the laboratory. The laboratory must meet the method required detection limits which are referenced within the methods.

4.0 CALIBRATION PROCEDURES AND FREQUENCY

In order to obtain a high level of precision and accuracy during sample processing procedures, laboratory instruments must be calibrated properly. Several analytical support areas must be considered so the integrity of standards and reagents is upheld prior to instrument calibration. The following sections describe the analytical support areas and laboratory instrument calibration procedures.

4.1 Analytical Support Areas

Prior to generating quality data, several analytical support areas must be considered; these are detailed in the following paragraphs.

Standard/Reagent Preparation - Primary reference standards and secondary standard solutions shall be obtained from National Institute of Standards and Technology (NIST), or other reliable commercial sources to verify the highest purity possible. The preparation and maintenance of standards and reagents will be accomplished according to the methods referenced. All standards and standard solutions are to be formally documented (i.e., in a logbook) and should identify the supplier, lot number, purity/concentration, receipt/preparation date, preparers name, method of preparation, expiration date, and any other pertinent information. All standard solutions shall be validated prior to use. Care shall be exercised in the proper storage and handling of standard solutions (e.g., separating volatile standards from nonvolatile standards). The laboratory shall continually monitor the quality of the standards and reagents through well documented procedures.

Balances - The analytical balances shall be calibrated and maintained in accordance with manufacturer specifications. Calibration is conducted with two Class AS" weights that bracket the expected balance use range. The laboratory shall check the accuracy of the balances daily and they must be properly documented in permanently bound logbooks.

Refrigerators/Freezers - The temperature of the refrigerators and freezers within the laboratory shall be monitored and recorded daily. This will verify that the quality of the standards and reagents is not compromised and the integrity of the analytical samples is upheld. Appropriate acceptance ranges (2 to 6°C for refrigerators) shall be clearly posted on each unit in service.

Water Supply System - The laboratory must maintain a sufficient water supply for all project needs. The grade of the water must be of the highest quality (analyte-free) in order to eliminate false-positives from the analytical results. Ultraviolet cartridges or carbon absorption treatments are recommended for organic

analyses and ion-exchange treatment is recommended for inorganic tests. Appropriate documentation of the quality of the water supply system(s) will be performed on a regular basis.

4.2 Laboratory Instruments

Calibration of instruments is required to verify that the analytical system is operating properly and at the sensitivity necessary to meet established quantitation limits. Each instrument for organic and inorganic analyses shall be calibrated with standards appropriate to the type of instrument and linear range established within the analytical method(s). Calibration of laboratory instruments will be performed according to specified methods.

In addition to the requirements stated within the analytical methods, the contract laboratory will be required to analyze an additional low level standard at or near the detection limits. In general, standards will be used that bracket the expected concentration of the samples. This will require the use of different concentration levels, which are used to demonstrate the instrument's linear range of calibration.

Calibration of an instrument must be performed prior to the analysis of any samples and then at periodic intervals (continuing calibration) during the sample analysis to verify that the instrument is still calibrated. If the contract laboratory cannot meet the method required calibration requirements, corrective action shall be taken as discussed in Section 7.0. All corrective action procedures taken by the contract laboratory are to be documented, summarized within the case narrative, and submitted with the analytical results.

5.0 INTERNAL QUALITY CONTROL CHECKS

Internal QC checks are used to determine if analytical operations at the laboratory are in control, as well as determining the effect sample matrix may have on data being generated. Two types of internal checks are performed and are described as batch QC and matrix-specific QC procedures. The type and frequency of specific QC samples performed by the contract laboratory will be according to the specified analytical method and project specific requirements. Acceptable criteria and/or target ranges for these QC samples are presented within the referenced analytical methods.

QC results which vary from acceptable ranges shall result in the implementation of appropriate corrective measures, potential application of qualifiers, and/or an assessment of the impact these corrective measures have on the established data quality objectives. Quality control samples including any project-specific QC will be analyzed are discussed below.

5.1 Batch QC

Method Blanks - A method blank is defined as laboratory-distilled or deionized water that is carried through the entire analytical procedure. The method blank is used to determine the level of laboratory background contamination. Method blanks are analyzed at a frequency of one per analytical batch.

Matrix Spike Blank Samples - A matrix spike blank (MSB) sample is an aliquot of water spiked (fortified) with all the elements being analyzed for calculation of precision and accuracy to verify that the analysis that is being performed is in control. A MSB will be performed for each matrix and organic parameter only.

5.2 Matrix-Specific QC

Matrix Spike Samples - An aliquot of a matrix is spiked with known concentrations of specific compounds as stipulated by the methodology. The matrix spike (MS) and matrix spike duplicate (MSD) are subjected to the entire analytical procedure in order to assess both accuracy and precision of the method for the matrix by measuring the percent recovery and relative percent difference of the two spiked samples. The samples are used to assess matrix interference effects on the method, as well as to evaluate instrument performance. MS/MSDs are analyzed at a frequency of one each per 20 samples per matrix.

Matrix Duplicates - The matrix duplicate (MD) is two representative aliquots of the same sample which are prepared and analyzed identically. Collection of duplicate samples provides for the evaluation of precision both in the field and at the laboratory by comparing the analytical results of two samples taken from the same location. Obtaining duplicate samples from a soil matrix requires homogenization (except for volatile organic compounds) of the sample aliquot prior to filling sample containers, in order to best achieve representative samples. Every effort will be made to obtain replicate samples; however, due to interferences, lack of homogeneity, and the nature of the soil samples, the analytical results are not always reproducible.

Rinsate (Equipment) Blanks - A rinsate blank is a sample of laboratory demonstrated analyte free water passed through and over the cleaned sampling equipment. A rinsate blank is used to indicate potential contamination from ambient air and from sample instruments used to collect and transfer samples. This water must originate from one common source within the laboratory and must be the same water used by the laboratory performing the analysis. The rinsate blank should be collected, transported, and analyzed in the same manner as the samples acquired that day. Rinsate blanks for nonaqueous matrices should be performed at a rate of 10 percent of the total number of samples collected throughout the sampling event. Rinse blanks will not be performed on samples (i.e., groundwater) where dedicated disposable equipment is used.

Trip Blanks - Trip blanks are not required for nonaqueous matrices. Trip blanks are required for aqueous sampling events. They consist of a set of sample bottles filled at the laboratory with laboratory demonstrated analyte free water. These samples then accompany the bottles that are prepared at the lab into the field and back to the laboratory, along with the collected samples for analysis. These bottles are never opened in the field. Trip blanks must return to the lab with the same set of bottles they accompanied to the field. Trip blanks will be analyzed for volatile organic parameters. Trip blanks must be included at a rate of one per volatile sample shipment.

6.0 CALCULATION OF DATA QUALITY INDICATORS

6.1 Precision

Precision is evaluated using analyses of a field duplicate and/or a laboratory MS/MSD which not only exhibit sampling and analytical precision, but indicate analytical precision through the reproducibility of the analytical results. RPD is used to evaluate precision by the following formula:

$$RPD = \frac{(X_1 - X_2) \times 100\%}{[(X_1 + X_2)/2]}$$

Where:

X_1 = Measured value of sample or matrix spike

X_2 = Measured value of duplicate or matrix spike duplicate

Precision will be determined through the use of MS/MSD (for organics) and matrix duplicates (for inorganics) analyses.

6.2 Accuracy

Accuracy is defined as the degree of difference between the measured or calculated value and the true value. The closer the numerical value of the measurement comes to the true value or actual concentration, the more accurate the measurement is. Analytical accuracy is expressed as the percent recovery of a compound or element that has been added to the environmental sample at known concentrations before analysis. Analytical accuracy may be assessed through the use of known and unknown QC samples and spiked samples. It is presented as percent recovery. Accuracy will be determined from matrix spike, matrix spike duplicate, and matrix spike blank samples, as well as from surrogate compounds added to organic fractions (i.e., volatiles, semivolatiles, PCB), and is calculated as follows:

$$Accuracy (\%R) = \frac{(X_s - X_u)}{K} \times 100\%$$

Where:

X_s - Measured value of the spike sample

X_u - Measured value of the unspiked sample

K - Known amount of spike in the sample

6.3 Completeness

Completeness is calculated on a per matrix basis for the project and is calculated as follows:

$$\text{Completeness (\%C)} = \frac{(X_v - X_n)}{N} \times 100\%$$

Where:

X_v - Number of valid measurements

X_n - Number of invalid measurements

N - Number of valid measurements expected to be obtained

7.0 CORRECTIVE ACTIONS

Laboratory corrective actions shall be implemented to resolve problems and restore proper functioning to the analytical system when errors, deficiencies, or out-of-control situations exist at the laboratory. Full documentation of the corrective action procedure needed to resolve the problem shall be filed in the project records, and the information summarized in the case narrative. A discussion of the corrective actions to be taken is presented in the following sections.

7.1 Incoming Samples

Problems noted during sample receipt shall be documented by the laboratory. The Golder Associates (Golder) Project Manager shall be contacted immediately for problem resolution. All corrective actions shall be documented thoroughly.

7.2 Sample Holding Times

If any sample extraction and/or analyses exceed method holding time requirements, the Golder Project Manager shall be notified immediately for problem resolution. All corrective actions shall be documented thoroughly.

7.3 Instrument Calibration

Sample analysis shall not be allowed until all initial calibrations meet the appropriate requirements. All laboratory instrumentation must be calibrated in accordance with method requirements. If any initial/continuing calibration standards exceed method QC limits, recalibration must be performed and, if necessary, reanalysis of all samples affected back to the previous acceptable calibration check.

7.4 Reporting Limits

The laboratory must meet the method required detection limits listed in NYSDEC ASP, 10/95 criteria. If difficulties arise in achieving these limits due to a particular sample matrix, the laboratory must notify Golder project personnel for problem resolution. In order to achieve those detection limits, the laboratory must utilize all appropriate cleanup procedures in an attempt to retain the project required detection limits. When any sample requires a secondary dilution due to high levels of target analytes, the laboratory must document all initial analyses and secondary dilution results. Secondary dilution will be

permitted only to bring target analytes within the linear range of calibration. If samples are analyzed at a secondary dilution with no target analytes detected, the Golder Project Manager will be immediately notified so that appropriate corrective actions can be initiated.

7.5 Method QC

All QC method-specified QC samples, shall meet the method requirements referenced in the analytical methods. Failure of method-required QC will result in the review and possible qualification of all affected data. If the laboratory cannot find any errors, the affected sample(s) shall be reanalyzed and/or re-extracted/redigested, then reanalyzed within method-required holding times to verify the presence or absence of matrix effects. If matrix effect is confirmed, the corresponding data shall be flagged accordingly using the flagging symbols and criteria. If matrix effect is not confirmed, then the entire batch of samples may have to be reanalyzed and/or re-extracted/redigested, then reanalyzed at no cost. Golder shall be notified as soon as possible to discuss possible corrective actions should unusually difficult sample matrices be encountered.

7.6 Calculation Errors

All analytical results must be reviewed systematically for accuracy prior to submittal. If upon data review calculation and/or reporting errors exist, the laboratory will be required to reissue the analytical data report with the corrective actions appropriately documented in the case narrative.

8.0 DATA REDUCTION, VALIDATION, AND USABILITY

8.1 Data Reduction

Laboratory analytical data are first generated in raw form at the instrument. These data may be either in a graphic or printed tabular format. Specific data generation procedures and calculations are found in each of the referenced methods. Analytical results must be reported consistently. Identification of all analytes must be accomplished with an authentic standard of the analyte traceable to NIST or USEPA sources. Individuals experienced with a particular analysis and knowledgeable of requirements will perform data reduction.

8.2 Data Validation

Data validation is a systematic procedure of reviewing a body of data against a set of established criteria to provide a specified level of assurance of validity prior to its intended use. All analytical samples collected will receive a limited data review. The data validation will be limited to a review of holding times, completeness of all required deliverables, review of QC results (surrogates, spikes, duplicates) and a 10% check of all samples analyzed to ensure they were analyzed properly. The methods as well as the general guidelines presented in the following documents will be used during the data review USEPA *Contract Laboratory Program (CLP) Organic Data Review, SOP Nos. HW-6, Revision #11 and USEPA*

Evaluation of Metals Data for the Contract Laboratory Program based on 3/90, SOW, Revision XI. These documents will be used with the following exceptions:

- Technical holding times will be in accordance with NYSDEC ASP, 10/95 edition.
- Organic calibration and QC criteria will be in accordance with NYSDEC ASP, 10/95 edition. Data will be qualified if it does not meet NYSDEC ASP, 10/95 criteria.

Where possible, discrepancies will be resolved by the project manager (i.e., no letters will be written to laboratories). A complete analytical data validation is not anticipated. However, if the initial limited data audit reveals significant deviations and problems with the analytical data, project personnel may recommend a complete variation of the data.

9.0 REFERENCES

Comprehensive Environmental Response Compensation and Liability Act (CERCLA) Quality Assurance Manual, Final Copy , Revision I, October 1989.

National Enforcement Investigations Center of USEPA Office of Enforcement. *NEIC Policies and Procedures*. Washington: USEPA.

New York State Department of Environmental Conservation (NYSDEC). 1995. *Analytical Services Protocol*, (ASP) 10/95 Edition. Albany: NYSDEC.

At Golder Associates we strive to be the most respected global group of companies specializing in ground engineering and environmental services. Employee owned since our formation in 1960, we have created a unique culture with pride in ownership, resulting in long-term organizational stability. Golder professionals take the time to build an understanding of client needs and of the specific environments in which they operate. We continue to expand our technical capabilities and have experienced steady growth with employees now operating from offices located throughout Africa, Asia, Australasia, Europe, North America and South America.

Africa	+ 27 11 254 4800
Asia	+ 852 2562 3658
Australasia	+ 61 3 8862 3500
Europe	+ 356 21 42 30 20
North America	+ 1 800 275 3281
South America	+ 55 21 3095 9500

solutions@golder.com
www.golder.com

Golder Associates Inc.
2430 N. Forest Road, Suite 100
Getzville, NY 14068 USA
Tel: (716) 204-5880
Fax: (716) 204-5878

