Former Michelsen Furniture Co. Site

Monroe COUNTY

Rochester, NEW YORK

SITE MANAGEMENT PLAN

NYSDEC Site Number: C828189

Prepared for:

M+M Housing Development Fund Corp. as Nominee for Mills and Michelsen LLC

312 State Street

Rochester, NY

Prepared by:

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Revisions to Final Approved Site Management Plan:

Revision No.	Date Submitted	Summary of Revision	NYSDEC Approval Date

[NOVEMBER 2015]

CERTIFICATION STATEMENT

I, Daniel Noll, P.E., certify that I am currently a NYS Professional Engineer as defined in 6 NYCRR 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).

_____

_____DATE

TABLE OF CONTENTS

Former Michelsen Furniture Co. Site

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Table of Contents

TABLE OF CONTENTS (Continued)

TABLE OF CONTENTS (Continued)

List of Tables

List of Figures

TABLE OF CONTENTS (Continued)

List of Appendices

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:	C818289 Former Michelsen Furniture Co. Site, 182 Avenue D and 374 Conkey Ave, Rochester, NY
Institutional Controls:	1. The property may be used for restricted residential, commercial and industrial use;
	2. All ECs must be inspected at a frequency and in a manner defined in the SMP.
	3. All ECs 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 Monroe County Department of Public 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 this SMP.
	6. Data and information pertinent to site management must be reported at the frequency and in a manner as defined in this SMP.
	7. All future activities that will disturb remaining contaminated material must be conducted in accordance with this SMP.
	8. Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical component of the remedy shall be performed as defined in this SMP.
	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 the Environmental Easement.
	10. The potential for vapor intrusion must be evaluated for any buildings developed in the area within the IC boundaries noted on the Site Survey included in Appendix 2, and any potential impacts that are identified must be monitored or mitigated.

Site Identification:	C818289 Former Michelsen Furniture Co. Site, 182 Avenue D and 374 Conkey Ave, Rochester, NY	
	11. Vegetable gardens and farming on the site are prohibited.	
Engineering Controls:	1. Cover system	
	2. Sub Slab Depressurization System (SSDS).	
	3. Groundwater remediation system (injection well network)	
Inspections:		Frequency
1. Cover inspection		Annually
2. SSDS inspection		Annually
Monitoring:		
1. Groundwater Monitoring Wells GPMW-34, GPMW-36, IW-2, IW-3, IW-4, IW-5, BMW-02, BMW-03, BMW-04		Quarterly
Maintenance:		
1. Cover		As needed
2. SSDS maintenance		As needed
Reporting:		
1. Groundwater Monitoring Report		Quarterly
2. 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

1.1 General

This Site Management Plan (SMP) is a required element of the remedial program for the Former Michelsen Furniture Co. Site located in Rochester, New York (hereinafter referred to as the "Site"). See Figure 1. The Site is currently in the New York State (NYS) Brownfield Cleanup Program (BCP) Site No. C8281889 which is administered by New York State Department of Environmental Conservation (NYSDEC).

M+M Housing Development Fund Corp. as Nominee for Mills and Michelsen, LLC entered into a Brownfield Cleanup Agreement (BCA), on September 30, 2014, as amended May 20, 2015, with the NYSDEC to remediate the site. A figure showing the site location and boundaries of this site is provided in Figure 2. The boundaries of the site are more fully described in the metes and bounds site description that is part of the Environmental Easement provided in Appendix 1.

After completion of the remedial work, some contamination was left at this site, which is hereafter referred to as "remaining contamination". Institutional and Engineering Controls (ICs and ECs) have been incorporated into the site remedy to control exposure to remaining contamination to ensure protection of public health and the environment. An Environmental Easement granted to the NYSDEC, and recorded with the Monroe County Clerk, requires compliance with this SMP and all ECs and ICs placed on the site.

This SMP was prepared to manage remaining contamination at the site until the Environmental Easement is extinguished in accordance with ECL Article 71, Title 36. This plan has been approved by the NYSDEC, and compliance with this plan is required by the grantor of the Environmental Easement and the grantor's successors and assigns. This SMP may only be revised with the approval of the NYSDEC.

It is important to note that:

- This SMP details the site-specific implementation procedures that are required by the Environmental Easement. Failure to properly implement the SMP is a violation of the Environmental Easement, 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 (Index #C828189-09-14) Site #C828189) for the site, and thereby subject to applicable penalties.

All reports associated with the site can be viewed by contacting the NYSDEC or its successor agency managing environmental issues in New York State. A list of contacts for persons involved with the site is provided in Appendix 2 of this SMP.

This SMP was prepared by LaBella Associates, D.P.C., on behalf of M+M Housing Development Fund Corp. as Nominee for Mills and Michelsen, LLC, in accordance with the requirements of the NYSDEC's DER-10 ("Technical Guidance for Site Investigation and Remediation"), dated May 3, 2010, and the guidelines provided by the NYSDEC. This SMP addresses the means for implementing the ICs and/or ECs that are required by the Environmental Easement for the site.

1.2 Revisions

Revisions to this plan will be proposed in writing to the NYSDEC's project manager. Revisions will be necessary upon, but not limited to, the following occurring: a change in media monitoring requirements, upgrades to or shut-down of a remedial system, post-remedial removal of contaminated sediment or soil, or other significant change to the site conditions. In accordance with the Environmental Easement for the site, the NYSDEC will provide a notice of any approved changes to the SMP, and append these notices to the SMP that is retained in its files.

1.3 Notifications

Notifications will be submitted by the property owner to the NYSDEC, as needed, in accordance with NYSDEC's DER – 10 for the following reasons:

- 60-day advance notice of any proposed changes in site use that are required under the terms of the BCA, 6NYCRR Part 375 and/or Environmental Conservation Law.
- 7-day advance notice of any field activity associated with the remedial program.
- 15-day advance notice of any proposed ground-intrusive activity pursuant to the Excavation Work Plan.
- Notice within 48-hours of any damage or defect to the foundation, structures or EC that reduces or has the potential to reduce the effectiveness of an EC, 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 ECs 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 submitted to the NYSDEC within 45 days describing and documenting 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/Remedial Party has been provided with a copy of the Brownfield Cleanup Agreement (BCA) and all approved work plans and reports, including this SMP.

- 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 to the NYSDEC.

Table A on the following page includes contact information for the above notification. The information on this table will be updated as necessary to provide accurate contact information. A full listing of site-related contact information is provided in Appendix 2.

Table A: Notifications*

Name	Contact Information
Todd Caffoe, P.E. NYSDEC Project Manager	(585) 226-5430 todd.caffoe.dec.ny.gov
Ms. Bernette Schilling, P.E. NYSDEC Regional HW Engineer	585-226-5415 bernette.schilling@dec.ny.gov
Ms. Kelly Lewandowski NYSDEC Site Control	518-402-9553 kelly.lewandowski@dec.ny.us

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

2.0 SUMMARY OF PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

2.1 Site Location and Description

The site is located in Rochester, Monroe County, New York and is identified as Section 091.770 Block 0002 and Lot 031 on the City of Rochester Tax Map (see Figures 1 and 2). The site is an approximately 0.62-acre area and is bounded by residential property to the north, Avenue D to the south, the El Camino Trail and City of Rochester Avenue D Recreation Center to the east, and Conkey Avenue to the west. The boundaries of the site are more fully described in Appendix 2 – Environmental Easement. The owner of the site parcels at the time of issuance of this SMP is:

M+M Housing Development Fund Corp. as Nominee for
Mills and Michelsen, LLC
312 State Street
Rochester, New York 14614

2.2 Physical Setting

2.2.1 Land Use

The Site consists of a 40 unit residential apartment building, asphalt paved parking lot and landscaped areas. The Site is zoned M-1 industrial and is currently partially occupied with residential tenants.

The properties adjoining the Site and in the neighborhood surrounding the Site primarily include residential properties. The properties immediately south of the Site include residential properties and a mini-mart; the properties immediately north and west of the Site include residential properties; the properties immediately east of the Site include residential properties and a recreation center.

2.2.2 Geology

Overburden soils at the Site consist generally of silt with varying amounts of sand and gravel. Groundwater is present in overburden soil at a depth of approximately 8 to 9 feet below ground surface (bgs).

Bedrock is encountered at the Site at depths of approximately 14 to 15 feet bgs. Bedrock at the Site consists of the Upper Silurian Decew Dolostone. Bedrock from consist of gray/olive dolostone with numerous horizontal fractures.

Site specific boring logs are provided in Appendix 3.

2.2.3 Hydrogeology

Groundwater was measured in monitoring wells at depths ranging from 10.21 to 11.81 feet bgs. Groundwater flow at the Site is to the north.

A groundwater contour map is shown in Figure 3. Groundwater elevation data is provided in Table 1. Groundwater monitoring well construction logs are provided in Appendix 3.

2.3 Investigation and Remedial History

The following narrative provides a remedial history timeline and a brief summary of the available project records to document key investigative and remedial milestones for the Site. Full titles for each of the reports referenced below are provided in Section 8.0 - References.

Summary of Remedial Investigation

The RI activities were conducted in accordance with a NYSDEC approved RI Work Plan (RIWP) last revised January 2015. This report was also completed in accordance with the NYSDEC Division of Environmental Remediation (DER) BCP

Guide dated May 2004 and the DER-10 (*Technical Guidance for Site Investigation and Remediation*) dated May 3, 2010.

Prior to being entered into the NYSDEC BCP, the following investigations were performed at the Site:

- *Phase II Environmental Site Assessment, 182 Avenue D, Rochester, NY, LaBella Associates, P.C., November 2012* – This investigation consisted of the advancement of six (6) direct push soil borings, installation of two shallow overburden groundwater monitoring wells, and collection and laboratory analysis of soil and groundwater samples. The findings of the investigation identified petroleum impacts proximate the northern property line of Parcel 2. However, given the lack of an access agreement at that time with the City of Rochester, the investigation could not continue to Parcel 2. Additionally, chlorinated volatile organic compounds (CVOCs) were identified in soil and groundwater at Parcel 1. At the time of the investigation it could not be determined if the CVOCs detected at the Site were attributable to historical Site operations or if they were from an off-site source.

- *Additional Subsurface Investigations, 182 Avenue D and 374 Conkey Avenue, Rochester, NY, LaBella Associates, D.P.C, January & March 2014* – LaBella performed additional investigation activities at both Site parcels in January and March 2014. It should be noted that a report has not been generated relative to these activities, however copies of all figures, data summary tables, laboratory reports, and field logs are included in the BCP Application.

  The January and March 2014 investigations consisted of additional soil borings and overburden monitoring wells, advancement of test pits and installation of one bedrock groundwater monitoring well. The findings of the test pit investigation at that time indicated that USTs were not present, and the approximate extent of petroleum impacts was identified. Laboratory analysis of soil samples from Parcel 2 indicate that petroleum related VOCs and SVOC are present in soil at concentrations below NYSDEC Commissioner Policy 51 (CP-51) and 6 NYCRR Part 375-6.8(a) Unrestricted Use Soil Cleanup Objectives (SCOs). Laboratory

analysis of groundwater samples indicated the presence of significant concentrations of CVOCs (in particular trichloroethene (TCE) in overburden and bedrock groundwater. The findings of investigations performed up until that time were indicative of a release in the vicinity of the facility loading dock and ramp into the Site building basement. However, additional investigation was required to refine the conceptual site model, including further delineation of this potential source area and identification of other potential on-site sources of CVOC impacts.

The BCP RI fieldwork included advancement of eighteen (18) direct push soil borings, eight (8) soil borings with a rotary drill rig, installation of four (4) overburden groundwater monitoring wells, installation of five (5) bedrock-overburden interface wells and installation of three (3) bedrock wells at the Site. RI sample locations are detailed on Figure 4. To evaluate conditions at the Site, the following soil and groundwater samples were submitted for laboratory testing:

Sampled Media	Sample Quantities
Soil Boring Soils	17
Overburden Groundwater	5
Interface Groundwater	5
Bedrock Groundwater	3

All samples were submitted for analysis of a combination of the following parameters:

- USEPA TCL VOCs
- USEPA TCL SVOCs
- PCBs
- Pesticides
- TAL Metals

Based on the work completed it was determined that the predominant contaminants of concern include chlorinated volatile organic compounds (CVOCs) (specifically Trichloroethene (TCE) and its breakdown compounds) in soil and

groundwater. Based on these findings, it appears the source of the VOC plume is in the area between the Site building and the ramp to the basement. CVOCs are present in soil at concentrations exceeding Part 375-6.8(a) Unrestricted Use Soil Cleanup Objectives (SCOs) and Part 375-6.8(b) Protection of Groundwater SCOs, but below Part 375-6.8(b) Restricted Residential SCOs. CVOC concentrations exceed Part 703 Groundwater Standards.

Semi-volatile organic compounds were detected in one (1) subsurface soil sample (i.e., IW-3 at a depth of 4' to 10' bgs) at concentrations exceeding Part 375-6.8(b) Restricted Industrial SCOs.

Based on the results of the RI the following conclusions were made:

1. The soil and groundwater impacts at the Site have been delineated and the primary contaminants at the Site consist of CVOCs.
2. Subsurface soil sampling at the Site only identified one area of soil that contains SVOCs above the SCGs. This area is located beneath the parking lot at the Site.
3. Subsurface VOC impacts in soil were not identified at concentrations above the NYSDEC Part 375-6.8(b) Restricted Residential SCOs. However, low concentrations of VOCs above the NYSDEC Part 375-6.8(a) Unrestricted Use Soil Cleanup Objectives (SCOs) and Part 375-6.8(b) Protection of Groundwater SCOs in soil were detected beneath the Site building.
4. Groundwater at the Site is impacted by CVOCs at concentrations above Part 703 groundwater standards. The groundwater flow at the Site is to the north, towards adjacent residential properties. The potential exists that CVOCs are migrating off-Site. While the results of on-Site sampling indicate groundwater contamination may be moving off-Site, off-Site sampling is necessary to confirm the nature and extent.
5. Based on the concentrations of VOCs in soil and groundwater beneath the Site building a completed exposure pathway does appear to exist for VOCs. However, while, data is not available documenting current concentrations of VOCs in sub slab vapor or indoor air, the installation of the sub slab depressurization system

and ventilation of the underground parking garage addresses any potential vapor intrusion concerns.

RI Soil samples containing exceedances of Part 375-6.8 SCOs are presented on Figure 5. Exceedances of Part 703 Groundwater Standards for VOCs are presented on Figure 6. Data collected from the RI is presented in Tables 2 through 7 in Appendix 4.

Areas of Concern

The cumulative findings of the pre-BCP investigations and the RI performed at the Site identified four (4) areas of concern (AOCs) remaining at the Site that warranted further consideration. The data discussed below is included in the RI Report, submitted under separate cover. The nature and extent of impacts for these areas have been defined and are summarized below:

AOC #1: Subsurface Soils Impacted with CVOCs

Based on laboratory analysis of subsurface soil samples collected, CVOCs are present in subsurface soils at concentrations exceeding Part 375-6.8(a) Unrestricted Use SCOs and Part 375-6.8(b) Protection of Groundwater SCOs, but below Part 375-6.8(b) Restricted Residential SCOs.

AOC #2: Groundwater Impacted with CVOCs

Based on the results of laboratory analysis of groundwater samples collected during the RI, CVOCs are present at the Site at concentrations exceeding Part 703 groundwater standards. The highest concentrations of CVOCs in groundwater were detected in the area between the building and the ramp to the basement.

AOC #3: Potential Vapor Intrusion Concern

Given the presence of CVOCs in soil and groundwater beneath the Site building the presence of sub slab vapors at concentrations requiring mitigation are assumed. IRMs performed at the Site included installation of an SSDS, which addresses any potential vapor intrusion concerns.

AOC #4: SVOCs in Subsurface Soil

Based on laboratory analysis of subsurface soil samples collected, SVOCs are present in subsurface soils at concentrations exceeding Part 375-6.8(b) Restricted Industrial SCOs in the vicinity of IW-3.

Summary of Interim Remedial Measures (IRMs) and Remedial Actions

The following IRMs have been implemented at the Site:

1. UST Removal – Two (2) 3,000 gallon heating oil USTs were removed, decommissioned and disposed as scrap steel. Approximately 550 gallons of residual heating oil was removed and disposed at Industrial Oil Tank Services in Oriskany, New York.
2. Soil Removal – A total of 1,917.06 tons of soil was characterized, removed from the Site and transported to Mill Seat Landfill in Riga, New York for disposal as non-hazardous waste.
3. Sub Slab Depressurization System (SSDS) – An SSDS was installed in the Site building during redevelopment.

The locations of IRMs implemented at the Site are detailed on Figure 7.

The following remedial actions were performed at the site:

Installation of Cover System

A cover system was installed to address the CVOC impacts in soil in AOC #1 and the limited SVOC impacts in AOC #4. The cover system consisted of asphalt pavement, sidewalks and concrete aprons. The location of the cover system is detailed on Figure 8.

In Situ Chemical Oxidation

Six injection wells were installed in the area between the building and the concrete ramp to the basement as detailed on Figure 8. Each injection well was

constructed of two inch Sch 40 PVC with 0.020 inch machine slotted screens. Each well was installed to a total of five (5) feet into bedrock to straddle the bedrock/overburden contact. A quartz sand pack was placed around the screen section of each well followed by a two foot bentonite seal. The remainder of the annulus was grouted to the surface.

A total of 13,200 pounds (lbs) of sodium permanganate ("RemOx® L") was pumped at an approximately 10% concentration into the six injection wells and monitoring wells BW-02, BW-03, BW-04, GPMW-34, and GPMW-26. A total of 6,000 gallons of 10% solution was injected in the following distribution:

Well	Gallons of Solution Injected
RIW-1	1,125
RIW-2	275
RIW-3	775
RIW-4	1,625
RIW-5	425
RIW-6	600
GPMW-26	125
GPMW-34	150
BW-02	300
BW-03	300
BW-04	300

2.4 Remedial Action Objectives

The Remedial Action Objectives (RAOs) for the Site as listed in the Decision Document dated September 17, 2015 are as follows:

Groundwater

RAOs for Public Health Protection

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of, volatiles from contaminated groundwater.

RAOs for Environmental Protection

- Remove the source of ground or surface water contamination.

Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of or exposure from contaminants volatilizing from contaminants in soil.

RAOs for Environmental Protection

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

Soil Vapor

RAOs for Public Health Protection

- Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a site.

2.5 Remaining Contamination

2.5.1 Soil

Additional soil samples were not collected subsequent to implementation of the remedial action. As such, VOC and SVOC concentrations in areas not affected by remedial actions are anticipated to remain similar to those identified in previous investigations.

Based on the results of laboratory analysis of soil samples collected during the RI, CVOCs are present at the Site at concentrations exceeding SCGs for soil. TCE was detected in one (1) soil sample collected during pre-RI investigations at a concentration

above Part 375-6.8(a) Unrestricted SCOs but below Part 375-6.8(b) Restricted Residential SCOs. Concentrations of VOCs detected in RI soil samples did not exceed Part 375-6.8(b) Restricted Residential SCOs. TCE was detected in three soil samples collected from RI and pre-RI sampling at concentrations exceeding Part 375-6.8(b) Protection of Groundwater SCOs.

SVOCs were identified in one soil sample (i.e., IW-3 at a depth of 4' to 10' bgs) during the RI at concentrations exceeding Part 375-6.8(b) Restricted Industrial SCOs. Concentrations of all other SVOCs detected in soil samples were below Part 375-6.8(a) Unrestricted Use SCOs.

2.5.2 Groundwater

VOCs remain in Site groundwater at concentrations exceeding SCGs.

Groundwater contamination was detected in bedrock monitoring wells located proximate the northern property line during the RI. The potential exists that contamination is migrating off-site with groundwater. Contaminant levels are anticipated to decrease over time due to the groundwater treatment remedy that was implemented at the site.

Table 8 in Appendix 4 and Figure 10 summarize the results of all samples of groundwater that exceed the SCGs after completion of the remedial action.

2.5.3 Soil Vapor

Soil vapor samples have not been collected at the Site; however an SSDS has been installed at the Site to mitigate the potential for vapor intrusion into the Site building.

An SSDS was installed as an IRM during redevelopment of the Site. Subsequent to activation of the system, a pressure field extension test was performed to evaluate the effectiveness of the SSDS. The testing consisted of drilling ½ inch holes in the basement

concrete slab in locations detailed on the Figure 11. At each location Teflon tubing was placed in the hole and sealed with plumber's putty. The tubing was connected to a digital monometer and the pressure reading was recorded. Recorded pressure readings were as follows:

Sample Location	Measurement (inches of water column)
SSV-1	-0.106
SSV-2	-0.087
SSV-3	-0.097
SSV-4	-0.093
SSV-5	-0.091
SSV-6	-0.018
SSV-7	-0.083
SSV-8	-0.079

3.0 INSTITUTIONAL AND ENGINEERING CONTROL PLAN

3.1 General

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

This plan provides:

- A description of all IC/ECs on the site;
- The basic implementation and intended role of each IC/EC;
- A description of the key components of the ICs set forth in the Environmental Easement;
- A description of the controls to be evaluated during each required inspection and periodic review;
- A description of plans and procedures to be followed for implementation of IC/ECs, such as the implementation of the Excavation Work Plan (EWP) (as provided in Appendix 5) 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 IC/ECs required by the site remedy, as determined by the NYSDEC.

3.2 Institutional Controls

A series of ICs is required by the Decision Document to: (1) implement, maintain and monitor Engineering Control systems; (2) prevent future exposure to remaining contamination; and, (3) limit the use and development of the site to restricted residential, commercial or industrial uses only. Adherence to these ICs on the site is required by the

Environmental Easement and will be implemented under this SMP. ICs identified in the Environmental Easement may not be discontinued without an amendment to or extinguishment of the Environmental Easement. The IC boundaries are the same as the BCP Site boundaries as shown on Figure 2. These ICs are:

- The property may be used for restricted residential, commercial or industrial uses;
- All ECs must be operated and maintained as specified in this SMP;
- All ECs must be inspected at a frequency and in a manner defined in the SMP.
- The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Monroe 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.
- Groundwater and other environmental or public health monitoring must be performed as defined in this SMP;
- Data and information pertinent to site management must be reported at the frequency and in a manner as defined in this SMP;
- All future activities that will disturb remaining contaminated material must be conducted in accordance with this SMP;
- Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in this SMP;
- Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical component of the remedy shall be performed as defined in this SMP;
- 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 the Environmental Easement.
- The potential for vapor intrusion must be evaluated for any buildings developed in the area within the IC boundaries, and any potential impacts that are identified must be monitored or mitigated; and
- Vegetable gardens and farming on the site are prohibited;

3.3 Engineering Controls

3.3.1 Cover (or Cap)

Exposure to remaining contamination at the site is prevented by a cover system placed over the site. This cover system is comprised of a minimum of 24 inches of clean soil or asphalt pavement, concrete-covered sidewalks, and concrete building slabs. Figure 8 presents the location of the cover system and applicable demarcation layers. The Excavation Work Plan (EWP) provided in Appendix 5 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 of this cover are provided in the Monitoring and Sampling Plan included in Section 4.0 of 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 associated Community Air Monitoring Plan (CAMP) prepared for the site and provided in Appendix 6 and 7, respectively.

3.3.2 Sub Slab Depressurization System

A Sub Slab Depressurization System (SSDS) has been installed in the Site building to mitigate the potential for soil vapor intrusion.

Procedures for operating and maintaining the SSDS system are documented in the Operation and Maintenance Plan (Section 5.0 of this SMP). As built drawings, signed and sealed by a professional engineer, are included in Appendix 8 – Operations and Maintenance Manual. Figure 11 shows the location of the ECs for the site.

3.3.3 Groundwater Treatment System

A groundwater treatment system consisting of a network of six injection wells was installed in the area between the building and the concrete ramp to the basement to facilitate introduction of in-situ chemical oxidation (ISCO) compounds to the subsurface (see Figure 9). Each injection well was constructed of two inch Sch 40 PVC with 0.020

inch machine slotted screens. Each well was installed to a total of five (5) feet into bedrock to straddle the bedrock/overburden contact. A quartz sand pack was placed around the screen section of each well followed by a two foot bentonite seal. The remainder of the annulus was grouted to the surface. Each injection well was completed at the surface with a flush-mount protective casing. In addition to the six dedicated injection wells, ISCO injections were performed in bedrock monitoring wells BW-02, BW-03 and BW-04 and overburden monitoring wells GPMW-26 and GPMW-34.

3.3.4 Criteria for Completion of Remediation/Termination of Remedial Systems

Generally, remedial processes are considered completed when 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 6.4 of NYSDEC DER-10.

3.3.3.1 - Cover (or Cap)

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

3.3.3.2 - Sub-Slab Depressurization (SSD) System

The active SSD system will not be discontinued unless prior written approval is granted by the NYSDEC and the NYSDOH. In the event that monitoring data indicates that the SSD system may no longer be required, a proposal to discontinue the SSD system will be submitted by the remedial party to the NYSDEC and NYSDOH.

3.0 MONITORING AND SAMPLING PLAN

4.1 General

This Monitoring and Sampling Plan describes the measures for evaluating the overall performance and effectiveness of the remedy. This Monitoring and Sampling Plan may only be revised with the approval of the NYSDEC. Details regarding the sampling procedures, data quality usability objectives, analytical methods, etc. for all samples collected as part of site management for the site are included in the Quality Assurance Project Plan provided in Appendix 9.

This Monitoring and Sampling Plan describes the methods to be used for:

- Sampling and analysis of all appropriate media (e.g., groundwater);
- Assessing compliance with applicable NYSDEC standards, criteria and guidance (SCGs), particularly groundwater standards and Part 375 SCOs for soil; and
- Evaluating site information periodically to confirm that the remedy continues to be effective in protecting public health and the environment;

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

- Sampling locations, protocol and frequency;
- Information on all designed monitoring systems;
- Analytical sampling program requirements;
- Inspection and maintenance requirements for monitoring wells;
- Monitoring well decommissioning procedures; and

- Annual inspection and periodic certification.

Reporting requirements are provided in Section 7.0 of this SMP.

4.2 Site – wide Inspection

Site-wide inspections will be performed at a minimum of once per year. Modification to the frequency or duration of the inspections will require approval from the NYSDEC. Site-wide inspections will also be performed after all severe weather conditions that may affect ECs or monitoring devices. During these inspections, an inspection form will be completed as provided in Appendix 10 – Site Management Forms. The form will compile sufficient information to assess the following:

- Compliance with all ICs, including site usage;
- An evaluation of the condition and continued effectiveness of ECs;
- 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.

Inspections of all remedial components installed at the site will be conducted. A comprehensive site-wide inspection will be conducted and documented according to the SMP schedule, regardless of the frequency of the Periodic Review Report. The inspections will determine and document the following:

- Whether ECs 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 Easement;

- Achievement of remedial performance criteria; and
- If site records are complete and up to date; and

Reporting requirements are outlined in Section 7.0 of this plan.

Inspections will also be performed in the event of an emergency. If an emergency, such as a natural disaster or an unforeseen failure of any of the ECs occurs that reduces or has the potential to reduce the effectiveness of ECs in place at the site, verbal notice to the NYSDEC must be given by noon of the following day. In addition, an inspection of the site will be conducted within 5 days of the event to verify the effectiveness of the IC/ECs implemented at the site by a qualified environmental professional, as determined by the NYSDEC. Written confirmation must be provided to the NYSDEC within 7 days of the event that includes a summary of actions taken, or to be taken, and the potential impact to the environment and the public.

4.3 Treatment System Monitoring and Sampling

4.3.1 SSDS Monitoring

Monitoring of the SSDS will be performed on a routine basis, as identified in Table B Remedial System Monitoring Requirements and Schedule (see below). Modification to the frequency or sampling requirements will require approval from the NYSDEC. A visual inspection of the complete system will be conducted during each monitoring event. Unscheduled inspections and/or sampling may take place when a suspected failure of the SSDS system has been reported or an emergency occurs that is deemed likely to affect the operation of the system. SSDS system components to be monitored include, but are not limited to, the components included in Table B below.

Table B – SSDS Monitoring Requirements and Schedule

Remedial System Component	Monitoring Parameter	Operating Range	Monitoring Schedule
U-tube manometer	Visual inspection	Negative pressure	Quarterly
Fans	Visual inspection	NA	Annually
Alarms	Function check, disconnect power	NA	Annually

A complete list of components to be inspected is provided in the Inspection Checklist, provided in Appendix 10- Site Management Forms. If any equipment readings are not within their specified operation range, any equipment is observed to be malfunctioning or the system is not performing within specifications; maintenance and repair, as per the Operation and Maintenance Plan, is required immediately.

4.4 Post-Remediation Media Monitoring and Sampling

Samples shall be collected from the groundwater on a routine basis. Sampling locations, required analytical parameters and schedule are provided in Table C – Post Remediation Sampling Requirements and Schedule below. Modification to the frequency or sampling requirements will require approval from the NYSDEC.

Table C – Post Remediation Sampling Requirements and Schedule

Sampling Location	Analytical Parameters	Schedule
	VOCs (EPA Method 8260)	
Monitoring Well GPMW-34	X	Quarterly
Monitoring Well GPMW-26	X	Quarterly
Monitoring Well IW-2	X	Quarterly
Monitoring Well IW-3	X	Quarterly
Monitoring Well IW-4	X	Quarterly
Monitoring Well IW-5	X	Quarterly
Monitoring Well BMW-02	X	Quarterly
Monitoring Well BMW-03	X	Quarterly
Monitoring Well BMW-04	X	Quarterly

Detailed sample collection and analytical procedures and protocols are provided in Section 4.4.1 below and Appendix 9 – Quality Assurance Project Plan.

4.4.1 Groundwater Sampling

Groundwater monitoring will be performed quarterly to assess the performance of the remedy. Modification to the frequency or sampling requirements will require approval from the NYSDEC. The goals of the groundwater remediation system are to reduce on-site contamination levels via groundwater to an asymptotic state and to mitigate the potential for off-site migration of contaminants via groundwater. If contaminant levels at the property line do not decrease or on-site data remain at levels indicative of an on-site source, additional injections of sodium permanganate or other treatment(s) may be required.

Low-flow sampling methods will be utilized for groundwater sample collection. Groundwater samples will be collected using low-flow sampling techniques in accordance with USEPA Region 1 Low Stress (Low Flow) Purging and Sampling Procedure for the Collection of Groundwater Samples from Monitoring Wells, Revised January 2010. Low flow purging and sampling procedures will be as follows:

1. Low flow purging of the monitoring wells will include collection of water quality indicator parameters. Water quality indicator parameters will be recorded at five (5)-minute intervals during the purging of the well. These water quality indicator parameters will include:

- Water Level Drawdown
- Temperature
- pH
- Dissolved Oxygen
- Specific Conductance
- Oxidation Reduction Potential
- Turbidity

2. Groundwater sampling will commence once the groundwater quality indicator parameters have stabilized for at least three (3) consecutive readings for the following parameters:

- Water Level Drawdown <0.3'
- Temperature - +/- 3%
- pH - +/- 0.1unit
- Dissolved Oxygen - +/-10%
- Specific Conductance - +/-3%
- Oxidation Reduction Potential - +/-10 millivolts
- Turbidity - +/-10% for values greater than 1 NTU

As an alternative to low-flow sampling, passive diffusion bag (PDB) samplers may be used. Groundwater samples that are collected via passive methods (i.e., no-purge) will be collected according to the following procedures:

- PDB samplers will be deployed by hanging in the well at the middle of the well screen unless a low water table, need to deploy multiple samplers or the targeting of a specific depth interval is identified. The PDB samplers will be deployed at least 14 days prior to sampling.
- The PDB samplers will be deployed using a Teflon® coated string or synthetic rope.
- When transferring water from the PDB to sample containers, care will be taken to avoid agitating the sample, since agitation promotes the loss of volatile constituents;
- Any observable physical characteristics of the groundwater (e.g., color, sheen, odor, turbidity) at the time of sampling will be recorded; and
- Weather conditions at the time of sampling will be recorded.

Each groundwater sample collected for laboratory analysis will be labeled and preserved in accordance with Sections 9 and 13 of the QAPP. Laboratory QA/QC

sampling will include analysis of sample blanks as follows: one trip blank for each sampling matrix type (i.e., soil, groundwater, soil vapor). The blanks will be provided at a rate of one per 20 samples collected for each parameter group, or one per shipment, whichever is greater. Additionally, one (1) Matrix Spike/Matrix Spike Duplicate (MS/MSD) and one (1) duplicate sample will be collected and analyzed for each twenty samples collected for each parameter group, or one per shipment, whichever is greater. Duplicate samples will be submitted to the laboratory as blind duplicates.

The samples will be delivered under Chain of Custody procedures to a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP)-certified laboratory. The laboratory will provide a NYSDEC ASP Category B Deliverables data package for all samples except the TO-15 samples (indoor air,, sub-slab soil vapor). For the TO-15 samples, the laboratory will provide a data package using the ASP Category B format. A DUSR will be completed for all ASP-B and ASP-B format laboratory data packages per DER-10. The DUSRs will include the laboratory data summary pages showing corrections made by the data validator and each page will be initialed by the data validator. The laboratory data summary pages will be included even if no changes were made.

Table D summarizes the wells identification number, as well as the purpose, location, depths, diameter and screened intervals of the wells. As part of the groundwater monitoring, on-site wells are sampled to evaluate the effectiveness of the remedial system.

Table D – Monitoring Well Construction Details

Monitoring Well ID	Well Location	Coordinates (longitude/ latitude)	Well Diameter (inches)	Top of Screen (Approx. Depth Below Ground Surface)	Bottom of Screen (Approx. Depth Below Ground Surface)
GPMW-34	Source	43.1804° N 77.6197° W	1	9	14
GPMW-26	Source	43.1805° N 77.6196° W	1	9	14
IW-2	Down gradient	43.1806° N 77.6198° W	2	11	21
IW-3	Down gradient	43.1806° N 77.6199° W	2	12	22
IW-4	Source	43.1805° N 77.6199° W	2	10	20
IW-5	Source	43.1805° N 77.6198° W	2	10	20
BMW-02	Down gradient	43.1809° N 77.6198° W	2	15	24
BMW-03	Down gradient	43.1809° N 77.6197° W	2	15	24
BMW-04	Down gradient	43.1809° N 77.6195° W	2	15	24

If biofouling or silt accumulation occurs in the on-site monitoring wells, the wells will be physically agitated/surged and redeveloped. Additionally, monitoring wells will be properly decommissioned and replaced, if an event renders the wells unusable.

Repairs and/or replacement of wells in the monitoring well network will be performed based on assessments of structural integrity and overall performance.

The NYSDEC will be notified prior to any repair or decommissioning of any monitoring well for the purpose of replacement, and the repair or decommissioning and replacement process will be documented in the subsequent Periodic Review Report. Well decommissioning without replacement will be done only with the prior approval of the NYSDEC. Well abandonment will be performed in accordance with NYSDEC's guidance entitled "CP-43: Groundwater Monitoring Well Decommissioning Procedures." Monitoring wells that are decommissioned because they have been rendered unusable will be replaced in kind in the nearest available location, unless otherwise approved by the NYSDEC.

The sampling frequency may only be modified with the approval of the NYSDEC. This SMP will be modified to reflect changes in sampling plans approved by the NYSDEC.

Deliverables for the groundwater monitoring program are specified in Section 7.0 – Reporting Requirements.

4.4.2 Monitoring and Sampling Protocol

All sampling activities will be recorded in a field book and associated sampling log as provided in Appendix 10 - Site Management Forms. Other observations (e.g., groundwater monitoring well integrity, etc.) will be noted on the sampling log. The sampling log will serve as the inspection form for the monitoring network.

4.0 OPERATION AND MAINTENANCE PLAN

4.1 General

This Operation and Maintenance Plan provides a brief description of the measures necessary to operate, monitor and maintain the mechanical components of the remedy selected for the site. This Operation and Maintenance Plan:

- Includes the procedures necessary to allow individuals unfamiliar with the site to operate and maintain the SSDS systems;
- Will be updated periodically to reflect changes in site conditions or the manner in which the SSDS systems are operated and maintained.

Further detail regarding the Operation and Maintenance of the SSDS is provided in Appendix 9 - Operation and Maintenance Manual. A copy of this Operation and Maintenance Manual, along with the complete SMP, is to be maintained at the site. This Operation and Maintenance Plan is not to be used as a stand-alone document, but as a component document of this SMP.

4.2 Operation and Maintenance of SSDS

The following sections provide a description of the operations and maintenance of SSDS. Cut-sheets and as-built drawings for SSDS are provided in Appendix 9 - Operations and Maintenance Manual.

5.2.1 System Start-Up and Testing

After the SSDS is installed or modified a start-up test will be performed to evaluate the effectiveness of the SSDS. The first step will be to start each of the SSDS fans on the roof of the building to document that the fans are functioning properly. Once the fans are fully operational at the roof level, a digital micromanometer will be used to collect vacuum readings from the pressure field extension (PFE) monitoring points in the

basement of the building. PFE measurements will need to achieve a minimum of 0.01 inches of water vacuum in order to meet the performance requirements of the October 2006 NYSDOH Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York. If these criteria are not met, adjustments will be made to the SSDS fans to increase air flow and vacuum influence including replacement of the fans with larger fans, if necessary.

The system testing described above will be conducted if, in the course of the SSDS system lifetime, the system goes down or significant changes are made to the system and the system must be restarted.

5.2.2 Routine System Operation and Maintenance

All fans must be kept in continuous operation. Fans must restart automatically in event of power loss. Fan gauges must be regularly inspected to verify that values have not changed significantly.

5.2.3 Non-Routine Operation and Maintenance

In the event of unusual fan noise, failure to start, physical damage or repeated circuit breaker trip, turn fan off and service or replace. Any changes in the structure, HVAC systems, slab conditions, etc. will require a re-evaluation of the SSDS.

5.2.4 System Monitoring Devices and Alarms

The SSDS system has an alarm to indicate that the system is not operating properly. In the event that warning device is activated, applicable maintenance and repairs will be conducted, as specified in the Operation and Maintenance Plan, and the SSDS system will be restarted. Operational problems will be noted in the Periodic Review Report to be prepared for that reporting period.

6.0 PERIODIC ASSESSMENTS/EVALUATIONS

6.1 Climate Change Vulnerability Assessment

Increases in both the severity and frequency of storms/weather events, an increase in sea level elevations along with accompanying flooding impacts, shifting precipitation patterns and wide temperature fluctuation, resulting from global climactic change and instability, have the potential to significantly impact the performance, effectiveness and protectiveness of a given site and associated remedial systems. Vulnerability assessments provide information so that the site and associated remedial systems are prepared for the impacts of the increasing frequency and intensity of severe storms/weather events and associated flooding.

Given the urban nature of the Site and surrounding area, the distance from and elevation above nearby water bodies (e.g., the Genesee River), and the presence of sufficient municipal storm water collection infrastructure, vulnerability assessments do not appear to be warranted.

6.2 Green Remediation Evaluation

NYSDEC's DER-31 Green Remediation requires that green remediation concepts and techniques be considered during all stages of the remedial program including site management, with the goal of improving the sustainability of the cleanup and summarizing the net environmental benefit of any implemented green technology. This section of the SMP provides a summary of any green remediation evaluations to be completed for the site during site management, and as reported in the Periodic Review Report (PRR).

The Green Remediation Evaluation will include the following items:

- Energy usage by SSDS;

- Fossil fuel usage associated with travel to and from the Site for sampling and monitoring activities;
- Waste generation from groundwater sampling events (i.e., purge and decontamination water); and
- Water usage for decontamination of sampling equipment.

6.2.1 Timing of Green Remediation Evaluations

For major remedial system components, green remediation evaluations and corresponding modifications will be undertaken as part of a formal Remedial System Optimization (RSO), or at any time that the Project Manager feels appropriate, e.g. during significant maintenance events or in conjunction with storm recovery activities.

Modifications resulting from green remediation evaluations will be routinely implemented and scheduled to occur during planned/routine operation and maintenance activities. Reporting of these modifications will be presented in the PRR.

6.2.2. Remedial Systems

Remedial systems will be operated properly considering the current site conditions to conserve materials and resources to the greatest extent possible. Consideration will be given to operating rates and use of reagents and consumables. Spent materials will be sent for recycling, as appropriate. The SSDS operation will be evaluated as part of the Green Remediation Evaluation.

6.2.3 Frequency of System Checks, Sampling and Other Periodic Activities

Transportation to and from the Site and use of consumables in relation to visiting the Site in order to conduct system checks and or collect samples and shipping samples to a laboratory for analyses have direct and/or inherent energy costs. The schedule and/or

means of these periodic activities have been prepared so that these tasks can be accomplished in a manner that does not impact remedy protectiveness but reduces expenditure of energy or resources.

Consideration shall be given to:

- Reduced sampling frequencies;
- Reduced site visits and system checks;
- Coordination/consolidation of activities to maximize foreman/labor time; and
- Use of mass transit for site visits, where available.

6.2.4 Metrics and Reporting

As discussed in Section 7.0 information on energy usage, solid waste generation, transportation and shipping, water usage and land use and ecosystems will be recorded to facilitate and document consistent implementation of green remediation during site management and to identify corresponding benefits; a set of metrics has been developed.

6.3 Remedial System Optimization

A Remedial Site Optimization (RSO) study will be conducted any time that the NYSDEC or the remedial party requests in writing that an in-depth evaluation of the remedy is needed. An RSO may be appropriate if any of the following occur:

- The remedial actions have not met or are not expected to meet RAOs in the time frame estimated in the Decision Document;
- The management and operation of the remedial system is exceeding the estimated costs;
- The remedial system is not performing as expected or as designed;
- Previously unidentified source material may be suspected;
- Plume shift has potentially occurred;

- Site conditions change due to development, change of use, change in groundwater use, etc.;
- There is an anticipated transfer of the site management to another remedial party or agency; and
- A new and applicable remedial technology becomes available.

An RSO will provide a critique of a site's conceptual model, give a summary of past performance, document current cleanup practices, summarize progress made toward the site's cleanup goals, gather additional performance or media specific data and information and provide recommendations for improvements to enhance the ability of the present system to reach RAOs or to provide a basis for changing the remedial strategy.

7.0. REPORTING REQUIREMENTS

7.1 Site Management Reports

All site management inspection, maintenance and monitoring events will be recorded on the appropriate site management forms provided in Appendix 10. These forms are subject to NYSDEC revision.

All applicable inspection forms and other records, including media sampling data and system maintenance reports, generated for the site during the reporting period will be provided in electronic format to the NYSDEC in accordance with the requirements of Table E and summarized in the Periodic Review Report.

Table E: Schedule of Monitoring/Inspection Reports

Task/Report	Reporting Frequency*
Inspection Report	Annually
Periodic Review Report	Annually, or as otherwise determined by the Department

* The frequency of events will be conducted as specified until otherwise approved by the NYSDEC.

All interim monitoring/inspections reports will include, at a minimum:

- Date of event or reporting period;
- Name, company, and position of person(s) conducting monitoring/inspection activities;
- Description of the activities performed;
- Where appropriate, color photographs or sketches showing the approximate location of any problems or incidents noted (included either on the checklist/form or on an attached sheet);
- 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 contaminant conditions have changed since the last reporting event.

Routine maintenance event reporting forms will include, at a minimum:

- Date of event;
- Name, company, and position of person(s) conducting maintenance activities;
- Description of maintenance activities performed;
- Any modifications to the system;
- Where appropriate, color photographs or sketches showing the approximate location of any problems or incidents noted (included either on the checklist/form or on an attached sheet); and,
- Other documentation such as copies of invoices for maintenance work, receipts for replacement equipment, etc., (attached to the checklist/form).

Non-routine maintenance event reporting forms will include, at a minimum:

- Date of event;
- Name, company, and position of person(s) conducting non-routine maintenance/repair activities;
- Description of non-routine activities performed;
- Where appropriate, color photographs or sketches showing the approximate location of any problems or incidents (included either on the form or on an attached sheet); and

- Other documentation such as copies of invoices for repair work, receipts for replacement equipment, etc. (attached to the checklist/form).

Data will be reported in digital format as determined by the NYSDEC. Currently, data is to be supplied electronically and submitted to the NYSDEC EQuIS™ database in accordance with the requirements found at this link http://www.dec.ny.gov/chemical/62440.html.

7.2 Periodic Review Report

A Periodic Review Report (PRR) will be submitted to the Department beginning sixteen (16) months after the Certificate of Completion is issued. After submittal of the initial Periodic Review Report, the next PRR shall be submitted annually to the Department or at another frequency as may be required by the Department. 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 1 - Environmental Easement. The report will be prepared in accordance with NYSDEC's 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 site management forms and other records generated for the site during the reporting period in the NYSDEC-approved electronic format, if not previously submitted.
- 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, etc.), 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 in digital format as determined by the NYSDEC. Currently, data is supplied electronically and submitted to the NYSDEC EQuIS^{TM} database in accordance with the requirements found at this link: http://www.dec.ny.gov/chemical/62440.html.

- A site evaluation, which includes the following:

  – The compliance of the remedy with the requirements of the site-specific 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 and Sampling Plan for the media being monitored;

  – Recommendations regarding any necessary changes to the remedy and/or Monitoring and Sampling Plan; and

  – Trends in contaminant levels in the affected media will be evaluated to determine if the remedy continues to be effective in achieving remedial goals as specified by the Decision Document.

  – The overall performance and effectiveness of the remedy.

7.2.1 Certification of Institutional and Engineering Controls

Following the last inspection of the reporting period, a Professional Engineer licensed to practice in New York State will prepare, and include in the Periodic Review Report, the following certification as per the requirements of NYSDEC DER-10:

"*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 and/or engineering 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 easement;*

- *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, [name], of [business address], am certifying as [Owner/Remedial Party or Owner's/Remedial Party's Designated Site Representative]. [I have been authorized and designated by all site owners/remedial parties to sign this certification] for the site."

The signed certification will be included in the Periodic Review Report.

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

7.3 Corrective Measures Work 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 Work 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 Work Plan until it has been approved by the NYSDEC.

7.4 Remedial Site Optimization Report

In the event that an RSO is to be performed (see Section 6.3, upon completion of an RSO, an RSO report must be submitted to the Department for approval. The RSO report will document the research/ investigation and data gathering that was conducted, evaluate the results and facts obtained, present a revised conceptual site model and present recommendations. RSO recommendations are to be implemented upon approval from the NYSDEC. Additional work plans, design documents, HASPs etc., may still be required to implement the recommendations, based upon the actions that need to be taken. A final engineering report and update to the SMP may also be required.

The RSO report will be submitted, in electronic format, to the NYSDEC Central Office, Regional Office in which the site is located, Site Control and the NYSDOH Bureau of Environmental Exposure Investigation.

8.0 REFERENCES

6NYCRR Part 375, Environmental Remediation Programs. December 14, 2006.

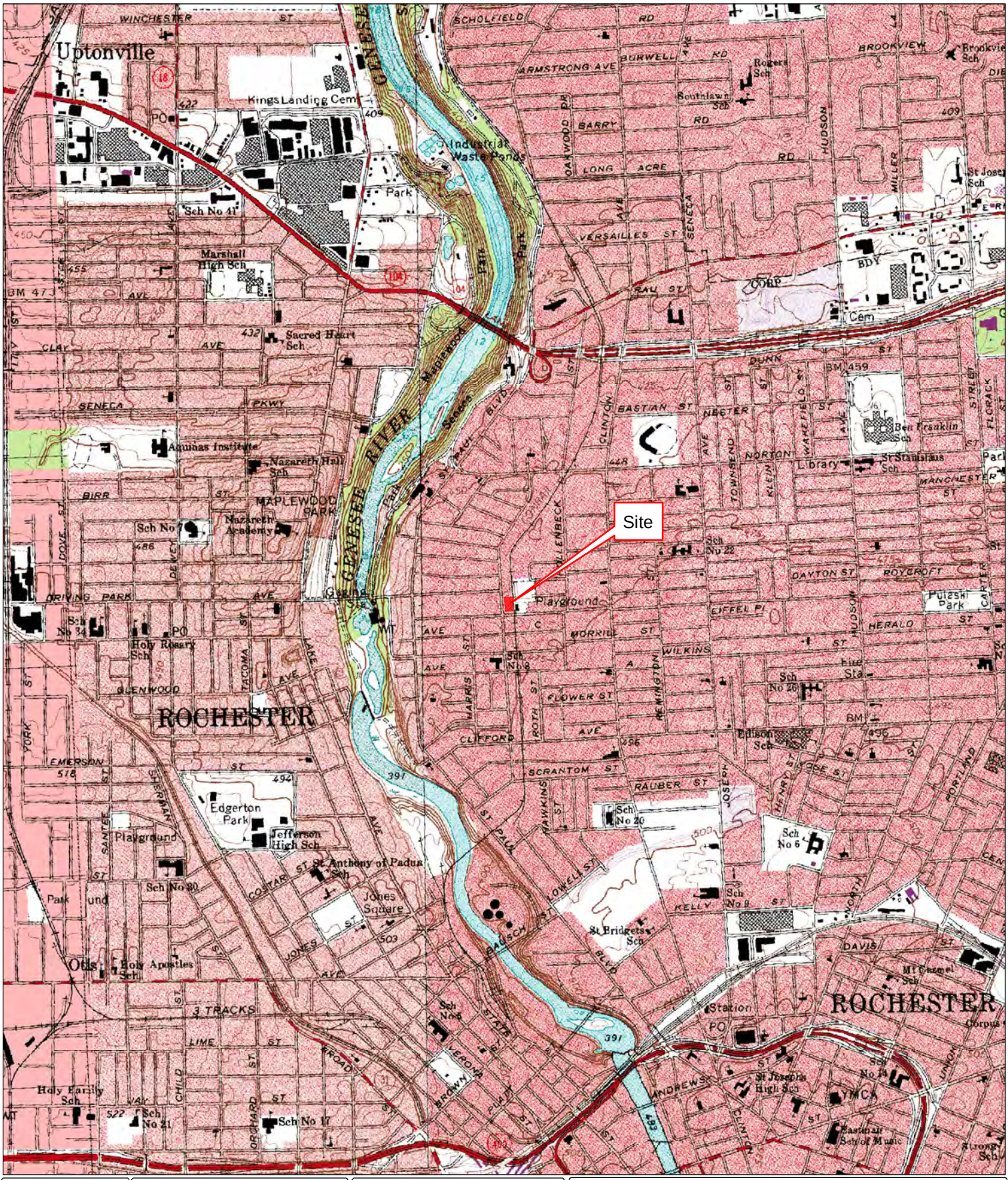
NYSDEC DER-10 – "Technical Guidance for Site Investigation and Remediation".

NYSDEC, 1998. Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1. June 1998 (April 2000 addendum).

LaBella Associates, D.P.C., Interim Remedial Measures Work Plan, April 2015

LaBella Associates, D.P.C. Remedial Investigation Report, Former Michelsen Furniture Co. Site, June 2015

LaBella Associates, D.P.C., Remedial Alternatives Analysis/Remedial Action Work Plan, Former Michelsen Furniture Co. Site, June 2015



PROJECT/DRAWING NUMBER

214539

FIGURE 1

DRAWING TITLE

SITE LOCATION MAP

ISSUED FOR: DRAFT

DATE: 09/11/2015

DESIGNED BY: DKE

DRAWN BY: DKE

REVIEWED BY:

PROJECT/CLIENT

Site Management Plan

Former Michelsen Furniture Co. Site
182 Avenue D & 374 Conkey Ave.
Rochester, New York

Client: M+M Housing Development Fund Corp. as Nominee for Mills and Michelsen LLC

LABELLA Associates, D.P.C.
300 STATE STREET
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P: (585) 454-6110
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0 1,050 2,100 4,200 Feet

1 inch = 2,000 feet

N W E S

Path: J:\Urban League of Rochester Economic Development\214539 - Michelson BCP Site RI & Remediation\Drawings\SMP\Fig. 1 - Site location.mxd

User: dengert

Path: J:\Urban League of Rochester Economic Development\214539 - Michelson BCP Site RI & Remediation\Drawings\SMP\Fig. 2 - Site layout map.mxd

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Site Management Plan

Former Michelsen Furniture Co. Site
182 Avenue D &
374 Conkey Ave.
Rochester, New York

M+M Housing Development Fund Corp. as Nominee for Mills and Michelsen LLC

Title:
Adjacent Property Information

N W E S

100 80

1 inch = 100 feet

214539

Figure 2

Path: J:\Urban League of Rochester Economic Development\214539 - Michelson BCP Site RI & Remediation\Drawings\SMP\Fig. 3 - GW Contours.mxd

LABELLA Associates, D.P.C.
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ROCHESTER, NY 14614
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F: (585) 454-3066
www.labellapc.com

Site Management Plan

Former Michelsen Furniture Co. Site
182 Avenue D &
374 Conkey Ave.
Rochester, New York

M+M Housing Development Fund Corp. as Nominee for Mills and Michelsen LLC

Title:

Groundwater Elevation Contouring

N W E S

10 0 10

1 inch = 25 feet

214539

Figure 3

Legend

- 2015 RIWP Monitoring Well
- 2015 RIWP Soil Boring
- 2015 RIWP Interface Well
- 2015 RIWP Bedrock Well
- Previous Monitoring Well Locations
- Previous Bedrock Well Location
- SiteBoundary

Notes:
1. Site Boundary determined using 2011 City of Rochester Tax Parcel data.
2. 2009 Aerial photograph obtained from NYS GIS Clearinghouse.

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Site Management Plan

Former Michelsen Furniture Co. Site
182 Avenue D &
374 Conkey Ave.
Rochester, New York

M+M Housing Development Fund Corp. as Nominee for Mills and Michelsen LLC

Title:

RI Boring & Monitoring Well Locations

N W E S

10 0 10

1 inch = 25 feet

214539

Figure 4

Path: J:\Urban League of Rochester Economic Development\214539 - Michelson BCP Site RI & Remediation\Drawings\SMP\Fig. 4 Exploration Locations.mxd

Path: J:\Urban League of Rochester Economic Development\214539 - Michelson BCP Site RI & Remediation\Drawings\SMP\Fig 5 - Soil Exceedences.mxd

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Site Management Plan

Former Michelsen Furniture Co. Site
182 Avenue D &
374 Conkey Ave.
Rochester, New York

M+M Housing Development Fund Corp. as Nominee for Mills and Michelsen LLC

Title:

Location of Soil Samples Exceeding Part 375-6.8 SCOs

N
W
E
S

10 0 10

1 inch = 25 feet

214539

Figure 5

Path: J:\Urban League of Rochester Economic Development\214539 - Michelson BCP Site RI & Remediation\Drawings\SMP\Fig 6 - GW Exeedences.mxd

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Site Management Plan

Former Michelsen Furniture Co. Site
182 Avenue D &
374 Conkey Ave.
Rochester, New York

M+M Housing Development Fund Corp. as Nominee for Mills and Michelsen LLC

Title:

Location of Groundwater VOC Samples Exceeding Part 703 Groundwater Standards

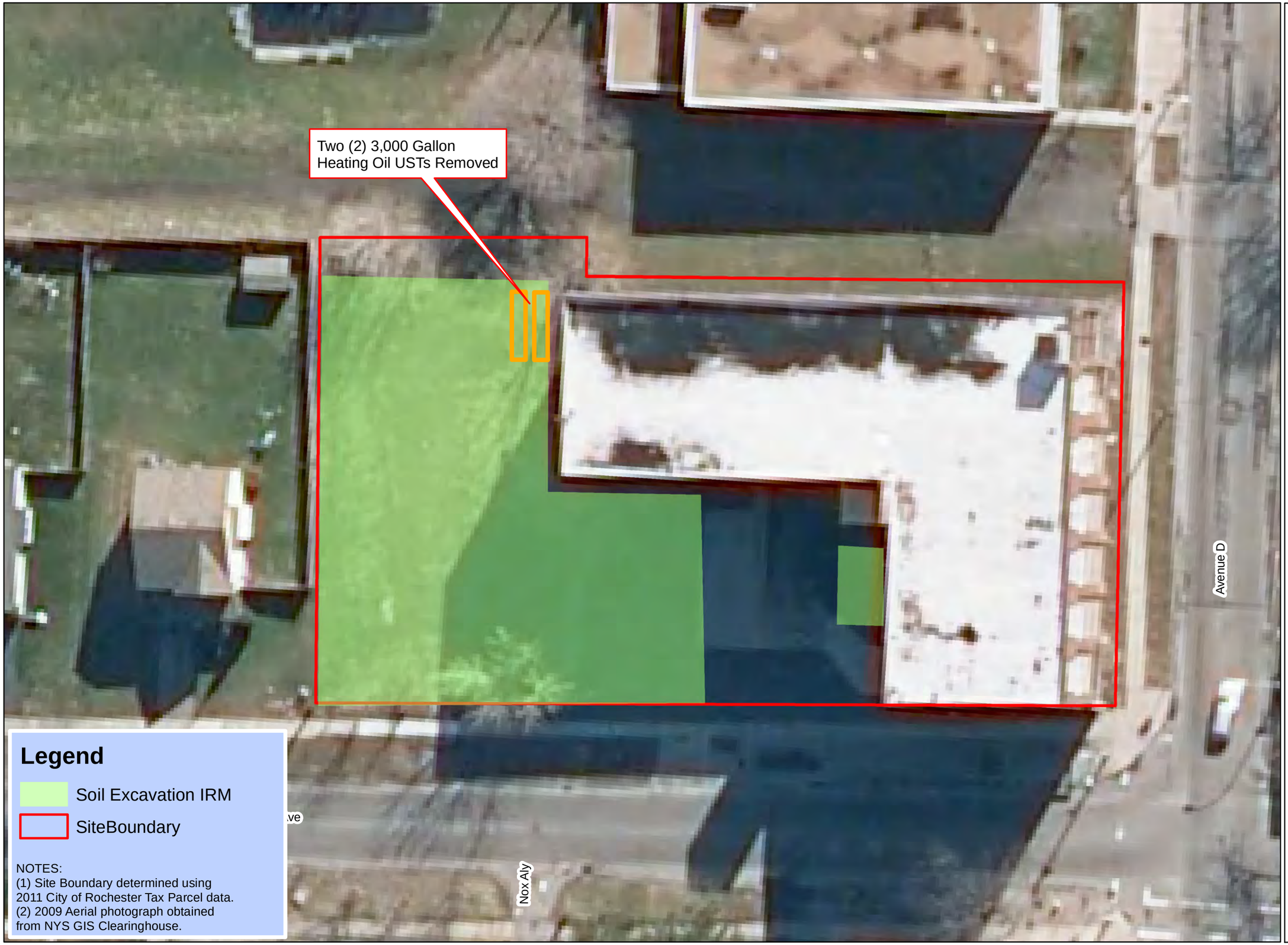
N W E S

10 0 10

1 inch = 25 feet

214539

Figure 6



Path: J:\Urban League of Rochester Economic Development\214539 - Michelson BCP Site RI & Remediation\Drawings\SMP\Fig. 7 - IRMs.mxd

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Site Management Plan

Former Michelsen Furniture Co. Site
182 Avenue D &
374 Conkey Ave.
Rochester, New York

M+M Housing Development Fund Corp. as Nominee for Mills and Michelsen LLC

Title:

IRMs Implemented

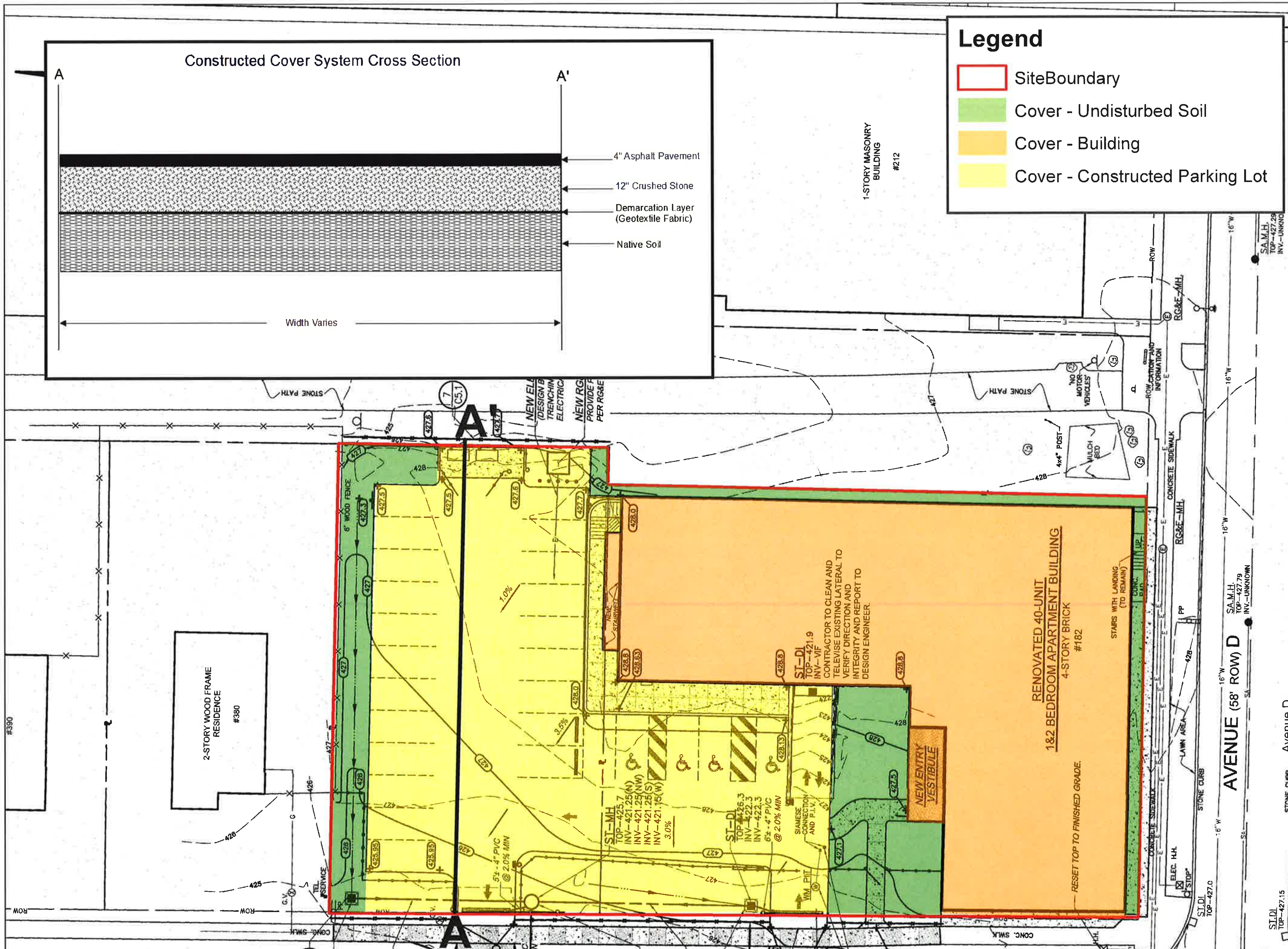
N W E S

10 0 10

1 inch = 25 feet

214539

Figure 7



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Associates, D.P.C.

Site Management Plan

Former Michelsen Furniture Co. Site
182 Avenue D &
374 Conkey Ave.
Rochester, New York

M+M Housing Development Fund Corp. as Nominee for Mills and Michelsen LLC

Title:

Cover System

It is a violation of New York Education Law Article 145 Sec.7209, for any person, unless acting under the direction of a licensed architect, professional engineer, or land surveyor, to alter an item in any way. If an item bearing the seal of an architect, engineer, or land surveyor is altered; the altering architect, engineer, or land surveyor shall affix to the item their seal and notation "altered by" followed by their signature and date of such alteration, and a specific description of the alteration.

10 0 10
1 inch = 25 feet

214539

Figure 8

Path: J:\Urban League of Rochester Economic Development\214539 - Michelson BCP Site RI & Remediation\Drawings\SMP\Fig. 8 - cover.mxd

Path: J:\Urban League of Rochester Economic Development\214539 - Michelson BCP Site RI & Remediation\Drawings\SMP\Fig 10 - Post Remediation GW Exeedences.mxd

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Site Management Plan

Former Michelsen Furniture Co. Site

182 Avenue D
&
374 Conkey Avenue
Rochester, New York

Urban League of Rochester Economic Develoment Corporation

Title:

Post Remediation VOC Samples Exceeding Part 703 Groundwater Standards

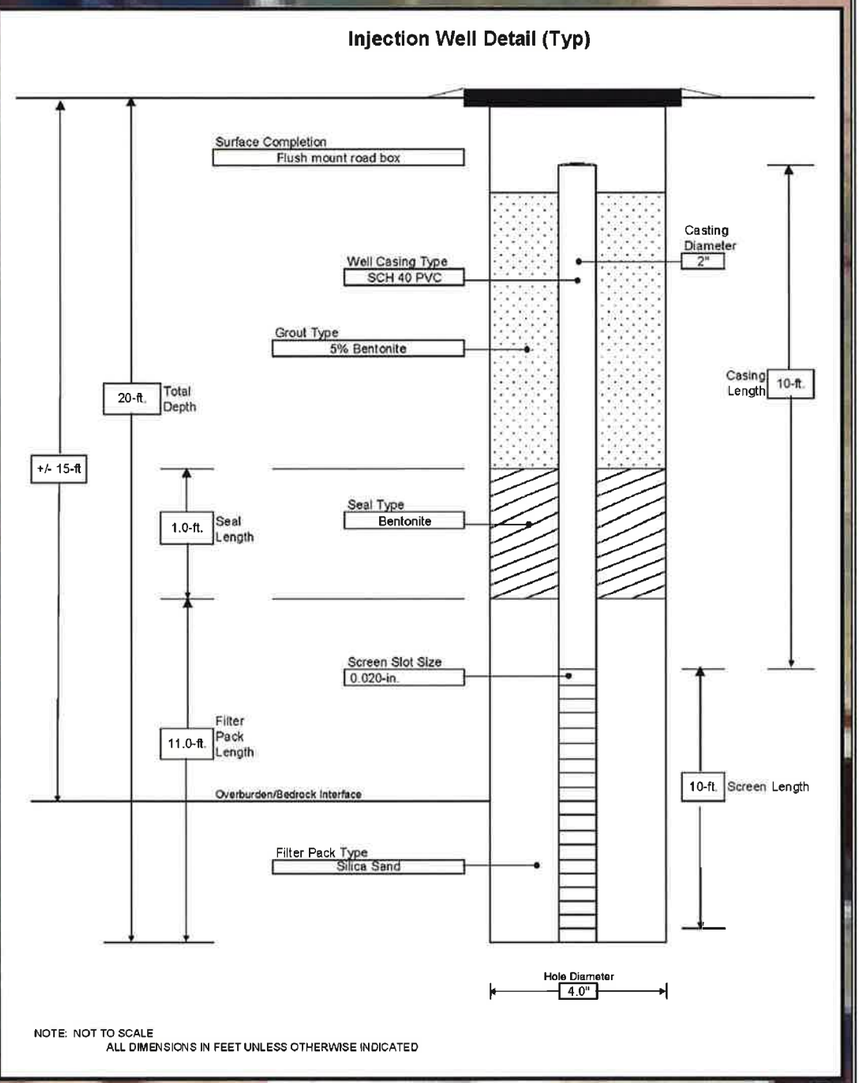
10 0 10

1 inch = 25 feet

214539

Figure 10

Injection Well Detail (Typ)



NOTE: NOT TO SCALE
ALL DIMENSIONS IN FEET UNLESS OTHERWISE INDICATED

Legend

- Remedial Injection Wells (RIW)
- Overburden Monitoring Wells
- 2015 RIWP Bedrock Well
- SiteBoundary

Notes:
1. Site Boundary determined using 2011 City of Rochester Tax Parcel data.
2. 2009 Aerial photograph obtained from NYS GIS Clearinghouse.

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Site Management Plan

Former Michelsen Furniture Co. Site
182 Avenue D &
374 Conkey Ave.
Rochester, New York

M+M Housing Development Fund Corp. as Nominee for Mills and Michelsen LLC

Title:

Injection Well Location and Construction Diagram

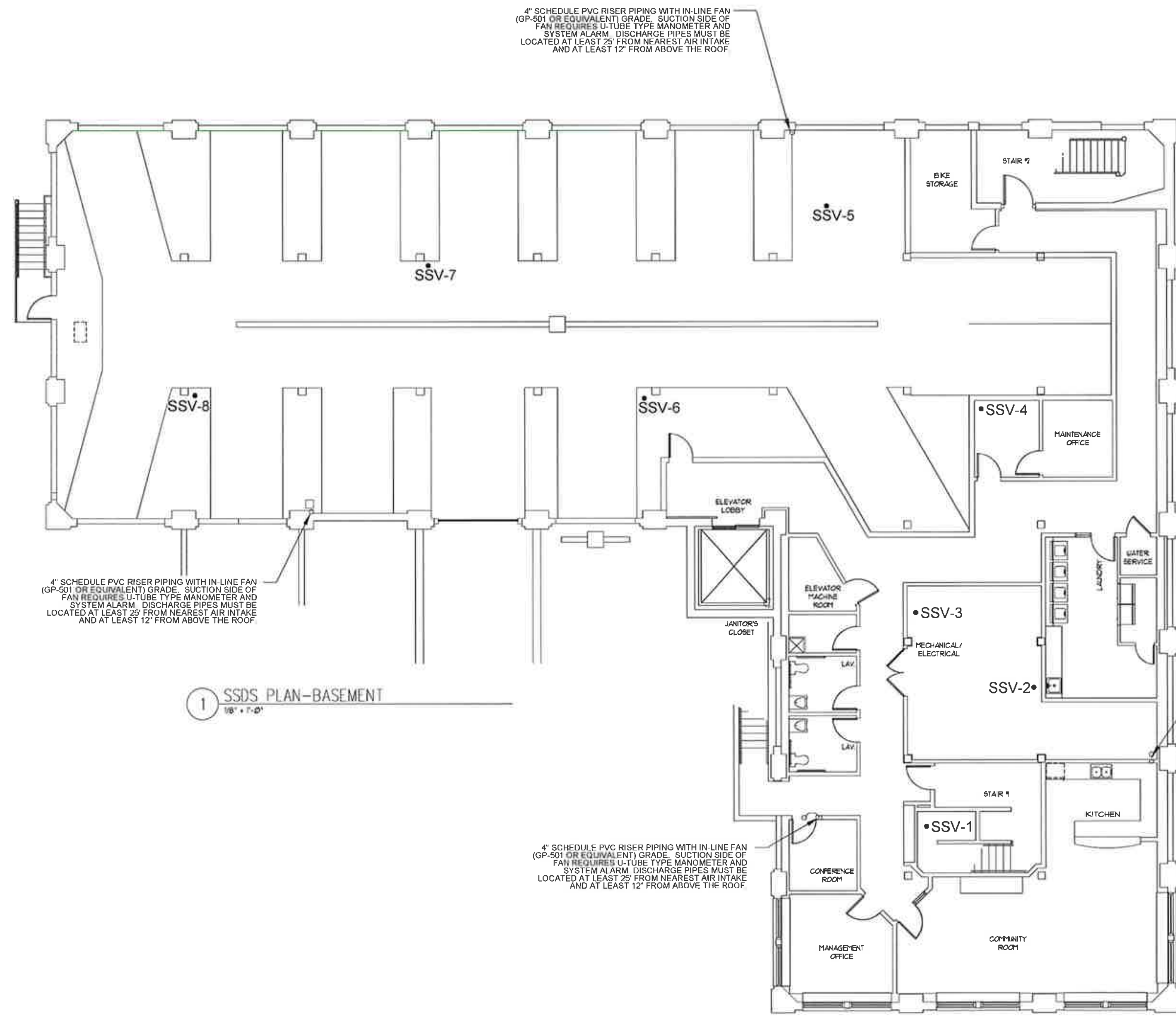
N W E S

10 0 10
1 inch = 25 feet

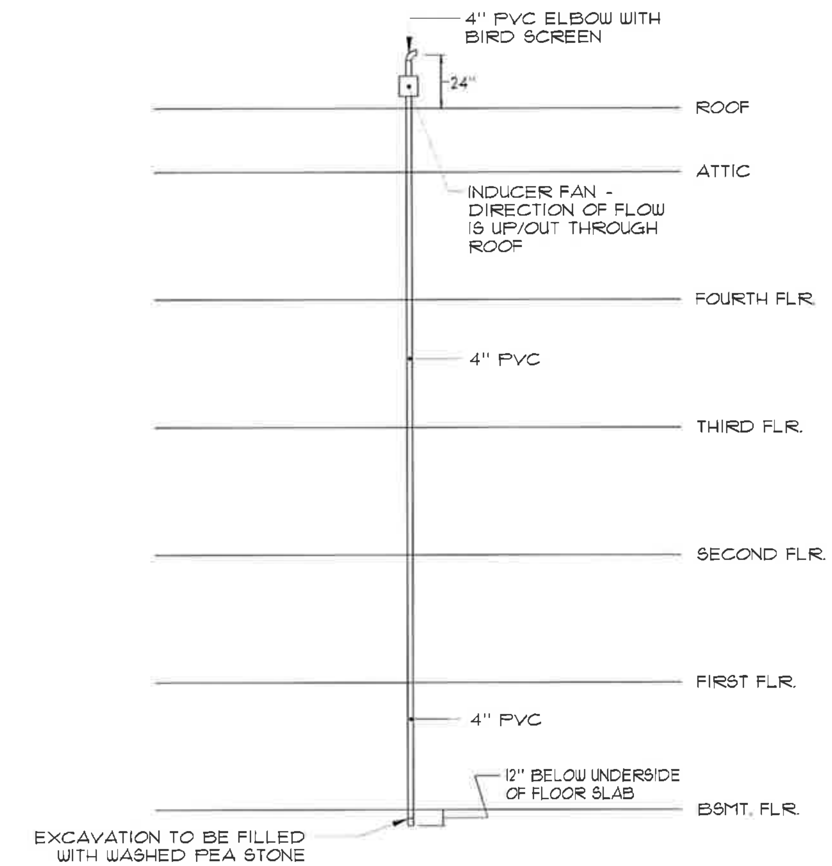
214539

Figure 9

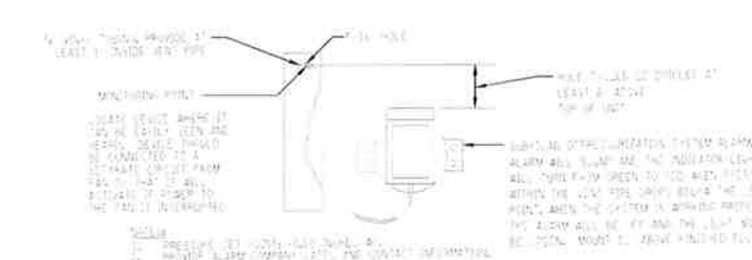
Path: J:\Urban League of Rochester Economic Development\214539 - Michelson BCP Site RI & Remediation\Drawings\SMP\Fig 9 - injection wells.mxd



1 SSDS PLAN-BASEMENT
1/8" = 1'-0"



2 SSDS EXHAUST PROFILE DETAIL
1/8" = 1'-0"



3 SUBSLAB DEPRESSURIZATION SYSTEM ALARM DETAIL
NO SCALE

NOTES:

1. EXHAUST PIPES TERMINATE APPROXIMATELY 24 INCHES ABOVE THE SURFACE OF THE ROOF; IN A LOCATION AT LEAST 25 FEET FROM ANY AIR INTAKES, AT LEAST 10 FEET AWAY FROM ANY WINDOW, AIR INTAKES, OR OTHER OPENING INTO THE CONDITIONED SPACES OF THE BUILDING THAT IS LESS THAN 2 FEET BELOW THE EXHAUST POINT, AND 10 FEET FROM ANY ADJOINING OR ADJACENT BUILDINGS.
2. ALL EXPOSED AND VISIBLE INTERIOR AND EXTERIOR VENT PIPES ARE IDENTIFIED WITH A LABEL AT LEAST EVERY 25-FEET.
3. EACH VERTICAL STANDPIPE IS EQUIPPED WITH A MANOMETER (VACU-RAY VACUMETER U-TUBE TYPE MANOMETER OR APPROVED EQUIVALENT) BELOW THE FAN, TO DEMONSTRATE THAT PRESSURE WITHIN THE PIPE IS BELOW ATMOSPHERIC PRESSURE.
4. EACH FAN IS EQUIPPED WITH A PROMINENTLY POSITIONED VISIBLE OR AUDIBLE WARNING SYSTEM TO ALERT THE BUILDING OCCUPANT IF THERE IS LOSS OF PRESSURE OR AIR FLOW IN THE VENT PIPE, OR IF THE FAN CEASES OPERATION. THE WARNING SYSTEM WAS INSTALLED ON A SEPARATE CIRCUIT SO THAT IN THE EVENT THE FAN LOSES POWER, THE WARNING SYSTEM WILL STILL ACTIVATE.
5. RISER PIPE SHOWN IS 4-INCH SCHEDULE 40 PVC PIPE.

STATE OF NEW YORK · DANIEL P. NOLL · No. 081636 · LICENSED PROFESSIONAL ENGINEER

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PROJECT/CLIENT
FORMER MICHELSEN FURNITURE CO. SITE
BCP SITE #C828189
182 AVENUE D & 374 CONKEY STREET
ROCHESTER, NEW YORK

DRAWING TITLE
SUB-SLAB DEPRESSURIZATION SYSTEM DETAILS

ISSUED FOR: STET
DESIGNED BY: DKE
DRAWN BY: CTJ
REVIEWED BY: DPN
DATE: FEBRUARY 2015

PROJECT/DRAWING NUMBER
214539

FIGURE 11

APPENDIX 1 – ENVIRONMENTAL EASEMENT

MONROE COUNTY CLERK'S OFFICE

ROCHESTER, NY

THIS IS NOT A BILL. THIS IS YOUR RECEIPT

Receipt # 1307624

Index DEEDS

Book 11599 Page 427

No. Pages : 11

Instrument EASEMENT AGREEMENT

Date : 10/01/2015

Time : 04:26:21PM

Control # 201510010816

TT # TT0000003761

Ref 1 #

Employee : TracyC

Return To:
BOX 30 AMY REICHHART

M7M HOUSING DEVELOPMENT FUND CORP
MILLS AND MICHELSEN LLC

PEOPLT OF THE STATE OF NEW YORK
COMMISSIONER OF THE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
NYSDEC

COUNTY FEE TP584	$	5.00
COUNTY FEE NUMBER PAGES	$	50.00
RECORDING FEE	$	45.00
STATE FEE TRANSFER TAX	$	0.00

Total $ 100.00

State of New York

MONROE COUNTY CLERK'S OFFICE

WARNING - THIS SHEET CONSTITUTES THE CLERKS ENDORSEMENT, REQUIRED BY SECTION 317-a(5) & SECTION 319 OF THE REAL PROPERTY LAW OF THE STATE OF NEW YORK. DO NOT DETACH OR REMOVE.

TRANSFER AMT

TRANSFER AMT $1.00

CHERYL DINOLFO

MONROE COUNTY CLERK

PI182-201510010816-11

10

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

THIS INDENTURE made this 14th day of SEPTEMBER 2015 between Owner(s) M+M Housing Development Fund Corp., (the "Grantor Fee Owner") having an office at 312 State Street, Rochester, New York 14608, County of Monroes, State of New York, and Mills and Michelsen LLC, (the "Grantor Beneficial Owner), having an office at 312 State Street, Rochester, New York 14608, County of Monroe, State of New York (collectively, 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,

Box 30 Amy Reichhart

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 182 Avenue D in the City of Rochester, County of Monroe and State of New York, known and designated on the tax map of the County Clerk of Monroe as tax map parcel numbers: Section 091.77 Block 2 Lot 31.001, being the same as that property conveyed to Grantor by deeds dated September 17, 2014 and October 16, 2014 and recorded in the Monroe County Clerk's Office in Liber and Page 11456/217 and 11456/211, respectively. The property subject to this Environmental Easement (the "Controlled Property") comprises approximately 0.630 +/- acres, and is hereinafter more fully described in the Land Title Survey dated January 30, 2014 and last revised June 15, 2015 prepared by Dana C. Grover, NYSPLS of Grover & Bates Associates, which will be attached to the Site Management Plan. The Controlled Property description is set forth in and attached hereto as

Schedule A;

WHEREAS, Grantor Beneficial Owner, is the owner of the beneficial interest in the Controlled Property being the same as a portion of that beneficial interest conveyed to Grantor Beneficial Owner by means of a Declaration of Interest and Nominee Agreement dated October 16, 2014 and recorded in the Monroe County Clerk's Office in Liber and Page 11456/224 ; 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: C828189-09-14 as amended May 20, 2015, 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 Monroe 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 b 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: C828189
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 Fee Owner has caused this instrument to be signed in its name.

M+M Housing Development Fund Corp.:

By: _____

Print Name: Carolyn Vitale

Title: Vice Pres/Sec Date: 8/26/2015

Grantor Fee Owner's Acknowledgment

STATE OF NEW YORK)
) ss:
COUNTY OF)

On the 26 day of August, in the year 2015, before me, the undersigned, personally appeared Carolyn Vitale, 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

STEPHANIE L. YOUNG
NOTARY PUBLIC-STATE OF NEW YORK
No. 01YO6089740
Qualified in Monroe County
My Commission Expires March 31, 2019

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

Mills and Michelsen LLC:

By: _____

Print Name: Carolyn Vitale

Title: Vice Pres / Sec. Date: 8/26/2015

Grantor Beneficial Owner's Acknowledgment

STATE OF NEW YORK)
) ss:
COUNTY OF)

On the 26 day of August, in the year 20 __, before me, the undersigned, personally appeared Carolyn Vitale, 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

STEPHANIE L. YOUNG
NOTARY PUBLIC-STATE OF NEW YORK
No. 01YO6089740
Qualified in Monroe County
My Commission Expires March 31, 2019

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

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

Grantee's Acknowledgment

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

On the 14th day of September, 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

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

SCHEDULE "A" PROPERTY DESCRIPTION

Perimeter Description of 182 Ave. D
and 374 Conkey Avenue

All that tract or parcel of land being part of Lots 1,2,5,6 and all of Lots 3 and 4 of the C. A. Davis subdivision situate in the City of Rochester, County of Monroe, State of New York bounded and described as follows. Beginning at the intersection of the north line of Avenue D with the east line of Conkey Avenue; thence

1) Easterly and along the northerly line of Avenue D for a distance of 117.82 feet to a point; thence

2) Northerly turning an interior angle to the right of 89° 28' 30" for a distance of 149.87 feet to a point; thence

3) Easterly turning an interior angle to the right of 270° 31' 34" for a distance of 12.19 feet to a point; thence

4) Northerly turning an interior angle to the right of 89° 33' 01" for a distance of 75.00 feet to a point; thence

5) Westerly turning an interior angle to the right of 90° 26' 55" for a distance of 130.47 feet to the easterly line of Conkey Avenue; thence

6) Southerly turning an interior angle of 89° 23' 00" and along the easterly line of Conkey Avenue for a distance of 224.87 feet to the point of beginning.

Containing therein 0.630 acres.

SCHEDULE A

Parcel One (374 Conkey Avenue - Tax Map No. 091.77-2-32):

ALL THAT TRACT OR PARCEL OF LAND situate in the City of Rochester, County of Monroe and State of New York, on the east side of Conkey Avenue and more particularly described as follows Beginning at a point in the east line of Conkey Avenue which point is two hundred twenty-four and eighty-seven hundredths (224.87) feet north of the intersection of said east line of Conkey Avenue with the north line of Avenue D; thence easterly and in a line parallel to the north line of property now owned by Conkey Properties, Inc. and seventy-five (75) feet north thereof a distance of one hundred thirty (130) feet more or less to the west line of property owned by the New York Central Railroad; thence southerly and along said west line of New York Central Railroad property a distance of seventy-five (75) feet more or less to the point of intersection of said New York Central Railroad west line and of said Conkey Properties, Inc. north line extended easterly; thence westerly along the north line of said property owned by Conkey Properties Inc. and said north line extended a distance of one hundred thirty (130) feet more or less to the east line of Conkey Avenue; thence northerly along said east line of Conkey Avenue a distance of seventy-five (75) feet to the place of beginning.

Together with an easement across the easterly portion of the land conveyed by deed recorded in the Monroe County Clerk's Office in Liber 3299 of Deeds at page 240 for the purpose of ingress and egress to the parcel herein conveyed to and from the tracks and property of the New York Central Railroad over and upon a side track or spur track.

Parcel Two (182 Avenue D - Tax Map No. 091.77-2-31):

All that tract or parcel of land, situate in the City of Rochester, County of Monroe and State of New York, bounded and described as follows: Commencing at the point of intersection of the northerly line of Avenue D and the easterly line of Conkey Avenue, and running thence

1. easterly a distance of 117.82 feet along said northerly line of Avenue D; thence

2. northerly on a line making an interior angle with course (1) of 89° 28' 30" a distance of 149.87 feet; thence

3. westerly on a line making an interior angle with course (2) 90° 21' 30" a distance of 118.49 feet to the easterly line of Conkey Avenue; thence

4. southerly on a line making an interior angle with course (3) of 89° 23' a distance of 149.87 feet on said easterly line of Conkey Avenue, to the place of beginning, as shown on survey map made by Crawford & Dobbs, Surveyors, by Raymond B. Crawford, L.S. 9944.

For Conveyancing Only

Together with all right, title and interest of, in and to any streets and roads abutting the above described premises. Our Policy of Title Insurance includes such buildings and improvements thereon which by law constitute real property, unless specifically excepted therein.

We Grover & Bates Associates do hereby certify to the following:

1) NYS Homes and Community Renewal,
2) Urban League of Rochester Economic Development Corporation,
3) Urban League of Rochester, N.Y. Inc.,
4) Cannon Heyman & Weiss, LLP,
5) City of Rochester,
6) RBC Tax Credit Equity, LLC, its successors and assigns,
7) Mills and Michelsen LLC,
8) M & M Housing Development Fund Corp.,
9) Chicago Title Insurance Co.,
10) New York State Housing Finance Agency, its successors and/or assigns,
11) JPMorgan Chase Bank, N. A., its successors and/or assigns,
12) State of New York Mortgage Agency, its successors and/or assigns
13) RBC Tax Credit Manager II, its affiliates, successors and assigns

that this map or plat and the survey on which it is based were made in accordance with the 2011 Minimum Standard detail Requirements for ALTA/ACSM Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 1-4, 6-b, 7-9, 11(a), 13, 18- 20a of Table A thereof. The field work was completed on Jan. 14, 2014.

Date of Plat or Map: Sept. 8, 2014

Combined Perimeter Description and the environmental easement description for Tax Account No. 091.77-2-31.001

All that tract or parcel of land being part of Lots 1,2,5,6 and all of Lots 3 and 4 of the C. A. Davis subdivision situate in the City of Rochester, County of Monroe, State of New York bounded and described as follows. Beginning at the intersection of the north line of Avenue D with the east line of Conkey Avenue; thence

1) Easterly and along the northerly line of Avenue D for a distance of 117.82 feet to a point; thence

2) Northerly turning an interior angle to the right of 89° 28' 30" for a distance of 149.87 feet to a point; thence

3) Easterly turning an interior angle to the right of 270° 31' 34" for a distance of 12.19 feet to a point; thence

4) Northerly turning an interior angle to the right of 89° 33' 01" for a distance of 75.00 feet to a point; thence

5) Westerly turning an interior angle to the right of 90° 26' 55" for a distance of 130.47 feet to the easterly line of Conkey Avenue; thence

6) Southerly turning an interior angle of 89° 23' 00" and along the easterly line of Conkey Avenue for a distance of 224.87 feet to the point of beginning. Containing therein 0.630 acres. As shown on a map by Grover and Bates Associates. Map no. 14-W11 dated Jan. 30, 2014 and Revised Sept. 8, 2014.

NOTES:

PROPERTY IS NOT WITHIN A FEDERAL OR STATE DESIGNATED WETLAND, PER A LETTER DATED JAN. 2, 2013 FROM THE CITY OF ROCHESTER

NO OBSERVATION OF EVIDENCE OF USE AS A SOLID WASTE DUMP SITE

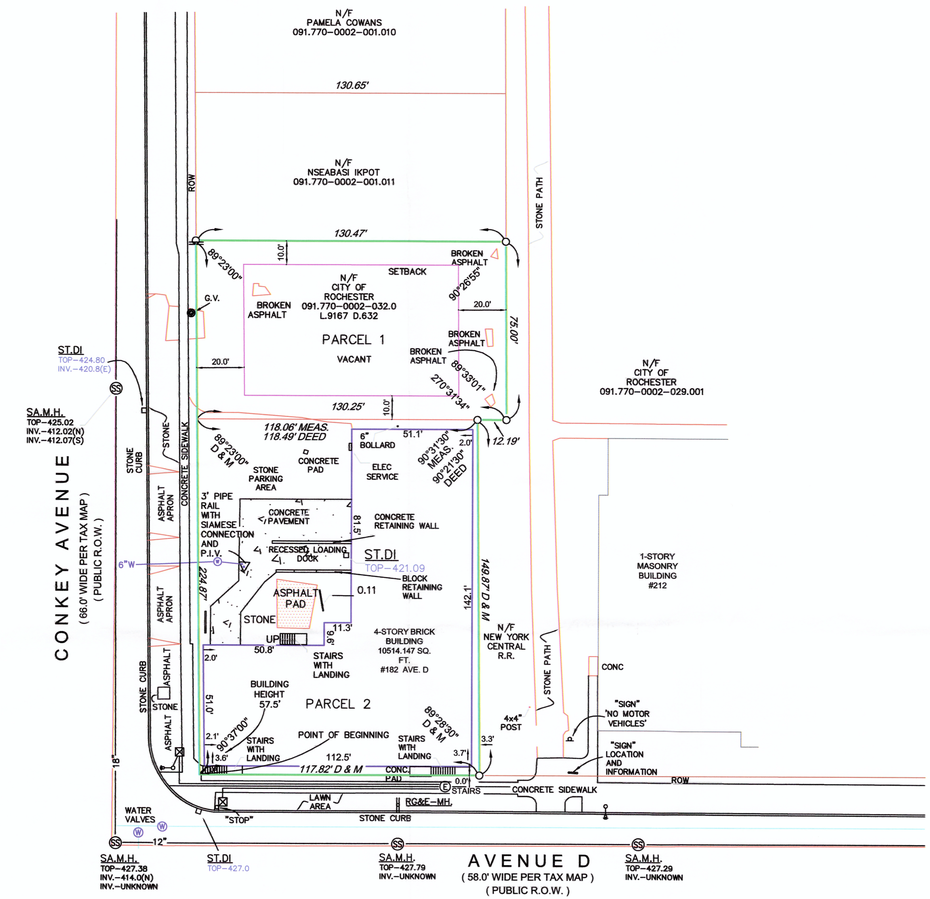
NO OBSERVATION OF EARTH MOVING AT TIME OF SURVEY

CURRENT DESCRIPTION FOR SOUTHERLY PORTION DOES NOT CLOSE MATHMATICALLY BY 0.34'

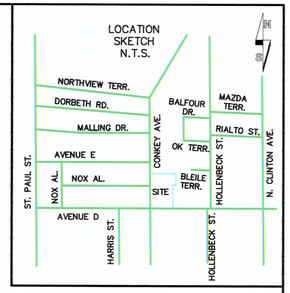
FLOOD ZONE - ZONE X
COMMUNITY NO. 36055C0211 G
PANEL 0211G
EFFECTIVE DATE, AUG. 28, 2008.

NO FORMAL PARKING SPACES OR CURB CUTS ARE DELINEATED ON SITE.
ALL CURBS ARE FLUSH WITH SIDEWALK AND PAVEMENT.

PROPERTY HAS PEDESTRIAN AND VEHICULAR ACCESS TO A PUBLIC R.O.W.



- (W) - WATER VALVE
- (E) - ELECTRIC MH
- (S) - SANITARY SEWER MH
- - LIGHT POLE W/ DAVIT
- - SIGN
- - DROP INLET
- - POWER POLE
- - ELEC. HAND HOLE
- - GAS VALVE
- N/F - NOW OR FORMERLY
- D & M - DEED AND MEASURE
- SA.M.H. - SANITARY MANHOLE



REF. ABSTRACTS;

FIRST AMERICAN TITLE INSURANCE CO.
SEARCH NO. 364502,
DATED SEPT. 30, 2011.

CHICAGO TITLE INSURANCE CO.
SEARCH NO. 1416-00781
DATED TO APRIL 21, 2014

TITLE COMMITMENT:

CHICAGO TITLE INSURANCE CO.
TITLE REPORT No. 1413-41307,
EFFECTIVE DATE JULY 24, 2014.

REF. DEEDS:

PARCEL 1
CITY OF ROCHESTER
L. 9167 D. 632
AREA = 0.224 ACRES

PARCEL 2
JOHN DUBICKAS, L. 6309 D. 134
ONE HALF INTEREST

LAWRENCE S. LEVINSON & JUDITH MAIER, ONE HALF INTEREST, L. 9216 D. 152
AREA = 0.406 ACRES

TOTAL AREA = 0.630 ACRES

ALTA/ACSM LAND TITLE SURVEY

OF LANDS OF

LAWRENCE S. LEVINSON & JUDITH MAIER AND JOHN DUBICKAS, AND THE CITY OF ROCHESTER

BEING PART OF LOTS 1,2,5 & 6 AND ALL OF LOTS 3 & 4
OF THE C. A. DAVIS SUBDIVISION, SITUATE IN THE

CITY OF ROCHESTER
COUNTY OF MONROE, STATE OF NEW YORK

SCALE: 1 IN. = 30 FT.

JAN. 30, 2014
AUG. 22, 2014 - CERTIFICATIONS ADDED
SEPT. 8, 2014 - REVISED
JUNE 15, 2015 - REVISED
SEPT. 24, 2015 - REVISED PERIMETER DESCRIPTION ONLY

GROVER & BATES ASSOCIATES
65 SOUTH MAIN STREET
PERRY, NEW YORK
585-237-3550

ZONING SETBACKS

PARCEL	ZONE	FRONT	BACK	SIDE
PARCEL 1	R-1 (RESDENTIAL)	20'	20'	10'
PARCEL 2	M-1 (MANUFACTURING)	NONE	NONE	NONE

0 30 60 90 FEET
0 9.14 18.29 27.43 METERS

BUILDING TIES SHOWN HEREON ARE TO THE EXTERIOR FACE OF THE BUILDING

THIS MAP MAY NOT BE USED IN CONNECTION WITH A "SURVEY" AFFIDAVIT OR SIMILAR DOCUMENT, STATEMENT OR MECHANISM TO OBTAIN TITLE INSURANCE FOR ANY SUBSEQUENT OR FUTURE GRANTEES.

COPIES FROM THE ORIGINAL OF THIS SURVEY NOT MARKED WITH AN ORIGINAL OF THE LAND SURVEYOR'S INKED SEAL OR HIS EMBOSSED SEAL SHALL NOT BE CONSIDERED TO BE VALID TRUE COPIES.

UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY MAP BEARING A LICENSED LAND SURVEYOR'S SEAL IS A VIOLATION OF SECTION 7209, SUBDIVISION 2, OF THE NEW YORK STATE EDUCATION LAW.

14-W11

STATE OF NEW YORK
DANA C. GROVER
No. 49812
Licensed Land Surveyor

Dana C. Grover, PLS No. 49812

*AS USED IN THIS CERTIFICATION, CERTIFY MEANS TO STATE OR DECLARE A PROFESSIONAL OPINION OF CONDITIONS REGARDING THOSE FACTS OR FINDINGS, WHICH ARE THE SUBJECT OF THE CERTIFICATION, AND DOES NOT CONSTITUTE A WARRANTY OR GUARNANTEE, EITHER EXPRESS OR IMPLIED.

CERTIFICATIONS SHOWN HEREON SHALL RUN ONLY TO THE PERSON FOR WHOM THE SURVEY IS PREPARED AND ON HIS BEHALF TO THE TITLE COMPANY, GOVERNMENT AGENCY, AND LENDING INSTITUTION. CERTIFICATIONS ARE NOT TRANSFERABLE TO ADDITIONAL INSTITUTIONS OR SUBSEQUENT OWNERS.

"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 New York Environmental Conservation Law. The engineering and institutional controls for this Easement are set forth in more deteil in the Site Management Plan (SMP). A copy of the SMP must be obtained by any party with an interest in the property. The SMP can be obtained from NYS Department of Environmental Conservation, Division of Environmental Remediation, Site Control Section, 625 Broadway, Albany, NY 12233 or at derweb@dec.ny.gov"

APPENDIX 2 – LIST OF SITE CONTACTS

Name	Phone/Email Address
Site Owner/Remedial Party M+M Housing Development Fund Corp. as Nominee for Mills and Michelsen, LLC Contact – Carolyn Vitale	(585) 454-5710 cvitale@ulr.org
LaBella Associates, DPC David Engert, CHMM	(585) 295-6630 dengert@labellapc.com
NYSDEC Project Manager Todd Caffoe, P.E.	(585) 226-5430 todd.caffoe.dec.ny.gov
NYSDEC Regional HW Engineer Ms. Bernette Schilling, P.E.	(585) 226-5415 bernette.schilling@dec.ny.gov
NYSDEC Site Control Ms. Kelly Lewandowski	(518)402-9553 kelly.lewandowski@dec.ny.us
Remedial Party Attorney Nixon Peabody LLP – Amy Reichhart	(585) 263-1322 areichhart@nixonpeabody.com

Adjacent Properties

Address	Street	Direction	OWNER	OWNER Address	OWNER City, State Zip
380	Conkey Avenue	North	Ikpot, Nseabasi	380 Conkey Ave.	Rochester, NY 14621
237	Avenue E	Northwest	Gaffel, Ian Robert & Robin, Glenda		Bundaberg,Queensland, Australia 4670
373-375	Conkey Avenue	West	City of Rochester	30 Church St., Room 125B	Rochester, NY 14614
365	Conkey Avenue	West	Randle, Willie	365 Conkey Ave.	Rochester, NY 14621
162-164	Avenue D	West	Kister Holding LLC	1779 74th St.	Brooklyn, NY 11204
337-339	Conkey Avenue	West	City of Rochester	30 Church St., Room 125B	Rochester, NY 14614
336-340	Conkey Avenue	South	Saeed, Munssar M.	340 Conkey Ave.	Rochester, NY 14621
490	Conkey Avenue	South and East	City of Rochester	30 Church St., Room 125B	Rochester, NY 14614
195	Avenue D	Southeast	Wright, Laura M.	102 Lux St.	Rochester, NY 14621
212	Avenue D	East	City of Rochester	30 Church St., Room 125B	Rochester, NY 14614

Source: Landmax

APPENDIX 3 – RI BORING AND WELL CONSTRUCTION LOGS

LABELLA Associates, P.C.

300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

TEST BORING LOG

Phase II Environmental Site Assessment
182 Avenue D & 364 Conkey Avenue
Rochester, New York

BORING: GP-11
SHEET 1 OF 1
JOB: 214128
CHKD BY:

CONTRACTOR: LBA ENV, LLC
DRILLER: RR
LABELLA REPRESENTATIVE: JMG
BORING LOCATION:
GROUND SURFACE ELEVATION:
START DATE: 1/16/2014
END DATE: 1/16/2014
TIME: TO
DATUM:

TYPE OF DRILL RIG: 54LT
AUGER SIZE AND TYPE:
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE:
INSIDE DIAMETER: ~1.8-Inch
OTHER:

DEPTH	SAMPLE NO. AND DEPTH	SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0			1"	Grass/vegetation		
			2"	Crushed red brick, some black cinders, some coarse SAND, dry	0.0	
		24"	1'	Black cinders, trace gray ash, moist	0.0	
2				Brown fine SAND, trace SILT, trace MC SAND, moist	0.0	
					0.0	
4					0.0	
				Brown fine SAND, trace SILT, trace MC SAND, moist	0.0	
		44"			0.0	
6						
					0.0	
			7'			
8			7.5'	Gray (stained) F SAND, trace SILT, trace MC SAND, moist, petro odor	31/60	
				Gray sandy SILT, dense, moist, petro odor	70	
					120	
		46"		Gray sandy SILT, little fine subangular gravel, moist, petro odor	155	
10	GP-11 10.5'				137	
					208	
					58	
12					191	
				Gray sandy SILT, little fine subangular gravel, moist, petro odor	63	
			13'		163	
		48"			146	
				Brown/gray SILT, little F subangular gravel, moist, petro odor		
14	GP-11 14.5'-15'				58	
					119	
					131	
					40	
16				Refusal at 15'		
18						

WATER LEVEL DATA			BOTTOM OF	BOTTOM OF	GROUNDWATER
DATE	TIME	ELAPSED TIME	CASING	BORING	ENCOUNTERED
				15-Ft.	NA

NOTES:
Initial ref. at 1' bgs; crushed brick in shoe

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.

2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

3) Abbreviations

and = 35 to 50 %	c = coarse	
some = 20 to 35%	m = medium	BGS = Below the Ground Surface
little = 10 to 20%	f = fine	NA = Not Applicable
trace = 1 to 10%	vf = very fine	

LABELLA Associates, P.C.

300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

TEST BORING LOG

Phase II Environmental Site Assessment
182 Avenue D & 364 Conkey Avenue
Rochester, New York

BORING: GP-12
SHEET 1 OF 1
JOB: 214128
CHKD BY:

CONTRACTOR: LBA ENV, LLC
DRILLER: RR
LABELLA REPRESENTATIVE: JMG
BORING LOCATION:
GROUND SURFACE ELEVATION:
START DATE: 1/16/2014
END DATE: 1/16/2014
TIME: TO
DATUM:

TYPE OF DRILL RIG: 54LT
AUGER SIZE AND TYPE:
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE:
INSIDE DIAMETER: ~1.8-Inch
OTHER:

DEPTH	SAMPLE NO. AND DEPTH	SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0			1"	Grass/vegetation		
		14"	1'	Crushed red brick, little black cinders, moist	0.0	
	GP-12 2'			Black cinders, trace gray ash, moist, no odor	0.0	
2					0.0	
4					0.0	
		26"	6'	Brown fine SAND, little SILT, trace MC SAND, moist, slight petro odor	10	
6					24	
				Gray/black (stained) silty SAND, moist, petro odor	94	
					185	
8					63	
			9'	Gray/black (stained) silty SAND, moist, petro odor	100	
					140	
		48"		Gray/brown clayey SILT, little F SAND, little F subangular gravel, moist, petro odor and sheen	280	
10					210	
					182	
	GP-12 12'				151	
12					368	
				Gray/brown clayey SILT, little F SAND, little F subangular gravel, moist, petro odor and sheen	84	
		48"			155	
14					105	
					170	
					65	
					5.5	
16				Refusal at 15.1'		
18						

WATER LEVEL DATA			BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED
DATE	TIME	ELAPSED TIME			
				15.1-Ft.	NA

NOTES:

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.

2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

3) Abbreviations

and = 35 to 50 %	c = coarse	
some = 20 to 35%	m = medium	BGS = Below the Ground Surface
little = 10 to 20%	f = fine	NA = Not Applicable
trace = 1 to 10%	vf = very fine	

BORING: GP-12

LABELLA Associates, P.C.

300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

TEST BORING LOG

Phase II Environmental Site Assessment
182 Avenue D & 364 Conkey Avenue
Rochester, New York

BORING: GP-13
SHEET 1 OF 1
JOB: 214128
CHKD BY:

CONTRACTOR: LBA ENV, LLC
DRILLER: RR
LABELLA REPRESENTATIVE: JMG
BORING LOCATION:
GROUND SURFACE ELEVATION:
START DATE: 1/16/2014
END DATE: 1/16/2014
TIME: TO
DATUM:

TYPE OF DRILL RIG: 54LT
AUGER SIZE AND TYPE:
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE:
INSIDE DIAMETER: ~1.8-Inch
OTHER:

DEPTH	SAMPLE NO. AND DEPTH	SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0			1"	Grass/vegetation		
			0.5'	Brown coarse SAND, little F SA gravel, moist/dry	B	
		36"		Brown coarse SAND and black cinders, little F SA gravel, moist/dry	B	
			1.5'			
2			2'	Crushed red brick	B	
				Brown F SAND, moist, no odor	B	
4					B	
					B	
		36"		Brown silty SAND, trace C. subangular gravel, no odor	B	
6					B	
					B	
8					B	
					B	
		48"		Brown silty SAND, trace C. subangular gravel, no odor	B	
10			10'		B	
				Brown silty SAND, trace C. subangular gravel, dense, no odor	B	
12					6	
				Brown silty SAND, trace C. subangular gravel, no odor	5	
		48"			11	
14			14.8'		42	
				Brown silty SAND, gray staining, slight petro odor	104	
	GP-13 15'				24	
16			15.5'	Brown silty SAND, no staining, very slight petro odor	6 B	
				Refusal at 16'		
18						

WATER LEVEL DATA			BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED
DATE	TIME	ELAPSED TIME			
				16-Ft.	NA

NOTES:
Background = <2 ppm

GENERAL NOTES
1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
3) Abbreviations
and = 35 to 50 %
some = 20 to 35%
little = 10 to 20%
trace = 1 to 10%
c = coarse
m = medium
f = fine
vf = very fine
BGS = Below the Ground Surface
NA = Not Applicable

BORING: GP-13

LABELLA Associates, P.C.

300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

TEST BORING LOG

Phase II Environmental Site Assessment
182 Avenue D & 364 Conkey Avenue
Rochester, New York

BORING: GP-14
SHEET 1 OF 1
JOB: 214128
CHKD BY:

CONTRACTOR: LBA ENV, LLC
DRILLER: RR
LABELLA REPRESENTATIVE: JMG
BORING LOCATION:
GROUND SURFACE ELEVATION:
START DATE: 1/16/2014
END DATE: 1/16/2014
TIME: TO
DATUM:

TYPE OF DRILL RIG: 54LT
AUGER SIZE AND TYPE:
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE:
INSIDE DIAMETER: ~1.8-Inch
OTHER:

DEPTH	SAMPLE NO. AND DEPTH	SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0			1"	Grass/vegetation		
			8"	Crushed asphalt	B	
		30"		Crushed brick	B	
2			1.5'	Brown silty SAND, moist, no odor	B	
					B	
4						
				Brown silty SAND, moist, no odor	B	
		46"			B	
6			6.5'		B	
				Brown silty CLAY, moist, no odor	B	
			7'	Brown silty SAND, trace MC SAND, moist, no odor	B	
8						
				Brown silty SAND, little F subangular gravel, dense, moist, no odor	B	
		44"			B	
10					B	
					B	
12					B	
				Brown silty SAND, little F subangular gravel, dense, moist, no odor	B	Sleeve split during drilling
		6"			B	
14						
				Refusal at 14'		
16						
18						

WATER LEVEL DATA			BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED
DATE	TIME	ELAPSED TIME			
				14-Ft.	NA

NOTES:
Background = <2ppm

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.

2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

3) Abbreviations

and = 35 to 50 %	c = coarse	
some = 20 to 35%	m = medium	BGS = Below the Ground Surface
little = 10 to 20%	f = fine	NA = Not Applicable
trace = 1 to 10%	vf = very fine	

BORING: GP-14

LABELLA Associates, P.C.

300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

TEST BORING LOG

Phase II Environmental Site Assessment
182 Avenue D & 364 Conkey Avenue
Rochester, New York

BORING: GP-15
SHEET 1 OF 1
JOB: 214128
CHKD BY:

CONTRACTOR: LBA ENV, LLC
DRILLER: RR
LABELLA REPRESENTATIVE: JMG
BORING LOCATION:
GROUND SURFACE ELEVATION:
START DATE: 1/16/2014
END DATE: 1/16/2014
TIME: TO
DATUM:

TYPE OF DRILL RIG: 54LT
AUGER SIZE AND TYPE:
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE:
INSIDE DIAMETER: ~1.8-Inch
OTHER:

DEPTH	SAMPLE NO. AND DEPTH	SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0			1"	Grass/vegetation		
			1'	Dark brown SILT and roots, moist	0.0	
	GP-15 1' (slag only)	24"	1.2'	Dark gray porous slag, slight sulfur odor	0.0	
2				Brown fine SAND, moist, no odor	0.0	
					0.0	
4						
			5.5	Brown fine SAND, little SILT, little F subangular gravel, moist, no odor	0.0	
		48"		Gray CLAY, not laminated, no odor, moist		
6			6'		0.0	
				Brown silty SAND, little MC SAND, trace F subangular gravel, moist, no odor	0.0	
					0.0	
8						
				Brown silty SAND, little MC SAND, trace F subangular gravel, moist, no odor	0.0	
	GP-15 10'	48"	10'		0.0	
10					0.0	
				Brown silty SAND, little MC SAND, trace F subangular gravel, moist, no odor, dense		
					0.0	
12						
		44"		Brown silty SAND, little MC SAND, trace F subangular gravel, moist, no odor, dense	0.0	
14					0.0	
16				Refusal at 14.5'		
18						

WATER LEVEL DATA			BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED
DATE	TIME	ELAPSED TIME			
				14.5-Ft.	NA

NOTES:

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.

2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

3) Abbreviations

and = 35 to 50 %	c = coarse	
some = 20 to 35%	m = medium	BGS = Below the Ground Surface
little = 10 to 20%	f = fine	NA = Not Applicable
trace = 1 to 10%	vf = very fine	

LABELLA Associates, P.C.

300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

TEST BORING LOG

Phase II Environmental Site Assessment
182 Avenue D & 364 Conkey Avenue
Rochester, New York

BORING: GP-16
SHEET 1 OF 1
JOB: 214128
CHKD BY:

CONTRACTOR: LBA ENV, LLC
DRILLER: RR
LABELLA REPRESENTATIVE: JMG
BORING LOCATION:
GROUND SURFACE ELEVATION:
START DATE: 1/16/2014
END DATE: 1/16/2014
TIME: TO
DATUM:

TYPE OF DRILL RIG: 54LT
AUGER SIZE AND TYPE:
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE:
INSIDE DIAMETER: ~1.8-Inch
OTHER:

DEPTH	SAMPLE NO. AND DEPTH	SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0			2"	Grass/vegetation		
			8"	Black cinders, moist, no odor	0.0	
		38"	1.5'	Brown silty SAND, no odor	0.0	
2				Brown SILT, trace F SAND, moist, dense	0.0	
					0.0	
4					0.0	
				Brown SILT, trace F SAND, moist, dense	0.0	
		36"			0.0	
6					0.0	
			6.7'		0.0	
			7'	Brown/red coarse SAND, moist, no odor		
8				Brown/red MC SAND, little F subangular gravel, moist, no odor	0.0	
					0.0	
		34"		Brown silty SAND, little F subangular gravel, moist, dense, no odor	0.0	
10					0.0	
					0.0	
					0.0	
12					0.0	
			13.5'	Brown silty SAND, little F subangular gravel, moist, dense, no odor	0.0	
		30"		Brown silty SAND, little F subangular gravel, wet, dense, no odor	0.0	
14			14'		0.0	
				Brown silty SAND, little F subangular gravel, moist, dense, slight petro odor	0.6	
16				Refusal at 15'		
18						

WATER LEVEL DATA			BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED
DATE	TIME	ELAPSED TIME			
				15-Ft.	13.5'

NOTES:
MWGP-15 installed

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.

2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

3) Abbreviations
and = 35 to 50 %
some = 20 to 35%
little = 10 to 20%
trace = 1 to 10%
c = coarse
m = medium
f = fine
vf = very fine
BGS = Below the Ground Surface
NA = Not Applicable

LABELLA Associates, P.C.

300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

TEST BORING LOG

Phase II Environmental Site Assessment
182 Avenue D & 364 Conkey Avenue
Rochester, New York

BORING: GP-17
SHEET 1 OF 1
JOB: 214128
CHKD BY:

CONTRACTOR: LBA ENV, LLC
DRILLER: RR
LABELLA REPRESENTATIVE: JMG
BORING LOCATION:
GROUND SURFACE ELEVATION:
START DATE: 1/16/2014
END DATE: 1/16/2014
TIME: TO
DATUM:

TYPE OF DRILL RIG: 54LT
AUGER SIZE AND TYPE:
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE:
INSIDE DIAMETER: ~1.8-Inch
OTHER:

DEPTH	SAMPLE NO. AND DEPTH	SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0			1"	Grass/vegetation		
		46"		Brown sandy SILT, little F subangular gravel, moist, no odor	0.0 0.0	
2					0.0	
4					0.0	
		48"		Brown sandy SILT, little F subangular gravel, moist, no odor	0.0 0.0	
6					0.0	
8					0.0	
		44"	9.5'	Brown sandy SILT, little F subangular gravel, moist, no odor	0.0	
			10'	Brown CLAY, not laminated, moist	0.0	
10				Brown sandy SILT, little F subangular gravel, moist, no odor	0.0	
12					0.0	
	GP-17 13'	10"		Brown sandy SILT, little F subangular gravel, wet (saturated), no odor	0.0	
14					0.0	
16				Refusal at 13.2'		
18						

WATER LEVEL DATA			BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED
DATE	TIME	ELAPSED TIME			
				13.2-Ft.	NA

NOTES:

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.

2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

3) Abbreviations

and = 35 to 50 %
some = 20 to 35%
little = 10 to 20%
trace = 1 to 10%
c = coarse
m = medium
f = fine
vf = very fine
BGS = Below the Ground Surface
NA = Not Applicable

LABELLA Associates, P.C.

300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

TEST BORING LOG

Phase II Environmental Site Assessment
182 Avenue D & 364 Conkey Avenue
Rochester, New York

BORING: GP-18
SHEET 1 OF 1
JOB: 214128
CHKD BY:

CONTRACTOR: LBA ENV, LLC
DRILLER: RR
LABELLA REPRESENTATIVE: JMG
BORING LOCATION:
GROUND SURFACE ELEVATION:
START DATE: 1/17/2014
END DATE: 1/17/2014
TIME: TO
DATUM:

TYPE OF DRILL RIG: 54LT
AUGER SIZE AND TYPE:
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE:
INSIDE DIAMETER: ~1.8-Inch
OTHER:

DEPTH	SAMPLE NO. AND DEPTH	SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0			1"	Grass/vegetation		
			0.5'	Crushed red brick and black cinders	0.0	
		24"		Brown/red SILT, little F subangular gravel, trace F SAND, moist, no odor	0.0	
2					0.0	
4					0.0	
					0.0	
6		48"		Brown/red SILT, little F subangular gravel, trace F SAND, moist, no odor	0.0	
			7'		0.0	
8				Brown/gray silty SAND, trace MC SAND, moist, no odor	2.4	
					4.2	
		48"		Brown/gray silty SAND, trace MC SAND, moist, petro odor	4.6	
					25	
10					201	
					208	
					429	
	GP-18				528	
12	11'-12'				108	
					32	
		48"		Brown/gray silty SAND, trace MC SAND, moist, dense, black staining, petro odor	182	
14					309	
	GP-18				449	
	15'				208	
					227	
					21	
16				Refusal at 15.5'		
18						

WATER LEVEL DATA			BOTTOM OF	BOTTOM OF	GROUNDWATER
DATE	TIME	ELAPSED TIME	CASING	BORING	ENCOUNTERED
				15.5-Ft.	NA

NOTES:

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.

2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

3) Abbreviations

and = 35 to 50 %	c = coarse	
some = 20 to 35%	m = medium	BGS = Below the Ground Surface
little = 10 to 20%	f = fine	NA = Not Applicable
trace = 1 to 10%	vf = very fine	

LABELLA Associates, P.C.

300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

TEST BORING LOG

Phase II Environmental Site Assessment
182 Avenue D & 364 Conkey Avenue
Rochester, New York

BORING: GP-19
SHEET 1 OF 1
JOB: 214128
CHKD BY:

CONTRACTOR: LBA ENV, LLC
DRILLER: RR
LABELLA REPRESENTATIVE: JMG
BORING LOCATION:
GROUND SURFACE ELEVATION:
START DATE: 1/17/2014
END DATE: 1/17/2014
TIME: TO
DATUM:

TYPE OF DRILL RIG: 54LT
AUGER SIZE AND TYPE:
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE:
INSIDE DIAMETER: ~1.8-Inch
OTHER:

DEPTH	SAMPLE NO. AND DEPTH	SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0			1"	Grass/vegetation		
		36"		Crushed brick and CMF SAND, dry, no odor	B B	
2					B	
			2.8'		B	
4				Brown F and MC SAND, moist (fill?)		
				Brown sandy SILT, little F subangular gravel, moist, no odor	B	
		42"				
6					B	
			7'		B	
8				Brown sandy SILT, little F subangular gravel, moist, dense, no odor	B	
				Brown sandy SILT, little F subangular gravel, moist, no odor	B	
		48"			B	
10			10'			
				Brown/gray sandy SILT, little F subangular gravel, moist, dense, no odor	B	
12					B	
				Brown/gray sandy SILT, little F subangular gravel, moist, dense, no odor	4.0 4.5	
		40"				
14	GP-19 14-14.7'		14'		13.0 12.0	
				Brown/gray sandy SILT, little F SA gravel, moist, dense, slight petro odor/sheen	124	
				Refusal at 14.7'		
16						
18						

WATER LEVEL DATA			BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED
DATE	TIME	ELAPSED TIME			
				-Ft.	

NOTES:
Background = ~3.5

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.

2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

3) Abbreviations

and = 35 to 50 %	c = coarse	
some = 20 to 35%	m = medium	BGS = Below the Ground Surface
little = 10 to 20%	f = fine	NA = Not Applicable
trace = 1 to 10%	vf = very fine	

LABELLA Associates, P.C.

300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

TEST BORING LOG

Phase II Environmental Site Assessment
182 Avenue D & 364 Conkey Avenue
Rochester, New York

BORING: GP-20
SHEET 1 OF 1
JOB: 214128
CHKD BY:

CONTRACTOR: LBA ENV, LLC
DRILLER: RR
LABELLA REPRESENTATIVE: JMG
BORING LOCATION:
GROUND SURFACE ELEVATION:
START DATE: 1/17/2014
END DATE: 1/17/2014
TIME: TO
DATUM:

TYPE OF DRILL RIG: 54LT
AUGER SIZE AND TYPE:
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE:
INSIDE DIAMETER: ~1.8-Inch
OTHER:

DEPTH	SAMPLE NO. AND DEPTH	SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0			6"	Concrete floor slab		
				Brown SILT, little C subangular gravel, moist, no odor	0.0	
		14"			0.0	
2					0.0	
					0.0	
				Refusal at 3'		
4						
6						
8						
10						
12						
14						
16						
18						

WATER LEVEL DATA			BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED
DATE	TIME	ELAPSED TIME			
				3-Ft.	NA

NOTES:
No significant subbase for floor observed.
MWGP-20 installed; PID in corehole to bottom of slab = 0.0 ppm

GENERAL NOTES
1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
3) Abbreviations
and = 35 to 50 %
some = 20 to 35%
little = 10 to 20%
trace = 1 to 10%
c = coarse
m = medium
f = fine
vf = very fine
BGS = Below the Ground Surface
NA = Not Applicable

BORING: GP-20

LABELLA Associates, P.C.

300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

TEST BORING LOG

Phase II Environmental Site Assessment
182 Avenue D & 364 Conkey Avenue
Rochester, New York

BORING: GP-21
SHEET 1 OF 1
JOB: 214128
CHKD BY:

CONTRACTOR: LBA ENV, LLC
DRILLER: RR
LABELLA REPRESENTATIVE: JMG
BORING LOCATION:
GROUND SURFACE ELEVATION:
START DATE: 1/17/2014
END DATE: 1/17/2014
TIME: TO
DATUM:

TYPE OF DRILL RIG: 54LT
AUGER SIZE AND TYPE:
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE:
INSIDE DIAMETER: ~1.8-Inch
OTHER:

DEPTH	SAMPLE NO. AND DEPTH	SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0			6"	Concrete floor slab		
				Brown MC SAND, little F SAND, little F subangular gravel, moist, no odor	0.0	
		22"			0.0	
2					0.0	
					0.0	
4					0.0	
				Brown MC SAND, little F SAND, little F subangular gravel, moist, no odor	0.0	
		26"			0.0	
6			6'			
				Brown MC SAND, little F SAND, little F subangular gravel, moist, dense no odor	0.0	
	GP-21 7'		6.6'			
				Brown MC SAND, little F SAND, little F subangular gravel, moist, dense, no odor	0.5	slow climb
8				Refusal at 7'		
10						
12						
14						
16						
18						

WATER LEVEL DATA			BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED
DATE	TIME	ELAPSED TIME			
				7-Ft.	NA

NOTES:
Corehole to bottom of slab = 0.0ppm
GPMW-21 installed

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.

2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

3) Abbreviations

and = 35 to 50 %	c = coarse	
some = 20 to 35%	m = medium	BGS = Below the Ground Surface
little = 10 to 20%	f = fine	NA = Not Applicable
trace = 1 to 10%	vf = very fine	

LABELLA Associates, P.C.

300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

TEST BORING LOG

Phase II Environmental Site Assessment
182 Avenue D & 364 Conkey Avenue
Rochester, New York

BORING: GP-22
SHEET 1 OF 1
JOB: 214128
CHKD BY:

CONTRACTOR: LBA ENV, LLC
DRILLER: RR
LABELLA REPRESENTATIVE: JMG
BORING LOCATION:
GROUND SURFACE ELEVATION:
START DATE: 1/17/2014
END DATE: 1/17/2014
TIME: TO
DATUM:

TYPE OF DRILL RIG: 54LT
AUGER SIZE AND TYPE:
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE:
INSIDE DIAMETER: ~1.8-Inch
OTHER:

DEPTH	SAMPLE NO. AND DEPTH	SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0			6"	Concrete floor slab		
		18"		Brown silty SAND, little F subangular gravel, moist, no odor	0.0 0.0 0.0 0.0	
2						
4						
6	GP-22 7.6'	44"		Brown silty SAND, little F subangular gravel, moist, no odor	0.0 0.0 0.0 0.6	
8				Refusal at 7.6'		
10						
12						
14						
16						
18						

WATER LEVEL DATA			BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED
DATE	TIME	ELAPSED TIME			
				7.6-Ft.	NA

NOTES:

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.

2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

3) Abbreviations

and = 35 to 50 %	c = coarse	
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little = 10 to 20%	f = fine	NA = Not Applicable
trace = 1 to 10%	vf = very fine	

BORING: GP-22

LABELLA Associates, P.C.

300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

TEST BORING LOG

Phase II Environmental Site Assessment
182 Avenue D & 364 Conkey Avenue
Rochester, New York

BORING: GP-23
SHEET 1 OF 1
JOB: 214128
CHKD BY:

CONTRACTOR: LBA ENV, LLC
DRILLER: RR
LABELLA REPRESENTATIVE: JMG
BORING LOCATION:
GROUND SURFACE ELEVATION:
START DATE: 1/17/2014
END DATE: 1/17/2014
TIME: TO
DATUM:

TYPE OF DRILL RIG: 54LT
AUGER SIZE AND TYPE:
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE:
INSIDE DIAMETER: ~1.8-Inch
OTHER:

DEPTH	SAMPLE NO. AND DEPTH	SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0			6"	Concrete floor slab		
		30"		Brown silty SAND, little F subangular gravel, moist, no odor	0.0 0.0	
2					0.0	
4					0.0	
	GP-23 6.8'	28"		Brown silty SAND, little F subangular gravel, moist, no odor	0.0 0.0 0.5 1.4 8.4	
6				Refusal at 6.8'		
8						
10						
12						
14						
16						
18						

WATER LEVEL DATA			BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED
DATE	TIME	ELAPSED TIME			
				6.8-Ft.	NA

NOTES:
GPMW-23 installed

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.

2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

3) Abbreviations

and = 35 to 50 %	c = coarse	
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little = 10 to 20%	f = fine	NA = Not Applicable
trace = 1 to 10%	vf = very fine	

BORING: GP-23

LABELLA Associates, P.C.

300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

TEST BORING LOG

Phase II Environmental Site Assessment
182 Avenue D & 364 Conkey Avenue
Rochester, New York

BORING: GP-24
SHEET 1 OF 1
JOB: 214128
CHKD BY:

CONTRACTOR: LBA ENV, LLC
DRILLER: RR
LABELLA REPRESENTATIVE: JMG
BORING LOCATION:
GROUND SURFACE ELEVATION:
START DATE: 1/17/2014
END DATE: 1/17/2014
TIME: TO
DATUM:

TYPE OF DRILL RIG: 54LT
AUGER SIZE AND TYPE:
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE:
INSIDE DIAMETER: ~1.8-Inch
OTHER:

DEPTH	SAMPLE NO. AND DEPTH	SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0			6"	Concrete floor slab		
				Brown silty SAND, little F subangular gravel, moist, petro odor	166	
					152	
2	GP-24 2'-3'	42"			227	
					200	
					294	
					154	
4					92	
					90	
				Brown silty SAND, little F subangular gravel, wet, petro odor	85	
6		36"			180	
					90	
					65	
8						
				Refusal at 8.1'		
10						
12						
14						
16						
18						

WATER LEVEL DATA			BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED
DATE	TIME	ELAPSED TIME			
				8.1-Ft.	4'

NOTES:
GPMW-24 installed

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.

2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

3) Abbreviations

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some = 20 to 35%	m = medium	BGS = Below the Ground Surface
little = 10 to 20%	f = fine	NA = Not Applicable
trace = 1 to 10%	vf = very fine	

LABELLA Associates, P.C.

300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

TEST BORING LOG

Phase II Environmental Site Assessment
182 Avenue D & 364 Conkey Avenue
Rochester, New York

BORING: GP-25
SHEET 1 OF 1
JOB: 214128
CHKD BY:

CONTRACTOR: LBA ENV, LLC
DRILLER: RR
LABELLA REPRESENTATIVE: JMG
BORING LOCATION:
GROUND SURFACE ELEVATION:
START DATE: 1/17/2014
END DATE: 1/17/2014
TIME: TO
DATUM:

TYPE OF DRILL RIG: 54LT
AUGER SIZE AND TYPE:
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE:
INSIDE DIAMETER: ~1.8-Inch
OTHER:

DEPTH	SAMPLE NO. AND DEPTH	SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0			6"	Concrete floor slab		
				Brown sandy SILT, little F subangular gravel, moist, very slight petro odor	3.0	
2		32"			2.0	
					6.7	
4					2.0	
					3.6	
			5'	Brown sandy SILT, little F subangular gravel, moist, very slight petro odor	4.7	
					5.0	
6		48"		Brown sandy SILT, little F subangular gravel, moist, dense very slight petro odor	14.8	
					10.7	
8					12.8	
				Refusal at 7.8'		
10						
12						
14						
16						
18						

WATER LEVEL DATA			BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED
DATE	TIME	ELAPSED TIME			
				7.8-Ft.	NA

NOTES:

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.

2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

3) Abbreviations

and = 35 to 50 %	c = coarse	
some = 20 to 35%	m = medium	BGS = Below the Ground Surface
little = 10 to 20%	f = fine	NA = Not Applicable
trace = 1 to 10%	vf = very fine	

LABELLA Associates, P.C.

300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

TEST BORING LOG

Phase II Environmental Site Assessment
182 Avenue D & 364 Conkey Avenue
Rochester, New York

BORING: GP-26
SHEET 1 OF 1
JOB: 214128
CHKD BY:

CONTRACTOR: LBA ENV, LLC
DRILLER: RR
LABELLA REPRESENTATIVE: JMG
BORING LOCATION:
GROUND SURFACE ELEVATION:
START DATE: 3/14/2014
END DATE: 3/14/2014
TIME: TO
DATUM:

TYPE OF DRILL RIG: 54LT
AUGER SIZE AND TYPE:
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE:
INSIDE DIAMETER: ~1.8-Inch
OTHER:

DEPTH	SAMPLE NO. AND DEPTH	SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0			6"	Concrete floor slab	0.0	
				Brown silty SAND, wet (from concrete coring), no odor	0.0	
2		24"			0.1	
4					0.1	
					0.9	
			5'	Brown silty SAND, little CLAY, moist, no odor	1.4 2.0	
6		36"			4.2	
					7.2	
	GP-26 7' - 7.2'		7'		10.4	
7.2	GP-26	10"			3.2	
8	7.5' - 7.7'			Brown silty SAND, little MC SAND, little F subangular gravel, trace black staining, slight chemical odor, wet	16.8 62.9	
				Refusal at 7.7'		
10						
12						
14						
16						
18						

WATER LEVEL DATA			BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED
DATE	TIME	ELAPSED TIME			
				7.7-Ft.	NA

NOTES:
Installed GPMW-26 w/ 5' screen

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.

2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

3) Abbreviations
and = 35 to 50 %
some = 20 to 35%
little = 10 to 20%
trace = 1 to 10%
c = coarse
m = medium
f = fine
vf = very fine
BGS = Below the Ground Surface
NA = Not Applicable

LABELLA Associates, P.C.

300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

TEST BORING LOG

Phase II Environmental Site Assessment
182 Avenue D & 364 Conkey Avenue
Rochester, New York

BORING: GP-27
SHEET 1 OF 1
JOB: 214128
CHKD BY:

CONTRACTOR: LBA ENV, LLC
DRILLER: RR
LABELLA REPRESENTATIVE: JMG
BORING LOCATION:
GROUND SURFACE ELEVATION:
START DATE: 3/14/2014
END DATE: 3/14/2014
TIME: TO
DATUM:

TYPE OF DRILL RIG: 54LT
AUGER SIZE AND TYPE:
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE:
INSIDE DIAMETER: ~1.8-Inch
OTHER:

DEPTH	SAMPLE NO. AND DEPTH	SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0			6"	Concrete floor slab	0.6	
				Brown silty SAND, moist, no odor	0.7	
		30"				
2					2.0	
			3.7'			
				Brown silty CLAY, sandy partings, moist, no odor	0.7	
4						
				Brown silty CLAY, sandy partings, moist, no odor	0.6	
					3.9	
					1.7	
					5.7	
6		46"				
					8.7	
			7.5'		6.4	
				Brown silty SAND, trace black staining, moist, no odor	1.7	
8					1.3	
		6"		Brown silty SAND, little CLAY, trace black staining, moist, no odor	7.5	
				Refusal @ 8.2'	6.8	
10						
12						
14						
16						
18						

WATER LEVEL DATA			BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED
DATE	TIME	ELAPSED TIME			
				8.2-Ft.	NA

NOTES:
Installed GPMW-27 w/ 5' screen

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.

2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

3) Abbreviations

and = 35 to 50 %	c = coarse	
some = 20 to 35%	m = medium	BGS = Below the Ground Surface
little = 10 to 20%	f = fine	NA = Not Applicable
trace = 1 to 10%	vf = very fine	

BORING: GP-27

LABELLA Associates, P.C.

300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

TEST BORING LOG

Phase II Environmental Site Assessment
182 Avenue D & 364 Conkey Avenue
Rochester, New York

BORING: GP-28
SHEET 1 OF 1
JOB: 214128
CHKD BY:

CONTRACTOR: LBA ENV, LLC
DRILLER: RR
LABELLA REPRESENTATIVE: JMG
BORING LOCATION:
GROUND SURFACE ELEVATION:
START DATE: 3/14/2014
END DATE: 3/14/2014
TIME: TO
DATUM:

TYPE OF DRILL RIG: 54LT
AUGER SIZE AND TYPE:
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE:
INSIDE DIAMETER: ~1.8-Inch
OTHER:

DEPTH	SAMPLE NO. AND DEPTH	SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0			6"	Concrete floor slab	0.1	
				Brown silty SAND, little MC SAND, wet (from concrete coring), no odor	0.1	
		28"			0.1	
2					0.1	
					0.2	
4						
				Brown silty SAND, little MC SAND, moist, no odor	0.3	
					0.4	
6		36"			0.2	
	GP-28 6.8' - 7.1'		6.8'			
				Brown silty SAND, little MC SAND, little angular gravel, moist, trace black staining, no odor	0.8	
8					1.4	
				Refusal @ 7.1'		
10						
12						
14						
16						
18						

WATER LEVEL DATA			BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED
DATE	TIME	ELAPSED TIME			
				7.1-Ft.	NA

NOTES:
No well installed
PID background = 0.1 ppm

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.

2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

3) Abbreviations

and = 35 to 50 %	c = coarse	
some = 20 to 35%	m = medium	BGS = Below the Ground Surface
little = 10 to 20%	f = fine	NA = Not Applicable
trace = 1 to 10%	vf = very fine	

LABELLA Associates, P.C.

300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

TEST BORING LOG

Phase II Environmental Site Assessment
182 Avenue D & 364 Conkey Avenue
Rochester, New York

BORING: GP-29
SHEET 1 OF 1
JOB: 214128
CHKD BY:

CONTRACTOR: LBA ENV, LLC
DRILLER: RR
LABELLA REPRESENTATIVE: JMG
BORING LOCATION:
GROUND SURFACE ELEVATION:
START DATE: 3/14/2014
END DATE: 3/14/2014
TIME: TO
DATUM:

TYPE OF DRILL RIG: 54LT
AUGER SIZE AND TYPE:
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE:
INSIDE DIAMETER: ~1.8-Inch
OTHER:

DEPTH	SAMPLE NO. AND DEPTH	SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0			6"	Concrete floor slab	0.1	
				Brown silty SAND, trace C subrounded gravel, wet (from concrete coring), no odor		
2					0.1	
4					0.1	
					0.1	
				Brown silty SAND, trace C subrounded gravel, moist, no odor	0.5	
					0.9	
6		42"			1.1	
					2.2	
					22.6	
8	GP-29 7.8' - 8.4'		7.8'	Brown silty SAND, trace C subrounded gravel, moist, slight chemical odor	23.9	
				Brown silty SAND, little CLAY, moist, slight chemical odor	13.9	
				Refusal @ 8.4'		
10						
12						
14						
16						
18						

WATER LEVEL DATA			BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED
DATE	TIME	ELAPSED TIME			
				8.4-Ft.	NA

NOTES:
No well installed
PID background = 0.1 ppm

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.

2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

3) Abbreviations

and = 35 to 50 %	c = coarse	
some = 20 to 35%	m = medium	BGS = Below the Ground Surface
little = 10 to 20%	f = fine	NA = Not Applicable
trace = 1 to 10%	vf = very fine	

LABELLA Associates, P.C.

300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

TEST BORING LOG

Phase II Environmental Site Assessment
182 Avenue D & 364 Conkey Avenue
Rochester, New York

BORING: GP-30
SHEET 1 OF 1
JOB: 214128
CHKD BY:

CONTRACTOR: LBA ENV, LLC
DRILLER: RR
LABELLA REPRESENTATIVE: SMR
BORING LOCATION:
GROUND SURFACE ELEVATION:
START DATE: 3/14/2014
END DATE: 3/14/2014
TIME: TO
DATUM:

TYPE OF DRILL RIG: 54LT
AUGER SIZE AND TYPE:
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE:
INSIDE DIAMETER: ~1.8-Inch
OTHER:

DEPTH	SAMPLE NO. AND DEPTH	SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0			6"	Asphalt, light grey crushed stone	0.0	
				fill, red-brown crushed brick, dry	0.0	
			1.5'			
2		40"		Black crushed A gravel, fill, red-brown crushed brick, wet	0.0	
			3'			
				Brown M SAND, no odor, moist	0.0	
4					0.1	
				Brown M SAND and gravel, no odor, moist	0.0	
					0.0	
6		36"			0.0	
			7'			
				Brown M SAND and gravel, no odor, moist, black streak, grey staining, faint odor	2.7	
					10.2	
8				dark grey staining, significant odor	28.6	
			8.2'	dark grey staining, significant odor	4.7	
				Grey MF sandy SILT, dense, little gravel, moist, strong odor, density increases	51.8	
	GP-30				325	
10	9.5' - 10'	36"			267.0	
			10.5'		235.0	
				F SILT, little CLAY, very dense, moist		
12					180.0	
				F SILT, little CLAY, very dense, wet	104.0	
			13'		164.0	
			13.5'	Light brown M SILT, little SAND and gravel, strong odor, moist		
	GP-30	24"		Light brown M SILT, some CLAY, little SAND and gravel, strong odor, dry	405.0	
14	13.5' - 14'					
				Refusal @ 14.9'		
16						
18						

WATER LEVEL DATA			BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	NOTES:
DATE	TIME	ELAPSED TIME				
				14.9-Ft.	NA	Installed well MWGP-30 w/ 10' screen

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.

2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

3) Abbreviations

and = 35 to 50 %	c = coarse	
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little = 10 to 20%	f = fine	NA = Not Applicable
trace = 1 to 10%	vf = very fine	

BORING: GP-30

LABELLA Associates, P.C.

300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

TEST BORING LOG

Phase II Environmental Site Assessment
182 Avenue D & 364 Conkey Avenue
Rochester, New York

BORING: GP-31
SHEET 1 OF 1
JOB: 214128
CHKD BY:

CONTRACTOR: LBA ENV, LLC
DRILLER: RR
LABELLA REPRESENTATIVE: SMR
BORING LOCATION:
GROUND SURFACE ELEVATION:
START DATE: 3/14/2014
END DATE: 3/14/2014
TIME: TO
DATUM:

TYPE OF DRILL RIG: 54LT
AUGER SIZE AND TYPE:
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE:
INSIDE DIAMETER: ~1.8-Inch
OTHER:

DEPTH	SAMPLE NO. AND DEPTH	SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0			6"	Asphalt	8.6	
			1'	C SAND and gravel, grey, wet, no odor	2.1	
2		48"		M SAND, some gravel, brown, dense, moist	1.1	
					1.1	
4				C SAND, brown, dry/moist, no odor	0.9	
			4.2'	C SAND and asphalt, wet, likely collapse	0.5	
			4.5'	Red siltstone bedrock lens		
6		38"		MC SAND, brown, dry/moist, no odor	0.8	
					1.2	
			7'		1.0	
8				MC SAND, coarsens downward brown, dry/moist, no odor	0.7	
				C SAND and subrounded gravel, moist, no odor	1.2	
10		36"		M SAND, some SILT, wet, very dense, no odor	1.0	
					0.6	
					0.4	
12					0.4	
			13.2'	M SAND, some SILT, very wet, very dense, no odor	0.3	
				M SAND, little SILT, trace CLAY, moist to dry, very dense, no odor		
	GP-31	30"	14'		3.6	
14	13.5' - 14'			Bedrock fragments, C SAND and gravel, dry, no odor	7.4	
					25.0	
					6.2	
				Refusal @ 14.4'		
16						
18						

WATER LEVEL DATA			BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED
DATE	TIME	ELAPSED TIME			
				14.4-Ft.	NA

NOTES:
Installed well MWGP-30 w/ 10' screen

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.

2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

3) Abbreviations
and = 35 to 50 %
some = 20 to 35%
little = 10 to 20%
trace = 1 to 10%
c = coarse
m = medium
f = fine
vf = very fine
BGS = Below the Ground Surface
NA = Not Applicable

LABELLA Associates, P.C.

300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

TEST BORING LOG

Phase II Environmental Site Assessment
182 Avenue D & 364 Conkey Avenue
Rochester, New York

BORING: GP-32
SHEET 1 OF 1
JOB: 214539
CHKD BY:

CONTRACTOR: LBA ENV, LLC
DRILLER: MP
LABELLA REPRESENTATIVE: SMR
BORING LOCATION:
GROUND SURFACE ELEVATION:
START DATE: 2/2/2015
END DATE: 2/2/2015
TIME: TO
DATUM:

TYPE OF DRILL RIG: 54LT
AUGER SIZE AND TYPE:
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE:
INSIDE DIAMETER: ~1.8-Inch
OTHER:

DEPTH	SAMPLE NO. AND DEPTH	SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0			6"	Concrete	0.5	PID BG= 0.5 ppm
2		20"		Brown SAND and F A GRAVEL, no odor, saturated (from concrete coring)	0.6	
4					0.7	
					0.5	
6	GP-32 6.8'-8'	4'-6.8'/ 18"	4.4'	Grey Brown SILTY SAND, trace CLAY	0.7	
					1.7	
8		6.8'-8'/ 14"			5.8	
10				Refusal @ 8.0' BGS		
12						
14						
16						
18						

WATER LEVEL DATA			BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED
DATE	TIME	ELAPSED TIME			
				8' BGS	NA

NOTES: No well installed

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.

2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

3) Abbreviations

and = 35 to 50 %	c = coarse	
some = 20 to 35%	m = medium	BGS = Below the Ground Surface
little = 10 to 20%	f = fine	NA = Not Applicable
trace = 1 to 10%	vf = very fine	

BORING: GP-32

LABELLA Associates, P.C.

300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

TEST BORING LOG

Phase II Environmental Site Assessment
182 Avenue D & 364 Conkey Avenue
Rochester, New York

BORING: GP-33
SHEET 1 OF 1
JOB: 214539
CHKD BY:

CONTRACTOR: LBA ENV, LLC
DRILLER: MP
LABELLA REPRESENTATIVE: SMR
BORING LOCATION:
GROUND SURFACE ELEVATION:
START DATE: 2/2/2015
END DATE: 2/2/2015
TIME: TO
DATUM:

TYPE OF DRILL RIG: 54LT
AUGER SIZE AND TYPE:
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE:
INSIDE DIAMETER: ~1.8-Inch
OTHER:

DEPTH	SAMPLE NO. AND DEPTH	SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0			6"	Concrete floor		
					0.3	
				Brown M SAND, some F A GRAVEL, trace SILT, no odor, moist		
2		21"			0.5	
					0.7	
4			4'		0.0	
				Brown MF SAND, trace GRAVEL, moist, no odor		
6		17"	6'			
	GP-33 7'-7.4'			Brown SILTY SAND, dense, no odor, moist	0.5	
8				Refusal @ 7.4' BGS		
10						
12						
14						
16						
18						

WATER LEVEL DATA			BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED
DATE	TIME	ELAPSED TIME			
				7.4" BGS	NA

NOTES: GPMW-33 installed w/ 5' screen

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.

2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

3) Abbreviations

and = 35 to 50 %	c = coarse	
some = 20 to 35%	m = medium	BGS = Below the Ground Surface
little = 10 to 20%	f = fine	NA = Not Applicable
trace = 1 to 10%	vf = very fine	

LABELLA Associates, P.C.

300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

TEST BORING LOG

Phase II Environmental Site Assessment
182 Avenue D & 364 Conkey Avenue
Rochester, New York

BORING: GP-34
SHEET 1 OF 1
JOB: 214539
CHKD BY:

CONTRACTOR: LBA ENV, LLC
DRILLER: MP
LABELLA REPRESENTATIVE: SMR
BORING LOCATION: boxed out plumbing area
GROUND SURFACE ELEVATION:
START DATE: 2/3/2015
END DATE: 2/3/2015
TIME: TO
DATUM:

TYPE OF DRILL RIG: 54LT
AUGER SIZE AND TYPE:
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE:
INSIDE DIAMETER: ~1.8-Inch
OTHER:

DEPTH	SAMPLE NO. AND DEPTH	SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0			6"	Concrete slab (distance only)		
				Brown M SAND, some F A GRAVEL, no odor, dry	0.7	
2		28"			4.9	
			3'	Brown M SAND, some F A GRAVEL, moist	2.4	
4			4'		7.2	
				Brown M SAND, some F A GRAVEL, wet, some dense SILT	12.9	
					15.6	
6	GP-34 6'-7'	17"	6'	Brown M SAND and MF R GRAVEL, wet, no odor	21.8	
					26.4	
8				Refusal @ 7.3' BGS		
10						
12						
14						
16						
18						

WATER LEVEL DATA			BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED
DATE	TIME	ELAPSED TIME			
				7.3" BGS	NA

NOTES: GPMW-34 installed

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.

2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

3) Abbreviations

and = 35 to 50 %	c = coarse	
some = 20 to 35%	m = medium	BGS = Below the Ground Surface
little = 10 to 20%	f = fine	NA = Not Applicable
trace = 1 to 10%	vf = very fine	

BORING: GP-34

LABELLA Associates, P.C.

300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

TEST BORING LOG

Phase II Environmental Site Assessment
182 Avenue D & 364 Conkey Avenue
Rochester, New York

BORING: GP-35
SHEET 1 OF 1
JOB: 214539
CHKD BY:

CONTRACTOR: LBA ENV, LLC
DRILLER: MP
LABELLA REPRESENTATIVE: SMR
BORING LOCATION:
GROUND SURFACE ELEVATION:
START DATE: 2/3/2015
END DATE: 2/3/2015
TIME: TO
DATUM:

TYPE OF DRILL RIG: 54LT
AUGER SIZE AND TYPE:
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE:
INSIDE DIAMETER: ~1.8-Inch
OTHER:

DEPTH	SAMPLE NO. AND DEPTH	SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0			6"	Concrete slab		
				Brown M SAND, some SA GRAVEL, no odor, moist	0.0	
2					0.0	
			3.5'		0.0	
4	GP-35			Brown M SAND, some SA GRAVEL, no odor, wet	0.0	
	4'-4.5'			Brown M SAND, some SA GRAVEL, trace SILT, no odor, wet	0.0	
6					0.0	
8				Refusal @ 7.2' BGS		
10						
12						
14						
16						
18						

WATER LEVEL DATA			BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED
DATE	TIME	ELAPSED TIME			
				7.2" BGS	NA

NOTES: no Well installed

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.

2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

3) Abbreviations

and = 35 to 50 %	c = coarse	
some = 20 to 35%	m = medium	BGS = Below the Ground Surface
little = 10 to 20%	f = fine	NA = Not Applicable
trace = 1 to 10%	vf = very fine	

BORING: GP-35

LABELLA Associates, P.C.

300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

TEST BORING LOG

Phase II Environmental Site Assessment
182 Avenue D & 364 Conkey Avenue
Rochester, New York

BORING: GP-36
SHEET 1 OF 1
JOB: 214539
CHKD BY:

CONTRACTOR: LBA ENV, LLC
DRILLER: MP
LABELLA REPRESENTATIVE: SMR
BORING LOCATION:
GROUND SURFACE ELEVATION:
START DATE: 2/3/2015
END DATE: 2/3/2015
TIME: TO
DATUM:

TYPE OF DRILL RIG: 54LT
AUGER SIZE AND TYPE:
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE:
INSIDE DIAMETER: ~1.8-Inch
OTHER:

DEPTH	SAMPLE NO. AND DEPTH	SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0			6"	Concrete floor		
				Brown M SAND, some F SA GRAVEL, no odor, moist	1.4	
2		22"			1.2	
					1.2	
4			4'		0.3	
				Brown Silty SAND, some GRAVEL, dry, no odor	1.8	
6	GP-36 6.5'-7'	25"			1.4	Gravel lense @ 6.5'
					3.2	
				Refusal @ 7.0' BGS		
8						
10						
12						
14						
16						
18						

WATER LEVEL DATA			BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	NOTES:
DATE	TIME	ELAPSED TIME				
				7' BGS	NA	

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.

2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

3) Abbreviations

and = 35 to 50 %	c = coarse	
some = 20 to 35%	m = medium	BGS = Below the Ground Surface
little = 10 to 20%	f = fine	NA = Not Applicable
trace = 1 to 10%	vf = very fine	

BORING: GP-36

LABELLA Associates, P.C.

300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

TEST BORING LOG

Phase II Environmental Site Assessment
182 Avenue D & 364 Conkey Avenue
Rochester, New York

BORING: GP-37
SHEET 1 OF 1
JOB: 214539
CHKD BY:

CONTRACTOR: LBA ENV, LLC
DRILLER: MP
LABELLA REPRESENTATIVE: SMR
BORING LOCATION:
GROUND SURFACE ELEVATION:
START DATE: 2/3/2015
END DATE: 2/3/2015
TIME: TO
DATUM:

TYPE OF DRILL RIG: 54LT
AUGER SIZE AND TYPE:
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE:
INSIDE DIAMETER: ~1.8-Inch
OTHER:

DEPTH	SAMPLE NO. AND DEPTH	SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0			6"	Concrete slab		
				Brown Silty SAND, and C SA GRAVEL, no odor, dry	0.2	
2		36"	2.5'		0.4	
				Brown silty SAND and C SA GRAVEL, no odor, moist	0.1	
4					0.1	
			4.8'	Bedrock Fragments, GRAVEL		
			5'	Brown-grey C SAND and MF A GRAVEL, no odor	3.1	
6	GP-37 6'-6.5'				1.5	
				Refusal @ 6.5' BGS		
8						
10						
12						
14						
16						
18						

WATER LEVEL DATA			BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED
DATE	TIME	ELAPSED TIME			
				6.5' BGS	NA

NOTES: no Well installed

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.

2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

3) Abbreviations

and = 35 to 50 %	c = coarse	
some = 20 to 35%	m = medium	BGS = Below the Ground Surface
little = 10 to 20%	f = fine	NA = Not Applicable
trace = 1 to 10%	vf = very fine	

LABELLA Associates, P.C.

300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

TEST BORING LOG

Phase II Environmental Site Assessment
182 Avenue D & 364 Conkey Avenue
Rochester, New York

BORING: GP-38
SHEET 1 OF 1
JOB: 214539
CHKD BY:

CONTRACTOR: LBA ENV, LLC
DRILLER: MP
LABELLA REPRESENTATIVE: SMR
BORING LOCATION:
GROUND SURFACE ELEVATION:
START DATE: 2/3/2015
END DATE: 2/3/2015
TIME: TO
DATUM:

TYPE OF DRILL RIG: 54LT
AUGER SIZE AND TYPE:
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE:
INSIDE DIAMETER: ~1.8-Inch
OTHER:

DEPTH	SAMPLE NO. AND DEPTH	SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0			6"	Concrete		
				Brown SAND, some GRAVEL, some SILT, dry, no odor	0.3	
2		18"			0.4	
			3'		0.1	
4	GP-38		4'	Brown SAND, some GRAVEL, some SILT, moist, no odor	0.1	
	4'-4.5'				0.5	
			24"	Brown SAND, some GRAVEL, some SILT, wet, no odor	0.1	
6					0	
				Refusal @ 6.3' BGS		
8						
10						
12						
14						
16						
18						

WATER LEVEL DATA			BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	NOTES:
DATE	TIME	ELAPSED TIME				
				6.3' BGS	NA	

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.

2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

3) Abbreviations

and = 35 to 50 %
some = 20 to 35%
little = 10 to 20%
trace = 1 to 10%

c = coarse
m = medium
f = fine
vf = very fine

BGS = Below the Ground Surface
NA = Not Applicable

LABELLA Associates, P.C.

300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

TEST BORING LOG

Phase II Environmental Site Assessment
182 Avenue D & 364 Conkey Avenue
Rochester, New York

BORING: GP-39
SHEET 1 OF 1
JOB: 214539
CHKD BY:

CONTRACTOR: LBA ENV, LLC
DRILLER: MP
LABELLA REPRESENTATIVE: SMR
BORING LOCATION: NE corner proximate UST area
GROUND SURFACE ELEVATION:
START DATE: 2/3/2015
END DATE: 2/3/2015
TIME: TO
DATUM:

TYPE OF DRILL RIG: 54LT
AUGER SIZE AND TYPE:
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE:
INSIDE DIAMETER: ~1.8-Inch
OTHER:

DEPTH	SAMPLE NO. AND DEPTH	SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0			6"	Grey SANDY SILT, no odor, dry	0.0	
				Red SAND, some silt, dry, no odor		
			1.5'		0.0	
2		38"		Brown-grey SAND, some M A GRAVEL, some SILT, trace urban fill (ash, cinders, etc.	0.0	
					0.0	
4					0.2	
				moist	0.2	
			5'			
6		37"		Red-brown Silty SAND, dense, moist, no odor	1.8	
					3.0	
8					2.3	
			8.5'		0.1	
				Brown C SAND, dry	2.2	
10		30"	10'	Grey-brown Silty SAND, some CLAY, very dense	3.2	
					15.9	
			11.5'	Grey petroleum stain, faint petro odor	31.2	
12			12'		171.0	
				Brown C SAND, dry	163.0	
			13'		249.0	
	GP-39 13'-15'					
14		27"		Grey stained SILT, some SAND, trace GRAVEL, moist, petro odors	386.0	
					249.0	
					167.0	
					121.0	
16				Refusal @ 15.9' BGS		
18						

WATER LEVEL DATA			BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED
DATE	TIME	ELAPSED TIME			
				15.9" BGS	NA

NOTES: (4) 2oz + (4) 4oz taken here
DUPE

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.

2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

3) Abbreviations

and = 35 to 50 %	c = coarse	
some = 20 to 35%	m = medium	BGS = Below the Ground Surface
little = 10 to 20%	f = fine	NA = Not Applicable
trace = 1 to 10%	vf = very fine	

LABELLA Associates, P.C.

300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

TEST BORING LOG

Phase II Environmental Site Assessment
182 Avenue D & 364 Conkey Avenue
Rochester, New York

BORING: GP-40
SHEET 1 OF 1
JOB: 214539
CHKD BY:

CONTRACTOR: LBA ENV, LLC
DRILLER: MP
LABELLA REPRESENTATIVE: SMR
BORING LOCATION: 15' N of GP-39
GROUND SURFACE ELEVATION:
START DATE: 2/3/2015
END DATE: 2/3/2015
TIME: TO
DATUM:

TYPE OF DRILL RIG: 54LT
AUGER SIZE AND TYPE:
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE:
INSIDE DIAMETER: ~1.8-Inch
OTHER:

DEPTH	SAMPLE NO. AND DEPTH	SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0			10"	Grey SILT, dense, no odor	0.0	
					0.0	
2			2.5'	Brown-grey SAND and GRAVEL, no odor, dry	0.1	
			3'	some silt		
				Brick fragments	0.1	
4					0.1	
				Red SAND and MF A GRAVEL, brick fragments, moist	0.0	
6					0	
	GP-40 7.5'-8'		7'		0.1	
8				Brown SANDY SILT, wet, no odor	0.1	
					0.0	
10				NO DATA - NO RECOVERY	0.0	
					0.0	
12					0.0	
				BORING CONCLUDED @ 12' BGS (lost macro core, came unscrewed)		
14						
16						
18						

WATER LEVEL DATA			BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED
DATE	TIME	ELAPSED TIME			
				12' BGS	9'

NOTES: no Well installed

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.

2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

3) Abbreviations

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trace = 1 to 10%	vf = very fine	

BORING: GP-40

LABELLA Associates, P.C.

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ENVIRONMENTAL ENGINEERING CONSULTANTS

TEST BORING LOG

Phase II Environmental Site Assessment
182 Avenue D & 364 Conkey Avenue
Rochester, New York

BORING: GP-41
SHEET 1 OF 1
JOB: 214539
CHKD BY:

CONTRACTOR: LBA ENV, LLC
DRILLER: MP
LABELLA REPRESENTATIVE: SMR
BORING LOCATION:
GROUND SURFACE ELEVATION:
START DATE: 2/3/2015
END DATE: 2/3/2015
TIME: TO
DATUM:

TYPE OF DRILL RIG: 54LT
AUGER SIZE AND TYPE:
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE:
INSIDE DIAMETER: ~1.8-Inch
OTHER:

DEPTH	SAMPLE NO. AND DEPTH	SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0			6"	Brown SAND and GRAVEL, dry	0.0	
2		48"	2.5'	Red SAND and F A GRAVEL, dry, trace brick fragments, no odor	0.0 0.0	
4			3' 4'	BLACK SAND Brown Silty SAND and F A GRAVEL, moist, no odor	0.0	
6		48"		Brown Silty SAND and F A GRAVEL, trace brick fragments, moist, no odor	0.0 0	
8					0.0	
10		48"	11'	no brick fragments	0.0 0.0	
12				Grey SANDY SILT, petro odor, moist, trace clay	28.9 102.0	
14	GP-41 11'-13' MS/MSD	48" OVERPAC			26.2 16.1 2.2 3.0	
16				Refusal @ 15' BGS		
18						

WATER LEVEL DATA			BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED
DATE	TIME	ELAPSED TIME			
				15' BGS	NA

NOTES: no Well installed

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.

2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

3) Abbreviations

and = 35 to 50 %
some = 20 to 35%
little = 10 to 20%
trace = 1 to 10%
c = coarse
m = medium
f = fine
vf = very fine
BGS = Below the Ground Surface
NA = Not Applicable

BORING: GP-41

LABELLA Associates, P.C.

300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

TEST BORING LOG

Phase II Environmental Site Assessment
182 Avenue D & 364 Conkey Avenue
Rochester, New York

BORING: GP-42
SHEET 1 OF 1
JOB: 214539
CHKD BY:

CONTRACTOR: LBA ENV, LLC
DRILLER: MP
LABELLA REPRESENTATIVE: SMR
BORING LOCATION:
GROUND SURFACE ELEVATION:
START DATE: 2/3/2015
END DATE: 2/3/2015
TIME: TO
DATUM:

TYPE OF DRILL RIG: 54LT
AUGER SIZE AND TYPE:
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE:
INSIDE DIAMETER: ~1.8-Inch
OTHER:

DEPTH	SAMPLE NO. AND DEPTH	SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0				Brown SAND and GRAVEL, dry, no odor	0.0	
					0.0	
2		48"			0.0	
			2.5'	Black SAND and F GRAVEL, dry, no odor		
			3'		0.0	
4				Brown Silty SAND, some MF A GRAVEL, moist, no odor		
					1.1	Changed PID filter BG= 1.1
6		48"			1.1	
					1.1	
8					1.2	
	GP-42 9'-9.5'		9'		0.5	PID BG= 0.4
					84.4	
10		48"		Grey Sandy SILT, dense, some CLAY, faint petro odor, grey stain, moist	18.1	
					63.3	
12			12'		54.7	
				wet, more CLAY	23.5	
14		40"				
16				Refusal @ 15.0' BGS		
18						

WATER LEVEL DATA			BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED
DATE	TIME	ELAPSED TIME			
				8' BGS	NA

NOTES: no Well installed

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.

2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

3) Abbreviations

and = 35 to 50 %	c = coarse	
some = 20 to 35%	m = medium	BGS = Below the Ground Surface
little = 10 to 20%	f = fine	NA = Not Applicable
trace = 1 to 10%	vf = very fine	

BORING: GP-42

LABELLA Associates, P.C.

300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

TEST BORING LOG

Phase II Environmental Site Assessment
182 Avenue D & 364 Conkey Avenue
Rochester, New York

BORING: GP-43
SHEET 1 OF 1
JOB: 214539
CHKD BY:

CONTRACTOR: LBA ENV, LLC
DRILLER: MP
LABELLA REPRESENTATIVE: SMR
BORING LOCATION:
GROUND SURFACE ELEVATION:
START DATE: 2/4/2015
END DATE: 2/4/2015
TIME: TO
DATUM:

TYPE OF DRILL RIG: 54LT
AUGER SIZE AND TYPE:
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE:
INSIDE DIAMETER: ~1.8-Inch
OTHER:

DEPTH	SAMPLE NO. AND DEPTH	SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0		8"		Brown SAND and GRAVEL, brick fragments, dry, dense	0.0 0.0	
2				Refusal @ 1.4' BGS		
4						
6						
8						
10						
12						
14						
16						
18						

WATER LEVEL DATA			BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED
DATE	TIME	ELAPSED TIME			
				1.4' BGS	NA

NOTES: no Well installed
Tried 3 locations
no samples taken

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.

2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

3) Abbreviations

and = 35 to 50 %
some = 20 to 35%
little = 10 to 20%
trace = 1 to 10%
c = coarse
m = medium
f = fine
vf = very fine
BGS = Below the Ground Surface
NA = Not Applicable

BORING: GP-43

LABELLA Associates, P.C.

300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

TEST BORING LOG

Phase II Environmental Site Assessment
182 Avenue D & 364 Conkey Avenue
Rochester, New York

BORING: GP-44
SHEET 1 OF 1
JOB: 214539
CHKD BY:

CONTRACTOR: LBA ENV, LLC
DRILLER: MP
LABELLA REPRESENTATIVE: SMR
BORING LOCATION:
GROUND SURFACE ELEVATION:
START DATE: 2/4/2015
END DATE: 2/4/2015
TIME: TO
DATUM:

TYPE OF DRILL RIG: 54LT
AUGER SIZE AND TYPE:
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE:
INSIDE DIAMETER: ~1.8-Inch
OTHER:

DEPTH	SAMPLE NO. AND DEPTH	SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0		0		NO RECOVERY Refusal @ 4" BGS	N/A	
2						
4						
6						
8						
10						
12						
14						
16						
18						

WATER LEVEL DATA			BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED
DATE	TIME	ELAPSED TIME			
					NA

NOTES: no Well installed

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.

2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

3) Abbreviations

and = 35 to 50 %	c = coarse	
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little = 10 to 20%	f = fine	NA = Not Applicable
trace = 1 to 10%	vf = very fine	

BORING: GP-44

LABELLA Associates, P.C.

300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

TEST BORING LOG

Phase II Environmental Site Assessment
182 Avenue D & 364 Conkey Avenue
Rochester, New York

BORING: GP-45
SHEET 1 OF 1
JOB: 214539
CHKD BY:

CONTRACTOR: LBA ENV, LLC
DRILLER: MP
LABELLA REPRESENTATIVE: SMR
BORING LOCATION: Proximate NE building corner
GROUND SURFACE ELEVATION:
START DATE: 2/4/2015
END DATE: 2/4/2015
TIME: TO
DATUM:

TYPE OF DRILL RIG: 54LT
AUGER SIZE AND TYPE:
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE:
INSIDE DIAMETER: ~1.8-Inch
OTHER:

DEPTH	SAMPLE NO. AND DEPTH	SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0			6"	Brwon-black SAND and F A GRAVEL, organic material	0.0	
				Red SAND and GRAVEL, moist, no odor		
		48"	1.2'		0.0	
2				Brown silty SAND and M SA GRAVEL, dense, moist, no odor	0.0	
4					0.0	
			4.6'		4.1	
				Brown SILT, some SAND, some MF A GRAVEL, moist, dense, no odor	3.4	
6		48"			2.8	
					2.5	
			7.6'	grey petro stain, faint petro odors	14.2	
8						
					25.3	
				medium-strong petro odors, wet	143	
10	GP-45 10.5'-11'	48"			187.0	
					231.0	
12					132.0	
					39.3	
				some clay	80.8	
		42"			7.1	
14		OVERPAC		Brown clayey SILT, very dense, wet, no odors	2.4	
					4.0	
				Refusal @ 14.5' BGS		
16						
18						

WATER LEVEL DATA			BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED
DATE	TIME	ELAPSED TIME			
				14.5' BGS	NA

NOTES: no Well installed

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.

2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

3) Abbreviations

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some = 20 to 35%	m = medium	BGS = Below the Ground Surface
little = 10 to 20%	f = fine	NA = Not Applicable
trace = 1 to 10%	vf = very fine	

LABELLA Associates, P.C.

300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

TEST BORING LOG

Phase II Environmental Site Assessment
182 Avenue D & 364 Conkey Avenue
Rochester, New York

BORING: GP-46
SHEET 1 OF 1
JOB: 214539
CHKD BY:

CONTRACTOR: LBA ENV, LLC
DRILLER: MP
LABELLA REPRESENTATIVE: SMR
BORING LOCATION:
GROUND SURFACE ELEVATION:
START DATE: 2/4/2015
END DATE: 2/4/2015
TIME: TO
DATUM:

TYPE OF DRILL RIG: 54LT
AUGER SIZE AND TYPE:
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE:
INSIDE DIAMETER: ~1.8-Inch
OTHER:

DEPTH	SAMPLE NO. AND DEPTH	SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0		0		No SAMPLE Refusal @ 0.7' BGS		
2						
4						
6						
8						
10						
12						
14						
16						
18						

WATER LEVEL DATA			BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED
DATE	TIME	ELAPSED TIME			
					NA

NOTES: Tried 3 locations, all encountered shallow refusal

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.

2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

3) Abbreviations

and = 35 to 50 %	c = coarse	
some = 20 to 35%	m = medium	BGS = Below the Ground Surface
little = 10 to 20%	f = fine	NA = Not Applicable
trace = 1 to 10%	vf = very fine	

BORING: GP-46

LABELLA Associates, P.C.

300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

TEST BORING LOG

Phase II Environmental Site Assessment
182 Avenue D & 364 Conkey Avenue
Rochester, New York

BORING: GP-47
SHEET 1 OF 1
JOB: 214539
CHKD BY:

CONTRACTOR: LBA ENV, LLC
DRILLER: MP
LABELLA REPRESENTATIVE: SMR
BORING LOCATION:
GROUND SURFACE ELEVATION:
START DATE: 2/4/2015
END DATE: 2/4/2015
TIME: TO
DATUM:

TYPE OF DRILL RIG: 54LT
AUGER SIZE AND TYPE:
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE:
INSIDE DIAMETER: ~1.8-Inch
OTHER:

DEPTH	SAMPLE NO. AND DEPTH	SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0		0		NO SAMPLE Refusal @ 3" BGS		
2						
4						
6						
8						
10						
12						
14						
16						
18						

WATER LEVEL DATA			BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED
DATE	TIME	ELAPSED TIME			
					NA

NOTES: no Well installed

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.

2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

3) Abbreviations

and = 35 to 50 %	c = coarse	
some = 20 to 35%	m = medium	BGS = Below the Ground Surface
little = 10 to 20%	f = fine	NA = Not Applicable
trace = 1 to 10%	vf = very fine	

BORING: GP-47

LABELLA Associates, P.C.

300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

TEST BORING LOG

Phase II Environmental Site Assessment
182 Avenue D & 364 Conkey Avenue
Rochester, New York

BORING: GP-48
SHEET 1 OF 1
JOB: 214539
CHKD BY:

CONTRACTOR: LBA ENV, LLC
DRILLER: MP
LABELLA REPRESENTATIVE: SMR
BORING LOCATION:
GROUND SURFACE ELEVATION:
START DATE: 2/4/2015
END DATE: 2/4/2015
TIME: TO
DATUM:

TYPE OF DRILL RIG: 54LT
AUGER SIZE AND TYPE:
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE:
INSIDE DIAMETER: ~1.8-Inch
OTHER:

DEPTH	SAMPLE NO. AND DEPTH	SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0		14"		Grey SAND and GRAVEL, dry, dense, no odor	1.4 0.3 0.3	Rock obstructing probe tip
				Refusal @ 1.1' BGS		
2						
4						
6						
8						
10						
12						
14						
16						
18						

WATER LEVEL DATA			BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED
DATE	TIME	ELAPSED TIME			
				1.1' BGS	NA

NOTES: no Well installed

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.

2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

3) Abbreviations

and = 35 to 50 %
some = 20 to 35%
little = 10 to 20%
trace = 1 to 10%

c = coarse
m = medium
f = fine
vf = very fine

BGS = Below the Ground Surface
NA = Not Applicable

BORING: GP-48

LABELLA Associates, P.C.

300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

TEST BORING LOG

Phase II Environmental Site Assessment
182 Avenue D & 364 Conkey Avenue
Rochester, New York

BORING: GP-49
SHEET 1 OF 1
JOB: 214539
CHKD BY:

CONTRACTOR: LBA ENV, LLC
DRILLER: MP
LABELLA REPRESENTATIVE: SMR
BORING LOCATION:
GROUND SURFACE ELEVATION:
START DATE: 2/4/2015
END DATE: 2/4/2015
TIME: TO
DATUM:

TYPE OF DRILL RIG: 54LT
AUGER SIZE AND TYPE:
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE:
INSIDE DIAMETER: ~1.8-Inch
OTHER:

DEPTH	SAMPLE NO. AND DEPTH	SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0				Grey SAND and GRAVEL, dry, no odor	0.2 0.3 0..1	
2				Refusal @ 1.0' BGS		
4						
6						
8						
10						
12						
14						
16						
18						

WATER LEVEL DATA			BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED
DATE	TIME	ELAPSED TIME			
				1.0' BGS	NA

NOTES: no Well installed

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.

2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

3) Abbreviations

and = 35 to 50 %	c = coarse	
some = 20 to 35%	m = medium	BGS = Below the Ground Surface
little = 10 to 20%	f = fine	NA = Not Applicable
trace = 1 to 10%	vf = very fine	

BORING: GP-49

LABELLA Associates, P.C.

300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

TEST BORING LOG

Phase II Environmental Site Assessment
182 Avenue D & 364 Conkey Avenue
Rochester, New York

BORING: GP-50
SHEET 1 OF 1
JOB: 214539
CHKD BY:

CONTRACTOR: LBA ENV, LLC
DRILLER: MP
LABELLA REPRESENTATIVE: SMR
BORING LOCATION:
GROUND SURFACE ELEVATION:
START DATE: 2/4/2015
END DATE: 2/4/2015
TIME: TO
DATUM:

TYPE OF DRILL RIG: 54LT
AUGER SIZE AND TYPE:
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE:
INSIDE DIAMETER: ~1.8-Inch
OTHER:

DEPTH	SAMPLE NO. AND DEPTH	SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0				Brown to grey SAND and GRAVEL, moist/dry, no odor	0.3	PID BG=0.3
2		40"			0.3 0.4	
4					0.7	
				Light brown SAND, moist, no odor	0.1	
6	GP-50 5'-5.5'	42"	5'	Light brown SILTY SAND, no odor, wet	0.0 0.0	
8			7.6'	Brown SILT, dry, no odor, wet	0.1	
				some F SAND, some SR GRAVEL, wet	0.1 0.0	
10		36"	10'	Brown C SAND, saturated, no odor	0.0	
12					0.0	
		24"			0.0	
14				Refusal @ 13.4' BGS		
16						
18						

WATER LEVEL DATA			BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED
DATE	TIME	ELAPSED TIME			
				13.4' BGS	NA

NOTES: no Well installed

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.

2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

3) Abbreviations

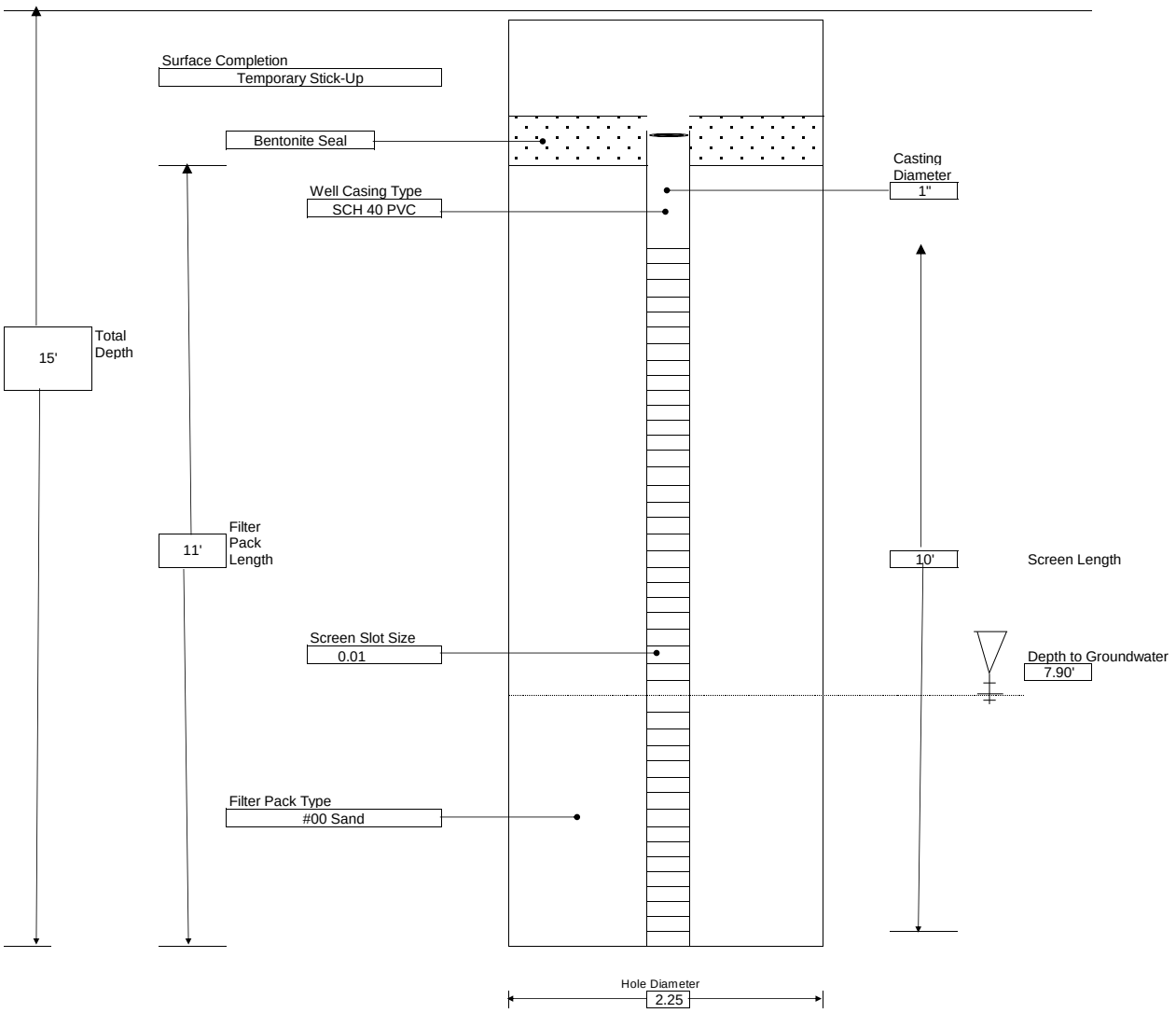
and = 35 to 50 %
some = 20 to 35%
little = 10 to 20%
trace = 1 to 10%
c = coarse
m = medium
f = fine
vf = very fine
BGS = Below the Ground Surface
NA = Not Applicable

LABELLA Associates, P.C. 300 STATE STREET, ROCHESTER, NEW YORK ENVIRONMENTAL ENGINEERING CONSULTANTS	PROJECT Phase II Environmental Site Assessment 182 Avenue D & 364 Conkey Avenue Rochester, New York	BORING: GPMW-16 SHEET 1 OF 1 JOB # 214128 CHKD. BY:

CONTRACTOR: LBA ENV, LLC
DRILLER: RR
LABELLA REPRESENTATIVE: JMG
BORING LOCATION:
GROUND SURFACE ELEVATION: N/A DATUM: N/A
START DATE: 1/16/2014 END DATE:
TYPE OF DRILL RIG: 54LT
AUGER SIZE AND TYPE: N/A
OVERBURDEN SAMPLING METHOD:
ROCK DRILLING METHOD: N/A

WATER LEVEL DATA

DATE	TIME	WATER	CASING	REMARKS
1/17/2014		7.90'		Turbid



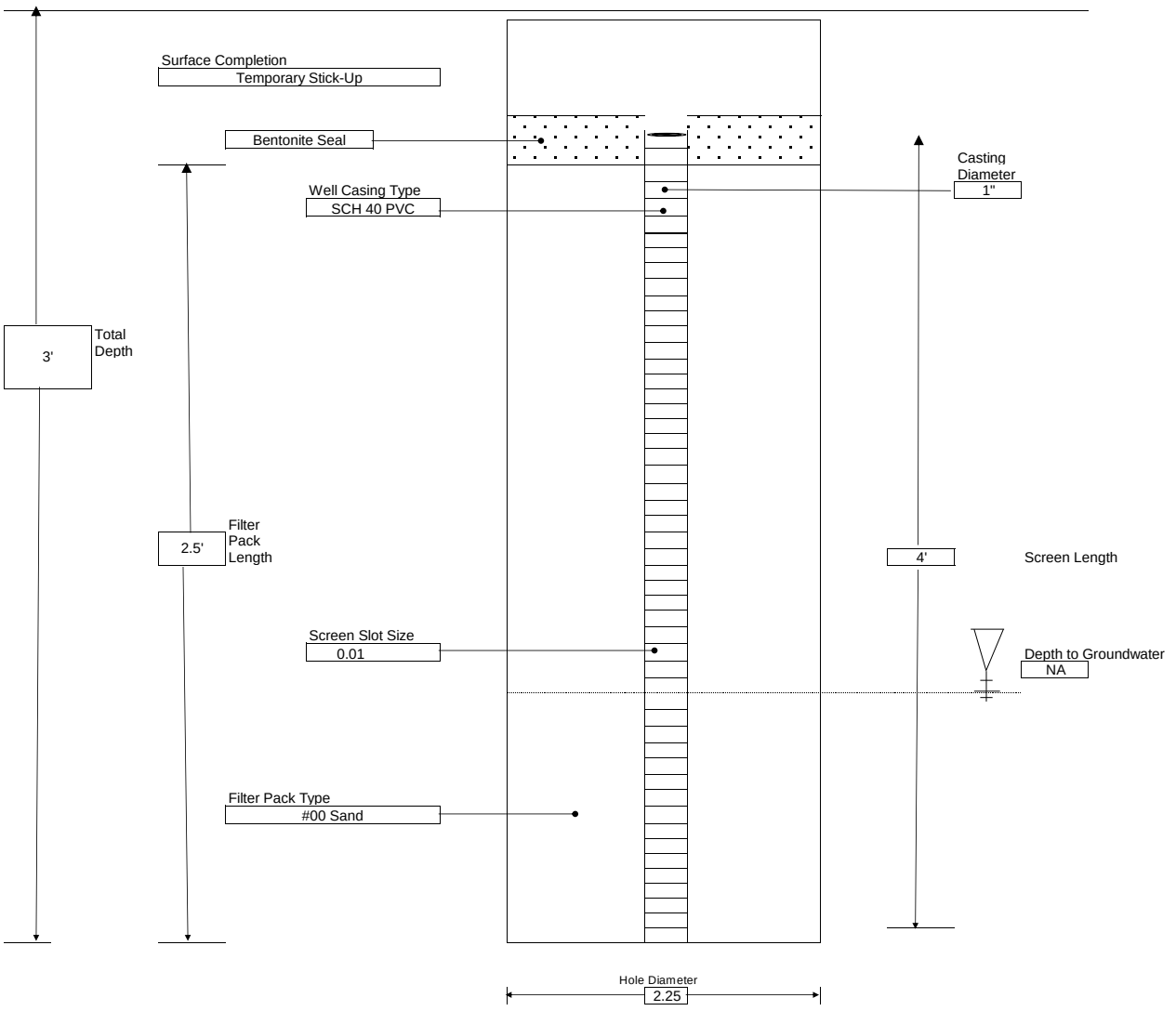
LABELLA Associates, P.C. 300 STATE STREET, ROCHESTER, NEW YORK ENVIRONMENTAL ENGINEERING CONSULTANTS	PROJECT Phase II Environmental Site Assessment 182 Avenue D & 364 Conkey Avenue Rochester, New York	BORING: GPMW-20 SHEET 1 OF 1 JOB # 214128 CHKD. BY:

CONTRACTOR: LBA ENV, LLC
DRILLER: RR
LABELLA REPRESENTATIVE: JMG
BORING LOCATION:
GROUND SURFACE ELEVATION: N/A DATUM: N/A
START DATE: 1/17/2014 END DATE:

TYPE OF DRILL RIG:
AUGER SIZE AND TYPE: N/A
OVERBURDEN SAMPLING METHOD:
ROCK DRILLING METHOD: N/A

WATER LEVEL DATA

DATE	TIME	WATER	CASING	REMARKS
1/17/2014		DRY		Could not sample



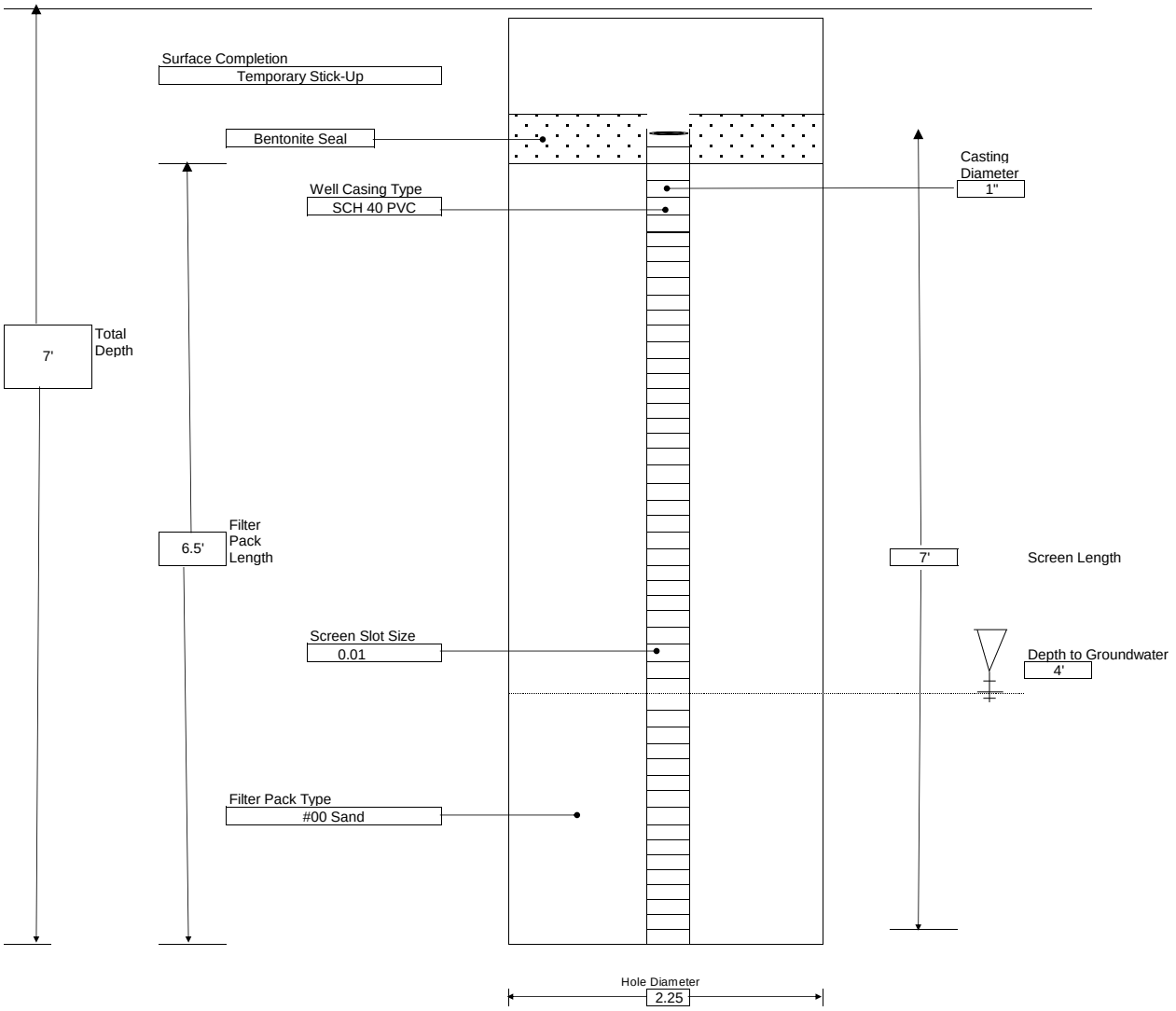
LABELLA Associates, P.C. 300 STATE STREET, ROCHESTER, NEW YORK ENVIRONMENTAL ENGINEERING CONSULTANTS	PROJECT Phase II Environmental Site Assessment 182 Avenue D & 364 Conkey Avenue Rochester, New York	BORING: GPMW-21 SHEET 1 OF 1 JOB # 214128 CHKD. BY:

CONTRACTOR: LBA ENV, LLC
DRILLER: RR
LABELLA REPRESENTATIVE: JMG
BORING LOCATION:
GROUND SURFACE ELEVATION: N/A DATUM: N/A
START DATE: 1/17/2014 END DATE:

TYPE OF DRILL RIG: 54LT
AUGER SIZE AND TYPE: N/A
OVERBURDEN SAMPLING METHOD:
ROCK DRILLING METHOD: N/A

WATER LEVEL DATA

DATE	TIME	WATER	CASING	REMARKS
1/17/2014		4'		Turbid



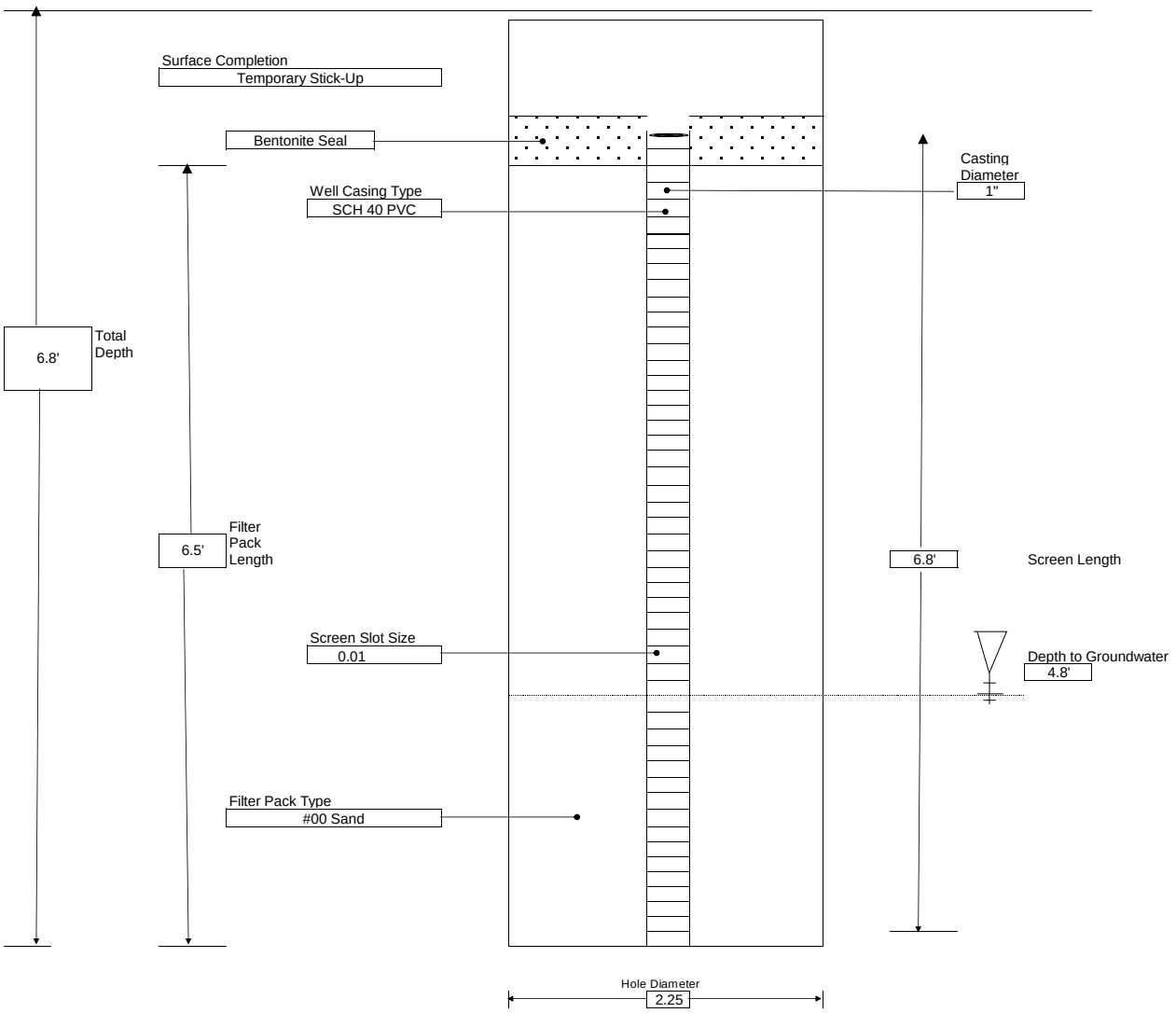
LABELLA Associates, P.C. 300 STATE STREET, ROCHESTER, NEW YORK ENVIRONMENTAL ENGINEERING CONSULTANTS	PROJECT Phase II Environmental Site Assessment 182 Avenue D & 364 Conkey Avenue Rochester, New York	BORING: GPMW-23 SHEET 1 OF 1 JOB # 214128 CHKD. BY:

CONTRACTOR: LBA ENV, LLC
DRILLER: RR
LABELLA REPRESENTATIVE: JMG
BORING LOCATION:
GROUND SURFACE ELEVATION: N/A DATUM: N/A
START DATE: 1/17/2014 END DATE:

TYPE OF DRILL RIG:
AUGER SIZE AND TYPE: N/A
OVERBURDEN SAMPLING METHOD:
ROCK DRILLING METHOD: N/A

WATER LEVEL DATA

DATE	TIME	WATER	CASING	REMARKS
1/17/2014		4.8'		Turbid



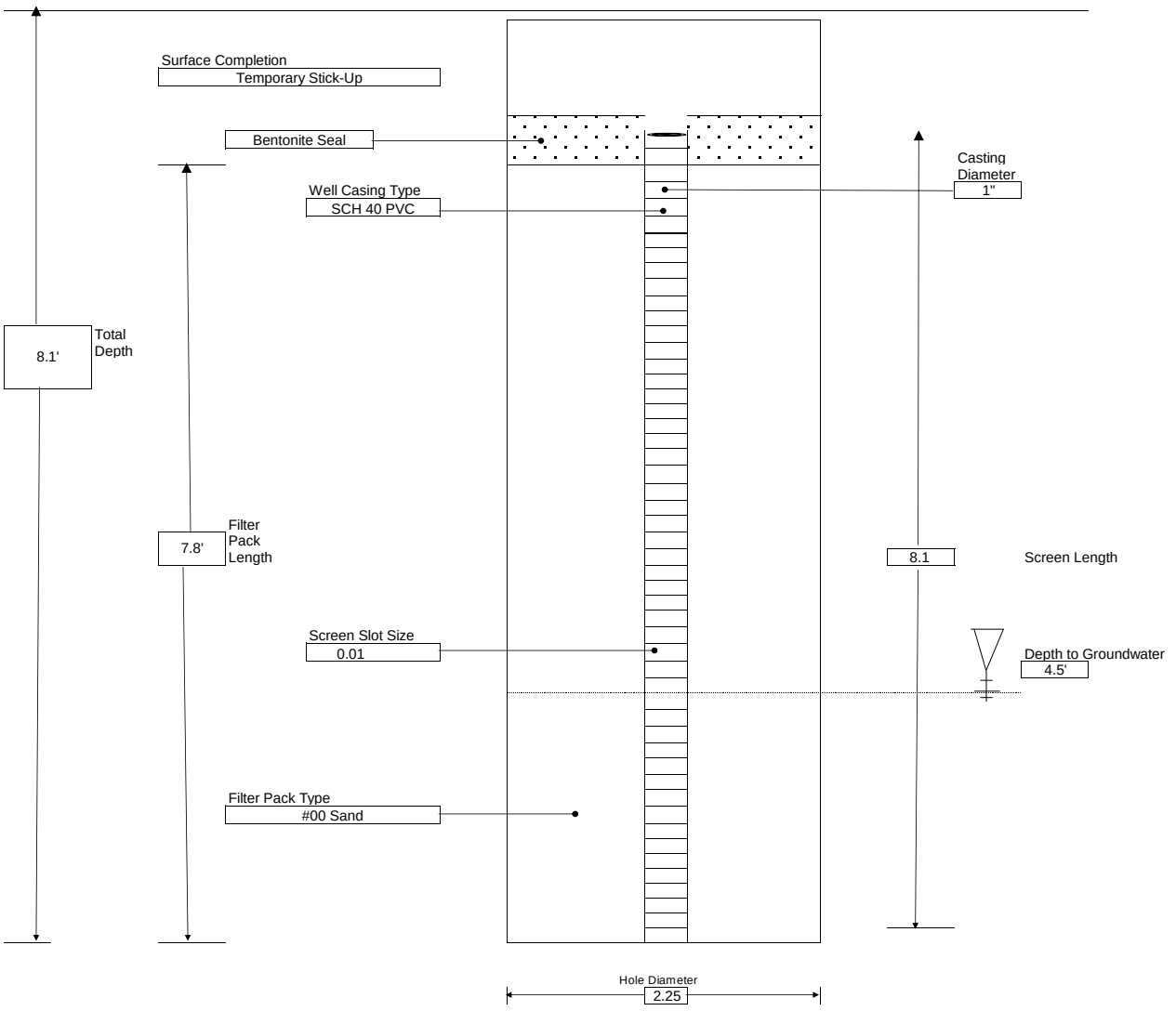
LABELLA Associates, P.C. 300 STATE STREET, ROCHESTER, NEW YORK ENVIRONMENTAL ENGINEERING CONSULTANTS	PROJECT Phase II Environmental Site Assessment 182 Avenue D & 364 Conkey Avenue Rochester, New York	BORING: GPMW-24 SHEET 1 OF 1 JOB # 214128 CHKD. BY:

CONTRACTOR: LBA ENV, LLC
DRILLER: RR
LABELLA REPRESENTATIVE: JMG
BORING LOCATION:
GROUND SURFACE ELEVATION: N/A DATUM: N/A
START DATE: 1/17/2014 END DATE:

TYPE OF DRILL RIG:
AUGER SIZE AND TYPE: N/A
OVERBURDEN SAMPLING METHOD:
ROCK DRILLING METHOD: N/A

WATER LEVEL DATA

DATE	TIME	WATER	CASING	REMARKS
1/17/2014		4.5'		Turbid, petro sheen and strong odor

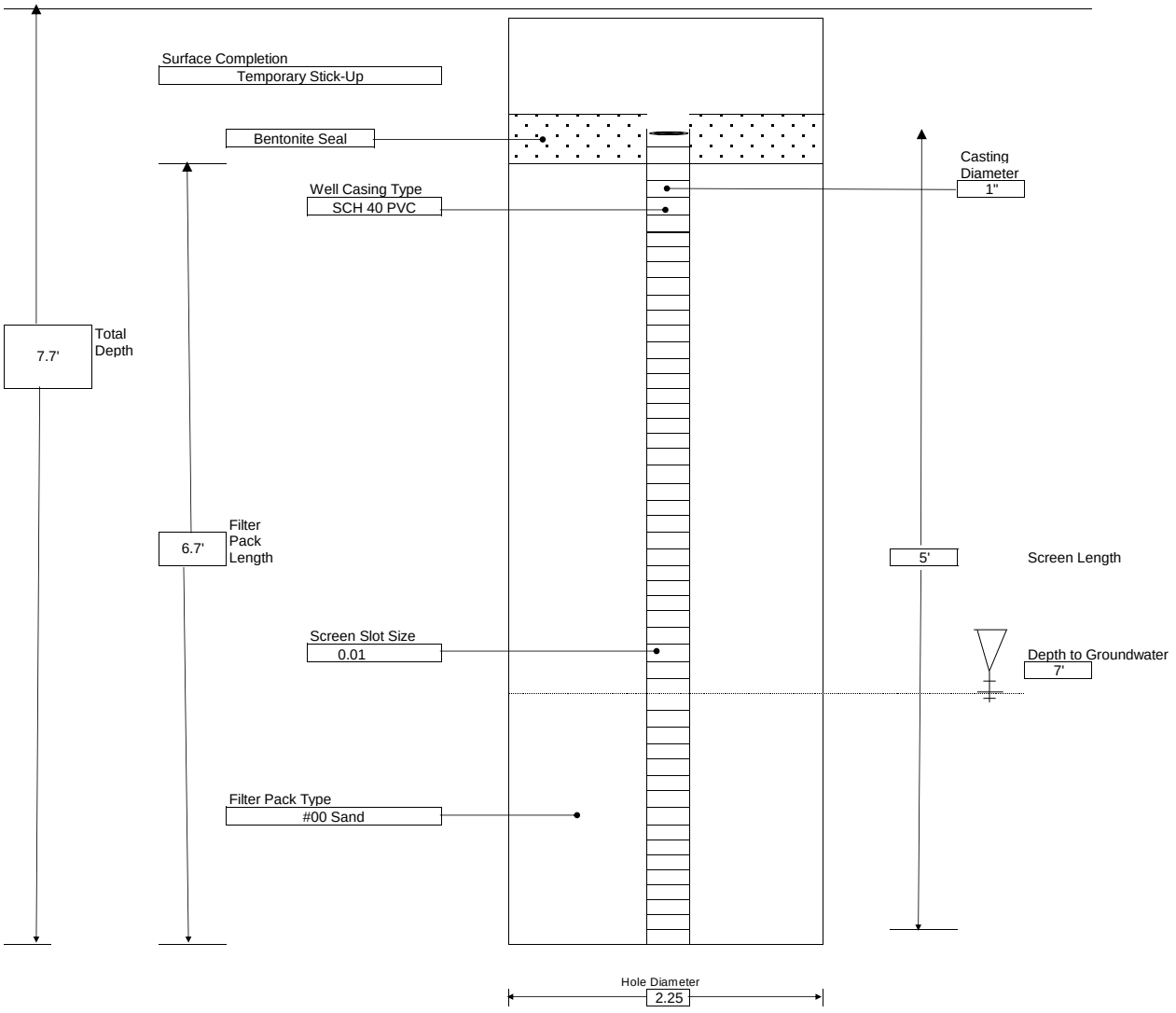


LABELLA Associates, P.C. 300 STATE STREET, ROCHESTER, NEW YORK ENVIRONMENTAL ENGINEERING CONSULTANTS	PROJECT Phase II Environmental Site Assessment 182 Avenue D & 364 Conkey Avenue Rochester, New York	BORING: GPMW-26 SHEET 1 OF 1 JOB # 214128 CHKD. BY:

CONTRACTOR: LBA ENV, LLC
DRILLER: NW
LABELLA REPRESENTATIVE: JMG, SMR
BORING LOCATION:
GROUND SURFACE ELEVATION: N/A DATUM: N/A
START DATE: 3/14/14 END DATE:
TYPE OF DRILL RIG:
AUGER SIZE AND TYPE: N/A
OVERBURDEN SAMPLING METHOD:
ROCK DRILLING METHOD: N/A

WATER LEVEL DATA

DATE	TIME	WATER	CASING	REMARKS
3/14/2014		7'		Turbid, slight chem odor



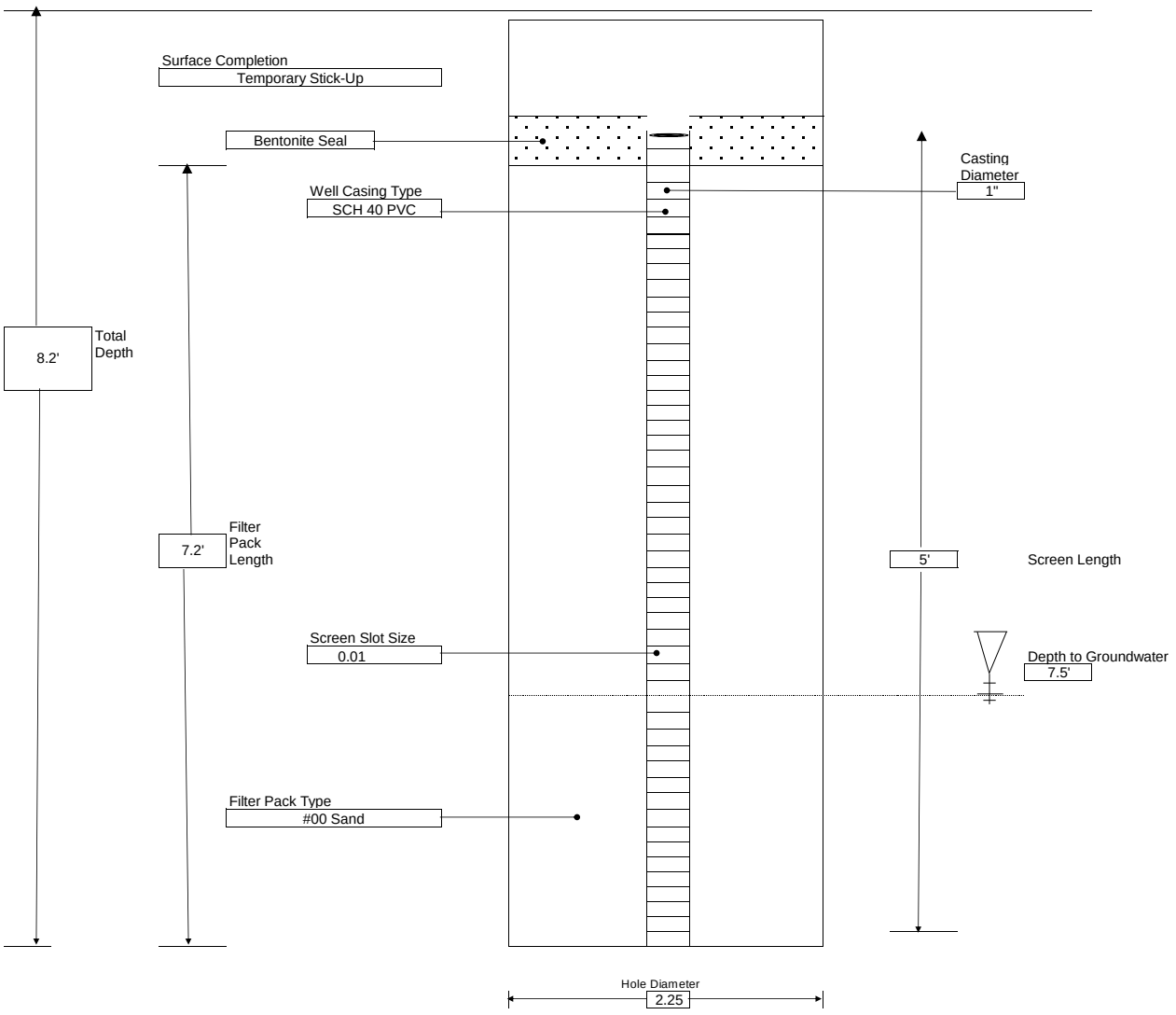
LABELLA Associates, P.C. 300 STATE STREET, ROCHESTER, NEW YORK ENVIRONMENTAL ENGINEERING CONSULTANTS	PROJECT Phase II Environmental Site Assessment 182 Avenue D & 364 Conkey Avenue Rochester, New York	BORING: GPMW-27 SHEET 1 OF 1 JOB # 214128 CHKD. BY:

CONTRACTOR: LBA ENV, LLC
DRILLER: NW
LABELLA REPRESENTATIVE: JMG, SMR
TYPE OF DRILL RIG:
AUGER SIZE AND TYPE: N/A
OVERBURDEN SAMPLING METHOD:
ROCK DRILLING METHOD: N/A

BORING LOCATION:
GROUND SURFACE ELEVATION: N/A DATUM: N/A
START DATE: 3/14/14 END DATE:

WATER LEVEL DATA

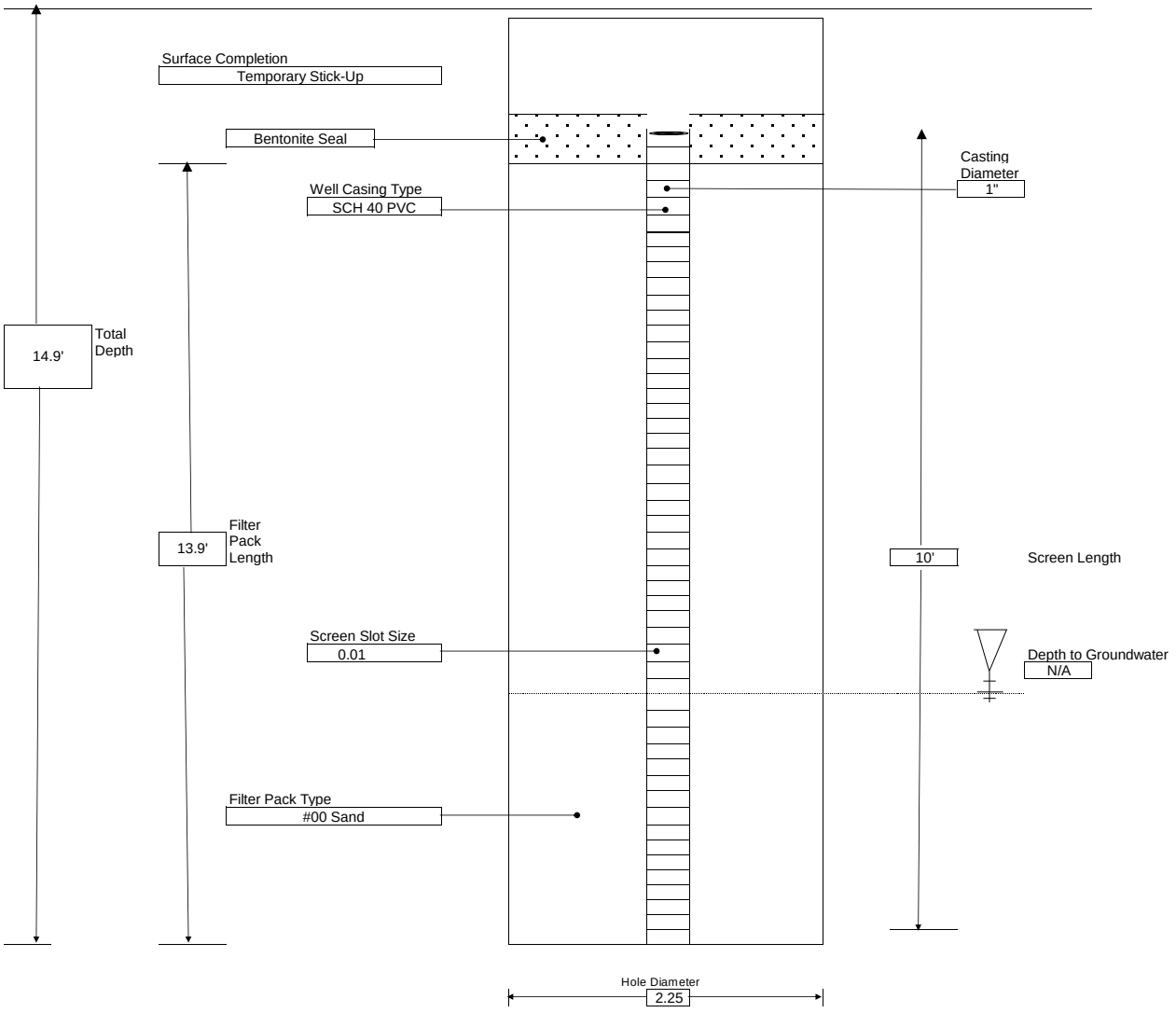
DATE	TIME	WATER	CASING	REMARKS
3/14/2014		7.5'		Turbid



LABELLA Associates, P.C. 300 STATE STREET, ROCHESTER, NEW YORK ENVIRONMENTAL ENGINEERING CONSULTANTS	PROJECT Phase II Environmental Site Assessment 182 Avenue D & 364 Conkey Avenue Rochester, New York	BORING: GPMW-30 SHEET 1 OF 1 JOB # 214128 CHKD. BY:

CONTRACTOR: LBA ENV, LLC	BORING LOCATION:
DRILLER: NW	GROUND SURFACE ELEVATION: N/A DATUM: N/A
LABELLA REPRESENTATIVE: JMG, SMR	START DATE: 3/14/14 END DATE:

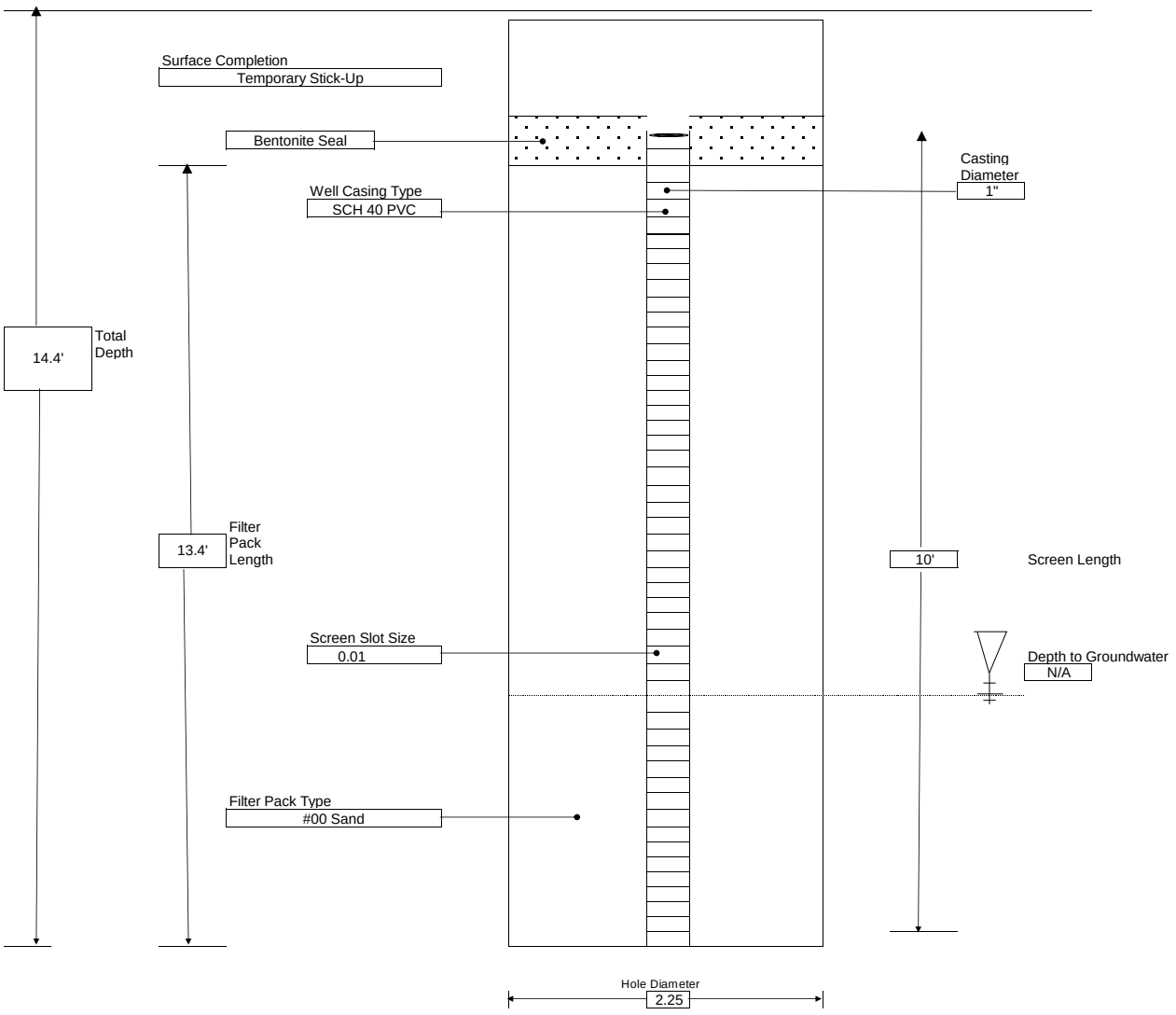
	WATER LEVEL DATA				
TYPE OF DRILL RIG:	DATE	TIME	WATER	CASING	REMARKS
AUGER SIZE AND TYPE: N/A	3/14/2014		N/A		N/A
OVERBURDEN SAMPLING METHOD:					
ROCK DRILLING METHOD: N/A					



LABELLA Associates, P.C. 300 STATE STREET, ROCHESTER, NEW YORK ENVIRONMENTAL ENGINEERING CONSULTANTS	PROJECT Phase II Environmental Site Assessment 182 Avenue D & 364 Conkey Avenue Rochester, New York	BORING: GPMW-31 SHEET 1 OF 1 JOB # 214128 CHKD. BY:

CONTRACTOR: LBA ENV, LLC	BORING LOCATION:
DRILLER: NW	GROUND SURFACE ELEVATION: N/A DATUM: N/A
LABELLA REPRESENTATIVE: JMG, SMR	START DATE: 3/14/14 END DATE:

	WATER LEVEL DATA				
TYPE OF DRILL RIG:	DATE	TIME	WATER	CASING	REMARKS
AUGER SIZE AND TYPE: N/A	3/14/2014		N/A		N/A
OVERBURDEN SAMPLING METHOD:					
ROCK DRILLING METHOD: N/A					



LABELLA Associates, D.P.C.

300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

TEST BORING LOG

Phase II Environmental Site Assessment
Geoprobe® Overburden Soil Sampling
182 Avenue D, Rochester, New York
Client: Urban League of Rochester EDC

BORING: **IW-1**
SHEET 1 OF 1
JOB: **214539**
CHKD BY:

CONTRACTOR: Nothnagle Drilling, Inc.
DRILLER: S. Loranty
LABELLA REPRESENTATIVE: S. Rife

BORING LOCATION: Avenue D Right-Of-Way
GROUND SURFACE ELEVATION: NA
START DATE: 03/16/2015 END DATE: 03/16/2015

TIME: 800 TO 1230
DATUM: NA
WEATHER: Cloudy, 10° F

TYPE OF DRILL RIG: Truck-Mounted CME 85
AUGER SIZE AND TYPE: ~4" Interior Hollow Stem
OVERBURDEN SAMPING METHOD: N/A

DRIVE SAMPLER TYPE: N/A
INSIDE DIAMETER: N/A
OTHER:

DEPTH (FT)	SAMPLE DATA: SAMPLE NO. AND DEPTH	SAMPLE DATA: SAMPLE RUN/RECOVERY	SAMPLE DATA: STRATA CHANGE	VISUAL MATERIALS CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0	NO SAMPLE			No overburden samples taken due to close proximity of GPMW-50		
2						
4						
6						
8						
10						
12						
14				Bedrock @ 14' BGS		
16						

WATER LEVEL DATA			DEPTH (FT)		
DATE	TIME	ELASPED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED

NOTES:
Well IW-1 Installed w/ 10' screen
Bottom of well @ 21' BGS
~25 gallons of water lost into rock formation

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.
3) ABBREVIATIONS:
and = 35 - 50%; some = 20 - 35%; little = 10 - 20%; trace = 1 - 10%
C = Coarse; M = Medium; F = Fine; VF = Very Fine
BGS = Below Ground Surface; NA = Not Applicable
A = Angular; R = Rounded; SA= Subangular; SR = Subrounded

BORING: **IW-1**

LABELLA Associates, D.P.C.

300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

TEST BORING LOG

Phase II Environmental Site Assessment
Geoprobe® Overburden Soil Sampling
182 Avenue D, Rochester, New York
Client: Urban League of Rochester EDC

BORING: **IW-2**
SHEET 1 OF 1
JOB: **214539**
CHKD BY:

CONTRACTOR: Nothnagle Drilling, Inc.
DRILLER: S. Loranty
LABELLA REPRESENTATIVE: S. Rife

BORING LOCATION: Proximate NW Building Corner
GROUND SURFACE ELEVATION: NA
START DATE: 03/17/2015 END DATE: 03/17/2015

TIME: 730 TO 900
DATUM: NA
WEATHER: Cloudy, 10° F

TYPE OF DRILL RIG: Truck-mounted CME 85
AUGER SIZE AND TYPE: ~4" Interior Hollow Stem
OVERBURDEN SAMPING METHOD: Direct Push

DRIVE SAMPLER TYPE: Split Spoon
INSIDE DIAMETER: ~1"
OTHER:

DEPTH (FT)	SAMPLE DATA: SAMPLE NO. AND DEPTH	SAMPLE DATA: SAMPLE RUN/RECOVERY	SAMPLE DATA: STRATA CHANGE	VISUAL MATERIALS CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0		0' - 4' / 24"		Brown MF SAND, trace SILT, dry, no odor	0 0 0	
2		2' - 4' / 24"	2'	Brown-red SAND, trace SR F GRAVEL, dry, no odor	0 0	
4		4' - 6' / 24"	4'	Brown SILT, some SAND, dry, no odor	0 0 0	
6		6' - 8' / 24"			0 0 0	
8		8' - 10' / 24"	8.6'	Brown C SAND and VC A GRAVEL, dry, no odor	0 0 0	
10		10' - 12' / 24"	10'	Brown-grey SILTY SAND, dry, no odor	0 0	
12		12' - 14' / 24"	12'	Brown-grey SILTY SAND, some C A GRAVEL, dense dry, no odor	0 0	
14	BMW-2 MS/MSD 13' - 15.8'	14' - 15.8' / 23"	14' 14.4' 14.5'	Brown SAND and GRAVEL, no odor, dry Bedrock Fragments Brown CLAYEY SILT, dry, no odor	0.4 0.2 0.2	
16				Bedrock @ 15.8' BGS		

WATER LEVEL DATA			DEPTH (FT)		
DATE	TIME	ELASPED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED

NOTES:
Well IW-2 Installed w/ 10' screen
Bottom of well @ 21' BGS
~30 gallons of water lost into rock formation

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.
3) ABBREVIATIONS:

and = 35 - 50%
some = 20 - 35%
little = 10 - 20%
trace = 1 - 10%

C = Coarse
M = Medium
F = Fine
VF = Very Fine

BGS = Below Ground Surface
NA = Not Applicable
A = Angular
R = Rounded
SA= Subangular
SR = Subrounded

BORING: **IW-2**

LABELLA Associates, D.P.C.

300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

TEST BORING LOG

Phase II Environmental Site Assessment
Geoprobe® Overburden Soil Sampling
182 Avenue D, Rochester, New York
Client: Urban League of Rochester EDC

BORING: **IW-3**
SHEET 1 OF 1
JOB: **214539**
CHKD BY:

CONTRACTOR: Nothnagle Drilling, Inc.
DRILLER: S. Loranty
LABELLA REPRESENTATIVE: S. Rife

BORING LOCATION: Proximate Loading Dock Concrete
GROUND SURFACE ELEVATION: NA
START DATE: 03/17/2015 END DATE: 03/17/2015

TIME: 1230 TO 1430
DATUM: NA
WEATHER: Cloudy, 10° F

TYPE OF DRILL RIG: Truck-mounted CME 85
AUGER SIZE AND TYPE: ~4" Interior Hollow Stem
OVERBURDEN SAMPING METHOD: Direct Push

DRIVE SAMPLER TYPE: Split Spoon
INSIDE DIAMETER: ~1"
OTHER:

DEPTH (FT)	SAMPLE DATA: SAMPLE NO. AND DEPTH	SAMPLE DATA: SAMPLE RUN/RECOVERY	SAMPLE DATA: STRATA CHANGE	VISUAL MATERIALS CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0	BMW-3 4' - 10'	0' - 4' / 24"		Brown MF SAND, trace SILT, dry, no odor		
2		2' - 4' / 10"	2'	Brown-red SAND, trace SR F GRAVEL, dry, no odor		
4		4' - 6' / 9"	4'	Brown SILT, some SAND, dry, no odor		
6		6' - 8' / 10"				
8		8' - 10' / 11"	8.6'	Brown C SAND and VC A GRAVEL, dry, no odor		
10		N/A	10'	Encountered concrete footer of historical structure @ 10' BGS Switched split spoon DPT probe to rotary bit, no samples recovered		
12		N/A				
14		N/A				
				No longer to scale		
17				Bedrock @ 17' BGS		

WATER LEVEL DATA			DEPTH (FT)		
DATE	TIME	ELASPED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED

NOTES:
Well IW-3 Installed w/ 10' screen
Bottom of well @ 22' BGS
~20 gallons of water lost into rock formation

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.
3) ABBREVIATIONS:

and = 35 - 50%
some = 20 - 35%
little = 10 - 20%
trace = 1 - 10%

C = Coarse
M = Medium
F = Fine
VF = Very Fine

BGS = Below Ground Surface
NA = Not Applicable
A = Angular
R = Rounded
SA= Subangular
SR = Subrounded

BORING: **IW-3**

APPENDIX 4 – RI DATA TABLES

Table 1
Site Management Plan
Former Michelsen Furniture Co. Site
182 Avenue D and 374 Conkey Avenue
Rochester, NY

Groundwater Elevations

Well ID	Casing Elevation	Corrected to BM	DTW	Water Elevation
Bench Mark	8.6458	100	NA	NA
BW-04	6.8333	101.8125	11.81	90.0025
BW-03	6.8125	101.8333	11.8	90.0333
IW-2	6.0625	102.5833	11.49	91.0933
IW-3	6.7708	101.875	10.87	91.005
BW-02	7.3332	101.3126	11.28	90.0326
IW-4	6.5115	102.1343	10.78	91.3543
IW-1	5.4271	103.2187	10.21	93.0087

Table 2
Site Management Plan
Former Michelsen Furniture Co. Site
182 Avenue D & 374 Conkey Avenue
Rochester, New York

Summary of Volatile Organic Compounds (VOCs) in Soil Samples
Results in Milligrams per Kilogram (mg/Kg) or Parts Per Million (PPM)

Sample ID	Pre-RI Samples														NYCRR Part 375-6.8(a) Unrestricted Use Soil Cleanup Objectives	NYCRR Part 375-6.8(b) Restricted Residential Soil Cleanup Objectives	NYCRR Part 375-6.8(b) Protection of Groundwater Soil Cleanup Objectives
	GP-05	GP-08	GP-09	GP-12	GP-22	GP-23	GP-24	GP-26	GP-27	GP-28	GP-29	GP-30	GP-31	UST Base			
Depth	3' - 4'	13' - 13.5'	13' - 14.1'	12'	7.6'	6.8' - 8.4'	2' - 3'	7.5'-7.7'	8' - 8.2'	6.8' - 7.1'	7.8' - 8.4'	13.5' - 14'	13.5' - 14'	9'			
Sample Collection Date	10/10/12	10/10/12	10/10/12	1/17/14	1/17/14	1/17/14	1/17/14	3/14/2014	3/14/2014	3/14/2014	3/14/2014	3/14/2014	3/14/2014	2/9/2015			
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NA	NA	NA
Vinyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	0.02	0.9	0.02
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	0.33	100	0.33
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	0.05	100	0.05
Carbon disulfide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NA	NA	NA
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	51	100	0.05
Methyl acetate	ND	ND	1,300	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NA	NA	NA
Methyl cyclohexane	ND	ND	ND	0.820	ND	ND	0.160	ND	ND	ND	ND	ND	ND	NS	NA	NA	NA
trans-1,2-dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	0.19	100	0.19
Methyl tert-butyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.93	100	0.93
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	0.27	3.1	0.27
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	0.12	100	0.12
cis-1,2-dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	0.25	100	0.25
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	0.37	49	0.37
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NA	NA	NA
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	0.02	3.1	0.02
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.06	4.8	0.06
Trichloroethene	ND	***0.960***	ND	ND	ND	0.012	ND	***3.300***	0.022	0.011	***0.470***	ND	0.230	NS	0.47	21	0.47
Toluene	ND	ND	ND	ND	ND	ND U	ND	ND	ND	ND	ND	ND	ND	ND	0.7	100	0.7
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND U	ND	ND	ND	ND	ND	ND	ND	NS	NA	NA	NA
Tetrachloroethene	ND	0.016	ND	ND	ND	ND U	ND	0.039	ND	ND	ND	ND	0.010	NS	1.3	19	1.3
Ethylbenzene	ND	ND	ND	0.170	ND	ND U	0.270	ND	ND	ND	ND	0.160	ND	0.011	1	41	1
m,p-Xylene	ND	ND	ND	0.072	ND	ND U	0.150	ND	ND	ND	ND	ND	ND	ND	0.26	100	1.6
o-Xylene	ND	ND	ND	ND	ND	ND U	ND	ND	ND	ND	ND	ND	ND	0.011	0.26	100	1.6
Isopropylbenzene	ND	ND	ND	ND	ND	ND U	ND	ND	ND	ND	ND	ND	ND	0.026	2.3**	NA	NA
n-Propylbenzene	ND	ND	ND	0.460	ND	ND U	0.370	ND	ND	ND	ND	ND	ND	0.037	3.9	100	3.9
1,3,5-Trimethylbenzene	ND	ND	ND	2.600	ND	ND U	0.840	ND	ND	ND	ND	1.400	ND	0.460	8.4	52	8.4
1,2,4-Trimethylbenzene	ND	ND	ND	0.760	ND	ND U	2.000	ND	ND	ND	ND	1.400	ND	0.015	3.6	52	3.6
tert-Butylbenzene	ND	ND	ND	0.044	ND	ND U	ND	ND	ND	ND	ND	0.036	ND	0.014	5.9**	100	5.9
sec-Butylbenzene	ND	ND	ND	0.580	ND	ND U	0.280	ND	ND	ND	ND	0.520	ND	0.086	11	100	11
4-Isopropyltoluene	ND	ND	ND	0.950	ND	ND U	0.410	ND	ND	ND	ND	0.400	ND	0.087	10**	NA	NA
n-Butylbenzene	ND	ND	ND	0.910	ND	ND U	0.370	ND	ND	ND	ND	0.690	ND	0.079	12	100	12
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND U	ND	ND	ND	ND	ND	ND	ND	NS	1.1	100	1.1
Naphthalene	ND	ND	ND	2.500	ND	ND U	3.100	ND	ND	ND	ND	4.000	ND	ND	12	100	12

Notes:
VOC analysis by United States Environmental Protection Agency (USEPA) Method SW846 8260.
Bold type indicates that the constituent was detected above NYCRR Part 375-6.8(A) Unrestricted Use Soil Cleanup Objectives
Bold Italic type indicates that the constituent was detected above NYCRR Part 375-6.8(b) Protection of Groundwater Soil Cleanup Objectives
U - Indicates that the constituent was not detected.
NA = Not Applicable or Not Available
NS = Not sampled for
*Indicates no Part 375-6 SCO for this compound; SCO from NYSDEC Commissioner Policy 51 Supplemental SCOs for Protection of Groundwater.
**Indicates no Part 375-6 SCO or CP-51 SSCO for this compound; SCO from NYSDEC CP-51 Table 2: Soil Cleanup Levels for Gasoline Contaminated Soil.

Table 2
Site Management Plan
Former Michelsen Furniture Co. Site
182 Avenue D & 374 Conkey Avenue
Rochester, New York

Summary of Volatile Organic Compounds (VOCs) in Soil Samples
Results in Milligrams per Kilogram (mg/Kg) or Parts Per Million (PPM)

Sample ID	Soil Samples																	NYCRR Part 375-6.8(a) Unrestricted Use Soil Cleanup Objectives	NYCRR Part 375-6.8(b) Restricted Residential Soil Cleanup Objectives	NYCRR Part 375-6.8(b) Protection of Groundwater Soil Cleanup Objectives
	GP-32	GP-33	GP-34	GP-35	GP-36	GP-37	GP-38	GP-39	GP-40	GP-41	GP-42	GP-45	GP-50	IW-2	IW-3	IW-4	IW-5			
Depth	6.8' - 8'	7' - 7.4'	6' - 7'	4' - 4.5'	6.5' - 7'	6' - 6.5'	4' - 4.5'	13' - 15'	7.5' - 8'	11' - 13'	9' - 9.5'	10.5' - 11'	5' - 5.5'			7-9'	12-14'			
Sample Collection Date	2/2/15	2/2/15	2/3/15	2/3/15	2/3/15	2/3/15	2/3/15	2/3/15	2/3/15	2/3/15	2/3/15	2/4/15	2/4/15	3/17/15	3/17/15	4/7/15	4/7/15			
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
Vinyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.02	0.9	0.02
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.33	100	0.33
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.05	100	0.05
Carbon disulfide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7**	NA	NA
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.05	100	0.05
Methyl acetate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
Methyl cyclohexane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
trans-1,2-dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.19	100	0.19
Methyl tert-butyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.93	100	0.93
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.27	3.1	0.27
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3**	100	0.12
cis-1,2-dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.25	100	0.25
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.37	49	0.37
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.02	3.1	0.02
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.06	4.8	0.06
Trichloroethene	0.053	0.096	0.035	ND	0.013	0.020	ND	ND	ND	ND	ND	ND	ND	0.006	ND	0.048	0.020	0.47	21	0.47
Toluene	ND	ND	ND	ND	ND	ND	ND	***1.000***	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7	100	0.7
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
Tetrachloroethene	ND	ND	ND	ND	ND	0.0058	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	19	1.3
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	0.940	ND	ND	ND	0.500	ND	ND	ND	ND	ND	1	41	1
m,p-Xylene	ND	ND	ND	ND	ND	ND	ND	**Tot. Xylenes:**	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.26	100	1.6
o-Xylene	ND	ND	ND	ND	ND	ND	ND	**5.500**	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.26	100	1.6
Isopropylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3**	NA	NA
n-Propylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	100	3.9
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.4	52	8.4
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.6	52	3.6
tert-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.9**	100	5.9
sec-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	100	11
4-Isopropyltoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10**	NA	NA
n-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	100	12
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	100	1.1
Naphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	100	12

Notes:
VOC analysis by United States Environmental Protection Agency (USEPA) Method SW846 8260.
Bold type indicates that the constituent was detected above NYCRR Part 375-6.8(A) Unrestricted Use Soil Cleanup Objectives
Bold Italic type indicates that the constituent was detected above NYCRR Part 375-6.8(b) Protection of Groundwater Soil Cleanup Objectives
U - Indicates that the constituent was not detected.
NA = Not Applicable or Not Available
*Indicates no Part 375-6 SCO for this compound; SCO from NYSDEC Commissioner Policy 51 Supplemental SCOs for Protection of Groundwater.
**Indicates no Part 375-6 SCO or CP-51 SSCO for this compound; SCO from NYSDEC CP-51 Table 2: Soil Cleanup Levels for Gasoline Contaminated Soil.

Table 3
Site Management Plan
Former Michelsen Furniture Co. Site
182 Avenue D & 374 Conkey Avenue
Rochester, New York

Summary of Semi-Volatile Organic Compounds (SVOCs) in Soil (Remedial Investigation)
Results in Milligrams per Kilogram (mg/Kg) or Parts Per Million (PPM)

Sample ID	Pre-RI Samples						RI Samples								NYCRR Part 375-6.8(a) Unrestricted Use Soil Cleanup Objectives
	GP-05	GP-08	GP-09	GP-22	GP-23	GP-24	GP-34	GP-37	GP-39	GP-41	IW-2 (BMW-2)	IW-3 (BMW-3)	IW-4	IW-5	
Depth	3'-4'	13'-13.5'	13'-14.1'	7.6'	6.8'-8.4'	2'-3'	6' - 7'	6' - 6.5'	13' - 15'	11' - 13'	13'-15.8'	4'-10'	7-9'	12-14'	
Sample Collection Date	10/10/12	10/10/12	10/10/12	1/17/14	1/17/14	1/17/14	2/3/15	2/3/15	2/3/15	2/3/15	3/17/2015	3/17/2015	4/7/15	4/7/15	
Naphthalene	<0.037 U	<0.041 U	<0.043 U	<0.040 U	<0.039 U	2.700	<0.038 U	<0.036 U	0.780 U	<0.039 U	<0.036 U	4.0	<0.036	<0.039	12
Acenaphthylene	<0.037 U	<0.041 U	<0.043 U	<0.040 U	<0.039 U	0.120	<0.038 U	<0.036 U	0.250	<0.039 U	<0.036 U	<0.75 U	<0.036	<0.039	100
Acenaphthene	<0.037 U	<0.041 U	<0.043 U	<0.040 U	<0.039 U	0.600	<0.038 U	<0.036 U	<0.039 U	<0.039 U	<0.036 U	6.8	<0.036	<0.039	20
Fluorene	<0.037 U	<0.041 U	<0.043 U	<0.040 U	<0.039 U	0.690	<0.038 U	<0.036 U	0.340	<0.039 U	<0.036 U	8.7	<0.036	<0.039	30
Phenanthrene	<0.037 U	<0.041 U	<0.043 U	<0.040 U	<0.039 U	2.000	<0.038 U	<0.036 U	0.860	1.300	<0.036 U	56.0	<0.036	0.16	100
Anthracene	<0.037 U	<0.041 U	<0.043 U	<0.040 U	<0.039 U	0.120	<0.038 U	<0.036 U	<0.039 U	<0.039 U	<0.036 U	17.0	<0.036	<0.039	100
Fluoranthene	<0.037 U	<0.041 U	<0.043 U	<0.040 U	<0.039 U	0.042	<0.038 U	<0.036 U	0.041	1.700	<0.036 U	52.0	<0.036	0.045	100
Pyrene	<0.037 U	<0.041 U	<0.043 U	<0.040 U	<0.039 U	0.200	<0.038 U	<0.036 U	0.086	1.200	<0.036 U	36.0	<0.036	<0.039	100
Benzo(a)anthracene	<0.037 U	<0.041 U	<0.043 U	<0.040 U	<0.039 U	<0.041 U	<0.038 U	<0.036 U	<0.039 U	0.740	<0.036 U	**23.0**	<0.036	<0.039	1
Chrysene	<0.037 U	<0.041 U	<0.043 U	<0.040 U	<0.039 U	<0.041 U	<0.038 U	<0.036 U	<0.039 U	0.630	<0.036 U	**19.0**	<0.036	<0.039	1
Benzo(b)fluoranthene	<0.037 U	<0.041 U	<0.043 U	<0.040 U	<0.039 U	<0.041 U	<0.038 U	<0.036 U	<0.039 U	0.770	<0.036 U	**21.0**	<0.036	<0.039	1
Benzo(k)fluoranthene	<0.037 U	<0.041 U	<0.043 U	<0.040 U	<0.039 U	<0.041 U	<0.038 U	<0.036 U	<0.039 U	<0.039 U	<0.036 U	**10.0**	<0.036	<0.039	0.8
Benzo(a)pyrene	<0.037 U	<0.041 U	<0.043 U	<0.040 U	<0.039 U	<0.041 U	<0.038 U	<0.036 U	<0.039 U	0.570	<0.036 U	**17.0**	<0.036	<0.039	1
Indeno(1,2,3-cd)pyrene	<0.037 U	<0.041 U	<0.043 U	<0.040 U	<0.039 U	<0.041 U	<0.038 U	<0.036 U	<0.039 U	<0.039 U	<0.036 U	**4.4**	<0.036	<0.039	0.5
Dibenzo(a,h)anthracene	<0.037 U	<0.041 U	<0.043 U	<0.040 U	<0.039 U	<0.041 U	<0.038 U	<0.036 U	<0.039 U	<0.039 U	<0.036 U	**1.7**	<0.036	<0.039	0.33
Benzo(g,h,i)perylene	<0.037 U	<0.041 U	<0.043 U	<0.040 U	<0.039 U	<0.041 U	<0.038 U	<0.036 U	<0.039 U	<0.039 U	<0.036 U	4.3	<0.036	<0.039	100
Carbazole	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.0	<0.036	<0.039	NA
2-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1	<0.036	<0.039	NA

Notes:
SVOC analysis by United States Environmental Protection Agency (USEPA) Method SW846 8270.
Bold type indicates that the constituent was detected above NYCRR Part 375-6.8(A) Unrestricted Use Soil Cleanup Objectives
U - Indicates that the constituent was not detected.
NA = Not Applicable or Not Available

Table 4
Site Management Plan
Former Michelsen Furinture Co. Site
182 Avenue D 374 Conkey Avenue
Rochester, NY

Summary of Metals in Soil (RI)
Results in Miligrams per Kilogram (mg/Kg) or Parts Per Million (ppm)

Sample ID	RI Samples								NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives for the Protection of Public Health: Unrestricted Use	NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives for the Protection of Public Health: Restricted Residential Use
	GP-34	GP-37	GP-39	GP-41	IW-2	IW-3	IW-4	IW-5		
Depth	**6'-7'**	**6'-6.5'**	**13'-15'**	**11'-13'**	**13'-15.5'**	**4'-10'**	**7'-9'**	**12;-14'**		
Sample Collection Date	**2/3/2015**	**2/3/2015**	**2/3/2015**	**2/3/2015**	**3/17/2015**	**3/17/2015**	**4/7/2015**	**4/7/2015**		
Aluminum	3,700.00	4,200.00	16,000.00	4,600.00	2,800.00	8,400.00	4,000.00	4,800.00	Not Listed	Not Listed
Antimony	ND<2.3	ND<2.3	ND<2.2	ND<2.4	ND<2.2	ND<2.3	ND<2.2	ND<2.4	Not Listed	Not Listed
Arsenic	3.60	3.40	4.30	4.70	4.00	7.50	2.40	ND<2.4	13.0	16.00
Barium	23.00	33.00	170.00	29.00	31.00	290.00	21.00	36.00	350.0	400.00
Berylium	ND<0.23	0.25	0.28	0.33	ND<0.22	0.36	ND<0.22	ND<0.24	7.2	72.00
Cadmium	ND<0.58	ND<0.57	1.20	ND<0.59	ND<0.55	ND<0.56	ND<0.55	ND<0.59	2.5	4.30
Calcium	93,000.00	110,000.00	310,000.00	180,000.00	56,000.00	92,000.00	72,000.00	67,000.00	Not Listed	Not Listed
Chromium	4.90	5.60	1.80	5.30	4.40	9.50	5.10	7.10	30.0	110.00
Cobalt	4.00	5.00	3.10	4.80	3.70	3.70	4.10	4.30	Not Listed	Not Listed
Copper	6.40	8.20	3.50	11.00	7.20	17.00	9.40	8.60	50.0	270.00
Cyanide	ND<0.29	ND<1.4	ND<1.6	ND<1.5	ND<0.82	ND<0.28	ND<0.28	ND<1.5	27.0	27.00
Iron	9,100.00	9,100.00	7,200.00	11,000.00	8,300.00	11,000.00	8,600.00	9,700.00	Not Listed	Not Listed
Lead	14.00	10.00	11.00	26.00	9.40	**170.00**	6.20	7.00	63.0	400.00
Magnesium	12,000.00	16,000.00	8,200.00	1,800.00	8,600.00	8,900.00	3,100.00	9,200.00	Not Listed	Not Listed
Manganese	260.00	270.00	350.00	330.00	220.00	750.00	300.00	30.00	1,600.0	2,000.00
Mercury	ND<0.023	ND<0.023	ND>0.022	ND<0.024	ND>0.022	0.034	ND<0.022	ND<0.024	0.18	0.81
Nickel	8.00	9.00	5.40	10.00	7.40	8.60	6.20	7.70	30.0	310.00
Potassium	19,000.00	2,200.00	1,300.00	2,800.00	970.00	1,100.00	1,500.00	1,500.00	Not Listed	Not Listed
Selenium	ND<2.3	ND<2.3	ND<2.2	ND<2.4	ND<2.2	ND<2.3	ND<2.2	ND<2.4	3.9	180.00
Silver	ND<1.2	ND<1.1	ND<1.1	ND<1.2	ND<1.1	ND<1.1	ND<1.1	ND<1.2	2.0	180.00
Sodium	160.00	180.00	180.00	1,600.00	140.00	550.00	340.00	210.00	Not Listed	Not Listed
Thallium	ND<2.3	ND<2.3	ND<2.2	ND<2.4	ND<2.2	ND<2.3	ND<2.2	ND<2.4	Not Listed	Not Listed
Vanadium	5.50	6.30	ND<2.2	4.50	7.20	8.10	7.50	10.00	Not Listed	Not Listed
Zinc	19.00	39.00	**1,400.00**	ND<5.9	13.00	**370.00**	22.00	24.00	109.0	10,000.00

Notes:

Metals analysis by United States Environmental Protection Agency (USEPA) Method SW846 6010/7470.

Bold type indicates that the constituent was detected above NYCRR Part 375-6.8(A) Unrestricted Use Soil Cleanup Objectives

U - Indicates that the constituent was not detected.

NA = Not Applicable or Not Available

Table 5
Site Management Plan
Former Michelsen Furniture Co. Site
182 Avenue D & 374 Conkey Avenue
Rochester, New York

Summary of Detected Volatile Organic Compounds in Groundwater (Remedial Investigation)

Results in Micrograms per Liter (ug/L)

Sample ID	Pre-RI Samples											NYSDEC Part 703 Groundwater Standards
	MW-01	MW-02	GPMW-16	GPMW-21	GPNW-23	GPMW-24	BW-01	GPMW-26	GPMW-27	GPMW-30	GPMW-31	
Sample Collection Date	10/10/2012	10/25/2012	1/17/2014	1/17/2014	1/17/2014	1/17/2014	1/24/2014	3/14/2014	3/14/2014	3/19/2014	3/19/2014	
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
Vinyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2
1,1,1-Trichloroethane	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	5
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	**120.0**	ND	ND	50
Carbon disulfide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
trans-1,2-dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
Methyl tert-butyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
2-Butanone	ND	ND	15	ND	ND	ND	ND	ND	15.0	ND	ND	50
cis-1,2-dichloroethene	ND	ND	**7.9**	ND	ND	**3,500**	ND	**9.3**	**84.0**	ND	ND	5
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
Cyclohexane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6
Benzene	**1.7**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1
Trichloroethene	ND	**280**	**21**	**6.0**	**82**	ND	**600**	**420.0**	**420.0**	ND	**1100.0**	5
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1
Tetrachloroethene	ND	**5.8**	3.5	ND	**14**	ND	ND	ND	1.3	ND	ND	5
Ethylbenzene	4.0	ND	ND	ND	ND	**230**	ND	**14.0**	ND	**110.0**	**8.1**	5
m,p-Xylene	**6.4**	ND	ND	2.8	ND	ND	ND	ND	1.3	ND	ND	5
o-Xylene	ND	ND	ND	ND	ND	ND	ND	ND	3.1	ND	ND	5
Isopropylbenzene	1.9	ND	ND	ND	ND	ND	ND	ND	ND	**98.0**	ND	5
n-Propylbenzene	**5.1**	ND	ND	ND	ND	ND	ND	ND	ND	**150.0**	ND	5
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	**160**	ND	ND	ND	**380.0**	ND	5
tert-butylbenzene	<1.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
1,2,4-Trimethylbenzene	**30**	ND	1.9	1.2	ND	**520**	ND	ND	4.6	**320.0**	ND	5
sec-Butylbenzene	3.6	ND	ND	ND	ND	ND	ND	ND	ND	**140.0**	ND	5
4-Isopropyltoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	**85.0**	ND	5
n-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	**140.0**	ND	5
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3
Naphthalene	3.1	ND	ND	ND	ND	**580**	ND	ND	ND	**1200.0**	**66.0**	10

Notes:
VOC analysis by United States Environmental Protection Agency (USEPA) Method SW846 8260B.
Bold and highlighted type indicates that the constituent was detected above NYSDEC Part 703 Groundwater Standards
U - Indicates that the constituent was not detected.
NA = Not Applicable or Not Available

Table 5
Site Management Plan
Former Michelsen Furniture Co. Site
182 Avenue D & 374 Conkey Avenue
Rochester, New York

Summary of Detected Volatile Organic Compounds in Groundwater (Remedial Investigation)

Results in Micrograms per Liter (ug/L)

Sample ID	RI Samples													NYSDEC Part 703 Groundwater Standards
	GPMW-26	GPMW-33	GPMW-34	GPMW-35	GPMW-38	IW-1	IW-2	IW-3	IW-4	IW-5	BW-02	BW-03	BW-04	
Sample Collection Date	3/25/2015	3/25/2015	3/25/2015	3/25/2015	3/25/2015	4/22/2015	3/31/2015	3/31/2015	4/10/2015	4/10/2015	4/9/2015	4/9/2015	4/10/2015	
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
Vinyl chloride	ND	ND	ND	ND	ND	ND	ND	1.0	ND	ND	ND	ND	**2.4**	2
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	4.5	**6.0**	ND	ND	ND	ND	ND	5
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	1.6	1.4	ND	ND	ND	ND	ND	5
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50
Carbon disulfide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
trans-1,2-dichloroethene	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	5
Methyl tert-butyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	5
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50
cis-1,2-Dichloroethene	1.7	ND	**6.5**	ND	1.5	ND	**190**	**89**	ND	**68**	**32**	**16**	**180**	5
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
Cyclohexane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1
Trichloroethene	**130**	**39**	**4,200**	3.9	**5.3**	ND	**180** V	**140**	**660**	**1,500**	**89**	**16**	**190**	5
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1
Tetrachloroethene	3.2	ND	**16**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
m,p-Xylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
o-Xylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
Isopropylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
n-Propylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
tert-butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
sec-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
4-Isopropyltoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
n-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3
Naphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10

Notes:

1. VOC analysis by United States Environmental Protection Agency (USEPA) Method SW846 8260B.
2. **Bold and highlighted type indicates that the constituent was detected above NYSDEC Part 703 Groundwater Standards**
3. "V" - indicates that the sample concentration is too high to evaluate accurate spike recoveries.
4. "ND" - Indicates that the constituent was not detected.
5. "NA" - Not Applicable or Not Available

Table 6
Site Management Plan
Former Michelsen Furniture Co. Site
182 Avenue D & 374 Conkey Avenue
Rochester, New York

Summary of Semi-Volatile Organic Compounds in Groundwater (Remedial Investigation)
Results in Micrograms per Liter (ug/L)

Sample ID	Pre-RI Samples						RI Samples					NYSDEC Part 703 Groundwater Standards
	MW-01	MW-02	GPMW-16	GPMW-21	GPMW-23	GPMW-24	GPMW-34	GPMW-35	IW-2	IW-3	IW-5	
Sample Collection Date	10/10/2012	10/25/2012	1/17/2014	1/17/2014	1/17/2014	1/17/2014	3/25/2015	3/25/2015	3/31/2015	3/31/2015	4/7/2015	
Naphthalene	3.1	<0.25 U	1.1	0.55	0.50	**630**	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	10
Acenaphthylene	<0.050 U	<0.050 U	0.20	<0.050 U	<0.050 U	<25 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	NA
Acenaphthene	0.84	0.050	<0.050 U	<0.050 U	<0.050 U	**90**	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	20
Fluorene	0.42	<0.050 U	0.10	0.20	0.17	**94**	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	50
Phenanthrene	0.55	0.16	0.12	0.44	0.38	**220**	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	50
Anthracene	0.078	<0.050 U	<0.050 U	<0.050 U	<0.050 U	**210**	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	50
Fluoranthene	0.13	0.10	<0.050 U	<0.050 U	<0.050 U	<25 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	50
Pyrene	0.095	0.12	<0.050 U	<0.050 U	<0.050 U	19	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	50
Benzo(a)anthracene	<0.050 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	**1.0**	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	0.002
Chrysene	<0.050 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	**1.4**	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	0.002
Benzo(b)fluoranthene	<0.050 U	0.054	<0.050 U	<0.050 U	<0.050 U	**0.68**	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	0.002
Benzo(k)fluoranthene	<0.050 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	**0.22**	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	0.002
Benzo(a)pyrene	<0.050 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	0.62	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	NA
Indeno(1,2,3-cd)pyrene	<0.050 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	**0.34**	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	0.002
Dibenzo(a,h)anthracene	<0.050 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	0.10	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	NA
Benzo(g,h,i)perylene	<0.050 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	0.39	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	NA

Notes:

SVOC analysis by United States Environmental Protection Agency (USEPA) Method SW846 8270.

U - Indicates that the constituent was not detected.

NA - Indicates Not Applicable or Not Available

Table 7
Site Management Plan
Former Michelsen Furinture Co. Site
182 Avenue D 374 Conkey Avenue
Rochester, NY

Summary of Metals in Groundwater Samples (RI)
Results in Micrograms per Liter (ug/L) or Parts Per Billion (ppb)

Sample ID	RI Samples					NYSDEC Part 703 Groundwater Standards
	GP-34	GP-35	IW-2	IW-3	IW-5	
Sample Collection Date	3/25/2015	2/3/2015	3/31/2015	3/31/2015	4/7/2015	
Aluminum	**1,100.00**	**1,400.00**	<100.0 U	<100.0 U	**2,700.00**	100.0
Antimony	<2.0 U	<2.0 U	<2.0 U	<2.0 U	<2.0 U	0.003
Arsenic	2.20	3.50	<2.0 U	<2.0 U	2.30	25.000
Barium	68.00	120.00	73.00	31.00	92.00	1,000.0
Berylium	<2.0 U	<2.0 U	<2.0 U	<2.0 U	<2.0	Not Listed
Cadmium	<5.0 U	<5.0 U	<5.0 U	<5.0 U	<5.0	5.000
Calcium	84,000.00	180,000.00	100,000.00	69,000.00	140,000.00	Not Listed
Chromium	11.00	<10 U	<10 U	<10 U	<10.0	50.00
Cobalt	<10.0 U	<10.0 U	<10.0 U	<10.0 U	<10.0	Not Listed
Copper	<20.0 U	<20.0 U	<20.0 U	<20.0 U	<20.0	200.0
Iron	**2,000.00**	**3,600.00**	270.00	120.00	**3,200.00**	300.0
Lead	**4.20**	**12.00**	<2.0 U	<2.0 U	**4.10**	25.000
Magnesium	28,000.00	**40,000.00**	**48,000.00**	34,000.00	**51,000.00**	35,000.0
Manganese	**310.00**	**600.00**	190.00	20.00	140.00	300.0
Mercury	<0.2 U	<0.2 U	<0.2 U	<0.2 U	<0.2	0.7000
Nickel	<2.0 U	<20.0 U	<20.0 U	<20.0 U	<20.0	100.0
Potassium	3,200.00	2,200.00	3,200.00	4,200.00	6,800.00	Not Listed
Selenium	**2.90**	**8.80**	<2.0 U	5.40	<2.0	10.00
Silver	<10.0 U	<10.0 U	<10.0 U	<10.0 U	<10.0	50.0
Sodium	33,000.00	7,500.00	34,000.00	61,000.00	57,000.00	Not Listed
Thallium	<2.0 U	<2.0 U	<2.0 U	<2.0 U	<2.0	8.0000
Vanadium	<20.0 U	<20.0 U	<20.0 U	<20.0 U	<20.0	Not Listed
Zinc	<50.0 U	<50.0 U	<50.0 U	<50.0 U	<50.0	Not Listed

Notes:

Metals analysis by United States Environmental Protection Agency (USEPA) Method SW846 6010/7470.

Bold type indicates that the constituent was detected above NYSDEC Part 703 Groundwater Standards

U - Indicates that the constituent was not detected.

NA = Not Applicable or Not Available

Table 8
Site Management Plan
Former Michelsen Furniture Co. Site
182 Avenue D & 374 Conkey Avenue
Rochester, New York

Summary of Detected Volatile Organic Compounds in Post Remediation Groundwater Samples
Results in Micrograms per Liter (µg/L) or Parts Per Billion (ppb)

Sample ID	Sample Location							NYSDEC Part 703 Groundwater Standards
	GPMW-26	GPMW-34	IW-3	IW-4	BW-02	BW-03	BW-04	
Sample Collection Date	10/30/2015	10/30/2015	10/30/2015	10/30/2015	10/30/2015	10/30/2015	10/30/2015	
ACETONE	ND	**79.5**	ND	ND	ND	ND	ND	50
BENZENE	ND	ND	ND	ND	ND	ND	**1.32**	1
BROMOCHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	5
BROMODICHLOROMETHANE	ND	**1.8**	ND	ND	ND	ND	ND	50
BROMOFORM	ND	ND	ND	ND	ND	ND	ND	50
BROMOMETHANE	ND	ND	ND	ND	ND	ND	ND	5
CARBON DISULFIDE	ND	ND	ND	ND	ND	ND	ND	NA
CARBON TETRACHLORIDE	ND	ND	ND	ND	ND	ND	ND	5
CHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	5
CHLORODIBROMOMETHANE	ND	ND	ND	ND	ND	ND	ND	NA
CHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	5
CHLOROFORM	ND	**8.9**	ND	ND	ND	ND	ND	7
CHLOROMETHANE	ND	ND	ND	ND	ND	ND	ND	NA
CYCLOHEXANE	ND	ND	ND	ND	ND	ND	1.55	NA
1,2-DIBROMO-3-CHLOROPROPANE	ND	ND	ND	ND	ND	ND	ND	0.04
1,2-DIBROMOETHANE	ND	ND	ND	ND	ND	ND	ND	NA
1,2-DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	NA
1,3-DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	3
1,4-DICHLOROBENZENE	ND	ND	ND	ND	ND	ND	ND	3
DICHLORODIFLUOROMETHANE	ND	ND	ND	ND	ND	ND	ND	3
1,1-DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	5
1,2-DICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	0.6
1,1-DICHLOROETHENE	ND	ND	**1.39**	ND	ND	ND	**2.72**	0.7
CIS-1,2-DICHLOROETHENE	ND	ND	**114**	ND	**27.2**	**2.07**	**664**	5
TRANS-1,2-DICHLOROETHENE	ND	ND	ND	ND	ND	ND	**6.15**	5
1,2-DICHLOROPROPANE	ND	ND	ND	ND	ND	ND	ND	1
CIS-1,3-DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	0.4
TRANS-1,3-DICHLOROPROPENE	ND	ND	ND	ND	ND	ND	ND	0.4
ETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	5
2-HEXANONE	ND	ND	ND	ND	ND	ND	ND	50
ISOPROPYLBENZENE	ND	ND	ND	ND	ND	ND	ND	5
2-BUTANONE (MEK)	**215**	**218**	ND	ND	ND	ND	ND	50
METHYL ACETATE	ND	ND	ND	ND	ND	ND	ND	NA
METHYL CYCLOHEXANE	ND	ND	ND	ND	ND	**1.13**	**2.1**	NA
METHYLENE CHLORIDE	ND	ND	ND	ND	ND	ND	ND	5
4-METHYL-2-PENTANONE (MIBK)	ND	ND	ND	ND	ND	ND	ND	NA
METHYL TERT-BUTYL ETHER	ND	ND	ND	ND	ND	ND	ND	NA
STYRENE	ND	ND	ND	ND	ND	ND	ND	5
1,1,2,2-TETRACHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	0.2
TETRACHLOROETHENE	ND	ND	**1.87**	ND	ND	ND	ND	0.7
TOLUENE	ND	ND	ND	ND	ND	ND	ND	5
1,2,3-TRICHLOROBENZENE	ND	ND J4	ND	ND J4	ND J4	ND	ND	5
1,2,4-TRICHLOROBENZENE	ND	ND J4	ND	ND J4	ND J4	ND	ND	5
1,1,1-TRICHLOROETHANE	ND	ND	**12.7**	ND	ND	ND	ND	5
1,1,2-TRICHLOROETHANE	ND	ND	ND	ND	ND	ND	ND	5
TRICHLOROETHENE	**1.47**	ND	**261**	ND	**95** J6	**2.52**	**256**	5
TRICHLOROFLUOROMETHANE	ND	ND	ND	ND	ND	ND	ND	5
1,1,2-TRICHLOROTRIFLUOROETHANE	ND	ND	ND	ND	ND	ND	ND	NA
VINYL CHLORIDE	ND	ND	ND	ND	ND	ND	**37.1**	2
XYLENES, TOTAL	ND	ND	ND	ND	ND	ND	ND	5

Notes:
1. VOC analysis for TCL List VOCs by United States Environmental Protection Agency (USEPA) Method SW846 8260B.
2. Bold and highlighted type indicates that the constituent was detected above NYSDEC Part 703 Groundwater Standards.
3. "ND" - Indicates that the constituent was not detected.
4. "NA" - Indicates information is not applicable or not available.
5. "J4" - Indicates that the associated batch QC was outside the established quality control range for accuracy.
6. "J6" - Indicates that The sample matrix interfered with the ability to make any accurate determination; spike value is low.
7. If no standard is established for a selected compound, TOGS Table 1.1.1 Guidance values are substituted.

APPENDIX 5 – EXCAVATION WORK PLAN (EWP)

5-1 NOTIFICATION

At least 15 days prior to the start of any activity that is anticipated to encounter remaining contamination, the site owner or their representative will notify the NYSDEC. The following table includes contact information for the above notification. The information on this table will be updated as necessary to provide accurate contact information. A full listing of site-related contact information is provided in Appendix 2.

Notifications*

Michael Cruden, P.E. NYSDEC Remedial Bureau E	(518) 402-8914 michael.cruden@dec.ny.us
Todd Caffoe, P.E. NYSDEC Project Manager	(585) 226-5430 todd.caffoe.dec.ny.gov
Ms. Kelly Lewandowski NYSDEC Site Control	518-402-9553 kelly.lewandowski@dec.ny.us

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

This notification will include:

- A detailed description of the work to be performed, including the location and areal extent of excavation, plans/drawings for site re-grading, intrusive elements or utilities to be installed below the soil cover, estimated volumes of contaminated soil to be excavated and any work that may impact an engineering control;
- A summary of environmental conditions anticipated to be encountered in the work areas, including the nature and concentration levels of contaminants of

concern, potential presence of grossly contaminated media, and plans for any pre-construction sampling;

- A schedule for the work, detailing the start and completion of all intrusive work;
- A summary of the applicable components of this EWP;
- A statement that the work will be performed in compliance with this EWP and 29 CFR 1910.120;
- A copy of the contractor's health and safety plan (HASP), in electronic format, if it differs from the HASP provided in Appendix 6 of this SMP;
- Identification of disposal facilities for potential waste streams; and
- Identification of sources of any anticipated backfill, along with all required chemical testing results.

5-2 SOIL SCREENING METHODS

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

Soils will be segregated based on previous environmental data and screening results into material that requires off-site disposal and material that requires testing to determine if the material can be reused on-site as soil beneath a cover or if the material can be used as cover soil. Further discussion of off-site disposal of materials and on-site reuse is provided in Section 5-7 of this Appendix.

5-3 SOIL STAGING METHODS

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

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

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

5-4 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 remedial party (if applicable) and its contractors are 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).

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

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

The 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.

5-5 MATERIALS TRANSPORT OFF-SITE

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

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

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

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

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

5-6 MATERIALS DISPOSAL OFF-SITE

All material excavated and removed from the site will 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 material from this site is proposed for unregulated off-site disposal (i.e. clean soil removed for development purposes), a formal request with an associated plan will be made to the NYSDEC. Unregulated off-site management of materials from this site will not occur without formal NYSDEC approval.

Off-site disposal locations for excavated soils will be identified in the pre-excavation notification. This will include estimated quantities and a breakdown by class of disposal facility if appropriate, i.e. hazardous waste disposal facility, solid waste landfill, petroleum treatment facility, C/D 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 Unrestricted SCOs is prohibited from being taken to a New York State recycling facility (6NYCRR Part 360-16 Registration Facility).

In the event that characterization sampling detects chlorinated VOCs at any concentration, a Contained In Demonstration Work Plan (CIDWP) must be prepared and

approved by NYSDEC unless the soil is to be disposed at a hazardous waste landfill. A copy of the NYSDEC approved CIDWP from the soil removal IRM is attached to this EWP as guidance.

5-7 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 reuse on-site will be placed below the demarcation layer or impervious surface, and will not be reused within a cover soil layer, within landscaping berms, or as backfill for subsurface utility lines.

Any demolition material proposed for reuse on-site will be sampled for asbestos and the results will be reported to the NYSDEC for acceptance. Concrete crushing or processing on-site will not be performed without prior NYSDEC approval. Organic matter (wood, roots, stumps, etc.) or other solid waste derived from clearing and grubbing of the site will not be reused on-site.

5-7.1 Development of Screening Procedures for Excavated Soil

Upon encountering potentially-impacted soil, on-site contractors should follow their own company's Health and Safety Plan (HASP) to provide for worker protection.

Three classes of soil have been defined for the Site and will be managed and handled in a manner dictated by evidence of environmental impairment. The three classes of material are described below.

Material Classifications

Class of Material	Description	Screening Parameter	Management/ Re-use of Material
Class 1	Soil and fill materials free of petroleum impacts.	No Discernable Odor; PID Readings < 5 ppm; No Staining.	Use on-site for backfill in excavations.
Class 2	Soil and fill material with low to moderate petroleum or solvent impacts (based on consultation with NYSDEC).	PID readings greater than 5 ppm but less than 25 ppm.	Stage on-site and sample per DER-10, reuse as backfill in excavations below cover system if below restricted residential use SCOs. If soil does not meet restricted residential SCOs or if soil exhibits nuisance odor characteristics, it will be transported for offsite disposal (will require NYSDEC approved Contained-In Demonstration for disposal as non-hazardous waste).
Class 3	Soil and fill material with petroleum or solvent impacts.	Significant odor/staining, PID readings greater than 25 ppm.	Off-site disposal at a NYSDEC Part 360 landfill or other approved disposal facility (will require NYSDEC approved Contained-In Demonstration for disposal as non-hazardous waste).

The on-site management and use of Class 2 Materials as fill is supported by the Site specific screening of materials with a PID and the corresponding analytical data from soil samples.

5-8 FLUIDS MANAGEMENT

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

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

5-9 COVER SYSTEM RESTORATION

After the completion of soil removal and any other invasive activities the cover system will be restored in a manner that complies with the decision document. The existing cover system is comprised of a minimum of 24 inches of clean soil or asphalt pavement, concrete covered sidewalks and concrete building, etc. The demarcation layer, consisting of geotextile fabric or equivalent material will be replaced to provide a visual reference to the top of the remaining contamination zone, the zone that requires adherence to special conditions for disturbance of remaining contaminated soils defined in this SMP. If the type of cover system changes from that which exists prior to the excavation (i.e., a soil cover is replaced by asphalt), this will constitute a modification of the cover element of the remedy and the upper surface of the remaining contamination. A figure showing the modified surface will be included in the subsequent Periodic Review Report and in an updated SMP.

5-10 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. A Request to Import/Reuse Fill or Soil form, which can be found at http://www.dec.ny.gov/regulations/67386.html, will be prepared and submitted to the NYSDEC project manager allowing a minimum of 5 business days for review.

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

All imported soils will meet the backfill and cover soil quality standards established in 6NYCRR 375-6.7(d). All imported soils will meet 6NYCRR 375-6.8(b) Restricted Residential soil cleanup objectives. Soils that meet 'exempt' fill requirements under 6 NYCRR Part 360, but do not meet backfill or cover soil objectives for this site, will not be imported onto the site without prior approval by NYSDEC. Solid waste will not be imported onto the site. Analytical testing of imported soil and frequency of testing are detailed in the following table:

Recommended Number of Soil Samples for Soil Imported To or Exported From a Site			
Contaminant	**VOCs**	**SVOCs, Metals, PCBs, Pesticides**	
Soil Quantity (cubic yards)	**Discrete Samples**	**Composite**	**Discrete Samples/Composite**
0-50	1	1	3-5 discrete samples from different locations in the fill being provided will comprise a composite sample for analysis
50-100	2	1	
100-200	3	1	
200-300	4	1	
300-400	4	2	
400-500	5	2	
500-800	6	2	
800-1000	7	2	
>1000	Add an additional 2 VOC and 1 composite for each additional 1000 Cubic yards or consult with DER		

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.

5-11 STORMWATER POLLUTION PREVENTION

Barriers and hay bale checks will be installed 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 the NYSDEC. All necessary repairs shall be made immediately.

Accumulated sediments will be removed as required to keep the 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.

Silt fencing or hay bales will be installed around the entire perimeter of the construction area.

5-12 EXCAVATION CONTINGENCY PLAN

If underground tanks or other previously unidentified contaminant sources are found during post-remedial subsurface excavations or development related construction, excavation activities 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 a full list of analytes (TAL metals; TCL volatiles 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 Review Report.

5-13 COMMUNITY AIR MONITORING PLAN

The Site Community Air Monitoring Plan (CAMP) is the generic NYSDOH CAMP and a copy is included in Appendix 7. Air sampling stations will be based on generally prevailing wind conditions. 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. Given the presence of residential properties and the Avenue D Recreation Center, at a minimum, one (1) monitoring station will be located on the eastern property line and one (1) sampling station will be placed on the northern property line. Exceedances of action levels listed in the CAMP will be reported to NYSDEC and NYSDOH Project Managers.

5-14 ODOR CONTROL PLAN

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

responsibility of the remedial party'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; and (c) using foams to cover exposed odorous soils. If odors develop and cannot be otherwise controlled, additional means to eliminate odor nuisances will include: (d) direct load-out of soils to trucks for off-site disposal; (e) use of chemical odorants in spray or misting systems; and, (f) use of staff to monitor odors in surrounding neighborhoods.

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

5-15 DUST CONTROL PLAN

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

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

5-16 OTHER NUISANCES

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

LABELLA Associates, D.P.C.
Engineering
Architecture
Environmental
Planning

Contained-In Demonstration Work Plan
NYSDEC BCP Site No. C828189

Location:

Former Michelsen Furniture Co. Site
BCP Site No. C828189
182 Avenue D & 374 Conkey Avenue
Rochester, New York

Prepared for:

Urban League of Rochester Economic Development Corporation
312 State Street
Rochester, New York 14614

LaBella Project No. 214633.02

October 2014

TABLE OF CONTENTS

1.0 INTRODUCTION & BACKGROUND

LaBella Associates, D.P.C. (LaBella) has been retained by the Urban League of Rochester Economic Development Corporation (URLEDC) to prepare this "Contained-In" Demonstration Work Plan (CIDWP) for the property located at 182 Avenue D and 374 Conkey Avenue in the City of Rochester, Monroe County, New York, hereinafter referred to as the "Site". A Site Location Map is included as Figure 1. The site has been enrolled in the NYSDEC BCP Program and has been assigned Site No. C828189.

This CIDWP is being submitted to forward information on soil and groundwater sampling completed at the Site during subsurface investigation activities performed by LaBella. In addition, this CIDWP provides a proposed sampling plan. This CIDWP was prepared in accordance with the "Contained-In" Criteria identified in NYSDEC Technical and Administrative Guidance Memorandum (TAGM) 3028.

1.1 Site Description & History

The Site consists of two (2) contiguous tax parcels encompassing approximately 0.62 acres. The Site location and surrounding area are shown on Figure 2. The Site is located in a primarily residential urban neighborhood in the City of Rochester. It is bounded by Avenue D to the south, Conkey Avenue to the east, residential property to the north, and the El Camino Trail and City of Rochester Avenue D Recreation Center to the east.

Parcel 1, addressed 182 Avenue D, encompasses approximately 0.4 acres and is improved with an approximately 44,000 square foot, four story brick warehouse building. Parcel 2 is a vacant lot addressed 374 Conkey Avenue and encompasses approximately 0.22 acres. The Site was initially operated by the George J. Michelsen Furniture Company from at least 1918 through 1954 and was utilized for furniture manufacturing. Based on a review of historical street directories, additional operators at the Site in the 1950s included Columbia Carpet Co., Rice Tool & Die Co. and General Fabricators Co. Parcel 2 historically contained a railroad spur that serviced the Michelsen Building. The Site has been utilized primarily for warehouse and distribution from the 1960's to September 2014.

1.2 Prior Investigations

The following environmental investigations have been performed at the Site:

- Phase I Environmental Site Assessment, 182 Avenue D, Rochester, NY, LaBella Associates, P.C., September 2011
- Phase II Environmental Site Assessment, 182 Avenue D, Rochester, NY, LaBella Associates, P.C., November 2012
- Additional Subsurface Investigations, 182 Avenue D and 374 Conkey Avenue, Rochester, NY, LaBella Associates, D.P.C, January & March 2014

Previous investigations have revealed the presence of tetrachloroethene (PCE), trichloroethene (TCE) and petroleum contamination at the Site. Previous investigation locations are depicted on Figure 2. Laboratory analysis of soil and groundwater samples collected during previous investigations is summarized on Tables 1 through 4.

1.3 Remedial Investigation Work Plan

LaBella prepared a Remedial Investigation Work Plan (RIWP) to evaluate the areas of concern identified during previous investigations and the extent of remedial actions required (if any) at the Site. The RIWP was submitted in July 2014 along with the Brownfield Cleanup Program Application. NYSDEC approved the RIWP in January 2015. Remedial Investigation activities are ongoing at the Site.

1.4 Summary of Contamination

Approximately 150 cubic yards (CY) of soil was excavated in preparation for construction of a new entryway vestibule at the Site. The soil was placed on and covered with 6-mil polyethylene sheeting. Laboratory analysis of a sample collected from the soil pile detected low concentrations of PCE and TCE (25.2 and 24.7 µg/Kg, respectively). A sample analyzed by the Toxicity Characteristic Leaching Procedure (TCLP) did not detected VOCs in the TCLP extract.

2.0 PROPOSED "CONTAINED-IN" SAMPLING

2.1 Proposed Sampling for "Contained-In"

Approximately 150 CY of soil has been staged on and covered with polyethylene sheeting. The soil will be sampled in accordance with Table 5.4 of DER-10. Based on the anticipated volume of soil to be removed, three (3) discrete soil sample will be collected. Samples will be submitted under chain-of-custody procedures to a NYSDOH ELAP certified laboratory for the following analysis:

- USEPA Target Compound List (TCL) list VOCs by USEPA Method 8260
- Toxicity Characteristic Leaching Procedure (TCLP) for VOCs by USEPA Method 1311

This sampling will be conducted in order to characterize the waste for appropriate disposal and to compare the testing results against the "Contained-In" Criteria identified in NYSDEC TAGM 3028.

Currently it is anticipated that the soil will be approved for 'contained-in' and will be disposed of at a solid waste landfill with a 6 NYCRR Part 360 Permit (i.e., Waste Management's Mill Seat Landfill in Riga, NY). The specific facility will be provided with the request for "Contained-In" when sampling results are received.

3.0 "CONTAINED-IN" REQUEST

Subsequent to completing/receiving the laboratory reports, LaBella will submit a "Contained-In" request that provides the sampling completed, the laboratory reports, the quantities of soil, etc. This request will provide the proposed disposal facility and request approval by NYSDEC (if data supports the request).

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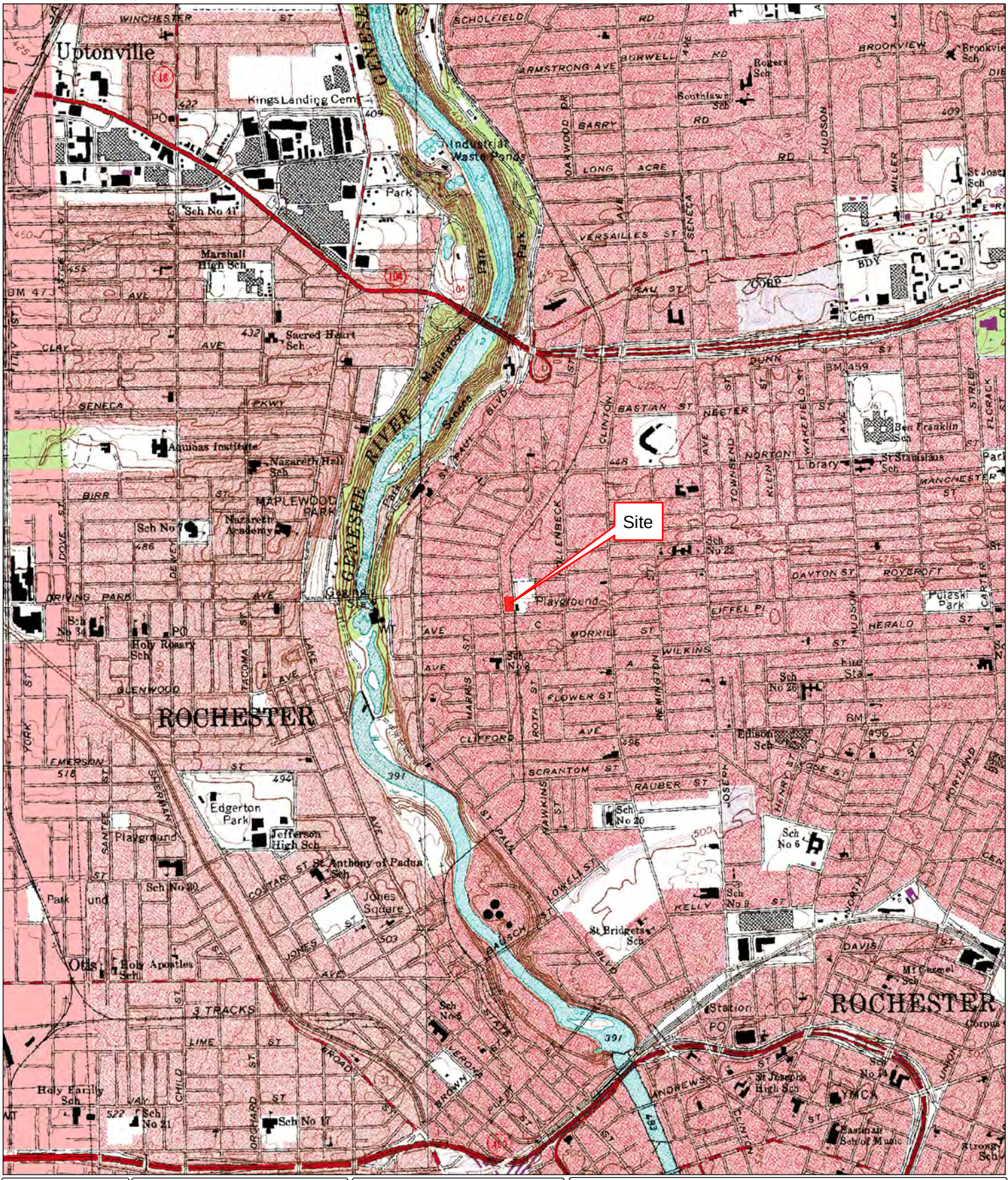
FIGURES



PROJECT/DRAWING NUMBER 214539 FIGURE 1	DRAWING TITLE SITE LOCATION MAP ISSUED FOR: DRAFT DESIGNED BY: DKE DRAWN BY: DKE REVIEWED BY: DATE: 03/19/2015	PROJECT/CLIENT Condained In Demonstration Work Plan Former Michelsen Furniture Co. Site 182 Avenue D & 374 Conkey Ave. Rochester, New York Client: Urban League of Rochester Economic Development Corp.	LABELLA Associates, D.P.C. 300 STATE STREET ROCHESTER, NY 14614 P: (585) 454-6110 F: (585)454-3066 www.labellapc.com COPYRIGHT 2003 0 1,050 2,100 4,200 Feet 1 inch = 2,000 feet N W E S

Path: J:\Urban League of Rochester Economic Development\214539 - Michelson BCP Site RI & Remediation\Drawings\CIDWP\Fig. 1 - Site location.mxd

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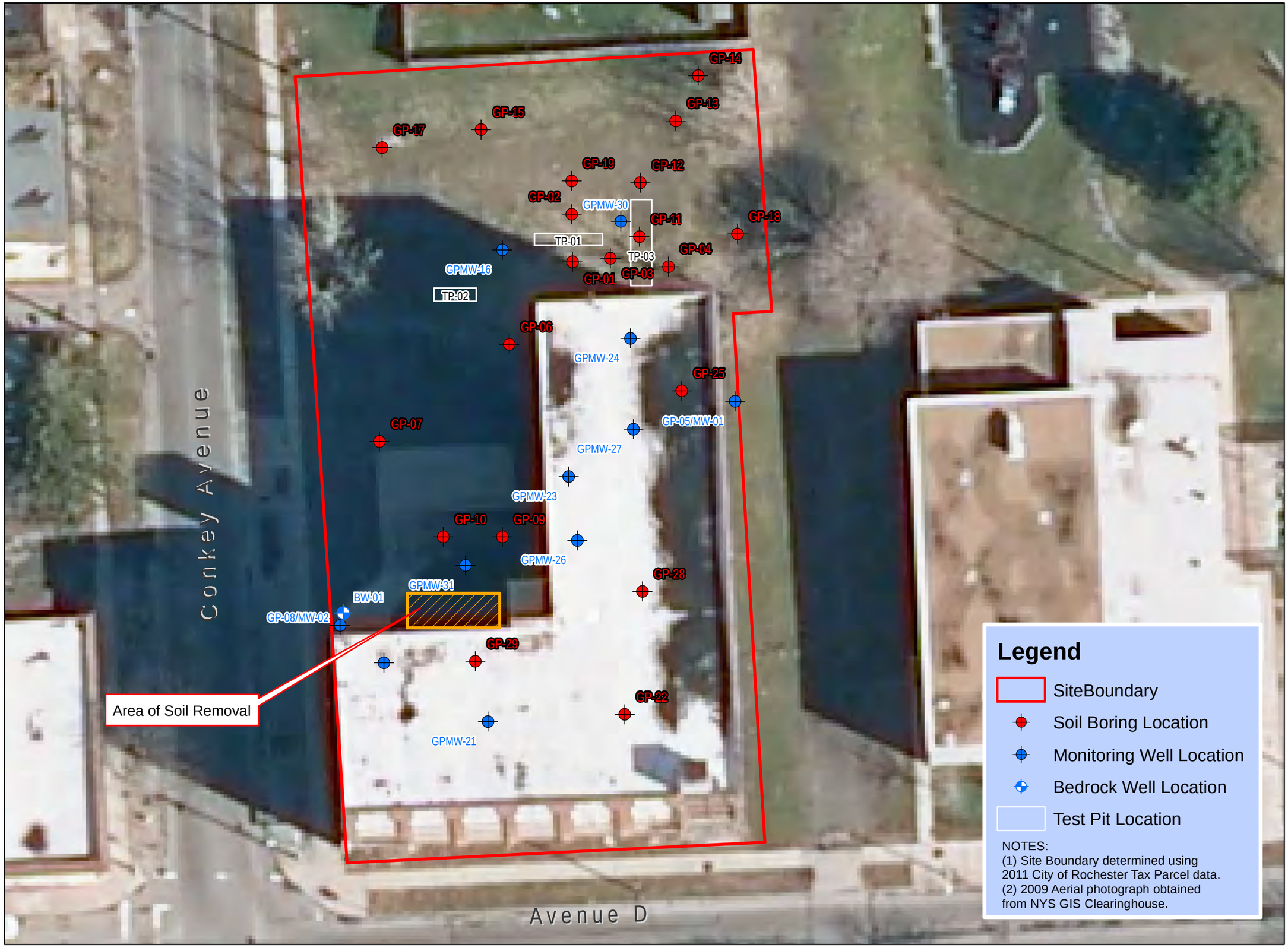

Path: J:\Urban League of Rochester Economic Development\214539 - Michelson BCP Site RI & Remediation\Drawings\CIDWP\Fig. 2 - Previous Investigations.mxd

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Contained In Demonstration Work Plan

Former Michelsen Furniture Co. Site

182 Avenue D
&
374 Conkey Avenue
Rochester, New York

Urban League of Rochester Economic Develoment Corporation

Title:

Previous Investigaiton Locations

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1 inch = 25 feet

214539

Figure 2

LABELLA Associates, D.P.C. | Engineering Architecture Environmental Planning

TABLES

Table 1
Interim Remedial Measures Work Plan
Former Michelsen Furniture Co. Site
182 Avenue D & 374 Conkey Avenue
Rochester, New York

Summary of Volatile Organic Compounds (VOCs) in Soil Samples
Results in Milligrams per Kilogram (mg/Kg) or Parts Per Million (PPM)

Sample ID	Soil Samples													NYCRR Part 375-6.8(a) Unrestricted Use Soil Cleanup Objectives
	GP-05	GP-08	GP-09	GP-12	GP-22	GP-23	GP-24	GP-26	GP-27	GP-28	GP-29	GP-30	GP-31	
Depth	3'-4'	13'-13.5'	13'-14.1'	12'	7.6'	6.8'-8.4'	2'-3'	7.5'-7.7'	8'-8.2'	6.8'-7.1'	7.8'-8.4'	13.5'-14'	13.5'-14'	
Sample Collection Date	10/10/12	10/10/12	10/10/12	1/17/14	1/17/14	1/17/14	1/17/14	3/14/2014	3/14/2014	3/14/2014	3/14/2014	3/14/2014	3/14/2014	
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Vinyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.02
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.33
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.05
Carbon disulfide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7**
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.05
Methyl acetate	ND	ND	1,300	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Methyl cyclohexane	ND	ND	ND	0.820	ND	ND	0.160	ND	ND	ND	ND	ND	ND	NA
trans-1,2-dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.19
Methyl tert-butyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.93
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.27
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3**
cis-1,2-dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.25
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.37
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.02
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.06
Trichloroethene	ND	**0.960**	ND	ND	ND	0.012	ND	**3.300**	0.022	0.011	**0.470**	ND	0.230	0.47
Toluene	ND	ND	ND	ND	ND	ND U	ND	ND	ND	ND	ND	ND	ND	0.7
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND U	ND	ND	ND	ND	ND	ND	ND	NA
Tetrachloroethene	ND	0.016	ND	ND	ND	ND U	ND	0.039	ND	ND	ND	ND	0.010	1.3
Ethylbenzene	ND	ND	ND	0.170	ND	ND U	0.270	ND	ND	ND	ND	0.160	ND	1
m,p-Xylene	ND	ND	ND	0.072	ND	ND U	0.150	ND	ND	ND	ND	ND	ND	0.26
o-Xylene	ND	ND	ND	ND	ND	ND U	ND	ND	ND	ND	ND	ND	ND	0.26
Isopropylbenzene	ND	ND	ND	ND	ND	ND U	ND	ND	ND	ND	ND	ND	ND	2.3**
n-Propylbenzene	ND	ND	ND	0.460	ND	ND U	0.370	ND	ND	ND	ND	ND	ND	3.9
1,3,5-Trimethylbenzene	ND	ND	ND	2.600	ND	ND U	0.840	ND	ND	ND	ND	1.400	ND	8.4
1,2,4-Trimethylbenzene	ND	ND	ND	0.760	ND	ND U	2.000	ND	ND	ND	ND	1.400	ND	3.6
tert-Butylbenzene	ND	ND	ND	0.044	ND	ND U	ND	ND	ND	ND	ND	0.036	ND	5.9**
sec-Butylbenzene	ND	ND	ND	0.580	ND	ND U	0.280	ND	ND	ND	ND	0.520	ND	11
4-Isopropyltoluene	ND	ND	ND	0.950	ND	ND U	0.410	ND	ND	ND	ND	0.400	ND	10**
n-Butylbenzene	ND	ND	ND	0.910	ND	ND U	0.370	ND	ND	ND	ND	0.690	ND	12
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND U	ND	ND	ND	ND	ND	ND	ND	1.1
Naphthalene	ND	ND	ND	2.500	ND	ND U	3.100	ND	ND	ND	ND	4.000	ND	12

Notes:
VOC analysis by United States Environmental Protection Agency (USEPA) Method SW846 8260.
Bold type indicates that the constituent was detected above NYCRR Part 375-6.8(A) Unrestricted Use Soil Cleanup Objectives
U - Indicates that the constituent was not detected.
NA = Not Applicable or Not Available
*Indicates no Part 375-6 SCO for this compound; SCO from NYSDEC Commissioner Policy 51 Supplemental SCOs for Protection of Groundwater.
**Indicates no Part 375-6 SCO or CP-51 SSCO for this compound; SCO from NYSDEC CP-51 Table 2: Soil Cleanup Levels for Gasoline Contaminated Soil.

Table 2
Interim Remedial Measures Work Plan
Former Michelsen Furniture Co. Site
182 Avenue D & 374 Conkey Avenue
Rochester, New York

Summary of Semi-Volatile Organic Compounds (SVOCs) in Soil Samples
Results in Milligrams per Kilogram (mg/Kg) or Parts Per Million (PPM)

Sample ID	Soil Samples						NYCRR Part 375-6.8(a) Unrestricted Use Soil Cleanup Objectives
	GP-05	GP-08	GP-09	GP-22	GP-23	GP-24	
Depth	3'-4'	13'-13.5'	13'-14.1'	7.6'	6.8'-8.4'	2'-3'	
Sample Collection Date	10/10/12	10/10/12	10/10/12	1/17/14	1/17/14	1/17/14	
Naphthalene	<0.037 U	<0.041 U	<0.043 U	<0.040 U	<0.039 U	2.700	12
Acenaphthylene	<0.037 U	<0.041 U	<0.043 U	<0.040 U	<0.039 U	0.120	100
Acenaphthene	<0.037 U	<0.041 U	<0.043 U	<0.040 U	<0.039 U	0.600	20
Fluorene	<0.037 U	<0.041 U	<0.043 U	<0.040 U	<0.039 U	0.690	30
Phenanthrene	<0.037 U	<0.041 U	<0.043 U	<0.040 U	<0.039 U	2.000	100
Anthracene	<0.037 U	<0.041 U	<0.043 U	<0.040 U	<0.039 U	0.120	100
Fluoranthene	<0.037 U	<0.041 U	<0.043 U	<0.040 U	<0.039 U	0.042	100
Pyrene	<0.037 U	<0.041 U	<0.043 U	<0.040 U	<0.039 U	0.200	100
Benzo(a)anthracene	<0.037 U	<0.041 U	<0.043 U	<0.040 U	<0.039 U	<0.041 U	1
Chrysene	<0.037 U	<0.041 U	<0.043 U	<0.040 U	<0.039 U	<0.041 U	1
Benzo(b)fluoranthene	<0.037 U	<0.041 U	<0.043 U	<0.040 U	<0.039 U	<0.041 U	1
Benzo(k)fluoranthene	<0.037 U	<0.041 U	<0.043 U	<0.040 U	<0.039 U	<0.041 U	0.8
Benzo(a)pyrene	<0.037 U	<0.041 U	<0.043 U	<0.040 U	<0.039 U	<0.041 U	1
Indeno(1,2,3-cd)pyrene	<0.037 U	<0.041 U	<0.043 U	<0.040 U	<0.039 U	<0.041 U	0.5
Dibenzo(a,h)anthracene	<0.037 U	<0.041 U	<0.043 U	<0.040 U	<0.039 U	<0.041 U	0.33
Benzo(g,h,i)perylene	<0.037 U	<0.041 U	<0.043 U	<0.040 U	<0.039 U	<0.041 U	100

Notes:

SVOC analysis by United States Environmental Protection Agency (USEPA) Method SW846 8270.

Bold type indicates that the constituent was detected above NYCRR Part 375-6.8(A) Unrestricted Use Soil Cleanup Objectives

U - Indicates that the constituent was not detected.

NA = Not Applicable or Not Available

Table 3
Interim Remedial Measures Work Plan
Former Michelsen Furniture Co. Site
182 Avenue D & 374 Conkey Avenue
Rochester, New York

Summary of Detected Volatile Organic Compounds in Groundwater Samples
Results in Micrograms per Liter (ug/L)

Sample ID	MW-01	MW-02	GPMW-16	GPMW-21	GPNW-23	GPMW-24	BW-01	GPMW-26	GPMW-27	GPMW-30	GPMW-31	NYSDEC Part 703 Groundwater Standards
Sample Collection Date	10/10/2012	10/25/2012	1/17/2014	1/17/2014	1/17/2014	1/17/2014	1/24/2014	3/14/2014	3/14/2014	3/19/2014	3/19/2014	
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
Vinyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2
1,1,1-Trichloroethane	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	5
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	**120.0**	ND	ND	50
Carbon disulfide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
trans-1,2-dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
Methyl tert-butyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
2-Butanone	ND	ND	15	ND	ND	ND	ND	ND	15.0	ND	ND	50
cis-1,2-dichloroethene	ND	ND	**7.9**	ND	ND	**3,500**	ND	**9.3**	**84.0**	ND	ND	5
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
Cyclohexane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6
Benzene	**1.7**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1
Trichloroethene	ND	**280**	**21**	**6.0**	**82**	ND	**600**	**420.0**	**420.0**	ND	**1100.0**	5
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1
Tetrachloroethene	ND	**5.8**	3.5	ND	**14**	ND	ND	ND	1.3	ND	ND	5
Ethylbenzene	4.0	ND	ND	ND	ND	**230**	ND	**14.0**	ND	**110.0**	**8.1**	5
m,p-Xylene	**6.4**	ND	ND	2.8	ND	ND	ND	ND	1.3	ND	ND	5
o-Xylene	ND	ND	ND	ND	ND	ND	ND	ND	3.1	ND	ND	5
Isopropylbenzene	1.9	ND	ND	ND	ND	ND	ND	ND	ND	**98.0**	ND	5
n-Propylbenzene	**5.1**	ND	ND	ND	ND	ND	ND	ND	ND	**150.0**	ND	5
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	**160**	ND	ND	ND	**380.0**	ND	5
tert-butylbenzene	<1.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
1,2,4-Trimethylbenzene	**30**	ND	1.9	1.2	ND	**520**	ND	ND	4.6	**320.0**	ND	5
sec-Butylbenzene	3.6	ND	ND	ND	ND	ND	ND	ND	ND	**140.0**	ND	5
4-Isopropyltoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	**85.0**	ND	5
n-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	**140.0**	ND	5
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3
Naphthalene	3.1	ND	ND	ND	ND	**580**	ND	ND	ND	**1200.0**	**66.0**	10

Notes:
VOC analysis by United States Environmental Protection Agency (USEPA) Method SW846 8260B.
Bold and highlighted type indicates that the constituent was detected above NYSDEC Part 703 Groundwater Standards
U - Indicates that the constituent was not detected.
NA = Not Applicable or Not Available

Table 4
Interim Remedial Measures Work Plan
Former Michelsen Furniture Co. Site
182 Avenue D & 374 Conkey Avenue
Rochester, New York

Summary of Semi-Volatile Organic Compounds in Groundwater
Results in Micrograms per Liter (ug/L)

Sample ID	MW-01	MW-02	MWGP-16	MWGP-21	MWGP-23	MWGP-24	NYSDEC Part 703 Groundwater Standards
Sample Collection Date	10/10/2012	10/25/2012	1/17/2014	1/17/2014	1/17/2014	1/17/2014	
Naphthalene	3.1	<0.25 U	1.1	0.55	0.50	**630**	10
Acenaphthylene	<0.050 U	<0.050 U	0.20	<0.050 U	<0.050 U	<25 U	NA
Acenaphthene	0.84	0.050	<0.050 U	<0.050 U	<0.050 U	**90**	20
Fluorene	0.42	<0.050 U	0.10	0.20	0.17	**94**	50
Phenanthrene	0.55	0.16	0.12	0.44	0.38	**220**	50
Anthracene	0.078	<0.050 U	<0.050 U	<0.050 U	<0.050 U	**210**	50
Fluoranthene	0.13	0.10	<0.050 U	<0.050 U	<0.050 U	<25 U	50
Pyrene	0.095	0.12	<0.050 U	<0.050 U	<0.050 U	19	50
Benzo(a)anthracene	<0.050 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	**1.0**	0.002
Chrysene	<0.050 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	**1.4**	0.002
Benzo(b)fluoranthene	<0.050 U	0.054	<0.050 U	<0.050 U	<0.050 U	**0.68**	0.002
Benzo(k)fluoranthene	<0.050 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	**0.22**	0.002
Benzo(a)pyrene	<0.050 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	0.62	NA
Indeno(1,2,3-cd)pyrene	<0.050 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	**0.34**	0.002
Dibenzo(a,h)anthracene	<0.050 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	0.10	NA
Benzo(g,h,i)perylene	<0.050 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	0.39	NA

Notes:

AVOC analysis by United States Environmental Protection Agency (USEPA) Method SW846 8270.

U - Indicates that the constituent was not detected.

APPENDIX 6 – HEALTH & SAFETY PLAN

Site Health and Safety Plan

Location:

Former Michelsen Furniture Co. Site
182 Avenue D and 374 Conkey Avenue
Rochester, New York

Prepared For:

M+M Housing Development Fund Corp. as Nominee for Mills and Michelsen LLC
312 State Street
Rochester, New York 14614

LaBella Project No. 214539

September 2015

Site Health and Safety Plan

Location:

Former Michelsen Furniture Co. Site
182 Avenue D and 374 Conkey Avenue
Rochester, New York

Prepared For:

M+M Housing Development Fund Corp. as Nominee for
Mills and Michelsen LLC
312 State Street
Rochester, New York 14614

LaBella Project No. 214539

September 2015

LaBella Associates, D.P.C.
300 State Street
Rochester, New York 14614

Table of Contents

Page

SITE HEALTH AND SAFETY PLAN

Project Title:	Former Michelsen Furniture Co. Site - Brownfield Cleanup Program
Project Number:	214539
Project Location (Site):	182 Avenue D & 374 Conkey Ave Rochester, New York
Environmental Director:	Gregory Senecal, CHMM
Project Manager:	Dave Engert, CHMM
Plan Review Date:	_____
Plan Approval Date:	_____
Plan Approved By:	_____ Mr. Richard Rote, CIH
Site Safety Supervisor:	Jennifer Gillen
Site Contact:	To Be Determined
Safety Director:	Rick Rote, CIH
Proposed Date(s) of Field Activities:	To Be Determined
Site Conditions:	Level, encompassing approximately 0.62 acres
Site Environmental Information Provided By:	• Phase I Environmental Site Assessment, LaBella, 2011 • Phase II ESA, LaBella, 2012 • Follow Up Subsurface Investigation Activities, LaBella, 2014
Air Monitoring Provided By:	LaBella Associates, D.P.C.
Site Control Provided By:	Contractor(s)

EMERGENCY CONTACTS

	Name	Phone Number
Ambulance:	As Per Emergency Service	911
Hospital Emergency:	Rochester General Hospital	585-922-8000
Poison Control Center:	Upstate New York Poison Control Center	1-800-222-1222
Police (local, state):	Rochester Police Department	911
Fire Department:	Rochester Fire Department	911
Site Contact:	Kathy Wood	585-454-5710 x 2002
Agency Contact:	NYSDEC – Todd Caffoe, P.E. NYSDOH – Dawn Hettrick	585-226-5350 518-402-7860
Environmental Director:	Greg Senecal, CHMM	Direct: 585-295-6243 Cell: 585-752-6480
Project Manager:	Dave Engert, CHMM.	Direct: 585-295-630 Cell: 585-737-3293
Site Safety Supervisor:	Steven Rife	Direct: 585-295-7004 Cell: 585-755-9244
Safety Director	Rick Rote, CIH	Direct: 585-295-6241

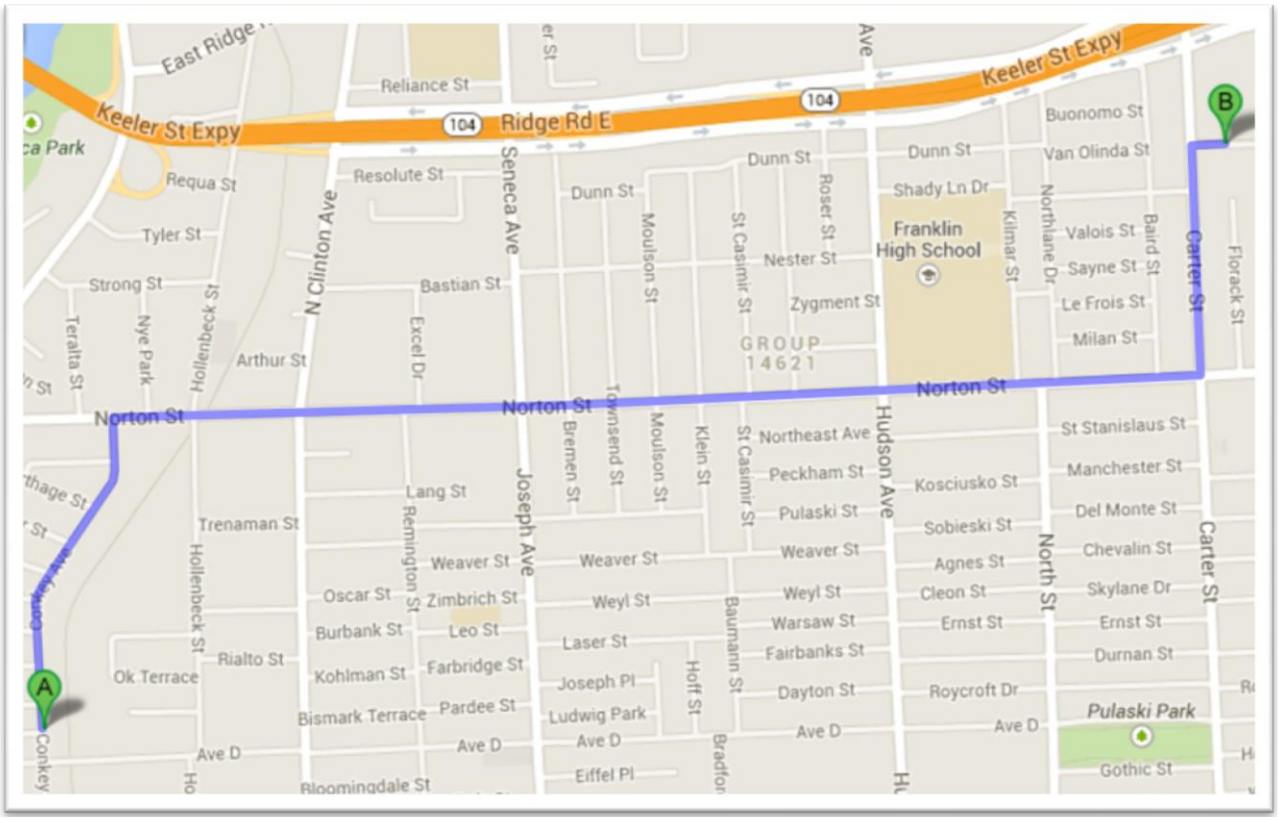
MAP AND DIRECTIONS TO THE MEDICAL FACILITY
ROCHESTER GENERAL HOSPITAL

Total Time: 6 minutes
Total Distance: 2.1 miles

Directions:

1. Turn Right onto Conkey Avenue, travel north 0.4 miles
2. Turn Right onto Norton Street, travel east 1.3 miles
3. Turn Left onto Carter Street, travel north 0.3 miles
4. Turn Right into Rochester General Hospital

Map:



LABELLA

1.0 Introduction

The purpose of this Health and Safety Plan (HASP) it to provide guidelines for responding to potential health and safety issues that may be encountered during the Remedial Investigation (RI) at the Former Michelsen Furniture Site, located at 182 Avenue D and 374 Conkey Avenue in the City of Rochester, Monroe County, New York. This HASP only reflects the policies of LaBella Associates D.P.C. The requirements of this HASP are applicable to all approved LaBella personnel at the work site. This document's project specifications and the Community Air Monitoring Plan (CAMP) are to be consulted for guidance in preventing and quickly abating any threat to human safety or the environment. The provisions of the HASP were developed in general accordance with 29 CFR 1910 and 29 CFR 1926 and do not replace or supersede any regulatory requirements of the USEPA, NYSDEC, OSHA or and other regulatory body.

2.0 Responsibilities

This HASP presents guidelines to minimize the risk of injury to project personnel, and to provide rapid response in the event of injury. The HASP is applicable only to activities of approved LaBella personnel and their authorized visitors. The Project Manager shall implement the provisions of this HASP for the duration of the project. It is the responsibility of LaBella employees to follow the requirements of this HASP, and all applicable company safety procedures.

3.0 Activities Covered

The activities covered under this HASP are limited to the following:

- Management of environmental investigation and remediation activities
- Environmental Monitoring
- Collection of samples
- Management of excavated soil and fill.

4.0 Work Area Access and Site Control

The contractor(s) will have primary responsibility for work area access and site control. However, a minimum requirement for work area designation and control will consist of:

- Drilling (Geoprobe®/Rotary) – Orange cones to establish at least a 10-foot by 10-foot work area
- Test Pitting – Orange cones and orange temporary fencing to establish at least 10-feet of distance between test pit and fencing.

5.0 Potential Health and Safety Hazards

This section lists some potential health and safety hazards that project personnel may encounter at the project site and some actions to be implemented by approved personnel to control and reduce the associated risk to health and safety. This is not intended to be a complete listing of any and all potential health and safety hazards. New or different hazards may be encountered as site environmental and site work conditions change. The suggested actions to be taken under this plan are not to be substituted for good judgment on the part of project personnel. At all times, the Site Safety Officer has responsibility for site safety and his or her instructions must be followed.

5.1 Hazards Due to Heavy Machinery

Potential Hazard:
Heavy machinery including trucks, excavators, backhoes, etc will be in operation at the site. The presence of such equipment presents the danger of being struck or crushed. Use caution when working near heavy machinery.

Protective Action:
Make sure that operators are aware of your activities, and heed operator's instructions and warnings. Wear bright colored clothing and walk safe distances from heavy equipment. A hard hat, safety glasses and steel toe shoes are required.

5.2 Excavation Hazards

Potential Hazard:
Excavations and trenches can collapse, causing injury or death. Edges of excavations can be unstable and collapse. Toxic and asphyxiant gases can accumulate in confined spaces and trenches. Excavations that require working within the excavation will require air monitoring in the breathing zone (refer to Section 9.0).

Excavations left open create a fall hazard which can cause injury or death.

Protective Action:
Personnel must receive approval from the Project Manager to enter an excavation for any reason. Subsequently, approved personnel are to receive authorization for entry from the Site Safety Officer. Approved personnel are not to enter excavations over 4 feet in depth unless excavations are adequately sloped. Additional personal protective equipment may be required based on the air monitoring.

Personnel should exercise caution near all excavations at the site as it is expected that excavation sidewalls will be unstable. All excavations will be backfilled by the end of each day. Additionally, no test pit will be left unattended during the day.

Fencing and/or barriers accompanied by "no trespassing" signs should be placed around all excavations when left open for any period of time when work is not being conducted.

5.3 Cuts, Punctures and Other Injuries

Potential Hazard:
In any excavation or construction, work site there is the potential for the presence of sharp or jagged edges on rock, metal materials, and other sharp objects. Serious cuts and punctures can result in loss of blood and infection.

Protective Action:
The Project Manager is responsible for making First Aid supplies available at the work site to treat minor injuries. The Site Safety Officer is responsible for arranging the transportation of authorized on-site personnel to medical facilities when First Aid treatment in not sufficient. Do not move seriously injured workers. All injuries requiring treatment are to be reported to the Project Manager. Serious injuries are to be reported immediately to the Site Safety Officer

5.4 Injury Due to Exposure of Chemical Hazards

Potential Hazards:
Volatile organic vapors from petroleum products, chlorinated solvents or other chemicals may be encountered during excavation activities at the project work site. Inhalation of high concentrations of organic vapors can cause headache, stupor, drowsiness, confusion and other health effects. Skin contact can cause irritation, chemical burn, or dermatitis.

Protective Action:
The presence of organic vapors may be detected by their odor and by monitoring instrumentation. Approved employees will not work in environments where hazardous concentrations of organic vapors are present. Air monitoring (refer to Section 9.0 and to the Modified CAMP in Appendix 7) of the work area will be performed at least every 60 minutes or more often using a Photoionization Detector (PID). Personnel are to leave the work area whenever PID measurements of ambient air exceed 25 ppm consistently for a 5 minute period. In the event that sustained total volatile organic compound (VOC) readings of 25 ppm is encountered personnel should upgrade personal protective equipment to Level C (refer to Section 8.0) and an Exclusion Zone should be established around the work area to limit and monitor access to this area (refer to Section 6.0).

5.5 Injuries Due to Extreme Hot or Cold Weather Conditions

Potential Hazards:
Extreme hot weather conditions can cause heat exhaustion, heat stress and heat stroke or extreme cold weather conditions can cause hypothermia.

Protective Action:
Precaution measures should be taken such as dress appropriately for the weather conditions and drink plenty of fluid. If personnel should suffer from any of the above conditions, proper techniques should be taken to cool down or heat up the body and taken to the nearest hospital if needed.

5.6 Potential Exposure to Asbestos

Potential Hazards:
During ground intrusive activities (e.g., test pitting or drilling) soil containing asbestos may be encountered. Asbestos is friable when dry and can be inhaled when exposed to air.

Protective Action:
The presence of asbestos can be identified through visual observation of a white magnesium silicate material. If encountered, work should be halted and a sample of the suspected asbestos should be collected and placed in a plastic sealable bag. This sample should be sent to the asbestos laboratory at LaBella Associates for analysis.

5.7 Potential Exposure to Thorium^{232}

Potential Hazards:
During ground intrusive activities (e.g., test pitting or drilling) soil containing ^{232}Thorium may be encountered. ^{232}Thorium is a radioactive substance and poses an exposure risk to humans once encountered.

Protective Action:
Each test pit, soil sample, or other soil from the subsurface should initially be screened with the Ludlum meter to check the level of radiation on the soil as compared to the Site background level of radiation. Should the level of radiation on the soil sample exceed 2 times the Site background level, then work should be halted at the specified location and Mr. Rick Rote of LaBella Associates, P.C. should be contacted immediately (see page ii Emergency Contacts).

6.0 Work Zones

In the event that conditions warrant establishing various work zones (i.e., based on hazards - Section 5.4), the following work zones should be established:

Exclusion Zone (EZ):
The EZ will be established in the immediate vicinity and adjacent downwind direction of site activities that elevate breathing zone VOC concentrations to unacceptable levels based on field screening. These site activities include contaminated soil excavation and soil sampling activities. If access to the site is required to accommodate non-project related personnel then an EZ will be established by constructing a barrier around the work area (yellow caution tape and/or construction fencing). The EZ barrier shall encompass the work area and any equipment staging/soil staging areas necessary to perform the associated work. The contractor(s) will be responsible for establishing the EZ and limiting access to approved personnel. Depending on the condition for establishing the EZ, access to the EZ may require adequate PPE (e.g., Level C).

Contaminant Reduction Zone (CRZ):
The CRZ will be the area where personnel entering the EZ will don proper PPE prior to entering the EZ and the area where PPE may be removed. The CRZ will also be the area where decontamination of equipment and personnel will be conducted as necessary.

7.0 Decontamination Procedures

Upon leaving the work area, approved personnel shall decontaminate footwear as needed. Under normal work conditions, detailed personal decontamination procedures will not be necessary. Work clothing may become contaminated in the event of an unexpected splash or spill or contact with a contaminated substance. Minor splashes on clothing and footwear can be rinsed with clean water. Heavily contaminated clothing should be removed if it cannot be rinsed with water. Personnel assigned to this project should be prepared with a change of clothing whenever on site.

Personnel will use the contractor's disposal container for disposal of PPE.

8.0 Personal Protective Equipment

Generally, site conditions at this work site require level of protection of Level D or modified Level D. However, air monitoring will be conducted to determine if up-grading to Level C PPE is required (refer to Section 9.0). Descriptions of the typical safety equipment associated with Level D and Level C are provided below:

Level D:
Hard hat, safety glasses, rubber nitrile sampling gloves, steel toe construction grade boots, etc.

Level C:
Level D PPE and full or ½-face respirator and tyvek suit (if necessary). [*Note: Organic vapor cartridges are to be changed after each 8-hours of use or more frequently.*]

9.0 Air Monitoring

According to 29 CFR 1910.120(h), air monitoring shall be used to identify and quantify airborne levels of hazardous substances and health hazards in order to determine the appropriate level of employee protection required for personnel working onsite. Air monitoring will consist at a minimum of the procedures described in Appendix 7 "Site Specific CAMP". Please refer to the Site Specific CAMP for further details on air monitoring at the Site.

The Air Monitor will utilize a photoionization Detector (PID) to screen the ambient air in the work areas for total Volatile Organic Compounds (VOCs) and a DustTrak tm Model 8520 aerosol monitor or equivalent for measuring particulates. Work area ambient air will generally be monitored in the work area and downwind of the work area. Air monitoring of the work areas and downwind of the work areas will be performed at least every 60 minutes or more often using a PID, and the DustTrak meter.

If sustained PID readings of greater than 25 ppm are recorded in the breathing zone, then either personnel are to leave the work area until satisfactory readings are obtained or approved personnel may re-enter the work areas wearing at a minimum a ½ face respirator with organic vapor cartridges for an 8-hour duration (i.e., upgrade to Level C PPE). Organic vapor cartridges are to be changed after each 8-hours of use or more frequently, if necessary. If PID readings are sustained, in the work area, at levels above 25 ppm for a 5 minute average, work will be stopped immediately until safe levels of VOCs are encountered or additional PPE will be required (i.e., Level B).

If dust concentrations exceed the upwind concentration by 150 $\mu g/m^3$ (0.15 mg/m^3) consistently for a 10 minute period within the work area or at the downwind location, then LaBella personnel may not re-enter the work area until dust concentrations in the work area decrease below 150 $\mu g/m^3$ (0.15 mg/m^3), which may be accomplished by the construction manager implementing dust control or suppression measures.

10.0 Emergency Action Plan

In the event of an emergency, employees are to turn off and shut down all powered equipment and leave the work areas immediately. Employees are to walk or drive out of the Site as quickly as possible and wait at the assigned 'safe area'. Follow the instructions of the Site Safety Officer.

Employees are not authorized or trained to provide rescue and medical efforts. Rescue and medical efforts will be provided by local authorities.

11.0 Medical Surveillance

Medical surveillance will be provided to all employees who are injured due to overexposure from an emergency incident involving hazardous substances at this site.

12.0 Employee Training

Personnel who are not familiar with this site plan will receive training on its entire content and organization before working at the Site.

Individuals involved with the remedial investigation must be 40-hour OSHA HAZWOPER trained with current 8-hour refresher certification.

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Table 1
Exposure Limits and Recognition Qualities

Compound	PEL-TWA (ppm)(b)(d)	TLV-TWA (ppm)(c)(d)	STEL	LEL (%)(e)	UEL (%)(f)	IDLH (ppm)(g)(d)	Odor	Odor Threshold (ppm)	Ionization Potential
Acetone	750	500	NA	2.15	13.2	20,000	Sweet	4.58	9.69
Anthracene	0.2	0.2	NA	NA	NA	NA	Faint aromatic	NA	NA
Benzene	1	0.5	5	1.3	7.9	3000	Pleasant	8.65	9.24
Benzo (a) pyrene (coal tar pitch volatiles)	0.2	0.1	NA	NA	NA	700	NA	NA	NA
Benzo (a)anthracene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo (b) Fluoranthene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo (g,h,i)perylene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo (k) Fluoranthene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	NA	NA	NA	NA	NA	NA	NA	NA	10.88
Carbon Disulfide	20	1	NA	1.3	50	500	Odorless or strong garlic type	0.096	10.07
Chlorobenzene	75	10	NA	1.3	9.6	2,400	Faint almond	0.741	9.07
Chloroform	50	2	NA	NA	NA	1,000	ethereal odor	11.7	11.42
Chrysene	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethylene	200	200	NA	9.7	12.8	400	Acrid	NA	9.65
1,2-Dichlorobenzene	50	25	NA	2.2	9.2		Pleasant		9.07
Ethylbenzene	100	100	NA	1	6.7	2,000	Ether	2.3	8.76
Fluoranthene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isopropylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methylene Chloride	500	50	NA	12	23	5,000	Chloroform-like	10.2	11.35
Naphthalene	10, Skin	10	NA	0.9	5.9	250	Moth Balls	0.3	8.12
n-propylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NA	NA	NA	NA	NA	NA	NA	NA	NA
p-Isopropylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA
sec-Butylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tetrachloroethane	NA	NA	NA	NA	NA	NA	Sweet	NA	NA
Toluene	100	100	NA	0.9	9.5	2,000	Sweet	2.1	8.82
Trichloroethylene	100	50	NA	8	12.5	1,000	Chloroform	1.36	9.45
1,2,4-Trimethylbenzene	NA	25	NA	0.9	6.4	NA	Distinct	2.4	NA
1,3,5-Trimethylbenzene	NA	25	NA	NA	NA	NA	Distinct	2.4	NA
Vinyl Chloride	1	1	NA	NA	NA	NA	NA	NA	NA
Xylenes (o,m,p)	100	100	NA	1	7	1,000	Sweet	1.1	8.56
Metals									
Arsenic	0.01	0.2	NA	NA	NA	100, Ca	Almond	NA	NA
Cadmium	0.2	0.5	NA	NA	NA	NA	NA	NA	NA
Chromium	1	0.5	NA	NA	NA	NA	NA	NA	NA
Lead	0.05	0.15	NA	NA	NA	700	NA	NA	NA
Mercury	0.05	0.05	NA	NA	NA	28	Odorless	NA	NA
Selenium	0.2	0.02	NA	NA	NA	Unknown	NA	NA	NA
Other									
Asbestos	0.1 (f/cc)	NA	1.0 (f/cc)	NA	NA	NA	NA	NA	NA

APPENDIX 7 – COMMUNITY AIR MONITORING PLAN

Community Air Monitoring Plan

Location:

Former Michelsen Furniture Co. Site
182 Avenue D & 374 Conkey Avenue
Rochester, New York

Prepared for:

M+M Housing Development Fund Corp. as Nominee for Mills and Michelsen LLC
312 State Street
Rochester, New York 14614

LaBella Project No. 214539

September 2015

Community Air Monitoring Plan

Location:

Former Michelsen Furniture Co. Site
182 Avenue D & 374 Conkey Avenue
Rochester, New York

Prepared for:

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312 State Street
Rochester, New York 14614

LaBella Project No. 214539

September 2015

Table of Contents

Page

1.0 INTRODUCTION

This Site Specific Community Air Monitoring Plan (CAMP) has been prepared by LaBella Associates, D.P.C. on behalf of the M+M Housing Development Fund Corp. as Nominee for Mills and Michelsen LLC. This CAMP addresses potential Volatile Organic Vapor (VOC) and particulate emissions that may occur during implementation of the Remedial Investigation Work Plan (RIWP) at the Former Michelsen Furniture Co. Site located at 182 Avenue D and 374 Conkey Avenue which encompasses approximately 0.62 acres in the City of Rochester, Monroe County, New York herein after referred to as the "Site."

1.1 PURPOSE

Various levels of VOCs, semi-VOCs, and metals (collectively refered to as "constituents of concern (COCs)) have been detected in the soil and groundwater at the Site or are suspected to be contained in the soil and/or groundwater at the Site. The presence of these COCs through disturbance of soil and groundwater at the Site can potentially result in nuisance odors or health threats to the neighborhood in the immediate vicinity of the Site as well as to the various occupants of the Site.

This CAMP is specific to activities being conducted as part of the Remedial investigation at the Site. The CAMP describes the air monitoring activities to be completed in order to provide a measure of protection for any downwind receptors including Site occupants and occupants of neighboring properties. This CAMP is not intended to provide action levels for respiratory protection of workers involved with the RI. Rather, a Health & Safety Plan (HASP) has been developed and is included as Appendix 4 to the RIWP to cover workers directly involved with the RI work.

This CAMP includes the requirements of the New York State Department of Health (NYSDOH) Generic CAMP (included as Appendix 1A of the Draft DER-10 New York State Department of Environmental Conservation (NYSDEC) Technical Guidance for Site Investigation and Remediation dated December 2002).

Pursuant to the New York State Department of Environmental Conservation (NYSDEC) Technical Administrative Guidance Manual (TAGM) #4031 – Fugitive Dust Suppression and particulate Monitoring Program at Inactive Hazardous Waste Sites, (HWR-89-4031), this CAMP addresses methods that will be utilized to monitor particulate (dust) levels at the perimeter of, and within the work areas of the Site. If elevated levels of particulate emissions are encountered, this CAMP identifies the procedures that will be employed to mitigate elevated particulate levels.

Air monitoring procedures for these COCs are also included in this CAMP. Monitoring for COCs in, or near, the work areas of the Site will also be conducted per the HASP.

2.0 METHODOLOGY

This CAMP has been designed for remedial investigation activities at the Site. The CAMP pertains primarily to remedial investigation activities that disturb soil and groundwater at the Site. The following procedures will be implemented to monitor and, if necessary, mitigate the potential migration of fugitive particulate and/or COC emissions at the Site.

2.1 Site Background Monitoring

Each day of field work during the ground intrusive work a wind sock or flag will be used to monitor wind direction in the work areas. Based upon daily wind conditions three temporary monitoring points, one up wind, one downwind, and one in the direction of the closest sensitive receptor to the work areas, will be identified. The wind direction will be observed and noted frequently throughout the day and monitoring stations will be adjusted appropriately.

This CAMP will utilize a photoionization Detector (PID) to screen the ambient air in the work areas for total VOCs and a DustTrak tm Model 8530 aerosol monitor or equivalent for measuring particulates.

Each day, prior to the commencement of the ground intrusive work, background concentrations of particulates and VOCs will be measured and recorded as 15 minute averages at the identified three locations (one upwind, one downwind, and one in the direction of the closest sensitive receptor) with the typical equipment engines and any other gas/diesel engines operating on Site. This will be established as the Site background level for the day.

2.2 VOC Monitoring, Response Levels and Actions

Volatile organic compounds (VOCs) will be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis. The PID will be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment will 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 will be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities will 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 will be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities will 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 will be shutdown.
4. All 15-minute readings will be recorded and be available for State (DEC and NYSDOH) personnel to review. Instantaneous readings, if any, used for decision purposes will also be recorded.

2.3 Particulate Monitoring, Response Levels and Actions

Particulate concentrations will be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The equipment will 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 will be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/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 mcg/m^3 above the upwind level, work will 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 mcg/m^3 of the upwind level and in preventing visible dust migration.
3. All readings will be recorded and be available for State (DEC and NYSDOH) and County Health personnel to review.

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APPENDIX 8 – QUALITY ASSURANCE PROJECT PLAN

Quality Assurance Project Plan

Location:

Former Michelsen Furniture Site
182 Avenue D & 374 Conkey Avenue
Rochester, New York

Prepared For:

M+M Housing Development Fund Corp. as Nominee for Mills and Michelsen LLC
312 State Street
Rochester, New York 14614

LaBella Project No. 214539

September 2015

Quality Assurance Project Plan

Location:

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Table of Contents

Page

Table of Contents (continued)

Page

1. Introduction

The Quality Assurance Project Plan (QAPP) contains procedures which provide for collected data to be properly evaluated, and document that quality control (QC) procedures have been followed in the collection of samples. The quality control program represents the methodology and measurement procedures used in collecting quality field data. This methodology includes the proper use of equipment, documentation of sample collection, and sample handling practices.

Procedures used in the firm's QAPP are compatible with federal, state, and local regulations, as well as, appropriate professional and technical standards.

This QAPP has been organized into the following areas:

- Quality Control Objectives and Checks
- Field Equipment, Handling, and Calibration
- Sampling Techniques
- Sample Handling and Packaging

It should be noted that project-related documents may have project specific details that will differ from the procedures in this QAPP. In such cases, the project-related documents should be followed (subsequent to regulatory approval).

2. Quality Control Objectives

The United States Environmental Protection Agency (EPA) has identified five general levels of analytical data quality as being potentially applicable to site investigations conducted under CERCLA. These levels are summarized below:

- **Level I -** Field screening. This level is characterized by the use of portable instruments, which can provide real-time data to assist in the optimization of sampling point locations and for health and safety support. Data can be generated regarding the presence or absence of certain contaminants (especially volatiles) at sampling locations.
- **Level II -** Field analysis. This level is characterized by the use of portable analytical instruments, which can be used on site or in mobile laboratories stationed near a site (close-support labs). Depending upon the types of contaminants, sample matrix, and personnel skills, qualitative and quantitative data can be obtained.
- **Level III -** Laboratory analysis using methods other than the Contract Laboratory Program (CLP) Routine Analytical Services (RAS). This level is used primarily in support of engineering studies using standard EPA-approved procedures. Some procedures may be equivalent to CLP RAS, without the CLP requirements for documentation.
- **Level IV -** CLP Routine Analytical Services. This level is characterized by rigorous QC protocols and documentation and provides qualitative and quantitative analytical data. Some regions have obtained similar support via their own regional laboratories, university laboratories, or other commercial laboratories.
- **Level V -** Non-standard methods. Analyses, which may require method modification and/or

development. CLP Special Analytical Services (SAS) are considered Level V.

Unless stated otherwise, all data will be generated in accordance with Level IV. When CLP methodology is not available, federal and state approved methods will be utilized. Level III will be utilized, as necessary, for non-CLP RAS work which may include ignitability, corrosivity, reactivity, EP toxicity, and other state approved parameters for characterization. Level I will be used throughout the RI for health and safety monitoring activities.

All measurements will be made to provide that analytical results are representative of the media and conditions measured. Unless otherwise specified, all data will be calculated and reported in units consistent with other organizations reporting similar data to allow comparability of data bases among organizations. Data will be reported in µg/L and mg/L for aqueous samples, and µg/kg and mg/kg (dry weight) for soils, or otherwise as applicable.

The characteristics of major importance for the assessment of generated data are accuracy, precision, completeness, representativeness, and comparability. Application of these characteristics to specific projects is addressed later in this document. The characteristics are defined below.

2.1. Accuracy

Accuracy is the degree of agreement of a measurement or average of measurements with an accepted reference or "true" value and is a measure of bias in the system.

2.2. Precision

Precision is the degree of mutual agreement among individual measurements of a given parameter.

2.3. Completeness

Completeness is a measure of the amount of valid data obtained from a measurement system compared to the amount expected to be obtained under correct normal conditions.

2.4. Representativeness

Representativeness expresses the degree to which data accurately and precisely represents a characteristic of a population, parameter variations at a sampling point, a process condition, or an environmental condition

Careful choice and use of appropriate methods in the field will ensure that samples are representative. This is relatively easy with water or air samples since these components are homogeneously dispersed. In soil and sediment, contaminants are unlikely to be evenly distributed, and thus it is important for the sampler and analyst to exercise good judgment when removing a sample.

2.5. Comparability

Comparability expresses the confidence with which one data set can be compared to another. The data sets may be inter- or intra- laboratory.

3.0 Measurement of Data Quality

3.1. Accuracy

Accuracy of a particular analysis is measured by assessing its performance with "known" samples. These "knowns" take the form of EPA standard reference materials, or laboratory prepared solutions of target analytes spiked into a pure water or sample matrix. In the case of GC or GC/MS analyses, solutions of surrogate compounds, which can be spiked into every sample and are designed to mimic the behavior of target analytes without interfering with their determination, are used.

In each case the recovery of the analyte is measured as a percentage, correcting for analytes known to be present in the original sample if necessary, as in the case of a matrix spike analysis. For EPA supplied known solutions, this recovery is compared to the published data that accompany the solution.

For the firm's prepared solutions, the recovery is compared to EPA-developed data or the firm's historical data as available. For surrogate compounds, recoveries are compared to EPA CLP acceptable recovery tables.

If recoveries do not meet required criteria, then the analytical data for the batch (or, in the case of surrogate compounds, for the individual sample) are considered potentially inaccurate. The analyst or his supervisor must initiate an investigation of the cause of the problem and take corrective action. This can include recalibration of the instrument, reanalysis of the QC sample, reanalysis of the samples in the batch, or flagging the data as suspect if the problems cannot be resolved. For highly contaminated samples, recovery of the matrix spike may depend on sample homogeneity. As a rule, analyses are not corrected for recovery of matrix spike or surrogate compounds.

3.2. Precision

Precision of a particular analysis is measured by assessing its performance with duplicate or replicate samples. Duplicate samples are pairs of samples taken in the field and transported to the laboratory as distinct samples. Their identity as duplicates is sometimes not known to ASC and usually not known to bench analysts, so their usefulness for monitoring analytical precision at bench level is limited. For most purposes, precision is determined by the analysis of replicate pairs (i.e., two samples prepared at the laboratory from one original sample). Often in replicate analysis the sample chosen for replication does not contain target analytes so that quantitation of precision is impossible. For EPA CLP analyses, replicate pairs of spiked samples, known as matrix spike/matrix spike duplicate samples, are used for precision studies. This has the advantage that two real positive values for a target analyte can be compared.

Precision is calculated in terms of Relative Percent Difference (RPD).

- Where X_1 and X_2 represent the individual values found for the target analyte in the two replicate analyses or in the matrix spike/matrix spike duplicate analyses.
- RPDs must be compared to the method RPD for the analysis. The analyst or his supervisor must investigate the cause of RPDs outside stated acceptance limits. This may include a visual inspection of the sample for non homogeneity, analysis of check samples, etc. Follow-up action may include sample reanalysis or flagging of the data as suspect if problems cannot be resolved.
- During the data review and validation process (see Section 9), field duplicate RPDs are assessed as a measure of the total variability of both field sampling and laboratory analysis.

3.3. Completeness

Completeness for each parameter is calculated as follows:

- The firm's target value for completeness for all parameters is 100%. A completeness value of 95% will be considered acceptable. Incomplete results will be reported to the site managers. In planning the field sample collection, the site manager will plan to collect field duplicates from identified critical areas. This procedure should assure 100% completeness for these areas.

3.4. Representativeness

The characteristic of representativeness is not quantifiable. Subjective factors to be taken into account are as follows:

- The degree of homogeneity of a site;
- The degree of homogeneity of a sample taken from one point in a site; and
- The available information on which a sampling plan is based.

To maximize representativeness of results, sampling techniques and sample locations will be carefully chosen so that they provide laboratory samples representative of the site and the specific area. Within the laboratory, precautions are taken to extract from the sample bottle an aliquot representative of the whole sample. This includes premixing the sample and discarding pebbles from soil samples.

4. QC Targets

Target values for detection limit, percent spike recovery and percent "true" value of known check standards, and RPD of duplicates/replicates are included in the QCP, Analytical Procedures. Note that tabulated values are not always attainable. Instances may arise where high sample concentrations, non homogeneity of samples, or matrix interferences preclude achievement of target detection limits or other quality control criteria. In such instances, the firm will report reasons for deviations from these detection limits or noncompliance with quality control criteria.

5. Sampling Procedures

This section describes the sampling procedures to be utilized for each environmental medium that will be collected and analyzed in accordance with appropriate state and federal requirements. All procedures described are consistent with EPA sampling procedures as described in SW-846, third edition, September 1986. All samples will be delivered to the laboratory within 24 to 28 hours of collection.

6. Soil & Groundwater Investigation

The groundwater sampling plan outlined in this subsection has been prepared in general accordance with RCRA Groundwater Monitoring Technical Enforcement Guidance Document 9950.1 (September 1986), Office of Solid Waste and Emergency Response.

Prior to drilling, all drill sites will be cleared with appropriate utility companies to avoid potential accidents relating to underground utilities.

6.1. Test Borings and Well Installation

6.1.1. Drilling Equipment

Direct Push Geoprobe® Soil Borings:

Borings will be advanced with a Geoprobe® direct push sampling system. The use of direct push technology allows for rapid sampling, observation, and characterization of relatively shallow overburden soils. The Geoprobe® utilizes a four-foot macro-core sampler, with disposable polyethylene sleeves. Soil cores will be retrieved in four-foot sections, and can be easily cut from the polyethylene sleeves for observation and sampling. The macro-core sampler will be decontaminated between samples and borings using an alconox and water solution.

6.1.2. Drilling Techniques

Direct Push Geoprobe® Advanced Borings:

Prior to initiating drilling activities, the Geoprobe®, macro cores, drive rods, pertinent equipment, well pipe and screens will be steam cleaned or washed with an alconox and water solution followed by a clean water rinse. This cleaning procedure will also be used between each boring. Throughout and after the cleaning processes, direct contact between the equipment and the ground surface will be avoided. Plastic sheeting and/or clean support structures (e.g., pallets, sawhorses) will be used to create a designated decontamination area. The drilling rig and all equipment will be steam cleaned upon completion of the investigation and prior to leaving the site.

Test borings will be advanced with 2-inch direct push macro-cores through overburden soils. Drilling fluids, other than water from a NYSDEC-approved source, will not be allowed without special consideration and agreement from NYSDEC. The use of lubricants is also not allowed unless approved by the NYSDEC representative.

It will be the responsibility of the consultant to arrange for the appropriate drilling equipment to be present at the site. Standby time to arrange for additional equipment or a water supply will not be allowed

unless caused by unexpected site conditions.

During the drilling, a Photoionization detector (PID) will be used to monitor the gases exiting the hole. Macro-core cuttings will be contained if the PID meter readings are greater than 5 ppm above background or the cuttings show visible evidence of contamination, or as specified in the RI Work Plan.

6.1.3. Well Casing (Riser)

Direct Push Geoprobe® Groundwater Monitoring Wells:

Direct Push Geoprobe® advanced groundwater-monitoring wells will use 2.25-inch threaded flush joint PVC pipe.

6.1.4. Well Screen

Direct Push Geoprobe® Groundwater Monitoring Wells:

Direct Push Geoprobe® advanced groundwater-monitoring wells utilized 2.25-inch diameter well screen. Groundwater-monitoring wells will be set to intersect the top of the shallow overburden groundwater table. Each Geoprobe® advanced well will be equipped with 5 to 10 feet (based on anticipated groundwater level) of 0.020 inch slotted PVC screen connected to an appropriate length of PVC riser to complete the well installation.

6.1.5. Artificial Sand Pack

Granular backfill will be chemically and texturally clean (as determined using a 10x hand lens), inert, siliceous, and of appropriate grain size for the screen slot size and the host environment. Sand pack grain size will be selected based on sieve analyses of formation samples. The sand pack will be installed using a tremie pipe and the casing will be equipped with centralizers (wells 16 ft. or deeper only) to minimize the tendency for particle separation and bridging. Prior to casing and screen insertion, a minimum of 6-in of gravel-pack bedding will be placed in the bottom of the hole. The well screen and casing will be installed, and the sand pack placed around the screen and casing to a depth extending at least 25 percent of the screen length above the top of the screen, where possible.

6.1.6. Bentonite Seal

A minimum 2-foot thick seal of tamped bentonite pellets will be placed directly on top of the sand pack, and care will be taken to avoid bridging. The seal will be measured immediately after placement, without allowance for swelling. In the event that the bentonite seal cannot be 2-ft. thick due to a shallow water table, a seal at least 1-ft. thick will be set.

6.1.7. Grout Mixture

Upon completion of the bentonite seal, the well will be grouted with a non-shrinking cement grout (e.g., Volclay^{R}) mix to be placed from the top of the bentonite seal to the ground surface. The cement grout shall consist of a mixture of Portland cement (ASTM C 150) and water, in the proportion of not more than 7 gallons of clean water per bag of cement (1 cubic foot or 94 pounds). Additionally, 3% by weight of bentonite powder shall be added, if permitted.

6.1.8 Surface Protection

At all times during the progress of the work, precautions shall be used to prevent tampering with or the entrance of foreign material into the well. Upon completion of the well, a suitable lockable cap shall be installed to prevent material from entering the well. The PVC well riser shall be protected by a flush mounted road box set into a concrete pad. A concrete pad, sloped away from the well, shall be constructed around the flush mount road box at ground level.

Any well that is to be temporarily removed from service or left incomplete due to delay in construction shall be capped with a watertight cap and equipped with a "vandal-proof" cover, satisfying applicable NYSDEC regulations or recommendations.

6.1.9. Surveying

Coordinates and elevations will be established for each monitoring well and sampling location. Elevations to the closest 0.01 foot shall be used for the survey. These elevations shall be referenced to a regional, local, or project-specific datum. USGS benchmarks will be used whenever available. The location, identification, coordinates, and elevations of the wells will be plotted on maps with a scale large enough to show their location with reference to other structures at each site.

6.1.10. Well Development

After completion of the well, but not sooner than 24 hours after grouting is completed, development will be accomplished using pumping, bailing, or surge blocking. No dispersing agents, acids, disinfectants, or other additives will be used during development or introduced into the well at any other time. During development, water will be removed throughout the entire water column by periodically lowering and raising the pump intake (or bailer stopping point).

Well development will include washing the entire well cap and the interior of the well casing above the water table, using only water from the well itself. As a result of this operation, the well casing will be free of extraneous materials (grout, bentonite, and sand) inside the riser, well cap, and blank casing between top of the well casing and water table. This washing will be conducted before and/or during development; not after development. Development water will be either properly contained and treated as waste until the results of chemical analysis of samples are obtained or discharged on site as determined by the site-specific work plans and/or consultation with the NYSDEC representatives on site.

Development will be completed by removing the approximate volume of water introduced during drilling (if any) and an additional five (5) well volumes. Well development will be performed using dedicated bailers and/or pumping equipment (depending on volumes), and will continue until groundwater turbidity reaches 50 National Turbidity Units (NTUs), or lower. In the event that 50 NTUs is not reached after removing a reasonable number of well volumes (10), the NYSDEC will be contacted to request ceasing development. If dedicated equipment is not used, then the equipment will be decontaminated between each well (alconox wash with potable water rinse). If the NYSDEC Project Manager agrees that removal of this volume of water is impractical, then LaBella will work with NYSDEC to develop an alternate well development protocol.

7. Geologic Logging and Sampling

At each soil boring location, the boring will be advanced through overburden using either a drill rig and hollow-stem auger or direct push technology; soils will be visually inspected for stains and monitored with a PID to help determine potential for vertical migration of contaminants. Soil samples will be collected continuously in both the unsaturated soil zone and the saturated zone. Selected wells will be sampled continuously over the entire depth of the well. The sampling device will be decontaminated according to procedures outlined in the Decontamination section of this document. Soil samples will be screened in the field for volatile organic vapors using a PID, classified in accordance with Unified Soil Classification System (USCS) specifications, and logged. Samples will be stored in glass jars until they are needed for testing or the project is complete.

Hydrogeologic suitability for well emplacement will be determined by the supervising geologist in consultation with NYSDEC, based on thickness and estimated hydraulic conductivity of the saturated zone encountered. If necessary, the borehole will be advanced to water or abandoned.

8. Hydraulic Conductivity Testing Procedures

If necessary, single-well, rising head tests will be performed in order to determine the in-place hydraulic conductivity of unconsolidated and/or consolidated geologic materials, which occur in the monitoring interval of newly installed wells. The tests will be performed by a qualified hydrogeologist. These tests involve lowering the water level in the well and measuring the change in head with respect to time as the well is allowed to recover. In wells which are slow to recover, the water level will be bailed down as described below. The measurements in these wells will be taken manually. Wells which recover too quickly for this method will be tested by removing one bailer of water and the recovery measured by means of a pressure transducer system.

The rising head tests for wells with rapid recovery rates will be conducted as follows:

- The static water level in the well to be tested is measured and recorded;
- A pressure transducer is placed in the well to a minimum depth of three feet below the static water level;
- Readings are made using the data logger until three consecutive readings are the same (equilibrium conditions);
- The data logger is then calibrated to read 0.00 feet at static conditions. A pre-cleaned bailer is then lowered into the well and placed just below the water surface.
- Water level measurements are made until the water level returns to static conditions following introduction of the bailer. If static conditions are not reached within 15 minutes following introduction of the bailer, the well will be tested using the procedures described below for slow recovery wells;
- Once static conditions are reestablished, the bailer is rapidly removed from the water column thereby creating an instantaneous decline of the water level in the well. Coincident with the withdrawal of the bailer, automatic logging of the water levels is initiated using the data logger. The primary goal in the recovery test is to "instantaneously" remove a volume of water that will result in a measurable head decline, the recovery of which (to static conditions) can be monitored over time. Such an instantaneous withdrawal results in recovery due to contributions of flow from the surrounding formation. This flow is controlled by its hydraulic conductivity and not by other factors such as storage effects;

- The water level measurements will continue until water levels recover to within a minimum of 10 percent of the original static water level (90 percent recovery), or an elapsed time of one hour. If the well has not recovered to static conditions after one hour at the discretion of the hydrogeologist, the transducer will be removed and the well will be tested at a later date using the procedures described below for slow recovery wells.
- Data stored in the data loggers will be "dumped" to a hard copy printout using a field printer or to a magnetic disk using a portable computer. If field printouts are used, they will be dated and signed by the hydrogeologist.

For wells with slow recovery rates, the following procedures will be used:

- The static water level is measured and recorded;
- The well is bailed by hand until the depth to water appears to stabilize based on the depth of travel of the bailer rope or to the top of the open or screened interval in wells which are screened below the standing water level;
- The bailer is then removed and water level measurements are collected by hand (measuring tape or electronic water level indicator) at a frequency, which will provide approximately 15 to 20 data, points during recovery (to within 10 percent of the total drawdown), if feasible. Water level measurements are recorded on the hydraulic conductivity testing report.
- A pre-cleaned bailer (one for each well) will be used in the rising head testing. All equipment entering the well, such as the transducer and transducer cable, will be cleaned prior to reuse in accordance with the Decontamination section below. All well water and rinse water generated by the tests will be collected in appropriate containers and disposed of in accordance with the Investigation Derived Materials section below.
- The data from both types of rising head tests will be reduces and evaluated.
- The following equation will be used to calculate the in-situ hydraulic conductivity of the formation opposite the interval of the piezometer (Hvorslev, 1951).

$$k = d^2 \ln \frac{\left[\frac{2mL}{D}\right]}{8L(t_2 - t_1)} \ln \frac{H_1}{H_2}$$

Where:

K = hydraulic conductivity (ft./min.)
d = casing diameter (ft.)
L = intake length (ft.)
D = intake diameter (ft.)
t_1 = time 1 from semilog graph (min.)
t_2 = time 2 from semilog graph (min.)
H_1 = residual head (ft.) corresponding to t_1
H_2 = residual head (ft.) corresponding to t_2
m = square root of the ratio of horizontal to vertical permeability (an estimated value)

9. Groundwater Sampling Procedures

The groundwater in all new monitoring wells will be allowed to stabilize for 7 days following development. Water levels will be measured to within 0.01 foot prior to purging and sampling. Sampling of each well will be accomplished in one of two ways.

Active Sampling:

Low flow sampling of the monitoring wells will occur in order to minimize groundwater drawdown and to obtain a representative sample of groundwater conditions. In order to accomplish this task, the following steps will be taken:

1. Low flow purging of the monitoring wells will include collection of water quality indicator parameters. Water quality indicator parameters will be recorded at five (5)-minute intervals during the purging of the well. These water quality indicator parameters will include:

- Water Level Drawdown
- Temperature
- pH
- Dissolved Oxygen
- Specific Conductance
- Oxidation Reduction Potential
- Turbidity

2. Groundwater sampling will commence once the groundwater quality indicator parameters have stabilized for at least three (3) consecutive readings for the following parameters:

- Water Level Drawdown <0.3'
- Temperature - +/- 3%
- pH - +/- 0.1unit
- Dissolved Oxygen - +/-10%
- Specific Conductance - +/-3%
- Oxidation Reduction Potential - +/-10 millivolts
- Turbidity - +/-10% for values greater than 1 NTU

4. Each monitoring well will be sampled as indicated at the beginning of this Section. In the event that recoverable groundwater will not be adequate for all testing parameters for wells where the full suite of parameters are to be analyzed for, samples will be collected based on the following hierarchy – 1) VOCs, 2) SVOCs, 3) Metals, 4) PCBs, 5) Pesticides.

Passive Sampling:

Groundwater samples that are collected via passive methods (i.e., no-purge) will be collected according to the following procedures and in the volumes specified in Table 11-1:

- Samples will be collected via passive diffusion bag (PDB) samplers. PDB samplers are made of low-density polyethylene plastic tubing (typically 4 mil), filled with laboratory grade (ASTM Type II) deionized water and sealed at both ends.
- PDB samplers will only be used to collect groundwater samples which will be analyzed for VOCs and in general only for chlorinated VOCs.
- PDB samplers will be deployed by hanging in the well at the middle of the well screen unless

a low water table, need to deploy multiple samplers or the targeting of a specific depth interval is identified. The PDB samplers will be deployed at least 14 days prior to sampling.

- The PDB samplers will be deployed using a Teflon® coated string or synthetic rope.
- When transferring water from the PDB to sample containers, care will be taken to avoid agitating the sample, since agitation promotes the loss of volatile constituents;
- Any observable physical characteristics of the groundwater (e.g., color, sheen, odor, turbidity) at the time of sampling will be recorded; and
- Weather conditions (i.e., air temperature, sky condition, recent heavy rainfall, drought conditions) at the time of sampling will be recorded.

10. Geotechnical Sampling

If necessary, a grain size analysis will be conducted by sieving for two non-cohesive units, and Atterberg limits for one cohesive unit, (ASTM methods D 4318-84 and D 422-63, respectively) in each borehole. Grain size analysis by hydrometer will be performed on soils where 20 percent of the sample is less than No. 200 sieve size (i.e., silt or clay). Site-specific work plans indicate specific sampling requirements for physical or geotechnical testing.

Remolded permeability samples will be analyzed in accordance with ASTM D-5084.

11. Management of Investigative-Derived Waste

Purpose:

The purposes of these guidelines are to ensure the proper holding, storage, transportation, and disposal of materials that may contain hazardous wastes. Investigation-derived waste (IDW) included the following:

- Drill cuttings, discarded soil samples, drilling mud solids, and used sample containers;
- Well development and purge waters and discarded groundwater samples;
- Decontamination waters and associated solids;
- Soiled disposable personal protective equipment (PPE);
- Used disposable sampling equipment;
- Used plastic sheeting and aluminum foil;
- Other equipment or materials that either contain or have been in contact with potentially-impacted environmental media.
- Because these materials may contain regulated chemical constituents, they must be managed as a solid waste. This management may be terminated id characterization analytical results indicate the absence of these constituents.

Procedure:

1. Contain all investigation-derived wastes in Department of Transpiration (DOT)-approved 55-gallon drums, roll-off boxes, or other containers suitable for the wastes.
2. Contain wastes from separate borings or wells in separate containers (i.e. do not combine wastes from several borings/wells in a single container, unless it is a container used specifically for transfer purposes, or unless specific permission to do so has been provided by the LaBella Project Manager. Unused samples from surface sample locations within a

given area may be combined.

3. To the extent practicable, separate solids from drilling muds, decontamination waters, and similar liquids. Place solids within separate containers.
4. Transfer all waste containers to a staging area. Access to this area will be controlled. Waste containers must be transferred to the staging area as soon as practicable after the generating activity is complete.
5. Pending transfer, all containers will be covered and secured when not immediately attended,
6. Label all containers with regard to contents, origin, and date of generation. Use indelible ink for all labeling.
7. Collect samples for waste characterization purposes, use boring/well sample analytical data for characterization.
8. For wastes determined to be hazardous in character, be aware on accumulation time limitations. Coordinate the disposal of these wastes with the Owner and NYSDEC.
9. Dispose of investigation-derived wastes as follows;
    - Soil, water, and other environmental media for which analysis does not detect organic constituents, and for which inorganic constituents are at levels consistent with background, may be spread on-site or otherwise treated as a non0-waste material.
    - Soils, water, and other environmental media in which organic compounds are detected or metals are present above background will be disposed as industrial waste. Alternate disposition must be consistent with applicable State and Federal laws.
    - Personal protective equipment, disposable bailers, and similar equipment may be disposed as municipal waste, unless waste characterization results mandate disposal as industrial wastes

12. Decontamination

Sampling methods and equipment have been chosen to minimize decontamination requirements and to prevent the possibility of cross-contamination. Decontamination of equipment will be performed between discrete sampling locations. Equipment used to collect composite samples will not require decontamination between sub-sample collection; however decontamination of equipment will be performed between separate composite samples. All drilling equipment will be decontaminated prior to drilling, after drilling each monitoring well, and after the completion of all drilling. Special attention will be given to the drilling assembly, augers, and PVC casing and screens.

Drilling decontamination will consist of:

- Steam cleaning;
- Scrubbing with brushes, if soil remains on equipment; and
- Steam rinse.

Split spoons and other non-disposable equipment will be decontaminated between each sampling event. The sampler will be cleaned prior to each use, by one of the following procedures:

- Initially cleaned of all foreign matter;
- Sanitized with a steam cleaner;

OR

- Initially cleaned of all foreign matter;
- Scrubbed with brushes in trisodium phosphate or alconox solution;
- Rinsed with deionized water;
- Rinsed with pesticide grade methanol;
- Triple rinsed with deionized water; and
- Allowed to air dry.

13. Sample Containers

The volumes and containers required for the sampling activities are included in pre-washed sample containers will be ordered directly from a firm, which prepares the containers in accordance with EPA bottle washing procedures.

Table 1
Water Samples

Type of Analysis	Type and Size of Container	Number of Containers and Sample Volume (per sample)	Preservation	Maximum Holding Time
Volatile Organics	40-ml glass vial with Teflon-backed septum	Two (2); fill completely, no air space	Cool to 4° C (ice in cooler), Hydrochloric acid to pH <2	7 days

Semivolatile Organics	1,000-ml amber glass jar	One (1); fill completely	Cool to 4° C (ice in cooler)	7/40 days
Pesticides	1,000-ml amber glass jar	One (1); fill completely	Cool to 4° C (ice in cooler)	7/40 days
PCBs	1,000-ml amber glass jar	One (1); fill completely	Cool to 4° C (ice in cooler)	7/40 days
Metals	500-ml polyethylene	One (1); fill completely	Cool to 4° C (Nitric acid to pH <2	6 months

* Holding time is based on verified time of sample receipt at laboratory.

Note: All sample bottles will be prepared in accordance with USEPA bottle washing procedures. These procedures are incorporated in LaBella Associates Quality Control Procedures Manual, January, 1992

TABLE 2
Soil Samples

Type of Analysis	Type and Size of Container	Number of Containers and Sample Volume (per sample)	Preservation	Maximum Holding Time
Volatile Organics, Semivolatile Organics, PCBs, and Pesticides	8-oz, glass jar with Teflon-lined cap	Two (2), fill as completely as possible	Cool to 4° C (ice in cooler)	7 days
RCRA Characterization	8-oz. glass jar with Teflon-lined cap	One (1); fill completely	Cool to 4° C (ice in cooler)	Must be extracted within 10 days; analyzed with 30 days

* Holding time is based on the times from verified time of sample receipt at the laboratory.

Note: All sample bottles will be prepared in accordance with USEPA bottle washing procedures. These procedures are incorporated in LaBella Associates Quality Control Procedures Manual, January, 1992.

TABLE 3
List of Major Instruments for Sampling and Analysis

- MSA 360 0_2 /Explosimeter
- S.E. International Radiation Monitor Model 4C
- Photovac Micro Tip FID or PID
- Organic Vapor Analyzer Foxboro (128)

- Hollige Series 963 Nephlometer (turbidity meter)
- EM-31 Geomics Electromagnetic Induction Device
- pH/Temperature/Conductivity Meter - Portable
- Hewlett Packard (HP) 1000 computer with RTE-6 operating system; and HP 9144 computer with RTE-4 operating system equipped with Aquarius software for control and data acquisition from gas chromatograph/mass spectrometer (GC/MS) systems; combined wiley and National Bureau of Standards (NBS) mass spectral library; and data archiving on magnetic tape
- Viriam 6000 and 37000 gas chromatrographs equipped with flame ionization, electron capture, photoionization and wall detectors as appropriate for various analyses,, and interfaced to Variam DS604 or D5634 data systems for processing data.
- Spectra-Physics Model SP 4100 and SP 4270 and Variam 4270 cam puting integrators
- Perkin Eimer (PE) 3000% and 3030% fully Automated Atomic Absorption Spectrophotometers (AAS) with Furnace Atomizer and background correction system
- PE Plasma II Inductively Coupled Argon Plasma (ICAP) Spectre meter with PE7500 laboratory computer
- Dionex 20001 ion chromatograph with conductivity detector for anion analysis, with integrating recorder

14. Sample Custody

This section describes standard operating procedures for sample identification and chain-of-custody to be utilized for all Phase II field activities. The purpose of these procedures is to ensure that the quality of the samples is maintained during their collection, transportation, and storage through analysis. All chain-of-custody requirements comply with standard operating procedures indicated in EPA sample handling protocol.

Sample identification documents must be carefully prepared so that sample identification and chain-of-custody can be maintained and sample disposition controlled. Sample identification documents include:

- Field notebooks,
- Sample label,
- Custody seals, and
- Chain-of-custody records.

15. Chain-of-Custody

The primary objective of the chain-of-custody procedures is to provide an accurate written or computerized record that can be used to trace the possession and handling of a sample from collection to completion of all required analyses. A sample is in custody if it is:

- In someone's physical possession;
- In someone's view;
- Locked up; or
- Kept in a secured area that is restricted to authorized personnel.

15.1. Field Custody Procedures

- As few persons as possible should handle samples.
- Sample bottles will be obtained precleaned from a source such as I-Chem. Coolers or boxes containing cleaned bottles should be sealed with a custody tape seal during transport to the field or while in storage prior to use.
- The sample collector is personally responsible for the care and custody of samples collected until they are transferred to another person or dispatched properly under chain-of-custody rules.
- The sample collector will record sample data in the notebook.
- The site manager will determine whether proper custody procedures were followed during the fieldwork and decide if additional samples are required.

15.2. Sample Tags

Sample tags attached to or affixed around the sample container must be used to properly identify all samples collected in the field. The sample tags are to be placed on the bottles so as not to obscure any QC lot numbers on the bottles; sample information must be printed in a legible manner using waterproof ink. Field identification must be sufficient to enable cross-reference with the logbook. For chain-of-custody purposes, all QC samples are subject to exactly the same custodial procedures and documentation as "real" samples.

15.3. Transfer of Custody and Shipment

- The coolers in which the samples are packed must be accompanied by a chain-of-custody record. When transferring samples, the individuals relinquishing and receiving them must sign, date, and note the time on the chain-of-custody record. This record documents sample custody transfer
- Shipping containers must be sealed with custody seals for shipment to the laboratory. The method of shipment, name of courier, and other pertinent information are entered in the "Remarks" section of the chain-of-custody record and traffic reports.
- All shipments must be accompanied by the chain-of-custody record identifying their contents. The original record accompanies the shipment. The other copies are distributed appropriately to the site manage.

- If sent by mail, the package is registered with return receipt requested. If sent by common carrier, a bill of lading is used. Freight bills, Postal Service receipts, and bill of lading are retained as part of the permanent documentation.

15.4. Chain-of-Custody Record

The chain-of-custody record must be fully completed in duplicate, using black carbon paper where possible, by the field technician who has been designated by the project manager as responsible for sample shipment to the appropriate laboratory for analysis. In addition, if samples are known to require rapid turnaround in the laboratory because of project time constraints or analytical concerns (e.g., extraction time or sample retention period limitations, etc.), the person completing the chain-of-custody

record should note these constraints in the "Remarks" section of the record.

15.5. Laboratory Custody Procedures

A designated sample custodian accepts custody of the shipped samples and verifies that the sample identification number matches that on the chain-of-custody record and traffic reports, if required. Pertinent information as to shipment, pickup, and courier is entered in the "Remarks" section.

15.6. Custody Seals

Custody seals are preprinted adhesive-backed seals with security slots designed to break if the seals are disturbed. Sample shipping containers (coolers, cardboard boxes, etc., as appropriate) are sealed in as many places as necessary to ensure security. Seals must be signed and dated before use. On receipt at the laboratory, the custodian must check (and certify, by completing the package receipt log and LABMIS entries) that seals on boxes and bottles are intact. Strapping tape should be placed over the seals to ensure that seals are not accidentally broken during shipment.

16. Documentation

16.1. Sample Identification

All containers of samples collected from the project will be identified using the following format on a label or tag fixed to the sample container (labels are to be covered with Mylar tape):

XX-YY-O/D

- XX This set of initials indicates the specific Phase II sampling project
- YY These initials identify the sample location. Actual sample locations will be recorded in the task log.
- O/D An "O" designates an original sample; "D" identifies it as a duplicate.

Each sample will be labeled, chemically preserved, if required and sealed immediately after collection. To minimize handling of sample containers, labels will be filled out prior to sample collection. The sample label will be filled out using waterproof ink and will be firmly affixed to the sample containers and protected with Mylar tape. The sample label will give the following information:

- Name of sampler,
- Date and time of collection,
- Sample number,
- Analysis required,
- pH, and
- Preservation.

16.2. Daily Logs

Daily logs and data forms are necessary to provide sufficient data and observations to enable participants to reconstruct event that occurred during the project and to refresh the memory of the field personnel if called upon to give testimony during legal proceedings. All daily logs will be kept in a bound waterproof

notebook containing numbered pages. All entries will be made in waterproof ink, dated, and signed. No pages will be removed for any reason. Corrections will be made according to the procedures given at the end of this section. The daily logs will include a site log and task log.

The site log is the responsibility of the site manager and will include a complete summary of the day's activity at the site.

The **Task Log** will include:

- Name of person making entry (signature).
- Names of team members on-site.
- Levels of personnel protection:
  - Level of protection originally used;
  - Changes in protection, if required; and
  - Reasons for changes.
- Time spent collecting samples.
- Documentation on samples taken, including:
  - Sampling location and depth station numbers;
  - Sampling date and time, sampling personnel;
  - Type of sample (grab, composite, etc.); and
  - Sample matrix.
- On-site measurement data.
- Field observations and remarks.
- Weather conditions, wind direction, etc.
- Unusual circumstances or difficulties.
- Initials of person recording the information.

17. Corrections to Documentation

17.1. Notebook

As with any data logbooks, no pages will be removed for any reason. If corrections are necessary, these must be made by drawing a single line through the original entry (so that the original entry can still be read) and writing the corrected entry alongside. The correction must be initialed and dated. Most corrected errors will require a footnote explaining the correction.

17.2. Sampling Forms

As previously stated, all sample identification tags, chain-of-custody records, and other forms must be written in waterproof ink. None of these documents are to be destroyed or thrown away, even if they are illegible or contain inaccuracies that require a replacement document.

If an error is made on a document assigned to one individual, that individual may make corrections simply by crossing a line through the error and entering the corrected information. The incorrect information should not be obliterated. Any subsequent error discovered on a document should be corrected by the person who made the entry. All corrections must be initialed and dated.

17.3. Photographs

Photographs will be taken as directed by the site manager. Documentation of a photograph is crucial to its validity as a representation of an existing situation. The following information will be noted in the task log concerning photographs:

- Date, time, location photograph was taken;
- Photographer (signature);
- Weather conditions;
- Description of photograph taken;
- Reasons why photograph was taken;
- Sequential number of the photograph and the film roll number; and
- Camera lens system used.

After the photographs have been developed, the information recorded in the field notebook should be transferred to the back of the photographs

18. Sample Handling, Packaging, and Shipping

The transportation and handling of samples must be accomplished in a manner that not only protects the integrity of the sample, but also prevents any detrimental effects due to the possible hazardous nature of samples. Regulations for packaging, marking, labeling, and shipping hazardous materials are promulgated by the United States Department of Transportation (DOT) in the Code of Federal Regulation, 49 CFR 171 through 177. All samples will be delivered to the laboratory with 24 to 48 hours from the day of collection.

All chain-of-custody requirements must comply with standard operating procedures in the EPA sample handling protocol. All sample control and chain-of-custody procedures applicable to the Consultant are presented in the Field Personnel Chain-of-Custody Documentation and Quality Control Procedures Manual, January 1992.

18.1. Sample Packaging

Samples must be packaged carefully to avoid breakage or contamination and must be shipped to the laboratory at proper temperatures. The following sample packaging requirements will be followed:

- Sample bottle lids must never be mixed. All sample lids must stay with the original containers.
- The sample volume level can be marked by placing the top of the label at the appropriate sample height, or with a grease pencil. This procedure will help the laboratory to determine if any leakage occurred during shipment. The label should not cover any bottle preparation QC lot numbers.
- All sample bottles are placed in a plastic bag to minimize the potential for vermiculite contamination.
- Shipping coolers must be partially filled with packing materials and ice when required, to prevent the bottles from moving during shipment.
- The sample bottles must be placed in the cooler in such a way as to ensure that they do not touch one another.
- The environmental samples are to be cooled. The use of "blue ice" or some other artificial

icing material is preferred. If necessary, ice may be used, provided that it is placed in plastic bags. Ice is not to be used as a substitute for packing materials.

- Any remaining space in the cooler should be filled with inert packing material. Under no circumstances should material such as sawdust, sand, etc., be used.
- A duplicate custody record and traffic reports, if required must be placed in a plastic bag and taped to the bottom of the cooler lid. Custody seals are affixed to the sample cooler.

18.2. Shipping Containers

Shipping containers are to be custody-sealed for shipment as appropriate. The container custody seal will consist of filament tape wrapped around the package at least twice and custody seals affixed in such a way that access to the container can be gained only by cutting the filament tape and breaking a seal.

Field personnel will make arrangements for transportation of samples to the lab. When custody is relinquished to a shipper, field personnel will telephone the lab custodian to inform him of the expected time of arrival of the sample shipment and to advise him of any time constraints on sample analysis. The lab must be notified as early in the week as possible, and in no case later than 3 p.m. (EST) on Thursday, regarding samples intended for Saturday delivery.

18.3. Marking and Labeling

- Use abbreviations only where specified.
- The words "This End Up" or "This Side Up" must be clearly printed on the top of the outer package. Upward pointing arrows should be placed on the sides of the package. The words "Laboratory Samples" should also be printed on the top of the package.
- After a sample container has been sealed, two chain-of-custody seals are placed on the container, one on the front and one on the back. The seals are protected from accidental damage by placing strapping tape over then.
- If samples are designated as medium or high hazard, they must be sealed in metal paint cans, placed in the cooler with vermiculite and labeled and placarded in accordance with DOT regulations.
- In addition, the coolers must also be labeled and placarded in accordance with DOT regulations if shipping medium and high hazard samples.

19. Calibration Procedures and Frequency

All instruments and equipment used during sampling and analysis will be operated, calibrated, and maintained according to the manufacturer's guidelines and recommendations as well as criteria set forth in the applicable analytical methodology references. Operation, calibration, and maintenance will be performed by personnel properly trained in these procedures. Documentation of all routine and special maintenance and calibration information will be maintained in an appropriate logbook or reference file, and will be available on request. Table 7-1 lists the major instruments to be used for sampling and analysis. Brief descriptions of calibration procedures for major field and laboratory instruments follow.

20. Field Instrumentation

20.1. Photovac Micro Tip Flameionizer (FID)

Standard operating procedures for the FID require that routine maintenance and calibration be performed every six months. Field calibration will be performed on a daily basis. The packages used for calibration are non-toxic analyzed gas mixtures available in pressurized containers.

20.2. Photovac/MiniRea Photoionization Detector (PID)

Standard operating procedures for the PID require that routine maintenance and calibration be performed every six months. Field calibration will be performed on a daily basis. The packages used for calibration are non-toxic analyzed gas mixtures available in pressurized containers.

20.3. Organic Vapor Analyzer

Organic vapor analyzers (OVAs) are calibrated and routine maintenance performed every six months when the units are not in use. Calibration is performed and the major system checks are performed prior to the instrument being released for field use.

Calibration of the OVA 128 GC must be performed by a factory-authorized service representative. The instrument is removed from its protective case and the probe is connected to the base unit. After checking for an airtight seal in the sample line (plugging the sample inlet to stop the pump), the hydrogen supply is turned on and the pressure is set to 10 psi. The electronics are turned on and the instrument is allowed to warm up for at least 5 minutes. After warm up, the instrument is zeroed on the "X10" scale using the adjust knob. The flame is then lit and a gas-tight sample bag is filled with a mixture of 100 ppm methane in air. The sample bag is then attached to the probe inlet and the internal pump is allowed to draw in as much sample as is needed. R32 on the control board is adjusted to read 100 ppm on the "X10" scale and then the hydrogen supply is shut down. The pump can now be turned off and the sample bag removed. Using the adjust knob, the meter is set to read 4 ppm on the "X1" scale. Switching back to the "X10" scale the adjust knob is again used to set the meter to 40 ppm. The scale is then set to "X100" and R33 is adjusted until the meter reads 40 ppm on the "X100" scale.

The OVA has a detection limit of 0.1 ppm in methane equivalents and a working range of 0 to 1,000 ppm. During daily field use, system checks are performed which involve calibration and maintenance of the pump systems, gases, and filters. Care is taken to check for and prevent clogging or leaks. Quad rings and the burner chamber are examined on a weekly basis. Routine biannual maintenance includes a thorough cleaning as well as a re-examination of the pump system for leaks and wear. Parts are replaced as necessary. Instrument operation is verified by calibrating and running the OVA for 4 to 6 hours. An instrument specific logbook is maintained with the OVA to document its use and maintenance.

20.4. Conductance, Temperature, and pH Tester

Temperature and conductance instruments are factory calibrated. Temperature accuracy can be checked against an NBS certified thermometer prior to field use if necessary. Conductance accuracy may be checked with a solution of known conductance and recalibration can be instituted, if necessary.

To recalibrate conductance, remove the black plug revealing the adjustment potentiometer screw. Add standard solution to cup, discard and refill. Repeat procedure until the digital display indicates the same

value twice in a row. Adjust the potentiometer until the digital display indicates the known value of conductance. To increase the digital display reading, turn the adjustment potentiometer screw counter-clockwise (clockwise to decrease).

To standardize the pH electrode and meter, place the pH electrode in the 7.0 buffer bottle. Adjust the "ZERO" potentiometer on the face of the tester so that the digital display indicates 7.00.

Then place the pH electrode in the 4.0 or 10.0 buffer bottle (depending on where you expect the actual measurement to be). Adjust the "SLOPE" potentiometer on the face of the tester so that the digital display indicates the value of the buffer chosen.

Note: There is interaction between the "ZERO" and "SLOPE" adjustments, so the procedure should be repeated several times.

Do not subject the pH electrode to freezing temperatures.

It is good practice to rinse the electrode in distilled water when going from one buffer to another. When not in use the cap should be kept on the electrode. Keeping the cotton in the cap moist will keep the electrode ready to use. Moisten the cotton frequently (once a week, usually).

20.5. 0_2/Explosimeter

The primary maintenance item of the Model 260 is the rechargeable 2.4 volt (V) nickel cadmium battery. The battery is recharged by removing the screw cap covering receptacle and connecting one end of the charging cable to the instrument and the other end to a 115V AC outlet.

The battery can also be recharged using a 12V DC source. An accessory battery charging cable is available, one end of which plugs into the Model 260 while the other end is fitted with an automobile cigarette lighter plug.

Recommended charging time is 16 hours.

Before the calibration of the combustible gas indicator can be checked, the Model 260 must be in operating condition. Calibration check-adjustment is made as follows:

1. Attach the flow control to the recommended calibration gas tank.
2. Connect the adapter-hose to the flow control.
3. Open flow control valve.
4. Connect the adapter-hose fitting to the inlet of the instrument; after about 15 seconds the LEL meter pointer should be stable and within the range specified on the calibration sheet accompanying the calibration equipment. If the meter pointer is not in the correct range, stop the flow; remove the right hand side cover. Turn on the flow and adjust the "S" control with a small screwdriver to obtain a reading as specified on the calibration sheet.
5. Disconnect the adapter-hose fitting from the instrument.
6. Close the flow control valve.
7. Remove the adapter-hose from the flow control.

8. Remove the flow control from the calibration gas tank.
9. Replace the side cover on the Model 260.

CAUTION: Calibration gas tank contents are under pressure. Use no oil, grease, or flammable solvents on the flow control or the calibration gas tank. Do not store calibration gas tank near heat or fire or in rooms used for habitation. Do not throw in fire, incinerate, or puncture. Keep out of reach of children. It is illegal and hazardous to refill this tank. Do not attach the calibration gas tank to any other apparatus than described above. Do not attach any gas tank other than MSA calibration tanks to the regulator.

20.6. Nephelometer (Turbidity Meter)

The Series 95 nephelometer is calibrated before each use. Allow the instrument to warm up for approximately 2 hours. Using turbidity-free deionized water, zero the meter. Set the scale to 100, fill with a 40 NTU standard (AEPA-1 turbidity standard from Advanced Polymer Systems, Inc.), and insert into the instrument. Adjust the standardize control to give a readout of 200. Re-zero the instrument and repeat these steps with the scale set at 10 and 1 using 4.0 and 0.4 NTU standards, respectively. These standards are prepared by diluting aliquots of the 40 NTU standard.

20.7. S.E. International Radiation Monitor Model 4EC

This radiation monitor detects alpha, beta, gamma, and X-rays. The analog meter is scaled in CPM (counts per minute) or mR/hr (milli-Roentgens per hour), and the X1, X10, X100 switch extends the effective measurement range. This handheld unit is powered by a single 9-volt battery that offers up to 2,000 hours of operation.

21. Internal Quality Control Checks

QC data are necessary to determine precision and accuracy and to demonstrate the absence of interferences and/or contamination of field equipment. Field-based QC will comprise at least 10% of each data set generated and will consist of standards, replicates, spikes, and blanks. Field duplicates and field blanks will be analyzed by the laboratory as samples and will not necessarily be identified to the laboratory as duplicates or blanks. For each matrix, field duplicates will be provided at a rate of one per 10 samples collected or one per shipment, whichever is greater. Field blanks which consist of trip, routine field, and rinsate blanks will be provided at a rate of one per 20 samples collected for each parameter group, or one per shipment, whichever is greater.

Calculations will be performed for recoveries and standard deviations along with review of retention times, response factors, chromatograms, calibration, tuning, and all other QC information generated. All QC data, including split samples, will be documented in the site logbook. QC records will be retained and results reported with sample data.

21.1. Blank Samples

Blank samples are analyzed in order to assess possible contamination from the field and/or laboratory so that corrective measures may be taken, if necessary. Field samples are discussed in the following subsection:

21.2. Field Blanks

Various types of blanks are used to check the cleanliness of field handling methods. The following types

of blanks may be used: the trip blank, the routine field blank, and the field equipment blank. They are analyzed in the laboratory as samples, and their purpose is to assess the sampling and transport procedures as possible sources of sample contamination. Field staff may add blanks if field circumstances are such that they consider normal procedures are not sufficient to prevent or control sample contamination, or at the direction of the project manager. Rigorous documentation of all blanks in the site logbooks is mandatory.

- **Routine Field Blanks** or bottle blanks are blank samples prepared in the field to access ambient field conditions. They will be prepared by filling empty sample containers with deionized water and any necessary preservatives. They will be handled like a sample and shipped to the laboratory for analysis.
- **Trip Blanks** are similar to routine field blanks with the exception that they are **not** exposed to field conditions. Their analytical results give the overall level of contamination from everything except ambient field conditions. For the RI/FS, one trip blank will be collected with every batch of water samples for volatile organic analysis. Each trip blank will be prepared by filling a 40-ml vial with deionized water prior to the sampling trip, transported to the site, handled like a sample, and returned to the laboratory for analysis without being opened in the field.
- **Field Equipment Blanks** are blank samples (sometimes called transfer blanks or rinsate blanks) designed to demonstrate that sampling equipment has been properly prepared and cleaned before field use, and that cleaning procedures between samples are sufficient to minimize cross contamination. If a sampling team is familiar with a particular site, they may be able to predict which areas or samples are likely to have the highest concentration of contaminants. Unless other constraints apply, these samples should be taken last to avoid excessive contamination of sampling equipment.

21.3. Field Duplicates

Field duplicate samples consist of a set of two samples collected independently at a sampling location during a single sampling event. In some instances the field duplicate can be a blind duplicate, i.e., indistinguishable from other analytical samples so that personnel performing the analyses are not able to determine which samples are field duplicates. Field duplicates are designed to assess the consistency of the overall sampling and analytical system.

21.4. Quality Control Check Samples

Inorganic and organic control check samples are available from EPA free of charge and are used as a means of evaluating analytical techniques of the analyst. Control check samples are subjected to the entire sample procedure, including extraction, digestion, etc., as appropriate for the analytical method utilized.

APPENDIX 9 - O&M MANUAL

Operation, Maintenance and Monitoring Plan

Michelsen Site

182 Avenue D, Rochester, NY

Sub-Slab Depressurization System

This Operation, Maintenance and Monitoring (OM&M) Plan describes the measures necessary to operate, monitor and maintain the mechanical components of the sub-slab depressurization system (SSDS) for the building located182 Avenue D, Rochester, New York property. The OM&M items identified include the following:

- The steps necessary to allow individuals unfamiliar with the Site to operate and maintain the SSDS;
- an operation and maintenance contingency plan; and,
- the required regulatory reporting.

A copy of this Plan should be kept at the Site.

SYSTEM LAYOUT AND COMPONENTS

The SSDS was installed in conjunction with the rehabilitation of the building. The system consists of four (4) suction points as detailed on the As Built Drawings (See SMP Figure 11). The suction pits were installed by removing a section of the concrete floor and approximately 1-2 cubic feet of sub soil. The void was filled with washed pea stone and the riser pipe was installed. The concrete floor was then restored and sealed. The riser pipes consisted of 4 inch schedule 40 PVC that were run up through the building interior to a roof penetration. Riser pipes were installed at a pitch that ensures that any rainwater or condensation within the pipes drains downward into the ground beneath the slab. Each riser pipe is equipped with a centrifugal exhaust fan mounted approximately 2 feet above the roofline. Based on product availability, two (2) of the riser pipes were equipped with RadonAway Model GP-501 fans and two (2) were equipped with Fantech Model HP-190 fans. Each riser pipe is equipped with a vacuum indicator mounted on the riser pipe or interior wall. Each vacuum indicator consists of an oil filled U-tube style manometer. The indicator is inspected by observing the level of the colored fluid. In addition, each riser pipe is equipped with a system alarm that provides a visual and audible alarm in the event of a loss of system vacuum.

Following the installation of the SSDS, testing was conducted by LaBella to evaluate the effectiveness and to confirm that there is adequate negative pressure beneath the entire floor slab of the building. The following post start-up testing was completed:

- **Component Check** - all components of the system were confirmed to be in-place
- **Alarm Test** – On November 23rd, 2015 the alarms were tested to confirm proper operation of the alarms. The alarm test consisted of disconnecting the fan power and confirming both the light and audible alarm were triggered.

  Pressure Field Extension Testing - Subsequent to activation of the system, a pressure field extension test was performed to evaluate the effectiveness of the SSDS. The testing consisted of drilling ½ inch holes in the basement concrete slab in locations detailed on the Figure 4. At each location Teflon tubing was placed in the hole and sealed with plumber's putty. The tubing was connected to a digital monometer and the pressure reading was recorded. Recorded pressure readings were as follows:

Sample Location	Measurement (inches of water column)
SSV-1	-0.106
SSV-2	-0.087
SSV-3	-0.097
SSV-4	-0.093

SSV-5	-0.091
SSV-6	-0.018
SSV-7	-0.083
SSV-8	-0.079

SYSTEM MAINTENANCE

The system was designed and installed to operate with minimal maintenance. In the event of an alarm, the system should be inspected for obvious damage. In the event no damage is apparent, the system can be shut-off and restarted. In the event the alarm continues, the fan should be evaluated and the manufacturer contacted or a mitigation contractor (e.g., radon mitigation specialist) should be contacted for servicing the fan. Information on contacts for the system are provided below.

In the event that maintenance is required of the system, reports and any other information generated during regular operations at the Site will be reported to the NYSDEC. Maintenance events must be documented and documentation must include the following information:

- Date;
- Condition of SSDS upon arrival;
- Name, company, and position of person(s) conducting maintenance activities;
- Maintenance activities conducted;
- Any modifications to the system;
- Other documentation such as copies of invoices or work orders for maintenance work, receipts for replacement equipment, etc., (attached to the checklist/form); and,
- Condition of SSDS when finished.

In the event that the system and/or system components are observed to require non-routine maintenance (e.g., broken components, alarm sounding, etc.) the following persons can be contacted to assist with repairs to the system:

RadonAway
3 Saber Way
PO Box 8244
Ward Hill, MA 01835
Phone: (800) 767-3703
Fax: (978) 521-3964

Todd Caffoe, P.E.
NYSDEC
6274 East Avon-Lima Road
Avon, NY 14414-9516
(585) 226-5350

Dave Engert, CHMM
LaBella Associates, D.P.C.
300 State Street
Rochester, New York 14614
(585) 295-6630

All non-routine maintenance of the SSDS will be documented and these documents will be kept on-file.

MONITORING

Unless it becomes evident that more frequent monitoring is necessary, annual monitoring of the Site's SSDS will be performed to ensure that the system is operating properly. A visual inspection of the accessible portions of the system will be conducted during each monitoring event. SSDS components to be visually inspected include: the vent fans, system piping, system wiring, and system alarms. In addition, the U-Tube Manometer

reading should also be recorded. In the event that a vent fan appears to be malfunctioning, or if piping or wiring appears damaged, the component(s) in question should be promptly repaired or replaced, following the manufacturer's recommendations and instructions. Vent fan failure(s), repair(s), replacement(s), and/or operational problems should be documented and included with the annual certification.

APPENDIX 10 – SITE MANAGEMENT FORMS

LABELLA Associates, D.P.C.

300 State Street
Rochester, New York 14614
Phone: 585-454-6110
Fax: 585-454-3066

Site Wide Inspection Form	
	Project Name: Former Penn Yan Marine
	Location: 15 Waddell Avenue, Penn Yan, NY
	LaBella Project No.:
	Inspected By:
	Date of Inspection:
	Weather Conditions:
	Comments
Compliance with SMP/Environmental Easement	
Condition of SSDS (if applicable)	
Condition of groundwater monitoring wells to be used for long-term monitoring as indicated in SMP.	
General site conditions at time of inspection	
Site management activities currently being conducted (if any)	
Site records up to date?	
Additional Notes/Comments:	

LABELLA Associates, D.P.C.	**SUB-SLAB DEPRESSURIZATION SYSTEM INSPECTION FORM** Project Name: Former Michelsen Furniture Co. Site - Site No. C828189
	Location: 690 Saint Paul Street, Rochester, New York
300 State Street	LaBella Project No.: 209280
Rochester, New York 14614	Inspected By:
Phone: (585) 454-6110	Date of Inspection:
Fax: (585) 454-3066	Weather Conditions:

INSPECTION FINDINGS:

Sub-Slab Depressurization System - Fan #1:		
Operational -	Yes	No
Vacuum Gauge Reading (inches of water) -		
Open Ball Valve on Trap & Drain Water -		
Alarm Check -	Alarm Sounded?	Alarm Failed?

Sub-Slab Depressurization System - Fan #2:		
Operational -	Yes	No
Vacuum Gauge Reading (inches of water) -		
Open Ball Valve on Trap & Drain Water -		
Alarm Check -	Alarm Sounded?	Alarm Failed?

Sub-Slab Depressurization System - Fan #3:		
Operational -	Yes	No
Vacuum Gauge Reading (inches of water) -		
Open Ball Valve on Trap & Drain Water -		
Alarm Check -	Alarm Sounded?	Alarm Failed?

Sub-Slab Depressurization System - Fan #4:		
Operational -	Yes	No
Vacuum Gauge Reading (inches of water) -		
Open Ball Valve on Trap & Drain Water -		
Alarm Check -	Alarm Sounded?	Alarm Failed?

SSDS Piping Check (Note Condition - Good/Fair/Poor):		
(include pictures if warranted)	As-Found Condition	As-Left Condition
Chase -		
6th Floor Piping -		
Piping on Roof -		
Exhaust Point Above Roof -		
Tubing -		
Vacuum Gauges -		
Integrity of Joint Seals -		
Ball Valves on Traps -		
Condition of Labels -		
Overall Physical Condition of SSDS -		

Comments:

LABELLA Associates, D.P.C.
300 State Street
Rochester, New York 14614
Telephone: (585) 454-6110
Facsimile: (585) 454-3066

WELL I.D.: _____

Project Name: Former Michelsen Furniture Co. Site
Location: 182 Avenue D and 374 Conkey Avenue
Project No.:
Sampled By:
Date:
Weather:

WELL SAMPLING INFORMATION

Well Diameter:
Depth of Well:
Measuring Point: Top of PVC
Pump Type:
Static Water Level:
Length of Well Screen:
Depth to Top of Pump:
Tubing Type:

FIELD PARAMETER MEASUREMENT

Time	Pump Rate	Gallons Purged	pH	Temp °C	Conductivity (µS/cm)	Turbidity (NTU)	Dissolved O_2 (mg/L)	Redox (mV)	Alkalinity	Iron (II)	Comments
			+/- 0.1		+/- 3%		+ 10%	+/- 10 mV			

Total _____ Gallons Purged

Purge Time Start: _____ Purge Time End: _____ Final Static Water Level: _____

OBSERVATIONS

Notes:

Summary of Green Remediation Metrics for Site Management

Site Name: _____ Site Code: _____
Address: _____ City: _____
State: _____ Zip Code: _____ County: _____

Initial Report Period (Start Date of period covered by the Initial Report submittal)
Start Date: _____

Current Reporting Period
Reporting Period From: _____ To: _____

Contact Information
Preparer's Name: _____ Phone No.: _____
Preparer's Affiliation: _____

I. Energy Usage: Quantify the amount of energy used directly on-site and the portion of that derived from renewable energy sources.

	Current Reporting Period	**Total to Date**
Fuel Type 1 (e.g. natural gas (cf))		
Fuel Type 2 (e.g. fuel oil, propane (gals))		
Electricity (kWh)		
Of that Electric usage, provide quantity:		
Derived from renewable sources (e.g. solar, wind)		
Other energy sources (e.g. geothermal, solar thermal (Btu))		

Provide a description of all energy usage reduction programs for the site in the space provided on Page 3.

II. Solid Waste Generation: Quantify the management of solid waste generated on-site.

	Current Reporting Period (tons)	**Total to Date (tons)**
Total waste generated on-site		
OM&M generated waste		
Of that total amount, provide quantity:		
Transported off-site to landfills		
Transported off-site to other disposal facilities		
Transported off-site for recycling/reuse		
Reused on-site		

Provide a description of any implemented waste reduction programs for the site in the space provided on Page 3.

III. Transportation/Shipping: Quantify the distances travelled for delivery of supplies, shipping of laboratory samples, and the removal of waste.

	Current Reporting Period (miles)	**Total to Date (miles)**
Standby Engineer/Contractor		
Laboratory Courier/Delivery Service		
Waste Removal/Hauling		

Provide a description of all mileage reduction programs for the site in the space provided on Page 3. Include specifically any local vendor/services utilized that are within 50 miles of the site.

IV. Water Usage: Quantify the volume of water used on-site from various sources.

	Current Reporting Period (gallons)	**Total to Date (gallons)**
Total quantity of water used on-site		
Of that total amount, provide quantity:		
Public potable water supply usage		
Surface water usage		
On-site groundwater usage		
Collected or diverted storm water usage		

Provide a description of any implemented water consumption reduction programs for the site in the space provided on Page 3.

V. Land Use and Ecosystems: Quantify the amount of land and/or ecosystems disturbed and the area of land and/or ecosystems restored to a pre-development condition (i.e. Green Infrastructure).

	Current Reporting Period (acres)	**Total to Date (acres)**
Land disturbed		
Land restored		

Provide a description of any implemented land restoration/green infrastructure programs for the site in the space provided on Page 3.

Description of green remediation programs reported above (Attach additional sheets if needed)
Energy Usage:
Waste Generation:
Transportation/Shipping:
Water usage:
Land Use and Ecosystems:
Other:

CERTIFICATION BY CONTRACTOR
I, _____ (**Name**) do hereby certify that I am _____ (**Title**) of the Company/Corporation herein referenced and contractor for the work described in the foregoing application for payment. According to my knowledge and belief, all items and amounts shown on the face of this application for payment are correct, all work has been performed and/or materials supplied, the foregoing is a true and correct statement of the contract account up to and including that last day of the period covered by this application. _____ **Date** **Contractor**