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To:	Mr. John Spellman, P.E. New York State Department of Environmental Conservation Division of Environmental Remediation 625 Broadway Albany, NY 12233-7014	Date: Project No. Re:	December 6, 2012 091990-1-1104 Final Remedial Investigation Report Operable Unit 2 Schenectady (Clinton Street) Non-Owned Former MGP Site Schenectady, New York

We are sending you the following enclosures:

No.	Type	Description
1	Binder	Text, tables and figures - Final Remedial Investigation Report
		Operable Unit 2, Schenectady (Clinton Street), Non-Owned Former MGP Site, Schenectady, New York

These are transmitted as checked below:

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Message:

Copy to: A. DeMarco, NYSDOH (1 copy)
W. Jones, P.E., National Grid, (1 copy)

Signed: Jerry Zak

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Final Remedial Investigation Report

Operable Unit 2

Schenectady (Clinton Street) Non-Owned Former MGP Site

Schenectady, New York

Order on Consent
Site No. V00474
Index No. D0-0001-0011

Submitted to:
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300 Erie Boulevard West
Syracuse, New York 13202

Submitted by:
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December 2012
Project #091990-1-1104

Jerry Zak
Senior Project Manager

Qualified Environmental Professional's Certification

I, John Finn, certify that I am currently a Qualified Environmental Professional as defined in 6 NYCRR Part 375 and that this Report was prepared in accordance with applicable statues and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10) and that all activities were performed in accordance with the DER-approved work plans and DER-approved work plan modifications as discussed in this Report.



December 5, 2012

Date

John Finn, PE
QEP
GEI Consultants, Inc., P.C.

Table of Contents

Abbreviations and Acronyms v

Executive Summary vii

1. Introduction 1
- 1.1 Site Description 1
- 1.2 Objectives 3
- 1.3 Report Organization 3

2. Background 5
- 2.1 Zoning and Water Supply 5
- 2.2 Site History 5
  - 2.2.1 The Gas Plant in OU1 6
  - 2.2.2 OU2 Land Development 7
- 2.3 Previous Environmental Investigations and Remedial Measures 8
  - 2.3.1 C.T. Male Associates, 2004, 2006, 2007, and 2008 8
  - 2.3.2 AECOM, Inc., OU1, 2006 - 2008 10
  - 2.3.3 Pre-Design Investigation, OU2 North 12
  - 2.3.4 NAPL Removal Program 12
  - 2.3.5 Adjacent Site 13
- 2.4 Potential Source Areas 13
  - 2.4.1 OU2 North 13
  - 2.4.2 OU2 South 14

3. Site Investigation Methods 16
- 3.1 Scope of Work 16
- 3.2 Site Survey 16
- 3.3 Surface Soil Sampling 17
- 3.4 Subsurface Utility Location 17
- 3.5 Test Pit Excavation 18
- 3.6 Subsurface Soil Borings 18
  - 3.6.1 Cyanide Chemistry and Forensic Soil Samples 21
    - 3.6.1.1 Total and Free Cyanide 21
    - 3.6.1.2 NewFields Environmental Forensics Practice, LLC 21
    - 3.6.1.3 META Environmental, Inc. 22
- 3.7 Monitoring and Recovery Well Installation 22
- 3.8 Well Development 23
- 3.9 Groundwater Monitoring 24
  - 3.9.1 Depth-to-Water Measurements 24

3.9.2 NAPL Gauging, Removal, and Recovery 24
3.9.3 Groundwater Sampling 24
3.10 Soil Vapor Sampling 25
3.11 Work Zone and Community Air Monitoring 25
3.12 Data Validation 26
3.13 Cultural Resources Assessment 27
3.14 Investigation-Derived Waste Management 27

4. Site Physical Characteristics 29
4.1 Site Topography and Drainage 29
4.2 Site Geology 29
4.3 Hydrogeology 30
4.4 Cultural Resources Assessment 31
4.5 Coal Pockets Building Slab 31

5. Nature and Extent of Contamination 32
5.1 "Near Surface" Soil 33
5.1.1 CT Male - OU2 North and OU2 South 33
5.2 Subsurface Soil - OU2 North 33
5.2.1 Forensics 35
5.3 Subsurface Soil – OU2 South 36
5.4 Groundwater 37
5.4.1 OU2 North 37
5.4.2 OU2 South Shallow Overburden Groundwater Results 38
5.4.3 OU2 South Deep Overburden Groundwater Results 39
5.4.4 Groundwater Summary 40
5.5 Postage Stamp and Associated Area 40
5.5.1 Surface Soil 41
5.5.1.1 PAHs 41
5.5.1.2 PCBs 42
5.5.1.3 Total Cyanide and Free Cyanide 42
5.5.2 Subsurface Soil 42
5.5.2.1 BTEX 42
5.5.2.2 Polycyclic Aromatic Hydrocarbons 43
5.5.2.3 Polychlorinated Biphenyls 44
5.5.2.4 Cyanide 44
5.5.2.5 Forensics 45
5.5.2.6 Subsurface Soil Beneath the Coal Pockets Building Slab 45
5.5.2.7 Position Paper 46
5.5.3 Groundwater 46
5.6 Soil Vapor 47
5.7 Air Monitoring 48
5.8 Summary of Nature and Extent of Contamination 48

6. Qualitative Human Health Exposure Assessment 49
6.1 Exposure Pathways 49
6.2 Surface Soil 50
6.3 Subsurface Soil 50
6.4 Groundwater 51
6.5 Soil Vapor 52
6.6 QHHEA Discussion 52

7. Fish and Wildlife Resources Impact Assessment 54

8. Conceptual Site Model 55

9. Conclusions and Recommendations 57
9.1 OU2 North 57
9.2 OU2 South 57
9.3 Recommendations 58

References 59

Table of Contents (cont.)

Tables

1 Soil Boring/Monitoring Well Location Coordinates
2 Soil Boring/Monitoring Well Location, Analytical Sample Rationale and Summary
3 Monitoring Well Construction Details
4 Groundwater Elevations (2009 – 2011)
5 Final Groundwater Discharge Parameters (2009 – 2011)
6 Groundwater Analytical Sample Rationale and Summary (2008 – 2011)
7 2009 – 2010 Subsurface Soil Analytical Results (mg/kg)
8 2009 – 2010 Groundwater Analytical Results (µg/L)
9 2011 Postage Stamp Surface Soil Analytical Results (mg/kg)
10 2011 Postage Stamp Subsurface Soil Analytical Results (mg/kg)
11 2011 Postage Stamp Groundwater Analytical Results (µg/L)

Figures

1 Site Location Map
2 Current Conditions OU1 and OU2
3 Historical Structures and Utilities
4 Sample Locations
5 Geologic Cross-Sections C and E and Summarized Analytical Results
6 Geologic Cross-Section F and Summarized Analytical Results
7 Geologic Cross-Sections G and H and Summarized Analytical Results
8 Geologic Cross-Sections I and J and Summarized Analytical Results
9 Geologic Cross-Section K and Summarized Analytical Results
10 2009 and 2011 Shallow Overburden Groundwater Contour Map
11 November 2010 Deep Overburden Groundwater Contour Map
12 OU2 North CT Male Near Surface Soil Summarized Analytical Results (mg/kg)
13 OU2 North Subsurface Soil Summarized Analytical Results (mg/kg)
14 OU2 South Subsurface Soil Summarized Analytical Results (mg/kg)
15 OU2 North and OU2 South Subsurface Soil Physical Impacts
16 OU2 North and OU2 South Groundwater Summarized Analytical Results (ug/l)
17 Postage Stamp Surface and Subsurface Soil Summarized Total PAH Analytical Results (mg/kg)
18 Postage Stamp Surface and Subsurface Soil Summarized Total PCBs Analytical Results (mg/kg)

19 Postage Stamp Surface and Subsurface Soil Summarized Free and Total Cyanide Analytical Results (mg/kg)
20 Postage Stamp Subsurface Soil Physical Impacts
21 Postage Stamp Groundwater Summarized Analytical Results (µg/L)
22 Fish and Wildlife Resources

Appendices (Electronic Only)

A Correspondence
B Zoning Documentation Excerpts
C Historical Documents and Phase 1A Cultural Resources Assessment
D C.T. Male Environmental Investigation Reports and AECOM Analytical Data
E 2011 NAPL Removal Program Report
F Soil Boring Logs, Monitoring Well Construction and Soil Sample Digital Photographs
G NewField's Forensic Evaluation Report Logs, META Environmental, Inc.'s Report, and National Grid's Position Paper
H AECOM Soil Vapor and Ambient Air Results Letter and GEI Soil Vapor Investigation Letter
I Air Monitoring Reports
J Data Usability Reports and Validated Form 1s

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Abbreviations and Acronyms

Alpha	Alpha Analytical, Inc.
AWQS	Ambient Water Quality Standards
bgs	below the ground surface
Boart	Boart Longyear Environmental & Infrastructure
BTEX	Benzene, Toluene, Ethylbenzene, Xylene
CAMP	Community Air-Monitoring Plan
Clean Harbors	Clean Harbors Environmental Services, Inc.
COCs	Constituents of Concern
COPECs	Chemicals of Potential Ecological Concern
CSM	Conceptual Site Model
DELTA	Delta Engineers, Architects. And Land Surveyors
Dig Safely	Dig Safely New York
DNAPL	Dense Non-Aqueous Phase Liquid
DRO	Diesel Range Organics
DOT	United States Department of Transportation
ELAP	Environmental Laboratory Accreditation Program
Enviroprobe	Enviroprobe Services, Inc.
EPA	United States Environmental Protection Agency
ERP	Environmental Restoration Program
FWRIA	Fish and Wildlife Resources Impacts Analysis
GEI	GEI Consultants, Inc., P.C.
GPR	Ground Penetrating Radar
GRO	Gasoline Range Organics
HAA	Hartgen Archeological Associates, Inc.
HASP	Health and Safety Plan
IDW	Investigation-Derived Wastes
IRM	Intermediate Remedial Measure
LNAPL	Light Non-aqueous Phase Liquids
MGP	Manufactured Gas Plant
META	META Environmental, Inc.
NAD83	North American Datum of 1983
NAPL	Non-aqueous Phase Liquids
NAVD88	North America Vertical Datum of 1988
NewFields	NewFields Environmental Forensics Practice, LLC
NTUs	Nephelometric Turbidity Units
6NYCRR	Subpart 375-6 of the New York State Code of Rules and Regulations
NYSASP	New York State Analytical Services Protocol

NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
OPRHP	New York State Office of Parks, Recreation and Historic Preservation
OU	Operable Unit
PAH	Polycyclic Aromatic Hydrocarbon
PCBs	Polychlorinated Biphenyls
PDI	Pre-Design Investigation
PID	Photoionization Detector
PPE	Personal Protective Equipment
PVC	Polyvinyl Chloride
QA/QC	Quality Assurance/Quality Control
QAPP	Quality Assurance Project Plan
QHHEA	Qualitative Human Health Exposure Assessment
RI	Remedial Investigation
RIR	Remedial Investigation Report
ROW	Right-of-way
Sanborn	Sanborn Fire Insurance
SCOs	Soil Cleanup Objectives
SHPO	New York State Historic Preservation Office
SMP	Site Management Plan
SRI	Supplemental Remedial Investigation
SVOC	Semivolatile Organic Compound
TAL	Target Analyte List
TCL	Target Compound List
USCS	Unified Soil Classification System
UST	Underground Storage Tank
VCO	Voluntary Consent Order
VOC	Volatile Organic Compound

MEASUREMENTS

ft/ft	feet per foot
mg/kg	milligram per kilogram
ppm	parts per million
µg/L	microgram per liter
$\mu g/m^3$	microgram per cubic meter

Executive Summary

A Remedial Investigation (RI) was performed by GEI Consultants, Inc., P.C. (GEI) on behalf of National Grid in Operable Unit 2 (OU2) of the Clinton Street Former Manufactured Gas Plant (MGP) Site in Schenectady, Schenectady County, New York. The investigation was conducted pursuant to a Voluntary Consent Order (VCO) between National Grid and the New York State Department of Environmental Conservation (NYSDEC), Index Number D0-0001-0011. The NYSDEC Site Number is V00474. Field work for GEI's investigation was conducted in 2009, 2010, and 2011.

The MGP operated for about 55 years (ca. 1851 to 1906) using coal to produce gas in Operable Unit 1 (OU1) on the east side of Broadway. Several residuals of the MGP process were generated during operation in OU1 including coal tar, coke, and ash. Physical evidence of purifier waste was not observed.

OU2 is located on the west side of Broadway, across from the former MGP process area. It has been divided into OU2 North and OU2 South to facilitate reporting. OU2 North is a paved parking area at the end of and on the north side of the Clinton Street Extension that is owned by the City of Schenectady. It is bounded by Broadway on the east, Hamilton Street to the north, the Delaware and Hudson railroad to the west, and the Clinton Street Extension on the south. OU2 North also contains a small gravel lot at the end of the Clinton Street Extension, also owned by the City that is referred to as the "postage stamp". The associated gravel area south of the postage stamp is also owned by the City and is part of OU2.

OU2 South consists of privately owned commercial buildings, paved parking lots and some vacant gravel lots. It is bounded by the Clinton Street Extension to the north, Broadway to the east, Edison Avenue to the south and the Delaware and Hudson railroad to the west.

The remedial investigation of OU2 North and OU2 South consisted of surface soil sampling, installation of soil borings and collection and analysis of subsurface soil, installation of monitoring and NAPL recovery wells, sampling and analysis of groundwater, forensic evaluation of subsurface impacts, soil vapor sampling, a human health exposure assessment, an ecological assessment, and a cultural resources assessment.

OU2 North

Coal tar was found in the subsurface at OU2 North. Volatile and semi-volatile organic compounds were detected in subsurface soil and groundwater. Dissolved phase organic impacts are migrating

in groundwater from OU2 North to OU2 South. The tar does not appear to be contiguous with coal tar in OU1, as tar in OU2 North is at a higher elevation than in OU1. Forensic analysis of NAPL in OU2 North indicated the NAPL is coal tar. The source of tar in OU2 North is nonetheless assumed to be OU1, as the former MGP also included a right of way or easement in the current location of the Clinton Street Extension. Based on elevations and the presence of a lean clay unit, some tar migration from OU2 North to the postage stamp and OU2 South occurred in the past. It is not possible to determine whether tar migration is currently on-going.

Forensic analysis of some hydrocarbon impacts at the Postage Stamp are of petrogenic origin (refined crude oil) and some are pyrogenic (from the combustion of coal). The potential source of non-MGP hydrocarbons is uncertain, but they may be related to the presence of a former lubricating oil manufacturer.

Polychlorinated biphenyls (PCBs) as well as total and free cyanide were also found in the OU2 North postage stamp and associated area. PCBs are not a by-product of the MGP process. Cyanide can be associated with MGP gas purification waste and anti-caking agents used in road salt. No purifier waste has been observed in OU2 North or South (or at OU1), but road salt has been stored in the southwest corner of OU2 North and excess snow (that may contain road salt) has been dumped at the postage stamp and associated area.

The extent of MGP-related physical and chemical impacts has been delineated in OU2 North. The impacts at 312 Broadway are confined to the east of the "coal pockets" building slab (in the subsurface), Hamilton Street to the north, and Broadway to the east. They apparently extend into OU2 South beneath the Clinton Street Extension At the postage stamp subsurface impacts also extend into OU2 South, and toward the railroad.

There is no wildlife habitat in the area and no apparent ecological risk. OU2 North is generally paved, impacts are below the pavement, and groundwater is not used. The potential for human exposure is low. An Interim Remedial Measure (IRM), excavating MGP-impacted soil beneath the parking lot, was completed in September 2012. Potential risk was reduced during the IRM, via removal of impacted soil.

OU2 South

Subsurface soil in the northern portion of OU2 South contains hydrocarbon odors and sheen. Several millimeter-scale lenses of viscous tar were observed in three borings in the northwest corner of OU2 South. One of the three is just south of the postage stamp. The other two are on the east side of Van Guysling Avenue.

Coal tar in the subsurface of OU1 has migrated beneath Broadway into the southern portion of OU2 South. The tar is mobile, gathering in wells along Broadway in OU2 South. The tar is periodically removed from the wells. Some physical impacts (sheen, odor) are present in the subsurface to the west of these wells and groundwater has also been impacted.

PCBs were widely detected in the shallow subsurface just south of the postage stamp in OU2. PCBs are not MGP-related. Total and free cyanide were also detected in this area. Cyanide can be related to gas purifier waste, but none has been observed at the Site. The cyanide may also be related to storage of road salt in the area. Finally, a forensic evaluation of hydrocarbons at the Postage Stamp and associated area (unrelated to the NAPL forensics at OU2 North) indicated that not all hydrocarbon impacts are MGP-related.

One soil vapor sample was collected in the northern portion of OU2 South in 2008. Five soil vapor samples were collected nearby in February 2012. MGP-related impacts are not apparent in the soil vapor sample results.

For OU2 South most MGP-related physical and chemical impacts in soil and groundwater decrease to non-detectable levels in the downgradient direction, before the boundaries of OU2 South are crossed. However, some MGP and non-MGP hydrocarbons are apparent in the subsurface at the base of the railroad grade in the southwest portion of OU2 North and northwest portion of OU2 South.

There is no wildlife habitat in OU2 North or South and no apparent ecological risk. The potential for human exposure to OU2 South impacts is low. Most of the area is paved, covered in gravel, or covered with buildings. Groundwater is not used.

National Grid completed the IRM at 312 Broadway in OU2 North in September 2012. The IRM is being followed with appropriate institutional controls.

Following NYSDEC approval of this RI Report, National Grid will proceed with a feasibility study for OU2.

1. Introduction

This Remedial Investigation Report (RIR) was prepared on behalf of National Grid by GEI Consultants, Inc., P.C. (GEI). The RIR presents the results of investigations performed in Operable Unit 2 (OU2) of the Schenectady (Clinton Street) Non-Owned Former Manufactured Gas Plant (MGP) Site. The Site consists of Operable Unit 1 (OU1) and OU2. A remedial investigation was completed for OU1 by AECOM, Inc. in 2009. The draft OU1 Remedial Investigation (RI) report is currently being reviewed by the New York State Department of Environmental Conservation (NYSDEC).

The Site is in the City of Schenectady, Schenectady County, New York (Figure 1). Figure 2 presents the current site conditions and boundaries of each Operable Unit.

The OU2 RI was initiated after OU1 investigations discovered that MGP residuals had affected OU2 and that coal tar was migrating from OU1 into OU2. The OU2 RI was conducted pursuant to a Voluntary Consent Order (VCO) between National Grid and the NYSDEC, Index Number D0-0001-0011, which was executed on July 3, 2001, in accordance with applicable guidelines of the NYSDEC and the New York State Department of Health (NYSDOH). The NYSDEC Site Number is V00474. Relevant correspondence is provided in Appendix A.

1.1 Site Description

For ease of discussion OU2 is divided into OU2 North and OU2 South. OU2 North is generally a paved parking lot (312 Broadway) bounded by Hamilton Street to the north, Broadway on the east, a gravel lot and Clinton Street Extension to the south, and Delaware and Hudson (a subsidiary of Canadian Pacific Railway) Railway to the west (Figure 2). The “Postage Stamp” at the end of the Clinton Street Extension is also part of OU2 North. 312 Broadway, the Postage Stamp, and the gravel area south of the Postage Stamp are owned by the City of Schenectady. Road de-icing salts are sometimes stored at the southwest corner of the 312 Broadway parking lot in OU2 North. South of this area excess snow has been observed dumped at the Postage Stamp and associated gravel lot.

A “vault” is present within the retaining wall along the railroad in OU2 North. This vault used to be a tunnel that connected the east side of the railroad to the west side of the railroad. At some point the tunnel was closed and converted to a vault. For a period of time the vault was used by the City of Schenectady for storage. At one point steel drums with oil and metal cuttings were stored there.

OU2 South is bounded by Clinton Street Extension to the north, Broadway to the east, Edison Avenue 350 feet south of the southern OU2 boundary, and Delaware and Hudson (a subsidiary of Canadian Pacific Railway) Railway to the west. OU2 South contains several commercial establishments and buildings (461 Clinton Street Extension, 318, 330, 336, 340 and 376 Broadway). These are privately owned. Gravel areas west of Van Guysling Avenue are owned by the City of Schenectady.

A segment of Schermerhorn Creek is exposed near the western boundary of OU2 South. The creek flows north and bends west into a culvert beneath the Delaware and Hudson Railway (Figure 2) and continues underground before it discharges into the Mohawk River approximately 3,000 feet to the northwest, according to Schenectady Public Works Department personnel. The creek is not a state or federally regulated waterbody.

The fieldwork for the OU2 RI was performed using procedures described in the NYSDEC approved *Remedial Investigation Work Plan, Operable Unit 2, Schenectady (Clinton Street) Non-owned Former MGP Site, Schenectady, New York*, dated June 29, 2009 (AECOM, 2009b), *Operable Unit 2 Supplemental Investigation, Schenectady (Clinton Street) Former Manufactured Gas Plant Site, Schenectady, New York, dated September 13, 2010*, and *Letter Work Plan, Operable Unit 2 Supplemental Remedial Investigation and Feasibility Study, Clinton Street Former Manufactured Gas Plant Site, Schenectady, New York*, dated September 22, 2011. Four companion documents detail additional procedures and protocols for the RI as follow:

1. Generic Field Sampling Plan for Site Investigations at Manufactured Gas Plant Sites, dated November 2002 (Foster Wheeler, 2002a).
2. Quality Assurance Project Plan (QAPP) (Foster Wheeler, 2002b).
3. Community Air Monitoring Program Plan (GEI, 2009a).
4. Site-specific Health and Safety Plan (HASP) (GEI, 2009b).

These documents were updated prior to each field mobilization to ensure that protocols were current and consistent with the work being conducted.

The OU2 field work was performed by GEI between October 2009 and February 2012.

During the OU2 remedial investigation MGP-impacts were identified in the subsurface of OU2 North. Because the City of Schenectady has plans to redevelop the 312 Broadway parking area as part of an Environmental Restoration Program (ERP - Article 56, Title 5 of NYS Environmental Conservation Law) NYSDEC requested (Appendix A) that National Grid design and execute an Interim Remedial Measure (IRM) to address the impacts in this area. A NYSDEC-approved Pre-Design Investigation (PDI) was completed in November 2010 and the IRM was designed and approved. The IRM consisted of excavation of the subsurface impacts in accordance with the

NYSDEC Final Commissioner Policy CP-51/Soil Cleanup Guidance (NYSDEC, 2010). The proposed excavation footprint at 312 Broadway is presented in Figure 2. The Cleanup was completed in September 2012.

During the OU2 RI the City of Schenectady identified a small parcel of land that is also part of the City's ERP. NYSDEC requested that it be included with OU2 North. During ERP and OU2 planning meetings this parcel became known as the "Postage Stamp" (Figure 2).

NYSDEC requested (Appendix A) that National Grid conduct a Feasibility Study (FS) at the Postage Stamp. National Grid agreed to do so after executing a Supplemental Remedial Investigation (SRI) to gather additional data at the Postage Stamp and its associated area (Appendix A). NYSDEC approved the Work Plan for SRI and the results are discussed in this report.

NYSDEC also requested (Appendix A) that additional soil vapor investigation be conducted at the Site. National Grid executed a NYSDEC-approved Work Plan and the results for OU2 are discussed in this report.

1.2 Objectives

The objectives of the OU2 RI were to:

- Determine the nature and extent of MGP-related residuals.
- Evaluate the potential sources of impacts.
- Identify potential routes of off-site migration from OU1.
- Conduct a qualitative human health exposure assessment.
- Acquire sufficient data to support FS.

These objectives are consistent with NYSDEC guidance in DER-10 (May 2010). This report discusses all data and information generated for OU2 North and OU2 South since 2004.

1.3 Report Organization

This report is organized into eight sections including this introduction.

- Section 2 describes the Site and relevant surroundings, presents historical ownership, property use, and operational summary.
- Section 3 describes the RI activities performed at the Site.
- Section 4 describes the physical characteristics at the Site – the topography, geology, and hydrology.

- Section 5 provides characterization of physical and chemical impacts at the Site.
- Section 6 presents a Qualitative Human Health Exposure Assessment (QHHEA) for the Site.
- Section 7 presents a Fish and Wildlife Resources Impact Assessment (FWRIA).
- Section 8 presents the Conceptual Site Model (CSM).
- Section 9 presents Conclusions and Recommendations.

The references for citations in this report follow Section 9.

Tables, figures, and appendices are included in sections that immediately follow the report text.

2. Background

This section provides information regarding zoning and water supply, site ownership and operational history, and results of previous investigations.

2.1 Zoning and Water Supply

The City of Schenectady has zoned the entire area within OU2 as C-4, Downtown Commercial District. This zoning is broadly described as non-residential and is meant to encourage mixed commercial use with easy pedestrian access. The City nonetheless has designated "Permitted and Special Permit Uses" which allow for residential use. Currently there is no known residential use in OU2. Relevant excerpts from the City of Schenectady zoning documents are provided in Appendix B.

OU2 is supplied with potable water from the Great Flats aquifer. Water is pumped from twelve 70-foot deep wells located at the water treatment plant on Rice Road in the Town of Rotterdam, approximately 2.5 miles northwest of OU2 (Appendix B).

The City's Environmental Health department has reported that any private wells in the vicinity of the Site have been abandoned.

2.2 Site History

The following provides a narrative on the history of OU2 and includes the "Postage Stamp" and associated area next to the railroad right-of-way.

Historical land use information for the Site was developed using Sanborn Fire Insurance (Sanborn) maps, a historic Niagara Mohawk Power Company publication called *The Synchronizer*, the Phase 1A Literature Review and Archeological Assessment Report provided by Hartgen Archeological Associates (HAA), and digital photographs of other historic maps filed at the Schenectady Historical Society. Copies of the historical documents are presented in Appendix C. The full Hartgen Report is also found in Appendix C.

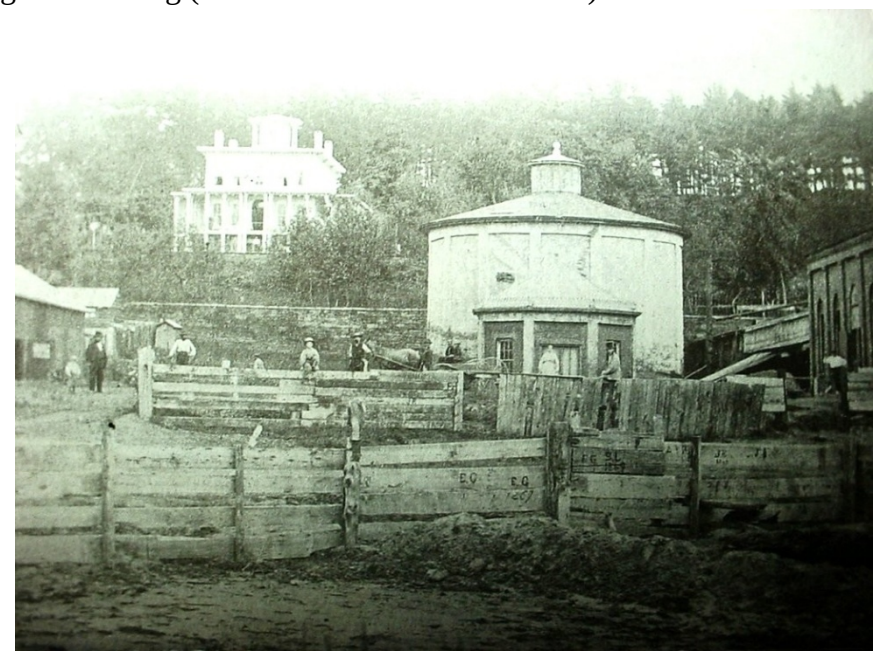
Sanborn maps provide coverage of OU2 North and South for 1889, 1894, 1900, 1914, 1930, 1951, 1988, 1993-1995, and 1999. The Schenectady Historical Society has additional maps that include OU2 North and South in 1866, 1880, 1884, 1889, 1892, 1894, and 1904.

OU2 North and South were slowly developed for commercial uses between 1889 and 1930 as described below. However, based on the documents named above, no MGP process buildings or

structures were ever present in OU2 North or South. The former MGP structures were all located in OU1, shown in Figure 3.

2.2.1 The Gas Plant in OU1

According to *The Synchronizer* (1921) and A Guide for Historic Preservation (1978), the gas works was constructed in the early 1850s and began operation in 1851 (Appendix C). The plant (Figure 3) was located on Center Street (now Broadway) and was the first to operate in Schenectady. The plant structures depicted in the 1866 map include a large circular structure (assumed to be the gas holder), a small circular building (determined from an 1870 photograph to be the plant office), and one long rectangular building (assumed to be the retort house).



An 1870 view looking toward the Schenectady gas plant from Broadway.

An 1870 photograph (courtesy of Hartgen Archeological Associates, Inc.) taken from Broadway looking southeast, shows the office in front of a white gas holder. The office has windows and a door, which is consistent with an occupied building. The 1880 map identifies the plant as the Schenectady Gas Company. In 1882, according to the Burleigh map, a second gas holder has been added to the plant close to Center Street. A tunnel connecting both sides of the railroad is apparent in the 1892 map. This tunnel was blocked up (and used for storage by the City of Schenectady) at an unknown time and is not depicted on Sanborn maps.

The 1892 map depicts a right-of-way attributed to the Schenectady Gas Light Company in the same location as the current Clinton Street Extension. The 1894 and 1889 maps of the gas plant are nearly identical, with the addition of a "tar well" in OU1 on the 1889 map.

The 1904 map indicates the plant was called the Mohawk Gas Company. The right-of-way (ROW) attributed in 1892 to the Schenectady Gas Light Company in 1894 was labeled Mohawk Gas Company. Gas production ceased by 1906 when it was "moved" to the second Schenectady MGP on Lower Broadway in 1906. Most of the remaining gas plant buildings, including the gas holder in the southeast portion of the Site, are depicted as storage and non-MGP use buildings on the 1910 map. These non-MGP uses remain apparent in the 1930 and 1951 Sanborn maps. No gas plant structures are apparent in the 1988 Sanborn map.

2.2.2 OU2 Land Development

In 1866 the land west of the gas works was open space with the Schermerhorn Creek and its tributaries draining the area. By 1880 a railroad Right of Way (ROW) labeled as the "D&H Canal Co. (lessee)", was depicted running north and south. Also in 1880 there appears to be a street or ROW between Center Street and the railroad that is labeled "Gas Co.". The 1882 oblique Burleigh map shows this ROW with two fence lines separating it from the open fields surrounding it. The current Clinton Street Extension now occupies the ROW.

OU2 began to change by 1889. A carriage company was located on the corner of Center Street and the unlabeled street leading toward the railroad. By1889, a carriage company was listed as Brougham and Co. (a famous name in horse drawn carriages). The land of OU2 North was shown as the Campbell Estate and most of OU2 South was on the Robert Furman Plat. Also that year, Van Guysling Street was marked out and building lots were established.

The 1894 map shows additional development with a photo shop and a burnt out building in OU2 North and further development along Center Street. There are a couple of homes shown near the Postage Stamp west of Van Guysling. By 1900 the area along the railroad on the west side of OU2 North had a builder's supply, a coal depot, a blacksmith shop and an ice house. The photo shop still existed at that time.

By 1914 there was significant commercial development in the area of OU2. The 1914 Sanborn Map provided by Hartgen Archeological Associates, Inc. identifies the OU2 North Parcel as the City Pipe Yard (to be a public market). The Schenectady County Coal Company "Coal Pocket" building is depicted west of Van Guysling. A retaining wall separated a railroad spur that ran parallel to the building. A section of the spur appeared to be a loading dock and there also appeared to be a ramp into the building. The spur continued to the south and was built above a beverage depot before it ended in the OU2 South parcel. Trains presumably backed up each car to the loading dock to off-load the coal. These structures were still there in the 1930 and 1951 Sanborn Maps, however the Pipe Yard is converted to a public market. In the corner of the City Pipe Yard was a wagon painting building and on the Van Guysling side of the pipe yard was a two story scale house.

Further south along Van Guysling was a hide and tallow company, a lubricating oil company, a wholesale grocery store, a beer company, and horse sales and stables.

By 1930 the commercial makeup of the neighborhood had changed again. The buildings housing the beverage companies under the railroad spur were vacant, a lumber and pipe yard was listed on the south side of the Postage Stamp; junk storage and a junk yard were found on Van Guysling and a "filling station" was located in the middle of what is now the Clinton Street Extension. The 2007 C.T. Male Report (described below) describes the presence of an underground gasoline storage tank (1930) in OU2 North.

By 1951 another junk yard was shown where the lumber and pipe yard were in 1930 and across the street there appeared to be a meat packing house.

In summary, OU2 had a number of mixed uses starting in 1889 which became fully developed by 1914. The area of the Postage Stamp had coal storage, a wagon shed, beverage companies, a railroad spur, lumber and pipe storage, and a junk yard. Other potentially relevant businesses formerly part of OU2 included a manufacturer of lubricating oil, located just south of the Clinton Street Extension (roughly coincident with the current location of 461 Clinton Street), as shown in the 1914 Sanborn map. By 1930 the lubricating oil manufacturer's site was occupied by a junk shop and attendant yard. Based on the Sanborn maps the junk shop remained through 1951 and up until to 1988, expanding further south and to the west of Van Guysling, encroaching (roughly) on the current location of 336 Broadway and the southwestern portion of OU2 South.

2.3 Previous Environmental Investigations and Remedial Measures

2.3.1 C.T. Male Associates, 2004, 2006, 2007, and 2008

C.T. Male Associates conducted environmental investigations in OU2 North on behalf of the Schenectady Metroplex Development Authority and the City of Schenectady in 2004, 2006, 2007 and 2008. The results were reported in:

- Phase II Environmental Site Assessment, Lower Broadway Parking Lot, 312 Broadway, City of Schenectady, Schenectady County, New York, dated May 21, 2004.

- Draft Remedial Investigation Report, Environmental Restoration Project Clean Water/Clean Air Bond Act of 1996, ERP Site #E-447035, Lower Broadway Parking Lot 312 Broadway, City of Schenectady, Schenectady County, New York, dated January 2007.

- Remedial Investigation Report, Environmental Restoration Project Clean Water/Clean Air Bond Act 1996, ERP Site #E-447035, Lower Broadway Parking Lot/312 Broadway -

Adjacent Parcel Site, City of Schenectady, Schenectady County, New York, dated July 7, 2008.

Copies of these documents, as provided to National Grid from NYSDEC, are provided in Appendix D.

C.T. Male collected "near surface" soil samples in OU2 North (SS-1(06) through SS-12(06)) and OU2 South (SS-13(06) through SS-15(06)). These locations are shown on Figure 4. The results are discussed in Section 5.

Organic and inorganic compounds were detected in a number of these samples in excess of 6NYCRR Part 375 Restricted Use Commercial (Commercial) Soil Cleanup Objectives (SCOs). Elevated levels of polychlorinated biphenyls (PCBs) were detected at one location (CTMSS-13(08)). An elevated level of total cyanide was also detected in the CTMSS-13(08) sample.

According to the January 2007 C.T. Male report, C.T. Male investigated the contents of an above ground "vault" at the southwest corner of OU2 North. The vault had an earthen floor and contained "numerous" drums of "metal turnings/cuttings". PCBs were detected in a sample collected from 1 to 2 feet below ground surface (bgs) within the vault at 20 milligrams per kilogram (mg/kg). The Commercial SCO for PCBs is 1 mg/kg.

The borings and wells installed by C. T. Male are identified below.

Boring ID	Operable Unit	Year Installed
CTMMW-1(04) through CTMMW-4(04)	OU2 North	2004
GP/CTM-1(06) through GP/CTM-10(06); GP-11(06) through GP-13(06) and GP/CTM-14(06), GP/CTM-15(06)		2006
GP/CTM-20(08) Through GP/CTM-23(08)	OU2 South	2008

C.T. Male collected subsurface soil and groundwater samples that contained concentrations of organic compounds in excess of Commercial SCOs and New York State Ambient Water Quality Standards and Guidance Values (AWQS), respectively. Both of their reports indicated the presence of coal tar or creosote odors in subsurface soil at several locations in OU2 North and the

northwest corner of OU2 South. Viscous tar eventually gathered in monitoring well CTMMW-1(04). The results are more fully discussed in Section 5.

C.T. Male (2007) also reported that the NYSDEC project manager had determined that a Fish and Wildlife Analysis was not required for OU2 North because of its use as a paved parking lot, its location, and the lack of observable wildlife resources.

2.3.2 AECOM, Inc., OU1, 2006 - 2008

AECOM, Inc. conducted the OU1 RI on behalf of National Grid. The fieldwork consisted of the excavation of test pits, installation of soil borings and monitoring wells, collection of groundwater samples, and collection of soil vapor samples. No ecological assessment was conducted because the area is highly urbanized with no apparent habitat for fish or wildlife.

AECOM identified four unconsolidated geologic units. A layer of historic fill material was observed in all areas of the Site, ranging from 5 to 20 feet thick. The fill consisted of sand and gravel mixed with varying amounts of coal fragments, coke, ash and clinkers, and building debris such as bricks and concrete rubble.

Beneath the fill was a layer of alluvium consisting of silt, silty sand, sand and lesser amounts of gravel. The alluvium was as thick as 90 feet in the central portion of OU1. A peat unit was observed within the alluvium in several of the soil borings ranging from 0.5 to 2.0 feet thick. The peat was not laterally continuous.

Beneath the alluvium was a glacial till unit comprised of dense clayey silt mixed with gravel. The depth to till ranged from 85 to 97 feet.

Groundwater was present at depths ranging between 7 and 10 feet bgs at the former MGP process area. The flow direction for groundwater in both the shallow and intermediate portions of the aquifer underlying the Site was from the east to west/southwest.

Several subsurface MGP features were still present in the subsurface at the Site. Portions of the foundation for the MGP process building were found. Foundations for each of the three former gas holders for the MGP were observed. Foundations were present in the footprint of the former purifiers and one of the two former tar wells for the MGP.

Coal tar and related non-aqueous phase liquid (NAPL) mixed with soil were present in localized areas of subsurface soils at the Site. The occurrence of the coal tar NAPL in OU1 roughly corresponded to the footprint of the former MGP process area. Visible evidence of coal tar NAPL

was observed to depths of approximately 55 feet bgs in OU1, at boring SB-37(08) within the alluvial soil unit. Visible evidence of coal tar NAPL was observed in monitoring well SB-19/MW-8(06) during the groundwater sampling performed during the RI.

The analytical results of the groundwater sampling performed at the Site indicated that several of the wells were found to have MGP-related Constituents of Concern (COC) in concentrations exceeding NYSDEC groundwater standards. Similar to the subsurface soil impacts, the area with the greatest concentrations of COCs was the former MGP process area. The groundwater plume was assumed to extend further to the west. The AECOM analytical results tables are provided in Appendix D.

AECOM concluded that the impacts in OU1 were delineated vertically and horizontally to the north, east, and south. However, physical impacts were observed on the east side of Broadway, as follow.

- SB-16(06) – coal tar observed at 37 feet bgs; sheen present to 40 feet bgs.
- SB-44(08) – coal tar observed at 40 feet bgs; sheen present at 48 feet bgs.
- SB-13(06) – hydrocarbon odor at 30 feet bgs.
- SB-28(08) – hydrocarbon odor at 32 feet bgs.

AECOM installed several borings/wells and one soil vapor point on the west side of Broadway in OU2 North and OU2 South. They are identified below.

Boring ID	Operable Unit	Year Installed
SV-7(08)	OU2 South	2008
SB-29/MW-12(08)		
SB-30/MW-12D(08)		
SB-35/MW-13D(08)		
SB-42/MW-14(08)		
SB-43/MW-14D(08)		
SB-48/MW-16D(08)	OU2 North	

AECOM made observations of impacts at the borings, as follow:

- SB-30/MW-12D(08) – coal tar at 43.5 feet bgs; sheen at 47 feet bgs; hydrocarbon odor at 51 feet.
- SB-35/MW-13D(08) – coal tar at 41 feet bgs; hydrocarbon odor at 42 feet bgs.
- SB-43/MW-14D(08) – coal tar at 45 feet bgs.
- SB-48/MW-16D(08) – coal tar at 10 feet bgs; hydrocarbon odor to 22.5 feet bgs.

- No physical impacts were reported for SV-7(08), SB-29/MW-12(08), or SB-42/MW14(08).

The data generated from this effort were presented in the OU2 RI Work Plan, dated June 2009. The data tables are presented in Appendix D. The data and findings are discussed in Section 5.

As of March 2012, the NYSDEC had not approved the OU1 RI report because additional sub-slab soil vapor and indoor air sampling data were required. GEI developed a work plan and conducted a soil vapor investigation at the Schenectady Municipal Housing Authority in February 2012. The results will be reported separately to NYSDEC.

2.3.3 Pre-Design Investigation, OU2 North

GEI conducted a PDI for OU2 North in the fall of 2010. The purpose was to determine the boundaries of an Interim Remedial Measures (IRM) excavation intended to remove accessible NAPL and soil impacts from the subsurface in accordance with the NYSDEC Final Commissioner Policy CP-51/Soil Cleanup Guidance (NYSDEC, 2010).

GEI also installed several borings in OU2 South to identify a location for installation of a tar recovery well. Tar recovery well SB-117/RW-1(10) was installed. The borings are identified below.

Boring ID	Operable Unit	Year Installed
SB-110(10) through SB-116(10), SB-117/RW-1(10)	OU2 South	2010
SB-100(10) through SB-109(10) SB-118(10) through SB-123(10)	OU2 North PDI	

The data and information generated are discussed in Section 5. The locations of all the borings are presented in Figure 4.

2.3.4 NAPL Removal Program

As part of the NYSDEC-approved NAPL Removal Program, GEI gauges, monitors and recovers NAPL in wells SB-19/MW-8S(06) and SB-44/MW-8D(08) in OU1 and SB-30/MW-12D(08), SB-43/MW-14D(08), and SB-117/RW-1(10) in OU2 on a monthly basis. This effort is being conducted to establish the feasibility and practicality of a more formal NAPL recovery program. GEI provides the NYSDEC with an annual report that summarizes this work. The most recent report is provided in Appendix E.

2.3.5 Adjacent Site

During the OU2 RI field work, GEI learned that remedial efforts were underway at an adjacent site. According to United States Environmental Protection Agency (EPA) documents (http://www.epaosc.org/Schemerhorn - correct spelling is *Schermerhorn*), a metal scrap yard was operated by Buff and Buff, Inc. at 95 Van Guysling Avenue from 1953 to 1993. This is located down gradient of OU2 South. The location is identified in Figure 4.

Polychlorinated biphenyls (PCBs) oils were discharged onto the ground surface at that site. EPA oversaw removal of the upper 5 feet of soils and stabilization of deeper soils in 2009. The cleanup was completed in April 2010.

2.4 Potential Source Areas

2.4.1 OU2 North

Coal tar dense non-aqueous phase liquid (DNAPL) has accumulated in monitoring well CTMMW-1(04) installed by C.T. Male Associates in OU2 North, and tar impacts were observed in soil at a variety of depths in OU2 North.

Coal tar is a common source of organic compounds, such as volatile organic compounds (VOCs) and polycyclic aromatic hydrocarbons (PAHs), at former MGP sites. It may also be a source of inorganic compounds that were present in coal feedstocks. Cyanide may also be present at former MGP sites because gas purification processes (passing coal gas through wood chips, lime, iron filings) may result in generation of cyanide compounds (cyanide is further discussed in Section 3). Gas purification may leave waste products in the form of lime, wood chips, and an associated deep blue color in soil.

The MGP-related subsurface soil impacts in OU2 North are likely to affect groundwater quality as it passes through the area. Coal tar observed in OU2 North is generally very viscous or solidified. As such, current migration of tar from OU2 North appears unlikely, but it may have occurred in the past. Accessible tar and impacted soils were removed from OU2 North during an IRM that was completed in September 2012.

Excess snow has been observed piled in the OU2 North Postage Stamp and associated area during the winter months. There is potential for the snow to contain de-icing salt. Road salt used for de-icing in the winter months may also be a source of total cyanide because sodium ferrocyanide and ferric ferrocyanide are commonly added to road salt as anti-caking agents. Stored de-icing road salt has been observed in the southwest corner of OU2 North, as shown below.



De-icing Road Salt Pile in Southwest Corner of OU2 North (2011)

The aboveground vault identified and investigated by C.T. Male (subsection 2.3.1) contained steel drums and 20 mg/kg of PCBs were detected in shallow subsurface soil. PCBs are not a by-product of coal gas manufacturing. This is a potential source area for PCBs in OU2 North and OU2 South.

2.4.2 OU2 South

The OU1 RI Report (AECOM, 2009a) concluded that the former OU1 MGP process area was affected by MGP-residuals, including coal tar, as deep as 55 feet below ground surface in boring SB37(08). The OU1 report also concluded that groundwater generally flows from east to west/southwest across OU1.

The impacted area in OU2 South, west of Broadway, is directly across from the most heavily impacted former gas plant process area in OU1. The OU1 process area is a source area for impacts in the southern portion of OU2 South.

The 95 Van Guysling Avenue former Buff and Buff, Inc. property (Figure 4) had a recent PCB cleanup (subsection 2.3.4, above). This area is downgradient in OU2 South, however it could be a potential source of impacts in OU2 North or OU2 South. In addition, the General Electric (GE) facility west of the Site is a New York State Superfund site. The Record of Decision for the Site indicated that elevated levels of PCBs are present.

Former businesses that operated after the MGP (Figure 3) include a manufacturer of lubricating oil, located near the current location of 461 Clinton Street. A junkyard operated between Broadway

and Van Guysling in OU2 South, from at least 1930 to 1988. It expanded west of Van Guysling, to the southwestern portion of OU2 South. The oil maker may have impacted OU2 South with hydrocarbon liquids; the potential impacts from a junkyard that operated for more than 50 years could be far more diverse.

3. Site Investigation Methods

This section describes the methods and procedures applied during the RI. Unless otherwise noted, they are consistent with the NYSDEC-approved RI Work Plan for OU2. Copies of the NYSDEC Work Plan approval letters are provided in Appendix A.

3.1 Scope of Work

The RI field work included the following:

- Site surveying.
- Surface soil sampling.
- Subsurface utility clearance.
- Test pit excavation.
- Subsurface soil boring and subsurface soil sampling.
- Monitoring well installation and development.
- Groundwater gauging and sampling.
- Gauging for the presence of NAPL.
- NAPL removal and recovery measurements.
- Soil vapor sampling.
- Air monitoring.
- Management of investigation-derived wastes (IDW).

As mentioned in subsection 2.3.2, AECOM conducted an investigation in OU2 South during the OU1 RI. This work followed methods and procedures in the NYSDEC-approved OU1 Work Plan. The findings are discussed in Section 5.

3.2 Site Survey

Property boundaries, important site features, ground surface elevations at each test pit location, soil boring and monitoring well, and the top of each monitoring well (top of well casing) were surveyed. Horizontal measurements were referenced to North American Datum of 1983 (NAD83), New York State Central Zone coordinates. Vertical elevations were referenced to the North American Vertical Datum of 1988 (NAVD88). Several wells in OU1 were also re-surveyed to confirm that all elevation data (in OU1 and OU2) are compatible. The OU2 soil boring and monitoring well elevation data are presented in Table 1.

Boring locations were surveyed after completion except for borings proposed in the 2011 SRI. A grid of borings was surveyed and marked out prior to drilling in the Postage Stamp and its

associated area. Borings were evenly spaced and located within the property boundaries. Marked grid locations that were above utilities, inaccessible by the drill rig, or could not be cleared to 5 feet because of refusal were moved a few feet away. Final boring locations were re-surveyed at the end of the investigation.

The surveying was conducted by Delta Engineers, Architects, and Land Surveyors of Vernon, New York.

3.3 Surface Soil Sampling

Surface soil samples were collected at the Postage Stamp and associated area during the 2011 SRI, at the locations shown on Figure 4. The surficial grass mat, roots and gravel were removed first and each sample was collected at a depth between 0.0 to 2.0 inches below ground. Two samples were collected from soils directly beneath asphalt. At these locations, the asphalt was removed and later resurfaced.

Stainless steel spoons and bowls were decontaminated using 100% laboratory grade methanol, nitric acid, Alconox solution, and de-ionized water before collecting samples. All samples were homogenized in stainless steel bowls before filling sample containers.

Sixty-four surface soil samples (including two duplicates) were collected from boring locations at the Postage Stamp and associated area. The rationale for collecting each surface soil sample was to determine the concentration and extent of PAHs, PCBs, and total and free cyanide at the Postage Stamp and its associated area.

The samples were submitted to Test America, an Environmental Laboratory Accreditation Program (ELAP) certified laboratory, and analyzed for a combination of the following methods; PAHs – EPA Method 8270C, PCBs – EPA 8082, total cyanide – EPA 9012, and free cyanide – EPA 9016. One sample (TP-2(11) SS) was inadvertently analyzed for benzene, toluene, ethylbenzene, and total xylene (BTEX) – EPA Method 8260B. This sample was collected from directly beneath the asphalt during test pit excavation.

Quality Control/Quality Assurance (QA/QC) samples including blind duplicate, matrix spike/matrix spike duplicate (MS/MSD), and rinsate blank samples were also collected, analyzed, and reviewed as part of the data validation process. The analytical results are discussed in Section 5.

3.4 Subsurface Utility Location

Utility locating was initiated by contacting Dig Safely New York (Dig Safely). Dig Safely marked-out utility lines in public rights-of-way based on information provided by utility companies.

Enviroprobe Services, Inc. (Enviroprobe) was contracted by GEI to identify and mark subsurface utilities on private property. Enviroprobe used ground penetrating radar (GPR) with a 250 MHz or 500 MHz antenna and radio frequency locator, a radio-detection pipe and cable locator, and a Fisher TW-6 magnetic locator. After utility mark-outs, but prior to drilling, all boring locations were cleared to a depth of 5 feet using a vacuum truck or hand auger by Boart Longyear Environmental & Infrastructure of North Reading, Massachusetts (Boart) or Clean Harbors Environmental Services, Inc. (Clean Harbors).

3.5 Test Pit Excavation

GEI contracted Land Remediation of Averill Park, New York to excavate two test pits in OU2 North during the 2011 SRI (Figure 4).

Asphalt was saw-cut prior to test pit excavation and segregated to be recycled. The test pits were excavated using a four-wheel drive CAT 420 rubber-tired backhoe. The goal was to uncover the concrete slab of the former "Coal Pockets" building, determine the northern and eastern edges of the slab, and clear two locations to drill through the slab and characterize soil beneath it. Test pits were excavated to approximately 5 feet below ground where the slab was encountered. A trench box was lowered into the test pit and a jack-hammer was used to break through the concrete by an operator working within the box. The air quality in the excavation was monitored and is discussed in section 3.8.

Excavated soils were placed on a waterproof tarp. The shallower soils, expected to contain the least potential impacts, were used as a "bed" for deeper soils. When the test pits were back-filled, the deeper soils were placed back in the pit first, and compacted, to ensure that all remaining soils could be returned to the pit. Test pits were restored with a 14-inch layer of compacted crusher run followed by a 4-inch layer asphalt that was tamped and steam rolled flush with the existing asphalt.

Two grab soil samples were collected from test pit TP-2(11) directly beneath the asphalt and 3 feet below ground and were analyzed for PAHs, PCBs, and total and free cyanide. The sample collected at 3 feet was also analyzed for BTEX. The analytical results are discussed in Section 5. Test pit logs are presented in Appendix D.

3.6 Subsurface Soil Borings

Soil borings were installed to characterize the geology and subsurface conditions, assess the horizontal and vertical extent of MGP or other impacts, and support installation of monitoring wells. The locations of the soil borings are shown in Figure 4. A summary of the soil boring location rationales is provided in Table 2.

Drilling was conducted by Boart in 2009. Borings were advanced using rotosonic drilling equipment on a track-mounted drilling rig. Continuous soil samples were collected at all locations in 5-foot sleeves for both field characterization and for the collection of samples for chemical analyses.

The 2010 SRI drilling and well installation was conducted by Parratt-Wolff (East Syracuse, New York) using a truck-mounted Geoprobe®, driving 2 or 4 foot Macro-Core® samplers. One of the borings was converted to a monitoring well and a truck-mounted hollow stem auger rig was used.

Zebra Environmental (Schenectady, New York) conducted the drilling for the 2011 SRI. Zebra used a track-mounted Geoprobe® 7822 equipped with a dual-tube sampling system to collect 5 foot Macro-Core® samples. Two borings were converted to monitoring wells using the same rig equipped with hollow stem augers.

The soil borings installed during the OU2 RI are identified below.

Boring IDs	Operable Unit	Year Installed
SB-92(09) through SB-94(09), SB-95/MW-26D(09), SB-96(09) through SB-98(09)	OU2 North	2009*
SB-60/MW-17S(09), SB-61/MW-17D(09), SB-62(09) through SB-64(09), SB-65/MW-18S(09), SB-66/MW-18D(09), SB-67(09), SB-68/MW-23D, SB-69/MW-19S(09), SB-70/MW-19D(09), SB-71(09) through SB-75(09), SB-76/MW-21S(09), SB-77/MW-20S(09), SB-78/MW-20D(09) SB-81(09), SB-84/MW-24S(09), SB-85/MW-24D(09), SB-86/MW-25S(09), SB-87/MW-25D(09), SB-90(09), SB-91(09) through SB-98(09)	OU2 South	
SB-100(10) through SB-109(10), SB-124(10), SB-126(10), SB-127(10)	OU2 North	2010**
SB-125/MW-27S(10)	OU2 South	
SB-128(11) through SB-137(11), SB-140(11), SB-141(11), SB-154(11), SB-155(11), SB-156(11), SB-163(11), SB-164(11), SB-168(11), SB-169(11)	OU2 North	2011
SB-138(11), SB-139(11), SB-142(11) through SB-153(11), SB-157(11) through SB-162(11), SB-165/MW-29S(11) through SB-167(11)	OU2 South	

*SB-99(09) was installed in OU1.

**SB-110(10) through SB-116(10), SB-117/RW-1(10), and SB-118(10) through SB-123(10) are not listed here and were installed as part of the PDI/IRM.

For all investigation work, soil samples were logged by a geologist or a trained scientist to identify and record observations as follows:

- Presence of fill or native soil/rock, using the Unified Soil Classification System (USCS)
- Moisture content
- Organic vapors, as indicated by photoionization detector (PID)
- Visual and olfactory observations of impacts

The soil boring logs are provided in Appendix F. Digital photographs of soil borings are included in Appendix F on compact disc.

In general, two analytical samples were collected from each boring. Samples were collected from the most apparently impacted intervals (based on PID screening and field observations) and from below the impacted interval or the bottom of the boring to confirm "non-impacted" conditions. If impacts were not apparent, a sample was collected from the 1-foot interval immediately below the water table.

As many as eight (including duplicates) subsurface analytical samples were collected from each 2011 SRI grid borings drilled in the Postage Stamp and its associated area. In general, samples were collected from approximately 3 feet and 8 feet bgs at each boring location. Beyond the 8 foot depth, the most apparently impacted soils were sampled (generally between 10 and 15 feet bgs) and from below the impacted interval and/or near the bottom of the boring to evaluate deeper "non-impacted" conditions.

Within the two test pit footprints, two borings were drilled to characterize soil beneath the slab of the Coal Pockets building. Two samples were collected from soils directly beneath the slab and deeper to evaluate conditions beneath the slab.

The samples collected during the RI were submitted to Test America and analyzed by the methods listed below.

Year	VOC 8260	BTEX 8260	SVOC 8270	PAH 8270	Metals 6000/7000	Hg 7470	PCBs 8082	Total Cyanide 9012	Free Cyanide 9016
2009	X		X		X	X		X	
2010	X		X		X	X	X	X	
2011	X	X	X	X			X	X	X

SVOC – semivolatile organic compounds

Ten samples collected during the 2011 SRI were also analyzed for diesel range organics (DRO - EPA Method 8015) and gasoline range organics (GRO - EPA Method 8015). These are discussed in subsection 3.5.1.2.

Appropriate QA/QC samples including blind duplicate, MS/MSD, and rinsate blank samples were also collected, analyzed, and reviewed. The analytical results are discussed in Section 5.

In general, each boring not finished as a monitoring well was abandoned by filling the boring with a cement/bentonite grout mixture tremied from the bottom of the boring up to ground surface. Borings not completed as wells during the 2011 SRI were abandoned with hydrated bentonite.

The location and ground surface elevation at each boring were surveyed at the conclusion of the drilling program.

3.6.1 Cyanide Chemistry and Forensic Soil Samples

3.6.1.1 Total and Free Cyanide

Cyanide is found in numerous chemical forms, many of which are not toxic to humans or the environment because the biologically available form of cyanide is not present. Forms of cyanide naturally exist in some foods and are present in regulated manufactured products. The potentially toxic form of cyanide, free cyanide, is biologically available and it poses greater exposure risks than total cyanide.

The acceptable method to measure total cyanide is EPA Method 9012. In the past, other EPA-approved methods have been used to estimate other forms of cyanide, including free cyanide. In June 2010, the EPA approved Method 9016 which more accurately quantifies free cyanide in soil and water using the microdiffusion method.

The NYSDEC has established standards for total cyanide but there are no standards for free cyanide. It is important in terms of relative exposure risk to measure the amount of free cyanide instead of estimating its concentrations based on other methods.

3.6.1.2 NewFields Environmental Forensics Practice, LLC

The origin of DNAPL located in the subsurface at OU2 North during the OU1 RI was uncertain. The former presence of a wagon-painting business was suspect as a possible source, as coal tar pitch is known to have been used as a base for paints. To assist in evaluating the potential source of the DNAPL, forensic hydrocarbon identification soil samples were collected at:

- SB-93(09), adjacent to CTMMW-3(04) and near the former wagon painting building.
- SB-96(09), adjacent to CTMMW-1(04), where viscous NAPL had gathered in the well.
- SB-97(09), within the approximate footprint of the former gasoline filling station and former gasoline underground storage tanks (USTs)
- SB-98(09), within the approximate footprint of the former wagon painting building.
- SB-99(09) was collected in OU1, adjacent to TP7(06) former Gas Holder B in OU1 where a quarter-sized patch of NAPL was observed during the OU1 RI.

In addition, NAPL samples were collected from monitoring wells CTMMW-1(04) in OU2 North, SB-43/MW-14D(08) in OU2 South, and SB-19/MW-8(06) in OU1.

The soil and NAPL samples were submitted to Alpha Analytical, Inc. (Alpha) in Mansfield, Massachusetts. Alpha performed high resolution hydrocarbon fingerprinting and total petroleum

hydrocarbons analysis (modified EPA Method 8015B); polycyclic aromatic hydrocarbon (PAH) quantification and fingerprinting (modified EPA Method 8270C); and quantitative biomarker fingerprinting (modified EPA Method 8270C).

The analytical results were evaluated by NewFields Environmental Forensics Practice, LLC (NewFields) in Rockland, Massachusetts, to evaluate whether tar and NAPL in OU2 North was related to the tar and NAPL found in OU1. To do so, NewFields compared hydrocarbon concentrations, PAH patterns, PAH ratios, origin feedstocks, geochemical biomarkers, and metals content of the samples. The results are discussed in Section 5. The NewFields report is provided in Appendix G.

3.6.1.3 META Environmental, Inc.

The origin of some hydrocarbon impacts observed in the subsurface at the Postage Stamp and its associated area (based on odor) was uncertain during the 2011 SRI. A former lubricating oil manufacturer was suspect as a potential source. To assist in evaluating these impacts, ten samples were selected and analyzed for diesel range organics (DRO - EPA Method 8015) and gasoline range organics (GRO - EPA Method 8015), as follow:

- SB-135(11)(10-12), SB-136(11)(10-11) on 10/12/11, SB-136(11)(10-11) on 10/20/11, SB-140(11)(11.3-12.3), SB-149(11)(8-10), SB-153(11)(10-10.75), SB-158(11)(10.8-12.4), SB-159(11)(9.75-10), SB-159(11)(11-15), and SB-161(11)(11-11.75)

The analytical results, gas chromotographs, and mass spectrometry results were reviewed by META Environmental, Inc. (META) in Watertown, Massachusetts, to evaluate whether the hydrocarbons detected were most closely related to MGP residuals or other potential sources. META described whether the results were principally pyrogenic (weathered tar), principally petrogenic (weathered petroleum), high molecular weight PAHs, or apparently urban background conditions. The results are discussed in Section 5. The complete META report is also provided in Appendix G.

3.7 Monitoring and Recovery Well Installation

Sixteen monitoring wells were installed by GEI during the OU2 North and OU2 South RI. Ten were screened across the water table to evaluate shallow groundwater conditions. The remaining seven wells were installed so that the well screens intercepted “deep” groundwater at elevations similar to, or below the deepest impacted interval observed in OU2 South in boring SB-43/MW-14D(08), at 45 feet bgs (the deepest NAPL observed at the Site). One recovery well, SB-117/RW-1(10), was installed in 2010. The location of each well is shown in Figures 2 and 4. Table 3 provides construction details for the wells installed at the Site.

Boring IDs	Operable Unit	Year Installed
SB-95/MW-26D(09)	OU2 North	2009
SB-133/MW-28S(11)		2011
SB-60/MW-17S(09), SB-61/MW17D(09) SB-65/MW-18S(09), SB-66/MW-18D(09), SB-69/MW-19S(09), SB-70/MW-19D(09), SB-77/MW-20S(09), SB-78/MW-20D(09), SB-84/MW-24S(09), SB-85/MW-24D(09), SB-86/MW-25S(09), SB-87/MW-25D(09),	OU2 South	2009
SB-125/MW-27S(10), SB-117/RW-1(10)*		2010
SB-165/MW-29S(11)		2011

*Recovery well

The monitoring wells were generally constructed using a 2-inch diameter Schedule 40 polyvinyl chloride (PVC) well riser with a 10-foot long 0.02-inch slotted PVC screen, and a 2-foot long sump for monitoring the presence of DNAPL. The two monitoring wells installed during the 2011 SRI were constructed as described except a sump was not included at the bottom.

The annular space between the well screen and boring wall was backfilled with chemically inert sand (#2 Morie) to promote groundwater flow and minimize the passage of any fine-grained formational material into the well. A minimum 2-foot layer of bentonite clay chips was placed above the sand pack and artificially hydrated with potable water (only if the seal was above the saturated water table) to prevent migration of potential contaminants to the sampling zone (i.e., screened interval) from the surface and overlying material. The remaining annular space was filled to grade with cement/bentonite grout mixture. Each monitoring well was fitted with a flush-mount locking road box set in a concrete pad.

The recovery well (SB-117/RW-1(10)) was installed using mud-rotary techniques and a hole of approximately 10 inches in diameter was created. The well was constructed with a 6-inch inside diameter (ID) stainless steel solid riser casing, 10-foot long 0.02-inch flush-threaded continuous-slot well screen and 5-foot long solid casing (sump) at the bottom. A 5-foot long bentonite seal was tremied into the hole, surrounding the sump. The annular space between the well screen and the borehole was backfilled with chemically inert sand (#1 Morie) to approximately 2 feet above the top of the screen interval. A 2-foot bentonite seal was placed at the top of the sand pack. The remaining annular space was filled to grade with a cement/bentonite grout mixture and completed with a flush-mount locking road box set in a concrete pad. The well was protected with a lockable traffic rated well vault.

3.8 Well Development

Monitoring wells were developed a minimum of 48 hours after installation to remove fine-grained sediment and fluid residue from the well and sand pack. Surge-and-pump methods were used. Following surging, water was pumped from the well until the turbidity was reduced to at least 50 nephelometric turbidity units (NTUs), or a minimum of ten well volumes of water were removed.

The recovery well was developed with a bailer to avoid potential interruption of the NAPL flow. Discharge water was contained on-site in a poly tank. The water was disposed of by Clean Harbors, Inc. on behalf of National Grid (subsection 3.12).

3.9 Groundwater Monitoring

Groundwater monitoring activities consisted of collection of depth-to-water measurements, gauging the wells for the presence of NAPL, and collection of groundwater samples for laboratory analyses.

3.9.1 Depth-to-Water Measurements

A complete round of depth-to-water measurements for all site wells (including OU1 wells) was collected on October 3, 2009. A complete round of measurements for OU2 North and South wells was conducted on October 17, 2010. Prior to sampling seven wells in the Postage Stamp and vicinity including GP-CTM-9(06), GP-CTM-23(08), SB-77/MW-20S(09), SB-86/MW-25S(09), SB-125/MW-27S(10), SB-133/MW-28S(11), and SB165/MW-39S(11) (discussed in subsection 3.6.3), a round of measurements was collected from those wells and GP-CTM-10(06) and SB-76/MW-21S(09) on November 15, 2011. The data are presented in Table 4.

3.9.2 NAPL Gauging, Removal, and Recovery

Existing wells in OU2 North and OU2 South have been periodically checked for the presence of light NAPL (LNAPL) and DNAPL using an oil-water interface probe and/or weighted cotton string. Monitoring wells CTMMW-1(04) in OU2 North and SB-30/MW-12D(08), SB-43/MW-14D(08), and SB-117/RW-1(10)) in OU2 South contained DNAPL in the well sumps.

These four wells have demonstrated recharge of DNAPL following DNAPL removal. As such, these wells receive periodic DNAPL removal and recharge monitoring. The 2011 annual recovery report is provided in Appendix E.

3.9.3 Groundwater Sampling

Monitoring wells not containing NAPL were sampled at least two weeks after they were developed. Wells were purged at a maximum rate of 500 milliliters/minute (ml/min) with a peristaltic pump. A water quality multi-parameter sonde device equipped with a closed flow-through cell was used to monitor purge water for dissolved oxygen, pH, temperature, conductivity, oxidation-reduction potential, and turbidity. Groundwater samples were collected when the parameters stabilized within 10 percent. Final groundwater discharge parameters are presented in Table 5.

Prior to 2011, VOC samples were collected using a bailer. All other samples were collected directly from the discharge side of the peristaltic pump. Groundwater samples collected during

the 2011 SRI were collected using low-flow techniques, directly from the discharge side of the peristaltic pump for all analyses, including VOCs, per recent EPA guidance (Puls and Barcelona, 1996).

Table 6 presents a groundwater analytical sample rationale and summary of the samples collected by GEI. Appropriate QA/QC samples were also collected and analyzed.

3.10 Soil Vapor Sampling

One soil vapor sample was collected by AECOM in OU2 South (SV-7(08)) during the OU1 remedial investigation, close to SB-42/MW-14(08). The results are presented in a letter from AECOM to NYSDEC (Appendix H) and are discussed in Section 5.

NYSDEC requested additional soil vapor sampling in OU2. GEI collected two soil vapor sample pairs [SV12(12)A and SV12(12)B; SV13(12)A and SV13(12)B] in OU2 adjacent to 318 Broadway in February 2012. The methods are described in a GEI letter report to the NYSDEC and NYSDOH provided in Appendix H. The results are discussed in the letter report and in Section 5.

3.11 Work Zone and Community Air Monitoring

As required by NYSDEC and the NYSDOH, community air monitoring was conducted by GEI at the upwind and downwind Site boundaries during intrusive investigations (test pit excavation, soil boring, and monitoring well installation) to monitor respirable dust and VOCs. Wind direction was determined by observing a flag mounted on the drill rig or permanently mounted on surrounding buildings. The procedures followed methods described in the CAMP (GEI, 2009).

Air monitoring equipment was calibrated at the start of each day. Total VOC vapors were measured using a PID, either a RAE Systems MiniRAE 2000 PID or Ion Science PhoCheck+ PID. Particulates less than 10 microns in size were measured using a Thermo MiniRAM™ or DataRAM™ PM-10 particulate meter with a cyclone and air pump or a TSI Dust Trak aerosol monitor. The PIDs and dust meters logged information continuously throughout the work day. This information was downloaded to a laptop computer at the end of each work day so that NYSDEC and NYSDOH could review the information if needed.

The action levels for selected parameters were as follow:

- Benzene 1 part per million (ppm)
- Total VOCs 5 ppm
- Dust 150 micrograms per cubic meter (µg/m3)

If real-time measurements of total VOCs indicated that the action level was exceeded, then the benzene concentration would be determined at that location using benzene-specific colorimetric tubes. The total VOC action level was never exceeded. Weekly air monitoring reports were generated during the 2009 field work. These reports were provided to NYSDEC. Copies of the reports are provided in Appendix I.

Work zone air monitoring was conducted as well. A RAE Systems MultiRae plus was used to measure total VOCs, hydrogen cyanide, hydrogen sulfide, lower explosive limit, and oxygen. Particulates less than 10 microns in size were also measured using the same instruments described above.

During test pit excavations in 2011, the air in the excavation was monitored by Land Remediation for oxygen deficiency, explosivity, organic vapors, carbon monoxide and hydrogen sulfide using a RAE Systems MultiRae plus. The bottom, middle, top and corners of the excavation were monitored prior to entry and continuously during excavation work in the trench box.

Action levels were not exceeded during the field investigations in 2009 and 2010. In 2011 all air monitoring equipment was checked daily to ensure that data were being logged, and no exceedences were noted. However, at the end of the field program the logged data were lost during download to the GEI network.

3.12 Data Validation

All analytical data were validated per appropriate EPA guidance, consistent with New York State Analytical Services Protocol (NYSASP) Category B guidance. The data usability reports are presented in Appendix J. The validated analytical results for soil are presented in Tables 7, 9, and 10. The validated analytical results for groundwater are presented in Tables 8 and 11. All laboratory data and documents are on file with GEI. These documents are available upon request.

Validation procedures resulted in qualifications and some rejected results for free and total cyanide, as follows:

- Laboratory recovery of total cyanide matrix spike and matrix spike duplicates was low due to interferences caused by the soil samples themselves. This caused low-bias detections of total cyanide in several samples.
- Free cyanide results were detected at levels less than the laboratory reporting limit but above the method detection limit. These detections were qualified as estimates (J flags).
- Some of the total cyanide results reported by the laboratory as non-detects were rejected because spike recovery was too low to support reliability of the result.

- Because the laboratory methods, reporting limits, and method detection limits are different for free and total cyanide (and the matrix difficulties mentioned above), there are cases where:
    - Free cyanide was detected (and J flagged) at a concentration slightly higher than the associated detection of total cyanide.
    - Free cyanide was detected (and J flagged) at a higher detection limit than the associated but non-detected (and UJ flagged) total cyanide.

These shortcomings were not a function of poor laboratory work. They are a function of the current state of laboratory technology and interference from the samples themselves.

3.13 Cultural Resources Assessment

GEI contracted Hartgen Archeological Associates, Inc. (HAA), to perform a Phase IA Literature Review and Archeological Sensitivity Assessment for the Site. HAA's research consisted of several tasks, as follow:

- Examination of soils and bedrock information available from the U.S. Department of Agriculture, Natural Resources Conservation Service website.
- File searches at New York State Office of Parks, Recreation and Historic Preservation (OPRHP), New York State Museum, and National Register listings.
- Review of previous cultural resource survey reports in the vicinity of the Site.
- Review of historical maps.

HAA assessed the archeological sensitivity and potential cultural resources at the Site. Their full report is provided in Appendix C.

A copy of the complete report was provided to the New York State Historic Preservation Office (SHPO), a branch of OPRHP, for review. The findings are discussed in subsection 4.4.

3.14 Investigation-Derived Waste Management

Several types of IDW were generated during the RI activities, as follows:

- Test pit spoils.
- Decontamination wash-water from the down hole drilling tools.
- Soil drill cuttings from sampling activities.
- Well development water.
- Groundwater sampling purge water.
- Personal protective equipment (PPE).
- NAPL purged from wells.

- Miscellaneous sampling equipment and plastic sheeting.

All IDW generated during drilling activities was placed in separate United States Department of Transportation (DOT)-approved steel drums or polyethylene tanks on-site, and properly labeled. Test pit spoils were placed in a 20-yard roll-off container. Clean Harbors, Inc. (a National Grid waste disposal subcontractor) was provided with sample results and/or sampled the waste as necessary and disposed of the waste at approved facilities on behalf of National Grid.

4. Site Physical Characteristics

This section describes the Site physical characteristics.

4.1 Site Topography and Drainage

The ground surface in OU2 North and OU2 South is relatively flat with a slight gradient to the west. In general, the elevation on Broadway is about 226 feet. The elevation on Van Guysling Street is about 225 feet. Topographic contours are shown in Figure 4.

Surface water discharges to catch basins in Broadway and Van Guysling Avenue, the parking lots, and Schermerhorn Creek, which is partially culverted. Surface water ultimately drains to the Mohawk River approximately 3,500 feet northwest of the Site.

4.2 Site Geology

Eight geologic cross-sections were prepared to illustrate the subsurface conditions observed during the investigation of OU2 North and OU2 South, based on boring logs provided in Appendix F. The cross-sections are presented in Figures 5 through 9. As shown in the figures, four primary subsurface soil units were identified, as follow.

- Fill – fill material was observed in all borings. The minimum thickness was 1.1 feet (at SB-65/MW-18S(09) and the maximum thickness was 23 feet, at SB-155(11). The fill consisted of sand, gravel, wood fragments, brick, ash, and cinders.

- Sand and Silt – Beneath the fill was a unit comprised of highly variable amounts of silt and sand. This is the same geologic formation described as the alluvium unit in the OU1 RI Report (AECOMa, 2009). The thickness of the sand/silt unit in OU2 South ranged from 2 feet at SB-42(08)/MW-14(08) to 73 feet at SB-81(09).

- A lean clay layer was identified during the PDI in OU2 North at many of the PDI borings, after the first round of OU2 RI borings were completed. Lean clay was identified at relatively shallow depths in OU2 South (SB-60/MW-17S(09), SB-76/MW-21S(09), SB-81(09), SB-125/MW-27S(10), and SB-127(10), in the Postage Stamp). The lean clay is not contiguous throughout OU2; where present over a large area it is likely to have confining properties.

- Peat – A peat layer was observed in eighteen borings at a depth that varied from approximately 12 to 22 feet (bgs). The peat unit is not contiguous and its thickness ranged from less than six inches at SB-162(11) to 12.5 feet at SB-71(09).

- Till – A glacial till unit was identified at approximately 90 feet bgs in OU1. In OU2 South it was encountered at approximately 70 to 80 feet bgs at seven boring locations: SB-61/MW-17D(09), SB-63(09), SB-64(09), SB-66/MW-18D(09), SB-71(09), SB-92(09), and SB-95/MW-26D(09). The till consists of lean clay with gravel, is non-plastic, and likely has confining properties. It is assumed to be a contiguous unit and at SB-63(09), it was at least 10 feet thick. The total maximum thickness is not known.

The stratigraphy in OU2 North and OU2 South is consistent with that in OU1. The peat layer is not expected to exert much control as a confining unit because it is discontinuous. The lean clay observed is most apparent in OU2 North and the northern portion of OU2 South. It appears to have confining properties and may have exerted some control on past migration of shallow NAPL.

4.3 Hydrogeology

A complete round of groundwater level measurements was recorded in OU1 and OU2 prior to well development in early November 2009. Another complete round of measurements was recorded in both operable units prior to groundwater sampling in late November 2009. A third round of measurements was recorded for OU2 wells only, in November 2010 prior to start of the SRI work. Select wells were gauged in the vicinity of the Postage Stamp prior to an abbreviated sampling round during the 2011 SRI. The measurements and elevations are provided in Table 4.

The water table in OU2 is found at depths generally ranging from approximately 5 to 11 feet bgs. At upgradient monitoring well MW-6(06) in OU1, the depth to water was approximately 30 feet bgs because this well is located at a much higher elevation than the wells in the former process area.

The groundwater flow direction in OU2 North and South (2009 data) for shallow wells (less than 40 feet deep) screened across the water table is shown in Figure 10. Shallow groundwater flow is from the northeast to southwest across OU2 North and OU2 South, with Schermerhorn Creek as the apparent discharge point. The hydraulic gradient for the 2009 shallow groundwater flow is approximately 0.0047 feet per foot (ft/ft). Figure 10 also includes the groundwater flow direction for the select wells sampled in 2011. While there is some variance in contour lines, the shallow groundwater flow is apparently influenced by Schermerhorn Creek – where shallow groundwater discharge occurs. The hydraulic gradient for the 2011 shallow groundwater flow at and near the Postage Stamp is approximately 0.008 ft/ft.

The groundwater flow direction for deep wells (40 to 90 feet deep), shown in Figure 11, is from the east-northeast to the west-southwest in OU2 North and OU2 South. The hydraulic gradient for the deeper groundwater is 0.0008 to 0.002 ft/ft.

A slight downward gradient is apparent at the well pairs closest to Broadway. Farther to the west, the gradient shifts upward. The variance may be a function of the permeability of the soil the wells were screened in and/or discharge of groundwater to Schermerhorn Creek. Regardless of cause, the variances do not affect groundwater flow findings described above.

4.4 Cultural Resources Assessment

The Cultural Resource Assessment determined that OU1 and OU2 North are sensitive areas with potential to contain archeological remains. OU2 South was not identified as sensitive. The report recommended monitoring if remedial activities including excavation were called for. The full report is provided in Appendix C.

4.5 Coal Pockets Building Slab

The northern and eastern edges of the Coal Pockets building slab were located in test pits TP-1(11) and TP-2(11), respectively (Figure 4). The slab surface was approximately 5 feet bgs. The slab was a minimum of 20 inches thick, made of concrete reinforced with 1-inch diameter steel rebar, set on 14-inch centers. The slab was intact with little sign of deterioration. The steel rebar did not appear oxidized and the jackhammer could not break the rebar. The north and east slab edges were surveyed, and based on the survey data and Sanborn Map dimensions, the slab is 75 feet by 165 feet; the location of the building slab is shown on Figure 3.

The volume of the slab is approximately 20,600 cubic feet. A rule of thumb for weight of one cubic foot of concrete with rebar is 150 pounds. As such, the slab weighs approximately 1545 tons.

5. Nature and Extent of Contamination

This section of the report describes the nature and extent of contamination in OU2 North and OU2 South. Because NYSDEC has requested a follow-on Feasibility Study for the Postage Stamp, the impacts there are discussed separately from the rest of OU2 North and OU2 South.

All data acquired on behalf of National Grid and the City of Schenectady since 2004 are discussed. Analytical results of subsurface soil samples collected by GEI in OU2 North and OU2 South are presented in Table 7. Groundwater analytical results generated by GEI in OU2 North and OU2 South are provided in Table 8. Surface soil, subsurface soil, and groundwater analytical results generated at the Postage Stamp and associated area are provided in Tables 9, 10, and 11, respectively. Data generated by C.T. Male and AECOM are provided in Appendix D.

C.T. Male "near surface" soil analytical data are summarized in Figure 12. Subsurface soil physical observations and summarized analytical results prior to 2011 are included in Figures 5 through 9 and 13 through 15. Groundwater analytical results prior to 2011 are included in Figure 16. 2011 subsurface soil analytical results and physical observations are included in Figures 17 through 20. Soil boring logs are provided in Appendix F. 2011 Groundwater analytical results for the Postage Stamp and associated area are summarized in Figure 21.

Soil analytical results in Tables 7, 9, and 10 are compared to Title 6, Chapter 100, Part 700-705, Subpart 375-6 of the New York State Code of Rules and Regulations (6NYCRR Part 375) Unrestricted Use Soil Cleanup Objectives (SCOs) - NYSDEC, 2006). In the remaining report text these standards are referred to as the Unrestricted SCOs. The Unrestricted SCOs are the most stringent standards, and are regarded as protective of both human and ecological health. They are included here to provide a "baseline" that site conditions can be compared to.

Zoning in OU2 North and OU2 South is C-4 (predominantly commercial), but it allows permitted residential use (currently neither OU2 North nor OU2 South are used for residential purposes). Based on discussion with NYSDEC it is nonetheless appropriate to also compare subsurface soil analytical results to the Restricted Use Commercial SCOs (subparagraph 375-1.8(g)(2)(ii) of Part 375) on the basis that actual land use in OU2 North and OU2 South will remain predominantly commercial. In the remaining report text, these standards are referred to as the Commercial SCOs.

Groundwater analytical results in Tables 8 and 11 are compared to the New York State Ambient Water Quality Standards (AWQS).

New York State currently does not have any standards, criteria or guidance values for concentrations of compounds in soil vapor. Several studies have been conducted, both nationally and in the State of New York, to provide information on indoor and outdoor air background levels in a variety of settings.

5.1 "Near Surface" Soil

5.1.1 CT Male - OU2 North and OU2 South

C.T. Male collected "near surface" soil samples (ranging in depth from directly below ground surface to four feet bgs) in OU2 North (in 2004, 2006 and 2008). The analytical results are summarized in Figure 12.

Several PAH compounds at CTMMW-04(04), near the center of OU2 North, exceeded the Commercial SCOs. The same was true at CTMSS-13(08) in OU2 South. PCBs, with a Commercial SCO of 1 mg/kg, were also detected in CTMSS-13(08) at a concentration of 65 mg/kg. The sample was collected near the location of the above ground "vault", where 20 mg/kg of PCBs were identified by C.T. Male (subsection 2.4.1) in shallow subsurface soil. PCBs are not a by-product of gas manufacturing.

Total cyanide was also detected in several near surface soil samples. Sample CTMSS-13(08) contained 83 mg/kg of total cyanide. The Commercial SCO is 27 mg/kg. In general, however, the total cyanide concentrations were below the Commercial SCO. There are no descriptions of wood chips, lime, or blue staining in any of the C.T. Male boring logs. A pile of road de-icing salt – a potential source of total cyanide – has been has been observed in the southeast corner of OU2 North.

Surface and shallow subsurface soil quality at the Postage Stamp and associated area is discussed more fully in subsection 5.5.

5.2 Subsurface Soil - OU2 North

Boring and well locations and summarized analytical results for OU2 North subsurface soil are presented on Figure 13 and 15. Validated analytical data are presented in Table 7. A range of chemical impacts (Figure 13) in excess of the Commercial SCOs are present in the subsurface soil.

A range of physical impacts (Figure 15) are also present in subsurface soil, including MGP-related NAPL. Many soil analytical samples were deliberately collected at intervals where physical impacts (coal tar, sheen, hydrocarbon odors) were apparent. As shown in Figure 13, the highest levels of organic impacts are present in the southwest quadrant of OU2 North.

Concentrations of VOCs such as benzene, toluene, ethylbenzene, and xylene (BTEX) were either absent or below Commercial SCOs, ranging from non-detect at several sample locations to 406 mg/kg in sample SB-115(10) 18-19.

PAH compounds were commonly detected. Most samples collected along the Clinton Street Extension at depths ranging from 9 to 19 feet bgs contained PAH concentrations that exceeded the Commercial SCOs. There were as many as 15 PAH compounds detected in a single sample (SB-100(10) 10-11), where each compound exceeded the associated Commercial SCO. Total PAHs in this sample were 25,092 mg/kg.

Samples collected closest to the north, east, and west boundaries of OU2 North were either non-detect for BTEX and PAHs or had concentrations below the Commercial SCOs.

C.T. Male collected five samples (including a duplicate) between 6 and 12 feet bgs for PCB analysis at four soil borings since 2004: CTMSB-18(07), GP/CTM-20, GP/CTM-22, and GP/CTM-23. PCBs were not detected in any of the samples.

Samples were collected and analyzed for total cyanide at nine borings at 312 Broadway. Total cyanide was detected in most of the samples at concentrations below the Commercial SCO of 27 mg/kg. Only three samples approached 27 mg/kg, as follow:

- The duplicate of SB-100(10), from 10 to 11 feet bgs contained 26 mg/kg of total cyanide.
- CTMSB-19(07), from 10 to 12 feet bgs contained 22 mg/kg of total cyanide.
- SB-93(09), from 10.6 to 11.6 feet bgs contained 17.4 mg/kg of total cyanide.

These three samples were collected from the 10 to 12 foot bgs interval within the proposed IRM footprint. Neither GEI nor C.T. Male encountered wood chips, lime, or blue stain (potential gas purification residues that may contain cyanide) in any borings in this area.

However, a pile of road de-icing salt and piles of excess snow – potential sources of total cyanide – have been observed in the southwest corner of OU2 North. Samples collected from borings SB-124(10) and SB-127(10) from 12 to 13 feet bgs contained concentrations of total cyanide below the Commercial SCO. SB-130(11), however, contained 233 mg/kg total cyanide and 2.3 mg/kg free cyanide. Sample SB-142(11) 3-3.5 contained 0.41 mg/kg total cyanide and 0.68 mg/kg free cyanide.

With NYSDEC oversight and concurrence, National Grid designed an IRM to address the chemical and physical impacts at 312 Broadway in OU2 North separate from the Postage Stamp. It consisted of excavating NAPL-impacted soil, and soil with BTEX concentrations that exceed the Part 375 Commercial use SCOs and total PAH concentrations that exceed the NYSDEC CP-51 Soil Cleanup Guidance (NYSDEC, 2010), as listed below:

Compound	Part 375/CP-51 Limits
Benzene	44 mg/kg - Part 375
Toluene	500 mg/kg - Part 375
Ethylbenzene	390 mg/kg - Part 375
Total Xylene	500 mg/kg - Part 375
PAHs	500 mg/kg - CP-51

The proposed excavation footprint is shown in Figure 13. Soil borings outside the footprint drilled between 2004 and 2010, except for CTMMW-4(04) and SB-101(10), are free of physical impacts, and BTEX and PAHs concentrations are less than the Commercial SCOs for BTEX or the CP-51 limit for total PAHs. CTMMW-4(04) and SB-101(10) exhibited a faint petroleum odor and tar stringers, respectively. Most of the borings installed at the Postage Stamp and associated area revealed the presence of subsurface impacts and elevated PAHs. These are fully addressed below, in Section 5.5.

Chemical and *observed* physical impacts are found primarily within the sand and silt unit (subsection 4.2). The sand/silt and peat units do not appear to confine or control migration of NAPL in subsurface soil. A nearly contiguous lean clay unit has been observed in OU2 North and the northern portion of OU2 South. This may have influenced migration of NAPL from OU2 North to OU2 South.

The source of coal tar in OU2 North does not appear to be subsurface migration from OU1. The elevations of coal tar in OU2 North are generally higher than the closest tar impacts in OU1 – which would require "uphill" movement. The OU1 former MGP is nonetheless assumed to be the source of tar in OU2 North. There is no other apparent source. Additional discussion is provided in the next subsection.

Based on a sample collected just above till (76-77 feet bgs) at SB-95/MW-26D(09), neither chemical nor physical impacts in OU2 North have migrated downward to significant depth. The deepest physical impacts in OU2 North were odors observed 22.5 feet bgs at boring SB-48(08).

5.2.1 Forensics

A forensic evaluation of NAPL and NAPL-impacted soil from OU2 North and OU1 was conducted by NewFields Environmental LLC. The purpose was to determine if NAPL at OU2 North is coal tar that originated at OU1, or whether the NAPL at OU2 North is coal tar pitch – a derivation of coal tar used as a paint base (that may have been used at the former wagon painting shop at OU2 North).

The forensic evaluation determined that NAPLs at OU1 and OU2 are coal tar. Coal tar pitch was not present. The hydrocarbon "fingerprints" of both NAPLs were different, but the differences

are irrelevant. The composition of coal tar generated at a single source can vary over time, depending on variances in the feedstock (coal) and on changes in the gas making process, as a plant expands or is improved. Therefore, the assumed source of the OU2 North coal tar is OU1. The complete forensics report is in Appendix G. Further evaluation of coal tar chemistry or specific gas plant processes is not necessary to adequately address MGP impacts at the Site.

5.3 Subsurface Soil – OU2 South

The locations and depths of the borings installed in OU2 South, exclusive of the area associated with the Postage Stamp and associated area were based on groundwater flow direction (west/southwest) and the greatest vertical depths of physical impacts in OU2 South observed during the OU1 RI (coal tar at 45 feet bgs, sheen at 47 feet bgs, and odor at 51 feet bgs). As such, many of the OU2 South borings were advanced to 50 feet bgs or deeper, to evaluate whether physical impacts might be present at similar depths throughout OU2 South. The findings are discussed below.

Validated subsurface soil analytical data are presented in Table 7 and Appendix J. Boring locations and summarized analytical results are presented in Figures 5 through 9 and in Figure 14. Physical impacts are presented on Figure 15.

Physical impacts ranged from slight hydrocarbon-like odors to NAPL saturation at various depths in eighteen borings identified below. No apparent purifier wastes were observed.

SB-30/MW-12D(08)	SB-68/MW-23D(09)	SB-74(09)	SB-81(09)
SB-35/MW-13D(08)	SB-71(09)	SB-75(09)	SB-110(10)
SB-43/MW-14D(08)	SB-72(09)	SB-76/MW-21S(09)	SB-112(10)
SB-67(09)	SB-73(09)	SB-78/MW-20D(09)	SB-113(10)
SB-114(10)			

Thirty-seven analytical samples were collected at various depths from these borings (Figure 14). The Commercial SCOs for VOCs including BTEX were exceeded just once, in a sample containing coal tar collected from SB-43(08) 40-42.5. No other BTEX compounds were detected above Commercial SCOs in other borings in OU2 South.

The Commercial SCOs were most often exceeded by concentrations of PAH compounds, whether coal tar was present or not. The PAHs included benzo(a)pyrene, dibenz(a,h)anthracene, naphthalene, phenanthrene, benz(a)anthracene, benz(b)fluoranthene, chrysene, indeno(1,2,3-cd)pyrene, acenaphthene, anthracene, fluoranthene, fluorene, pyrene, and benz(k)fluoranthene. Dibenzofuran also exceeded the Commercial SCO in sample SB-78(09) 10-11.

Metals were not detected above the Commercial SCOs in any subsurface soil samples. Total cyanide was detected above the Commercial SCO (27 mg/kg) in one sample only – SB-78(09) 10-11, at a concentration of 42.6 mg/kg.

At borings SB-75(09), SB-76/MW-21S(09), and SB-78/MW-20D(09) adjacent to Clinton Street Extension, hydrocarbon odors and trace sheen (SB-78/MW-20D(09)) were noted between 10 and 15 feet below ground. Coal tar impacts were also observed at similar depths in borings SB-72(09) and SB-73(09). No physical impacts were observed in twelve borings located in the south, southwest and west perimeter of OU2 South (identified below).

SB-60/MW-17S	SB-61/MW-17D(09)	SB-62(09)	SB-63(09)
SB-64(09)	SB-65/MW-18S(09)	SB-66/MW-18D(09)	SB-69/MW-19S
SB-70/MW-19D(09)	SB-84/MW-24S(09)	SB-85/MW-24D(09)	SB-90(09)

Sixteen samples collected from various depths at these borings met Commercial SCOs. One sample, SB-90(09) 10-11, contained one PAH above the applicable SCO.

The locations of MGP-related physical impacts (Figure 15) are roughly coincident with subsurface soil analytical samples that contained organic compounds in excess of the Commercial SCOs. Apparently mobile NAPL is present at locations such as SB-30/MW-12D (between roughly 40 and 50 bgs) along the eastern edge of OU2 South, closest to OU1 and immediately downgradient of the former process area. Sheen impacts were observed at locations slightly farther downgradient to the west, while only odor impacts were sporadically observed at other locations.

As in OU2 North, chemical and physical impacts are found primarily within the sand and silt unit (subsection 4.2). The sand/silt and peat units do not appear to confine or control migration of NAPL in subsurface soil. The deepest physical impacts (stain and sheen) observed in OU2 South (Figure 15) were at SB-117/RW-1(10), 49 feet bgs.

5.4 Groundwater

One round of groundwater samples was collected from OU2 North and OU2 South wells in November and December of 2009. The single well installed during the 2010 SRI (SB-125/MW-27S(10)) was sampled in November 2010. The 2009 and 2010 groundwater analytical results are presented on Table 8 and summarized in Figure 16.

5.4.1 OU2 North

Groundwater impacts (Figure 16) within the proposed excavation footprint at deep well SB-48/MW-16D(09) and shallow wells CTMMW-1(04), CTMMW-2(04), CTMMW-3(04), CTMSB/MW-19(07) and GP/CTM-6(06) exceed the AWQS, primarily for PAHs. Samples for

PCBs analysis were collected from a few wells. PCBs were not detected at elevated levels and did not exceed the AWQS.

Few groundwater samples collected in OU2 North have been analyzed for total cyanide. However, one sample from well CTMSB/MW-19(07) contained 220 ug/l of total cyanide. The AWQS for total cyanide is 200 ug/l.

Groundwater at the 312 Broadway parcel, north of the IRM footprint is not affected by organic compounds at concentrations in excess of the AWQS, except for well GP/CTM-08(06). A sample collected there contained one PAH compound at a concentration above the AWQS. It is at the north edge of OU2 North and likely represents the quality of groundwater coming into OU-2 North from an upgradient location. Groundwater quality at the Postage Stamp and associated area is fully discussed in subsection 5.5.3.

The groundwater sample collected from deep well SB-95/MW-26D(09), screened from 50 to 60 feet bgs, did not contain chemical compounds at concentrations above the AWQS. This suggests that MGP residuals in OU2 North are not affecting the deeper, resident groundwater
The 312 Broadway IRM is expected to eliminate OU2 North (except the Postage Stamp and Associated Area) as a source area, and it will be followed with a Site Management Plan (SMP) and institutional controls. The IRM was completed in September 2012.

5.4.2 OU2 South Shallow Overburden Groundwater Results

BTEX compounds were detected at concentrations greater than the AWQS in samples from six of ten shallow wells installed and sampled prior to 2011. The BTEX concentrations ranged from 0.21 microgram per liter (µg/L) at SB-42/MW-14(08) to 151.8 µg/L at SB-76/MW-21S(09). As shown in Figure 16, the greatest BTEX concentrations were detected downgradient of the former MGP process area. The limits of the BTEX-impacted shallow groundwater are defined by the non-detect results to the west and south at wells SB-60/MW-17S(09), SB-66/MW-18S(09), and SB-86/MW-25S(09).

Two of the ten shallow wells had at least one other VOC detected. At monitoring well SB-77/MW-20S(09), isopropylbenzene (5.8 µg/L) and styrene (5.7 µg/L) were both detected above the respective standard of 5 µg/L. At well SB-84/MW-24S(09), chlorobenzene (210 µg/L) was detected above the AWQS of 5 µg/L. This location is downgradient of the former junk shop and junkyard.

PAH compounds were detected above the applicable AWQS in seven of the ten shallow wells. Total PAH concentrations ranged from not detected to 991.9 µg/L at SB-77/MW-20S(09). Figure 16 shows the distribution of total PAHs at concentrations above the AWQS.

As with BTEX concentrations, the greatest concentrations of PAHs were detected in samples from wells down gradient of the former MGP process area. PAHs were not detected in samples from wells SB-60/MW-17S(09), SB-66/MW-18S(09), and SB-86/MW-25S(09).

Five of the wells had at least one other SVOC detected. At monitoring well SB-77/MW-20S(09), 2,4-dimethylphenol (120 µg/L) and 4-methylphenol (39 µg/L) were both detected above the respective AWQS. At SB-84/MW-24S(09), 2,4-dichlorophenol (27 µg/L) and 4-methylphenol (1.7J µg/L) were also detected above the respective AWQS (downgradient of junk shop and junkyard).

All of the samples collected from the shallow wells contained iron, manganese, and sodium in concentrations greater than the applicable AWQS for these compounds. These metals are commonly found naturally in groundwater in New York State and likely reflect ambient conditions. Magnesium was found in several samples.

Arsenic was detected at concentrations above the AWQS (25 µg/L) in three samples. It was present at monitoring wells SB-60/MW-17S(09) (25.9 µg/L), SB-66/MW-18S(09) (48.6 µg/L), and SB-69/MW-19S(09) (35.9 µg/L). All three of these wells are in the southern portion of OU2 South. Arsenic was not detected in any OU2 soil above the Unrestricted SCO (13 mg/kg). The source to groundwater is not likely related to former MGP operations, given the locations of the impacts (well separate from OU1 and other locations where MGP impacts are obvious).

The samples from monitoring wells SB-84/MW-24S(09) and SB-86/MW-25S(09) contained thallium (4.6 µg/L and 7.7 µg/L, respectively) above the AWQS standard of 0.5 µg/L. Monitoring well SB-86/MW-25S(09) also contained barium (2360 µg/L) above the groundwater standard of 1000 µg/L.

Total cyanide was present in shallow groundwater sample SB-77/MW-20S(09), at 354 µg/L, above the AWQS (200 ug/L). Total cyanide was present in the soil sample collected at neighboring soil boring SB-78(09), at 42.5 mg/kg. These concentrations of total cyanide correlate well. Samples collected from wells SB-84/MW-24S(09) and SB-86/MW-25S(09) were analyzed for PCBs because they were relatively close to the EPA cleanup along Schermerhorn Creek. PCBs were not detected at SB-86/MW-25S(09). They were present at SB-84/MW-24S(09), closest to the PCB cleanup area, at 20.9 µg/L.

5.4.3 OU2 South Deep Overburden Groundwater Results

Deep wells SB-30/MW-12D(08), SB-35/MW-13D(08), and SB-43/MW-14D(08) are located on the west side of Broadway, downgradient of the OU1 source area. Each well was installed in a boring that contained physical impacts including NAPL (Figure 16). The groundwater quality at each well reflects these conditions, as BTEX and PAH concentrations above the AWQS are present in all three.

Samples collected from deep wells farther to the west and south (perimeter wells) in OU2 South (SB-61/MW-17D(09), SB-66/MW-18D(09), SB-70/MW-19D(09), SB-85/MW-24D(09), and SB-87/MW-25D(09)) generally contained organic compounds at concentrations below the AWQS. Only well SB-85/MW-24D(09) contained 1.2 µg/L of benzene (the AWQS for benzene is 1.0 µg/L) and 1,2,4-trichlorobenzene at 39 µg/L (the AWQS is 5 µg/L). MW-25D(09) contained cis-1,2-dichloroethene at 6 µg/L (the AWQS is 5 µg/L). 1,2,4-trichlorobenzene and cis-1,2-dichloroethene are chlorinated compounds and are not MGP-related. SB-85/MW-24D(09) is downgradient of the former junk shop and junkyard.

Iron, manganese, and sodium were commonly found in all the deep wells. These metals are often naturally occurring in groundwater. Magnesium was present in a few of the deep groundwater samples, slightly higher than the AWQS of 35,000 µg/L.

As mentioned above, arsenic was present in samples collected from the shallow wells that are mated with SB-61/MW-17D(09), SB-66/MW-18D(09), and SB-70/MW-19D(09). Arsenic, however, was not detected in the deep groundwater.

Total cyanide was not detected in any of the deep groundwater samples above the AWQS of 200 µg/L. PCBs were either not detected in the OU2 South deep wells, or PCB samples were not collected from them.

5.4.4 Groundwater Summary

Groundwater flow is generally east to west/southwest (refer to Figures 10 and 11). Both shallow and deep groundwater downgradient of source areas in OU1 and OU2 North exhibit the greatest chemical impacts. Chemical impacts decline to non-detectable concentrations as groundwater flows to the west and south. Impacts also decline with depth and are apparently limited to soils above the till unit.

Groundwater impacts have been delineated both vertically and horizontally, except at the SB-125/MW-27S(10) location. This is further discussed below.

5.5 Postage Stamp and Associated Area

The investigation at the Postage Stamp and associated area was designed to:

- Better characterize and delineate MGP and other impacts.
- Assess the potential significance of the aboveground vault.
- Evaluate subsurface soil quality beneath the Coal Pockets building slab.
- Support a Feasibility Study.

It is discussed separately from the rest of OU2 to facilitate development of the feasibility study.

Physical impacts were generally contained in the Postage Stamp and southwest quadrant of the 2011 borings grid (Figure 20). Tiny tar stringers or tar coated wood fragments were observed in ten borings at depths between 10 and 18 feet bgs in fill. Hardened tar was observed in three borings; SB-135(11), SB-160(11), and SB-163(11). Suspected petroleum-related impacts were observed in twelve borings, five of which were in the southwest quadrant. No purifier wastes were observed.

The Commercial SCOs for BTEX (Figure 17) were exceeded at just one boring, SB-136(11), in samples collected between 10 and 15 feet below ground. Tar was present there and it generated the highest PID readings (maximum of 563 parts per million). BTEX compounds were not detected above Commercial SCOs in other borings in the Postage Stamp and associated area.

5.5.1 Surface Soil

Thirty-nine surface soil samples (and two blind duplicate samples) were collected from 0.0 to 2.0 inches bgs in the Postage Stamp and associated area, as shown in Figure 4. The samples were analyzed for PAHs, PCBs, and total and free cyanide. The results are presented in Table 9 and Figures 17, 18, and 19.

5.5.1.1 PAHs

The heavier molecular weight PAHs - benz[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, benzo[k]fluoranthene, chrysene, dibenz[a,h]anthracene, and indeno[1,2,3-cd]pyrene were commonly found in surface soil samples. Twenty-four samples contained PAHs – primarily benz[a]pyrene – at concentrations higher than the Commercial SCOs. The Commercial SCO for benz[a]pyrene is 1 mg/kg.

The highest concentration of total PAHs detected in surface soil was 130.2 mg/kg from sample SS-154(11) located west of the retaining wall near the property boundary and railroad (Figure 17). Empty, old, plastic oil containers and metal paint cans are lying on the ground in this area (see photograph below).



Discarded cans and trash on the railroad embankment near the Postage Stamp

5.5.1.2 PCBs

PCBs were detected in thirty-four of the surface soil samples. Nine samples contained concentrations higher than the Commercial SCO for total PCBs of 1 mg/kg (Figure 18). Those in excess of the SCO were scattered, roughly around the perimeter of the Postage Stamp and associated area.

5.5.1.3 Total Cyanide and Free Cyanide

Total cyanide was detected in sixteen surface soil samples. Twelve of these samples contained total cyanide at concentrations less than the Commercial SCO of 27 mg/kg. All four samples (SS-154(11), SS-155(11), SS-156(11) and SS-162(11)) with total cyanide higher than 27 mg/kg were located close to and parallel with the railroad tracks (Figure 19). The concentrations ranged between 52 and 101 mg/kg.

Free cyanide was detected in four surface soil samples. SS-134(11) contained 1.3 mg/kg, SS-136(11) contained 0.79 J mg/kg, SS-138(11) contained 0.86J mg/kg, and SS-143(11) contained 0.81J mg/kg. These locations are close to Van Guysling Avenue.

5.5.2 Subsurface Soil

5.5.2.1 BTEX

Forty-two soil borings were installed in the Postage Stamp and associated area. Relatively few (twenty-seven) subsurface soil samples contained detectable BTEX compounds. Those that did were a minimum of eight feet bgs and most were deeper. Only two of them (SB-136(11) 10-15 and SB-136(11)B 10-11) contained benzene at concentrations above the Commercial SCO of 44 mg/kg.

5.5.2.2 Polycyclic Aromatic Hydrocarbons

Many subsurface soil samples in the Postage Stamp and associated area contained PAH concentrations that exceeded the Commercial SCOs (Table 10). Twenty-eight borings produced forty-nine samples that contained PAH compounds in excess of the associated Commercial SCOs. The borings and sample depths are summarized below.

SB-128(11) 3-3.5 and 7.5-10	SB-130(11) 3-3.5 and 9-10	SB-131(11) 12.7-13.3
SB-133(11) 3-3.5	SB-134(11) 8-10	SB-135(11) 2.75-3, 7.5-9, and 10-12
SB-136(11) 10-15 and B 10-11	SB-138(11) 5-10 and 15-16	SB-139(11) 3-3.5, 8.5-10, and 10-11.5
SB-140(11) 8-10 and 11.3-12.3	SB-141(11) 11-12.5	SB-142(11) 3-3.5 and 5.5-10
SB-143(11) 2-4 and 7.75-9.5	SB-145(11) 12-12.5	SB-146(11) 13.5-14.5
SB-149(11) 3-3.2	SB-150(11) 3-3.5	SB-152(11) 6-7
SB-153(11) 3-3.5	SB-156(11) 3-3.5, 5-6.5, and 23.3-24	SB-158(11) 3-5, 8-9, 10.8-12.4, and 16.5-17.5
SB-159(11) 3-3.5 and 7.75-9.75	SB-160(11) 3-5 and 8-9.5	SB-161(11) 3-5 and 11.75-13
SB-162(11) 2.75-4 and 16.75-18	SB-166(11) 3-5 and 8-10	SB-167(11) 3-5
SB-168(11) 10.5-12		

The PAH compounds most commonly found at concentrations above the Commercial SCOs were the heavier molecular weight PAHs - benz[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, benzo[k]fluoranthene, chrysene, dibenz[a,h]anthracene, and indeno[1,2,3-cd]pyrene.

PAH concentrations were above 500 mg/kg in two shallow subsurface samples; SB-135(11) 2.75-3 collected above a layer of hardened tar and SB-143(11) 2-4 where no physical impacts were observed (Figure 17).

PAH concentrations were above 500 mg/kg in eighteen samples collected from the twelve borings listed below. These borings cover a range of ground surface elevations (as they proceed from Van Guysling Avenue toward the railroad). There is an approximate 10-foot difference in elevation (from 209.22 feet to 219.35 feet). The salient point is that most of the highest analytical concentrations (and physical impacts) are present at similar elevations (roughly 195 to 200 feet, NAVD 88).

SB-130(11)	SB-139(11)	SB-145(11)
SB-131(11)	SB-140(11)	SB-156(11)
SB-135(11)	SB-141(11)	SB-162(11)
SB-136(11)	SB-143(11)	SB-168(11)

Four samples collected between 10 and 15 feet below ground at boring SB-136(11) had concentrations of PAHs between 3,195 and 8,838 mg/kg. The highest total PAH concentration was 9,445 mg/kg in sample SB-145(11) 12-12.5 collected from soil impacted with sheen. The deepest sample that contained PAH concentrations above 500 mg/kg was collected at boring SB-156(11) between 23.3 and 24 feet below ground near the property boundary. A photograph of the impacted soil is provided below.



MGP-impacted interval at soil boring SB-156(11)

5.5.2.3 Polychlorinated Biphenyls

PCB concentrations above the Commercial SCO of 1 mg/kg in shallow subsurface soil (between 3 and 5 feet) were widespread in the Postage Stamp and the associated area. Concentrations ranged between 1.1 mg/kg (SB-150(11) 3-3.5) and 590 mg/kg (SB-153(11) 3-3.5). PCBs were not detected above the SCO deeper than 7 feet. PCBs are not a by-product of gas manufacturing. Their source could be related to the nearby PCB clean-up or the former junk yard.

5.5.2.4 Cyanide

Seventeen subsurface soil samples collected between 3 and 12.3 feet below ground from fourteen borings (listed below) contained concentrations of total cyanide above the SCO of 27 mg/kg. Cyanide concentrations in these samples ranged from 28.5 to 233 mg/kg.

SB-130(11)	SB-138(11)	SB-155(11)	SB-158(11)	SB-162(11)
SB-135(11)	SB-139(11)	SB-156(11)	SB-159(11)	SB-168(11)
SB-136(11)	SB-140(11)	SB-157(11)	SB-161(11)	

Elevated concentrations of cyanide were not necessarily coincidental with observed MGP-impacts. A high concentration (204 mg/kg) of cyanide was detected in sample SB-155(11) 8-10 from soil where no MGP-physical impacts were apparent.

Free cyanide was detected in fifteen borings and thirty-five samples (Figure 19). All concentrations were estimates and ranged from 0.66 mg/kg to 2.3 mg/kg.

5.5.2.5 Forensics

The origin of some hydrocarbon impacts in the southern portion of the Postage Stamp and associated area was uncertain, based primarily on the odors that were detected. A former lubricating oil manufacturer had operated nearby at one time; it was suspect as a potential source of non-MGP hydrocarbons.

META Environmental reviewed gas chromatographs and mass spectrometry results from samples whose odors were apparently hydrocarbon-related, but not clearly MGP-related. META evaluated whether the hydrocarbons detected could be defined as principally pyrogenic (derived from coal), principally petrogenic (derived from petroleum), high molecular weight PAHs, or urban background (summarized below). META concluded the samples should be categorized as shown below.

Principally Pyrogenic (Weathered Tar)	Principally Petrogenic (Weathered Petroleum)	High molecular weight PAHs	Urban Background
SB-135(11)(10-12) SB-136(11)(10-11), SB-136(11)(15-16) and a duplicate SB-140(11)(11.3-12.3)	SB-149(11)(8-10) SB-158(11)(10.8-12.4)* SB-159(11)(9.75-10)	SB-161(11)(11-11.75)*	SB-153(11)(10-10.75) SB-159(11)(11-15)

*Sample SB-158(11)(10.8-12.4) contained a mixture of weathered fuel oil and high molecular weight PAHs at concentrations above site-specific variability of tarry materials. Sample SB-161(11)(11-11.75) contained high molecular weight PAHs in a similar pattern as SB-158(11)(10.8-12.4).

The four principally pyrogenic samples categorized as weathered tar were collected from borings within the Postage Stamp where impacts were characterized as petroleum-like. Based on META's analysis it appears that these impacts are likely to be MGP-related.

The other (petrogenic, high molecular weight PAHs, and urban background) six samples were collected from borings located in the associated area where impacts were described as petroleum-related. These samples were categorized as weathered petroleum, containing high molecular weight PAHs. The sample locations are cross-gradient of the former lubricating oil maker and the former junk yard.

The complete META report is provided in Appendix G.

5.5.2.6 Subsurface Soil Beneath the Coal Pockets Building Slab

Two holes were jack-hammered through the slab when it was exposed in test pits TP-1(11) and TP-2(11). Soil borings (SB-163(11) and SB-164(11)) were advanced through the holes in the slab after the test pits were restored.

No physical impacts were observed aside from an approximately 3-inch piece of hardened tar 6 feet below ground in boring SB-163(11). This piece of tar was from backfilled spoils and was not beneath the slab based on the depth it was found. Four analytical samples (SB-163(11) 10 - 11.75, SB-163(11) 15.5 - 17.5 SB-164(11) 8 – 10 SB-164(11) 19 – 20) were collected from these borings below the slab and deeper. None of the compounds detected in any of the samples exceeded the Commercial SCOs for BTEX, PAHs, PCBs, or cyanides.

5.5.2.7 Position Paper

GEI assisted National Grid with development of a Position Paper that explains how some impacts at the Postage Stamp and associated area are not a by-product of MGP processes because they do not qualify as "existing" contaminantion and are not co-migled with MGP impacts. The position paper is provided in Appendix H (to be appended after NYSDEC review).

5.5.3 Groundwater

Groundwater elevation measurements were collected from the wells shown on Figure 21. The elevations are consistent with previous findings that shallow groundwater flow is west/southwest toward Schermerhorn Creek.

Shallow groundwater in OU2 North at GP/CTM-9(06) is not impacted with BTEX, PAHs, or PCBs. Total cyanide was present in the sample at 1530 ug/l, well above the AWQS of 200 ug/l.

Samples collected from three wells (SB-133/MW-28S(11), GP/CTM-23(08), and SB-125/MW-27S(10)) within the Postage Stamp and associated area contained concentrations of BTEX and PAH compounds above the AWQS. Total BTEX concentrations ranged from 73.1 to 309 ug/L. Total PAH concentrations ranged from 113.89 to 347.6 ug/L. PCBs were not detected in the samples from these wells. Total cyanide was present above the AWQS of 200 ug/l in samples collected from SB-133/MW-28S(11) and GP/CTM-23(08), at concentrations of 297 ug/l and 767 ug/l, respectively. PCBs and free cyanide were not detected in any of these three wells.

Two wells sampled to the south of this area (SB-86/MW-25S(09) and SB-165/MW-29S(11)) did not contain detectable concentrations of BTEX and PAHs.

PCBs were detected at 0.43 ug/l in SB-86/MW-25S(09). PCBs were not detected in SB-165/MW-29S(11). The NYSDEC "standard" for PCBs in groundwater is 0.09 ug/l.
Total cyanide was detected in SB-86/MW-25S(09) at 56 ug/l, well below the AWQS of 200. In well SB-165/MW-29S(11)), total cyanide was present at 17.6 ug/l. Free cyanide was not detected in either well sample.

5.6 Soil Vapor

The SV7(08) soil vapor sample location is shown on Figure 13, near the northeast corner of OU2 South in between 318 and 330 Broadway. The sample was collected by AECOM in 2008 at 8.5 feet bgs at a location (SB-43/MW-14D(08)) where a hydrocarbon odor was observed at 35 feet bgs and NAPL was observed between 39.5 and 45 bgs. The analytical results are presented in Appendix H, in a letter to the NYSDEC dated February 20, 2009.

Numerous VOCs were detected in this soil vapor sample. However, three compounds that are strongly indicative of MGP-related soil vapor - indene, indane, and naphthalene – were not detected at all. Two other compounds (heptanes and cyclohexane) that are more strongly associated with gasoline were detected.

NYSDEC requested that additional soil vapor data be generated in OU2 South and sampling was conducted in February 2012. Two temporary soil vapor sample pairs [SV12(12)A and SV12(12)B; SV13(12)A and SV13(12)B] were installed approximately 2 ("A") and 4 ("B") feet bgs, or 1 and 3 feet above the apparent water table (~5 feet bgs), and sampled.

Samples SV12(12)A, SV12(12)B, and a duplicate were collected in the 318 Broadway parking lot, on the south side of the building. These samples were collected close to SV7(08) and SB-43/MW-14D(08). SV13(12)A and SV13(12)B were collected on the north side of 318 Broadway adjacent to Clinton Street Extension.

For the detected compounds, SV12(12)A results were generally similar (within an order of magnitude) to SV7(08) results. More compounds were detected in SV12(12)B than SV7(08); however, the method detection limits were generally lower in 2012. Concentrations of VOCs were highest in soil vapor samples collected 2 feet bgs (SV12(12)A and SV13(12)A).

While soil vapor data cannot be directly compared to indoor air data (they are different media), some value is nonetheless present in a comparison with indoor air background concentrations. At both soil vapor sample locations, the deeper "B" samples have generally lower VOC concentrations than are "typical" in indoor air, based on A NYSDOH study (2006). In other words, the deeper soil vapor VOC concentrations tend to be lower than the lowest VOC concentrations found in indoor air that is not MGP-impacted. The results of outdoor air sample AMB2(12) were also generally lower than the NYSDOH outdoor air background values.

Overall, sample results suggest the source of soil vapor impacts is shallow subsurface soil, not deeper (4 feet bgs) soils that are closest to MGP impacts. MGP impacts in OU2 at 318 Broadway are not apparent in soil vapor results.

The May 2012 soil vapor letter report to NYSDEC is provided in Appendix H.

5.7 Air Monitoring

Dust and VOC concentrations were continually monitored and recorded at upwind and downwind locations, per the approved-CAMP and as required by NYSDOH, during all intrusive field events. 15-minute average concentrations of VOCs and dust at upwind and downwind locations were well below action levels during all intrusive work.

On occasion dust concentrations were elevated, caused by nearby road maintenance operations (ie. street sweeper), but the concentrations remained below the action level. Daily checks of the monitoring equipment during the 2011 field work verified that VOC and dust levels did not exceed action levels, but the monitoring data were lost during download.

Copies of the air monitoring reports that were provided to NYSDEC during field investigations are provided in Appendix I.

5.8 Summary of Nature and Extent of Contamination

Subsurface physical impacts in OU2 North and OU2 South are most apparent along both sides of the Clinton Street Extension, the western side of Broadway across from the OU1 source area, and at the Postage Stamp and associated area.

NAPL was observed as deep as 45 feet bgs in OU2 South on the east side of Broadway. OU1 is the source of these impacts. The related soil and groundwater impacts in OU2 South are terminated well before the till unit that has been observed at approximately 70 to 77 feet below grade. The subsurface soil physical impacts have been delineated. The 312 Broadway impacts in OU2 North were addressed during the IRM in 2012.

Hydrocarbon impacts in shallow and deep overburden groundwater have been delineated, except for shallow groundwater at well SB-125/MW27S(10). The assumption is that impacts at this well are reduced to non-detect levels as it continues flowing under railroad tracks or as it discharges to Schermerhorn Creek. Otherwise, overburden groundwater impacts are reduced as they flow toward Schermerhorn Creek. Organic compounds are very low or non-detectable at wells SB-60/MW-17S(09), SB-61/MW-17D(09), SB-65/MW-18S(09), and SB-66/MW-18D(09) to the south; SB-84/MW-24S(09), SB-86/MW-25S(09), SB-87/MW-25D(09), and SB-165/MW-29S(11) to the west; and SB-95/MW-26D(09) to the north.

Soil vapor impacts are apparent at SV7(08). However, VOC compounds that are strongly indicative of an MGP source were not detected at all. This suggests that non-MGP petroleum products were the most likely sources of VOCs found in the soil vapor sample. Additional soil vapor sampling was conducted in February 2012 and the results will be provided separately to NYSDEC.

6. Qualitative Human Health Exposure Assessment

This section addresses the qualitative risks that may be posed to human receptors by Constituents of Potential Concern (COPCs) detected in surface soil, subsurface soil, groundwater, and soil vapor in OU2 North (including the Postage Stamp) and OU2 South at concentrations above the unrestricted SCOs and AWQSs. This conservative comparison to unrestricted SCOs is presented at the request of NYSDEC and NYSDOH.

The 312 Broadway parking lot area of OU2 North is not discussed because an IRM was completed there in 2012. The IRM mitigated most exposure concerns there.

The Postage Stamp portion of OU2 North and OU2 South are also evaluated with respect to the Commercial SCOs. This comparison is most relevant given the current commercial use of these areas. It is based on validated analytical data acquired by GEI in 2009, 2010, and 2011.

Tables 7 through 11 present the analytical results for compounds that are above criteria values in subsurface soil and groundwater. The soil vapor analytical results are provided in Appendix H.

6.1 Exposure Pathways

An exposure pathway describes the means by which a potential receptor may be exposed to contaminants originating from a site. Assessment of potential exposure pathways includes the following five elements (NYSDEC DER-10, 2010):

(1) A contaminant source
(2) Contaminant release and transport mechanisms
(3) A point of exposure
(4) A route of exposure
(5) A receptor population

The NYSDEC and NYSDOH consider an exposure pathway complete when all five elements are present. An exposure pathway is incomplete and can be eliminated from further evaluation when any one of the five elements has not existed in the past, does not exist in the present, and will never exist in the future (NYSDEC, 2010).

The OU2 North Postage Stamp consists of a gravel lot and an elevated vegetated bank at the western boundary. Much of OU2 South is covered by impervious surfaces including buildings, concrete drives, sidewalks, and asphalt parking. Small areas along Broadway are grassed. A gravel parking lot is present at the western boundary of OU2 South (south of the Postage Stamp).

Based on these conditions, there is limited potential for visitors to come in contact with the soils at the Site.

6.2 Surface Soil

The heavier molecular weight PAHs - benz[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, benzo[k]fluoranthene, chrysene, dibenz[a,h]anthracene, and indeno[1,2,3-cd]pyrene - were present at concentrations above the unrestricted SCOs in twenty-nine samples. PCBs were present in 36 samples at concentrations above the unrestricted SCOs. Four samples contained free cyanide and four samples contained total cyanide at levels higher than the unrestricted SCOs.

A total of ten compounds exceed the unrestricted use concentrations (benz[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, benzo[k]fluoranthene, chrysene, dibenz[a,h]anthracene, and indeno[1,2,3-cd]pyrene, PCBs, free and total cyanide).

The potential receptors include the Adult Commercial Worker, Adult Utility Worker, Visitor, and Trespasser under current and future expected use in these areas. The potential pathways are ingestion, dermal contact, and inhalation. Potentially complete exposure pathways exist for these compounds.

6.3 Subsurface Soil

The following compounds were detected in subsurface soil at concentrations above the Unrestricted SCOs:

Volatile Compounds	Dibenz(a,h)anthracene
Benzene	Fluoranthene
Ethylbenzene	Fluorene
Toluene	Indeno(1,2,3-cd)pyrene
Xylenes	Naphthalene
Acetone	Phenanthrene
1,2-dichloroethane	Pyrene
Semivolatile Compounds	Dibenzofuran
Acenaphthene	4-methylphenol
Acenaphthylene	2-methylphenol
Anthracene	**Inorganic/Metals**
Benz(a)anthracene	Total PCBs
Benzo(a)pyrene	Total cyanide
Benz(b)fluoranthene	Zinc
Benzo[g,h,i]perylene	Lead
Benz(k)fluoranthene	Iron
Chrysene	Copper

Potentially complete exposure pathways exist for these compounds. The potential pathways are ingestion, dermal contact, and inhalation. The potential receptors include the Adult Commercial Worker and Adult Utility Worker under current and future expected use in OU2 South. Adults, children, and trespassers are not expected to conduct digging that would allow for exposure.

Potentially complete pathways are most likely in the northern portion of OU2 South close to the Clinton Street Extension and in the Postage Stamp and its associated area. In the southern portion of OU2 South, most impacts are below the water table (8-10 feet bgs), which would limit most types of excavation.

6.4 Groundwater

The following compounds were detected in groundwater at concentrations above the AWQS:

Volatile Compounds	Fluorene
Benzene	Indeno(1,2,3-cd)pyrene
Ethylbenzene	Naphthalene
Toluene	Phenanthrene
Xylenes	Pyrene
Acetone	1,2-dichlorobenzene
1,2-dichloroethane	1,3-dichlorobenzene
Isopropylbenzene	1,4-dichlorobenzene
Chlorobenzene	1,2,4-trichlorobenzene
Chloroform	2,4-dimethylphenol
Cis,1-2-dichloroethene	2-methylphenol
Styrene	2,4-dichlorophenol
Semivolatile Compounds	4-methylphenol
Acenaphthene	Dibenzofuran
Acenaphthylene	**Inorganic/Metals**
Anthracene	Total cyanide
Benz(a)anthracene	Arsenic
Benzo(a)pyrene	Magnesium
Benz(b)fluoranthene	Iron
Benzo[g,h,i]perylene	Manganese
Benz(k)fluoranthene	Sodium
Chrysene	Thallium
Dibenz(a,h)anthracene	Barium
Fluoranthene	

Potential groundwater receptors include the Adult Commercial Worker and the Adult Utility Worker. There are potentially complete pathways for these compounds via ingestion, dermal contact, and inhalation. An actual complete pathway would be triggered by intrusive subsurface

activity, such as excavation. Groundwater at the Site is approximately 6 to 11 feet below grade, limiting the potential for contact.

Deliberate ingestion of groundwater in OU2 North and South is not considered a potential exposure pathway for any current or future receptor. Public water is supplied to the area by the City of Schenectady. The City Environmental Health Department has stated there are no private wells nearby. The nearest known wells are at the water treatment plant in Rotterdam, approximately 3 miles to the northwest. The commercial setting and infrastructure minimizes the likelihood that groundwater will be a future source of drinking water.

6.5 Soil Vapor

A potentially complete exposure pathway to numerous volatile organic compounds (Appendix H, samples SV7(08), SV12(12)A and SV12(12)B, and SV13(12)A and SV13(12)B) in soil vapor exists for Adult Utility and Construction Workers if there is intrusive activity such as excavation.

6.6 QHHEA Discussion

Based on the unrestricted SCOs (for surface and subsurface soil), the AWQS for groundwater, and the presence of volatile compounds in soil vapor at concentrations above "background", there are potentially complete exposure pathways for all three media.

A total of ten compounds exceeded the unrestricted use concentrations (benz[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, benzo[k]fluoranthene, chrysene, dibenz[a,h]anthracene, and indeno[1,2,3-cd]pyrene, PCBs, free and total cyanide) for surface soil. When compared to the Commercial SCOs for surface soils, two of the PAHs (benzo[k]fluoranthene and chrysene) drop out of consideration. However, potential exposure for adults and trespassers remain.

There were 31 compounds or compound groups (total PCBs) in subsurface soil with concentrations higher than the Unrestricted SCOs. However, the current and expected future use in OU2 North and South is Commercial. When comparing the concentrations of chemicals detected in subsurface soils the Commercial SCOs, the number of COPCs is reduced to the 18 compounds identified below.

Semivolatile Compounds	Benzene
Benzo[k]fluoranthene	Anthracene
Benzo(a)pyrene	Acenaphthene
Dibenz(a,h)anthracene	Fluoranthene
Naphthalene	Fluorene
Phenanthrene	Pyrene
Benz(a)anthracene	Dibenzofuran
Benz(b)fluoranthene	**Inorganic/Metals**
Chrysene	Total PCBs
Indeno(1,2,3-cd)pyrene	Total cyanide

Most of the exceedances are for soils at depth. As previously discussed, this is a developed site with surfaces covered with buildings, concrete, asphalt or gravel. These potentially complete exposure pathways require intrusive subsurface activity such as excavation. These activities can be managed by the current owners to prevent exposures.

Potentially complete exposure pathways to VOCs, SVOCs, total cyanide and metals exist for groundwater via ingestion, dermal contact, and inhalation at the Site for the Adult Commercial Worker and Adult Utility Worker. However, these potentially complete exposure pathways must be triggered by intrusive subsurface activity, such as excavation. Groundwater at the Site is approximately 6 to 11 feet below grade, limiting the potential for contact. In addition, iron, magnesium, manganese, sodium, and thallium detected in the groundwater in OU2 South are frequently naturally occurring compounds.

Dilution and dispersion of soil vapor migrating from soil to air greatly reduces the concentrations of vapors, minimizing human health exposures. Many of the analyzed VOCs were not detected. Although these concentrations in soil vapor are slightly higher than some of the background indoor air concentrations, these concentrations are well below occupational exposure standards. As such, soil vapor poses minimal risk at the Site.

As a result of the potential for complete exposure pathways to groundwater, surface and subsurface soil, and soil vapor, any future intrusive activity should evaluate and address as necessary the identified pathways to COPCs for Site workers. Future excavation can be safely managed by the property owners within OU2 North and South to address potential exposure pathways for the construction and utility worker to COPC’s in surface and subsurface soil, and groundwater.

7. Fish and Wildlife Resources Impact Assessment

In 2007 (C.T. Male) reported that the NYSDEC had determined that a Fish and Wildlife Analysis was not required for OU2 North because of its use as a paved parking lot, its location, and the lack of observable wildlife resources.

OU2 North and OU2 South are located in a highly urbanized setting. To the north is a parking lot and parking garage. To the east is multi-story housing. To the south are more commercial operations and paved areas. To the west is an elevated railroad over 100 years old, with a junk yard to the west of it.

Application of the NYSDEC Environmental Resource Mapper (Figure 22) demonstrates there are no state-regulated surface water bodies, freshwater wetlands, or significant ecological communities within 0.5 miles. Schermerhorn Creek, a partially culverted stream runs along the southeast corner of the Site. This waterbody is not recognized on federal or state inventories.

Shallow groundwater apparently discharges to Schermerhorn Creek. The wells closest to the exposed portion of the creek are free of organic impacts; deep groundwater passes below the creek.

There is little or no habitat for flora or fauna at or near OU2 – and little fauna aside from transient urban species. The lack of habitat is not a function of contamination; it is a function of heavy development in and around OU2. Therefore, no ecological assessment is necessary for OU2 South.

8. Conceptual Site Model

The Conceptual Site Model (CSM) provides a holistic framework for the physical, chemical and contaminant distribution at the Site. It serves as a basis for future decisions regarding investigation or remediation. Typically, a CSM identifies sources of contamination, migration pathways stemming from the sources, human or environmental receptors, and potential constraints.

Source(s)

No documentation identifying the source of tar in OU2 North has been found, but OU1 is the assumed source. OU1 is also the source of DNAPL in OU2 South along the west side of Broadway.

PCBs are widely present in the shallow subsurface at the Postage Stamp and associated area. The former railroad tunnel (now the vault) was initially identified as a potential source for PCBs because it contained oily residues, and PCBs in the earthern floor of the vault. However, the concentrations of PCBs at the Postage Stamp and associated area are higher. Therefore, the vault does not appear to be the source of PCBs. The former Buff and Buff scrapyard is a likely source, given the EPA PCB cleanup conducted there in 2009.

Total and free cyanide are present in both soil and groundwater in OU2 North and OU2 south. The cyanide source is uncertain. It may be related to road salt stored in both OU2 North and OU2 South. Cyanide can be related to MGP purifier waste, but none has been observed at the Site.

Migration Pathways

Most tar recently observed in OU2 North is very viscous or hardened and does not currently appear to have mobility. But it appears there was past subsurface migration from OU2 North into OU2 South. The locations and elevations of MGP impacts are consistent with south/southwest migration (and groundwater flow direction) beneath the Clinton Street Extension and towards the Postage Stamp and associated area.

A lean clay unit was observed in a number of borings in OU2 North and the northern portion of OU2 South. This unit may have influenced active NAPL movement in the past.

The depth of most MGP impacts in OU2 North range from about 6 to 15 feet bgs. These depths suggest it is the source of subsurface soil and groundwater impacts between 10 and 24 feet bgs on the south side of the Clinton Street Extension.

Subsurface soil has been a migration pathway for NAPL from OU1 west into OU2 South beneath Broadway. The migration appears to be on-going because coal tar DNAPL is periodically removed from the wells in OU2 South on the west side of Broadway and they continue to recharge with coal tar. Given the apparent mobility of coal tar in this part of OU2 South, it is a contributing source area for the rest of OU2 South.

The extent of coal tar into OU2 South is limited, however. No evidence of coal tar has been found in the OU2 South subsurface more than 150 feet west of Broadway. The depth to coal tar on the west side of Broadway ranges from approximately 29 to 45 feet bgs. Downgradient physical impacts (to the west) are consistent with these depths – to almost 43 feet bgs at SB-112(10).

Groundwater is a potential migration pathway from the Postage Stamp and associated area to the south/southwest.

The extent of soil and groundwater physical and chemical impacts appears to be limited to within the boundaries of OU2 North and South, except just south of the Postage Stamp, where impacted subsurface soil and groundwater is present near the railroad.

Ecological Receptors

There are no apparent ecological receptors.

Human Receptors

As discussed in Section 6, there are several potential human receptors for compounds detected in surface soil, subsurface soil, groundwater, and soil vapor. The potential receptors for surface soil include adults and trespassers. The potential receptors for subsurface soils, groundwater, and soil vapor are construction and utility workers – those with reason to perform intrusive activities such as excavation that might expose impacted soils or groundwater.

9. Conclusions and Recommendations

9.1 OU2 North

The Postage Stamp and 312 Broadway impacts in OU2 North have been the subject of several environmental investigations since 2004. Subsurface soil and groundwater have been adequately characterized there. The impacts at 312 Broadway were addressed with an IRM, which is being followed by appropriate institutional controls.

While migration of NAPL from OU2 North to OU2 South probably occurred in the past, it is not possible to determine if there is on-going migration. The *potential* for migration of NAPL from OU2 North into OU2 South was reduced by the IRM completed in September 2012.

A subsurface steel pipe containing a limited amount of tar was found in the subsurface at 312 Broadway during the IRM. The pipe appeared to originate from a former gas holder foundation in OU1. This pipe was electrically traced to the intersection of Van Guysling Avenue and the Clinton Street extension, where the signal was lost. Additional evaluation of the pipe will be conducted to determine whether it may extend into the Postage Stamp or associated area.

Total and free cyanide and PCBs were detected in OU2 North and the Postage Stamp and associated area. PCBs are not a by-product of gas manufacturing and were not commercially available until after gas making at the Site had ceased. Total cyanide may be associated with gas purification processes but no purifier wastes have been observed in OU2 North or OU2 South. The weight of evidence indicates that road salt storage is the most likely source. Road salt is commonly augmented by anti-caking agents that contain cyanide compounds (ferric ferrocyanide).

There is no evidence of ecological risk and the potential for human exposure is low because the area is generally paved and groundwater is not used.

A Feasibility Study for the Postage Stamp and OU2 South will be developed after this report is accepted by the NYSDEC.

9.2 OU2 South

The northern portion of OU2 South contains some physical impacts (sheen and odor) in subsurface soil and groundwater quality has been affected by impacted groundwater flowing from OU2 North.

Millimeter scale coal tar lenses were observed at the Postage Stamp. These may be contiguous with OU2 North, north of the Clinton Street Extension. Some non-MGP hydrocarbon impacts are also present in the area associated with the Postage Stamp.

Physical impacts in the northern portion of OU2 South are limited to approximately 24 feet bgs or shallower, and most are below the water table. Much of this area is covered with buildings and paved parking areas.

The southern portion of OU2 South is affected by on-going migration of NAPL from OU1 beneath Broadway. NAPL is periodically removed from the wells on the west side of Broadway in OU2 South, exerting some control on the extent of on-going migration. The NAPL extent is limited to approximately 150 feet into OU2 South. Organic compounds are non-detectable before groundwater flows beyond the south and west perimeters of OU2 South.

9.3 Recommendations

Additional evaluation of the steel pipe observed at 312 Broadway should be conducted, at which point the remedial investigation of OU2 will be complete. Development of a Feasibility Study for OU2 South should begin, with concurrent evaluation of the steel pipe.

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Tables

Table 1
Soil Boring/Monitoring Well Location Coordinates
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample ID	Company	Operable Unit	Easting	Northing	Ground Surface Elevation	Top of Casing
CTMMW-1(04)	CT Male	OU2 North	641110.855	1449235.4310	225.72	225.72
CTMMW-2(04)	CT Male	OU2 North	641053.4741	1449260.6400	NA	NA
CTMMW-3(04)	CT Male	OU2 North	641076.7312	1449314.7810	NA	NA
CTMMW-4(04)	CT Male	OU2 North	641013.7464	1449444.0100	226.61	226.61
GP/CTM-1(06)	CT Male	OU2 North	641131.7649	1449291.3610	225.64	225.40
GP/CTM-2(06)	CT Male	OU2 North	641173.6531	1449384.8200	226.58	226.43
GP/CTM-3(06)	CT Male	OU2 North	641195.0607	1449481.8743	227.18	226.84
GP/CTM-4(06)	CT Male	OU2 North	641211.0267	1449547.2082	227.67	227.49
GP/CTM-5(06)	CT Male	OU2 North	641010.2992	1449313.0954	225.86	225.59
GP/CTM-6(06)	CT Male	OU2 North	641050.9464	1449406.3921	226.46	226.23
GP/CTM-7(06)	CT Male	OU2 North	641098.4429	1449515.3224	226.84	226.60
GP/CTM-8(06)	CT Male	OU2 North	641123.7506	1449585.8720	226.73	226.44
GP/CTM-9(06)	CT Male	OU2 North	640936.3449	1449406.1111	225.88	225.69
GP/CTM-10(06)	CT Male	OU2 North	640932.9411	1449489.2757	226.25	226.06
GP/CTM-14(06)	CT Male	OU2 North	641263.3554	1449339.5948	227.13	226.81
GP/CTM-15(06)	CT Male	OU2 North	641197.7121	1449207.7604	225.98	225.61
CTMSB-16(07)*	CT Male	OU2 North	640808.4694	1449373.7080	238	--
CTMSB-17(07)*	CT Male	OU2 North	640822.1926	1449368.1270	238	--
CTMSB/MW-18(07)*	CT Male	OU2 North	641002.2342	1449568.1260	226	NA
CTMSB/MW-19(07)*	CT Male	OU2 North	641117.7119	1449254.6800	225	NA
GP/CTM-20(08)	CT Male	OU2 North	640830.8367	1449333.4216	NA	--
GP/CTM-22(08)	CT Male	OU2 North	640878.03	1449308.2541	NA	--
GP/CTM-23(08)	CT Male	OU2 North	640836.5173	1449293.7058	NA	--
SB-29/MW-12(08)	AECOM	OU2 South	640994.6858	1448960.0525	226.00	225.70
SB-30/MW-12D(08)	AECOM	OU2 South	640998.2581	1448959.6436	226.04	225.75
SB-35/MW-13D(08)	AECOM	OU2 South	641039.0133	1449055.1598	225.42	224.87
SB-42/MW-14(08)	AECOM	OU2 South	641076.0527	1449131.1864	225.11	224.93
SB-43/MW-14D(08)	AECOM	OU2 South	641081.2677	1449134.8075	225.15	224.89
SB-48/MW-16D(08)	AECOM	OU2 North	641118.7779	1449233.0150	225.68	225.20
SB-60/MW-17S(09)	GEI	OU2 South	640947.8845	1448852.2944	226.29	225.99
SB-61/MW-17D(09)	GEI	OU2 South	640950.9424	1448859.4512	226.30	225.83
SB-62(09)	GEI	OU2 South	640873.2912	1448919.1511	225.62	--
SB-63(09)	GEI	OU2 South	640902.024	1448998.8295	225.99	--
SB-64(09)	GEI	OU2 South	640792.1	1448938.1821	225.79	--
SB-65/MW-18S(09)	GEI	OU2 South	640730.3043	1448798.5065	225.31	225.06
SB-66/MW-18D(09)	GEI	OU2 South	640732.1102	1448802.8868	225.13	224.90
SB-67(09)	GEI	OU2 South	640968.9404	1449018.4653	226.19	--
SB-68/MW-23D	GEI	OU2 South	640910.6338	1449085.6825	226.21	225.93
SB-69/MW-19S(09)	GEI	OU2 South	640842.1407	1449063.6491	225.48	225.16
SB-70/MW-19D(09)	GEI	OU2 South	640840.7824	1449061.1489	225.53	225.19
SB-71(09)	GEI	OU2 South	640973.9941	1449112.8878	226.65	--
SB-72(09)	GEI	OU2 South	641012.9652	1449164.9928	225.94	--
SB-73(09)	GEI	OU2 South	640941.6259	1449170.9923	226.54	--
SB-74(09)	GEI	OU2 South	640880.2088	1449142.5795	225.75	--
SB-75(09)	GEI	OU2 South	641086.7663	1449197.8776	225.16	--
SB-76/MW-21S(09)	GEI	OU2 South	641010.3593	1449217.5107	225.98	225.66
SB-77/MW-20S(09)	GEI	OU2 South	640929.0506	1449251.6804	226.17	225.94
SB-78/MW-20D(09)	GEI	OU2 South	640934.8513	1449249.0238	226.16	225.94
SB-81(09)	GEI	OU2 South	640980.6153	1448926.3246	225.96	--
SB-84/MW-24S(09)	GEI	OU2 South	640765.9318	1449106.3383	227.89	227.71
SB-85/MW-24D(09)	GEI	OU2 South	640767.8036	1449109.3971	227.82	227.61
SB-86/MW-25S(09)	GEI	OU2 South	640802.2438	1449238.1192	227.54	227.28
SB-87/MW-25D(09)	GEI	OU2 South	640802.4497	1449235.7451	227.51	227.26
SB-90(09)	GEI	OU2 South	640818.5015	1449119.6835	225.27	--
SB-91(09)	GEI	OU2 South	640842.367	1449203.1224	225.84	--
SB-92(09)	GEI	OU2 North	640992.84	1449312.5446	225.97	--

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Soil Boring/Monitoring Well Location Coordinates
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample ID	Company	Operable Unit	Easting	Northing	Ground Surface Elevation	Top of Casing
SB-93(09)	GEI	OU2 North	641077.9056	1449322.6380	225.38	--
SB-94(09)	GEI	OU2 North	641166.1435	1449345.7431	226.43	--
SB-95/MW-26D(09)	GEI	OU2 North	641042.9421	1449404.4639	226.50	226.21
SB-96(09)	GEI	OU2 North	641112.3298	1449258.5458	224.68	--
SB-97(09)	GEI	OU2 North	641105.6855	1449258.5458	225.58	--
SB-98(09)	GEI	OU2 North	641122.1724	1449287.1452	225.59	--
SB-99(09)	GEI	OU1	641246.324	1449280.1775	227.08	--
SB-100(10)	GEI	OU2 North	640974.1848	1449281.6125	226.01	--
SB-101(10)	GEI	OU2 North	640902.3678	1449336.8681	225.79	--
SB-102(10)	GEI	OU2 North	641065.2828	1449253.1079	225.75	--
SB-103(10)	GEI	OU2 North	641025.3517	1449311.0968	225.82	--
SB-104(10)	GEI	OU2 North	641026.798	1449373.7610	226.18	--
SB-105(10)	GEI	OU2 North	641026.1024	1449429.0746	226.53	--
SB-106(10)	GEI	OU2 North	641087.255	1449429.8120	226.62	--
SB-107(10)	GEI	OU2 North	641106.558	1449380.9711	226.05	--
SB-108(10)	GEI	OU2 North	641128.2557	1449338.5574	226.08	--
SB-109(10)	GEI	OU2 North	641124.0103	1449266.1858	225.49	--
SB-110(10)	GEI	OU2 South	641040.8746	1449138.3861	225.52	--
SB-111(10)	GEI	OU2 South	641002.8142	1449102.0256	227.1	--
SB-112(10)	GEI	OU2 South	640958.604	1448952.6083	226.31	--
SB-113(10)	GEI	OU2 South	641007.5779	1448990.5132	226.22	--
SB-114(10)	GEI	OU2 South	641017.1805	1449076.8695	226.23	--
SB-115(10)	GEI	OU2 South	641103.8088	1449230.7594	225.79	--
SB-116(10)	GEI	OU2 South	641124.3825	1449245.6361	225.64	--
SB-117/RW-1(10)	GEI	OU2 South	640992.817	1448951.4871	226.02	NA
SB-118(10)	GEI	OU2 North	641000.8695	1449275.4845	226.16	--
SB-119(10)	GEI	OU2 North	641111.5894	1449341.8338	225.75	--
SB-120(10)	GEI	OU2 North	641091.0398	1449378.1786	226.05	--
SB-121(10)	GEI	OU2 North	641078.4782	1449419.7483	226.29	--
SB-122(10)	GEI	OU2 North	641027.0743	1449272.5559	225.95	--
SB-123(10)	GEI	OU2 North	640978.3415	1449380.0419	226.34	--
SB-124(10)	GEI	OU2 North	640853.5003	1449320.4283	226.22	--
SB-125/MW-27S(10)	GEI	OU2 South	640786.0636	1449273.2278	228.36	227.76
SB-126(10)	GEI	OU2 North	640884.2566	1449403.1034	226.39	--
SB-127(10)	GEI	OU2 North	640821.9254	1449321.6711	225.73	--
SB-128(11)	GEI	OU2 North	640930.5431	1449361.1037	225.93	--
SB-129(11)	GEI	OU2 North	640845.1298	1449361.7977	226.11	--
SB-130(11)	GEI	OU2 North	640900.3923	1449302.4384	225.8	--
SB-131(11)	GEI	OU2 North	640878.9612	1449315.5443	225.88	--
SB-132(11)	GEI	OU2 North	640857.8398	1449328.5622	225.8	--
SB-133/MW-28S(11)	GEI	OU2 North	640836.6589	1449341.4803	226.28	225.91
SB-134(11)	GEI	OU2 North	640881.0186	1449288.7617	226.1	--
SB-135(11)	GEI	OU2 North	640865.9304	1449294.4770	226.29	--
SB-136(11)	GEI	OU2 North	640848.3035	1449301.6506	226.39	--
SB-137(11)	GEI	OU2 North	640823.3379	1449320.4026	226.01	--
SB-138(11)	GEI	OU2 South	640866.6091	1449258.1299	226.1	--
SB-139(11)	GEI	OU2 South	640851.3998	1449266.8982	226.52	--
SB-140(11)	GEI	OU2 South	640831.464	1449285.9890	226.4	--
SB-141(11)	GEI	OU2 South	640810.2349	1449298.9951	226.39	--
SB-142(11)	GEI	OU2 South	640857.673	1449240.4040	225.87	--
SB-143(11)	GEI	OU2 South	640841.1436	1449251.2054	226.4	--
SB-144(11)	GEI	OU2 South	640818.1595	1449264.7084	226.78	--
SB-145(11)	GEI	OU2 South	640797.523	1449278.9910	227.37	--
SB-146(11)	GEI	OU2 South	640847.9458	1449217.2619	225.96	--
SB-147(11)	GEI	OU2 South	640826.6764	1449230.4533	226.64	--
SB-148(11)	GEI	OU2 South	640805.276	1449243.2443	227.32	--

Table 1
Soil Boring/Monitoring Well Location Coordinates
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample ID	Company	Operable Unit	Easting	Northing	Ground Surface Elevation	Top of Casing
SB-149(11)	GEI	OU2 South	640784.004	1449256.6088	227.9	--
SB-150(11)	GEI	OU2 South	640834.8755	1449196.0185	225.93	--
SB-151(11)	GEI	OU2 South	640813.3873	1449209.0382	226.78	--
SB-152(11)	GEI	OU2 South	640792.2104	1449221.9746	227.66	--
SB-153(11)	GEI	OU2 South	640772.5577	1449237.1064	228.07	--
SB-154(11)	GEI	OU2 North	640815.033	1449354.4725	238.01	--
SB-155(11)	GEI	OU2 North	640802.7085	1449336.0415	235.82	--
SB-156(11)	GEI	OU2 South	640778.7598	1449318.2412	232.52	--
SB-157(11)	GEI	OU2 South	640778.1655	1449287.1094	228.6	--
SB-158(11)	GEI	OU2 South	640762.4017	1449269.8708	229.41	--
SB-159(11)	GEI	OU2 South	640749.6494	1449248.3923	229.41	--
SB-160(11)	GEI	OU2 South	640728.6818	1449242.0000	229.38	--
SB-161(11)	GEI	OU2 South	640744.5172	1449271.7965	230.02	--
SB-162(11)	GEI	OU2 South	640756.1596	1449293.2206	231.04	--
SB-163(11)	GEI	OU2 North	640923.7111	1449473.0225	226.23	--
SB-164(11)	GEI	OU2 North	640924.2034	1449416.3457	226	--
SB-165/MW-29S(11)	GEI	OU2 South	640712.1447	1449222.5145	229.42	229.2
SB-166(11)	GEI	OU2 South	640758.6596	1449211.0515	229.14	--
SB-167(11)	GEI	OU2 South	640781.4972	1449199.2312	227.99	--
SB-168(11)	GEI	OU2 South	640895.872	1449319.7511	225.82	--
SB-169(11)	GEI	OU2 South	640869.4241	1449328.0661	225.83	--

* - estimated

NA - Not Available

Table 2
Soil Boring/Monitoring Well Location, Analytical Sample Rationale and Summary
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample ID	Company	Operable Unit	Rationale	Total Depth (feet bgs)	Sample Depth (feet bgs)	Number of Samples	Laboratory Analyses
CTMMW-1(04)	CT Male	OU2 North	NA	NA	NA	NA	NA
CTMMW-2(04)	CT Male	OU2 North	NA	NA	NA	NA	NA
CTMMW-3(04)	CT Male	OU2 North	NA	NA	NA	NA	NA
CTMMW-4(04)	CT Male	OU2 North	NA	NA	NA	NA	NA
GP/CTM-1(06)	CT Male	OU2 North	NA	16	4-6	1	Note 1
GP/CTM-2(06)	CT Male	OU2 North	NA	14	4-6	1	Note 1
GP/CTM-3(06)	CT Male	OU2 North	NA	14	4-8	1	Note 1
GP/CTM-4(06)	CT Male	OU2 North	NA	14	4-6	1	Note 1
GP/CTM-5(06)	CT Male	OU2 North	NA	16	10-12	1	Note 1
GP/CTM-6(06)	CT Male	OU2 North	NA	15	4-6	1	Note 1
GP/CTM-7(06)	CT Male	OU2 North	NA	16	4-6	1	Note 1
GP/CTM-8(06)	CT Male	OU2 North	NA	16	4-6	1	Note 1
GP/CTM-9(06)	CT Male	OU2 North	NA	14	4-6	1	Note 1
GP/CTM-10(06)	CT Male	OU2 North	NA	15	4-6	1	Note 1
CTMSB-14(07)	CT Male	OU2 North	NA	15	4-6	1	Note 2
CTMSB-15(07)	CT Male	OU2 North	NA	15	8-12	1	Note 2
CTMSB-16(07)	CT Male	OU2 North	Assess shallow soil near above ground vault.	6	1-2 2-3	2	Note 2
CTMSB-17(07)	CT Male	OU2 North	Assess shallow soil near above ground vault.	5	1-2 2-3	2	Note 2
CTMSB/MW-18(07)	CT Male	OU2 North	Assess shallow soil at the Site.	12	2-4 10-12 (and a duplicate)	3	Note 2
CTMSB/MW-19(07)	CT Male	OU2 North	Assess shallow soil at the Site.	12	10-12 (and a duplicate)	2	Note 2

Table 2
Soil Boring/Monitoring Well Location, Analytical Sample Rationale and Summary
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample ID	Company	Operable Unit	Rationale	Total Depth (feet bgs)	Sample Depth (feet bgs)	Number of Samples	Laboratory Analyses
GP/CTM-20(08)	CT Male	OU2 North	Assess soil and groundwater at the Site.	16	6-8 (and a duplicate)	2	Note 3
GP/CTM-22(08)	CT Male	OU2 North	Assess soil and groundwater at the Site.	20	10-12	1	Note 3
GP/CTM-23(08)	CT Male	OU2 North	Assess soil and groundwater at the Site.	20	10-12	1	Note 3
SB-29/MW-12(08)	AECOM	OU2 South	Assess shallow soil and groundwater southwest of the former MGP in OU1.	15	NS	0	NS
SB-30/MW-12D(08)	AECOM	OU2 South	Assess deep soil and groundwater southwest of the former MGP in OU1.	75	41.5-43.5 (and a duplicate) 50-52.5	3	Note 4
SB-35/MW-13D(08)	AECOM	OU2 South	Assess deep soil and groundwater west of the former MGP in OU1.	64	40-41.5 45-47.5	2	Note 4
SB-42/MW-14(08)	AECOM	OU2 South	Assess shallow soil and groundwater west of the former MGP in OU1.	15	NS	0	NS
SB-43/MW-14D(08)	AECOM	OU2 South	Assess deep soil and groundwater west of the former MGP in OU1.	75	40-42.5 50-52.5	2	Note 4
SB-48/MW-16D(08)	AECOM	OU2 North	Assess deep soil and groundwater west of former Gas Holder B.	75	9-10 27.5-30	2	Note 4
SB-60/MW-17S(09)	GEI	OU2 South	Assess shallow soil and groundwater south of residuals observed at SB-29(08) and SB-30(08).	20.5	NS	0	NS
SB-61/MW-17D(09)	GEI	OU2 South	Assess deep soil and groundwater south of residuals observed at SB-29(08) and SB-30(08).	75	11-12 72-73	2	Note 4
SB-62(09)	GEI	OU2 South	Assess the horizontal and vertical extent of residuals observed at SB-29(08) and SB-30(08).	75	8-9 73.5-74.5	2	Note 4
SB-63(09)	GEI	OU2 South	As above.	85	8-9 74-75	2	Note 4
SB-64(09)	GEI	OU2 South	As above.	75	11-12 72.5-73.5	2	Note 4
SB-65/MW-18S(09)	GEI	OU2 South	Assess shallow groundwater and horizontal and vertical extent of residuals observed at SB-29(08) and SB-30(08).	20.5	NS	0	NS
SB-66/MW-18D(09)	GEI	OU2 South	Assess deep soil and groundwater to delineate horizontal and vertical extent of residuals observed at SB-29(08) and SB-30(08).	75	10-11 73-74	2	Note 4
SB-67(09)	GEI	OU2 South	Assess the horizontal and vertical extent of residuals observed at SB-35(08) at an off-site property west of the MGP in OU1.	75	6-7 65-75	2	Note 4
SB-68/MW-23D	GEI	OU2 South	Assess the horizontal and vertical extent of residuals observed at SB-35(08), SB-42(08), and SB-43(08).	75	12.5-12.8 74-75	2	Note 4
SB-69/MW-19S(09)	GEI	OU2 South	Assess shallow soil and groundwater to delineate horizontal and vertical extent of residuals observed at SB-35(08), SB-42(08), and SB-43(08).	20.5	NS	0	NS
SB-70/MW-19D(09)	GEI	OU2 South	Assess deep soil and groundwater to delineate horizontal and vertical extent of residuals observed at SB-35(08), SB-42(08), and SB-43(08).	75	9-10 (and a duplicate) 74-75	3	Note 4

Table 2
Soil Boring/Monitoring Well Location, Analytical Sample Rationale and Summary
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample ID	Company	Operable Unit	Rationale	Total Depth (feet bgs)	Sample Depth (feet bgs)	Number of Samples	Laboratory Analyses
SB-71(09)	GEI	OU2 South	Assess the horizontal and vertical extent of residuals observed at SB-35(08), SB-42(08), and SB-43(08) at an off-site property west of the MGP building.	80	13.7-14 19-20 77-77.5	3	Note 4
SB-72(09)	GEI	OU2 South	Assess the horizontal and vertical extent of residuals observed at SB-42(08) and SB-43(08).	75	12.7-13.2 74-75	2	Note 4
SB-73(09)	GEI	OU2 South	As above.	75	12-13 20-21 74-75	3	Note 4
SB-74(09)	GEI	OU2 South	As above.	75	11.8-12.8 74-75	2	Note 4
SB-75(09)	GEI	OU2 South	Assess the horizontal and vertical extent of residuals observed at SB-48(08) southwest of the former Gas Holder B.	75	10-11 73-74 (and a duplicate)	3	Note 4
SB-76/MW-21S(09)	GEI	OU2 South	Assess soil and groundwater to delineate the horizontal and vertical extent of residuals observed southwest of the former Gas Holder B foundation and downgradient former UST off site.	75	11.7-12.2 15-16 74-75	3	Note 4
SB-77/MW-20S(09)	GEI	OU2 South	Assess shallow soil and groundwater west of impacts observed at SB-42(08) and SB-43(08) and adjacent to the City of Schenectady lower Broadway parking lot.	20.5	NS	0	NS
SB-78/MW-20D(09)	GEI	OU2 South	Assess deep soil and groundwater west of impacts observed at SB-42(08) and SB-43(08) and adjacent to the City of Schenectady lower Broadway parking lot.	75	10-11 74-75	2	Note 4
SB-81(09)	GEI	OU2 South	Assess the horizontal and vertical extent of residuals observed at SB-29(08) and SB-30(08).	75	11-12 48-49 74-75	3	Note 4
SB-84/MW-24S(09)	GEI	OU2 South	Assess shallow soil and groundwater west of impacts observed at SB-35(08).	21.5	NS	0	NS
SB-85/MW-24D(09)	GEI	OU2 South	Assess deep soil and groundwater west of impacts observed at SB-35(08).	75	11-12 72-73	2	Note 4
SB-86/MW-25S(09)	GEI	OU2 South	Assess shallow soil and groundwater west of impacts observed at SB48 and adjacent to the City of Schenectady lower Broadway parking lot.	21.5	NS	0	NS
SB-87/MW-25D(09)	GEI	OU2 South	Assess deep soil and groundwater west of impacts observed at SB-48(08) and adjacent to the City of Schenectady lower Broadway parking lot.	75	11-12 74-75	2	Note 4
SB-90(09)	GEI	OU2 South	Assess the horizontal and vertical extent of residuals observed at SB-35(08).	75	10-11 74-75	2	Note 4
SB-91(09)	GEI	OU2 South	Assess the horizontal and vertical extent of residuals observed at SB-42(08) and SB-43(08).	75	10-11 74-75	2	Note 4
SB-92(09)	GEI	OU2 North	Assess the horizontal and vertical extent of residuals observed at SB-48(08).	75	5-6 71-72	2	Note 4
SB-93(09)	GEI	OU2 North	As above.	75	10.6-11.6 (forensics only) 70-75 (and a duplicate)	3	Note 4
SB-94(09)	GEI	OU2 North	Assess horizontal and vertical extent of residuals observed at SB-48(08).	75	9-10 73-75	2	Note 4

Table 2
Soil Boring/Monitoring Well Location, Analytical Sample Rationale and Summary
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample ID	Company	Operable Unit	Rationale	Total Depth (feet bgs)	Sample Depth (feet bgs)	Number of Samples	Laboratory Analyses
SB-95/MW-26D(09)	GEI	OU2 North	Assess deep soil and groundwater northwest of impacts observed at SB-48(08).	80	9-10 76-77	2	Note 4
SB-96(09)	GEI	OU2 North	Assess shallow soil adjacent to CTMMW-1(04) and SB-48(08).	25	6.4-8.6 (forensics only) 22-24	2	Note 4
SB-97(09)	GEI	OU2 North	Assess shallow soil within footprint of former gasoline USTs.	25	10-10.8 (forensics only) 24-25	2	Note 4
SB-98(09)	GEI	OU2 North	Assess shallow soil within footprint of former wagon painting building.	25	11.3-12.3 (forensics only)	1	Forensics
SB-99(09)	GEI	OU1	Assess shallow soil within footprint of test pit TP7(06).	10	3-4 (forensics only) 9-10 (forensics only)	2	Forensics
SB-100(10)	GEI	OU2 North	As part of the IRM, assess shallow soil in City of Schenectady lower Broadway parking lot to determine area to be excavated.	13	10-11 (and a duplicate)	2	Note 5
SB-101(10)	GEI	OU2 North	As above.	20.5	11 -12	1	Note 5
SB-102(10)	GEI	OU2 North	As above.	14	11 -12	1	Note 5
SB-103(10)	GEI	OU2 North	As above.	13	12-13	1	Note 5
SB-104(10)	GEI	OU2 North	As above.	13	10-11	1	Note 5
SB-105(10)	GEI	OU2 North	As above.	13	12-13	1	Note 5
SB-106(10)	GEI	OU2 North	As above.	13	12-13	1	Note 5
SB-107(10)	GEI	OU2 North	As above.	13	12-13	1	Note 5
SB-108(10)	GEI	OU2 North	As above.	13	12-13	1	Note 5
SB-109(10)	GEI	OU2 North	As above.	14	11 -12	1	Note 5
SB-110(10)	GEI	OU2 South	Exploration boring to find location for recovery well.	49	11-12	1	Note 5
SB-111(10)	GEI	OU2 South	As above.	49	17-18	1	Note 5
SB-112(10)	GEI	OU2 South	As above.	49	10-11	1	Note 5
SB-113(10)	GEI	OU2 South	As above.	49	13-14	1	Note 5
SB-114(10)	GEI	OU2 South	As above.	49	12-13	1	Note 5
SB-115(10)	GEI	OU2 South	As part of the IRM, assess shallow soil in City of Schenectady lower Broadway parking lot to determine area to be excavated.	13.4	18-19	1	Note 5
SB-116(10)	GEI	OU2 South	As above.	13.4	13-14	1	Note 5
SB-117/RW-1(10)	GEI	OU2 South	Exploration boring to find location for recovery well; installed recovery well.	54	9-10	1	Note 5
SB-118(10)	GEI	OU2 North	As part of the IRM, assess shallow soil in City of Schenectady lower Broadway parking lot to determine area to be excavated.	17	15-16	1	Note 5
SB-119(10)	GEI	OU2 North	As above.	13	11-12 (and a duplicate)	2	Note 5
SB-120(10)	GEI	OU2 North	As above.	13	11-12	1	Note 5
SB-121(10)	GEI	OU2 North	As above.	13	10-11	1	Note 5

Table 2
Soil Boring/Monitoring Well Location, Analytical Sample Rationale and Summary
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample ID	Company	Operable Unit	Rationale	Total Depth (feet bgs)	Sample Depth (feet bgs)	Number of Samples	Laboratory Analyses
SB-122(10)	GEI	OU2 North	As above.	17	16-17	1	Note 5
SB-123(10)	GEI	OU2 North	As above.	13	12-13	1	Note 5
SB-124(10)	GEI	OU2 North	Assess shallow soil and confirm strong coal tar odor observed at GP/CTM-20(06).	35	12-13 (and a duplicate) 19 -20	3	Note 6
SB-125/MW-27S(10)	GEI	OU2 South	Assess shallow soil and groundwater southwest of GP/CTM-20(06) and downgradient of impacts at City of Schenectady lower Broadway parking lot.	33	16-17 23-24	2	Note 6
SB-126(10)	GEI	OU2 North	Assess shallow soil northwest of GP/CTM-20(06).	5	NS	0	Note 6
SB-127(10)	GEI	OU2 North	Assess shallow soil west of GP/CTM-20(06).	33	12 -13 20-21	2	Note 6
SB-128(11)	GEI	OU2 North	Assess shallow soil north of SB-101(10).	25	3-3.5 (and a duplicate) 7.5-10 (and a duplicate) 11.3-11.5 13-15 20-22 (and a duplicate)	8	Note 7
SB-129(11)	GEI	OU2 North	Assess shallow soil near above ground vault.	4.5	3-3.5	1	Note 7
SB-130(11)	GEI	OU2 North	Assess shallow soil in Postage Stamp parcel.	25	3-3.5 3-5 9-10 20-21	4	Note 7
SB-131(11)	GEI	OU2 North	As above.	25	3-3.5 3-4 7-8 12.7-13.3 24-25	5	Note 7
SB-132(11)	GEI	OU2 North	As above.	30	3-3.5 3-3.5 8.5-10 13.3-13.8 15-16 25-26	6	Note 7
SB-133/MW-28S(11)	GEI	OU2 North	Assess shallow soil and groundwater in Postage Stamp parcel.	25	3-3.5 3-3.5 7.8-8.8 13-13.3 15-16 21-22	6	Note 7
SB-134(11)	GEI	OU2 North	Assess shallow soil in Postage Stamp parcel.	25	3-3.5 3-3.5 8-10 21-22	4	Note 7

Table 2
Soil Boring/Monitoring Well Location, Analytical Sample Rationale and Summary
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample ID	Company	Operable Unit	Rationale	Total Depth (feet bgs)	Sample Depth (feet bgs)	Number of Samples	Laboratory Analyses
SB-135(11)	GEI	OU2 North	As above.	25	2.75-3 7.5-9 10-12 21.5-22.5	4	Note 7
SB-136(11)	GEI	OU2 North	As above.	25	3-5 9.5 10-11 (and a duplicate) 10-15 (and a duplicate) 20-21	7	Note 7
SB-137(11)	GEI	OU2 North	As above.	25	3-3.5 3-3.5 8.5-10 13.2-13.5 (and a duplicate) 19-20	6	Note 7
SB-138(11)	GEI	OU2 South	Assess shallow soil south of Postage Stamp.	25	3-3.5 3-3.5 5-10 12.2-12.5 15-16 22.5-23.5	6	Note 7
SB-139(11)	GEI	OU2 South	As above.	25	3-3.5 8.5-10 10-11.5 22.8-23.6	4	Note 7
SB-140(11)	GEI	OU2 South	Assess shallow soil in Postage Stamp parcel.	25	3-3.5 8-10 11.3-12.3 19-20	4	Note 7
SB-141(11)	GEI	OU2 South	Assess shallow soil in Postage Stamp parcel.	25	5-6 11-12.5 16-17	3	Note 7
SB-142(11)	GEI	OU2 South	Assess shallow soil south of Postage Stamp.	25	3-3.5 3-3.5 5.5-10 12-14 18.5-20	5	Note 7
SB-143(11)	GEI	OU2 South	As above.	25	2-4 7.75-9.5 17.75-19.75	3	Note 7
SB-144(11)	GEI	OU2 South	As above.	25	3-4 11.3 12.5-14 20-21	4	Note 7

Table 2
Soil Boring/Monitoring Well Location, Analytical Sample Rationale and Summary
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample ID	Company	Operable Unit	Rationale	Total Depth (feet bgs)	Sample Depth (feet bgs)	Number of Samples	Laboratory Analyses
SB-145(11)	GEI	OU2 South	As above.	25	3-3.2 3-3.5 7.5-9 12-12.5 16.5-17.5	5	Note 7
SB-146(11)	GEI	OU2 South	As above.	25	3-3.5 10-11 13.5-14.5 17-18	4	Note 7
SB-147(11)	GEI	OU2 South	As above.	25	3-4.5 7-9 13-14 18.5-20	4	Note 7
SB-148(11)	GEI	OU2 South	As above.	25	4-5 7.5-9.5 13-14 20-21	4	Note 7
SB-149(11)	GEI	OU2 South	As above.	25	3-3.2 3-3.5 8-10 13-15	4	Note 7
SB-150(11)	GEI	OU2 South	As above.	25	3-3.5 7.5-10 15-16 20-21	4	Note 7
SB-151(11)	GEI	OU2 South	As above.	25	4-5 8-9.5 18-19	3	Note 7
SB-152(11)	GEI	OU2 South	As above.	25	3-3.5 6-7 10.75-13.25 (and a duplicate) 17-19	5	Note 7
SB-153(11)	GEI	OU2 South	As above.	25	3-3.5 9.5-10 10-10.75 16.5-17.5 23.5-24.5	5	Note 7
SB-154(11)	GEI	OU2 North	Assess shallow soil in Postage Stamp parcel.	5	3.1-3.9	1	Note 7
SB-155(11)	GEI	OU2 North	As above.	35	3-5 8-10 22.6-22.8 23.5-25 30-32	5	Note 7

Table 2
Soil Boring/Monitoring Well Location, Analytical Sample Rationale and Summary
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample ID	Company	Operable Unit	Rationale	Total Depth (feet bgs)	Sample Depth (feet bgs)	Number of Samples	Laboratory Analyses
SB-156(11)	GEI	OU2 South	As above.	35	3-3.5 5-6.5 12.5-15 23.3-24 26-29	5	Note 7
SB-157(11)	GEI	OU2 South	Assess shallow soil south of Postage Stamp.	25	4.5-5 8-9 16-17	3	Note 7
SB-158(11)	GEI	OU2 South	As above.	25	3-5 8-9 10.8-12.4 16.5-17.5	4	Note 7
SB-159(11)	GEI	OU2 South	As above.	25	3-3.5 7.75-9.75 9.75-10 11-15 16-17 22-23	6	Note 7
SB-160(11)	GEI	OU2 South	As above.	15	3-5 8-9.5	2	Note 7
SB-161(11)	GEI	OU2 South	As above.	25	3-5 8-10 11-11.75 11.75-13 17-18	5	Note 7
SB-162(11)	GEI	OU2 South	As above.	25	2.75-4 8-10 11-12 11.75-13 22-23	5	Note 7
SB-163(11)	GEI	OU2 North	Assess shallow soil underneath Coal Pockets building slab.	25	10-11.75 15.5-17.5	2	Note 7
SB-164(11)	GEI	OU2 North	Assess shallow soil underneath Coal Pockets building slab.	25	8-10 19-20	2	Note 7
SB-165/MW-29S(11)	GEI	OU2 South	Assess shallow soil and groundwater south of Postage Stamp.	25	3.5-5 7.5-10 16.5-17.5 22-24.5	4	Note 7
SB-166(11)	GEI	OU2 South	Assess shallow soil south of Postage Stamp.	25	0.2-1 3-5 8-10 11.5-13 16-18 (and a duplicate)	6	Note 7
SB-167(11)	GEI	OU2 South	As above.	25	3-5 8.5-10 11.5-12.5 24-25	4	Note 7

Table 2
Soil Boring/Monitoring Well Location, Analytical Sample Rationale and Summary
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample ID	Company	Operable Unit	Rationale	Total Depth (feet bgs)	Sample Depth (feet bgs)	Number of Samples	Laboratory Analyses
SB-168(11)	GEI	OU2 South	As above.	25	4-5 8.75-10 10.5-12 (and a duplicate) 20-22 (and a duplicate)	6	Note 7
SB-169(11)	GEI	OU2 South	As above.	5	3-4	1	Note 7

Notes:

Note 1. VOCs - 8260B, SVOC - 8270C, Metals - 6000/7000

Note 2. VOCs - 8260B, SVOC - 8270C, Metals - 6000/7000, PCBs - 8082, Pesticides - 8081

Note 3. VOCs - 8260B, SVOC - 8270C, Metals - 6000/7000, Total CN - 9012, PCBs - 8082, Pesticides - 8081

Note 4. VOCs - 8260B, SVOC - 8270C, Metals - 6000/7000, Total CN - 9012

Note 5. VOCs - 8260B, SVOC - 8270C, Total CN - 9012

Note 6. VOCs - 8260B, SVOC - 8270C, Metals - 6000/7000, Total CN - 9012, PCBs - 8082

Note 7. BTEX - 8260B, PAH - 8270C, Total CN - 9012, Free CN - 9016, PCBs - 8082

bgs - below ground surface

NS - Not Sampled

Table 3
Monitoring Well Construction Details
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Well ID	Boring ID	Date Installed	Operable Unit	Ground Surface Elevation (ft, NAVD88)	Top of Casing Elevation (ft, NAVD88)	Total Boring Depth (ft, bgs)	Top of Screen (ft, bgs)	Bottom of Screen (ft, bgs)	Well Bottom (ft, bgs)	Screen Midpoint (ft, bgs)	Top of Sand Pack (ft, bgs)	Well Screen Material	Unit Screened
CTMMW-1(04)	CTMMW-1(04)	2004	OU2 North	225.72	225.72	NA	10	20	20	15	NA	NA	NA
CTMMW-2(04)	CTMMW-2(04)	2004	OU2 North	NA	NA	NA	6	16	16	11	NA	NA	NA
CTMMW-3(04)	CTMMW-3(04)	2004	OU2 North	NA	NA	NA	6	16	16	11	NA	NA	NA
CTMMW-4(04)	CTMMW-4(04)	2004	OU2 North	226.61	226.61	NA	6	16	16	11	NA	NA	NA
CTM-1(06)	GP-1	5/8/2006	OU2 North	225.64	225.40	16	5	15	15	10	4	1-in ID Sch 40 PVC 0.010" slot	f-c sand
CTM-2(06)	GP-2	5/8/2006	OU2 North	226.58	226.43	14	4	14	14	9	3	1-in ID Sch 40 PVC 0.010" slot	f-c sand and silt
CTM-3(06)	GP-3	5/8/2006	OU2 North	227.18	226.84	14	4	14	14	9	3	1-in ID Sch 40 PVC 0.010" slot	f-c sand
CTM-4(06)	GP-4	5/8/2006	OU2 North	227.67	227.49	15	4	14	14	9	3	1-in ID Sch 40 PVC 0.010" slot	f-c sand and silt
CTM-5(06)	GP-5	5/8/2006	OU2 North	225.86	225.59	16	4	14	14	9	3	1-in ID Sch 40 PVC 0.010" slot	f-c sand and silt
CTM-6(06)	GP-6	5/9/2006	OU2 North	226.46	226.23	15	4	14	14	9	3	1-in ID Sch 40 PVC 0.010" slot	f-c sand and silt
CTM-7(06)	GP-7	5/9/2006	OU2 North	226.84	226.60	16	4	14	14	9	3	1-in ID Sch 40 PVC 0.010" slot	f-c sand and silt
CTM-8(06)	GP-8	5/9/2006	OU2 North	226.73	226.44	16	4	14	14	9	3	1-in ID Sch 40 PVC 0.010" slot	f-c sand and silt
CTM-9(06)	GP-9	5/9/2006	OU2 North	225.88	225.69	14	4	14	14	9	3	1-in ID Sch 40 PVC 0.010" slot	f-c sand and silt
CTM-10(06)	GP-10	5/10/2006	OU2 North	226.25	226.06	15	4	14	14	9	3	1-in ID Sch 40 PVC 0.010" slot	f-c sand and silt
CTM-14(06)	GP-14	5/10/2006	OU1	227.13	226.81	15	5	15	15	10	4	1-in ID Sch 40 PVC 0.010" slot	f-c sand and silt
CTM-15(06)	GP-15	5/10/2006	OU1	225.98	225.61	15	5	15	15	10	4	1-in ID Sch 40 PVC 0.010" slot	f-c sand and silt
CTMMW-18(07)	CTMSB-18(07)	5/29/2007	OU2 North	228.16	228.01	12	2	12	12	7	1.5	1-in ID Sch 40 PVC 0.010" slot	f-c sand and silt
CTMMW-19(07)	CTMSB-19(07)	5/29/2007	OU2 North	227.56	227.44	12	2	12	12	7	1.5	1-in ID Sch 40 PVC 0.010" slot	f-c sand and silt
CTM-20(08)	GP-20(08)	1/28/2008	OU2 North	NA	228.14	16	6	16	16	11	4	1-in ID Sch 40 PVC 0.010" slot	f-c sand and silt
CTM-22(08)	GP-22(08)	1/28/2008	OU2 North	NA	228.21	20	5	15	15	10	3.5	1-in ID Sch 40 PVC 0.010" slot	f-c sand and silt
CTM-23(08)	GP-23(08)	1/28/2008	OU2 North	NA	228.17	20	3	18	18	11	2	1-in ID Sch 40 PVC 0.010" slot	f-c sand and silt
MW-1(04)	SB-1(04)	2004	OU1	226.89	226.57	18	6	16	16	11	4	2-in ID Sch 40 PVC 0.020" slot	f-m sand and silt
MW-1D(08)	SB-51(08)	9/2/2008	OU1	226.47	226.45	90	23	33	35	28	21	2-in ID Sch 40 PVC 0.020" slot	silt with f-sand
MW-2(04)	SB-2(04)	11/2/2004	OU1	234.02	233.71	18	8	18	18	13	6	2-in ID Sch 40 PVC 0.020" slot	f sand and silt
MW-3(04)	SB-6(04)	11/3/2004	OU1	234.89	234.75	20	8	18	20	13	6	2-in ID Sch 40 PVC 0.020" slot	f-m sand and silt
MW-4(04)	SB-9(04)	11/4/2004	OU1	227.18	227.00	18	3	13	13	8	2	2-in ID Sch 40 PVC 0.020" slot	f-m sand and silt
MW-5(06)	SB-10A(06)	11/7/2006	OU1	230.67	230.41	30	7	17	17	12	5	2-in ID Sch 40 PVC 0.020" slot	f-m sand, silt, clay
MW-6(06)	SB-12(06)	11/7/2006	OU1	255.83	255.23	40	22	32	33	27	21	2-in ID Sch 40 PVC 0.020" slot	f sand, silt, clay
MW-7(06)	SB-13(06)	11/1/2006	OU1	227.13	226.89	39	4	14	16	9	3	2-in ID Sch 40 PVC 0.020" slot	f-m sand
MW-7D(08)	SB-28(08)	10/23/2008	OU1	227.31	226.86	75	30	40	42	35	28	2-in ID Sch 40 PVC 0.020" slot	f-m sand
MW-8(06)	SB-19(06)	11/2/2006	OU1	225.91	225.71	25	6	16	18	11	4	2-in ID Sch 40 PVC 0.020" slot	f-m sand and silt
MW-8D(08)	SB-44(08)	11/5/2008	OU1	225.92	225.67	75	32	42	44	37	30	2-in ID Sch 40 PVC 0.020" slot	f-m sand
MW-9(06)	SB-23(06)	11/3/2006	OU1	231.45	231.14	30	7.5	17.5	18.5	12.5	5.5	2-in ID Sch 40 PVC 0.020" slot	f-m sand and silt
MW-10(06)	SB-21(06)	11/1/2006	OU1	231.61	231.28	30	6	16	18	11	4	2-in ID Sch 40 PVC 0.020" slot	f-m sand
MW-11D(08)	SB-26(08)	10/29/2008	OU1	226.51	226.09	75	32	42	44	37	30	2-in ID Sch 40 PVC 0.020" slot	f-m sand
MW-12(08)	SB-29(08)	10/29/2008	OU2 South	226.00	225.70	15	3	13	15	8	2	2-in ID Sch 40 PVC 0.020" slot	silt and f-m sand
MW-12D(08)	SB-30(08)	10/24/2008	OU2 South	226.04	225.75	75	35	45	47	40	33	2-in ID Sch 40 PVC 0.020" slot	f-c sand
MW-13D(08)	SB-35(08)	11/2/2008	OU2 South	225.42	224.87	64	33	43	45	38	31	2-in ID Sch 40 PVC 0.020" slot	f-c sand
MW-14(08)	SB-42(08)	11/1/2008	OU2 South	225.11	224.93	15	3	13	15	8	2	2-in ID Sch 40 PVC 0.020" slot	f-m sand and peat
MW-14D(08)	SB-43(08)	11/1/2008	OU2 South	225.15	224.89	75	35	45	47	40	33	2-in ID Sch 40 PVC 0.020" slot	f-c sand
MW-15D(08)	SB-47(08)	11/4/2008	OU1	225.66	225.24	50	30	40	50	35	28	2-in ID Sch 40 PVC 0.020" slot	silt
MW-16D(08)	SB-48(08)	10/31/2008	OU2 North	225.68	225.20	75	30	40	42	35	28	2-in ID Sch 40 PVC 0.020" slot	f-c sand
MW-17D(09)	SB-61(09)	10/12/2009	OU2 South	226.30	225.83	75	40	50	52.5	45	38	2-in ID Sch 40 PVC 0.020" slot	silt and f-m sand
MW-17S(09)	SB-60(09)	10/12/2009	OU2 South	226.29	225.99	5	8	18	20.5	13	6	2-in ID Sch 40 PVC 0.020" slot	silt and silty clay

Table 3
Monitoring Well Construction Details
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Well ID	Boring ID	Date Installed	Operable Unit	Ground Surface Elevation (ft, NAVD88)	Top of Casing Elevation (ft, NAVD88)	Total Boring Depth (ft, bgs)	Top of Screen (ft, bgs)	Bottom of Screen (ft, bgs)	Well Bottom (ft, bgs)	Screen Midpoint (ft, bgs)	Top of Sand Pack (ft, bgs)	Well Screen Material	Unit Screened
MW-18D(09)	SB-66(09)	10/25/2009	OU2 South	225.13	224.90	75	40	50	52.5	45	38	2-in ID Sch 40 PVC 0.020" slot	f-c sand
MW-18S(09)	SB-65(09)	10/25/2009	OU2 South	225.31	225.06	5	8	18	20.5	13	6	2-in ID Sch 40 PVC 0.020" slot	silt, sand and clay
MW-19D(09)	SB-70(09)	10/20/2009	OU2 South	225.53	225.19	75	40	50	52.5	45	38	2-in ID Sch 40 PVC 0.020" slot	f-c sand
MW-19S(09)	SB-69(09)	10/20/2009	OU2 South	225.48	225.16	5	8	18	20.5	13	6	2-in ID Sch 40 PVC 0.020" slot	f-m sand and silt
MW-20D(09)	SB-78(09)	10/24/2009	OU2 South	226.16	225.94	75	40	50	52.5	45	38	2-in ID Sch 40 PVC 0.020" slot	f-c sand and silt
MW-20S(09)	SB-77(09)	10/24/2009	OU2 South	226.17	225.94	5	8	18	20.5	13	6	2-in ID Sch 40 PVC 0.020" slot	silt, sand and clay
MW-21S(09)	SB-76(09)	10/11/2009	OU2 South	225.98	225.66	75	8	18	20.5	13	6	2-in ID Sch 40 PVC 0.020" slot	silt, sand and clay
MW-23D(09)	SB-68(09)	10/14/2009	OU2 South	226.21	225.93	75	40	50	52.5	45	38	2-in ID Sch 40 PVC 0.020" slot	f-m sand and silt
MW-24D(09)	SB-85(09)	10/22/2009	OU2 South	227.82	227.61	75	40	50	52.5	45	38	2-in ID Sch 40 PVC 0.020" slot	f-c sand
MW-24S(09)	SB-84(09)	10/22/2009	OU2 South	227.89	227.71	5	9	19	21.5	14	7	2-in ID Sch 40 PVC 0.020" slot	f-m sand and silt
MW-25D(09)	SB-87(09)	10/23/2009	OU2 South	227.51	227.26	75	40	50	52.5	45	38	2-in ID Sch 40 PVC 0.020" slot	f-c sand
MW-25S(09)	SB-86(09)	10/23/2009	OU2 South	227.54	227.28	21.5	9	19	21.5	14	7	2-in ID Sch 40 PVC 0.020" slot	silt, clay, fill
MW-26D(09)	SB-95(09)	10/9/2009	OU2 North	226.50	226.21	80	50	60	62.5	55	48	2-in ID Sch 40 PVC 0.020" slot	silt and fine sand
MW-27S(10)	SB-101(10)	10/27/2010	OU2 South	228.36	227.76	33	8	18	20.0	13	6	2-in ID Sch 40 PVC 0.020" slot	silt and f-m sand
RW-1(10)	SB-117(10)	11/3/2010	OU2 South	226.02	NA	53	37	47	52.0	42	35	6-in ID stainless steel 0.020" slot	silt and f-c sand
MW-28S(11)	SB-133(11)	10/21/2011	OU2 North	226.28	226.18	25	6.5	16.5	16.5	12	4	2-in ID Sch 40 PVC 0.020" slot	silt and f-c sand
MW-29S(11)	SB-165(11)	10/20/2011	OU2 South	229.42	229.2	25	5	15	15	10	4	2-in ID Sch 40 PVC 0.020" slot	f-m sand and clay

Notes:

ft, NAVD88 = feet above North American Vertical Datum of 1988.

ft, bgs = feet below ground surface.

NA - Not Available

Table 4
Groundwater Elevations (2009 - 2011)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Well ID	Operable Unit	Easting	Northing	Ground Surface Elevation (ft, NAVD88)	Top of Casing Elevation (ft, NAVD88)	Top of Screen (ft, bgs)	Bottom of Screen (ft, bgs)	Well Bottom (ft, bgs)	Screen Midpoint (ft, bgs)	Depth to Water (11/3/09)	Groundwater Elevation (11/3/09)	Depth to Water (11/30/09)	Groundwater Elevation (11/30/09)	Depth to Water (11/17/10)	Groundwater Elevation (11/17/10)	Depth to Water (11/15/11)	Groundwater Elevation (11/15/11)
CTM-1(06)	OU2 North	641131.7649	1449291.3610	225.64	225.40	5	15	15	10	6.73	218.67	6.91	218.49	NM	NM	NM	NM
CTM-2(06)	OU2 North	641173.6531	1449384.8200	226.58	226.43	4	14	14	9	6.9	219.53	7.01	219.42	NM	NM	NM	NM
CTM-3(06)	OU2 North	641195.0607	1449481.8743	227.18	226.84	4	14	14	9	NM	NM	7.36	219.48	NM	NM	NM	NM
CTM-4(06)	OU2 North	641211.0267	1449547.2082	227.67	227.49	4	14	14	9	NM	NM	8.1	219.39	NM	NM	NM	NM
CTM-5(06)	OU2 North	641010.2992	1449313.0954	225.86	225.59	4	14	14	9	5.71	219.88	5.89	219.7	NM	NM	NM	NM
CTM-6(06)	OU2 North	641050.9464	1449406.3921	226.46	226.23	4	14	14	9	6.32	219.91	6.53	219.7	5.8	220.66	NM	NM
CTM-7(06)	OU2 North	641098.4429	1449515.3224	226.84	226.60	4	14	14	9	NM	NM	6.99	219.61	NM	NM	NM	NM
CTM-8(06)	OU2 North	641123.7506	1449585.8720	226.73	226.44	4	14	14	9	NM	NM	7.31	219.13	NM	NM	NM	NM
CTM-9(06)	OU2 North	640936.3449	1449406.1111	225.88	225.69	4	14	14	9	6.21	219.48	6.35	219.34	NM	NM	5.51	220.18
CTM-10(06)	OU2 North	640932.9411	1449489.2757	226.25	226.06	4	14	14	9	NM	NM	6.79	219.27	NM	NM	5.63	220.43
CTM-14(06)	OU1	641263.3554	1449339.5948	227.13	226.81	5	15	14	10	7.11	219.7	7.04	219.77	NM	NM	NM	NM
CTM-15(06)	OU1	641197.7121	1449207.7604	225.98	225.61	5	15	14	10	5.41	220.2	5.69	219.92	NM	NM	NM	NM
CTM-23(08)	OU2 North	640836.5173	1449293.7058	228.17	226.18	3	18	18	10.5	NM	NM	NM	NM	NM	NM	7.26	218.92
CTMMW-1(04)	OU2 North	641110.855	1449235.4310	225.72	225.72	10	20	20	15	NM	NM	NM	NM	dry	NM	NM	NM
CTMMW-2(04)	OU2 North	641053.4741	1449260.6400	NA	**	6	16	16	11	6.39	NA	6.61	NA	6.22	NM	NM	NM
CTMMW-3(04)	OU2 North	641076.7312	1449314.7810	NA	**	6	16	16	11	5.71	NA	5.9	NA	5.15	NM	NM	NM
CTMMW-4(04)	OU2 North	641013.7464	1449444.0100	226.61	226.61	6	16	16	11	NM	NM	6.87	219.74	flooded	NM	NM	NM
SB-1/MW-1(04)	OU1	641241.0235	1449278.5619	226.89	226.57	6	16	16	11	7.92	218.65	6.62	219.95	NM	NM	NM	NM
SB-51/MW-1D(08)	OU1	641245.8733	1449284.7244	226.47	226.45	23	33	35	28	6.11	220.34	6.36	220.09	NM	NM	NM	NM
SB-2/MW-2(04)	OU1	641361.5251	1449032.9626	234.02	233.71	8	18	18	13	11.8	221.91	NM	NM	NM	NM	NM	NM
SB-6/MW-3(04)	OU1	641244.8216	1448950.0645	234.89	234.75	8	18	20	13	14.11	220.64	14.38	220.37	NM	NM	NM	NM
SB-9/MW-4(04)	OU1	641233.4012	1449264.6046	227.18	227.00	3	13	13	8	5.77	221.23	6.05	220.95	NM	NM	NM	NM
SB-10A/MW-5(06)	OU1	641186.71	1448864.5144	230.67	230.41	7	17	17	12	9.84	220.57	9.99	220.42	NM	NM	NM	NM
SB-12/MW-6(06)	OU1	641307.974	1448924.7950	255.83	255.23	22	32	33	27	NM	NM	30.42	224.81	NM	NM	NM	NM
SB-13/MW-7(06)	OU1	641105.711	1448967.6976	227.13	226.89	4	14	16	9	6.75	220.14	6.87	220.02	NM	NM	NM	NM
SB-28/MW-7D(08)	OU1	641110.7042	1448966.0856	227.31	226.86	30	40	42	35	6.81	220.05	7.2	219.66	NM	NM	NM	NM
SB-19/MW-8(06)	OU1	641158.3763	1449124.0335	225.91	225.71	6	16	18	11	5.33	220.38	5.59	220.12	NM	NM	NM	NM
SB-44/MW-8D(08)	OU1	641155.033	1449117.7890	225.92	225.67	32	42	44	37	7.52	218.15	5.86	219.81	NM	NM	NM	NM
SB-23/MW-9(06)	OU1	641283.4714	1449289.5830	231.45	231.14	7.5	17.5	18.5	12.5	10.82	220.32	11	220.14	NM	NM	NM	NM
SB-21/MW-10(06)	OU1	641327.9526	1449196.4531	231.61	231.28	6	16	18	11	9.46	221.82	9.7	221.58	NM	NM	NM	NM
SB-26/MW-11D(08)	OU1	641060.3493	1448903.8421	226.51	226.09	32	42	44	37	6.29	219.8	6.62	219.47	NM	NM	NM	NM
SB-29/MW-12(08)	OU2 South	640994.6858	1448960.0525	226.00	225.70	3	13	15	8	6.33	219.37	6.78	218.92	5.46	220.54	NM	NM
SB-30/MW-12D(08)	OU2 South	640998.2581	1448959.6436	226.04	225.75	35	45	47	40	6.15	219.6	6.51	219.24	5.88	220.16	NM	NM
SB-35/MW-13D(08)	OU2 South	641039.0133	1449055.1598	225.42	224.87	33	43	45	38	5.12	219.75	5.5	219.37	4.88	220.54	NM	NM
SB-42/MW-14(08)	OU2 South	641076.0527	1449131.1864	225.11	224.93	3	13	15	8	5.12	219.81	5.31	219.62	4.81	220.3	NM	NM
SB-43/MW-14D(08)	OU2 South	641082.2677	1449135.8075	225.15	224.89	35	45	47	40	5.07	219.82	5.44	219.45	4.81	220.34	NM	NM
SB-47/MW-15D(08)	OU1	641194.1179	1449203.5426	225.66	225.24	30	40	42	35	4.9	220.34	5.26	219.98	NM	NM	NM	NM
SB-48/MW-16D(08)	OU2 North	641118.7779	1449233.0150	225.68	225.20	30	40	42	35	5.29	219.91	5.62	219.58	5.01	220.67	NM	NM
SB-60/MW-17S(09)	OU2 South	640947.8845	1448852.2944	226.29	225.99	8	18	20.5	13	8.68	217.31	8.96	217.03	6.12	220.17	NM	NM
SB-61/MW-17D(09)	OU2 South	640950.9424	1448859.4512	226.30	225.83	40	50	52.5	45	6.36	219.47	6.64	219.19	6.06	220.24	NM	NM
SB-65/MW-18S(09)	OU2 South	640730.3043	1448798.5065	225.31	225.06	8	18	20.5	13	6.21	218.85	7.14	217.92	NM	NM	NM	NM
SB-66/MW-18D(09)	OU2 South	640732.1102	1448802.8868	225.13	224.90	40	50	52.5	45	5.56	219.34	5.99	218.91	NM	NM	NM	NM
SB-69/MW-19S(09)	OU2 South	640842.1407	1449063.6491	225.48	225.16	8	18	20.5	13	6.37	218.79	6.72	218.44	5.38	220.1	6.41	218.75
SB-70/MW-19D(09)	OU2 South	640840.7824	1449061.1489	225.53	225.19	40	50	52.5	45	5.61	219.58	6.05	219.14	5.79	219.74	NM	NM
SB-77/MW-20S(09)	OU2 South	640929.0506	1449251.6804	226.17	225.94	8	18	20.5	13	6.7	219.24	7.18	218.76	5.92	220.25	5.79	220.15
SB-78/MW-20D(09)	OU2 South	640934.8513	1449249.0238	226.16	225.94	40	50	52.5	45	6.19	219.75	6.59	219.35	6.2	219.96	NM	NM
SB-76/MW-21S(09)	OU2 South	641010.3593	1449217.5107	225.98	225.66	8	18	20.5	13	5.82	219.84	6.2	219.46	5.71	220.27	7.19	218.47
SB-68/MW-23D(09)	OU2 South	640910.6338	1449085.6825	226.21	225.93	40	50	52.5	45	6.4	219.53	6.76	219.17	6.2	220.01	NM	NM
SB-84/MW-24S(09)	OU2 South	640765.9318	1449106.3383	227.89	227.71	9	19	21.5	14	9.39	218.32	9.58	218.13	7.86	220.03	9.57	218.14
SB-85/MW-24D(09)	OU2 South	640767.8036	1449109.3971	227.82	227.61	40	50	52.5	45	8.1	219.51	8.54	219.07	9.08	218.74	NM	NM
SB-86/MW-25S(09)	OU2 South	640802.2438	1449238.1192	227.54	227.28	9	19	21.5	14	8.27	219.01	8.5	218.78	7.44	220.1	8.25	219.03
SB-87/MW-25D(09)	OU2 South	640802.4497	1449235.7451	227.51	227.26	40	50	52.5	45	7.71	219.55	8.11	219.15	8.29	219.22	NM	NM
SB-95/MW-26D(09)	OU2 South	641042.9421	1449404.4639	226.50	226.21	50	60	62.5	55	6.28	219.93	6.64	219.57	6.03	220.47	NM	NM
SB-125/MW27S(10)	OU2 South	640821.9254	1449321.6711	228.76	227.76	8	18	20	13	NI	NI	NI	NI	8.75	220.01	8.81	218.95
SB-117/RW-1(10)	OU2 South	640992.817	1448951.4871	226.02	NS	37	47	52	42	NI	NI	NI	NI	8.18	NA	NM	NM
SB-133/MW-28S(11)	OU2 North	640836.6589	1449341.4803	226.28	226.18	6.5	16.5	16.5	12	NI	NI	NI	NI	NI	NI	6.55	219.63
SB-165/MW-29S(11)	OU2 South	640712.1447	1449222.5145	229.42	229.2	5	15	15	10	NI	NI	NI	NI	NI	NI	11.6	217.6

Notes:
ft - feet
bgs - below ground surface
NAVD88 - North American Vertical Datum 1988
** CT Male used assumed benchmark and not actual survey
NA - Not Available.
NI - Not Installed.
NM - Not Measured.

Table 5
Final Groundwater Discharge Parameters (2009-2011)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Location	Operable Unit	Date Sampled	Temperature (deg. C)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH (S.U.)	Oxidation-Reduction Potential (mV)	Turbidity (NTU)
MW-12(08)	OU2 South	12/1/2009	13.93	1.71	0.00	6.88	-164	2.7
MW-13D(08)	OU2 South	12/2/2009	12.68	2.04	0.00	6.92	-141	1.8
MW-14(08)	OU2 South	12/1/2009	13.48	6.00	0.00	6.79	-118	20
MW-16D(08)	OU2 North	12/1/2009	12.99	2.46	0.00	7.26	-46	0.0
MW-17D(09)	OU2 South	12/1/2009	13.70	0.92	0.00	8.12	-135	0.0
MW-17S(09)	OU2 South	12/1/2009	12.74	1.95	0.00	6.67	-109	69.8
MW-18D(09)	OU2 South	11/30/2009	13.77	0.98	0.00	8.99	-200	20.1
MW-18S(09)	OU2 South	11/30/2009	13.50	1.79	0.00	6.80	-155	49
MW-19D(09)	OU2 South	12/1/2009	14.36	3.01	0.00	9.70	-326	26.6
MW-19S(09)	OU2 South	12/1/2009	15.26	3.05	0.00	7.08	-184	67
MW-20D(09)	OU2 South	12/1/2009	14.52	2.61	0.00	7.05	-105	0.0
MW-20S(09)	OU2 South	12/1/2009	14.69	2.63	0.00	8.08	-236	5.4
MW-21S(09)	OU2 South	12/1/2009	14.22	18.3	0.00	6.88	-164	7.5
MW-23D(09)	OU2 South	11/30/2009	13.32	2.37	0.00	7.39	-213	1.2
MW-24D(09)	OU2 South	12/2/2009	12.42	2.01	0.00	6.83	-136	1.6
MW-24S(09)	OU2 South	12/2/2009	12.32	4.55	0.00	6.62	-133	22
MW-25D(09)	OU2 South	12/2/2009	13.49	2.54	0.00	7.06	-133	0.0
MW-25S(09)	OU2 South	12/2/2009	13.75	17.9	0.00	7.63	-118	6.3
MW-26D(09)	OU2 South	12/1/2009	14.19	2.48	0.00	7.17	-145	16
MW-27S(10)	OU2 South	11/17/2010	15.43	1.5	NA	6.61	-81.2	2.6
CTM-9(06)	OU2 North	11/15/2011	16.7	10.8	6.38	7.16	240	2.71
CTM-23(08)	OU2 North	11/15/2011	14.8	1.2	2.57	6.81	33.5	1.22
MW-20S(09)	OU2 South	11/15/2011	15.5	326.3	0.08	7.17	-206.8	1.45
MW-25S(09)	OU2 South	11/15/2011	14.9	12.7	0.00	6.65	-149.8	17.2
MW-27S(10)	OU2 South	11/15/2011	15.7	2.3	0.00	6.85	-150.8	6.83
MW-28S(11)	OU2 North	11/15/2011	14.6	12.8	0.00	7.05	-159.8	5.57
MW-29S(11)	OU2 South	11/15/2011	14.7	20.4	2.92	6.44	54.7	0.38

Notes:

deg. C = degrees Celsius

mS/cm = milliSiemens per centimeter

mg/L = milligrams per liter

S.U. = Standard units

mV = milliVolts

NTU = Nephelometric Turbidity Units

NA = Not Available

*A dissolved oxygen (DO) of 0 (zero) means the meter was malfunctioning.

Table 6
Groundwater Analytical Sample Rationale and Summary (2008 - 2011)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample ID	Operable Unit	Rationale	Screen Interval (ft, bgs)	Number of Samples	Laboratory Analyses
GP/CTM-9(08)	OU2 North	Assess shallow groundwater.	4-14	1	Note 3
GP/CTM-23(08)	OU2 North	Assess shallow groundwater.	3-18	1	Note 3
MW-12(08)	OU2 South	Assess shallow groundwater downgradient and southwest of the former MGP in OU1.	3-13	2	Note 1
MW-12D(08)	OU2 South	Assess deep groundwater downgradient and southwest of the former MGP in OU1.	35-45	1	Note 1
MW-13D(08)	OU2 South	Assess deep groundwater downgradient and west of the former MGP in OU1.	33-43	2	Note 1
MW-14(08)	OU2 South	Assess shallow groundwater downgradient and west of the former MGP in OU1.	3-13	3	Note 1
MW-14D(08)	OU2 South	Assess deep groundwater downgradient and west of the former MGP in OU1.	35-45	1	Note 1
MW-16D(08)	OU2 North	Assess deep groundwater downgradient and west of the former MGP in OU1.	30-40	3	Note 1
MW-17S(09)	OU2 South	Assess shallow groundwater downgradient and southwest of the former MGP in OU1.	8-18	1	Note 1
MW-17D(09)	OU2 South	Assess deep groundwater downgradient and southwest of the former MGP in OU1.	40-50	1	Note 1
MW-18S(09)	OU2 South	Assess shallow groundwater downgradient and west of the former MGP in OU1.	8-18	1	Note 1
MW-18D(09)	OU2 South	Assess deep groundwater downgradient and west of the former MGP in OU1.	40-50	1	Note 1
MW-19S(09)	OU2 South	Assess shallow groundwater downgradient of SB-42/MW-14(08).	8-18	1	Note 1
MW-19D(09)	OU2 South	Assess deep groundwater downgradient of SB-35/MW-13D(08).	40-50	1	Note 1
MW-20S(09)	OU2 South	Assess shallow groundwater downgradient of OU2 North and OU1.	8-18	2	Note 1 and 3
MW-20D(09)	OU2 South	Assess shallow groundwater downgradient of OU2 North and OU1.	40-50	1	Note 1
MW-21S(09)	OU2 South	Assess shallow groundwater downgradient of impacts observed at SB-48(08) in OU2 North.	8-18	1	Note 1
MW-23D(09)	OU2 South	Assess deep groundwater downgradient of SB-43/MW-14D(08) downgradient and west of the former MGP in OU1.	40-50	1	Note 1
MW-24S(09)	OU2 South	Assess shallow groundwater downgradient of SB-42/MW-14(08).	9-19	1	Note 2
MW-24D(09)	OU2 South	Assess deep groundwater downgradient of SB-43/MW-14D(08).	40-50	1	Note 1
MW-25S(09)	OU2 South	Assess shallow groundwater downgradient of OU2 North.	9-19	1	Note 2 and 3
MW-25D(09)	OU2 South	Assess deep groundwater downgradient of OU2 North.	40-50	1	Note 1
MW-26D(09)	OU2 North	Assess deep groundwater upgradient in OU2 North.	50-60	1	Note 1
MW-27S(10)	OU2 South	Assess shallow groundwater southwest and downgradient of OU2 North.	8-18	3	Note 2 and 3
MW-28S(11)	OU2 North	Replace GP/CTM-20(08) and assess shallow groundwater.	6.5-16.5	1	Note 3
MW-29S(11)	OU2 South	Assess shallow groundwater downgradient of postage stamp.	5-15	1	Note 3

Notes:

Note 1. VOCs - 8260B, SVOC - 8270C, Metals - 6000/7000, Total CN - 9012

Note 2. VOCs - 8260B, SVOC - 8270C, Metals - 6000/7000, PCBs - 8082, Total CN - 9012

Note 3. BTEX - 8260B, PAH - 8270C, PCBs - 8082, Total CN - 9012, Free CN - 9016

ft - feet

bgs - below ground surface

NS - Not Sampled

Table 7
2009 - 2010 Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-61(09) 11 - 12 10/12/2009		SB-61(09) 72 - 73 10/12/2009		SB-62(09) 8 - 9 10/13/2009		SB-62(09) 73.5 - 74.5 10/13/2009		SB-63(09) 8 - 9 10/09/2009		SB-63(09) 74 - 75 10/09/2009		SB-64(09) 11 - 12 10/20/2009		SB-64(09) 72.5 - 73.5 10/20/2009	
BTEX (mg/kg)																		
Benzene	0.06	44	0.0056	U	0.0053	U	0.0056	U	0.0053	U	0.0061	U	0.0056	U	0.006	U	0.006	U
Toluene	0.7	500	0.0056	U	0.0053	U	0.00095	J	0.0019	J	0.0061	U	0.0056	U	0.0025	J	0.0085	
Ethylbenzene	1	390	0.0056	U	0.0053	U	0.0056	U	0.0053	U	0.0061	U	0.0056	U	0.006	U	0.006	U
Total Xylene	0.26	500	0.017	U	0.016	U	0.017	U	0.016	U	0.018	U	0.017	U	0.018	U	0.0038	J
Total BTEX	NE	NE	ND		ND		0.00095		0.0019		ND		ND		0.0025		0.0123	
Other VOCs (mg/kg)																		
Acetone	0.05	500	0.023	U	0.021	U	0.023	U	0.021	U	0.024	U	0.022	U	0.024	U	0.024	U
Bromodichloromethane	NE	NE	0.0056	U	0.0053	U	0.0056	U	0.0053	U	0.0061	U	0.0056	U	0.006	U	0.006	U
Bromoform	NE	NE	0.0056	U	0.0053	U	0.0056	U	0.0053	U	0.0061	U	0.0056	U	0.006	U	0.006	U
Bromomethane	NE	NE	0.0056	UJ	0.0053	UJ	0.0056	UJ	0.0053	UJ	0.0061	UJ	0.0056	UJ	0.006	UJ	0.006	UJ
2-Butanone	0.12	500	0.0056	U	0.0053	U	0.0056	U	0.0053	U	0.0061	U	0.0056	U	0.006	U	0.006	U
Carbon disulfide	NE	NE	0.0056	U	0.0053	U	0.0056	U	0.0053	U	0.0061	U	0.0056	U	0.006	U	0.006	U
Carbon tetrachloride	0.76	22	0.0056	U	0.0053	U	0.0056	U	0.0053	U	0.0061	U	0.0056	U	0.006	U	0.006	U
Chlorobenzene	1.1	500	0.0056	U	0.0053	U	0.0056	U	0.0053	U	0.0061	U	0.0056	U	0.006	U	0.006	U
Chloroethane	NE	NE	0.0056	U	0.0053	U	0.0056	U	0.0053	U	0.0061	U	0.0056	U	0.006	U	0.006	U
Chloroform	0.37	350	0.0056	U	0.0053	U	0.0056	U	0.0053	U	0.0061	U	0.0056	U	0.006	U	0.006	U
Chloromethane	NE	NE	0.0056	U	0.0053	U	0.0056	U	0.0053	U	0.0061	U	0.0056	U	0.006	U	0.006	U
Cyclohexane	NE	NE	0.0056	U	0.0053	U	0.0056	U	0.0053	U	0.0061	U	0.0056	U	0.006	U	0.006	U
1,2-Dibromo-3-chloropropane	NE	NE	0.0056	U	0.0053	U	0.0056	U	0.0053	U	0.0061	U	0.0056	U	0.006	U	0.006	U
Dibromochloromethane	NE	NE	0.0056	U	0.0053	U	0.0056	U	0.0053	U	0.0061	U	0.0056	U	0.006	U	0.006	U
1,2-Dibromoethane	NE	NE	0.0056	U	0.0053	U	0.0056	U	0.0053	U	0.0061	U	0.0056	U	0.006	U	0.006	U
1,2-Dichlorobenzene	1.1	500	0.0056	U	0.0053	U	0.0056	U	0.0053	U	0.0061	U	0.0056	U	0.006	U	0.006	U
1,3-Dichlorobenzene	2.4	280	0.0056	U	0.0053	U	0.0056	U	0.0053	U	0.0061	U	0.0056	U	0.006	U	0.006	U
1,4-Dichlorobenzene	1.8	130	0.0056	U	0.0053	U	0.0056	U	0.0053	U	0.0061	U	0.0056	U	0.006	U	0.006	U
Dichlorodifluoromethane	NE	NE	0.0056	U	0.0053	U	0.0056	U	0.0053	U	0.0061	U	0.0056	U	0.006	U	0.006	U
1,1-Dichloroethane	0.27	240	0.0056	U	0.0053	U	0.0056	U	0.0053	U	0.0061	U	0.0056	U	0.006	U	0.006	U
1,2-Dichloroethane	0.02	30	0.0056	U	0.0053	U	0.0056	U	0.0053	U	0.0061	U	0.0056	U	0.006	U	0.006	U
cis-1,2-Dichloroethene	0.25	500	0.0056	U	0.0053	U	0.0056	U	0.0053	U	0.0061	U	0.0056	U	0.006	U	0.006	U
trans-1,2-Dichloroethene	0.19	500	0.0056	U	0.0053	U	0.0056	U	0.0053	U	0.0061	U	0.0056	U	0.006	U	0.006	U
1,1-Dichloroethene	0.33	500	0.0056	U	0.0053	U	0.0056	U	0.0053	U	0.0061	U	0.0056	U	0.006	U	0.006	U
1,2-Dichloropropane	NE	NE	0.0056	U	0.0053	U	0.0056	U	0.0053	U	0.0061	U	0.0056	U	0.006	U	0.006	U
cis-1,3-Dichloropropene	NE	NE	0.0056	U	0.0053	U	0.0056	U	0.0053	U	0.0061	U	0.0056	U	0.006	U	0.006	U
trans-1,3-Dichloropropene	NE	NE	0.0056	U	0.0053	U	0.0056	U	0.0053	U	0.0061	U	0.0056	U	0.006	U	0.006	U
2-Hexanone	NE	NE	0.0056	U	0.0053	U	0.0056	U	0.0053	U	0.0061	U	0.0056	U	0.006	U	0.006	U
Isopropyl benzene	NE	NE	0.0056	U	0.0053	U	0.0056	U	0.0053	U	0.0061	U	0.0056	U	0.006	U	0.006	U
Methyl acetate	NE	NE	0.0056	U	0.0053	U	0.0056	U	0.0053	U	0.0061	U	0.0056	U	0.006	U	0.006	U
Methyl tert-butyl ether	0.93	500	0.0056	U	0.0053	U	0.0056	U	0.0053	U	0.0061	U	0.0056	U	0.006	U	0.006	U
4-Methyl-2-pentanone	NE	NE	0.0056	U	0.0053	U	0.0056	U	0.0053	U	0.0061	U	0.0056	U	0.006	U	0.006	U
Methylcyclohexane	NE	NE	0.0056	U	0.0053	U	0.0056	U	0.0053	U	0.0061	U	0.0056	U	0.006	U	0.006	U
Methylene chloride	0.05	500	0.002	J	0.00074	J	0.003	J	0.0024	J	0.003	J	0.0027	J	0.006	U	0.006	U
Styrene	NE	NE	0.0056	U	0.0053	U	0.0056	U	0.0053	U	0.0061	U	0.0056	U	0.006	U	0.006	U
1,1,2,2-Tetrachloroethane	NE	NE	0.0056	U	0.0053	U	0.0056	U	0.0053	U	0.0061	U	0.0056	U	0.006	U	0.006	U

Table 7
2009 - 2010 Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-61(09) 11 - 12 10/12/2009		SB-61(09) 72 - 73 10/12/2009		SB-62(09) 8 - 9 10/13/2009		SB-62(09) 73.5 - 74.5 10/13/2009		SB-63(09) 8 - 9 10/09/2009		SB-63(09) 74 - 75 10/09/2009		SB-64(09) 11 - 12 10/20/2009		SB-64(09) 72.5 - 73.5 10/20/2009	
Tetrachloroethene	1.3	150	0.0056	U	0.0053	U	0.0056	U	0.0053	U	0.0061	U	0.0056	U	0.006	U	0.006	U
1,1,2-Trichloro-1,2,2-trifluoroethane	NE	NE	0.0056	U	0.0053	U	0.0056	U	0.0053	U	0.0061	U	0.0056	U	0.006	U	0.006	U
1,2,4-Trichlorobenzene	NE	NE	0.0056	U	0.0053	U	0.0056	U	0.0053	U	0.0061	U	0.0056	U	0.006	U	0.006	U
1,1,1-Trichloroethane	0.68	500	0.0056	U	0.0053	U	0.0056	U	0.0053	U	0.0061	U	0.0056	U	0.006	U	0.006	U
1,1,2-Trichloroethane	NE	NE	0.0056	U	0.0053	U	0.0056	U	0.0053	U	0.0061	U	0.0056	U	0.006	U	0.006	U
Trichloroethene	0.47	200	0.0056	U	0.0053	U	0.0056	U	0.0053	U	0.0061	U	0.0056	U	0.006	U	0.006	U
Trichlorofluoromethane	NE	NE	0.0056	U	0.0053	U	0.0056	U	0.0053	U	0.0061	U	0.0056	U	0.006	U	0.006	U
Vinyl chloride	0.02	13	0.0056	U	0.0053	U	0.0056	U	0.0053	U	0.0061	U	0.0056	U	0.006	U	0.006	U
Total VOCs	NE	NE	0.002		0.00074		0.00395		0.0043		0.003		0.0027		0.0025		0.0123	
Non-carcinogenic PAHs (mg/kg)																		
Acenaphthene	20	500	0.075	U	0.071	U	0.075	U	0.071	U	0.08	U	0.075	U	0.081	U	0.08	U
Acenaphthylene	100	500	0.075	U	0.071	U	0.075	U	0.071	U	0.08	U	0.075	U	0.081	U	0.08	U
Anthracene	100	500	0.075	U	0.071	U	0.075	U	0.071	U	0.08	U	0.075	U	0.081	U	0.08	U
Benzo[g,h,i]perylene	100	500	0.075	U	0.071	U	0.075	U	0.071	U	0.08	U	0.075	U	0.081	U	0.08	U
Fluoranthene	100	500	0.075	U	0.071	U	0.075	U	0.071	U	0.08	U	0.075	U	0.081	U	0.08	U
Fluorene	100	500	0.075	U	0.071	U	0.075	U	0.071	U	0.08	U	0.075	U	0.081	U	0.08	U
2-Methylnaphthalene	NE	NE	0.075	U	0.071	U	0.075	U	0.071	U	0.08	U	0.075	U	0.081	U	0.08	U
Naphthalene	12	500	0.075	U	0.071	U	0.075	U	0.071	U	0.08	U	0.075	U	0.081	U	0.08	U
Phenanthrene	100	500	0.075	U	0.071	U	0.075	U	0.071	U	0.08	U	0.075	U	0.081	U	0.08	U
Pyrene	100	500	0.075	U	0.071	U	0.075	U	0.071	U	0.08	U	0.075	U	0.081	U	0.08	U
Total Non-carcinogenic PAHs	NE	NE	ND		ND		ND		ND		ND		ND		ND		ND	
Carcinogenic PAHs (mg/kg)																		
Benz[a]anthracene	1	5.6	0.075	U	0.071	U	0.075	U	0.071	U	0.08	U	0.075	U	0.081	U	0.08	U
Benzo[a]pyrene	1	1	0.075	U	0.071	U	0.075	U	0.071	U	0.08	U	0.075	U	0.081	U	0.08	U
Benzo[b]fluoranthene	1	5.6	0.075	U	0.071	U	0.075	U	0.071	U	0.08	U	0.075	U	0.081	U	0.08	U
Benzo[k]fluoranthene	0.8	56	0.075	U	0.071	U	0.075	U	0.071	U	0.08	U	0.075	U	0.081	U	0.08	U
Chrysene	1	56	0.075	U	0.071	U	0.075	U	0.071	U	0.08	U	0.075	U	0.081	U	0.08	U
Dibenz[a,h]anthracene	0.33	0.56	0.075	U	0.071	U	0.075	U	0.071	U	0.08	U	0.075	U	0.081	U	0.08	U
Indeno[1,2,3-cd]pyrene	0.5	5.6	0.075	U	0.071	U	0.075	U	0.071	U	0.08	U	0.075	U	0.081	U	0.08	U
Total Carcinogenic PAHs	NE	NE	ND		ND		ND		ND		ND		ND		ND		ND	
Total PAHs	NE	500*	ND		ND		ND		ND		ND		ND		ND		ND	
Other SVOCs (mg/kg)																		
Acetophenone	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Atrazine	NE	NE	0.37	U	0.35	U	0.37	U	0.35	U	0.4	U	0.37	U	0.4	U	0.39	U
Benzaldehyde	NE	NE	0.37	U	0.35	U	0.37	U	0.35	U	0.4	U	0.37	U	0.4	U	0.39	U
1,1-Biphenyl	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Bis(chloroisopropyl)ether	NE	NE	0.075	U	0.071	U	0.075	U	0.071	U	0.08	U	0.075	U	0.081	U	0.08	U
Bis(2-chloroethyl)ether	NE	NE	0.075	U	0.071	U	0.075	U	0.071	U	0.08	U	0.075	U	0.081	U	0.08	U
Bis(2-chloroethoxy)methane	NE	NE	0.37	U	0.35	U	0.37	U	0.35	U	0.4	U	0.37	U	0.4	U	0.39	U
Bis(2-ethylhexyl)phthalate	NE	NE	0.37	U	0.35	U	0.37	U	0.35	U	0.4	U	0.051	J	0.4	U	0.39	U
4-Bromophenyl phenyl ether	NE	NE	0.37	U	0.35	U	0.37	U	0.35	U	0.4	U	0.37	U	0.4	U	0.39	U
Butyl benzyl phthalate	NE	NE	0.37	U	0.35	U	0.37	U	0.35	U	0.4	U	0.37	U	0.4	U	0.39	U
Caprolactam	NE	NE	1.9	U	1.8	U	1.9	U	1.8	U	2	U	1.9	U	2	U	2	U

Table 7
2009 - 2010 Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-61(09) 11 - 12 10/12/2009		SB-61(09) 72 - 73 10/12/2009		SB-62(09) 8 - 9 10/13/2009		SB-62(09) 73.5 - 74.5 10/13/2009		SB-63(09) 8 - 9 10/09/2009		SB-63(09) 74 - 75 10/09/2009		SB-64(09) 11 - 12 10/20/2009		SB-64(09) 72.5 - 73.5 10/20/2009	
Carbazole	NE	NE	0.075	U	0.071	U	0.075	U	0.071	U	0.08	U	0.075	U	0.081	U	0.08	U
4-Chloro-3-methylphenol	NE	NE	0.37	U	0.35	U	0.37	U	0.35	U	0.4	U	0.37	U	0.4	U	0.39	U
4-Chloroaniline	NE	NE	0.37	U	0.35	U	0.37	U	0.35	U	0.4	U	0.37	U	0.4	U	0.39	U
2-Chloronaphthalene	NE	NE	0.075	U	0.071	U	0.075	U	0.071	U	0.08	U	0.075	U	0.081	U	0.08	U
2-Chlorophenol	NE	NE	0.37	U	0.35	U	0.37	U	0.35	U	0.4	U	0.37	U	0.4	U	0.39	U
4-Chlorophenyl phenyl ether	NE	NE	0.37	U	0.35	U	0.37	U	0.35	U	0.4	U	0.37	U	0.4	U	0.39	U
Dibenzofuran	7	350	0.37	U	0.35	U	0.37	U	0.35	U	0.4	U	0.37	U	0.4	U	0.39	U
3,3-Dichlorobenzidine	NE	NE	0.37	U	0.35	U	0.37	U	0.35	U	0.4	U	0.37	U	0.4	U	0.39	U
2,4-Dichlorophenol	NE	NE	0.075	U	0.071	U	0.075	U	0.071	U	0.08	U	0.075	U	0.081	U	0.08	U
Diethyl phthalate	NE	NE	0.045	J	0.35	U	0.37	U	0.35	U	0.4	U	0.37	U	0.4	U	0.39	U
Dimethyl phthalate	NE	NE	0.37	U	0.35	U	0.37	U	0.35	U	0.4	U	0.37	U	0.4	U	0.39	U
2,4-Dimethylphenol	NE	NE	0.37	U	0.35	U	0.37	U	0.35	U	0.4	U	0.37	U	0.4	U	0.39	U
Di-n-butyl phthalate	NE	NE	0.37	U	0.35	U	0.37	U	0.35	U	0.4	U	0.37	U	0.4	U	0.39	U
4,6-Dinitro-2-methylphenol	NE	NE	1.9	U	1.8	U	1.9	U	1.8	U	2	U	1.9	U	2	U	2	U
2,4-Dinitrophenol	NE	NE	1.9	U	1.8	U	1.9	U	1.8	U	2	U	1.9	U	2	U	2	U
2,4-Dinitrotoluene	NE	NE	0.37	U	0.35	U	0.37	U	0.35	U	0.4	U	0.37	U	0.4	U	0.39	U
2,6-Dinitrotoluene	NE	NE	0.37	U	0.35	U	0.37	U	0.35	U	0.4	U	0.37	U	0.4	U	0.39	U
Di-n-octyl phthalate	NE	NE	0.37	U	0.35	U	0.37	U	0.35	U	0.4	U	0.37	U	0.4	U	0.39	U
Hexachlorobenzene	0.33	6	0.075	U	0.071	U	0.075	U	0.071	U	0.08	U	0.075	U	0.081	U	0.08	U
Hexachlorobutadiene	NE	NE	0.075	U	0.071	U	0.075	U	0.071	U	0.08	U	0.075	U	0.081	U	0.08	U
Hexachlorocyclopentadiene	NE	NE	0.37	U	0.35	U	0.37	U	0.35	U	0.4	U	0.37	U	0.4	U	0.39	U
Hexachloroethane	NE	NE	0.37	U	0.35	U	0.37	U	0.35	U	0.4	U	0.37	U	0.4	U	0.39	U
Isophorone	NE	NE	0.37	U	0.35	U	0.37	U	0.35	U	0.4	U	0.37	U	0.4	U	0.39	U
2-Methylphenol	0.33	500	0.37	U	0.35	U	0.37	U	0.35	U	0.4	U	0.37	U	0.4	U	0.39	U
4-Methylphenol (p-Cresol)	0.33	500	0.37	U	0.35	U	0.37	U	0.35	U	0.4	U	0.37	U	0.4	U	0.39	U
2-Nitroaniline	NE	NE	1.9	U	1.8	U	1.9	U	1.8	U	2	U	1.9	U	2	U	2	U
3-Nitroaniline	NE	NE	1.9	U	1.8	U	1.9	U	1.8	U	2	U	1.9	U	2	U	2	U
4-Nitroaniline	NE	NE	1.9	U	1.8	U	1.9	U	1.8	U	2	U	1.9	U	2	U	2	U
Nitrobenzene	NE	NE	0.075	U	0.071	U	0.075	U	0.071	U	0.08	U	0.075	U	0.081	U	0.08	U
2-Nitrophenol	NE	NE	0.37	U	0.35	U	0.37	U	0.35	U	0.4	U	0.37	U	0.4	U	0.39	U
4-Nitrophenol	NE	NE	1.9	U	1.8	U	1.9	U	1.8	U	2	U	1.9	U	2	U	2	U
N-Nitrosodi-n-propylamine	NE	NE	0.075	U	0.071	U	0.075	U	0.071	U	0.08	U	0.075	U	0.081	U	0.08	U
N-Nitrosodiphenylamine	NE	NE	0.075	U	0.071	U	0.075	U	0.071	U	0.08	U	0.075	U	0.081	U	0.08	U
Pentachlorophenol	0.8	6.7	0.37	U	0.35	U	0.37	U	0.35	U	0.4	U	0.37	U	0.4	U	0.39	U
Phenol	0.33	500	0.075	U	0.071	U	0.075	U	0.071	U	0.08	U	0.075	U	0.081	U	0.08	U

Table 7
2009 - 2010 Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-61(09) 11 - 12 10/12/2009		SB-61(09) 72 - 73 10/12/2009		SB-62(09) 8 - 9 10/13/2009		SB-62(09) 73.5 - 74.5 10/13/2009		SB-63(09) 8 - 9 10/09/2009		SB-63(09) 74 - 75 10/09/2009		SB-64(09) 11 - 12 10/20/2009		SB-64(09) 72.5 - 73.5 10/20/2009	
2,4,5-Trichlorophenol	NE	NE	0.37	U	0.35	U	0.37	U	0.35	U	0.4	U	0.37	U	0.4	U	0.39	U
2,4,6-Trichlorophenol	NE	NE	0.37	U	0.35	U	0.37	U	0.35	U	0.4	U	0.37	U	0.4	U	0.39	U
Total SVOCs	NE	NE	0.045		ND		ND		ND		ND		0.051		ND		ND	
PCBs (mg/kg)																		
Aroclor 1016	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Aroclor 1221	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Aroclor 1232	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Aroclor 1242	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Aroclor 1248	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Aroclor 1254	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Aroclor 1260	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Total Metals (mg/kg)																		
Aluminum	NE	NE	3290		3390		4060		2490		4230		2650		3150		2310	
Antimony	NE	NE	1.1	U	1.1	U	1.1	U	1.1	U	1.2	U	1.1	U	1.2	U	1.2	U
Arsenic	13	16	4.3		2.7		2		2.3		2.5		1.8		1.8		1.9	
Barium	350	400	16.6	J	21.6		21.3	J	12.9	J	17.7	J	11.6	J	11.4	J	14.7	J
Beryllium	7.2	590	0.18	J	0.15	J	0.18	J	0.14	J	0.36	J	0.22	J	0.31	J	0.24	J
Cadmium	2.5	9.3	0.042	J	0.071	J	0.098	J	0.057	J	0.17	J	0.13	J	0.6	U	0.6	U
Calcium	NE	NE	2920	J	22000	J	17200	J	30600	J	22100		37100		23200		36100	
Chromium	NE	NE	3.6		5.3		6		3.4		6.7		4.8		4.3		3.4	
Cobalt	NE	NE	2.5	J	4.2	J	4.6	J	2.3	J	4	J	2.6	J	2.8	J	1.9	J
Copper	50	270	6.7		9.3		8.9		6.7		8.4		6.2		8.1		5.9	
Iron	NE	NE	6860	J	10200	J	10400	J	6040	J	12300		9270		8500		8430	
Lead	63	1000	2.8	J	3.8	J	4.3	J	2.3	J	3.8		2.4		2.5		2	
Magnesium	NE	NE	1160	J	5410	J	4340	J	2910	J	5390		4490		2840		3070	
Manganese	1600	10000	81.5	J	233	J	157	J	112	J	247		138		206		109	
Mercury	0.18	2.8	0.037	U	0.035	U	0.037	U	0.035	U	0.04	U	0.037	U	0.04	U	0.04	U
Nickel	30	310	5.9		8.2		9.3		5.9		8.2		5.5		6.7		5	
Potassium	NE	NE	531	J	686		744		516	J	774		538	J	519	J	438	J
Selenium	3.9	1500	0.56	U	0.53	U	0.56	U	0.53	U	0.61	U	0.56	U	0.6	U	0.6	U
Silver	2	1500	0.56	U	0.53	U	0.56	U	0.53	U	0.088	J	0.56	U	0.088	J	0.6	U
Sodium	NE	NE	563	U	534	U	565	U	529	U	71.7	J	41.6	J	102	J	86.3	J
Thallium	NE	NE	1.1	U	1.1	U	1.1	U	1.1	U	1.2	U	1.1	U	1.2	U	1.2	U
Vanadium	NE	NE	7.1		11.4		12.4		6.1		14.5		11.4		9.1		6.1	
Zinc	109	10000	15.2	J	20.7	J	24.6	J	15.8	J	26		18.8		21.3	J	16.8	J
Total Cyanide (mg/kg)																		
Cyanide, Total	27	27	0.56	U	0.17	J	0.56	U	0.53	U	0.61	U	0.56	U	0.6	U	0.6	U
Other (%)																		
Percent Solids	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	

Table 7
2009 - 2010 Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-66(09) 10 - 11 10/25/2009		SB-66(09) 70 - 71 10/25/2009		SB-67(09) 6 - 7 10/13/2009		SB-67(09) 65 - 75 10/13/2009		SB-68(09) 12.5 - 12.8 10/14/2009		SB-68(09) 74 - 75 10/14/2009		SB-70(09) 9 - 10 10/20/2009		Duplicate of: SB-70(09) 9 - 10 10/20/2009	
BTEX (mg/kg)																		
Benzene	0.06	44	0.006	U	0.0059	U	0.0054	U	0.0052	U	0.0059	U	0.005	U	0.0058	U	0.0059	U
Toluene	0.7	500	0.006	U	0.0012	J	0.0054	U	0.0016	J	0.0059	U	0.001	J	0.0012	J	0.00099	J
Ethylbenzene	1	390	0.006	U	0.0059	U	0.0054	U	0.0052	U	0.0059	U	0.005	U	0.0058	U	0.0059	U
Total Xylene	0.26	500	0.018	U	0.018	U	0.016	U	0.016	U	0.018	U	0.015	U	0.018	U	0.018	U
Total BTEX	NE	NE	ND		0.0012		ND		0.0016		ND		0.001		0.0012		0.00099	
Other VOCs (mg/kg)																		
Acetone	0.05	500	0.024	U	0.024	U	0.022	U	0.021	U	0.009	J	0.02	U	0.023	U	0.024	U
Bromodichloromethane	NE	NE	0.006	U	0.0059	U	0.0054	U	0.0052	U	0.0059	U	0.005	U	0.0058	U	0.0059	U
Bromoform	NE	NE	0.006	U	0.0059	U	0.0054	U	0.0052	U	0.0059	U	0.005	U	0.0058	U	0.0059	U
Bromomethane	NE	NE	0.006	UJ	0.0059	UJ	0.0054	UJ	0.0052	UJ	0.0059	UJ	0.005	UJ	0.0058	UJ	0.0059	UJ
2-Butanone	0.12	500	0.006	U	0.0059	U	0.0054	U	0.0052	U	0.0059	U	0.005	U	0.0058	U	0.0059	U
Carbon disulfide	NE	NE	0.006	U	0.0059	U	0.0054	U	0.0052	U	0.0059	U	0.005	U	0.0058	U	0.0059	U
Carbon tetrachloride	0.76	22	0.006	U	0.0059	U	0.0054	U	0.0052	U	0.0059	U	0.005	U	0.0058	U	0.0059	U
Chlorobenzene	1.1	500	0.006	U	0.0059	U	0.0054	U	0.0052	U	0.0059	U	0.005	U	0.0058	U	0.0059	U
Chloroethane	NE	NE	0.006	U	0.0059	U	0.0054	U	0.0052	U	0.0059	U	0.005	U	0.0058	U	0.0059	U
Chloroform	0.37	350	0.006	U	0.0059	U	0.0054	U	0.0052	U	0.0059	U	0.005	U	0.0058	U	0.0059	U
Chloromethane	NE	NE	0.006	U	0.0059	U	0.0054	U	0.0052	U	0.0059	U	0.005	U	0.0058	U	0.0059	U
Cyclohexane	NE	NE	0.0011	J	0.0059	U	0.0054	U	0.0052	U	0.0059	U	0.005	U	0.0058	U	0.0059	U
1,2-Dibromo-3-chloropropane	NE	NE	0.006	U	0.0059	U	0.0054	U	0.0052	U	0.0059	U	0.005	U	0.0058	U	0.0059	U
Dibromochloromethane	NE	NE	0.006	U	0.0059	U	0.0054	U	0.0052	U	0.0059	U	0.005	U	0.0058	U	0.0059	U
1,2-Dibromoethane	NE	NE	0.006	U	0.0059	U	0.0054	U	0.0052	U	0.0059	U	0.005	U	0.0058	U	0.0059	U
1,2-Dichlorobenzene	1.1	500	0.006	U	0.0059	U	0.0054	U	0.0052	U	0.0059	U	0.005	U	0.0058	U	0.0059	U
1,3-Dichlorobenzene	2.4	280	0.006	U	0.0059	U	0.0054	U	0.0052	U	0.0059	U	0.005	U	0.0058	U	0.0059	U
1,4-Dichlorobenzene	1.8	130	0.006	U	0.0059	U	0.0054	U	0.0052	U	0.0059	U	0.005	U	0.0058	U	0.0059	U
Dichlorodifluoromethane	NE	NE	0.006	U	0.0059	U	0.0054	U	0.0052	U	0.0059	U	0.005	U	0.0058	U	0.0059	U
1,1-Dichloroethane	0.27	240	0.006	U	0.0059	U	0.0054	U	0.0052	U	0.0059	U	0.005	U	0.0058	U	0.0059	U
1,2-Dichloroethane	0.02	30	0.006	U	0.0059	U	0.0054	U	0.0052	U	0.0059	U	0.005	U	0.0058	U	0.0059	U
cis-1,2-Dichloroethene	0.25	500	0.006	U	0.0059	U	0.0054	U	0.0052	U	0.0059	U	0.005	U	0.0058	U	0.0059	U
trans-1,2-Dichloroethene	0.19	500	0.006	U	0.0059	U	0.0054	U	0.0052	U	0.0059	U	0.005	U	0.0058	U	0.0059	U
1,1-Dichloroethene	0.33	500	0.006	U	0.0059	U	0.0054	U	0.0052	U	0.0059	U	0.005	U	0.0058	U	0.0059	U
1,2-Dichloropropane	NE	NE	0.006	U	0.0059	U	0.0054	U	0.0052	U	0.0059	U	0.005	U	0.0058	U	0.0059	U
cis-1,3-Dichloropropene	NE	NE	0.006	U	0.0059	U	0.0054	U	0.0052	U	0.0059	U	0.005	U	0.0058	U	0.0059	U
trans-1,3-Dichloropropene	NE	NE	0.006	U	0.0059	U	0.0054	U	0.0052	U	0.0059	U	0.005	U	0.0058	U	0.0059	U
2-Hexanone	NE	NE	0.006	U	0.0059	U	0.0054	U	0.0052	U	0.0059	U	0.005	U	0.0058	U	0.0059	U
Isopropyl benzene	NE	NE	0.006	U	0.0059	U	0.0054	U	0.0052	U	0.003	J	0.005	U	0.0058	U	0.0059	U
Methyl acetate	NE	NE	0.006	U	0.0059	U	0.0054	U	0.0052	U	0.0059	U	0.005	U	0.0058	U	0.0059	U
Methyl tert-butyl ether	0.93	500	0.006	U	0.0059	U	0.0054	U	0.0052	U	0.0059	U	0.005	U	0.0058	U	0.0059	U
4-Methyl-2-pentanone	NE	NE	0.006	U	0.0059	U	0.0054	U	0.0052	U	0.0059	U	0.005	U	0.0058	U	0.0059	U
Methylcyclohexane	NE	NE	0.006	U	0.0059	U	0.0054	U	0.0052	U	0.0059	U	0.005	U	0.0058	U	0.0059	U
Methylene chloride	0.05	500	0.006	U	0.0044	J	0.0027	J	0.0018	J	0.00081	J	0.0016	J	0.0058	U	0.0059	U
Styrene	NE	NE	0.006	U	0.0059	U	0.0054	U	0.0052	U	0.0059	U	0.005	U	0.0058	U	0.0059	U
1,1,2,2-Tetrachloroethane	NE	NE	0.006	U	0.0059	U	0.0054	U	0.0052	U	0.0059	U	0.005	U	0.0058	U	0.0059	U

Table 7
2009 - 2010 Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-66(09) 10 - 11 10/25/2009		SB-66(09) 70 - 71 10/25/2009		SB-67(09) 6 - 7 10/13/2009		SB-67(09) 65 - 75 10/13/2009		SB-68(09) 12.5 - 12.8 10/14/2009		SB-68(09) 74 - 75 10/14/2009		SB-70(09) 9 - 10 10/20/2009		Duplicate of: SB-70(09) 9 - 10 10/20/2009	
Tetrachloroethene	1.3	150	0.006	U	0.0059	U	0.0054	U	0.0052	U	0.0059	U	0.005	U	0.0058	U	0.0059	U
1,1,2-Trichloro-1,2,2-trifluoroethane	NE	NE	0.006	U	0.0059	U	0.0054	U	0.0052	U	0.0059	U	0.005	U	0.0058	U	0.0059	U
1,2,4-Trichlorobenzene	NE	NE	0.006	U	0.0059	U	0.0054	U	0.0052	U	0.0059	U	0.005	U	0.0058	U	0.0059	U
1,1,1-Trichloroethane	0.68	500	0.006	U	0.0059	U	0.0054	U	0.0052	U	0.0059	U	0.005	U	0.0058	U	0.0059	U
1,1,2-Trichloroethane	NE	NE	0.006	U	0.0059	U	0.0054	U	0.0052	U	0.0059	U	0.005	U	0.0058	U	0.0059	U
Trichloroethene	0.47	200	0.006	U	0.0059	U	0.0054	U	0.0052	U	0.0059	U	0.005	U	0.0058	U	0.0059	U
Trichlorofluoromethane	NE	NE	0.006	U	0.0059	U	0.0054	U	0.0052	U	0.0059	U	0.005	U	0.0058	U	0.0059	U
Vinyl chloride	0.02	13	0.006	U	0.0059	U	0.0054	U	0.0052	U	0.0059	U	0.005	U	0.0058	U	0.0059	U
Total VOCs	NE	NE	0.0011		0.0056		0.0027		0.0034		0.01281		0.0026		0.0012		0.00099	
Non-carcinogenic PAHs (mg/kg)																		
Acenaphthene	20	500	0.08	U	0.079	U	0.096	J	0.069	U	0.1	J	0.067	U	0.078	U	0.08	U
Acenaphthylene	100	500	0.08	U	0.079	U	0.36	U	0.038	J	0.4	U	0.067	U	0.078	U	0.08	U
Anthracene	100	500	0.08	U	0.079	U	0.38		0.069	U	0.32	J	0.067	U	0.078	U	0.08	U
Benzo[g,h,i]perylene	100	500	0.08	U	0.079	U	1.4		0.069	U	0.26	J	0.067	U	0.078	U	0.08	U
Fluoranthene	100	500	0.033	J	0.079	U	3.7		0.069	U	1.3		0.067	U	0.078	U	0.08	U
Fluorene	100	500	0.08	U	0.079	U	0.093	J	0.069	U	0.16	J	0.067	U	0.078	U	0.08	U
2-Methylnaphthalene	NE	NE	0.08	U	0.079	U	0.36	U	0.069	U	0.4	U	0.067	U	0.078	U	0.08	U
Naphthalene	12	500	0.019	J	0.079	U	0.36	U	0.069	U	0.4	U	0.067	U	0.078	U	0.08	U
Phenanthrene	100	500	0.036	J	0.079	U	1.3		0.069	U	0.53		0.067	U	0.078	U	0.08	U
Pyrene	100	500	0.028	J	0.079	U	3.2		0.069	U	0.91		0.067	U	0.078	U	0.08	U
Total Non-carcinogenic PAHs	NE	NE	0.116		ND		10.169		0.038		3.58		ND		ND		ND	
Carcinogenic PAHs (mg/kg)																		
Benz[a]anthracene	1	5.6	0.024	J	0.079	U	2.4		0.069	U	0.46		0.067	U	0.078	U	0.08	U
Benzo[a]pyrene	1	1	0.08	U	0.079	U	2		0.069	U	0.4		0.067	U	0.078	U	0.08	U
Benzo[b]fluoranthene	1	5.6	0.08	U	0.079	U	2.8		0.069	U	0.51		0.067	U	0.078	U	0.08	U
Benzo[k]fluoranthene	0.8	56	0.08	U	0.079	U	0.36	U	0.069	U	0.4	U	0.067	U	0.078	U	0.08	U
Chrysene	1	56	0.018	J	0.079	U	2.1		0.069	U	0.45		0.067	U	0.078	U	0.08	U
Dibenz[a,h]anthracene	0.33	0.56	0.08	U	0.079	U	0.67		0.069	U	0.4	U	0.067	U	0.078	U	0.08	U
Indeno[1,2,3-cd]pyrene	0.5	5.6	0.08	U	0.079	U	1.3		0.069	U	0.41		0.067	U	0.078	U	0.08	U
Total Carcinogenic PAHs	NE	NE	0.042		ND		11.27		ND		2.23		ND		ND		ND	
Total PAHs	NE	500*	0.158		ND		21.439		0.038		5.81		ND		ND		ND	
Other SVOCs (mg/kg)																		
Acetophenone	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Atrazine	NE	NE	0.39	U	0.39	U	1.8	U	0.34	U	2	U	0.33	U	0.38	U	0.39	U
Benzaldehyde	NE	NE	0.39	U	0.39	U	1.8	U	0.34	U	2	U	0.33	U	0.38	U	0.39	U
1,1-Biphenyl	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Bis(chloroisopropyl)ether	NE	NE	0.08	U	0.079	U	0.36	U	0.069	U	0.4	U	0.067	U	0.078	U	0.08	U
Bis(2-chloroethyl)ether	NE	NE	0.08	U	0.079	U	0.36	U	0.069	U	0.4	U	0.067	U	0.078	U	0.08	U
Bis(2-chloroethoxy)methane	NE	NE	0.39	U	0.39	U	1.8	U	0.34	U	2	U	0.33	U	0.38	U	0.39	U
Bis(2-ethylhexyl)phthalate	NE	NE	0.39	U	0.39	U	0.22	J	0.34	U	2	U	0.33	U	0.38	U	0.39	U
4-Bromophenyl phenyl ether	NE	NE	0.39	U	0.39	U	1.8	U	0.34	U	2	U	0.33	U	0.38	U	0.39	U
Butyl benzyl phthalate	NE	NE	0.39	U	0.39	U	1.8	U	0.34	U	2	U	0.33	U	0.38	U	0.39	U
Caprolactam	NE	NE	2	U	2	U	9.1	U	1.7	U	10	U	1.7	U	2	U	2	U

Table 7
2009 - 2010 Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-66(09) 10 - 11 10/25/2009		SB-66(09) 70 - 71 10/25/2009		SB-67(09) 6 - 7 10/13/2009		SB-67(09) 65 - 75 10/13/2009		SB-68(09) 12.5 - 12.8 10/14/2009		SB-68(09) 74 - 75 10/14/2009		SB-70(09) 9 - 10 10/20/2009		Duplicate of: SB-70(09) 9 - 10 10/20/2009	
Carbazole	NE	NE	0.08	U	0.079	U	0.13	J	0.069	U	0.17	J	0.067	U	0.078	U	0.08	U
4-Chloro-3-methylphenol	NE	NE	0.39	U	0.39	U	1.8	U	0.34	U	2	U	0.33	U	0.38	U	0.39	U
4-Chloroaniline	NE	NE	0.39	U	0.39	U	1.8	U	0.34	U	2	U	0.33	U	0.38	U	0.39	U
2-Chloronaphthalene	NE	NE	0.08	U	0.079	U	0.36	U	0.069	U	0.4	U	0.067	U	0.078	U	0.08	U
2-Chlorophenol	NE	NE	0.39	U	0.39	U	1.8	U	0.34	U	2	U	0.33	U	0.38	U	0.39	U
4-Chlorophenyl phenyl ether	NE	NE	0.39	U	0.39	U	1.8	U	0.34	U	2	U	0.33	U	0.38	U	0.39	U
Dibenzofuran	7	350	0.39	U	0.39	U	1.8	U	0.34	U	0.079	J	0.33	U	0.38	U	0.39	U
3,3-Dichlorobenzidine	NE	NE	0.39	U	0.39	U	1.8	U	0.34	U	2	U	0.33	U	0.38	U	0.39	U
2,4-Dichlorophenol	NE	NE	0.08	U	0.079	U	0.36	U	0.069	U	0.4	U	0.067	U	0.078	U	0.08	U
Diethyl phthalate	NE	NE	0.39	U	0.39	U	1.8	U	0.34	U	2	U	0.33	U	0.38	U	0.39	U
Dimethyl phthalate	NE	NE	0.39	U	0.39	U	1.8	U	0.34	U	2	U	0.33	U	0.38	U	0.39	U
2,4-Dimethylphenol	NE	NE	0.39	U	0.39	U	1.8	U	0.34	U	2	U	0.33	U	0.38	U	0.39	U
Di-n-butyl phthalate	NE	NE	0.39	U	0.39	U	1.8	U	0.34	U	2	U	0.33	U	0.38	U	0.39	U
4,6-Dinitro-2-methylphenol	NE	NE	2	U	2	U	9.1	U	1.7	U	10	U	1.7	U	2	U	2	U
2,4-Dinitrophenol	NE	NE	2	U	2	U	9.1	U	1.7	U	10	U	1.7	U	2	U	2	U
2,4-Dinitrotoluene	NE	NE	0.39	U	0.39	U	1.8	U	0.34	U	2	U	0.33	U	0.38	U	0.39	U
2,6-Dinitrotoluene	NE	NE	0.39	U	0.39	U	1.8	U	0.34	U	2	U	0.33	U	0.38	U	0.39	U
Di-n-octyl phthalate	NE	NE	0.39	U	0.39	U	1.8	U	0.34	U	2	U	0.33	U	0.38	U	0.39	U
Hexachlorobenzene	0.33	6	0.08	U	0.079	U	0.36	U	0.069	U	0.4	U	0.067	U	0.078	U	0.08	U
Hexachlorobutadiene	NE	NE	0.08	U	0.079	U	0.36	U	0.069	U	0.4	U	0.067	U	0.078	U	0.08	U
Hexachlorocyclopentadiene	NE	NE	0.39	U	0.39	U	1.8	U	0.34	U	2	U	0.33	U	0.38	U	0.39	U
Hexachloroethane	NE	NE	0.39	U	0.39	U	1.8	U	0.34	U	2	U	0.33	U	0.38	U	0.39	U
Isophorone	NE	NE	0.39	U	0.39	U	1.8	U	0.34	U	2	U	0.33	U	0.38	U	0.39	U
2-Methylphenol	0.33	500	0.39	U	0.39	U	1.8	U	0.34	U	2	U	0.33	U	0.38	U	0.39	U
4-Methylphenol (p-Cresol)	0.33	500	0.39	U	0.39	U	1.8	U	0.34	U	2	U	0.33	U	0.38	U	0.39	U
2-Nitroaniline	NE	NE	2	U	2	U	9.1	U	1.7	U	10	U	1.7	U	2	U	2	U
3-Nitroaniline	NE	NE	2	U	2	U	9.1	U	1.7	U	10	U	1.7	U	2	U	2	U
4-Nitroaniline	NE	NE	2	U	2	U	9.1	U	1.7	U	10	U	1.7	U	2	U	2	U
Nitrobenzene	NE	NE	0.08	U	0.079	U	0.36	U	0.069	U	0.4	U	0.067	U	0.078	U	0.08	U
2-Nitrophenol	NE	NE	0.39	U	0.39	U	1.8	U	0.34	U	2	U	0.33	U	0.38	U	0.39	U
4-Nitrophenol	NE	NE	2	U	2	U	9.1	U	1.7	U	10	U	1.7	U	2	U	2	U
N-Nitrosodi-n-propylamine	NE	NE	0.08	U	0.079	U	0.36	U	0.069	U	0.4	U	0.067	U	0.078	U	0.08	U
N-Nitrosodiphenylamine	NE	NE	0.08	U	0.079	U	0.36	U	0.069	U	0.4	U	0.067	U	0.078	U	0.08	U
Pentachlorophenol	0.8	6.7	0.39	U	0.39	U	1.8	U	0.34	U	2	U	0.33	U	0.38	U	0.39	U
Phenol	0.33	500	0.08	U	0.079	U	0.36	U	0.069	U	0.4	U	0.067	U	0.078	U	0.08	U

Table 7
2009 - 2010 Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-66(09) 10 - 11 10/25/2009		SB-66(09) 70 - 71 10/25/2009		SB-67(09) 6 - 7 10/13/2009		SB-67(09) 65 - 75 10/13/2009		SB-68(09) 12.5 - 12.8 10/14/2009		SB-68(09) 74 - 75 10/14/2009		SB-70(09) 9 - 10 10/20/2009		Duplicate of: SB-70(09) 9 - 10 10/20/2009	
2,4,5-Trichlorophenol	NE	NE	0.39	U	0.39	U	1.8	U	0.34	U	2	U	0.33	U	0.38	U	0.39	U
2,4,6-Trichlorophenol	NE	NE	0.39	U	0.39	U	1.8	U	0.34	U	2	U	0.33	U	0.38	U	0.39	U
Total SVOCs	NE	NE	0.158				21.789		0.038		6.059		ND		ND		ND	
PCBs (mg/kg)																		
Aroclor 1016	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Aroclor 1221	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Aroclor 1232	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Aroclor 1242	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Aroclor 1248	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Aroclor 1254	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Aroclor 1260	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Total Metals (mg/kg)																		
Aluminum	NE	NE	3480		3060		6010		2520		3950		2540		3820		3460	
Antimony	NE	NE	1.2	U	1.2	U	0.19	J	1	U	1.2	U	1	U	0.22	J	1.2	U
Arsenic	13	16	2.6		3.3		5.1		1.8		4.3		2.3		2.9		3.1	
Barium	350	400	19.2	J	16.1	J	119		6.9	J	18.7	J	13.2	J	20	J	16.6	J
Beryllium	7.2	590	0.29	J	0.24	J	0.36	J	0.14	J	0.22	J	0.16	J	0.35	J	0.33	J
Cadmium	2.5	9.3	0.048	J	0.037	J	0.28	J	0.055	J	0.073	J	0.076	J	0.58	U	0.59	U
Calcium	NE	NE	23400		41200		24500	J	31000	J	22600	J	48400	J	23800		23700	
Chromium	NE	NE	5.3		5.1		10		3.8		5.5		3.6		5.1		4.4	
Cobalt	NE	NE	3	J	2.8	J	5.6		2.7	J	3.7	J	2.5	J	2.8	J	2.8	J
Copper	50	270	12		8.5		36.1		9.2		9.7		6.7		9.3		8	
Iron	NE	NE	8570		10600		11700	J	7320	J	11600	J	6490	J	10700		11000	
Lead	63	1000	10.6		2.8		208	J	2.6	J	5.4	J	2.4	J	3.5		3	
Magnesium	NE	NE	3310		3340		5920	J	3860	J	2770	J	3730	J	2400		2320	
Manganese	1600	10000	142		143		218	J	125	J	197	J	132	J	121		115	
Mercury	0.18	2.8	0.021	J	0.039	U	0.84		0.034	U	0.019	J	0.033	U	0.036	J	0.039	U
Nickel	30	310	7.3		7.2		10.8		6.2		8.5		6.2		7.3		6.9	
Potassium	NE	NE	578	J	571	J	703		532		705		464	J	559	J	481	J
Selenium	3.9	1500	0.6	U	0.59	U	0.26	J	0.52	U	0.59	U	0.5	U	0.4	J	0.34	J
Silver	2	1500	0.6	U	0.59	U	0.21	J	0.52	U	0.59	U	0.5	U	0.58	U	0.59	U
Sodium	NE	NE	81.4	J	27.1	J	538	U	520	U	591	U	501	U	95.7	J	95.7	J
Thallium	NE	NE	1.2	U	1.2	U	1.1	U	1	U	1.2	U	1	U	1.2	U	1.2	U
Vanadium	NE	NE	8.8		10		15		6.8		10.5		6.1		10.8		9.1	
Zinc	109	10000	25.9		23		130	J	17.5	J	23.4	J	16.5	J	24	J	21.7	J
Total Cyanide (mg/kg)																		
Cyanide, Total	27	27	0.14	J	0.59	U	0.3	J	0.52	U	0.59	U	0.5	U	0.58	U	0.59	U
Other (%)																		
Percent Solids	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	

Table 7
2009 - 2010 Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-70(09) 74 - 75 10/20/2009		SB-71(09) 13.7 - 14 10/10/2009		SB-71(09) 19 - 20 10/10/2009		SB-71(09) 77 - 77.5 10/11/2009		SB-72(09) 12.7 - 13.2 10/10/2009		SB-72(09) 74 - 75 10/10/2009		SB-73(09) 12 - 13 10/10/2009	
BTEX (mg/kg)																
Benzene	0.06	44	0.0058	U	0.14		0.0075	U	0.0059	U	0.12		0.0059	U	0.39	
Toluene	0.7	500	0.0058	U	0.4		0.0019	J	0.0059	U	0.22		0.0059	U	0.52	
Ethylbenzene	1	390	0.0058	U	1		0.0025	J	0.0059	U	0.54		0.0059	U	0.44	
Total Xylene	0.26	500	0.017	U	2.9		0.009	J	0.018	U	1.8		0.018	U	1.4	
Total BTEX	NE	NE	ND		4.44		0.0134		ND		2.68		ND		2.75	
Other VOCs (mg/kg)																
Acetone	0.05	500	0.023	U	0.13	U	0.027	J	0.023	U	0.13	U	0.023	U	0.05	J
Bromodichloromethane	NE	NE	0.0058	U	0.034	U	0.0075	U	0.0059	U	0.032	U	0.0059	U	0.038	U
Bromoform	NE	NE	0.0058	U	0.034	U	0.0075	U	0.0059	U	0.032	U	0.0059	U	0.038	U
Bromomethane	NE	NE	0.0058	UJ	0.034	UJ	0.0075	UJ	0.0059	UJ	0.032	UJ	0.0059	UJ	0.038	UJ
2-Butanone	0.12	500	0.0058	U	0.034	U	0.0075	U	0.0059	U	0.032	U	0.0059	U	0.038	U
Carbon disulfide	NE	NE	0.0058	U	0.034	U	0.0075	U	0.0059	U	0.032	U	0.0059	U	0.038	U
Carbon tetrachloride	0.76	22	0.0058	U	0.034	U	0.0075	U	0.0059	U	0.032	U	0.0059	U	0.038	U
Chlorobenzene	1.1	500	0.0058	U	0.034	U	0.0075	U	0.0059	U	0.032	U	0.0059	U	0.038	U
Chloroethane	NE	NE	0.0058	U	0.034	U	0.0075	U	0.0059	U	0.032	U	0.0059	U	0.038	U
Chloroform	0.37	350	0.0058	U	0.034	U	0.0075	U	0.0059	U	0.032	U	0.0059	U	0.038	U
Chloromethane	NE	NE	0.0058	U	0.034	U	0.0075	U	0.0059	U	0.032	U	0.0059	U	0.038	U
Cyclohexane	NE	NE	0.0058	U	0.034	U	0.0075	U	0.0059	U	0.032	U	0.0059	U	0.038	U
1,2-Dibromo-3-chloropropane	NE	NE	0.0058	U	0.034	U	0.0075	U	0.0059	U	0.032	U	0.0059	U	0.038	U
Dibromochloromethane	NE	NE	0.0058	U	0.034	U	0.0075	U	0.0059	U	0.032	U	0.0059	U	0.038	U
1,2-Dibromoethane	NE	NE	0.0058	U	0.034	U	0.0075	U	0.0059	U	0.032	U	0.0059	U	0.038	U
1,2-Dichlorobenzene	1.1	500	0.0058	U	0.034	U	0.0075	U	0.0059	U	0.032	U	0.0059	U	0.038	U
1,3-Dichlorobenzene	2.4	280	0.0058	U	0.034	U	0.0075	U	0.0059	U	0.032	U	0.0059	U	0.038	U
1,4-Dichlorobenzene	1.8	130	0.0058	U	0.034	U	0.0075	U	0.0059	U	0.032	U	0.0059	U	0.038	U
Dichlorodifluoromethane	NE	NE	0.0058	U	0.034	U	0.0075	U	0.0059	U	0.032	U	0.0059	U	0.038	U
1,1-Dichloroethane	0.27	240	0.0058	U	0.034	U	0.0075	U	0.0059	U	0.032	U	0.0059	U	0.038	U
1,2-Dichloroethane	0.02	30	0.0058	U	0.034	U	0.0075	U	0.0059	U	0.032	U	0.0059	U	0.038	U
cis-1,2-Dichloroethene	0.25	500	0.0058	U	0.034	U	0.0075	U	0.0059	U	0.032	U	0.0059	U	0.038	U
trans-1,2-Dichloroethene	0.19	500	0.0058	U	0.034	U	0.0075	U	0.0059	U	0.032	U	0.0059	U	0.038	U
1,1-Dichloroethene	0.33	500	0.0058	U	0.034	U	0.0075	U	0.0059	U	0.032	U	0.0059	U	0.038	U
1,2-Dichloropropane	NE	NE	0.0058	U	0.034	U	0.0075	U	0.0059	U	0.032	U	0.0059	U	0.038	U
cis-1,3-Dichloropropene	NE	NE	0.0058	U	0.034	U	0.0075	U	0.0059	U	0.032	U	0.0059	U	0.038	U
trans-1,3-Dichloropropene	NE	NE	0.0058	U	0.034	U	0.0075	U	0.0059	U	0.032	U	0.0059	U	0.038	U
2-Hexanone	NE	NE	0.0058	U	0.034	U	0.0075	U	0.0059	U	0.032	U	0.0059	U	0.038	U
Isopropyl benzene	NE	NE	0.0058	U	0.093		0.0037	J	0.0059	U	0.058		0.0059	U	0.036	J
Methyl acetate	NE	NE	0.0058	U	0.034	U	0.0075	U	0.0059	U	0.032	U	0.0059	U	0.038	U
Methyl tert-butyl ether	0.93	500	0.0058	U	0.034	U	0.0075	U	0.0059	U	0.032	U	0.0059	U	0.038	U
4-Methyl-2-pentanone	NE	NE	0.0058	U	0.034	U	0.0075	U	0.0059	U	0.032	U	0.0059	U	0.038	U
Methylcyclohexane	NE	NE	0.0058	U	0.034	U	0.0075	U	0.0059	U	0.032	U	0.0059	U	0.038	U
Methylene chloride	0.05	500	0.0058	U	0.014	J	0.0035	J	0.0028	J	0.016	J	0.0059	U	0.018	J
Styrene	NE	NE	0.0058	U	0.034	U	0.0075	U	0.0059	U	0.032	U	0.0059	U	0.038	U
1,1,2,2-Tetrachloroethane	NE	NE	0.0058	U	0.034	U	0.0075	U	0.0059	U	0.032	U	0.0059	U	0.038	U

Table 7
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National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-70(09) 74 - 75 10/20/2009		SB-71(09) 13.7 - 14 10/10/2009		SB-71(09) 19 - 20 10/10/2009		SB-71(09) 77 - 77.5 10/11/2009		SB-72(09) 12.7 - 13.2 10/10/2009		SB-72(09) 74 - 75 10/10/2009		SB-73(09) 12 - 13 10/10/2009	
Tetrachloroethene	1.3	150	0.0058	U	0.034	U	0.0075	U	0.0059	U	0.032	U	0.0059	U	0.038	U
1,1,2-Trichloro-1,2,2-trifluoroethane	NE	NE	0.0058	U	0.034	U	0.0075	U	0.0059	U	0.032	U	0.0059	U	0.038	U
1,2,4-Trichlorobenzene	NE	NE	0.0058	U	0.034	U	0.0075	U	0.0059	U	0.032	U	0.0059	U	0.038	U
1,1,1-Trichloroethane	0.68	500	0.0058	U	0.034	U	0.0075	U	0.0059	U	0.032	U	0.0059	U	0.038	U
1,1,2-Trichloroethane	NE	NE	0.0058	U	0.034	U	0.0075	U	0.0059	U	0.032	U	0.0059	U	0.038	U
Trichloroethene	0.47	200	0.0058	U	0.034	U	0.0075	U	0.0059	U	0.032	U	0.0059	U	0.038	U
Trichlorofluoromethane	NE	NE	0.0058	U	0.034	U	0.0075	U	0.0059	U	0.032	U	0.0059	U	0.038	U
Vinyl chloride	0.02	13	0.0058	U	0.034	U	0.0075	U	0.0059	U	0.032	U	0.0059	U	0.038	U
Total VOCs	NE	NE	ND		254.547		0.0476		0.0028		122.754		ND		412.854	
Non-carcinogenic PAHs (mg/kg)																
Acenaphthene	20	500	0.078	U	110		0.1	U	0.078	U	110		0.079	U	130	
Acenaphthylene	100	500	0.078	U	160		0.1	U	0.078	U	33		0.079	U	310	
Anthracene	100	500	0.078	U	200		0.1	U	0.078	U	100		0.079	U	290	
Benzo[g,h,i]perylene	100	500	0.078	U	54		0.1	U	0.078	U	31		0.079	U	90	
Fluoranthene	100	500	0.078	U	300		0.1	U	0.078	U	160		0.079	U	470	
Fluorene	100	500	0.078	U	180		0.1	U	0.078	U	89		0.079	U	330	
2-Methylnaphthalene	NE	NE	0.078	U	250		0.1	U	0.078	U	120		0.079	U	410	
Naphthalene	12	500	0.084		1100		1.5		0.078	U	460		0.079	U	1500	
Phenanthrene	100	500	0.078	U	500		0.1	U	0.078	U	280		0.079	U	850	
Pyrene	100	500	0.078	U	230		0.1	U	0.078	U	160		0.079	U	350	
Total Non-carcinogenic PAHs	NE	NE	0.084		3084		1.5		ND		1543		ND		4730	
Carcinogenic PAHs (mg/kg)																
Benz[a]anthracene	1	5.6	0.078	U	130		0.1	U	0.078	U	68		0.079	U	220	
Benzo[a]pyrene	1	1	0.078	U	97		0.1	U	0.078	U	53		0.079	U	120	
Benzo[b]fluoranthene	1	5.6	0.078	U	120		0.1	U	0.078	U	52		0.079	U	150	
Benzo[k]fluoranthene	0.8	56	0.078	U	2.7	U	0.1	U	0.078	U	3.4	U	0.079	U	20	U
Chrysene	1	56	0.078	U	100		0.1	U	0.078	U	67		0.079	U	160	
Dibenz[a,h]anthracene	0.33	0.56	0.078	U	17		0.1	U	0.078	U	6.9		0.079	U	15	J
Indeno[1,2,3-cd]pyrene	0.5	5.6	0.078	U	50		0.1	U	0.078	U	28		0.079	U	60	
Total Carcinogenic PAHs	NE	NE	ND		514		ND		ND		274.9		ND		725	
Total PAHs	NE	500*	0.084		3598		1.5		ND		1817.9		ND		5455	
Other SVOCs (mg/kg)																
Acetophenone	NE	NE	NA		NA		NA		NA		NA		NA		NA	
Atrazine	NE	NE	0.38	U	13	U	0.49	U	0.38	U	17	U	0.39	U	99	U
Benzaldehyde	NE	NE	0.38	U	13	U	0.49	U	0.38	U	17	U	0.39	U	99	U
1,1-Biphenyl	NE	NE	NA		NA		NA		NA		NA		NA		NA	
Bis(chloroisopropyl)ether	NE	NE	0.078	U	2.7	U	0.1	U	0.078	U	3.4	U	0.079	U	20	U
Bis(2-chloroethyl)ether	NE	NE	0.078	U	2.7	U	0.1	U	0.078	U	3.4	U	0.079	U	20	U
Bis(2-chloroethoxy)methane	NE	NE	0.38	U	13	U	0.49	U	0.38	U	17	U	0.39	U	99	U
Bis(2-ethylhexyl)phthalate	NE	NE	0.38	U	13	U	0.49	U	0.38	U	17	U	0.39	U	99	U
4-Bromophenyl phenyl ether	NE	NE	0.38	U	13	U	0.49	U	0.38	U	17	U	0.39	U	99	U
Butyl benzyl phthalate	NE	NE	0.38	U	13	U	0.49	U	0.38	U	17	U	0.39	U	99	U
Caprolactam	NE	NE	2	U	68	U	2.5	U	2	U	87	U	2	U	510	U

Table 7
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National Grid
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Carbazole	NE	NE	0.078	U	67		0.1	U	0.078	U	24		0.079	U	91	
4-Chloro-3-methylphenol	NE	NE	0.38	U	13	U	0.49	U	0.38	U	17	U	0.39	U	99	U
4-Chloroaniline	NE	NE	0.38	U	13	U	0.49	U	0.38	U	17	U	0.39	U	99	U
2-Chloronaphthalene	NE	NE	0.078	U	2.7	U	0.1	U	0.078	U	3.4	U	0.079	U	20	U
2-Chlorophenol	NE	NE	0.38	U	13	U	0.49	U	0.38	U	17	U	0.39	U	99	U
4-Chlorophenyl phenyl ether	NE	NE	0.38	U	13	U	0.49	U	0.38	U	17	U	0.39	U	99	U
Dibenzofuran	7	350	0.38	U	150		0.49	U	0.38	U	81		0.39	U	230	
3,3-Dichlorobenzidine	NE	NE	0.38	U	13	U	0.49	U	0.38	U	17	U	0.39	U	99	U
2,4-Dichlorophenol	NE	NE	0.078	U	2.7	U	0.1	U	0.078	U	3.4	U	0.079	U	20	U
Diethyl phthalate	NE	NE	0.38	U	13	U	0.49	U	0.38	U	17	U	0.39	U	99	U
Dimethyl phthalate	NE	NE	0.38	U	13	U	0.49	U	0.38	U	17	U	0.39	U	99	U
2,4-Dimethylphenol	NE	NE	0.38	U	13	U	0.49	U	0.38	U	17	U	0.39	U	99	U
Di-n-butyl phthalate	NE	NE	0.38	U	13	U	0.49	U	0.38	U	17	U	0.39	U	99	U
4,6-Dinitro-2-methylphenol	NE	NE	2	U	68	U	2.5	U	2	U	87	U	2	U	510	U
2,4-Dinitrophenol	NE	NE	2	U	68	U	2.5	U	2	U	87	U	2	U	510	U
2,4-Dinitrotoluene	NE	NE	0.38	U	13	U	0.49	U	0.38	U	17	U	0.39	U	99	U
2,6-Dinitrotoluene	NE	NE	0.38	U	13	U	0.49	U	0.38	U	17	U	0.39	U	99	U
Di-n-octyl phthalate	NE	NE	0.38	U	13	U	0.49	U	0.38	U	17	U	0.39	U	99	U
Hexachlorobenzene	0.33	6	0.078	U	2.7	U	0.1	U	0.078	U	3.4	U	0.079	U	20	U
Hexachlorobutadiene	NE	NE	0.078	U	2.7	U	0.1	U	0.078	U	3.4	U	0.079	U	20	U
Hexachlorocyclopentadiene	NE	NE	0.38	U	13	U	0.49	U	0.38	U	17	U	0.39	U	99	U
Hexachloroethane	NE	NE	0.38	U	13	U	0.49	U	0.38	U	17	U	0.39	U	99	U
Isophorone	NE	NE	0.38	U	13	U	0.49	U	0.38	U	17	U	0.39	U	99	U
2-Methylphenol	0.33	500	0.38	U	13	U	0.49	U	0.38	U	17	U	0.39	U	99	U
4-Methylphenol (p-Cresol)	0.33	500	0.38	U	13	U	0.49	U	0.38	U	17	U	0.39	U	99	U
2-Nitroaniline	NE	NE	2	U	68	U	2.5	U	2	U	87	U	2	U	510	U
3-Nitroaniline	NE	NE	2	U	68	U	2.5	U	2	U	87	U	2	U	510	U
4-Nitroaniline	NE	NE	2	U	68	U	2.5	U	2	U	87	U	2	U	510	U
Nitrobenzene	NE	NE	0.078	U	2.7	U	0.1	U	0.078	U	3.4	U	0.079	U	20	U
2-Nitrophenol	NE	NE	0.38	U	13	U	0.49	U	0.38	U	17	U	0.39	U	99	U
4-Nitrophenol	NE	NE	2	U	68	U	2.5	U	2	U	87	U	2	U	510	U
N-Nitrosodi-n-propylamine	NE	NE	0.078	U	2.7	U	0.1	U	0.078	U	3.4	U	0.079	U	20	U
N-Nitrosodiphenylamine	NE	NE	0.078	U	2.7	U	0.1	U	0.078	U	3.4	U	0.079	U	20	U
Pentachlorophenol	0.8	6.7	0.38	U	13	U	0.49	U	0.38	U	17	U	0.39	R	99	U
Phenol	0.33	500	0.078	U	2.7	U	0.1	U	0.078	U	3.4	U	0.079	U	20	U

Table 7
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National Grid
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Schenectady, New York

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2,4,5-Trichlorophenol	NE	NE	0.38	U	13	U	0.49	U	0.38	U	17	U	0.39	U	99	U
2,4,6-Trichlorophenol	NE	NE	0.38	U	13	U	0.49	U	0.38	U	17	U	0.39	U	99	U
Total SVOCs	NE	NE	0.084		3815		1.5		ND		1922.9		ND		5776	
PCBs (mg/kg)																
Aroclor 1016	NE	NE	NA		NA		NA		NA		NA		NA		NA	
Aroclor 1221	NE	NE	NA		NA		NA		NA		NA		NA		NA	
Aroclor 1232	NE	NE	NA		NA		NA		NA		NA		NA		NA	
Aroclor 1242	NE	NE	NA		NA		NA		NA		NA		NA		NA	
Aroclor 1248	NE	NE	NA		NA		NA		NA		NA		NA		NA	
Aroclor 1254	NE	NE	NA		NA		NA		NA		NA		NA		NA	
Aroclor 1260	NE	NE	NA		NA		NA		NA		NA		NA		NA	
Total Metals (mg/kg)																
Aluminum	NE	NE	3600		4610		7880		2900		5330		3710		9840	
Antimony	NE	NE	0.27	J	1.3	U	1.5	U	1.2	U	1.3	U	1.2	U	1.5	U
Arsenic	13	16	2.3		3		2.3		3.5		4.6		5		10.2	
Barium	350	400	13.8	J	24.6	J	45.4		28.9		31.9		25.9		65.2	
Beryllium	7.2	590	0.32	J	0.34	J	0.55	J	0.22	J	0.43	J	0.28	J	0.69	
Cadmium	2.5	9.3	0.58	U	0.19	J	0.27	J	0.15	J	0.17	J	0.18	J	0.33	J
Calcium	NE	NE	32600		22500		10600		44900		17100		51900		21900	
Chromium	NE	NE	6.1		6.9		11.7		3.9		7.6		5.7		13.1	
Cobalt	NE	NE	3.9	J	4.2	J	6.7	J	2.2	J	4.4	J	2.8	J	7.5	
Copper	50	270	9		10.1		14		8.1		10.2		10		20	
Iron	NE	NE	10800		11800		16800		7210		12800		10900		20200	
Lead	63	1000	3.8		5.7		6.7		2.3		6		3		14.1	
Magnesium	NE	NE	5700		5380		6400		3030		4390		4630		5880	
Manganese	1600	10000	222		286		196		238		267		206		421	
Mercury	0.18	2.8	0.038	U	0.032	J	0.049	U	0.039	U	0.047		0.039	U	0.06	
Nickel	30	310	8.3		8.6		16.5		6.1		9.5		7.6		16.2	
Potassium	NE	NE	579	J	873		1160		580	J	861		667		1760	
Selenium	3.9	1500	0.58	U	0.67	U	0.75	U	0.59	U	0.64	U	0.59	U	0.75	U
Silver	2	1500	0.11	J	0.67	U	0.1	J	0.094	J	0.64	U	0.069	J	0.14	J
Sodium	NE	NE	119	J	336	J	225	J	60.7	J	464	J	75.9	J	1050	
Thallium	NE	NE	1.2	U	1.3	U	1.5	U	1.2	U	1.3	U	1.2	U	1.5	U
Vanadium	NE	NE	12.9		13.1		19.4		6.8		14.8		10.2		23.2	
Zinc	109	10000	26.4	J	29.7		50.5		20		30.7		25.5		53.3	
Total Cyanide (mg/kg)																
Cyanide, Total	27	27	0.58	U	1.4		0.75	U	0.59	U	2		0.59	U	8.4	
Other (%)																
Percent Solids	NE	NE	NA		NA		NA		NA		NA		NA		NA	

Table 7
2009 - 2010 Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-73(09) 20 - 21 10/10/2009		SB-73(09) 74 - 75 10/10/2009		SB-74(09) 11.8 - 12.8 10/21/2009		SB-74(09) 74 - 75 10/21/2009		SB-75(09) 10 - 11 10/25/2009		SB-75(09) 73 - 74 10/25/2009		Duplicate of: SB-75(09) 73 - 74 10/25/2009	
BTEX (mg/kg)																
Benzene	0.06	44	0.023		0.006	U	0.014		0.0065	U	0.016		0.0059	U	0.0059	U
Toluene	0.7	500	0.0014	J	0.006	U	0.0088		0.0065	U	0.0055	J	0.0054	J	0.0081	
Ethylbenzene	1	390	0.012		0.006	U	0.02		0.0065	U	0.01		0.0059	U	0.0059	U
Total Xylene	0.26	500	0.024		0.018	U	0.044		0.02	U	0.029		0.0037	J	0.0036	J
Total BTEX	NE	NE	0.0604		ND		0.0868		ND		0.0605		0.0091		0.0117	
Other VOCs (mg/kg)																
Acetone	0.05	500	0.016	J	0.024	U	0.025	U	0.026	U	0.015	J	0.012	J	0.024	U
Bromodichloromethane	NE	NE	0.0066	U	0.006	U	0.0061	U	0.0065	U	0.0062	U	0.0059	U	0.0059	U
Bromoform	NE	NE	0.0066	U	0.006	U	0.0061	U	0.0065	U	0.0062	U	0.0059	U	0.0059	U
Bromomethane	NE	NE	0.0066	UJ	0.006	UJ	0.0061	UJ	0.0065	UJ	0.0062	UJ	0.0059	UJ	0.0059	UJ
2-Butanone	0.12	500	0.0066	U	0.006	U	0.0061	U	0.0065	U	0.0062	U	0.0059	U	0.0059	U
Carbon disulfide	NE	NE	0.0066	U	0.006	U	0.0061	U	0.0065	U	0.0062	U	0.0059	U	0.0059	U
Carbon tetrachloride	0.76	22	0.0066	U	0.006	U	0.0061	U	0.0065	U	0.0062	U	0.0059	U	0.0059	U
Chlorobenzene	1.1	500	0.0066	U	0.006	U	0.0061	U	0.0065	U	0.0062	U	0.0059	U	0.0059	U
Chloroethane	NE	NE	0.0066	U	0.006	U	0.0061	U	0.0065	U	0.0062	U	0.0059	U	0.0059	U
Chloroform	0.37	350	0.0066	U	0.006	U	0.0061	U	0.0065	U	0.0062	U	0.0059	U	0.0059	U
Chloromethane	NE	NE	0.0066	U	0.006	U	0.0061	U	0.0065	U	0.0062	U	0.0059	U	0.0059	U
Cyclohexane	NE	NE	0.0066	U	0.006	U	0.0061	U	0.0065	U	0.0062	U	0.0059	U	0.0059	U
1,2-Dibromo-3-chloropropane	NE	NE	0.0066	U	0.006	U	0.0061	U	0.0065	U	0.0062	U	0.0059	U	0.0059	U
Dibromochloromethane	NE	NE	0.0066	U	0.006	U	0.0061	U	0.0065	U	0.0062	U	0.0059	U	0.0059	U
1,2-Dibromoethane	NE	NE	0.0066	U	0.006	U	0.0061	U	0.0065	U	0.0062	U	0.0059	U	0.0059	U
1,2-Dichlorobenzene	1.1	500	0.0066	U	0.006	U	0.0061	U	0.0065	U	0.0062	U	0.0059	U	0.0059	U
1,3-Dichlorobenzene	2.4	280	0.0066	U	0.006	U	0.0061	U	0.0065	U	0.0062	U	0.0059	U	0.0059	U
1,4-Dichlorobenzene	1.8	130	0.0066	U	0.006	U	0.0061	U	0.0065	U	0.0062	U	0.0059	U	0.0059	U
Dichlorodifluoromethane	NE	NE	0.0066	U	0.006	U	0.0061	U	0.0065	U	0.0062	U	0.0059	U	0.0059	U
1,1-Dichloroethane	0.27	240	0.0066	U	0.006	U	0.0061	U	0.0065	U	0.0062	U	0.0059	U	0.0059	U
1,2-Dichloroethane	0.02	30	0.0066	U	0.006	U	0.0061	U	0.0065	U	0.0062	U	0.0059	U	0.0059	U
cis-1,2-Dichloroethene	0.25	500	0.0066	U	0.006	U	0.0061	U	0.0065	U	0.0062	U	0.0059	U	0.0059	U
trans-1,2-Dichloroethene	0.19	500	0.0066	U	0.006	U	0.0061	U	0.0065	U	0.0062	U	0.0059	U	0.0059	U
1,1-Dichloroethene	0.33	500	0.0066	U	0.006	U	0.0061	U	0.0065	U	0.0062	U	0.0059	U	0.0059	U
1,2-Dichloropropane	NE	NE	0.0066	U	0.006	U	0.0061	U	0.0065	U	0.0062	U	0.0059	U	0.0059	U
cis-1,3-Dichloropropene	NE	NE	0.0066	U	0.006	U	0.0061	U	0.0065	U	0.0062	U	0.0059	U	0.0059	U
trans-1,3-Dichloropropene	NE	NE	0.0066	U	0.006	U	0.0061	U	0.0065	U	0.0062	U	0.0059	U	0.0059	U
2-Hexanone	NE	NE	0.0066	U	0.006	U	0.0061	U	0.0065	U	0.0062	U	0.0059	U	0.0059	U
Isopropyl benzene	NE	NE	0.0035	J	0.006	U	0.0017	J	0.0065	U	0.0031	J	0.0059	U	0.0059	U
Methyl acetate	NE	NE	0.0066	U	0.006	U	0.0061	U	0.0065	U	0.0062	U	0.0059	U	0.0059	U
Methyl tert-butyl ether	0.93	500	0.0066	U	0.006	U	0.0061	U	0.0065	U	0.0062	U	0.0059	U	0.0059	U
4-Methyl-2-pentanone	NE	NE	0.0066	U	0.006	U	0.0061	U	0.0065	U	0.0062	U	0.0059	U	0.0059	U
Methylcyclohexane	NE	NE	0.0066	U	0.006	U	0.0061	U	0.0065	U	0.0062	U	0.0059	U	0.0059	U
Methylene chloride	0.05	500	0.0025	J	0.0032	J	0.0061	U	0.0065	U	0.0049	J	0.0052	J	0.0042	J
Styrene	NE	NE	0.0066	U	0.006	U	0.0061	U	0.0065	U	0.0062	U	0.0059	U	0.0059	U
1,1,2,2-Tetrachloroethane	NE	NE	0.0066	U	0.006	U	0.0061	U	0.0065	U	0.0062	U	0.0059	U	0.0059	U

Table 7
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National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-73(09) 20 - 21 10/10/2009		SB-73(09) 74 - 75 10/10/2009		SB-74(09) 11.8 - 12.8 10/21/2009		SB-74(09) 74 - 75 10/21/2009		SB-75(09) 10 - 11 10/25/2009		SB-75(09) 73 - 74 10/25/2009		Duplicate of: SB-75(09) 73 - 74 10/25/2009	
Tetrachloroethene	1.3	150	0.0066	U	0.006	U	0.0061	U	0.0065	U	0.0062	U	0.0059	U	0.0059	U
1,1,2-Trichloro-1,2,2-trifluoroethane	NE	NE	0.0066	U	0.006	U	0.0061	U	0.0065	U	0.0062	U	0.0059	U	0.0059	U
1,2,4-Trichlorobenzene	NE	NE	0.0066	U	0.006	U	0.0061	U	0.0065	U	0.0062	U	0.0059	U	0.0059	U
1,1,1-Trichloroethane	0.68	500	0.0066	U	0.006	U	0.0061	U	0.0065	U	0.0062	U	0.0059	U	0.0059	U
1,1,2-Trichloroethane	NE	NE	0.0066	U	0.006	U	0.0061	U	0.0065	U	0.0062	U	0.0059	U	0.0059	U
Trichloroethene	0.47	200	0.0066	U	0.006	U	0.0061	U	0.0065	U	0.0062	U	0.0059	U	0.0059	U
Trichlorofluoromethane	NE	NE	0.0066	U	0.006	U	0.0061	U	0.0065	U	0.0062	U	0.0059	U	0.0059	U
Vinyl chloride	0.02	13	0.0066	U	0.006	U	0.0061	U	0.0065	U	0.0062	U	0.0059	U	0.0059	U
Total VOCs	NE	NE	0.0824		0.0032		1.4885		ND		2.4835		0.0263		0.0159	
Non-carcinogenic PAHs (mg/kg)																
Acenaphthene	20	500	0.088	U	0.079	U	1.4		0.087	U	5.2		0.079	U	0.079	U
Acenaphthylene	100	500	0.088	U	0.079	U	0.4		0.087	U	0.59		0.079	U	0.079	U
Anthracene	100	500	0.088	U	0.079	U	1.7		0.087	U	3.3		0.079	U	0.079	U
Benzo[g,h,i]perylene	100	500	0.088	U	0.079	U	0.37		0.087	U	1.6		0.079	U	0.079	U
Fluoranthene	100	500	0.024	J	0.079	U	2.5		0.087	U	8.2		0.079	U	0.079	U
Fluorene	100	500	0.088	U	0.079	U	1.5		0.087	U	2.9		0.079	U	0.079	U
2-Methylnaphthalene	NE	NE	0.088	U	0.079	U	1.4		0.087	U	2.4		0.079	U	0.079	U
Naphthalene	12	500	1.9		0.079	U	4.5		0.087	U	4.3		0.079	U	0.079	U
Phenanthrene	100	500	0.038	J	0.079	U	4.7		0.087	U	13		0.079	U	0.079	U
Pyrene	100	500	0.088	U	0.079	U	2.2		0.087	U	6.7		0.079	U	0.079	U
Total Non-carcinogenic PAHs	NE	NE	1.962		ND		20.67		ND		48.19		ND		ND	
Carcinogenic PAHs (mg/kg)																
Benz[a]anthracene	1	5.6	0.088	U	0.079	U	1.1		0.087	U	3.2		0.079	U	0.079	U
Benzo[a]pyrene	1	1	0.088	U	0.079	U	0.79		0.087	U	2.9		0.079	U	0.079	U
Benzo[b]fluoranthene	1	5.6	0.088	U	0.079	U	1.1		0.087	U	3.7		0.079	U	0.079	U
Benzo[k]fluoranthene	0.8	56	0.088	U	0.079	U	0.082	U	0.087	U	0.084	U	0.079	U	0.079	U
Chrysene	1	56	0.088	U	0.079	U	0.82		0.087	U	2.8		0.079	U	0.079	U
Dibenz[a,h]anthracene	0.33	0.56	0.088	U	0.079	U	0.092		0.087	U	0.35		0.079	U	0.079	U
Indeno[1,2,3-cd]pyrene	0.5	5.6	0.088	U	0.079	U	0.35		0.087	U	1.5		0.079	U	0.079	U
Total Carcinogenic PAHs	NE	NE	ND		ND		4.252		ND		14.45		ND		ND	
Total PAHs	NE	500*	1.962		ND		24.922		ND		62.64		ND		ND	
Other SVOCs (mg/kg)																
Acetophenone	NE	NE	NA		NA		NA		NA		NA		NA		NA	
Atrazine	NE	NE	0.43	U	0.39	U	0.4	U	0.43	U	0.41	U	0.39	U	0.39	U
Benzaldehyde	NE	NE	0.43	U	0.39	U	0.4	U	0.43	U	0.41	U	0.39	U	0.39	U
1,1-Biphenyl	NE	NE	NA		NA		NA		NA		NA		NA		NA	
Bis(chloroisopropyl)ether	NE	NE	0.088	U	0.079	U	0.082	U	0.087	U	0.084	U	0.079	U	0.079	U
Bis(2-chloroethyl)ether	NE	NE	0.088	U	0.079	U	0.082	U	0.087	U	0.084	U	0.079	U	0.079	U
Bis(2-chloroethoxy)methane	NE	NE	0.43	U	0.39	U	0.4	U	0.43	U	0.41	U	0.39	U	0.39	U
Bis(2-ethylhexyl)phthalate	NE	NE	0.43	U	0.39	U	0.4	U	0.43	U	0.41	U	0.39	U	0.39	U
4-Bromophenyl phenyl ether	NE	NE	0.43	U	0.39	U	0.4	U	0.43	U	0.41	U	0.39	U	0.39	U
Butyl benzyl phthalate	NE	NE	0.43	U	0.39	U	0.4	U	0.43	U	0.41	U	0.39	U	0.39	U
Caprolactam	NE	NE	2.2	U	2	U	2.1	U	2.2	U	2.1	U	2	U	2	U

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National Grid
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Carbazole	NE	NE	0.088	U	0.079	U	0.68		0.087	U	0.92		0.079	U	0.079	U
4-Chloro-3-methylphenol	NE	NE	0.43	U	0.39	U	0.4	U	0.43	U	0.41	U	0.39	U	0.39	U
4-Chloroaniline	NE	NE	0.43	U	0.39	U	0.4	U	0.43	U	0.41	U	0.39	U	0.39	U
2-Chloronaphthalene	NE	NE	0.088	U	0.079	U	0.082	U	0.087	U	0.084	U	0.079	U	0.079	U
2-Chlorophenol	NE	NE	0.43	U	0.39	U	0.4	U	0.43	U	0.41	U	0.39	U	0.39	U
4-Chlorophenyl phenyl ether	NE	NE	0.43	U	0.39	U	0.4	U	0.43	U	0.41	U	0.39	U	0.39	U
Dibenzofuran	7	350	0.43	U	0.39	U	1.2		0.43	U	2.7		0.39	U	0.39	U
3,3-Dichlorobenzidine	NE	NE	0.43	U	0.39	U	0.4	U	0.43	U	0.41	U	0.39	U	0.39	U
2,4-Dichlorophenol	NE	NE	0.088	U	0.079	U	0.082	U	0.087	U	0.084	U	0.079	U	0.079	U
Diethyl phthalate	NE	NE	0.43	U	0.39	U	0.4	U	0.43	U	0.41	U	0.39	U	0.39	U
Dimethyl phthalate	NE	NE	0.43	U	0.39	U	0.4	U	0.43	U	0.41	U	0.39	U	0.39	U
2,4-Dimethylphenol	NE	NE	0.43	U	0.39	U	0.4	U	0.43	U	0.41	U	0.39	U	0.39	U
Di-n-butyl phthalate	NE	NE	0.43	U	0.39	U	0.4	U	0.43	U	0.41	U	0.39	U	0.39	U
4,6-Dinitro-2-methylphenol	NE	NE	2.2	U	2	U	2.1	U	2.2	U	2.1	U	2	U	2	U
2,4-Dinitrophenol	NE	NE	2.2	U	2	U	2.1	U	2.2	U	2.1	U	2	U	2	U
2,4-Dinitrotoluene	NE	NE	0.43	U	0.39	U	0.4	U	0.43	U	0.41	U	0.39	U	0.39	U
2,6-Dinitrotoluene	NE	NE	0.43	U	0.39	U	0.4	U	0.43	U	0.41	U	0.39	U	0.39	U
Di-n-octyl phthalate	NE	NE	0.43	U	0.39	U	0.4	U	0.43	U	0.41	U	0.39	U	0.39	U
Hexachlorobenzene	0.33	6	0.088	U	0.079	U	0.082	U	0.087	U	0.084	U	0.079	U	0.079	U
Hexachlorobutadiene	NE	NE	0.088	U	0.079	U	0.082	U	0.087	U	0.084	U	0.079	U	0.079	U
Hexachlorocyclopentadiene	NE	NE	0.43	U	0.39	U	0.4	U	0.43	U	0.41	U	0.39	U	0.39	U
Hexachloroethane	NE	NE	0.43	U	0.39	U	0.4	U	0.43	U	0.41	U	0.39	U	0.39	U
Isophorone	NE	NE	0.43	U	0.39	U	0.4	U	0.43	U	0.41	U	0.39	U	0.39	U
2-Methylphenol	0.33	500	0.43	U	0.39	U	0.4	U	0.43	U	0.41	U	0.39	U	0.39	U
4-Methylphenol (p-Cresol)	0.33	500	0.43	U	0.39	U	0.4	U	0.43	U	0.023	J	0.39	U	0.39	U
2-Nitroaniline	NE	NE	2.2	U	2	U	2.1	U	2.2	U	2.1	U	2	U	2	U
3-Nitroaniline	NE	NE	2.2	U	2	U	2.1	U	2.2	U	2.1	U	2	U	2	U
4-Nitroaniline	NE	NE	2.2	U	2	U	2.1	U	2.2	U	2.1	U	2	U	2	U
Nitrobenzene	NE	NE	0.088	U	0.079	U	0.082	U	0.087	U	0.084	U	0.079	U	0.079	U
2-Nitrophenol	NE	NE	0.43	U	0.39	U	0.4	U	0.43	U	0.41	U	0.39	U	0.39	U
4-Nitrophenol	NE	NE	2.2	U	2	U	2.1	U	2.2	U	2.1	U	2	U	2	U
N-Nitrosodi-n-propylamine	NE	NE	0.088	U	0.079	U	0.082	U	0.087	U	0.084	U	0.079	U	0.079	U
N-Nitrosodiphenylamine	NE	NE	0.088	U	0.079	U	0.082	U	0.087	U	0.084	U	0.079	U	0.079	U
Pentachlorophenol	0.8	6.7	0.43	U	0.39	U	0.4	U	0.43	U	0.41	U	0.39	U	0.39	U
Phenol	0.33	500	0.088	U	0.079	U	0.082	U	0.087	U	0.084	U	0.079	U	0.079	U

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2009 - 2010 Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-73(09) 20 - 21 10/10/2009		SB-73(09) 74 - 75 10/10/2009		SB-74(09) 11.8 - 12.8 10/21/2009		SB-74(09) 74 - 75 10/21/2009		SB-75(09) 10 - 11 10/25/2009		SB-75(09) 73 - 74 10/25/2009		Duplicate of: SB-75(09) 73 - 74 10/25/2009	
2,4,5-Trichlorophenol	NE	NE	0.43	U	0.39	U	0.4	U	0.43	U	0.41	U	0.39	U	0.39	U
2,4,6-Trichlorophenol	NE	NE	0.43	U	0.39	U	0.4	U	0.43	U	0.41	U	0.39	U	0.39	U
Total SVOCs	NE	NE	1.962		ND		26.802		ND		66.283		ND		ND	
PCBs (mg/kg)																
Aroclor 1016	NE	NE	NA		NA		NA		NA		NA		NA		NA	
Aroclor 1221	NE	NE	NA		NA		NA		NA		NA		NA		NA	
Aroclor 1232	NE	NE	NA		NA		NA		NA		NA		NA		NA	
Aroclor 1242	NE	NE	NA		NA		NA		NA		NA		NA		NA	
Aroclor 1248	NE	NE	NA		NA		NA		NA		NA		NA		NA	
Aroclor 1254	NE	NE	NA		NA		NA		NA		NA		NA		NA	
Aroclor 1260	NE	NE	NA		NA		NA		NA		NA		NA		NA	
Total Metals (mg/kg)																
Aluminum	NE	NE	8420		3720		3420		3500		4120		2960		3320	
Antimony	NE	NE	1.3	U	1.2	U	1.2	U	1.3	U	1.2	U	1.2	U	1.2	U
Arsenic	13	16	3.7		5.1		2.1		1.2	J	2.7		5.8		6.7	
Barium	350	400	62.7		25.4		12.3	J	23.1	J	18.8	J	26.5		26.2	
Beryllium	7.2	590	0.61		0.27	J	0.33	J	0.34	J	0.32	J	0.23	J	0.23	J
Cadmium	2.5	9.3	0.37	J	0.17	J	0.61	U	0.65	U	0.031	J	0.056	J	0.073	J
Calcium	NE	NE	10600		51400		15200		27400		20100		62900		55200	
Chromium	NE	NE	12.1		5.4		5.1		6.3		6.5		5.1		5	
Cobalt	NE	NE	6.9		2.7	J	3.1	J	3.6	J	3.9	J	2.5	J	2.8	J
Copper	50	270	15.9		10.3		7.7		8.2		8.5		9.3		9.5	
Iron	NE	NE	21600		10700		10400		11500		11900		9770		10700	
Lead	63	1000	7.6		2.7		3.5		3.5		4.7		2.6		2.9	
Magnesium	NE	NE	6010		4070		2640		5490		4470		3890		3760	
Manganese	1600	10000	444		203		262		164		288		251		255	
Mercury	0.18	2.8	0.016	J	0.039	U	0.04	U	0.043	U	0.015	J	0.039	U	0.039	U
Nickel	30	310	16.8		7.5		7.2		7.9		8.4		6.9		7.2	
Potassium	NE	NE	1040		692		527	J	523	J	593	J	563	J	550	J
Selenium	3.9	1500	0.66	U	0.6	U	0.61	U	0.65	U	0.62	U	0.59	U	0.59	U
Silver	2	1500	0.13	J	0.6	U	0.61	U	0.65	U	0.13	J	0.09	J	0.091	J
Sodium	NE	NE	740		59.4	J	235	J	87.3	J	130	J	87	J	93	J
Thallium	NE	NE	1.3	U	1.2	U	1.2	U	1.3	U	1.2	U	1.2	U	1.2	U
Vanadium	NE	NE	18.4		9.1		11		14.8		12.8		8		8.6	
Zinc	109	10000	49		24.8		22.7	J	26	J	26.6		21.6		23.2	
Total Cyanide (mg/kg)																
Cyanide, Total	27	27	0.66	U	0.6	U	0.61	U	0.65	U	0.83		0.59	U	0.59	U
Other (%)																
Percent Solids	NE	NE	NA		NA		NA		NA		NA		NA		NA	

Table 7
2009 - 2010 Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-76(09) 11.7 - 12.2 10/11/2009		SB-76(09) 15 - 16 10/11/2009		SB-76(09) 74 - 75 10/11/2009		SB-78(09) 10 - 11 10/24/2009		SB-78(09) 74 - 75 10/24/2009		SB-81(09) 11 - 12 10/12/2009		SB-81(09) 48 - 49 10/12/2009		SB-81(09) 74 - 75 10/12/2009	
BTEX (mg/kg)																		
Benzene	0.06	44	0.0054	U	0.012		0.0061	U	0.31	U	0.0059	U	0.0068	U	0.006	U	0.0063	U
Toluene	0.7	500	0.0054	U	0.0024	J	0.0061	U	0.15	J	0.0059	U	0.0011	J	0.006	U	0.0063	U
Ethylbenzene	1	390	0.001	J	0.0052	J	0.0061	U	0.3	J	0.0059	U	0.0068	U	0.006	U	0.0063	U
Total Xylene	0.26	500	0.016	U	0.015	J	0.018	U	1.5		0.018	U	0.02	U	0.018	U	0.019	U
Total BTEX	NE	NE	0.001		0.0346		ND		1.95		ND		0.0011		ND		ND	
Other VOCs (mg/kg)																		
Acetone	0.05	500	0.022	U	0.025	U	0.024	U	1.2	U	0.013	J	0.027	U	0.024	U	0.025	U
Bromodichloromethane	NE	NE	0.0054	U	0.0063	U	0.0061	U	0.31	U	0.0059	U	0.0068	U	0.006	U	0.0063	U
Bromoform	NE	NE	0.0054	U	0.0063	U	0.0061	U	0.31	U	0.0059	U	0.0068	U	0.006	U	0.0063	U
Bromomethane	NE	NE	0.0054	UJ	0.0063	UJ	0.0061	UJ	0.31	U	0.0059	UJ	0.0068	UJ	0.006	UJ	0.0063	UJ
2-Butanone	0.12	500	0.0054	U	0.0063	U	0.0061	U	0.31	U	0.0059	U	0.0068	U	0.006	U	0.0063	U
Carbon disulfide	NE	NE	0.0054	U	0.0063	U	0.0061	U	0.31	U	0.0059	U	0.0068	U	0.006	U	0.0063	U
Carbon tetrachloride	0.76	22	0.0054	U	0.0063	U	0.0061	U	0.31	U	0.0059	U	0.0068	U	0.006	U	0.0063	U
Chlorobenzene	1.1	500	0.0054	U	0.0063	U	0.0061	U	0.31	U	0.0059	U	0.0068	U	0.006	U	0.0063	U
Chloroethane	NE	NE	0.0054	U	0.0063	U	0.0061	U	0.31	U	0.0059	U	0.0068	U	0.006	U	0.0063	U
Chloroform	0.37	350	0.0054	U	0.0063	U	0.0061	U	0.31	U	0.0059	U	0.0068	U	0.006	U	0.0063	U
Chloromethane	NE	NE	0.0054	U	0.0063	U	0.0061	U	0.31	U	0.0059	U	0.0068	U	0.006	U	0.0063	U
Cyclohexane	NE	NE	0.0054	U	0.0063	U	0.0061	U	0.31	U	0.0059	U	0.0068	U	0.006	U	0.0063	U
1,2-Dibromo-3-chloropropane	NE	NE	0.0054	U	0.0063	U	0.0061	U	0.31	U	0.0059	U	0.0068	U	0.006	U	0.0063	U
Dibromochloromethane	NE	NE	0.0054	U	0.0063	U	0.0061	U	0.31	U	0.0059	U	0.0068	U	0.006	U	0.0063	U
1,2-Dibromoethane	NE	NE	0.0054	U	0.0063	U	0.0061	U	0.31	U	0.0059	U	0.0068	U	0.006	U	0.0063	U
1,2-Dichlorobenzene	1.1	500	0.0054	U	0.0063	U	0.0061	U	0.31	U	0.0059	U	0.0068	U	0.006	U	0.0063	U
1,3-Dichlorobenzene	2.4	280	0.0054	U	0.0063	U	0.0061	U	0.31	U	0.0059	U	0.0068	U	0.006	U	0.0063	U
1,4-Dichlorobenzene	1.8	130	0.0054	U	0.0063	U	0.0061	U	0.31	U	0.0059	U	0.0068	U	0.006	U	0.0063	U
Dichlorodifluoromethane	NE	NE	0.0054	U	0.0063	U	0.0061	U	0.31	U	0.0059	U	0.0068	U	0.006	U	0.0063	U
1,1-Dichloroethane	0.27	240	0.0054	U	0.0063	U	0.0061	U	0.31	U	0.0059	U	0.0068	U	0.006	U	0.0063	U
1,2-Dichloroethane	0.02	30	0.0054	U	0.0063	U	0.0061	U	0.31	U	0.0059	U	0.0068	U	0.006	U	0.0063	U
cis-1,2-Dichloroethene	0.25	500	0.0054	U	0.0063	U	0.0061	U	0.31	U	0.0059	U	0.0068	U	0.006	U	0.0063	U
trans-1,2-Dichloroethene	0.19	500	0.0054	U	0.0063	U	0.0061	U	0.31	U	0.0059	U	0.0068	U	0.006	U	0.0063	U
1,1-Dichloroethene	0.33	500	0.0054	U	0.0063	U	0.0061	U	0.31	U	0.0059	U	0.0068	U	0.006	U	0.0063	U
1,2-Dichloropropane	NE	NE	0.0054	U	0.0063	U	0.0061	U	0.31	U	0.0059	U	0.0068	U	0.006	U	0.0063	U
cis-1,3-Dichloropropene	NE	NE	0.0054	U	0.0063	U	0.0061	U	0.31	U	0.0059	U	0.0068	U	0.006	U	0.0063	U
trans-1,3-Dichloropropene	NE	NE	0.0054	U	0.0063	U	0.0061	U	0.31	U	0.0059	U	0.0068	U	0.006	U	0.0063	U
2-Hexanone	NE	NE	0.0054	U	0.0063	U	0.0061	U	0.31	U	0.0059	U	0.0068	U	0.006	U	0.0063	U
Isopropyl benzene	NE	NE	0.0028	J	0.0035	J	0.0061	U	0.072	J	0.0059	U	0.0068	U	0.006	U	0.0063	U
Methyl acetate	NE	NE	0.0054	U	0.0063	U	0.0061	U	0.31	U	0.0059	U	0.0068	U	0.006	U	0.0063	U
Methyl tert-butyl ether	0.93	500	0.0054	U	0.0063	U	0.0061	U	0.31	U	0.0059	U	0.0068	U	0.006	U	0.0063	U
4-Methyl-2-pentanone	NE	NE	0.0054	U	0.0063	U	0.0061	U	0.31	U	0.0059	U	0.0068	U	0.006	U	0.0063	U
Methylcyclohexane	NE	NE	0.0054	U	0.0063	U	0.0061	U	0.31	U	0.0059	U	0.0068	U	0.006	U	0.0063	U
Methylene chloride	0.05	500	0.0054	U	0.0024	J	0.0061	U	0.31	U	0.0051	J	0.0068	U	0.006	U	0.0063	U
Styrene	NE	NE	0.0054	U	0.0063	U	0.0061	U	0.31	U	0.0059	U	0.0068	U	0.006	U	0.0063	U
1,1,2,2-Tetrachloroethane	NE	NE	0.0054	U	0.0063	U	0.0061	U	0.31	U	0.0059	U	0.0068	U	0.006	U	0.0063	U

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Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-76(09) 11.7 - 12.2 10/11/2009		SB-76(09) 15 - 16 10/11/2009		SB-76(09) 74 - 75 10/11/2009		SB-78(09) 10 - 11 10/24/2009		SB-78(09) 74 - 75 10/24/2009		SB-81(09) 11 - 12 10/12/2009		SB-81(09) 48 - 49 10/12/2009		SB-81(09) 74 - 75 10/12/2009	
Tetrachloroethene	1.3	150	0.0054	U	0.0063	U	0.0061	U	0.31	U	0.0059	U	0.0068	U	0.006	U	0.0063	U
1,1,2-Trichloro-1,2,2-trifluoroethane	NE	NE	0.0054	U	0.0063	U	0.0061	U	0.31	U	0.0059	U	0.0068	U	0.006	U	0.0063	U
1,2,4-Trichlorobenzene	NE	NE	0.0054	U	0.0063	U	0.0061	U	0.31	U	0.0059	U	0.0068	U	0.006	U	0.0063	U
1,1,1-Trichloroethane	0.68	500	0.0054	U	0.0063	U	0.0061	U	0.31	U	0.0059	U	0.0068	U	0.006	U	0.0063	U
1,1,2-Trichloroethane	NE	NE	0.0054	U	0.0063	U	0.0061	U	0.31	U	0.0059	U	0.0068	U	0.006	U	0.0063	U
Trichloroethene	0.47	200	0.0054	U	0.0063	U	0.0061	U	0.31	U	0.0059	U	0.0068	U	0.006	U	0.0063	U
Trichlorofluoromethane	NE	NE	0.0054	U	0.0063	U	0.0061	U	0.31	U	0.0059	U	0.0068	U	0.006	U	0.0063	U
Vinyl chloride	0.02	13	0.0054	U	0.0063	U	0.0061	U	0.31	U	0.0059	U	0.0068	U	0.006	U	0.0063	U
Total VOCs	NE	NE	0.5938		0.0405		ND		1102.02		0.0181		0.0011		ND		ND	
Non-carcinogenic PAHs (mg/kg)																		
Acenaphthene	20	500	3.9		0.085	U	0.082	U	1100		0.079	U	0.091	U	0.08	U	0.084	U
Acenaphthylene	100	500	0.52		0.085	U	0.082	U	240		0.079	U	0.091	U	0.08	U	0.084	U
Anthracene	100	500	1.7		0.085	U	0.082	U	1000		0.079	U	0.091	U	0.08	U	0.084	U
Benzo[g,h,i]perylene	100	500	0.72		0.085	U	0.082	U	260		0.079	U	0.091	U	0.08	U	0.084	U
Fluoranthene	100	500	3.9		0.085	U	0.082	U	1800		0.015	J	0.091	U	0.08	U	0.084	U
Fluorene	100	500	5.8		0.085	U	0.082	U	880		0.079	U	0.091	U	0.08	U	0.084	U
2-Methylnaphthalene	NE	NE	0.59		0.085	U	0.082	U	1100		0.079	U	0.091	U	0.08	U	0.084	U
Naphthalene	12	500	14		0.66		0.082	U	5000		0.029	J	0.091	U	0.08	U	0.084	U
Phenanthrene	100	500	9.3		0.085	U	0.082	U	3200		0.025	J	0.091	U	0.08	U	0.084	U
Pyrene	100	500	2.6		0.085	U	0.082	U	1400		0.079	U	0.091	U	0.08	U	0.084	U
Total Non-carcinogenic PAHs	NE	NE	43.03		0.66		ND		15980		0.069		ND		ND		ND	
Carcinogenic PAHs (mg/kg)																		
Benz[a]anthracene	1	5.6	1.6		0.085	U	0.082	U	730		0.079	U	0.091	U	0.08	U	0.084	U
Benzo[a]pyrene	1	1	1.3		0.085	U	0.082	U	560		0.079	U	0.091	U	0.08	U	0.084	U
Benzo[b]fluoranthene	1	5.6	1.7		0.085	U	0.082	U	710		0.079	U	0.091	U	0.08	U	0.084	U
Benzo[k]fluoranthene	0.8	56	0.36	U	0.085	U	0.082	U	33	U	0.079	U	0.091	U	0.08	U	0.084	U
Chrysene	1	56	1.5		0.085	U	0.082	U	590		0.079	U	0.091	U	0.08	U	0.084	U
Dibenz[a,h]anthracene	0.33	0.56	0.46		0.085	U	0.082	U	63		0.079	U	0.091	U	0.08	U	0.084	U
Indeno[1,2,3-cd]pyrene	0.5	5.6	0.81		0.085	U	0.082	U	260		0.079	U	0.091	U	0.08	U	0.084	U
Total Carcinogenic PAHs	NE	NE	7.37		ND		ND		2913		ND		ND		ND		ND	
Total PAHs	NE	500*	50.4		0.66		ND		18893		0.069		ND		ND		ND	
Other SVOCs (mg/kg)																		
Acetophenone	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Atrazine	NE	NE	1.8	U	0.42	U	0.4	U	160	U	0.39	U	0.45	U	0.39	U	0.41	U
Benzaldehyde	NE	NE	1.8	U	0.42	U	0.4	U	160	U	0.39	U	0.45	U	0.39	U	0.41	U
1,1-Biphenyl	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Bis(chloroisopropyl)ether	NE	NE	0.36	U	0.085	U	0.082	U	33	U	0.079	U	0.091	U	0.08	U	0.084	U
Bis(2-chloroethyl)ether	NE	NE	0.36	U	0.085	U	0.082	U	33	U	0.079	U	0.091	U	0.08	U	0.084	U
Bis(2-chloroethoxy)methane	NE	NE	1.8	U	0.42	U	0.4	U	160	U	0.39	U	0.45	U	0.39	U	0.41	U
Bis(2-ethylhexyl)phthalate	NE	NE	1.8	U	0.42	U	0.4	U	160	U	0.39	U	0.45	U	0.39	U	0.41	U
4-Bromophenyl phenyl ether	NE	NE	1.8	U	0.42	U	0.4	U	160	U	0.39	U	0.45	U	0.39	U	0.41	U
Butyl benzyl phthalate	NE	NE	1.8	U	0.42	U	0.4	U	160	U	0.39	U	0.45	U	0.39	U	0.41	U
Caprolactam	NE	NE	9.1	U	2.2	U	2.1	U	840	U	2	U	2.3	U	2	U	2.1	U

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Carbazole	NE	NE	8.9		0.085	U	0.082	U	390		0.079	U	0.091	U	0.08	U	0.084	U
4-Chloro-3-methylphenol	NE	NE	1.8	U	0.42	U	0.4	U	160	U	0.39	U	0.45	U	0.39	U	0.41	U
4-Chloroaniline	NE	NE	1.8	U	0.42	U	0.4	U	160	U	0.39	U	0.45	U	0.39	U	0.41	U
2-Chloronaphthalene	NE	NE	0.36	U	0.085	U	0.082	U	33	U	0.079	U	0.091	U	0.08	U	0.084	U
2-Chlorophenol	NE	NE	1.8	U	0.42	U	0.4	U	160	U	0.39	U	0.45	U	0.39	U	0.41	U
4-Chlorophenyl phenyl ether	NE	NE	1.8	U	0.42	U	0.4	U	160	U	0.39	U	0.45	U	0.39	U	0.41	U
Dibenzofuran	7	350	3.6		0.42	U	0.4	U	820		0.39	U	0.45	U	0.39	U	0.41	U
3,3-Dichlorobenzidine	NE	NE	1.8	U	0.42	U	0.4	U	160	U	0.39	U	0.45	U	0.39	U	0.41	U
2,4-Dichlorophenol	NE	NE	0.36	U	0.085	U	0.082	U	33	U	0.079	U	0.091	U	0.08	U	0.084	U
Diethyl phthalate	NE	NE	1.8	U	0.42	U	0.4	U	160	U	0.39	U	0.45	U	0.39	U	0.41	U
Dimethyl phthalate	NE	NE	1.8	U	0.42	U	0.4	U	160	U	0.39	U	0.45	U	0.39	U	0.41	U
2,4-Dimethylphenol	NE	NE	1.8	U	0.42	U	0.4	U	160	U	0.39	U	0.45	U	0.39	U	0.41	U
Di-n-butyl phthalate	NE	NE	1.8	U	0.42	U	0.4	U	160	U	0.39	U	0.45	U	0.39	U	0.41	U
4,6-Dinitro-2-methylphenol	NE	NE	9.1	U	2.2	U	2.1	U	840	U	2	U	2.3	U	2	U	2.1	U
2,4-Dinitrophenol	NE	NE	9.1	U	2.2	U	2.1	U	840	U	2	U	2.3	U	2	U	2.1	U
2,4-Dinitrotoluene	NE	NE	1.8	U	0.42	U	0.4	U	160	U	0.39	U	0.45	U	0.39	U	0.41	U
2,6-Dinitrotoluene	NE	NE	1.8	U	0.42	U	0.4	U	160	U	0.39	U	0.45	U	0.39	U	0.41	U
Di-n-octyl phthalate	NE	NE	1.8	U	0.42	U	0.4	U	160	U	0.39	U	0.45	U	0.39	U	0.41	U
Hexachlorobenzene	0.33	6	0.36	U	0.085	U	0.082	U	33	U	0.079	U	0.091	U	0.08	U	0.084	U
Hexachlorobutadiene	NE	NE	0.36	U	0.085	U	0.082	U	33	U	0.079	U	0.091	U	0.08	U	0.084	U
Hexachlorocyclopentadiene	NE	NE	1.8	U	0.42	U	0.4	U	160	U	0.39	U	0.45	U	0.39	U	0.41	U
Hexachloroethane	NE	NE	1.8	U	0.42	U	0.4	U	160	U	0.39	U	0.45	U	0.39	U	0.41	U
Isophorone	NE	NE	1.8	U	0.42	U	0.4	U	160	U	0.39	U	0.45	U	0.39	U	0.41	U
2-Methylphenol	0.33	500	1.8	U	0.42	U	0.4	U	160	U	0.39	U	0.45	U	0.39	U	0.41	U
4-Methylphenol (p-Cresol)	0.33	500	1.8	U	0.42	U	0.4	U	160	U	0.39	U	0.45	U	0.39	U	0.41	U
2-Nitroaniline	NE	NE	9.1	U	2.2	U	2.1	U	840	U	2	U	2.3	U	2	U	2.1	U
3-Nitroaniline	NE	NE	9.1	U	2.2	U	2.1	U	840	U	2	U	2.3	U	2	U	2.1	U
4-Nitroaniline	NE	NE	9.1	U	2.2	U	2.1	U	840	U	2	U	2.3	U	2	U	2.1	U
Nitrobenzene	NE	NE	0.36	U	0.085	U	0.082	U	33	U	0.079	U	0.091	U	0.08	U	0.084	U
2-Nitrophenol	NE	NE	1.8	U	0.42	U	0.4	U	160	U	0.39	U	0.45	U	0.39	U	0.41	U
4-Nitrophenol	NE	NE	9.1	U	2.2	U	2.1	U	840	U	2	U	2.3	U	2	U	2.1	U
N-Nitrosodi-n-propylamine	NE	NE	0.36	U	0.085	U	0.082	U	33	U	0.079	U	0.091	U	0.08	U	0.084	U
N-Nitrosodiphenylamine	NE	NE	0.36	U	0.085	U	0.082	U	33	U	0.079	U	0.091	U	0.08	U	0.084	U
Pentachlorophenol	0.8	6.7	1.8	U	0.42	U	0.4	U	160	U	0.39	U	0.45	U	0.39	U	0.41	U
Phenol	0.33	500	0.36	U	0.085	U	0.082	U	33	U	0.079	U	0.091	U	0.08	U	0.084	U

Table 7
2009 - 2010 Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-76(09) 11.7 - 12.2 10/11/2009		SB-76(09) 15 - 16 10/11/2009		SB-76(09) 74 - 75 10/11/2009		SB-78(09) 10 - 11 10/24/2009		SB-78(09) 74 - 75 10/24/2009		SB-81(09) 11 - 12 10/12/2009		SB-81(09) 48 - 49 10/12/2009		SB-81(09) 74 - 75 10/12/2009	
2,4,5-Trichlorophenol	NE	NE	1.8	U	0.42	U	0.4	U	160	U	0.39	U	0.45	U	0.39	U	0.41	U
2,4,6-Trichlorophenol	NE	NE	1.8	U	0.42	U	0.4	U	160	U	0.39	U	0.45	U	0.39	U	0.41	U
Total SVOCs	NE	NE	62.9		0.66		ND		20103		0.069		ND		ND		ND	
PCBs (mg/kg)																		
Aroclor 1016	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Aroclor 1221	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Aroclor 1232	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Aroclor 1242	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Aroclor 1248	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Aroclor 1254	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Aroclor 1260	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Total Metals (mg/kg)																		
Aluminum	NE	NE	2670		11600		2460		3820		3210		4540		4530		2280	
Antimony	NE	NE	0.18	J	1.3	U	1.2	U	1.2	U	1.2	U	1.4	U	1.2	U	1.3	U
Arsenic	13	16	2.5		2.1		2.6		2.5		0.87	J	2.6		4.9		4.9	
Barium	350	400	11	J	71.5		16.3	J	28.1		12.5	J	30.5		25.1		15.6	J
Beryllium	7.2	590	0.14	J	0.92		0.22	J	0.29	J	0.22	J	0.32	J	0.35	J	0.21	J
Cadmium	2.5	9.3	0.064	J	0.41	J	0.15	J	0.13	J	0.033	J	0.1	J	0.2	J	0.11	J
Calcium	NE	NE	15200	J	1600		48400		24200		48800		1080		30400		37100	
Chromium	NE	NE	4.1		16.5		3.5		6.5		5		6		7.5		3.6	
Cobalt	NE	NE	2.9	J	10.8		2.1	J	3	J	2.9	J	3.8	J	4.6	J	1.7	J
Copper	50	270	6.2		23.2		6.8		11		8.3		6.7		12.1		5.2	
Iron	NE	NE	8460	J	19200		7690		13300		10200		10100		11700		7620	
Lead	63	1000	7.8	J	11.9		2		29		2.6		4.2		5.1		2.3	
Magnesium	NE	NE	2770	J	3590		3290		4990		4160		1330		6410		2560	
Manganese	1600	10000	145	J	145		183		197		141		144		214		131	
Mercury	0.18	2.8	0.03	J	0.033	J	0.04	U	0.16		0.039	U	0.045	U	0.039	U	0.041	U
Nickel	30	310	5.6		24.9		5.1		7.2		6.8		7.9		10.4		4.5	J
Potassium	NE	NE	488	J	1210		461	J	664		529	J	433	J	879		452	J
Selenium	3.9	1500	0.41	J	0.63	U	0.61	U	0.3	J	0.59	U	0.68	U	0.6	U	0.63	U
Silver	2	1500	0.54	U	0.079	J	0.61	U	0.11	J	0.59	U	0.68	U	0.076	J	0.63	U
Sodium	NE	NE	268	J	2120		98.8	J	174	J	101	J	12.6	J	87.5	J	42.8	J
Thallium	NE	NE	1.1	U	1.3	U	1.2	U	1.2	U	1.2	U	1.4	U	1.2	U	1.3	U
Vanadium	NE	NE	8.5		22.9		6.1		11.2		10.1		11.7		13.3		6.7	
Zinc	109	10000	21.5	J	69.2		18.1		51.1		23.4		23.3		30.6		16.6	
Total Cyanide (mg/kg)																		
Cyanide, Total	27	27	10.5		0.63	U	0.61	U	42.6		0.12	J	0.68	U	0.6	U	0.63	U
Other (%)																		
Percent Solids	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	

Table 7
2009 - 2010 Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-85(09) 11 - 12 10/22/2009		SB-85(09) 72 - 73 10/22/2009		SB-87(09) 11 - 12 10/23/2009		SB-87(09) 74 - 75 10/23/2009		SB-90(09) 10 - 11 10/21/2009		SB-90(09) 74 - 75 10/21/2009		SB-91(09) 10 - 11 10/19/2009		SB-91(09) 74 - 75 10/19/2009	
BTEX (mg/kg)																		
Benzene	0.06	44	0.0062	U	0.0061	U	0.0063	U	0.006	U	0.006	U	0.0056	U	0.0065	U	0.0058	U
Toluene	0.7	500	0.0015	J	0.0061	U	0.0063	U	0.006	U	0.002	J	0.0056	U	0.0044	J	0.0058	U
Ethylbenzene	1	390	0.0062	U	0.0061	U	0.0063	U	0.006	U	0.006	U	0.0056	U	0.0065	U	0.0058	U
Total Xylene	0.26	500	0.018	U	0.018	U	0.019	U	0.018	U	0.018	U	0.017	U	0.02	U	0.018	U
Total BTEX	NE	NE	0.0015		ND		ND		ND		0.002		ND		0.0044		ND	
Other VOCs (mg/kg)																		
Acetone	0.05	500	0.025	U	0.024	U	0.025	U	0.024	U	0.024	U	0.022	U	0.026	U	0.023	U
Bromodichloromethane	NE	NE	0.0062	U	0.0061	U	0.0063	U	0.006	U	0.006	U	0.0056	U	0.0065	U	0.0058	U
Bromoform	NE	NE	0.0062	U	0.0061	U	0.0063	U	0.006	U	0.006	U	0.0056	U	0.0065	U	0.0058	U
Bromomethane	NE	NE	0.0062	UJ	0.0061	UJ	0.0063	UJ	0.006	UJ	0.006	UJ	0.0056	UJ	0.0065	UJ	0.0058	UJ
2-Butanone	0.12	500	0.0062	U	0.0061	U	0.0063	U	0.006	U	0.006	U	0.0056	U	0.0072		0.0058	U
Carbon disulfide	NE	NE	0.0062	U	0.0061	U	0.0063	U	0.006	U	0.006	U	0.0056	U	0.0065	U	0.0058	U
Carbon tetrachloride	0.76	22	0.0062	U	0.0061	U	0.0063	U	0.006	U	0.006	U	0.0056	U	0.0065	U	0.0058	U
Chlorobenzene	1.1	500	0.0062	U	0.0061	U	0.0063	U	0.006	U	0.006	U	0.0056	U	0.0065	U	0.0058	U
Chloroethane	NE	NE	0.0062	U	0.0061	U	0.0063	U	0.006	U	0.006	U	0.0056	U	0.0065	U	0.0058	U
Chloroform	0.37	350	0.0062	U	0.0061	U	0.0063	U	0.006	U	0.006	U	0.0056	U	0.0065	U	0.0058	U
Chloromethane	NE	NE	0.0062	U	0.0061	U	0.0063	U	0.006	U	0.006	U	0.0056	U	0.0065	U	0.0058	U
Cyclohexane	NE	NE	0.0062	U	0.0061	U	0.0063	U	0.006	U	0.006	U	0.0056	U	0.0065	U	0.0058	U
1,2-Dibromo-3-chloropropane	NE	NE	0.0062	U	0.0061	U	0.0063	U	0.006	U	0.006	U	0.0056	U	0.0065	U	0.0058	U
Dibromochloromethane	NE	NE	0.0062	U	0.0061	U	0.0063	U	0.006	U	0.006	U	0.0056	U	0.0065	U	0.0058	U
1,2-Dibromoethane	NE	NE	0.0062	U	0.0061	U	0.0063	U	0.006	U	0.006	U	0.0056	U	0.0065	U	0.0058	U
1,2-Dichlorobenzene	1.1	500	0.0062	U	0.0061	U	0.0063	U	0.006	U	0.006	U	0.0056	U	0.0065	U	0.0058	U
1,3-Dichlorobenzene	2.4	280	0.0062	U	0.0061	U	0.0063	U	0.006	U	0.006	U	0.0056	U	0.0065	U	0.0058	U
1,4-Dichlorobenzene	1.8	130	0.0062	U	0.0061	U	0.0063	U	0.006	U	0.0014	J	0.0056	U	0.0065	U	0.0058	U
Dichlorodifluoromethane	NE	NE	0.0062	U	0.0061	U	0.0063	U	0.006	U	0.006	U	0.0056	U	0.0065	U	0.0058	U
1,1-Dichloroethane	0.27	240	0.0062	U	0.0061	U	0.0063	U	0.006	U	0.006	U	0.0056	U	0.0065	U	0.0058	U
1,2-Dichloroethane	0.02	30	0.0062	U	0.0061	U	0.0063	U	0.006	U	0.006	U	0.0056	U	0.0065	U	0.0058	U
cis-1,2-Dichloroethene	0.25	500	0.0062	U	0.0061	U	0.0063	U	0.006	U	0.006	U	0.0056	U	0.0065	U	0.0058	U
trans-1,2-Dichloroethene	0.19	500	0.0062	U	0.0061	U	0.0063	U	0.006	U	0.006	U	0.0056	U	0.0065	U	0.0058	U
1,1-Dichloroethene	0.33	500	0.0062	U	0.0061	U	0.0063	U	0.006	U	0.006	U	0.0056	U	0.0065	U	0.0058	U
1,2-Dichloropropane	NE	NE	0.0062	U	0.0061	U	0.0063	U	0.006	U	0.006	U	0.0056	U	0.0065	U	0.0058	U
cis-1,3-Dichloropropene	NE	NE	0.0062	U	0.0061	U	0.0063	U	0.006	U	0.006	U	0.0056	U	0.0065	U	0.0058	U
trans-1,3-Dichloropropene	NE	NE	0.0062	U	0.0061	U	0.0063	U	0.006	U	0.006	U	0.0056	U	0.0065	U	0.0058	U
2-Hexanone	NE	NE	0.0062	U	0.0061	U	0.0063	U	0.006	U	0.006	U	0.0056	U	0.0065	U	0.0058	U
Isopropyl benzene	NE	NE	0.0062	U	0.0061	U	0.0063	U	0.006	U	0.006	U	0.0056	U	0.0065	U	0.0058	U
Methyl acetate	NE	NE	0.0062	U	0.0061	U	0.0063	U	0.006	U	0.006	U	0.0056	U	0.0065	U	0.0058	U
Methyl tert-butyl ether	0.93	500	0.0062	U	0.0061	U	0.0063	U	0.006	U	0.006	U	0.0056	U	0.0065	U	0.0058	U
4-Methyl-2-pentanone	NE	NE	0.0062	U	0.0061	U	0.0063	U	0.006	U	0.006	U	0.0056	U	0.0065	U	0.0058	U
Methylcyclohexane	NE	NE	0.0062	U	0.0061	U	0.0063	U	0.006	U	0.006	U	0.0056	U	0.0065	U	0.0058	U
Methylene chloride	0.05	500	0.0062	U	0.0061	U	0.0063	U	0.006	U	0.006	U	0.0056	U	0.0065	U	0.0058	U
Styrene	NE	NE	0.0062	U	0.0061	U	0.0063	U	0.006	U	0.006	U	0.0056	U	0.0065	U	0.0058	U
1,1,2,2-Tetrachloroethane	NE	NE	0.0062	U	0.0061	U	0.0063	U	0.006	U	0.006	U	0.0056	U	0.0065	U	0.0058	U

Table 7
2009 - 2010 Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-85(09) 11 - 12 10/22/2009		SB-85(09) 72 - 73 10/22/2009		SB-87(09) 11 - 12 10/23/2009		SB-87(09) 74 - 75 10/23/2009		SB-90(09) 10 - 11 10/21/2009		SB-90(09) 74 - 75 10/21/2009		SB-91(09) 10 - 11 10/19/2009		SB-91(09) 74 - 75 10/19/2009	
Tetrachloroethene	1.3	150	0.0062	U	0.0061	U	0.0063	U	0.006	U	0.006	U	0.0056	U	0.0065	U	0.0058	U
1,1,2-Trichloro-1,2,2-trifluoroethane	NE	NE	0.0062	U	0.0061	U	0.0063	U	0.006	U	0.006	U	0.0056	U	0.0065	U	0.0058	U
1,2,4-Trichlorobenzene	NE	NE	0.0062	U	0.0061	U	0.0016	J	0.0021	J	0.093		0.0056	U	0.0065	U	0.0058	U
1,1,1-Trichloroethane	0.68	500	0.0062	U	0.0061	U	0.0063	U	0.006	U	0.006	U	0.0056	U	0.0065	U	0.0058	U
1,1,2-Trichloroethane	NE	NE	0.0062	U	0.0061	U	0.0063	U	0.006	U	0.006	U	0.0056	U	0.0065	U	0.0058	U
Trichloroethene	0.47	200	0.0062	U	0.0061	U	0.0063	U	0.006	U	0.006	U	0.0056	U	0.0065	U	0.0058	U
Trichlorofluoromethane	NE	NE	0.0062	U	0.0061	U	0.0063	U	0.006	U	0.006	U	0.0056	U	0.0065	U	0.0058	U
Vinyl chloride	0.02	13	0.0062	U	0.0061	U	0.0063	U	0.006	U	0.006	U	0.0056	U	0.0065	U	0.0058	U
Total VOCs	NE	NE	0.0275		ND		0.0016		0.0021		0.5664		ND		0.0116		ND	
Non-carcinogenic PAHs (mg/kg)																		
Acenaphthene	20	500	0.036	J	0.082	U	0.084	U	0.081	U	0.29		0.074	U	0.026	J	0.078	U
Acenaphthylene	100	500	0.086		0.082	U	0.084	U	0.081	U	0.83		0.074	U	0.088	U	0.078	U
Anthracene	100	500	0.31		0.082	U	0.084	U	0.081	U	1.5		0.074	U	0.049	J	0.078	U
Benzo[g,h,i]perylene	100	500	0.4		0.082	U	0.084	U	0.081	U	1.8		0.074	U	0.13		0.078	U
Fluoranthene	100	500	1.2		0.082	U	0.084	U	0.081	U	6.1		0.074	U	0.47		0.078	U
Fluorene	100	500	0.1		0.082	U	0.084	U	0.081	U	0.99		0.074	U	0.014	J	0.078	U
2-Methylnaphthalene	NE	NE	0.026	J	0.082	U	0.084	U	0.081	U	0.47		0.074	U	0.088	U	0.078	U
Naphthalene	12	500	0.036	J	0.082	U	0.084	U	0.081	U	1.2		0.074	U	0.022	J	0.078	U
Phenanthrene	100	500	1.1		0.082	U	0.084	U	0.081	U	7.2		0.074	U	0.16		0.078	U
Pyrene	100	500	1.2		0.082	U	0.084	U	0.081	U	6.9		0.074	U	0.47		0.078	U
Total Non-carcinogenic PAHs	NE	NE	4.494		ND		ND		ND		27.28		ND		1.341		ND	
Carcinogenic PAHs (mg/kg)																		
Benz[a]anthracene	1	5.6	0.6		0.082	U	0.084	U	0.081	U	3.2		0.074	U	0.31		0.078	U
Benzo[a]pyrene	1	1	0.52		0.082	U	0.084	U	0.081	U	2.7		0.074	U	0.25		0.078	U
Benzo[b]fluoranthene	1	5.6	0.71		0.082	U	0.084	U	0.081	U	3.8		0.074	U	0.4		0.078	U
Benzo[k]fluoranthene	0.8	56	0.082	U	0.082	U	0.084	U	0.081	U	0.24	U	0.074	U	0.088	U	0.078	U
Chrysene	1	56	0.43		0.082	U	0.084	U	0.081	U	3.1		0.074	U	0.28		0.078	U
Dibenz[a,h]anthracene	0.33	0.56	0.069	J	0.082	U	0.084	U	0.081	U	0.47		0.074	U	0.04	J	0.078	U
Indeno[1,2,3-cd]pyrene	0.5	5.6	0.33		0.082	U	0.084	U	0.081	U	1.6		0.074	U	0.12		0.078	U
Total Carcinogenic PAHs	NE	NE	2.659		ND		ND		ND		14.87		ND		1.4		ND	
Total PAHs	NE	500*	7.153		ND		ND		ND		42.15		ND		2.741		ND	
Other SVOCs (mg/kg)																		
Acetophenone	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Atrazine	NE	NE	0.4	U	0.4	U	0.42	U	0.4	U	1.2	U	0.36	U	0.43	U	0.38	U
Benzaldehyde	NE	NE	0.4	U	0.4	U	0.42	U	0.4	U	1.2	U	0.36	U	0.43	U	0.38	U
1,1-Biphenyl	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Bis(chloroisopropyl)ether	NE	NE	0.082	U	0.082	U	0.084	U	0.081	U	0.24	U	0.074	U	0.088	U	0.078	U
Bis(2-chloroethyl)ether	NE	NE	0.082	U	0.082	U	0.084	U	0.081	U	0.24	U	0.074	U	0.088	U	0.078	U
Bis(2-chloroethoxy)methane	NE	NE	0.4	U	0.4	U	0.42	U	0.4	U	1.2	U	0.36	U	0.43	U	0.38	U
Bis(2-ethylhexyl)phthalate	NE	NE	0.4	U	0.4	U	0.42	U	0.4	U	1.2	U	0.36	U	0.43	U	0.38	U
4-Bromophenyl phenyl ether	NE	NE	0.4	U	0.4	U	0.42	U	0.4	U	1.2	U	0.36	U	0.43	U	0.38	U
Butyl benzyl phthalate	NE	NE	0.4	U	0.12	J	0.42	U	0.4	U	1.2	U	0.36	U	0.43	U	0.38	U
Caprolactam	NE	NE	2.1	U	2.1	U	2.1	U	2	U	6.1	U	1.9	U	2.2	U	2	U

Table 7
2009 - 2010 Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-85(09) 11 - 12 10/22/2009		SB-85(09) 72 - 73 10/22/2009		SB-87(09) 11 - 12 10/23/2009		SB-87(09) 74 - 75 10/23/2009		SB-90(09) 10 - 11 10/21/2009		SB-90(09) 74 - 75 10/21/2009		SB-91(09) 10 - 11 10/19/2009		SB-91(09) 74 - 75 10/19/2009	
Carbazole	NE	NE	0.052	J	0.082	U	0.084	U	0.081	U	0.65		0.074	U	0.088	U	0.078	U
4-Chloro-3-methylphenol	NE	NE	0.4	U	0.4	U	0.42	U	0.4	U	1.2	U	0.36	U	0.43	U	0.38	U
4-Chloroaniline	NE	NE	0.4	U	0.4	U	0.42	U	0.4	U	1.2	U	0.36	U	0.43	U	0.38	U
2-Chloronaphthalene	NE	NE	0.082	U	0.082	U	0.084	U	0.081	U	0.24	U	0.074	U	0.088	U	0.078	U
2-Chlorophenol	NE	NE	0.4	U	0.4	U	0.42	U	0.4	U	1.2	U	0.36	U	0.43	U	0.38	U
4-Chlorophenyl phenyl ether	NE	NE	0.4	U	0.4	U	0.42	U	0.4	U	1.2	U	0.36	U	0.43	U	0.38	U
Dibenzofuran	7	350	0.11	J	0.4	U	0.42	U	0.4	U	0.77	J	0.36	U	0.43	U	0.38	U
3,3-Dichlorobenzidine	NE	NE	0.4	U	0.4	U	0.42	U	0.4	U	1.2	U	0.36	U	0.43	U	0.38	U
2,4-Dichlorophenol	NE	NE	0.082	U	0.082	U	0.084	U	0.081	U	0.24	U	0.074	U	0.088	U	0.078	U
Diethyl phthalate	NE	NE	0.4	U	0.4	U	0.42	U	0.4	U	1.2	U	0.36	U	0.43	U	0.032	J
Dimethyl phthalate	NE	NE	0.4	U	0.4	U	0.42	U	0.4	U	1.2	U	0.36	U	0.43	U	0.38	U
2,4-Dimethylphenol	NE	NE	0.4	U	0.4	U	0.42	U	0.4	U	1.2	U	0.36	U	0.43	U	0.38	U
Di-n-butyl phthalate	NE	NE	0.4	U	0.4	U	0.42	U	0.4	U	1.2	U	0.36	U	0.43	U	0.38	U
4,6-Dinitro-2-methylphenol	NE	NE	2.1	U	2.1	U	2.1	U	2	U	6.1	U	1.9	U	2.2	U	2	U
2,4-Dinitrophenol	NE	NE	2.1	U	2.1	U	2.1	U	2	U	6.1	U	1.9	U	2.2	U	2	U
2,4-Dinitrotoluene	NE	NE	0.4	U	0.4	U	0.42	U	0.4	U	1.2	U	0.36	U	0.43	U	0.38	U
2,6-Dinitrotoluene	NE	NE	0.4	U	0.4	U	0.42	U	0.4	U	1.2	U	0.36	U	0.43	U	0.38	U
Di-n-octyl phthalate	NE	NE	0.4	U	0.4	U	0.42	U	0.4	U	1.2	U	0.36	U	0.43	U	0.38	U
Hexachlorobenzene	0.33	6	0.018	J	0.082	U	0.084	U	0.081	U	0.24	U	0.074	U	0.088	U	0.078	U
Hexachlorobutadiene	NE	NE	0.082	U	0.082	U	0.084	U	0.081	U	0.24	U	0.074	U	0.088	U	0.078	U
Hexachlorocyclopentadiene	NE	NE	0.4	U	0.4	U	0.42	U	0.4	U	1.2	U	0.36	U	0.43	U	0.38	U
Hexachloroethane	NE	NE	0.4	U	0.4	U	0.42	U	0.4	U	1.2	U	0.36	U	0.43	U	0.38	U
Isophorone	NE	NE	0.4	U	0.4	U	0.42	U	0.4	U	1.2	U	0.36	U	0.43	U	0.38	U
2-Methylphenol	0.33	500	0.4	U	0.4	U	0.42	U	0.4	U	1.2	U	0.36	U	0.43	U	0.38	U
4-Methylphenol (p-Cresol)	0.33	500	0.4	U	0.4	U	0.42	U	0.4	U	0.12	J	0.36	U	0.43	U	0.38	U
2-Nitroaniline	NE	NE	2.1	U	2.1	U	2.1	U	2	U	6.1	U	1.9	U	2.2	U	2	U
3-Nitroaniline	NE	NE	2.1	U	2.1	U	2.1	U	2	U	6.1	U	1.9	U	2.2	U	2	U
4-Nitroaniline	NE	NE	2.1	U	2.1	U	2.1	U	2	U	6.1	U	1.9	U	2.2	U	2	U
Nitrobenzene	NE	NE	0.082	U	0.082	U	0.084	U	0.081	U	0.24	U	0.074	U	0.088	U	0.078	U
2-Nitrophenol	NE	NE	0.4	U	0.4	U	0.42	U	0.4	U	1.2	U	0.36	U	0.43	U	0.38	U
4-Nitrophenol	NE	NE	2.1	U	2.1	U	2.1	U	2	U	6.1	U	1.9	U	2.2	U	2	U
N-Nitrosodi-n-propylamine	NE	NE	0.082	U	0.082	U	0.084	U	0.081	U	0.24	U	0.074	U	0.088	U	0.078	U
N-Nitrosodiphenylamine	NE	NE	0.082	U	0.082	U	0.084	U	0.081	U	0.24	U	0.074	U	0.088	U	0.078	U
Pentachlorophenol	0.8	6.7	0.4	U	0.4	U	0.42	U	0.4	U	1.2	U	0.36	U	0.43	U	0.38	U
Phenol	0.33	500	0.082	U	0.082	U	0.084	U	0.081	U	0.24	U	0.074	U	0.088	U	0.078	U

Table 7
2009 - 2010 Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-85(09) 11 - 12 10/22/2009		SB-85(09) 72 - 73 10/22/2009		SB-87(09) 11 - 12 10/23/2009		SB-87(09) 74 - 75 10/23/2009		SB-90(09) 10 - 11 10/21/2009		SB-90(09) 74 - 75 10/21/2009		SB-91(09) 10 - 11 10/19/2009		SB-91(09) 74 - 75 10/19/2009	
2,4,5-Trichlorophenol	NE	NE	0.4	U	0.4	U	0.42	U	0.4	U	1.2	U	0.36	U	0.43	U	0.38	U
2,4,6-Trichlorophenol	NE	NE	0.4	U	0.4	U	0.42	U	0.4	U	1.2	U	0.36	U	0.43	U	0.38	U
Total SVOCs	NE	NE	7.333		0.12		0.0016		0.0021		43.7844		ND		2.741		0.032	
PCBs (mg/kg)																		
Aroclor 1016	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Aroclor 1221	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Aroclor 1232	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Aroclor 1242	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Aroclor 1248	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Aroclor 1254	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Aroclor 1260	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Total Metals (mg/kg)																		
Aluminum	NE	NE	4800	J	3670	J	7680	J	2830	J	4740	J	3760	J	9630		2440	
Antimony	NE	NE	1.2	UJ	1.2	UJ	1.3	UJ	1.2	UJ	1.2	UJ	1.1	UJ	1.3	U	0.23	J
Arsenic	13	16	3.1		2.8		4.7		1.4		2.9		5.6		7.1		1.2	
Barium	350	400	26.7	J	20.2	J	54.3	J	11.8	J	26.9	J	39.7	J	68.9		10	J
Beryllium	7.2	590	0.24	J	0.18	J	0.38	J	0.16	J	0.23	J	0.22	J	0.84		0.27	J
Cadmium	2.5	9.3	0.62	U	0.61	U	0.072	J	0.031	J	0.05	J	0.057	J	0.65	U	0.58	U
Calcium	NE	NE	21600	J	27200	J	29200	J	38000	J	24700	J	60000	J	4280		45500	
Chromium	NE	NE	7.1	J	5.5	J	10.3	J	4	J	7.3	J	7.4	J	12.8		3.7	
Cobalt	NE	NE	5.1	J	4.1	J	8.9		2.6	J	5.4	J	3.2	J	8.6		2	J
Copper	50	270	8.9		6.9		15.3		7.4		11.4		8.6		18.2		7.1	
Iron	NE	NE	12300	J	9770	J	18400	J	6960	J	12000	J	10800	J	28100		6170	
Lead	63	1000	8.7		3.6		10.2		2.9		14.2		3.3		17.9		2.3	
Magnesium	NE	NE	5320	J	4870	J	6710	J	3050	J	5940	J	4850	J	3640		3150	
Manganese	1600	10000	429	J	157	J	417	J	114	J	284	J	312	J	273		136	
Mercury	0.18	2.8	0.041	U	0.04	U	0.036	J	0.04	U	0.13		0.037	U	0.016	J	0.039	U
Nickel	30	310	10.5		8.5		17.7		6.4		10.8		9		17.8		5.1	
Potassium	NE	NE	785		697		1380		554	J	877		719		1490		430	J
Selenium	3.9	1500	0.62	U	0.61	U	0.63	U	0.6	U	0.6	U	0.56	U	0.65	U	0.58	U
Silver	2	1500	0.62	U	0.61	U	0.63	U	0.6	U	0.6	U	0.56	U	0.65	U	0.58	U
Sodium	NE	NE	122	J	122	J	323	J	110	J	152	J	114	J	286	J	95.9	J
Thallium	NE	NE	0.25	J	1.2	U	0.4	J	1.2	U	0.32	J	0.42	J	1.3	U	1.2	U
Vanadium	NE	NE	14.7	J	12.4	J	19.6	J	7.2	J	14.6	J	11.3	J	25.2		6.5	
Zinc	109	10000	30.7	J	21.8	J	41.7	J	18.3	J	33	J	23.1	J	55.9	J	18.2	J
Total Cyanide (mg/kg)																		
Cyanide, Total	27	27	0.58	J	0.61	U	0.16	J	0.16	J	0.75		0.56	U	0.18	J	0.58	U
Other (%)																		
Percent Solids	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	

Table 7
2009 - 2010 Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-92(09) 5 - 6 10/08/2009		SB-92(09) 71 - 72 10/08/2009		SB-93(09) 10.6 - 11.6 10/05/2009		SB-93(09) 70 - 75 10/06/2009		Duplicate of: SB-93(09) 70 - 75 10/06/2009		SB-94(09) 9 - 10 10/07/2009		SB-94(09) 73 - 75 10/07/2009		SB-95(09) 9 - 10 10/08/2009	
BTEX (mg/kg)																		
Benzene	0.06	44	0.0064	U	0.0059	U	0.0037	J	0.0059	U	0.0057	U	0.0017	J	0.0062	U	0.0029	J
Toluene	0.7	500	0.0064	U	0.0023	J	0.011		0.0059	U	0.0057	U	0.0062	U	0.0062	U	0.006	U
Ethylbenzene	1	390	0.0064	U	0.0059	U	0.017		0.0059	U	0.0057	U	0.0062	U	0.0062	U	0.006	U
Total Xylene	0.26	500	0.019	U	0.018	U	0.048		0.018	U	0.017	U	0.018	U	0.019	U	0.018	U
Total BTEX	NE	NE	ND		0.0023		0.0797		ND		ND		0.0017		ND		0.0029	
Other VOCs (mg/kg)																		
Acetone	0.05	500	0.026	U	0.023	U	0.031	U	0.023	U	0.023	U	0.0062	J	0.025	U	0.013	J
Bromodichloromethane	NE	NE	0.0064	U	0.0059	U	0.0079	U	0.0059	U	0.0057	U	0.0062	U	0.0062	U	0.006	U
Bromoform	NE	NE	0.0064	U	0.0059	U	0.0079	U	0.0059	U	0.0057	U	0.0062	U	0.0062	U	0.006	U
Bromomethane	NE	NE	0.0064	UJ	0.0059	UJ	0.0079	UJ	0.0059	UJ	0.0057	UJ	0.0062	UJ	0.0062	UJ	0.006	UJ
2-Butanone	0.12	500	0.0064	U	0.0059	U	0.0079	U	0.0059	U	0.0057	U	0.0062	U	0.0062	U	0.006	U
Carbon disulfide	NE	NE	0.0064	U	0.0059	U	0.0079	U	0.0059	U	0.0057	U	0.0062	U	0.0062	U	0.006	U
Carbon tetrachloride	0.76	22	0.0064	U	0.0059	U	0.0079	U	0.0059	U	0.0057	U	0.0062	U	0.0062	U	0.006	U
Chlorobenzene	1.1	500	0.0064	U	0.0059	U	0.0079	U	0.0059	U	0.0057	U	0.0062	U	0.0062	U	0.006	U
Chloroethane	NE	NE	0.0064	U	0.0059	U	0.0079	U	0.0059	U	0.0057	U	0.0062	U	0.0062	U	0.006	U
Chloroform	0.37	350	0.0064	U	0.0059	U	0.0079	U	0.0059	U	0.0057	U	0.0062	U	0.0062	U	0.006	U
Chloromethane	NE	NE	0.0064	U	0.0059	U	0.0079	U	0.0059	U	0.0057	U	0.0062	U	0.0062	U	0.006	U
Cyclohexane	NE	NE	0.0064	U	0.0059	U	0.0079	U	0.0059	U	0.0057	U	0.0062	U	0.0062	U	0.006	U
1,2-Dibromo-3-chloropropane	NE	NE	0.0064	U	0.0059	U	0.0079	U	0.0059	U	0.0057	U	0.0062	U	0.0062	U	0.006	U
Dibromochloromethane	NE	NE	0.0064	U	0.0059	U	0.0079	U	0.0059	U	0.0057	U	0.0062	U	0.0062	U	0.006	U
1,2-Dibromoethane	NE	NE	0.0064	U	0.0059	U	0.0079	U	0.0059	U	0.0057	U	0.0062	U	0.0062	U	0.006	U
1,2-Dichlorobenzene	1.1	500	0.0064	U	0.0059	U	0.0079	U	0.0059	U	0.0057	U	0.0062	U	0.0062	U	0.006	U
1,3-Dichlorobenzene	2.4	280	0.0064	U	0.0059	U	0.0079	U	0.0059	U	0.0057	U	0.0062	U	0.0062	U	0.006	U
1,4-Dichlorobenzene	1.8	130	0.0064	U	0.0059	U	0.0079	U	0.0059	U	0.0057	U	0.0062	U	0.0062	U	0.006	U
Dichlorodifluoromethane	NE	NE	0.0064	U	0.0059	U	0.0079	U	0.0059	U	0.0057	U	0.0062	U	0.0062	U	0.006	U
1,1-Dichloroethane	0.27	240	0.0064	U	0.0059	U	0.0079	U	0.0059	U	0.0057	U	0.0062	U	0.0062	U	0.006	U
1,2-Dichloroethane	0.02	30	0.0064	U	0.0059	U	0.0079	U	0.0059	U	0.0057	U	0.0062	U	0.0062	U	0.006	U
cis-1,2-Dichloroethene	0.25	500	0.0064	U	0.0059	U	0.0079	U	0.0059	U	0.0057	U	0.0062	U	0.0062	U	0.006	U
trans-1,2-Dichloroethene	0.19	500	0.0064	U	0.0059	U	0.0079	U	0.0059	U	0.0057	U	0.0062	U	0.0062	U	0.006	U
1,1-Dichloroethene	0.33	500	0.0064	U	0.0059	U	0.0079	U	0.0059	U	0.0057	U	0.0062	U	0.0062	U	0.006	U
1,2-Dichloropropane	NE	NE	0.0064	U	0.0059	U	0.0079	U	0.0059	U	0.0057	U	0.0062	U	0.0062	U	0.006	U
cis-1,3-Dichloropropene	NE	NE	0.0064	U	0.0059	U	0.0079	U	0.0059	U	0.0057	U	0.0062	U	0.0062	U	0.006	U
trans-1,3-Dichloropropene	NE	NE	0.0064	U	0.0059	U	0.0079	U	0.0059	U	0.0057	U	0.0062	U	0.0062	U	0.006	U
2-Hexanone	NE	NE	0.0064	U	0.0059	U	0.0079	U	0.0059	U	0.0057	U	0.0062	U	0.0062	U	0.006	U
Isopropyl benzene	NE	NE	0.0064	U	0.0059	U	0.0051	J	0.0028	J	0.0057	U	0.0062	U	0.0062	U	0.006	U
Methyl acetate	NE	NE	0.0064	U	0.0059	U	0.0079	U	0.0059	U	0.0057	U	0.0062	U	0.0062	U	0.006	U
Methyl tert-butyl ether	0.93	500	0.0064	U	0.0059	U	0.0079	U	0.0059	U	0.0057	U	0.0062	U	0.0062	U	0.006	U
4-Methyl-2-pentanone	NE	NE	0.0064	U	0.0059	U	0.0079	U	0.0059	U	0.0057	U	0.0062	U	0.0062	U	0.006	U
Methylcyclohexane	NE	NE	0.0064	U	0.0059	U	0.0079	U	0.0059	U	0.0057	U	0.0062	U	0.0062	U	0.006	U
Methylene chloride	0.05	500	0.0037	J	0.0048	J	0.0079	U	0.0059	U	0.0057	U	0.0051	J	0.0047	J	0.0047	J
Styrene	NE	NE	0.0064	U	0.0059	U	0.0079	U	0.0059	U	0.0057	U	0.0062	U	0.0062	U	0.006	U
1,1,2,2-Tetrachloroethane	NE	NE	0.0064	U	0.0059	U	0.0079	U	0.0059	U	0.0057	U	0.0062	U	0.0062	U	0.006	U

Table 7
2009 - 2010 Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-92(09) 5 - 6 10/08/2009		SB-92(09) 71 - 72 10/08/2009		SB-93(09) 10.6 - 11.6 10/05/2009		SB-93(09) 70 - 75 10/06/2009		Duplicate of: SB-93(09) 70 - 75 10/06/2009		SB-94(09) 9 - 10 10/07/2009		SB-94(09) 73 - 75 10/07/2009		SB-95(09) 9 - 10 10/08/2009	
Tetrachloroethene	1.3	150	0.0064	U	0.0059	U	0.0079	U	0.0059	U	0.0057	U	0.0062	U	0.0062	U	0.006	U
1,1,2-Trichloro-1,2,2-trifluoroethane	NE	NE	0.0064	U	0.0059	U	0.0079	U	0.0059	U	0.0057	U	0.0062	U	0.0062	U	0.006	U
1,2,4-Trichlorobenzene	NE	NE	0.0064	U	0.0059	U	0.0079	U	0.0059	U	0.0057	U	0.0062	U	0.0062	U	0.006	U
1,1,1-Trichloroethane	0.68	500	0.0064	U	0.0059	U	0.0079	U	0.0059	U	0.0057	U	0.0062	U	0.0062	U	0.006	U
1,1,2-Trichloroethane	NE	NE	0.0064	U	0.0059	U	0.0079	U	0.0059	U	0.0057	U	0.0062	U	0.0062	U	0.006	U
Trichloroethene	0.47	200	0.0064	U	0.0059	U	0.0079	U	0.0059	U	0.0057	U	0.0062	U	0.0062	U	0.006	U
Trichlorofluoromethane	NE	NE	0.0064	U	0.0059	U	0.0079	U	0.0059	U	0.0057	U	0.0062	U	0.0062	U	0.006	U
Vinyl chloride	0.02	13	0.0064	U	0.0059	U	0.0079	U	0.0059	U	0.0057	U	0.0062	U	0.0062	U	0.006	U
Total VOCs	NE	NE	3.4037		0.0071		580.085		0.0028		ND		0.013		0.0047		0.0206	
Non-carcinogenic PAHs (mg/kg)																		
Acenaphthene	20	500	11		0.078	U	560	J	0.078	U	0.076	U	0.082	U	0.082	U	0.08	U
Acenaphthylene	100	500	2		0.078	U	67		0.078	U	0.076	U	0.082	U	0.082	U	0.08	U
Anthracene	100	500	20		0.078	U	440	J	0.078	U	0.076	U	0.05	J	0.082	U	0.08	U
Benzo[g,h,i]perylene	100	500	20		0.078	U	97		0.078	U	0.076	U	0.076	J	0.082	U	0.013	J
Fluoranthene	100	500	69		0.0069	J	830		0.0093	J	0.076	U	0.22		0.082	U	0.019	J
Fluorene	100	500	9.8		0.078	U	460	J	0.078	U	0.076	U	0.082	U	0.082	U	0.08	U
2-Methylnaphthalene	NE	NE	3.4		0.078	U	580	J	0.078	U	0.076	U	0.082	U	0.082	U	0.08	U
Naphthalene	12	500	8.3		0.078	U	1900		0.03	J	0.076	U	0.041	J	0.082	U	0.08	U
Phenanthrene	100	500	72		0.078	U	1300		0.021	J	0.076	U	0.092		0.082	U	0.08	U
Pyrene	100	500	60		0.078	U	710	J	0.078	U	0.076	U	0.19		0.082	U	0.08	U
Total Non-carcinogenic PAHs	NE	NE	275.5		0.0069		6944		0.0603		ND		0.669		ND		0.032	
Carcinogenic PAHs (mg/kg)																		
Benz[a]anthracene	1	5.6	27		0.078	U	320	J	0.078	U	0.076	U	0.12		0.082	U	0.08	U
Benzo[a]pyrene	1	1	26		0.078	U	250	J	0.078	U	0.076	U	0.1		0.082	U	0.08	U
Benzo[b]fluoranthene	1	5.6	23		0.078	U	300	J	0.078	U	0.076	U	0.1		0.082	U	0.08	U
Benzo[k]fluoranthene	0.8	56	13		0.078	U	74		0.078	U	0.076	U	0.048	J	0.082	U	0.08	U
Chrysene	1	56	28		0.078	U	250	J	0.078	U	0.076	U	0.11		0.082	U	0.08	U
Dibenz[a,h]anthracene	0.33	0.56	4.7		0.078	U	30		0.078	U	0.076	U	0.022	J	0.082	U	0.08	U
Indeno[1,2,3-cd]pyrene	0.5	5.6	16		0.078	U	95		0.078	U	0.076	U	0.068	J	0.082	U	0.011	J
Total Carcinogenic PAHs	NE	NE	137.7		ND		1319		ND		ND		0.568		ND		0.011	
Total PAHs	NE	500*	413.2		0.0069		8263		0.0603		ND		1.237		ND		0.043	
Other SVOCs (mg/kg)																		
Acetophenone	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Atrazine	NE	NE	8.5	U	0.39	U	10	U	0.38	U	0.37	U	0.41	U	0.41	U	0.4	U
Benzaldehyde	NE	NE	8.5	U	0.39	U	90	J	0.38	U	0.37	U	0.41	U	0.41	U	0.4	U
1,1-Biphenyl	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Bis(chloroisopropyl)ether	NE	NE	1.7	U	0.078	U	2.1	U	0.078	U	0.076	U	0.082	U	0.082	U	0.08	U
Bis(2-chloroethyl)ether	NE	NE	1.7	U	0.078	U	2.1	U	0.078	U	0.076	U	0.082	U	0.082	U	0.08	U
Bis(2-chloroethoxy)methane	NE	NE	8.5	U	0.39	U	10	U	0.38	U	0.37	U	0.41	U	0.41	U	0.4	U
Bis(2-ethylhexyl)phthalate	NE	NE	8.5	U	0.39	U	10	U	0.041	J	0.079	J	0.41	U	0.1	J	0.4	U
4-Bromophenyl phenyl ether	NE	NE	8.5	U	0.39	U	10	U	0.38	U	0.37	U	0.41	U	0.41	U	0.4	U
Butyl benzyl phthalate	NE	NE	8.5	U	0.39	U	10	U	0.38	U	0.37	U	0.41	U	0.41	U	0.4	U
Caprolactam	NE	NE	44	U	2	U	53	U	2	U	1.9	U	2.1	U	2.1	U	2	U

Table 7
2009 - 2010 Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-92(09) 5 - 6 10/08/2009		SB-92(09) 71 - 72 10/08/2009		SB-93(09) 10.6 - 11.6 10/05/2009		SB-93(09) 70 - 75 10/06/2009		Duplicate of: SB-93(09) 70 - 75 10/06/2009		SB-94(09) 9 - 10 10/07/2009		SB-94(09) 73 - 75 10/07/2009		SB-95(09) 9 - 10 10/08/2009	
Carbazole	NE	NE	7.6		0.078	U	140	J	0.078	U	0.076	U	0.082	U	0.082	U	0.08	U
4-Chloro-3-methylphenol	NE	NE	8.5	U	0.39	U	10	U	0.38	U	0.37	U	0.41	U	0.41	U	0.4	U
4-Chloroaniline	NE	NE	8.5	U	0.39	U	10	U	0.38	U	0.37	U	0.41	U	0.41	U	0.4	U
2-Chloronaphthalene	NE	NE	1.7	U	0.078	U	2.1	U	0.078	U	0.076	U	0.082	U	0.082	U	0.08	U
2-Chlorophenol	NE	NE	8.5	U	0.39	U	10	U	0.38	U	0.37	U	0.41	U	0.41	U	0.4	U
4-Chlorophenyl phenyl ether	NE	NE	8.5	U	0.39	U	10	U	0.38	U	0.37	U	0.41	U	0.41	U	0.4	U
Dibenzofuran	7	350	7	J	0.39	U	340	J	0.38	U	0.37	U	0.41	U	0.41	U	0.4	U
3,3-Dichlorobenzidine	NE	NE	8.5	U	0.39	U	10	U	0.38	U	0.37	U	0.41	U	0.41	U	0.4	U
2,4-Dichlorophenol	NE	NE	1.7	U	0.078	U	2.1	U	0.078	U	0.076	U	0.082	U	0.082	U	0.08	U
Diethyl phthalate	NE	NE	1.2	J	0.076	J	16	J	0.38	U	0.37	U	0.41	U	0.41	U	0.14	J
Dimethyl phthalate	NE	NE	8.5	U	0.39	U	10	U	0.38	U	0.37	U	0.41	U	0.41	U	0.4	U
2,4-Dimethylphenol	NE	NE	8.5	U	0.39	U	0.51	J	0.38	U	0.37	U	0.41	U	0.41	U	0.4	U
Di-n-butyl phthalate	NE	NE	8.5	U	0.39	U	10	U	0.38	U	0.37	U	0.41	U	0.41	U	0.4	U
4,6-Dinitro-2-methylphenol	NE	NE	44	U	2	U	53	U	2	U	1.9	U	2.1	U	2.1	U	2	U
2,4-Dinitrophenol	NE	NE	44	U	2	U	53	U	2	U	1.9	U	2.1	U	2.1	U	2	U
2,4-Dinitrotoluene	NE	NE	8.5	U	0.39	U	10	U	0.38	U	0.37	U	0.41	U	0.41	U	0.4	U
2,6-Dinitrotoluene	NE	NE	8.5	U	0.39	U	10	U	0.38	U	0.37	U	0.41	U	0.41	U	0.4	U
Di-n-octyl phthalate	NE	NE	8.5	U	0.39	U	10	U	0.38	U	0.37	U	0.41	U	0.41	U	0.4	U
Hexachlorobenzene	0.33	6	1.7	U	0.078	U	2.1	U	0.078	U	0.076	U	0.082	U	0.082	U	0.08	U
Hexachlorobutadiene	NE	NE	1.7	U	0.078	U	2.1	U	0.078	U	0.076	U	0.082	U	0.082	U	0.08	U
Hexachlorocyclopentadiene	NE	NE	8.5	U	0.39	U	10	U	0.38	U	0.37	U	0.41	U	0.41	U	0.4	U
Hexachloroethane	NE	NE	8.5	U	0.39	U	10	U	0.38	U	0.37	U	0.41	U	0.41	U	0.4	U
Isophorone	NE	NE	8.5	U	0.39	U	10	U	0.38	U	0.37	U	0.41	U	0.41	U	0.4	U
2-Methylphenol	0.33	500	8.5	U	0.39	U	10	U	0.38	U	0.37	U	0.41	U	0.41	U	0.4	U
4-Methylphenol (p-Cresol)	0.33	500	0.38	J	0.39	U	0.74	J	0.38	U	0.37	U	0.41	U	0.41	U	0.4	U
2-Nitroaniline	NE	NE	44	U	2	U	53	U	2	U	1.9	U	2.1	U	2.1	U	2	U
3-Nitroaniline	NE	NE	44	U	2	U	53	U	2	U	1.9	U	2.1	U	2.1	U	2	U
4-Nitroaniline	NE	NE	44	U	2	U	53	U	2	U	1.9	U	2.1	U	2.1	U	2	U
Nitrobenzene	NE	NE	1.7	U	0.078	U	2.1	U	0.078	U	0.076	U	0.082	U	0.082	U	0.08	U
2-Nitrophenol	NE	NE	8.5	U	0.39	U	10	U	0.38	U	0.37	U	0.41	U	0.41	U	0.4	U
4-Nitrophenol	NE	NE	44	U	2	U	53	U	2	U	1.9	U	2.1	U	2.1	U	2	U
N-Nitrosodi-n-propylamine	NE	NE	1.7	U	0.078	U	2.1	U	0.078	U	0.076	U	0.082	U	0.082	U	0.08	U
N-Nitrosodiphenylamine	NE	NE	1.7	U	0.078	U	2.1	U	0.078	U	0.076	U	0.082	U	0.082	U	0.08	U
Pentachlorophenol	0.8	6.7	8.5	U	0.39	U	10	U	0.38	U	0.37	U	0.41	U	0.41	U	0.4	U
Phenol	0.33	500	1.7	U	0.078	U	2.1	U	0.078	U	0.076	U	0.082	U	0.082	U	0.08	U

Table 7
2009 - 2010 Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-92(09) 5 - 6 10/08/2009		SB-92(09) 71 - 72 10/08/2009		SB-93(09) 10.6 - 11.6 10/05/2009		SB-93(09) 70 - 75 10/06/2009		Duplicate of: SB-93(09) 70 - 75 10/06/2009		SB-94(09) 9 - 10 10/07/2009		SB-94(09) 73 - 75 10/07/2009		SB-95(09) 9 - 10 10/08/2009	
2,4,5-Trichlorophenol	NE	NE	8.5	U	0.39	U	10	U	0.38	U	0.37	U	0.41	U	0.41	U	0.4	U
2,4,6-Trichlorophenol	NE	NE	8.5	U	0.39	U	10	U	0.38	U	0.37	U	0.41	U	0.41	U	0.4	U
Total SVOCs	NE	NE	429.38		0.0829		8850.25		0.1013		0.079		1.237		0.1		0.183	
PCBs (mg/kg)																		
Aroclor 1016	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Aroclor 1221	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Aroclor 1232	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Aroclor 1242	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Aroclor 1248	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Aroclor 1254	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Aroclor 1260	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Total Metals (mg/kg)																		
Aluminum	NE	NE	6720		3320		6510		2900		3440		7050		5690		6130	
Antimony	NE	NE	2	J	0.23	J	1.6	U	1.2	U	1.1	U	0.21	J	1.2	UJ	0.24	J
Arsenic	13	16	9.7		6.3		11.9		4.6		5.7		2.6		3.2		2	
Barium	350	400	242		20.1	J	40.9		14.2	J	13.4	J	34.5		37.8		23.9	J
Beryllium	7.2	590	0.53		0.31	J	0.53	J	0.25	J	0.28	J	0.43	J	0.41	J	0.39	J
Cadmium	2.5	9.3	0.73		0.21	J	0.21	J	0.11	J	0.17	J	0.13	J	0.26	J	0.16	J
Calcium	NE	NE	25300	J	59400	J	25500		49300		50400		1800	J	29900	J	2450	J
Chromium	NE	NE	19.1		5.8		9.6		4.7		5.1		7.9		8.3		6.6	
Cobalt	NE	NE	6.3	J	2.6	J	5.9	J	2.4	J	2.8	J	4.1	J	4.9	J	3.4	J
Copper	50	270	129		10.3		14		6.9		8.4		8.2		12.4		10	
Iron	NE	NE	14300		10100		17200		12500		14300		12700		14900		11500	
Lead	63	1000	819		3.2		10.7		2.8		2.9		15.7		4.3		5.7	
Magnesium	NE	NE	3040		4250		5380		3820		3770		1480		7420		1480	
Manganese	1600	10000	201		169		396		160		178		102		337		283	
Mercury	0.18	2.8	1.8		0.039	U	0.24		0.039	U	0.038	U	0.035	J	0.016	J	0.035	J
Nickel	30	310	15.9		7.1		12.4		6.2		7.6		8.5		10.3		8.4	
Potassium	NE	NE	874		691		1010		517	J	624		607	J	1180		606	
Selenium	3.9	1500	1.8		0.59	U	0.79	U	0.59	U	0.57	U	0.62	U	0.62	U	0.6	U
Silver	2	1500	0.65		0.59	U	0.12	J	0.074	J	0.09	J	0.62	U	0.13	J	0.073	J
Sodium	NE	NE	493	J	133	J	221	J	130	J	115	J	384	J	174	J	166	J
Thallium	NE	NE	1.3	U	1.2	U	1.6	U	1.2	U	1.1	U	1.2	U	1.2	U	1.2	U
Vanadium	NE	NE	24.5	J	9	J	18.6		7.9		8.5		17.9	J	16.2	J	13.1	J
Zinc	109	10000	330	J	24.4	J	41.9		22.7		25.4		28.3	J	33.2	J	28.6	J
Total Cyanide (mg/kg)																		
Cyanide, Total	27	27	2.2		0.59	U	17.4		0.59	U	0.57	U	0.62	U	0.62	U	0.6	U
Other (%)																		
Percent Solids	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	

Table 7
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National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-95(09) 76 - 77 10/08/2009		SB-96(09) 22 - 24 10/07/2009		SB-97(09) 24 - 25 10/07/2009		SB-100(10) 10 - 11 10/26/2010		Duplicate of: SB-100(10) 10 - 11 10/26/2010		SB-101(10) 11 - 12 10/28/2010		SB-102(10) 11 - 12 10/26/2010		SB-103(10) 12 - 13 10/26/2010	
BTEX (mg/kg)																		
Benzene	0.06	44	0.0058	U	0.087	J	0.39		4.1		0.68	J	1.1	J	0.76		0.0071	U
Toluene	0.7	500	0.0025	J	0.0074	U	0.0074	U	20	J	2.5	J	1.5	J	0.14	J	0.0071	U
Ethylbenzene	1	390	0.0058	U	0.0074	U	0.0074	U	15	J	2.9	J	1.1	J	0.77		0.0047	J
Total Xylene	0.26	500	0.017	U	0.022	U	0.022	U	66	J	13	J	3.9	J	2.4		0.029	
Total BTEX	NE	NE	0.0025		0.087		0.39		105.1		19.08		7.6		4.07		0.0337	
Other VOCs (mg/kg)																		
Acetone	0.05	500	0.012	J	0.014	J	0.032		14	U	13	U	12	U	2.4	U	0.02	J
Bromodichloromethane	NE	NE	0.0058	U	0.0074	U	0.0074	U	3.5	U	3.1	U	3.1	U	0.6	U	0.0071	U
Bromoform	NE	NE	0.0058	U	0.0074	U	0.0074	U	3.5	U	3.1	U	3.1	U	0.6	U	0.0071	U
Bromomethane	NE	NE	0.0058	UJ	0.0074	UJ	0.0074	UJ	3.5	U	3.1	U	3.1	U	0.6	U	0.0071	U
2-Butanone	0.12	500	0.0058	U	0.0074	U	0.0074	U	3.5	U	3.1	U	3.1	U	0.6	U	0.0074	
Carbon disulfide	NE	NE	0.0058	U	0.0074	U	0.0074	U	3.5	U	3.1	U	3.1	U	0.6	U	0.0071	U
Carbon tetrachloride	0.76	22	0.0058	U	0.0074	U	0.0074	U	3.5	U	3.1	U	3.1	U	0.6	U	0.0071	U
Chlorobenzene	1.1	500	0.0058	U	0.0074	U	0.0074	U	3.5	U	3.1	U	3.1	U	0.6	U	0.0071	U
Chloroethane	NE	NE	0.0058	U	0.0074	U	0.0074	U	3.5	U	3.1	U	3.1	U	0.6	U	0.0071	UJ
Chloroform	0.37	350	0.0058	U	0.0074	U	0.0074	U	3.5	U	3.1	U	3.1	U	0.6	U	0.0071	U
Chloromethane	NE	NE	0.0058	U	0.0074	U	0.0074	U	3.5	U	3.1	U	3.1	U	0.6	U	0.0071	U
Cyclohexane	NE	NE	0.0058	U	0.0074	U	0.0074	U	3.5	U	3.1	U	3.1	U	0.6	U	0.0071	U
1,2-Dibromo-3-chloropropane	NE	NE	0.0058	U	0.0074	U	0.0074	U	3.5	U	3.1	U	3.1	U	0.6	U	0.0071	U
Dibromochloromethane	NE	NE	0.0058	U	0.0074	U	0.0074	U	3.5	U	3.1	U	3.1	U	0.6	U	0.0071	U
1,2-Dibromoethane	NE	NE	0.0058	U	0.0074	U	0.0074	U	3.5	U	3.1	U	3.1	U	0.6	U	0.0071	U
1,2-Dichlorobenzene	1.1	500	0.0058	U	0.0074	U	0.0074	U	3.5	U	3.1	U	3.1	U	0.6	U	0.0071	U
1,3-Dichlorobenzene	2.4	280	0.0058	U	0.0074	U	0.0074	U	3.5	U	3.1	U	3.1	U	0.6	U	0.0071	U
1,4-Dichlorobenzene	1.8	130	0.0058	U	0.0074	U	0.0074	U	3.5	U	3.1	U	3.1	U	0.6	U	0.0071	U
Dichlorodifluoromethane	NE	NE	0.0058	U	0.0074	U	0.0074	U	3.5	U	3.1	U	3.1	U	0.6	U	0.0071	U
1,1-Dichloroethane	0.27	240	0.0058	U	0.0074	U	0.0074	U	3.5	U	3.1	U	3.1	U	0.6	U	0.0071	U
1,2-Dichloroethane	0.02	30	0.0058	U	0.0074	U	0.0074	U	3.5	U	3.1	U	3.1	U	0.68		0.0071	U
cis-1,2-Dichloroethene	0.25	500	0.0058	U	0.0074	U	0.0074	U	3.5	U	3.1	U	3.1	U	0.6	U	0.0071	U
trans-1,2-Dichloroethene	0.19	500	0.0058	U	0.0074	U	0.0074	U	3.5	U	3.1	U	3.1	U	0.6	U	0.0071	U
1,1-Dichloroethene	0.33	500	0.0058	U	0.0074	U	0.0074	U	3.5	U	3.1	U	3.1	U	0.6	U	0.0071	U
1,2-Dichloropropane	NE	NE	0.0058	U	0.0074	U	0.0074	U	3.5	U	3.1	U	3.1	U	0.6	U	0.0071	U
cis-1,3-Dichloropropene	NE	NE	0.0058	U	0.0074	U	0.0074	U	3.5	U	3.1	U	3.1	U	0.6	U	0.0071	U
trans-1,3-Dichloropropene	NE	NE	0.0058	U	0.0074	U	0.0074	U	3.5	U	3.1	U	3.1	U	0.6	U	0.0071	U
2-Hexanone	NE	NE	0.0058	U	0.0074	U	0.0074	U	3.5	U	3.1	U	3.1	U	0.6	U	0.0071	U
Isopropyl benzene	NE	NE	0.0058	U	0.0074	U	0.0074	U	3.5	U	3.1	U	3.1	U	0.11	J	0.0093	
Methyl acetate	NE	NE	0.0058	U	0.0074	U	0.0074	U	3.5	U	3.1	U	3.1	U	0.6	U	0.0071	U
Methyl tert-butyl ether	0.93	500	0.0058	U	0.0074	U	0.0074	U	3.5	U	3.1	U	3.1	U	0.6	U	0.0071	U
4-Methyl-2-pentanone	NE	NE	0.0058	U	0.0074	U	0.0074	U	3.5	U	3.1	U	3.1	U	0.6	U	0.0071	U
Methylcyclohexane	NE	NE	0.0058	U	0.0074	U	0.0074	U	3.5	U	3.1	U	3.1	U	0.6	U	0.0071	U
Methylene chloride	0.05	500	0.0035	J	0.0074	U	0.0061	J	3.5	U	3.1	U	3.1	U	0.6	U	0.0071	U
Styrene	NE	NE	0.0058	U	0.0074	U	0.0074	U	3.5	U	3.1	U	3.1	U	0.6	U	0.0071	U
1,1,2,2-Tetrachloroethane	NE	NE	0.0058	U	0.0074	U	0.0074	U	3.5	U	3.1	U	3.1	U	0.6	U	0.0071	U

Table 7
2009 - 2010 Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-95(09) 76 - 77 10/08/2009		SB-96(09) 22 - 24 10/07/2009		SB-97(09) 24 - 25 10/07/2009		SB-100(10) 10 - 11 10/26/2010		Duplicate of: SB-100(10) 10 - 11 10/26/2010		SB-101(10) 11 - 12 10/28/2010		SB-102(10) 11 - 12 10/26/2010		SB-103(10) 12 - 13 10/26/2010	
Tetrachloroethene	1.3	150	0.0019	J	0.0074	U	0.0074	U	3.5	U	3.1	U	3.1	U	0.6	U	0.0071	U
1,1,2-Trichloro-1,2,2-trifluoroethane	NE	NE	0.0058	U	0.0074	U	0.0074	U	3.5	U	3.1	U	3.1	U	0.6	U	0.0071	U
1,2,4-Trichlorobenzene	NE	NE	0.0058	U	0.0074	U	0.0074	U	3.5	U	3.1	U	3.1	U	0.6	U	0.0071	U
1,1,1-Trichloroethane	0.68	500	0.0058	U	0.0074	U	0.0074	U	3.5	U	3.1	U	3.1	U	0.6	U	0.0071	U
1,1,2-Trichloroethane	NE	NE	0.0058	U	0.0074	U	0.0074	U	3.5	U	3.1	U	3.1	U	0.6	U	0.0071	U
Trichloroethene	0.47	200	0.0058	U	0.0074	U	0.0074	U	3.5	U	3.1	U	3.1	U	0.6	U	0.0071	U
Trichlorofluoromethane	NE	NE	0.0058	U	0.0074	U	0.0074	U	3.5	U	3.1	U	3.1	U	0.6	U	0.0071	U
Vinyl chloride	0.02	13	0.0058	U	0.0074	U	0.0074	U	3.5	U	3.1	U	3.1	U	0.6	U	0.0071	U
Total VOCs	NE	NE	0.0199		0.101		0.4281		105.1		19.08		7.6		4.86		0.0704	
Non-carcinogenic PAHs (mg/kg)																		
Acenaphthene	20	500	0.078	U	0.2	U	0.099	U	1.3	J	290	J	8.7		22		0.015	J
Acenaphthylene	100	500	0.078	U	0.2	U	0.099	U	0.23	J	1300		3.1		5.5		0.041	J
Anthracene	100	500	0.078	U	0.2	U	0.099	U	0.99	J	1200		5.4		20		0.035	J
Benzo[g,h,i]perylene	100	500	0.078	U	0.2	U	0.099	U	0.35	J	360		2.3	J	9.3	J	0.012	J
Fluoranthene	100	500	0.078	U	0.2	U	0.099	U	2	J	2800		12		41		0.078	J
Fluorene	100	500	0.078	U	0.2	U	0.099	U	0.97	J	1300		7.2		24		0.026	J
2-Methylnaphthalene	NE	NE	0.078	U	0.2	U	0.099	U	1.8	J	1600		11		21		0.049	J
Naphthalene	12	500	0.023	J	0.2	U	0.099	U	19	J	6900		58		59		0.24	
Phenanthrene	100	500	0.078	U	0.2	U	0.099	U	2.3	J	3800		17		48		0.12	
Pyrene	100	500	0.078	U	0.2	U	0.099	U	1.3	J	1700		8.9		29		0.055	J
Total Non-carcinogenic PAHs	NE	NE	0.023		ND		ND		30.24		21250		133.6		278.8		0.671	
Carcinogenic PAHs (mg/kg)																		
Benz[a]anthracene	1	5.6	0.078	U	0.2	U	0.099	U	0.81	J	930		4.9		17		0.033	J
Benzo[a]pyrene	1	1	0.078	U	0.2	U	0.099	U	1	J	860		4		14		0.22	
Benzo[b]fluoranthene	1	5.6	0.078	U	0.2	U	0.099	U	0.62	J	580	J	3.5		14		0.03	J
Benzo[k]fluoranthene	0.8	56	0.078	U	0.2	U	0.099	U	0.3	J	190	J	1.6		6.2		0.02	J
Chrysene	1	56	0.078	U	0.2	U	0.099	U	0.63	J	790		3.7		13		0.024	J
Dibenz[a,h]anthracene	0.33	0.56	0.078	U	0.2	U	0.099	U	0.56	J	62	J	0.92		2.7		0.095	U
Indeno[1,2,3-cd]pyrene	0.5	5.6	0.078	U	0.2	U	0.099	U	0.68	J	430		2.1	J	7.9	J	0.21	J
Total Carcinogenic PAHs	NE	NE	ND		ND		ND		4.6		3842		20.72		74.8		0.537	
Total PAHs	NE	500*	0.023		ND		ND		34.84		25092		154.32		353.6		1.208	
Other SVOCs (mg/kg)																		
Acetophenone	NE	NE	NA		NA		NA		0.92	U	8.3	U	0.82	U	1.6	U	0.47	U
Atrazine	NE	NE	0.38	U	0.98	U	0.49	U	0.92	U	8.3	U	0.82	U	1.6	U	0.47	U
Benzaldehyde	NE	NE	0.38	U	0.98	U	0.37	J	0.92	UJ	8.3	UJ	0.82	UJ	1.6	UJ	0.47	UJ
1,1-Biphenyl	NE	NE	NA		NA		NA		0.31	J	220	J	2		4.5		0.47	U
Bis(chloroisopropyl)ether	NE	NE	0.078	U	0.2	U	0.099	U	0.19	U	1.7	U	0.17	U	0.32	U	0.095	U
Bis(2-chloroethyl)ether	NE	NE	0.078	U	0.2	U	0.099	U	0.19	U	1.7	U	0.17	U	0.32	U	0.095	U
Bis(2-chloroethoxy)methane	NE	NE	0.38	U	0.98	U	0.49	U	0.92	U	8.3	U	0.82	U	1.6	U	0.47	U
Bis(2-ethylhexyl)phthalate	NE	NE	0.38	U	0.98	U	0.49	U	0.92	U	8.3	U	0.82	U	1.6	U	0.088	J
4-Bromophenyl phenyl ether	NE	NE	0.38	U	0.98	U	0.49	U	0.92	U	8.3	U	0.82	U	1.6	U	0.47	U
Butyl benzyl phthalate	NE	NE	0.38	U	0.98	U	0.49	U	0.92	U	8.3	U	0.82	U	1.6	U	0.47	U
Caprolactam	NE	NE	2	U	5.1	U	2.5	U	4.8	U	43	U	4.2	U	8	U	2.4	U

Table 7
2009 - 2010 Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-95(09) 76 - 77 10/08/2009		SB-96(09) 22 - 24 10/07/2009		SB-97(09) 24 - 25 10/07/2009		SB-100(10) 10 - 11 10/26/2010		Duplicate of: SB-100(10) 10 - 11 10/26/2010		SB-101(10) 11 - 12 10/28/2010		SB-102(10) 11 - 12 10/26/2010		SB-103(10) 12 - 13 10/26/2010	
Carbazole	NE	NE	0.078	U	0.2	U	0.099	U	0.63	J	520		2.6		7.1		0.095	U
4-Chloro-3-methylphenol	NE	NE	0.38	U	0.98	U	0.49	U	0.92	U	8.3	U	0.82	U	1.6	U	0.47	U
4-Chloroaniline	NE	NE	0.38	U	0.98	U	0.49	U	0.92	U	8.3	U	0.82	U	1.6	U	0.47	U
2-Chloronaphthalene	NE	NE	0.078	U	0.2	U	0.099	U	0.19	U	1.7	U	0.17	U	0.32	U	0.095	U
2-Chlorophenol	NE	NE	0.38	U	0.98	U	0.49	U	0.92	U	8.3	U	0.82	U	1.6	U	0.47	U
4-Chlorophenyl phenyl ether	NE	NE	0.38	U	0.98	U	0.49	U	0.92	U	8.3	U	0.82	U	1.6	U	0.47	U
Dibenzofuran	7	350	0.38	U	0.98	U	0.49	U	0.89	J	1100		6.2		14		0.47	U
3,3-Dichlorobenzidine	NE	NE	0.38	U	0.98	U	0.49	U	0.92	UJ	8.3	UJ	0.82	UJ	1.6	UJ	0.47	UJ
2,4-Dichlorophenol	NE	NE	0.078	U	0.2	U	0.099	U	0.19	U	1.7	U	0.17	U	0.32	U	0.095	U
Diethyl phthalate	NE	NE	0.38	U	0.98	U	0.49	U	0.92	U	8.3	U	0.82	U	1.6	U	0.47	U
Dimethyl phthalate	NE	NE	0.38	U	0.98	U	0.49	U	0.92	U	8.3	U	0.82	U	1.6	U	0.47	U
2,4-Dimethylphenol	NE	NE	0.38	U	0.98	U	0.49	U	0.18	J	330	U	1.6		0.96	J	0.47	U
Di-n-butyl phthalate	NE	NE	0.38	U	0.98	U	0.49	U	0.92	U	8.3	U	0.82	U	1.6	U	0.47	U
4,6-Dinitro-2-methylphenol	NE	NE	2	U	5.1	U	2.5	U	4.8	U	43	U	4.2	U	8	U	2.4	U
2,4-Dinitrophenol	NE	NE	2	U	5.1	U	2.5	U	4.8	UJ	43	UJ	4.2	UJ	8	UJ	2.4	UJ
2,4-Dinitrotoluene	NE	NE	0.38	U	0.98	U	0.49	U	0.92	U	8.3	U	0.82	U	1.6	U	0.47	U
2,6-Dinitrotoluene	NE	NE	0.38	U	0.98	U	0.49	U	0.92	U	8.3	U	0.82	U	1.6	U	0.47	U
Di-n-octyl phthalate	NE	NE	0.38	U	0.98	U	0.49	U	0.92	U	8.3	U	0.82	U	1.6	U	0.47	U
Hexachlorobenzene	0.33	6	0.078	U	0.2	U	0.099	U	0.19	U	1.7	U	0.17	U	0.32	U	0.095	U
Hexachlorobutadiene	NE	NE	0.078	U	0.2	U	0.099	U	0.19	U	1.7	U	0.17	U	0.32	U	0.095	U
Hexachlorocyclopentadiene	NE	NE	0.38	U	0.98	U	0.49	U	0.92	U	8.3	U	0.82	U	1.6	U	0.47	U
Hexachloroethane	NE	NE	0.38	U	0.98	U	0.49	U	0.92	U	8.3	U	0.82	U	1.6	U	0.47	U
Isophorone	NE	NE	0.38	U	0.98	U	0.49	U	0.92	U	8.3	U	0.82	U	1.6	U	0.47	U
2-Methylphenol	0.33	500	0.38	U	0.98	U	0.49	U	0.92	U	8.3	U	0.82	U	0.13	J	0.47	U
4-Methylphenol (p-Cresol)	0.33	500	0.38	U	0.98	U	0.49	U	0.92	U	4.1	J	0.82	U	0.27	J	0.47	U
2-Nitroaniline	NE	NE	2	U	5.1	U	2.5	U	4.8	U	43	U	4.2	U	8	U	2.4	U
3-Nitroaniline	NE	NE	2	U	5.1	U	2.5	U	4.8	U	43	U	4.2	U	8	U	2.4	U
4-Nitroaniline	NE	NE	2	U	5.1	U	2.5	U	4.8	U	30	J	4.2	U	8	U	2.4	U
Nitrobenzene	NE	NE	0.078	U	0.2	U	0.099	U	0.19	UJ	1.7	UJ	0.17	UJ	0.32	UJ	0.095	UJ
2-Nitrophenol	NE	NE	0.38	U	0.98	U	0.49	U	0.92	U	8.3	U	0.82	U	1.6	U	0.47	U
4-Nitrophenol	NE	NE	2	U	5.1	U	2.5	U	4.8	U	43	U	4.2	U	8	U	2.4	U
N-Nitrosodi-n-propylamine	NE	NE	0.078	U	0.2	U	0.099	U	0.19	U	1.7	U	0.17	U	0.32	U	0.095	U
N-Nitrosodiphenylamine	NE	NE	0.078	U	0.2	U	0.099	U	0.19	U	1.7	U	0.17	U	0.32	U	0.095	U
Pentachlorophenol	0.8	6.7	0.38	U	0.98	U	0.49	U	0.92	U	5.2	J	0.82	U	1.6	U	0.47	U
Phenol	0.33	500	0.078	U	0.2	U	0.099	U	0.19	U	1.5	J	0.17	U	0.32	U	0.095	U

Table 7
2009 - 2010 Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-95(09) 76 - 77 10/08/2009		SB-96(09) 22 - 24 10/07/2009		SB-97(09) 24 - 25 10/07/2009		SB-100(10) 10 - 11 10/26/2010		Duplicate of: SB-100(10) 10 - 11 10/26/2010		SB-101(10) 11 - 12 10/28/2010		SB-102(10) 11 - 12 10/26/2010		SB-103(10) 12 - 13 10/26/2010	
2,4,5-Trichlorophenol	NE	NE	0.38	U	0.98	U	0.49	U	0.92	U	8.3	U	0.82	U	1.6	U	0.47	U
2,4,6-Trichlorophenol	NE	NE	0.38	U	0.98	U	0.49	U	0.92	U	8.3	U	0.82	U	1.6	U	0.47	U
Total SVOCs	NE	NE	0.023		ND		0.37		36.85		26972.8		166.72		380.56		1.296	
PCBs (mg/kg)																		
Aroclor 1016	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Aroclor 1221	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Aroclor 1232	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Aroclor 1242	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Aroclor 1248	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Aroclor 1254	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Aroclor 1260	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Total Metals (mg/kg)																		
Aluminum	NE	NE	5220		12200		11100		NA		NA		NA		NA		NA	
Antimony	NE	NE	0.27	J	1.5	UJ	0.32	J	NA		NA		NA		NA		NA	
Arsenic	13	16	3.4		2.6		4.4		NA		NA		NA		NA		NA	
Barium	350	400	26		79.5		67.2		NA		NA		NA		NA		NA	
Beryllium	7.2	590	0.35	J	0.74		0.73		NA		NA		NA		NA		NA	
Cadmium	2.5	9.3	0.28	J	0.5	J	0.47	J	NA		NA		NA		NA		NA	
Calcium	NE	NE	48200	J	54300	J	25200	J	NA		NA		NA		NA		NA	
Chromium	NE	NE	8.3		17.3		15.7		NA		NA		NA		NA		NA	
Cobalt	NE	NE	4.5	J	9.7	J	9.2	J	NA		NA		NA		NA		NA	
Copper	50	270	13.8		23.4		21.2		NA		NA		NA		NA		NA	
Iron	NE	NE	13900		24700		24100		NA		NA		NA		NA		NA	
Lead	63	1000	4.1		11.2		9.9		NA		NA		NA		NA		NA	
Magnesium	NE	NE	7390		6370		5930		NA		NA		NA		NA		NA	
Manganese	1600	10000	189		304		300		NA		NA		NA		NA		NA	
Mercury	0.18	2.8	0.038	U	0.031	J	0.032	J	NA		NA		NA		NA		NA	
Nickel	30	310	11.5		23.7		21.4		NA		NA		NA		NA		NA	
Potassium	NE	NE	858		1800		1740		NA		NA		NA		NA		NA	
Selenium	3.9	1500	0.58	U	0.74	U	0.42	J	NA		NA		NA		NA		NA	
Silver	2	1500	0.095	J	0.13	J	0.1	J	NA		NA		NA		NA		NA	
Sodium	NE	NE	225	J	158	J	127	J	NA		NA		NA		NA		NA	
Thallium	NE	NE	1.2	U	1.5	U	1.5	U	NA		NA		NA		NA		NA	
Vanadium	NE	NE	12.6	J	23.3	J	22.6	J	NA		NA		NA		NA		NA	
Zinc	109	10000	38.9	J	69.6	J	65.3	J	NA		NA		NA		NA		NA	
Total Cyanide (mg/kg)																		
Cyanide, Total	27	27	0.58	U	0.74	U	0.74	U	3.7	J	26	J	0.23	J	6.7		0.71	U
Other (%)																		
Percent Solids	NE	NE	NA		NA		NA		71.6		80		80.8		82.8		70.7	

Table 7
2009 - 2010 Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-104(10) 10 - 11 10/26/2010		SB-105(10) 12 - 13 10/27/2010		SB-106(10) 12 - 13 10/27/2010		SB-107(10) 12 - 13 10/27/2010		SB-108(10) 12 - 13 10/26/2010		SB-109(10) 11 - 12 10/26/2010		SB-110(10) 11 - 12 10/30/2010		SB-111(10) 17 - 18 10/30/2010	
BTEX (mg/kg)																		
Benzene	0.06	44	0.0064	U	0.0065	U	0.0066	U	0.0077	U	0.0071	U	0.96	J	0.0064	U	0.0068	U
Toluene	0.7	500	0.0064	U	0.0065	U	0.0066	U	0.0077	U	0.0071	U	3.4	U	0.0064	U	0.0031	J
Ethylbenzene	1	390	0.0064	U	0.0065	U	0.0066	U	0.0077	U	0.0071	U	3	J	0.0064	U	0.0068	U
Total Xylene	0.26	500	0.019	U	0.019	U	0.02	U	0.023	U	0.021	U	7.9	J	0.019	U	0.02	U
Total BTEX	NE	NE	ND		ND		ND		ND		ND		11.86		ND		0.0031	
Other VOCs (mg/kg)																		
Acetone	0.05	500	0.025	U	0.027	J	0.012	J	0.024	J	0.035		14	U	0.015	J	0.032	J
Bromodichloromethane	NE	NE	0.0064	U	0.0065	U	0.0066	U	0.0077	U	0.0071	U	3.4	U	0.0064	U	0.0068	U
Bromoform	NE	NE	0.0064	U	0.0065	U	0.0066	U	0.0077	U	0.0071	U	3.4	U	0.0064	U	0.0068	U
Bromomethane	NE	NE	0.0064	U	0.0065	U	0.0066	U	0.0077	U	0.0071	U	3.4	U	0.0064	UJ	0.0068	UJ
2-Butanone	0.12	500	0.0064	U	0.0065	UJ	0.0066	UJ	0.0077	UJ	0.015		3.4	U	0.0064	UJ	0.0068	UJ
Carbon disulfide	NE	NE	0.0064	U	0.0065	U	0.0066	U	0.0077	U	0.0071	U	3.4	U	0.0064	U	0.0068	U
Carbon tetrachloride	0.76	22	0.0064	U	0.0065	U	0.0066	U	0.0077	U	0.0071	U	3.4	U	0.0064	U	0.0068	U
Chlorobenzene	1.1	500	0.0064	U	0.0065	U	0.0066	U	0.0077	U	0.0071	U	3.4	U	0.0064	U	0.0068	U
Chloroethane	NE	NE	0.0064	UJ	0.0065	UJ	0.0066	UJ	0.0077	UJ	0.0071	UJ	3.4	U	0.0064	U	0.0068	U
Chloroform	0.37	350	0.0064	U	0.0065	U	0.0066	U	0.0077	U	0.0071	U	3.4	U	0.0064	U	0.0068	U
Chloromethane	NE	NE	0.0064	U	0.0065	U	0.0066	U	0.0077	U	0.0071	U	3.4	U	0.0064	U	0.0068	U
Cyclohexane	NE	NE	0.0064	U	0.0065	U	0.0066	U	0.0077	U	0.0071	U	3.4	U	0.0064	U	0.0068	U
1,2-Dibromo-3-chloropropane	NE	NE	0.0064	U	0.0065	U	0.0066	U	0.0077	U	0.0071	U	3.4	U	0.0064	U	0.0068	U
Dibromochloromethane	NE	NE	0.0064	U	0.0065	U	0.0066	U	0.0077	U	0.0071	U	3.4	U	0.0064	U	0.0068	U
1,2-Dibromoethane	NE	NE	0.0064	U	0.0065	U	0.0066	U	0.0077	U	0.0071	U	3.4	U	0.0064	U	0.0068	U
1,2-Dichlorobenzene	1.1	500	0.0064	U	0.0065	U	0.0066	U	0.0077	U	0.0071	U	3.4	U	0.0064	U	0.0068	U
1,3-Dichlorobenzene	2.4	280	0.0064	U	0.0065	U	0.0066	U	0.0077	U	0.0071	U	3.4	U	0.0064	U	0.0068	U
1,4-Dichlorobenzene	1.8	130	0.0064	U	0.0065	U	0.0066	U	0.0077	U	0.0071	U	3.4	U	0.0064	U	0.0068	U
Dichlorodifluoromethane	NE	NE	0.0064	U	0.0065	UJ	0.0066	UJ	0.0077	UJ	0.0071	U	3.4	U	0.0064	UJ	0.0068	UJ
1,1-Dichloroethane	0.27	240	0.0064	U	0.0065	U	0.0066	U	0.0077	U	0.0071	U	3.4	U	0.0064	U	0.0068	U
1,2-Dichloroethane	0.02	30	0.0064	U	0.0065	U	0.0066	U	0.0077	U	0.0071	U	3.4	U	0.0064	U	0.0068	U
cis-1,2-Dichloroethene	0.25	500	0.0064	U	0.0065	U	0.0066	U	0.0077	U	0.0071	U	3.4	U	0.0064	U	0.0068	U
trans-1,2-Dichloroethene	0.19	500	0.0064	U	0.0065	U	0.0066	U	0.0077	U	0.0071	U	3.4	U	0.0064	U	0.0068	U
1,1-Dichloroethene	0.33	500	0.0064	U	0.0065	U	0.0066	U	0.0077	U	0.0071	U	3.4	U	0.0064	U	0.0068	U
1,2-Dichloropropane	NE	NE	0.0064	U	0.0065	U	0.0066	U	0.0077	U	0.0071	U	3.4	U	0.0064	U	0.0068	U
cis-1,3-Dichloropropene	NE	NE	0.0064	U	0.0065	U	0.0066	U	0.0077	U	0.0071	U	3.4	U	0.0064	U	0.0068	U
trans-1,3-Dichloropropene	NE	NE	0.0064	U	0.0065	U	0.0066	U	0.0077	U	0.0071	U	3.4	U	0.0064	U	0.0068	U
2-Hexanone	NE	NE	0.0064	U	0.0065	UJ	0.0066	UJ	0.0077	UJ	0.0071	U	3.4	U	0.0064	UJ	0.0068	UJ
Isopropyl benzene	NE	NE	0.0064	U	0.0065	U	0.0066	U	0.0077	U	0.0071	U	0.77	J	0.0064	U	0.0068	U
Methyl acetate	NE	NE	0.0064	U	0.0065	U	0.0066	U	0.0077	U	0.0071	U	3.4	U	0.0064	U	0.0068	U
Methyl tert-butyl ether	0.93	500	0.0064	U	0.0065	U	0.0066	U	0.0077	U	0.0071	U	3.4	U	0.0064	U	0.0068	U
4-Methyl-2-pentanone	NE	NE	0.0064	U	0.0065	UJ	0.0066	UJ	0.0077	UJ	0.0071	U	3.4	U	0.0064	UJ	0.0068	UJ
Methylcyclohexane	NE	NE	0.0064	U	0.0065	U	0.0066	U	0.0077	U	0.0071	U	3.4	U	0.0064	U	0.0068	U
Methylene chloride	0.05	500	0.0064	U	0.0065	U	0.0066	U	0.0077	U	0.0071	U	3.4	U	0.0064	U	0.0068	U
Styrene	NE	NE	0.0064	U	0.0065	U	0.0066	U	0.0077	U	0.0071	U	3.4	U	0.0064	U	0.0068	U
1,1,2,2-Tetrachloroethane	NE	NE	0.0064	U	0.0065	U	0.0066	U	0.0077	U	0.0071	U	3.4	U	0.0064	U	0.0068	U

Table 7
2009 - 2010 Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-104(10) 10 - 11 10/26/2010		SB-105(10) 12 - 13 10/27/2010		SB-106(10) 12 - 13 10/27/2010		SB-107(10) 12 - 13 10/27/2010		SB-108(10) 12 - 13 10/26/2010		SB-109(10) 11 - 12 10/26/2010		SB-110(10) 11 - 12 10/30/2010		SB-111(10) 17 - 18 10/30/2010	
Tetrachloroethene	1.3	150	0.0064	U	0.0065	U	0.0066	U	0.0077	U	0.0071	U	3.4	U	0.0064	U	0.0068	U
1,1,2-Trichloro-1,2,2-trifluoroethane	NE	NE	0.0064	U	0.0065	U	0.0066	U	0.0077	U	0.0071	U	3.4	U	0.0064	U	0.0068	U
1,2,4-Trichlorobenzene	NE	NE	0.0064	U	0.0065	U	0.0066	U	0.0077	U	0.0071	U	3.4	U	0.0064	UJ	0.0068	UJ
1,1,1-Trichloroethane	0.68	500	0.0064	U	0.0065	U	0.0066	U	0.0077	U	0.0071	U	3.4	U	0.0064	U	0.0068	U
1,1,2-Trichloroethane	NE	NE	0.0064	U	0.0065	U	0.0066	U	0.0077	U	0.0071	U	3.4	U	0.0064	U	0.0068	U
Trichloroethene	0.47	200	0.0064	U	0.0065	U	0.0066	U	0.0077	U	0.0071	U	3.4	U	0.0064	U	0.0068	U
Trichlorofluoromethane	NE	NE	0.0064	U	0.0065	U	0.0066	U	0.0077	U	0.0071	U	3.4	U	0.0064	U	0.0068	U
Vinyl chloride	0.02	13	0.0064	U	0.0065	U	0.0066	U	0.0077	U	0.0071	U	3.4	U	0.0064	U	0.0068	U
Total VOCs	NE	NE	ND		0.027		0.012		0.024		0.05		12.63		0.015		0.0351	
Non-carcinogenic PAHs (mg/kg)																		
Acenaphthene	20	500	0.65	J	0.087	U	0.088		0.41		0.49		8		37		0.091	U
Acenaphthylene	100	500	84	U	0.087	U	0.087	U	0.2	J	0.094	U	1.5		4.6		0.091	U
Anthracene	100	500	0.11	J	0.087	U	0.087	U	2.3		0.094		7.1		27		0.091	U
Benzo[g,h,i]perylene	100	500	0.019	J	0.087	UJ	0.087	UJ	1.9	J	0.059	J	4.2	J	9.4		0.091	U
Fluoranthene	100	500	0.12	J	0.087	U	0.024	J	8.8		0.22		16		49		0.091	U
Fluorene	100	500	0.4	J	0.087	U	0.06	J	0.53		0.16		6.8		22		0.091	U
2-Methylnaphthalene	NE	NE	0.022	J	0.087	U	0.087	U	0.075	J	0.033	J	6.6		31		0.091	U
Naphthalene	12	500	0.077	J	0.087	U	0.087	U	0.2	J	0.13		23		100		0.046	J
Phenanthrene	100	500	0.7	J	0.087	U	0.052	J	5.1		0.3		19		75		0.091	U
Pyrene	100	500	0.075	J	0.087	U	0.016	J	6		0.16		12		43		0.091	U
Total Non-carcinogenic PAHs	NE	NE	2.173		ND		0.24		25.515		1.646		104.2		398		0.046	
Carcinogenic PAHs (mg/kg)																		
Benz[a]anthracene	1	5.6	0.037	J	0.087	U	0.087	U	4		0.1		7.2		21		0.091	U
Benzo[a]pyrene	1	1	0.2	J	0.3		0.087	U	3.6		0.27		7.2		20		0.091	U
Benzo[b]fluoranthene	1	5.6	0.042	J	0.087	U	0.087	U	3.1		0.099		5.5		22		0.091	U
Benzo[k]fluoranthene	0.8	56	84	U	0.087	U	0.087	U	1.5		0.041	J	3.6		0.17	U	0.091	U
Chrysene	1	56	0.026	J	0.087	U	0.087	U	3.2		0.082	J	6.4		15		0.091	U
Dibenz[a,h]anthracene	0.33	0.56	84	U	0.087	U	0.087	U	0.95		0.094	U	1.9		2.9		0.091	U
Indeno[1,2,3-cd]pyrene	0.5	5.6	0.2	J	0.087	UJ	0.087	UJ	2	J	0.24	J	3.9	J	8.6		0.091	U
Total Carcinogenic PAHs	NE	NE	0.505		0.3		ND		18.35		0.832		35.7		89.5		ND	
Total PAHs	NE	500*	2.678		0.3		0.24		43.865		2.478		139.9		487.5		0.046	
Other SVOCs (mg/kg)																		
Acetophenone	NE	NE	420	U	0.43	U	0.43	U	1	U	0.46	U	1.8	U	0.84	U	0.45	U
Atrazine	NE	NE	420	U	0.43	U	0.43	U	1	U	0.46	U	1.8	U	0.84	U	0.45	U
Benzaldehyde	NE	NE	420	U	0.43	UJ	0.43	UJ	1	UJ	0.46	UJ	1.8	UJ	0.84	UJ	0.45	UJ
1,1-Biphenyl	NE	NE	0.044	J	0.43	U	0.43	U	1	U	0.46	U	1.2	J	5.1		0.45	U
Bis(chloroisopropyl)ether	NE	NE	84	U	0.087	U	0.087	U	0.21	U	0.094	U	0.37	U	0.17	U	0.091	U
Bis(2-chloroethyl)ether	NE	NE	84	U	0.087	U	0.087	U	0.21	U	0.094	U	0.37	U	0.17	U	0.091	U
Bis(2-chloroethoxy)methane	NE	NE	420	U	0.43	U	0.43	U	1	U	0.46	U	1.8	U	0.84	U	0.45	U
Bis(2-ethylhexyl)phthalate	NE	NE	0.18	J	0.43	U	0.43	U	1	U	0.12	J	1.8	U	0.84	U	0.45	U
4-Bromophenyl phenyl ether	NE	NE	420	U	0.43	U	0.43	U	1	U	0.46	U	1.8	U	0.84	U	0.45	U
Butyl benzyl phthalate	NE	NE	420	U	0.43	U	0.43	U	1	U	0.46	U	1.8	U	0.84	U	0.45	U
Caprolactam	NE	NE	2100	U	2.2	U	2.2	U	5.3	U	2.4	U	9.3	U	4.3	U	2.3	U

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National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
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Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-104(10) 10 - 11 10/26/2010		SB-105(10) 12 - 13 10/27/2010		SB-106(10) 12 - 13 10/27/2010		SB-107(10) 12 - 13 10/27/2010		SB-108(10) 12 - 13 10/26/2010		SB-109(10) 11 - 12 10/26/2010		SB-110(10) 11 - 12 10/30/2010		SB-111(10) 17 - 18 10/30/2010	
Carbazole	NE	NE	0.26	J	0.087	U	0.087	U	0.11	J	0.094	U	2.2		9.7		0.091	U
4-Chloro-3-methylphenol	NE	NE	420	U	0.43	U	0.43	U	1	U	0.46	U	1.8	U	0.84	U	0.45	U
4-Chloroaniline	NE	NE	420	U	0.43	U	0.43	U	1	U	0.46	U	1.8	U	0.84	U	0.45	U
2-Chloronaphthalene	NE	NE	84	U	0.087	U	0.087	U	0.21	U	0.094	U	0.37	U	0.17	U	0.091	U
2-Chlorophenol	NE	NE	420	U	0.43	U	0.43	U	1	U	0.46	U	1.8	U	0.84	U	0.45	U
4-Chlorophenyl phenyl ether	NE	NE	420	U	0.43	U	0.43	U	1	U	0.46	U	1.8	U	0.84	U	0.45	U
Dibenzofuran	7	350	0.13	J	0.43	U	0.43	U	0.26	J	0.087	J	4.9		20		0.45	U
3,3-Dichlorobenzidine	NE	NE	420	UJ	0.43	UJ	0.43	UJ	0.57	J	0.46	UJ	1.8	UJ	0.84	U	0.45	U
2,4-Dichlorophenol	NE	NE	84	U	0.087	U	0.087	U	0.21	U	0.094	U	0.37	U	0.17	U	0.091	U
Diethyl phthalate	NE	NE	420	U	0.43	U	0.43	U	1	U	0.46	U	1.8	U	0.84	U	0.45	U
Dimethyl phthalate	NE	NE	420	U	0.43	U	0.43	U	1	U	0.46	U	1.8	U	0.84	U	0.45	U
2,4-Dimethylphenol	NE	NE	420	U	0.43	U	0.43	U	1	U	0.46	U	1.8	U	0.84	U	0.45	U
Di-n-butyl phthalate	NE	NE	420	U	0.43	U	0.43	U	1	U	0.46	U	1.8	U	0.84	U	0.45	U
4,6-Dinitro-2-methylphenol	NE	NE	2100	U	2.2	U	2.2	U	5.3	U	2.4	U	9.3	U	4.3	U	2.3	U
2,4-Dinitrophenol	NE	NE	2100	UJ	2.2	UJ	2.2	U	5.3	UJ	2.4	UJ	9.3	UJ	4.3	U	2.3	U
2,4-Dinitrotoluene	NE	NE	420	U	0.43	U	0.43	U	1	U	0.46	U	1.8	U	0.84	U	0.45	U
2,6-Dinitrotoluene	NE	NE	420	U	0.43	U	0.43	U	1	U	0.46	U	1.8	U	0.84	U	0.45	U
Di-n-octyl phthalate	NE	NE	420	U	0.43	U	0.43	U	1	U	0.46	U	1.8	U	0.84	U	0.45	U
Hexachlorobenzene	0.33	6	84	U	0.087	U	0.087	U	0.21	U	0.094	U	0.37	U	0.17	U	0.091	U
Hexachlorobutadiene	NE	NE	84	U	0.087	U	0.087	U	0.21	U	0.094	U	0.37	U	0.17	U	0.091	U
Hexachlorocyclopentadiene	NE	NE	420	U	0.43	U	0.43	U	1	U	0.46	U	1.8	U	0.84	U	0.45	U
Hexachloroethane	NE	NE	420	U	0.43	U	0.43	U	1	U	0.46	U	1.8	U	0.84	U	0.45	U
Isophorone	NE	NE	420	U	0.43	U	0.43	U	1	U	0.46	U	1.8	U	0.84	U	0.45	U
2-Methylphenol	0.33	500	420	U	0.43	U	0.43	U	1	U	0.46	U	1.8	U	0.84	U	0.45	U
4-Methylphenol (p-Cresol)	0.33	500	420	U	0.43	U	0.43	U	1	U	0.46	U	1.8	U	0.21	J	0.45	U
2-Nitroaniline	NE	NE	2100	U	2.2	U	2.2	U	5.3	U	2.4	U	9.3	U	4.3	U	2.3	U
3-Nitroaniline	NE	NE	2100	U	2.2	U	2.2	U	5.3	U	2.4	U	9.3	U	4.3	U	2.3	U
4-Nitroaniline	NE	NE	2100	U	2.2	U	2.2	U	5.3	U	2.4	U	9.3	U	4.3	U	2.3	U
Nitrobenzene	NE	NE	84	UJ	0.087	UJ	0.087	UJ	0.21	UJ	0.094	UJ	0.37	UJ	0.17	U	0.091	U
2-Nitrophenol	NE	NE	420	U	0.43	U	0.43	U	1	U	0.46	U	1.8	U	0.84	U	0.45	U
4-Nitrophenol	NE	NE	2100	U	2.2	U	2.2	U	5.3	U	2.4	U	9.3	U	4.3	U	2.3	U
N-Nitrosodi-n-propylamine	NE	NE	84	U	0.087	U	0.087	U	0.21	U	0.094	U	0.37	U	0.17	U	0.091	U
N-Nitrosodiphenylamine	NE	NE	84	U	0.087	U	0.087	U	0.21	U	0.094	U	0.37	U	0.17	U	0.091	U
Pentachlorophenol	0.8	6.7	420	U	0.43	U	0.43	U	1	U	0.46	U	1.8	U	0.84	U	0.45	U
Phenol	0.33	500	84	U	0.087	U	0.087	U	0.21	U	0.094	U	0.37	U	0.17	U	0.091	U

Table 7
2009 - 2010 Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-104(10) 10 - 11 10/26/2010		SB-105(10) 12 - 13 10/27/2010		SB-106(10) 12 - 13 10/27/2010		SB-107(10) 12 - 13 10/27/2010		SB-108(10) 12 - 13 10/26/2010		SB-109(10) 11 - 12 10/26/2010		SB-110(10) 11 - 12 10/30/2010		SB-111(10) 17 - 18 10/30/2010	
2,4,5-Trichlorophenol	NE	NE	420	U	0.43	U	0.43	U	1	U	0.46	U	1.8	U	0.84	U	0.45	U
2,4,6-Trichlorophenol	NE	NE	420	U	0.43	U	0.43	U	1	U	0.46	U	1.8	U	0.84	U	0.45	U
Total SVOCs	NE	NE	3.292		0.3		0.24		44.805		2.685		148.2		522.51		0.046	
PCBs (mg/kg)																		
Aroclor 1016	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Aroclor 1221	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Aroclor 1232	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Aroclor 1242	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Aroclor 1248	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Aroclor 1254	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Aroclor 1260	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Total Metals (mg/kg)																		
Aluminum	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Antimony	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Arsenic	13	16	NA		NA		NA		NA		NA		NA		NA		NA	
Barium	350	400	NA		NA		NA		NA		NA		NA		NA		NA	
Beryllium	7.2	590	NA		NA		NA		NA		NA		NA		NA		NA	
Cadmium	2.5	9.3	NA		NA		NA		NA		NA		NA		NA		NA	
Calcium	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Chromium	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Cobalt	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Copper	50	270	NA		NA		NA		NA		NA		NA		NA		NA	
Iron	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Lead	63	1000	NA		NA		NA		NA		NA		NA		NA		NA	
Magnesium	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Manganese	1600	10000	NA		NA		NA		NA		NA		NA		NA		NA	
Mercury	0.18	2.8	NA		NA		NA		NA		NA		NA		NA		NA	
Nickel	30	310	NA		NA		NA		NA		NA		NA		NA		NA	
Potassium	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Selenium	3.9	1500	NA		NA		NA		NA		NA		NA		NA		NA	
Silver	2	1500	NA		NA		NA		NA		NA		NA		NA		NA	
Sodium	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Thallium	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Vanadium	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA	
Zinc	109	10000	NA		NA		NA		NA		NA		NA		NA		NA	
Total Cyanide (mg/kg)																		
Cyanide, Total	27	27	0.64	U	0.65	U	0.66	U	2.9		0.26	J	4.5		0.48	J	0.68	UJ
Other (%)																		
Percent Solids	NE	NE	78.6		77.2		75.8		64.6		70.5		72.7		78.6		73.8	

Table 7
2009 - 2010 Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-112(10) 10 - 11 10/28/2010		SB-113(10) 13 - 14 10/29/2010		SB-114(10) 12 - 13 10/30/2010		SB-115(10) 18 - 19 10/26/2010		SB-116(10) 13 - 14 10/26/2010		SB-117(10) 9 - 10 11/01/2010		SB-118(10) 15 - 16 11/01/2010	
BTEX (mg/kg)																
Benzene	0.06	44	0.0074	U	0.015	UJ	0.0061	U	15		7.2		0.0066	U	0.61	
Toluene	0.7	500	0.0074	U	0.038	J	0.0061	U	64		5.3		0.0066	U	0.32	U
Ethylbenzene	1	390	0.0074	U	0.015	UJ	0.0061	U	47		22		0.0066	U	0.13	J
Total Xylene	0.26	500	0.022	U	0.045	UJ	0.018	U	280		69		0.02	U	0.31	J
Total BTEX	NE	NE	ND		0.038		ND		406		103.5		ND		1.05	
Other VOCs (mg/kg)																
Acetone	0.05	500	0.03	U	0.094	J	0.024	UJ	13	U	13	U	0.022	J	1.3	UJ
Bromodichloromethane	NE	NE	0.0074	U	0.015	UJ	0.0061	U	3.2	U	3.2	U	0.0066	U	0.32	U
Bromoform	NE	NE	0.0074	U	0.015	UJ	0.0061	U	3.2	U	3.2	U	0.0066	U	0.32	U
Bromomethane	NE	NE	0.0074	U	0.015	UJ	0.0061	UJ	3.2	U	3.2	U	0.0066	UJ	0.32	U
2-Butanone	0.12	500	0.0074	U	0.015	UJ	0.0061	UJ	3.2	U	3.2	U	0.0066	UJ	0.32	UJ
Carbon disulfide	NE	NE	0.0074	U	0.015	UJ	0.0061	U	3.2	U	3.2	U	0.0066	U	0.32	U
Carbon tetrachloride	0.76	22	0.0074	U	0.015	UJ	0.0061	U	3.2	U	3.2	U	0.0066	U	0.32	U
Chlorobenzene	1.1	500	0.0074	U	0.015	UJ	0.0061	U	3.2	U	3.2	U	0.0066	U	0.32	U
Chloroethane	NE	NE	0.0074	UJ	0.015	UJ	0.0061	U	3.2	U	3.2	U	0.0066	U	0.32	U
Chloroform	0.37	350	0.0074	U	0.015	UJ	0.0061	U	3.2	U	3.2	U	0.0066	U	0.32	U
Chloromethane	NE	NE	0.0074	U	0.015	UJ	0.0061	U	3.2	U	3.2	U	0.0066	U	0.32	U
Cyclohexane	NE	NE	0.0074	U	0.015	UJ	0.0061	U	3.2	U	3.2	U	0.0066	U	0.32	U
1,2-Dibromo-3-chloropropane	NE	NE	0.0074	U	0.015	UJ	0.0061	U	3.2	U	3.2	U	0.0066	U	0.32	U
Dibromochloromethane	NE	NE	0.0074	U	0.015	UJ	0.0061	U	3.2	U	3.2	U	0.0066	U	0.32	U
1,2-Dibromoethane	NE	NE	0.0074	U	0.015	UJ	0.0061	U	3.2	U	3.2	U	0.0066	U	0.32	U
1,2-Dichlorobenzene	1.1	500	0.0074	U	0.015	UJ	0.0061	U	3.2	U	3.2	U	0.0066	U	0.32	U
1,3-Dichlorobenzene	2.4	280	0.0074	U	0.015	UJ	0.0061	U	3.2	U	3.2	U	0.0066	U	0.32	U
1,4-Dichlorobenzene	1.8	130	0.0074	U	0.015	UJ	0.0061	U	3.2	U	3.2	U	0.0066	U	0.32	U
Dichlorodifluoromethane	NE	NE	0.0074	U	0.015	UJ	0.0061	UJ	3.2	U	3.2	U	0.0066	UJ	0.32	U
1,1-Dichloroethane	0.27	240	0.0074	U	0.015	UJ	0.0061	U	3.2	U	3.2	U	0.0066	U	0.32	U
1,2-Dichloroethane	0.02	30	0.0074	U	0.015	UJ	0.0061	U	3.2	U	3.2	U	0.0066	U	0.32	U
cis-1,2-Dichloroethene	0.25	500	0.0074	U	0.015	UJ	0.0061	U	3.2	U	3.2	U	0.0066	U	0.32	U
trans-1,2-Dichloroethene	0.19	500	0.0074	U	0.015	UJ	0.0061	U	3.2	U	3.2	U	0.0066	U	0.32	U
1,1-Dichloroethene	0.33	500	0.0074	U	0.015	UJ	0.0061	U	3.2	U	3.2	U	0.0066	U	0.32	U
1,2-Dichloropropane	NE	NE	0.0074	U	0.015	UJ	0.0061	U	3.2	U	3.2	U	0.0066	U	0.32	U
cis-1,3-Dichloropropene	NE	NE	0.0074	U	0.015	UJ	0.0061	U	3.2	U	3.2	U	0.0066	U	0.32	U
trans-1,3-Dichloropropene	NE	NE	0.0074	U	0.015	UJ	0.0061	U	3.2	U	3.2	U	0.0066	U	0.32	U
2-Hexanone	NE	NE	0.0074	U	0.015	UJ	0.0061	UJ	3.2	U	3.2	U	0.0066	UJ	0.32	UJ
Isopropyl benzene	NE	NE	0.0074	U	0.015	UJ	0.0061	U	3.6	J	2.9	J	0.0066	U	0.32	U
Methyl acetate	NE	NE	0.0074	U	0.015	UJ	0.0061	U	3.2	U	3.2	U	0.0066	U	0.32	U
Methyl tert-butyl ether	0.93	500	0.0074	U	0.015	UJ	0.0061	U	3.2	U	3.2	U	0.0066	U	0.32	U
4-Methyl-2-pentanone	NE	NE	0.0074	U	0.015	UJ	0.0061	UJ	3.2	U	3.2	U	0.0066	UJ	0.32	U
Methylcyclohexane	NE	NE	0.0074	U	0.015	UJ	0.0061	U	3.2	U	3.2	U	0.0066	U	0.32	U
Methylene chloride	0.05	500	0.0074	U	0.015	UJ	0.0061	U	3.2	U	3.2	U	0.0066	U	0.32	U
Styrene	NE	NE	0.0074	U	0.015	UJ	0.0061	U	3.2	U	3.2	U	0.0066	U	0.32	U
1,1,2,2-Tetrachloroethane	NE	NE	0.0074	U	0.015	UJ	0.0061	U	3.2	U	3.2	U	0.0066	U	0.32	U

Table 7
2009 - 2010 Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-112(10) 10 - 11 10/28/2010		SB-113(10) 13 - 14 10/29/2010		SB-114(10) 12 - 13 10/30/2010		SB-115(10) 18 - 19 10/26/2010		SB-116(10) 13 - 14 10/26/2010		SB-117(10) 9 - 10 11/01/2010		SB-118(10) 15 - 16 11/01/2010	
Tetrachloroethene	1.3	150	0.0074	U	0.015	UJ	0.0061	U	3.2	U	3.2	U	0.0066	U	0.32	U
1,1,2-Trichloro-1,2,2-trifluoroethane	NE	NE	0.0074	U	0.015	UJ	0.0061	U	3.2	U	3.2	U	0.0066	U	0.32	U
1,2,4-Trichlorobenzene	NE	NE	0.0074	U	0.015	UJ	0.0061	UJ	3.2	U	3.2	U	0.0066	UJ	0.033	J
1,1,1-Trichloroethane	0.68	500	0.0074	U	0.015	UJ	0.0061	U	3.2	U	3.2	U	0.0066	U	0.32	U
1,1,2-Trichloroethane	NE	NE	0.0074	U	0.015	UJ	0.0061	U	3.2	U	3.2	U	0.0066	U	0.32	U
Trichloroethene	0.47	200	0.0074	U	0.015	UJ	0.0061	U	3.2	U	3.2	U	0.0066	U	0.32	U
Trichlorofluoromethane	NE	NE	0.0074	U	0.015	UJ	0.0061	U	3.2	U	3.2	U	0.0066	U	0.32	U
Vinyl chloride	0.02	13	0.0074	U	0.015	UJ	0.0061	U	3.2	U	3.2	U	0.0066	U	0.32	U
Total VOCs	NE	NE	ND		0.132		ND		409.6		106.4		0.022		1.083	
Non-carcinogenic PAHs (mg/kg)																
Acenaphthene	20	500	0.099	U	0.2	UJ	0.081	U	44		750		0.035	J	0.19	
Acenaphthylene	100	500	0.099	U	0.2	UJ	0.081	U	77		100		0.087	U	0.053	J
Anthracene	100	500	0.099	U	0.2	UJ	0.081	U	89		600		0.032	J	0.23	
Benzo[g,h,i]perylene	100	500	0.02	J	0.2	UJ	0.081	U	21	J	160	J	0.033	J	0.15	
Fluoranthene	100	500	0.054	J	0.2	UJ	0.081	U	130		1400		0.17		0.62	
Fluorene	100	500	0.099	U	0.2	UJ	0.081	U	150		590		0.087	U	0.36	
2-Methylnaphthalene	NE	NE	0.099	U	0.2	UJ	0.081	U	230		710		0.087	U	0.13	
Naphthalene	12	500	0.099	U	0.2	UJ	0.081	U	480		2500		0.087	U	3	
Phenanthrene	100	500	0.032	J	0.2	UJ	0.081	U	170		1600		0.078	J	0.66	
Pyrene	100	500	0.038	J	0.2	UJ	0.081	U	99		820		0.12		0.54	
Total Non-carcinogenic PAHs	NE	NE	0.144		ND		ND		1490		9230		0.468		5.933	
Carcinogenic PAHs (mg/kg)																
Benz[a]anthracene	1	5.6	0.039	J	0.2	UJ	0.081	U	77		460		0.1		0.3	
Benzo[a]pyrene	1	1	0.23		0.2	UJ	0.081	U	49		260		0.093		0.3	
Benzo[b]fluoranthene	1	5.6	0.043	J	0.2	UJ	0.081	U	45		230		0.081	J	0.23	
Benzo[k]fluoranthene	0.8	56	0.02	J	0.2	UJ	0.081	U	22		110		0.087	U	0.1	
Chrysene	1	56	0.03	J	0.2	UJ	0.081	U	59		300		0.082	J	0.27	
Dibenz[a,h]anthracene	0.33	0.56	0.099	U	0.2	UJ	0.081	U	8.7		36		0.087	U	0.085	U
Indeno[1,2,3-cd]pyrene	0.5	5.6	0.23	J	0.2	UJ	0.081	U	20	J	130	J	0.18		0.26	
Total Carcinogenic PAHs	NE	NE	0.592		ND		ND		280.7		1526		0.536		1.46	
Total PAHs	NE	500*	0.736		ND		ND		1770.7		10756		1.004		7.393	
Other SVOCs (mg/kg)																
Acetophenone	NE	NE	0.49	U	0.97	UJ	0.4	U	4.2	U	8.3	U	0.43	U	0.42	U
Atrazine	NE	NE	0.49	U	0.97	UJ	0.4	U	4.2	U	8.3	U	0.43	U	0.42	U
Benzaldehyde	NE	NE	0.49	UJ	0.97	UJ	0.4	UJ	4.2	UJ	11	J	0.43	UJ	0.42	UJ
1,1-Biphenyl	NE	NE	0.49	U	0.97	UJ	0.4	U	28		78		0.43	U	0.041	J
Bis(chloroisopropyl)ether	NE	NE	0.099	U	0.2	UJ	0.081	U	0.86	U	1.7	U	0.087	U	0.085	U
Bis(2-chloroethyl)ether	NE	NE	0.099	U	0.2	UJ	0.081	U	0.86	U	1.7	U	0.087	U	0.085	U
Bis(2-chloroethoxy)methane	NE	NE	0.49	U	0.97	UJ	0.4	U	4.2	U	8.3	U	0.43	U	0.42	U
Bis(2-ethylhexyl)phthalate	NE	NE	0.49	U	0.97	UJ	0.4	U	4.2	U	8.3	U	0.43	U	0.42	U
4-Bromophenyl phenyl ether	NE	NE	0.49	U	0.97	UJ	0.4	U	4.2	U	8.3	U	0.43	U	0.42	U
Butyl benzyl phthalate	NE	NE	0.49	U	0.97	UJ	0.4	U	4.2	U	8.3	U	0.43	U	0.42	U
Caprolactam	NE	NE	2.5	U	5	UJ	2	U	22	U	43	U	2.2	U	2.2	U

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National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-112(10) 10 - 11 10/28/2010		SB-113(10) 13 - 14 10/29/2010		SB-114(10) 12 - 13 10/30/2010		SB-115(10) 18 - 19 10/26/2010		SB-116(10) 13 - 14 10/26/2010		SB-117(10) 9 - 10 11/01/2010		SB-118(10) 15 - 16 11/01/2010	
Carbazole	NE	NE	0.099	U	0.2	UJ	0.081	U	39		120		0.087	U	0.068	J
4-Chloro-3-methylphenol	NE	NE	0.49	U	0.97	UJ	0.4	U	4.2	U	8.3	U	0.43	U	0.42	U
4-Chloroaniline	NE	NE	0.49	U	0.97	UJ	0.4	U	4.2	U	8.3	U	0.43	U	0.42	U
2-Chloronaphthalene	NE	NE	0.099	U	0.2	UJ	0.081	U	0.86	U	1.7	U	0.087	U	0.085	U
2-Chlorophenol	NE	NE	0.49	U	0.97	UJ	0.4	U	4.2	U	8.3	U	0.43	U	0.42	U
4-Chlorophenyl phenyl ether	NE	NE	0.49	U	0.97	UJ	0.4	U	4.2	U	8.3	U	0.43	U	0.42	U
Dibenzofuran	7	350	0.49	U	0.97	UJ	0.4	U	71		270		0.43	U	0.13	J
3,3-Dichlorobenzidine	NE	NE	0.49	UJ	0.97	UJ	0.4	U	4.2	UJ	8.3	UJ	0.43	U	0.42	U
2,4-Dichlorophenol	NE	NE	0.099	U	0.2	UJ	0.081	U	0.86	U	1.7	U	0.087	U	0.085	U
Diethyl phthalate	NE	NE	0.49	U	0.97	UJ	0.4	U	4.2	U	8.3	U	0.43	U	0.42	U
Dimethyl phthalate	NE	NE	0.49	U	0.97	UJ	0.4	U	4.2	U	8.3	U	0.43	U	0.42	U
2,4-Dimethylphenol	NE	NE	0.49	U	0.97	UJ	0.4	U	6.6		6.8	J	0.43	U	0.24	J
Di-n-butyl phthalate	NE	NE	0.49	U	0.97	UJ	0.4	U	4.2	U	8.3	U	0.43	U	0.42	U
4,6-Dinitro-2-methylphenol	NE	NE	2.5	U	5	UJ	2	U	22	U	43	U	2.2	U	2.2	U
2,4-Dinitrophenol	NE	NE	2.5	UJ	5	UJ	2	U	22	UJ	43	UJ	2.2	U	2.2	U
2,4-Dinitrotoluene	NE	NE	0.49	U	0.97	UJ	0.4	U	4.2	U	8.3	U	0.43	U	0.42	U
2,6-Dinitrotoluene	NE	NE	0.49	U	0.97	UJ	0.4	U	4.2	U	8.3	U	0.43	U	0.42	U
Di-n-octyl phthalate	NE	NE	0.49	U	0.97	UJ	0.4	U	4.2	U	8.3	U	0.43	U	0.42	U
Hexachlorobenzene	0.33	6	0.099	U	0.2	UJ	0.081	U	0.86	U	1.7	U	0.087	U	0.085	U
Hexachlorobutadiene	NE	NE	0.099	U	0.2	UJ	0.081	U	0.86	U	1.7	U	0.087	U	0.085	U
Hexachlorocyclopentadiene	NE	NE	0.49	U	0.97	UJ	0.4	U	4.2	U	8.3	U	0.43	U	0.42	U
Hexachloroethane	NE	NE	0.49	U	0.97	UJ	0.4	U	4.2	U	8.3	U	0.43	U	0.42	U
Isophorone	NE	NE	0.49	U	0.97	UJ	0.4	U	4.2	U	8.3	U	0.43	U	0.42	U
2-Methylphenol	0.33	500	0.49	U	0.97	UJ	0.4	U	0.46	J	8.3	U	0.43	U	0.42	U
4-Methylphenol (p-Cresol)	0.33	500	0.49	U	0.97	UJ	0.4	U	1.1	J	1.5	J	0.43	U	0.42	U
2-Nitroaniline	NE	NE	2.5	U	5	UJ	2	U	22	U	43	U	2.2	U	2.2	U
3-Nitroaniline	NE	NE	2.5	U	5	UJ	2	U	22	U	43	U	2.2	U	2.2	U
4-Nitroaniline	NE	NE	2.5	U	5	UJ	2	U	22	U	43	U	2.2	U	2.2	U
Nitrobenzene	NE	NE	0.099	UJ	0.2	UJ	0.081	U	0.86	UJ	1.7	UJ	0.087	U	0.085	U
2-Nitrophenol	NE	NE	0.49	U	0.97	UJ	0.4	U	4.2	U	8.3	U	0.43	U	0.42	U
4-Nitrophenol	NE	NE	2.5	U	5	UJ	2	U	22	U	43	U	2.2	U	2.2	U
N-Nitrosodi-n-propylamine	NE	NE	0.099	U	0.2	UJ	0.081	U	0.86	U	1.7	U	0.087	U	0.085	U
N-Nitrosodiphenylamine	NE	NE	0.099	U	0.2	UJ	0.081	U	0.86	U	1.7	U	0.087	U	0.085	U
Pentachlorophenol	0.8	6.7	0.49	U	0.97	UJ	0.4	U	4.2	U	8.3	U	0.43	U	0.42	U
Phenol	0.33	500	0.099	U	0.2	UJ	0.081	U	0.86	U	0.74	J	0.087	U	0.085	U

Table 7
2009 - 2010 Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-112(10) 10 - 11 10/28/2010		SB-113(10) 13 - 14 10/29/2010		SB-114(10) 12 - 13 10/30/2010		SB-115(10) 18 - 19 10/26/2010		SB-116(10) 13 - 14 10/26/2010		SB-117(10) 9 - 10 11/01/2010		SB-118(10) 15 - 16 11/01/2010	
2,4,5-Trichlorophenol	NE	NE	0.49	U	0.97	UJ	0.4	U	4.2	U	8.3	U	0.43	U	0.42	U
2,4,6-Trichlorophenol	NE	NE	0.49	U	0.97	UJ	0.4	U	4.2	U	8.3	U	0.43	U	0.42	U
Total SVOCs	NE	NE	0.736		ND		ND		1916.86		11244		1.004		7.872	
PCBs (mg/kg)																
Aroclor 1016	NE	NE	NA		NA		NA		NA		NA		NA		NA	
Aroclor 1221	NE	NE	NA		NA		NA		NA		NA		NA		NA	
Aroclor 1232	NE	NE	NA		NA		NA		NA		NA		NA		NA	
Aroclor 1242	NE	NE	NA		NA		NA		NA		NA		NA		NA	
Aroclor 1248	NE	NE	NA		NA		NA		NA		NA		NA		NA	
Aroclor 1254	NE	NE	NA		NA		NA		NA		NA		NA		NA	
Aroclor 1260	NE	NE	NA		NA		NA		NA		NA		NA		NA	
Total Metals (mg/kg)																
Aluminum	NE	NE	NA		NA		NA		NA		NA		NA		NA	
Antimony	NE	NE	NA		NA		NA		NA		NA		NA		NA	
Arsenic	13	16	NA		NA		NA		NA		NA		NA		NA	
Barium	350	400	NA		NA		NA		NA		NA		NA		NA	
Beryllium	7.2	590	NA		NA		NA		NA		NA		NA		NA	
Cadmium	2.5	9.3	NA		NA		NA		NA		NA		NA		NA	
Calcium	NE	NE	NA		NA		NA		NA		NA		NA		NA	
Chromium	NE	NE	NA		NA		NA		NA		NA		NA		NA	
Cobalt	NE	NE	NA		NA		NA		NA		NA		NA		NA	
Copper	50	270	NA		NA		NA		NA		NA		NA		NA	
Iron	NE	NE	NA		NA		NA		NA		NA		NA		NA	
Lead	63	1000	NA		NA		NA		NA		NA		NA		NA	
Magnesium	NE	NE	NA		NA		NA		NA		NA		NA		NA	
Manganese	1600	10000	NA		NA		NA		NA		NA		NA		NA	
Mercury	0.18	2.8	NA		NA		NA		NA		NA		NA		NA	
Nickel	30	310	NA		NA		NA		NA		NA		NA		NA	
Potassium	NE	NE	NA		NA		NA		NA		NA		NA		NA	
Selenium	3.9	1500	NA		NA		NA		NA		NA		NA		NA	
Silver	2	1500	NA		NA		NA		NA		NA		NA		NA	
Sodium	NE	NE	NA		NA		NA		NA		NA		NA		NA	
Thallium	NE	NE	NA		NA		NA		NA		NA		NA		NA	
Vanadium	NE	NE	NA		NA		NA		NA		NA		NA		NA	
Zinc	109	10000	NA		NA		NA		NA		NA		NA		NA	
Total Cyanide (mg/kg)																
Cyanide, Total	27	27	0.74	U	0.35	J	0.61	UJ	4		14.5		0.66	U	0.64	UJ
Other (%)																
Percent Solids	NE	NE	67.2		33.5		82.2		78		79.2		76.2		78	

Table 7
2009 - 2010 Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-119(10) 11 - 12 11/01/2010		Duplicate of: SB-119(10) 11 - 12 11/01/2010		SB-120(10) 11 - 12 11/01/2010		SB-121(10) 10 - 11 11/01/2010		SB-122(10) 16 - 17 11/01/2010		SB-123(10) 12 - 13 11/01/2010		SB-124(10) 12 - 13 10/28/2010		Duplicate of: SB-124(10) 12 - 13 10/28/2010	
BTEX (mg/kg)																		
Benzene	0.06	44	0.0059	U	0.0059	U	0.006	U	0.0064	U	0.03		0.0062	U	0.078	J	0.36	
Toluene	0.7	500	0.0059	U	0.0059	U	0.006	U	0.0064	U	0.0064	U	0.0062	U	0.1	J	1.2	J
Ethylbenzene	1	390	0.0059	U	0.0059	U	0.006	U	0.0064	U	0.0054	J	0.0062	U	0.13	J	1.6	J
Total Xylene	0.26	500	0.018	U	0.018	U	0.018	U	0.019	U	0.019	U	0.019	U	0.34	J	5.6	J
Total BTEX	NE	NE	ND		ND		ND		ND		0.0354		ND		0.648		8.76	
Other VOCs (mg/kg)																		
Acetone	0.05	500	0.023	UJ	0.023	UJ	0.0076	J	0.013	J	0.011	J	0.025	UJ	1.2	UJ	1.2	UJ
Bromodichloromethane	NE	NE	0.0059	U	0.0059	U	0.006	U	0.0064	U	0.0064	U	0.0062	U	0.31	U	0.31	U
Bromoform	NE	NE	0.0059	U	0.0059	U	0.006	U	0.0064	U	0.0064	U	0.0062	U	0.31	U	0.31	U
Bromomethane	NE	NE	0.0059	UJ	0.0059	UJ	0.006	UJ	0.0064	UJ	0.0064	U	0.0062	UJ	0.31	U	0.31	U
2-Butanone	0.12	500	0.0059	UJ	0.0059	UJ	0.006	UJ	0.0064	UJ	0.0064	U	0.0062	UJ	0.31	UJ	0.31	UJ
Carbon disulfide	NE	NE	0.0059	U	0.0059	U	0.006	U	0.0064	U	0.0064	U	0.0062	U	0.31	U	0.31	U
Carbon tetrachloride	0.76	22	0.0059	U	0.0059	U	0.006	U	0.0064	U	0.0064	U	0.0062	U	0.31	U	0.31	U
Chlorobenzene	1.1	500	0.0059	U	0.0059	U	0.006	U	0.0064	U	0.0064	U	0.0062	U	0.31	U	0.31	U
Chloroethane	NE	NE	0.0059	U	0.0059	U	0.006	U	0.0064	U	0.0064	U	0.0062	U	0.31	U	0.31	U
Chloroform	0.37	350	0.0059	U	0.0059	U	0.006	U	0.0064	U	0.0064	U	0.0062	U	0.31	U	0.31	U
Chloromethane	NE	NE	0.0059	U	0.0059	U	0.006	U	0.0064	U	0.0064	U	0.0062	U	0.31	U	0.31	U
Cyclohexane	NE	NE	0.0059	U	0.0059	U	0.006	U	0.0064	U	0.0064	U	0.0062	U	0.31	U	0.31	U
1,2-Dibromo-3-chloropropane	NE	NE	0.0059	U	0.0059	U	0.006	U	0.0064	U	0.0064	U	0.0062	U	0.31	U	0.31	U
Dibromochloromethane	NE	NE	0.0059	U	0.0059	U	0.006	U	0.0064	U	0.0064	U	0.0062	U	0.31	U	0.31	U
1,2-Dibromoethane	NE	NE	0.0059	U	0.0059	U	0.006	U	0.0064	U	0.0064	U	0.0062	U	0.31	U	0.31	U
1,2-Dichlorobenzene	1.1	500	0.0059	U	0.0059	U	0.006	U	0.0064	U	0.0064	U	0.0062	U	0.31	U	0.31	U
1,3-Dichlorobenzene	2.4	280	0.0059	U	0.0059	U	0.006	U	0.0064	U	0.0064	U	0.0062	U	0.31	U	0.31	U
1,4-Dichlorobenzene	1.8	130	0.0059	U	0.0059	U	0.006	U	0.0064	U	0.0064	U	0.0062	U	0.31	U	0.31	U
Dichlorodifluoromethane	NE	NE	0.0059	UJ	0.0059	UJ	0.006	UJ	0.0064	UJ	0.0064	U	0.0062	UJ	0.31	U	0.31	U
1,1-Dichloroethane	0.27	240	0.0059	U	0.0059	U	0.006	U	0.0064	U	0.0064	U	0.0062	U	0.31	U	0.31	U
1,2-Dichloroethane	0.02	30	0.0059	U	0.0059	U	0.006	U	0.0064	U	0.0064	U	0.0062	U	0.31	U	0.31	U
cis-1,2-Dichloroethene	0.25	500	0.0059	U	0.0059	U	0.006	U	0.0064	U	0.0064	U	0.0062	U	0.31	U	0.31	U
trans-1,2-Dichloroethene	0.19	500	0.0059	U	0.0059	U	0.006	U	0.0064	U	0.0064	U	0.0062	U	0.31	U	0.31	U
1,1-Dichloroethene	0.33	500	0.0059	U	0.0059	U	0.006	U	0.0064	U	0.0064	U	0.0062	U	0.31	U	0.31	U
1,2-Dichloropropane	NE	NE	0.0059	U	0.0059	U	0.006	U	0.0064	U	0.0064	U	0.0062	U	0.31	U	0.31	U
cis-1,3-Dichloropropene	NE	NE	0.0059	U	0.0059	U	0.006	U	0.0064	U	0.0064	U	0.0062	U	0.31	U	0.31	U
trans-1,3-Dichloropropene	NE	NE	0.0059	U	0.0059	U	0.006	U	0.0064	U	0.0064	U	0.0062	U	0.31	U	0.31	U
2-Hexanone	NE	NE	0.0059	UJ	0.0059	UJ	0.006	UJ	0.0064	UJ	0.0064	U	0.0062	UJ	0.31	U	0.31	U
Isopropyl benzene	NE	NE	0.0059	U	0.0059	U	0.006	U	0.0064	U	0.0011	J	0.0062	U	0.31	U	0.12	J
Methyl acetate	NE	NE	0.0059	U	0.0059	U	0.006	U	0.0064	U	0.0064	U	0.0062	U	0.31	U	0.31	U
Methyl tert-butyl ether	0.93	500	0.0059	U	0.0059	U	0.006	U	0.0064	U	0.0064	U	0.0062	U	0.31	U	0.31	U
4-Methyl-2-pentanone	NE	NE	0.0059	UJ	0.0059	UJ	0.006	UJ	0.0064	UJ	0.0064	U	0.0062	UJ	0.31	U	0.31	U
Methylcyclohexane	NE	NE	0.0059	U	0.0059	U	0.006	U	0.0064	U	0.0064	U	0.0062	U	0.31	U	0.31	U
Methylene chloride	0.05	500	0.0059	U	0.0059	U	0.006	U	0.0064	U	0.0019	J	0.0062	U	0.31	U	0.31	U
Styrene	NE	NE	0.0059	U	0.0059	U	0.006	U	0.0064	U	0.0064	U	0.0062	U	0.31	U	0.31	
1,1,2,2-Tetrachloroethane	NE	NE	0.0059	U	0.0059	U	0.006	U	0.0064	U	0.0064	U	0.0062	U	0.31	U	0.31	U

Table 7
2009 - 2010 Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-119(10) 11 - 12 11/01/2010		Duplicate of: SB-119(10) 11 - 12 11/01/2010		SB-120(10) 11 - 12 11/01/2010		SB-121(10) 10 - 11 11/01/2010		SB-122(10) 16 - 17 11/01/2010		SB-123(10) 12 - 13 11/01/2010		SB-124(10) 12 - 13 10/28/2010		Duplicate of: SB-124(10) 12 - 13 10/28/2010	
Tetrachloroethene	1.3	150	0.0059	U	0.0059	U	0.006	U	0.0064	U	0.0064	U	0.0062	U	0.31	U	0.31	U
1,1,2-Trichloro-1,2,2-trifluoroethane	NE	NE	0.0059	U	0.0059	U	0.006	U	0.0064	U	0.0064	U	0.0062	U	0.31	U	0.31	U
1,2,4-Trichlorobenzene	NE	NE	0.0059	UJ	0.0059	UJ	0.006	UJ	0.0064	UJ	0.0064	U	0.0062	UJ	0.31	U	0.31	U
1,1,1-Trichloroethane	0.68	500	0.0059	U	0.0059	U	0.006	U	0.0064	U	0.0064	U	0.0062	U	0.31	U	0.31	U
1,1,2-Trichloroethane	NE	NE	0.0059	U	0.0059	U	0.006	U	0.0064	U	0.0064	U	0.0062	U	0.31	U	0.31	U
Trichloroethene	0.47	200	0.0059	U	0.0059	U	0.006	U	0.0064	U	0.0064	U	0.0062	U	0.31	U	0.31	U
Trichlorofluoromethane	NE	NE	0.0059	U	0.0059	U	0.006	U	0.0064	U	0.0064	U	0.0062	U	0.31	U	0.31	U
Vinyl chloride	0.02	13	0.0059	U	0.0059	U	0.006	U	0.0064	U	0.0064	U	0.0062	U	0.31	U	0.31	U
Total VOCs	NE	NE	ND		ND		0.0076		0.013		0.0494		ND		ND		0.43	
Non-carcinogenic PAHs (mg/kg)																		
Acenaphthene	20	500	0.055	J	0.16		0.08	U	0.086	U	0.023	J	0.083	U	110	J	22	J
Acenaphthylene	100	500	0.079	UJ	0.37	J	0.08	U	0.086	U	0.085	U	0.083	U	160	J	12	J
Anthracene	100	500	0.018	J	1.7	J	0.012	J	0.086	U	0.01	J	0.083	U	220	J	28	J
Benzo[g,h,i]perylene	100	500	0.079	UJ	2.4	J	0.08	U	0.086	U	0.085	U	0.083	U	59	J	7.3	J
Fluoranthene	100	500	0.025	J	6.4	J	0.024	J	0.086	U	0.085	U	0.083	U	430	J	53	J
Fluorene	100	500	0.079	UJ	0.61	J	0.08	U	0.086	U	0.085	U	0.083	U	200	J	26	J
2-Methylnaphthalene	NE	NE	0.079	U	0.12	J	0.08	U	0.086	U	0.042	J	0.083	U	230	J	26	J
Naphthalene	12	500	0.037	J	0.26	J	0.08	U	0.086	U	0.81		0.083	U	1000	J	130	J
Phenanthrene	100	500	0.13	J	2.6	J	0.059	J	0.086	U	0.029	J	0.083	U	560	J	68	J
Pyrene	100	500	0.018	J	5.8	J	0.017	J	0.086	U	0.013	J	0.083	U	270	J	35	J
Total Non-carcinogenic PAHs	NE	NE	0.283		20.42		0.112		ND		0.927		ND		3239		407.3	
Carcinogenic PAHs (mg/kg)																		
Benz[a]anthracene	1	5.6	0.079	UJ	3.2	J	0.08	U	0.086	U	0.085	U	0.083	U	140	J	19	J
Benzo[a]pyrene	1	1	0.079	UJ	3.5	J	0.08	U	0.086	U	0.085	U	0.083	U	120	J	16	J
Benzo[b]fluoranthene	1	5.6	0.079	UJ	4.7	J	0.08	U	0.086	U	0.085	U	0.083	U	100	J	13	J
Benzo[k]fluoranthene	0.8	56	0.079	U	0.15	U	0.08	U	0.086	U	0.085	U	0.083	U	50	J	6.4	J
Chrysene	1	56	0.079	UJ	2.9	J	0.08	U	0.086	U	0.085	U	0.083	U	120	J	14	J
Dibenz[a,h]anthracene	0.33	0.56	0.079	UJ	0.67	J	0.08	U	0.086	U	0.085	U	0.083	U	30	J	3.2	J
Indeno[1,2,3-cd]pyrene	0.5	5.6	0.079	UJ	2.1	J	0.08	U	0.086	U	0.085	U	0.083	U	65	J	7.5	J
Total Carcinogenic PAHs	NE	NE	ND		17.07		ND		ND		ND		ND		625		79.1	
Total PAHs	NE	500*	0.283		37.49		0.112		ND		0.927		ND		3864		486.4	
Other SVOCs (mg/kg)																		
Acetophenone	NE	NE	0.39	U	0.76	U	0.39	U	0.42	U	0.42	U	0.41	U	40	UJ	4.1	UJ
Atrazine	NE	NE	0.39	U	0.76	U	0.39	U	0.42	U	0.42	U	0.41	U	40	U	4.1	U
Benzaldehyde	NE	NE	0.39	UJ	0.76	UJ	0.39	UJ	0.42	UJ	0.42	UJ	0.41	UJ	40	U	4.1	U
1,1-Biphenyl	NE	NE	0.39	U	0.76	U	0.39	U	0.42	U	0.42	U	0.41	U	48	J	5.3	J
Bis(chloroisopropyl)ether	NE	NE	0.079	U	0.15	U	0.08	U	0.086	U	0.085	U	0.083	U	8.2	UJ	0.83	U
Bis(2-chloroethyl)ether	NE	NE	0.079	U	0.15	U	0.08	U	0.086	U	0.085	U	0.083	U	8.2	U	0.83	U
Bis(2-chloroethoxy)methane	NE	NE	0.39	U	0.76	U	0.39	U	0.42	U	0.42	U	0.41	U	40	U	4.1	U
Bis(2-ethylhexyl)phthalate	NE	NE	0.39	U	0.76	U	0.39	U	0.42	U	0.42	U	0.41	U	40	U	4.1	U
4-Bromophenyl phenyl ether	NE	NE	0.39	U	0.76	U	0.39	U	0.42	U	0.42	U	0.41	U	40	U	4.1	U
Butyl benzyl phthalate	NE	NE	0.39	U	0.76	U	0.39	U	0.42	U	0.42	U	0.41	U	40	U	4.1	U
Caprolactam	NE	NE	2	U	3.9	U	2	U	2.2	U	2.2	U	2.1	U	210	U	21	U

Table 7
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National Grid
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Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-119(10) 11 - 12 11/01/2010		Duplicate of: SB-119(10) 11 - 12 11/01/2010		SB-120(10) 11 - 12 11/01/2010		SB-121(10) 10 - 11 11/01/2010		SB-122(10) 16 - 17 11/01/2010		SB-123(10) 12 - 13 11/01/2010		SB-124(10) 12 - 13 10/28/2010		Duplicate of: SB-124(10) 12 - 13 10/28/2010	
Carbazole	NE	NE	0.079	U	0.15		0.08	U	0.086	U	0.085	U	0.083	U	74	J	18	J
4-Chloro-3-methylphenol	NE	NE	0.39	U	0.76	U	0.39	U	0.42	U	0.42	U	0.41	U	40	U	4.1	U
4-Chloroaniline	NE	NE	0.39	U	0.76	U	0.39	U	0.42	U	0.42	U	0.41	U	40	U	4.1	U
2-Chloronaphthalene	NE	NE	0.079	U	0.15	U	0.08	U	0.086	U	0.085	U	0.083	U	8.2	U	0.83	U
2-Chlorophenol	NE	NE	0.39	U	0.76	U	0.39	U	0.42	U	0.42	U	0.41	U	40	U	4.1	U
4-Chlorophenyl phenyl ether	NE	NE	0.39	U	0.76	U	0.39	U	0.42	U	0.42	U	0.41	U	40	U	4.1	U
Dibenzofuran	7	350	0.39	U	0.16	J	0.39	U	0.42	U	0.42	U	0.41	U	170	J	20	J
3,3-Dichlorobenzidine	NE	NE	0.39	U	0.76	U	0.39	U	0.42	U	0.42	U	0.41	U	40	U	4.1	U
2,4-Dichlorophenol	NE	NE	0.079	U	0.15	U	0.08	U	0.086	U	0.085	U	0.083	U	8.2	U	0.83	U
Diethyl phthalate	NE	NE	0.39	U	0.76	U	0.39	U	0.42	U	0.42	U	0.052	J	40	U	4.1	U
Dimethyl phthalate	NE	NE	0.39	U	0.76	U	0.39	U	0.42	U	0.42	U	0.41	U	40	U	4.1	U
2,4-Dimethylphenol	NE	NE	0.39	U	0.76	U	0.39	U	0.42	U	0.42	U	0.41	U	40	U	4.1	U
Di-n-butyl phthalate	NE	NE	0.39	U	0.76	U	0.39	U	0.42	U	0.42	U	0.41	U	40	U	4.1	U
4,6-Dinitro-2-methylphenol	NE	NE	2	U	3.9	U	2	U	2.2	U	2.2	U	2.1	U	210	U	21	U
2,4-Dinitrophenol	NE	NE	2	U	3.9	U	2	U	2.2	U	2.2	U	2.1	U	210	UJ	21	UJ
2,4-Dinitrotoluene	NE	NE	0.39	U	0.76	U	0.39	U	0.42	U	0.42	U	0.41	U	40	U	4.1	U
2,6-Dinitrotoluene	NE	NE	0.39	U	0.76	U	0.39	U	0.42	U	0.42	U	0.41	U	40	U	4.1	U
Di-n-octyl phthalate	NE	NE	0.39	U	0.76	U	0.39	U	0.42	U	0.42	U	0.41	U	40	U	4.1	U
Hexachlorobenzene	0.33	6	0.079	U	0.15	U	0.08	U	0.086	U	0.085	U	0.083	U	8.2	U	0.83	U
Hexachlorobutadiene	NE	NE	0.079	U	0.15	U	0.08	U	0.086	U	0.085	U	0.083	U	8.2	U	0.83	U
Hexachlorocyclopentadiene	NE	NE	0.39	U	0.76	U	0.39	U	0.42	U	0.42	U	0.41	U	40	U	4.1	U
Hexachloroethane	NE	NE	0.39	U	0.76	U	0.39	U	0.42	U	0.42	U	0.41	U	40	U	4.1	U
Isophorone	NE	NE	0.39	U	0.76	U	0.39	U	0.42	U	0.42	U	0.41	U	40	U	4.1	U
2-Methylphenol	0.33	500	0.39	U	0.76	U	0.39	U	0.42	U	0.42	U	0.41	U	40	U	4.1	U
4-Methylphenol (p-Cresol)	0.33	500	0.39	U	0.76	U	0.39	U	0.42	U	0.42	U	0.41	U	40	U	4.1	U
2-Nitroaniline	NE	NE	2	U	3.9	U	2	U	2.2	U	2.2	U	2.1	U	210	U	21	U
3-Nitroaniline	NE	NE	2	U	3.9	U	2	U	2.2	U	2.2	U	2.1	U	210	U	21	U
4-Nitroaniline	NE	NE	2	U	3.9	U	2	U	2.2	U	2.2	U	2.1	U	210	U	21	U
Nitrobenzene	NE	NE	0.079	U	0.15	U	0.08	U	0.086	U	0.085	U	0.083	U	8.2	U	0.83	U
2-Nitrophenol	NE	NE	0.39	U	0.76	U	0.39	U	0.42	U	0.42	U	0.41	U	40	U	4.1	U
4-Nitrophenol	NE	NE	2	U	3.9	U	2	U	2.2	U	2.2	U	2.1	U	210	U	21	U
N-Nitrosodi-n-propylamine	NE	NE	0.079	U	0.15	U	0.08	U	0.086	U	0.085	U	0.083	U	8.2	UJ	0.83	UJ
N-Nitrosodiphenylamine	NE	NE	0.079	U	0.15	U	0.08	U	0.086	U	0.085	U	0.083	U	8.2	U	0.83	UJ
Pentachlorophenol	0.8	6.7	0.39	U	0.76	U	0.39	U	0.42	U	0.42	U	0.41	U	40	U	4.1	U
Phenol	0.33	500	0.079	U	0.15	U	0.08	U	0.086	U	0.085	U	0.083	U	8.2	U	0.83	U

Table 7
2009 - 2010 Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-119(10) 11 - 12 11/01/2010		Duplicate of: SB-119(10) 11 - 12 11/01/2010		SB-120(10) 11 - 12 11/01/2010		SB-121(10) 10 - 11 11/01/2010		SB-122(10) 16 - 17 11/01/2010		SB-123(10) 12 - 13 11/01/2010		SB-124(10) 12 - 13 10/28/2010		Duplicate of: SB-124(10) 12 - 13 10/28/2010	
2,4,5-Trichlorophenol	NE	NE	0.39	U	0.76	U	0.39	U	0.42	U	0.42	U	0.41	U	40	U	4.1	U
2,4,6-Trichlorophenol	NE	NE	0.39	U	0.76	U	0.39	U	0.42	U	0.42	U	0.41	U	40	U	4.1	U
Total SVOCs	NE	NE	0.283		37.8		0.112		ND		0.927		0.052		4156		529.7	
PCBs (mg/kg)																		
Aroclor 1016	NE	NE	NA		NA		NA		NA		NA		NA		0.02	U	0.021	U
Aroclor 1221	NE	NE	NA		NA		NA		NA		NA		NA		0.02	U	0.021	U
Aroclor 1232	NE	NE	NA		NA		NA		NA		NA		NA		0.02	U	0.021	U
Aroclor 1242	NE	NE	NA		NA		NA		NA		NA		NA		0.02	U	0.021	U
Aroclor 1248	NE	NE	NA		NA		NA		NA		NA		NA		0.02	U	0.021	U
Aroclor 1254	NE	NE	NA		NA		NA		NA		NA		NA		0.02	U	0.021	U
Aroclor 1260	NE	NE	NA		NA		NA		NA		NA		NA		0.02	U	0.021	U
Total Metals (mg/kg)																		
Aluminum	NE	NE	NA		NA		NA		NA		NA		NA		7060	J	8400	J
Antimony	NE	NE	NA		NA		NA		NA		NA		NA		1.1	U	1.2	UJ
Arsenic	13	16	NA		NA		NA		NA		NA		NA		2.9	J	5.5	J
Barium	350	400	NA		NA		NA		NA		NA		NA		23	J	47.8	J
Beryllium	7.2	590	NA		NA		NA		NA		NA		NA		0.59		0.66	
Cadmium	2.5	9.3	NA		NA		NA		NA		NA		NA		0.54	U	0.58	U
Calcium	NE	NE	NA		NA		NA		NA		NA		NA		1870	J	15200	J
Chromium	NE	NE	NA		NA		NA		NA		NA		NA		7.5	J	11.2	J
Cobalt	NE	NE	NA		NA		NA		NA		NA		NA		4.6	J	6.9	
Copper	50	270	NA		NA		NA		NA		NA		NA		11.8		17.5	
Iron	NE	NE	NA		NA		NA		NA		NA		NA		14700	J	18600	J
Lead	63	1000	NA		NA		NA		NA		NA		NA		5.1	J	11.9	J
Magnesium	NE	NE	NA		NA		NA		NA		NA		NA		1550	J	4770	J
Manganese	1600	10000	NA		NA		NA		NA		NA		NA		117	J	358	J
Mercury	0.18	2.8	NA		NA		NA		NA		NA		NA		0.046		0.07	
Nickel	30	310	NA		NA		NA		NA		NA		NA		9.5		14.9	
Potassium	NE	NE	NA		NA		NA		NA		NA		NA		531	J	1010	
Selenium	3.9	1500	NA		NA		NA		NA		NA		NA		0.54	U	0.58	U
Silver	2	1500	NA		NA		NA		NA		NA		NA		0.54	U	0.58	U
Sodium	NE	NE	NA		NA		NA		NA		NA		NA		271	J	811	
Thallium	NE	NE	NA		NA		NA		NA		NA		NA		1.1	UJ	1.2	UJ
Vanadium	NE	NE	NA		NA		NA		NA		NA		NA		16.1	J	18.3	J
Zinc	109	10000	NA		NA		NA		NA		NA		NA		27.7	J	48.8	J
Total Cyanide (mg/kg)																		
Cyanide, Total	27	27	0.59	UJ	0.59	UJ	0.6	U	0.64	UJ	0.64	UJ	0.62	UJ	1.4		0.58	
Other (%)																		
Percent Solids	NE	NE	85.3		85.2		82.8		78.1		78.5		80.1		81.6		80.8	

Table 7
2009 - 2010 Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-124(10) 19 - 20 10/27/2010		SB-125(10) 16 - 17 10/27/2010		SB-125(10) 23 - 24 10/27/2010		SB-127(10) 12 - 13 10/27/2010		SB-127(10) 20 - 21 10/27/2010	
BTEX (mg/kg)												
Benzene	0.06	44	0.0067	U	0.28	J	0.0067	U	6.5	U	0.0065	U
Toluene	0.7	500	0.0067	U	0.24	J	0.0067	U	5.2	J	0.0065	U
Ethylbenzene	1	390	0.0067	U	1.1		0.0067	U	7.8		0.0065	U
Total Xylene	0.26	500	0.02	U	3.5		0.02	U	26		0.019	U
Total BTEX	NE	NE	ND		5.12		ND		39		ND	
Other VOCs (mg/kg)												
Acetone	0.05	500	0.027	U	2.8	U	0.027	U	26	U	0.015	J
Bromodichloromethane	NE	NE	0.0067	U	0.7	U	0.0067	U	6.5	U	0.0065	U
Bromoform	NE	NE	0.0067	U	0.7	U	0.0067	U	6.5	U	0.0065	U
Bromomethane	NE	NE	0.0067	U	0.7	U	0.0067	U	6.5	U	0.0065	U
2-Butanone	0.12	500	0.0067	U	0.7	U	0.0067	U	6.5	U	0.0065	U
Carbon disulfide	NE	NE	0.0067	U	0.7	U	0.0067	U	6.5	U	0.0065	U
Carbon tetrachloride	0.76	22	0.0067	U	0.7	U	0.0067	U	6.5	U	0.0065	U
Chlorobenzene	1.1	500	0.0067	U	0.7	U	0.0067	U	6.5	U	0.0065	U
Chloroethane	NE	NE	0.0067	UJ	0.7	U	0.0067	UJ	6.5	U	0.0065	UJ
Chloroform	0.37	350	0.0067	U	0.7	U	0.0067	U	6.5	U	0.0065	U
Chloromethane	NE	NE	0.0067	U	0.7	U	0.0067	U	6.5	U	0.0065	U
Cyclohexane	NE	NE	0.0067	U	0.7	U	0.0067	U	6.5	U	0.0065	U
1,2-Dibromo-3-chloropropane	NE	NE	0.0067	U	0.7	U	0.0067	U	6.5	U	0.0065	U
Dibromochloromethane	NE	NE	0.0067	U	0.7	U	0.0067	U	6.5	U	0.0065	U
1,2-Dibromoethane	NE	NE	0.0067	U	0.7	U	0.0067	U	6.5	U	0.0065	U
1,2-Dichlorobenzene	1.1	500	0.0067	U	0.7	U	0.0067	U	6.5	U	0.0065	U
1,3-Dichlorobenzene	2.4	280	0.0067	U	0.7	U	0.0067	U	6.5	U	0.0065	U
1,4-Dichlorobenzene	1.8	130	0.0067	U	0.7	U	0.0067	U	6.5	U	0.0065	U
Dichlorodifluoromethane	NE	NE	0.0067	U	0.7	U	0.0067	U	6.5	U	0.0065	U
1,1-Dichloroethane	0.27	240	0.0067	U	0.7	U	0.0067	U	6.5	U	0.0065	U
1,2-Dichloroethane	0.02	30	0.0067	U	0.34	J	0.0067	U	6.5	U	0.0065	U
cis-1,2-Dichloroethene	0.25	500	0.0067	U	0.7	U	0.0067	U	6.5	U	0.0065	U
trans-1,2-Dichloroethene	0.19	500	0.0067	U	0.7	U	0.0067	U	6.5	U	0.0065	U
1,1-Dichloroethene	0.33	500	0.0067	U	0.7	U	0.0067	U	6.5	U	0.0065	U
1,2-Dichloropropane	NE	NE	0.0067	U	0.7	U	0.0067	U	6.5	U	0.0065	U
cis-1,3-Dichloropropene	NE	NE	0.0067	U	0.7	U	0.0067	U	6.5	U	0.0065	U
trans-1,3-Dichloropropene	NE	NE	0.0067	U	0.7	U	0.0067	U	6.5	U	0.0065	U
2-Hexanone	NE	NE	0.0067	U	0.7	U	0.0067	U	6.5	U	0.0065	U
Isopropyl benzene	NE	NE	0.0067	U	0.26	J	0.0067	U	6.5	U	0.0065	U
Methyl acetate	NE	NE	0.0067	U	0.7	U	0.0067	U	6.5	U	0.0065	U
Methyl tert-butyl ether	0.93	500	0.0067	U	0.7	U	0.0067	U	6.5	U	0.0065	U
4-Methyl-2-pentanone	NE	NE	0.0067	U	0.7	U	0.0067	U	6.5	U	0.0065	U
Methylcyclohexane	NE	NE	0.0067	U	0.7	U	0.0067	U	6.5	U	0.0065	U
Methylene chloride	0.05	500	0.0067	UU	0.7	U	0.0067	U	6.5	U	0.0065	U
Styrene	NE	NE	0.0067	U	0.7	U	0.0067	U	1.3	J	0.0065	U
1,1,2,2-Tetrachloroethane	NE	NE	0.0067	U	0.7	U	0.0067	U	6.5	U	0.0065	U

Table 7
2009 - 2010 Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-124(10) 19 - 20 10/27/2010		SB-125(10) 16 - 17 10/27/2010		SB-125(10) 23 - 24 10/27/2010		SB-127(10) 12 - 13 10/27/2010		SB-127(10) 20 - 21 10/27/2010	
Tetrachloroethene	1.3	150	0.0067	U	0.7	U	0.0067	U	6.5	U	0.0065	U
1,1,2-Trichloro-1,2,2-trifluoroethane	NE	NE	0.0067	U	0.7	U	0.0067	U	6.5	U	0.0065	U
1,2,4-Trichlorobenzene	NE	NE	0.0067	U	0.7	U	0.0067	U	6.5	U	0.0065	U
1,1,1-Trichloroethane	0.68	500	0.0067	U	0.7	U	0.0067	U	6.5	U	0.0065	U
1,1,2-Trichloroethane	NE	NE	0.0067	U	0.7	U	0.0067	U	6.5	U	0.0065	U
Trichloroethene	0.47	200	0.0067	U	0.7	U	0.0067	U	6.5	U	0.0065	U
Trichlorofluoromethane	NE	NE	0.0067	U	0.7	U	0.0067	U	6.5	U	0.0065	U
Vinyl chloride	0.02	13	0.0067	U	0.7	U	0.0067	U	6.5	U	0.0065	U
Total VOCs	NE	NE	ND		0.6		ND		1.3		0.015	
Non-carcinogenic PAHs (mg/kg)												
Acenaphthene	20	500	0.089	U	110		0.0095	J	0.86		0.085	U
Acenaphthylene	100	500	0.089	U	16		0.09	U	3.4		0.085	U
Anthracene	100	500	0.0096	J	82		0.09	U	7.2		0.085	U
Benzo[g,h,i]perylene	100	500	0.089	U	14		0.09	U	1.1		0.085	U
Fluoranthene	100	500	0.015	J	120		0.09	U	8.5		0.085	U
Fluorene	100	500	0.089	U	120		0.09	U	3.7		0.085	U
2-Methylnaphthalene	NE	NE	0.089	U	190		0.09	U	1		0.085	U
Naphthalene	12	500	0.047	J	340		0.039	J	9.5		0.085	U
Phenanthrene	100	500	0.024	J	170		0.09	U	11		0.085	U
Pyrene	100	500	0.01	J	82		0.09	U	5.3		0.085	U
Total Non-carcinogenic PAHs	NE	NE	0.1056		1244		0.0485		51.56		ND	
Carcinogenic PAHs (mg/kg)												
Benz[a]anthracene	1	5.6	0.089	U	62		0.09	U	2.9		0.085	U
Benzo[a]pyrene	1	1	0.089	U	38		0.09	U	2.4		0.085	U
Benzo[b]fluoranthene	1	5.6	0.018	J	33	J	0.09	UJ	2.1	J	0.085	UJ
Benzo[k]fluoranthene	0.8	56	0.089	U	17		0.09	U	0.83		0.085	U
Chrysene	1	56	0.089	U	45		0.09	U	2.4		0.085	U
Dibenz[a,h]anthracene	0.33	0.56	0.089	U	9.4		0.09	U	0.59		0.085	U
Indeno[1,2,3-cd]pyrene	0.5	5.6	0.089	U	15		0.09	U	1.2		0.085	U
Total Carcinogenic PAHs	NE	NE	0.018		219.4		ND		12.42		ND	
Total PAHs	NE	500*	0.1236		1463.4		0.0485		63.98		ND	
Other SVOCs (mg/kg)												
Acetophenone	NE	NE	0.44	UJ	9.1	UJ	0.44	UJ	0.84	UJ	0.42	UJ
Atrazine	NE	NE	0.44	U	9.1	U	0.44	U	0.84	U	0.42	U
Benzaldehyde	NE	NE	0.44	U	9.1	U	0.44	U	0.84	U	0.42	U
1,1-Biphenyl	NE	NE	0.44	U	24		0.44	U	0.74	J	0.42	U
Bis(chloroisopropyl)ether	NE	NE	0.089	U	1.8	U	0.09	U	0.17	U	0.085	U
Bis(2-chloroethyl)ether	NE	NE	0.089	U	1.8	U	0.09	U	0.17	U	0.085	U
Bis(2-chloroethoxy)methane	NE	NE	0.44	U	9.1	U	0.44	U	0.84	U	0.42	U
Bis(2-ethylhexyl)phthalate	NE	NE	0.44	U	9.1	U	0.44	U	0.84	U	0.42	U
4-Bromophenyl phenyl ether	NE	NE	0.44	U	9.1	U	0.44	U	0.84	U	0.42	U
Butyl benzyl phthalate	NE	NE	0.44	U	9.1	U	0.44	U	0.84	U	0.42	U
Caprolactam	NE	NE	2.3	U	47	U	2.3	U	4.3	U	2.2	U

Table 7
2009 - 2010 Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-124(10) 19 - 20 10/27/2010		SB-125(10) 16 - 17 10/27/2010		SB-125(10) 23 - 24 10/27/2010		SB-127(10) 12 - 13 10/27/2010		SB-127(10) 20 - 21 10/27/2010	
Carbazole	NE	NE	0.089	U	25		0.09	U	2.6		0.085	U
4-Chloro-3-methylphenol	NE	NE	0.44	U	9.1	U	0.44	U	0.84	U	0.42	U
4-Chloroaniline	NE	NE	0.44	U	9.1	U	0.44	U	0.84	U	0.42	U
2-Chloronaphthalene	NE	NE	0.089	U	1.8	U	0.09	U	0.17	U	0.085	U
2-Chlorophenol	NE	NE	0.44	U	9.1	U	0.44	U	0.84	U	0.42	U
4-Chlorophenyl phenyl ether	NE	NE	0.44	U	9.1	U	0.44	U	0.84	U	0.42	U
Dibenzofuran	7	350	0.44	U	64		0.44	U	3		0.42	U
3,3-Dichlorobenzidine	NE	NE	0.44	U	9.1	U	0.44	U	0.84	U	0.42	U
2,4-Dichlorophenol	NE	NE	0.089	U	1.8	U	0.09	U	0.17	U	0.085	U
Diethyl phthalate	NE	NE	0.44	U	9.1	U	0.44	U	0.84	U	0.057	J
Dimethyl phthalate	NE	NE	0.44	U	9.1	U	0.44	U	0.84	U	0.42	U
2,4-Dimethylphenol	NE	NE	0.44	U	9.1	U	0.44	U	0.84	U	0.42	U
Di-n-butyl phthalate	NE	NE	0.44	U	9.1	U	0.44	U	0.84	U	0.42	U
4,6-Dinitro-2-methylphenol	NE	NE	2.3	U	47	U	2.3	U	4.3	U	2.2	U
2,4-Dinitrophenol	NE	NE	2.3	UJ	47	UJ	2.3	UJ	4.3	UJ	2.2	UJ
2,4-Dinitrotoluene	NE	NE	0.44	U	9.1	U	0.44	U	0.84	U	0.42	U
2,6-Dinitrotoluene	NE	NE	0.44	U	9.1	U	0.44	U	0.84	U	0.42	U
Di-n-octyl phthalate	NE	NE	0.44	U	9.1	U	0.44	U	0.84	U	0.42	U
Hexachlorobenzene	0.33	6	0.089	U	1.8	U	0.09	U	0.17	U	0.085	U
Hexachlorobutadiene	NE	NE	0.089	U	1.8	U	0.09	U	0.17	U	0.085	U
Hexachlorocyclopentadiene	NE	NE	0.44	U	9.1	U	0.44	U	0.84	U	0.42	U
Hexachloroethane	NE	NE	0.44	U	9.1	U	0.44	U	0.84	U	0.42	U
Isophorone	NE	NE	0.44	U	9.1	U	0.44	U	0.84	U	0.42	U
2-Methylphenol	0.33	500	0.44	U	9.1	U	0.44	U	0.84	U	0.42	U
4-Methylphenol (p-Cresol)	0.33	500	0.44	U	9.1	U	0.44	U	0.84	U	0.42	U
2-Nitroaniline	NE	NE	2.3	U	47	U	2.3	U	4.3	U	2.2	U
3-Nitroaniline	NE	NE	2.3	U	47	U	2.3	U	4.3	U	2.2	U
4-Nitroaniline	NE	NE	2.3	U	47	U	2.3	U	4.3	U	2.2	U
Nitrobenzene	NE	NE	0.089	U	1.8	U	0.09	U	0.17	U	0.085	U
2-Nitrophenol	NE	NE	0.44	U	9.1	U	0.44	U	0.84	U	0.42	U
4-Nitrophenol	NE	NE	2.3	U	47	U	2.3	U	4.3	U	2.2	U
N-Nitrosodi-n-propylamine	NE	NE	0.089	UJ	1.8	UJ	0.09	UJ	0.17	UJ	0.085	UJ
N-Nitrosodiphenylamine	NE	NE	0.089	UJ	1.8	UJ	0.09	UJ	0.17	UJ	0.085	UJ
Pentachlorophenol	0.8	6.7	0.44	U	9.1	U	0.44	U	0.84	U	0.42	U
Phenol	0.33	500	0.089	U	1.8	U	0.09	U	0.17	U	0.085	U

Table 7
2009 - 2010 Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-124(10) 19 - 20 10/27/2010		SB-125(10) 16 - 17 10/27/2010		SB-125(10) 23 - 24 10/27/2010		SB-127(10) 12 - 13 10/27/2010		SB-127(10) 20 - 21 10/27/2010	
2,4,5-Trichlorophenol	NE	NE	0.44	U	9.1	U	U	U	U	U	U	U
2,4,6-Trichlorophenol	NE	NE	0.44	U	9.1	U	0.44	U	0.84	U	0.42	U
Total SVOCs	NE	NE	0.1236		1576.4		ND		70.32		0.057	
PCBs (mg/kg)												
Aroclor 1016	NE	NE	0.022	U	0.023	U	0.022	U	0.022	U	0.021	U
Aroclor 1221	NE	NE	0.022	U	0.023	U	0.022	U	0.022	U	0.021	U
Aroclor 1232	NE	NE	0.022	U	0.023	U	0.022	U	0.022	U	0.021	U
Aroclor 1242	NE	NE	0.022	U	0.023	U	0.022	U	0.022	U	0.021	U
Aroclor 1248	NE	NE	0.022	U	0.023	U	0.022	U	0.022	U	0.021	U
Aroclor 1254	NE	NE	0.022	U	0.023	U	0.022	U	0.022	U	0.021	U
Aroclor 1260	NE	NE	0.022	U	0.023	U	0.022	U	0.022	U	0.021	U
Total Metals (mg/kg)												
Aluminum	NE	NE	7310	J	9280	J	9010	J	7620	J	9130	J
Antimony	NE	NE	1.3	UJ	1.3	UJ	1.3	UJ	1.3	UJ	1.2	UJ
Arsenic	13	16	2.7		4.9		1.7		2.3		2.6	
Barium	350	400	65.8	J	65.2	J	63	J	57.3	J	76.7	J
Beryllium	7.2	590	0.62		0.71		0.71		0.67		0.77	
Cadmium	2.5	9.3	0.63	U	0.65	U	0.64	U	0.64	U	0.61	U
Calcium	NE	NE	18300	J	5080	J	10300	J	9870	J	5770	J
Chromium	NE	NE	11	J	13	J	13.2	J	11.6	J	13.6	J
Cobalt	NE	NE	8.2		7.5		8.2		8.3		9	
Copper	50	270	15.5		14.9		17.8		17		19.6	
Iron	NE	NE	19800	J	18000	J	19500	J	19300	J	24400	J
Lead	63	1000	8.1		8.7		9.2		9		10.2	
Magnesium	NE	NE	5590	J	3490	J	6020	J	5780	J	4580	J
Manganese	1600	10000	470	J	176	J	315	J	302	J	518	J
Mercury	0.18	2.8	0.043	J	0.08		0.054		0.04	J	0.046	
Nickel	30	310	17.8		16.4		20.4		18		21.7	
Potassium	NE	NE	787		720		982		774		889	
Selenium	3.9	1500	0.63	U	0.65	U	0.64	U	0.64	U	0.61	U
Silver	2	1500	0.12	J	0.65	U	0.13	J	0.64	U	0.16	J
Sodium	NE	NE	132	J	960		125	J	370	J	216	J
Thallium	NE	NE	1.3	UJ	1.3	UJ	1.3	UJ	1.3	UJ	1.2	UJ
Vanadium	NE	NE	15.6	J	20.6	J	18	J	16.7	J	19.2	J
Zinc	109	10000	48.2	J	44.9	J	58.9	J	51.2	J	60.1	J
Total Cyanide (mg/kg)												
Cyanide, Total	27	27	0.67	U	0.7	U	0.67	U	0.65	U	0.65	U
Other (%)												
Percent Solids	NE	NE	74.5		71.7		74.6		77.5		77.4	

Table 7
2009 - 2010 Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Notes:

mg/kg - milligrams/kilogram or parts per million (ppm)
BTEX - benzene, toluene, ethylbenzene, and xylenes
VOCs - volatile organic compounds
PAHs - polycyclic aromatic hydrocarbons
SVOCs - semivolatile organic compounds
Total BTEX, Total VOCs, Total PAHs and Total SVOCs are calculated using detects only.

6 NYCRR - New York State Register and Official Compilation of Codes, Rules and Regulations of the State of New York

6 NYCRR 375 SCO UNRESTRICTED USE - regulatory comparison against NYCRR, Chapter IV, Part 375-6 Unrestricted Use Soil Cleanup Objectives

6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL - regulatory comparison against NYCRR, Chapter IV, Part 375-6 Restricted Use Commercial Soil Cleanup Objectives

Shading indicates that the detected concentration is above the NYCRR objective it was compared to.
Yellow shading indicates that the detected result value exceeds established 6 NYCRR 375 SCO UNRESTRICTED USE and 6 NYCRR 375 SCO RESTRICTED COMMERCIAL USE.
Gray shading indicates that the detected result value exceeds established 6 NYCRR 375 SCO RESTRICTED COMMERCIAL USE.

*A soil cleanup level of 500 mg/kg for total PAHs for subsurface soil can be used at commercial use sites where the Ecological Soil Cleanup Objectives are not applicable. The 500 mg/kg soil cleanup level is in lieu of achieving all of the contaminant PAH-specific SCOs in Part 375-6.

Validation Qualifiers:

J - estimated value
U - indicates not detected to the reporting limit for organic analysis and the method detection limit for inorganic analysis
UJ - not detected at or above the reporting limit shown and the reporting limit is estimated

Validated

Table 8
2009 - 2010 Groundwater Analytical Results (ug/L)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Date:	NYS AWQS	MW-12(08) 12/01/2009	MW-13D(08) 12/02/2009	Duplicate of: MW-13D(08) 12/02/2009	MW-14(08) 12/01/2009	MW-16D(08) 12/01/2009	MW-17D(08) 12/01/2009	MW-17S(08) 12/01/2009	MW-18D(09) 11/30/2009	MW-18S(09) 11/30/2009	MW-19D(09) 12/01/2009	MW-19S(09) 12/01/2009
BTEX (ug/L)												
Benzene	1	0.23 J	15	23	1 U	0.35 J	1 U	1 U	0.12 J	1 U	0.66 J	16
Toluene	5	1 U	36 J	58 J	0.21 J	1 U	1 U	1 U	0.19 J	1 U	0.25 J	0.27 J
Ethylbenzene	5	1 U	200 J	330 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 J
Total Xylene	5	1.5 J	150 J	240 J	3 U	3 U	3 U	3 U	3 U	3 U	3 U	16
Total BTEX	NE	1.73	401	651	0.21	0.35	ND	ND	0.31	ND	0.91	32.77
Other VOCs (ug/L)												
Acetone	50*	5 U	50 U	100 U	5 U	5 U	5 U	2.5 J	5 U	5 U	15	5 U
Bromodichloromethane	50*	1 U	10 U	20 U	1 U	1.2	1.2	1 U	0.49 J	1 U	0.19 J	1 U
Bromoform	50*	1 U	10 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	5	1 UJ	10 U	20 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2-Butanone	50*	5 U	50 U	100 U	5 U	5 U	5 U	5 U	5 U	5 U	2 J	5 U
Carbon disulfide	60*	1 U	10 U	20 U	1 U	1 U	1 U	0.29 J	1 U	1 U	1 U	1 U
Carbon tetrachloride	5	1 U	10 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	5	1 U	10 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	5	1 U	10 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	7	1 U	10 U	20 U	1 U	8	2.3	1 U	3	1 U	3.5	1 U
Chloromethane	5	1 U	10 U	20 U	1 U	0.35 J	1 U	1 U	1 U	1 U	1 U	1 U
Cyclohexane	NE	1 U	10 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane	0.04	1 U	10 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	50*	1 U	10 U	20 U	1 U	0.3 J	0.46 J	1 U	0.2 J	1 U	1 U	1 U
1,2-Dibromoethane	0.0006	1 U	10 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	5	1 U	10 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.6	1 U	10 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	0.07	1 U	10 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	5	1 U	10 U	20 U	0.6 J	1 U	1 U	1 U	1 U	1 U	0.37 J	1 U
trans-1,2-Dichloroethene	5	1 U	10 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1	1 U	10 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	NE	1 U	10 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene	NE	1 U	10 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	5	1 U	10 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Hexanone	50*	5 U	50 U	100 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Isopropyl benzene	5	1 U	12	18 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.4
4-Methyl-2-pentanone	NE	5 U	50 U	100 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methyl acetate	NE	1 U	10 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl tert-butyl ether	10	1 U	10 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylcyclohexane	NE	1 U	10 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride	5	1 U	10 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Styrene	5	1 U	10 U	6.8 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	5	1 U	10 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	5	1 U	10 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	5	1 U	10 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane	5	1 U	10 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

GEI Consultants

Table 8
2009 - 2010 Groundwater Analytical Results (ug/L)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: / Sample Date:	NYS AWQS	MW-12(08) 12/01/2009		MW-13D(08) 12/02/2009		Duplicate of: MW-13D(08) 12/02/2009		MW-14(08) 12/01/2009		MW-16D(08) 12/01/2009		MW-17D(08) 12/01/2009		MW-17S(08) 12/01/2009		MW-18D(09) 11/30/2009		MW-18S(09) 11/30/2009		MW-19D(09) 12/01/2009		MW-19S(09) 12/01/2009	
1,1,2-Trichloroethane	1	1	U	10	U	20	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Trichloroethene	5	1	U	10	U	20	U	0.22	J	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Trichlorofluoromethane	5	1	U	10	U	20	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Vinyl chloride	2	1	U	10	U	20	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Total VOCs	NE	1.73		497		747.8		1.44		10.2		3.96		2.79		4		ND		21.97		35.47	
Non-carcinogenic PAHs (ug/L)																							
Acenaphthene	20*	1.1	J	140		130		0.88	J	2	U	1.9	U	1.9	U	8		1.9	U	0.92	J	4.9	
Acenaphthylene	NE	1.9	U	2	U	2	U	1.9	U	2	U	1.9	U	1.9	U	0.72	J	1.9	U	0.17	J	1.9	U
Anthracene	50*	1.9	U	7.5		7		1.9	U	2	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
Benzo[g,h,i]perylene	NE	1.9	U	2	U	2	U	1.9	U	1.9	J	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
Fluoranthene	50*	1.9	U	1.9	J	1.9	J	1.9	U	0.98	J	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
Fluorene	50*	1.9	U	25		23		0.16	J	2	U	1.9	U	1.9	U	0.39	J	1.9	U	1.9	U	1.4	J
2-Methylnapthalene	NE	1.9	U	84		72		1.9	U	2	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.3	J
Naphthalene	10*	2.4		1700		1300		1.3	J	2	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	44	
Phenanthrene	50*	1.9	U	42		38		1.9	U	2	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.1	J
Pyrene	50*	1.9	U	2.4		2.2		1.9	U	0.87	J	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
Total Non-carcinogenic PAHs	NE	3.5		2002.8		1574.1		2.34		3.75		ND		ND		9.11		ND		1.09		52.7	
Carcinogenic PAHs (ug/L)																							
Benz[a]anthracene	0.002*	1.9	U	2	U	2	U	1.9	U	2.2		1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
Benzo[a]pyrene	0	1.9	U	2	U	2	U	1.9	U	1.5	J	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
Benzo[b]fluoranthene	0.002*	1.9	U	2	U	2	U	1.9	U	1.6	J	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
Benzo[k]fluoranthene	0.002*	1.9	U	2	U	2	U	1.9	U	1.9	J	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
Chrysene	0.002*	1.9	U	2	U	2	U	1.9	U	2.3		1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
Dibenz[a,h]anthracene	NE	1.9	U	2	U	2	U	1.9	U	1.9	J	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
Indeno[1,2,3-cd]pyrene	0.002*	1.9	U	2	U	2	U	1.9	U	2.1		1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
Total Carcinogenic PAHs	NE	ND		ND		ND		ND		13.5		ND		ND		ND		ND		ND		ND	
Total PAHs	NE	3.5		2002.8		1574.1		2.34		17.25		ND		ND		9.11		ND		1.09		52.7	
SVOCs (ug/L)																							
Acetaphenone	NE	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
Atrazine	7.5	9.4	UJ	10	UJ	10	UJ	9.6	UJ	9.9	UJ	9.4	UJ	9.7	UJ	9.4	UJ	9.4	UJ	9.4	UJ	9.4	UJ
Benzaldehyde	NE	9.4	U	10	U	10	U	9.6	U	9.9	U	9.4	U	9.7	U	9.4	U	9.4	U	9.4	U	9.4	U
1-1'-Biphenyl	5	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
Bis(chloroisopropyl)ether	5	1.9	U	2	U	2	U	1.9	U	2	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
Bis(2-chloroethoxy)methane	5	9.4	U	10	U	10	U	9.6	U	9.9	U	9.4	U	9.7	U	9.4	U	9.4	U	9.4	U	9.4	U
Bis(2-chloroethyl)ether	1	1.9	U	2	U	2	U	1.9	U	2	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
Bis(2-ethylhexyl)phthalate	5	9.4	U	0.63	J	10	U	9.6	U	9.9	U	9.4	U	9.7	U	9.4	U	9.4	U	9.4	U	9.4	U
4-Bromophenyl phenyl ether	NE	9.4	U	10	U	10	U	9.6	U	9.9	U	9.4	U	9.7	U	9.4	U	9.4	U	9.4	U	9.4	U
Butyl benzyl phthalate	50*	9.4	U	10	U	10	U	9.6	U	9.9	U	9.4	U	9.7	U	9.4	U	9.4	U	9.4	U	9.4	U
Caprolactam	NE	47	U	50	U	50	U	48	U	50	U	47	U	48	U	47	U	47	U	47	U	47	U
Carbazole	NE	1.9	U	5.7		5.4		1.9	U	2	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	3	
4-Chloro-3-methylphenol	NE	9.4	U	10	U	10	U	9.6	U	9.9	U	9.4	U	9.7	U	9.4	U	9.4	U	9.4	U	9.4	U
4-Chloroaniline	5	9.4	U	10	U	10	U	9.6	U	9.9	U	9.4	U	9.7	U	9.4	U	9.4	U	9.4	U	9.4	U
2-Chloronapthalene	10*	1.9	U	2	U	2	U	1.9	U	2	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U

Table 8
2009 - 2010 Groundwater Analytical Results (ug/L)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: / Sample Date:	NYS AWQS	MW-12(08) 12/01/2009		MW-13D(08) 12/02/2009		Duplicate of: MW-13D(08) 12/02/2009		MW-14(08) 12/01/2009		MW-16D(08) 12/01/2009		MW-17D(08) 12/01/2009		MW-17S(08) 12/01/2009		MW-18D(09) 11/30/2009		MW-18S(09) 11/30/2009		MW-19D(09) 12/01/2009		MW-19S(09) 12/01/2009	
2-Chlorophenol	NE	9.4	U	10	U	10	U	9.6	U	9.9	U	9.4	U	9.7	U	9.4	U	9.4	U	9.4	U	9.4	U
4-Chlorophenyl phenyl ether	NE	9.4	U	10	U	10	U	9.6	U	9.9	U	9.4	U	9.7	U	9.4	U	9.4	U	9.4	U	9.4	U
Dibenzofuran	NE	9.4	U	3.9	J	3.5	J	9.6	U	9.9	U	9.4	U	9.7	U	9.4	U	9.4	U	9.4	U	0.49	J
1,2-Dichlorobenzene	3	1	U	10	U	20	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,3-Dichlorobenzene	3	1	U	10	U	20	U	0.13	J	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,4-Dichlorobenzene	3	1	U	10	U	20	U	0.28	J	1	U	1	U	1	U	1	U	1	U	1	U	1	U
3,3-Dichlorobenzidine	5	9.4	U	10	U	10	U	9.6	U	9.9	U	9.4	U	9.7	U	9.4	U	9.4	U	9.4	U	9.4	U
2,4-Dichlorophenol	5	1.9	U	2	U	2	U	1.9	U	2	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
Diethyl phthalate	50*	9.4	U	10	U	10	U	9.6	U	9.9	U	9.4	U	9.7	U	9.4	U	9.4	U	9.4	U	9.4	U
Dimethyl phthalate	50*	9.4	U	10	U	10	U	9.6	U	9.9	U	9.4	U	9.7	U	9.4	U	9.4	U	9.4	U	9.4	U
2,4-Dimethylphenol	50*	9.4	U	10	U	10	U	9.6	U	9.9	U	9.4	U	9.7	U	9.4	U	9.4	U	9.4	U	9.4	U
Di-n-butyl phthalate	50*	9.4	U	10	U	10	U	9.6	U	9.9	U	9.4	U	9.7	U	9.4	U	9.4	U	9.4	U	9.4	U
4,6-Dinitro-2-methylphenol	NE	47	U	50	U	50	U	48	U	50	U	47	U	48	U	47	U	47	U	47	U	47	U
2,4-Dinitrophenol	10*	47	U	50	U	50	U	48	U	50	U	47	U	48	U	47	U	47	U	47	U	47	U
2,4-Dinitrotoluene	5	9.4	U	10	U	10	U	9.6	U	9.9	U	9.4	U	9.7	U	9.4	U	9.4	U	9.4	U	9.4	U
2,6-Dinitrotoluene	5	9.4	U	10	U	10	U	9.6	U	9.9	U	9.4	U	9.7	U	9.4	U	9.4	U	9.4	U	9.4	U
Di-n-octyl phthalate	50*	9.4	U	10	U	10	U	9.6	U	9.9	U	9.4	U	9.7	U	9.4	U	9.4	U	9.4	U	9.4	U
Hexachlorobenzene	0.04	1.9	U	2	U	2	U	1.9	U	2	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
Hexachlorobutadiene	0.5	1.9	U	2	U	2	U	1.9	U	2	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
Hexachlorocyclopentadiene	5	9.4	U	10	U	10	U	9.6	U	9.9	U	9.4	U	9.7	U	9.4	U	9.4	U	9.4	U	9.4	U
Hexachloroethane	5	9.4	U	10	U	10	U	9.6	U	9.9	U	9.4	U	9.7	U	9.4	U	9.4	U	9.4	U	9.4	U
Isophorone	50*	9.4	U	10	U	10	U	9.6	U	9.9	U	9.4	U	9.7	U	9.4	U	9.4	U	9.4	U	9.4	U
2-Methylphenol	1	9.4	U	10	U	10	U	9.6	U	9.9	U	9.4	U	9.7	U	9.4	U	9.4	U	9.4	U	9.4	U
4-Methylphenol	1	9.4	U	10	U	10	U	9.6	U	9.9	U	9.4	U	9.7	U	9.4	U	9.4	U	9.4	U	9.4	U
2-Nitroaniline	5	47	U	50	U	50	U	48	U	50	U	47	U	48	U	47	U	47	U	47	U	47	U
3-Nitroaniline	5	47	U	50	U	50	U	48	U	50	U	47	U	48	U	47	U	47	U	47	U	47	U
4-Nitroaniline	5	47	U	50	U	50	U	48	U	50	U	47	U	48	U	47	U	47	U	47	U	47	U
Nitrobenzene	0.4	1.9	U	2	U	2	U	1.9	U	2	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
2-Nitrophenol	NE	9.4	U	10	U	10	U	9.6	U	9.9	U	9.4	U	9.7	U	9.4	U	9.4	U	9.4	U	9.4	U
4-Nitrophenol	NE	47	U	50	U	50	U	48	U	50	U	47	U	48	U	47	U	47	U	47	U	47	U
N-Nitrosodi-n-propylamine	NE	1.9	U	2	U	2	U	1.9	U	2	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
N-Nitrosodiphenylamine	50*	1.9	U	2	U	2	U	1.9	U	2	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
Pentachlorophenol	1	9.4	U	10	U	10	U	9.6	U	9.9	U	9.4	U	9.7	U	9.4	U	9.4	U	9.4	U	9.4	U
Phenol	1	1.9	U	2	U	2	U	1.9	U	2	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
1,2,4-Trichlorobenzene	5	1	U	10	U	20	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
2,4,5-Trichlorophenol	NE	9.4	U	10	U	10	U	9.6	U	9.9	U	9.4	U	9.7	U	9.4	U	9.4	U	9.4	U	9.4	U
2,4,6-Trchlorophenol	NE	9.4	U	10	U	10	U	9.6	U	9.9	U	9.4	U	9.7	U	9.4	U	9.4	U	9.4	U	9.4	U
Total SVOCs	NE	ND		10.23		8.9		0.41		ND		ND		ND		ND		ND		ND		3.49	

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National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Date:	NYS AWQS	MW-12(08) 12/01/2009		MW-13D(08) 12/02/2009		Duplicate of: MW-13D(08) 12/02/2009		MW-14(08) 12/01/2009		MW-16D(08) 12/01/2009		MW-17D(08) 12/01/2009		MW-17S(08) 12/01/2009		MW-18D(09) 11/30/2009		MW-18S(09) 11/30/2009		MW-19D(09) 12/01/2009		MW-19S(09) 12/01/2009	
PCBs (ug/L)																							
Aroclor 1016	NE	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
Aroclor 1221	NE	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
Aroclor 1232	NE	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
Aroclor 1242	NE	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
Aroclor 1248	NE	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
Aroclor 1254	NE	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
Aroclor 1260	NE	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
Total PCBs	NE	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
Metals (ug/L)																							
Aluminum	NE	47.3	J	68.3	J	75.9	J	566		46.9	J	28.2	J	966		111	J	83.3	J	94.6	J	63.1	J
Antimony	3	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Arsenic	25	25		10	U	10	U	22.7		10	U	10	U	25.9		10	U	48.6		10	U	35.9	
Barium	1000	271		170	J	171	J	349		120	J	150	J	272		88.4	J	386		203		461	
Beryllium	3*	4	U	4	U	4	U	4	U	4	U	4	U	4	U	4	U	4	U	4	U	4	U
Cadmium	5	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Calcium	NE	155000		203000		203000		198000		177000		103000		159000		121000		217000		209000		174000	
Chromium	50	5	U	5	U	5	U	4.6	J	5	U	5	U	1.8	J	5	U	5	U	5	U	5	U
Cobalt	NE	50	U	50	U	50	U	0.73	J	50	U	50	U	2.7	J	50	U	0.44	J	50	U	0.86	J
Copper	200	25	U	25	U	25	U	25	U	25	U	25	U	25	U	25	U	25	U	25	U	25	U
Iron	300	29500		1860		1880		27900		318		1650		54200		2460		32200		6140		29800	
Lead	25	2.8	J	3.2		2.5	J	6		3	U	1.9	J	5.4		1.4	J	4.1		1.7	J	2.9	J
Magnesium	35000*	23300		37000		37100		19600		35800		21500		26300		26100		31000		36500		22900	
Manganese	300	1890		1650		1660		2060		641		836		1550		445		4060		486		2450	
Mercury	0.7	0.2	U	0.2	U	0.2	U	0.2	U	0.2	UJ	0.2	U	0.2	U	0.57	J	0.2	UJ	0.2	UJ	0.2	UJ
Nickel	100	40	U	40	U	40	U	5	J	40	U	40	U	4.8	J	40	U	40	U	40	U	1.8	J
Potassium	NE	11100		6840		6930		8830		14700		11400		4820	J	11700		3820	J	16400		4060	J
Selenium	10	5	U	5	U	5	U	5	U	6.4	J	5	U	5	U	3.4	J	3.7	J	5	U	5	U
Silver	50	5	U	0.84	J	0.71	J	5	U	5	U	5	U	0.68	J	5	U	0.68	J	5	U	5	U
Sodium	20000	160000		134000		134000		770000		194000		119000		154000		100000		75500		344000		417000	
Thallium	0.5*	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Vanadium	NE	50	U	50	U	50	U	50	U	50	U	50	U	2.2	J	50	U	50	U	50	U	50	U
Zinc	2000*	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U
Total Cyanide (ug/L)																							
Cyanide, Total	200	10	U	87.8	J	33.4	J	8.5	J	43.2		10	U	12.3		15.2		10	U	10	U	19.1	

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National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Date:	NYS AWQS	MW-20D(09) 12/01/2009	MW-20S(09) 12/01/2009	MW-21S(09) 12/01/2009	MW-23D(09) 11/30/2009	MW-24D(09) 12/02/2009	MW-24S(09) 12/02/2009	MW-25D(09) 12/02/2009	MW-25S(09) 12/02/2009	MW-26D(09) 12/01/2009	MW-27S(10) 11/17/2010	Duplicate of: MW-27S(10) 11/17/2010
BTEX (ug/L)												
Benzene	1	0.75 J	69	66	1 U	1.2	50 U	1 U	1 U	1 U	43	39
Toluene	5	0.24 J	49	8.8 J	1 U	1 U	50 U	1 U	1 U	0.25 J	24	20
Ethylbenzene	5	1 U	24 J	24	1 U	0.5 J	50 U	1 U	1 U	1 U	23	22
Total Xylene	5	0.76 J	75	53 J	3 U	0.54 J	150 U	3 U	3 U	3 U	67	61
Total BTEX	NE	1.75	217	151.8	ND	2.24	ND	ND	ND	0.25	157	142
Other VOCs (ug/L)												
Acetone	50*	5 U	120 U	100 U	4.1 J	5 U	250 U	5 U	5 U	5 U	12 UJ	12 UJ
Bromodichloromethane	50*	1.1	25 U	20 U	0.34 J	2.5	50 U	1.1	1 U	1.3	2.5 U	2.5 U
Bromoform	50*	1 U	25 U	20 U	1 U	1 U	50 U	1 U	1 U	1 U	2.5 U	2.5 U
Bromomethane	5	1 U	25 U	20 U	1 UJ	1 U	50 U	1 U	1 U	1 UJ	2.5 U	2.5 U
2-Butanone	50*	5 U	120 U	100 U	5 U	5 U	250 U	5 U	5 U	5 U	12 UJ	12 UJ
Carbon disulfide	60*	1 U	25 U	20 U	0.32 J	1 U	50 U	1 U	1 U	0.59 J	2.5 U	2.5 U
Carbon tetrachloride	5	1 U	25 U	20 U	1 U	1 U	50 U	1 U	1 U	1 U	2.5 U	2.5 U
Chlorobenzene	5	1 U	25 U	20 U	1 U	0.27 J	210	1 U	1 U	1 U	2.5 U	2.5 U
Chloroethane	5	1 U	25 U	20 U	1 U	1 U	50 U	1 U	1 U	1 U	2.5 U	2.5 U
Chloroform	7	3.1	25 U	20 U	0.98 J	3.4	50 U	1.8	1 U	3.4	2.5 U	2.5 U
Chloromethane	5	1 U	25 U	20 U	1 U	1 U	50 U	1 U	1 U	1 U	2.5 U	2.5 U
Cyclohexane	NE	1 U	25 U	20 U	1 U	1 U	50 U	1 U	1 U	1 U	2.5 U	2.5 U
1,2-Dibromo-3-chloropropane	0.04	1 U	25 U	20 U	1 U	1 U	50 U	1 U	1 U	1 U	2.5 U	2.5 U
Dibromochloromethane	50*	1 U	25 U	20 U	0.19 J	1.3	50 U	1 U	1 U	0.53 J	2.5 U	2.5 U
1,2-Dibromoethane	0.0006	1 U	25 U	20 U	1 U	1 U	50 U	1 U	1 U	1 U	2.5 U	2.5 U
1,1-Dichloroethane	5	1 U	25 U	20 U	1 U	1 U	50 U	1 U	1 U	1 U	2.5 U	2.5 U
1,2-Dichloroethane	0.6	1 U	25 U	20 U	1 U	1 U	50 U	1 U	1 U	1 U	2.5 U	2.5 U
1,1-Dichloroethene	0.07	1 U	25 U	20 U	1 U	1 U	50 U	1 U	1 U	1 U	2.5 U	2.5 U
cis-1,2-Dichloroethene	5	1 U	25 U	20 U	0.67 J	2.6	50 U	6	1 U	1 U	2.5 U	2.5 U
trans-1,2-Dichloroethene	5	1 U	25 U	20 U	1 U	0.27 J	50 U	1.8	1 U	1 U	2.5 U	2.5 U
1,2-Dichloropropane	1	1 U	25 U	20 U	1 U	1 U	50 U	1 U	1 U	1 U	2.5 U	2.5 U
cis-1,3-Dichloropropene	NE	1 U	25 U	20 U	1 U	1 U	50 U	1 U	1 U	1 U	2.5 U	2.5 U
trans-1,3-Dichloropropene	NE	1 U	25 U	20 U	1 U	1 U	50 U	1 U	1 U	1 U	2.5 UJ	2.5 UJ
Dichlorodifluoromethane	5	1 U	25 U	20 U	1 U	1 U	50 U	1 U	1 U	1 U	2.5 U	2.5 U
2-Hexanone	50*	5 U	120 U	100 U	5 U	5 U	250 U	5 U	5 U	5 U	12 U	12 U
Isopropyl benzene	5	1 U	5.8 J	4.6 J	1 U	1 U	50 U	1 U	1 U	1 U	1.5 J	1.3 J
4-Methyl-2-pentanone	NE	5 U	120 U	100 U	5 U	5 U	250 U	5 U	5 U	5 U	12 U	12 U
Methyl acetate	NE	1 U	25 U	20 U	1 U	1 U	50 U	1 U	1 U	1 U	2.5 U	2.5 U
Methyl tert-butyl ether	10	1 U	25 U	20 U	1 U	1 U	50 U	1 U	1 U	1 U	2.5 U	2.5 U
Methylcyclohexane	NE	1 U	25 U	20 U	1 U	1 U	50 U	1 U	1 U	1 U	2.5 U	2.5 U
Methylene chloride	5	1 U	25 U	20 U	1 U	1 U	50 U	1 U	1 U	1 U	2.2 J	2 J
Styrene	5	1 U	5.7 J	3.6 J	1 U	1 U	50 U	1 U	1 U	1 U	2.5 U	2.5 U
Tetrachloroethene	5	1 U	25 U	20 U	1 U	1 U	50 U	1 U	1 U	1 U	2.5 U	2.5 U
1,1,2,2-Tetrachloroethane	5	1 U	25 U	20 U	1 U	1 U	50 U	1 U	1 U	1 U	2.5 U	2.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	5	1 U	25 U	20 U	1 U	1 U	50 U	1 U	1 U	1 U	2.5 U	2.5 U
1,1,1-Trichloroethane	5	1 U	25 U	20 U	1 U	1 U	50 U	1 U	1 U	1 U	2.5 U	2.5 U

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National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Date:	NYS AWQS	MW-20D(09) 12/01/2009	MW-20S(09) 12/01/2009	MW-21S(09) 12/01/2009	MW-23D(09) 11/30/2009	MW-24D(09) 12/02/2009	MW-24S(09) 12/02/2009	MW-25D(09) 12/02/2009	MW-25S(09) 12/02/2009	MW-26D(09) 12/01/2009	MW-27S(10) 11/17/2010	Duplicate of: MW-27S(10) 11/17/2010
1,1,2-Trichloroethane	1	1 U	25 U	20 U	1 U	1 U	50 U	1 U	1 U	1 U	2.5 U	2.5 U
Trichloroethene	5	1 U	25 U	20 U	1 U	1 U	50 U	1 U	1 U	1 U	2.5 U	2.5 U
Trichlorofluoromethane	5	1 U	25 U	20 U	1 U	1 U	50 U	1 U	1 U	1 U	2.5 U	2.5 U
Vinyl chloride	2	0.28 J	25 U	20 U	1 U	1.9	50 U	1 U	1 U	0.86 J	2.5 U	2.5 U
Total VOCs	NE	11.13	263.5	163.3	6.6	55.33	1334	10.7	ND	6.93	3.7	3.3
Non-carcinogenic PAHs (ug/L)												
Acenaphthene	20*	2.7	120	9.4	0.17 J	0.58 J	2 U	1.9 U	1.9 U	1.9 U	17 J	10 J
Acenaphthylene	NE	0.61 J	18	1.9 U	2 U	2 U	2 U	1.9 U	1.9 U	1.9 U	3.6	2
Anthracene	50*	1 J	12	1.9 U	2 U	2 U	2 U	1.9 U	1.9 U	1.9 U	2.3	1.8 J
Benzo[g,h,i]perylene	NE	1.9 U	1.9 U	1.9 U	2 U	2 U	2 U	1.9 U	1.9 U	1.9 U	1.9 U	2 U
Fluoranthene	50*	0.92 J	12	0.18 J	2 U	2 U	0.38 J	1.9 U	1.9 U	1.9 U	3.8	3.2
Fluorene	50*	2.6	83	2.6	2 U	2 U	2 U	1.9 U	1.9 U	1.9 U	14	11
2-Methylnapthalene	NE	4.9	35	3.3	2 U	2 U	2 U	1.9 U	1.9 U	1.9 U	28 J	15 J
Naphthalene	10*	13	610	420	0.42 J	1.4 J	0.71 J	1.9 U	1.9 U	1.9 U	300 J	160 J
Phenanthrene	50*	4	95	1.6 J	2 U	2 U	0.47 J	1.9 U	1.9 U	1.9 U	15 J	11 J
Pyrene	50*	0.78 J	6.9	1.9 U	2 U	2 U	0.22 J	1.9 U	1.9 U	1.9 U	2.5	2.1
Total Non-carcinogenic PAHs	NE	30.51	991.9	437.08	0.59	1.98	1.78	ND	ND	ND	386.2	216.1
Carcinogenic PAHs (ug/L)												
Benz[a]anthracene	0.002*	1.9 U	1.9 U	1.9 U	2 U	2 U	2 U	1.9 U	1.9 U	1.9 U	1.9 U	2 U
Benzo[a]pyrene	0	1.9 U	1.9 U	1.9 U	2 U	2 U	2 U	1.9 U	1.9 U	1.9 U	1.9 U	2 U
Benzo[b]fluoranthene	0.002*	1.9 U	1.9 U	1.9 U	2 U	2 U	2 U	1.9 U	1.9 U	1.9 U	1.9 U	2 U
Benzo[k]fluoranthene	0.002*	1.9 U	1.9 U	1.9 U	2 U	2 U	2 U	1.9 U	1.9 U	1.9 U	1.9 U	2 U
Chrysene	0.002*	1.9 U	1.9 U	1.9 U	2 U	2 U	2 U	1.9 U	1.9 U	1.9 U	1.9 U	2 U
Dibenz[a,h]anthracene	NE	1.9 U	1.9 U	1.9 U	2 U	2 U	2 U	1.9 U	1.9 U	1.9 U	1.9 U	2 U
Indeno[1,2,3-cd]pyrene	0.002*	1.9 U	1.9 U	1.9 U	2 U	2 U	2 U	1.9 U	1.9 U	1.9 U	1.9 U	2 U
Total Carcinogenic PAHs	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total PAHs	NE	30.51	991.9	437.08	0.59	1.98	1.78	ND	ND	ND	386.2	216.2
SVOCs (ug/L)												
Acetaphenone	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.5 U	9.5 U
Atrazine	7.5	9.7 UJ	9.4 UJ	9.4 UJ	9.8 UJ	9.8 UJ	9.9 UJ	9.4 UJ	9.4 UJ	9.6 U	9.5 U	9.8 U
Benzaldehyde	NE	9.7 U	9.4 U	9.4 U	9.8 U	9.8 U	9.9 U	9.4 U	9.4 U	9.6 U	9.5 U	9.8 U
1-1'-Biphenyl	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 J	2.4 J
Bis(chloroisopropyl)ether	5	1.9 U	1.9 U	1.9 U	2 U	2 U	2 U	1.9 U	1.9 U	1.9 U	1.9 U	2 U
Bis(2-chloroethoxy)methane	5	9.7 U	9.4 U	9.4 U	9.8 U	9.8 U	9.9 U	9.4 U	9.4 U	9.6 U	9.5 U	9.8 U
Bis(2-chloroethyl)ether	1	1.9 U	1.9 U	1.9 U	2 U	2 U	2 U	1.9 U	1.9 U	1.9 U	1.9 U	2 U
Bis(2-ethylhexyl)phthalate	5	9.7 U	9.4 U	9.4 U	9.8 U	9.8 U	9.9 U	9.4 U	9.4 U	9.6 U	9.5 U	9.8 U
4-Bromophenyl phenyl ether	NE	9.7 U	9.4 U	9.4 U	9.8 U	9.8 U	9.9 U	9.4 U	9.4 U	9.6 U	9.5 U	9.8 U
Butyl benzyl phthalate	50*	9.7 U	9.4 U	9.4 U	9.8 U	9.8 U	9.9 U	9.4 U	9.4 U	9.6 U	9.5 U	9.8 U
Caprolactam	NE	48 U	47 U	47 U	49 U	49 U	50 U	47 U	47 U	48 U	48 U	49 U
Carbazole	NE	0.95 J	120	4.3	2 U	2 U	2 U	1.9 U	1.9 U	1.9 U	8.3 J	5.3 J
4-Chloro-3-methylphenol	NE	9.7 U	9.4 U	9.4 U	9.8 U	9.8 U	9.9 U	9.4 U	9.4 U	9.6 U	9.5 U	9.8 U
4-Chloroaniline	5	9.7 U	9.4 U	9.4 U	9.8 U	9.8 U	9.9 U	9.4 U	9.4 U	9.6 U	9.5 U	9.8 U
2-Chloronapthalene	10*	1.9 U	1.9 U	1.9 U	2 U	2 U	2 U	1.9 U	1.9 U	1.9 U	1.9 U	2 U

Table 8
2009 - 2010 Groundwater Analytical Results (ug/L)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: / Sample Date:	NYS AWQS	MW-20D(09) 12/01/2009		MW-20S(09) 12/01/2009		MW-21S(09) 12/01/2009		MW-23D(09) 11/30/2009		MW-24D(09) 12/02/2009		MW-24S(09) 12/02/2009		MW-25D(09) 12/02/2009		MW-25S(09) 12/02/2009		MW-26D(09) 12/01/2009		MW-27S(10) 11/17/2010		Duplicate of: MW-27S(10) 11/17/2010	
2-Chlorophenol	NE	9.7	U	9.4	U	9.4	U	9.8	U	9.8	U	14		9.4	U	9.4	U	9.6	U	9.5	U	9.8	U
4-Chlorophenyl phenyl ether	NE	9.7	U	9.4	U	9.4	U	9.8	U	9.8	U	9.9	U	9.4	U	9.4	U	9.6	U	9.5	U	9.8	U
Dibenzofuran	NE	1.8	J	100		3.3	J	9.8	U	9.8	U	0.24	J	9.4	U	9.4	U	9.6	U	9.5	J	6.4	J
1,2-Dichlorobenzene	3	1	U	25	U	20	U	1	U	0.35	J	54		1	U	1	U	1	U	2.5	U	2.5	U
1,3-Dichlorobenzene	3	1	U	25	U	20	U	1	U	0.2	J	130		1	U	1	U	1	U	2.5	U	2.5	U
1,4-Dichlorobenzene	3	1	U	25	U	20	U	1	U	1.3		270		1	U	1	U	1	U	2.5	U	2.5	U
3,3-Dichlorobenzidine	5	9.7	U	9.4	U	9.4	U	9.8	U	9.8	U	9.9	U	9.4	U	9.4	U	9.6	U	1.9	UJ	9.8	UJ
2,4-Dichlorophenol	5	1.9	U	1.9	U	1.9	U	2	U	2	U	27		1.9	U	1.9	U	1.9	U	1.9	U	2	U
Diethyl phthalate	50*	9.7	U	9.4	U	9.4	U	9.8	U	9.8	U	9.9	U	9.4	U	9.4	U	0.44	J	9.5	U	9.8	U
Dimethyl phthalate	50*	9.7	U	9.4	U	9.4	U	9.8	U	9.8	U	9.9	U	9.4	U	9.4	U	9.6	U	9.5	U	9.8	U
2,4-Dimethylphenol	50*	9.7	U	120		40		9.8	U	9.8	U	9.9	U	9.4	U	9.4	U	9.6	U	53	J	21	J
Di-n-butyl phthalate	50*	9.7	U	9.4	U	9.4	U	9.8	U	9.8	U	9.9	U	9.4	U	9.4	U	9.6	U	9.5	U	9.8	U
4,6-Dinitro-2-methylphenol	NE	48	U	47	U	47	U	49	U	49	U	50	U	47	U	47	U	48	U	48	U	49	U
2,4-Dinitrophenol	10*	48	U	47	U	47	U	49	U	49	U	50	U	47	U	47	U	48	U	48	U	49	U
2,4-Dinitrotoluene	5	9.7	U	9.4	U	9.4	U	9.8	U	9.8	U	9.9	U	9.4	U	9.4	U	9.6	U	9.5	U	9.8	U
2,6-Dinitrotoluene	5	9.7	U	9.4	U	9.4	U	9.8	U	9.8	U	9.9	U	9.4	U	9.4	U	9.6	U	9.5	U	9.8	U
Di-n-octyl phthalate	50*	9.7	U	9.4	U	9.4	U	9.8	U	9.8	U	9.9	U	9.4	U	9.4	U	9.6	U	9.5	U	9.8	U
Hexachlorobenzene	0.04	1.9	U	1.9	U	1.9	U	2	U	2	U	2	U	1.9	U	1.9	U	1.9	U	1.9	U	2	U
Hexachlorobutadiene	0.5	1.9	U	1.9	U	1.9	U	2	U	2	U	2	U	1.9	U	1.9	U	1.9	U	1.9	U	2	U
Hexachlorocyclopentadiene	5	9.7	U	9.4	U	9.4	U	9.8	U	9.8	U	9.9	U	9.4	U	9.4	U	9.6	U	9.5	U	9.8	U
Hexachloroethane	5	9.7	U	9.4	U	9.4	U	9.8	U	9.8	U	9.9	U	9.4	U	9.4	U	9.6	U	9.5	U	9.8	U
Isophorone	50*	9.7	U	9.4	U	9.4	U	9.8	U	9.8	U	9.9	U	9.4	U	9.4	U	9.6	U	9.5	U	9.8	U
2-Methylphenol	1	9.7	U	9.4	U	9.4	U	9.8	U	9.8	U	9.9	U	9.4	U	9.4	U	9.6	U	2	J	1.1	J
4-Methylphenol	1	9.7	U	39		9.4	U	9.8	U	9.8	U	1.7	J	9.4	U	9.4	U	9.6	U	8.9	J	4.4	J
2-Nitroaniline	5	48	U	47	U	47	U	49	U	49	U	50	U	47	U	47	U	48	U	48	U	49	U
3-Nitroaniline	5	48	U	47	U	47	U	49	U	49	U	50	U	47	U	47	U	48	U	48	U	49	U
4-Nitroaniline	5	48	U	47	U	47	U	49	U	49	U	50	U	47	U	47	U	48	U	48	U	49	U
Nitrobenzene	0.4	1.9	U	1.9	U	1.9	U	2	U	2	U	2	U	1.9	U	1.9	U	1.9	U	1.9	U	2	U
2-Nitrophenol	NE	9.7	U	9.4	U	9.4	U	9.8	U	9.8	U	9.9	U	9.4	U	9.4	U	9.6	U	9.5	U	9.8	U
4-Nitrophenol	NE	48	U	47	U	47	U	49	U	49	U	50	U	47	U	47	U	48	U	48	U	49	U
N-Nitrosodi-n-propylamine	NE	1.9	U	1.9	U	1.9	U	2	U	2	U	2	U	1.9	U	1.9	U	1.9	U	1.9	U	2	U
N-Nitrosodiphenylamine	50*	1.9	U	1.9	U	1.9	U	2	U	2	U	2	U	1.9	U	1.9	U	1.9	U	1.9	U	2	U
Pentachlorophenol	1	9.7	U	9.4	U	9.4	U	9.8	U	9.8	U	9.9	U	9.4	U	9.4	U	9.6	U	9.5	U	9.8	U
Phenol	1	1.9	U	7.6		1.9	U	2	U	2	U	2	U	1.9	U	1.9	U	1.9	U	1.9	U	2	U
1,2,4-Trichlorobenzene	5	1	U	25	U	20	U	1	U	39		670		1	U	1	U	1	U	2.5	U	2.5	U
2,4,5-Trichlorophenol	NE	9.7	U	9.4	U	9.4	U	9.8	U	9.8	U	22		9.4	U	9.4	U	9.6	U	9.5	U	9.8	U
2,4,6-Trchlorophenol	NE	9.7	U	9.4	U	9.4	U	9.8	U	9.8	U	9.9	U	9.4	U	9.4	U	9.6	U	9.5	U	9.8	U
Total SVOCs	NE	2.75		386.6		47.6		ND		40.85		1188.94		ND		ND		0.44		84.9		40.6	

Table 8
2009 - 2010 Groundwater Analytical Results (ug/L)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Validated

Sample Name: Sample Date:	NYS AWQS	MW-20D(09) 12/01/2009		MW-20S(09) 12/01/2009		MW-21S(09) 12/01/2009		MW-23D(09) 11/30/2009		MW-24D(09) 12/02/2009		MW-24S(09) 12/02/2009		MW-25D(09) 12/02/2009		MW-25S(09) 12/02/2009		MW-26D(09) 12/01/2009		MW-27S(10) 11/17/2010		Duplicate of: MW-27S(10) 11/17/2010	
PCBs (ug/L)																							
Aroclor 1016	NE	NA		NA		NA		NA		NA		0.39	U	NA		0.38	U	NA		0.39	U	0.39	U
Aroclor 1221	NE	NA		NA		NA		NA		NA		0.39	U	NA		0.38	U	NA		0.39	U	0.39	U
Aroclor 1232	NE	NA		NA		NA		NA		NA		0.39	U	NA		0.38	U	NA		0.39	U	0.39	U
Aroclor 1242	NE	NA		NA		NA		NA		NA		0.39	U	NA		0.38	U	NA		0.39	U	0.39	U
Aroclor 1248	NE	NA		NA		NA		NA		NA		1.1	J	NA		0.38	U	NA		0.39	U	0.39	U
Aroclor 1254	NE	NA		NA		NA		NA		NA		0.39	U	NA		0.38	U	NA		0.39	U	0.39	U
Aroclor 1260	NE	NA		NA		NA		NA		NA		19	J	NA		0.38	U	NA		0.39	U	0.39	U
Total PCBs	NE	NA		NA		NA		NA		NA		20.1		NA		ND		NA		ND		ND	
Metals (ug/L)																							
Aluminum	NE	50.9	J	24.6	J	45.8	J	105	J	59.4	J	1300		24.4	J	582		255		29.1	J	200	U
Antimony	3	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Arsenic	25	10	U	10	U	19.9		10	U	10	U	10	U	10	U	22.7		10	U	4.3	J	3.2	J
Barium	1000	168	J	234		631		178	J	192	J	651		134	J	2360		237		205		194	J
Beryllium	3*	4	U	4	U	4	U	4	U	4	U	4	U	4	U	4	U	4	U	4	U	4	U
Cadmium	5	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Calcium	NE	178000		179000		155000		148000		144000		500000		158000		730000		148000		206000		197000	
Chromium	50	5	U	5	U	2.2	J	5	U	5	U	1.8	J	5	U	16.1		5	U	5	U	5	U
Cobalt	NE	50	U	50	U	1.5	J	50	U	50	U	3.2	J	50	U	4.1	J	50	U	50	U	50	U
Copper	200	25	U	25	U	25	U	25	U	25	U	25	U	25	U	4.9	J	25	U	25	U	25	U
Iron	300	4170		4150		46100		7690		9130		56600		5230		131000		7980		18000		15800	
Lead	25	2.4	J	2.4	J	3.6		2.6	J	1.7	J	6.3		2.7	J	8.1		2	J	3	U	3	U
Magnesium	35000*	28400		13400		28700		26800		22800		129000		25600		96700		24200		14900		14000	
Manganese	300	2440		827		1370		830		1470		10300		1160		10500		667		707		572	
Mercury	0.7	0.2	U	0.2	U	0.2	U	0.2	UJ	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Nickel	100	40	U	40	U	1.9	J	40	U	40	U	5.8	J	40	U	16.2	J	40	U	1.6	J	40	U
Potassium	NE	12400		14100		21100		15600		10200		6990		12900		25300		19900		11900	J	11800	J
Selenium	10	5	U	5	U	5	U	3.6	J	5	U	5	U	5	U	5	U	5	U	5.6	J	5	UJ
Silver	50	5	U	5	U	5	U	5	U	5	U	1.2	J	0.96	J	1.6	J	5	U	5	U	5	U
Sodium	20000	252000		373000		1930000		258000		193000		149000		289000		3370000		266000		188000		188000	
Thallium	0.5*	10	U	10	U	10	U	10	U	10	U	4.6	J	10	U	7.7	J	10	U	10	UJ	10	UJ
Vanadium	NE	50	U	50	U	2.9	J	50	U	50	U	2	J	50	U	50	U	50	U	50	U	50	U
Zinc	2000*	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	5.8	J	5.2	J
Total Cyanide (ug/L)																							
Cyanide, Total	200	10	U	354		43.6		12.6		10	U	68.3		10	U	73.8		10	U	25.7		29.6	

Table 8
2009 - 2010 Groundwater Analytical Results (ug/L)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Notes:

ug/L - micrograms per liter or parts per billion (ppb)
BTEX - benzene, toluene, ethylbenzene, and xylenes
VOCs - volatile organic compounds
PAHs - polycyclic aromatic hydrocarbons
PCBs - polychlorinated biphenyls
SVOCs - semivolatile organic compounds
Total BTEX, total VOCs, total PAHs, total PCBs, and total SVOCs are calculated using detects only.

NYS AWQS - New York State Ambient Water Quality Standards and Guidance Values for GA groundwater
* indicates the value is a guidance value and not a standard

NE - not established
NA - not analyzed
ND - not detected; total concentration is listed as ND because no compounds were detected in the group

Gray shading indicates that the detected result value exceeds NYS AWQS

Validation Qualifiers:

J - estimated value
U - indicates not detected to the reporting limit for organic analysis and the method detection limit for inorganic analysis
UJ - not detected at or above the reporting limit shown and the reporting limit is estimated

Validated

Table 9
2011 Postage Stamp - Surface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SS-128(11) 0 - 0.2 10/10/2011	SS-128(11) 0 - 0.2 10/21/2011	SS-129(11) 0 - 0.2 10/12/2011	SS-130(11) 0 - 0.2 10/10/2011	SS-130(11) 0 - 0.2 10/19/2011	SS-131(11) 0 - 0.2 10/10/2011	SS-132(11) 0 - 0.2 10/10/2011	SS-132(11) 0 - 0.2 10/20/2011	SS-133(11) 0 - 0.2 10/10/2011	SS-133(11) 0 - 0.2 10/20/2011
BTEX (mg/kg)												
Benzene	0.06	44	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Toluene	0.7	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	1	390	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Xylene	0.26	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total BTEX	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Non-carcinogenic PAHs (mg/kg)												
Acenaphthene	20	500	0.36 U	NA	0.41 U	0.36 U	NA	0.37 U	0.17 J	NA	0.46 U	NA
Acenaphthylene	100	500	0.36 U	NA	0.41 U	0.17 J	NA	0.37 U	0.36 U	NA	0.46 U	NA
Anthracene	100	500	0.36 U	NA	0.41 U	0.23 J	NA	0.37 U	0.51	NA	0.083 J	NA
Benzo[g,h,i]perylene	100	500	0.33 J	NA	0.087 J	0.92	NA	0.18 J	1	NA	0.87	NA
Fluoranthene	100	500	0.48	NA	0.15 J	2.2	NA	0.21 J	3.6	NA	1.8	NA
Fluorene	30	500	0.36 U	NA	0.41 U	0.36 U	NA	0.37 U	0.17 J	NA	0.46 U	NA
2-Methylnaphthalene	NE	NE	0.36 U	NA	0.41 U	0.36 U	NA	0.37 U	0.36 U	NA	0.46 U	NA
Naphthalene	12	500	0.36 U	NA	0.41 U	0.19 J	NA	0.37 U	0.36 U	NA	0.46 U	NA
Phenanthrene	100	500	0.17 J	NA	0.41 U	0.63	NA	0.078 J	2.6	NA	0.78	NA
Pyrene	100	500	0.51	NA	0.21 J	1.9	NA	0.2 J	2.9	NA	1.5	NA
Carcinogenic PAHs (mg/kg)												
Benz[a]anthracene	1	5.6	0.34	NA	0.087	1.4	NA	0.13	1.5	NA	0.68	NA
Benzo[a]pyrene	1	1	0.43	NA	0.093	1.4	NA	0.17	1.4	NA	1	NA
Benzo[b]fluoranthene	1	5.6	0.54	NA	0.12	1.6	NA	0.22	1.8	NA	1.6	NA
Benzo[k]fluoranthene	0.8	56	0.18	NA	0.066	0.56	NA	0.08	0.68	NA	0.49	NA
Chrysene	1	56	0.35 J	NA	0.11 J	1.2	NA	0.16 J	1.6	NA	1.3	NA
Dibenz[a,h]anthracene	0.33	0.56	0.061	NA	0.041 U	0.22	NA	0.031 J	0.24	NA	0.15	NA
Indeno[1,2,3-cd]pyrene	0.5	5.6	0.34	NA	0.089	1.1	NA	0.15	1.1	NA	0.98	NA
Total PAHs (mg/kg)												
Total PAHs	NE	NE	3.731	NA	1.012	13.72	NA	1.609	19.27	NA	11.233	NA
PCBs (mg/kg)												
Aroclor 1016	NE	NE	0.074 U	NA	0.084 U	0.073 U	NA	0.076 U	0.073 U	NA	0.093 U	NA
Aroclor 1221	NE	NE	0.074 U	NA	0.084 U	0.073 U	NA	0.076 U	0.073 U	NA	0.093 U	NA
Aroclor 1232	NE	NE	0.074 U	NA	0.084 U	0.073 U	NA	0.076 U	0.073 U	NA	0.093 U	NA
Aroclor 1242	NE	NE	0.074 U	NA	0.084 U	0.073 U	NA	0.076 U	0.073 U	NA	0.093 U	NA
Aroclor 1248	NE	NE	0.074 U	NA	0.084 U	0.073 U	NA	0.076 U	0.073 U	NA	0.093 U	NA
Aroclor 1254	NE	NE	0.074 U	NA	0.084 U	0.073 U	NA	0.076 U	0.073 U	NA	0.093 U	NA
Aroclor 1260	NE	NE	0.3	NA	0.21	0.29	NA	0.45	0.13	NA	0.061 J	NA
Total PCBs	0.1	1	0.3	NA	0.21	0.29	NA	0.45	0.13	NA	0.061	NA
Cyanides (mg/kg)												
Free Cyanide	NE	NE	NA	2.6 U	2.8 UJ	NA	2.7 U	NA	NA	2.6 U	NA	3.2 U
Total Cyanide	27	27	NA	3.9 J	0.63 UJ	NA	4.4	NA	NA	0.58 U	NA	0.7 U

Validated

Table 9
2011 Postage Stamp - Surface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SS-134(11) 0 - 0.2 10/10/2011	SS-134(11) 0 - 0.2 10/20/2011	SS-135(11) 0 - 0.2 10/11/2011	SS-135(11) 0 - 0.2 10/20/2011	SS-136(11) 0 - 0.2 10/11/2011	SS-136(11) 0 - 0.2 10/20/2011	SS-137(11) 0 - 0.2 10/10/2011	SS-137(11) 0 - 0.2 10/20/2011	SS-138(11) 0 - 0.2 10/10/2011	SS-138(11) 0 - 0.2 10/20/2011
BTEX (mg/kg)												
Benzene	0.06	44	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Toluene	0.7	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	1	390	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Xylene	0.26	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total BTEX	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Non-carcinogenic PAHs (mg/kg)												
Acenaphthene	20	500	0.36 U	NA	0.69 U	NA	0.065 J	NA	0.36 U	NA	0.36 U	NA
Acenaphthylene	100	500	0.06 J	NA	0.69 U	NA	0.36 U	NA	0.36 U	NA	0.06 J	NA
Anthracene	100	500	0.11 J	NA	0.69 U	NA	0.21 J	NA	0.088 J	NA	0.17 J	NA
Benzo[g,h,i]perylene	100	500	0.68	NA	0.24 J	NA	1.7 J	NA	0.32 J	NA	0.63	NA
Fluoranthene	100	500	1.3	NA	0.35 J	NA	4.4 J	NA	0.86	NA	1.2	NA
Fluorene	30	500	0.36 U	NA	0.69 U	NA	0.065 J	NA	0.36 U	NA	0.36 U	NA
2-Methylnaphthalene	NE	NE	0.36 U	NA	0.69 U	NA	0.36 U	NA	0.36 U	NA	0.11 J	NA
Naphthalene	12	500	0.36 U	NA	0.69 U	NA	0.36 U	NA	0.36 U	NA	0.075 J	NA
Phenanthrene	100	500	0.54	NA	0.15 J	NA	1.8	NA	0.47	NA	0.62	NA
Pyrene	100	500	1.1	NA	0.59 J	NA	5	NA	0.83	NA	0.89	NA
Carcinogenic PAHs (mg/kg)												
Benz[a]anthracene	1	5.6	0.7	NA	0.35	NA	2.2	NA	0.4	NA	0.61	NA
Benzo[a]pyrene	1	1	0.99	NA	0.5 J	NA	3.6 J	NA	0.43	NA	0.69	NA
Benzo[b]fluoranthene	1	5.6	1.2	NA	0.61 J	NA	6.8 J	NA	0.51	NA	1	NA
Benzo[k]fluoranthene	0.8	56	0.42	NA	0.29 J	NA	2.4 J	NA	0.2	NA	0.37	NA
Chrysene	1	56	0.88	NA	0.45 J	NA	4.9	NA	0.49	NA	0.71	NA
Dibenz[a,h]anthracene	0.33	0.56	0.16	NA	0.064 J	NA	0.48 J	NA	0.067	NA	0.12	NA
Indeno[1,2,3-cd]pyrene	0.5	5.6	0.78	NA	0.21 J	NA	1.8 J	NA	0.35	NA	0.7	NA
Total PAHs (mg/kg)												
Total PAHs	NE	NE	8.92	NA	3.804	NA	35.42	NA	5.015	NA	7.955	NA
PCBs (mg/kg)												
Aroclor 1016	NE	NE	0.37 U	NA	0.07 U	NA	0.073 U	NA	0.073 U	NA	0.37 U	NA
Aroclor 1221	NE	NE	0.37 U	NA	0.07 U	NA	0.073 U	NA	0.073 U	NA	0.37 U	NA
Aroclor 1232	NE	NE	0.37 U	NA	0.07 U	NA	0.073 U	NA	0.073 U	NA	0.37 U	NA
Aroclor 1242	NE	NE	0.37 U	NA	0.07 U	NA	0.073 U	NA	0.073 U	NA	0.37 U	NA
Aroclor 1248	NE	NE	0.37 U	NA	0.07 U	NA	0.073 U	NA	0.073 U	NA	0.37 U	NA
Aroclor 1254	NE	NE	0.37 U	NA	0.07 U	NA	0.073 U	NA	0.073 U	NA	0.37 U	NA
Aroclor 1260	NE	NE	6.9	NA	0.24	NA	0.084	NA	0.43	NA	6.4	NA
Total PCBs	0.1	1	6.9	NA	0.24	NA	0.084	NA	0.43	NA	6.4	NA
Cyanides (mg/kg)												
Free Cyanide	NE	NE	NA	1.3 J	NA	2.5 U	NA	0.79 J	NA	2.6 U	NA	0.86 J
Total Cyanide	27	27	NA	0.55 U	NA	0.56 U	NA	0.55 U	NA	1.2	NA	4.7

Validated

Table 9
2011 Postage Stamp - Surface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SS-139(11) 0 - 0.2 10/11/2011	SS-139(11) 0 - 0.2 10/20/2011	SS-140(11) 0 - 0.2 10/11/2011	SS-140(11) 0 - 0.2 10/21/2011	SS-141(11) 0 - 0.2 10/11/2011	SS-141(11) 0 - 0.2 10/21/2011	SS-142(11) 0 - 0.2 10/11/2011	SS-142(11) 0 - 0.2 10/21/2011	SS-143(11) 0 - 0.2 10/11/2011	Duplicate of: SS-143(11) 0 - 0.2 10/11/2011
BTEX (mg/kg)												
Benzene	0.06	44	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Toluene	0.7	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	1	390	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Xylene	0.26	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total BTEX	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Non-carcinogenic PAHs (mg/kg)												
Acenaphthene	20	500	0.42	NA	0.73 J	NA	0.076 J	NA	0.36 U	NA	0.26 J	0.056 J
Acenaphthylene	100	500	0.4 U	NA	0.77 U	NA	0.23 J	NA	0.36 U	NA	0.35 U	0.35 U
Anthracene	100	500	1.2	NA	1.9	NA	0.28 J	NA	0.085 J	NA	0.93 J	0.13 J
Benzo[g,h,i]perylene	100	500	3.7	NA	3.4	NA	0.42 J	NA	0.35 J	NA	1.8 J	0.55 J
Fluoranthene	100	500	9.2	NA	9.4	NA	1.6	NA	0.6	NA	4.5 J	0.8 J
Fluorene	30	500	0.46	NA	0.67 J	NA	0.098 J	NA	0.36 U	NA	0.28 J	0.062 J
2-Methylnaphthalene	NE	NE	0.072 J	NA	0.15 J	NA	0.085 J	NA	0.36 U	NA	0.35 U	0.35 U
Naphthalene	12	500	0.23 J	NA	0.38 J	NA	0.17 J	NA	0.36 U	NA	0.35 U	0.35 U
Phenanthrene	100	500	4.8	NA	8	NA	0.97	NA	0.32 J	NA	3 J	0.62 J
Pyrene	100	500	7.6	NA	13	NA	1.8	NA	0.93	NA	6.1 J	1.4 J
Carcinogenic PAHs (mg/kg)												
Benz[a]anthracene	1	5.6	4.3	NA	7.4	NA	1	NA	0.5	NA	3.3 J	0.61 J
Benzo[a]pyrene	1	1	4.8	NA	7	NA	1.1 J	NA	0.54 J	NA	2.7 J	0.66 J
Benzo[b]fluoranthene	1	5.6	5.6	NA	9.2	NA	1.5 J	NA	0.75 J	NA	3.3 J	0.71 J
Benzo[k]fluoranthene	0.8	56	2.4	NA	3.8	NA	0.64 J	NA	0.35 J	NA	1.5 J	0.39 J
Chrysene	1	56	4.4	NA	7.4	NA	1.1	NA	0.67	NA	3.5 J	0.7 J
Dibenz[a,h]anthracene	0.33	0.56	0.84	NA	0.91	NA	0.11 J	NA	0.064 J	NA	0.48 J	0.12 J
Indeno[1,2,3-cd]pyrene	0.5	5.6	3.8	NA	3.6	NA	0.44 J	NA	0.36 J	NA	1.7 J	0.54 J
Total PAHs (mg/kg)												
Total PAHs	NE	NE	53.822	NA	76.94	NA	11.619	NA	5.519	NA	33.35	7.348
PCBs (mg/kg)												
Aroclor 1016	NE	NE	0.08 U	NA	0.078 U	NA	0.075 U	NA	0.074 U	NA	0.072 U	0.072 U
Aroclor 1221	NE	NE	0.08 U	NA	0.078 U	NA	0.075 U	NA	0.074 U	NA	0.072 U	0.072 U
Aroclor 1232	NE	NE	0.08 U	NA	0.078 U	NA	0.075 U	NA	0.074 U	NA	0.072 U	0.072 U
Aroclor 1242	NE	NE	0.08 U	NA	0.078 U	NA	0.075 U	NA	0.074 U	NA	0.072 U	0.072 U
Aroclor 1248	NE	NE	0.08 U	NA	0.078 U	NA	0.075 U	NA	0.074 U	NA	0.072 U	0.072 U
Aroclor 1254	NE	NE	0.08 U	NA	0.078 U	NA	0.075 U	NA	0.074 U	NA	0.072 U	0.072 U
Aroclor 1260	NE	NE	0.078 J	NA	0.26	NA	0.64	NA	0.55	NA	0.05 J	0.032 J
Total PCBs	0.1	1	0.078	NA	0.26	NA	0.64	NA	0.55	NA	0.05	0.032
Cyanides (mg/kg)												
Free Cyanide	NE	NE	NA	2.8 U	NA	2.5 U	NA	2.7 U	NA	2.7 U	NA	NA
Total Cyanide	27	27	NA	0.61 U	NA	1.4 J	NA	1.6 J	NA	0.62 U	NA	NA

Table 9
2011 Postage Stamp - Surface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SS-143(11) 0 - 0.2 10/20/2011	SS-144(11) 0 - 0.2 10/11/2011	SS-144(11) 0 - 0.2 10/21/2011	Duplicate of: SS-144(11) 0 - 0.2 10/21/2011	SS-145(11) 0 - 0.2 10/11/2011	SS-145(11) 0 - 0.2 10/21/2011	SS-146(11) 0 - 0.2 10/11/2011	SS-146(11) 0 - 0.2 10/21/2011	SS-147(11) 0 - 0.2 10/11/2011	SS-147(11) 0 - 0.2 10/21/2011
BTEX (mg/kg)												
Benzene	0.06	44	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Toluene	0.7	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	1	390	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Xylene	0.26	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total BTEX	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Non-carcinogenic PAHs (mg/kg)												
Acenaphthene	20	500	NA	0.8	NA	NA	0.73 J	NA	0.35 U	NA	0.14 J	NA
Acenaphthylene	100	500	NA	0.78 U	NA	NA	0.78 U	NA	0.35 U	NA	0.36 U	NA
Anthracene	100	500	NA	2.1	NA	NA	2.1	NA	0.079 J	NA	0.44	NA
Benzo[g,h,i]perylene	100	500	NA	6.7	NA	NA	6.5	NA	0.42 J	NA	1.3	NA
Fluoranthene	100	500	NA	11	NA	NA	18	NA	0.48	NA	2.2	NA
Fluorene	30	500	NA	0.75 J	NA	NA	0.77 J	NA	0.35 U	NA	0.15 J	NA
2-Methylnaphthalene	NE	NE	NA	0.18 J	NA	NA	0.14 J	NA	0.35 U	NA	0.059 J	NA
Naphthalene	12	500	NA	0.53 J	NA	NA	0.37 J	NA	0.35 U	NA	0.19 J	NA
Phenanthrene	100	500	NA	8.2	NA	NA	8.7	NA	0.31 J	NA	1.6	NA
Pyrene	100	500	NA	16	NA	NA	15	NA	0.75	NA	3.6	NA
Carcinogenic PAHs (mg/kg)												
Benz[a]anthracene	1	5.6	NA	8.5	NA	NA	8.1	NA	0.35	NA	1.9	NA
Benzo[a]pyrene	1	1	NA	8.1	NA	NA	8.5	NA	0.41 J	NA	1.8	NA
Benzo[b]fluoranthene	1	5.6	NA	8.7	NA	NA	9.3	NA	0.45 J	NA	2	NA
Benzo[k]fluoranthene	0.8	56	NA	4.6	NA	NA	3.9	NA	0.25 J	NA	0.84	NA
Chrysene	1	56	NA	8.4	NA	NA	7.9	NA	0.45	NA	2.1	NA
Dibenz[a,h]anthracene	0.33	0.56	NA	1.6	NA	NA	1.4	NA	0.12 J	NA	0.13	NA
Indeno[1,2,3-cd]pyrene	0.5	5.6	NA	6.5	NA	NA	7	NA	0.37 J	NA	1.2	NA
Total PAHs (mg/kg)												
Total PAHs	NE	NE	NA	92.66	NA	NA	98.41	NA	4.439	NA	19.649	NA
PCBs (mg/kg)												
Aroclor 1016	NE	NE	NA	0.08 U	NA	NA	0.079 U	NA	0.071 U	NA	0.073 U	NA
Aroclor 1221	NE	NE	NA	0.08 U	NA	NA	0.079 U	NA	0.071 U	NA	0.073 U	NA
Aroclor 1232	NE	NE	NA	0.08 U	NA	NA	0.079 U	NA	0.071 U	NA	0.073 U	NA
Aroclor 1242	NE	NE	NA	0.08 U	NA	NA	0.079 U	NA	0.071 U	NA	0.073 U	NA
Aroclor 1248	NE	NE	NA	0.08 U	NA	NA	0.079 U	NA	0.071 U	NA	0.073 U	NA
Aroclor 1254	NE	NE	NA	0.08 U	NA	NA	0.079 U	NA	0.071 U	NA	0.073 U	NA
Aroclor 1260	NE	NE	NA	0.17	NA	NA	0.11	NA	0.36	NA	0.33 J	NA
Total PCBs	0.1	1	NA	0.17	NA	NA	0.11	NA	0.36	NA	0.33	NA
Cyanides (mg/kg)												
Free Cyanide	NE	NE	0.81 J	NA	2.7 U	2.8 U	NA	2.9 U	NA	2.4 U	NA	2.4 U
Total Cyanide	27	27	0.56 U	NA	0.6 U	0.61 U	NA	0.66 U	NA	0.55 U	NA	0.7 J

Validated

Table 9
2011 Postage Stamp - Surface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SS-148(11) 0 - 0.2 10/11/2011	SS-149(11) 0 - 0.2 10/11/2011	SS-150(11) 0 - 0.2 10/12/2011	SS-151(11) 0 - 0.2 10/12/2011	SS-152(11) 0 - 0.2 10/12/2011	SS-153(11) 0 - 0.2 10/12/2011	SS-154(11) 0 - 0.2 10/12/2011	SS-154(11) 0 - 0.2 10/21/2011	SS-155(11) 0 - 0.2 10/12/2011	SS-155(11) 0 - 0.2 10/21/2011
BTEX (mg/kg)												
Benzene	0.06	44	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Toluene	0.7	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	1	390	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Xylene	0.26	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total BTEX	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Non-carcinogenic PAHs (mg/kg)												
Acenaphthene	20	500	0.25 J	0.52 J	0.36 U	0.081 J	0.16 J	0.35 J	2.2 J	NA	0.079 J	NA
Acenaphthylene	100	500	0.06 J	0.76 U	0.36 U	0.14 J	0.38 U	0.86 U	0.67 J	NA	0.48	NA
Anthracene	100	500	0.88	1.4	0.1 J	0.42	0.61	1.1	3.7	NA	0.51	NA
Benzo[g,h,i]perylene	100	500	2.2	4.5	0.54	1.3	1.7	4.6	7.3	NA	1.9	NA
Fluoranthene	100	500	5.3	8	0.71	2.2	4	6.9	16	NA	2.4	NA
Fluorene	30	500	0.23 J	0.48 J	0.36 U	0.11 J	0.17 J	0.32 J	2 J	NA	0.13 J	NA
2-Methylnaphthalene	NE	NE	0.37 U	0.76 U	0.36 U	0.35 U	0.38 U	0.86 U	1.4 J	NA	0.074 J	NA
Naphthalene	12	500	0.13 J	0.24 J	0.36 U	0.064 J	0.08 J	0.19 J	5.3	NA	0.19 J	NA
Phenanthrene	100	500	3.5	5.6	0.41	1.5	2.4	4.6	17	NA	1.6	NA
Pyrene	100	500	7.7	12	1.2	4	5.8	13 J	21	NA	4	NA
Carcinogenic PAHs (mg/kg)												
Benz[a]anthracene	1	5.6	4.7	6.3	0.57	2	3.5	5.6	10	NA	2.4	NA
Benzo[a]pyrene	1	1	4.3	6	0.59	2	3.2	4.9	8.1	NA	2.2	NA
Benzo[b]fluoranthene	1	5.6	4.9	6.8	0.63	2	3.5	5	11	NA	3.2	NA
Benzo[k]fluoranthene	0.8	56	2.5	3.2	0.34	1.1	2	2.9	4.8	NA	1.3	NA
Chrysene	1	56	4.6	6.2	0.7	2.1	3.5	5.5	12	NA	2.9	NA
Dibenz[a,h]anthracene	0.33	0.56	0.71	0.97	0.15	0.37	0.44	0.9	0.63	NA	0.54	NA
Indeno[1,2,3-cd]pyrene	0.5	5.6	2.4	4.3	0.51	1.4	1.8	4.1	7.1	NA	1.9	NA
Total PAHs (mg/kg)												
Total PAHs	NE	NE	44.36	66.51	6.45	20.785	32.86	59.96	130.2	NA	25.803	NA
PCBs (mg/kg)												
Aroclor 1016	NE	NE	0.076 U	0.077 U	0.072 U	0.071 U	0.077 U	0.088 U	5.3 U	NA	3.9 U	NA
Aroclor 1221	NE	NE	0.076 U	0.077 U	0.072 U	0.071 U	0.077 U	0.088 U	5.3 U	NA	3.9 U	NA
Aroclor 1232	NE	NE	0.076 U	0.077 U	0.072 U	0.071 U	0.077 U	0.088 U	5.3 U	NA	3.9 U	NA
Aroclor 1242	NE	NE	0.076 U	0.077 U	0.072 U	0.071 U	0.077 U	0.088 U	5.3 U	NA	3.9 U	NA
Aroclor 1248	NE	NE	0.076 U	0.077 U	0.072 U	0.071 U	0.077 U	0.088 U	5.3 U	NA	3.9 U	NA
Aroclor 1254	NE	NE	0.076 U	0.077 U	0.072 U	0.071 U	0.077 U	0.4 J	5.3 U	NA	3.9 U	NA
Aroclor 1260	NE	NE	0.39	0.32	1.3 J	0.51	0.41	0.23 J	110	NA	61	NA
Total PCBs	0.1	1	0.39	0.32	1.3	0.51	0.41	0.63	110	NA	61	NA
Cyanides (mg/kg)												
Free Cyanide	NE	NE	2.6 U	NA	2.5 U	2.4 U	2.6 U	2.9 U	NA	2.8 U	NA	2.8 U
Total Cyanide	27	27	0.57 UJ	NA	0.3 J	0.24 J	0.57 UJ	0.65 UJ	65.2 J	NA	NA	101 J

Table 9
2011 Postage Stamp - Surface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Validated

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SS-156(11) 0 - 0.2 10/12/2011	SS-156(11) 0 - 0.2 10/21/2011	SS-157(11) 0 - 0.2 10/12/2011	SS-158(11) 0 - 0.2 10/12/2011	SS-158(11) 0 - 0.2 10/21/2011	SS-159(11) 0 - 0.2 10/12/2011	SS-160(11) 0 - 0.2 10/17/2011	SS-161(11) 0 - 0.2 10/17/2011	SS-162(11) 0 - 0.2 10/18/2011	SS-165(11) 0 - 0.2 10/19/2011
BTEX (mg/kg)												
Benzene	0.06	44	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Toluene	0.7	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	1	390	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Xylene	0.26	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total BTEX	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Non-carcinogenic PAHs (mg/kg)												
Acenaphthene	20	500	0.4 U	NA	0.16 J	0.38 U	NA	0.24 J	NA	NA	0.42 J	0.61 J
Acenaphthylene	100	500	0.89	NA	0.37 U	0.38 U	NA	0.39 U	NA	NA	0.57 J	0.78 U
Anthracene	100	500	0.64	NA	0.4	0.38 U	NA	0.73	NA	NA	1.4	1.6
Benzo[g,h,i]perylene	100	500	2.4	NA	1.2	0.38 U	NA	1.6	NA	NA	5.2	4.5
Fluoranthene	100	500	3.4	NA	2.2	0.38 U	NA	3.5	NA	NA	5.3	9.8
Fluorene	30	500	0.13 J	NA	0.14 J	0.38 U	NA	0.25 J	NA	NA	0.43 J	0.58 J
2-Methylnaphthalene	NE	NE	0.13 J	NA	0.12 J	0.38 U	NA	0.39 U	NA	NA	0.18 J	0.78 U
Naphthalene	12	500	0.39 J	NA	0.47	0.38 U	NA	0.13 J	NA	NA	0.32 J	0.24 J
Phenanthrene	100	500	1.8	NA	1.7	0.38 U	NA	3	NA	NA	6.8	7.1
Pyrene	100	500	5.2	NA	4.4	0.078 J	NA	5.5	NA	NA	14	10
Carcinogenic PAHs (mg/kg)												
Benz[a]anthracene	1	5.6	3.8	NA	2	0.046	NA	3	NA	NA	5.6	5.8
Benzo[a]pyrene	1	1	3.5	NA	1.9	0.043	NA	2.7	NA	NA	4.8	5.8
Benzo[b]fluoranthene	1	5.6	5.4	NA	2.2	0.066	NA	2.9	NA	NA	5.8	6.5
Benzo[k]fluoranthene	0.8	56	2.7	NA	0.86	0.038 U	NA	1.7	NA	NA	2.7	2.6
Chrysene	1	56	4.3	NA	2.1	0.38 U	NA	3.1	NA	NA	6.6	5.3
Dibenz[a,h]anthracene	0.33	0.56	0.79	NA	0.3	0.038 U	NA	0.45	NA	NA	1.4	0.83
Indeno[1,2,3-cd]pyrene	0.5	5.6	2.7	NA	1.3	0.037 J	NA	1.7	NA	NA	5	4.8
Total PAHs (mg/kg)												
Total PAHs	NE	NE	38.17	NA	21.45	0.27	NA	30.5	NA	NA	66.52	66.06
PCBs (mg/kg)												
Aroclor 1016	NE	NE	0.16 U	NA	0.075 U	0.077 U	NA	0.079 U	0.083 U	0.08 U	5.1 U	0.08 U
Aroclor 1221	NE	NE	0.16 U	NA	0.075 U	0.077 U	NA	0.079 U	0.083 U	0.08 U	5.1 U	0.08 U
Aroclor 1232	NE	NE	0.16 U	NA	0.075 U	0.077 U	NA	0.079 U	0.083 U	0.08 U	5.1 U	0.08 U
Aroclor 1242	NE	NE	0.16 U	NA	0.075 U	0.077 U	NA	0.079 U	0.083 U	0.08 U	5.1 U	0.08 U
Aroclor 1248	NE	NE	0.16 U	NA	0.075 U	0.077 U	NA	0.079 U	0.083 U	0.08 U	5.1 U	0.08 U
Aroclor 1254	NE	NE	0.16 U	NA	0.075 U	0.077 U	NA	0.47 J	0.083 U	0.08 U	5.1 U	0.08 U
Aroclor 1260	NE	NE	2.7 J	NA	0.16	0.41	NA	0.75 J	0.45	0.19	70	0.15
Total PCBs	0.1	1	2.7	NA	0.16	0.41	NA	1.22	0.45	0.19	70	0.15
Cyanides (mg/kg)												
Free Cyanide	NE	NE	NA	2.8 U	2.5 U	NA	2.6 U	1.1 U	2.8 U	2.7 U	3.3 U	2.7 U
Total Cyanide	27	27	93.1 J	NA	0.56 UJ	NA	0.57 U	0.59 UJ	0.62 UJ	5 J	52 J	0.2 J

Table 9
2011 Postage Stamp - Surface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-166(11) 0.2 - 1.0 10/19/2011	SS-167(11) 0 - 0.2 10/19/2011	SS-168(11) 0 - 0.2 10/19/2011	SS-169(11) 0 - 0.2 10/19/2011	TP-2(11)(SS) NA 10/11/2011
BTEX (mg/kg)							
Benzene	0.06	44	NA	NA	NA	NA	0.0056 U
Toluene	0.7	500	NA	NA	NA	NA	0.0056 U
Ethylbenzene	1	390	NA	NA	NA	NA	0.0056 U
Total Xylene	0.26	500	NA	NA	NA	NA	0.0056 U
Total BTEX	NE	NE	NA	NA	NA	NA	ND
Non-carcinogenic PAHs (mg/kg)							
Acenaphthene	20	500	0.23 J	0.16 J	0.38 U	0.37 U	0.37 U
Acenaphthylene	100	500	0.15 J	0.39 U	0.38 U	0.37 U	0.094 J
Anthracene	100	500	0.67	0.49	0.38 U	0.075 J	0.13 J
Benzo[g,h,i]perylene	100	500	1.4	2.2	0.18 J	0.28 J	0.8
Fluoranthene	100	500	3.5	3.3	0.31 J	0.63	1.6
Fluorene	30	500	0.26 J	0.15 J	0.38 U	0.37 U	0.37 U
2-Methylnaphthalene	NE	NE	0.38 U	0.39 U	0.38 U	0.37 U	0.37 U
Naphthalene	12	500	0.12 J	0.082 J	0.38 U	0.37 U	0.37 U
Phenanthrene	100	500	2.3	2.2	0.11 J	0.34 J	0.64
Pyrene	100	500	3.1	6.4	0.28 J	1.1 J	1.4
Carcinogenic PAHs (mg/kg)							
Benz[a]anthracene	1	5.6	1.7	2.9	0.13	0.46 J	0.82
Benzo[a]pyrene	1	1	1.7	2.7	0.19	0.49 J	1
Benzo[b]fluoranthene	1	5.6	2	2.8	0.3	0.73 J	1.2
Benzo[k]fluoranthene	0.8	56	0.81	1.5	0.095	0.36 J	0.38
Chrysene	1	56	1.6	2.9	0.22 J	0.64 J	0.89
Dibenz[a,h]anthracene	0.33	0.56	0.33	0.52	0.04	0.1	0.16
Indeno[1,2,3-cd]pyrene	0.5	5.6	1.5	2.1	0.18	0.27 J	0.89
Total PAHs (mg/kg)							
Total PAHs	NE	NE	21.37	30.402	2.035	5.475	10.004
PCBs (mg/kg)							
Aroclor 1016	NE	NE	0.38 U	0.078 U	0.078 U	0.076 U	0.074 U
Aroclor 1221	NE	NE	0.38 U	0.078 U	0.078 U	0.076 U	0.074 U
Aroclor 1232	NE	NE	0.38 U	0.078 U	0.078 U	0.076 U	0.074 U
Aroclor 1242	NE	NE	0.38 U	0.078 U	0.078 U	0.076 U	0.074 U
Aroclor 1248	NE	NE	0.38 U	0.078 U	0.078 U	0.076 U	0.074 U
Aroclor 1254	NE	NE	0.38 U	0.078 U	0.078 U	0.076 U	0.074 U
Aroclor 1260	NE	NE	4	0.18	0.078 U	0.26	0.32
Total PCBs	0.1	1	4	0.18	ND	0.26	0.32
Cyanides (mg/kg)							
Free Cyanide	NE	NE	2.5 U	2.6 U	2.6 U	2.5 U	NA
Total Cyanide	27	27	2.7 J	0.59 UJ	0.58 UJ	0.56 UJ	NA

Table 9
2011 Postage Stamp - Surface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Notes:

Sample SB-166(11) 0.2 - 1.0 was collected directly beneath a 2-inch layer of asphalt
Sample TP-2(11) SS was collected directly beneath a 4-inch layer of asphalt
mg/kg - milligrams/kilogram or parts per million (ppm)
PAHs - polycyclic aromatic hydrocarbons
PCBs - polychlorinated biphenyls
Total PAHs and Total PCBs are calculated using detects only.

6 NYCRR - New York State Register and Official Compilation of Codes, Rules and Regulations of the State of New York
6 NYCRR 375 SCO UNRESTRICTED USE - regulatory comparison against NYCRR, Chapter IV, Part 375-6 Unrestricted Use Soil Cleanup Objectives
6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL - regulatory comparison against NYCRR, Chapter IV, Part 375-6 Restricted Use Commercial Soil Cleanup Objectives

NE - not established
NA - not analyzed
ND - not detected; total concentration is listed as ND because no compounds were detected in the group

Yellow shading indicates that the detected result value exceeds established 6 NYCRR 375 SCO UNRESTRICTED USE and 6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL
Gray shading indicates that the detected result value exceeds established 6 NYCRR 375 SCO UNRESTRICTED USE

Validation Qualifiers:

J - estimated value
U - indicates not detected to the reporting limit
UJ - not detected at or above the reporting limit shown and the reporting limit is estimated

Table 10
2011 Postage Stamp -Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-128(11) 3 - 3.5 10/12/2011	Duplicate of: SB-128(11) 3 - 3.5 10/12/2011	SB-128(11) 7.5 - 10 10/18/2011	Duplicate of: SB-128(11) 7.5 - 10 10/18/2011	SB-128(11) 11.3 - 11.5 10/18/2011	SB-128(11) 13 - 15 10/18/2011	SB-128(11) 20 - 22 10/18/2011	Duplicate of: SB-128(11) 20 - 22 10/18/2011	SB-129(11) 3 - 3.5 10/12/2011	SB-130(11) 3 - 3.5 10/10/2011
BTEX (mg/kg)												
Benzene	0.06	44	0.006 U	0.0058 U	0.0058 U	0.0058 U	0.063	0.014 J	0.0043 J	0.0042 J	0.0058 U	0.0059 U
Toluene	0.7	500	0.006 U	0.0058 U	0.0058 U	0.0058 U	0.016	0.001 J	0.00097 J	0.00094 J	0.0058 U	0.0059 U
Ethylbenzene	1	390	0.006 U	0.0058 U	0.0058 U	0.0058 U	0.054	0.011 J	0.0021 J	0.0018 J	0.0058 U	0.0059 U
Total Xylene	0.26	500	0.006 U	0.0058 U	0.0058 U	0.0058 U	0.08	0.018 J	0.0083	0.0077	0.0058 U	0.0059 U
Total BTEX	NE	NE	ND	ND	ND	ND	0.213	0.044	0.01567	0.01464	ND	ND
Non-carcinogenic PAHs (mg/kg)												
Acenaphthene	20	500	0.39 U	0.061 J	0.38 U	0.38 U	NA	0.096 J	0.42 U	0.43 U	0.38 U	0.47 J
Acenaphthylene	100	500	0.39 U	0.13 J	0.077 J	0.1 J	NA	0.44 U	0.42 U	0.43 U	0.064 J	0.87
Anthracene	100	500	0.39 UJ	0.45 J	0.13 J	0.32 J	NA	0.44 U	0.42 U	0.43 U	0.38 U	1.5
Benzo[g,h,i]perylene	100	500	0.07 J	2 J	0.61	0.84	NA	0.44 U	0.42 U	0.43 U	0.41	5.4
Fluoranthene	100	500	0.091 J	3.7 J	0.96	1.6	NA	0.44 U	0.42 U	0.43 U	0.16 J	12
Fluorene	30	500	0.39 U	0.066 J	0.38 U	0.11 J	NA	0.44 U	0.42 U	0.43 U	0.38 U	0.58 J
2-Methylnaphthalene	NE	NE	0.39 U	0.38 U	0.38 U	0.11 J	NA	0.44 U	0.42 U	0.43 U	0.38 U	0.22 J
Naphthalene	12	500	0.39 U	0.2 J	0.07 J	0.26 J	NA	0.14 J	0.42 U	0.43 U	0.14 J	0.73 J
Phenanthrene	100	500	0.39 UJ	1.4 J	0.3 J	0.67	NA	0.086 J	0.42 U	0.43 U	0.14 J	5.1
Pyrene	100	500	0.12 J	5.1 J	1.5 J	2.6 J	NA	0.44 U	0.42 U	0.43 U	0.32 J	10
Carcinogenic PAHs (mg/kg)												
Benz[a]anthracene	1	5.6	0.079 J	3.4 J	0.8	1.3	NA	0.024 J	0.026 J	0.018 J	0.21	6.6
Benzo[a]pyrene	1	1	0.087 J	2.9 J	0.88	1.4	NA	0.044 U	0.017 J	0.043 U	0.28	7.6
Benzo[b]fluoranthene	1	5.6	0.11 J	3.4 J	1.1	1.6	NA	0.044 U	0.019 J	0.043 U	0.4	8.7
Benzo[k]fluoranthene	0.8	56	0.057 J	1.9 J	0.58	0.68	NA	0.044 U	0.042 U	0.043 U	0.19	3.1
Chrysene	1	56	0.078 J	3.4 J	0.88	1.3	NA	0.44 U	0.42 U	0.43 U	0.26 J	6
Dibenz[a,h]anthracene	0.33	0.56	0.039 UJ	0.5 J	0.15 J	0.26 J	NA	0.044 U	0.042 U	0.043 U	0.11	1.2
Indeno[1,2,3-cd]pyrene	0.5	5.6	0.072 J	2 J	0.67	0.91	NA	0.044 U	0.042 U	0.043 U	0.39	6.5
Total PAHs (mg/kg)												
Total PAHs	NE	500	0.764	30.607	8.707	14.06	NA	0.346	0.062	0.018	3.074	10
Other SVOCs (mg/kg)												
Acetophenone	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Atrazine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzaldehyde	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Biphenyl	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(chloroisopropyl)ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-chloroethyl)ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-chloroethoxy)methane	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-ethylhexyl)phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Bromophenyl phenyl ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Butyl benzyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Caprolactam	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbazole	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	7	350	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3,3-Dichlorobenzidine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 10
2011 Postage Stamp -Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-128(11) 3 - 3.5 10/12/2011	Duplicate of: SB-128(11) 3 - 3.5 10/12/2011	SB-128(11) 7.5 - 10 10/18/2011	Duplicate of: SB-128(11) 7.5 - 10 10/18/2011	SB-128(11) 11.3 - 11.5 10/18/2011	SB-128(11) 13 - 15 10/18/2011	SB-128(11) 20 - 22 10/18/2011	Duplicate of: SB-128(11) 20 - 22 10/18/2011	SB-129(11) 3 - 3.5 10/12/2011	SB-130(11) 3 - 3.5 10/10/2011
2,4-Dichlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diethyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dimethyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-butyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-octyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	0.33	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachloroethane	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isophorone	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol (o-Cresol)	0.33	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol (p-Cresol)	0.33	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3-Nitroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrobenzene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitrophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodi-n-propylamine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pentachlorophenol	0.8	6.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenol	0.33	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCBs (mg/kg)												
Aroclor 1016	NE	NE	0.08 U	0.077 U	0.078 U	0.078 U	NA	0.089 U	0.085 U	0.087 U	0.078 U	0.079 U
Aroclor 1221	NE	NE	0.08 U	0.077 U	0.078 U	0.078 U	NA	0.089 U	0.085 U	0.087 U	0.078 U	0.079 U
Aroclor 1232	NE	NE	0.08 U	0.077 U	0.078 U	0.078 U	NA	0.089 U	0.085 U	0.087 U	0.078 U	0.079 U
Aroclor 1242	NE	NE	0.08 U	0.077 U	0.078 U	0.078 U	NA	0.089 U	0.085 U	0.087 U	0.078 U	0.079 U
Aroclor 1248	NE	NE	0.08 U	0.077 U	0.078 U	0.078 U	NA	0.089 U	0.085 U	0.087 U	0.078 U	0.079 U
Aroclor 1254	NE	NE	0.08 U	0.077 U	0.078 U	0.078 U	NA	0.089 U	0.085 U	0.087 U	0.078 U	0.079 U
Aroclor 1260	NE	NE	0.08 UJ	0.52 J	0.078 U	0.078 U	NA	0.089 U	0.085 U	0.087 U	0.078 U	0.84
Total PCBs	0.1	1	ND	0.52	ND	ND	NA	ND	ND	ND	ND	0.84
Cyanides (mg/kg)												
Free Cyanide	NE	NE	1.1 UJ	2.5 UJ	2.5 U	2.5 U	NA	2.8 U	2.7 U	2.7 U	2.5 UJ	NA
Total Cyanide	27	27	1.5 J	15.1 J	0.91 J	0.69 J	NA	0.67 UJ	0.64 UJ	0.63 UJ	25.7 J	NA
Other (mg/kg)												
Diesel Range Organics	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Gasoline Range Organics	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 10
2011 Postage Stamp -Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-130(11) 3 - 5 10/19/2011	SB-130(11) 9 - 10 10/12/2011	SB-130(11) 20 - 21 10/12/2011	SB-131(11) 3 - 3.5 10/10/2011	SB-131(11) 3 - 4 10/20/2011	SB-131(11) 7 - 8 10/12/2011	SB-131(11) 12.7 - 13.3 10/12/2011	SB-131(11) 24 - 25 10/12/2011	SB-132(11) 3 - 3.5 10/10/2011	SB-132(11) 3 - 3.5 10/20/2011
BTEX (mg/kg)												
Benzene	0.06	44	NA	7.8	0.0067 U	0.0057 U	NA	0.007 U	13	0.0068 U	0.0055 U	NA
Toluene	0.7	500	NA	7.9	0.0067 U	0.0057 U	NA	0.007 U	11	0.0068 U	0.0055 U	NA
Ethylbenzene	1	390	NA	16	0.0067 U	0.0057 U	NA	0.007 U	12	0.0068 U	0.0055 U	NA
Total Xylene	0.26	500	NA	45	0.0067 U	0.0057 U	NA	0.007 U	49	0.0068 U	0.0055 U	NA
Total BTEX	NE	NE	NA	76.7	ND	ND	NA	ND	85	ND	ND	NA
Non-carcinogenic PAHs (mg/kg)												
Acenaphthene	20	500	NA	55	0.068 J	0.37 U	NA	0.067 J	51	0.1 J	0.36 U	NA
Acenaphthylene	100	500	NA	13 J	0.44 U	0.37 U	NA	0.46 U	110	0.45 U	0.36 U	NA
Anthracene	100	500	NA	89	0.44 U	0.37 U	NA	0.46 U	150	0.45 U	0.36 U	NA
Benzo[g,h,i]perylene	100	500	NA	64	0.44 U	0.57	NA	0.21 J	63	0.45 U	0.22 J	NA
Fluoranthene	100	500	NA	220	0.44 U	0.58	NA	0.23 J	250	0.45 U	0.25 J	NA
Fluorene	30	500	NA	52	0.44 U	0.37 U	NA	0.46 U	120	0.45 U	0.36 U	NA
2-Methylnaphthalene	NE	NE	NA	11 J	0.24 J	0.37 U	NA	0.14 J	69	0.31 J	0.36 U	NA
Naphthalene	12	500	NA	37	1.2	0.37 U	NA	0.56	170	1.4	0.36 U	NA
Phenanthrene	100	500	NA	230	0.44 U	0.22 J	NA	0.14 J	510	0.45 U	0.069 J	NA
Pyrene	100	500	NA	290	0.44 U	0.64	NA	0.47	260	0.45 U	0.25 J	NA
Carcinogenic PAHs (mg/kg)												
Benz[a]anthracene	1	5.6	NA	130	0.018 J	0.51	NA	0.19	130	0.045 U	0.16	NA
Benzo[a]pyrene	1	1	NA	94	0.044 U	0.8	NA	0.23	100	0.045 U	0.2	NA
Benzo[b]fluoranthene	1	5.6	NA	110	0.044 U	0.91	NA	0.21	100	0.045 U	0.3	NA
Benzo[k]fluoranthene	0.8	56	NA	43	0.044 U	0.4	NA	0.13	52	0.045 U	0.1	NA
Chrysene	1	56	NA	110	0.44 U	0.55	NA	0.21 J	120	0.45 U	0.2 J	NA
Dibenz[a,h]anthracene	0.33	0.56	NA	17	0.044 U	0.11	NA	0.046 U	7.7	0.045 U	0.054	NA
Indeno[1,2,3-cd]pyrene	0.5	5.6	NA	70	0.044 U	0.64	NA	0.18	64	0.045 U	0.24	NA
Total PAHs (mg/kg)												
Total PAHs	NE	500	NA	1635	1.526	5.93	NA	2.967	2326.7	1.81	2.043	NA
Other SVOCs (mg/kg)												
Acetophenone	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Atrazine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzaldehyde	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Biphenyl	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(chloroisopropyl)ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-chloroethyl)ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-chloroethoxy)methane	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-ethylhexyl)phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Bromophenyl phenyl ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Butyl benzyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Caprolactam	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbazole	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	7	350	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3,3-Dichlorobenzidine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 10
2011 Postage Stamp -Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-130(11) 3 - 5 10/19/2011	SB-130(11) 9 - 10 10/12/2011	SB-130(11) 20 - 21 10/12/2011	SB-131(11) 3 - 3.5 10/10/2011	SB-131(11) 3 - 4 10/20/2011	SB-131(11) 7 - 8 10/12/2011	SB-131(11) 12.7 - 13.3 10/12/2011	SB-131(11) 24 - 25 10/12/2011	SB-132(11) 3 - 3.5 10/10/2011	SB-132(11) 3 - 3.5 10/20/2011
2,4-Dichlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diethyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dimethyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-butyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-octyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	0.33	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachloroethane	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isophorone	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol (o-Cresol)	0.33	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol (p-Cresol)	0.33	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3-Nitroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrobenzene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitrophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodi-n-propylamine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pentachlorophenol	0.8	6.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenol	0.33	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCBs (mg/kg)												
Aroclor 1016	NE	NE	NA	0.084 U	0.09 U	0.076 U	NA	0.093 U	0.09 U	0.091 U	0.074 U	NA
Aroclor 1221	NE	NE	NA	0.084 U	0.09 U	0.076 U	NA	0.093 U	0.09 U	0.091 U	0.074 U	NA
Aroclor 1232	NE	NE	NA	0.084 U	0.09 U	0.076 U	NA	0.093 U	0.09 U	0.091 U	0.074 U	NA
Aroclor 1242	NE	NE	NA	0.084 U	0.09 U	0.076 U	NA	0.093 U	0.09 U	0.091 U	0.074 U	NA
Aroclor 1248	NE	NE	NA	0.084 U	0.09 U	0.076 U	NA	0.093 U	0.09 U	0.091 U	0.074 U	NA
Aroclor 1254	NE	NE	NA	0.084 U	0.09 U	0.076 U	NA	0.093 U	0.09 U	0.091 U	0.074 U	NA
Aroclor 1260	NE	NE	NA	0.084 U	0.09 U	0.076 U	NA	0.093 U	0.09 U	0.091 U	0.082	NA
Total PCBs	0.1	1	NA	ND	ND	ND	NA	ND	ND	ND	0.082	NA
Cyanides (mg/kg)												
Free Cyanide	NE	NE	2.3 J	2.8 UJ	3.1 UJ	NA	1.6 J	3.1 UJ	2.9 U	3.1 U	NA	0.74 J
Total Cyanide	27	27	233	9 J	0.67 UJ	NA	1.2	23.7 J	6.2 J	0.68 UJ	NA	2.3
Other (mg/kg)												
Diesel Range Organics	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Gasoline Range Organics	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 10
2011 Postage Stamp -Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-132(11) 8.5 - 10 10/12/2011	SB-132(11) 13.3 - 13.8 10/12/2011	SB-132(11) 15 - 16 10/12/2011	SB-132(11) 25 - 26 10/12/2011	SB-133(11) 3 - 3.5 10/10/2011	SB-133(11) 3 - 3.5 10/20/2011	SB-133(11) 7.8 - 8.8 10/12/2011	SB-133(11) 13 - 13.3 10/12/2011	SB-133(11) 15 - 16 10/12/2011	SB-133(11) 21 - 22 10/12/2011
BTEX (mg/kg)												
Benzene	0.06	44	0.006 U	16	0.089	0.0072 U	0.0059 U	NA	0.0011 J	16	0.1	0.0067 U
Toluene	0.7	500	0.006 U	42	0.017	0.00021 J	0.0059 U	NA	0.00013 J	42	0.012	0.00078 J
Ethylbenzene	1	390	0.006 U	21	0.077	0.0072 U	0.0059 U	NA	0.0063 U	20	0.028	0.0068
Total Xylene	0.26	500	0.006 U	110	0.25	0.0072 U	0.0059 U	NA	0.0063 U	110	0.11	0.037
Total BTEX	NE	NE	ND	189	0.433	0.00021	ND	NA	0.00123	188	0.25	0.04458
Non-carcinogenic PAHs (mg/kg)												
Acenaphthene	20	500	0.1 J	NA	0.27 J	0.48 U	0.47 J	NA	0.41 U	NA	0.37 J	0.44 U
Acenaphthylene	100	500	0.4 U	NA	0.48	0.48 U	0.87	NA	0.41 U	NA	0.17 J	0.44 U
Anthracene	100	500	0.4 U	NA	0.67	0.48 U	1.5	NA	0.41 U	NA	0.91	0.09 J
Benzo[g,h,i]perylene	100	500	0.4 U	NA	0.24 J	0.48 U	5.4	NA	0.41 U	NA	0.27 J	0.44 U
Fluoranthene	100	500	0.4 U	NA	1.1	0.48 U	12	NA	0.41 U	NA	1.1	0.23 J
Fluorene	30	500	0.4 U	NA	0.54	0.48 U	0.58 J	NA	0.41 U	NA	0.7	0.095 J
2-Methylnaphthalene	NE	NE	0.2 J	NA	0.72	0.48 U	0.22 J	NA	0.41 U	NA	0.36 J	0.088 J
Naphthalene	12	500	0.57	NA	3.2	0.37 J	0.73 J	NA	0.12 J	NA	1.1	0.56
Phenanthrene	100	500	0.4 U	NA	2.1	0.1 J	5.1	NA	0.41 U	NA	2.6	0.38 J
Pyrene	100	500	0.4 U	NA	1.4	0.48 U	10	NA	0.083 J	NA	1.6	0.23 J
Carcinogenic PAHs (mg/kg)												
Benz[a]anthracene	1	5.6	0.04 U	NA	0.59	0.037 J	6.6	NA	0.046	NA	0.91	0.11
Benzo[a]pyrene	1	1	0.04 U	NA	0.46	0.048 U	7.6	NA	0.047	NA	0.55	0.082
Benzo[b]fluoranthene	1	5.6	0.04 U	NA	0.53	0.021 J	8.7	NA	0.043	NA	0.58	0.079
Benzo[k]fluoranthene	0.8	56	0.04 U	NA	0.23	0.048 U	3.1	NA	0.03 J	NA	0.3	0.065
Chrysene	1	56	0.4 U	NA	0.67	0.48 U	6	NA	0.41 U	NA	0.87	0.076 J
Dibenz[a,h]anthracene	0.33	0.56	0.04 U	NA	0.072	0.048 U	1.2	NA	0.041 U	NA	0.11	0.044 U
Indeno[1,2,3-cd]pyrene	0.5	5.6	0.04 U	NA	0.27	0.048 U	6.5	NA	0.02 J	NA	0.31	0.04 J
Total PAHs (mg/kg)												
Total PAHs	NE	500	0.87	NA	13.542	0.528	76.57	NA	0.389	NA	12.81	2.125
Other SVOCs (mg/kg)												
Acetophenone	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Atrazine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzaldehyde	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Biphenyl	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(chloroisopropyl)ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-chloroethyl)ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-chloroethoxy)methane	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-ethylhexyl)phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Bromophenyl phenyl ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Butyl benzyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Caprolactam	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbazole	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	7	350	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3,3-Dichlorobenzidine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 10
2011 Postage Stamp -Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-132(11) 8.5 - 10 10/12/2011	SB-132(11) 13.3 - 13.8 10/12/2011	SB-132(11) 15 - 16 10/12/2011	SB-132(11) 25 - 26 10/12/2011	SB-133(11) 3 - 3.5 10/10/2011	SB-133(11) 3 - 3.5 10/20/2011	SB-133(11) 7.8 - 8.8 10/12/2011	SB-133(11) 13 - 13.3 10/12/2011	SB-133(11) 15 - 16 10/12/2011	SB-133(11) 21 - 22 10/12/2011
2,4-Dichlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diethyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dimethyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-butyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-octyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	0.33	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachloroethane	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isophorone	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol (o-Cresol)	0.33	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol (p-Cresol)	0.33	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3-Nitroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrobenzene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitrophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodi-n-propylamine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pentachlorophenol	0.8	6.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenol	0.33	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCBs (mg/kg)												
Aroclor 1016	NE	NE	0.081 U	NA	0.091 U	0.097 U	0.079 U	NA	0.084 U	NA	0.09 U	0.09 U
Aroclor 1221	NE	NE	0.081 U	NA	0.091 U	0.097 U	0.079 U	NA	0.084 U	NA	0.09 U	0.09 U
Aroclor 1232	NE	NE	0.081 U	NA	0.091 U	0.097 U	0.079 U	NA	0.084 U	NA	0.09 U	0.09 U
Aroclor 1242	NE	NE	0.081 U	NA	0.091 U	0.097 U	0.079 U	NA	0.084 U	NA	0.09 U	0.09 U
Aroclor 1248	NE	NE	0.081 U	NA	0.091 U	0.097 U	0.079 U	NA	0.084 U	NA	0.09 U	0.09 U
Aroclor 1254	NE	NE	0.081 U	NA	0.091 U	0.097 U	0.079 U	NA	0.084 U	NA	0.09 U	0.09 U
Aroclor 1260	NE	NE	0.081 U	NA	0.091 U	0.097 U	0.84	NA	0.084 U	NA	0.09 U	0.09 U
Total PCBs	0.1	1	ND	NA	ND	ND	0.84	NA	ND	NA	ND	ND
Cyanides (mg/kg)												
Free Cyanide	NE	NE	2.7 U	NA	3.1 U	3.2 U	NA	2.5 U	2.9 U	NA	3.1 U	3 U
Total Cyanide	27	27	0.6 UJ	NA	0.68 UJ	0.72 UJ	NA	0.93	1.8 J	NA	0.67 UJ	0.67 UJ
Other (mg/kg)												
Diesel Range Organics	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Gasoline Range Organics	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 10
2011 Postage Stamp -Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-134(11) 3 - 3.5 10/10/2011	SB-134(11) 3 - 3.5 10/20/2011	SB-134(11) 8 - 10 10/13/2011	SB-134(11) 21 - 22 10/13/2011	SB-135(11) 2.75 - 3 10/13/2011	SB-135(11) 7.5 - 9 10/13/2011	SB-135(11) 10 - 12 10/13/2011	SB-135(11) 21.5 - 22.5 10/13/2011	SB-136(11) 3 - 5 10/12/2011	SB-136(11) 9.5 - 9.5 10/12/2011
BTEX (mg/kg)												
Benzene	0.06	44	0.0035 J	NA	2.8	0.034	NA	0.058	24	0.0072 U	NA	1.9
Toluene	0.7	500	0.0058 U	NA	0.17 J	0.0026 J	NA	0.0008 J	16	0.00042 J	NA	0.56 J
Ethylbenzene	1	390	0.0058 U	NA	0.31 J	0.013	NA	0.0015 J	16	0.0072 U	NA	0.47 J
Total Xylene	0.26	500	0.0058 U	NA	0.67 U	0.031	NA	0.025	44	0.011	NA	1
Total BTEX	NE	NE	0.0035	NA	3.28	0.0806	NA	0.0853	100	0.01142	NA	3.93
Non-carcinogenic PAHs (mg/kg)												
Acenaphthene	20	500	0.11 J	NA	3.5 J	0.48 U	14 J	3.9 J	250	0.47 U	NA	NA
Acenaphthylene	100	500	0.25 J	NA	2.7 J	0.48 U	8.7 J	1.4 J	190	0.47 U	NA	NA
Anthracene	100	500	1.1	NA	14	0.48 U	36	5.8	420	0.47 U	NA	NA
Benzo[g,h,i]perylene	100	500	3.4	NA	25	0.48 U	39	12	130	0.47 U	NA	NA
Fluoranthene	100	500	8.1	NA	64	0.48 U	190	39	750	0.47 U	NA	NA
Fluorene	30	500	0.3 J	NA	6 J	0.48 U	20	4.5	340	0.47 U	NA	NA
2-Methylnaphthalene	NE	NE	0.76 U	NA	9 U	0.48 U	7.5 J	4.5 U	280	0.47 U	NA	NA
Naphthalene	12	500	0.33 J	NA	3.8 J	0.37 J	43	3.1 J	980	0.27 J	NA	NA
Phenanthrene	100	500	3.6	NA	31	0.14 J	140	14	1300	0.47 U	NA	NA
Pyrene	100	500	8.3	NA	86	0.096 J	180	38	690	0.47 U	NA	NA
Carcinogenic PAHs (mg/kg)												
Benz[a]anthracene	1	5.6	4.2	NA	44	0.048	63	20	310	0.02 J	NA	NA
Benzo[a]pyrene	1	1	5	NA	37	0.048 U	72 J	22 J	280 J	0.047 U	NA	NA
Benzo[b]fluoranthene	1	5.6	5.6	NA	39	0.041 J	80	22	280	0.047 U	NA	NA
Benzo[k]fluoranthene	0.8	56	0.076 U	NA	17	0.048 U	31	9.6	140	0.047 U	NA	NA
Chrysene	1	56	3.9	NA	39	0.48 U	56	18	280	0.47 U	NA	NA
Dibenz[a,h]anthracene	0.33	0.56	0.57	NA	6.6	0.048 U	5.6	2.7	28	0.047 U	NA	NA
Indeno[1,2,3-cd]pyrene	0.5	5.6	3.8	NA	27	0.048 U	46	14	160	0.047 U	NA	NA
Total PAHs (mg/kg)												
Total PAHs	NE	500	48.56	NA	445.6	0.695	1031.8	230	6808	0.29	NA	NA
Other SVOCs (mg/kg)												
Acetophenone	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Atrazine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzaldehyde	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Biphenyl	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(chloroisopropyl)ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-chloroethyl)ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-chloroethoxy)methane	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-ethylhexyl)phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Bromophenyl phenyl ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Butyl benzyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Caprolactam	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbazole	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	7	350	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3,3-Dichlorobenzidine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 10
2011 Postage Stamp -Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-134(11) 3 - 3.5 10/10/2011	SB-134(11) 3 - 3.5 10/20/2011	SB-134(11) 8 - 10 10/13/2011	SB-134(11) 21 - 22 10/13/2011	SB-135(11) 2.75 - 3 10/13/2011	SB-135(11) 7.5 - 9 10/13/2011	SB-135(11) 10 - 12 10/13/2011	SB-135(11) 21.5 - 22.5 10/13/2011	SB-136(11) 3 - 5 10/12/2011	SB-136(11) 9.5 - 9.5 10/12/2011
2,4-Dichlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diethyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dimethyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-butyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-octyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	0.33	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachloroethane	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isophorone	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol (o-Cresol)	0.33	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol (p-Cresol)	0.33	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3-Nitroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrobenzene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitrophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodi-n-propylamine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pentachlorophenol	0.8	6.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenol	0.33	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCBs (mg/kg)												
Aroclor 1016	NE	NE	0.077 U	NA	0.091 U	0.098 U	0.081 U	0.091 UJ	0.085 UJ	0.096 UJ	NA	NA
Aroclor 1221	NE	NE	0.077 U	NA	0.091 U	0.098 U	0.081 U	0.091 U	0.085 U	0.096 U	NA	NA
Aroclor 1232	NE	NE	0.077 U	NA	0.091 U	0.098 U	0.081 U	0.091 U	0.085 U	0.096 U	NA	NA
Aroclor 1242	NE	NE	0.077 U	NA	0.091 U	0.098 U	0.081 U	0.091 U	0.085 U	0.096 U	NA	NA
Aroclor 1248	NE	NE	0.077 U	NA	0.091 U	0.098 U	0.081 U	0.091 U	0.085 U	0.096 U	NA	NA
Aroclor 1254	NE	NE	0.077 U	NA	0.091 U	0.098 U	0.081 U	0.091 U	0.085 U	0.096 U	NA	NA
Aroclor 1260	NE	NE	0.23	NA	0.091 U	0.098 U	0.081 U	0.091 U	0.085 UJ	0.096 UJ	NA	NA
Total PCBs	0.1	1	0.23	NA	ND	ND	ND	ND	ND	ND	NA	NA
Cyanides (mg/kg)												
Free Cyanide	NE	NE	NA	0.66 J	3.1 U	3.2 U	2.7 U	3.1 U	2.9 U	1.6 U	2.7 U	NA
Total Cyanide	27	27	NA	0.7	19.5 J	0.73 UJ	21.9 J	29 J	39.1 J	0.72 U	78.8 J	NA
Other (mg/kg)												
Diesel Range Organics	NE	NE	NA	NA	NA	NA	NA	NA	13000 J	NA	NA	NA
Gasoline Range Organics	NE	NE	NA	NA	NA	NA	NA	NA	340 J	NA	NA	NA

Table 10
2011 Postage Stamp -Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-136(11) 10 - 15 10/12/2011	Duplicate of: SB-136(11) 10 - 15 10/12/2011	SB-136(11)B 10 - 11 10/20/2011	Duplicate of: SB-136(11)B 10 - 11 10/20/2011	SB-136(11) 20 - 21 10/12/2011	SB-137(11) 3 - 3.5 10/10/2011	SB-137(11) 3 - 3.5 10/20/2011	SB-137(11) 8.5 - 10 10/12/2011	SB-137(11) 13.2 - 13.5 10/12/2011	Duplicate of: SB-137(11) 13.2 - 13.5 10/12/2011
BTEX (mg/kg)												
Benzene	0.06	44	90	93	92 J	17 J	0.0087	0.0054 U	NA	0.0026 J	2.6	5.8 J
Toluene	0.7	500	120	130	110 J	18 J	0.0051 J	0.0054 U	NA	0.00026 J	14 J	31 J
Ethylbenzene	1	390	66	80	69 J	14 J	0.0028 J	0.0054 U	NA	0.0062 U	19 J	41 J
Total Xylene	0.26	500	220	260	220 J	44 J	0.047	0.0054 U	NA	0.0062 U	68 J	140 J
Total BTEX	NE	NE	496	563	491	93	0.0636	ND	NA	0.00286	103.6	217.8
Non-carcinogenic PAHs (mg/kg)												
Acenaphthene	20	500	170 J	440 J	110 J	370 J	0.16 J	0.35 U	NA	0.072 J	NA	NA
Acenaphthylene	100	500	54	120	18 J	59 J	0.48 U	0.35 U	NA	0.41 U	NA	NA
Anthracene	100	500	220 J	430 J	160 J	470 J	0.18 J	0.35 U	NA	0.41 U	NA	NA
Benzo[g,h,i]perylene	100	500	100	200	140 J	240 J	0.064 J	0.05 J	NA	0.1 J	NA	NA
Fluoranthene	100	500	380 J	750 J	410 J	1000 J	0.37 J	0.088 J	NA	0.22 J	NA	NA
Fluorene	30	500	150 J	390 J	110 J	380 J	0.17 J	0.35 U	NA	0.41 U	NA	NA
2-Methylnaphthalene	NE	NE	130 J	360 J	78 J	330 J	0.2 J	0.35 U	NA	0.077 J	NA	NA
Naphthalene	12	500	360 J	1200 J	280 J	1100 J	0.83	0.35 U	NA	0.23 J	NA	NA
Phenanthrene	100	500	710 J	1800 J	410 J	1300 J	0.64	0.35 U	NA	0.17 J	NA	NA
Pyrene	100	500	450 J	1200 J	380 J	820 J	0.47 J	0.12 J	NA	0.32 J	NA	NA
Carcinogenic PAHs (mg/kg)												
Benz[a]anthracene	1	5.6	210 J	420 J	200 J	430 J	0.19	0.055	NA	0.16	NA	NA
Benzo[a]pyrene	1	1	150	340	210 J	440 J	0.15	0.064	NA	0.16	NA	NA
Benzo[b]fluoranthene	1	5.6	150	350	210 J	450 J	0.17	0.083	NA	0.17	NA	NA
Benzo[k]fluoranthene	0.8	56	85	190	100	160	0.087	0.025 J	NA	0.1	NA	NA
Chrysene	1	56	160 J	370 J	200 J	390 J	0.18 J	0.063 J	NA	0.16 J	NA	NA
Dibenz[a,h]anthracene	0.33	0.56	13	58	29	42	0.048 U	0.035 U	NA	0.034 J	NA	NA
Indeno[1,2,3-cd]pyrene	0.5	5.6	110	220	150	220	0.075	0.039	NA	0.11	NA	NA
Total PAHs (mg/kg)												
Total PAHs	NE	500	3602	8838	3195	8201	3.936	0.587	NA	2.083	NA	NA
Other SVOCs (mg/kg)												
Acetophenone	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Atrazine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzaldehyde	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Biphenyl	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(chloroisopropyl)ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-chloroethyl)ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-chloroethoxy)methane	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-ethylhexyl)phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Bromophenyl phenyl ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Butyl benzyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Caprolactam	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbazole	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	7	350	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3,3-Dichlorobenzidine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 10
2011 Postage Stamp -Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-136(11) 10 - 15 10/12/2011	Duplicate of: SB-136(11) 10 - 15 10/12/2011	SB-136(11)B 10 - 11 10/20/2011	Duplicate of: SB-136(11)B 10 - 11 10/20/2011	SB-136(11) 20 - 21 10/12/2011	SB-137(11) 3 - 3.5 10/10/2011	SB-137(11) 3 - 3.5 10/20/2011	SB-137(11) 8.5 - 10 10/12/2011	SB-137(11) 13.2 - 13.5 10/12/2011	Duplicate of: SB-137(11) 13.2 - 13.5 10/12/2011
2,4-Dichlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diethyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dimethyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-butyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-octyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	0.33	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachloroethane	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isophorone	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol (o-Cresol)	0.33	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol (p-Cresol)	0.33	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3-Nitroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrobenzene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitrophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodi-n-propylamine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pentachlorophenol	0.8	6.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenol	0.33	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCBs (mg/kg)												
Aroclor 1016	NE	NE	0.087 U	0.084 U	NA	NA	0.097 U	0.072 U	NA	0.083 U	NA	NA
Aroclor 1221	NE	NE	0.087 U	0.084 U	NA	NA	0.097 U	0.072 U	NA	0.083 U	NA	NA
Aroclor 1232	NE	NE	0.087 U	0.084 U	NA	NA	0.097 U	0.072 U	NA	0.083 U	NA	NA
Aroclor 1242	NE	NE	0.087 U	0.084 U	NA	NA	0.097 U	0.072 U	NA	0.083 U	NA	NA
Aroclor 1248	NE	NE	0.087 U	0.084 U	NA	NA	0.097 U	0.072 U	NA	0.083 U	NA	NA
Aroclor 1254	NE	NE	0.087 U	0.084 U	NA	NA	0.097 U	0.072 U	NA	0.083 U	NA	NA
Aroclor 1260	NE	NE	0.087 UJ	0.084 U	NA	NA	0.097 U	0.11	NA	0.083 U	NA	NA
Total PCBs	0.1	1	ND	ND	NA	NA	ND	0.11	NA	ND	NA	NA
Cyanides (mg/kg)												
Free Cyanide	NE	NE	3 UJ	2.9 UJ	NA	NA	3.2 UJ	NA	2.4 U	2.8 U	NA	NA
Total Cyanide	27	27	14.4 J	10.5 J	NA	NA	0.72 UJ	NA	0.53 U	16.1 J	NA	NA
Other (mg/kg)												
Diesel Range Organics	NE	NE	NA	NA	10000	12000	NA	NA	NA	NA	NA	NA
Gasoline Range Organics	NE	NE	NA	NA	160	210	NA	NA	NA	NA	NA	NA

Table 10
2011 Postage Stamp -Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-137(11) 19 - 20 10/12/2011	SB-138(11) 3 - 3.5 10/10/2011	SB-138(11) 3 - 3.5 10/20/2011	SB-138(11) 5 - 10 10/13/2011	SB-138(11) 12.2 - 12.5 10/13/2011	SB-138(11) 15 - 16 10/13/2011	SB-138(11) 22.5 - 23.5 10/13/2011	SB-139(11) 3 - 3.5 10/13/2011	SB-139(11) 8.5 - 10 10/13/2011	SB-139(11) 10 - 11.5 10/13/2011
BTEX (mg/kg)												
Benzene	0.06	44	0.0064 U	0.0059 U	NA	0.0082 U	24	1.9	0.0018 J	0.00076 J	0.039	7.3
Toluene	0.7	500	0.0064 U	0.0059 U	NA	0.0082 U	61	1.3	0.0019 J	0.0061 U	0.0098	9
Ethylbenzene	1	390	0.0064 U	0.0059 U	NA	0.0082 U	57	1.7	0.084	0.0061 U	0.0021 J	18
Total Xylene	0.26	500	0.0064 U	0.0059 U	NA	0.0082 U	300	8	0.14	0.0061 U	0.013	69
Total BTEX	NE	NE	ND	ND	NA	ND	442	12.9	0.2277	0.00076	0.0639	103.3
Non-carcinogenic PAHs (mg/kg)												
Acenaphthene	20	500	0.43 U	0.39 U	NA	5.4 U	NA	1.3	0.46 U	0.14 J	9.4 J	96
Acenaphthylene	100	500	0.43 U	0.065 J	NA	3.5 J	NA	0.87	0.46 U	0.61 J	12 J	11 J
Anthracene	100	500	0.43 U	0.12 J	NA	2.5 J	NA	2.6	0.46 U	0.68 J	40	120
Benzo[g,h,i]perylene	100	500	0.43 U	0.42	NA	45	NA	0.47	0.46 U	11	120	43
Fluoranthene	100	500	0.43 U	1.1	NA	60	NA	3.1	0.46 U	10	220	250
Fluorene	30	500	0.43 U	0.069 J	NA	5.4 U	NA	4	0.46 U	0.15 J	18 J	94
2-Methylnaphthalene	NE	NE	0.43 U	0.39 U	NA	5.4 U	NA	3.4	0.46 U	0.18 J	23 U	26
Naphthalene	12	500	0.17 J	0.24 J	NA	1.1 J	NA	4.4	0.4 J	0.68 J	13 J	100
Phenanthrene	100	500	0.43 U	0.99	NA	4.2 J	NA	6.3	0.46 U	2.5	64	390
Pyrene	100	500	0.43 U	1.1	NA	72	NA	2.8	0.46 U	11	410	230
Carcinogenic PAHs (mg/kg)												
Benz[a]anthracene	1	5.6	0.043 U	0.37	NA	34	NA	1.6	0.046 U	6.7	150	95
Benzo[a]pyrene	1	1	0.043 U	0.47	NA	52 J	NA	1.1 J	0.046 U	11	150	89
Benzo[b]fluoranthene	1	5.6	0.043 U	0.53	NA	63	NA	1.1	0.046 U	12	170	93
Benzo[k]fluoranthene	0.8	56	0.043 U	0.19	NA	21	NA	0.47	0.046 U	4	70	40
Chrysene	1	56	0.43 U	0.43	NA	29	NA	1.4	0.46 U	6.3	140	88
Dibenz[a,h]anthracene	0.33	0.56	0.043 U	0.057	NA	6.5	NA	0.17	0.046 U	1.8	28	8.6
Indeno[1,2,3-cd]pyrene	0.5	5.6	0.043 U	0.43	NA	47	NA	0.5	0.046 U	11	120	51
Total PAHs (mg/kg)												
Total PAHs	NE	500	0.17	6.581	NA	440.8	NA	35.58	0.4	89.74	1734.4	1824.6
Other SVOCs (mg/kg)												
Acetophenone	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Atrazine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzaldehyde	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Biphenyl	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(chloroisopropyl)ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-chloroethyl)ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-chloroethoxy)methane	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-ethylhexyl)phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Bromophenyl phenyl ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Butyl benzyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Caprolactam	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbazole	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	7	350	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3,3-Dichlorobenzidine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 10
2011 Postage Stamp -Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-137(11) 19 - 20 10/12/2011	SB-138(11) 3 - 3.5 10/10/2011	SB-138(11) 3 - 3.5 10/20/2011	SB-138(11) 5 - 10 10/13/2011	SB-138(11) 12.2 - 12.5 10/13/2011	SB-138(11) 15 - 16 10/13/2011	SB-138(11) 22.5 - 23.5 10/13/2011	SB-139(11) 3 - 3.5 10/13/2011	SB-139(11) 8.5 - 10 10/13/2011	SB-139(11) 10 - 11.5 10/13/2011
2,4-Dichlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diethyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dimethyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-butyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-octyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	0.33	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachloroethane	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isophorone	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol (o-Cresol)	0.33	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol (p-Cresol)	0.33	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3-Nitroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrobenzene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitrophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodi-n-propylamine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pentachlorophenol	0.8	6.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenol	0.33	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCBs (mg/kg)												
Aroclor 1016	NE	NE	0.086 U	0.079 U	NA	0.11 UJ	NA	0.085 UJ	0.093 UJ	0.081 UJ	0.095 UJ	0.085 UJ
Aroclor 1221	NE	NE	0.086 U	0.079 U	NA	0.11 U	NA	0.085 U	0.093 U	0.081 U	0.095 U	0.085 U
Aroclor 1232	NE	NE	0.086 U	0.079 U	NA	0.11 U	NA	0.085 U	0.093 U	0.081 U	0.095 U	0.085 U
Aroclor 1242	NE	NE	0.086 U	0.079 U	NA	0.11 U	NA	0.085 U	0.093 U	0.081 U	0.095 U	0.085 U
Aroclor 1248	NE	NE	0.086 U	0.079 U	NA	0.11 U	NA	0.085 U	0.093 U	0.081 U	0.095 U	0.085 U
Aroclor 1254	NE	NE	0.086 U	0.079 U	NA	0.11 U	NA	0.085 U	0.093 U	0.081 U	0.095 U	0.085 U
Aroclor 1260	NE	NE	0.086 U	0.051 J	NA	0.11 UJ	NA	0.085 UJ	0.093 UJ	0.081 UJ	0.095 UJ	0.085 UJ
Total PCBs	0.1	1	ND	0.051	NA	ND	NA	ND	ND	ND	ND	ND
Cyanides (mg/kg)												
Free Cyanide	NE	NE	2.9 U	NA	0.75 J	3.6 U	NA	2.9 U	3.2 U	2.8 U	3.1 U	2.8 U
Total Cyanide	27	27	0.64 UJ	NA	0.57 U	39.3 J	NA	0.79 J	0.7 UJ	50.3 J	35.3 J	20.3 J
Other (mg/kg)												
Diesel Range Organics	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Gasoline Range Organics	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 10
2011 Postage Stamp -Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-139(11) 22.8 - 23.6 10/13/2011	SB-140(11) 3 - 3.5 10/13/2011	SB-140(11) 8 - 10 10/13/2011	SB-140(11) 11.3 - 12.3 10/13/2011	SB-140(11) 19 - 20 10/13/2011	SB-141(11) 5 - 6 10/13/2011	SB-141(11) 11 - 12.5 10/13/2011	SB-141(11) 16 - 17 10/13/2011	SB-142(11) 3 - 3.5 10/11/2011	SB-142(11) 3 - 3.5 10/20/2011
BTEX (mg/kg)												
Benzene	0.06	44	0.0067 U	NA	4.8	9.1	0.023	0.007	12	0.0067 U	0.0073 U	NA
Toluene	0.7	500	0.00022 J	NA	1.1	13	0.001 J	0.001 J	13	0.00025 J	0.0073 U	NA
Ethylbenzene	1	390	0.0067 U	NA	0.27 J	16	0.039	0.0033 J	18	0.0067 U	0.0073 U	NA
Total Xylene	0.26	500	0.0075	NA	1.1	46	0.066	0.0044 J	54	0.014	0.0073 U	NA
Total BTEX	NE	NE	0.00772	NA	7.27	84.1	0.129	0.0157	97	0.01425	ND	NA
Non-carcinogenic PAHs (mg/kg)												
Acenaphthene	20	500	0.45 U	0.37 U	23 J	110	0.43 U	NA	140	0.12 J	2.4 U	NA
Acenaphthylene	100	500	0.45 U	0.37 U	18 J	87	0.43 U	NA	18 J	0.44 U	1.1 J	NA
Anthracene	100	500	0.45 U	0.37 U	100	170	0.43 U	NA	160	0.25 J	2.1 J	NA
Benzo[g,h,i]perylene	100	500	0.45 U	0.47	170	55	0.43 U	NA	60	0.13 J	7.3	NA
Fluoranthene	100	500	0.45 U	0.72	560	350	0.43 U	NA	320	0.66	13	NA
Fluorene	30	500	0.45 U	0.37 U	51	150	0.43 U	NA	120	0.19 J	0.63 J	NA
2-Methylnaphthalene	NE	NE	0.45 U	0.37 U	42 U	95	0.43 U	NA	61	0.079 J	2.4 U	NA
Naphthalene	12	500	0.17 J	0.14 J	23 J	240	0.27 J	NA	150	0.26 J	0.71 J	NA
Phenanthrene	100	500	0.45 U	0.23 J	290	590	0.43 U	NA	540	0.9	7.1	NA
Pyrene	100	500	0.45 U	0.79	660	310	0.43 U	NA	300	0.58	20	NA
Carcinogenic PAHs (mg/kg)												
Benz[a]anthracene	1	5.6	0.045 U	0.53	280	130	0.043 U	NA	130	0.26	11	NA
Benzo[a]pyrene	1	1	0.045 U	0.67	300	120	0.28	NA	130	0.25	9.5	NA
Benzo[b]fluoranthene	1	5.6	0.045 U	0.71	320	130	0.043 U	NA	130	0.31	11	NA
Benzo[k]fluoranthene	0.8	56	0.045 U	0.22	120	51	0.043 U	NA	55	0.099	5	NA
Chrysene	1	56	0.45 U	0.5	250	120	0.43 U	NA	110	0.25 J	9.7	NA
Dibenz[a,h]anthracene	0.33	0.56	0.045 U	0.092	29	13	0.043 U	NA	11	0.033 J	1.7	NA
Indeno[1,2,3-cd]pyrene	0.5	5.6	0.045 U	0.53	210	70	0.043 U	NA	66	0.17	8	NA
Total PAHs (mg/kg)												
Total PAHs	NE	500	0.17	5.602	3404	2791	0.55	NA	2501	4.541	107.84	NA
Other SVOCs (mg/kg)												
Acetophenone	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Atrazine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzaldehyde	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Biphenyl	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(chloroisopropyl)ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-chloroethyl)ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-chloroethoxy)methane	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-ethylhexyl)phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Bromophenyl phenyl ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Butyl benzyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Caprolactam	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbazole	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	7	350	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3,3-Dichlorobenzidine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 10
2011 Postage Stamp -Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-139(11) 22.8 - 23.6 10/13/2011	SB-140(11) 3 - 3.5 10/13/2011	SB-140(11) 8 - 10 10/13/2011	SB-140(11) 11.3 - 12.3 10/13/2011	SB-140(11) 19 - 20 10/13/2011	SB-141(11) 5 - 6 10/13/2011	SB-141(11) 11 - 12.5 10/13/2011	SB-141(11) 16 - 17 10/13/2011	SB-142(11) 3 - 3.5 10/11/2011	SB-142(11) 3 - 3.5 10/20/2011
2,4-Dichlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diethyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dimethyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-butyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-octyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	0.33	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachloroethane	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isophorone	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol (o-Cresol)	0.33	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol (p-Cresol)	0.33	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3-Nitroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrobenzene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitrophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodi-n-propylamine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pentachlorophenol	0.8	6.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenol	0.33	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCBs (mg/kg)												
Aroclor 1016	NE	NE	0.09 U	0.076 U	0.086 U	0.088 U	0.088 U	NA	0.092 U	0.09 U	0.097 U	NA
Aroclor 1221	NE	NE	0.09 U	0.076 U	0.086 U	0.088 U	0.088 U	NA	0.092 U	0.09 U	0.097 U	NA
Aroclor 1232	NE	NE	0.09 U	0.076 U	0.086 U	0.088 U	0.088 U	NA	0.092 U	0.09 U	0.097 U	NA
Aroclor 1242	NE	NE	0.09 U	0.076 U	0.086 U	0.088 U	0.088 U	NA	0.092 U	0.09 U	0.097 U	NA
Aroclor 1248	NE	NE	0.09 U	0.076 U	0.086 U	0.088 U	0.088 U	NA	0.092 U	0.09 U	0.097 U	NA
Aroclor 1254	NE	NE	0.09 U	0.076 U	0.086 U	0.088 U	0.088 U	NA	0.092 U	0.09 U	0.097 U	NA
Aroclor 1260	NE	NE	0.09 U	0.076 U	0.086 U	0.088 U	0.088 U	NA	0.092 U	0.09 U	0.097 U	NA
Total PCBs	0.1	1	ND	ND	ND	ND	ND	NA	ND	ND	ND	NA
Cyanides (mg/kg)												
Free Cyanide	NE	NE	3.1 U	2.5 U	2.9 U	3 U	3 U	NA	3 U	2.9 U	NA	0.68 J
Total Cyanide	27	27	0.67 UJ	0.21 J	22.2 J	42 J	0.66 UJ	NA	1.3 J	0.83 J	NA	0.41 J
Other (mg/kg)												
Diesel Range Organics	NE	NE	NA	NA	NA	1100 J	NA	NA	NA	NA	NA	NA
Gasoline Range Organics	NE	NE	NA	NA	NA	31 J	NA	NA	NA	NA	NA	NA

Table 10
2011 Postage Stamp -Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-142(11) 5.5 - 10 10/13/2011	SB-142(11) 12 - 14 10/13/2011	SB-142(11) 18.5 - 20 10/13/2011	SB-143(11) 2 - 4 10/14/2011	SB-143(11) 7.75 - 9.5 10/14/2011	SB-143(11) 17.75 - 19.75 10/14/2011	SB-144(11) 3 - 4 10/14/2011	SB-144(11) 11.3 - 11.3 10/14/2011	SB-144(11) 12.5 - 14 10/14/2011	SB-144(11) 20 - 21 10/14/2011
BTEX (mg/kg)												
Benzene	0.06	44	0.00074 J	0.0061 U	0.0066 U	0.0059 U	0.0065 U	0.0065 U	NA	1	0.06	0.0074 U
Toluene	0.7	500	0.00027 J	0.0061 U	0.0066 U	0.00017 J	0.00016 J	0.00017 J	NA	2.1	0.0013 J	0.0074 U
Ethylbenzene	1	390	0.0061 U	0.0061 U	0.0066 U	0.0059 U	0.0065 U	0.0065 U	NA	6.2	0.1	0.0074 U
Total Xylene	0.26	500	0.0061 U	0.00074 J	0.0066 U	0.0059 U	0.0065 U	0.0022 J	NA	15	0.09	0.0074 U
Total BTEX	NE	NE	0.00101	0.00074	ND	0.00017	0.00016	0.00237	NA	24.3	0.2513	ND
Non-carcinogenic PAHs (mg/kg)												
Acenaphthene	20	500	8.1 U	0.4 U	0.44 U	4.8 J	21 U	0.43 U	NA	NA	0.48	0.49 U
Acenaphthylene	100	500	3.1 J	0.4 U	0.44 U	9.8	6.1 J	0.43 U	NA	NA	0.42 U	0.49 U
Anthracene	100	500	14	0.4 U	0.44 U	45	34	0.11 J	NA	NA	0.39 J	0.49 U
Benzo[g,h,i]perylene	100	500	21	0.086 J	0.44 U	37	53	0.21 J	NA	NA	0.21 J	0.49 U
Fluoranthene	100	500	87	0.28 J	0.44 U	170	260	1.1	NA	NA	0.9	0.49 U
Fluorene	30	500	5.1 J	0.4 U	0.44 U	23	10 J	0.43 U	NA	NA	0.35 J	0.49 U
2-Methylnaphthalene	NE	NE	8.1 U	0.4 U	0.44 U	3.2 J	21 U	0.43 U	NA	NA	0.39 J	0.49 U
Naphthalene	12	500	8.1 U	0.13 J	0.065 J	4.3 J	21 U	0.098 J	NA	NA	7.1	0.25 J
Phenanthrene	100	500	37	0.099 J	0.44 U	180	90	0.17 J	NA	NA	0.99	0.49 U
Pyrene	100	500	97	0.29 J	0.44 U	160	220	0.84	NA	NA	0.9	0.49 U
Carcinogenic PAHs (mg/kg)												
Benz[a]anthracene	1	5.6	43	0.21	0.044 U	56	110	0.47	NA	NA	0.5	0.049 U
Benzo[a]pyrene	1	1	42	0.2	0.044 U	60	110	0.42	NA	NA	0.48	0.049 U
Benzo[b]fluoranthene	1	5.6	42	0.2	0.044 U	66	130	0.49	NA	NA	0.53	0.049 U
Benzo[k]fluoranthene	0.8	56	20	0.088	0.044 U	22	44	0.21	NA	NA	0.21	0.049 U
Chrysene	1	56	38	0.19 J	0.44 U	54	100	0.42 J	NA	NA	0.43	0.49 U
Dibenz[a,h]anthracene	0.33	0.56	4.3	0.028 J	0.044 U	3.8	11	0.038 J	NA	NA	0.062	0.049 U
Indeno[1,2,3-cd]pyrene	0.5	5.6	25	0.079	0.044 U	34	60	0.23	NA	NA	0.22	0.049 U
Total PAHs (mg/kg)												
Total PAHs	NE	500	478.5	1.88	0.065	932.9	1238.1	4.806	NA	NA	14.142	0.25
Other SVOCs (mg/kg)												
Acetophenone	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Atrazine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzaldehyde	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Biphenyl	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(chloroisopropyl)ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-chloroethyl)ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-chloroethoxy)methane	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-ethylhexyl)phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Bromophenyl phenyl ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Butyl benzyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Caprolactam	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbazole	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	7	350	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3,3-Dichlorobenzidine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 10
2011 Postage Stamp -Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-142(11) 5.5 - 10 10/13/2011	SB-142(11) 12 - 14 10/13/2011	SB-142(11) 18.5 - 20 10/13/2011	SB-143(11) 2 - 4 10/14/2011	SB-143(11) 7.75 - 9.5 10/14/2011	SB-143(11) 17.75 - 19.75 10/14/2011	SB-144(11) 3 - 4 10/14/2011	SB-144(11) 11.3 - 11.3 10/14/2011	SB-144(11) 12.5 - 14 10/14/2011	SB-144(11) 20 - 21 10/14/2011
2,4-Dichlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diethyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dimethyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-butyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-octyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	0.33	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachloroethane	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isophorone	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol (o-Cresol)	0.33	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol (p-Cresol)	0.33	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3-Nitroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrobenzene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitrophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodi-n-propylamine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pentachlorophenol	0.8	6.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenol	0.33	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCBs (mg/kg)												
Aroclor 1016	NE	NE	0.082 U	0.082 U	0.089 U	0.079 U	0.087 U	0.086 U	NA	NA	0.086 U	0.1 U
Aroclor 1221	NE	NE	0.082 U	0.082 U	0.089 U	0.079 U	0.087 U	0.086 U	NA	NA	0.086 U	0.1 U
Aroclor 1232	NE	NE	0.082 U	0.082 U	0.089 U	0.079 U	0.087 U	0.086 U	NA	NA	0.086 U	0.1 U
Aroclor 1242	NE	NE	0.082 U	0.082 U	0.089 U	0.079 U	0.087 U	0.086 U	NA	NA	0.086 U	0.1 U
Aroclor 1248	NE	NE	0.082 U	0.082 U	0.089 U	0.079 U	0.087 U	0.086 U	NA	NA	0.086 U	0.1 U
Aroclor 1254	NE	NE	0.082 U	0.082 U	0.089 U	0.079 U	0.087 U	0.086 U	NA	NA	0.086 U	0.1 U
Aroclor 1260	NE	NE	0.082 U	0.082 U	0.089 U	0.079 UJ	0.087 U	0.086 U	NA	NA	0.086 U	0.1 U
Total PCBs	0.1	1	ND	ND	ND	ND	ND	ND	NA	NA	ND	ND
Cyanides (mg/kg)												
Free Cyanide	NE	NE	2.7 U	0.78 J	2.9 U	1.3 J	1.4 J	1.4 J	1.1 J	NA	1.9 J	1.6 J
Total Cyanide	27	27	0.5 J	R	0.6 J	6.9 J	3.9 J	R	0.81 J	NA	R	R
Other (mg/kg)												
Diesel Range Organics	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Gasoline Range Organics	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 10
2011 Postage Stamp -Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-145(11) 3 - 3.2 10/11/2011	SB-145(11) 3 - 3.5 10/20/2011	SB-145(11) 7.5 - 9 10/14/2011	SB-145(11) 12 - 12.5 10/14/2011	SB-145(11) 16.5 - 17.5 10/14/2011	SB-146(11) 3 - 3.5 10/11/2011	SB-146(11) 10 - 11 10/17/2011	SB-146(11) 13.5 - 14.5 10/17/2011	SB-146(11) 17 - 18 10/17/2011	SB-147(11) 3 - 4.5 10/14/2011
BTEX (mg/kg)												
Benzene	0.06	44	0.0056 U	NA	0.0056 U	6.8	0.0068 U	NA	0.0066 U	0.019	0.0067 U	NA
Toluene	0.7	500	0.0056 U	NA	0.0056 U	7.9	0.0007 J	NA	0.0066 U	0.0026 J	0.0067 U	NA
Ethylbenzene	1	390	0.0056 U	NA	0.0056 U	7.3	0.0068 U	NA	0.0066 U	0.024	0.0067 U	NA
Total Xylene	0.26	500	0.0056 U	NA	0.0056 U	21	0.13	NA	0.0066 U	0.052	0.0067 U	NA
Total BTEX	NE	NE	ND	NA	ND	43	0.1307	NA	ND	0.0976	ND	NA
Non-carcinogenic PAHs (mg/kg)												
Acenaphthene	20	500	0.37 U	NA	0.37 U	620	0.45 U	0.4 U	0.44 U	5.9	0.44 U	NA
Acenaphthylene	100	500	0.37 U	NA	0.37 U	53 J	0.45 U	0.4 U	0.44 U	0.22 J	0.44 U	NA
Anthracene	100	500	0.1 J	NA	0.37 U	570	0.45 U	0.4 U	0.44 U	3.5	0.44 U	NA
Benzo[g,h,i]perylene	100	500	0.37	NA	0.37 U	180	0.45 U	0.16 J	0.11 J	0.6 J	0.44 U	NA
Fluoranthene	100	500	1.1	NA	0.37 U	1000	0.45 U	0.3 J	0.28 J	5.9	0.44 U	NA
Fluorene	30	500	0.37 U	NA	0.37 U	470	0.45 U	0.4 U	0.44 U	4	0.44 U	NA
2-Methylnaphthalene	NE	NE	0.37 U	NA	0.37 U	370	0.45 U	0.4 U	0.44 U	2	0.44 U	NA
Naphthalene	12	500	0.37 U	NA	0.37 U	1200	0.26 J	0.4 U	0.44 U	5.1	0.44 U	NA
Phenanthrene	100	500	0.33 J	NA	0.37 U	1900	0.45 U	0.17 J	0.15 J	12	0.44 U	NA
Pyrene	100	500	1.1	NA	0.37 U	1000	0.45 U	0.44	0.29 J	5.6	0.44 U	NA
Carcinogenic PAHs (mg/kg)												
Benz[a]anthracene	1	5.6	0.57	NA	0.037 U	430	0.022 J	0.21	0.18	2	0.044 U	NA
Benzo[a]pyrene	1	1	0.51	NA	0.037 U	400	0.011 J	0.22	0.19	1.4	0.044 U	NA
Benzo[b]fluoranthene	1	5.6	0.85	NA	0.037 U	380	0.017 J	0.29	0.23	1.4	0.044 U	NA
Benzo[k]fluoranthene	0.8	56	0.36	NA	0.037 U	210	0.045 U	0.14	0.11	0.77	0.044 U	NA
Chrysene	1	56	0.88	NA	0.37 U	370	0.45 U	0.27 J	0.17 J	1.7	0.44 U	NA
Dibenz[a,h]anthracene	0.33	0.56	0.082	NA	0.037 U	52	0.045 U	0.046	0.044 U	0.13	0.044 U	NA
Indeno[1,2,3-cd]pyrene	0.5	5.6	0.44	NA	0.037 U	240	0.0091 J	0.17	0.14	0.76	0.044 U	NA
Total PAHs (mg/kg)												
Total PAHs	NE	500	6.692	NA	ND	9445	0.3191	2.416	1.85	52.98	ND	NA
Other SVOCs (mg/kg)												
Acetophenone	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Atrazine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzaldehyde	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Biphenyl	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(chloroisopropyl)ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-chloroethyl)ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-chloroethoxy)methane	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-ethylhexyl)phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Bromophenyl phenyl ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Butyl benzyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Caprolactam	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbazole	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	7	350	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3,3-Dichlorobenzidine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 10
2011 Postage Stamp -Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-145(11) 3 - 3.2 10/11/2011	SB-145(11) 3 - 3.5 10/20/2011	SB-145(11) 7.5 - 9 10/14/2011	SB-145(11) 12 - 12.5 10/14/2011	SB-145(11) 16.5 - 17.5 10/14/2011	SB-146(11) 3 - 3.5 10/11/2011	SB-146(11) 10 - 11 10/17/2011	SB-146(11) 13.5 - 14.5 10/17/2011	SB-146(11) 17 - 18 10/17/2011	SB-147(11) 3 - 4.5 10/14/2011
2,4-Dichlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diethyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dimethyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-butyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-octyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	0.33	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachloroethane	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isophorone	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol (o-Cresol)	0.33	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol (p-Cresol)	0.33	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3-Nitroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrobenzene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitrophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodi-n-propylamine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pentachlorophenol	0.8	6.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenol	0.33	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCBs (mg/kg)												
Aroclor 1016	NE	NE	0.075 U	NA	0.076 U	0.096 U	0.091 U	0.081 U	0.089 U	0.097 U	0.09 U	0.082 U
Aroclor 1221	NE	NE	0.075 U	NA	0.076 U	0.096 U	0.091 U	0.081 U	0.089 U	0.097 U	0.09 U	0.082 U
Aroclor 1232	NE	NE	0.075 U	NA	0.076 U	0.096 U	0.091 U	0.081 U	0.089 U	0.097 U	0.09 U	0.082 U
Aroclor 1242	NE	NE	0.075 U	NA	0.076 U	0.096 U	0.091 U	0.081 U	0.089 U	0.097 U	0.09 U	0.082 U
Aroclor 1248	NE	NE	0.075 U	NA	0.076 U	0.096 U	0.091 U	0.081 U	0.089 U	0.097 U	0.09 U	0.082 U
Aroclor 1254	NE	NE	0.075 U	NA	0.076 U	0.096 U	0.091 U	0.081 U	0.089 U	0.097 U	0.09 U	0.082 U
Aroclor 1260	NE	NE	0.15	NA	0.076 U	0.096 U	0.091 U	0.081 U	0.25 J	0.097 U	0.047 J	0.054 J
Total PCBs	0.1	1	0.15	NA	ND	ND	ND	ND	0.25	ND	0.047	0.054
Cyanides (mg/kg)												
Free Cyanide	NE	NE	NA	0.8 J	3.6	2.8 J	1.9 J	2.6 UJ	2.9 U	2.1 J	3.1 U	1.1 J
Total Cyanide	27	27	NA	0.58 U	R	5.5 J	R	9.2 J	0.39 J	0.72 UJ	0.67 UJ	1.5 J
Other (mg/kg)												
Diesel Range Organics	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Gasoline Range Organics	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 10
2011 Postage Stamp -Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-147(11) 7 - 9 10/14/2011	SB-147(11) 13 - 14 10/14/2011	SB-147(11) 18.5 - 20 10/14/2011	SB-148(11) 4 - 5 10/14/2011	SB-148(11) 7.5 - 9.5 10/14/2011	SB-148(11) 13 - 14 10/14/2011	SB-148(11) 20 - 21 10/14/2011	SB-149(11) 3 - 3.2 10/11/2011	SB-149(11) 3 - 3.5 10/20/2011	SB-149(11) 8 - 10 10/14/2011
BTEX (mg/kg)												
Benzene	0.06	44	0.0063 U	0.007 U	0.0068 U	NA	0.0065 U	0.006 U	0.007 U	0.0058 U	NA	0.0064 U
Toluene	0.7	500	0.0063 U	0.007 U	0.0068 U	NA	0.0065 U	0.006 U	0.007 U	0.0058 U	NA	0.001 J
Ethylbenzene	1	390	0.0063 U	0.007 U	0.0068 U	NA	0.0065 U	0.006 U	0.007 U	0.0058 U	NA	0.0064 U
Total Xylene	0.26	500	0.0063 U	0.007 U	0.0068 U	NA	0.0065 U	0.006 U	0.007 U	0.0058 U	NA	0.0017 J
Total BTEX	NE	NE	ND	ND	ND	NA	ND	ND	ND	ND	NA	0.0027
Non-carcinogenic PAHs (mg/kg)												
Acenaphthene	20	500	0.42 U	0.46 U	0.45 U	NA	0.43 U	0.4 U	0.46 U	0.26 J	NA	0.42 U
Acenaphthylene	100	500	0.42 U	0.46 U	0.45 U	NA	0.43 U	0.4 U	0.46 U	0.46	NA	0.42 U
Anthracene	100	500	0.42 U	0.46 U	0.45 U	NA	0.43 U	0.4 U	0.46 U	0.99	NA	0.42 U
Benzo[g,h,i]perylene	100	500	0.42 U	0.46 U	0.45 U	NA	0.43 U	0.042 J	0.46 U	2.8	NA	0.059 J
Fluoranthene	100	500	0.42 U	0.46 U	0.45 U	NA	0.43 U	0.22 J	0.46 U	7.6	NA	0.12 J
Fluorene	30	500	0.42 U	0.46 U	0.45 U	NA	0.43 U	0.4 U	0.46 U	0.35 J	NA	0.42 U
2-Methylnaphthalene	NE	NE	0.42 U	0.46 U	0.45 U	NA	0.43 U	0.4 U	0.46 U	0.15 J	NA	0.42 U
Naphthalene	12	500	0.42 U	0.46 U	0.45 U	NA	0.43 U	0.4 U	0.46 U	0.3 J	NA	0.42 U
Phenanthrene	100	500	0.42 U	0.46 U	0.45 U	NA	0.43 U	0.4 U	0.46 U	4.4	NA	0.076 J
Pyrene	100	500	0.42 U	0.46 U	0.45 U	NA	0.43 U	0.19 J	0.46 U	6.4	NA	0.12 J
Carcinogenic PAHs (mg/kg)												
Benz[a]anthracene	1	5.6	0.042 U	0.046 U	0.045 U	NA	0.027 J	0.1	0.046 U	3.5	NA	0.074
Benzo[a]pyrene	1	1	0.042 U	0.046 U	0.045 U	NA	0.017 J	0.091	0.046 U	3.9	NA	0.082
Benzo[b]fluoranthene	1	5.6	0.042 U	0.046 U	0.045 U	NA	0.023 J	0.097	0.046 U	5.1	NA	0.1
Benzo[k]fluoranthene	0.8	56	0.042 U	0.046 U	0.045 U	NA	0.012 J	0.043	0.046 U	1.8	NA	0.049
Chrysene	1	56	0.42 U	0.46 U	0.45 U	NA	0.43 U	0.083 J	0.46 U	4.1	NA	0.067 J
Dibenz[a,h]anthracene	0.33	0.56	0.042 U	0.046 U	0.045 U	NA	0.043 U	0.013 J	0.046 U	0.64	NA	0.014 J
Indeno[1,2,3-cd]pyrene	0.5	5.6	0.042 U	0.046 U	0.045 U	NA	0.015 J	0.047	0.046 U	3.3	NA	0.062
Total PAHs (mg/kg)												
Total PAHs	NE	500	ND	ND	ND	NA	0.094	0.926	ND	46.05	NA	0.823
Other SVOCs (mg/kg)												
Acetophenone	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Atrazine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzaldehyde	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Biphenyl	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(chloroisopropyl)ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-chloroethyl)ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-chloroethoxy)methane	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-ethylhexyl)phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Bromophenyl phenyl ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Butyl benzyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Caprolactam	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbazole	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	7	350	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3,3-Dichlorobenzidine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 10
2011 Postage Stamp -Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-147(11) 7 - 9 10/14/2011	SB-147(11) 13 - 14 10/14/2011	SB-147(11) 18.5 - 20 10/14/2011	SB-148(11) 4 - 5 10/14/2011	SB-148(11) 7.5 - 9.5 10/14/2011	SB-148(11) 13 - 14 10/14/2011	SB-148(11) 20 - 21 10/14/2011	SB-149(11) 3 - 3.2 10/11/2011	SB-149(11) 3 - 3.5 10/20/2011	SB-149(11) 8 - 10 10/14/2011
2,4-Dichlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diethyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dimethyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-butyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-octyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	0.33	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachloroethane	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isophorone	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol (o-Cresol)	0.33	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol (p-Cresol)	0.33	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3-Nitroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrobenzene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitrophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodi-n-propylamine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pentachlorophenol	0.8	6.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenol	0.33	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCBs (mg/kg)												
Aroclor 1016	NE	NE	0.085 U	0.093 U	0.09 U	0.086 U	0.087 U	0.081 U	0.094 U	0.078 U	NA	0.085 U
Aroclor 1221	NE	NE	0.085 U	0.093 U	0.09 U	0.086 U	0.087 U	0.081 U	0.094 U	0.078 U	NA	0.085 U
Aroclor 1232	NE	NE	0.085 U	0.093 U	0.09 U	0.086 U	0.087 U	0.081 U	0.094 U	0.078 U	NA	0.085 U
Aroclor 1242	NE	NE	0.085 U	0.093 U	0.09 U	0.086 U	0.087 U	0.081 U	0.094 U	0.078 U	NA	0.085 U
Aroclor 1248	NE	NE	0.085 U	0.093 U	0.09 U	0.086 U	0.087 U	0.081 U	0.094 U	0.078 U	NA	0.085 U
Aroclor 1254	NE	NE	0.085 U	0.093 U	0.09 U	0.086 U	0.087 U	0.081 U	0.094 U	0.078 U	NA	0.085 U
Aroclor 1260	NE	NE	0.12	0.064 J	0.096	0.12	0.11	0.072 J	0.1	1.2	NA	0.085 U
Total PCBs	0.1	1	0.12	0.064	0.096	0.12	0.11	0.072	0.1	1.2	NA	ND
Cyanides (mg/kg)												
Free Cyanide	NE	NE	0.9 J	3.1 U	3 U	2.1 J	0.89 J	2 J	0.87 J	NA	0.72 J	1.6 J
Total Cyanide	27	27	1.2 J	R	R	10.1 J	R	R	R	NA	0.18 J	R
Other (mg/kg)												
Diesel Range Organics	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	1400 J
Gasoline Range Organics	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	160 J

Table 10
2011 Postage Stamp -Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-149(11) 13 - 15 10/14/2011	SB-150(11) 3 - 3.5 10/12/2011	SB-150(11) 7.5 - 10 10/17/2011	SB-150(11) 15 - 16 10/17/2011	SB-150(11) 20 - 21 10/17/2011	SB-151(11) 4 - 5 10/17/2011	SB-151(11) 8 - 9.5 10/17/2011	SB-151(11) 18 - 19 10/17/2011	SB-152(11) 3 - 3.5 10/12/2011	SB-152(11) 6 - 7 10/17/2011
BTEX (mg/kg)												
Benzene	0.06	44	0.0061 U	0.0069 U	0.0061 U	0.0064 U	0.0068 U	NA	0.0064 U	0.0065 U	0.0053 U	0.006 U
Toluene	0.7	500	0.0061 U	0.0069 U	0.0061 U	0.0064 U	0.0068 U	NA	0.0064 U	0.0065 U	0.0053 U	0.006 U
Ethylbenzene	1	390	0.0061 U	0.0069 U	0.0061 U	0.0064 U	0.0068 U	NA	0.0064 U	0.0065 U	0.0053 U	0.006 U
Total Xylene	0.26	500	0.0061 U	0.0069 U	0.0061 U	0.0064 U	0.0068 U	NA	0.0064 U	0.0065 U	0.0053 U	0.006 U
Total BTEX	NE	NE	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND
Non-carcinogenic PAHs (mg/kg)												
Acenaphthene	20	500	0.4 U	0.45 U	0.4 U	0.42 U	0.45 U	NA	0.42 U	0.43 U	0.13 J	0.13 J
Acenaphthylene	100	500	0.4 U	0.16 J	0.4 U	0.42 U	0.45 U	NA	0.42 U	0.43 U	0.074 J	0.35 J
Anthracene	100	500	0.4 U	0.22 J	0.4 U	0.42 U	0.45 U	NA	0.42 U	0.43 U	0.43	1.5
Benzo[g,h,i]perylene	100	500	0.4 U	1.8	0.4 U	0.42 U	0.45 U	NA	0.42 U	0.43 U	0.39	2.6
Fluoranthene	100	500	0.4 U	2.6	0.4 U	0.42 U	0.45 U	NA	0.089 J	0.43 U	2.1	7.6
Fluorene	30	500	0.4 U	0.45 U	0.4 U	0.42 U	0.45 U	NA	0.42 U	0.43 U	0.13 J	0.41 J
2-Methylnaphthalene	NE	NE	0.4 U	0.45 U	0.4 U	0.42 U	0.45 U	NA	0.42 U	0.43 U	0.35 U	0.8 U
Naphthalene	12	500	0.4 U	0.45 U	0.4 U	0.42 U	0.45 U	NA	0.42 U	0.43 U	0.35 U	0.18 J
Phenanthrene	100	500	0.4 U	0.67	0.4 U	0.42 U	0.45 U	NA	0.42 U	0.43 U	1.8	8
Pyrene	100	500	0.4 U	5.4	0.4 U	0.42 U	0.45 U	NA	0.074 J	0.43 U	2.1	13
Carcinogenic PAHs (mg/kg)												
Benz[a]anthracene	1	5.6	0.035 J	2.4	0.04 U	0.042 U	0.045 U	NA	0.042 U	0.043 U	1.1	3.7
Benzo[a]pyrene	1	1	0.032 J	2.3	0.04 U	0.042 U	0.045 U	NA	0.042 U	0.043 U	1.1	3.2
Benzo[b]fluoranthene	1	5.6	0.04	2.5	0.04 U	0.042 U	0.045 U	NA	0.042 U	0.043 U	1.4	3.8
Benzo[k]fluoranthene	0.8	56	0.015 J	1.2	0.04 U	0.042 U	0.045 U	NA	0.042 U	0.043 U	0.64	1.6
Chrysene	1	56	0.4 U	2.8	0.4 U	0.42 U	0.45 U	NA	0.42 U	0.43 U	1.4	3.8
Dibenz[a,h]anthracene	0.33	0.56	0.04 U	0.49	0.04 U	0.042 U	0.045 U	NA	0.042 U	0.043 U	0.12	0.51
Indeno[1,2,3-cd]pyrene	0.5	5.6	0.015 J	1.8 J	0.04 U	0.042 U	0.045 U	NA	0.042 U	0.043 U	0.4	2.3
Total PAHs (mg/kg)												
Total PAHs	NE	500	0.137	24.34	ND	ND	ND	NA	0.163	ND	13.314	52.68
Other SVOCs (mg/kg)												
Acetophenone	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Atrazine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzaldehyde	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Biphenyl	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(chloroisopropyl)ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-chloroethyl)ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-chloroethoxy)methane	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-ethylhexyl)phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Bromophenyl phenyl ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Butyl benzyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Caprolactam	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbazole	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	7	350	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3,3-Dichlorobenzidine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 10
2011 Postage Stamp -Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-149(11) 13 - 15 10/14/2011	SB-150(11) 3 - 3.5 10/12/2011	SB-150(11) 7.5 - 10 10/17/2011	SB-150(11) 15 - 16 10/17/2011	SB-150(11) 20 - 21 10/17/2011	SB-151(11) 4 - 5 10/17/2011	SB-151(11) 8 - 9.5 10/17/2011	SB-151(11) 18 - 19 10/17/2011	SB-152(11) 3 - 3.5 10/12/2011	SB-152(11) 6 - 7 10/17/2011
2,4-Dichlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diethyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dimethyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-butyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-octyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	0.33	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachloroethane	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isophorone	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol (o-Cresol)	0.33	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol (p-Cresol)	0.33	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3-Nitroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrobenzene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitrophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodi-n-propylamine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pentachlorophenol	0.8	6.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenol	0.33	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCBs (mg/kg)												
Aroclor 1016	NE	NE	0.082 U	0.092 U	0.081 U	0.085 U	0.091 U	0.084 U	0.085 U	0.086 U	0.071 U	0.081 U
Aroclor 1221	NE	NE	0.082 U	0.092 U	0.081 U	0.085 U	0.091 U	0.084 U	0.085 U	0.086 U	0.071 U	0.081 U
Aroclor 1232	NE	NE	0.082 U	0.092 U	0.081 U	0.085 U	0.091 U	0.084 U	0.085 U	0.086 U	0.071 U	0.081 U
Aroclor 1242	NE	NE	0.082 U	0.092 U	0.081 U	0.085 U	0.091 U	0.084 U	0.085 U	0.086 U	0.071 U	0.081 U
Aroclor 1248	NE	NE	0.082 U	0.092 U	0.081 U	0.085 U	0.091 U	0.084 U	0.085 U	0.086 U	0.071 U	0.081 U
Aroclor 1254	NE	NE	0.082 U	0.092 U	0.081 U	0.085 U	0.091 U	0.084 U	0.085 U	0.086 U	0.071 U	0.081 U
Aroclor 1260	NE	NE	0.082 U	1.1	0.081 U	0.29	0.02 J	0.29	0.085 U	0.21	1.2	1.5
Total PCBs	0.1	1	ND	1.1	ND	0.29	0.02	0.29	ND	0.21	1.2	1.5
Cyanides (mg/kg)												
Free Cyanide	NE	NE	1.3 J	3.2 U	2.7 U	2.8 U	3 U	2.9 U	2.8 U	3 U	2.4 UJ	2.7 U
Total Cyanide	27	27	R	2.3 J	0.61 UJ	0.64 UJ	0.68 UJ	0.69 J	0.64 UJ	0.65 UJ	0.95 J	1.7 J
Other (mg/kg)												
Diesel Range Organics	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Gasoline Range Organics	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 10
2011 Postage Stamp -Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-152(11) 10.75 - 13.25 10/17/2011	Duplicate of: SB-152(11) 10.75 - 13.25 10/17/2011	SB-152(11) 17 - 19 10/17/2011	SB-153(11) 3 - 3.5 10/12/2011	SB-153(11) 9.5 - 10 10/17/2011	SB-153(11) 10 - 10.75 10/17/2011	SB-153(11) 16.5 - 17.5 10/17/2011	SB-153(11) 23.5 - 24.5 10/17/2011	SB-154(11) 3.1 - 3.9 10/18/2011	SB-155(11) 3 - 5 10/18/2011
BTEX (mg/kg)												
Benzene	0.06	44	0.0066 U	0.0065 U	0.0066 U	0.0058 U	0.0061 U	0.0064 U	0.01 U	0.0065 U	0.0055 U	0.0052 U
Toluene	0.7	500	0.0066 U	0.0065 U	0.0066 U	0.0058 U	0.0014 J	0.00035 J	0.01 U	0.0065 U	0.0055 U	0.0052 U
Ethylbenzene	1	390	0.0066 U	0.0065 U	0.0066 U	0.0058 U	0.0061 U	0.0064 U	0.01 U	0.0065 U	0.0055 U	0.0052 U
Total Xylene	0.26	500	0.0066 U	0.0065 U	0.0066 U	0.0058 U	0.0015 J	0.0064 U	0.01 U	0.0065 U	0.0055 U	0.0052 U
Total BTEX	NE	NE	ND	ND	ND	ND	0.0029	0.00035	ND	ND	ND	ND
Non-carcinogenic PAHs (mg/kg)												
Acenaphthene	20	500	0.43 U	0.43 U	0.44 U	2	NA	0.42 U	0.66 U	0.43 U	0.36 U	0.34 U
Acenaphthylene	100	500	0.43 U	0.43 U	0.44 U	0.29 J	NA	0.42 U	0.66 U	0.43 U	0.36 U	0.1 J
Anthracene	100	500	0.43 U	0.43 U	0.44 U	3.9	NA	0.42 U	0.66 U	0.43 U	0.36 U	0.13 J
Benzo[g,h,i]perylene	100	500	0.43 U	0.43 U	0.44 U	4.9	NA	0.064 J	0.66 U	0.43 U	0.36 U	0.3 J
Fluoranthene	100	500	0.43 U	0.15 J	0.44 U	13	NA	0.16 J	0.66 U	0.43 U	0.084 J	0.91
Fluorene	30	500	0.43 U	0.43 U	0.44 U	1.7 J	NA	0.42 U	0.66 U	0.43 U	0.36 U	0.34 U
2-Methylnaphthalene	NE	NE	0.43 U	0.43 U	0.44 U	0.74 J	NA	0.072 J	0.66 U	0.43 U	0.36 U	0.34 U
Naphthalene	12	500	0.43 U	0.43 U	0.44 U	1.4 J	NA	0.068 J	0.66 U	0.43 U	0.11 J	0.34 U
Phenanthrene	100	500	0.43 U	0.075 J	0.44 U	18	NA	0.42 U	0.66 U	0.43 U	0.072 J	0.37
Pyrene	100	500	0.43 U	0.11 J	0.44 U	24	NA	0.14 J	0.66 U	0.43 U	0.12 J	1.9
Carcinogenic PAHs (mg/kg)												
Benz[a]anthracene	1	5.6	0.043 U	0.07	0.044 U	8.3	NA	0.098	0.066 U	0.043 U	0.045	0.66
Benzo[a]pyrene	1	1	0.043 U	0.043 U	0.044 U	6.5	NA	0.077	0.066 U	0.043 U	0.042	0.48
Benzo[b]fluoranthene	1	5.6	0.043 U	0.046	0.044 U	8.2	NA	0.098	0.066 U	0.043 U	0.054	0.91
Benzo[k]fluoranthene	0.8	56	0.043 U	0.043 U	0.044 U	3.7	NA	0.042 U	0.066 U	0.043 U	0.03 J	0.39
Chrysene	1	56	0.43 U	0.067 J	0.44 U	9	NA	0.081 J	0.66 U	0.43 U	0.068 J	0.9
Dibenz[a,h]anthracene	0.33	0.56	0.043 U	0.043 U	0.044 U	1.3	NA	0.042 U	0.066 U	0.043 U	0.036 U	0.098
Indeno[1,2,3-cd]pyrene	0.5	5.6	0.043 U	0.03 J	0.044 U	4.9	NA	0.067	0.066 U	0.043 U	0.036 U	0.34
Total PAHs (mg/kg)												
Total PAHs	NE	500	ND	0.548	ND	111.83	NA	0.925	ND	ND	0.625	7.488
Other SVOCs (mg/kg)												
Acetophenone	NE	NE	NA	NA	NA	NA	NA	0.42 U	NA	NA	NA	NA
Atrazine	NE	NE	NA	NA	NA	NA	NA	0.42 U	NA	NA	NA	NA
Benzaldehyde	NE	NE	NA	NA	NA	NA	NA	0.42 UJ	NA	NA	NA	NA
1,1-Biphenyl	NE	NE	NA	NA	NA	NA	NA	0.42 U	NA	NA	NA	NA
Bis(chloroisopropyl)ether	NE	NE	NA	NA	NA	NA	NA	0.42 U	NA	NA	NA	NA
Bis(2-chloroethyl)ether	NE	NE	NA	NA	NA	NA	NA	0.042 U	NA	NA	NA	NA
Bis(2-chloroethoxy)methane	NE	NE	NA	NA	NA	NA	NA	0.42 U	NA	NA	NA	NA
Bis(2-ethylhexyl)phthalate	NE	NE	NA	NA	NA	NA	NA	0.42 U	NA	NA	NA	NA
4-Bromophenyl phenyl ether	NE	NE	NA	NA	NA	NA	NA	0.42 U	NA	NA	NA	NA
Butyl benzyl phthalate	NE	NE	NA	NA	NA	NA	NA	0.42 U	NA	NA	NA	NA
Caprolactam	NE	NE	NA	NA	NA	NA	NA	0.42 U	NA	NA	NA	NA
Carbazole	NE	NE	NA	NA	NA	NA	NA	0.42 U	NA	NA	NA	NA
4-Chloro-3-methylphenol	NE	NE	NA	NA	NA	NA	NA	0.42 U	NA	NA	NA	NA
4-Chloroaniline	NE	NE	NA	NA	NA	NA	NA	0.42 U	NA	NA	NA	NA
2-Chloronaphthalene	NE	NE	NA	NA	NA	NA	NA	0.42 U	NA	NA	NA	NA
2-Chlorophenol	NE	NE	NA	NA	NA	NA	NA	0.42 U	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	NE	NE	NA	NA	NA	NA	NA	0.42 U	NA	NA	NA	NA
Dibenzofuran	7	350	NA	NA	NA	NA	NA	0.42 U	NA	NA	NA	NA
3,3-Dichlorobenzidine	NE	NE	NA	NA	NA	NA	NA	0.86 U	NA	NA	NA	NA

Table 10
2011 Postage Stamp -Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-152(11) 10.75 - 13.25 10/17/2011	Duplicate of: SB-152(11) 10.75 - 13.25 10/17/2011	SB-152(11) 17 - 19 10/17/2011	SB-153(11) 3 - 3.5 10/12/2011	SB-153(11) 9.5 - 10 10/17/2011	SB-153(11) 10 - 10.75 10/17/2011	SB-153(11) 16.5 - 17.5 10/17/2011	SB-153(11) 23.5 - 24.5 10/17/2011	SB-154(11) 3.1 - 3.9 10/18/2011	SB-155(11) 3 - 5 10/18/2011
2,4-Dichlorophenol	NE	NE	NA	NA	NA	NA	NA	0.42 U	NA	NA	NA	NA
Diethyl phthalate	NE	NE	NA	NA	NA	NA	NA	0.42 U	NA	NA	NA	NA
Dimethyl phthalate	NE	NE	NA	NA	NA	NA	NA	0.42 U	NA	NA	NA	NA
2,4-Dimethylphenol	NE	NE	NA	NA	NA	NA	NA	0.42 U	NA	NA	NA	NA
Di-n-butyl phthalate	NE	NE	NA	NA	NA	NA	NA	0.42 U	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	NE	NE	NA	NA	NA	NA	NA	1.3 U	NA	NA	NA	NA
2,4-Dinitrophenol	NE	NE	NA	NA	NA	NA	NA	1.3 U	NA	NA	NA	NA
2,4-Dinitrotoluene	NE	NE	NA	NA	NA	NA	NA	0.086 U	NA	NA	NA	NA
2,6-Dinitrotoluene	NE	NE	NA	NA	NA	NA	NA	0.086 U	NA	NA	NA	NA
Di-n-octyl phthalate	NE	NE	NA	NA	NA	NA	NA	0.42 U	NA	NA	NA	NA
Hexachlorobenzene	0.33	6	NA	NA	NA	NA	NA	0.042 U	NA	NA	NA	NA
Hexachlorobutadiene	NE	NE	NA	NA	NA	NA	NA	0.086 U	NA	NA	NA	NA
Hexachlorocyclopentadiene	NE	NE	NA	NA	NA	NA	NA	0.42 U	NA	NA	NA	NA
Hexachloroethane	NE	NE	NA	NA	NA	NA	NA	0.042 U	NA	NA	NA	NA
Isophorone	NE	NE	NA	NA	NA	NA	NA	0.42 U	NA	NA	NA	NA
2-Methylphenol (o-Cresol)	0.33	500	NA	NA	NA	NA	NA	0.42 U	NA	NA	NA	NA
4-Methylphenol (p-Cresol)	0.33	500	NA	NA	NA	NA	NA	0.42 U	NA	NA	NA	NA
2-Nitroaniline	NE	NE	NA	NA	NA	NA	NA	0.86 U	NA	NA	NA	NA
3-Nitroaniline	NE	NE	NA	NA	NA	NA	NA	0.86 U	NA	NA	NA	NA
4-Nitroaniline	NE	NE	NA	NA	NA	NA	NA	0.86 U	NA	NA	NA	NA
Nitrobenzene	NE	NE	NA	NA	NA	NA	NA	0.042 U	NA	NA	NA	NA
2-Nitrophenol	NE	NE	NA	NA	NA	NA	NA	0.42 U	NA	NA	NA	NA
4-Nitrophenol	NE	NE	NA	NA	NA	NA	NA	1.3 U	NA	NA	NA	NA
N-Nitrosodi-n-propylamine	NE	NE	NA	NA	NA	NA	NA	0.042 U	NA	NA	NA	NA
N-Nitrosodiphenylamine	NE	NE	NA	NA	NA	NA	NA	0.42 U	NA	NA	NA	NA
Pentachlorophenol	0.8	6.7	NA	NA	NA	NA	NA	1.3 U	NA	NA	NA	NA
Phenol	0.33	500	NA	NA	NA	NA	NA	0.42 U	NA	NA	NA	NA
2,4,5-Trichlorophenol	NE	NE	NA	NA	NA	NA	NA	0.42 U	NA	NA	NA	NA
2,4,6-Trichlorophenol	NE	NE	NA	NA	NA	NA	NA	0.42 U	NA	NA	NA	NA
PCBs (mg/kg)												
Aroclor 1016	NE	NE	0.088 U	0.087 U	0.088 U	39 U	NA	0.086 U	0.13 U	0.088 U	0.074 U	0.069 U
Aroclor 1221	NE	NE	0.088 U	0.087 U	0.088 U	39 U	NA	0.086 U	0.13 U	0.088 U	0.074 U	0.069 U
Aroclor 1232	NE	NE	0.088 U	0.087 U	0.088 U	39 U	NA	0.086 U	0.13 U	0.088 U	0.074 U	0.069 U
Aroclor 1242	NE	NE	0.088 U	0.087 U	0.088 U	39 U	NA	0.086 U	0.13 U	0.088 U	0.074 U	0.069 U
Aroclor 1248	NE	NE	0.088 U	0.087 U	0.088 U	39 U	NA	0.086 U	0.13 U	0.088 U	0.074 U	0.069 U
Aroclor 1254	NE	NE	0.088 U	0.087 U	0.088 U	39 U	NA	0.086 U	0.13 U	0.088 U	0.074 U	0.069 U
Aroclor 1260	NE	NE	0.088 U	0.087 U	0.088 UJ	590	NA	0.054 J	0.069 J	0.49	0.58	0.24
Total PCBs	0.1	1	ND	ND	ND	590	ND	0.054	0.069	0.49	0.58	0.24
Cyanides (mg/kg)												
Free Cyanide	NE	NE	2.9 U	2.9 U	3 U	2.6 UJ	NA	2.8 U	1.3 J	2.9 U	2.4 U	2.2 U
Total Cyanide	27	27	0.66 UJ	0.65 UJ	0.66 UJ	10.4 J	NA	0.64 UJ	1 UJ	0.65 UJ	1 J	7.6 J
Other (mg/kg)												
Diesel Range Organics	NE	NE	NA	NA	NA	NA	NA	45	NA	NA	NA	NA
Gasoline Range Organics	NE	NE	NA	NA	NA	NA	NA	23 J	NA	NA	NA	NA

Table 10
2011 Postage Stamp -Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-155(11) 8 - 10 10/18/2011	SB-155(11) 22.6 - 22.8 10/18/2011	SB-155(11) 23.5 - 25 10/18/2011	SB-155(11) 30 - 32 10/18/2011	SB-156(11) 3 - 3.5 10/12/2011	SB-156(11) 5 - 6.5 10/18/2011	SB-156(11) 12.5 - 15 10/18/2011	SB-156(11) 23.3 - 24 10/18/2011	SB-156(11) 26 - 29 10/18/2011	SB-157(11) 4.5 - 5 10/14/2011
BTEX (mg/kg)												
Benzene	0.06	44	0.0053 U	0.26	0.069	0.0065 U	0.0063 U	0.0058 U	0.0054 U	40	0.0068 U	NA
Toluene	0.7	500	0.0053 U	0.18	0.004 J	0.0065 U	0.0063 U	0.002 J	0.0054 U	45	0.0068 U	NA
Ethylbenzene	1	390	0.0053 U	0.33	0.033	0.0065 U	0.0063 U	0.0014 J	0.0054 U	16	0.0068 U	NA
Total Xylene	0.26	500	0.0053 U	0.83	0.1	0.0065 U	0.0063 U	0.016	0.0054 U	77	0.0068 U	NA
Total BTEX	NE	NE	ND	1.6	0.206	ND	ND	0.0194	ND	178	ND	NA
Non-carcinogenic PAHs (mg/kg)												
Acenaphthene	20	500	0.35 U	NA	0.82	0.43 U	0.29 J	6.1	0.35 U	40	0.44 U	NA
Acenaphthylene	100	500	0.19 J	NA	0.43 U	0.43 U	0.84	1.2 J	0.35 U	69	0.44 U	NA
Anthracene	100	500	0.12 J	NA	0.43 U	0.43 U	1.3	5.5	0.35 U	140	0.44 U	NA
Benzo[g,h,i]perylene	100	500	0.74	NA	0.43 U	0.43 U	4.3	2.5 J	0.058 J	69	0.44 U	NA
Fluoranthene	100	500	0.76	NA	0.088 J	0.43 U	5.7	27	0.2 J	250	0.44 U	NA
Fluorene	30	500	0.35 U	NA	0.29 J	0.43 U	0.35 J	8.5	0.35 U	94	0.44 U	NA
2-Methylnaphthalene	NE	NE	0.35 U	NA	0.51	0.43 U	0.16 J	4.8	0.35 U	38	0.44 U	NA
Naphthalene	12	500	0.088 J	NA	4.7	0.43 U	0.38 J	10	0.12 J	76	0.44 U	NA
Phenanthrene	100	500	0.53	NA	0.41 J	0.43 U	4.3	54	0.26 J	500	0.44 U	NA
Pyrene	100	500	1.3	NA	0.11 J	0.43 U	10	39	0.26 J	270	0.44 U	NA
Carcinogenic PAHs (mg/kg)												
Benz[a]anthracene	1	5.6	0.64	NA	0.051	0.023 J	5.7	8.6	0.099	130	0.044 U	NA
Benzo[a]pyrene	1	1	0.67	NA	0.03 J	0.043 U	5.5	4	0.098	110	0.044 U	NA
Benzo[b]fluoranthene	1	5.6	0.82	NA	0.032 J	0.043 U	7.7	6.1	0.084	110	0.044 U	NA
Benzo[k]fluoranthene	0.8	56	0.46	NA	0.043 U	0.043 U	3	3.6	0.056	68	0.044 U	NA
Chrysene	1	56	0.87	NA	0.43 U	0.43 U	6.7	11	0.095 J	120	0.44 U	NA
Dibenz[a,h]anthracene	0.33	0.56	0.19	NA	0.043 U	0.043 U	1.2	0.38 U	0.035 U	16	0.044 U	NA
Indeno[1,2,3-cd]pyrene	0.5	5.6	0.71	NA	0.043 U	0.043 U	4.6	2.5	0.052	72	0.044 U	NA
Total PAHs (mg/kg)												
Total PAHs	NE	500	8.088	NA	7.041	0.023	62.02	194.4	1.382	2172	ND	NA
Other SVOCs (mg/kg)												
Acetophenone	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Atrazine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzaldehyde	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Biphenyl	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(chloroisopropyl)ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-chloroethyl)ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-chloroethoxy)methane	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-ethylhexyl)phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Bromophenyl phenyl ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Butyl benzyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Caprolactam	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbazole	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	7	350	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3,3-Dichlorobenzidine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 10
2011 Postage Stamp -Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-155(11) 8 - 10 10/18/2011	SB-155(11) 22.6 - 22.8 10/18/2011	SB-155(11) 23.5 - 25 10/18/2011	SB-155(11) 30 - 32 10/18/2011	SB-156(11) 3 - 3.5 10/12/2011	SB-156(11) 5 - 6.5 10/18/2011	SB-156(11) 12.5 - 15 10/18/2011	SB-156(11) 23.3 - 24 10/18/2011	SB-156(11) 26 - 29 10/18/2011	SB-157(11) 4.5 - 5 10/14/2011
2,4-Dichlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diethyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dimethyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-butyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-octyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	0.33	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachloroethane	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isophorone	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol (o-Cresol)	0.33	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol (p-Cresol)	0.33	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3-Nitroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrobenzene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitrophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodi-n-propylamine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pentachlorophenol	0.8	6.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenol	0.33	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCBs (mg/kg)												
Aroclor 1016	NE	NE	0.071 U	NA	0.088 U	0.087 U	1.7 U	0.078 U	0.072 U	0.095 U	0.091 U	0.081 U
Aroclor 1221	NE	NE	0.071 U	NA	0.088 U	0.087 U	1.7 U	0.078 U	0.072 U	0.095 U	0.091 U	0.081 U
Aroclor 1232	NE	NE	0.071 U	NA	0.088 U	0.087 U	1.7 U	0.078 U	0.072 U	0.095 U	0.091 U	0.081 U
Aroclor 1242	NE	NE	0.071 U	NA	0.088 U	0.087 U	1.7 U	0.078 U	0.072 U	0.095 U	0.091 U	0.081 U
Aroclor 1248	NE	NE	0.071 U	NA	0.088 U	0.087 U	1.7 U	0.078 U	0.072 U	0.095 U	0.091 U	0.081 U
Aroclor 1254	NE	NE	0.071 U	NA	0.088 U	0.087 U	1.7 U	0.078 U	0.072 U	0.095 U	0.091 U	0.081 U
Aroclor 1260	NE	NE	0.071 U	NA	0.088 U	0.029 J	16	0.79	0.072 U	0.095 U	0.029 J	1.2 J
Total PCBs	0.1	1	ND	NA	ND	0.029	16	0.79	ND	ND	0.029	1.2
Cyanides (mg/kg)												
Free Cyanide	NE	NE	2.4 U	NA	2.9 UJ	2.8 U	1.6 UJ	2.6 U	2.3 U	3.1 U	3 U	1.6 J
Total Cyanide	27	27	204 J	NA	0.66 UJ	0.65 UJ	74.3 J	31.3 J	25.5 J	0.99 J	0.68 UJ	42.5 J
Other (mg/kg)												
Diesel Range Organics	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Gasoline Range Organics	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 10
2011 Postage Stamp -Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-157(11) 8 - 9 10/14/2011	SB-157(11) 16 - 17 10/14/2011	SB-158(11) 3 - 5 10/14/2011	SB-158(11) 8 - 9 10/14/2011	SB-158(11) 10.8 - 12.4 10/14/2011	SB-158(11) 16.5 - 17.5 10/14/2011	SB-159(11) 3 - 3.5 10/12/2011	SB-159(11) 7.75 - 9.75 10/17/2011	SB-159(11) 9.75 - 10 10/17/2011	SB-159(11) 11 - 15 10/17/2011
BTEX (mg/kg)												
Benzene	0.06	44	0.0056 U	0.0065 J	0.006 U	0.0023 J	0.007 U	0.0011 J	0.0093	NA	0.0025 J	0.04 U
Toluene	0.7	500	0.00031 J	0.0014 J	0.006 U	0.0023 J	0.001 J	0.0012 J	0.0057 J	NA	0.0013 J	0.023 J
Ethylbenzene	1	390	0.0056 U	0.05	0.006 U	0.0062 U	0.007 U	0.0011 J	0.003 J	NA	0.00093 J	0.04 U
Total Xylene	0.26	500	0.0012 J	0.079	0.006 U	0.00089 J	0.00068 J	0.0069	0.0077	NA	0.003 J	0.0078 J
Total BTEX	NE	NE	0.00151	0.1369	ND	0.00549	0.00168	0.0103	0.0257	NA	0.00773	0.0308
Non-carcinogenic PAHs (mg/kg)												
Acenaphthene	20	500	0.37 U	0.12 J	0.094 J	0.47 J	1.4 J	2.3	3.8 J	0.71 J	NA	0.098 J
Acenaphthylene	100	500	0.37 U	0.45 U	0.24 J	0.28 J	1.5 J	0.14 J	3.9	0.61 J	NA	0.53 U
Anthracene	100	500	0.37 U	0.45 U	0.44	0.93	11	1.3	13	3.2	NA	0.53 U
Benzo[g,h,i]perylene	100	500	0.37 U	0.45 U	3.6	3	19	0.55	26	11	NA	0.072 J
Fluoranthene	100	500	0.37 U	0.14 J	3.6	3.8	52	3.7	45	9.9	NA	0.2 J
Fluorene	30	500	0.37 U	0.45 U	0.13 J	1.1	6	1.8	4.6	0.73 J	NA	0.53 U
2-Methylnaphthalene	NE	NE	0.37 U	0.45 U	0.086 J	1	4.6 U	0.36 J	0.76 J	0.51 J	NA	0.092 J
Naphthalene	12	500	0.11 J	0.26 J	0.23 J	0.7 J	1.5 J	0.9	2.2 J	1.1	NA	0.13 J
Phenanthrene	100	500	0.37 U	0.093 J	1.8	4	14	5.5	45	6.9	NA	0.53 U
Pyrene	100	500	0.37 U	0.12 J	2.8	3.2	42	2.7	68	18	NA	0.21 J
Carcinogenic PAHs (mg/kg)												
Benz[a]anthracene	1	5.6	0.025 J	0.071	2.4	2	26	1.4	28	11	NA	0.11
Benzo[a]pyrene	1	1	0.02 J	0.062	2.3	2.8	30	1.2	26	14	NA	0.11
Benzo[b]fluoranthene	1	5.6	0.026 J	0.071	5	2.9	35	1.3	27	12	NA	0.12
Benzo[k]fluoranthene	0.8	56	0.012 J	0.033 J	2	1.2	12	0.57	13	6.5	NA	0.053 U
Chrysene	1	56	0.37 U	0.45 U	3.2	2.1	26	1.2	25	11	NA	0.12 J
Dibenz[a,h]anthracene	0.33	0.56	0.037 U	0.0099 J	0.78	0.38	3.6	0.13	5.5	2.9	NA	0.053 U
Indeno[1,2,3-cd]pyrene	0.5	5.6	0.011 J	0.039 J	3.7	2.7	20	0.65	25	12	NA	0.081
Total PAHs (mg/kg)												
Total PAHs	NE	500	0.204	1.0189	32.4	32.56	301	25.7	361.76	122.06	NA	1.343
Other SVOCs (mg/kg)												
Acetophenone	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.53 U
Atrazine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.53 U
Benzaldehyde	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.53 UJ
1,1-Biphenyl	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.53 U
Bis(chloroisopropyl)ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.53 U
Bis(2-chloroethyl)ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.053 U
Bis(2-chloroethoxy)methane	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.53 U
Bis(2-ethylhexyl)phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.53 U
4-Bromophenyl phenyl ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.53 U
Butyl benzyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.53 U
Caprolactam	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.53 U
Carbazole	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.53 U
4-Chloro-3-methylphenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.53 U
4-Chloroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.53 U
2-Chloronaphthalene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.53 U
2-Chlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.53 U
4-Chlorophenyl phenyl ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.53 U
Dibenzofuran	7	350	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.53 U
3,3-Dichlorobenzidine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 U

Table 10
2011 Postage Stamp -Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-157(11) 8 - 9 10/14/2011	SB-157(11) 16 - 17 10/14/2011	SB-158(11) 3 - 5 10/14/2011	SB-158(11) 8 - 9 10/14/2011	SB-158(11) 10.8 - 12.4 10/14/2011	SB-158(11) 16.5 - 17.5 10/14/2011	SB-159(11) 3 - 3.5 10/12/2011	SB-159(11) 7.75 - 9.75 10/17/2011	SB-159(11) 9.75 - 10 10/17/2011	SB-159(11) 11 - 15 10/17/2011
2,4-Dichlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.53 U
Diethyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.53 U
Dimethyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.53 U
2,4-Dimethylphenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.53 U
Di-n-butyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.53 U
4,6-Dinitro-2-methylphenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 U
2,4-Dinitrophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 U
2,4-Dinitrotoluene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.11 U
2,6-Dinitrotoluene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.11 U
Di-n-octyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.53 U
Hexachlorobenzene	0.33	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.053 U
Hexachlorobutadiene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.11 U
Hexachlorocyclopentadiene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.53 U
Hexachloroethane	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.053 U
Isophorone	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.53 U
2-Methylphenol (o-Cresol)	0.33	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.53 U
4-Methylphenol (p-Cresol)	0.33	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.53 U
2-Nitroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 U
3-Nitroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 U
4-Nitroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 U
Nitrobenzene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.053 U
2-Nitrophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.53 U
4-Nitrophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 U
N-Nitrosodi-n-propylamine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.053 U
N-Nitrosodiphenylamine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.53 U
Pentachlorophenol	0.8	6.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 U
Phenol	0.33	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.53 U
2,4,5-Trichlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.53 U
2,4,6-Trichlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.53 U
PCBs (mg/kg)												
Aroclor 1016	NE	NE	0.075 U	0.092 U	1.6 U	0.082 U	0.094 U	0.093 U	0.39 U	0.087 U	NA	0.11 U
Aroclor 1221	NE	NE	0.075 U	0.092 U	1.6 U	0.082 U	0.094 U	0.093 U	0.39 U	0.087 U	NA	0.11 U
Aroclor 1232	NE	NE	0.075 U	0.092 U	1.6 U	0.082 U	0.094 U	0.093 U	0.39 U	0.087 U	NA	0.11 U
Aroclor 1242	NE	NE	0.075 U	0.092 U	1.6 U	0.082 U	0.094 U	0.093 U	0.39 U	0.087 U	NA	0.11 U
Aroclor 1248	NE	NE	0.075 U	0.092 U	1.6 U	0.082 U	0.094 U	0.093 U	0.39 U	0.087 U	NA	0.11 U
Aroclor 1254	NE	NE	0.075 U	0.092 U	1.6 U	0.082 U	0.094 U	0.093 U	0.39 U	0.087 U	NA	0.11 U
Aroclor 1260	NE	NE	0.075 U	0.092 U	34	0.082 U	0.094 U	0.093 U	6.8 J	0.041 J	NA	0.063 J
Total PCBs	0.1	1	ND	ND	34	ND	ND	ND	6.8	0.041	NA	0.063
Cyanides (mg/kg)												
Free Cyanide	NE	NE	1.5 J	1.5 J	2 J	1.1 J	1.3 J	1.1 J	2.6 UJ	3 U	NA	3.6 U
Total Cyanide	27	27	3.7 J	R	129 J	0.22 J	R	R	39 J	0.25 J	NA	0.81 UJ
Other (mg/kg)												
Diesel Range Organics	NE	NE	NA	NA	NA	NA	14000 J	NA	NA	NA	210	230
Gasoline Range Organics	NE	NE	NA	NA	NA	NA	78 J	NA	NA	NA	260 J	720 J

Table 10
2011 Postage Stamp -Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-159(11) 16 - 17 10/17/2011	SB-159(11) 22 - 23 10/17/2011	SB-160(11) 3 - 5 10/17/2011	SB-160(11) 8 - 9.5 10/17/2011	SB-161(11) 3 - 5 10/17/2011	SB-161(11) 8 - 10 10/17/2011	SB-161(11) 11 - 11.75 10/17/2011	SB-161(11) 11.75 - 13 10/17/2011	SB-161(11) 17 - 18 10/17/2011	SB-162(11) 2.75 - 4 10/18/2011
BTEX (mg/kg)												
Benzene	0.06	44	0.0067 U	0.0066 U	0.0059 U	0.0059 U	0.0056 U	0.0054 U	0.038 U	0.0065 U	0.0065 U	0.0057 U
Toluene	0.7	500	0.0067 U	0.0066 U	0.0059 U	0.0059 U	0.0056 U	0.00019 J	0.038 U	0.00016 J	0.0065 U	0.0057 U
Ethylbenzene	1	390	0.0067 U	0.0066 U	0.0059 U	0.0059 U	0.0056 U	0.0054 U	0.038 U	0.0065 U	0.0065 U	0.0057 U
Total Xylene	0.26	500	0.0067 U	0.0066 U	0.0059 U	0.0059 U	0.0056 U	0.0054 U	0.038 U	0.0065 U	0.0065 U	0.0057 U
Total BTEX	NE	NE	ND	ND	ND	ND	ND	0.00019	ND	0.00016	ND	ND
Non-carcinogenic PAHs (mg/kg)												
Acenaphthene	20	500	0.44 U	0.44 U	0.27 J	0.19 J	0.12 J	0.35 U	NA	1.8 J	0.43 U	0.19 J
Acenaphthylene	100	500	0.44 U	0.44 U	0.68	0.33 J	0.27 J	0.35 U	NA	1.3 J	0.43 U	0.64 J
Anthracene	100	500	0.19 J	0.44 U	0.86	1.5	0.58	0.1 J	NA	8.3	0.09 J	0.85
Benzo[g,h,i]perylene	100	500	0.15 J	0.44 U	4	5	3.7	0.15 J	NA	11	0.064 J	6.3
Fluoranthene	100	500	0.56	0.44 U	3.5	5	3	0.42	NA	32	0.29 J	4.4
Fluorene	30	500	0.08 J	0.44 U	0.24 J	0.42	0.16 J	0.35 U	NA	3.4 J	0.43 U	0.2 J
2-Methylnaphthalene	NE	NE	0.44 U	0.44 U	0.13 J	0.41	0.18 J	0.35 U	NA	4.3 U	0.43 U	0.13 J
Naphthalene	12	500	0.086 J	0.44 U	0.25 J	0.35 J	0.52	0.35 U	NA	0.93 J	0.43 U	0.45 J
Phenanthrene	100	500	0.36 J	0.44 U	2.9	5.4	2.5	0.4	NA	11	0.18 J	2.8
Pyrene	100	500	0.84	0.44 U	7.9	9.3	6.3	0.48	NA	56	0.38 J	9.9
Carcinogenic PAHs (mg/kg)												
Benz[a]anthracene	1	5.6	0.32	0.044 U	3.3	7.8	2.7	0.19	NA	20	0.17	5.5
Benzo[a]pyrene	1	1	0.31	0.044 U	3.8	5.6	2.6	0.21	NA	17	0.13	5
Benzo[b]fluoranthene	1	5.6	0.34	0.044 U	5	9.1	3.4	0.21	NA	17	0.16	8.1
Benzo[k]fluoranthene	0.8	56	0.15	0.044 U	2.3	4.2	1.8	0.15	NA	7.1	0.073	4
Chrysene	1	56	0.33 J	0.44 U	4.5	6.8	3.3	0.2 J	NA	18	0.18 J	6.4
Dibenz[a,h]anthracene	0.33	0.56	0.052	0.044 U	1.2	2.8	0.78	0.035 U	NA	3.1	0.018 J	2
Indeno[1,2,3-cd]pyrene	0.5	5.6	0.17	0.044 U	4.1	6	3.6	0.14	NA	11	0.075	7.1
Total PAHs (mg/kg)												
Total PAHs	NE	500	3.938	ND	44.93	70.2	35.51	2.65	NA	218.93	1.81	63.96
Other SVOCs (mg/kg)												
Acetophenone	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Atrazine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzaldehyde	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Biphenyl	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(chloroisopropyl)ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-chloroethyl)ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-chloroethoxy)methane	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-ethylhexyl)phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Bromophenyl phenyl ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Butyl benzyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Caprolactam	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbazole	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	7	350	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3,3-Dichlorobenzidine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 10
2011 Postage Stamp -Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-159(11) 16 - 17 10/17/2011	SB-159(11) 22 - 23 10/17/2011	SB-160(11) 3 - 5 10/17/2011	SB-160(11) 8 - 9.5 10/17/2011	SB-161(11) 3 - 5 10/17/2011	SB-161(11) 8 - 10 10/17/2011	SB-161(11) 11 - 11.75 10/17/2011	SB-161(11) 11.75 - 13 10/17/2011	SB-161(11) 17 - 18 10/17/2011	SB-162(11) 2.75 - 4 10/18/2011
2,4-Dichlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diethyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dimethyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-butyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-octyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	0.33	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachloroethane	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isophorone	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol (o-Cresol)	0.33	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol (p-Cresol)	0.33	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3-Nitroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrobenzene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitrophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodi-n-propylamine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pentachlorophenol	0.8	6.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenol	0.33	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCBs (mg/kg)												
Aroclor 1016	NE	NE	0.09 U	0.089 U	0.079 U	0.079 U	0.076 U	0.072 U	NA	0.088 U	0.087 U	0.077 U
Aroclor 1221	NE	NE	0.09 U	0.089 U	0.079 U	0.079 U	0.076 U	0.072 U	NA	0.088 U	0.087 U	0.077 U
Aroclor 1232	NE	NE	0.09 U	0.089 U	0.079 U	0.079 U	0.076 U	0.072 U	NA	0.088 U	0.087 U	0.077 U
Aroclor 1242	NE	NE	0.09 U	0.089 U	0.079 U	0.079 U	0.076 U	0.072 U	NA	0.088 U	0.087 U	0.077 U
Aroclor 1248	NE	NE	0.09 U	0.089 U	0.079 U	0.079 U	0.076 U	0.072 U	NA	0.088 U	0.087 U	0.077 U
Aroclor 1254	NE	NE	0.09 U	0.089 U	0.079 U	0.079 U	0.076 U	0.072 U	NA	0.088 U	0.087 U	0.077 U
Aroclor 1260	NE	NE	0.053 J	0.053 J	0.079 U	0.079 U	0.076 U	0.072 U	NA	0.088 U	0.087 U	0.47
Total PCBs	0.1	1	0.053	0.053	ND	ND	ND	ND	NA	ND	ND	0.47
Cyanides (mg/kg)												
Free Cyanide	NE	NE	3.1 U	0.86 J	1.1 J	2.7 U	2.4 U	2.3 U	NA	2.8 U	2.8 U	2.5 UJ
Total Cyanide	27	27	0.67 UJ	0.66 UJ	12.8 J	0.59 UJ	28.5 J	0.89 J	NA	0.65 UJ	0.65 UJ	69.1 J
Other (mg/kg)												
Diesel Range Organics	NE	NE	NA	NA	NA	NA	NA	NA	2600	NA	NA	NA
Gasoline Range Organics	NE	NE	NA	NA	NA	NA	NA	NA	390 J	NA	NA	NA

Table 10
2011 Postage Stamp -Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-162(11) 8 - 10 10/18/2011	SB-162(11) 11 - 12 10/18/2011	SB-162(11) 16.75 - 18 10/18/2011	SB-162(11) 22 - 23 10/18/2011	SB-163(11) 10 - 11.75 10/19/2011	SB-163(11) 15.5 - 17.5 10/19/2011	SB-164(11) 8 - 10 10/18/2011	SB-164(11) 19 - 20 10/18/2011	SB-165(11) 3.5 - 5 10/19/2011	SB-165(11) 7.5 - 10 10/19/2011
BTEX (mg/kg)												
Benzene	0.06	44	0.0054 U	NA	4.3	0.0075 U	0.0063 U	0.0066 UJ	0.0063 U	0.0064 U	0.0057 U	0.0056 U
Toluene	0.7	500	0.0054 U	NA	1.9	0.0075 U	0.0063 U	0.00018 J	0.00013 J	0.0064 U	0.0057 U	0.0056 U
Ethylbenzene	1	390	0.0054 U	NA	2.7	0.0075 U	0.0063 U	0.0066 UJ	0.0063 U	0.0064 U	0.0057 U	0.0056 U
Total Xylene	0.26	500	0.0054 U	NA	9.3	0.0075 U	0.0063 U	0.0066 UJ	0.0063 U	0.0064 U	0.0057 U	0.0056 U
Total BTEX	NE	NE	ND	NA	18.2	ND	ND	0.00018	0.00013	ND	ND	ND
Non-carcinogenic PAHs (mg/kg)												
Acenaphthene	20	500	0.36 U	NA	160	0.49 U	0.41 U	0.43 U	0.42 U	0.42 U	0.38 U	0.37 U
Acenaphthylene	100	500	0.36 U	NA	110	0.49 U	0.41 U	0.43 U	0.42 U	0.42 U	0.063 J	0.37 U
Anthracene	100	500	0.36 U	NA	280	0.49 U	0.41 U	0.43 U	0.42 U	0.42 U	0.093 J	0.37 U
Benzo[g,h,i]perylene	100	500	0.36 U	NA	170	0.11 J	0.41 U	0.43 U	0.42 U	0.42 U	0.65	0.34 J
Fluoranthene	100	500	0.11 J	NA	610	0.28 J	0.41 U	0.43 U	0.087 J	0.42 U	1.1	0.42
Fluorene	30	500	0.36 U	NA	190	0.49 U	0.41 U	0.43 U	0.42 U	0.42 U	0.38 U	0.37 U
2-Methylnaphthalene	NE	NE	0.36 U	NA	140	0.49 U	0.065 J	0.43 U	0.42 U	0.42 U	0.27 J	0.15 J
Naphthalene	12	500	0.36 U	NA	340	0.14 J	0.13 J	0.068 J	0.42 U	0.42 U	0.21 J	0.17 J
Phenanthrene	100	500	0.074 J	NA	940	0.26 J	0.08 J	0.43 U	0.42 U	0.42 U	0.4	0.3 J
Pyrene	100	500	0.12 J	NA	750	0.47 J	0.088 J	0.43 U	0.076 J	0.42 U	1.2	0.46
Carcinogenic PAHs (mg/kg)												
Benz[a]anthracene	1	5.6	0.064	NA	360	0.18	0.046	0.011 J	0.047	0.042 U	0.65	0.32
Benzo[a]pyrene	1	1	0.036 U	NA	300	0.19	0.041 U	0.043 U	0.046	0.042 U	0.87	0.45
Benzo[b]fluoranthene	1	5.6	0.07	NA	320	0.22	0.039 J	0.043 U	0.053	0.042 U	0.93	0.49
Benzo[k]fluoranthene	0.8	56	0.036 U	NA	170	0.049 U	0.015 J	0.043 U	0.027 J	0.042 U	0.33	0.17
Chrysene	1	56	0.059 J	NA	300	0.16 J	0.41 U	0.43 U	0.42 U	0.42 U	0.7	0.36 J
Dibenz[a,h]anthracene	0.33	0.56	0.036 U	NA	44	0.049 U	0.041 U	0.043 U	0.042 U	0.042 U	0.12	0.058
Indeno[1,2,3-cd]pyrene	0.5	5.6	0.036 U	NA	180	0.12	0.041 U	0.043 U	0.029 J	0.042 U	0.63	0.36
Total PAHs (mg/kg)												
Total PAHs	NE	500	0.497	NA	5364	2.13	0.088	0.079	0.365	ND	8.216	4.048
Other SVOCs (mg/kg)												
Acetophenone	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Atrazine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzaldehyde	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Biphenyl	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(chloroisopropyl)ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-chloroethyl)ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-chloroethoxy)methane	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-ethylhexyl)phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Bromophenyl phenyl ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Butyl benzyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Caprolactam	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbazole	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	7	350	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3,3-Dichlorobenzidine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 10
2011 Postage Stamp -Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-162(11) 8 - 10 10/18/2011	SB-162(11) 11 - 12 10/18/2011	SB-162(11) 16.75 - 18 10/18/2011	SB-162(11) 22 - 23 10/18/2011	SB-163(11) 10 - 11.75 10/19/2011	SB-163(11) 15.5 - 17.5 10/19/2011	SB-164(11) 8 - 10 10/18/2011	SB-164(11) 19 - 20 10/18/2011	SB-165(11) 3.5 - 5 10/19/2011	SB-165(11) 7.5 - 10 10/19/2011
2,4-Dichlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diethyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dimethyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-butyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-octyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	0.33	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachloroethane	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isophorone	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol (o-Cresol)	0.33	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol (p-Cresol)	0.33	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3-Nitroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrobenzene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitrophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodi-n-propylamine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pentachlorophenol	0.8	6.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenol	0.33	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCBs (mg/kg)												
Aroclor 1016	NE	NE	0.073 U	NA	0.09 U	0.1 U	0.084 U	0.088 U	0.085 U	0.086 U	0.077 U	0.075 U
Aroclor 1221	NE	NE	0.073 U	NA	0.09 U	0.1 U	0.084 U	0.088 U	0.085 U	0.086 U	0.077 U	0.075 U
Aroclor 1232	NE	NE	0.073 U	NA	0.09 U	0.1 U	0.084 U	0.088 U	0.085 U	0.086 U	0.077 U	0.075 U
Aroclor 1242	NE	NE	0.073 U	NA	0.09 U	0.1 U	0.084 U	0.088 U	0.085 U	0.086 U	0.077 U	0.075 U
Aroclor 1248	NE	NE	0.073 U	NA	0.09 U	0.1 U	0.084 U	0.088 U	0.085 U	0.086 U	0.077 U	0.075 U
Aroclor 1254	NE	NE	0.073 U	NA	0.09 U	0.1 U	0.084 U	0.088 U	0.085 U	0.086 U	0.077 U	0.075 U
Aroclor 1260	NE	NE	0.073 U	NA	0.098 J	0.1 U	0.084 U	0.088 UJ	0.085 U	0.086 U	0.077 U	0.075 U
Total PCBs	0.1	1	ND	NA	0.098	ND	ND	ND	ND	ND	ND	ND
Cyanides (mg/kg)												
Free Cyanide	NE	NE	2.5 U	3.2 U	2.8 U	3.2 U	2.7 U	2.8 U	2.9 U	2.8 U	2.5 U	2.5 U
Total Cyanide	27	27	0.49 J	75 J	12.9 J	0.83 J	0.63 UJ	0.66 UJ	0.63 UJ	26.5 J	0.41 J	0.56 UJ
Other (mg/kg)												
Diesel Range Organics	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Gasoline Range Organics	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 10
2011 Postage Stamp -Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-165(11) 16.5 - 17.5 10/19/2011	SB-165(11) 22 - 24.5 10/19/2011	SB-166(11) 3 - 5 10/19/2011	SB-166(11) 8 - 10 10/19/2011	SB-166(11) 11.5 - 13 10/19/2011	SB-166(11) 16 - 18 10/19/2011	Duplicate of: SB-166(11) 16 - 18 10/19/2011	SB-167(11) 3 - 5 10/19/2011	SB-167(11) 8.5 - 10 10/19/2011	SB-167(11) 11.5 - 12.5 10/19/2011
BTEX (mg/kg)												
Benzene	0.06	44	0.0061 U	0.0074 UJ	0.0057 U	0.0059 U	0.0065 U	0.0067 U	0.0068 U	0.0058 U	0.0063 U	0.0064 U
Toluene	0.7	500	0.0061 U	0.0074 UJ	0.0057 U	0.0059 U	0.0065 U	0.0067 U	0.0068 U	0.00053 J	0.0063 U	0.0064 U
Ethylbenzene	1	390	0.0061 U	0.0074 UJ	0.0057 U	0.0059 U	0.0065 U	0.0067 U	0.0068 U	0.0058 U	0.0063 U	0.0064 U
Total Xylene	0.26	500	0.0061 U	0.0074 UJ	0.0057 U	0.0059 U	0.0065 U	0.0067 U	0.0068 U	0.0058 U	0.0063 U	0.0064 U
Total BTEX	NE	NE	ND	ND	ND	ND	ND	ND	ND	0.00053	ND	ND
Non-carcinogenic PAHs (mg/kg)												
Acenaphthene	20	500	0.4 U	0.48 U	0.12 J	0.39 U	0.43 U	0.44 U	0.45 U	0.17 J	0.42 U	0.42 U
Acenaphthylene	100	500	0.4 U	0.48 U	0.21 J	0.59	0.43 U	0.44 U	0.45 U	0.3 J	0.42 U	0.42 U
Anthracene	100	500	0.4 U	0.48 U	0.38	0.44	0.43 U	0.44 U	0.45 U	2.4	0.42 U	0.42 U
Benzo[g,h,i]perylene	100	500	0.4 U	0.48 U	1.7	5.4	0.43 U	0.44 U	0.45 U	2.9	0.42 U	0.42 U
Fluoranthene	100	500	0.11 J	0.48 U	2.8	4	0.43 U	0.44 U	0.45 U	5.9	0.42 U	0.42 U
Fluorene	30	500	0.4 U	0.48 U	0.12 J	0.39 U	0.43 U	0.44 U	0.45 U	0.37 J	0.42 U	0.42 U
2-Methylnaphthalene	NE	NE	0.4 U	0.48 U	0.38 U	0.13 J	0.43 U	0.44 U	0.45 U	0.16 J	0.42 U	0.42 U
Naphthalene	12	500	0.4 U	0.48 U	0.13 J	0.34 J	0.11 J	0.44 U	0.45 U	0.37 J	0.42 U	0.42 U
Phenanthrene	100	500	0.4 U	0.48 U	1.5	0.52	0.43 U	0.44 U	0.45 U	5.8	0.42 U	0.42 U
Pyrene	100	500	0.13 J	0.48 U	2.9	4	0.43 U	0.44 U	0.45 U	9.9	0.072 J	0.42 U
Carcinogenic PAHs (mg/kg)												
Benz[a]anthracene	1	5.6	0.1	0.048 U	1.6	4	0.026 J	0.044 U	0.045 U	3.6	0.031 J	0.018 J
Benzo[a]pyrene	1	1	0.08	0.048 U	1.9	7	0.016 J	0.044 U	0.045 U	3	0.026 J	0.016 J
Benzo[b]fluoranthene	1	5.6	0.087	0.048 U	2.3	6.7	0.025 J	0.044 U	0.045 U	3.9	0.042 U	0.02 J
Benzo[k]fluoranthene	0.8	56	0.026 J	0.048 U	0.84	2.3	0.0095 J	0.044 U	0.045 U	1.5	0.042 U	0.01 J
Chrysene	1	56	0.068 J	0.48 U	1.8	4	0.43 U	0.44 U	0.45 U	4	0.42 U	0.42 U
Dibenz[a,h]anthracene	0.33	0.56	0.012 J	0.048 U	0.38	1.2	0.043 U	0.044 U	0.045 U	0.71	0.042 U	0.042 U
Indeno[1,2,3-cd]pyrene	0.5	5.6	0.031 J	0.048 U	1.7	6.1	0.043 U	0.044 U	0.045 U	3	0.042 U	0.042 U
Total PAHs (mg/kg)												
Total PAHs	NE	500	0.644	ND	20.38	46.72	0.1865	ND	ND	47.98	0.129	0.064
Other SVOCs (mg/kg)												
Acetophenone	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Atrazine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzaldehyde	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Biphenyl	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(chloroisopropyl)ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-chloroethyl)ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-chloroethoxy)methane	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-ethylhexyl)phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Bromophenyl phenyl ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Butyl benzyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Caprolactam	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbazole	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	7	350	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3,3-Dichlorobenzidine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 10
2011 Postage Stamp -Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-165(11) 16.5 - 17.5 10/19/2011	SB-165(11) 22 - 24.5 10/19/2011	SB-166(11) 3 - 5 10/19/2011	SB-166(11) 8 - 10 10/19/2011	SB-166(11) 11.5 - 13 10/19/2011	SB-166(11) 16 - 18 10/19/2011	Duplicate of: SB-166(11) 16 - 18 10/19/2011	SB-167(11) 3 - 5 10/19/2011	SB-167(11) 8.5 - 10 10/19/2011	SB-167(11) 11.5 - 12.5 10/19/2011
2,4-Dichlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diethyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dimethyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-butyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-octyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	0.33	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachloroethane	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isophorone	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol (o-Cresol)	0.33	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol (p-Cresol)	0.33	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3-Nitroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrobenzene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitrophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodi-n-propylamine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pentachlorophenol	0.8	6.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenol	0.33	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCBs (mg/kg)												
Aroclor 1016	NE	NE	0.082 U	0.098 U	0.77 U	0.079 U	0.087 U	0.09 U	0.091 U	3.9 U	0.085 U	0.085 U
Aroclor 1221	NE	NE	0.082 U	0.098 U	0.77 U	0.079 U	0.087 U	0.09 U	0.091 U	3.9 U	0.085 U	0.085 U
Aroclor 1232	NE	NE	0.082 U	0.098 U	0.77 U	0.079 U	0.087 U	0.09 U	0.091 U	3.9 U	0.085 U	0.085 U
Aroclor 1242	NE	NE	0.082 U	0.098 U	0.77 U	0.079 U	0.087 U	0.09 U	0.091 U	3.9 U	0.085 U	0.085 U
Aroclor 1248	NE	NE	0.082 U	0.098 U	0.77 U	0.079 U	0.087 U	0.09 U	0.091 U	3.9 U	0.085 U	0.085 U
Aroclor 1254	NE	NE	0.082 U	0.098 U	0.77 U	0.079 U	0.087 U	0.09 U	0.091 U	3.9 U	0.085 U	0.085 U
Aroclor 1260	NE	NE	0.082 U	0.098 U	10	0.12	0.087 U	0.09 U	0.047 J	36	0.25	0.085 U
Total PCBs	0.1	1	ND	ND	10	0.12	ND	ND	0.047	36	0.25	ND
Cyanides (mg/kg)												
Free Cyanide	NE	NE	2.6 U	3.2 U	2.6 U	2.6 U	2.7 U	3 U	3 U	2.5 U	2.7 U	2.8 U
Total Cyanide	27	27	0.6 UJ	0.74 UJ	3.8 J	0.93 J	0.63 UJ	0.66 UJ	0.68 UJ	7.4 J	0.63 UJ	0.64 UJ
Other (mg/kg)												
Diesel Range Organics	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Gasoline Range Organics	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 10
2011 Postage Stamp -Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-167(11) 24 - 25 10/19/2011	SB-168(11) 4 - 5 10/19/2011	SB-168(11) 8.75 - 10 10/19/2011	SB-168(11) 10.5 - 12 10/19/2011	Duplicate of: SB-168(11) 10.5 - 12 10/19/2011	SB-168(11) 20 - 22 10/19/2011	Duplicate of: SB-168(11) 20 - 22 10/19/2011	SB-169(11) 3 - 4 10/19/2011	TP-2(11) 3 - 3 10/11/2011
BTEX (mg/kg)											
Benzene	0.06	44	0.0071 U	NA	0.0058 U	13	10	0.007 U	0.0071 U	0.0056 U	0.0056 U
Toluene	0.7	500	0.0071 U	NA	0.0058 U	20	14	0.007 U	0.0071 U	0.0056 U	0.0056 U
Ethylbenzene	1	390	0.0071 U	NA	0.0058 U	5.9	4.6	0.007 U	0.0071 U	0.0056 U	0.0056 U
Total Xylene	0.26	500	0.0071 U	NA	0.0058 U	43	29	0.007 U	0.0071 U	0.0056 U	0.0056 U
Total BTEX	NE	NE	ND	NA	ND	81.9	57.6	ND	ND	ND	ND
Non-carcinogenic PAHs (mg/kg)											
Acenaphthene	20	500	0.47 U	0.4 U	0.38 U	17 J	46 J	0.46 U	0.47 U	0.37 U	0.37 U
Acenaphthylene	100	500	0.47 U	0.4 U	0.38 U	18 J	99 J	0.46 U	0.47 U	0.37 U	0.58
Anthracene	100	500	0.47 U	0.11 J	0.38 U	36 J	150 J	0.46 U	0.47 U	0.37 U	0.14 J
Benzo[g,h,i]perylene	100	500	0.47 U	0.47	0.38 U	10 J	53 J	0.46 U	0.47 U	0.14 J	1.4
Fluoranthene	100	500	0.47 U	0.99	0.38 U	60 J	210 J	0.46 U	0.47 U	0.11 J	0.58
Fluorene	30	500	0.47 U	0.4 U	0.38 U	30 J	99 J	0.46 U	0.47 U	0.37 U	0.09 J
2-Methylnaphthalene	NE	NE	0.47 U	0.4 U	0.38 U	21 J	81 J	0.46 U	0.47 U	0.37 U	0.37 U
Naphthalene	12	500	0.47 U	0.4 U	0.38 U	79 J	290 J	0.46 U	0.47 U	0.37 U	0.11 J
Phenanthrene	100	500	0.47 U	0.5	0.38 U	110 J	480 J	0.46 U	0.47 U	0.37 U	0.27 J
Pyrene	100	500	0.47 U	0.99	0.38 U	61 J	180 J	0.46 U	0.47 U	0.28 J	0.87
Carcinogenic PAHs (mg/kg)											
Benz[a]anthracene	1	5.6	0.047 U	0.57	0.038 U	24 J	96 J	0.046 U	0.047 U	0.14 J	0.66
Benzo[a]pyrene	1	1	0.047 U	0.74	0.038 U	22 J	80 J	0.046 U	0.047 U	0.16	0.93
Benzo[b]fluoranthene	1	5.6	0.047 U	0.84	0.038 U	21 J	81 J	0.046 U	0.047 U	0.27	1.3
Benzo[k]fluoranthene	0.8	56	0.047 U	0.31	0.038 U	10 J	34 J	0.046 U	0.047 U	0.12	0.39
Chrysene	1	56	0.47 U	0.62	0.38 U	22 J	97 J	0.46 U	0.47 U	0.28 J	0.82
Dibenz[a,h]anthracene	0.33	0.56	0.047 U	0.091	0.038 U	2.4 J	13 J	0.046 U	0.047 U	0.021 J	0.28
Indeno[1,2,3-cd]pyrene	0.5	5.6	0.047 U	0.54	0.038 U	13 J	50 J	0.046 U	0.047 U	0.14	1.3
Total PAHs (mg/kg)											
Total PAHs	NE	500	ND	6.771	ND	556.4	2139	ND	ND	1.661	9.72
Other SVOCs (mg/kg)											
Acetophenone	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
Atrazine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzaldehyde	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Biphenyl	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(chloroisopropyl)ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-chloroethyl)ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-chloroethoxy)methane	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-ethylhexyl)phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Bromophenyl phenyl ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
Butyl benzyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
Caprolactam	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbazole	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	7	350	NA	NA	NA	NA	NA	NA	NA	NA	NA
3,3-Dichlorobenzidine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 10
2011 Postage Stamp -Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Interval (ft): Sample Date:	6 NYCRR 375 SCO UNRESTRICTED USE	6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL	SB-167(11) 24 - 25 10/19/2011	SB-168(11) 4 - 5 10/19/2011	SB-168(11) 8.75 - 10 10/19/2011	SB-168(11) 10.5 - 12 10/19/2011	Duplicate of: SB-168(11) 10.5 - 12 10/19/2011	SB-168(11) 20 - 22 10/19/2011	Duplicate of: SB-168(11) 20 - 22 10/19/2011	SB-169(11) 3 - 4 10/19/2011	TP-2(11) 3 - 3 10/11/2011
2,4-Dichlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diethyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dimethyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-butyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-octyl phthalate	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	0.33	6	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachloroethane	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isophorone	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol (o-Cresol)	0.33	500	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol (p-Cresol)	0.33	500	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
3-Nitroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitroaniline	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrobenzene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitrophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodi-n-propylamine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pentachlorophenol	0.8	6.7	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenol	0.33	500	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCBs (mg/kg)											
Aroclor 1016	NE	NE	0.095 U	0.081 U	0.078 U	0.092 U	0.09 U	0.093 U	0.094 U	0.075 U	0.075 U
Aroclor 1221	NE	NE	0.095 U	0.081 U	0.078 U	0.092 U	0.09 U	0.093 U	0.094 U	0.075 U	0.075 U
Aroclor 1232	NE	NE	0.095 U	0.081 U	0.078 U	0.092 U	0.09 U	0.093 U	0.094 U	0.075 U	0.075 U
Aroclor 1242	NE	NE	0.095 U	0.081 U	0.078 U	0.092 U	0.09 U	0.093 U	0.094 U	0.075 U	0.075 U
Aroclor 1248	NE	NE	0.095 U	0.081 U	0.078 U	0.092 U	0.09 U	0.093 U	0.094 U	0.075 U	0.075 U
Aroclor 1254	NE	NE	0.095 U	0.081 U	0.078 U	0.092 U	0.09 U	0.093 U	0.094 U	0.075 U	0.075 U
Aroclor 1260	NE	NE	0.095 U	0.081 U	0.078 U	0.092 U	0.09 U	0.093 U	0.094 U	0.23	0.075 U
Total PCBs	0.1	1	ND	ND	ND	ND	ND	ND	ND	0.23	ND
Cyanides (mg/kg)											
Free Cyanide	NE	NE	3.1 U	2.6 U	2.5 U	3.1 U	3 U	3.1 U	3.1 U	2.5 U	NA
Total Cyanide	27	27	0.71 UJ	29.7 J	0.95 J	0.18 J	0.66 UJ	0.7 UJ	0.7 UJ	0.27 J	NA
Other (mg/kg)											
Diesel Range Organics	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
Gasoline Range Organics	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 10
2011 Postage Stamp - Subsurface Soil Analytical Results (mg/kg)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Notes:

mg/kg - milligrams/kilogram or parts per million (ppm)
BTEX - benzene, toluene, ethylbenzene, and xylenes
VOCs - volatile organic compounds
PAHs - polycyclic aromatic hydrocarbons
SVOCs - semivolatile organic compounds
PCBs - polychlorinated biphenyls
Total BTEX, Total PAHs, and Total PCBs are calculated using detects only.

6 NYCRR - New York State Register and Official Compilation of Codes, Rules and Regulations of the State of New York
6 NYCRR 375 SCO UNRESTRICTED USE - regulatory comparison against NYCRR, Chapter IV, Part 375-6 Unrestricted Use Soil Cleanup Objectives
6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL - regulatory comparison against NYCRR, Chapter IV, Part 375-6 Restricted Use Commercial Soil Cleanup Objectives

NE - not established
NA - not analyzed
ND - not detected; total concentration is listed as ND because no compounds were detected in the group

Yellow shading indicates that the detected result value exceeds established 6 NYCRR 375 SCO UNRESTRICTED USE and 6 NYCRR 375 SCO RESTRICTED USE COMMERCIAL
Gray shading indicates that the detected result value exceeds established 6 NYCRR 375 SCO UNRESTRICTED USE

*A soil cleanup level of 500 mg/kg for total PAHs for subsurface soil can be used at commercial use sites where the Ecological Soil Cleanup Objectives are not applicable. The 500 mg/kg soil cleanup level is in lieu of achieving all of the contaminant PAH-specific SCOs in Part 375-6.

Validation Qualifiers:

J - estimated value
U - indicates not detected to the reporting limit
UJ - not detected at or above the reporting limit shown and the reporting limit is estimated
R - rejected

Validated

Table 11
2011 Postage Stamp - Analytical Groundwater Results (ug/L)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Sample Name: Sample Date:	CAS no.	NYS AWQS	CTM-9(06) 11/15/2011	CTM-23(08) 11/15/2011	MW-20S(09) 11/15/2011	MW-25S(09) 11/15/2011	MW-27S(10) 11/15/2011	Duplicate of: MW-27S(10) 11/15/2011	MW-28S(11) 11/15/2011	MW-29S(11) 11/15/2011
BTEX (ug/L)										
Benzene	71-43-2	1	1 U	51	460	1 U	120	120	28	1 U
Toluene	108-88-3	5	1 U	5.1	360	1 U	27	28	37	1 U
Ethylbenzene	100-41-4	5	1 U	5	92	1 U	59	61	17	1 U
Total Xylene	1330-20-7	5	3 U	12	300	3 U	100	100	84	3 U
Total BTEX	TBTEX	NE	ND	73.1	1212	ND	306	309	166	ND
Non-carcinogenic PAHs (ug/L)										
Acenaphthene	83-32-9	20*	11 U	9.1 J	160	10 U	19 J	15	15	10 U
Acenaphthylene	208-96-8	NE	11 U	10 U	51 U	10 U	21 U	3.8 J	22	10 U
Anthracene	120-12-7	50*	11 U	10 U	18 J	10 U	21 U	10 U	5.9 J	10 U
Benzo[g,h,i]perylene	191-24-2	NE	11 U	10 U	51 U	10 U	21 U	10 U	10 U	10 U
Fluoranthene	206-44-0	50*	11 U	10 U	18 J	10 U	21 U	10 U	5.7 J	10 U
Fluorene	86-73-7	50*	11 U	5.2 J	110 J	10 U	7.8 J	6.5 J	27	10 U
2-Methylnaphthalene	91-57-6	NE	11 U	3.7 J	56	10 U	31	25	8.4 J	10 U
Naphthalene	91-20-3	10*	11 U	100	930	10 U	280 J	170 J	10 U	10 U
Phenanthrene	85-01-8	50*	11 U	5.1 J	110 J	10 U	9.8 J	8.1 J	26	10 U
Pyrene	129-00-0	50*	11 U	10 U	51 U	10 U	21 U	10 U	3.4 J	10 U
Carcinogenic PAHs (ug/L)										
Benz[a]anthracene	56-55-3	0.002*	1.1 U	1 U	5.1 U	1 U	2.1 U	1 U	0.49 J	1 U
Benzo[a]pyrene	50-32-8	ND	1.1 U	1 U	5.1 U	1 U	2.1 U	1 U	1 U	1 U
Benzo[b]fluoranthene	205-99-2	0.002*	1.1 U	1 U	5.1 U	1 U	2.1 U	1 U	1 U	1 U
Benzo[k]fluoranthene	207-08-9	0.002*	1.1 U	1 U	5.1 U	1 U	2.1 U	1 U	1 U	1 U
Chrysene	218-01-9	0.002*	11 U	10 U	51 U	10 U	21 U	10 U	10 U	10 U
Dibenz[a,h]anthracene	53-70-3	NE	1.1 U	1 U	5.1 U	1 U	2.1 U	1 U	1 U	1 U
Indeno[1,2,3-cd]pyrene	193-39-5	0.002*	1.1 U	1 U	5.1 U	1 U	2.1 U	1 U	1 U	1 U
Total PAHs (ug/L)										
Total PAHs	TPAH	NE	ND	123.1	1402	ND	347.6	228.4	113.89	ND
PCBs (ug/L)										
Aroclor 1016	12674-11-2	NE	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
Aroclor 1221	11104-28-2	NE	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
Aroclor 1232	11141-16-5	NE	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
Aroclor 1242	53469-21-9	NE	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
Aroclor 1248	12672-29-6	NE	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
Aroclor 1254	11097-69-1	NE	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
Aroclor 1260	11096-82-5	NE	0.51 U	0.51 U	0.51 UJ	0.43 J	0.51 U	0.51 U	0.51 U	0.51 U
Total PCBs	TPCB	NE	ND	ND	ND	0.43	ND	ND	ND	ND
Cyanides (ug/L)										
Free Cyanide	FREECN	NE	5 U	5.6 U	5 U	5.7 U	5 U	5 U	5 U	5 U
Total Cyanide	57-12-5	200	1530	767	1440	56	17.7	19.4	297	17.6

Table 11
2011 Postage Stamp - Analytical Groundwater Results (ug/L)
National Grid
Schenectady (Clinton Street) Former MGP Site OU2 Remedial Investigation
Schenectady, New York

Notes:

ug/L - micrograms per liter or parts per billion (ppb)
BTEX - benzene, toluene, ethylbenzene, and xylenes
PAHs - polycyclic aromatic hydrocarbons
PCBs - polychlorinated biphenyls
Total BTEX, Total PAHs, and Total PCBs are calculated using detects only.

NYS AWQS - New York State Ambient Water Quality Standards and Guidance Values for GA groundwater
* indicates the value is a guidance value and not a standard

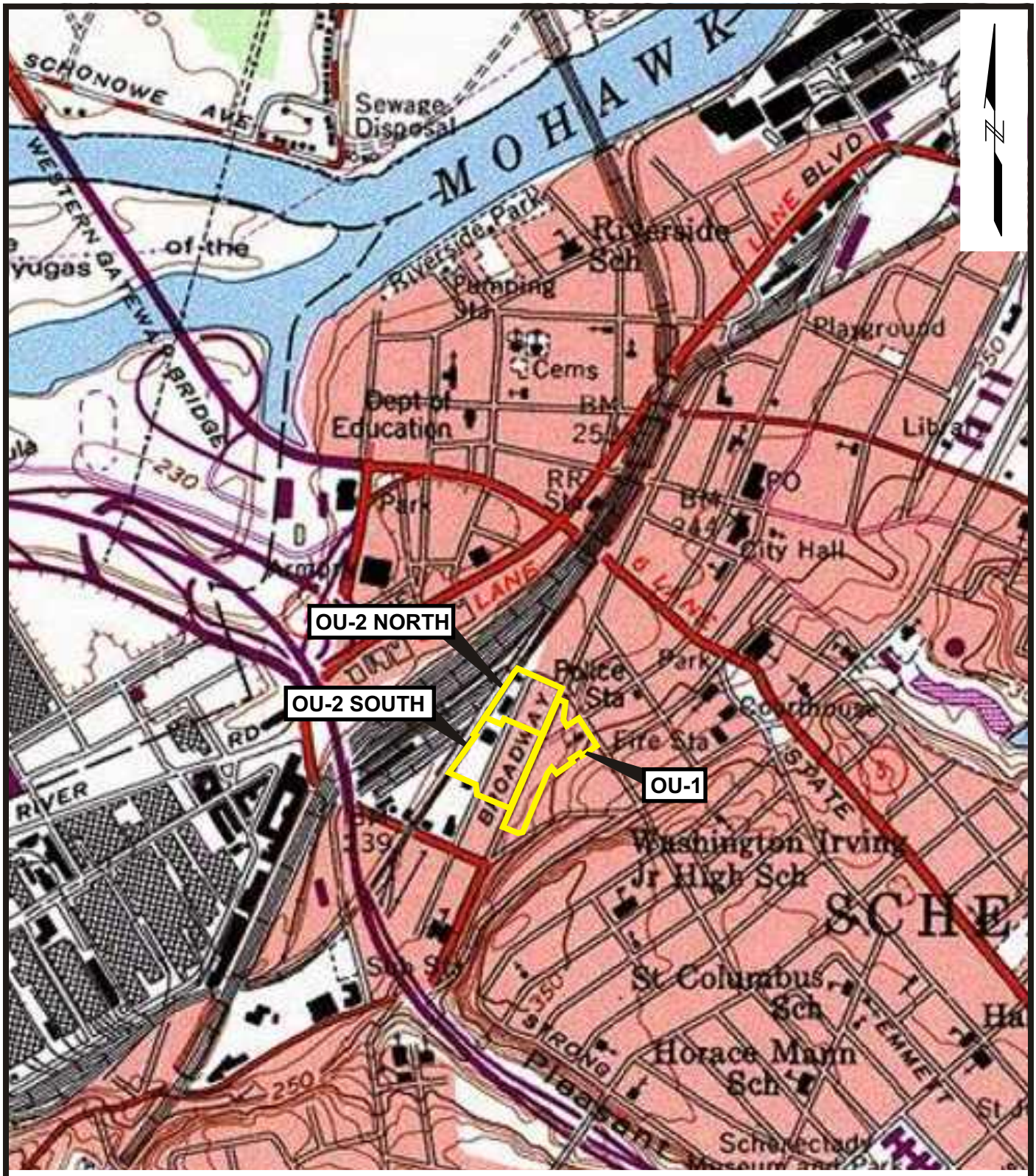
NE - not established
NA - not analyzed
ND - not detected; total concentration is listed as ND because no compounds were detected in the group

Bolding indicates a detected concentration
Gray shading indicates that the detected result value exceeds NYS AWQS

Validation Qualifiers:

J - estimated value
U - indicates not detected to the reporting limit
UJ - not detected at or above the reporting limit shown and the reporting limit is estimated

Figures



SOURCE:
Map created with TOPO! ® ©2001 National Geographic
(www.nationalgeographic.com/topo)

REMEDIAL INVESTIGATION - OU2
CLINTON STREET FORMER MGP SITE
SCHENECTADY, NEW YORK

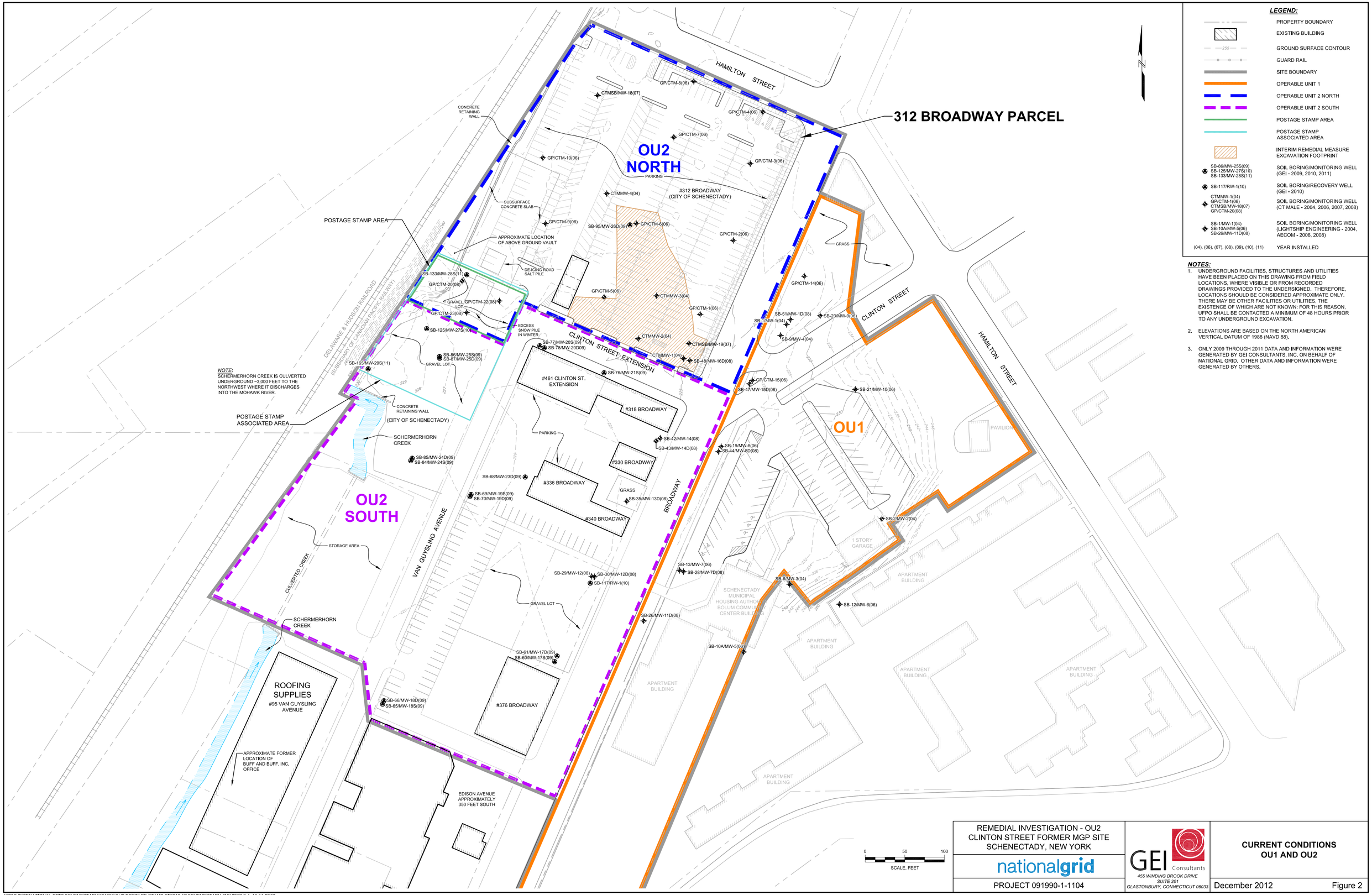
nationalgrid

GEI Consultants

SITE LOCATION MAP

Project 091990-1-1104 | December 2012 | Figure 1

I:\Project\National Grid\Schenectady\091990\OU2 Postage Stamp RI\2012-12\Schenectady-Site Loc.cdr



LEGEND:

- PROPERTY BOUNDARY
- EXISTING BUILDING
- 255 — GROUND SURFACE CONTOUR
- GUARD RAIL
- SITE BOUNDARY
- OPERABLE UNIT 1
- OPERABLE UNIT 2 NORTH
- OPERABLE UNIT 2 SOUTH
- POSTAGE STAMP AREA
- POSTAGE STAMP ASSOCIATED AREA
- INTERIM REMEDIAL MEASURE EXCAVATION FOOTPRINT
- SB-86/MW-25S(09) SB-125/MW-27S(10) SB-133/MW-28S(11) — SOIL BORING/MONITORING WELL (GEI - 2009, 2010, 2011)
- SB-117/RW-1(10) — SOIL BORING/RECOVERY WELL (GEI - 2010)
- CTMMW-1(04) GP/CTM-1(06) CTMSB/MW-18(07) GP/CTM-20(08) — SOIL BORING/MONITORING WELL (CT MALE - 2004, 2006, 2007, 2008)
- SB-1/MW-1(04) SB-10A/MW-5(06) SB-26/MW-11D(08) — SOIL BORING/MONITORING WELL (LIGHTSHIP ENGINEERING - 2004, AECOM - 2006, 2008)
- (04), (06), (07), (08), (09), (10), (11) — YEAR INSTALLED

NOTES:

1. UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLACED ON THIS DRAWING FROM FIELD LOCATIONS, WHERE VISIBLE OR FROM RECORDED DRAWINGS PROVIDED TO THE UNDERSIGNED. THEREFORE, LOCATIONS SHOULD BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE OTHER FACILITIES OR UTILITIES, THE EXISTENCE OF WHICH ARE NOT KNOWN. FOR THIS REASON, UFPO SHALL BE CONTACTED A MINIMUM OF 48 HOURS PRIOR TO ANY UNDERGROUND EXCAVATION.
2. ELEVATIONS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
3. ONLY 2009 THROUGH 2011 DATA AND INFORMATION WERE GENERATED BY GEI CONSULTANTS, INC. ON BEHALF OF NATIONAL GRID. OTHER DATA AND INFORMATION WERE GENERATED BY OTHERS.

NOTE:
SCHERMERHORN CREEK IS CULVERTED UNDERGROUND ~3,000 FEET TO THE NORTHWEST WHERE IT DISCHARGES INTO THE MOHAWK RIVER.

REMEDIAL INVESTIGATION - OU2
CLINTON STREET FORMER MGP SITE
SCHENECTADY, NEW YORK

nationalgrid

PROJECT 091990-1-1104

GEI Consultants
455 WINDING BROOK DRIVE
SUITE 201
GLASTONBURY, CONNECTICUT 06033

CURRENT CONDITIONS OU1 AND OU2

December 2012 — Figure 2

I:\PROJECT\NATIONAL GRID\SCHENECTADY\091990\OU2 POSTAGE STAMP RI\2012-12\SCHENECTADY-FIGURES 2-4_10-11.DWG

LEGEND:

- PROPERTY BOUNDARY
- EXISTING BUILDING
- HISTORICAL STRUCTURES
- GROUND SURFACE CONTOUR
- GUARD RAIL
- GAS LINE
- ELECTRIC LINE
- FIBER OPTIC LINE
- FIRE ALARM LINE
- TELEPHONE LINE
- TRAFFIC SIGNAL LINE
- WATER LINE
- SITE BOUNDARY
- OPERABLE UNIT 1
- OPERABLE UNIT 2 NORTH
- OPERABLE UNIT 2 SOUTH
- POSTAGE STAMP AREA
- POSTAGE STAMP ASSOCIATED AREA

NOTES:

1. UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLACED ON THIS DRAWING FROM FIELD LOCATIONS, WHERE VISIBLE OR FROM RECORDED DRAWINGS PROVIDED TO THE UNDERSIGNED. THEREFORE, LOCATIONS SHOULD BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE OTHER FACILITIES OR UTILITIES, THE EXISTENCE OF WHICH ARE NOT KNOWN; FOR THIS REASON, UPO SHALL BE CONTACTED A MINIMUM OF 48 HOURS PRIOR TO ANY UNDERGROUND EXCAVATION.
2. ELEVATIONS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
3. ONLY 2009 THROUGH 2011 DATA AND INFORMATION WERE GENERATED BY GEI CONSULTANTS, INC. ON BEHALF OF NATIONAL GRID. OTHER DATA AND INFORMATION WERE GENERATED BY OTHERS.

312 BROADWAY PARCEL

OU2 NORTH

OU2 SOUTH

OU1

POSTAGE STAMP AREA

POSTAGE STAMP ASSOCIATED AREA

NOTE: SCHERMERHORN CREEK IS CULVERTED UNDERGROUND ~3,000 FEET TO THE NORTHWEST WHERE IT DISCHARGES INTO THE MOHAWK RIVER.

APPROXIMATE LOCATION OF FORMER SCALES

APPROXIMATE LOCATION OF FORMER OFFICE BUILDING

APPROXIMATE LOCATION OF FORMER GARAGE BUILDING

APPROXIMATE LOCATION OF FORMER "COMFORT STATION" BUILDING

APPROXIMATE LOCATION OF FORMER "COAL POCKETS" BUILDING

APPROXIMATE LOCATION OF ABOVE GROUND VAULT

APPROXIMATE LOCATION OF FORMER WAGON PAINTING BUILDING

APPROXIMATE LOCATION OF FORMER GASOLINE FILLING STATION

HAMILTON STREET

CLINTON STREET

CLINTON STREET EXTENSION

BROADWAY

VAN GUYSLING AVENUE

DELAWARE & HUDSON RAILROAD (SUBSIDIARY OF CANADIAN PACIFIC RAILWAY)

SCHERMERHORN CREEK

CULVERTED CREEK

CONCRETE RETAINING WALL

#312 BROADWAY (CITY OF SCHENECTADY)

#318 BROADWAY

#330 BROADWAY

#336 BROADWAY

#340 BROADWAY

#376 BROADWAY

#461 CLINTON ST. EXTENSION

VACANT SALE HOUSE

DE-ICING ROAD SALT PILE

EXCESS SNOW PILE IN WINTER

THROUGH TRUSS BRIDGE

TRESTLE

SCATTERED PILES OF LUMBER AND PIPE

JUNK YARD 1930-1994

MANUFACTURING LUBRICATING OILS

JUNK STORAGE 1974-1989

JUNK YARD 1951-1995

JUNK YARD 1951-1988

STORAGE AREA

ROOFING SUPPLIES
#95 VAN GUYSLING AVENUE

APPROXIMATE FORMER LOCATION OF BUFF AND BUFF, INC. OFFICE

EDISON AVENUE APPROXIMATELY 350 FEET SOUTH

ELECTRIC GARAGE

GASOLINE PUMP HOUSE/ TANK

GAS HOLDER B

COKE HOUSE

TAR WELL F

TAR WELL A

REMAIN PURIFIERS

METERS

PUMP HOUSE

LIME METER

PIPE SHOP

OFFICE

DYNAMOS STORAGE

CABLE STORAGE

COAL STORAGE

1 STORY GARAGE

REPAIR SHOP

GAS HOLDER C

GAS HOLDER A

SCHENECTADY MUNICIPAL HOUSING AUTHORITY BOLUM COMMUNITY CENTER BUILDING

APARTMENT BUILDING

PAVILION

GRASS

N

0 50 100

SCALE, FEET

REMEDIAL INVESTIGATION - OU2
CLINTON STREET FORMER MGP SITE
SCHENECTADY, NEW YORK

nationalgrid

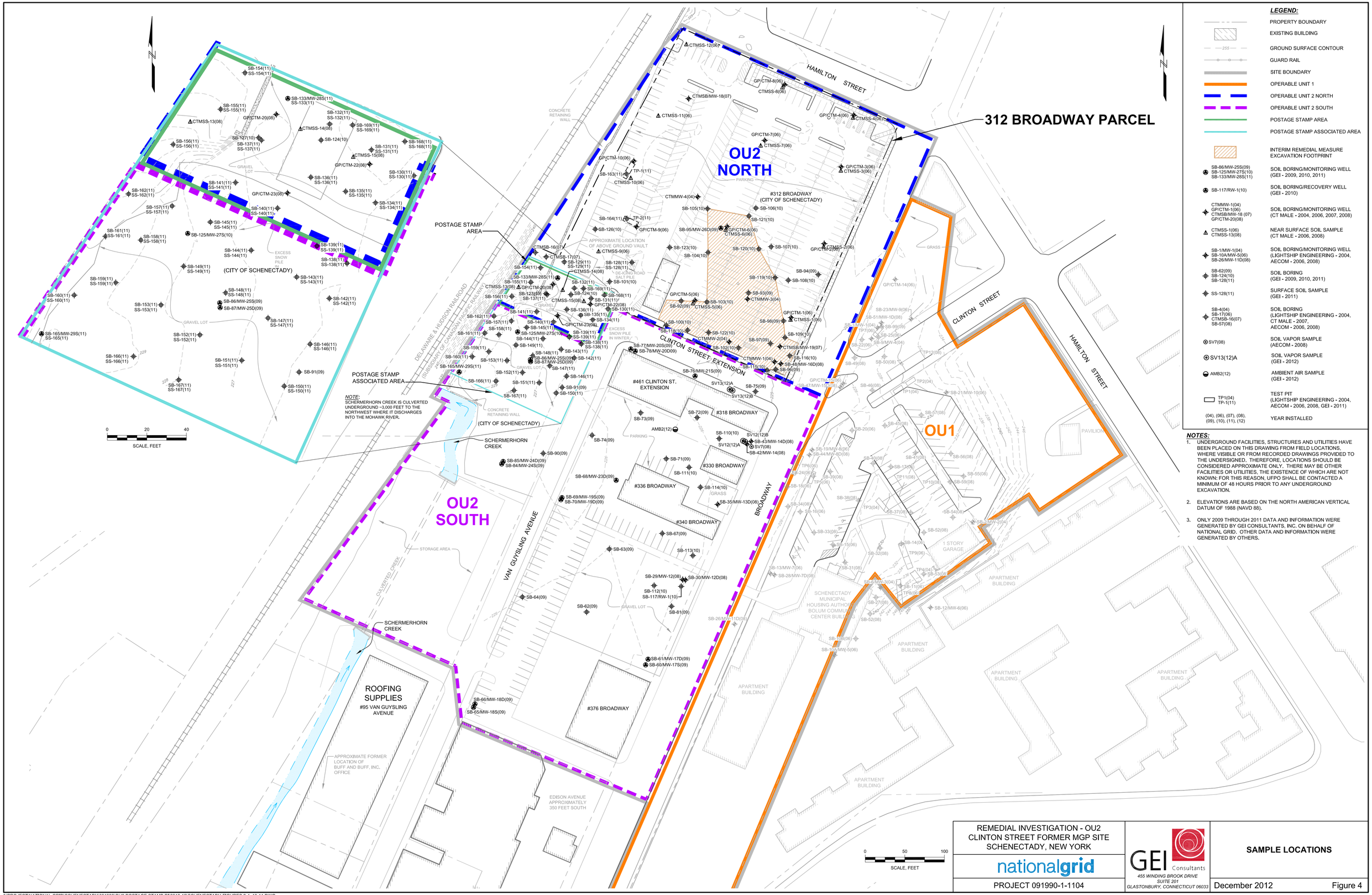
PROJECT 091990-1-1104

GEI Consultants
455 WINDING BROOK DRIVE
SUITE 201
GLASTONBURY, CONNECTICUT 06033

HISTORICAL STRUCTURES AND UTILITIES

December 2012 Figure 3

I:\PROJECT\NATIONAL GRID\SCHENECTADY\091990\OU2 POSTAGE STAMP RI\2012-12\SCHENECTADY-FIGURES 2-4_10-11.DWG



LEGEND:

- PROPERTY BOUNDARY
- EXISTING BUILDING
- 255 — GROUND SURFACE CONTOUR
- GUARD RAIL
- SITE BOUNDARY
- OPERABLE UNIT 1
- OPERABLE UNIT 2 NORTH
- OPERABLE UNIT 2 SOUTH
- POSTAGE STAMP AREA
- POSTAGE STAMP ASSOCIATED AREA
- INTERIM REMEDIAL MEASURE EXCAVATION FOOTPRINT
- SB-86/MW-25S(08), SB-125/MW-27S(10), SB-133/MW-28S(11) — SOIL BORING/MONITORING WELL (GEI - 2009, 2010, 2011)
- SB-117/RW-1(10) — SOIL BORING/RECOVERY WELL (GEI - 2010)
- CTMMW-1(04), GP/CTM-1(06), CTMSB/MW-18 (07), GP/CTM-20(08) — SOIL BORING/MONITORING WELL (CT MALE - 2004, 2006, 2007, 2008)
- CTMSS-1(06), CTMSS-13(08) — NEAR SURFACE SOIL SAMPLE (CT MALE - 2006, 2008)
- SB-1/MW-1(04), SB-10A/MW-5(06), SB-26/MW-11D(08) — SOIL BORING/MONITORING WELL (LIGHTSHIP ENGINEERING - 2004, AECOM - 2006, 2008)
- SB-62(09), SB-124(10), SB-128(11) — SOIL BORING (GEI - 2009, 2010, 2011)
- SS-128(11) — SURFACE SOIL SAMPLE (GEI - 2011)
- SB-4(04), SB-17(06), CTMSB-16(07), SB-57(08) — SOIL BORING (LIGHTSHIP ENGINEERING - 2004, CT MALE - 2007, AECOM - 2006, 2008)
- SV7(08) — SOIL VAPOR SAMPLE (AECOM - 2008)
- SV13(12)A — SOIL VAPOR SAMPLE (GEI - 2012)
- AMB2(12) — AMBIENT AIR SAMPLE (GEI - 2012)
- TP1(04), TP-1(11) — TEST PIT (LIGHTSHIP ENGINEERING - 2004, AECOM - 2006, 2008, GEI - 2011)
- (04), (06), (07), (08), (09), (10), (11), (12) — YEAR INSTALLED

NOTES:

1. UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLACED ON THIS DRAWING FROM FIELD LOCATIONS, WHERE VISIBLE OR FROM RECORDED DRAWINGS PROVIDED TO THE UNDERSIGNED. THEREFORE, LOCATIONS SHOULD BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE OTHER FACILITIES OR UTILITIES, THE EXISTENCE OF WHICH ARE NOT KNOWN: FOR THIS REASON, UFPO SHALL BE CONTACTED A MINIMUM OF 48 HOURS PRIOR TO ANY UNDERGROUND EXCAVATION.
2. ELEVATIONS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
3. ONLY 2009 THROUGH 2011 DATA AND INFORMATION WERE GENERATED BY GEI CONSULTANTS, INC, ON BEHALF OF NATIONAL GRID. OTHER DATA AND INFORMATION WERE GENERATED BY OTHERS.

REMEDIAL INVESTIGATION - OU2
CLINTON STREET FORMER MGP SITE
SCHENECTADY, NEW YORK

nationalgrid

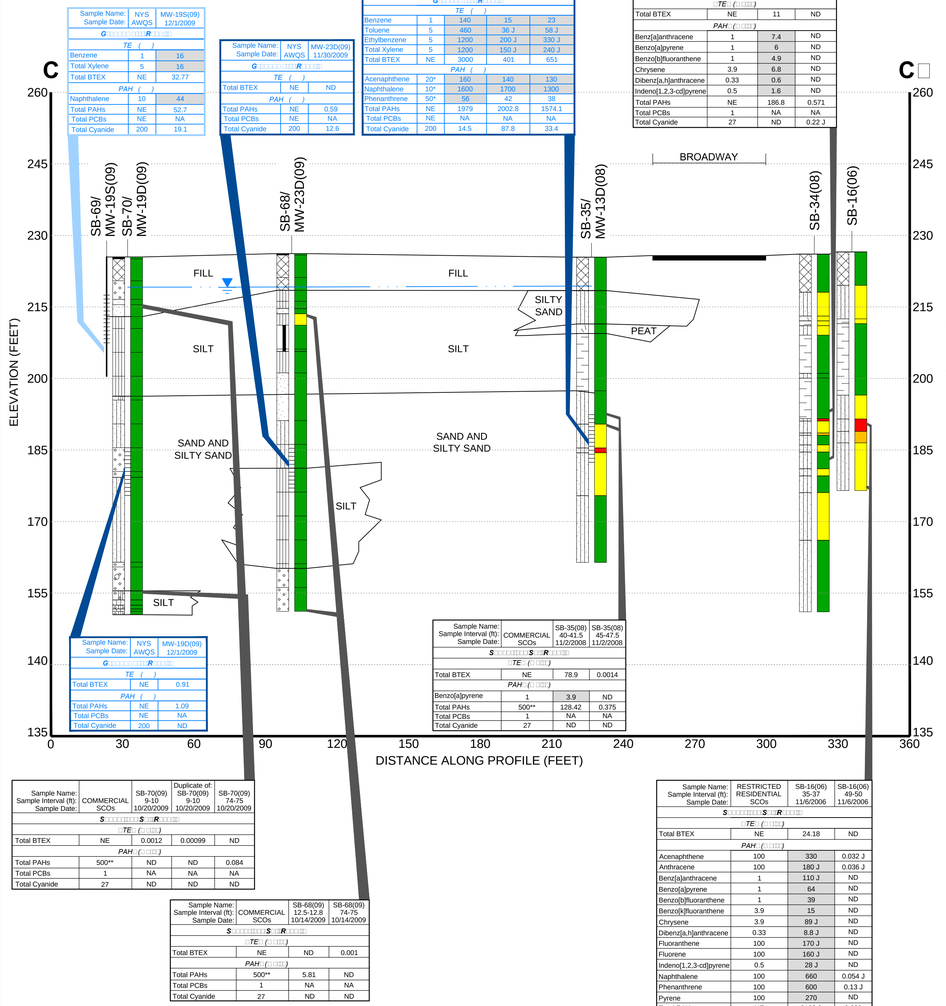
PROJECT 091990-1-1104

GEI Consultants
455 WINDING BROOK DRIVE
SUITE 201
GLASTONBURY, CONNECTICUT 06033

SAMPLE LOCATIONS

December 2012 Figure 4

I:\PROJECT\NATIONAL GRID\SCHENECTADY\091990\OU2 POSTAGE STAMP RI\2012-12\SCHENECTADY-FIGURES 2-4_10-11.DWG



Sample Name:		NYS	MW-19S(09)
Sample Date:		AWQS	12/1/2009
G			R
TE ( )			
Benzene		1	16
Total Xylene		5	16
Total BTEX		NE	32.77
PAH ( )			
Naphthalene	10		44
Total PAHs		NE	52.7
Total PCBs		NE	NA
Total Cyanide		200	19.1

Sample Name:		NYS	MW-23D(09)
Sample Date:		AWQS	11/30/2009
G			R
TE ( )			
Total BTEX		NE	ND
PAH ( )			
Total PAHs		NE	0.59
Total PCBs		NE	NA
Total Cyanide		200	12.6

Sample Name:		NYS	MW-13D(08)	MW-13D(08)	Duplicate of: MW-13D(08)
Sample Date:		AWQS	12/10/2008	12/2/2009	12/2/2009
G			R		
TE ( )					
Benzene	1		140	15	23
Toluene	5		460	36 J	58 J
Ethylbenzene	5		1200	200 J	330 J
Total Xylene	5		1200	150 J	240 J
Total BTEX	NE		3000	401	651
PAH ( )					
Acenaphthene	20*		160	140	130
Naphthalene	10*		1600	1700	1300
Phenanthrene	50*		56	42	38
Total PAHs	NE		1979	2002.8	1574.1
Total PCBs	NE		NA	NA	NA
Total Cyanide	200		14.5	87.8	33.4

Sample Name:		RESTRICTED	SB-34(08)	SB-34(08)
Sample Interval (ft):		RESIDENTIAL	32.5-35	42.5-45
Sample Date:		SCOs	10/21/2008	10/21/2008
S			R	
TE ( )				
Total BTEX		NE	11	ND
PAH ( )				
Benz[a]anthracene		1	7.4	ND
Benzo[a]pyrene		1	6	ND
Benzo[b]fluoranthene		1	4.9	ND
Chrysene		3.9	6.8	ND
Dibenz[a,h]anthracene		0.33	0.6	ND
Indeno[1,2,3-cd]pyrene		0.5	1.6	ND
Total PAHs		NE	186.8	0.571
Total PCBs		1	NA	NA
Total Cyanide		27	ND	0.22 J

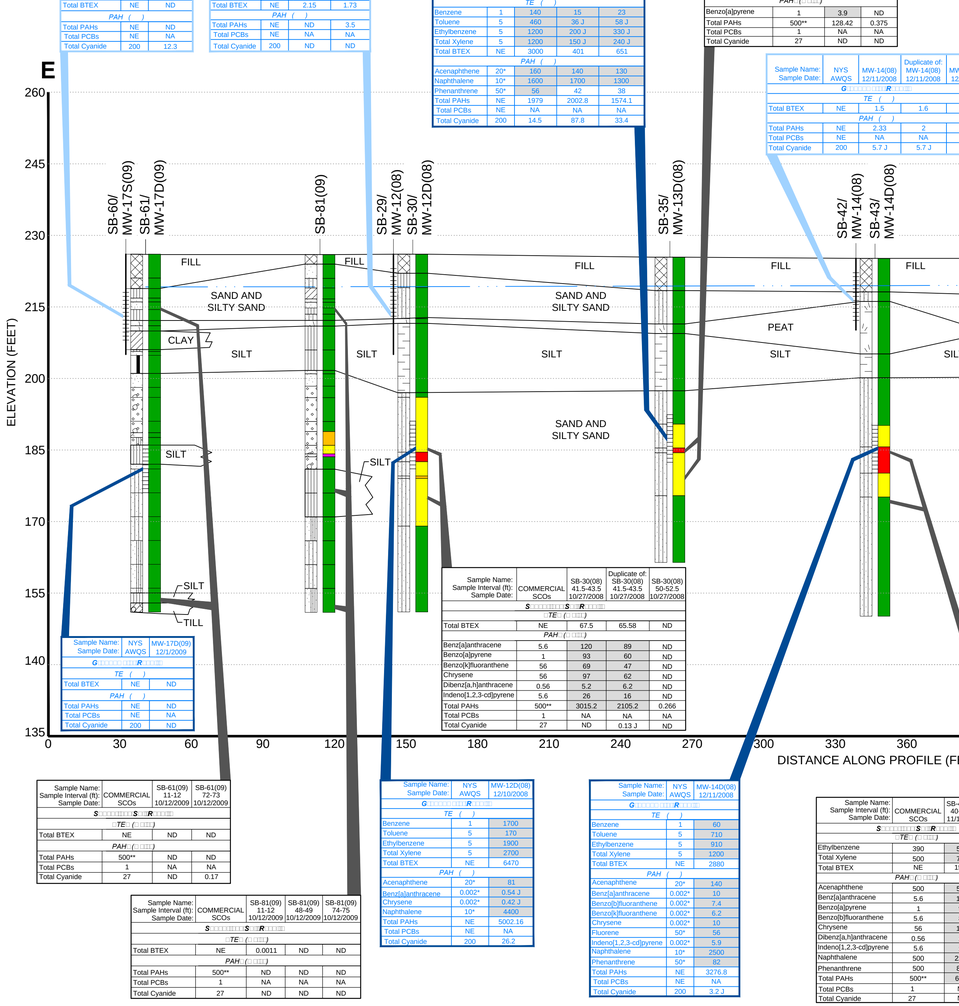
Sample Name:		NYS	MW-10D(09)
Sample Date:		AWQS	12/1/2009
G			R
TE ( )			
Total BTEX		NE	0.91
PAH ( )			
Total PAHs		NE	1.09
Total PCBs		NE	NA
Total Cyanide		200	ND

Sample Name:		COMMERCIAL	SB-35(08)	SB-35(08)
Sample Interval (ft):		SCOs	40-41.5	45-47.5
Sample Date:			11/2/2008	11/2/2008
S			R	
TE ( )				
Total BTEX		NE	78.9	0.0014
PAH ( )				
Benzo[a]pyrene		1	3.9	ND
Total PAHs		500**	128.42	0.375
Total PCBs		1	NA	NA
Total Cyanide		27	ND	ND

Sample Name:		COMMERCIAL	SB-70(09)	Duplicate of: SB-70(09)	SB-70(09)
Sample Interval (ft):		SCOs	9-10	9-10	74-75
Sample Date:			10/20/2009	10/20/2009	10/20/2009
S				R	
TE ( )					
Total BTEX		NE	0.0012	0.00099	ND
PAH ( )					
Total PAHs		500**	ND	ND	0.084
Total PCBs		1	NA	NA	NA
Total Cyanide		27	ND	ND	ND

Sample Name:		COMMERCIAL	SB-68(09)	SB-68(09)
Sample Interval (ft):		SCOs	12.5-12.8	74-75
Sample Date:			10/14/2009	10/14/2009
S			R	
TE ( )				
Total BTEX		NE	ND	0.001
PAH ( )				
Total PAHs		500**	5.81	ND
Total PCBs		1	NA	NA
Total Cyanide		27	ND	ND

Sample Name:		RESTRICTED	SB-16(06)	SB-16(06)
Sample Interval (ft):		RESIDENTIAL	35-37	49-50
Sample Date:		SCOs	11/6/2006	11/6/2006
S			R	
TE ( )				
Total BTEX		NE	24.18	ND
PAH ( )				
Acenaphthene		100	330	0.032 J
Anthracene		100	180 J	0.036 J
Benz[a]anthracene		1	110 J	ND
Benzo[a]pyrene		1	64	ND
Benzo[b]fluoranthene		1	39	ND
Benzo[k]fluoranthene		3.9	15	ND
Chrysene		3.9	89 J	ND
Dibenz[a,h]anthracene		0.33	8.8 J	ND
Fluoranthene		100	170 J	ND
Fluorene		100	160 J	ND
Indeno[1,2,3-cd]pyrene		0.5	28 J	ND
Naphthalene		100	660	0.054 J
Phenanthrene		100	600	0.13 J
Pyrene		100	270	ND
Total PAHs		NE	3182.8	0.333
Total PCBs		1	NA	NA
Total Cyanide		27	1.1	ND



Sample Name:		NYS	MW-17S(09)
Sample Date:		AWQS	12/1/2009
G			R
TE ( )			
Total BTEX		NE	ND
PAH ( )			
Total PAHs		NE	ND
Total PCBs		NE	NA
Total Cyanide		200	12.3

Sample Name:		NYS	MW-12(08)	MW-12(08)
Sample Date:		AWQS	12/10/2008	12/1/2009
G			R	
TE ( )				
Total BTEX		NE	2.15	1.73
PAH ( )				
Total PAHs		NE	ND	3.5
Total PCBs		NE	NA	NA
Total Cyanide		200	ND	ND

Sample Name:		NYS	MW-13D(08)	MW-13D(08)	Duplicate of: MW-13D(08)
Sample Date:		AWQS	12/10/2008	12/2/2009	12/2/2009
G			R		
TE ( )					
Benzene	1		140	15	23
Toluene	5		460	36 J	58 J
Ethylbenzene	5		1200	200 J	330 J
Total Xylene	5		1200	150 J	240 J
Total BTEX	NE		3000	401	651
PAH ( )					
Acenaphthene	20*		160	140	130
Naphthalene	10*		1600	1700	1300
Phenanthrene	50*		56	42	38
Total PAHs	NE		1979	2002.8	1574.1
Total PCBs	NE		NA	NA	NA
Total Cyanide	200		14.5	87.8	33.4

Sample Name:		COMMERCIAL	SB-35(08)	SB-35(08)
Sample Interval (ft):		SCOs	40-41.5	45-47.5
Sample Date:			11/2/2008	11/2/2008
S			R	
TE ( )				
Total BTEX		NE	78.9	0.0014
PAH ( )				
Benzo[a]pyrene		1	3.9	ND
Total PAHs		500**	128.42	0.375
Total PCBs		1	NA	NA
Total Cyanide		27	ND	ND

Sample Name:		NYS	MW-14(08)	Duplicate of: MW-14(08)	MW-14(08)
Sample Date:		AWQS	12/11/2008	12/1/2009	12/1/2009
G			R		
TE ( )					
Total BTEX		NE	1.5	1.6	0.21
PAH ( )					
Total PAHs		NE	2.33	2	2.34
Total PCBs		NE	NA	NA	NA
Total Cyanide		200	5.7 J	5.7 J	8.5

Sample Name:		NYS	MW-16D(08)	Duplicate of: MW-16D(08)	MW-16D(08)
Sample Date:		AWQS	12/10/2008	12/10/2008	12/1/2009
G			R		
TE ( )					
Total BTEX		NE	ND	ND	0.35
PAH ( )					
Benz[a]anthracene		0.002*	ND	ND	2.2
Benzo[a]pyrene		ND	ND	ND	1.5 J
Benzo[b]fluoranthene		0.002*	ND	ND	1.6 J
Benzo[k]fluoranthene		0.002*	ND	ND	1.9 J
Chrysene		0.002*	ND	ND	2.3
Indeno[1,2,3-cd]pyrene		0.002*	ND	ND	2.1
Total PAHs		NE	1.4	ND	17.25
Total PCBs		NE	NA	NA	NA
Total Cyanide		200	34.7	36.1	43.2

Sample Name:		COMMERCIAL	SB-97(09)
Sample Interval (ft):		SCOs	24-25
Sample Date:			10/7/2009
S			R
TE ( )			
Total BTEX		NE	0.39
PAH ( )			
Total PAHs		500**	ND
Total PCBs		1	NA
Total Cyanide		27	ND

Sample Name:		COMMERCIAL	SB-48(08)	SB-48(08)
Sample Interval (ft):		SCOs	9-10	27.5-30
Sample Date:			10/31/2008	10/31/2008
S			R	
TE ( )				
Total BTEX		NE	80.1	0.0022
PAH ( )				
Acenaphthene		500	1000	0.16
Anthracene		500	920	0.19
Benz[a]anthracene		5.6	770	0.16
Benzo[a]pyrene		1	600	0.13
Benzo[b]fluoranthene		5.6	810	0.15
Chrysene		56	570	0.12
Dibenz[a,h]anthracene		0.56	91	ND
Flouranthene		500	1900	0.36
Flourene		500	810	0.14
Indeno[1,2,3-cd]pyrene		5.6	320	0.062 J
Naphthalene		500	2000	0.16
Phenanthrene		500	2700	0.58
Pyrene		500	1300	0.3
Total PAHs		500**	14921	2.717
Total PCBs		1	NA	NA
Total Cyanide		27	13.5 J	ND

Sample Name:		COMMERCIAL	SB-69(09)	SB-70(09)	MW-19D(09)
Sample Interval (ft):		SCOs	9-10	9-10	74-75
Sample Date:			10/20/2009	10/20/2009	10/20/2009
S				R	
TE ( )					
Total BTEX		NE	0.0012	0.00099	ND
PAH ( )					
Total PAHs		500**	ND	ND	0.084
Total PCBs		1	NA	NA	NA
Total Cyanide		27	ND	ND	ND

Sample Name:		COMMERCIAL	SB-61(09)	SB-61(09)
Sample Interval (ft):		SCOs	11-12	72-73
Sample Date:			10/12/2009	10/12/2009
S			R	
TE ( )				
Total BTEX		NE	ND	ND
PAH ( )				
Total PAHs		500**	ND	ND
Total PCBs		1	NA	NA
Total Cyanide		27	ND	0.17

Sample Name:		COMMERCIAL	SB-81(09)	SB-81(09)	SB-81(09)
Sample Interval (ft):		SCOs	11-12	48-49	74-75
Sample Date:			10/12/2009	10/12/2009	10/12/2009
S			R		
TE ( )					
Total BTEX		NE	0.0011	ND	ND
PAH ( )					
Total PAHs		500**	ND	ND	ND
Total PCBs		1	NA	NA	NA
Total Cyanide		27	ND	ND	ND

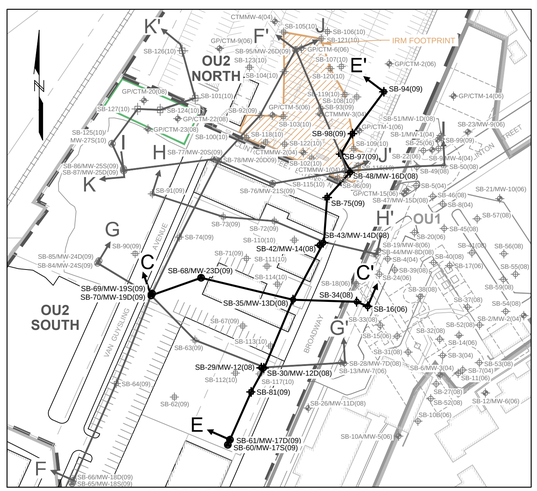
Sample Name:		NYS	MW-12D(08)
Sample Date:		AWQS	12/10/2008
G			R
TE ( )			
Benzene		1	1700
Toluene		5	170
Ethylbenzene		5	1900
Total Xylene		5	2700
Total BTEX		NE	6470
PAH ( )			
Acenaphthene		20*	81
Benz[a]anthracene		0.002*	0.54 J
Chrysene		0.002*	0.42 J
Naphthalene		10*	4400
Total PAHs		NE	5002.16
Total PCBs		NE	NA
Total Cyanide		200	26.2

Sample Name:		COMMERCIAL	SB-30(08)	Duplicate of: SB-30(08)	SB-30(08)
Sample Interval (ft):		SCOs	41.5-43.5	41.5-43.5	50-52.5
Sample Date:			10/27/2008	10/27/2008	10/27/2008
S				R	
TE ( )					
Total BTEX		NE	67.5	65.58	ND
PAH ( )					
Benz[a]anthracene		5.6	120	89	ND
Benzo[a]pyrene		1	93	60	ND
Benzo[k]fluoranthene		56	69	47	ND
Chrysene		56	97	62	ND
Dibenz[a,h]anthracene		0.56	5.2	6.2	ND
Indeno[1,2,3-cd]pyrene		5.6	26	16	ND
Total PAHs		500**	3015.2	2105.2	0.266
Total PCBs		1	NA	NA	NA
Total Cyanide		27	ND	0.13 J	ND

Sample Name:		COMMERCIAL	SB-43(08)	SB-43(08)
Sample Interval (ft):		SCOs	40-42.5	50-52.5
Sample Date:			11/1/2008	11/1/2008
S			R	
TE ( )				
Ethylbenzene		390	590	ND
Total Xylene		500	770	ND
Total BTEX		NE	1520	ND
PAH ( )				
Acenaphthene		500	540	ND
Benz[a]anthracene		5.6	150	ND
Benzo[a]pyrene		1	99	ND
Benzo[b]fluoranthene		5.6	88	ND
Chrysene		56	110	ND
Dibenz[a,h]anthracene		0.56	10	ND
Indeno[1,2,3-cd]pyrene		5.6	27	ND
Naphthalene		500	2200	0.056 J
Phenanthrene		500	850	0.026 J
Total PAHs		500**	6291	0.131
Total PCBs		1	NA	NA
Total Cyanide		27	ND	ND

Sample Name:		COMMERCIAL	SB-94(09)	SB-94(09)
Sample Interval (ft):		SCOs	9-10	73-75
Sample Date:			10/7/2009	10/7/2009
S			R	
TE ( )				
Total BTEX		NE	0.0017	ND
PAH ( )				
Total PAHs		500**	1.237	ND
Total PCBs		1	NA	NA
Total Cyanide		27	ND	ND

Sample Name:		COMMERCIAL	SB-75(09)	SB-75(09)	Duplicate of: SB-75(09)
Sample Interval (ft):		SCOs	10-11	73-74	73-74
Sample Date:			10/25/2009	10/25/2009	10/25/2009
S			R		
TE ( )					
Total BTEX		NE	0.0605	0.0091	0.0117
PAH ( )					
Benzo[a]pyrene		1	2.9	ND	ND
Total PAHs		500**	62.64	ND	ND
Total PCBs		1	NA	NA	NA
Total Cyanide		27	0.83	ND	ND



CROSS SECTION LOCATION MAP

SCALE 1" = 100'

LEGEND:

GEOLOGY

- ASPHALT
- FILL
- CONCRETE
- OH, MODERATE TO HIGHLY PLASTIC ORGANIC SILTS AND CLAYS
- MH, ELASTIC SILT
- OL, LOW PLASTICITY ORGANIC SILTS AND CLAYS
- OLSH, LOW PLASTICITY ORGANIC SILTS OR CLAY WITH SHELLS
- CL, LEAN CLAY OR SANDY LEAN CLAY
- ML, SILT OR SANDY SILT
- SC, CLAYEY SAND
- SM, SILTY SAND, SILTY SAND WITH GRAVEL
- SP, POORLY GRADED SAND, POORLY GRADED SAND WITH GRAVEL
- SW, WELL GRADED SAND, WELL GRADED SAND WITH GRAVEL
- GC, CLAYEY GRAVEL
- GM, SILTY GRAVEL, SILTY GRAVEL WITH SAND
- GP, POORLY GRADED GRAVEL, POORLY GRADED GRAVEL WITH SAND

- YEAR INSTALLED
- MONITORING WELL IDENTIFICATION
- SOIL BORING IDENTIFICATION
- SOIL BORING/MONITORING WELL GEOLOGY
- SOIL BORING/MONITORING WELL PHYSICAL OBSERVATIONS
- WELL SCREEN INTERVAL (SB-95/MW-26D(09))
- GROUNDWATER ELEVATION

PHYSICAL OBSERVATION

- TAR SATURATED
- COATED MATERIAL, LENSES
- BLEBS, GLOBS, SHEEN
- TAR STAINING, ODORS
- PETROLEUM IMPACTS: SHEEN, STAINING, ODORS
- NO PHYSICAL IMPACTS OBSERVED

ANALYTICAL BO□ NOTES

COMMERCIAL SCOs - Regulatory comparison against 6NYCRR, Chapter IV, Part 375-6 Restricted Use Commercial Soil Cleanup Objectives

RESTRICTED RESIDENTIAL SCOs - Regulatory comparison against 6NYCRR, Chapter IV, Part 375-6 Restricted Use Restricted RESIDENTIAL Soil Cleanup Objectives

NYS AWQS - New York State Ambient Water Quality Standards and Guidance Values for GA Groundwater

62	COMPOUNDS THAT EXCEED PART 375 COMMERCIAL SCOs OR RESTRICTED USE RESTRICTED RESIDENTIAL SCOs
300	CONCENTRATION OF COMPOUND THAT EXCEEDS NYS AWQS
	SHALLOW WELLS (< 40 FEET BELOW GROUND SURFACE)
	DEEP WELLS (> 40 FEET BELOW GROUND SURFACE)
	SOIL SAMPLE
mg/kg	MILLIGRAM PER KILOGRAM
ε g/L	MICROGRAMS PER LITER
PAHs	POLYCYCLIC AROMATIC HYDROCARBONS
BTEX	BENZENE, TOLUENE, ETHYLBENZENE, XYLENES
PCBs	POLYCHLORINATED BIPHENYLS
NA	NOT AVAILABLE, NOT APPLICABLE, OR NOT ANALYZED
ND	NOT DETECTED
NE	NOT ESTABLISHED
J	ESTIMATED VALUE
ft	FEET
*	VALUE IS A GUIDANCE, NOT A STANDARD
**	ACCORDING TO NYSDEC CP-51, FOR COMMERCIAL SITES WHERE THE ECOLOGICAL STANDARDS ARE NOT APPLICABLE, DEC MAY APPROVE A REMEDIAL PROGRAM WHICH ACHIEVES A SOIL CLEANUP LEVEL OF 500 mg/kg FOR TOTAL PAHs FOR ALL SUBSURFACE SOIL. THE 500 mg/kg CLEANUP LEVEL IS IN LIEU OF ACHIEVING ALL OF THE PAH-SPECIFIC SCOs IN 6NYCRR 375-6.

NOTES:

1. CROSS SECTIONS A, B, C, AND D ARE LOCATED IN THE AECOM OU1 REPORT AND ARE NOT PROVIDED IN THIS REPORT. GEI CONSULTANTS, INC. EXTENDED CROSS SECTION C ONTO OU2 WHICH IS WHY IT IS THE FIRST CROSS SECTION IN THIS REPORT.
2. ONLY 2009 AND 2010 DATA AND INFORMATION WERE GENERATED BY GEI CONSULTANTS, INC. ON BEHALF OF NATIONAL GRID. OTHER DATA AND INFORMATION WERE GENERATED BY OTHER CONTRACTORS.
3. ELEVATIONS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

0 30 60
HORIZONTAL SCALE, FEET

30 15 0
VERTICAL SCALE, FEET
2X VERTICAL EXAGGERATION

REMEDIAL INVESTIGATION - OU2
CLINTON STREET FORMER MGP SITE
SCHENECTADY, NEW YORK

nationalgrid

PROJECT 091990-1-1104

GEI Consultants
□□WINDING □ROOK DRI□E
S□ITE □□□
GLASTON□□R□, CONNECTIC□T □□□□□

GEOLOGIC CROSS SECTIONS C AND E AND SUMMARI□ED ANALYTICAL RESULTS

December 2012 — Figure 5

I:\PROJECT\NATIONAL GRID\SCHENECTADY\091990\OU2 POSTAGE STAMP RI\2012-12\SCHENECTADY-CROSS SECTIONS.DWG

Sample Name:	NYS	MW-18D(09)
Sample Date:	AWQS	11/30/2009
GSCOs / RSCOs		
TE ( )		
Total BTEX	NE	0.31
PAH ( )		
Total PAHs	NE	9.11
Total PCBs	NE	NA
Total Cyanide	200	15.2

Sample Name:	NYS	MW-18S(09)
Sample Date:	AWQS	11/30/2009
GSCOs / RSCOs		
TE ( )		
Total BTEX	NE	ND
PAH ( )		
Total PAHs	NE	ND
Total PCBs	NE	NA
Total Cyanide	200	ND

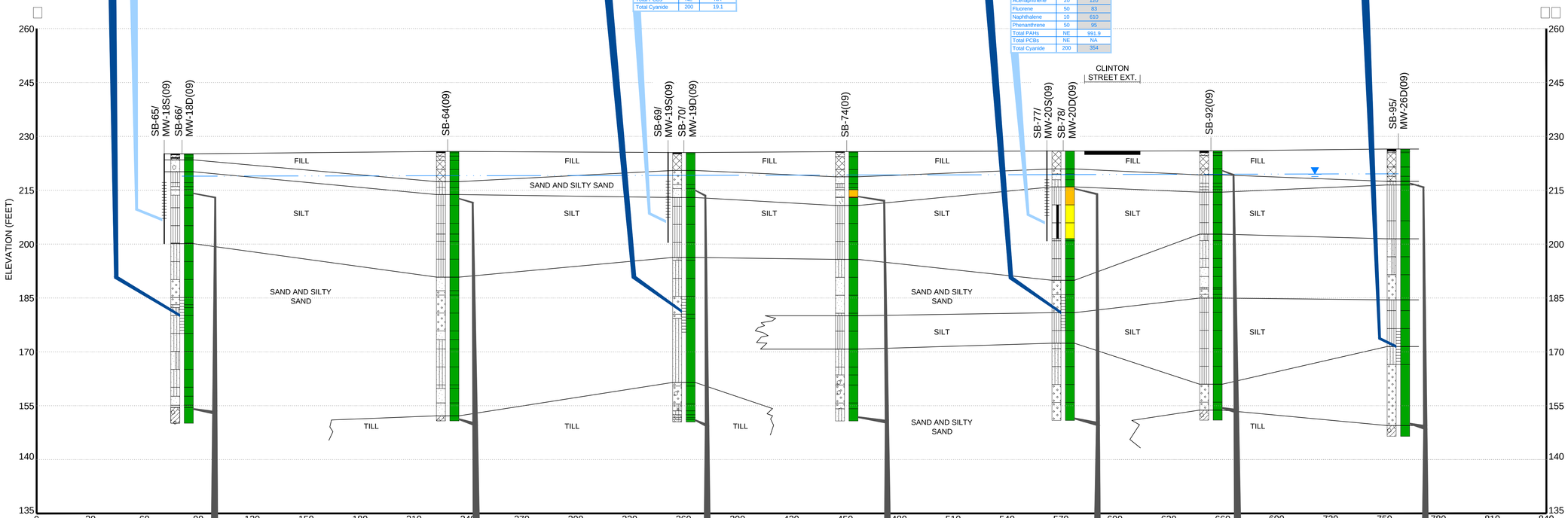
Sample Name:	NYS	MW-19D(09)
Sample Date:	AWQS	12/1/2009
GSCOs / RSCOs		
TE ( )		
Total BTEX	NE	0.91
PAH ( )		
Total PAHs	NE	1.09
Total PCBs	NE	NA
Total Cyanide	200	ND

Sample Name:	NYS	MW-19S(09)
Sample Date:	AWQS	12/1/2009
GSCOs / RSCOs		
TE ( )		
Benzene	1	16
Total Xylene	5	16
Total BTEX	NE	32.77
PAH ( )		
Naphthalene	10	44
Total PAHs	NE	52.7
Total PCBs	NE	NA
Total Cyanide	200	19.1

Sample Name:	NYS	MW-20D(09)
Sample Date:	AWQS	12/1/2009
GSCOs / RSCOs		
TE ( )		
Total BTEX	NE	1.75
PAH ( )		
Naphthalene	10*	13
Total PAHs	NE	30.51
Total PCBs	NE	NA
Total Cyanide	200	ND

Sample Name:	NYS	MW-20S(09)
Sample Date:	AWQS	12/1/2009
GSCOs / RSCOs		
TE ( )		
Benzene	1	69
Toluene	5	49
Ethylbenzene	5	24.3
Total Xylene	5	75
Total BTEX	NE	217
PAH ( )		
Acenaphthene	20	120
Fluorene	50	83
Naphthalene	10	610
Phenanthrene	50	95
Total PAHs	NE	991.9
Total PCBs	NE	NA
Total Cyanide	200	354

Sample Name:	NYS	MW-26D(09)
Sample Date:	AWQS	12/1/2009
GSCOs / RSCOs		
TE ( )		
Total BTEX	NE	0.25
PAH ( )		
Total PAHs	NE	ND
Total PCBs	NE	NA
Total Cyanide	200	ND



Sample Name:		SB-66(09)	SB-66(09)
Sample Interval (ft):	COMMERCIAL	10-11	70-71
Sample Date:	SCOs	10/25/2009	10/25/2009
SCOs / RSCOs			
TE ( )			
Total BTEX	NE	ND	0.0012
PAH ( )			
Total PAHs	500**	0.158	ND
Total PCBs	1	NA	NA
Total Cyanide	27	0.14 J	ND

Sample Name:		SB-64(09)	SB-64(09)
Sample Interval (ft):	COMMERCIAL	11-12	72.5-73.5
Sample Date:	SCOs	10/20/2009	10/20/2009
SCOs / RSCOs			
TE ( )			
Total BTEX	NE	0.0025	0.0123
PAH ( )			
Total PAHs	500**	ND	ND
Total PCBs	1	NA	NA
Total Cyanide	27	ND	ND

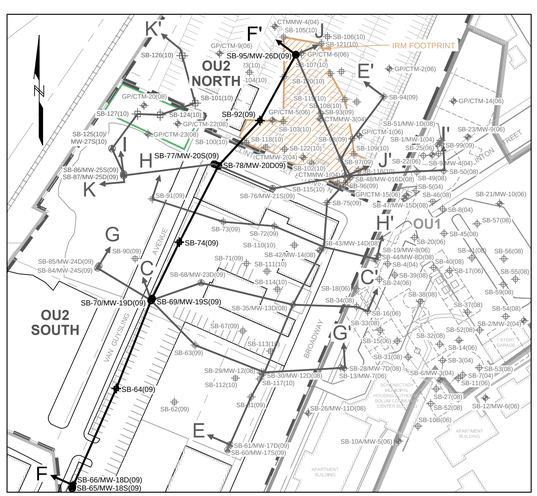
Sample Name:		SB-70(09)	Duplicate of: SB-70(09)	SB-70(09)
Sample Interval (ft):	COMMERCIAL	9-10	9-10	74-75
Sample Date:	SCOs	10/20/2009	10/20/2009	10/20/2009
SCOs / RSCOs				
TE ( )				
Total BTEX	NE	0.0012	0.00099	ND
PAH ( )				
Total PAHs	500**	ND	ND	0.084
Total PCBs	1	NA	NA	NA
Total Cyanide	27	ND	ND	ND

Sample Name:		SB-74(09)	SB-74(09)
Sample Interval (ft):	COMMERCIAL	11.8-12.8	74-75
Sample Date:	SCOs	10/21/2009	10/21/2009
SCOs / RSCOs			
TE ( )			
Total BTEX	NE	0.0868	ND
PAH ( )			
Total PAHs	500**	24.922	ND
Total PCBs	1	NA	NA
Total Cyanide	27	ND	ND

Sample Name:		SB-78(09)	SB-78(09)
Sample Interval (ft):	COMMERCIAL	10-11	74-75
Sample Date:	SCOs	10/24/2009	10/24/2009
SCOs / RSCOs			
TE ( )			
Total BTEX	NE	1.95	ND
PAH ( )			
Acenaphthene	500	1100	ND
Anthracene	500	1000	ND
Fluoranthene	500	1800	0.015
Fluorene	500	880	ND
Naphthalene	500	5000	0.029
Phenanthrene	500	3200	0.025
Pyrene	500	1400	ND
Benz[a]anthracene	5.6	730	ND
Benzo[a]pyrene	1	560	ND
Benzo[b]fluoranthene	5.6	710	ND
Chrysene	56	590	ND
Dibenz[a,h]anthracene	0.56	63	ND
Indeno(1,2,3-cd)pyrene	5.6	260	ND
Total PAHs	500**	18893	0.069
Total PCBs	1	NA	NA
Total Cyanide	27	42.6	0.12 J

Sample Name:		SB-92(09)	SB-92(09)
Sample Interval (ft):	COMMERCIAL	5-6	71-72
Sample Date:	SCOs	10/8/2009	10/8/2009
SCOs / RSCOs			
TE ( )			
Total BTEX	NE	ND	0.0023
PAH ( )			
Benz[a]anthracene	5.6	27	ND
Benzo[a]pyrene	1	26	ND
Benzo[b]fluoranthene	5.6	23	ND
Dibenz[a,h]anthracene	0.56	4.7	ND
Indeno(1,2,3-cd)pyrene	5.6	16	ND
Total PAHs	500**	413.2	0.0069
Total PCBs	1	NA	NA
Total Cyanide	27	2.2	ND

Sample Name:		SB-95(09)	SB-95(09)
Sample Interval (ft):	COMMERCIAL	9-10	76-77
Sample Date:	SCOs	10/8/2009	10/8/2009
SCOs / RSCOs			
TE ( )			
Total BTEX	NE	0.0029	0.0025
PAH ( )			
Total PAHs	500**	0.043	0.023
Total PCBs	1	NA	NA
Total Cyanide	27	ND	ND



CROSS SECTION LOCATION MAP

SCALE 1" = 100'

LEGEND:

GEOLOGY

- ASPHALT
- FILL
- CONCRETE
- OH, MODERATE TO HIGHLY PLASTIC ORGANIC SILTS AND CLAYS
- MH, ELASTIC SILT
- OL, LOW PLASTICITY ORGANIC SILTS AND CLAYS
- OLSH, LOW PLASTICITY ORGANIC SILTS OR CLAY WITH SHELLS
- CL, LEAN CLAY OR SANDY LEAN CLAY
- ML, SILT OR SANDY SILT
- SC, CLAYEY SAND
- SM, SILTY SAND, SILTY SAND WITH GRAVEL
- SP, POORLY GRADED SAND, POORLY GRADED SAND WITH GRAVEL
- SW, WELL GRADED SAND, WELL GRADED SAND WITH GRAVEL
- GC, CLAYEY GRAVEL
- GM, SILTY GRAVEL, SILTY GRAVEL WITH SAND
- GP, POORLY GRADED GRAVEL, POORLY GRADED GRAVEL WITH SAND

- YEAR INSTALLED
- MONITORING WELL IDENTIFICATION
- SOIL BORING IDENTIFICATION
- SOIL BORING/MONITORING WELL GEOLOGY
- SOIL BORING/MONITORING WELL PHYSICAL OBSERVATIONS
- WELL SCREEN INTERVAL
- GROUNDWATER ELEVATION

PHYSICAL OBSERVATION

- TAR SATURATED
- COATED MATERIAL, LENSES
- BLEBS, GLOBS, SHEEN
- TAR STAINING, ODORS
- PETROLEUM IMPACTS: SHEEN, STAINING, ODORS
- NO PHYSICAL IMPACTS OBSERVED

ANALYTICAL BO□ NOTES

COMMERCIAL SCOs - Regulatory comparison against 6NYCRR, Chapter IV, Part 375-6 Restricted Use Commercial Soil Cleanup Objectives

RESTRICTED RESIDENTIAL SCOs - Regulatory comparison against 6NYCRR, Chapter IV, Part 375-6 Restricted Use Restricted RESIDENTIAL Soil Cleanup Objectives

NYS AWQS - New York State Ambient Water Quality Standards and Guidance Values for GA Groundwater

62	COMPOUNDS THAT EXCEED PART 375 COMMERCIAL SCOs OR RESTRICTED USE RESTRICTED RESIDENTIAL SCOs
300	CONCENTRATION OF COMPOUND THAT EXCEEDS NYS AWQS
	SHALLOW WELLS (≤ 40 FEET BELOW GROUND SURFACE)
	DEEP WELLS (> 40 FEET BELOW GROUND SURFACE)
	SOIL SAMPLE
mg/kg	MILLIGRAM PER KILOGRAM
ε g/L	MICROGRAMS PER LITER
PAHs	POLYCYCLIC AROMATIC HYDROCARBONS
BTEX	BENZENE, TOLUENE, ETHYLBENZENE, XYLENES
PCBs	POLYCHLORINATED BIPHENYLS
NA	NOT AVAILABLE, NOT APPLICABLE, OR NOT ANALYZED
ND	NOT DETECTED
NE	NOT ESTABLISHED
J	ESTIMATED VALUE
ft	FEET
*	VALUE IS A GUIDANCE, NOT A STANDARD
**	ACCORDING TO NYSDEC CP-51, FOR COMMERCIAL SITES WHERE THE ECOLOGICAL STANDARDS ARE NOT APPLICABLE, DEC MAY APPROVE A REMEDIAL PROGRAM WHICH ACHIEVES A SOIL CLEANUP LEVEL OF 500 mg/kg FOR TOTAL PAHs FOR ALL SUBSURFACE SOIL. THE 500 mg/kg CLEANUP LEVEL IS IN LIEU OF ACHIEVING ALL OF THE PAH-SPECIFIC SCOs IN 6NYCRR 375-6.

0 30 60
HORIZONTAL SCALE, FEET

30 15 0
VERTICAL SCALE, FEET

2X VERTICAL EXAGGERATION

NOTES:

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REMEDIAL INVESTIGATION - OU2
CLINTON STREET FORMER MGP SITE
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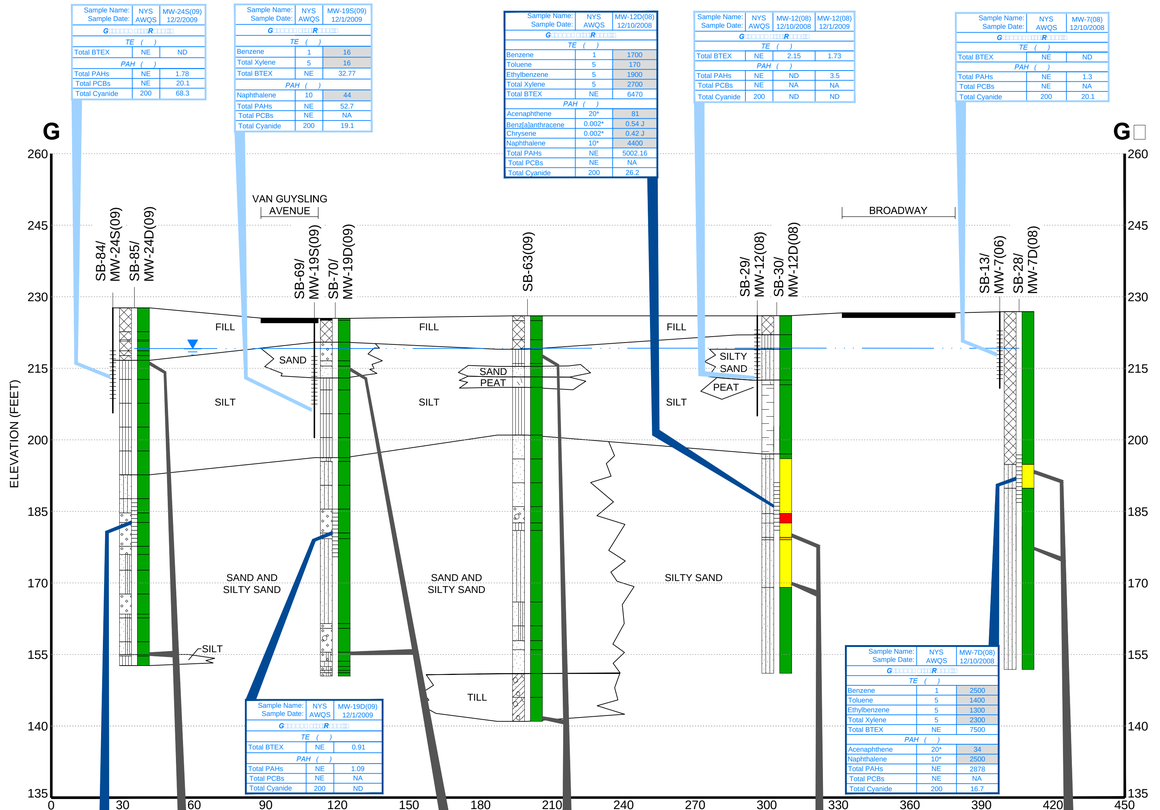
PROJECT 091990-1-1104

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S□ITE □□□
GLASTON□□R□, CONNECTIC□T □□□□□

GEOLOGIC CROSS SECTION □ AND SUMMARI□ED ANALYTICAL RESULTS

December 2012 Figure 6

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Sample Name:	NYS	MW-24S(09)
Sample Date:	AWQS	12/2/2009
G / R		
TE ( )		
Total BTEX	NE	ND
PAH ( )		
Total PAHs	NE	1.78
Total PCBs	NE	20.1
Total Cyanide	200	68.3

Sample Name:	NYS	MW-19S(09)
Sample Date:	AWQS	12/1/2009
G / R		
TE ( )		
Benzene	1	16
Total Xylene	5	16
Total BTEX	NE	32.77
PAH ( )		
Naphthalene	10	44
Total PAHs	NE	52.7
Total PCBs	NE	NA
Total Cyanide	200	19.1

Sample Name:	NYS	MW-12D(08)
Sample Date:	AWQS	12/10/2008
G / R		
TE ( )		
Benzene	1	1700
Toluene	5	170
Ethylbenzene	5	1900
Total Xylene	5	2700
Total BTEX	NE	6470
PAH ( )		
Acenaphthene	20*	81
Benz[a]anthracene	0.002*	0.54 J
Chrysene	0.002*	0.42 J
Naphthalene	10*	4400
Total PAHs	NE	5002.16
Total PCBs	NE	NA
Total Cyanide	200	26.2

Sample Name:	NYS	MW-12(08)	MW-12(08)
Sample Date:	AWQS	12/10/2008	12/1/2009
G / R			
TE ( )			
Total BTEX	NE	2.15	1.73
PAH ( )			
Total PAHs	NE	ND	3.5
Total PCBs	NE	NA	NA
Total Cyanide	200	ND	ND

Sample Name:	NYS	MW-7(08)
Sample Date:	AWQS	12/10/2008
G / R		
TE ( )		
Total BTEX	NE	ND
PAH ( )		
Total PAHs	NE	1.3
Total PCBs	NE	NA
Total Cyanide	200	20.1

Sample Name:	NYS	MW-19D(09)
Sample Date:	AWQS	12/1/2009
G / R		
TE ( )		
Total BTEX	NE	0.91
PAH ( )		
Total PAHs	NE	1.09
Total PCBs	NE	NA
Total Cyanide	200	ND

Sample Name:	NYS	MW-7D(08)
Sample Date:	AWQS	12/10/2008
G / R		
TE ( )		
Benzene	1	2500
Toluene	5	1400
Ethylbenzene	5	1300
Total Xylene	5	2300
Total BTEX	NE	7500
PAH ( )		
Acenaphthene	20*	34
Naphthalene	10*	2500
Total PAHs	NE	2878
Total PCBs	NE	NA
Total Cyanide	200	16.7

Sample Name:	NYS	MW-24D(09)
Sample Date:	AWQS	12/2/2009
G / R		
TE ( )		
Benzene	1	1.2
Total BTEX	NE	2.24
PAH ( )		
Total PAHs	NE	1.98
Total PCBs	NE	NA
Total Cyanide	200	ND

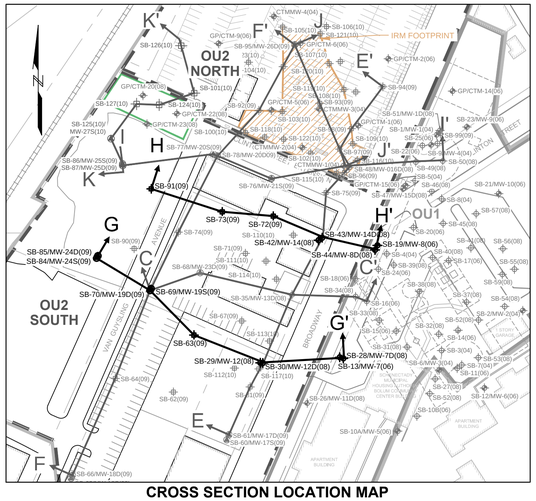
Sample Name:	COMMERCIAL	SB-70(09)	SB-70(09)	SB-70(09)
Sample Interval (ft):		9-10	9-10	74-75
Sample Date:	SCOs	10/20/2009	10/20/2009	10/9/2009
S / R				
TE ( )				
Total BTEX	NE	0.0012	0.00099	ND
PAH ( )				
Total PAHs	500**	ND	ND	0.084
Total PCBs	1	NA	NA	NA
Total Cyanide	27	ND	ND	ND

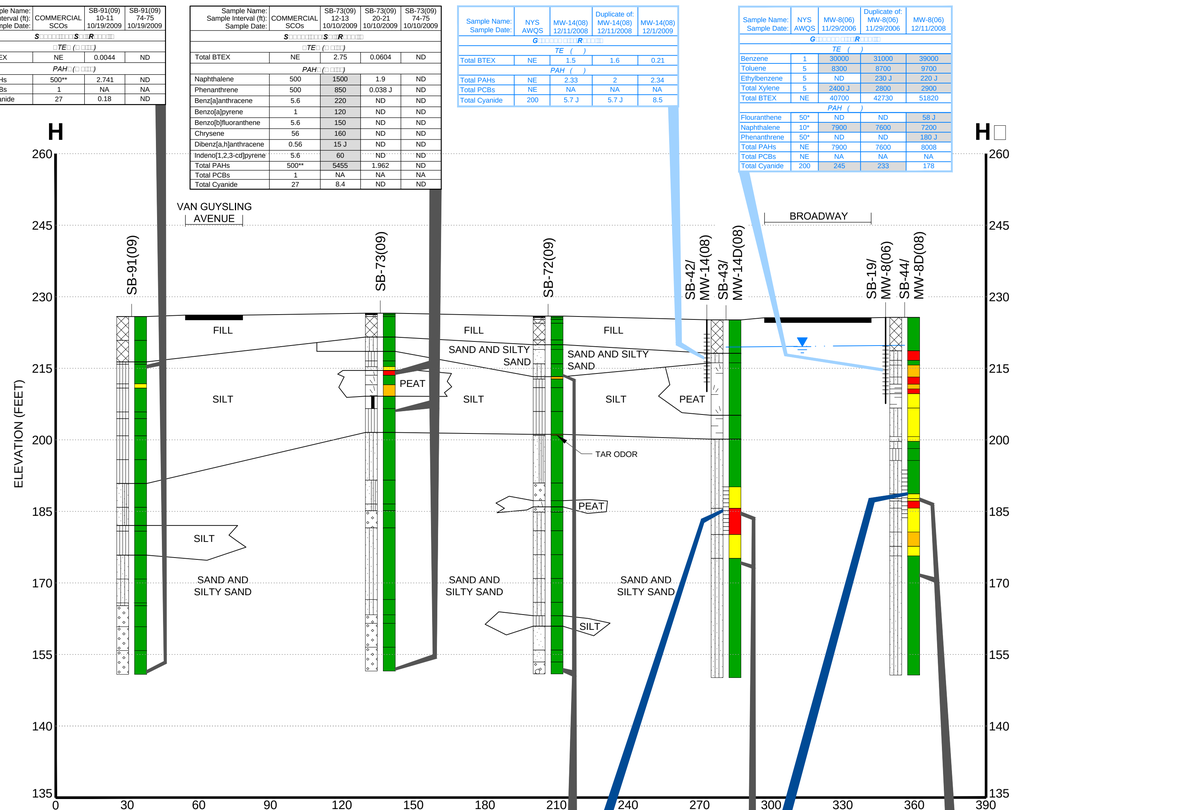
Sample Name:	COMMERCIAL	SB-63(09)	SB-63(09)
Sample Interval (ft):		8-9	74-75
Sample Date:	SCOs	10/9/2009	10/9/2009
S / R			
TE ( )			
Total BTEX	NE	ND	ND
PAH ( )			
Total PAHs	500**	ND	ND
Total PCBs	1	NA	NA
Total Cyanide	27	ND	ND

Sample Name:	RESTRICTED	SB-28(08)	SB-28(08)
Sample Interval (ft):	RESIDENTIAL	33.5-35	47.5-50
Sample Date:	SCOs	10/23/2008	10/23/2008
S / R			
TE ( )			
Total BTEX	NE	ND	ND
PAH ( )			
Total PAHs	NE	0.343	0.148
Total PCBs	1	NA	NA
Total Cyanide	27	ND	ND

Sample Name:	COMMERCIAL	SB-85(09)	SB-85(09)
Sample Interval (ft):		11-12	72-73
Sample Date:	SCOs	10/22/2009	10/22/2009
S / R			
TE ( )			
Total BTEX	NE	0.0015	ND
PAH ( )			
Total PAHs	500**	7.153	ND
Total PCBs	1	NA	NA
Total Cyanide	27	0.58 J	ND

Sample Name:	COMMERCIAL	SB-30(08)	Duplicate of:	SB-30(08)
Sample Interval (ft):		41.5-43.5	SB-30(08)	50-52.5
Sample Date:	SCOs	10/27/2008	10/27/2008	10/27/2008
S / R				
TE ( )				
Total BTEX	NE	67.5	65.58	ND
PAH ( )				
Benz[a]anthracene	5.6	120	89	ND
Benzo[a]pyrene	1	93	60	ND
Benzo[k]fluoranthene	56	69	47	ND
Chrysene	56	97	62	ND
Dibenz[a,h]anthracene	0.56	5.2	6.2	ND
Indeno[1,2,3-cd]pyrene	5.6	26	16	ND
Total PAHs	500**	3015.2	2105.2	0.266
Total PCBs	1	NA	NA	NA
Total Cyanide	27	ND	0.13 J	ND





Sample Name:		SB-91(09)	SB-91(09)
Sample Interval (ft):		10-11	74-75
Sample Date:	COMMERCIAL SCOs	10/19/2009	10/19/2009
S / R			
TE ( )			
Total BTEX	NE	0.0044	ND
PAH ( )			
Total PAHs	500**	2.741	ND
Total PCBs	1	NA	NA
Total Cyanide	27	0.18	ND

Sample Name:	COMMERCIAL	SB-73(09)	SB-73(09)	SB-73(09)
Sample Interval (ft):		12-13	20-21	74-75
Sample Date:	SCOs	10/10/2009	10/10/2009	10/10/2009
S / R				
TE ( )				
Total BTEX	NE	2.75	0.0604	ND
PAH ( )				
Naphthalene	500	1500	1.9	ND
Phenanthrene	500	850	0.038 J	ND
Benz[a]anthracene	5.6	220	ND	ND
Benzo[a]pyrene	1	120	ND	ND
Benzo[b]fluoranthene	5.6	150	ND	ND
Chrysene	56	160	ND	ND
Dibenz[a,h]anthracene	0.56	15 J	ND	ND
Indeno[1,2,3-cd]pyrene	5.6	60	ND	ND
Total PAHs	500**	5455	1.962	ND
Total PCBs	1	NA	NA	NA
Total Cyanide	27	8.4	ND	ND

Sample Name:	NYS	MW-14(08)	Duplicate of:	MW-14(08)
Sample Date:	AWQS	12/11/2008	MW-14(08)	12/1/2009
			12/11/2008	
G / R				
TE ( )				
Total BTEX	NE	1.5	1.6	0.21
PAH ( )				
Total PAHs	NE	2.33	2	2.34
Total PCBs	NE	NA	NA	NA
Total Cyanide	200	5.7 J	5.7 J	8.5

Sample Name:	NYS	MW-8(06)	Duplicate of:	MW-8(06)
Sample Date:	AWQS	11/29/2006	MW-8(06)	12/11/2008
			11/29/2006	
G / R				
TE ( )				
Benzene	1	30000	31000	39000
Toluene	5	8300	8700	9700
Ethylbenzene	5	ND	230 J	220 J
Total Xylene	5	2400 J	2800	2900
Total BTEX	NE	40700	42730	51820
PAH ( )				
Flouranthene	50*	ND	ND	58 J
Naphthalene	10*	7900	7600	7200
Phenanthrene	50*	ND	ND	180 J
Total PAHs	NE	7900	7600	8008
Total PCBs	NE	NA	NA	NA
Total Cyanide	200	245	233	178

Sample Name:		SB-72(09)	SB-72(09)
Sample Interval (ft):		12.7-13.2	74-75
Sample Date:	COMMERCIAL SCOs	10/10/2009	10/10/2009
S / R			
TE ( )			
Total BTEX	NE	2.68	ND
PAH ( )			
Benz[a]anthracene	5.6	68	ND
Benzo[a]pyrene	1	53	ND
Benzo[b]fluoranthene	5.6	52	ND
Chrysene	56	67	ND
Dibenz[a,h]anthracene	0.56	6.9	ND
Indeno[1,2,3-cd]pyrene	5.6	28	ND
Total PAHs	500**	1817.9	ND
Total PCBs	1	NA	NA
Total Cyanide	27	2	ND

Sample Name:	NYS	MW-14D(08)
Sample Date:	AWQS	12/11/2008
G / R		
TE ( )		
Benzene	1	60
Toluene	5	710
Ethylbenzene	5	910
Total Xylene	5	1200
Total BTEX	NE	2880
PAH ( )		
Acenaphthene	20*	140
Benz[a]anthracene	0.002*	10
Benzo[b]fluoranthene	0.002*	7.4
Benzo[k]fluoranthene	0.002*	6.2
Chrysene	0.002*	10
Fluorene	50*	56
Indeno[1,2,3-cd]pyrene	0.002*	5.9
Naphthalene	10*	2500
Phenanthrene	50*	82
Total PAHs	NE	3276.8
Total PCBs	NE	NA
Total Cyanide	200	3.2 J

Sample Name:	NYS	MW-8(06)
Sample Date:	AWQS	12/11/2008
G / R		
TE ( )		
Benzene	1	36
Toluene	5	170
Ethylbenzene	5	1900
Total Xylene	5	2300
Total BTEX	NE	4406
PAH ( )		
Acenaphthene	20*	580
Anthracene	50*	200
Benz[a]anthracene	0.002*	130
Benzo[b]fluoranthene	0.002*	71 J
Chrysene	0.002*	92 J
Flouranthene	50*	210
Flourene	50*	270
Indeno[1,2,3-cd]pyrene	0.002*	23 J
Naphthalene	10*	6900
Phenanthrene	50*	770
Pyrene	50*	300
Total PAHs	NE	10755
Total PCBs	NE	NA
Total Cyanide	200	110

Sample Name:	RESTRICTED	SB-44(08)	Duplicate of:	SB-44(08)
Sample Interval (ft):	RESIDENTIAL	38-40	SB-44(08)	52.5-55
Sample Date:	SCOs	11/5/2008	38-40	11/5/2008
			11/5/2008	
S / R				
TE ( )				
Ethylbenzene	41	300 J	180 J	ND
Total Xylene	100	450 J	260 J	ND
Total BTEX	NE	759.7	445.7	ND
PAH ( )				
Acenaphthene	100	460	420	ND
Anthracene	100	220	210	ND
Benz[a]anthracene	1	130	120	ND
Benzo[a]pyrene	1	85	78	ND
Benzo[b]fluoranthene	1	78	72	ND
Chrysene	3.9	110	90	ND
Dibenz[a,h]anthracene	0.33	8.2	7.7 J	ND
Fluoranthene	100	220	210	ND
Fluorene	100	250	240	ND
Indeno[1,2,3-cd]pyrene	5	23	22	ND
Naphthalene	100	1900	1800	0.053 J
Phenanthrene	100	730	680	ND
Pyrene	100	310	280	ND
Total PAHs	NE	5430.2	5085.7	0.053
Total PCBs	1	NA	NA	NA
Total Cyanide	27	ND	ND	ND

Sample Name:		SB-43(08)	SB-43(08)
Sample Interval (ft):		40-42.5	50-52.5
Sample Date:	COMMERCIAL SCOs	11/1/2008	11/1/2008
S / R			
TE ( )			
Ethylbenzene	390	590	ND
Total Xylene	500	770	ND
Total BTEX	NE	1520	ND
PAH ( )			
Acenaphthene	500	540	ND
Benz[a]anthracene	5.6	150	ND
Benzo[a]pyrene	1	99	ND
Benzo[b]fluoranthene	5.6	88	ND
Chrysene	56	110	ND
Dibenz[a,h]anthracene	0.56	10	ND
Indeno[1,2,3-cd]pyrene	5.6	27	ND
Naphthalene	500	2200	0.056 J
Phenanthrene	500	850	0.026 J
Total PAHs	500**	6291	0.131
Total PCBs	1	NA	NA
Total Cyanide	27	ND	ND

GEOLOGY

- ASPHALT
- FILL
- CONCRETE
- OH, MODERATE TO HIGHLY PLASTIC ORGANIC SILTS AND CLAYS
- MH, ELASTIC SILT
- OL, LOW PLASTICITY ORGANIC SILTS AND CLAYS
- OLSH, LOW PLASTICITY ORGANIC SILTS OR CLAY WITH SHELLS
- CL, LEAN CLAY OR SANDY LEAN CLAY
- ML, SILT OR SANDY SILT
- SC, CLAYEY SAND
- SM, SILTY SAND, SILTY SAND WITH GRAVEL
- SP, POORLY GRADED SAND, POORLY GRADED SAND WITH GRAVEL
- SW, WELL GRADED SAND, WELL GRADED SAND WITH GRAVEL
- GC, CLAYEY GRAVEL
- GM, SILTY GRAVEL, SILTY GRAVEL WITH SAND
- GP, POORLY GRADED GRAVEL, POORLY GRADED GRAVEL WITH SAND

LEGEND:

- YEAR INSTALLED
- MONITORING WELL IDENTIFICATION
- SOIL BORING IDENTIFICATION
- SOIL BORING/MONITORING WELL GEOLOGY
- SOIL BORING/MONITORING WELL PHYSICAL OBSERVATIONS
- WELL SCREEN INTERVAL
- GROUNDWATER ELEVATION

PHYSICAL OBSERVATION

- TAR SATURATED
- COATED MATERIAL, LENSES
- BLEBS, GLOBS, SHEEN
- TAR STAINING, ODORS
- PETROLEUM IMPACTS: SHEEN, STAINING, ODORS
- NO PHYSICAL IMPACTS OBSERVED

ANALYTICAL BO NOTES

COMMERCIAL SCOs - Regulatory comparison against 6NYCRR, Chapter IV, Part 375-6 Restricted Use Commercial Soil Cleanup Objectives

RESTRICTED RESIDENTIAL SCOs - Regulatory comparison against 6NYCRR, Chapter IV, Part 375-6 Restricted Use Restricted RESIDENTIAL Soil Cleanup Objectives

NYS AWQS - New York State Ambient Water Quality Standards and Guidance Values for GA Groundwater

62	COMPOUNDS THAT EXCEED PART 375 COMMERCIAL SCOs OR RESTRICTED USE RESTRICTED RESIDENTIAL SCOs
300	CONCENTRATION OF COMPOUND THAT EXCEEDS NYS AWQS
	SHALLOW WELLS (≤ 40 FEET BELOW GROUND SURFACE)
	DEEP WELLS (> 40 FEET BELOW GROUND SURFACE)
	SOIL SAMPLE
mg/kg	MILLIGRAM PER KILOGRAM
ε g/L	MICROGRAMS PER LITER
PAHs	POLYCYCLIC AROMATIC HYDROCARBONS
BTEX	BENZENE, TOLUENE, ETHYLBENZENE, XYLENES
PCBs	POLYCHLORINATED BIPHENYLS
NA	NOT AVAILABLE, NOT APPLICABLE, OR NOT ANALYZED
ND	NOT DETECTED
NE	NOT ESTABLISHED
J	ESTIMATED VALUE
ft	FEET
*	VALUE IS A GUIDANCE, NOT A STANDARD
**	ACCORDING TO NYSDEC CP-51, FOR COMMERCIAL SITES WHERE THE ECOLOGICAL STANDARDS ARE NOT APPLICABLE, DEC MAY APPROVE A REMEDIAL PROGRAM WHICH ACHIEVES A SOIL CLEANUP LEVEL OF 500 mg/kg FOR TOTAL PAHs FOR ALL SUBSURFACE SOIL. THE 500 mg/kg CLEANUP LEVEL IS IN LIEU OF ACHIEVING ALL OF THE PAH-SPECIFIC SCOs IN 6NYCRR 375-6.

NOTES:

1. ONLY 2009 AND 2010 DATA AND INFORMATION WERE GENERATED BY GEI CONSULTANTS, INC. ON BEHALF OF NATIONAL GRID. OTHER DATA AND INFORMATION WERE GENERATED BY OTHER CONTRACTORS.
2. ELEVATIONS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

HORIZONTAL SCALE, FEET: 0, 30, 60

VERTICAL SCALE, FEET: 0, 15, 30

2X VERTICAL EXAGGERATION

REMEDIAL INVESTIGATION - OU2
CLINTON STREET FORMER MGP SITE
SCHENECTADY, NEW YORK

nationalgrid

PROJECT 091990-1-1104

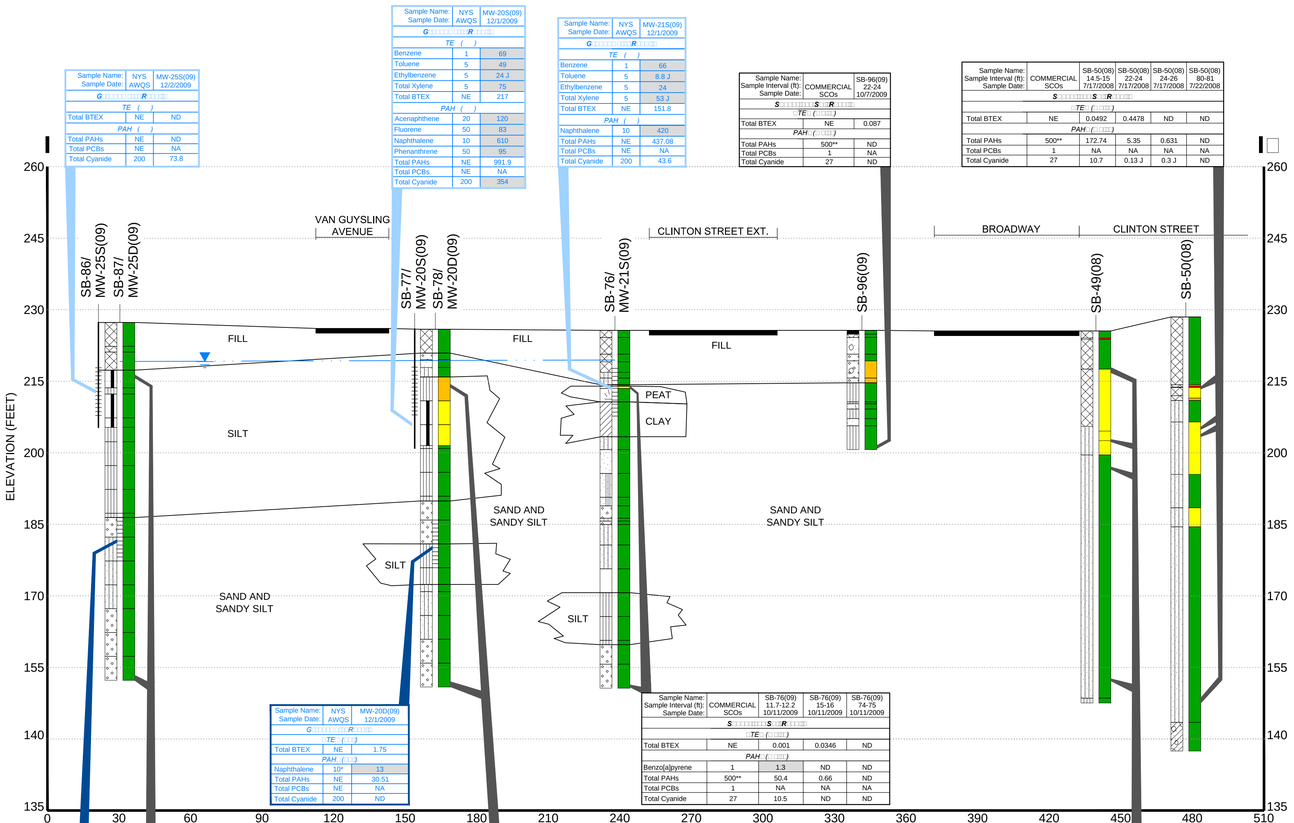
GEI Consultants

WINDING ROOK DRIVE
SUITE
GLASTONBURY, CONNECTICUT

GEOLOGIC CROSS SECTIONS G AND H AND SUMMARIED ANALYTICAL RESULTS

December 2012 Figure 7

I:\PROJECT\NATIONAL GRID\SCHENECTADY\091990\OU2 POSTAGE STAMP RI\2012-12\SCHENECTADY-CROSS SECTIONS.DWG



Sample Name:	NYS	MW-25S(09)
Sample Date:	AWQS	12/2/2009
GI...R...		
TE (...)		
Total BTEX	NE	ND
PAH (...)		
Total PAHs	NE	ND
Total PCBs	NE	NA
Total Cyanide	200	73.8

Sample Name:	NYS	MW-20S(09)
Sample Date:	AWQS	12/1/2009
GI...R...		
TE (...)		
Benzene	1	69
Toluene	5	49
Ethylbenzene	5	24 J
Total Xylene	5	75
Total BTEX	NE	217
PAH (...)		
Acenaphthene	20	120
Fluorene	50	83
Naphthalene	10	610
Phenanthrene	50	95
Total PAHs	NE	991.9
Total PCBs	NE	NA
Total Cyanide	200	354

Sample Name:	NYS	MW-21S(09)
Sample Date:	AWQS	12/1/2009
GI...R...		
TE (...)		
Benzene	1	66
Toluene	5	8.8 J
Ethylbenzene	5	24
Total Xylene	5	53 J
Total BTEX	NE	151.8
PAH (...)		
Naphthalene	10	420
Total PAHs	NE	437.08
Total PCBs	NE	NA
Total Cyanide	200	43.6

Sample Name:		SB-96(09)
Sample Interval (ft):	COMMERCIAL	22-24
Sample Date:	SCOs	10/7/2009
S...R...		
TE (...)		
Total BTEX	NE	0.087
PAH (...)		
Total PAHs	500**	ND
Total PCBs	1	NA
Total Cyanide	27	ND

Sample Name:		SB-50(08)	SB-50(08)	SB-50(08)	SB-50(08)
Sample Interval (ft):	COMMERCIAL	14.5-15	22-24	24-26	80-81
Sample Date:	SCOs	7/17/2008	7/17/2008	7/17/2008	7/22/2008
S...R...					
TE (...)					
Total BTEX	NE	0.0492	0.4478	ND	ND
PAH (...)					
Total PAHs	500**	172.74	5.35	0.631	ND
Total PCBs	1	NA	NA	NA	NA
Total Cyanide	27	10.7	0.13 J	0.3 J	ND

Sample Name:		SB-76(09)	SB-76(09)	SB-76(09)
Sample Interval (ft):	COMMERCIAL	11.7-12.2	15-16	74-75
Sample Date:	SCOs	10/11/2009	10/11/2009	10/11/2009
S...R...				
TE (...)				
Total BTEX	NE	0.001	0.0346	ND
PAH (...)				
Benzo[a]pyrene	1	1.3	ND	ND
Total PAHs	500**	50.4	0.66	ND
Total PCBs	1	NA	NA	NA
Total Cyanide	27	10.5	ND	ND

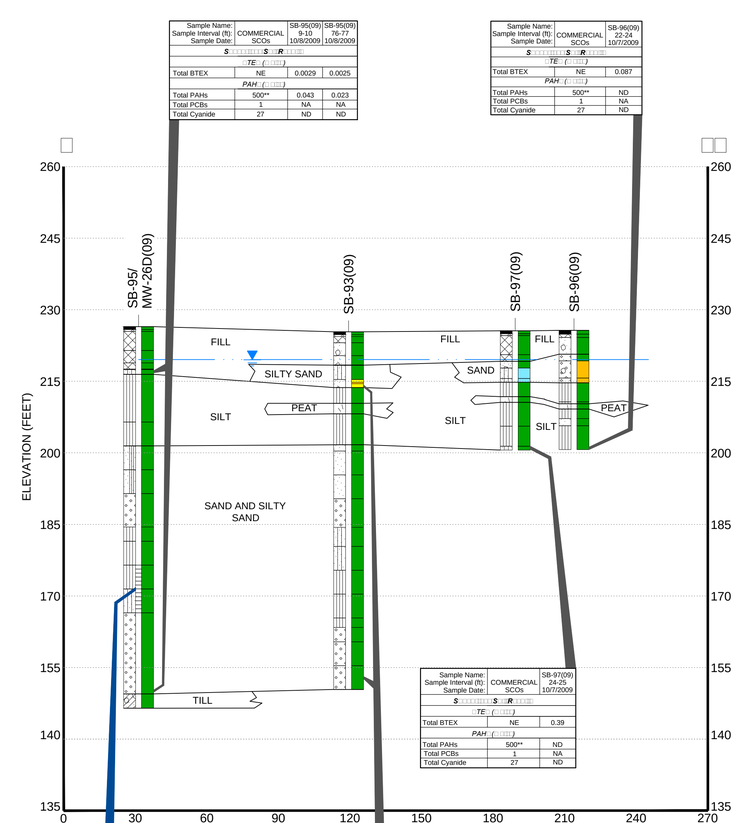
Sample Name:	NYS	MW-20D(09)
Sample Date:	AWQS	12/1/2009
GI...R...		
TE (...)		
Total BTEX	NE	1.75
PAH (...)		
Naphthalene	10*	13
Total PAHs	NE	30.51
Total PCBs	NE	NA
Total Cyanide	200	ND

Sample Name:	NYS	MW-25D(09)
Sample Date:	AWQS	12/2/2009
GI...R...		
TE (...)		
Total BTEX	NE	ND
PAH (...)		
Total PAHs	NE	ND
Total PCBs	NE	NA
Total Cyanide	200	ND

Sample Name:		SB-87(09)	SB-87(09)
Sample Interval (ft):	COMMERCIAL	11-12	74-75
Sample Date:	SCOs	10/23/2009	10/23/2009
S...R...			
TE (...)			
Total BTEX	NE	ND	ND
PAH (...)			
Total PAHs	500**	ND	ND
Total PCBs	1	NA	NA
Total Cyanide	27	0.16	0.16

Sample Name:		SB-78(09)	SB-78(09)
Sample Interval (ft):	COMMERCIAL	10-11	74-75
Sample Date:	SCOs	10/24/2009	10/24/2009
S...R...			
TE (...)			
Total BTEX	NE	1.95	ND
PAH (...)			
Acenaphthene	500	1100	ND
Anthracene	500	1000	ND
Fluoranthene	500	1800	0.015
Fluorene	500	880	ND
Naphthalene	500	5000	0.029
Phenanthrene	500	3200	0.025
Pyrene	500	1400	ND
Benz[a]anthracene	5.6	730	ND
Benzo[a]pyrene	1	560	ND
Benzo[b]fluoranthene	5.6	710	ND
Chrysene	56	590	ND
Dibenz[a,h]anthracene	0.56	63	ND
Indeno[1,2,3-cd]pyrene	5.6	260	ND
Total PAHs	500**	18893	0.069
Total PCBs	1	NA	NA
Total Cyanide	27	42.6	0.12 J

Sample Name:		SB-49(08)	SB-49(08)	SB-49(08)	SB-49(08)
Sample Interval (ft):	COMMERCIAL	8-10	22-24	28-30	72-74
Sample Date:	SCOs	8/1/2008	8/1/2008	8/1/2008	8/4/2008
S...R...					
TE (...)					
Total BTEX	NE	ND	10.95	13	ND
PAH (...)					
Total PAHs	500**	42.227	0.448	ND	ND
Total PCBs	1	NA	NA	NA	NA
Total Cyanide	27	5.1	ND	ND	ND



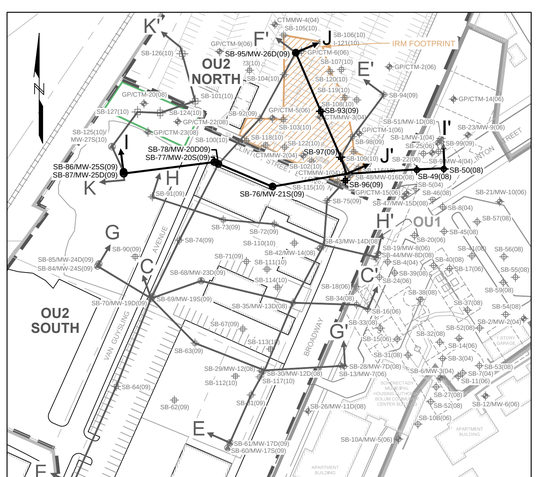
Sample Name:		SB-95(09)	SB-95(09)
Sample Interval (ft):	COMMERCIAL	9-10	76-77
Sample Date:	SCOs	10/8/2009	10/8/2009
S...R...			
TE (...)			
Total BTEX	NE	0.0029	0.0025
PAH (...)			
Total PAHs	500**	0.043	0.023
Total PCBs	1	NA	NA
Total Cyanide	27	ND	ND

Sample Name:		SB-96(09)
Sample Interval (ft):	COMMERCIAL	22-24
Sample Date:	SCOs	10/7/2009
S...R...		
TE (...)		
Total BTEX	NE	0.087
PAH (...)		
Total PAHs	500**	ND
Total PCBs	1	NA
Total Cyanide	27	ND

Sample Name:		SB-97(09)
Sample Interval (ft):	COMMERCIAL	24-25
Sample Date:	SCOs	10/7/2009
S...R...		
TE (...)		
Total BTEX	NE	0.39
PAH (...)		
Total PAHs	500**	ND
Total PCBs	1	NA
Total Cyanide	27	ND

Sample Name:	NYS	MW-26D(09)
Sample Date:	AWQS	12/1/2009
GI...R...		
TE (...)		
Total BTEX	NE	0.25
PAH (...)		
Total PAHs	NE	ND
Total PCBs	NE	NA
Total Cyanide	200	ND

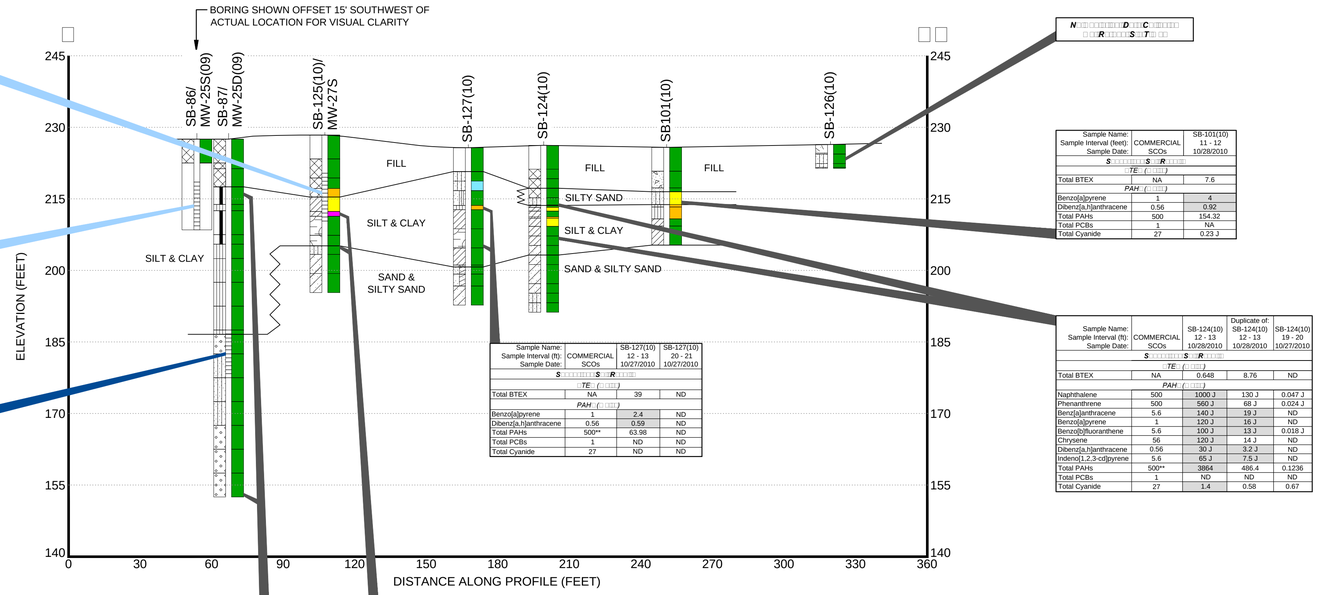
Sample Name:		SB-93(09)	Duplicate of: SB-93(09)
Sample Interval (ft):	COMMERCIAL	10.6-11.6	70-75
Sample Date:	SCOs	10/6/2009	10/6/2009
S...R...			
TE (...)			
Total BTEX	NE	0.0797	ND	ND
PAH (...)				
Acenaphthene	500	560 J	ND	ND
Fluoranthene	500	830	0.0093 J	ND
Naphthalene	500	1900	0.03 J	ND
Phenanthrene	500	1300	0.021 J	ND
Pyrene	500	710 J	ND	ND
Benz[a]anthracene	5.6	320 J	ND	ND
Benzo[a]pyrene	1	250 J	ND	ND
Benzo[b]fluoranthene	5.6	300 J	ND	ND
Benzo[k]fluoranthene	56	74	ND	ND
Chrysene	56	250 J	ND	ND
Dibenz[a,h]anthracene	0.56	30	ND	ND
Indeno[1,2,3-cd]pyrene	5.6	95	ND	ND
Total PAHs	500**	8263	0.0603	ND
Total PCBs	1	NA	NA	NA
Total Cyanide	27	17.4	ND	ND


OU2 NORTH
OU2 SOUTH
OU1
IRM FOOTPRINT
SB-95/MW-26D(09)
SB-93(09)
SB-97(09)
SB-96(09)
SB-86/MW-25S(09)
SB-87/MW-25D(09)
SB-78/MW-20D(09)
SB-77/MW-20S(09)
SB-76/MW-21S(09)
SB-49(08)
SB-50(08)
SB-96(09)
SB-85/MW-24D(09)
SB-84/MW-24S(09)
SB-70/MW-19D(09)
SB-69/MW-19S(09)
SB-29/MW-12D(09)
SB-28/MW-12S(09)
SB-26/MW-11D(09)
SB-13/MW-7(09)
SB-6/MW-3(04)
SB-61/MW-17D(09)
SB-60/MW-17S(09)
SB-66/MW-18D(09)
SB-10A/MW-5(09)
SB-64(09)
SB-112(10)
SB-117(10)
SB-62(09)
SB-63(09)
SB-67(09)
SB-68/MW-23D(09)
SB-71(09)
SB-74(09)
SB-90(09)
SB-73(09)
SB-72(09)
SB-110(10)
SB-111(10)
SB-114(10)
SB-115(10)
SB-116(10)
SB-118(10)
SB-119(10)
SB-120(10)
SB-121(10)
SB-122(10)
SB-123(10)
SB-124(10)
SB-125(10)/MW-27S(10)
SB-127(10)
SB-126(10)
SB-101(10)
SB-104(10)
SB-107(10)
SB-106(10)
SB-105(10)
SB-94(09)
SB-51/MW-10(09)
SB-52(09)
SB-23/MW-9(09)
SB-4(04)
SB-5(04)
SB-46(08)
SB-8(04)
SB-45(08)
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SB-43/MW-8S(08)
SB-18/MW-8(06)
SB-24(06)
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SB-41/MW-14D(09)
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SB-39/MW-15(09)
SB-38/MW-15D(09)
SB-48/MW-16D(09)
SB-47/MW-16S(09)
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SB-71/MW-24(09)
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SB-73/MW-24S(09)
SB-74/MW-25(09)
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SB-76/MW-25S(09)
SB-77/MW-26(09)
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SB-79/MW-26S(09)
SB-80/MW-27(09)
SB-81/MW-27D(09)
SB-82/MW-27S(09)
SB-83/MW-28(09)
SB-84/MW-28D(09)
SB-85/MW-28S(09)
SB-86/MW-29(09)
SB-87/MW-29D(09)
SB-88/MW-29S(09)

Sample Name:		MW-27S(10)	Duplicate of: MW-27S(10)
Sample Date:	NYS AWQS	11/17/2010	11/17/2010
G			
TE (L)			
Benzene	1	43	39
Toluene	5	24	22
Ethylbenzene	5	23	20
Xylene, Total	5	67	61
Total BTEX	NE	157	142
PAH (L)			
Naphthalene	10*	300 J	160 J
Total PAHs	NE	386.2	216.1
Total PCBs	NE	ND	ND
Total Cyanide	200	25.7	29.6

Sample Name:		MW-25S(09)
Sample Date:	NYS AWQS	12/2/2009
G		
TE ( )		
Total BTEX	NE	ND
PAH ( )		
Total PAHs	NE	ND
Total PCBs	NE	NA
Total Cyanide	200	73.8

Sample Name:		MW-25D(09)
Sample Date:	NYS AWQS	12/2/2009
G		
TE ( )		
Total BTEX	NE	ND
PAH ( )		
Total PAHs	NE	ND
Total PCBs	NE	NA
Total Cyanide	200	ND



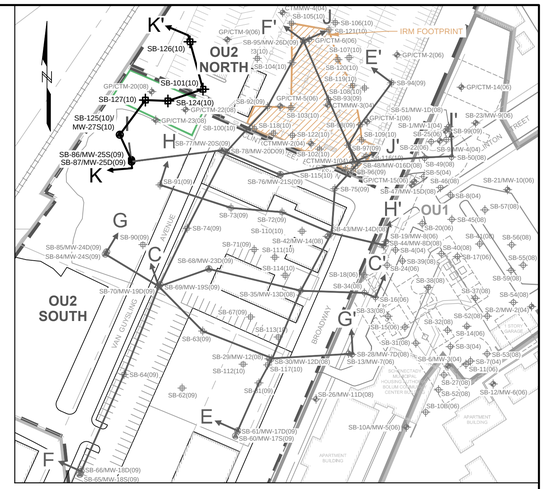
Sample Name:		SB-101(10)
Sample Interval (feet):	COMMERCIAL	11 - 12
Sample Date:	SCOs	10/28/2010
S		
TE: ( )		
Total BTEX	NA	7.6
PAH: ( )		
Benzo[a]pyrene	1	4
Dibenz[a,h]anthracene	0.56	0.92
Total PAHs	500	154.32
Total PCBs	1	NA
Total Cyanide	27	0.23 J

Sample Name:		SB-127(10)	SB-127(10)
Sample Interval (ft):	COMMERCIAL	12 - 13	20 - 21
Sample Date:	SCOs	10/27/2010	10/27/2010
S			
TE: ( )			
Total BTEX	NA	39	ND
PAH: ( )			
Benzo[a]pyrene	1	2.4	ND
Dibenz[a,h]anthracene	0.56	0.59	ND
Total PAHs	500**	63.98	ND
Total PCBs	1	ND	ND
Total Cyanide	27	ND	ND

Sample Name:		SB-124(10)	Duplicate of: SB-124(10)	SB-124(10)
Sample Interval (ft):	COMMERCIAL	12 - 13	12 - 13	19 - 20
Sample Date:	SCOs	10/28/2010	10/28/2010	10/27/2010
S				
TE: ( )				
Total BTEX	NA	0.648	8.76	ND
PAH: ( )				
Naphthalene	500	1000 J	130 J	0.047 J
Phenanthrene	500	560 J	68 J	0.024 J
Benz[a]anthracene	5.6	140 J	19 J	ND
Benzo[a]pyrene	1	120 J	16 J	ND
Benzo[b]fluoranthene	5.6	100 J	13 J	0.018 J
Chrysene	56	120 J	14 J	ND
Dibenz[a,h]anthracene	0.56	30 J	3.2 J	ND
Indeno[1,2,3-cd]pyrene	5.6	65 J	7.5 J	ND
Total PAHs	500**	3864	486.4	0.1236
Total PCBs	1	ND	ND	ND
Total Cyanide	27	1.4	0.58	0.67

Sample Name:		SB-87(09)	SB-87(09)
Sample Interval (ft):	COMMERCIAL	11-12	74-75
Sample Date:	SCOs	10/23/2009	10/23/2009
S			
TE: ( )			
Total BTEX	NE	ND	ND
PAH: ( )			
Total PAHs	500**	ND	ND
Total PCBs	1	NA	NA
Total Cyanide	27	0.16	0.16

Sample Name:		SB-125(10)	SB-125(10)
Sample Interval (ft):	COMMERCIAL	16-17	23-24
Sample Date:	SCOs	10/27/2010	10/27/2010
S			
TE: ( )			
Total BTEX	NA	5.12	ND
PAH: ( )			
Benz[a]anthracene	5.6	62	ND
Benzo[a]pyrene	1	38	ND
Benzo[b]fluoranthene	5.6	33 J	ND
Dibenz[a,h]anthracene	0.56	9.4	ND
Indeno[1,2,3-cd]pyrene	5.6	15	ND
Total PAHs	500**	1463.4	0.0485
Total PCBs	1	ND	ND
Total Cyanide	27	ND	ND



CROSS SECTION LOCATION MAP

SCALE 1" = 100'

LEGEND:

GEOLOGY

- ASPHALT
- FILL
- CONCRETE
- OH, MODERATE TO HIGHLY PLASTIC ORGANIC SILTS AND CLAYS
- MH, ELASTIC SILT
- OL, LOW PLASTICITY ORGANIC SILTS AND CLAYS
- OLSH, LOW PLASTICITY ORGANIC SILTS OR CLAY WITH SHELLS
- CL, LEAN CLAY OR SANDY LEAN CLAY
- ML, SILT OR SANDY SILT
- SC, CLAYEY SAND
- SM, SILTY SAND, SILTY SAND WITH GRAVEL
- SP, POORLY GRADED SAND, POORLY GRADED SAND WITH GRAVEL
- SW, WELL GRADED SAND, WELL GRADED SAND WITH GRAVEL
- GC, CLAYEY GRAVEL
- GM, SILTY GRAVEL, SILTY GRAVEL WITH SAND
- GP, POORLY GRADED GRAVEL, POORLY GRADED GRAVEL WITH SAND

- YEAR INSTALLED
- MONITORING WELL IDENTIFICATION (e.g. SB-95/MW-26D(09))
- SOIL BORING IDENTIFICATION
- SOIL BORING/MONITORING WELL GEOLOGY
- SOIL BORING/MONITORING WELL PHYSICAL OBSERVATIONS
- WELL SCREEN INTERVAL
- GROUNDWATER ELEVATION

PHYSICAL OBSERVATION

- TAR SATURATED
- COATED MATERIAL, LENSES
- BLEBS, GLOBS, SHEEN
- TAR STAINING, ODORS
- PETROLEUM IMPACTS: SHEEN, STAINING, ODORS
- NO PHYSICAL IMPACTS OBSERVED

ANALYTICAL BO NOTES

COMMERCIAL SCOs - Regulatory comparison against 6NYCRR, Chapter IV, Part 375-6 Restricted Use Commercial Soil Cleanup Objectives

RESTRICTED RESIDENTIAL SCOs - Regulatory comparison against 6NYCRR, Chapter IV, Part 375-6 Restricted Use Restricted RESIDENTIAL Soil Cleanup Objectives

NYS AWQS - New York State Ambient Water Quality Standards and Guidance Values for GA Groundwater

62	COMPOUNDS THAT EXCEED PART 375 COMMERCIAL SCOs OR RESTRICTED USE RESTRICTED RESIDENTIAL SCOs
300	CONCENTRATION OF COMPOUND THAT EXCEEDS NYS AWQS
	SHALLOW WELLS (≤ 40 FEET BELOW GROUND SURFACE)
	DEEP WELLS (> 40 FEET BELOW GROUND SURFACE)
	SOIL SAMPLE
mg/kg	MILLIGRAM PER KILOGRAM
µg/L	MICROGRAMS PER LITER
PAHs	POLYCYCLIC AROMATIC HYDROCARBONS
BTEX	BENZENE, TOLUENE, ETHYLBENZENE, XYLENES
PCBs	POLYCHLORINATED BIPHENYLS
NA	NOT AVAILABLE, NOT APPLICABLE, OR NOT ANALYZED
ND	NOT DETECTED
NE	NOT ESTABLISHED
J	ESTIMATED VALUE
ft	FEET
*	VALUE IS A GUIDANCE, NOT A STANDARD
**	ACCORDING TO NYSDEC CP-51, FOR COMMERCIAL SITES WHERE THE ECOLOGICAL STANDARDS ARE NOT APPLICABLE, DEC MAY APPROVE A REMEDIAL PROGRAM WHICH ACHIEVES A SOIL CLEANUP LEVEL OF 500 mg/kg FOR TOTAL PAHs FOR ALL SUBSURFACE SOIL. THE 500 mg/kg CLEANUP LEVEL IS IN LIEU OF ACHIEVING ALL OF THE PAH-SPECIFIC SCOs IN 6NYCRR 375-6.

0 30 60
HORIZONTAL SCALE, FEET

30 15 0
VERTICAL SCALE, FEET
4 x VERTICAL EXAGGERATION

NOTES:

1. ONLY 2009 AND 2010 DATA AND INFORMATION WERE GENERATED BY GEI CONSULTANTS, INC. ON BEHALF OF NATIONAL GRID. OTHER DATA AND INFORMATION WERE GENERATED BY OTHER CONTRACTORS.
2. ELEVATIONS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

REMEDIAL INVESTIGATION - OU2
CLINTON STREET FORMER MGP SITE
SCHENECTADY, NEW YORK

nationalgrid

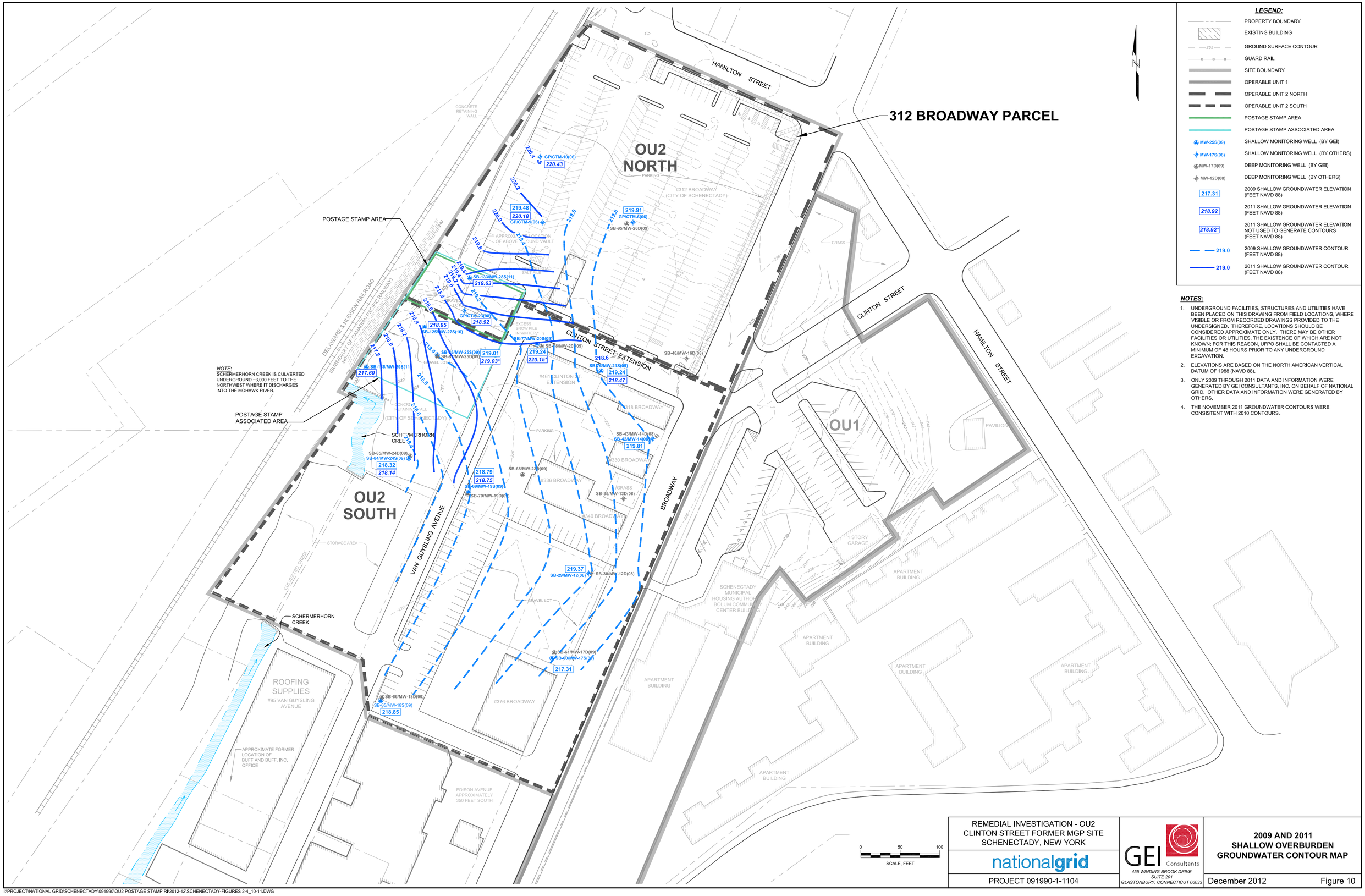
PROJECT 091990-1-1104

GEI Consultants
WINDING ROOK DRIVE
SUITE
GLASTONBURY, CONNECTICUT

GEOLOGIC CROSS SECTION AND SUMMARIED ANALYTICAL RESULTS

December 2012 Figure 9

I:\PROJECT\NATIONAL GRID\SCHENECTADY\091990\OU2 POSTAGE STAMP RI\2012-12\SCHENECTADY-CROSS SECTIONS.DWG



LEGEND:

- PROPERTY BOUNDARY
- EXISTING BUILDING
- 255 GROUND SURFACE CONTOUR
- GUARD RAIL
- SITE BOUNDARY
- OPERABLE UNIT 1
- OPERABLE UNIT 2 NORTH
- OPERABLE UNIT 2 SOUTH
- POSTAGE STAMP AREA
- POSTAGE STAMP ASSOCIATED AREA
- MW-25S(09) SHALLOW MONITORING WELL (BY GEI)
- MW-17S(08) SHALLOW MONITORING WELL (BY OTHERS)
- MW-17D(09) DEEP MONITORING WELL (BY GEI)
- MW-12D(08) DEEP MONITORING WELL (BY OTHERS)
- 217.31 2009 SHALLOW GROUNDWATER ELEVATION (FEET NAVD 88)
- 218.92 2011 SHALLOW GROUNDWATER ELEVATION (FEET NAVD 88)
- 218.92* 2011 SHALLOW GROUNDWATER ELEVATION NOT USED TO GENERATE CONTOURS (FEET NAVD 88)
- 219.0 2009 SHALLOW GROUNDWATER CONTOUR (FEET NAVD 88)
- 219.0 2011 SHALLOW GROUNDWATER CONTOUR (FEET NAVD 88)

NOTES:

1. UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLACED ON THIS DRAWING FROM FIELD LOCATIONS, WHERE VISIBLE OR FROM RECORDED DRAWINGS PROVIDED TO THE UNDERSIGNED. THEREFORE, LOCATIONS SHOULD BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE OTHER FACILITIES OR UTILITIES, THE EXISTENCE OF WHICH ARE NOT KNOWN; FOR THIS REASON, UFPO SHALL BE CONTACTED A MINIMUM OF 48 HOURS PRIOR TO ANY UNDERGROUND EXCAVATION.
2. ELEVATIONS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
3. ONLY 2009 THROUGH 2011 DATA AND INFORMATION WERE GENERATED BY GEI CONSULTANTS, INC, ON BEHALF OF NATIONAL GRID. OTHER DATA AND INFORMATION WERE GENERATED BY OTHERS.
4. THE NOVEMBER 2011 GROUNDWATER CONTOURS WERE CONSISTENT WITH 2010 CONTOURS.

REMEDIAL INVESTIGATION - OU2
CLINTON STREET FORMER MGP SITE
SCHENECTADY, NEW YORK

nationalgrid

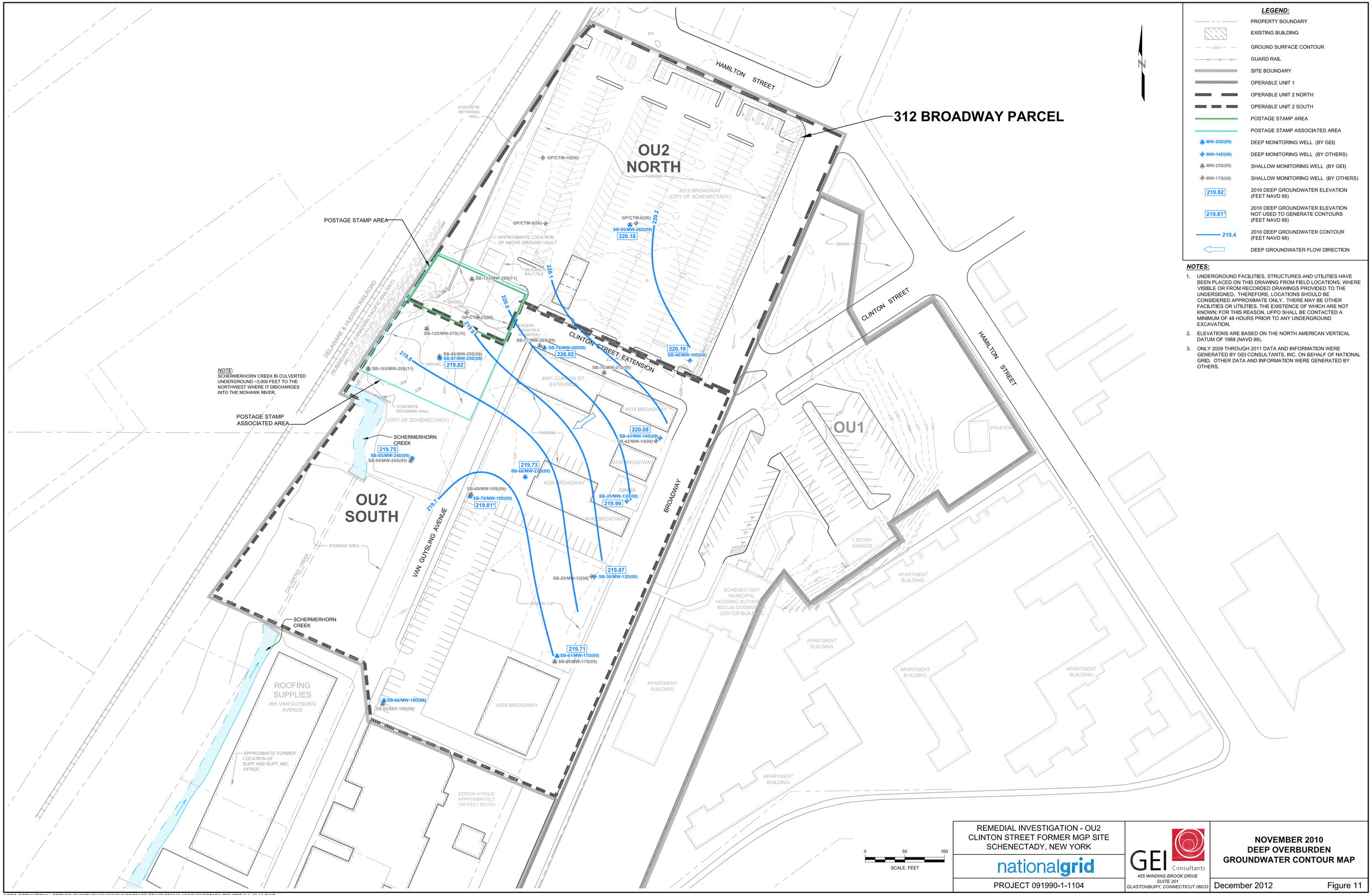
PROJECT 091990-1-1104

GEI Consultants
455 WINDING BROOK DRIVE
SUITE 201
GLASTONBURY, CONNECTICUT 06033

2009 AND 2011 SHALLOW OVERBURDEN GROUNDWATER CONTOUR MAP

December 2012 Figure 10

I:\PROJECT\NATIONAL GRID\SCHENECTADY\091990\OU2 POSTAGE STAMP RI\2012-12\SCHENECTADY-FIGURES 2-4_10-11.DWG



LEGEND:

- PROPERTY BOUNDARY
- EXISTING BUILDING
- 255 — GROUND SURFACE CONTOUR
- GUARD RAIL
- SITE BOUNDARY
- OPERABLE UNIT 1
- OPERABLE UNIT 2 NORTH
- OPERABLE UNIT 2 SOUTH
- POSTAGE STAMP AREA
- POSTAGE STAMP ASSOCIATED AREA
- MW-25D(09) — DEEP MONITORING WELL (BY GEI)
- MW-14D(08) — DEEP MONITORING WELL (BY OTHERS)
- MW-25S(09) — SHALLOW MONITORING WELL (BY GEI)
- MW-17S(08) — SHALLOW MONITORING WELL (BY OTHERS)
- 219.82 — 2010 DEEP GROUNDWATER ELEVATION (FEET NAVD 88)
- 219.81* — 2010 DEEP GROUNDWATER ELEVATION NOT USED TO GENERATE CONTOURS (FEET NAVD 88)
- 219.4 — 2010 DEEP GROUNDWATER CONTOUR (FEET NAVD 88)
- DEEP GROUNDWATER FLOW DIRECTION

NOTE:
SCHERMERHORN CREEK IS CULVERTED UNDERGROUND ~3,000 FEET TO THE NORTHWEST WHERE IT DISCHARGES INTO THE MOHAWK RIVER.

NOTES:

1. UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLACED ON THIS DRAWING FROM FIELD LOCATIONS, WHERE VISIBLE OR FROM RECORDED DRAWINGS PROVIDED TO THE UNDERSIGNED. THEREFORE, LOCATIONS SHOULD BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE OTHER FACILITIES OR UTILITIES, THE EXISTENCE OF WHICH ARE NOT KNOWN; FOR THIS REASON, UPPO SHALL BE CONTACTED A MINIMUM OF 48 HOURS PRIOR TO ANY UNDERGROUND EXCAVATION.
2. ELEVATIONS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
3. ONLY 2009 THROUGH 2011 DATA AND INFORMATION WERE GENERATED BY GEI CONSULTANTS, INC. ON BEHALF OF NATIONAL GRID. OTHER DATA AND INFORMATION WERE GENERATED BY OTHERS.

REMEDIAL INVESTIGATION - OU2
CLINTON STREET FORMER MGP SITE
SCHENECTADY, NEW YORK

nationalgrid

PROJECT 091990-1-1104

GEI Consultants
455 WINDING BROOK DRIVE
SUITE 201
GLASTONBURY, CONNECTICUT 06033

NOVEMBER 2010
DEEP OVERBURDEN
GROUNDWATER CONTOUR MAP

December 2012 — Figure 11

I:\PROJECT\NATIONAL GRID\SCHENECTADY\091990\OU2 POSTAGE STAMP RI\2012-12\SCHENECTADY-FIGURES 2-4_10-11.DWG

Sample Name:		CTMSS-11(06)
Sample Interval (ft):	COMMERCIAL	0.5
Sample Date:	SCOs	5/11/2006
Near Surface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	ND
PAHs (mg/kg)		
Total PAHs	500**	4.185
Total PCBs	1	ND
Total Cyanide	27	NA

Sample Name:		CTMSB-18(07)
Sample Interval (ft):	COMMERCIAL	2-4
Sample Date:	SCOs	5/29/2007
Near Surface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	0.0086
PAHs (mg/kg)		
Benzo[a]pyrene	1	1.2
Total PAHs	500**	12.173
Total PCBs	1	ND
Total Cyanide	27	NA

Sample Name:		CTMSS-12(06)
Sample Interval (ft):	COMMERCIAL	0.5
Sample Date:	SCOs	5/11/2006
Near Surface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	ND
PAHs (mg/kg)		
Total PAHs	500**	2.62
Total PCBs	1	ND
Total Cyanide	27	NA

Sample Name:		CTMSS-8(06)	Duplicate of: CTMSS-8(06)
Sample Interval (ft):	COMMERCIAL	0.5	0.5
Sample Date:	SCOs	5/11/2006	5/11/2006
Near Surface Soil Results			
BTEX (mg/kg)			
Total BTEX	NE	ND	ND
PAHs (mg/kg)			
Total PAHs	500**	1.792	2.077
Total PCBs	1	ND	ND
Total Cyanide	27	NA	NA

Sample Name:		CTMSS-7(06)
Sample Interval (ft):	COMMERCIAL	0.5
Sample Date:	SCOs	5/11/2006
Near Surface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	ND
PAHs (mg/kg)		
Total PAHs	500**	0.849
Total PCBs	1	ND
Total Cyanide	27	NA

Sample Name:		CTMSS-4(06)
Sample Interval (ft):	COMMERCIAL	0.5
Sample Date:	SCOs	5/11/2006
Near Surface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	ND
PAHs (mg/kg)		
Total PAHs	500**	7.95
Total PCBs	1	ND
Total Cyanide	27	NA

Sample Name:		CTMMW-4(04)
Sample Interval (ft):	COMMERCIAL	0-4
Sample Date:	SCOs	2004
Near Surface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	ND
PAHs (mg/kg)		
Benzo(a)anthracene	5.6	26
Benzo(b)fluoranthene	5.6	31
Benzo(k)fluoranthene	5.6	16
Dibenz(a,h)anthracene	0.56	4.2
Indeno(1,2,3-cd)pyrene	5.6	15
Total PAHs	500**	266.9
Total PCBs	1	ND
Total Cyanide	27	NA

Sample Name:		CTMSS-10(06)
Sample Interval (ft):	COMMERCIAL	0.5
Sample Date:	SCOs	5/11/2006
Near Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	ND
PAHs (mg/kg)		
Total PAHs	500**	8.18
Total PCBs	1	ND
Total Cyanide	27	NA

Sample Name:		CTMSS-9(06)
Sample Interval (ft):	COMMERCIAL	0.5
Sample Date:	SCOs	5/11/2006
Near Surface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	ND
PAHs (mg/kg)		
Total PAHs	500**	6.663
Total PCBs	1	ND
Total Cyanide	27	NA

Sample Name:		CTMSB-16(07)	CTMSB-16(07)
Sample Interval (ft):	COMMERCIAL	1-2	2-3
Sample Date:	SCOs	5/29/2007	5/29/2007
Near Surface Soil Results			
BTEX (mg/kg)			
Total BTEX	NE	ND	ND
PAHs (mg/kg)			
Benzo[a]pyrene	1	3.1	0.086 J
Total PAHs	500**	26.8	0.691
Total PCBs	1	20	0.17
Total Cyanide	27	NA	NA

Sample Name:		CTMSB-17(07)	CTMSB-17(07)
Sample Interval (ft):	COMMERCIAL	1-2	2-3
Sample Date:	SCOs	5/29/2007	5/29/2007
Near Surface Soil Results			
BTEX (mg/kg)			
Total BTEX	NE	ND	ND
PAHs (mg/kg)			
Total PAHs	500**	0.471	ND
Total PCBs	1	0.025	ND
Total Cyanide	27	NA	NA

Sample Name:		CTMSS-13(08)
Sample Interval (ft):	COMMERCIAL	1
Sample Date:	SCOs	1/28/2008
Near Surface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	ND
PAHs (mg/kg)		
Benzo(a)anthracene	5.6	39
Benzo(a)pyrene	1	15 J
Benzo(b)fluoranthene	5.6	21
Dibenz(a,h)anthracene	0.56	1.4 J
Total PAHs	500**	1055.6
Total PCBs	1	65
Total Cyanide	27	83

Sample Name:		CTMSS-14(08)
Sample Interval (ft):	COMMERCIAL	1
Sample Date:	SCOs	1/28/2008
Near Surface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	ND
PAHs (mg/kg)		
Benzo(a)pyrene	1	1.5 J
Total PAHs	500**	25.96
Total PCBs	1	0.28
Total Cyanide	27	5.31

Sample Name:		CTMSS-15(08)
Sample Interval (ft):	COMMERCIAL	1
Sample Date:	SCOs	1/28/2008
Near Surface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	ND
PAHs (mg/kg)		
Total PAHs	500**	6.83
Total PCBs	1	0.2
Total Cyanide	27	0.73

Sample Name:		CTMSS-5(06)
Sample Interval (ft):	COMMERCIAL	0.5
Sample Date:	SCOs	5/11/2006
Near Surface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	ND
PAHs (mg/kg)		
Total PAHs	500**	ND
Total PCBs	1	ND
Total Cyanide	27	NA

Sample Name:		CTMSS-3(06)
Sample Interval (ft):	COMMERCIAL	0.5
Sample Date:	SCOs	5/11/2006
Near Surface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	ND
PAHs (mg/kg)		
Total PAHs	500**	1.204
Total PCBs	1	ND
Total Cyanide	27	NA

Sample Name:		CTMSS-2(06)
Sample Interval (ft):	COMMERCIAL	0.5
Sample Date:	SCOs	5/11/2006
Near Surface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	ND
PAHs (mg/kg)		
Total PAHs	500**	3.255
Total PCBs	1	ND
Total Cyanide	27	NA

Sample Name:		CTMSS-6(06)
Sample Interval (ft):	COMMERCIAL	0.5
Sample Date:	SCOs	5/11/2006
Near Surface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	ND
PAHs (mg/kg)		
Total PAHs	500**	0.59
Total PCBs	1	ND
Total Cyanide	27	NA

Sample Name:		CTMSS-1(06)
Sample Interval (ft):	COMMERCIAL	0.5
Sample Date:	SCOs	5/11/2006
Near Surface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	ND
PAHs (mg/kg)		
Total PAHs	500**	ND
Total PCBs	1	ND
Total Cyanide	27	NA

312 BROADWAY PARCEL

OU2 NORTH

OU2 SOUTH

OU1

#312 BROADWAY (CITY OF SCHENECTADY)

#461 CLINTON ST. EXTENSION

#318 BROADWAY

#330 BROADWAY

#336 BROADWAY

#340 BROADWAY

#376 BROADWAY

#95 VAN GUYSLING AVENUE

ROOFING SUPPLIES

HAMILTON STREET

CLINTON STREET

CLINTON STREET EXTENSION

BROADWAY

VAN GUYSLING AVENUE

DELAWARE & HUDSON RAILROAD (FORMERLY CANADIAN PACIFIC RAILWAY)

SCHERMERHORN CREEK

CULVERTED CREEK

CONCRETE RETAINING WALL

SUBSURFACE CONCRETE SLAB

APPROXIMATE LOCATION OF ABOVE GROUND VAULT

DE-ICING ROAD SALT PILE

EXCESS SNOW PILE IN WINTER

GRAVEL LOT

PARKING

GRASS

STORAGE AREA

PAVILION

1 STORY GARAGE

APARTMENT BUILDING

SCHENECTADY MUNICIPAL HOUSING AUTHORITY BOLUM COMMUNITY CENTER BUILDING

EDISON AVENUE APPROXIMATELY 350 FEET SOUTH

APPROXIMATE FORMER LOCATION OF BUFF AND BUFF, INC. OFFICE

POSTAGE STAMP AREA

POSTAGE STAMP ASSOCIATED AREA

NOTE:
SCHERMERHORN CREEK IS CULVERTED UNDERGROUND ~3,000 FEET TO THE NORTHWEST WHERE IT DISCHARGES INTO THE MOHAWK RIVER.

0 50 100
SCALE, FEET

LEGEND:

- PROPERTY BOUNDARY
- EXISTING BUILDING
- 255 — GROUND SURFACE CONTOUR
- GUARD RAIL
- SITE BOUNDARY
- OPERABLE UNIT 1
- OPERABLE UNIT 2 NORTH
- OPERABLE UNIT 2 SOUTH
- POSTAGE STAMP AREA
- POSTAGE STAMP ASSOCIATED AREA
- INTERIM REMEDIAL MEASURE EXCAVATION FOOTPRINT
- CTMSS-1(06) / CTMSS-13(08) — NEAR SURFACE SOIL SAMPLE (CT MALE - 2006, 2008)
- CTMSB-16(07) — NEAR SURFACE SOIL BORING (CT MALE - 2007)
- CTMMW-4(04) / CTMSB/MW-18(07) — NEAR SURFACE SOIL BORING MONITORING WELL (CT MALE - 2004, 2007)
- (04), (06), (07), (08) — YEAR INSTALLED

ANALYTICAL BOX NOTES

COMMERCIAL SCOs - Regulatory comparison against 6NYCRR, Chapter IV, Part 375-6 Restricted Use Commercial Soil Cleanup Objectives

32.3	COMPOUNDS THAT EXCEED PART 375 COMMERCIAL SCOs
mg/kg	MILLIGRAM PER KILOGRAM
PAHs	POLYCYCLIC AROMATIC HYDROCARBONS
BTEX	BENZENE, TOLUENE, ETHYLBENZENE, XYLENE
PCBs	POLYCHLORINATED BIPHENYLS
	ONE OR MORE BTEX OR PAH COMPOUND CONCENTRATIONS EXCEED THE ASSOCIATED PART 375 COMMERCIAL SCOs
	NO BTEX OR PAH COMPOUNDS DETECTED AT CONCENTRATIONS ABOVE THE ASSOCIATED PART 375 COMMERCIAL SCOs
NA	NOT AVAILABLE, NOT APPLICABLE, OR NOT ANALYZED
ND	NOT DETECTED
NE	NOT ESTABLISHED
J	ESTIMATED VALUE
**	ACCORDING TO NYSDEC CP-51, FOR COMMERCIAL SITES WHERE THE ECOLOGICAL STANDARDS ARE NOT APPLICABLE, DEC MAY APPROVE A REMEDIAL PROGRAM WHICH ACHIEVES A SOIL CLEANUP LEVEL OF 500 MG/KG FOR TOTAL PAHS FOR ALL SUBSURFACE SOIL. THE 500 MG/KG CLEANUP LEVEL IS IN LIEU OF ACHIEVING ALL OF THE PAH-SPECIFIC SCOS IN 6NYCRR 375-6.

NOTES:

1. UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLACED ON THIS DRAWING FROM FIELD LOCATIONS, WHERE VISIBLE OR FROM RECORDED DRAWINGS PROVIDED TO THE UNDERSIGNED. THEREFORE, LOCATIONS SHOULD BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE OTHER FACILITIES OR UTILITIES, THE EXISTENCE OF WHICH ARE NOT KNOWN; FOR THIS REASON, UFPO SHALL BE CONTACTED A MINIMUM OF 48 HOURS PRIOR TO ANY UNDERGROUND EXCAVATION.
2. ELEVATIONS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
3. ONLY 2009 THROUGH 2011 DATA AND INFORMATION WERE GENERATED BY GEI CONSULTANTS, INC. ON BEHALF OF NATIONAL GRID. OTHER DATA AND INFORMATION WERE GENERATED BY OTHERS.
4. 2007 LOCATIONS ARE APPROXIMATE.

REMEDIAL INVESTIGATION - OU2
CLINTON STREET FORMER MGP SITE
SCHENECTADY, NEW YORK

nationalgrid

PROJECT 091990-1-1104

GEI Consultants
455 WINDING BROOK DRIVE
SUITE 201
GLASTONBURY, CONNECTICUT 06033

OU2 NORTH
CT MALE NEAR SURFACE SOIL
SUMMARIZED ANALYTICAL RESULTS
(mg/kg)

December 2012 Figure 12

I:\PROJECT\NATIONAL GRID\SCHENECTADY\091990\OU2 POSTAGE STAMP RI\2012-12\SCHENECTADY-NEAR SURFACE SOIL.DWG

LEGEND:

- PROPERTY BOUNDARY
- EXISTING BUILDING
- 255 GROUND SURFACE CONTOUR
- GUARD RAIL
- SITE BOUNDARY
- OPERABLE UNIT 1
- OPERABLE UNIT 2 NORTH
- OPERABLE UNIT 2 SOUTH
- POSTAGE STAMP AREA
- POSTAGE STAMP ASSOCIATED AREA
- INTERIM REMEDIAL MEASURE EXCAVATION FOOTPRINT
- SB-86/MW-25S(09) SB-125/MW-27S(10) SB-133/MW-28S(11) — SOIL BORING/MONITORING WELL (GEI - 2009, 2010, 2011)
- SB-117/RW-1(10) — SOIL BORING/RECOVERY WELL (GEI - 2010)
- GP/CTM-1(06) GP/CTM-20(08) — SOIL BORING/MONITORING WELL (CT MALE - 2006, 2008)
- SB-1/MW-1(04) SB-10A/MW-5(06) SB-26/MW-11D(08) — SOIL BORING/MONITORING WELL (AECOM - 2004, 2006, 2008)
- SB-62(09) SB-124(10) SB-128(11) — SOIL BORING (GEI - 2009, 2010, 2011)
- PDI-SB-100(10) — PRE-DESIGN INVESTIGATION SOIL BORING (GEI - 2010)
- SB-4(04) SB-17(06) CTMSB-16(07) SB-57(08) — SOIL BORING (LIGHTSHIP ENGINEERING - 2004, CT MALE - 2007, AECOM - 2006, 2008)
- (04), (06), (07), (08), (09), (10), (11) — YEAR INSTALLED

ANALYTICAL BOX NOTES

COMMERCIAL SCOs - Regulatory comparison against 6NYCRR, Chapter IV, Part 375-6 Restricted Use COMMERCIAL Soil Cleanup Objectives

- 32.3 — COMPOUNDS THAT EXCEED PART 375 COMMERCIAL SCOs OR RESTRICTED USE RESTRICTED RESIDENTIAL SCOs
- ONE OR MORE BTEX OR PAH COMPOUND CONCENTRATIONS EXCEED THE ASSOCIATED PART 375 COMMERCIAL SCOs
- NO BTEX OR PAH COMPOUNDS DETECTED AT CONCENTRATIONS ABOVE THE ASSOCIATED PART 375 COMMERCIAL SCOs
- mg/kg — MILLIGRAM PER KILOGRAM
- PAHs — POLYCYCLIC AROMATIC HYDROCARBONS
- BTEX — BENZENE, TOLUENE, ETHYLBENZENE, XYLENE
- PCBs — POLYCHLORINATED BIPHENYLS
- NA — NOT AVAILABLE, NOT APPLICABLE, OR NOT ANALYZED
- ND — NOT DETECTED
- NE — NOT ESTABLISHED
- J — ESTIMATED VALUE
- ** — ACCORDING TO NYSDEC CP-51, FOR COMMERCIAL SITES WHERE THE ECOLOGICAL STANDARDS ARE NOT APPLICABLE, DEC MAY APPROVE A REMEDIAL PROGRAM WHICH ACHIEVES A SOIL CLEANUP LEVEL OF 500 mg/kg FOR TOTAL PAHs FOR ALL SUBSURFACE SOIL. THE 500 mg/kg CLEANUP LEVEL IS IN LIEU OF ACHIEVING ALL OF THE PAH-SPECIFIC SCOs IN 6NYCRR 375-6.

NOTES:

1. UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLACED ON THIS DRAWING FROM FIELD LOCATIONS, WHERE VISIBLE, OR FROM RECORDED DRAWINGS PROVIDED TO THE UNDERSIGNED, THEREFORE, LOCATIONS SHOULD BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE OTHER FACILITIES OR UTILITIES, THE EXISTENCE OF WHICH ARE NOT KNOWN: FOR THIS REASON, UFPO SHALL BE CONTACTED A MINIMUM OF 48 HOURS PRIOR TO ANY UNDERGROUND EXCAVATION.
2. ELEVATIONS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
3. ONLY 2009 AND 2010 DATA AND INFORMATION WERE GENERATED BY GEI CONSULTANTS, INC., ON BEHALF OF NATIONAL GRID. OTHER DATA AND INFORMATION WERE GENERATED BY OTHERS.
4. DATA BOXES FOR SOIL BORINGS INSIDE THE IRM EXCAVATION FOOTPRINT ARE SHOWN FOR ONLY THOSE LOCATIONS THAT APPEAR ON CROSS SECTIONS.
5. DATA BOXES FOR SB-49(08) AND SB-50(08) IN OU1 ARE SHOWN BECAUSE THEY APPEAR IN CROSS SECTIONS.

NOTE:
SCHERMERHORN CREEK IS CULVERTED UNDERGROUND ~3,000 FEET TO THE NORTHWEST WHERE IT DISCHARGES INTO THE MOHAWK RIVER.

Sample Name:		SB-105(10)
Sample Interval (ft):	COMMERCIAL	12-13
Sample Date:	SCOs	10/27/2010
Subsurface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	ND
PAHs (mg/kg)		
Total PAHs	500**	0.3
Total PCBs	1	NA
Total Cyanide	27	ND

Sample Name:		SB-121(10)
Sample Interval (ft):	COMMERCIAL	10-11
Sample Date:	SCOs	11/1/2010
Subsurface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	ND
PAHs (mg/kg)		
Total PAHs	500**	ND
Total PCBs	1	NA
Total Cyanide	27	ND

Sample Name:		SB-106(10)
Sample Interval (ft):	COMMERCIAL	12-13
Sample Date:	SCOs	10/27/2010
Subsurface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	ND
PAHs (mg/kg)		
Total PAHs	500**	0.24
Total PCBs	1	NA
Total Cyanide	27	ND

Sample Name:		CTMSB-18(07)	CTMSB-18(07)	Duplicate of: CTMSB-18(07)
Sample Interval (ft):	COMMERCIAL	2-4	10-12	10-12
Sample Date:	SCOs	5/29/2007	5/29/2007	5/29/2007
Subsurface Soil Results				
BTEX (mg/kg)				
Total BTEX	NE	8.6	ND	ND
PAHs (mg/kg)				
Total PAHs	500**	12.173	ND	4.74
Total PCBs	1	ND	ND	ND
Total Cyanide	27	ND	ND	ND

Sample Name:		GP/CTM-7(06)
Sample Interval (ft):	COMMERCIAL	4-6
Sample Date:	SCOs	5/9/2006
Subsurface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	27
PAHs (mg/kg)		
Benzo[a]pyrene	1	1.5
Total PAHs	500**	20.384
Total PCBs	1	ND
Total Cyanide	27	NA

Sample Name:		GP/CTM-8(06)
Sample Interval (ft):	COMMERCIAL	4-6
Sample Date:	SCOs	5/9/2006
Subsurface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	ND
PAHs (mg/kg)		
Total PAHs	500**	0.354
Total PCBs	1	ND
Total Cyanide	27	NA

Sample Name:		SB-120(10)
Sample Interval (ft):	COMMERCIAL	11-12
Sample Date:	SCOs	11/1/2010
Subsurface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	ND
PAHs (mg/kg)		
Total PAHs	500**	0.112
Total PCBs	1	NA
Total Cyanide	27	ND

Sample Name:		GP/CTM-4(06)
Sample Interval (ft):	COMMERCIAL	4-6
Sample Date:	SCOs	5/8/2006
Subsurface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	ND
PAHs (mg/kg)		
Total PAHs	500**	1.62
Total PCBs	1	ND
Total Cyanide	27	NA

Sample Name:		SB-107(10)
Sample Interval (ft):	COMMERCIAL	12-13
Sample Date:	SCOs	10/27/2010
Subsurface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	ND
PAHs (mg/kg)		
Benzo[a]pyrene	1	3.6
Dibenz[a,h]anthracene	0.56	0.95
Total PAHs	500**	43.865
Total PCBs	1	NA
Total Cyanide	27	2.9

Sample Name:		GP/CTM-10(06)
Sample Interval (ft):	COMMERCIAL	4-6
Sample Date:	SCOs	5/9/2006
Subsurface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	ND
PAHs (mg/kg)		
Total PAHs	500**	3.46
Total PCBs	1	ND
Total Cyanide	27	NA

Sample Name:		GP/CTM-3(06)
Sample Interval (ft):	COMMERCIAL	4-8
Sample Date:	SCOs	5/8/2006
Subsurface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	ND
PAHs (mg/kg)		
Total PAHs	500**	4.05
Total PCBs	1	ND
Total Cyanide	27	NA

Sample Name:		SB-119(10)	SB-119(10)	Duplicate of: SB-119(10)
Sample Interval (ft):	COMMERCIAL	11-12	11-12	11-12
Sample Date:	SCOs	11/1/2010	11/1/2010	11/1/2010
Subsurface Soil Results				
BTEX (mg/kg)				
Total BTEX	NE	ND	ND	
PAHs (mg/kg)				
Benzo[a]pyrene	1	ND	3.5 J	
Dibenz[a,h]anthracene	0.56	ND	0.87 J	
Total PAHs	500**	0.283	37.49	
Total PCBs	1	NA	NA	
Total Cyanide	27	ND	ND	

Sample Name:		SB-95(09)	SB-95(09)
Sample Interval (ft):	COMMERCIAL	9-10	70-77
Sample Date:	SCOs	10/8/2009	10/8/2009
Subsurface Soil Results			
BTEX (mg/kg)			
Total BTEX	NE	0.0029	0.0025
PAHs (mg/kg)			
Total PAHs	500**	0.043	0.023
Total PCBs	1	NA	NA
Total Cyanide	27	ND	ND

Sample Name:		GP/CTM-2(06)
Sample Interval (ft):	COMMERCIAL	4-6
Sample Date:	SCOs	5/8/2006
Subsurface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	ND
PAHs (mg/kg)		
Total PAHs	500**	ND
Total PCBs	1	ND
Total Cyanide	27	NA

Sample Name:		GP/CTM-9(06)
Sample Interval (ft):	COMMERCIAL	4-6
Sample Date:	SCOs	5/9/2006
Subsurface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	ND
PAHs (mg/kg)		
Total PAHs	500**	ND
Total PCBs	1	ND
Total Cyanide	27	NA

Sample Name:		SB-123(10)
Sample Interval (ft):	COMMERCIAL	12-13
Sample Date:	SCOs	11/1/2010
Subsurface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	ND
PAHs (mg/kg)		
Total PAHs	500**	ND
Total PCBs	1	NA
Total Cyanide	27	ND

Sample Name:		SB-104(10)
Sample Interval (ft):	COMMERCIAL	10-11
Sample Date:	SCOs	10/29/2010
Subsurface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	ND
PAHs (mg/kg)		
Total PAHs	500**	2.678
Total PCBs	1	NA
Total Cyanide	27	ND

Sample Name:		GP/CTM-20(08) (2-2)	Duplicate of: GP/CTM-20(08) (2-2)
Sample Interval (ft):	COMMERCIAL	6-8	6-8
Sample Date:	SCOs	1/28/2008	1/28/2008
Subsurface Soil Results			
BTEX (mg/kg)			
Total BTEX	NE	ND	ND
PAHs (mg/kg)			
Benzo(a)anthracene	5.6	5.8 J	39 J
Benzo(b)fluoranthene	5.6	8.5 J	21 J
Benzo(a)pyrene	1	5.8 J	15 J
Dibenz(a,h)anthracene	0.56	1.1 J	1.2
Total PAHs	500**	71.02	1113.4
Total PCBs	1	ND	ND
Total Cyanide	27	1.77 J	4.39 J

Sample Name:		SB-127(10)	SB-127(10)
Sample Interval (ft):	COMMERCIAL	12 - 13	20 - 21
Sample Date:	SCOs	10/27/2010	10/27/2010
Subsurface Soil Results			
BTEX (mg/kg)			
Total BTEX	NA	39	ND
PAHs (mg/kg)			
Benzo[a]pyrene	1	2.4	ND
Dibenz[a,h]anthracene	0.56	0.59	ND
Total PAHs	500**	63.98	ND
Total PCBs	1	ND	ND
Total Cyanide	27	NA	ND

Sample Name:		SB-124(10)	Duplicate of: SB-124(10)	SB-124(10)
Sample Interval (ft):	COMMERCIAL	12 - 13	12 - 13	19 - 20
Sample Date:	SCOs	10/28/2010	10/28/2010	10/27/2010
Subsurface Soil Results				
BTEX (mg/kg)				
Total BTEX	NA	0.648	8.76	ND
PAHs (mg/kg)				
Naphthalene	500	1000 J	130 J	0.047 J
Phenanthrene	500	560 J	68 J	0.024 J
Benz[a]anthracene	5.6	140 J	19 J	ND
Benzo[a]pyrene	1	120 J	16 J	ND
Benzo[b]fluoranthene	5.6	100 J	13 J	0.018 J
Chrysene	56	120 J	14 J	ND
Dibenz[a,h]anthracene	0.56	30 J	3.2 J	ND
Indeno[1,2,3-cd]pyrene	5.6	65 J	7.5 J	ND
Total PAHs	500**	3864	486.4	0.1236
Total PCBs	1	ND	ND	ND
Total Cyanide	27	1.4	0.58	0.67

Sample Name:		GP/CTM-22(08) (3-2)
Sample Interval (ft):	COMMERCIAL	10-12
Sample Date:	SCOs	1/28/2008
Subsurface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	44.7
PAHs (mg/kg)		
Fluoranthene	500	980
Phenanthrene	500	930
Pyrene	500	850
Benz[a]anthracene	5.6	390
Benzo[a]pyrene	1	330
Benzo[b]fluoranthene	5.6	370
Benzo[k]fluoranthene	56	130
Chrysene	56	310
Dibenz[a,h]anthracene	0.56	49
Indeno[1,2,3-cd]pyrene	5.6	130
Total PAHs	500**	5949
Total PCBs	1	ND
Total Cyanide	27	3.87

Sample Name:		GP/CTM-23(08) (3-2)
Sample Interval (ft):	COMMERCIAL	10-12
Sample Date:	SCOs	1/28/2008
Subsurface Soil Results		
BTEX (mg/kg)		
Benzene	44	160
Xylenes	500	1080 J
Total BTEX	NE	1800
PAHs (mg/kg)		
Acenaphthene	500	920
Anthracene	500	800
Fluorene	500	780
Fluoranthene	500	1600
Naphthalene	500	4400
Phenanthrene	500	2800
Pyrene	500	1400
Benz[a]anthracene	5.6	600 J
Benzo[a]pyrene	1	550
Benzo[b]fluoranthene	5.6	600
Benzo[k]fluoranthene	56	210 J
Chrysene	56	490 J
Dibenz[a,h]anthracene	0.56	89 J
Indeno[1,2,3-cd]pyrene	5.6	220 J
Total PAHs	500**	15969
Total PCBs	1	ND
Total Cyanide	27	2.53

Sample Name:		SB-101(10)
Sample Interval (feet):	COMMERCIAL	11 - 12
Sample Date:	SCOs	10/28/2010
Subsurface Soil Results		
BTEX (mg/kg)		
Total BTEX	NA	7.6
PAHs (mg/kg)		
Benzo[a]pyrene	1	4
Dibenz[a,h]anthracene	0.56	0.92
Total PAHs	500	154.32
Total PCBs	1	NA
Total Cyanide	27	0.23 J

Sample Name:		SB-103(10)
Sample Interval (ft):	COMMERCIAL	12-13
Sample Date:	SCOs	10/26/2010
Subsurface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	0.0337
PAHs (mg/kg)		
Total PAHs	500**	1.208
Total PCBs	1	NA
Total Cyanide	27	ND

Sample Name:		SB-92(09)	SB-92(09)
Sample Interval (ft):	COMMERCIAL	5-6	71-72
Sample Date:	SCOs	10/8/2009	10/8/2009
Subsurface Soil Results			
BTEX (mg/kg)			
Total BTEX	NE	ND	0.0023
PAHs (mg/kg)			
Benz[a]anthracene	5.6	27	ND
Benzo[a]pyrene	1	26	ND
Benzo[b]fluoranthene	5.6	23	ND
Dibenz[a,h]anthracene	0.56	4.7	ND
Indeno[1,2,3-cd]pyrene	5.6	16	ND
Total PAHs	500**	413.2	0.0069
Total PCBs	1	NA	NA
Total Cyanide	27	2.2	ND

Sample Name:		GP/CTM-5(06)
Sample Interval (ft):	COMMERCIAL	4-6
Sample Date:	SCOs	5/8/2006
Subsurface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	0.73
PAHs (mg/kg)		
Total PAHs	500**	28.46
Total PCBs	1	ND
Total Cyanide	27	NA

Sample Name:		SB-100(10)	Duplicate of: SB-100(10)
Sample Interval (ft):	COMMERCIAL	10-11	10-11
Sample Date:	SCOs	10/26/2010	10/26/2010
Subsurface Soil Results			
BTEX (mg/kg)			
Total BTEX	NE	105.1	19.08
PAHs (mg/kg)			
Acenaphthylene	500	0.23 J	1300
Anthracene	500	0.99 J	1200
Fluoranthene	500	2 J	2800
Fluorene	500	0.97 J	1300
Naphthalene	500	19 J	6900
Phenanthrene	500	2.3 J	3800
Pyrene	500	1.3 J	1700
Benz[a]anthracene	5.6	0.81 J	930
Benzo[a]pyrene	1	1 J	860
Benzo[b]fluoranthene	5.6	0.62 J	580 J
Benzo[k]fluoranthene	56	0.3 J	190 J
Chrysene	56	0.63 J	790
Dibenz[a,h]anthracene	0.56	0.56 J	62 J
Indeno[1,2,3-cd]pyrene	5.6	0.68 J	430
Total PAHs	500**	34.84	25092
Total PCBs	1	NA	NA
Total Cyanide	27	3.7 J	26 J

Sample Name:		SB-116(10)
Sample Interval (ft):	COMMERCIAL	15-16
Sample Date:	SCOs	11/1/2010
Subsurface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	1.05
PAHs (mg/kg)		
Total PAHs	500**	7.393
Total PCBs	1	NA
Total Cyanide	27	ND

Sample Name:		SB-122(10)
Sample Interval (ft):	COMMERCIAL	15-17
Sample Date:	SCOs	11/1/2010
Subsurface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	0.0354
PAHs (mg/kg)		
Total PAHs	500**	0.927
Total PCBs	1	NA
Total Cyanide	27	ND

Sample Name:		SB-102(10)
Sample Interval (ft):	COMMERCIAL	11-12
Sample Date:	SCOs	10/26/2010
Subsurface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	4.07
PAHs (mg/kg)		
Benz[a]anthracene	5.6	17
Benzo[a]pyrene	1	14
Benzo[b]fluoranthene	5.6	14
Dibenz[a,h]anthracene	0.56	2.7
Indeno[1,2,3-cd]pyrene	5.6	7.9 J
Total PAHs	500**	353.6
Total PCBs	1	NA
Total Cyanide	27	6.7

Sample Name:		SB-115(10)
Sample Interval (ft):	COMMERCIAL	15-19
Sample Date:	SCOs	10/26/2010
Subsurface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	406
PAHs (mg/kg)		
Benz[a]anthracene	5.6	77
Benzo[a]pyrene	1	49
Benzo[b]fluoranthene	5.6	45
Chrysene	56	59
Dibenz[a,h]anthracene	0.56	8.7
Indeno[1,2,3-cd]pyrene	5.6	20 J
Total PAHs	500**	1770.7
Total PCBs	1	NA
Total Cyanide	27	4

Sample Name:		SB-96(09)
Sample Interval (ft):	COMMERCIAL	23-24
Sample Date:	SCOs	10/7/2009
Subsurface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	0.087
PAHs (mg/kg)		
Total PAHs	500**	ND
Total PCBs	1	NA
Total Cyanide	27	ND

Sample Name:		CTMMW-1(04)
Sample Interval (ft):	COMMERCIAL	8-10
Sample Date:	SCOs	2004
Subsurface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	ND
PAHs (mg/kg)		
Total PAHs	500**	3.86
Total PCBs	1	NA
Total Cyanide	27	ND

Sample Name:		SB-48(08)	SB-48(08)
Sample Interval (ft):	COMMERCIAL	9-10	27.5-30
Sample Date:	SCOs	10/31/2008	10/31/2008
Subsurface Soil Results			
BTEX (mg/kg)			
Total BTEX	NE	80.1	0.0022
PAHs (mg/kg)			
Acenaphthene	500	1000	0.16
Anthracene	500	920	0.19
Benz[a]anthracene	5.6	770	0.16
Benzo[a]pyrene	1	600	0.13
Benzo[b]fluoranthene	5.6	810	0.15
Chrysene	56	570	0.12
Dibenz[a,h]anthracene	0.56	91	ND
Fluoranthene	500	1900	0.39
Flourene	500	810	0.14
Indeno[1,2,3-cd]pyrene	5.6	320	0.062 J
Naphthalene	500	2000	0.16
Phenanthrene	500	2700	0.58
Pyrene	500	1300	0.3
Total PAHs	500**	14921	2.717
Total PCBs	1	NA	NA
Total Cyanide	27	13.5 J	ND

Sample Name:		SB-109(10)
Sample Interval (ft):	COMMERCIAL	11-12
Sample Date:	SCOs	10/26/2010
Subsurface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	11.86
PAHs (mg/kg)		
Benz[a]anthracene	5.6	7.2
Benzo[a]pyrene	1	7.2
Dibenz[a,h]anthracene	0.56	1.9
Total PAHs	500**	139.9
Total PCBs	1	NA
Total Cyanide	27	4.5

Sample Name:		SB-93(09)	SB-93(09)	Duplicate of: SB-93(09)
Sample Interval (ft):	COMMERCIAL	10.6-11.6	70-75	70-75
Sample Date:	SCOs	10/6/2009	10/6/2009	10/6/2009
Subsurface Soil Results				
BTEX (mg/kg)				
Total BTEX	NE	0.0797	ND	ND
PAHs (mg/kg)				
Acenaphthene	500	560 J	ND	ND
Fluoranthene	500	830	0.0093 J	ND
Naphthalene	500	1900	0.03 J	ND
Phenanthrene	500	1300	0.021 J	ND
Pyrene	500	710 J	ND	ND
Benz[a]anthracene	5.6	320 J	ND	ND
Benzo[a]pyrene	1	250 J	ND	ND
Benzo[b]fluoranthene	5.6	300 J	ND	ND
Benzo[k]fluoranthene	56	74	ND	ND
Chrysene	56	250 J	ND	ND
Dibenz[a,h]anthracene	0.56	30	ND	ND
Indeno[1,2,3-cd]pyrene	5.6	95	ND	ND
Total PAHs	500**	8263	0.0603	ND
Total PCBs	1	NA	NA	NA
Total Cyanide	27	17.4	ND	ND

Sample Name:		GP/CTM-1(06)	Duplicate of: GP/CTM-1(06)
Sample Interval (ft):	COMMERCIAL	4-6	4-6
Sample Date:	SCOs	5/8/2006	5/8/2006
Subsurface Soil Results			
BTEX (mg/kg)			
Total BTEX	NE	ND	ND
PAHs (mg/kg)			
Benzo[a]pyrene	1	1.7 J	1.1 J
Total PAHs	500**	21.102	12.44
Total PCBs	1	ND	ND
Total Cyanide	27	NA	NA

Sample Name:		SB-50(08)	SB-50(08)	SB-50(08)	SB-50(08)
Sample Interval (ft):	COMMERCIAL	14.5-15	22-24	24-26	80-81
Sample Date:	SCOs	7/17/2008	7/17/2008	7/17/2008	7/22/2008
Subsurface Soil Results					
BTEX (mg/kg)					
Total BTEX	NE	0.0492	0.4478	ND	ND
PAHs (mg/kg)					
Total PAHs	500**	172.74	5.35	0.631	ND
Total PCBs	1	NA	NA	NA	NA
Total Cyanide	27	10.7	0.13 J	0.3 J	ND

Sample Name:		SB-97(09)
Sample Interval (ft):	COMMERCIAL	24-25
Sample Date:	SCOs	10/7/2009
Subsurface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	0.39
PAHs (mg/kg)		
Total PAHs	500**	ND
Total PCBs	1	NA
Total Cyanide	27	ND

Sample Name:		SB-49(08)	SB-49(08)	SB-49(08)	SB-49(08)
Sample Interval (ft):	COMMERCIAL	8-10	22-24	28-30	72-74
Sample Date:	SCOs	8/1/2008	8/1/2008	8/1/2008	8/4/2008
Subsurface Soil Results					
BTEX (mg/kg)					
Total BTEX	NE	ND	10.95	13	ND
PAHs (mg/kg)					
Total PAHs	500**	42.227	0.448	ND	ND
Total PCBs	1	NA	NA	NA	NA
Total Cyanide	27	5.1	ND	ND	ND

Sample Name:		CTMSB-19(07)	Duplicate of: CTMSB-19(07)
Sample Interval (ft):	COMMERCIAL	10-12	10-12
Sample Date:	SCOs	5/29/2007	5/29/2007
Subsurface Soil Results			
BTEX (mg/kg)			
Total BTEX	NE	15.4	0.0317
PAHs (mg/kg)			
Benz[a]anthracene	5.6	4.7 J	24 J
Benzo[a]pyrene	1	4.7 J	23 J
Benzo[b]fluoranthene	5.6	5 J	25 J
Dibenz[a,h]anthracene	0.56	0.39 J	1.6 J
Indeno[1,2,3-cd]pyrene	5.6	2.2 J	11 J
Total PAHs	500**	134.29	657
Total PCBs	1	ND	ND
Total Cyanide	27	22 J	13 J

Sample Name:		SB-116(10)
Sample Interval (ft):	COMMERCIAL	13-14
Sample Date:	SCOs	10/26/2010
Subsurface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	103.5
PAHs (mg/kg)		
Acenaphthene	500	750
Anthracene	500	600
Fluoranthene	500	1400
Fluorene	500	590
Naphthalene	500	2500
Phenanthrene	500	1600
Pyrene	500	820
Benz[a]anthracene	5.6	460
Benzo[a]pyrene	1	260
Benzo[b]fluoranthene	5.6	230
Benzo[k]fluoranthene	56	110
Chrysene	56	300
Dibenz[a,h]anthracene	0.56	36
Indeno[1,2,3-cd]pyrene	5.6	130 J
Total PAHs	500**	10758
Total PCBs	1	NA
Total Cyanide	27	14.5

Sample Name:		SB-106(10)
Sample Interval (ft):	COMMERCIAL	12-13
Sample Date:	SCOs	10/26/2010
Subsurface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	ND
PAHs (mg/kg)		
Total PAHs	500**	2.478
Total PCBs	1	NA
Total Cyanide	27	0.26 J

Sample Name:		SB-94(09)	SB-94(09)
Sample Interval (ft):	COMMERCIAL	9-10	73-75
Sample Date:	SCOs	10/7/2009	10/7/2009
Subsurface Soil Results			
BTEX (mg/kg)			
Total BTEX	NE	0.0017	ND
PAHs (mg/kg)			
Total PAHs	500**	1.237	ND
Total PCBs	1	NA	NA
Total Cyanide	27	ND	ND

Sample Name:		SB-51MW-1D(08)	SB-51MW-2S(08)	SB-51MW-3D(08)	SB-51MW-4S(08)	SB-51MW-5D(08)	SB-51MW-6S(08)	SB-51MW-7D(08)	SB-51MW-8S(08)	SB-51MW-9D(08)
Sample Interval (ft):	COMMERCIAL	10-12	10-12	10-12	10-12	10-12	10-12	10-12	10-12	10-12
Sample Date:	SCOs	10/31/2008	10/31/2008	10/31/2008	10/31/2008	10/31/2008	10/31/2008	10/31/2008	10/31/2008	10/31/2008
Subsurface Soil Results										
BTEX (mg/kg)										
Total BTEX	NE	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022
PAHs (mg/kg)										
Acenaphthene	500	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
Anthracene	500	0.19	0.19	0.19	0.19	0.

312 BROADWAY PARCEL

OU2 NORTH

OU2 SOUTH

OU1

HAMILTON STREET

CLINTON STREET

CLINTON STREET EXTENSION

BROADWAY

VAN GUYSLING AVENUE

POSTAGE STAMP AREA

POSTAGE STAMP ASSOCIATED AREA

SUBSURFACE CONCRETE SLAB

SCHERMERHORN CREEK

DELAWARE & HUDSON RAILROAD (CANADIAN PACIFIC RAILWAY)

CONCRETE RETAINING WALL

PARKING

GRAVEL LOT

GRASS

#312 BROADWAY (CITY OF SCHENECTADY)

#318 BROADWAY

#330 BROADWAY

#336 BROADWAY

#340 BROADWAY

#461 CLINTON ST. EXTENSION

#95 VAN GUYSLING AVENUE

#376 BROADWAY

1 STORY BRICK

APARTMENT BUILDING

ROOFING SUPPLIES

SCHENECTADY MUNICIPAL HOUSING AUTH. BOLUM COMMUNITY CENTER BUILDING

APPROXIMATE FORMER LOCATION OF BOILER AND BUFFING OFFICE

EDISON AVENUE APPROXIMATELY 350 FEET SOUTH

NOTE:
SCHERMERHORN CREEK IS CULVERTED UNDERGROUND ~3,000 FEET TO THE NORTHWEST WHERE IT DISCHARGES INTO THE MOHAWK RIVER.

Sample Name:		SB-73(09)	SB-73(09)	SB-73(09)
Sample Interval (ft):	COMMERCIAL	12-13	20-21	74-75
Sample Date:	SCOs	10/10/2009	10/10/2009	10/10/2009
Subsurface Soil Results				
BTEX (mg/kg)				
Total BTEX	NE	2.75	0.0604	ND
PAHs (mg/kg)				
Naphthalene	500	1500	1.9	ND
Phenanthrene	500	850	0.038 J	ND
Benz[a]anthracene	5.6	220	ND	ND
Benzo[a]pyrene	1	120	ND	ND
Benzo[b]fluoranthene	5.6	150	ND	ND
Chrysene	56	160	ND	ND
Dibenz[a,h]anthracene	0.56	15 J	ND	ND
Indeno[1,2,3-cd]pyrene	5.6	60	ND	ND
Total PAHs	500**	5455	1.962	ND
Total PCBs	1	NA	NA	NA
Total Cyanide	27	8.4	ND	ND

Sample Name:		SB-72(09)	SB-72(09)
Sample Interval (ft):	COMMERCIAL	12.7-13.2	74-75
Sample Date:	SCOs	10/10/2009	10/10/2009
Subsurface Soil Results			
BTEX (mg/kg)			
Total BTEX	NE	2.68	ND
PAHs (mg/kg)			
Benz[a]anthracene	5.6	68	ND
Benzo[a]pyrene	1	53	ND
Benzo[b]fluoranthene	5.6	52	ND
Chrysene	56	67	ND
Dibenz[a,h]anthracene	0.56	6.9	ND
Indeno[1,2,3-cd]pyrene	5.6	28	ND
Total PAHs	500**	1817.9	ND
Total PCBs	1	NA	NA
Total Cyanide	27	2	ND

Sample Name:		SB-110(10)
Sample Interval (ft):	COMMERCIAL	11-12
Sample Date:	SCOs	10/30/2010
Subsurface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	ND
PAHs (mg/kg)		
Benz[a]anthracene	5.6	21
Benzo[a]pyrene	1	20
Benzo[b]fluoranthene	5.6	22
Chrysene	56	15
Dibenz[a,h]anthracene	0.56	2.9
Indeno[1,2,3-cd]pyrene	5.6	8.6
Total PAHs	500**	487.5
Total PCBs	1	NA
Total Cyanide	27	0.48 J

Sample Name:		SB-74(09)	SB-74(09)
Sample Interval (ft):	COMMERCIAL	11.5-12.5	74-75
Sample Date:	SCOs	10/21/2009	10/21/2009
Subsurface Soil Results			
BTEX (mg/kg)			
Total BTEX	NE	0.0868	ND
PAHs (mg/kg)			
Total PAHs	500**	24.922	ND
Total PCBs	1	NA	NA
Total Cyanide	27	ND	ND

Sample Name:		SB-90(09)	SB-90(09)
Sample Interval (ft):	COMMERCIAL	10-11	74-75
Sample Date:	SCOs	10/21/2009	10/21/2009
Subsurface Soil Results			
BTEX (mg/kg)			
Total BTEX	NE	0.002	ND
PAHs (mg/kg)			
Benzo[a]pyrene	1	2.7	ND
Total PAHs	500**	42.15	ND
Total PCBs	1	NA	NA
Total Cyanide	27	0.75	ND

Sample Name:		SB-85(09)	SB-85(09)
Sample Interval (ft):	COMMERCIAL	11-12	72-73
Sample Date:	SCOs	10/22/2009	10/22/2009
Subsurface Soil Results			
BTEX (mg/kg)			
Total BTEX	NE	0.0015	ND
PAHs (mg/kg)			
Total PAHs	500**	7.153	ND
Total PCBs	1	NA	NA
Total Cyanide	27	0.58 J	ND

Sample Name:		SB-68(09)	SB-68(09)
Sample Interval (ft):	COMMERCIAL	12.5-12.8	74-75
Sample Date:	SCOs	10/14/2009	10/14/2009
Subsurface Soil Results			
BTEX (mg/kg)			
Total BTEX	NE	ND	0.001
PAHs (mg/kg)			
Total PAHs	500**	5.81	ND
Total PCBs	1	NA	NA
Total Cyanide	27	ND	ND

Sample Name:		SB-70(09)	Duplicate of: SB-70(09)	SB-70(09)
Sample Interval (ft):	COMMERCIAL	9-10	9-10	74-75
Sample Date:	SCOs	10/20/2009	10/20/2009	10/20/2009
Subsurface Soil Results				
BTEX (mg/kg)				
Total BTEX	NE	0.0012	0.00099	ND
PAHs (mg/kg)				
Total PAHs	500**	ND	ND	0.084
Total PCBs	1	NA	NA	NA
Total Cyanide	27	ND	ND	ND

Sample Name:		SB-63(09)	SB-63(09)
Sample Interval (ft):	COMMERCIAL	8-9	74-75
Sample Date:	SCOs	10/9/2009	10/9/2009
Subsurface Soil Results			
BTEX (mg/kg)			
Total BTEX	NE	ND	ND
PAHs (mg/kg)			
Total PAHs	500**	ND	ND
Total PCBs	1	NA	NA
Total Cyanide	27	ND	ND

Sample Name:		SB-64(09)	SB-64(09)
Sample Interval (ft):	COMMERCIAL	11-12	72.5-73.5
Sample Date:	SCOs	10/20/2009	10/20/2009
Subsurface Soil Results			
BTEX (mg/kg)			
Total BTEX	NE	0.0025	0.0123
PAHs (mg/kg)			
Total PAHs	500**	ND	ND
Total PCBs	1	NA	NA
Total Cyanide	27	ND	ND

Sample Name:		SB-67(09)	SB-67(09)
Sample Interval (ft):	COMMERCIAL	6-7	65-75
Sample Date:	SCOs	10/13/2009	10/13/2009
Subsurface Soil Results			
BTEX (mg/kg)			
Total BTEX	NE	ND	0.0016
PAHs (mg/kg)			
Benzo[a]pyrene	1	2	ND
Dibenz[a,h]anthracene	0.56	0.67	ND
Total PAHs	500**	21.439	0.038
Total PCBs	1	NA	NA
Total Cyanide	27	0.3 J	ND

Sample Name:		SB-62(09)	SB-62(09)
Sample Interval (ft):	COMMERCIAL	8-9	73.5-74.5
Sample Date:	SCOs	10/13/2009	10/13/2009
Subsurface Soil Results			
BTEX (mg/kg)			
Total BTEX	NE	0.00095	0.0019
PAHs (mg/kg)			
Total PAHs	500**	ND	ND
Total PCBs	1	NA	NA
Total Cyanide	27	ND	ND

Sample Name:		SB-125(10)	SB-125(10)
Sample Interval (ft):	COMMERCIAL	16-17	23-24
Sample Date:	SCOs	10/27/2010	10/27/2010
Subsurface Soil Results			
BTEX (mg/kg)			
Total BTEX	NA	5.12	ND
PAHs (mg/kg)			
Benz[a]anthracene	5.6	62	ND
Benzo[a]pyrene	1	38	ND
Benzo[b]fluoranthene	5.6	33 J	ND
Dibenz[a,h]anthracene	0.56	9.4	ND
Indeno[1,2,3-cd]pyrene	5.6	15	ND
Total PAHs	500**	1463.4	0.0465
Total PCBs	1	ND	ND
Total Cyanide	27	ND	ND

Sample Name:		SB-87(09)	SB-87(09)
Sample Interval (ft):	COMMERCIAL	11-12	74-75
Sample Date:	SCOs	10/23/2009	10/23/2009
Subsurface Soil Results			
BTEX (mg/kg)			
Total BTEX	NE	ND	ND
PAHs (mg/kg)			
Total PAHs	500**	ND	ND
Total PCBs	1	NA	NA
Total Cyanide	27	0.16	0.16

Sample Name:		SB-91(09)	SB-91(09)
Sample Interval (ft):	COMMERCIAL	10-11	74-75
Sample Date:	SCOs	10/19/2009	10/19/2009
Subsurface Soil Results			
BTEX (mg/kg)			
Total BTEX	NE	0.0044	ND
PAHs (mg/kg)			
Total PAHs	500**	2.741	ND
Total PCBs	1	NA	NA
Total Cyanide	27	0.18	ND

Sample Name:		SB-78(09)	SB-78(09)
Sample Interval (ft):	COMMERCIAL	10-11	74-75
Sample Date:	SCOs	10/24/2009	10/24/2009
Subsurface Soil Results			
BTEX (mg/kg)			
Total BTEX	NE	1.95	ND
PAHs (mg/kg)			
Acenaphthene	500	1100	ND
Anthracene	500	1000	ND
Fluoranthene	500	1800	0.015
Fluorene	500	880	ND
Naphthalene	500	5000	0.029
Phenanthrene	500	3200	0.025
Pyrene	500	1400	ND
Benz[a]anthracene	5.6	730	ND
Benzo[a]pyrene	1	560	ND
Benzo[b]fluoranthene	5.6	710	ND
Chrysene	56	590	ND
Dibenz[a,h]anthracene	0.56	63	ND
Indeno[1,2,3-cd]pyrene	5.6	260	ND
Total PAHs	500**	18883	0.069
Total PCBs	1	NA	NA
Total Cyanide	27	42.6	0.12 J

Sample Name:		SB-75(09)	SB-75(09)	Duplicate of: SB-75(09)
Sample Interval (ft):	COMMERCIAL	10-11	73-74	73-74
Sample Date:	SCOs	10/25/2009	10/25/2009	10/25/2009
Subsurface Soil Results				
BTEX (mg/kg)				
Total BTEX	NE	0.0605	0.0091	0.0117
PAHs (mg/kg)				
Benz[a]pyrene	1	2.9	ND	ND
Total PAHs	500**	62.64	ND	ND
Total PCBs	1	NA	NA	NA
Total Cyanide	27	0.83	ND	ND

Sample Name:		GP/CTM-14(06)
Sample Interval (ft):	COMMERCIAL	6-8
Sample Date:	SCOs	5/10/2006
Subsurface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	ND
PAHs (mg/kg)		
Benzo(a)anthracene	5.6	13
Benzo(b)fluoranthene	5.6	16 J
Benzo(k)fluoranthene	1	13 J
Dibenz(a,h)anthracene	0.56	0.58 J
Total PAHs	500**	215.08
Total PCBs	1	ND
Total Cyanide	27	NA

Sample Name:		GP/CTM-15(06)
Sample Interval (ft):	COMMERCIAL	8-12
Sample Date:	SCOs	5/10/2006
Subsurface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	NA
PAHs (mg/kg)		
Benzo(a)pyrene	1	5.2 J
Total PAHs	500**	65.6
Total PCBs	1	ND
Total Cyanide	27	NA

Sample Name:		SB-76(09)	SB-76(09)	SB-76(09)
Sample Interval (ft):	COMMERCIAL	11.7-12.2	15-16	74-75
Sample Date:	SCOs	10/15/2009	10/11/2009	10/11/2009
Subsurface Soil Results				
BTEX (mg/kg)				
Total BTEX	NE	0.001	0.0346	ND
PAHs (mg/kg)				
Benzo[a]pyrene	1	1.3	ND	ND
Total PAHs	500**	50.4	0.66	ND
Total PCBs	1	NA	NA	NA
Total Cyanide	27	10.5	ND	ND

Sample Name:		SB-43(08)	SB-43(08)
Sample Interval (ft):	COMMERCIAL	40-42.5	50-52.5
Sample Date:	SCOs	11/1/2008	11/1/2008
Subsurface Soil Results			
BTEX (mg/kg)			
Ethylbenzene	390	590	ND
Total Xylene	500	770	ND
Total BTEX	NE	1520	ND
PAHs (mg/kg)			
Acenaphthene	500	540	ND
Benz[a]anthracene	5.6	150	ND
Benzo[a]pyrene	1	99	ND
Benzo[b]fluoranthene	5.6	88	ND
Chrysene	56	110	ND
Dibenz[a,h]anthracene	0.56	10	ND
Indeno[1,2,3-cd]pyrene	5.6	27	ND
Naphthalene	500	2200	0.056 J
Phenanthrene	500	850	0.026 J
Total PAHs	500**	6291	0.131
Total PCBs	1	NA	NA
Total Cyanide	27	ND	ND

Sample Name:		RESTRICTED	SB-44(08)	Duplicate of: SB-44(08)	SB-44(08)
Sample Interval (ft):		RESIDENTIAL	38-40	38-40	52.5-55
Sample Date:		SCOs	11/5/2008	11/5/2008	11/5/2008
Subsurface Soil Results					
BTEX (mg/kg)					
Ethylbenzene		41	300 J	180 J	ND
Total Xylene		100	450 J	260 J	ND
Total BTEX		NE	759.1	440.7	ND
PAHs (mg/kg)					
Acenaphthene		100	460	420	ND
Anthracene		100	220	210	ND
Benz[a]anthracene		1	130	120	ND
Benzo[a]pyrene		1	85	78	ND
Benzo[b]fluoranthene		1	78	72	ND
Chrysene		3.9	110	90	ND
Dibenz[a,h]anthracene		0.33	8.2	7.7 J	ND
Fluoranthene		100	220	210	ND
Fluorene		100	250	240	ND
Indeno[1,2,3-cd]pyrene		.5	23	22	ND
Naphthalene		100	1900	1800	0.053 J
Phenanthrene		100	730	680	ND
Pyrene		100	310	280	ND
Total PAHs		NE	5430.2	5095.7	0.053
Total PCBs		1	NA	NA	NA
Total Cyanide		27	ND	ND	ND

Sample Name:		SB-111(10)
Sample Interval (ft):	COMMERCIAL	17-18
Sample Date:	SCOs	10/30/2010
Subsurface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	0.0031
PAHs (mg/kg)		
Total PAHs	500**	0.046
Total PCBs	1	NA
Total Cyanide	27	ND

Sample Name:		SB-7(09)	SB-7(09)	SB-7(09)
Sample Interval (ft):	COMMERCIAL	13.7-14	19-20	77-77.5
Sample Date:	SCOs	10/10/2009	10/10/2009	10/10/2009
Subsurface Soil Results				
BTEX (mg/kg)				
Total BTEX	NE	4.44	0.0134	ND
PAHs (mg/kg)				
Naphthalene	500	1100	1.5	ND
Phenanthrene	500	500	ND	ND
Benz[a]anthracene	5.6	130	ND	ND
Benzo[a]pyrene	1	97	ND	ND
Benzo[b]fluoranthene	5.6	120	ND	ND
Chrysene	56	100	ND	ND
Dibenz[a,h]anthracene	0.56	17	ND	ND
Indeno[1,2,3-cd]pyrene	5.6	50	ND	ND
Total PAHs	500**	3598	1.5	ND
Total PCBs	1	NA	NA	NA
Total Cyanide	27	1.4	ND	ND

Sample Name:		RESTRICTED	SB-34(08)	SB-34(08)
Sample Interval (ft):		RESIDENTIAL	32.5-35	42.5-45
Sample Date:		SCOs	10/21/2008	10/21/2008
Subsurface Soil Results				
BTEX (mg/kg)				
Total BTEX		NE	11	ND
PAHs (mg/kg)				
Benz[a]anthracene		1	7.4	ND
Benzo[a]pyrene		1	6	ND
Benzo[b]fluoranthene		1	4.9	ND
Chrysene		3.9	6.8	ND
Dibenz[a,h]anthracene		0.33	0.6	ND
Indeno[1,2,3-cd]pyrene		0.5	1.6	ND
Total PAHs		NE	166.8	0.571
Total PCBs		1	NA	NA
Total Cyanide		27	ND	0.22 J

Sample Name:		RESTRICTED	SB-16(06)	SB-16(06)
Sample Interval (ft):		RESIDENTIAL	34-37	49-50
Sample Date:		SCOs	11/6/2006	11/6/2006
Subsurface Soil Results				
BTEX (mg/kg)				
Total BTEX		NE	24.18	ND
PAHs (mg/kg)				
Acenaphthene		100	330	0.032 J
Anthracene		100	180 J	0.036 J
Benz[a]anthracene		1	110 J	ND
Benzo[a]pyrene		1	64	ND
Benzo[b]fluoranthene		1	39	ND
Benzo[k]fluoranthene		3.9	15	ND
Chrysene		3.9	89 J	ND
Dibenz[a,h]anthracene		0.33	8.8 J	ND
Fluoranthene		100	170 J	ND
Fluorene		100	160 J	ND
Indeno[1,2,3-cd]pyrene		0.5	28 J	ND
Naphthalene		100	660	0.054 J
Phenanthrene		100	600	0.13 J
Pyrene		100	270	ND
Total PAHs		NE	3182.8	0.333
Total PCBs		1	NA	NA
Total Cyanide		27	1.1	ND

Sample Name:		SB-35(08)	SB-35(08)
Sample Interval (ft):	COMMERCIAL	40-41.5	45-47.5
Sample Date:	SCOs	11/2/2008	11/2/2008
Subsurface Soil Results			
BTEX (mg/kg)			
Total BTEX	NE	78.9	0.0014
PAHs (mg/kg)			
Benzo(a)pyrene	1	3.9	ND
Total PAHs	500**	126.42	0.375
Total PCBs	1	NA	NA
Total Cyanide	27	ND	ND

Sample Name:		RESTRICTED	SB-28(08)	SB-28(08)
Sample Interval (ft):		RESIDENTIAL	33.5-35	47.5-50
Sample Date:		SCOs	10/21/2008	10/23/2008
Subsurface Soil Results				
BTEX (mg/kg)				
Total BTEX		NE	ND	ND
PAHs (mg/kg)				
Total PAHs		NE	0.343	0.148
Total PCBs		1	NA	NA
Total Cyanide		27	ND	ND

Sample Name:		SB-112(10)
Sample Interval (ft):	COMMERCIAL	10-11
Sample Date:	SCOs	10/28/2010
Subsurface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	ND
PAHs (mg/kg)		
Total PAHs	500**	0.736
Total PCBs	1	NA
Total Cyanide	27	ND

Sample Name:		SB-81(09)	SB-81(09)	SB-81(09)
Sample Interval (ft):	COMMERCIAL	11-12	48-49	74-75
Sample Date:	SCOs	10/12/2009	10/12/2009	10/12/2009
Subsurface Soil Results				
BTEX (mg/kg)				
Total BTEX	NE	0.0011	ND	ND
PAHs (mg/kg)				
Total PAHs	500**	ND	ND	ND
Total PCBs	1	NA	NA	NA
Total Cyanide	27	ND	ND	ND

Sample Name:		SB-61(09)	SB-61(09)
Sample Interval (ft):	COMMERCIAL	11-12	72-73
Sample Date:	SCOs	10/12/2009	10/12/2009
Subsurface Soil Results			
BTEX (mg/kg)			
Total BTEX	NE	ND	ND
PAHs (mg/kg)			
Total PAHs	500**	ND	ND
Total PCBs	1	NA	NA
Total Cyanide	27	ND	0.17

Sample Name:		SB-117(10)
Sample Interval (ft):	COMMERCIAL	9-10
Sample Date:	SCOs	11/1/2010
Subsurface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	ND
PAHs (mg/kg)		
Total PAHs	500**	1.004
Total PCBs	1	NA
Total Cyanide	27	ND

Sample Name:		SB-30(08)	Duplicate of: SB-30(08)	SB-30(08)
Sample Interval (ft):	COMMERCIAL	41.5-43.5	41.5-43.5	50-52.5
Sample Date:	SCOs	10/27/2008	10/27/2008	10/27/2008
Subsurface Soil Results				
BTEX (mg/kg)				
Total BTEX	NE	67.5	65.58	ND
PAHs (mg/kg)				
Benz[a]anthracene	5.6	120	89	ND
Benzo[a]pyrene	1	93	60	ND
Benzo[k]fluoranthene	56	69	47	ND
Chrysene	56	97	62	ND
Dibenz[a,h]anthracene	0.56	5.2	6.2	ND
Indeno[1,2,3-cd]pyrene	5.6	26	16	ND
Total PAHs	500**	3015.2	2105.2	0.299
Total PCBs	1	NA	NA	NA
Total Cyanide	27	ND	0.13 J	ND

Sample Name:		SB-113(10)
Sample Interval (ft):	COMMERCIAL	13-14
Sample Date:	SCOs	10/29/2010
Subsurface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	0.038
PAHs (mg/kg)		
Total PAHs	500**	ND
Total PCBs	1	NA
Total Cyanide	27	0.35 J

Sample Name:		SB-26(08)
Sample Interval (ft):	COMMERCIAL	35-37.5
Sample Date:	SCOs	10/29/2008
Subsurface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	ND
PAHs (mg/kg)		
Total PAHs	500**	0.172
Total PCBs	1	NA
Total Cyanide	27	0.51 J

Sample Name:		SB-114(10)
Sample Interval (ft):	COMMERCIAL	12-13
Sample Date:	SCOs	10/30/2010
Subsurface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	ND
PAHs (mg/kg)		
Total PAHs	500**	ND
Total PCBs	1	NA
Total Cyanide	27	ND

Sample Name:		SB-66(09)	SB-66(09)
Sample Interval (ft):	COMMERCIAL	10-11	70-71
Sample Date:	SCOs	10/25/2009	10/25/2009
Subsurface Soil Results			
BTEX (mg/kg)			
Total BTEX	NE	ND	0.0012
PAHs (mg/kg)			
Total PAHs	500**	0.158	ND
Total PCBs	1	NA	NA
Total Cyanide	27	0.14 J	ND

0 50 100

SCALE, FEET

LEGEND:

- PROPERTY BOUNDARY
- EXISTING BUILDING
- 255 GROUND SURFACE CONTOUR
- GUARD RAIL
- SITE BOUNDARY
- OPERABLE UNIT 1
- OPERABLE UNIT 2 NORTH
- OPERABLE UNIT 2 SOUTH
- POSTAGE STAMP AREA
- POSTAGE STAMP ASSOCIATED AREA
- INTERIM REMEDIAL MEASURE EXCAVATION FOOTPRINT
- SB-86/MW-25S(09) SB-125/MW-27S(10) SB-133/MW-28S(11): SOIL BORING/MONITORING WELL (GEI - 2009, 2010, 2011)
- SB-117/RW-1(10): SOIL BORING/RECOVERY WELL (GEI - 2010)
- GP/CTM-1(06) GP/CTM-20(08): SOIL BORING/MONITORING WELL (CT MALE - 2006, 2008)
- SB-1/MW-1(04) SB-10A/MW-5(06) SB-26/MW-11D(08): SOIL BORING/MONITORING WELL (AECOM - 2004, 2006, 2008)
- SB-62(09) SB-124(10) SB-128(11): SOIL BORING (GEI - 2009, 2010, 2011)
- PDI-SB-100(10): PRE-DESIGN INVESTIGATION SOIL BORING (GEI - 2010)
- SB-4(04) SB-17(06) CTMSB-16(07) SB-57(08): SOIL BORING (LIGHTSHIP ENGINEERING - 2004, CT MALE - 2007, AECOM - 2006, 2008)
- (04), (06), (07), (08), (09), (10), (11): YEAR INSTALLED

ANALYTICAL BOX NOTES

COMMERCIAL SCOs - Regulatory comparison against 6NYCRR, Chapter IV, Part 375-6 Restricted Use COMMERCIAL Soil Cleanup Objectives

RESTRICTED RESIDENTIAL SCOs - Regulatory comparison against 6NYCRR, Chapter IV, Part 375-6 Restricted Use Restricted RESIDENTIAL Soil Cleanup Objectives

- 32.3: COMPOUNDS THAT EXCEED PART 375 COMMERCIAL SCOs OR RESTRICTED USE RESTRICTED RESIDENTIAL SCOs
- ONE OR MORE BTEX OR PAH COMPOUND CONCENTRATIONS EXCEED THE ASSOCIATED PART 375 COMMERCIAL SCOs OR RESTRICTED USE RESTRICTED RESIDENTIAL SCOs
- NO BTEX OR PAH COMPOUNDS DETECTED AT CONCENTRATIONS ABOVE THE ASSOCIATED PART 375 COMMERCIAL SCOs OR RESTRICTED USE RESTRICTED RESIDENTIAL SCOs

mg/kg	MILLIGRAM PER KILOGRAM
PAHs	POLYCYCLIC AROMATIC HYDROCARBONS
BTEX	BENZENE, TOLUENE, ETHYLBENZENE, XYLENE
PCBs	POLYCHLORINATED BIPHENYLS
NA	NOT AVAILABLE, NOT APPLICABLE, OR NOT ANALYZED
ND	NOT DETECTED
NE	NOT ESTABLISHED
J	ESTIMATED VALUE
**	ACCORDING TO NYSDEC CP-51, FOR COMMERCIAL SITES WHERE THE ECOLOGICAL STANDARDS ARE NOT APPLICABLE, DEC MAY APPROVE A REMEDIAL PROGRAM WHICH ACHIEVES A SOIL CLEANUP LEVEL OF 500 mg/kg FOR TOTAL PAHs FOR ALL SUBSURFACE SOIL. THE 500 mg/kg CLEANUP LEVEL IS IN LIEU OF ACHIEVING ALL OF THE PAH-SPECIFIC SCOs IN 6NYCRR 375-6.

NOTES:

1. UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLACED ON THIS DRAWING FROM FIELD LOCATIONS, WHERE VISIBLE OR FROM RECORDED DRAWINGS PROVIDED TO THE UNDERSIGNED. THEREFORE, LOCATIONS SHOULD BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE OTHER FACILITIES OR UTILITIES, THE EXISTENCE OF WHICH ARE NOT KNOWN: FOR THIS REASON, UFPO SHALL BE CONTACTED A MINIMUM OF 48 HOURS PRIOR TO ANY UNDERGROUND EXCAVATION.
2. ELEVATIONS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
3. ONLY 2009 AND 2010 DATA AND INFORMATION WERE GENERATED BY GEI CONSULTANTS, INC. ON BEHALF OF NATIONAL GRID. OTHER DATA AND INFORMATION WERE GENERATED BY OTHERS.
4. DATA BOXES FOR SOIL BORINGS INSIDE THE IRM EXCAVATION FOOTPRINT ARE SHOWN FOR ONLY THOSE LOCATIONS THAT APPEAR ON CROSS SECTIONS.
5. DATA BOXES FOR SOIL BORINGS IN OU1 ARE SHOWN BECAUSE THEY APPEAR IN CROSS SECTIONS OR FOR REFERENCE.

REMEDIAL INVESTIGATION - OU2
CLINTON STREET FORMER MGP SITE
SCHENECTADY, NEW YORK

nationalgrid

PROJECT 091990-1-1104

GEI Consultants
455 WINDING BROOK DRIVE
SUITE 201
GLASTONBURY, CONNECTICUT 06033

OU2 SOUTH SUBSURFACE SOIL SUMMARIZED ANALYTICAL RESULTS (mg/kg)

December 2012 — Figure 14

E:\Project\National Grid\Schenectady\091990\OU2 Postage Stamp RI\2012-12\ Schenectady-SubSoil Analytical-F14.dwg \Dec 04, 2012

LEGEND:

- PROPERTY BOUNDARY
- EXISTING BUILDING
- 255 GROUND SURFACE CONTOUR
- GUARD RAIL
- SITE BOUNDARY
- OPERABLE UNIT 1
- OPERABLE UNIT 2 NORTH
- OPERABLE UNIT 2 SOUTH
- POSTAGE STAMP AREA
- POSTAGE STAMP ASSOCIATED AREA
- INTERIM REMEDIAL MEASURE EXCAVATION FOOTPRINT
- SB-86/MW-25S(09) SB-125/MW-27S(10) SB-133/MW-28S(11) — SOIL BORING/MONITORING WELL (GEI - 2009, 2010, 2011)
- SB-117/RW-1(10) — SOIL BORING/RECOVERY WELL (GEI - 2010)
- CTMMW-1(04) GP/CTM-1(06) CTMSB/MW-18(07) GP/CTM-20(08) — SOIL BORING/MONITORING WELL (CT MALE - 2004, 2006, 2007, 2008)
- SB-19/MW-08D(08) SB-26/MW-11D(08) — SOIL BORING/MONITORING WELL (AECOM - 2006, 2008)
- SB-62(09) SB-124(10) SB-128(11) — SOIL BORING (GEI - 2009, 2010, 2011)
- PDI-SB-100(10) — PRE-DESIGN INVESTIGATION SOIL BORING (GEI - 2010)
- SB-17(06) CTMSB-16(07) SB-57(08) — SOIL BORING (AECOM - 2006, 2008, CT MALE - 2007)
- (16.0) — BORING TERMINATED (DEPTH IN FEET)

PHYSICAL OBSERVATIONS

- TAR SATURATED
- HARDENED TAR
- COATED MATERIAL, LENSES
- BLEBS, GLOBS, SHEEN
- STAINING, ODORS
- PETROLEUM IMPACTS: SHEEN, STAINING, ODORS
- NO PHYSICAL IMPACTS OBSERVED

NOTES:

1. UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLACED ON THIS DRAWING FROM FIELD LOCATIONS, WHERE VISIBLE OR FROM RECORDED DRAWINGS PROVIDED TO THE UNDERSIGNED. THEREFORE, LOCATIONS SHOULD BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE OTHER FACILITIES OR UTILITIES, THE EXISTENCE OF WHICH ARE NOT KNOWN. FOR THIS REASON, UFPO SHALL BE CONTACTED A MINIMUM OF 48 HOURS PRIOR TO ANY UNDERGROUND EXCAVATION.
2. ELEVATIONS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
3. ONLY 2009 THROUGH 2011 DATA AND INFORMATION WERE GENERATED BY GEI CONSULTANTS, INC. ON BEHALF OF NATIONAL GRID. OTHER DATA AND INFORMATION WERE GENERATED BY OTHERS.
4. 2007 LOCATIONS ARE APPROXIMATE.
5. THE COLORS INDICATE THE WORST PHYSICAL IMPACTS OBSERVED AT THAT LOCATION. IF IMPACTS WERE NOT OBSERVED AT A SOIL BORING LOCATION, THE TERMINATION DEPTH IS SHOWN IN PARENTHESES.
6. DATA BOXES FOR OU1 SOIL BORINGS ARE SHOWN BECAUSE THEY APPEAR IN CROSS SECTIONS OR FOR REFERENCE.

SB-101(10)	
Depth (feet)	Impact Type
0,0 - 9,3	no physical impacts
9,3 - 12,0	slight tar-like odor, staining
12,0 - 15,0	mod tar-like odor, tar stringers
15,0 - 20,5	no physical impacts
20,5	terminated

SB-118(10)	
Depth (feet)	Impact Type
0,0 - 5,0	no physical impacts
5,0 - 9,0	mod tar-like odor, coloring, and tar residue
9,0 - 13,0	mod tar-like odor, staining, sheen
13,0 - 17,0	stained
17,0	terminated

GP/CTM-5(06)	
Depth (feet)	Impact Type
0,0 - 9,0	no physical impacts
9,0 - 12,0	creosote-type odor
12,0 - 16,0	no recovery
16,0	terminated

SB-103(10)	
Depth (feet)	Impact Type
0,0 - 6,0	no physical impacts
6,0 - 7,0	solidified tar
7,0 - 13,0	no physical impacts
13,0	terminated

CTMMW-3(04)	
Depth (feet)	Impact Type
0,0 - 6,0	no physical impacts
6,0 - 20,0	creosote odor

SB-124(10)	
Depth (feet)	Impact Type
0,0 - 11,0	no physical impacts
11,0 - 13,8	slight to mod tar-like odor, staining
13,8 - 15,0	no physical impacts
15,0 - 15,3	mod tar-like odor, staining, sheen
15,3 - 17,0	slight tar-like odor
17,0 - 35,0	no physical impacts
35,0	terminated

SB-100(10)	
Depth (feet)	Impact Type
0,0 - 5,0	no physical impacts
5,0 - 9,0	petroleum-like odor, oily staining
9,0 - 12,3	tar-like odor, oily staining
12,3 - 13,0	no physical impacts
13,0	terminated

SB-122(10)	
Depth (feet)	Impact Type
0,0 - 5,0	no physical impacts
5,0 - 9,0	mod tar-like odor, staining, oily, slight tar-like odor
9,0 - 12,0	mod tar-like odor, stained
12,0 - 13,0	mod tar-like odor, stained
13,0	terminated

CTMMW-4(04)	
Depth (feet)	Impact Type
0,0 - 4,0	petroleum odor
4,0 - 14,0	no physical impacts

SB-93(09)	
Depth (feet)	Impact Type
0,0 - 10,0	no physical impacts
10,0 - 10,6	hydrocarbon-like odor, black discoloration
10,6 - 10,9	trace sheen
10,9 - 11,6	hydrocarbon-like odor, black discoloration
11,6 - 75,0	no physical impacts
75,0	terminated

CTMMW-2(04)	
Depth (feet)	Impact Type
0,0 - 6,0	no physical impacts
6,0 - 14,0	creosote odor
14,0 - 16,0	no physical impacts

SB-102(10)	
Depth (feet)	Impact Type
0,0 - 9,0	no physical impacts
9,0 - 14,0	slight to mod tar-like odor, black 11,6-12,0
14,0	terminated

SB-98(09)	
Depth (feet)	Impact Type
0,0 - 6,8	no physical impacts
6,8 - 12,3	slight hydrocarbon-like odor, black discoloration
12,3 - 25,0	no physical impacts
25,0	terminated

SB-109(10)	
Depth (feet)	Impact Type
0,0 - 9,0	no physical impacts
9,0 - 12,0	slight tar-like odor, black stained
12,0 - 14,0	no physical impacts
14,0	terminated

SB-97(09)	
Depth (feet)	Impact Type
0,0 - 7,8	no physical impacts
7,8 - 10,8	gasoline-like odor, some black discoloration
10,8 - 25,0	no physical impacts
25,0	terminated

SB-99(09)	
Depth (feet)	Impact Type
0,0 - 8,3	no physical impacts
8,3 - 10,0	slight MGP-like odor
10,0	terminated

SB-49(08)	
Depth (feet)	Impact Type
0,0 - 1,5	no physical impacts
1,5 - 1,8	lens of hardened coal tar
1,8 - 8,0	no physical impacts
8,0 - 18,0	slight hydrocarbon-like odor
18,0 - 20,0	no physical impacts
20,0 - 26,0	slight hydrocarbon-like odor
26,0 - 78,0	no physical impacts
78,0	terminated

SB-50(08)	
Depth (feet)	Impact Type
0,0 - 3,7	no physical impacts
3,7 - 4,0	slight hydrocarbon-like odor
4,0 - 14,2	no physical impacts
14,2 - 14,7	hydrocarbon stain and odor
14,7 - 14,8	lens saturated black, moderately viscous NAPL
14,8 - 17,0	no physical impacts
17,0 - 17,5	black hydrocarbon stain and odor
17,5 - 22,0	no physical impacts
22,0 - 33,0	slight hydrocarbon-like odor
33,0 - 40,0	no physical impacts
40,0 - 44,0	slight hydrocarbon-like odor
44,0 - 91,0	no physical impacts
91,0	terminated

SB-116(10)	
Depth (feet)	Impact Type
0,0 - 5,0	hand cleared
5,0 - 9,3	slight tar-like odor, black stained
9,3 - 9,5	no physical impacts
9,5 - 13,4	mod to slight tar-like odor, black stained
13,4	terminated

SB-48/MW-16D(08)	
Depth (feet)	Impact Type
0,0 - 6,5	no physical impacts
6,5 - 7,0	strong hydrocarbon-like odor, mod staining
7,0 - 9,0	strong hydrocarbon-like odor, heavy staining, mod sheen
9,0 - 10,0	strong hydrocarbon-like odor, heavy sheen, little black tiffy-like tar
10,0 - 12,0	no recovery
12,0 - 22,5	slight to mod hydrocarbon-like odor
22,5 - 75,0	no physical impacts
75,0	terminated

SB-96(09)	
Depth (feet)	Impact Type
0,0 - 6,4	no physical impacts
6,4 - 10,0	hydrocarbon-like odor, black stain, mod sheen
10,0 - 11,0	hydrocarbon-like odor, black stain, mod-heavy sheen
11,0 - 25,0	no physical impacts
25,0	terminated

SB-115(10)	
Depth (feet)	Impact Type
0,0 - 5,0	hand cleared
5,0 - 10,5	slight tar-like odor, black
10,5 - 10,6	slight tar-like odor, black, sheen
10,6 - 13,4	moderate tar-like odor, black
13,4	terminated

SB-19/MW-8(06)	
Depth (feet)	Impact Type
0,0 - 6,9	no physical impacts
6,9 - 9,0	saturated black viscous coal tar to hardened coal tar
9,0 - 10,0	hydrocarbon-like odor
10,0 - 12,5	black stained with brown NAPL blebs
12,5 - 14,0	saturated brown low viscosity NAPL
14,0 - 15,0	trace brown NAPL blebs
15,0 - 16,0	saturated brown low viscosity NAPL
16,0 - 25,0	hydrocarbon-like odor
25,0	terminated

SB-44/MW-8D(08)	
Depth (feet)	Impact Type
0,0 - 25,0	not sampled, see SB-19(06)
25,0 - 26,0	slight hydrocarbon-like odor
26,0 - 37,0	no physical impacts
37,0 - 38,5	slight hydrocarbon-like odor
38,5 - 40,0	saturated brown non-viscous NAPL
40,0 - 45,0	slight hydrocarbon-like odor
45,0 - 48,0	moderate hydrocarbon sheen
48,0 - 50,0	slight hydrocarbon-like odor
50,0 - 75,0	no physical impacts
75,0	terminated

SB-43/MW-14D(08)	
Depth (feet)	Impact Type
0,0 - 35,0	no physical impacts
35,0 - 39,5	slight hydrocarbon-like odor
39,5 - 45,0	saturated with viscous brown non-viscous NAPL
45,0 - 50,0	slight hydrocarbon-like odor
50,0 - 75,0	no physical impacts
75,0	terminated

SB-16(06)	
Depth (feet)	Impact Type
0,0 - 7,0	no physical impacts
7,0 - 15,0	hydrocarbon-like odor
15,0 - 30,0	no physical impacts
30,0 - 35,0	hydrocarbon-like odor
35,0 - 37,6	low viscosity NAPL
37,6 - 40,0	strong hydrocarbon-like odor
40,0 - 43,5	trace to heavy hydrocarbon sheen and odor
43,5 - 50,0	hydrocarbon-like odor
50,0	terminated

SB-34(08)	
Depth (feet)	Impact Type
0,0 - 9,0	not sampled, see SB-19(06)
9,0 - 17,0	mod to slight hydrocarbon-like odor
17,0 - 34,5	no physical impacts
34,5 - 35,0	brown non-viscous NAPL sheen
35,0 - 37,5	strong hydrocarbon-like odor
37,5 - 38,0	trace hydrocarbon sheen
38,0 - 57,0	slight hydrocarbon-like odor
57,0 - 75,0	no physical impacts
75,0	terminated

SB-127(10)	
Depth (feet)	Impact Type
0,0 - 7,0	no physical impacts
7,0 - 9,0	mod petroleum-like odor, staining, sheen
9,0 - 12,1	no physical impacts
12,1 - 13,0	mod tar-like odor, staining, sheen
13,0 - 33,0	no physical impacts
33,0	terminated

GP/CTM-23(08)	
Depth (feet)	Impact Type
0,0 - 8,0	no physical impacts
8,0 - 12,0	tar-like odor
12,0 - 20,0	no recovery
20,0	terminated

GP/CTM-20(08)	
Depth (feet)	Impact Type
0,0 - 8,5	no physical impacts
8,5 - 15,5	faint tar-like odor, sheen
15,5 - 16,0	strong tar-like odor
16,0	terminated

GP/CTM-22(08)	
Depth (feet)	Impact Type
0,0 - 9,0	no physical impacts
9,0 - 14,0	petroleum-like odor
14,0 - 16,0	faint petroleum-like odor
16,0 - 20,0	no recovery
20,0	terminated

SB-125/MW-27S(10)	
Depth (feet)	Impact Type
0,0 - 11,2	no physical impacts
11,2 - 13,0	mod tar-like odor, creosote-coated timber
13,0 - 16,0	slight tar-like odor
16,0 - 17,0	slight tar-like odor, ~ 2mm viscous tar lens
17,0 - 33,0	no physical impacts
33,0	terminated

SB-78/MW-20D(09)	
Depth (feet)	Impact Type
0,0 - 10,0	no physical impacts
10,0 - 15,0	mod hydrocarbon-like odor, trace spotty sheen
15,0 - 24,4	hydrocarbon-like odor
24,4 - 75,0	no physical impacts
75,0	terminated

CTMMW-1(04)	
Depth (feet)	Impact Type
0,0 - 6,0	no physical impacts
6,0 - 20,0	creosote odor

SB-76/MW-21S(09)	
Depth (feet)	Impact Type
0,0 - 11,7	no physical impacts
11,7 - 12,2	slight hydrocarbon-like odor, black discoloration
12,2 - 75,0	no physical impacts
75,0	terminated

SB-91(09)	
Depth (feet)	Impact Type
0 - 14,1	no physical impacts
14,1 - 15,0	tar-like odors
15,0 - 75,0	no physical impacts
75,0	terminated

SB-73(09)	
Depth (feet)	Impact Type
0,0 - 11,2	no physical impacts
11,2 - 12,0	slight tar-like odor, black
12,0 - 13,0	trace thin lenses of black viscous NAPL
13,0 - 15,0	no physical impacts
15,0 - 17,4	slight tar-like odor, trace blebs of NAPL
17,4 - 75,0	no physical impacts
75,0	terminated

SB-75(09)	
Depth (feet)	Impact Type
0,0 - 10,0	no physical impacts
10,0 -14,4	slight hydrocarbon-like odor
14,4 - 75,0	no physical impacts
75,0	terminated

SB-74(09)	
Depth (feet)	Impact Type
0,0 - 10,6	no physical impacts
10,6 - 12,6	slight hydrocarbon odor, black, spotty sheen
12,6 - 12,8	trace black viscous NAPL
12,8 - 75,0	no physical impacts
75,0	terminated

SB-72(09)	
Depth (feet)	Impact Type
0,0 - 12,7	no physical impacts
12,7 - 13,2	trace sheen
13,2 - 24,8	no physical impacts
24,8 - 25,0	slight hydrocarbon-like odor
25,0 - 80,0	no physical impacts
80,0	terminated

SB-110(10)	
Depth (feet)	Impact Type
0,0 - 9,0	no physical impacts
9,0 - 11,7	slight tar-like odor
11,7 - 45,0	no physical impacts
45,0 - 49,0	slight tar-like odor
49,0	terminated

SB-71(09)	
Depth (feet)	Impact Type
0,0 - 13,7	no physical impacts
13,7 - 14,0	sheen, black discoloration
14,0 - 42,0	no physical impacts
42,0 - 46,3	slight hydrocarbon-like odor
46,3 - 80,0	no physical impacts
80,0	terminated

SB-68/MW-23D(09)	
Depth (feet)	Impact Type
0,0 - 12,6	no physical impacts
12,6 - 15,0	slight hydrocarbon-like odor, black discoloration
15,0 - 75,0	no physical impacts
75,0	terminated

SB-114(10)	
Depth (feet)	Impact Type
0,0 - 33,0	no physical impacts
33,0 - 37,0	slight tar-like odor
37,0 - 41,0	no physical impacts
44,6 - 45,0	mod tar-like odor, tar staining
45,0 - 49,0	no physical impacts
49,0	terminated

SB-35/MW-13D(08)	
Depth (feet)	Impact Type
0,0 - 35,0	no physical impacts
35,0 - 40,0	slight hydrocarbon-like odor
40,0 - 41,0	saturated with brown non-viscous NAPL
41,0 - 50,0	slight hydrocarbon-like odor
50,0 - 64,0	no physical impacts
64,0	terminated

SB-67(09)	
Depth (feet)	Impact Type
0,0 - 35,0	no physical impacts
35,0 - 40,0	slight hydrocarbon-like odor
40,0 - 75,0	no physical impacts
75,0	terminated

SB-112(10)	
Depth (feet)	Impact Type
0,0 - 37,0	no physical impacts
37,0 - 42,7	slight to mod tar-like odor
42,7 - 49,0	no physical impacts
49,0	terminated

SB-81(09)	
Depth (feet)	Impact Type
0,0 - 37,1	no physical impacts
37,1 - 40,0	trace sheen
40,0 - 41,8	strong tar-like odor
41,8 - 42,4	strong tar-like odor, coated with oily NAPL
42,4 - 75,0	no physical impacts
75,0	terminated

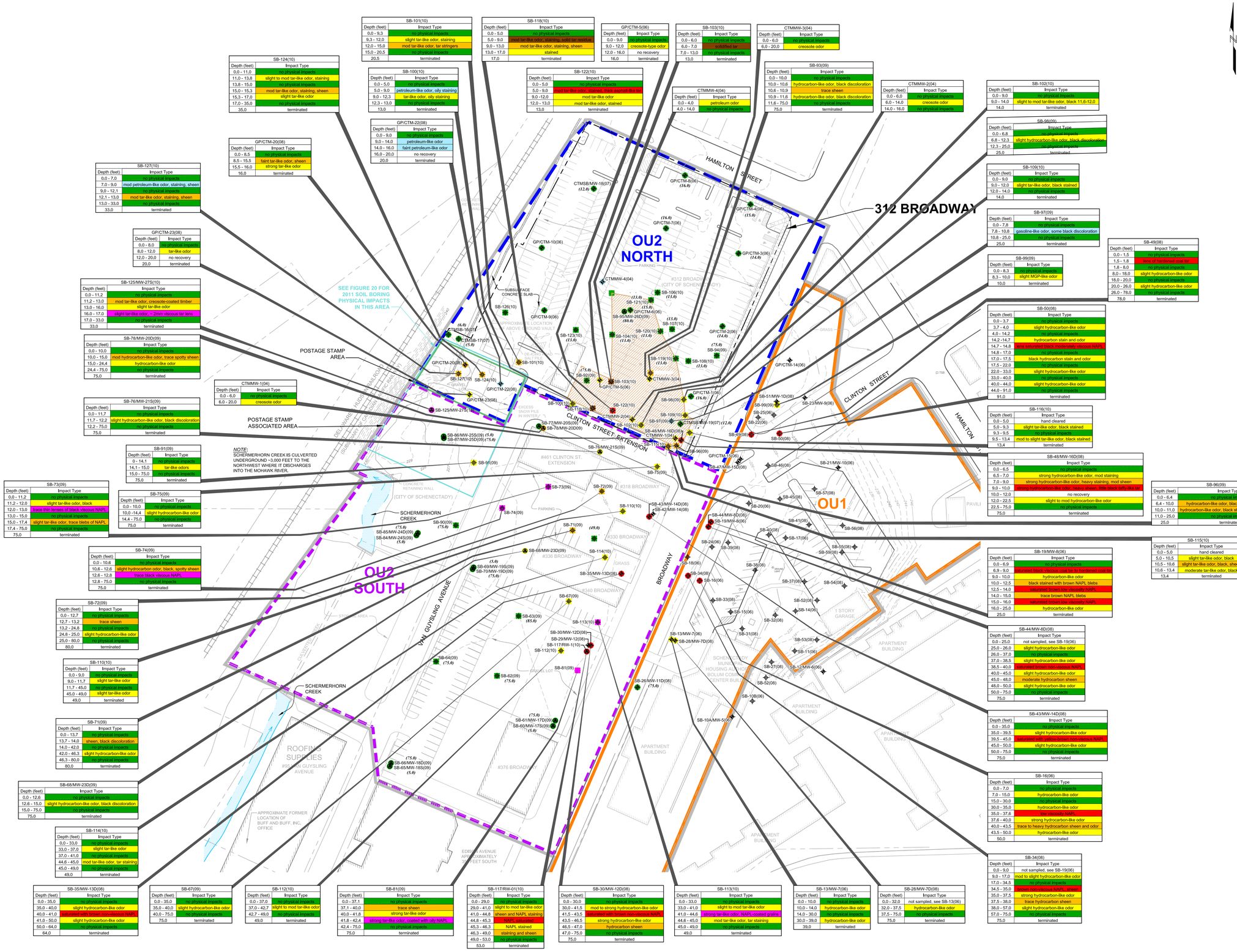
SB-117/RW-01(10)	
Depth (feet)	Impact Type
0,0 - 29,0	no physical impacts
29,0 - 41,0	slight to mod tar-like odor
41,0 - 44,8	sheen and NAPL staining
44,8 - 45,3	NAPL saturated
45,3 - 46,3	NAPL stained
46,3 - 49,0	staining and sheen
49,0 - 53,0	no physical impacts
53,0	terminated

SB-30/MW-12D(08)	
Depth (feet)	Impact Type
0,0 - 30,0	no physical impacts
30,0 - 41,5	mod to strong hydrocarbon-like odor
41,5 - 43,5	saturated with brown non-viscous NAPL
43,5 - 46,5	strong hydrocarbon-like odor
46,5 - 47,0	hydrocarbon sheen
47,0 - 75,0	no physical impacts
75,0	terminated

SB-113(10)	
Depth (feet)	Impact Type
0,0 - 33,0	no physical impacts
33,0 - 41,0	slight to mod tar-like odor
41,0 - 44,6	strong tar-like odor, NAPL-coated grains
44,6 - 45,0	mod tar-like odor, tar staining
45,0 - 49,0	no physical impacts
49,0	terminated

SB-13/MW-7(06)	
Depth (feet)	Impact Type
0,0 - 10,0	no physical impacts
10,0 - 14,0	hydrocarbon-like odor
14,0 - 30,0	no physical impacts
30,0 - 39,0	hydrocarbon-like odor
39,0	terminated

SB-28/MW-7D(08)	
Depth (feet)	Impact Type
0,0 - 32,0	not sampled, see SB-13(06)
32,0 - 37,5	hydrocarbon-like odor
37,5 - 75,0	no physical impacts
75,0	terminated



0 50 100
SCALE, FEET

REMEDIAL INVESTIGATION - OU2
CLINTON STREET FORMER MGP SITE
SCHENECTADY, NEW YORK

nationalgrid

PROJECT 091990-1-1104

GEI Consultants
455 WINDING BROOK DRIVE
SUITE 201
GLASTONBURY, CONNECTICUT 06033

OU2 NORTH AND OU2 SOUTH SUBSURFACE SOIL PHYSICAL IMPACTS

December 2012 — Figure 15

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312 BROADWAY PARCEL

OU2 NORTH

OU2 SOUTH

OU1

SEE FIGURE 21 FOR 2011 GROUNDWATER RESULTS IN THIS AREA AND 2011 RESULTS FOR MW-20S(09) AND CTM-9(06)

POSTAGE STAMP AREA

POSTAGE STAMP ASSOCIATED AREA

NOTE:
SCHERMERHORN CREEK IS CULVERTED UNDERGROUND ~3,000 FEET TO THE NORTHWEST WHERE IT DISCHARGES INTO THE MOHAWK RIVER.

SCHERMERHORN CREEK

SCHERMERHORN CREEK

HAMILTON STREET

CLINTON STREET

CLINTON STREET EXTENSION

HAMILTON STREET

BROADWAY

VAN GUYSLING AVENUE

DELAWARE & HUDSON RAILROAD (SUBSIDIARY OF CANADIAN PACIFIC RAILWAY)

ERIE CANAL

EDISON AVENUE APPROXIMATELY 350 FEET SOUTH

#312 BROADWAY (CITY OF SCHENECTADY)

#318 BROADWAY

#330 BROADWAY

#336 BROADWAY

#340 BROADWAY

#376 BROADWAY

#461 CLINTON ST. EXTENSION

SCHENECTADY MUNICIPAL HOUSING AUTHORITY BOLUM COMMUNITY CENTER BUILDING

1 STORY GARAGE

APARTMENT BUILDING

ROOFING SUPPLIES #95 VAN GUYSLING AVENUE

APPROXIMATE FORMER LOCATION OF BUFF AND BUFF, INC. OFFICE

APPROXIMATE LOCATION OF ABOVE GROUND VAULT

CONCRETE RETAINING WALL

SUBSURFACE CONCRETE SLAB

EXCESS SNOW PILE IN WINTER

GRAVEL LOT

PARKING

GRASS

STORAGE AREA

OLD ERIE CANAL

CTMW-1(04) GP/CTM-1(06) CTMSB/MW-18(07) GP/CTM-20(08) GP/CTM-22(08) GP/CTM-23(08) SB-125/MW-27S(10) SB-86/MW-25S(09) SB-87/MW-25D(09) SB-77/MW-20S(09) SB-76/MW-20D(09) SB-78/MW-21S(09) CTMMW-2(04) CTMSB/MW-19(07) SB-88/MW-16D(08) SB-47/MW-15D(08) GP/CTM-13(06) SB-42/MW-14(08) SB-43/MW-14D(08) SB-44/MW-14S(08) SB-19/MW-8(06) SB-85/MW-24D(09) SB-84/MW-24S(09) SB-68/MW-23D(09) SB-69/MW-19S(09) SB-70/MW-19D(09) SB-35/MW-13D(08) SB-66/MW-18D(09) SB-65/MW-18S(09) SB-61/MW-17D(09) SB-60/MW-17S(09) SB-29/MW-12(08) SB-30/MW-12D(08) SB-117/RW-1(10) SB-26/MW-11D(08) SB-13/MW-7(06) SB-28/MW-7D(08) SB-12/MW-6(06) SB-10A/MW-5(06) SB-2/MW-3(04) GP/CTM-3(06) GP/CTM-4(06) GP/CTM-7(06) GP/CTM-10(06) SB-95/MW-26D(09) GP/CTM-9(06) GP/CTM-6(06) CTMMW-4(04) CTMMW-3(04) GP/CTM-2(06) GP/CTM-14(06) SB-23/MW-9(08) SB-51/MW-10(08) SB-1/MW-1(04) SB-3/MW-4(04) GP/CTM-1(06) CTMMW-2(04) CTMMW-1(04) SB-21/MW-10(08)



LEGEND:

- PROPERTY BOUNDARY
- EXISTING BUILDING
- 255 GROUND SURFACE CONTOUR
- GUARD RAIL
- SITE BOUNDARY
- OPERABLE UNIT 1
- OPERABLE UNIT 2 NORTH
- OPERABLE UNIT 2 SOUTH
- POSTAGE STAMP AREA
- POSTAGE STAMP ASSOCIATED AREA
- INTERIM REMEDIAL MEASURE EXCAVATION FOOTPRINT
- SB-86/MW-25S(09) SB-125/MW-27S(10) — SOIL BORING/MONITORING WELL LOCATION (GEI - 2009, 2010)
- SB-117/RW-1(10) — SOIL BORING/RECOVERY WELL LOCATION (GEI - 2010)
- CTMMW-1(04) GP/CTM-1(06) CTMSB/MW-18(07) GP/CTM-20(08) — SOIL BORING/MONITORING WELL LOCATION (CT MALE - 2004, 2006, 2007, 2008)
- SB-1/MW-1(04) SB-10A/MW-5(06) SB-26/MW-11D(08) — SOIL BORING/MONITORING WELL LOCATION (LIGHTSHIP ENGINEERING - 2004, AECOM - 2006, 2008)
- (04), (06), (07), (08), (09), (10) YEAR INSTALLED

ANALYTICAL BOX NOTES

- 4284 CONCENTRATION OF COMPOUND THAT EXCEEDS NEW YORK STATE AMBIENT WATER QUALITY STANDARDS (AWQS)
- ONE OR MORE BTEX OR PAH COMPOUNDS DETECTED ABOVE ASSOCIATED AWQS
- NO BTEX OR PAH COMPOUNDS DETECTED ABOVE ASSOCIATED AWQS
- SHALLOW WELLS (≤ 40 FEET BELOW GROUND SURFACE)
- DEEP WELLS (> 40 FEET BELOW GROUND SURFACE)

µg/l	MICROGRAMS PER LITER
PAHs	POLYCYCLIC AROMATIC HYDROCARBONS
BTEX	BENZENE, TOLUENE, ETHYLBENZENE, XYLENE
PCBs	POLYCHLORINATED BIPHENYLS
NA	NOT AVAILABLE, NOT APPLICABLE, OR NOT ANALYZED
ND	NOT DETECTED
NE	NOT ESTABLISHED
J	ESTIMATED VALUE
*	VALUE IS A GUIDANCE, NOT A STANDARD

NOTES:

1. UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLACED ON THIS DRAWING FROM FIELD LOCATIONS, WHERE VISIBLE OR FROM RECORDED DRAWINGS PROVIDED TO THE UNDERSIGNED, THEREFORE, LOCATIONS SHOULD BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE OTHER FACILITIES OR UTILITIES, THE EXISTENCE OF WHICH ARE NOT KNOWN; FOR THIS REASON, UFPO SHALL BE CONTACTED A MINIMUM OF 48 HOURS PRIOR TO ANY UNDERGROUND EXCAVATION.
2. ELEVATIONS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
3. ONLY 2009 AND 2010 DATA AND INFORMATION WERE GENERATED BY GEI CONSULTANTS, INC. ON BEHALF OF NATIONAL GRID. OTHER DATA AND INFORMATION WERE GENERATED BY OTHERS.

Sample Name: / Sample Date:	NYS AWQS	CTM-6(06) 6/14/2006
Groundwater Results		
BTEX (µg/l)		
Total BTEX	NE	ND
PAHs (µg/l)		
Benz[a]anthracene	0.002*	7.7 J
Benzo[a]pyrene	ND	5.8 J
Benzo[b]fluoranthene	0.002*	8.3 J
Benzo[k]fluoranthene	0.002*	4.5 J
Chrysene	0.002*	7.3 J
Total PAHs	NE	112.2
Total PCBs	NE	ND
Total Cyanide	200	NA

Sample Name: / Sample Date:	NYS AWQS	CTM-10(06) 6/15/2006
Groundwater Results		
BTEX (µg/l)		
Total BTEX	NE	ND
PAHs (µg/l)		
Total PAHs	NE	ND
Total PCBs	NE	ND
Total Cyanide	200	NA

Sample Name: / Sample Date:	NYS AWQS	CTMMW-4(04) 2004
Groundwater Results		
BTEX (µg/l)		
Total BTEX	NE	ND
PAHs (µg/l)		
Total PAHs	NE	50
Total PCBs	NE	NA
Total Cyanide	200	NA

Sample Name: / Sample Date:	NYS AWQS	CTMMW-18(07) 6/5/2007	Duplicate of: CTMMW-18(07) 6/5/2007
Groundwater Results			
BTEX (µg/l)			
Total BTEX	NE	ND	ND
PAHs (µg/l)			
Total PAHs	NE	ND	ND
Total PCBs	NE	NA	NA
Total Cyanide	200	ND	ND

Sample Name: / Sample Date:	NYS AWQS	CTM-7(06) 6/14/2006
Groundwater Results		
BTEX (µg/l)		
Total BTEX	NE	ND
PAHs (µg/l)		
Total PAHs	NE	ND
Total PCBs	NE	ND
Total Cyanide	200	NA

Sample Name: / Sample Date:	NYS AWQS	CTM-8(06) 6/15/2006	Duplicate of: CTM-8(06) 6/15/2006
Groundwater Results			
BTEX (µg/l)			
Total BTEX	NE	ND	ND
PAHs (µg/l)			
Benzo[k]fluoranthene	0.002*	2.3 J	ND
Total PAHs	NE	2.3	ND
Total PCBs	NE	ND	ND
Total Cyanide	200	NA	NA

Sample Name: / Sample Date:	NYS AWQS	CTMMW-3(04) 2004
Groundwater Results		
BTEX (µg/l)		
Total BTEX	NE	ND
PAHs (µg/l)		
Benzo(a)anthracene	0.002*	18
Benzo(a)pyrene	ND	15
Benzo(b)fluoranthene	0.002*	16
Chrysene	0.002*	15
Flouranthene	50*	52
Flourene	50*	19
Naphthalene	10*	200
Phenanthrene	50*	95
Total PAHs	NE	533
Total PCBs	NE	NA
Total Cyanide	200	NA

Sample Name: / Sample Date:	NYS AWQS	CTM-4(06) 6/14/2006
Groundwater Results		
BTEX (µg/l)		
Total BTEX	NE	ND
PAHs (µg/l)		
Total PAHs	NE	ND
Total PCBs	NE	ND
Total Cyanide	200	NA

Sample Name: / Sample Date:	NYS AWQS	CTM-3(06) 6/14/2006
Groundwater Results		
BTEX (µg/l)		
Total BTEX	NE	ND
PAHs (µg/l)		
Total PAHs	NE	ND
Total PCBs	NE	ND
Total Cyanide	200	NA

Sample Name: / Sample Date:	NYS AWQS	CTM-2(06) 6/13/2006
Groundwater Results		
BTEX (µg/l)		
Total BTEX	NE	ND
PAHs (µg/l)		
Total PAHs	NE	3.2
Total PCBs	NE	ND
Total Cyanide	200	NA

Sample Name: / Sample Date:	NYS AWQS	CTM-14(06) 6/15/2006	CTM-14(06) 6/5/2007	CTM-14(06) 12/10/2008
Groundwater Results				
BTEX (µg/l)				
Total BTEX	NE	ND	NA	ND
PAHs (µg/l)				
Naphthalene	10	ND	NA	15
Total PAHs	NE	5.8	NA	25.36
Total PCBs	NE	ND	NA	NA
Total Cyanide	200	NA	202	147

Sample Name: / Sample Date:	NYS AWQS	CTM-1(06) 6/13/2006
Groundwater Results		
BTEX (µg/l)		
Total BTEX	NE	ND
PAHs (µg/l)		
Total PAHs	NE	30.2
Total PCBs	NE	ND
Total Cyanide	200	NA

Sample Name: / Sample Date:	NYS AWQS	MW-1D(08) 12/9/2008
Groundwater Results		
BTEX (µg/l)		
Benzene	1	11000
Total BTEX	NE	11000
PAHs (µg/l)		
Naphthalene	10*	11
Total PAHs	NE	16.75
Total PCBs	NE	NA
Total Cyanide	200	90.9

Sample Name: / Sample Date:	NYS AWQS	MW-1(06) 11/29/2006	MW-1(06) 12/9/2008
Groundwater Results			
BTEX (µg/l)			
Benzene	1	1.4	1
Total BTEX	NE	3.72	2.5
PAHs (µg/l)			
Total PAHs	NE	7.3	3.8
Total PCBs	NE	NA	NA
Total Cyanide	200	32.3	36.1

Sample Name: / Sample Date:	NYS AWQS	MW-4(08) 12/9/2008
Groundwater Results		
BTEX (µg/l)		
Benzene	1	1.6
Total BTEX	NE	1.6
PAHs (µg/l)		
Total PAHs	NE	1.2
Total PCBs	NE	NA
Total Cyanide	200	81.5

Sample Name: / Sample Date:	NYS AWQS	CTMMW-19(07) 6/5/2007
Groundwater Results		
BTEX (µg/l)		
Benzene	1	710
Toluene	5	310
Ethylbenzene	5	350
Total Xylene	5	1000
Total BTEX	NE	2370
PAHs (µg/l)		
Acenaphthene	20*	79
Naphthalene	10*	1300
Total PAHs	NE	1507.9
Total PCBs	NE	NA
Total Cyanide	200	220

Sample Name: / Sample Date:	NYS AWQS	GP/CTM-22(08) 2/5/2008	Duplicate of: GP/CTM-22(08) 2/5/2008
Groundwater Results			
BTEX (µg/l)			
Benzene	1	15	8.2 J
Toluene	5	23	15 J
Ethylbenzene	5	7.4	6.4 J
Xylene, m/p-	5	21	18 J
Xylene, o-	5	8.5	7.3 J
Total BTEX	NE	74.9	54.9
PAHs (µg/l)			
Acenaphthene	20*	15	25 J
Total PAHs	NE	45.2	81.2
Total PCBs	NE	ND	ND
Total Cyanide	200	900	64

Sample Name: / Sample Date:	NYS AWQS	GP/CTM-20(08) 2/5/2008
Groundwater Results		
BTEX (µg/l)		
Total BTEX	NE	3.5
PAHs (µg/l)		
Total PAHs	NE	NA
Total PCBs	NE	ND
Total Cyanide	200	87

Sample Name: / Sample Date:	NYS AWQS	GP/CTM-23(08) 2/5/2008
Groundwater Results		
BTEX (µg/l)		
Benzene	1	14
Toluene	5	NA
Total Xylene	5	NA
Total BTEX	NE	14
PAHs (µg/l)		
Naphthalene	10*	31
Total PAHs	NE	60.6
Total PCBs	NE	ND
Total Cyanide	200	1210

Sample Name: / Sample Date:	NYS AWQS	MW-27S(10) 11/17/2010	Duplicate of: MW-27S(10) 11/17/2010
Groundwater Results			
BTEX (µg/l)			
Benzene	1	43	39
Toluene	5	24	22
Ethylbenzene	5	23	20
Total Xylene	5	67	61
Total BTEX	NE	157	142
PAHs (µg/l)			
Naphthalene	10*	300 J	160 J
Total PAHs	NE	386.2	216.1
Total PCBs	NE	ND	ND
Total Cyanide	200	25.7	29.6

Sample Name: / Sample Date:	NYS AWQS	MW-25S(09) 12/2/2009
Groundwater Results		
BTEX (µg/l)		
Total BTEX	NE	ND
PAHs (µg/l)		
Total PAHs	NE	ND
Total PCBs	NE	NA
Total Cyanide	200	73.8

Sample Name: / Sample Date:	NYS AWQS	MW-25D(09) 12/2/2009
Groundwater Results		
BTEX (µg/l)		
Total BTEX	NE	ND
PAHs (µg/l)		
Total PAHs	NE	ND
Total PCBs	NE	NA
Total Cyanide	200	ND

Sample Name: / Sample Date:	NYS AWQS	MW-20S(09) 1/12/2009
Groundwater Results		
BTEX (µg/l)		
Benzene	1	69
Toluene	5	49
Ethylbenzene	5	24 J
Total Xylene	5	75
Total BTEX	NE	217
PAHs (µg/l)		
Acenaphthene	20*	120
Fluorene	50*	83
Naphthalene	10*	610
Phenanthrene	50*	95
Total PAHs	NE	991.9
Total PCBs	NE	NA
Total Cyanide	200	354

Sample Name: / Sample Date:	NYS AWQS	MW-20D(09) 12/1/2009
Groundwater Results		
BTEX (µg/l)		
Total BTEX	NE	1.75
PAHs (µg/l)		
Naphthalene	10*	13
Total PAHs	NE	30.51
Total PCBs	NE	NA
Total Cyanide	200	ND

Sample Name: / Sample Date:	NYS AWQS	MW-21S(09) 12/1/2009
Groundwater Results		
BTEX (µg/l)		
Benzene	1	66
Toluene	5	8.8 J
Ethylbenzene	5	24
Total Xylene	5	53 J
Total BTEX	NE	151.8
PAHs (µg/l)		
Naphthalene	10	420
Total PAHs	NE	437.08
Total PCBs	NE	NA
Total Cyanide	200	43.6

Sample Name: / Sample Date:	NYS AWQS	MW-14(08) 12/11/2008	Duplicate of: MW-14(08) 12/11/2008	MW-14(08) 12/1/2009
Groundwater Results				
BTEX (µg/l)				
Total BTEX	NE	1.5	1.6	0.21
PAHs (µg/l)				
Total PAHs	NE	2.33	2	2.34
Total PCBs	NE	NA	NA	NA
Total Cyanide	200	5.7 J	5.7 J	8.5

Sample Name: / Sample Date:	NYS AWQS	MW-14D(08) 12/11/2008
Groundwater Results		
BTEX (µg/l)		
Benzene	1	60
Toluene	5	710
Ethylbenzene	5	910
Total Xylene	5	1200
Total BTEX	NE	2880
PAHs (µg/l)		
Acenaphthene	20*	140
Benz[a]anthracene	0.002*	10
Benzo[b]fluoranthene	0.002*	7.4
Benzo[k]fluoranthene	0.002*	6.2
Chrysene	0.002*	10
Fluorene	50*	56
Indeno[1,2,3-cd]pyrene	0.002*	5.9
Naphthalene	10*	2500
Phenanthrene	50*	82
Total PAHs	NE	3276.8
Total PCBs	NE	NA
Total Cyanide	200	3.2 J

Sample Name: / Sample Date:	NYS AWQS	MW-24D(09) 12/2/2009
Groundwater Results		
BTEX (µg/l)		
Benzene	1	1.2
Total BTEX	NE	2.24
PAHs (µg/l)		
Total PAHs	NE	1.98
Total PCBs	NE	NA
Total Cyanide	200	ND

Sample Name: / Sample Date:	NYS AWQS	MW-24S(09) 12/2/2009
Groundwater Results		
BTEX (µg/l)		
Total BTEX	NE	ND
PAHs (µg/l)		
Total PAHs	NE	1.78
Total PCBs	NE	20.1
Total Cyanide	200	68.3

Sample Name: / Sample Date:	NYS AWQS	MW-23D(09) 11/30/2009
Groundwater Results		
BTEX (µg/l)		
Total BTEX	NE	ND
PAHs (µg/l)		
Total PAHs	NE	0.59
Total PCBs	NE	NA
Total Cyanide	200	12.6

Sample Name: / Sample Date:	NYS AWQS	MW-18S(09) 11/30/2009
Groundwater Results		
BTEX (µg/l)		
Total BTEX	NE	ND
PAHs (µg/l)		
Total PAHs	NE	ND
Total PCBs	NE	NA
Total Cyanide	200	ND

Sample Name: / Sample Date:	NYS AWQS	MW-18D(09) 11/30/2009
Groundwater Results		
BTEX (µg/l)		
Total BTEX	NE	0.31
PAHs (µg/l)		
Total PAHs	NE	9.11
Total PCBs	NE	NA
Total Cyanide	200	15.2

Sample Name: / Sample Date:	NYS AWQS	MW-19S(09) 12/1/2009
Groundwater Results		
BTEX (µg/l)		
Total BTEX	NE	16
Total Xylene	5	16
Total BTEX	NE	32.77
PAHs (µg/l)		
Naphthalene	10	44
Total PAHs	NE	52.7
Total PCBs	NE	NA
Total Cyanide	200	19.1

Sample Name: / Sample Date:	NYS AWQS	MW-19D(09) 12/1/2009
Groundwater Results		
BTEX (µg/l)		
Total BTEX	NE	0.91
PAHs (µg/l)		
Total PAHs	NE	1.09
Total PCBs	NE	NA
Total Cyanide	200	ND

Sample Name: / Sample Date:	NYS AWQS	MW-17S(09) 12/1/2009
Groundwater Results		
BTEX (µg/l)		
Total BTEX	NE	ND
PAHs (µg/l)		
Total PAHs	NE	ND
Total PCBs	NE	NA
Total Cyanide	200	12.3

Sample Name: / Sample Date:	NYS AWQS	MW-17D(09) 12/1/2009
Groundwater Results		
BTEX (µg/l)		
Total BTEX	NE	ND
PAHs (µg/l)		
Total PAHs	NE	ND
Total PCBs	NE	NA
Total Cyanide	200	ND

Sample Name: / Sample Date:	NYS AWQS	MW-12D(08) 12/10/2008
Groundwater Results		
BTEX (µg/l)		
Benzene	1	1700
Toluene	5	170
Ethylbenzene	5	1900
Total Xylene	5	2700
Total BTEX	NE	6470
PAHs (µg/l)		
Acenaphthene	20*	81
Benz[a]anthracene	0.002*	0.54 J
Chrysene	0.002*	0.42 J
Naphthalene	10*	4400
Total PAHs	NE	5002.16
Total PCBs	NE	NA
Total Cyanide	200	26.2

Sample Name: / Sample Date:	NYS AWQS	MW-11D(08) 12/9/2008
Groundwater Results		
BTEX (µg/l)		
Benzene	1	210
Ethylbenzene	5	8.5 J
Total Xylene	5	490
Total BTEX	NE	708.5
PAHs (µg/l)		
Acenaphthene	20*	73
Naphthalene	10*	40
Total PAHs	NE	125
Total PCBs	NE	NA
Total Cyanide	200	6.3 J

Sample Name: / Sample Date:	NYS AWQS	MW-7(08) 12/10/2008
Groundwater Results		
BTEX (µg/l)		
Total BTEX	NE	ND
PAHs (µg/l)		
Total PAHs	NE	1.3
Total PCBs	NE	NA
Total Cyanide	200	20.1

Sample Name: / Sample Date:	NYS AWQS	MW-7D(08) 12/10/2008
Groundwater Results		
BTEX (µg/l)		
Benzene	1	2500
Toluene	5	1400
Ethylbenzene	5	1300
Total Xylene	5	2300
Total BTEX	NE	7500
PAHs (µg/l)		
Acenaphthene	20*	34
Naphthalene	10*	2500
Total PAHs	NE	2878
Total PCBs	NE	NA
Total Cyanide	200	16.7

Sample Name: / Sample Date:	NYS AWQS	MW-13D(08) 12/10/2008	MW-13D(08) 12/2/2009	Duplicate of: MW-13D(08) 12/2/2009
Groundwater Results				
BTEX (µg/l)				
Benzene	1	140	15	23
Toluene	5	460	30 J	59 J
Ethylbenzene	5	1200	200 J	330 J
Total Xylene	5	1200	150 J	240 J
Total BTEX	NE	3000	401	651
PAHs (µg/l)				
Acenaphthene	20*	160	140	130
Naphthalene	10*	1600	1700	1300
Phenanthrene	50*	56	42	38
Total PAHs	NE	1979	2002.8	1574.1
Total PCBs	NE	NA	NA	NA
Total Cyanide	200	14.5	87.8	33.4

Sample Name: / Sample Date:	NYS AWQS	MW-16D(08) 12/10/2008	Duplicate of: MW-16D(08) 12/10/2008	MW-16D(08) 12/1/2009
Groundwater Results				
BTEX (µg/l)				
Total BTEX	NE	ND	ND	0.35
PAHs (µg/l)				
Benz[a]anthracene	0.002*	ND	ND	2.2
Benzo[a]pyrene	ND	ND	ND	1.5 J
Benzo[b]fluoranthene	0.002*	ND	ND	1.6 J
Benzo[k]fluoranthene	0.002*	ND	ND	1.9 J
Chrysene	0.002*	ND	ND	2.3
Indeno[1,2,3-cd]pyrene	0.002*	ND	ND	2.1
Total PAHs	NE	1.4	ND	17.25
Total PCBs	NE	NA	NA	NA
Total Cyanide	200	34.7	35.1	43.2

Sample Name: / Sample Date:	NYS AWQS	CTM-15(06) 6/15/2006	CTM-15(06) 6/5/2007	CTM-15(06) 12/11/2008
Groundwater Results				
BTEX (µg/l)				
Benzene	1	94	NA	86
Toluene	5	5.1	NA	ND
Ethylbenzene	5	55	NA	19
Xylene, m/p-	5	27	NA	NA
Xylene, o-	5	22	NA	NA
Total Xylene	5	NA	NA	19
Total BTEX	NE	203.1	NA	124
PAHs (µg/l)				
Acenaphthene	20*	44	NA	32
Benzo[k]fluoranthene	0.002*	2.4 J	NA	ND
Naphthalene	10*	88	NA	83
Total PAHs	NE	196.2	NA	129.44
Total PCBs	NE	ND	NA	NA
Total Cyanide	200	NA	0.092	226

Sample Name: / Sample Date:	NYS AWQS	MW-15D(08) 12/11/2008
Groundwater Results		
BTEX (µg/l)		
Benzene	1	4.6
Total BTEX	NE	5.67
PAHs (µg/l)		
Total PAHs	NE	3.83
Total PCBs	NE	NA
Total Cyanide	200	55.2

Sample Name: / Sample Date:	NYS AWQS	CTMMW-1(04) 2004
Groundwater Results		
BTEX (µg/l)		
Benzene	1	670
Total Xylene	5	330
Total BTEX	NE	1000
PAHs (µg/l)		
Acenaphthene	20*	160
Anthracene	50*	63
Benzo(a)anthracene	0.002*	21
Benzo(a)pyrene	ND	16
Benzo(b)flouranthene	0.002*	18
Chrysene	0.002*	24
Flouranthene	50*	65
Flourene	50*	75
Naphthalene	10*	8300
Phenanthrene	50*	130
Total PAHs	NE	5922
Total PCBs	NE	NA
Total Cyanide	200	NA

Sample Name: / Sample Date:	NYS AWQS	MW-8(06) 11/29/2006	Duplicate of: MW-8(06) 11/29/2006	MW-8(06) 12/11/2008
Groundwater Results				
BTEX (µg/l)				
Benzene	1	30000	31000	39000
Toluene	5	8300	8700	9700
Ethylbenzene	5	ND	230 J	220 J
Total Xylene	5	2400 J	2800	2900
Total BTEX	NE	40700	42730	51820
PAHs (µg/l)				
Flouranthene	50*	ND	ND	58 J
Naphthalene	10*	7900	7600	7200
Phenanthrene	50*	ND	ND	180 J
Total PAHs	NE	7900	7600	8008
Total PCBs	NE	NA	NA	NA
Total Cyanide	200	245	233	178

Sample Name: / Sample Date:	NYS AWQS	CTMMW-2(04) 2004
Groundwater Results		
BTEX (µg/l)		
Benzene	1	160
Toluene	5	10
Ethylbenzene	5	19
Total Xylene	5	49
Total BTEX	NE	238
PAHs (µg/l)		
Naphthalene	10*	280
Total PAHs	NE	335
Total PCBs	NE	NA
Total Cyanide	200	NA

Sample Name: / Sample Date:	NYS AWQS	MW-4D(08) 12/11/2008
Groundwater Results		
BTEX (µg/l)		
Benzene	1	36
Toluene	5	170
Ethylbenzene	5	1900
Total Xylene	5	2300
Total BTEX	NE	4406
PAHs (µg/l)		
Acenaphthene	20*	580
Anthracene	50*	200
Benz[a]anthracene	0.002*	130
Benzo[b]fluoranthene	0.002*	71 J
Chrysene	0.002*	92 J
Flouranthene	50*	210
Flourene	50*	270
Indeno[1,2,3-cd]pyrene	0.002*	23 J
Naphthalene	10*	6900
Phenanthrene	50*	770
Pyrene	50*	300
Total PAHs	NE	10755
Total PCBs	NE	NA
Total Cyanide	200	110

Sample Name: / Sample Date:	NYS AWQS	MW-12(08) 12/10/2008	MW-12(08) 12/1/2009
Groundwater Results			
BTEX (µg/l)			
Total BTEX	NE	2.15	1.73
PAHs (µg/l)			
Total PAHs	NE	ND	3.5
Total PCBs	NE	NA	NA
Total Cyanide	200	ND	ND

0 50 100
SCALE, FEET

REMEDIAL INVESTIGATION - OU2
CLINTON STREET FORMER MGP SITE
SCHENECTADY, NEW YORK

nationalgrid

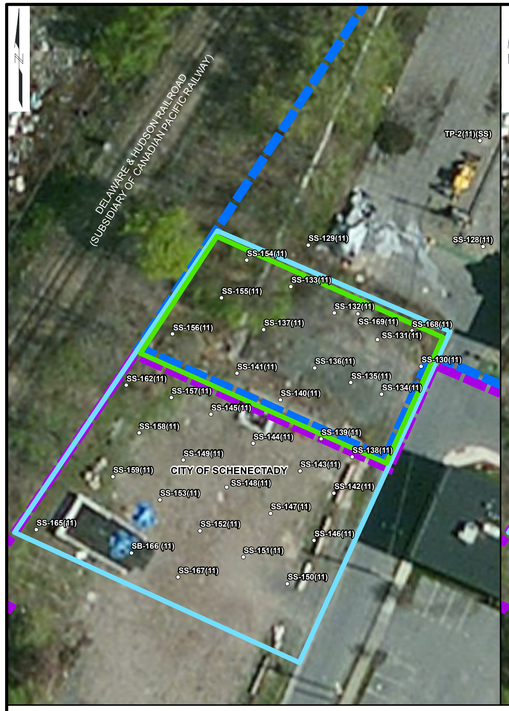
PROJECT 091990-1-1104

GEI Consultants
455 WINDING BROOK DRIVE
SUITE 201
GLASTONBURY, CONNECTICUT 06033

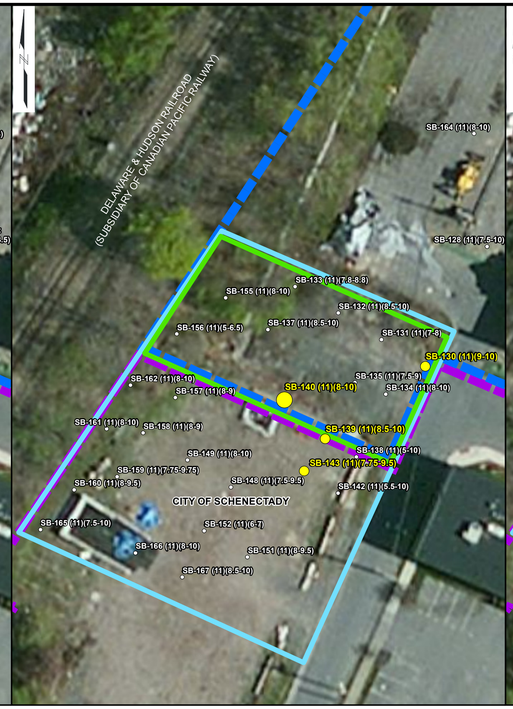
OU2 NORTH AND OU2 SOUTH GROUNDWATER SUMMARIZED ANALYTICAL RESULTS (µg/l)

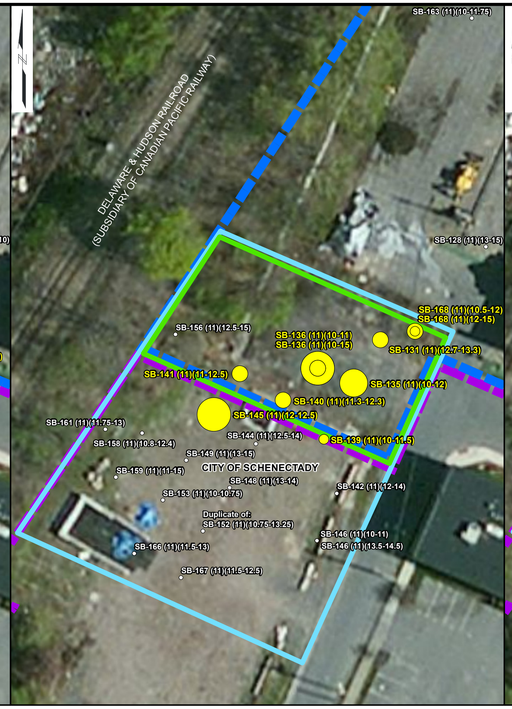
December 2012 Figure 16

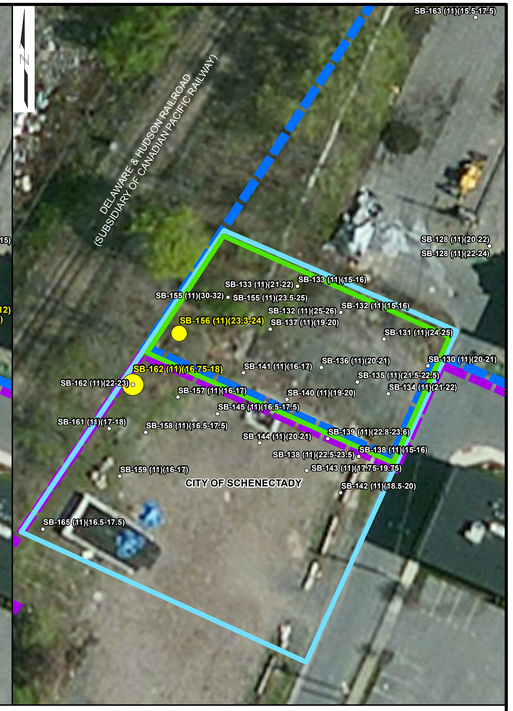
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0-1FEET BELOW GROUND SURFACE

Location Name	Depth (ft bgs)	Sample Date	Total PAHs (mg/kg)
		Commercial SCO	*500***
SS-128(11)	0-0.2	10/10/2011	**3.731**
SS-129(11)	0-0.2	10/12/2011	**1.012**
SS-130(11)	0-0.2	10/10/2011	**13.72**
SS-131(11)	0-0.2	10/10/2011	**1.609**
SS-132(11)	0-0.2	10/10/2011	**19.27**
SS-133(11)	0-0.2	10/10/2011	**11.233**
SS-134(11)	0-0.2	10/10/2011	**8.92**
SS-135(11)	0-0.2	10/11/2011	**3.804**
SS-136(11)	0-0.2	10/11/2011	**35.42**
SS-137(11)	0-0.2	10/10/2011	**5.015**
SS-138(11)	0-0.2	10/10/2011	**7.955**
SS-139(11)	0-0.2	10/11/2011	**53.822**
SS-140(11)	0-0.2	10/11/2011	**76.94**
SS-141(11)	0-0.2	10/11/2011	**11.619**
SS-142(11)	0-0.2	10/11/2011	**5.519**
SS-143(11)	0-0.2	10/11/2011	**33.35**
Duplicate of: SS-143(11)	0-0.2	10/11/2011	**7.348**
SS-144(11)	0-0.2	10/11/2011	**92.66**
SS-145(11)	0-0.2	10/11/2011	**98.41**
SS-146(11)	0-0.2	10/11/2011	**4.439**
SS-147(11)	0-0.2	10/11/2011	**19.649**
SS-148(11)	0-0.2	10/11/2011	**44.36**
SS-149(11)	0-0.2	10/11/2011	**66.51**
SS-150(11)	0-0.2	10/12/2011	**6.45**
SS-151(11)	0-0.2	10/12/2011	**20.785**
SS-152(11)	0-0.2	10/12/2011	**32.86**
SS-153(11)	0-0.2	10/12/2011	**59.96**
SS-154(11)	0-0.2	10/12/2011	**130.2**
SS-155(11)	0-0.2	10/12/2011	**25.803**
SS-156(11)	0-0.2	10/12/2011	**38.17**
SS-157(11)	0-0.2	10/12/2011	**21.45**
SS-158(11)	0-0.2	10/12/2011	**0.27**
SS-159(11)	0-0.2	10/12/2011	**30.5**
SS-162(11)	0-0.2	10/18/2011	**66.52**
SS-165(11)	0-0.2	10/19/2011	**66.06**
SB-166(11)	0.2-1	10/19/2011	**21.37**
SS-167(11)	0-0.2	10/19/2011	**30.402**
SS-168(11)	0-0.2	10/19/2011	**2.035**
SS-169(11)	0-0.2	10/19/2011	**5.475**
TP-2 (11)	0.2-1	10/11/2011	**10.004**

NOTE:
SB-166(11) 0.2-1 AND TP-1(11) 0.2-1 WERE COLLECTED DIRECTLY BENEATH A 2-INCH LAYER OF ASPHALT.

2-5 FEET BELOW GROUND SURFACE

Location Name	Depth (ft bgs)	Sample Date	Total PAHs (mg/kg)
		Commercial SCO	*500***
SB-128(11)	3-3.5	10/12/2011	**0.764**
Duplicate of: SB-128(11)	3-3.5	10/12/2011	**30.607**
SB-129(11)	3-3.5	10/12/2011	**3.074**
SB-130(11)	3-3.5	10/10/2011	**10**
SB-131(11)	3-3.5	10/10/2011	**5.93**
SB-132(11)	3-3.5	10/10/2011	**2.043**
SB-133(11)	3-3.5	10/10/2011	**76.57**
SB-134(11)	3-3.5	10/10/2011	**48.56**
SB-135(11)	2.75-3	10/13/2011	**1031.8**
SB-137(11)	3-3.5	10/10/2011	**0.587**
SB-138(11)	3-3.5	10/10/2011	**6.581**
SB-139(11)	3-3.5	10/13/2011	**69.74**
SB-140(11)	3-3.5	10/13/2011	**5.602**
SB-142(11)	3-3.5	10/11/2011	**107.84**
SB-143(11)	2-4	10/14/2011	**932.9**
SB-145(11)	3-3.2	10/11/2011	**6.692**
SB-146(11)	3-3.5	10/11/2011	**2.416**
SB-149(11)	3-3.2	10/11/2011	**46.05**
SB-150(11)	3-3.5	10/12/2011	**24.34**
SB-152(11)	3-3.5	10/12/2011	**13.314**
SB-153(11)	3-3.5	10/12/2011	**111.83**
SB-154(11)	3.1-3.9	10/18/2011	**0.625**
SB-155(11)	3-5	10/18/2011	**7.488**
SB-156(11)	3-3.5	10/12/2011	**62.02**
SB-158(11)	3-5	10/14/2011	**32.4**
SB-159(11)	3-3.5	10/12/2011	**361.76**
SB-160(11)	3-5	10/17/2011	**44.93**
SB-161(11)	3-5	10/17/2011	**35.51**
SB-162(11)	2.75-4	10/18/2011	**63.96**
SB-165(11)	3.5-5	10/19/2011	**8.216**
SB-166(11)	3-5	10/19/2011	**20.38**
SB-167(11)	3-5	10/19/2011	**47.98**
SB-168(11)	4-5	10/19/2011	**6.771**
SB-169(11)	3-4	10/19/2011	**1.661**
TP-2 (11)	3-3	10/11/2011	**9.72**

5-10 FEET BELOW GROUND SURFACE

Location Name	Depth (ft bgs)	Sample Date	Total PAHs (mg/kg)	Forensics
		Commercial SCO	*500***	
SB-128(11)	7.5-10	10/18/2011	**8.707**	
Duplicate of: SB-128(11)	7.5-10	10/18/2011	**14.06**	
SB-130(11)	9-10	10/12/2011	**1635**	
SB-131(11)	7-8	10/12/2011	**2.967**	
SB-132(11)	8.5-10	10/12/2011	**0.87**	
SB-133(11)	7.8-8.8	10/12/2011	**0.389**	
SB-134(11)	8-10	10/13/2011	**445.6**	
SB-135(11)	7.5-9	10/13/2011	**230**	
SB-137(11)	8.5-10	10/12/2011	**2.083**	
SB-138(11)	5-10	10/13/2011	**440.8**	
SB-139(11)	8.5-10	10/13/2011	**1734.4**	
SB-140(11)	8-10	10/13/2011	**3404**	
SB-142(11)	5.5-10	10/13/2011	**478.5**	
SB-143(11)	7.75-9.5	10/14/2011	**1238.1**	
SB-145(11)	7.5-9	10/14/2011	ND	
SB-147(11)	7-9	10/14/2011	ND	
SB-148(11)	7.5-9.5	10/14/2011	**0.094**	
SB-149(11)	8-10	10/14/2011	**0.823**	Petrogenic
SB-150(11)	7.5-10	10/17/2011	ND	
SB-151(11)	8-9.5	10/17/2011	**0.163**	
SB-152(11)	6-7	10/17/2011	**52.68**	
SB-155(11)	8-10	10/18/2011	**8.088**	
SB-156(11)	5-6.5	10/18/2011	**194.4**	
SB-157(11)	8-9	10/14/2011	**0.204**	
SB-158(11)	8-9	10/14/2011	**32.56**	
SB-159(11)	7.75-9.75	10/17/2011	**122.06**	Petrogenic
SB-160(11)	8-9.5	10/17/2011	**70.2**	
SB-161(11)	8-10	10/17/2011	**2.65**	
SB-162(11)	8-10	10/18/2011	**0.497**	
SB-164(11)	8-10	10/18/2011	**0.365**	
SB-165(11)	7.5-10	10/19/2011	**4.048**	
SB-166(11)	8-10	10/19/2011	**46.72**	
SB-167(11)	8.5-10	10/19/2011	**0.129**	
SB-168(11)	8.75-10	10/19/2011	ND	

10 - 15 FEET BELOW GROUND SURFACE

Location Name	Depth (ft bgs)	Sample Date	Total PAHs (mg/kg)	Forensics
		Commercial SCO	*500***	
SB-128(11)	13-15	10/18/2011	**0.346**	
SB-131(11)	12.7-13.3	10/12/2011	**2326.7**	
SB-135(11)	10-12	10/13/2011	**6808**	Pyrogenic
SB-136(11)	10-15	10/12/2011	**3602**	
Duplicate of: SB-136(11)	10-15	10/12/2011	**8838**	
SB-136(11)	10-11	10/20/2011	**3195**	Pyrogenic
Duplicate of: SB-136(11)	10-11	10/20/2011	**8201**	
SB-139(11)	10-11.5	10/13/2011	**1824.6**	
SB-140(11)	11.3-12.3	10/13/2011	**2791**	Pyrogenic
SB-141(11)	11-12.5	10/13/2011	**2501**	
SB-142(11)	12-14	10/13/2011	**1.88**	
SB-144(11)	12.5-14	10/14/2011	**14.142**	
SB-145(11)	12-12.5	10/14/2011	**9445**	
SB-146(11)	10-11	10/17/2011	**1.85**	
SB-146(11)	13.5-14.5	10/17/2011	**52.98**	
SB-147(11)	13-14	10/14/2011	ND	
SB-148(11)	13-14	10/14/2011	**0.926**	
SB-149(11)	13-15	10/14/2011	**0.137**	
SB-152(11)	10.75-13.25	10/17/2011	ND	
Duplicate of: SB-152(11)	10.75-13.25	10/17/2011	**0.548**	
SB-153(11)	10-10.75	10/17/2011	**0.925**	
SB-156(11)	12.5-15	10/18/2011	**1.382**	
SB-158(11)	10.8-12.4	10/14/2011	**301**	Origin Uncertain
SB-159(11)	11-15	10/17/2011	**1.343**	Origin Uncertain
SB-161(11)	11.75-13	10/17/2011	**218.93**	
SB-163(11)	10-11.75	10/19/2011	**0.088**	
SB-166(11)	11.5-13	10/19/2011	**0.1865**	
SB-167(11)	11.5-12.5	10/19/2011	**0.064**	
SB-168(11)	10.5-12	10/19/2011	**556.4**	
Duplicate of: SB-168(11)	10.5-12	10/19/2011	**2139**	

15 FEET AND DEEPER BELOW GROUND SURFACE

Location Name	Depth (ft bgs)	Sample Date	Total PAHs (mg/kg)
		Commercial SCO	*500***
SB-128(11)	20-22	10/18/2011	**0.062**
Duplicate of: SB-128(11)	20-22	10/18/2011	**0.018**
SB-130(11)	20-21	10/12/2011	**1.526**
SB-131(11)	24-25	10/12/2011	**1.81**
SB-132(11)	15-16	10/12/2011	**13.542**
SB-132(11)	25-26	10/12/2011	**0.528**
SB-133(11)	15-16	10/12/2011	**12.81**
SB-133(11)	21-22	10/12/2011	**2.125**
SB-134(11)	21-22	10/13/2011	**0.695**
SB-135(11)	21.5-22.5	10/13/2011	**0.29**
SB-136(11)	20-21	10/12/2011	**3.936**
SB-137(11)	19-20	10/12/2011	**0.17**
SB-138(11)	15-16	10/13/2011	**35.58**
SB-138(11)	22.5-23.5	10/13/2011	**0.4**
SB-139(11)	22.8-23.6	10/13/2011	**0.17**
SB-140(11)	19-20	10/13/2011	**0.55**
SB-141(11)	16-17	10/13/2011	**4.541**
SB-142(11)	18.5-20	10/13/2011	**0.065**
SB-143(11)	17.75-19.75	10/14/2011	**4.806**
SB-144(11)	20-21	10/14/2011	**0.25**
SB-145(11)	16.5-17.5	10/14/2011	**0.3191**
SB-146(11)	17-18	10/17/2011	ND
SB-147(11)	18.5-20	10/14/2011	ND
SB-148(11)	20-21	10/14/2011	ND
SB-150(11)	15-16	10/17/2011	ND
SB-150(11)	20-21	10/17/2011	ND
SB-151(11)	18-19	10/17/2011	ND
SB-152(11)	17-19	10/17/2011	ND
SB-153(11)	16.5-17.5	10/17/2011	ND
SB-153(11)	23.5-24.5	10/17/2011	ND
SB-155(11)	23.5-25	10/18/2011	**7.041**
SB-155(11)	30-32	10/18/2011	**0.023**
SB-156(11)	23.3-24	10/18/2011	**2172**
SB-156(11)	26-29	10/18/2011	ND
SB-157(11)	16-17	10/14/2011	**1.0189**
SB-158(11)	16.5-17.5	10/14/2011	**25.7**
SB-159(11)	16-17	10/17/2011	**3.938**
SB-159(11)	22-23	10/17/2011	ND
SB-161(11)	17-18	10/17/2011	**1.81**
SB-162(11)	16.75-18	10/18/2011	**5364**
SB-162(11)	22-23	10/18/2011	**2.13**
SB-163(11)	15.5-17.5	10/19/2011	**0.079**
SB-164(11)	19-20	10/18/2011	ND
SB-165(11)	16.5-17.5	10/19/2011	**0.644**
SB-165(11)	22-24.5	10/19/2011	ND
SB-166(11)	16-18	10/19/2011	ND
Duplicate of: SB-166(11)	16-18	10/19/2011	ND
SB-167(11)	24-25	10/19/2011	ND
SB-168(11)	20-22	10/19/2011	ND
Duplicate of: SB-168(11)	20-22	10/19/2011	ND

LEGEND

OPERABLE UNIT 2 NORTH
OPERABLE UNIT 2 SOUTH
"POSTAGE STAMP" AREA
"POSTAGE STAMP" AND ASSOCIATED AREA

TOTAL PAHs

< 500 mg/kg
500-2000 mg/kg
2000-4000 mg/kg
4000-6000 mg/kg
6000-8000 mg/kg
8000 > mg/kg

ANALYTICAL BOX NOTES

COMMERCIAL SCOs - Regulatory comparison against 6NYCRR, Chapter IV, Part 375-6 Restricted Use COMMERCIAL Soil Cleanup Objectives

** ACCORDING TO NYSDEC CP-51, FOR COMMERCIAL SITES WHERE THE ECOLOGICAL STANDARDS ARE NOT APPLICABLE, DEC MAY APPROVE A REMEDIAL PROGRAM WHICH ACHIEVES A SOIL CLEANUP LEVEL OF 500 mg/kg FOR TOTAL PAHs FOR ALL SUBSURFACE SOIL. THE 500 mg/kg CLEANUP LEVEL IS IN LIEU OF ACHIEVING ALL OF THE PAH-SPECIFIC SCOs IN 6NYCRR 375-6.

ft bgs FEET BELOW GROUND SURFACE
mg/kg MILLIGRAMS PER KILOGRAM
ND NOT DETECTED
PAHs POLYCYCLIC AROMATIC HYDROCARBONS

NOTES:
1. WHITE DOT INDICATES A DETECTION BELOW THE COMMERCIAL SCO.
2. YELLOW DOT INDICATES AN EXCEEDANCE OF THE COMMERCIAL SCO.
3. SAMPLE LOCATIONS WHERE TOTAL PAHs WERE NOT DETECTED (ND) ARE NOT SHOWN ON AERIAL PLAN.

0 17.5 35 70
SCALE, FEET

SOURCE:
BING AERIAL IMAGE © 2010 MICROSOFT CORP.

REMEDIAL INVESTIGATION - OU2
CLINTON STREET FORMER MGP SITE
SCHENECTADY, NEW YORK

nationalgrid

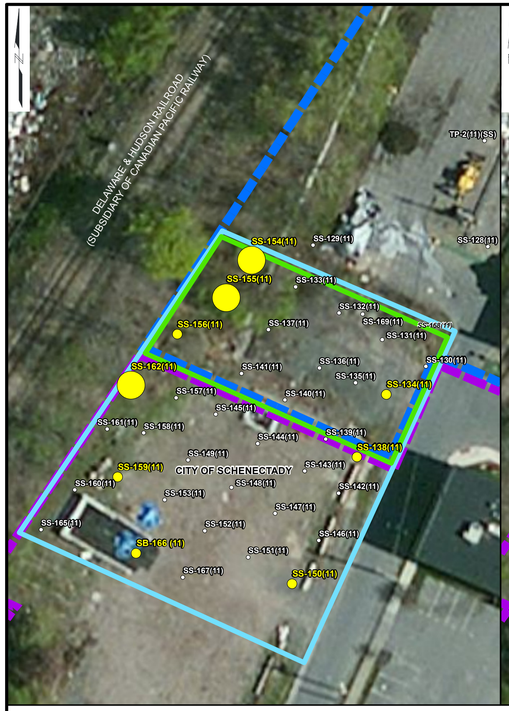
PROJECT 091990-1-1104

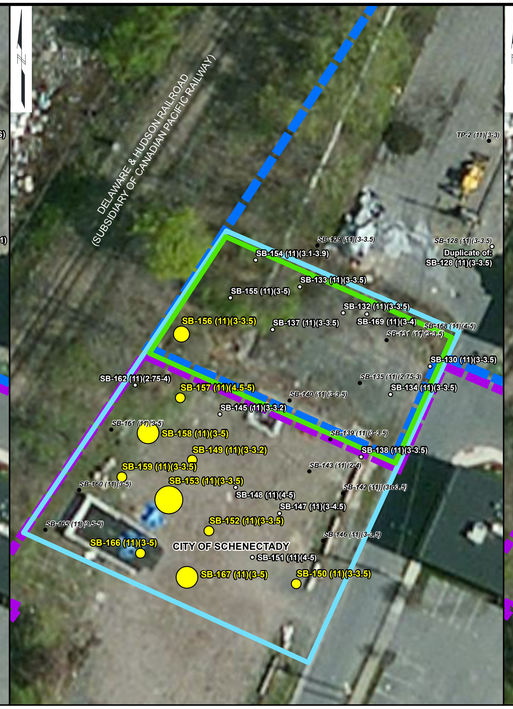
GEI Consultants
455 WINDING BROOK DRIVE
SUITE 201
GLASTONBURY, CONNECTICUT 06033

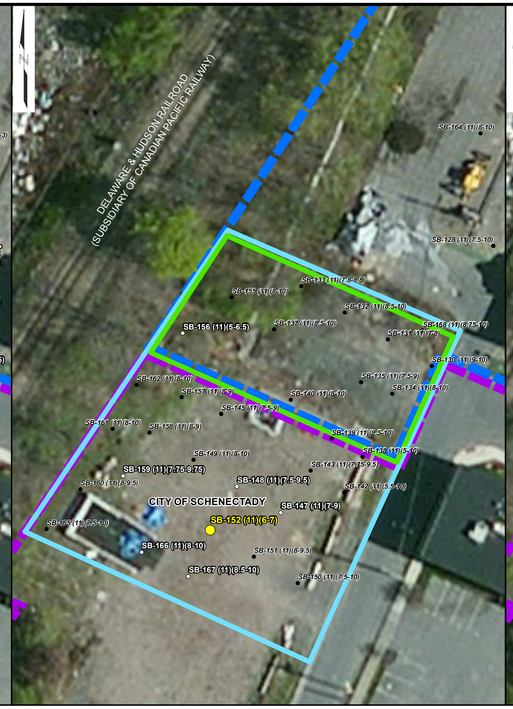
POSTAGE STAMP SURFACE AND SUBSURFACE SOIL SUMMARIZED TOTAL PAHs ANALYTICAL RESULTS (mg/kg)

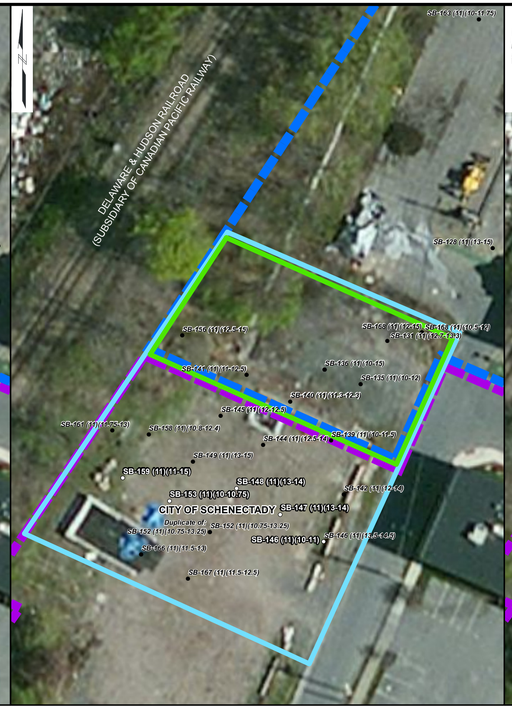
December 2012 Figure 17

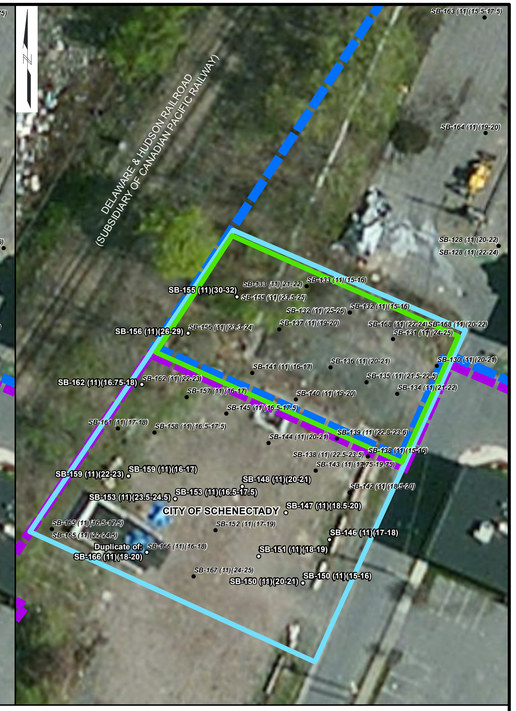
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0-1 FEET BELOW GROUND SURFACE

Location Name	Depth (ft bgs)	Sample Date	Total PCBs (mg/kg)
		Commercial SCO	*1*
SS-128(11)	0-0.2	10/10/2011	**0.3**
SS-129(11)	0-0.2	10/12/2011	**0.21**
SS-130(11)	0-0.2	10/10/2011	**0.29**
SS-131(11)	0-0.2	10/10/2011	**0.45**
SS-132(11)	0-0.2	10/10/2011	**0.13**
SS-133(11)	0-0.2	10/10/2011	**0.061**
SS-134(11)	0-0.2	10/10/2011	**6.9**
SS-135(11)	0-0.2	10/11/2011	**0.24**
SS-136(11)	0-0.2	10/11/2011	**0.084**
SS-137(11)	0-0.2	10/10/2011	**0.43**
SS-138(11)	0-0.2	10/10/2011	**6.4**
SS-139(11)	0-0.2	10/11/2011	**0.078**
SS-140(11)	0-0.2	10/11/2011	**0.26**
SS-141(11)	0-0.2	10/11/2011	**0.64**
SS-142(11)	0-0.2	10/11/2011	**0.55**
SS-143(11)	0-0.2	10/11/2011	**0.05**
Duplicate of: SS-143(11)	0-0.2	10/11/2011	**0.032**
SS-144(11)	0-0.2	10/11/2011	**0.17**
SS-145(11)	0-0.2	10/11/2011	**0.11**
SS-146(11)	0-0.2	10/11/2011	**0.36**
SS-147(11)	0-0.2	10/11/2011	**0.33**
SS-148(11)	0-0.2	10/11/2011	**0.39**
SS-149(11)	0-0.2	10/11/2011	**0.32**
SS-150(11)	0-0.2	10/12/2011	**1.3**
SS-151(11)	0-0.2	10/12/2011	**0.51**
SS-152(11)	0-0.2	10/12/2011	**0.41**
SS-153(11)	0-0.2	10/12/2011	**0.63**
SS-154(11)	0-0.2	10/12/2011	**110**
SS-155(11)	0-0.2	10/12/2011	**61**
SS-156(11)	0-0.2	10/12/2011	**2.7**
SS-157(11)	0-0.2	10/12/2011	**0.16**
SS-158(11)	0-0.2	10/12/2011	**0.41**
SS-159(11)	0-0.2	10/12/2011	**1.22**
SS-160(11)	0-0.2	10/17/2011	**0.45**
SS-161(11)	0-0.2	10/17/2011	**0.19**
SS-162(11)	0-0.2	10/18/2011	**70**
SS-165(11)	0-0.2	10/19/2011	**0.15**
SB-166(11)	0.2-1	10/19/2011	**4**
SS-167(11)	0-0.2	10/19/2011	**0.18**
SS-168(11)	0-0.2	10/19/2011	ND
SS-169(11)	0-0.2	10/19/2011	**0.26**
TP-2 (11)	0.2-1	10/11/2011	**0.32**

NOTE:
SB-166(11) 0.2-1 AND TP-1(11) 0.2-1 WERE COLLECTED DIRECTLY BENEATH A 2-INCH LAYER OF ASPHALT.

2-5 FEET BELOW GROUND SURFACE

Location Name	Depth (ft bgs)	Sample Date	Total PCBs (mg/kg)
		Commercial SCO	*1*
SB-128(11)	3-3.5	10/12/2011	ND
Duplicate of: SB-128(11)	3-3.5	10/12/2011	**0.52**
SB-129(11)	3-3.5	10/12/2011	ND
SB-130(11)	3-3.5	10/10/2011	**0.84**
SB-131(11)	3-3.5	10/10/2011	ND
SB-132(11)	3-3.5	10/10/2011	**0.082**
SB-133(11)	3-3.5	10/10/2011	**0.84**
SB-134(11)	3-3.5	10/10/2011	**0.23**
SB-135(11)	2.75-3	10/13/2011	ND
SB-137(11)	3-3.5	10/10/2011	**0.11**
SB-138(11)	3-3.5	10/10/2011	**0.051**
SB-139(11)	3-3.5	10/13/2011	ND
SB-140(11)	3-3.5	10/13/2011	ND
SB-142(11)	3-3.5	10/11/2011	ND
SB-143(11)	2-4	10/14/2011	ND
SB-145(11)	3-3.2	10/11/2011	**0.15**
SB-146(11)	3-3.5	10/11/2011	ND
SB-147(11)	3-4.5	10/14/2011	**0.054**
SB-148(11)	4-5	10/14/2011	**0.12**
SB-149(11)	3-3.2	10/11/2011	**1.2**
SB-150(11)	3-3.5	10/12/2011	**1.1**
SB-151(11)	4-5	10/17/2011	**0.29**
SB-152(11)	3-3.5	10/12/2011	**1.2**
SB-153(11)	3-3.5	10/12/2011	**590**
SB-154(11)	3.1-3.9	10/18/2011	**0.58**
SB-155(11)	3-5	10/18/2011	**0.24**
SB-156(11)	3-3.5	10/12/2011	**16**
SB-157(11)	4.5-5	10/14/2011	**1.2**
SB-158(11)	3-5	10/14/2011	**34**
SB-159(11)	3-3.5	10/12/2011	**6.8**
SB-160(11)	3-5	10/17/2011	ND
SB-161(11)	3-5	10/17/2011	ND
SB-162(11)	2.75-4	10/18/2011	**0.47**
SB-165(11)	3.5-5	10/19/2011	ND
SB-166(11)	3-5	10/19/2011	**10**
SB-167(11)	3-5	10/19/2011	**36**
SB-168(11)	4-5	10/19/2011	ND
SB-169(11)	3-4	10/19/2011	**0.23**
TP-2 (11)	3-3	10/11/2011	ND

5-10 FEET BELOW GROUND SURFACE

Location Name	Depth (ft bgs)	Sample Date	Total PCBs (mg/kg)
		Commercial SCO	*1*
SB-128(11)	7.5-10	10/18/2011	ND
Duplicate of: SB-128(11)	7.5-10	10/18/2011	ND
SB-130(11)	9-10	10/12/2011	ND
SB-131(11)	7-8	10/12/2011	ND
SB-132(11)	8.5-10	10/12/2011	ND
SB-133(11)	7.8-8.8	10/12/2011	ND
SB-134(11)	8-10	10/13/2011	ND
SB-135(11)	7.5-9	10/13/2011	ND
SB-137(11)	8.5-10	10/12/2011	ND
SB-138(11)	5-10	10/13/2011	ND
SB-139(11)	8.5-10	10/13/2011	ND
SB-140(11)	8-10	10/13/2011	ND
SB-142(11)	5.5-10	10/13/2011	ND
SB-143(11)	7.75-9.5	10/14/2011	ND
SB-145(11)	7.5-9	10/14/2011	ND
SB-147(11)	7-9	10/14/2011	**0.12**
SB-148(11)	7.5-9.5	10/14/2011	**0.11**
SB-149(11)	8-10	10/14/2011	ND
SB-150(11)	7.5-10	10/17/2011	ND
SB-151(11)	8-9.5	10/17/2011	ND
SB-152(11)	6-7	10/17/2011	**1.5**
SB-155(11)	8-10	10/18/2011	ND
SB-156(11)	5-6.5	10/18/2011	**0.79**
SB-157(11)	8-9	10/14/2011	ND
SB-158(11)	8-9	10/14/2011	ND
SB-159(11)	7.75-9.75	10/17/2011	**0.041**
SB-160(11)	8-9.5	10/17/2011	ND
SB-161(11)	8-10	10/17/2011	ND
SB-162(11)	8-10	10/18/2011	ND
SB-164(11)	8-10	10/18/2011	ND
SB-165(11)	7.5-10	10/19/2011	ND
SB-166(11)	8-10	10/19/2011	**0.12**
SB-167(11)	8.5-10	10/19/2011	**0.25**
SB-168(11)	8.75-10	10/19/2011	ND

10 - 15 FEET BELOW GROUND SURFACE

Location Name	Depth (ft bgs)	Sample Date	Total PCBs (mg/kg)
		Commercial SCO	*1*
SB-128(11)	13-15	10/18/2011	ND
SB-131(11)	12.7-13.3	10/12/2011	ND
SB-135(11)	10-12	10/13/2011	ND
SB-136(11)	10-15	10/12/2011	ND
Duplicate of: SB-136(11)	10-15	10/12/2011	ND
SB-139(11)	10-11.5	10/13/2011	ND
SB-140(11)	11.3-12.3	10/13/2011	ND
SB-141(11)	11-12.5	10/13/2011	ND
SB-142(11)	12-14	10/13/2011	ND
SB-144(11)	12.5-14	10/14/2011	ND
SB-145(11)	12-12.5	10/14/2011	ND
SB-146(11)	10-11	10/17/2011	**0.25**
SB-146(11)	13.5-14.5	10/17/2011	ND
SB-147(11)	13-14	10/14/2011	**0.064**
SB-148(11)	13-14	10/14/2011	**0.072**
SB-149(11)	13-15	10/14/2011	ND
SB-152(11)	10.75-13.25	10/17/2011	ND
Duplicate of: SB-152(11)	10.75-13.25	10/17/2011	ND
SB-153(11)	10-10.75	10/17/2011	**0.054**
SB-156(11)	12.5-15	10/18/2011	ND
SB-158(11)	10.8-12.4	10/14/2011	ND
SB-159(11)	11-15	10/17/2011	**0.063**
SB-161(11)	11.75-13	10/17/2011	ND
SB-163(11)	10-11.75	10/19/2011	ND
SB-166(11)	11.5-13	10/19/2011	ND
SB-167(11)	11.5-12.5	10/19/2011	ND
SB-168(11)	10.5-12	10/19/2011	ND
Duplicate of: SB-168(11)	10.5-12	10/19/2011	ND

15 FEET AND DEEPER BELOW GROUND SURFACE

Location Name	Depth (ft bgs)	Sample Date	Total PCBs (mg/kg)
		Commercial SCO	*1*
SB-128(11)	20-22	10/18/2011	ND
Duplicate of: SB-128(11)	20-22	10/18/2011	ND
SB-131(11)	24-25	10/12/2011	ND
SB-132(11)	15-16	10/12/2011	ND
SB-132(11)	25-26	10/12/2011	ND
SB-133(11)	15-16	10/12/2011	ND
SB-133(11)	21-22	10/12/2011	ND
SB-134(11)	21-22	10/13/2011	ND
SB-135(11)	21.5-22.5	10/13/2011	ND
SB-136(11)	20-21	10/12/2011	ND
SB-137(11)	19-20	10/12/2011	ND
SB-138(11)	15-16	10/13/2011	ND
SB-138(11)	22.5-23.5	10/13/2011	ND
SB-139(11)	22.8-23.6	10/13/2011	ND
SB-140(11)	19-20	10/13/2011	ND
SB-141(11)	16-17	10/13/2011	ND
SB-142(11)	18.5-20	10/13/2011	ND
SB-143(11)	17.75-19.75	10/14/2011	ND
SB-144(11)	20-21	10/14/2011	ND
SB-145(11)	16.5-17.5	10/14/2011	ND
SB-146(11)	17-18	10/17/2011	**0.047**
SB-147(11)	18.5-20	10/14/2011	**0.096**
SB-148(11)	20-21	10/14/2011	**0.1**
SB-150(11)	15-16	10/17/2011	**0.29**
SB-150(11)	20-21	10/17/2011	**0.02**
SB-151(11)	18-19	10/17/2011	**0.21**
SB-152(11)	17-19	10/17/2011	ND
SB-153(11)	16.5-17.5	10/17/2011	**0.069**
SB-153(11)	23.5-24.5	10/17/2011	**0.49**
SB-155(11)	23.5-25	10/18/2011	ND
SB-155(11)	30-32	10/18/2011	**0.029**
SB-156(11)	23.3-24	10/18/2011	ND
SB-156(11)	26-29	10/18/2011	**0.029**
SB-157(11)	16-17	10/14/2011	ND
SB-158(11)	16.5-17.5	10/14/2011	ND
SB-159(11)	16-17	10/17/2011	**0.053**
SB-159(11)	22-23	10/17/2011	**0.053**
SB-161(11)	17-18	10/17/2011	ND
SB-162(11)	16.75-18	10/18/2011	**0.098**
SB-162(11)	22-23	10/18/2011	ND
SB-163(11)	15.5-17.5	10/19/2011	ND
SB-164(11)	19-20	10/18/2011	ND
SB-165(11)	16.5-17.5	10/19/2011	ND
SB-165(11)	22-24.5	10/19/2011	ND
SB-166(11)	16-18	10/19/2011	ND
Duplicate of: SB-166(11)	16-18	10/19/2011	**0.047**
SB-167(11)	24-25	10/19/2011	ND
SB-168(11)	20-22	10/19/2011	ND
Duplicate of: SB-168(11)	20-22	10/19/2011	ND

LEGEND

- OPERABLE UNIT 2 NORTH
- OPERABLE UNIT 2 SOUTH
- POSTAGE STAMP AREA
- POSTAGE STAMP ASSOCIATED AREA

Total PCBs

- NOT DETECTED
- <1 mg/kg
- >1-10 mg/kg
- >10-25 mg/kg
- >25-50 mg/kg
- >50 mg/kg

ANALYTICAL BOX NOTES

COMMERCIAL SCOs - Regulatory comparison against 6NYCRR, Chapter IV, Part 375-6 Restricted Use COMMERCIAL Soil Cleanup Objectives

ft bgs	FEET BELOW GROUND SURFACE
mg/kg	MILLIGRAMS PER KILOGRAM
ND	NOT DETECTED
PCBs	POLYCHLORINATED BIPHENYLS

NOTES:
1. WHITE DOT INDICATES A DETECTION BELOW THE COMMERCIAL SCO.
2. YELLOW DOT INDICATES AN EXCEEDANCE OF THE COMMERCIAL SCO.
3. SAMPLE LOCATIONS WHERE TOTAL BTEX WAS NOT DETECTED (ND) ARE NOT SHOWN ON AERIAL PLAN.

0 17.5 35 70
SCALE, FEET

SOURCE:
BING AERIAL IMAGE © 2010 MICROSOFT CORP.

REMEDIAL INVESTIGATION - OU2
CLINTON STREET FORMER MGP SITE
SCHENECTADY, NEW YORK

nationalgrid

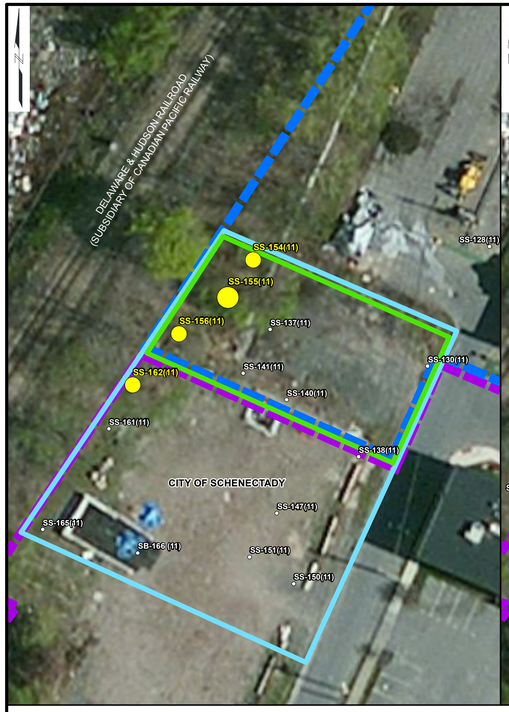
PROJECT 091990-1-1104

GEI Consultants
455 WINDING BROOK DRIVE
SUITE 201
GLASTONBURY, CONNECTICUT 06033

POSTAGE STAMP SURFACE AND SUBSURFACE SOIL SUMMARIZED TOTAL PCBs ANALYTICAL RESULTS (mg/kg)

December 2012 Figure 18

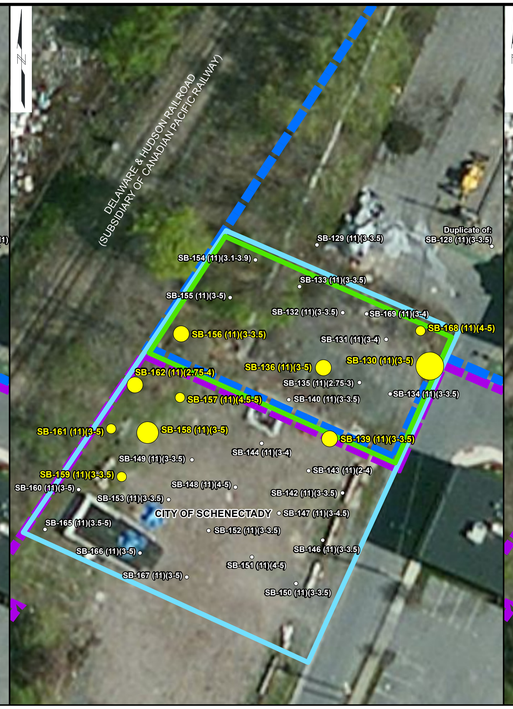
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0-1 FEET BELOW GROUND SURFACE

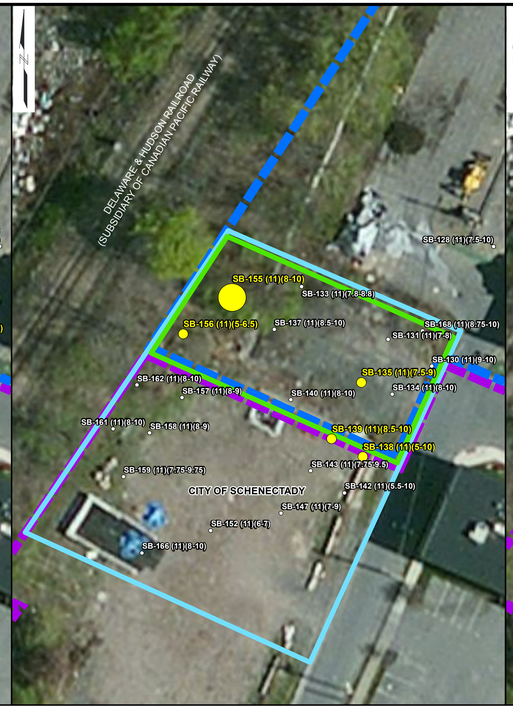
Sample Name	Depth (ft bgs)	Sample Date	Free Cyanide (mg/kg)	Total Cyanide (mg/kg)
	Commercial SCO		*NE*	*27*
SS-128(11)	0 - 0.2	10/21/2011	ND	3.9 J
SS-129(11)	0 - 0.2	10/12/2011	ND	ND
SS-130(11)	0 - 0.2	10/19/2011	ND	4.4
SS-132(11)	0 - 0.2	10/20/2011	ND	ND
SS-133(11)	0 - 0.2	10/20/2011	ND	ND
SS-134(11)	0 - 0.2	10/20/2011	**1.3 J**	ND
SS-135(11)	0 - 0.2	10/20/2011	ND	ND
SS-136(11)	0 - 0.2	10/20/2011	**0.79 J**	ND
SS-137(11)	0 - 0.2	10/20/2011	ND	1.2
SS-138(11)	0 - 0.2	10/20/2011	**0.86 J**	4.7
SS-139(11)	0 - 0.2	10/20/2011	ND	ND
SS-140(11)	0 - 0.2	10/21/2011	ND	1.4 J
SS-141(11)	0 - 0.2	10/21/2011	ND	1.6 J
SS-142(11)	0 - 0.2	10/21/2011	ND	ND
SS-143(11)	0 - 0.2	10/20/2011	**0.81 J**	ND
SS-144(11)	0 - 0.2	10/21/2011	ND	ND
Duplicate of: SS-144(11)	0 - 0.2	10/21/2011	ND	ND
SS-145(11)	0 - 0.2	10/21/2011	ND	ND
SS-146(11)	0 - 0.2	10/21/2011	ND	ND
SS-147(11)	0 - 0.2	10/21/2011	ND	0.7 J
SS-148(11)	0 - 0.2	10/11/2011	ND	ND
SS-150(11)	0 - 0.2	10/12/2011	ND	0.3 J
SS-151(11)	0 - 0.2	10/12/2011	ND	0.24 J
SS-152(11)	0 - 0.2	10/12/2011	ND	ND
SS-153(11)	0 - 0.2	10/12/2011	ND	ND
SS-154(11)	0 - 0.2	10/12/2011	NA	**65.2 J**
SS-155(11)	0 - 0.2	10/21/2011	ND	**101 J**
SS-156(11)	0 - 0.2	10/12/2011	NA	**93.1 J**
SS-157(11)	0 - 0.2	10/12/2011	ND	ND
SS-158(11)	0 - 0.2	10/21/2011	ND	ND
SS-159(11)	0 - 0.2	10/12/2011	ND	ND
SS-160(11)	0 - 0.2	10/17/2011	ND	ND
SS-161(11)	0 - 0.2	10/17/2011	ND	5 J
SS-162(11)	0 - 0.2	10/18/2011	ND	**52 J**
SS-165(11)	0 - 0.2	10/19/2011	ND	0.2 J
SB-166(11)	0.2 - 1.0	10/19/2011	ND	2.7 J
SS-167(11)	0 - 0.2	10/19/2011	ND	ND
SS-168(11)	0 - 0.2	10/19/2011	ND	ND
SS-169(11)	0 - 0.2	10/19/2011	ND	ND

NOTE:
SB-166(11) 0.2-1 WAS COLLECTED DIRECTLY BENEATH A 2-INCH LAYER OF ASPHALT.



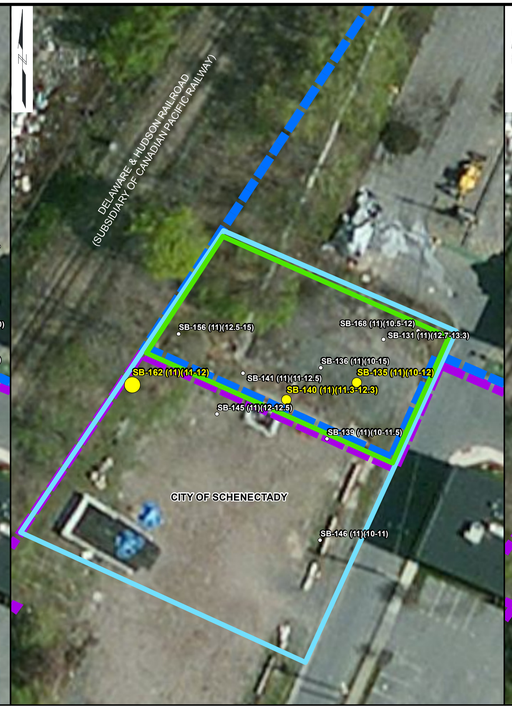
2-5 FEET BELOW GROUND SURFACE

Location Name	Depth (ft bgs)	Sample Date	Free Cyanide (mg/kg)	Total Cyanide (mg/kg)
	Commercial SCO		*NE*	*27*
SB-128(11)	3-3.5	10/12/2011	ND	**1.5 J**
Duplicate of: SB-128(11)	4-4.5	10/12/2011	ND	**15.1 J**
SB-129(11)	3-3.5	10/12/2011	ND	**25.7 J**
SB-130(11)	3-5	10/19/2011	**2.3 J**	**233**
SB-131(11)	3-4	10/20/2011	**1.6 J**	**1.2**
SB-132(11)	3-3.5	10/20/2011	**0.74 J**	**2.3**
SB-133(11)	3-3.5	10/20/2011	ND	**0.93**
SB-134(11)	3-3.5	10/20/2011	**0.66 J**	**0.7**
SB-136(11)	3-5	10/12/2011	ND	**78.8 J**
SB-137(11)	3-3.5	10/20/2011	ND	ND
SB-138(11)	3-3.5	10/20/2011	**0.75 J**	ND
SB-139(11)	3-3.5	10/13/2011	2.8 U	**50.3 J**
SB-140(11)	3-3.5	10/13/2011	2.5 U	**0.21 J**
SB-142(11)	3-3.5	10/20/2011	**0.68 J**	**0.41 J**
SB-143(11)	2-4	10/14/2011	**1.3 J**	**6.9 J**
SB-144(11)	3-4	10/14/2011	**1.1 J**	**0.81 J**
SB-145(11)	3-3.5	10/20/2011	**0.8 J**	ND
SB-146(11)	3-3.5	10/11/2011	ND	**9.2 J**
SB-147(11)	3-4.5	10/14/2011	**1.1 J**	**1.5 J**
SB-148(11)	4-5	10/14/2011	**2.1 J**	**10.1 J**
SB-149(11)	3-3.5	10/20/2011	**0.72 J**	**0.18 J**
SB-150(11)	3-3.5	10/12/2011	ND	**2.3 J**
SB-151(11)	4-5	10/17/2011	ND	**0.69 J**
SB-152(11)	3-3.5	10/12/2011	ND	**0.95 J**
SB-153(11)	3-3.5	10/12/2011	ND	**10.4 J**
SB-154(11)	3.1-3.9	10/18/2011	ND	**1 J**
SB-155(11)	3-5	10/18/2011	ND	**7.6 J**
SB-156(11)	3-3.5	10/12/2011	ND	**74.3 J**
SB-157(11)	4.5-5	10/14/2011	**1.6 J**	**42.5 J**
SB-158(11)	3-5	10/14/2011	**2 J**	**129 J**
SB-159(11)	3-3.5	10/12/2011	ND	**39 J**
SB-160(11)	3-5	10/17/2011	**1.1 J**	**12.8 J**
SB-161(11)	3-5	10/17/2011	ND	**28.5 J**
SB-162(11)	2.75-4	10/18/2011	ND	**69.1 J**
SB-165(11)	3.5-5	10/19/2011	ND	**0.41 J**
SB-166(11)	3-5	10/19/2011	ND	**3.8 J**
SB-167(11)	3-5	10/19/2011	ND	**7.4 J**
SB-168(11)	4-5	10/19/2011	ND	**29.7 J**
SB-169(11)	3-4	10/19/2011	ND	**0.27 J**



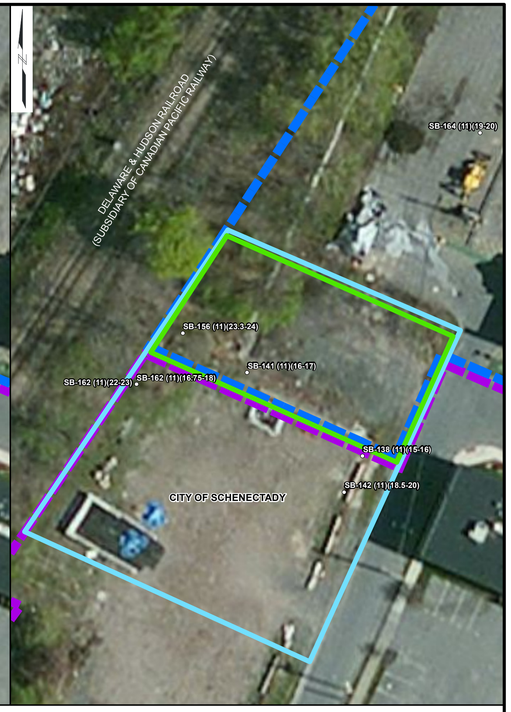
5-10 FEET BELOW GROUND SURFACE

Location Name	Depth (ft bgs)	Sample Date	Free Cyanide (mg/kg)	Total Cyanide (mg/kg)
	Commercial SCO		*NE*	*27*
SB-128(11)	7.5-10	10/18/2011	ND	**0.91 J**
Duplicate of: SB-128(11)	7.5-10	10/18/2011	ND	**0.69 J**
SB-130(11)	9-10	10/12/2011	ND	**9 J**
SB-131(11)	7-8	10/12/2011	ND	**23.7 J**
SB-132(11)	8.5-10	10/12/2011	ND	ND
SB-133(11)	7.8-8.8	10/12/2011	ND	**1.8 J**
SB-134(11)	8-10	10/13/2011	ND	**19.5 J**
SB-135(11)	7.5-9	10/13/2011	ND	**29 J**
SB-137(11)	8.5-10	10/12/2011	ND	**16.1 J**
SB-138(11)	5-10	10/13/2011	ND	**39.3 J**
SB-139(11)	8.5-10	10/13/2011	ND	**35.3 J**
SB-140(11)	8-10	10/13/2011	ND	**22.2 J**
SB-142(11)	5.5-10	10/13/2011	ND	**0.5 J**
SB-143(11)	7.75-9.5	10/14/2011	**1.4 J**	**3.9 J**
SB-145(11)	7.5-9	10/14/2011	**3.6**	R
SB-147(11)	7-9	10/14/2011	**0.9 J**	**1.2 J**
SB-148(11)	7.5-9.5	10/14/2011	**0.89 J**	R
SB-149(11)	8-10	10/14/2011	**1.6 J**	R
SB-150(11)	7.5-10	10/17/2011	ND	ND
SB-151(11)	8-9.5	10/17/2011	ND	ND
SB-152(11)	6-7	10/17/2011	ND	**1.7 J**
SB-155(11)	8-10	10/18/2011	ND	**204 J**
SB-156(11)	5-6.5	10/18/2011	ND	**31.3 J**
SB-157(11)	8-9	10/14/2011	**1.5 J**	**3.7 J**
SB-158(11)	8-9	10/14/2011	**1.1 J**	**0.22 J**
SB-159(11)	7.75-9.75	10/17/2011	ND	**0.25 J**
SB-160(11)	8-9.5	10/17/2011	ND	ND
SB-161(11)	8-10	10/17/2011	ND	**0.89 J**
SB-162(11)	8-10	10/18/2011	ND	**0.49 J**
SB-164(11)	8-10	10/18/2011	ND	ND
SB-165(11)	7.5-10	10/19/2011	ND	ND
SB-166(11)	8-10	10/19/2011	ND	**0.93 J**
SB-167(11)	8.5-10	10/19/2011	ND	ND
SB-168(11)	8.75-10	10/19/2011	ND	**0.95 J**



10 - 15 FEET BELOW GROUND SURFACE

Location Name	Depth (ft bgs)	Sample Date	Free Cyanide (mg/kg)	Total Cyanide (mg/kg)
	Commercial SCO		*NE*	*27*
SB-128(11)	13-15	10/18/2011	ND	ND
SB-131(11)	12.7-13.3	10/12/2011	ND	**6.2 J**
SB-135(11)	10-12	10/13/2011	ND	**39.1 J**
SB-136(11)	10-15	10/12/2011	ND	**14.4 J**
Duplicate of: SB-136(11)	10-15	10/12/2011	ND	**10.5 J**
SB-139(11)	10-11.5	10/13/2011	ND	**20.3 J**
SB-140(11)	11.3-12.3	10/13/2011	ND	**42 J**
SB-141(11)	11-12.5	10/13/2011	ND	**1.3 J**
SB-142(11)	12-14	10/13/2011	**0.78 J**	R
SB-144(11)	12.5-14	10/14/2011	**1.9 J**	R
SB-145(11)	12-12.5	10/14/2011	**2.8 J**	**5.5 J**
SB-146(11)	10-11	10/17/2011	ND	**0.39 J**
SB-146(11)	13.5-14.5	10/17/2011	**2.1 J**	ND
SB-147(11)	13-14	10/14/2011	ND	R
SB-148(11)	13-14	10/14/2011	**2 J**	R
SB-149(11)	13-15	10/14/2011	**1.3 J**	R
SB-152(11)	10.75-13.25	10/17/2011	ND	ND
Duplicate of: SB-152(11)	10.75-13.25	10/17/2011	ND	ND
SB-153(11)	10-10.75	10/17/2011	ND	ND
SB-156(11)	12.5-15	10/18/2011	ND	**25.5 J**
SB-158(11)	10.8-12.4	10/14/2011	**1.3 J**	R
SB-159(11)	11-15	10/17/2011	ND	ND
SB-162(11)	11-12	10/18/2011	ND	**75 J**
SB-163(11)	10-11.75	10/19/2011	ND	ND
SB-166(11)	11.5-13	10/19/2011	ND	ND
SB-167(11)	11.5-12.5	10/19/2011	ND	ND
SB-168(11)	10.5-12	10/19/2011	ND	**0.18 J**
Duplicate of: SB-168(11)	10.5-12	10/19/2011	ND	ND



15 FEET AND DEEPER BELOW GROUND SURFACE

Location Name	Depth (ft bgs)	Sample Date	Free Cyanide (mg/kg)	Total Cyanide (mg/kg)
	Commercial SCO		*NE*	*27*
SB-128(11)	20-22	10/18/2011	ND	ND
Duplicate of: SB-128(11)	20-22	10/18/2011	ND	ND
SB-130(11)	20-21	10/12/2011	ND	ND
SB-131(11)	24-25	10/12/2011	ND	ND
SB-132(11)	15-16	10/12/2011	ND	ND
SB-132(11)	25-26	10/12/2011	ND	ND
SB-133(11)	15-16	10/12/2011	ND	ND
SB-133(11)	21-22	10/12/2011	ND	ND
SB-134(11)	21-22	10/13/2011	ND	ND
SB-135(11)	21.5-22.5	10/13/2011	ND	ND
SB-136(11)	20-21	10/12/2011	ND	ND
SB-137(11)	19-20	10/12/2011	ND	ND
SB-138(11)	15-16	10/13/2011	ND	**0.79 J**
SB-138(11)	22.5-23.5	10/13/2011	ND	ND
SB-139(11)	22.8-23.6	10/13/2011	ND	ND
SB-140(11)	19-20	10/13/2011	ND	ND
SB-141(11)	16-17	10/13/2011	ND	**0.83 J**
SB-142(11)	18.5-20	10/13/2011	ND	**0.6 J**
SB-143(11)	17.75-19.75	10/14/2011	**1.4 J**	R
SB-144(11)	20-21	10/14/2011	**1.6 J**	R
SB-145(11)	16.5-17.5	10/14/2011	**1.9 J**	R
SB-146(11)	17-18	10/17/2011	ND	ND
SB-147(11)	18.5-20	10/14/2011	ND	R
SB-148(11)	20-21	10/14/2011	**0.87 J**	R
SB-150(11)	15-16	10/17/2011	ND	ND
SB-150(11)	20-21	10/17/2011	ND	ND
SB-151(11)	18-19	10/17/2011	ND	ND
SB-152(11)	17-19	10/17/2011	ND	ND
SB-153(11)	16.5-17.5	10/17/2011	**1.3 J**	ND
SB-153(11)	23.5-24.5	10/17/2011	ND	ND
SB-155(11)	23.5-25	10/18/2011	ND	ND
SB-155(11)	30-32	10/18/2011	ND	ND
SB-156(11)	23.3-24	10/18/2011	ND	**0.99 J**
SB-156(11)	26-29	10/18/2011	ND	ND
SB-157(11)	16-17	10/14/2011	**1.5 J**	R
SB-158(11)	16.5-17.5	10/14/2011	**1.1 J**	R
SB-159(11)	16-17	10/17/2011	ND	ND
SB-159(11)	22-23	10/17/2011	**0.86 J**	ND
SB-161(11)	17-18	10/17/2011	ND	ND
SB-162(11)	16.75-18	10/18/2011	ND	**12.9 J**
SB-162(11)	22-23	10/18/2011	ND	**0.83 J**
SB-163(11)	15.5-17.5	10/19/2011	ND	ND
SB-164(11)	19-20	10/18/2011	ND	**26.5 J**
SB-165(11)	16.5-17.5	10/19/2011	ND	ND
SB-165(11)	22-24.5	10/19/2011	ND	ND
SB-166(11)	16-18	10/19/2011	ND	ND
Duplicate of: SB-166(11)	16-18	10/19/2011	ND	ND
SB-167(11)	24-25	10/19/2011	ND	ND
SB-168(11)	20-22	10/19/2011	ND	ND
Duplicate of: SB-168(11)	20-22	10/19/2011	ND	ND

LEGEND

- OPERABLE UNIT 2 NORTH
- OPERABLE UNIT 2 SOUTH
- POSTAGE STAMP AREA
- POSTAGE STAMP ASSOCIATED AREA

Total Cyanide

- < 27 mg/kg
- 27-50 mg/kg
- 50-100 mg/kg
- 100 -200 mg/kg
- 200 > mg/kg

ANALYTICAL BOX NOTES

COMMERCIAL SCOs - Regulatory comparison against 6NYCRR, Chapter IV, Part 375-6

ft bgs	FEET BELOW GROUND SURFACE
mg/kg	MILLIGRAMS PER KILOGRAM
NA	NOT ANALYZED
ND	NOT DETECTED
J	ESTIMATED VALUE
R	REJECTED

NOTES:
1. WHITE DOT INDICATES A DETECTION BELOW THE COMMERCIAL SCO.
2. YELLOW DOT INDICATES AN EXCEEDANCE OF THE COMMERCIAL SCO.
3. SAMPLE LOCATIONS WHERE CYANIDE WAS NOT DETECTED (ND) ARE NOT SHOWN ON AERIAL PLAN.

0 17.5 35 70
SCALE, FEET

SOURCE:
BING AERIAL IMAGE © 2008 MICROSOFT CORP.

REMEDIAL INVESTIGATION - OU2
CLINTON STREET FORMER MGP SITE
SCHENECTADY, NEW YORK

nationalgrid

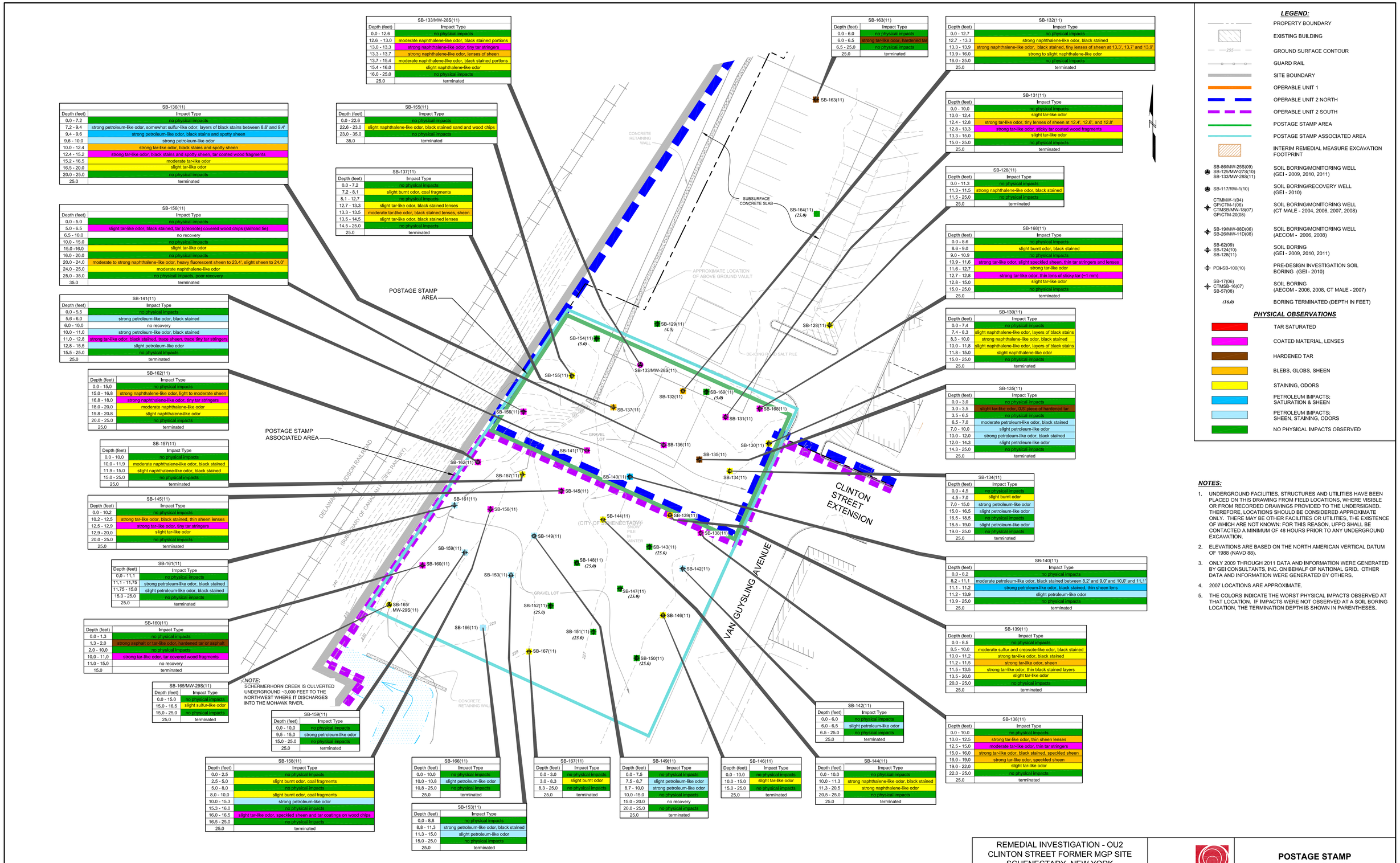
PROJECT 091990-1-1104

GEI Consultants
455 WINDING BROOK DRIVE
SUITE 201
GLASTONBURY, CONNECTICUT 06033

POSTAGE STAMP SURFACE AND SUBSURFACE SOIL SUMMARIZED FREE AND TOTAL CYANIDE ANALYTICAL RESULTS (mg/kg)

December 2012 Figure 19

J:\Projects\National_Grid\SchenectadyMGP\PostageStampRI\Schenectady_PSRI_Free-TotalCyanideSoil_09-2012.mxd



SB-133/MW-28S(11)	
Depth (feet)	Impact Type
0,0 - 12,6	no physical impacts
12,6 - 13,0	moderate naphthalene-like odor, black stained portions
13,0 - 13,3	strong naphthalene-like odor, tiny tar stringers
13,3 - 13,7	strong naphthalene-like odor, lenses of sheen
13,7 - 15,4	moderate naphthalene-like odor, black stained portions
15,4 - 16,0	slight naphthalene-like odor
16,0 - 25,0	no physical impacts
25,0	terminated

SB-163(11)	
Depth (feet)	Impact Type
0,0 - 6,0	no physical impacts
6,0 - 6,5	strong tar-like odor, hardened tar
6,5 - 25,0	no physical impacts
25,0	terminated

SB-132(11)	
Depth (feet)	Impact Type
0,0 - 12,7	no physical impacts
12,7 - 13,3	strong naphthalene-like odor, black stained
13,3 - 13,9	strong naphthalene-like odor, black stained, tiny lenses of sheen at 13,3', 13,7' and 13,9'
13,9 - 16,0	strong to slight naphthalene-like odor
16,0 - 25,0	no physical impacts
25,0	terminated

SB-136(11)	
Depth (feet)	Impact Type
0,0 - 7,2	no physical impacts
7,2 - 9,4	strong petroleum-like odor, somewhat sulfur-like odor, layers of black stains between 8,6' and 9,4'
9,4 - 9,6	strong petroleum-like odor, black stains and spotty sheen
9,6 - 10,0	strong petroleum-like odor
10,0 - 12,4	strong tar-like odor, black stains and spotty sheen
12,4 - 15,2	strong tar-like odor, black stains and spotty sheen, tar coated wood fragments
15,2 - 16,5	moderate tar-like odor
16,5 - 20,0	slight tar-like odor
20,0 - 25,0	no physical impacts
25,0	terminated

SB-155(11)	
Depth (feet)	Impact Type
0,0 - 22,6	no physical impacts
22,6 - 23,0	slight naphthalene-like odor, black stained sand and wood chips
23,0 - 35,0	no physical impacts
35,0	terminated

SB-131(11)	
Depth (feet)	Impact Type
0,0 - 10,0	no physical impacts
10,0 - 12,4	slight tar-like odor
12,4 - 12,8	strong tar-like odor, tiny lenses of sheen at 12,4', 12,6', and 12,8'
12,8 - 13,3	strong tar-like odor, sticky tar coated wood fragments
13,3 - 15,0	slight tar-like odor
15,0 - 25,0	no physical impacts
25,0	terminated

SB-137(11)	
Depth (feet)	Impact Type
0,0 - 7,2	no physical impacts
7,2 - 8,1	slight burnt odor, coal fragments
8,1 - 12,7	no physical impacts
12,7 - 13,3	slight tar-like odor, black stained lenses
13,3 - 13,5	moderate tar-like odor, black stained lenses, sheen
13,5 - 14,5	slight tar-like odor, black stained lenses
14,5 - 25,0	no physical impacts
25,0	terminated

SB-128(11)	
Depth (feet)	Impact Type
0,0 - 11,3	no physical impacts
11,3 - 11,5	strong naphthalene-like odor, black stained
11,5 - 25,0	no physical impacts
25,0	terminated

SB-156(11)	
Depth (feet)	Impact Type
0,0 - 5,0	no physical impacts
5,0 - 6,5	slight tar-like odor, black stained, tar (creosote) covered wood chips (railroad tie)
6,5 - 10,0	no recovery
10,0 - 15,0	no physical impacts
15,0 -16,0	slight tar-like odor
16,0 - 20,0	no physical impacts
20,0 - 24,0	moderate to strong naphthalene-like odor, heavy fluorescent sheen to 23,4', slight sheen to 24,0'
24,0 - 25,0	moderate naphthalene-like odor
25,0 - 35,0	no physical impacts, poor recovery
35,0	terminated

SB-168(11)	
Depth (feet)	Impact Type
0,0 - 8,6	no physical impacts
8,6 - 9,0	slight burnt odor, black stained
9,0 - 10,9	no physical impacts
10,9 - 11,6	strong tar-like odor, slight speckled sheen, thin tar stringers and lenses
11,6 - 12,7	strong tar-like odor
12,7 - 12,8	strong tar-like odor, thin lens of sticky tar (~1 mm)
12,8 - 15,0	slight tar-like odor
15,0 - 25,0	no physical impacts
25,0	terminated

SB-141(11)	
Depth (feet)	Impact Type
0,0 - 5,5	no physical impacts
5,6 - 6,0	strong petroleum-like odor, black stained
6,0 - 10,0	no recovery
10,0 - 11,0	strong petroleum-like odor, black stained
11,0 - 12,8	strong tar-like odor, black stained, trace sheen, trace tiny tar stringers
12,8 - 15,5	slight petroleum-like odor
15,5 - 25,0	no physical impacts
25,0	terminated

SB-130(11)	
Depth (feet)	Impact Type
0,0 - 7,4	no physical impacts
7,4 - 8,3	slight naphthalene-like odor, layers of black stains
8,3 - 10,0	strong naphthalene-like odor, black stained
10,0 - 11,8	slight naphthalene-like odor, layers of black stains
11,8 - 15,0	slight naphthalene-like odor
15,0 - 25,0	no physical impacts
25,0	terminated

SB-162(11)	
Depth (feet)	Impact Type
0,0 - 15,0	no physical impacts
15,0 - 16,8	strong naphthalene-like odor, light to moderate sheen
16,8 - 18,0	strong naphthalene-like odor, tiny tar stringers
18,0 - 20,0	moderate naphthalene-like odor
19,8 - 20,6	slight naphthalene-like odor
20,0 - 25,0	no physical impacts
25,0	terminated

SB-135(11)	
Depth (feet)	Impact Type
0,0 - 3,0	no physical impacts
3,0 - 3,5	slight tar-like odor, 0,5' piece of hardened tar
3,5 - 6,5	no physical impacts
6,5 - 7,0	moderate petroleum-like odor, black stained
7,0 - 10,0	slight petroleum-like odor
10,0 - 12,0	strong petroleum-like odor, black stained
12,0 - 14,3	slight petroleum-like odor
14,3 - 25,0	no physical impacts
25,0	terminated

SB-157(11)	
Depth (feet)	Impact Type
0,0 - 10,0	no physical impacts
10,0 - 11,9	moderate naphthalene-like odor, black stained
11,9 - 15,0	slight naphthalene-like odor, black stained
15,0 - 25,0	no physical impacts
25,0	terminated

SB-134(11)	
Depth (feet)	Impact Type
0,0 - 4,5	no physical impacts
4,5 - 7,0	slight burnt odor
7,0 - 15,0	strong petroleum-like odor
15,0 - 16,5	slight petroleum-like odor
16,5 - 18,5	no physical impacts
18,5 - 19,0	slight petroleum-like odor
19,0 - 25,0	no physical impacts
25,0	terminated

SB-145(11)	
Depth (feet)	Impact Type
0,0 - 10,2	no physical impacts
10,2 - 12,5	strong tar-like odor, black stained, thin sheen lenses
12,5 - 12,9	strong tar-like odor, tiny tar stringers
12,9 - 20,0	slight tar-like odor
20,0 - 25,0	no physical impacts
25,0	terminated

SB-140(11)	
Depth (feet)	Impact Type
0,0 - 8,2	no physical impacts
8,2 - 11,1	moderate petroleum-like odor, black stained between 8,2' and 9,0' and 10,0' and 11,1'
11,1 - 11,2	strong petroleum-like odor, black stained, thin sheen lens
11,2 - 13,9	slight petroleum-like odor
13,9 - 25,0	no physical impacts
25,0	terminated

SB-161(11)	
Depth (feet)	Impact Type
0,0 - 11,1	no physical impacts
11,1 - 11,75	strong petroleum-like odor, black stained
11,75 - 15,0	slight petroleum-like odor, black stained
15,0 - 25,0	no physical impacts
25,0	terminated

SB-139(11)	
Depth (feet)	Impact Type
0,0 - 8,5	no physical impacts
8,5 - 10,0	moderate sulfur and creosote-like odor, black stained
10,0 - 11,2	strong tar-like odor, black stained
11,2 - 11,5	strong tar-like odor, sheen
11,5 - 13,5	strong tar-like odor, thin black stained layers
13,5 - 20,0	slight tar-like odor
20,0 - 25,0	no physical impacts
25,0	terminated

SB-160(11)	
Depth (feet)	Impact Type
0,0 - 1,3	no physical impacts
1,3 - 2,0	strong asphalt or tar-like odor, hardened tar or asphalt
2,0 - 10,0	no physical impacts
10,0 - 11,0	strong tar-like odor, tar covered wood fragments
11,0 - 15,0	no recovery
15,0	terminated

SB-142(11)	
Depth (feet)	Impact Type
0,0 - 6,0	no physical impacts
6,0 - 6,5	slight petroleum-like odor
6,5 - 25,0	no physical impacts
25,0	terminated

SB-138(11)	
Depth (feet)	Impact Type
0,0 - 10,0	no physical impacts
10,0 - 12,5	strong tar-like odor, thin sheen lenses
12,5 - 15,0	moderate tar-like odor, thin tar stringers
15,0 - 16,0	strong tar-like odor, black stained, speckled sheen
16,0 - 19,0	strong tar-like odor, speckled sheen
19,0 - 22,0	slight tar-like odor
22,0 - 25,0	no physical impacts
25,0	terminated

SB-165/MW-29S(11)	
Depth (feet)	Impact Type
0,0 - 15,0	no physical impacts
15,0 - 16,5	slight sulfur-like odor
15,0 - 25,0	no physical impacts
25,0	terminated

SB-159(11)	
Depth (feet)	Impact Type
0,0 - 10,0	no physical impacts
9,5 - 15,0	strong petroleum-like odor
15,0 - 25,0	no physical impacts
25,0	terminated

SB-158(11)	
Depth (feet)	Impact Type
0,0 - 2,5	no physical impacts
2,5 - 5,0	slight burnt odor, coal fragments
5,0 - 8,0	no physical impacts
8,0 - 10,0	slight burnt odor, coal fragments
10,0 - 15,3	strong petroleum-like odor
15,3 - 16,0	no physical impacts
16,0 - 16,5	slight tar-like odor, speckled sheen and tar coatings on wood chips
16,5 - 25,0	no physical impacts
25,0	terminated

SB-166(11)	
Depth (feet)	Impact Type
0,0 - 10,0	no physical impacts
10,0 - 10,8	slight petroleum-like odor
10,8 - 25,0	no physical impacts
25,0	terminated

SB-167(11)	
Depth (feet)	Impact Type
0,0 - 3,0	no physical impacts
3,0 - 8,3	slight burnt odor
8,3 - 25,0	no physical impacts
25,0	terminated

SB-149(11)	
Depth (feet)	Impact Type
0,0 - 7,5	no physical impacts
7,5 - 8,7	slight petroleum-like odor
8,7 - 10,0	strong petroleum-like odor
10,0 -15,0	no physical impacts
15,0 - 20,0	no recovery
20,0 - 25,0	no physical impacts
25,0	terminated

SB-146(11)	
Depth (feet)	Impact Type
0,0 - 10,0	no physical impacts
10,0 - 15,0	slight tar-like odor
15,0 - 25,0	no physical impacts
25,0	terminated

SB-144(11)	
Depth (feet)	Impact Type
0,0 - 10,0	no physical impacts
10,0 - 11,3	strong naphthalene-like odor, black stained
11,3 - 20,5	strong naphthalene-like odor
20,5 - 25,0	no physical impacts
25,0	terminated

SB-153(11)	
Depth (feet)	Impact Type
0,0 - 8,8	no physical impacts
8,8 - 11,3	strong petroleum-like odor, black stained
11,3 - 15,0	slight petroleum-like odor
15,0 - 25,0	no physical impacts
25,0	terminated

LEGEND:

- PROPERTY BOUNDARY
- EXISTING BUILDING
- 255 GROUND SURFACE CONTOUR
- GUARD RAIL
- SITE BOUNDARY
- OPERABLE UNIT 1
- OPERABLE UNIT 2 NORTH
- OPERABLE UNIT 2 SOUTH
- POSTAGE STAMP AREA
- POSTAGE STAMP ASSOCIATED AREA
- INTERIM REMEDIAL MEASURE EXCAVATION FOOTPRINT
- SB-86/MW-25S(09) SB-125/MW-27S(10) SB-133/MW-28S(11) — SOIL BORING/MONITORING WELL (GEI - 2009, 2010, 2011)
- SB-117/RW-1(10) — SOIL BORING/RECOVERY WELL (GEI - 2010)
- CTMMW-1(04) GP/CTM-1(06) CTMSB/MW-18(07) GP/CTM-20(08) — SOIL BORING/MONITORING WELL (CT MALE - 2004, 2006, 2007, 2008)
- SB-19/MW-08D(06) SB-26/MW-11D(08) — SOIL BORING/MONITORING WELL (AECOM - 2006, 2008)
- SB-62(09) SB-124(10) SB-128(11) — SOIL BORING (GEI - 2009, 2010, 2011)
- PDI-SB-100(10) — PRE-DESIGN INVESTIGATION SOIL BORING (GEI - 2010)
- SB-17(06) CTMSB-16(07) SB-57(08) — SOIL BORING (AECOM - 2006, 2008, CT MALE - 2007)
- (16.0) — BORING TERMINATED (DEPTH IN FEET)

PHYSICAL OBSERVATIONS

- TAR SATURATED
- COATED MATERIAL, LENSES
- HARDENED TAR
- BLEBS, GLOBS, SHEEN
- STAINING, ODORS
- PETROLEUM IMPACTS; SATURATION & SHEEN
- PETROLEUM IMPACTS; SHEEN, STAINING, ODORS
- NO PHYSICAL IMPACTS OBSERVED

NOTES:

1. UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLACED ON THIS DRAWING FROM FIELD LOCATIONS. WHERE VISIBLE OR FROM RECORDED DRAWINGS PROVIDED TO THE UNDERSIGNED. THEREFORE, LOCATIONS SHOULD BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE OTHER FACILITIES OR UTILITIES, THE EXISTENCE OF WHICH ARE NOT KNOWN; FOR THIS REASON, UFPO SHALL BE CONTACTED A MINIMUM OF 48 HOURS PRIOR TO ANY UNDERGROUND EXCAVATION.
2. ELEVATIONS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
3. ONLY 2009 THROUGH 2011 DATA AND INFORMATION WERE GENERATED BY GEI CONSULTANTS, INC. ON BEHALF OF NATIONAL GRID. OTHER DATA AND INFORMATION WERE GENERATED BY OTHERS.
4. 2007 LOCATIONS ARE APPROXIMATE.
5. THE COLORS INDICATE THE WORST PHYSICAL IMPACTS OBSERVED AT THAT LOCATION. IF IMPACTS WERE NOT OBSERVED AT A SOIL BORING LOCATION, THE TERMINATION DEPTH IS SHOWN IN PARENTHESES.

0 20 40
SCALE, FEET

REMEDIAL INVESTIGATION - OU2
CLINTON STREET FORMER MGP SITE
SCHENECTADY, NEW YORK

nationalgrid

PROJECT 091990-1-1104

GEI Consultants
455 WINDING BROOK DRIVE
SUITE 201
GLASTONBURY, CONNECTICUT 06033

POSTAGE STAMP SUBSURFACE SOIL PHYSICAL IMPACTS

December 2012 Figure 20

I:\PROJECT\NATIONAL GRID\SCHENECTADY\091990\OU2 POSTAGE STAMP RI\2012-12\SCHENECTADY-PHYSICAL OBSERVATIONS.DWG

Sample Name: / Sample Date:	NYS AWQS	MW-28S(11) 11/15/2011
Groundwater Results		
BTEX (µg/l)		
Benzene	1	28
Toluene	5	37
Ethylbenzene	5	17
Total Xylene	5	84
Total BTEX	NE	166
PAHs (µg/l)		
Benz[a]anthracene	0.002*	0.49 J
Total PAHs	NE	113.89
Total PCBs	NE	ND
Total Cyanide	200	297

Sample Name: / Sample Date:	NYS AWQS	CTM-23(06) 2/5/2008	CTM-23(06) 11/15/2011
Groundwater Results			
BTEX (µg/l)			
Benzene	1	14	51
Toluene	5	NA	5.1
Total Xylene	5	NA	12
Total BTEX	NE	14	73.1
PAHs (µg/l)			
Naphthalene	10*	31	100
Total PAHs	NE	60.6	123.1
Total PCBs	NE	NA	ND
Total Cyanide	200	1210	767

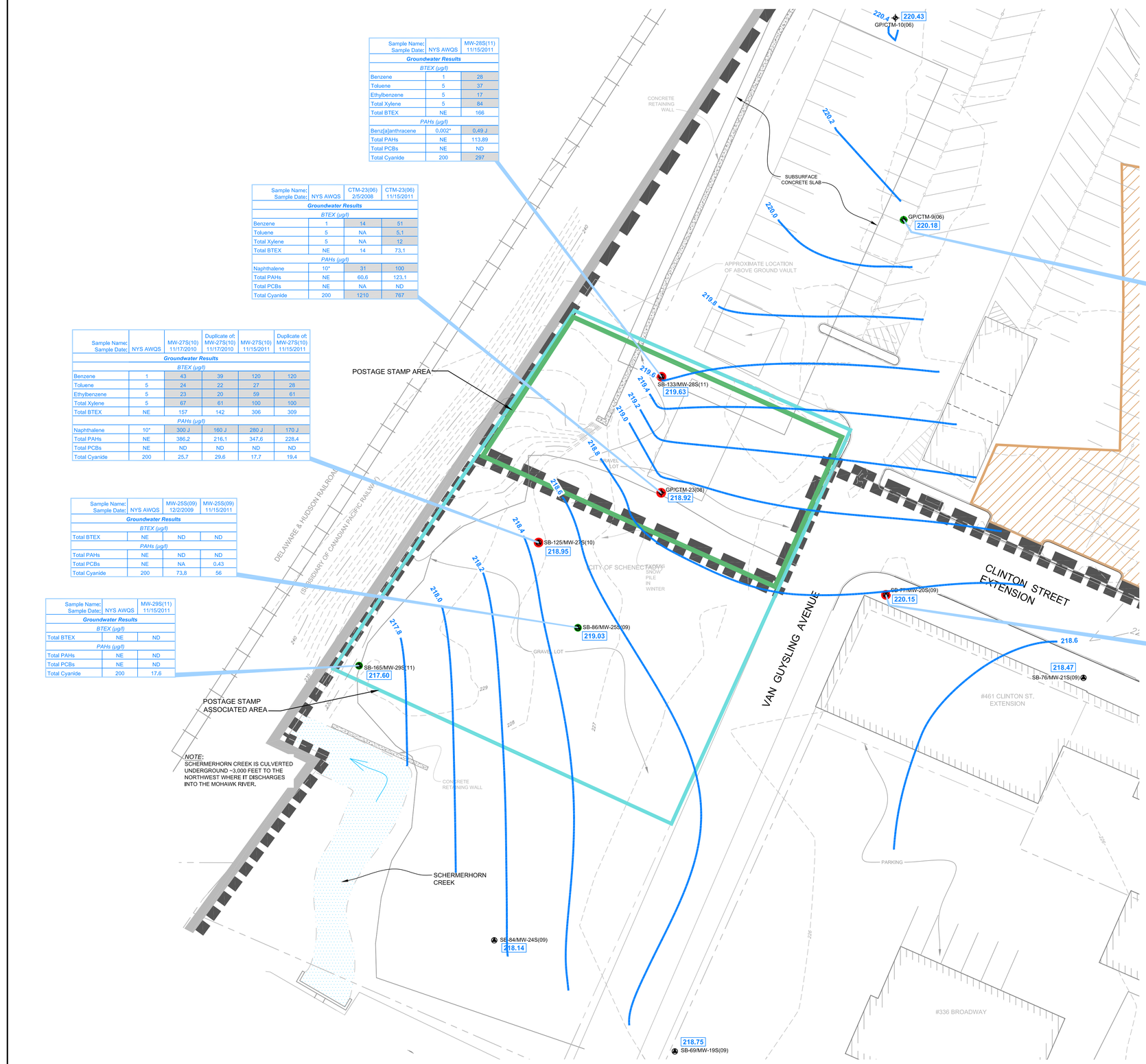
Sample Name: / Sample Date:	NYS AWQS	MW-27S(10) 11/17/2010	Duplicate of: MW-27S(10) 11/17/2010	MW-27S(10) 11/15/2011	Duplicate of: MW-27S(10) 11/15/2011
Groundwater Results					
BTEX (µg/l)					
Benzene	1	43	39	120	120
Toluene	5	24	22	27	28
Ethylbenzene	5	23	20	59	61
Total Xylene	5	67	61	100	100
Total BTEX	NE	157	142	306	309
PAHs (µg/l)					
Naphthalene	10*	300 J	160 J	280 J	170 J
Total PAHs	NE	386.2	216.1	347.6	228.4
Total PCBs	NE	ND	ND	ND	ND
Total Cyanide	200	25.7	29.6	17.7	19.4

Sample Name: / Sample Date:	NYS AWQS	MW-25S(09) 12/2/2009	MW-25S(09) 11/15/2011
Groundwater Results			
BTEX (µg/l)			
Total BTEX	NE	ND	ND
PAHs (µg/l)			
Total PAHs	NE	ND	ND
Total PCBs	NE	NA	0.43
Total Cyanide	200	73.8	56

Sample Name: / Sample Date:	NYS AWQS	MW-29S(11) 11/15/2011
Groundwater Results		
BTEX (µg/l)		
Total BTEX	NE	ND
PAHs (µg/l)		
Total PAHs	NE	ND
Total PCBs	NE	ND
Total Cyanide	200	17.6

Sample Name: / Sample Date:	NYS AWQS	CTM-9(06) 6/15/2006	CTM-9(06) 11/15/2011
Groundwater Results			
BTEX (µg/l)			
Total BTEX	NE	ND	ND
PAHs (µg/l)			
Total PAHs	NE	ND	ND
Total PCBs	NE	ND	ND
Total Cyanide	200	NA	1530

Sample Name: / Sample Date:	NYS AWQS	MW-20S(09) 1/12/2009	MW-20S(09) 11/15/2011
Groundwater Results			
BTEX (µg/l)			
Benzene	1	69	460
Toluene	5	49	360
Ethylbenzene	5	24 J	92
Total Xylene	5	75	300
Total BTEX	NE	1217	1212
PAHs (µg/l)			
Acenaphthene	20*	120	160
Fluorene	50*	83	110 J
Naphthalene	10*	610	930
Phenanthrene	50*	95	110 J
Total PAHs	NE	991.9	1402
Total PCBs	NE	NA	ND
Total Cyanide	200	354	1440



LEGEND:

- PROPERTY BOUNDARY
- EXISTING BUILDING
- 255 — GROUND SURFACE CONTOUR
- GUARD RAIL
- SITE BOUNDARY
- OPERABLE UNIT 1
- OPERABLE UNIT 2 NORTH
- OPERABLE UNIT 2 SOUTH
- POSTAGE STAMP AREA
- POSTAGE STAMP ASSOCIATED AREA
- INTERIM REMEDIAL MEASURE EXCAVATION FOOTPRINT
- SB-86/MW-25S(09) SB-125/MW-27S(10) — SOIL BORING/MONITORING WELL LOCATION (GEI - 2009, 2010)
- SB-117/RW-1(10) — SOIL BORING/RECOVERY WELL LOCATION (GEI - 2010)
- CTMMW-1(04) GP/CTM-1(06) CTMSB/MW-18(07) GP/CTM-20(06) — SOIL BORING/MONITORING WELL LOCATION (CT MALE - 2004, 2006, 2007, 2008)
- SB-1/MW-1(04) SB-10A/MW-5(06) SB-26/MW-11D(08) — SOIL BORING/MONITORING WELL LOCATION (LIGHTSHIP ENGINEERING - 2004, AECOM - 2006, 2008)
- (04), (06), (07), (08), (09), (10) — YEAR INSTALLED
- 220.18 — GROUNDWATER ELEVATION (NOVEMBER 15, 2011)
- 219.0 — 2011 SHALLOW GROUNDWATER CONTOUR (FEET NAVD 88)

ANALYTICAL BOX NOTES

- 1530 — CONCENTRATION OF COMPOUND THAT EXCEEDS NEW YORK STATE AMBIENT WATER QUALITY STANDARDS (AWQS)
- ONE OR MORE BTEX OR PAH COMPOUNDS DETECTED ABOVE ASSOCIATED AWQS
- NO BTEX OR PAH COMPOUNDS DETECTED ABOVE ASSOCIATED AWQS
- SHALLOW WELLS (< 40 FEET BELOW GROUND SURFACE)

µg/l	MICROGRAMS PER LITER
PAHs	POLYCYCLIC AROMATIC HYDROCARBONS
BTEX	BENZENE, TOLUENE, ETHYLBENZENE, XYLENE
PCBs	POLYCHLORINATED BIPHENYLS
NA	NOT AVAILABLE, NOT APPLICABLE, OR NOT ANALYZED
ND	NOT DETECTED
NE	NOT ESTABLISHED
J	ESTIMATED VALUE
*	VALUE IS A GUIDANCE, NOT A STANDARD

NOTES:

1. UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLACED ON THIS DRAWING FROM FIELD LOCATIONS, WHERE VISIBLE OR FROM RECORDED DRAWINGS PROVIDED TO THE UNDERSIGNED. THEREFORE, LOCATIONS SHOULD BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE OTHER FACILITIES OR UTILITIES. THE EXISTENCE OF WHICH ARE NOT KNOWN: FOR THIS REASON, UFPO SHALL BE CONTACTED A MINIMUM OF 48 HOURS PRIOR TO ANY UNDERGROUND EXCAVATION.
2. ELEVATIONS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
3. ONLY 2009 AND 2010 DATA AND INFORMATION WERE GENERATED BY GEI CONSULTANTS, INC. ON BEHALF OF NATIONAL GRID. OTHER DATA AND INFORMATION WERE GENERATED BY OTHERS.

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SCALE, FEET

REMEDIAL INVESTIGATION - OU2
CLINTON STREET FORMER MGP SITE
SCHENECTADY, NEW YORK

nationalgrid

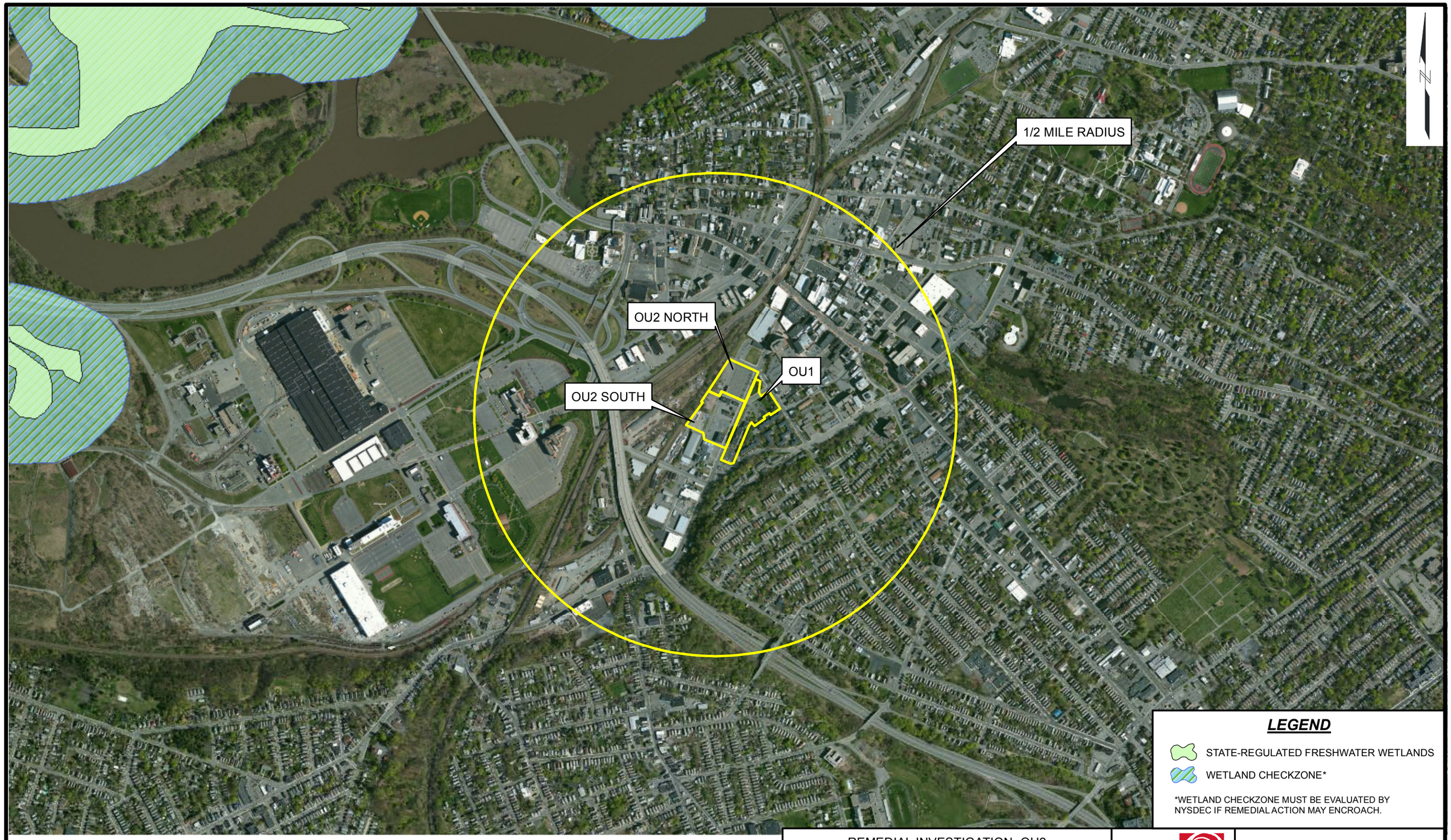
PROJECT 091990-1-1104

GEI Consultants
455 WINDING BROOK DRIVE
SUITE 201
GLASTONBURY, CONNECTICUT 06033

POSTAGE STAMP GROUNDWATER SUMMARIZED ANALYTICAL RESULTS (µg/L)

December 2012 — Figure 21

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LEGEND

STATE-REGULATED FRESHWATER WETLANDS

WETLAND CHECKZONE*

*WETLAND CHECKZONE MUST BE EVALUATED BY NYSDEC IF REMEDIAL ACTION MAY ENCROACH.

SOURCES:

1. DATA ACCESSED AND DERIVED FROM NYDEC ENVIRONMENTAL RESOURCE MAPPER (HTTP://WWW.DEC.NY.GOV/IMSMAPS/ERM/VIEWER.HTM)
2. AERIAL PHOTOGRAPH OBTAINED FROM BING MAPS. ©2010

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SCALE, FEET

REMEDIAL INVESTIGATION- OU2
CLINTON STREET FORMER MGP SITE
SCHENECTADY, NEW YORK

nationalgrid

GEI Consultants

FISH AND WILDLIFE RESOURCES

Project 091990 | December 2012 | Figure 22

J:\Projects\National_Grid\SchenectadyMGP\PostageStampRI\Schenectady_FishandWildlife_12-2012.mxd

Appendix A

Correspondence (Electronic Only)

New York State Department of Environmental Conservation
Division of Environmental Remediation
Remedial Bureau C, 11th Floor
625 Broadway, Albany, New York 12233-7014
Phone: (518) 402-9662 • **Fax:** (518) 402-9679
Website: www.dec.ny.gov

Alexander B. Grannis
Commissioner

July 1, 2009

Mr. Edward Neahauser
Principle Environmental Engineer
National Grid
300 Erie Boulevard West
Syracuse, NY 13202

Re: Schenectady (Clinton St.) MGP Site
Schenectady (City), Schenectady County, New York
Site No. V00474
Remedial Investigation Work Plan for OU2

Dear Mr. Neuhauser,

The New York State Department of Environmental Conservation (Department) has reviewed the OU2 Remedial Investigation Work Plan (WP) dated June 29, 2009 that was prepared by AECOM for the above site. Based on this review the WP is approved. Please confirm that field work related to the OU-2 remedial investigation will be initiated within 30 days of this approval and provide no less than seven days notice prior to performing any field work.

As always, please feel free to contact me at 518-402-9662 to discuss these comments or any aspect of this project. Thank you in advance for your timely work on this document.

Sincerely,

Charles Post
Engineering Geologist I
NYS Department of Environmental Conservation
Division of Environmental Remediation

ec: G. Heitzman
K. Goertz

New York State Department of Environmental Conservation
Division of Environmental Remediation
Remedial Bureau C, 11th Floor
625 Broadway, Albany, New York 12233-7014
Phone: (518) 402-9662 • **Fax:** (518) 402-9679
Website: www.dec.ny.gov

Alexander B. Grannis
Commissioner

June 21, 2010

Mr. Edward Neahauser
Principle Environmental Engineer
National Grid
300 Erie Boulevard West
Syracuse, NY 13202

Re: Schenectady (Clinton St.) MGP Site
Schenectady (City), Schenectady County, New York
Site No. V00474
Interim Remedial Measure within OU2 at 312 Broadway Parking Lot

Dear Mr. Neuhauser,

The New York State Department of Environmental Conservation (Department) met with representatives from the City of Schenectady and Metroplex on May 26, 2010 and was informed that the parking facility at 312 Broadway is scheduled to be upgraded. The proposed upgrades include the removal/replacement of some underground utilities within the property boundary including the storm water management and drainage system and resurfacing. The site owners indicated that the construction may be performed as early as the Fall of 2010, however a Spring 2011 start date was more likely. The 312 Broadway property is a project in the Department's Environmental Restoration Program (ERP).

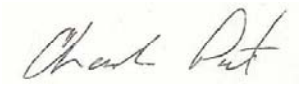
Based on these discussions it appears that the underground construction would be within the area identified by National Grid as having been contaminated with manufactured gas plant (MGP wastes attributable to the former Schenectady (Clinton Street) MGP. The depth of MGP-related contamination ranges from approximately five to 20 feet based on samples collected by both National Grid and the City of Schenectady. As such, National Grid is responsible for the remediation of this material.

The Department is requesting that National Grid consider the implementation of an interim remedial measure (IRM) immediately prior to, or concurrent with, the improvement project at the 312 Broadway site. The implementation would enable the property owner to install subsurface utilities in clean material, prevent damage to these improvements during future remediation, and minimize the length of time that parking would be impinged. The presumed remedial alternatives should include the excavation of soil contaminated with MGP-related source and residual material above and below the groundwater table. The Department is prepared to meet with National Grid to scope an IRM for this property.

As part of the evaluation of an IRM, the Department will require National Grid to evaluate the potential for recontamination from off-site sources and develop contingencies if the conditions identified during the IRM indicate that recontamination may occur. This evaluation could be performed as part of any design investigation that may be required.

As always, please feel free to contact me at 518-402-9662 to discuss these comments or any aspect of this project. Thank you in advance for your timely work on this document.

Sincerely,



Charles Post
Engineering Geologist I

ec: G. Heitzman, NYSDEC
I. Beilby, NYSDEC
N. Freeman, NYSDOH

New York State Department of Environmental Conservation
Division of Environmental Remediation
Remedial Bureau C, 11th Floor
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Alexander B. Grannis
Commissioner

June 23, 2010

Mr. Edward Neuhauser
Principal Environmental Engineer
National Grid
300 Erie Boulevard West
Syracuse, NY 13202

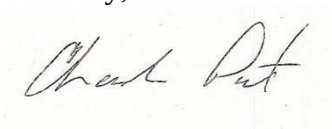
Re: Schenectady (Clinton St.) MGP Site
Schenectady (City), Schenectady County, New York
Site No. V00474
NAPL Extraction form Monitoring Wells Located in Operable Unit 1 and 2

Dear Mr. Neuhauser,

The New York State Department of Environmental Conservation (Department) has reviewed the Data Summary presented to the Department on May 27, 2010 for Operable Unit(OU) 2 and has noted accumulated manufactured gas plant (MGP)-related non-aqueous phase liquid (NAPL) in several groundwater monitoring wells. The Department does not agree with National Grid's previous conclusion that the conditions do not warrant the implementation of an interim remedial measure (IRM) for the presence and accumulation of NAPL in these monitoring wells. Rather, the presence of accumulated NAPL indicates that the NAPL is mobile and the well sumps appear to be topped or nearly topped; therefore, the NAPL migration should be addressed concurrently with the remedial investigation and the remedial alternatives analysis. The Department is requesting that the accumulated NAPL be periodically removed from groundwater monitoring wells located within OU1 and OU2 at a frequency sufficient to ensure that the well sumps are not topped. Additionally, the Department would request that active NAPL recovery feasibility be tested and evaluated. The feasibility results of NAPL recovery will be evaluated by the Department and can be integrated into the OU1 and OU2 alternatives analysis.

As always, please feel free to contact me at 518-402-9662 to discuss these comments or any aspect of this project. Thank you in advance for your timely work on this document.

Sincerely,



Charles Post
Engineering Geologist I
NYS Department of Environmental Conservation
Division of Environmental Remediation

40 years of stewardship 1970-2010

Ec: G. Heitzman
K. Goertz

Geotechnical
Environmental
Water Resources
Ecological

July 28, 2010

Mr. Charlie Post
New York State Department of Environmental Conservation
Bureau of Remedial Action
Division of Environmental Remediation
625 Broadway, 11th Floor
Albany, New York 12233-7010

Subject: Pre-Design Investigation Work Plan
312 Broadway and NAPL Recovery Pilot
Schenectady OU2 Former MGP Site
NYSDEC Site #V00474
Index #: D0-0001-0011

Dear Mr. Post:

At the request of the NYSDEC, in letters dated June 21, 2010 and June 23, 2010, this Pre-Design Investigation Work Plan has been developed in order to more precisely determine the extent of soil impacts at 312 Broadway, and to install a Pilot Non-Aqueous Phase Liquid (NAPL) Recovery Well on the west side of Broadway at the subject site. This data is necessary to begin the design of the Interim Remedial Measures (IRMs) at 312 Broadway and the NAPL Recovery Pilot west of Broadway.

Site Background and Description

The manufactured gas plant (MGP) operated for about 79 years (ca. 1851 to 1930) using coal to produce gas. Gas was distributed to consumers through buried mains and used primarily for illumination. Several residuals from the MGP process were generated which were identified at the site, including: coal tar, coke, and ash.

The on-site area consists of the area of the former MGP process operations, which is now occupied by the Schenectady Municipal Housing Authority (SMHA) and a portion of Clinton Street. The SMHA provides subsidized public housing for elderly or handicapped adults in several buildings at the site. The NYSDEC has indicated that this area will be designated Operable Unit 1 (OU1).

The off-site area consists of several roadways and portions of two city blocks to the west of the SMHA property. This area has been designated Operable Unit 2 (OU2).

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1301 Trumansburg Road, Suite N, Ithaca, NY 14850
607.216.8955 fax: 607.274.7577

Previous Investigations

The Remedial Investigation (RI) for OU1 was completed by AECOM in June of 2009. The RI found MGP source material beneath the parking lot of the SMHA property, and remnants of several subsurface MGP structures. Monitoring wells were installed in both the OU1 and OU2 areas. NAPL has accumulated in several of the wells, with the majority being recovered on the west side of Broadway (OU2).

The RI for OU2 has been completed by GEI Consultants, Inc. (GEI). The RI report will be drafted and submitted in the second half of 2010. Preliminary results indicate that MGP impacts are present at depth under Broadway and west of Broadway. The horizontal and vertical extents of the MGP soil impacts have been established.

Preliminary RI results for the 312 Broadway property within OU2 indicate the presence of NAPL and MGP soil impacts, which are apparently isolated from other MGP impacts at the site.

Pre-Design Investigation Objective

The purpose of the Pre-Design Investigation is twofold. First, additional sampling is needed in order to more clearly define the extent of MGP soil impacts exceeding Commercial Soil Cleanup Objectives (CSCOs) on the 312 Broadway property. It has been requested that this property be remediated, and left in a "shovel ready" condition so that the parcel can be redeveloped for a commercial property use by the owner. The focus of the Pre-Design Investigation will be to delineate the extent of soil impacts in order to facilitate direct loading of materials during the IRM. The sample locations will be placed between known soil impacts and clean samples to delineate the excavation limits. Angled borings advanced beneath Broadway and Clinton Street Extension will enable the IRM to address potential re-contamination of 312 Broadway. Also to be sampled on this parcel are several locations in the southwest corner of the parking lot to confirm that the area does not have MGP soil impacts.

Secondly, sampling will occur on the west side of Broadway to verify potential locations for the NAPL Recovery Pilot Well. These borings will aid in determining the extent of source material, including thickness of the lens of NAPL, depth of the lens (anticipated to be 40 to 45 feet below ground surface [bgs]), and horizontal extent of the lens. Sampling will occur on the west side of Broadway in the area of 318, 330, and 336 Broadway. It is anticipated that a suitable location for the NAPL Recovery Pilot Well will be found (based on visual inspection of the borelogs), and the well will be installed at that time.

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Scope of Work

312 Broadway

MGP-related soil impacts were found on the 312 Broadway property during the OU2 RI and previous sampling by CT Male. The sample locations and results are shown in Figure 1. These results were used to estimate the extent of soil impacts on the property. The estimated extent of soil impacts is shown in Figure 2. The soil impacts appear to be confined to a finger of contamination which begins in the southeast corner of the property, extending towards the center of the property. The depth of soil impacts range from approximately 4 to 11 feet, and groundwater levels are approximately 6 to 7 feet bgs. The Sampling Plan is shown on Figure 3.

Due to the utility corridor along Broadway and the Clinton Street Extension, it is anticipated that sheet piling will need to be used along Broadway and Clinton Street Extensions during the IRM to protect the these corridors. The groundwater and the sheet piling will make it extremely difficult to collect confirmation samples during the excavation, therefore, this pre-design investigation sampling event will be used to provide confirmatory sidewall samples. Because the perimeter of the excavation will be in excess of 300 feet, sidewall samples will be performed at approximately 60-linear foot intervals per DER-10 5.4(b)iii(2). No surface soil samples will be collected in accordance with DER-10 5.4(b)ii(1) because the area is a paved parking lot and expected to remain so in the future. To summarize the confirmation testing:

- Surface Soil Samples:
  - No sampling – Area is a paved parking lot.
- Sidewall Samples:
  - Sampled at approximately 60-linear foot intervals per DER-10 5.4(b)iii(2).
  - Samples will be collected at depth based on visual, olfactory, and photo-ionization detector (PID) observations to collect from the impacted zone, rather than the bottom of the wall. This will provide more realistic data on the extent of impacts.
- Bottom Samples:
  - Will be collected during the course of the IRM.

The methodology for delineating the area of impacts at 312 Broadway is as follows. Samples will be taken around the perimeter of the soil impacts between known clean and known impacted locations, and will continue outwards until borings show no visual, olfactory or PID signs of impacts. At this point, samples will be obtained. Conversely, if borings show no visual, olfactory or PID signs of impacts, borings will continue inward until samples are visually impacted. The last visually clean boring will then be sampled. Based on previous borings, depth of sampling is not anticipated to exceed 12 feet.

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There are two other areas on the 312 Broadway property that will be sampled. First, borings SB-100 and 101 will be taken on the southwest end of the site to confirm the area is not impacted. These samples will be collected due to Polycyclic Aromatic Hydrocarbon (PAH) exceedances in GP/CTM-23(08) and GP/CTM-22(08). Secondly, SB-115 and 116 will be angled borings under Clinton Street and Broadway, respectively, to assess whether impacts are located beneath either street.

Borings SB102 and 109 will be used to gather geotechnical data (Soil Penetration Test) for the site.

Analytical soil samples are also proposed to be collected from these borings to provide sufficient data so as to be used for confirmatory samples. Based upon visual, olfactory, and PID observations, one sample will be selected from each boring from the most impacted interval and analyzed for the following parameters:

- Target Compound List (TCL) Volatile Organic Compounds (VOCs) (U.S. EPA Method 8260B); and
- TCL Semi-Volatile Organic Compounds (SVOCs) (U.S. EPA Method 8270C).

Analysis will be performed by TestAmerica in Shelton, Connecticut, an ELAP-certified laboratory.

NAPL Recovery Pilot

The NAPL Recovery Pilot Well is intended to characterize and assess the mobility and potential for recovery of NAPL. The pilot well will generate data required to develop a final NAPL recovery approach for the Site. NAPL has been accumulated and recovered out of monitoring wells MW-12D, MW-14D, MW-16D, MW-8S, and MW-8D which were installed as part of the OU1 RI. Locations and amounts of recovered NAPL are shown on Figure 4. Although they all had some level of NAPL recovery, the boring logs indicate that the NAPL is being confined in varying strata, and the characteristics of the NAPL vary based on location and depth. MW-8D, on the east side of Broadway, had a high viscosity NAPL at depths of 13 to 16 feet. At MW-12D, MW-13D, and MW-14D, on the west side of Broadway, the NAPL is confined to a black or gray medium to coarse sand at depths of 40 to 45 feet, as noted in the boring logs attached as Appendix A. This material was characterized as non-viscous in the boring logs. Based on this data, the NAPL Recovery Pilot will be focused on the west side of Broadway.

To investigate the feasibility of performing NAPL recovery as an IRM, borings will be performed along Broadway on the 318, 330, and 336 properties in order to locate a feasible site for the NAPL Recovery Pilot Well and locations for potential subsequent wells, if the pilot is successful. Proposed boring locations are shown on Figure 3. Borings will also be performed to the west of the aforementioned borings to better define the extent of source impacts in OU2. These proposed boring locations are also shown on Figure 3.

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Analytical soil samples are also proposed to be collected from these borings. Based upon visual, olfactory observations and PID observations, one sample will be selected from each boring from the most impacted interval within 0 to 15 feet below grade and analyzed for the following parameters:

- TCL VOCs (U.S. EPA Method 8260B); and
- TCL SVOCs (U.S. EPA Method 8270C).

Analysis will be performed by TestAmerica in Shelton, Connecticut, an ELAP-certified laboratory.

Also to be tested will be NAPL samples from MW-14D and MW-8D in order to collect data on the physical characteristics. These two NAPLs appear to have differing physical properties, and the characterization will aid in designing the recovery well. They will be tested for the following:

- Specific Gravity;
- Flashpoint;
- Viscosity; and
- Characterization for disposal.

The borings on 318, 330, and 336 Broadway will be used to identify a suitable location to install a NAPL recovery well. Due to the parking constraints and businesses operating in the buildings, these borings will need to be done on a weekend. With the location and screen depth identified, the Pilot NAPL Recovery Well will be installed.

The recovery well will be installed using hollow-stem auger drilling techniques (or other appropriate methods) to the targeted depth of the recovery well, and will create a borehole of approximately 10 inches in diameter. The recovery wells will be constructed of 6-inch inside diameter (ID), flush-threaded stainless steel continuous-slot well screen and solid casing with a 5-foot sump. The screen slot size, length of screen section and filter pack gradation will be developed as a function of the related soil formation determined earlier by the exploratory borings. A 5-foot bentonite seal will be placed surrounding the sump. The annular space between the well screen and the borehole will be backfilled with filter sand to approximately 2 feet above the top of the screen interval. A 2-foot bentonite seal will be placed at the top of the sand pack. The remaining annular space will be filled with a cement/bentonite grout to the ground surface by tremie method. The well will be protected with a lockable traffic rated well vault. Figure 5 depicts typical recovery well construction.

The NAPL Recovery Pilot Well will be developed with a low energy pump appropriate for a NAPL recovery well to prevent interruption of the NAPL flow.

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NAPL Recovery Gauging

NAPL has been recovered in the past from several of the existing wells on site. During this sampling event, NAPL will be recovered and collected to the extent practicable from all existing NAPL-impacted wells. The purpose of this collection is to ensure that the well sumps are not topped, and to gauge recovery in these wells.

The scope of work described above will be done in compliance with the following approved plans:

- "*Remedial Investigation Work Plan, Operable Unit 2, Schenectady (Clinton Street) OU2 Non-Owned Former MGP Site*," dated June 29, 2009, prepared by AECOM;
- "*Community Air Monitoring Plan, Remedial Investigation (CAMP), Schenectady (Clinton Street) OU2 Non-Owned Former MGP Site*," dated September 3, 2009, prepared by GEI Consultants, Inc.; and
- "*Health and Safety Plan (HASP), Schenectady (Clinton Street) OU2 Non-Owned Former MGP Site*," dated September 2009, prepared by GEI Consultants, Inc.

Investigative-Derived Waste (IDW)

All soil cuttings, used disposable sampling equipment, and personal protective equipment (PPE) will be containerized in drums, sampled, and properly disposed of off site at a permitted disposal facility. Decontamination and well development water will be containerized in drums or a plastic bulk tank prior to sampling and off-site disposal. Any NAPL removed from wells will be containerized in drums prior to sampling and off-site disposal. The location of the temporary IDW area is shown on Figure 3.

Schedule

Based on approval of this Work Plan, notification of property owners, and scheduling of the boring contractor, it is anticipated that the Pre-Design Investigation will commence approximately one month after receiving NYSDEC approval of this Work Plan. The NAPL recovery IRM would then commence in the Fall / Winter of 2010. The IRM at 312 Broadway would commence in the Spring of 2011.

Report of Findings

Following the completion of the investigation, a Report of Findings will be prepared and submitted to the NYSDEC. The report will include a discussion of the following:

- Revised extent of soil impacts on the 312 Broadway property;
- Revised extent of soil impacts west of Broadway;
- NAPL Recovery and Recharge Evaluation;
- Boring logs;

GEI Consultants, Inc.
1301 Trumansburg Road, Suite N, Ithaca, NY 14850
607.216.8955 fax: 607.274.7577

- NAPL Recovery Pilot Well Log;
- Data Summary Package; and
- Summary of the CAMP.

Please feel free to contact me at any time at (607) 216-8956 with any questions you may have regarding the information provided in this Work Plan. Please direct the Department's official comments or response to Dr. Ed Neuhauser, National Grid's Project Manager for the site.

Sincerely,

GEI Consultants, Inc.

John T. Finn, P.E.
Senior Engineer

Jennifer Sandorf, P.G.
Investigation Task Manager

JTF:mlr

Attachments: Figures 1-5
Appendix A – Monitoring Well Boring Logs

H:\WPROC\Project\NationalGrid\NG-Schenectady PDI IRM\Work Plan\Schenectady OU2 PDI WP 7 28 10.docx

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607.216.8955 fax: 607.274.7577

Figures

N

VAN GUYSLING AVENUE

BROADWAY

CLINTON STREET EXTENSION

STORAGE AREA

CREEK

GRAVEL PARKING

(CITY OF SCHENECTADY)

GRAVEL

GRASS

PARKING

#336 BROADWAY

#340 BROADWAY

#330 BROADWAY

#318 BROADWAY

#312 BROADWAY (CITY OF SCHENECTADY)

APARTMENT BUILDING

SB-64(09)
SB-62(09)
SB-63(09)
SB-69/MW-19S(09)
SB-70/MW-19D(09)
SB-68/MW-23D(09)
SB-74(09)
SB-73(09)
SB-71(09)
SB-72(09)
SB-67(09)
SB-77/MW-20S(09)
SB-78/MW-20D(09)
SB-76/MW-21S(09)
SB-75(09)
SB-81(09)
SB-29/MW-12S(08)
SB-30/MW-12D(08)
SB-35/MW-13D(08)
SB-42/MW-14S(08)
SB-43/MW-14D(08)
SB-61/MW-17D(09)
SB-61/MW-17S(09)
SB-13/MW-7(06)
SB-28/MW-7D(08)
SB-18(06)
SB-34(08)
SB-16(06)
SB-24(06)
SB-19/MW-8(06)
SB-44/MW-8D(08)
SB-4(04)
SB-39(08)
SB-20(06)
SB-47/MW-15D(08)
GP/CTM-15(06)
SB-5(04)
SB-46(08)
SB-49(08)
SB-50(08)
SB-22(06)
SB-9/MW-4(04)
SB-99(09)
SB-1/MW-1(04)
SB-25(06)
SB51/MW-1D(08)
SB-23(06)
GP/CTM-14(06)
SB-90(09)
SB-91(09)
SB-85/MW-24D(09)
SB-84/MW-24S(09)
SB-86/MW-25S(09)
SB-87/MW-25D(09)
GP/CTM-23(08)
GP/CTM-20(08)
GP/CTM-22(08)
GP/CTM-10(06)
GP/CTM-9(06)
CTMMW-4(04)
SB-92(09)
GP/CTM-5(06)
SB-95/MW-26D(09)
GP/CTM-6(06)
GP/CTM-7(06)
GP/CTM-8(06)
CTMMW-2(04)
SB-93(09)
CTMMW-3(04)
GP/CTM-4(06)
SB-97(09)
CTMMW-1(04)
SB-96(09)
SB-94/MW-16D(08)
SB-98(09)
GP/CTM-1(06)
SB-100(09)
GP/CTM-2(06)
GP/CTM-3(06)

0 10 20 30 40 50

Legend

- Non-Impacted Soil Borings
- MGP-Impacted Soil Borings
- Soil Sample Analyzed for Forensic Only

SCHENECTADY CLINTON STREET MGP SITE
PRE-DESIGN INVESTIGATION WORK PLAN
OU-2

SCHENECTADY, NEW YORK

GEI Consultants

Project 091990-2

EXISTING SAMPLE LOCATIONS

July 2010 Figure 1

N

VAN GUYSLING AVENUE

CLINTON STREET EXTENSION

BROADWAY

STORAGE AREA

CREEK

GRAVEL PARKING

(CITY OF SCHENECTADY)

GRAVEL

PARKING

GRASS

#336 BROADWAY

#340 BROADWAY

#330 BROADWAY

#318 BROADWAY

#312 BROADWAY (CITY OF SCHENECTADY)

APARTMENT BUILDING

GP/CTM-20(08)

GP/CTM-23(08)

GP/CTM-22(08)

SB-86/MW-25S(09)

SB-87/MW-25D(09)

SB-85/MW-24D(09)

SB-84/MW-24S(09)

SB-90(09)

SB-91(09)

GP/CTM-10(06)

GP/CTM-9(06)

CTMMW-4(04)

GP/CTM-8(06)

GP/CTM-7(06)

SB-92(09)

GP/CTM-6(06)

SB-95/MW-26B(09)

GP/CTM-5(06)

CTMMW-2(04)

SB-93(09)

CTMMW-3(04)

SB-97(09)

SB-98(09)

GP/CTM-4(06)

GP/CTM-3(06)

GP/CTM-2(06)

SB-64(09)

SB-69/MW-19S(09)

SB-70/MW-19D(09)

SB-68/MW-23D(09)

SB-74(09)

SB-73(09)

SB-77/MW-20S(09)

SB-78/MW-20D(09)

SB-76/MW-21S(09)

SB-62(09)

SB-63(09)

SB-71(09)

SB-72(09)

SB-67(09)

SB-75(09)

SB-81(09)

SB-29/MW-12S(08)

SB-30/MW-12D(08)

SB-35/MW-13D(08)

SB-42/MW-14(08)

SB-43/MW-14D(08)

SB-61/MW-17D(09)

SB-17S(09)

SB-96(09)

SB-95/MW-16D(08)

SB-18(06)

SB-34(08)

SB-16(06)

SB-13/MW-7(06)

SB-28/MW-7D(08)

SB-24(06)

SB-39(08)

SB-19/MW-8(06)

SB-44/MW-8D(08)

SB-40(04)

SB-20(06)

SB-47/MW-15D(08)

GP/CTM-15(06)

SB-5(04)

SB-46(08)

SB-22(06)

SB-49(08)

SB-9/MW-4(04)

SB-99(09)

SB-1/MW-1(04)

SB-25(08)

SB51/MW-1D(08)

SB-23(08)

SB-50(08)

GP/CTM-14(06)

0 10 20 30 40 50

Legend

- Non-Impacted Area
- Potential MGP Impacted Area
- MGP Impacted Area: Commercial SCO's >500 mg/kg Total PAH's
- Non-Impacted Soil Borings
- MGP Impacted Soil Borings

SCHENECTADY CLINTON STREET MGP SITE
PRE-DESIGN INVESTIGATION WORK PLAN
OU-2

SCHENECTADY, NEW YORK

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Project 091990-2

312 BROADWAY MGP IMPACTS

July 2010

Figure 2

N

VAN GUYSLING AVENUE

CLINTON STREET EXTENSION

BROADWAY

STORAGE AREA

CREEK

GRAVEL PARKING

(CITY OF SCHENECTADY)

GRAVEL

GRASS

PARKING

#336 BROADWAY

#340 BROADWAY

#330 BROADWAY

#318 BROADWAY

#312 BROADWAY (CITY OF SCHENECTADY)

APARTMENT BUILDING

SB-101

SB-100

SB-105

SB-104

SB-103

SB-106

SB-102

SB-107

SB-108

SB-109

SB-115

SB-116

SB-111

SB-112

SB-113

SB-114

SB-110

GP/CTM-20(08)

GP/CTM-23(08)

GP/CTM-22(08)

SB-85/MW-24D(09)

SB-84/MW-24S(09)

SB-86/MW-25S(09)

SB-87/MW-25D(09)

SB-91(09)

SB-90(09)

GP/CTM-10(06)

GP/CTM-9(06)

CTMMW-4(04)

GP/CTM-7(06)

GP/CTM-8(06)

SB-92(09)

GP/CTM-6(06)

SB-95/MW-26D(09)

CTMMW-2(04)

SB-93(09)

CTMMW-3(04)

SB-97(09)

SB-98(09)

GP/CTM-5(06)

GP/CTM-3(06)

GP/CTM-4(06)

SB-64(09)

SB-70/MW-19D(09)

SB-69/MW-19S(09)

SB-66/MW-23D(09)

SB-74(09)

SB-73(09)

SB-77/MW-20S(09)

SB-78/MW-20D(09)

SB-62(09)

SB-63(09)

SB-71(09)

SB-72(09)

SB-76/MW-21S(09)

SB-67(09)

SB-75(09)

SB-81(09)

SB-29/MW-12D(08)

SB-30/MW-12S(08)

SB-35/MW-13D(08)

SB-42/MW-14S(08)

SB-43/MW-14D(08)

SB-16D(08)

SB-61/MW-17D(09)

SB-17S(09)

SB-18(06)

SB-34(08)

SB-16(06)

SB-19/MW-8(06)

SB-44/MW-8D(08)

SB-4(04)

SB-24(06)

SB-39(08)

SB-20(06)

SB-13/MW-7(09)

SB-28/MW-7D(08)

SB-47/MW-15D(08)

GP/CTM-15(06)

SB-5(04)

SB-46(08)

SB-49(08)

SB-22(06)

SB-9/MW-4(04)

SB-25(06)

SB-99(09)

SB-1/MW-1(04)

SB-1/MW-1D(08)

SB-23(06)

SB-50(08)

GP/CTM-14(06)

0 10 20 30 40 50

Legend

- Non-Impacted Area
- Potential MGP Impacted Area
- MGP Impacted Area: Commercial SCO's >500 mg/kg Total PAH's
- Non-Impacted Soil Borings
- MGP Impacted Soil Borings
- SB-105 Proposed Design Investigation Borings
- Proposed Angled Boring
- Geotech (SPT) Boring

SCHENECTADY CLINTON STREET MGP SITE
PRE-DESIGN INVESTIGATION WORK PLAN
OU-2

SCHENECTADY, NEW YORK

GEI Consultants

Project 091990-2

July 2010

PROPOSED SAMPLE LOCATIONS

Figure 3

N

VAN GUYSLING AVENUE

BROADWAY

CLINTON STREET EXTENSION

STORAGE AREA

CREEK

GRAVEL PARKING

(CITY OF SCHENECTADY)

PARKING

GRASS

GRAVEL

#336 BROADWAY

#340 BROADWAY

#330 BROADWAY

#318 BROADWAY

#312 BROADWAY (CITY OF SCHENECTADY)

APARTMENT BUILDING

FIRE ALARM

SB-101

SB-100

SB-104

SB-103

SB-106

SB-107

SB-108

SB-105

SB-102

SB-111

SB-112

SB-113

SB-114

SB-110

MW12-D
0.75 gal
12/1/09

MW14-D
1.75 gal
12/2/09

MW8-D
0.25 gal
12/2/09

MW8
Trace
10/9/09

CTMMW1
Trace
10/8/09

SB-64(09)
SB-62(09)
SB-63(09)
SB-61/MW-17S(09)
SB-61/MW-17D(09)
SB-84/MW-24S(09)
SB-85/MW-24D(09)
SB-90(09)
SB-91(09)
SB-86/MW-25S(09)
SB-87/MW-25D(09)
GP/CTM-23(08)
GP/CTM-20(08)
GP/CTM-21(08)
SB-69/MW-19S(09)
SB-70/MW-19D(09)
SB-68/MW-23D(09)
SB-74(09)
SB-73(09)
SB-71(09)
SB-67(09)
SB-81(09)
SB-29/MW-12S(08)
SB-30/MW-12D(08)
SB-35/MW-13D(08)
SB-77/MW-20S(09)
SB-78/MW-20D(09)
SB-76/MW-21S(09)
SB-75(09)
SB-42/MW-14S(08)
SB-43/MW-14D(08)
SB-18(06)
SB-34(08)
SB-16(06)
SB-13/MW-7S(06)
SB-28/MW-7D(08)
SB-24(06)
SB-44/MW-8S(04)
SB-19/MW-8D(06)
SB-39(08)
SB-20(06)
SB-47/MW-15D(08)
GP/CTM-15(06)
SB-5(04)
SB-46(08)
SB-22(06)
SB-49(08)
SB-9/MW-4(04)
SB-99(09)
SB-2/MW-1(04)
SB-26(06)
SB51/MW-1D(08)
SB-23(06)
SB-50(08)
GP/CTM-14(06)
SB-92(09)
GP/CTM-5(06)
SB-95/MW-26D(09)
GP/CTM-6(06)
GP/CTM-7(06)
GP/CTM-10(06)
GP/CTM-9(06)
CTMMW4-4(04)
SB-93(09)/MW-3(04)
SB-97(09)
SB-96(09)
CTMMW-1(04)
SB-98(09)
GP/CTM-1(06)
SB-94(09)
GP/CTM-2(06)
GP/CTM-3(06)
GP/CTM-4(06)
SB-52/MW-16D(08)

0 10 20 30 40 50

Legend

- MW14D 1.75 gal 12/2/09 — NAPL Recovery Volume Achieved
- Non-Impacted Soil Borings
- MGP-Impacted Soil Borings
- SB-105 — Proposed Design Investigation Borings
- Geotech (SPT) Boring

SCHENECTADY CLINTON STREET MGP SITE
PRE-DESIGN INVESTIGATION WORK PLAN
OU-2

SCHENECTADY, NEW YORK

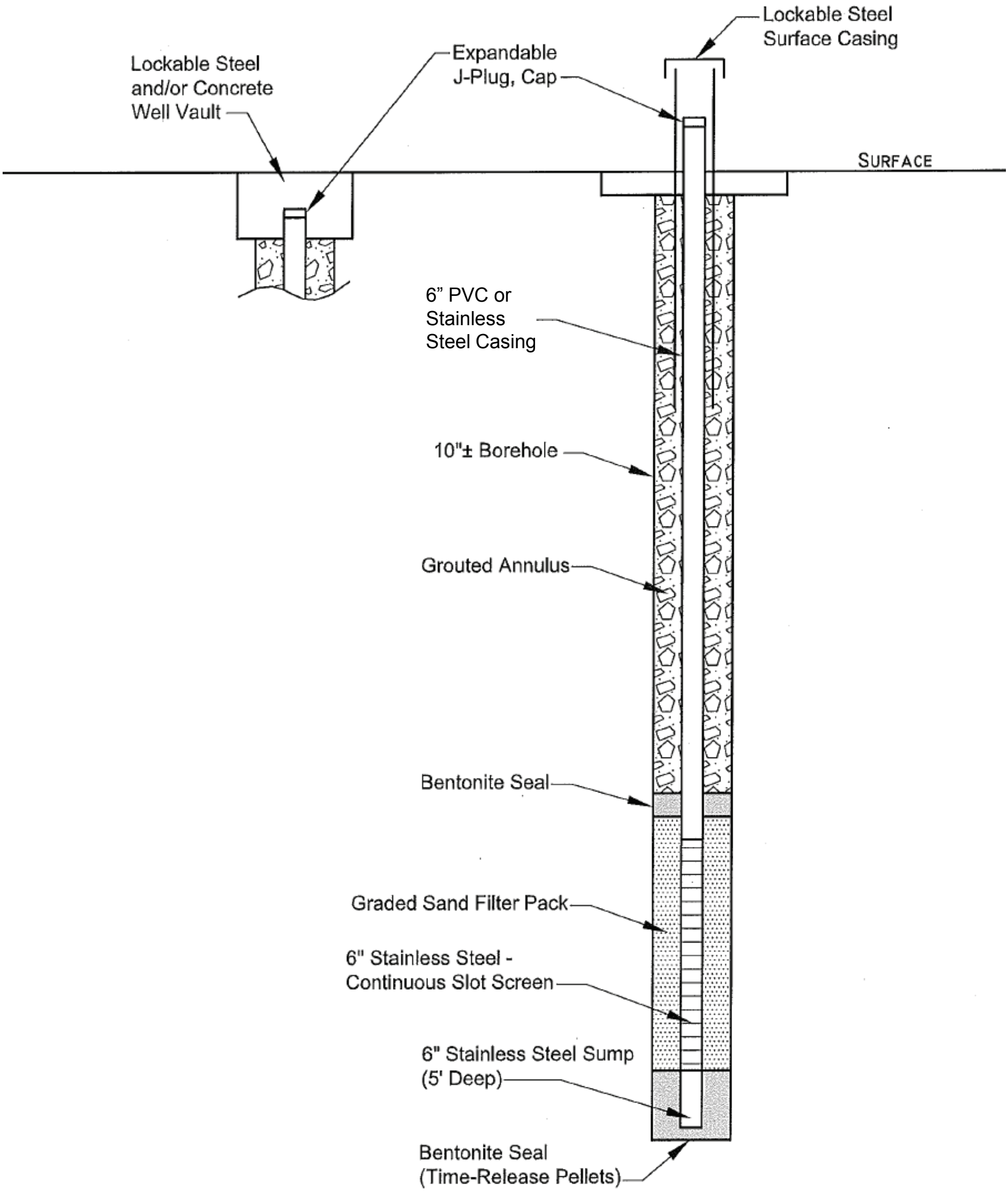
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Project 091990-2

July 2010

NAPL RECOVERY IN EXISTING WELLS

Figure 4



NOT TO SCALE

SCHENECTADY CLINTON STREET MGP SITE PRE-DESIGN INVESTIGATION WORK PLAN OU-2	GEI Consultants	**TYPICAL RECOVERY WELL**
SCHENECTADY, NEW YORK		June 2010 Figure 5

Appendix A

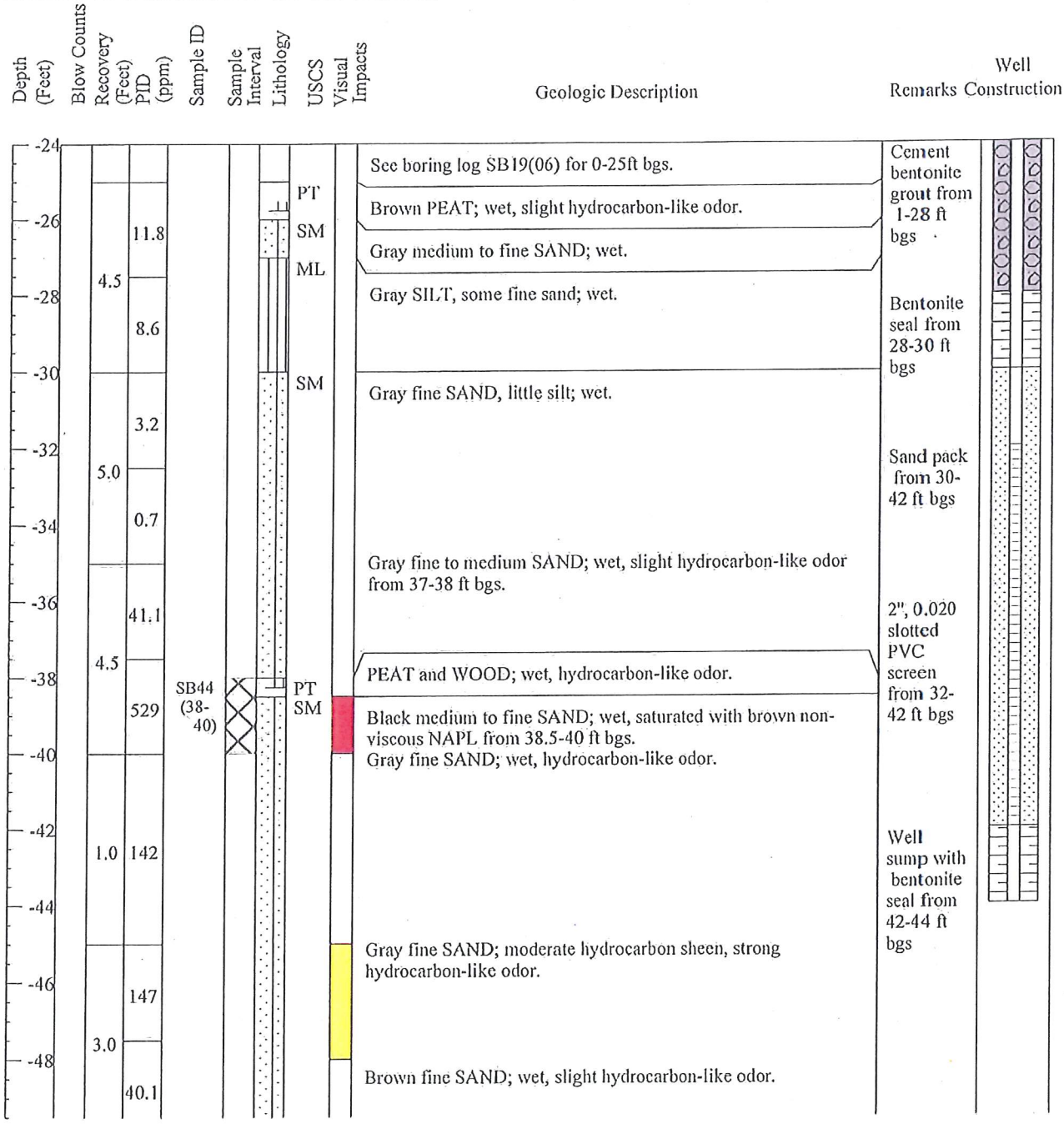
Monitoring Well Boring Logs

AECOM
1001 West Seneca Street, Suite 204
Ithaca, New York, 14850

Well ID: MW8D/SB44

Project Name: Schenectady Clinton Street MGP Site
Project Number: 04980-011
Date: November 5, 2008
Boring Location: Former Tar well B, east side of Broadway
Drilling Company: Geologic NY, Inc.

Drilling Method: Sonic
PVC Elevation (ft/msl, NAVD 88): 225.67
Ground Elevation (ft/msl, NAVD 88): 225.92
Total Depth: 75.0 ft bgs
Logged By: Jesse Lloyd



Coal Tar or Coal Tar NAPL Saturated Soil

Hydrocarbon Staining, Hydrocarbon Sheen or NAPL Blebs

Comments: Soil samples SB44(08)(38-40) and SB44(08)(52.5-55) were analyzed for VOCs, SVOCs, TAL metals, and total cyanide.

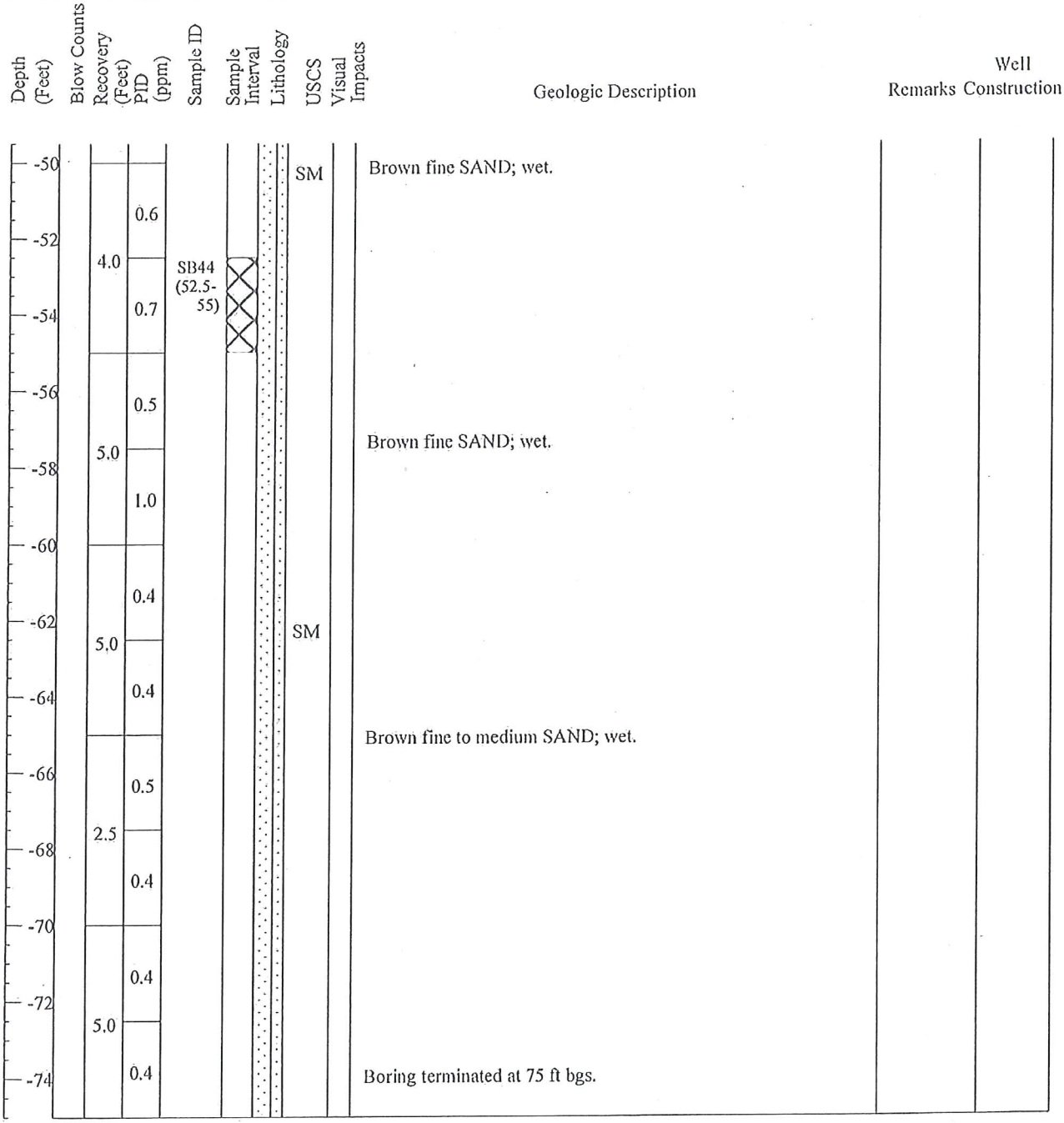
AECOM

1001 West Seneca Street, Suite 204
Ithaca, New York, 14850

Well ID: MW8D/SB44

Project Name: Schenectady Clinton Street MGP Site
Project Number: 04980-011
Date: November 5, 2008
Boring Location: Former Tar well B, east side of Broadway
Drilling Company: Geologic NY, Inc.

Drilling Method: Sonic
PVC Elevation (ft/msl, NAVD 88): 225.67
Ground Elevation (ft/msl, NAVD 88): 225.92
Total Depth: 75.0 ft bgs
Logged By: Jesse Lloyd



Coal Tar or Coal Tar NAPL Saturated Soil

Hydrocarbon Staining, Hydrocarbon Sheen or NAPL Blebs

Comments: Soil samples SB44(08)(38-40) and SB44(08)(52.5-55) were analyzed for VOCs, SVOCs, TAL metals, and total cyanide.

AECOM
1001 West Seneca Street, Suite 204
Ithaca, New York, 14850

Well ID: MW12D/SB30

Project Name: Schenectady Clinton Street MGP Site
Project Number: 04980-011
Date: October 24, 2008
Boring Location: Vacant lot, west side of Broadway
Drilling Company: Geologic NY, Inc.

Drilling Method: Sonic
PVC Elevation (ft/msl, NAVD 88): 225.75
Ground Elevation (ft/msl, NAVD 88): 226.04
Total Depth: 75.0 ft bgs
Logged By: Jesse Lloyd

Depth (Feet)	Blow Counts	Recovery (Feet)	PID (ppm)	Sample ID	Sample Interval	Lithology	USCS	Visual Impacts	Geologic Description	Remarks	Well Construction
0	7 8 7 6	1.4	0.6				Fill		Brown fine to medium SAND, trace coal fragments, brick fragments, coke, and gravel; dry.	Flush mounted curb box	
-2	2 4 3 3	1.0	0.7						Brown fine SAND; moist.		
									Ashes, little coke; dry.	Cement bentonite grout from 1-31 ft bgs	
-4	2 3 5 3	1.8	1.2				ML		Brown SILT; wet, firm.		
-6	2 3 6 6	1.8	1.5				SM		Brown fine to medium SAND; wet.		
-8		2.0	0.8						Brown and gray medium to fine SAND; wet.		
-10			0.4						Gray medium to fine SAND; wet.		
-12		3.5									
-14			1.3				PT		PEAT; wet.		
-16			0.9				OL		Gray SILT, little peat and fine sand; wet.		
-18		3.0	0.5								
-20			0.1						Gray SILT, little peat and fine sand; wet, firm.		
-22		2.5									
-24			0.6								
-26			1.2				OL		Gray SILT, little peat and fine sand; wet, firm.		

Coal Tar or Coal Tar NAPL Saturated Soil Hydrocarbon Staining, Hydrocarbon Sheen or NAPL Blebs

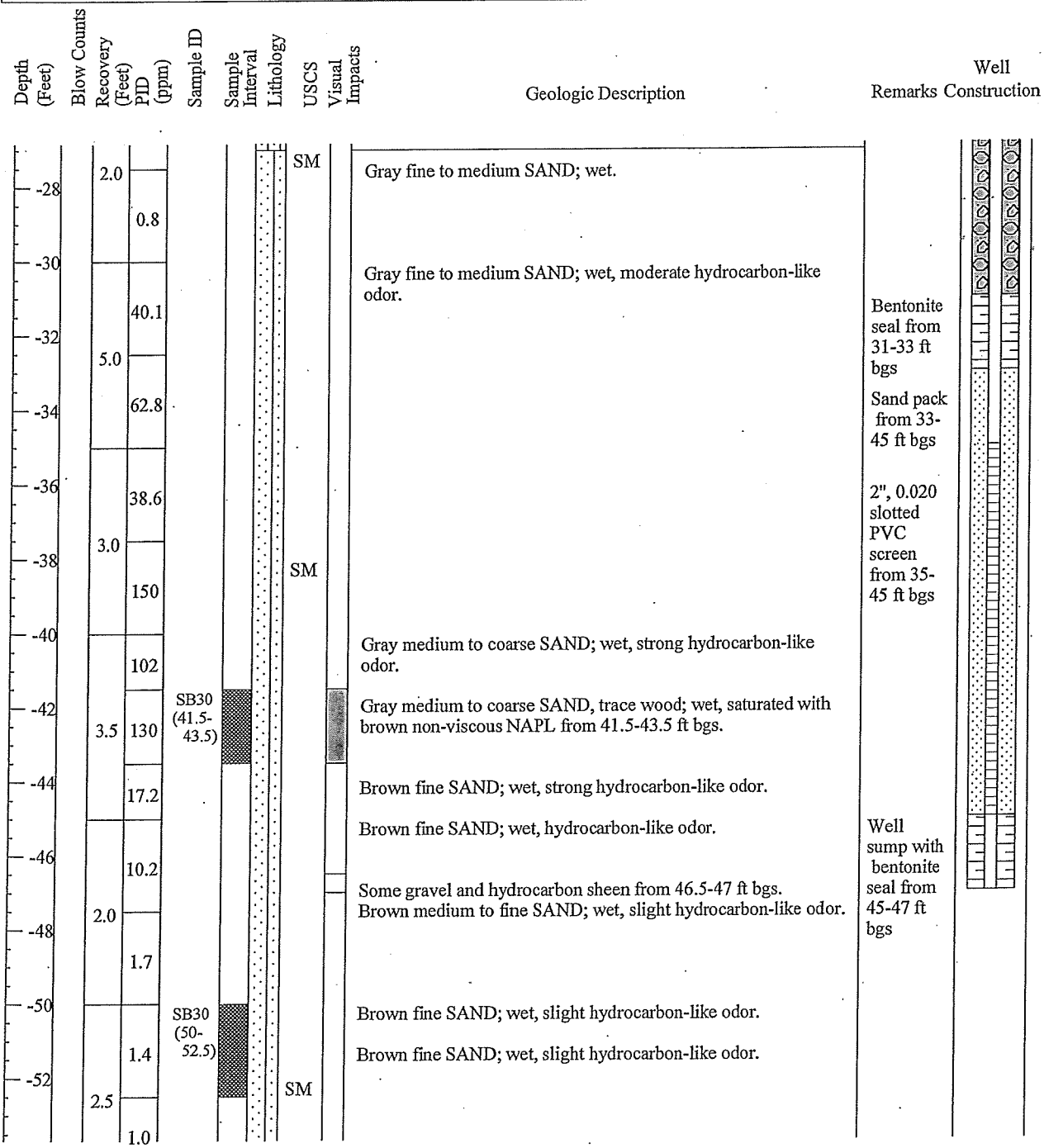
Comments: Soil samples SB30(08)(41.5-43.5) and SB30(08)(50-52.5) were analyzed for VOCs, SVOCs, TAL metals, and total cyanide.

AECOM
1001 West Seneca Street, Suite 204
Ithaca, New York, 14850

Well ID: MW12D/SB30

Project Name: Schenectady Clinton Street MGP Site
Project Number: 04980-011
Date: October 24, 2008
Boring Location: Vacant lot, west side of Broadway
Drilling Company: Geologic NY, Inc.

Drilling Method: Sonic
PVC Elevation (ft/msl, NAVD 88): 225.75
Ground Elevation (ft/msl, NAVD 88): 226.04
Total Depth: 75.0 ft bgs
Logged By: Jesse Lloyd



Coal Tar or Coal Tar NAPL Saturated Soil

Hydrocarbon Staining, Hydrocarbon Sheen or NAPL Blebs

Comments: Soil samples SB30(08)(41.5-43.5) and SB30(08)(50-52.5) were analyzed for VOCs, SVOCs, TAL metals, and total cyanide.

AECOM
1001 West Seneca Street, Suite 204
Ithaca, New York, 14850

Well ID: MW12D/SB30

Project Name: Schenectady Clinton Street MGP Site
Project Number: 04980-011
Date: October 24, 2008
Boring Location: Vacant lot, west side of Broadway
Drilling Company: Geologic NY, Inc.

Drilling Method: Sonic
PVC Elevation (ft/msl, NAVD 88): 225.75
Ground Elevation (ft/msl, NAVD 88): 226.04
Total Depth: 75.0 ft bgs
Logged By: Jesse Lloyd

Depth (Feet)	Blow Counts	Recovery (Feet)	PID (ppm)	Sample ID	Sample Interval	Lithology	USCS	Visual Impacts	Geologic Description	Remarks	Well Construction
-54											
-56		0.5	1.7						Brown fine to medium SAND; wet.		
-58		3.0	0.5								
			0.4								
-60									Little silt from 60-60.5 ft bgs.		
-62		5.0	0.4				SM		Brown fine SAND; wet.		
-64			0.4						Brown fine to medium SAND; wet.		
-66		4.5	0.4								
-68			0.4								
-70									No recovery from 70-75 ft bgs.		
-72		0.0	NA								
-74									Boring terminated at 75 ft bgs.		

Coal Tar or Coal Tar NAPL Saturated Soil Hydrocarbon Staining, Hydrocarbon Sheen or NAPL Blebs

Comments: Soil samples SB30(08)(41.5-43.5) and SB30(08)(50-52.5) were analyzed for VOCs, SVOCs, TAL metals, and total cyanide.

AECOM
1001 West Seneca Street, Suite 204
Ithaca, New York, 14850

Well ID: MW13D/SB35

Project Name: Schenectady Clinton Street MGP Site
Project Number: 04980-011
Date: November 2, 2008
Boring Location: 336/340 Broadway
Drilling Company: Geologic NY, Inc.

Drilling Method: Sonic
PVC Elevation (ft/msl, NAVD 88): 224.87
Ground Elevation (ft/msl, NAVD 88): 225.42
Total Depth: 64.0 ft bgs
Logged By: Jesse Lloyd

Depth (Feet)	Blow Counts	Recovery (Feet)	PID (ppm)	Sample ID	Sample Interval	Lithology	USCS	Visual Impacts	Geologic Description	Remarks	Well Construction
0			0.0				Fill		Brown medium SAND; dry.	Flush mounted curb box	
-2	NA	NA	0.0								
			0.0							Cement bentonite grout from 1-29 ft bgs	
-4			0.0								
-6	49 29 12 6	1.2	0.0						Brown medium SAND and GRAVEL; dry.		
-8	3 3 4 6	1.6	0.0				SM		Black fine SAND; moist.	Boring pre-cleared to 5 ft bgs by hand methods.	
-10			0.0						Gray fine SAND and SILT; wet, firm.		
-12		2.5									
			0.3								
-14							PT		PEAT; moist.		
-16			0.1				OL		Gray SILT, trace peat; wet, firm.		
-18		3.5									
			0.0								
-20							ML		Gray SILT; wet, firm.		
			0.3								
-22		2.5									
-24			0.6								
-26			1.3				ML		Gray SILT; wet, firm.		

Coal Tar or Coal Tar NAPL Saturated Soil

Hydrocarbon Staining, Hydrocarbon Sheen or NAPL Blebs

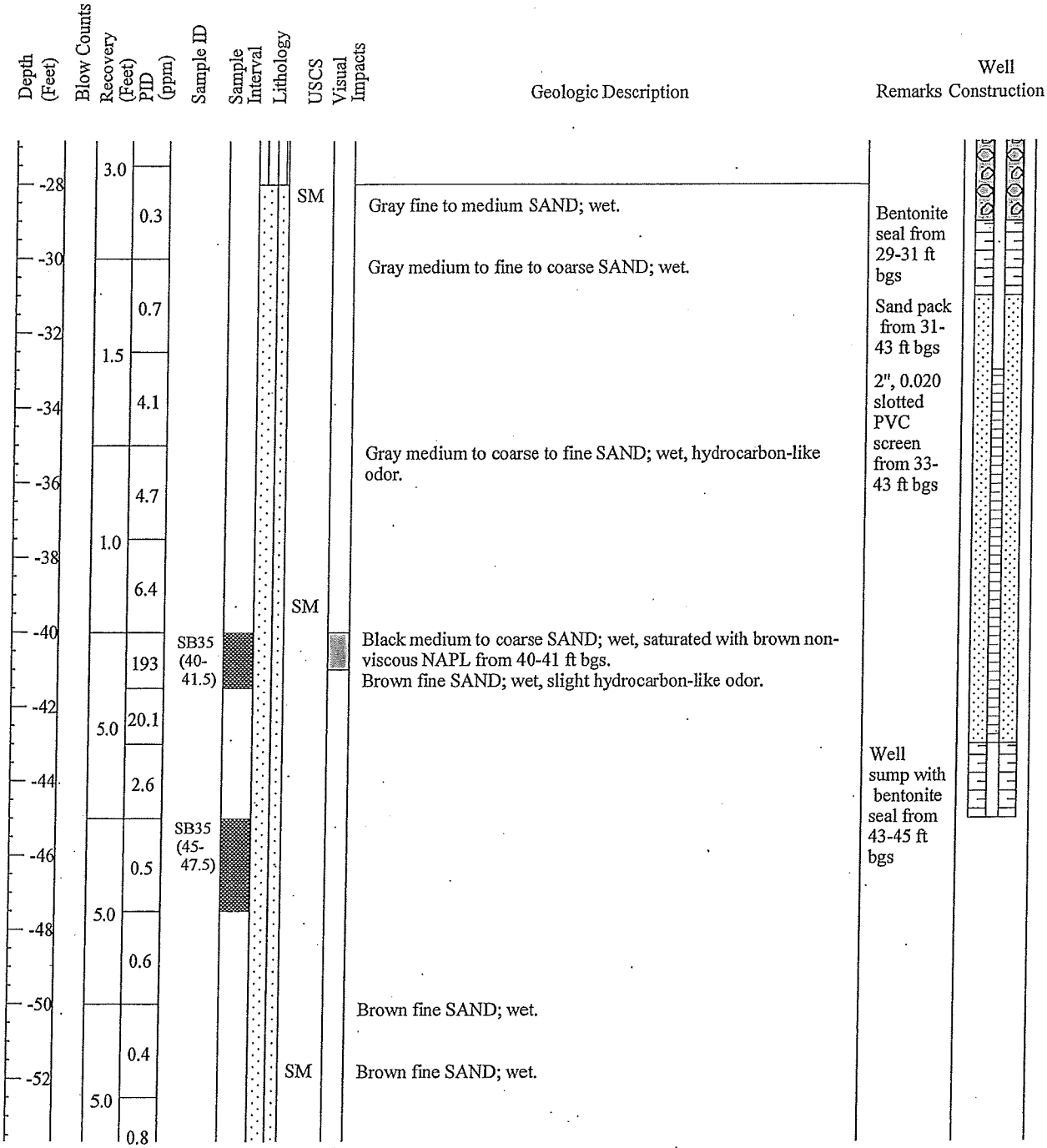
Comments: Soil samples SB35(08)(40-41.5) and SB35(08)(45-47.5) were analyzed for VOCs, SVOCs, TAL metals, and total cyanide.

AECOM
1001 West Seneca Street, Suite 204
Ithaca, New York, 14850

Well ID: MW13D/SB35

Project Name: Schenectady Clinton Street MGP Site
Project Number: 04980-011
Date: November 2, 2008
Boring Location: 336/340 Broadway
Drilling Company: Geologic NY, Inc.

Drilling Method: Sonic
PVC Elevation (ft/msl, NAVD 88): 224.87
Ground Elevation (ft/msl, NAVD 88): 225.42
Total Depth: 64.0 ft bgs
Logged By: Jesse Lloyd



Coal Tar or Coal Tar NAPL Saturated Soil

Hydrocarbon Staining, Hydrocarbon Sheen or NAPL Blebs

Comments: Soil samples SB35(08)(40-41.5) and SB35(08)(45-47.5) were analyzed for VOCs, SVOCs, TAL metals, and total cyanide.

AECOM
1001 West Seneca Street, Suite 204
Ithaca, New York, 14850

Well ID: MW13D/SB35

Project Name: Schenectady Clinton Street MGP Site
Project Number: 04980-011
Date: November 2, 2008
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Drilling Method: Sonic
PVC Elevation (ft/msl, NAVD 88): 224.87
Ground Elevation (ft/msl, NAVD 88): 225.42
Total Depth: 64.0 ft bgs
Logged By: Jesse Lloyd

Depth (Feet)	Blow Counts	Recovery (Feet)	PID (ppm)	Sample ID	Sample Interval	Lithology	USCS	Visual Impacts	Geologic Description	Remarks	Well Construction
-54											
-56		3.5	0.2						Brown fine SAND; wet.		
-58			0.6								
-60		0.5	0.5								
-62			0.0						Refusal at 64 ft bgs.		
-64											

Coal Tar or Coal Tar NAPL Saturated Soil Hydrocarbon Staining, Hydrocarbon Sheen or NAPL Blebs

Comments: Soil samples SB35(08)(40-41.5) and SB35(08)(45-47.5) were analyzed for VOCs, SVOCs, TAL metals, and total cyanide.

AECOM
1001 West Seneca Street, Suite 204
Ithaca, New York, 14850

Well ID: MW14D/SB43

Project Name: Schenectady Clinton Street MGP Site
Project Number: 04980-011
Date: November 1, 2008
Boring Location: 318 Broadway parking lot
Drilling Company: Geologic NY, Inc.

Drilling Method: Sonic
PVC Elevation (ft/msl, NAVD 88): 224.89
Ground Elevation (ft/msl, NAVD 88): 225.15
Total Depth: 75.0 ft bgs
Logged By: Jesse Lloyd

Depth (Feet)	Blow Counts	Recovery (Feet)	PID (ppm)	Sample ID	Sample Interval	Lithology	USCS	Visual Impacts	Geologic Description	Remarks	Well Construction
0			0.0				Fill		ASPHALT and ROAD BASE. Brown medium to fine SAND, some gravel and brick fragments; dry.	Flush mounted curb box	
-2	NA	NA	0.0						BRICKS and BRICK fragments, some brown fine sand; dry.	Boring pre-cleared to 5 ft bgs by hand methods.	
-4			0.0								
-4			0.0								
-6	2 2 2 1	1.2	0.0						Brown medium SAND, trace gravel and coal fragments; moist.		
-8	2 3 3 7	1.1	0.0				SM		Brown medium to fine SAND; wet.	Cement bentonite grout from 1-31 ft bgs	
-10			0.0				PT		PEAT, little silt; wet.		
-12		3.5									
-14			0.4						WOOD. No recovery from 15-20 ft bgs.		
-16			NA								
-18		0.0									
-20			NA				OL		Gray SILT, little peat; wet, firm.		
-22		5.0	2.6								
-24			16.1								
-26							SM		Gray medium to fine SAND; wet.		
			3.6				SM		Gray medium to fine SAND; wet.		

Coal Tar or Coal Tar NAPL Saturated Soil Hydrocarbon Staining, Hydrocarbon Sheen or NAPL Blebs

Comments: Soil samples SB43(08)(40-42.5) and SB43(08)(50-52.5) were analyzed for VOCs, SVOCs, TAL metals, and total cyanide.

AECOM
1001 West Seneca Street, Suite 204
Ithaca, New York, 14850

Well ID: MW14D/SB43

Project Name: Schenectady Clinton Street MGP Site
Project Number: 04980-011
Date: November 1, 2008
Boring Location: 318 Broadway parking lot
Drilling Company: Geologic NY, Inc.

Drilling Method: Sonic
PVC Elevation (ft/msl, NAVD 88): 224.89
Ground Elevation (ft/msl, NAVD 88): 225.15
Total Depth: 75.0 ft bgs
Logged By: Jesse Lloyd

Depth (Feet)	Blow Counts	Recovery (Feet)	PID (ppm)	Sample ID	Sample Interval	Lithology	USCS	Visual Impacts	Geologic Description	Well Remarks	Well Construction
-28		3.0	0.4								
-30											
-32			0.2							Bentonite seal from 31-33 ft bgs	
-34		3.0	0.5								
-36			1.7						Gray medium to coarse SAND; wet, hydrocarbon-like odor.	Sand pack from 33-45 ft bgs	
-38		3.0	629				SM			2", 0.020 slotted PVC screen from 35-45 ft bgs	
-40				SB43 (40-42.5)					Saturated with yellow brown NAPL from 39.5-40 ft bgs. Black medium to coarse to fine SAND; saturated with yellow brown non-viscous NAPL from 40-45 ft bgs.		
-42		2.0	785								
-44			591								
-46			12.8						Brown fine SAND; wet, slight hydrocarbon-like odor.	Well sump with bentonite seal from 45-47 ft bgs	
-48		2.5	11.6								
-50				SB43 (50-52.5)					Brown fine SAND; moist.		
-52		5.0	0.2				SM		Brown fine SAND; moist.		
			0.4								

Coal Tar or Coal Tar NAPL Saturated Soil Hydrocarbon Staining, Hydrocarbon Sheen or NAPL Blebs

Comments: Soil samples SB43(08)(40-42.5) and SB43(08)(50-52.5) were analyzed for VOCs, SVOCs, TAL metals, and total cyanide.

AECOM
1001 West Seneca Street, Suite 204
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Logged By: Jesse Lloyd

Depth (Feet)	Blow Counts Recovery (Feet)	PID (ppm)	Sample ID	Sample Interval	Lithology	USCS Visual Impacts	Geologic Description	Remarks	Well Construction
-54									
-56	4.0	0.4					Brown fine SAND; wet.		
-58		0.5							
-60	2.0	0.6					Brown fine to medium SAND; wet.		
-62						SM			
-64		0.6							
-66	0.5	0.6							
-68		0.6							
-70	0.0	NA					No recovery from 70-75 ft bgs.		
-72									
-74		NA					Boring terminated at 75 ft bgs.		

Coal Tar or Coal Tar NAPL Saturated Soil Hydrocarbon Staining, Hydrocarbon Sheen or NAPL Blebs

Comments: Soil samples SB43(08)(40-42.5) and SB43(08)(50-52.5) were analyzed for VOCs, SVOCs, TAL metals, and total cyanide.

New York State Department of Environmental Conservation
Division of Environmental Remediation
Remedial Bureau C, 11th Floor
625 Broadway, Albany, New York 12233-7014
Phone: (518) 402-9662 • **Fax:** (518) 402-9679
Website: www.dec.ny.gov

Alexander B. Grannis
Commissioner

Mr. Edward Neuhauser
Principle Environmental Engineer
National Grid
300 Erie Boulevard West
Syracuse, NY 13202

September 28, 2010

Re: Schenectady (Clinton St.) MGP Site
Schenectady (City), Schenectady County, New York
Site No. V00474
Operable Unit 2 Remedial Investigation - Approval

Dear Mr. Neuhauser,

The New York State Department of Environmental Conservation (Department) has reviewed each of the following work plans for the above reference site that were submitted by GEI Consultants, Inc.:

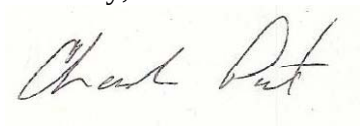
- Operable Unit 2 (OU-2) Pre-Design Investigation Work Plan - 312 Broadway and NAPL Recovery Pilot dated July 28, 2010, and the
- Supplemental Investigation dated September 13, 2010.

Based on the review of these documents the Department approves the work plans subject to the following clarifications:

- The depth of the sidewall sample locations will be determined in the field based on observations. The samples will be collected from locations biased toward the most highly contaminated interval.
- The Department will be notified no less than seven days prior to the performance of any field work so that observation of the work can be scheduled.
- The Department understands that the Health and Safety Plan and Community Air Monitoring Plan previously approved by the Department will be instituted during all subsurface intrusive work.

As always, please feel free to contact me at 518-402-9662 to discuss these comments or any aspect of this project. Thank you in advance for your timely work on this document.

Sincerely,



Charles Post
Engineering Geologist I
NYS Department of Environmental Conservation
Division of Environmental Remediation

Ec: G. Heitzman, NYSDEC
I. Beilby, NYSDEC
A. DeMarco, NYSDOH
J. Finn, GEI
J. Zak, GEI

2009

ANNUAL DRINKING WATER QUALITY REPORT

INTRODUCTION

We are very pleased to provide you with the 2009 Annual Drinking Water Quality Report. In 2009, your drinking water met all State drinking water health standards. This report is a snapshot of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to New York State standards. Our constant goal is and always has been, to provide to you a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and to protect our water resources.

If you have any questions concerning this report or concerns about your drinking water please contact the City of Schenectady, Department of Water, Room 206, City Hall, Schenectady, NY 12305. Or please call 518 - 382 - 5023. We want you to be informed about your drinking water.

WHERE DOES OUR WATER COME FROM?

In general, the sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and can pick up substances resulting from the presence of animals or from human activities. Contaminants that may be present in source water include: microbial contaminants; inorganic contaminants; pesticides and herbicides; organic chemical contaminants; and radioactive contaminants. In order to ensure that tap water is safe to drink, the State and the EPA prescribe regulations which limit the amount of certain contaminants in water provided by Public Water Systems. The State Health Department's and the FDA's regulations establish limits for contaminant's in bottled water which must provide the same protection for public health.

Our water source is a clean and plentiful groundwater aquifer called the Great Flats Aquifer. The water from the aquifer is pumped into the system through a series of twelve 70 foot drilled wells located at the treatment plant on Rice Road in the Town of Rotterdam. The water produced by the wells is of excellent quality prior to treatment. Chlorination, fluoridation and inorganic phosphates provide the only treatment required. During 2009, our system did not experience any restriction of our water source.

FACTS AND FIGURES

Our water system serves approximately 61,821 people in the City of Schenectady through 19,000 service connections. We also serve a portion of the Town of Niskayuna and a small number of customers in the Town of Rotterdam. The total water produced in 2009 was 4,613,334,000 gallons of water. The daily average of water treated and pumped into the distribution system is 12,639,000 gallons per day. Our highest single day usage was 18,666,000 gallons. Because the majority of the residential accounts are un-metered, there is no clear record of total water consumed and billed. Un-billed water is used to flush transmission and distribution mains, for fighting fires, or is lost through leaks in the system. The City will be supporting the leak detection and flushing programs in the summer of 2010. In 2009, inside City metered water customers were charged $1.48 per 100 cubic feet of water. One Hundred cubic feet equal's 748 gallons. A typical household on the flat rate within the City of Schenectady was charged approximately $216.00 for water.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

In accordance with State regulations, the Schenectady Water Department routinely monitors your drinking water for numerous contaminants. We test your drinking water for inorganic contaminants, radiological contaminants, lead and copper, nitrate, volatile organic contaminants, and synthetic organic contaminants. In addition, we test seventy samples for coliform bacteria each month. The **City of Schenectady Table Of Detected Contaminants** is the table that depicts contaminants that were detected in your drinking water. The State allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old and is noted. For a listing of all the parameters that we must analyze and the frequency of testing for compliance with the NYS Sanitary Code, see the **Table of Compounds Analyzed that were Below Limits of Detection.** It should be noted that all drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants.

The presence of contaminants does not necessarily pose a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at 1-800-426-4791 or the Schenectady County Health Department at 518- 386 - 2818.

WHAT DOES THIS INFORMATION MEAN?

As you can see by the tables, our system had no violations. We have learned through our testing that some contaminants have been detected; however, these contaminants were detected below the level allowed by the State. Additional information is available from the Safe Drinking Water Hotline 1-800-426-4791.

IS OUR WATER MEETING OTHER RULES THAT GOVERN OPERATIONS?

During 2009, our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements.

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

Although our drinking water met or exceeded State and Federal regulations, some people may be more vulnerable to disease causing microorganisms or pathogens in drinking water than the general population. Immune-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice from their health care provider about their drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium, Giardia and other microbial pathogens are available from the Safe Drinking Water Hotline 1-800-426-4791.

VULNERABILITY ASSESSMENT

The City of Schenectady Water Department vulnerability assessment has been updated in 2009 As a result of the assessment we have taken steps to increase security. For security reasons the assessment is strictly confidential.

In accordance with the 1996 New York State Public Health Law, the following annual report has been prepared for your information.

INFORMATION ON FLUORIDE ADDITION

Our system is one of many drinking water systems in New York State that provides drinking water with a controlled low level of fluoride for consumer dental health protection. According to the United States Centers for Disease Control, fluoride is very effective in preventing cavities when present in drinking water at an optimal range from 0.8 to 1.2 mg/l. To ensure that the fluoride supplement in your water provides optimal dental protection, the State Department of Health requires that the Schenectady Water Department monitor fluoride levels on a daily basis. During 2009 monitoring showed fluoride levels in your water were in optimal range 100% of the time. None of the monitoring results showed fluoride at levels that approach the 2.2 mg/l MCL for fluoride.

WHY SAVE WATER AND HOW TO AVOID WASTING IT

Although our system has an adequate amount of water to meet present demands, there are a number of reasons why it is important to conserve water:

★ Saving water saves energy and some of the costs associated with both of these necessities of life
★ Saving water reduces the cost of energy required to pump water and the need to construct costly new wells and pumping systems
★ Saving water lessens the strain on the water system during a dry spell or drought, helping to avoid severe water use restrictions so that essential fire fighting needs are met.
★ The Schenectady Water Department encourages water conservation. There are a lot of things you can do to conserve water in your own home. See the following conservation tips.
★ Only run the dishwasher and clothes washer when there is a full load
★ Use water saving showerheads
★ Install faucet aerators in the kitchen and the bathroom to reduce the flow from 4 to 2.5 gallons per minute
★ Check faucets and pipes for leaks and repair all leaks promptly
★ Take shorter showers
★ Check your toilets for leaks, by putting a few drops of food coloring in the tank, watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from one of these otherwise invisible toilet leaks. Fix it and you save 30,000 gallons a year.
★ If you have a meter, use it to detect hidden leaks.
Simply turn off all taps and water using appliances, then check the meter after 15 minutes, if it moved, you have a leak.

★ Adhere to the lawn sprinkling ordinance.
Lawn sprinkling with a hose or other use of water will be allowed only from May 1, 2010 to November 1, 2010 every other day. Those residences on the even numbered side of the street will be permitted sprinkling on even numbered days, the odd numbered side of the street on odd numbered days.
Lawn sprinkling shall not exceed four (4) hours per day between the hours of 7:00 AM to 9:00 AM and 7:00 PM to 9:00 PM. Observance of these restrictions will conserve energy resources while maintaining necessary water supplies for fire protection.

CLOSING

Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit our customers. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future. If you have any questions please call our office at 382-5023, or visit our web site at www.cityofschenectady.com

NOTE SECTION FOR CITY OF SCHENECTADY TABLE OF DETECTED CONTAMINANTS

1. The level presented represents the 90th percentile of the 30 sites tested. A percentile is a value on a scale of 100 that indicates the percent of a distribution that is equal to or below it. The 90th percentile is equal to or greater than 90 percent of the lead values detected at your water system. In this case 30 samples were collected in your water system, and the 90th percentile value was the 4th highest value.
The action level for lead was not exceeded at any of the sites tested.
2. During 2007 we collected and analyzed 30 samples for copper. The level included in the table represents the 90th percentile, the 4th highest levels detected. The action level for copper was not exceeded at any of the sites tested.
3. Water containing more than 20 *mg/I* should not be consumed by persons on severely restricted sodium diets; Water containing more than 270 *mg/I* should not be consumed by persons on moderately restricted sodium diets.
4. This result represents one sample only (Single Sample).

DEFINITIONS

Milligrams per liter (mg/l) correspond to one part of liquid in one million parts of liquid (parts per million - ppm).
Micrograms per liter (ug/l) correspond to one part of liquid in one billion parts of liquid (parts per billion - ppb).
90th Percentile Value - The values reported for lead and copper represent the 90th percentiles. A percentile is a value on a scale of 100 that indicates the percent of a distribution that is equal to or below it. The 90th percentile is equal to or grater than 90% of the lead and copper values detected at your water system.
Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.
Action Level (AL): The concentrations of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Maximum Contaminant Level - (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLG as possible.
Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
Maximum Residual Disinfectant Level Goal (MRDLG): The level of drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contamination.
Non-Detects (ND) – laboratory analysis indicates that the constituent is not present.
N/A - Not applicable

Adopt - a - hydrant

Anyone desiring to paint a fire hydrant this year will be able to do so through the Adopt-A-Hydrant program. The Water Department will supply you with the proper paint and brush. Anyone interested in doing so, should contact the Water Department at 382-5023.



SCHENECTADY WATER DEPARTMENT
PUBLIC WATER SUPPLY IDENTIFICATION NUMBER NY4600070
New York State Sanitary Code Compliance Monitoring Requirements
Table of Compounds Analyzed that were Below Limits of Detection

SYNTHETIC ORGANIC CHEMICALS	
CONTAMINANT	**MONITORING**
Alachlor	Monitoring requirement is one sample every eighteen months. Sample results from 8/11/08 IN COMPLIANCE
Aldrin	
Atrazine	
Chlordane	
Dieldrin	
Endrin	
Heptachlor	
Heptachlor epoxide	
Lindane	
Methoxyhlor	
Metolachlor	
Metribuzin	
Simazine	
Toxaphene	
Aldicarb	
Aldicarb Sulfone	
Aldicarb Sulfoxide	
Carbaryl	
Carbofuran	
1,2-dibromoethane	
1,2-dibro-3-chloropropane	
2,4-D	
Dalapon	
Dicamba	
Dinoseb	
Pentachlorophenol	
Pichloram	
2,4,5-TP	
Benzo(a)pyrene	
Butachlor	
Di (2-ethylhexy) adipate	
Di (2-ethylhexy) pthalate	
Glyphosate	
Hexachlorobenzene	
Hexachlorocyclopentadiene	
PCB	
Propachlor	

INORGANIC CHEMICALS - PRIMARY	
CONTAMINANT	**MONITORING**
Antimony	Monitoring Requirement is one sample every 3 years. Sample results from 08/11/08 IN COMPLIANCE
Arsenic	
Barium	
Beryllium	
Cadmium	
Silver	
Chromium	
Cyanide	
Mercury	
Nickel	
Selenium	
Thalium	

INORGANIC CHEMICALS - SECONDARY	
CONTAMINANT	**MONITORING**
Color	Monitoring is at State discretion. Every 9 years Sample results from 02/25/02 IN COMPLIANCE
Odor	
Turbidity	
Iron	
Zinc	
Asbestos	

VOLATILE ORGANIC CHEMICALS	
CONTAMINANT	**MONITORING**
Benzene	Monitoring requirement is one sample per year Sample results from Well #11 08-10-09 IN COMPLIANCE
Bromobenzene	
Bromomethane	
N-Butylbenzene	
sec-Butylbenzene	
Tert-Butylbenzene	
Carbon Tetrachloride	
Chlorobenzene	
2-Chlorotoluene	
4-Chlorotoluene	
Dibromethane	
1,2-Dichlorobenzene	
1,3-Dichlorobenzene	
1,4-Dichlorobenzene	
Dichlordifluoromethane	
1,1-Dichloroethane	
1,2-Dichloroethane	
1,1 Dichloroethene	
cis-1,2 Dichloroethene	
Trans-1,2-Dichloroethene	
1,2 Dichloropropane	
1,3 Dichloropropane	
2,2 Dichloropropane	
1,1 Dichloropropene	
1,3-Dichloropropene	
Ethylbenzene	
Isopropylbenzene	
p-Isopropyltoluene	
Methylene Chloride	
n-Propylbenzene	
Styrene	
1,1,1,2-Tetrachloroethane	
1,1,2,2-Tetrachloroethane	
Tetrachloroethene	
Toluene	
1,2,3-Trichlorobenzene	
1,2,4-Trichlorobenzene	
1,1,1-Trichloroethane	
1,1,2-Trichloroethane	
Trichloroethene	
Trichlorofluoromethane	
1,2,3-Trichloropropane	
1,2,4-Trimethylbenzene	
1,3,5-Trimethylbenzene	
Vinyl Chloride	
m-Xylene	
o-Xylene	
p-Xylene	

BACTERIOLOGICAL PARAMETERS	
CONTAMINANT	**MONITORING**
Total Coliform E-Coli	Monitoring requirement is 70 samples per month IN COMPLIANCE

RADIOLOGICAL PARAMETERS	
CONTAMINANT	**MONITORING**
Gross Alpha Particle Activity Radium 226 & 228	Monitoring requirement is one sample every nine years. Sample results from 06/07/04 IN COMPLIANCE

CITY OF SCHENECTADY
DEPARTMENT OF WATER
ROOM 206 CITY HALL
SCHENECTADY, NEW YORK 12305

PRESORTED
STANDARD
US POSTAGE
PAID
PERMIT #79
ALBANY, NY



CITY OF SCHENECTADY TABLE OF DETECTED CONTAMINANTS
(See Note Section on for an explanation of levels detected)

Contaminant	Violation Yes/No	Date of Sample	Level Detected	Unit Measurement	MCLG	Regulatory Limit MCL,TT, or AL	Likely Source
Chloride	No	2/25/02	42[4]	mg/l	N/A	MCL250	Natural occurring and indicative of road salt contamination
Manganese	No	2/25/02	20[4]	ug/l	N/A	MCL 300	Natural occurring and indicative of Landfill Contamination
Hardness	No	2/25/02	161[4]	mg/l	N/A	N/A	Natural Occurring
pH	No	2/25/02	7.1[4]	mg/l	N/A	6.5 - 8.5	Natural Occurring
Alkalinity	No	2/25/02	165[4]	mg/l	N/A	N/A	Natural Occurring
Calcium	No	2/25/02	53.6[4]	mg/l	N/A	N/A	Natural Occurring
Fluoride	No	3/14/05	.924[4]	mg/l	N/A	MCL=2.2	Natural Occurring; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories.
Sulfate	No	2/25/02	28[4]	mg/l	N/A	250	Natural Occurring
Dissolved Solids	No	2/25/02	285[4]	mg/l	N/A	500	Natural Occurring
Sodium	No	2/25/02	21.5[3]	mg/l	N/A	See Note #3	Natural occurring: road salt: water softeners, animal waste.
Copper	No	June 2007	Range .0 -.95 .08[2]	mg/l	1.3	AL=1.3	Corrosion of galvanized pipes, erosion of natural deposits.
Lead	No	June 2007	Range 0 - .005 .003[1]	ug/l	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits.
Total Trihalomethanes	No	08/10/09	13.1[4]	ug/l	N/A	MCL 80	By product of drinking water disinfection
HAA5	No	08/10/09	9.0[4]	ug/l	N/A	MCL 60	By product of drinking water disinfection
Nitrate	No	8/10/09	.20[4]	mg/l	N/A	10	Fertilizer runoff
Barium	No	3/14/05	.021[4]	mg/l	N/A	2.0	Natural Occurring

1970TO2010 40 YEARS

GEI Consultants

September 22, 2011
Project 091990-1-1105

Geotechnical
Environmental
Water Resources
Ecological

John Spellman, P.E.
New York State Department of
Environmental Conservation
Division of Environmental Remediation
625 Broadway
Albany, NY 12233-7014

RE: Letter Work Plan
Operable Unit 2 Supplemental Remedial Investigation and Feasibility Study
Clinton Street Former Manufactured Gas Plant Site
Schenectady, New York
NYSDEC Site # V00474

Dear Mr. Spellman:

During our August 11, 2011 teleconference you indicated that the Record of Decision (ROD) for the Interim Remedial Measure (IRM) in Operable Unit 2 (OU2) North at the Schenectady Clinton Street Former Manufactured Gas Plant (MGP) Site (Figure 1) cannot be completed without a Feasibility Study for the "postage stamp" parcel. The postage stamp parcel is in the northwest corner of OU2 South, adjacent to OU2 North (Figure 2), and is part of the City of Schenectady property included in the New York State Department of Environmental Conservation (NYSDEC) Environmental Restoration Program. During the teleconference NYSDEC requested that National Grid complete a Feasibility Study for the postage stamp parcel.

Later, on August 23, 2011, you emailed National Grid and GEI with comments on the June 2011 Draft OU2 Remedial Investigation (RI) Report for the Site. A number of the comments are easily addressed. However, several comments cannot be addressed without additional data and information.

As such, this letter provides National Grid's proposed scope of work to gather additional data, complete the Feasibility Study, and revise the Draft OU2 RI report.

Postage Stamp Parcel - Data Gaps

Vertical Extent

CT Male installed three borings in the past [GP/CTM-20(08), GP/CTM-22(08), and GP/CTM-23(08)], and converted all three to monitoring wells. One was advanced to 16 feet below ground surface (bgs) and the remaining two were advanced to 20 feet.

However, no soil samples were recovered from deeper than 16 feet at any of the three borings. Wells GP/MW-20(08) and GP/MW-22(08) have since been damaged and cannot be used for collection of groundwater samples.

GEI installed three borings [SB-125(10), SB-124(10), and SB-127(10)] to 33 feet, and converted SB-125/MW-27S(10) to a monitoring well.

All GEI and CT Male borings contained evidence of petroleum or MGP impacts, but CT Male's borings did not advance beyond 16 feet. GEI's borings encountered the most apparent impacts beginning at 16 feet. Additional borings are recommended to improve the delineation of impacts.

Polychlorinated Biphenyls (PCBs)

An aboveground vault (that may be a former tunnel) is located on the boundary of OU2 North and OU2 South at the postage stamp parcel. PCBs have been associated with drums that are now or were formerly stored in the vault. However, there are no existing surface soil PCB data, and little subsurface PCB data in the area of the vault. Additional PCB samples are recommended to clarify whether the vault and its contents may be a source of PCB impacts in both OU2 North and OU2 South.

Cyanide

Road salt has been stored in OU2 North and excess snow is sometimes dumped on the postage stamp parcel. Ferric ferrocyanide is a well-documented road salt additives (Langen, et al, 2006), used to prevent caking of the salt. There is little surface soil cyanide data and existing cyanide data for the postage stamp parcel are for total cyanide only. Additional samples and free cyanide analysis are recommended to clarify whether cyanide is present and what form it may take in both OU2 North and OU2 South.

OU2 North Data Gaps

Both CT Male and GEI have encountered shallow refusal (4 to 5 feet bgs) during drilling near the western boundary of OU2 North, in the general area of the former "coal pockets" building. This suggests that a slab is present. While subsurface soil is apparently free of physical impacts between the slab and the IRM footprint in OU2 North, it is prudent to evaluate soil beneath the slab. Two angle borings are recommended to verify current assumptions about soils beneath the slab.

"Near surface" soil samples were collected by CT Male in OU2 North, generally from 1 to 3 feet below the pavement. Shallower samples for PCBs, cyanide, and free cyanide are recommended.

Historical Information Gaps

Additional historical research is recommended to better assess the potential significance of:

- The aboveground vault (possibly a former tunnel)
- A pipe yard operated in the early 1900s at OU2 North
- A lubricant manufacturer in OU2 South

Goals

Several goals have been established for additional investigation, as follow:

- Assess the potential significance of the aboveground vault and former industrial operations in OU2 North and OU2 South.
- Install additional borings to better determine the vertical and lateral limits of MGP and other impacts in the "postage stamp" area, in support of feasibility study and OU2 RI report revision.
- Generate additional analytical data for total cyanide, free cyanide, and PCBs to support Feasibility Study and OU2 RI report revision.
- Evaluate the subsurface soil quality beneath the slab near the western boundary of OU2 North where both CT Male and GEI have meet shallow refusals.

Scope of Work

Figure 1 presents the Site location. Figure 2 presents the "postage stamp" parcel and its surroundings. Figures 3, 4, 5, and 6 provide a summary of existing data and information. Figure 7 presents our proposed surface and subsurface soil boring/sampling locations.

Field procedures will follow those described in the NYSDEC-approved OU2 work plan, dated June 29, 2009. Zebra Environmental, Inc. will install the Geoprobe® borings and wells. All locations will be hand cleared to 5 feet bgs with a vac truck before drilling begins.

Appropriate quality assurance/quality control samples (blind duplicates, matrix spike/matrix spike duplicates, and rinsate blanks) will be collected. Test America Laboratories will conduct laboratory analyses. All analytical data will be validated per ASP category B.

A Community Air Monitoring Plan will be implemented as described in the NYSDEC-approved OU2 RI work plan. GEI will implement and follow the NYSDEC-approved Health and Safety Plan.

Waste soil and wastewater will be containerized and stored within a fenced area on site until they can be properly removed and disposed.

Surface Soil Sampling

Thirty surface soil samples [SS016(11) through SS45(11)] will be collected at the soil boring locations shown in Figure 7. In OU2 North these samples will be collected just below the pavement. The samples will be analyzed for polycyclic aromatic hydrocarbons (PAHs) (Method 8270C), PCBs (Method 8082), total cyanide (Method 9012) and free cyanide (Method 9016).

The analytical methods identified above will be applied for soil samples described in the remainder of this work plan.

Subsurface Soil Boring and Sampling

Thirty soil borings [SB-128(11) through SB-152(11)] will be installed at the same locations as surface soil samples. Geoprobe® drilling methods will be used at all borings. Angle drilling will be used to sample soil beneath the slab in OU-2 North. Each boring will be advanced to a minimum depth of 25 feet bgs. Samples will be continuously logged and digitally photographed.

At each vertical boring, at 3 feet and 8 feet bgs, samples will be collected for benzene, toluene, ethylbenzene, xylene (BTEX-Method 8260), PAHs, PCBs, total cyanide and free cyanide. Beyond the 8 foot depth, the most apparent petroleum/MGP impacts will be sampled for the same suite of compounds. At the angle borings, samples will be collected at the approximate vertical depth of 10-13 feet bgs.

Monitoring Well Installation and Sampling

One soil boring at an apparently clean location on the downgradient side of the postage stamp parcel will be converted to a monitoring well [SB-128/MW-28S(11)]. The well will be constructed of 2-inch-diameter flush-threaded polyvinyl chloride. The 10-foot, 20-slot screen will be positioned to straddle the depth of the most apparent MGP-impacts observed at the upgradient borings (expected to be 12 to 24 feet bgs).

A second boring will be converted to a monitoring well [SB-134/MW-29S(11)] to "replace" GP/MW-CTM20(08).

The new wells will be developed a minimum of 24 hours after installation to remove fine grains and promote groundwater flow into the well. Development will follow the surge and pump method until a minimum of 10 volumes have been removed. GP/CTM-23(08) and GP/CTM-09(06) will be re-developed before sampling.

A minimum of two weeks later a round of groundwater samples will be collected using low-flow techniques from the following wells:

GP/CTM-9(06), SB-128/MW28S(11), GP/CTM-23(08), SB-77/MW-20S(09),SB-125/MW-27S(10), SB-86/MW25S(09), and SB-134/MW-29S(11).

Data Reduction and Validation

Laboratory analysis and data validation will require approximately seven weeks (after the lab has received the last groundwater samples). During that time physical data (soil boring logs, groundwater levels) will be reduced.

Feasibility Study and OU2 RI Report Revision

When the validated data are available in tabular form, development of the Feasibility Study and revision of the OU2 RI report will begin.

The OU2 RI Report revision will address comments provided to National Grid and GEI by NYSDEC on August 23, 2011.

Schedule

We anticipate that the following schedule can be implemented:

September 23, 2011	Draft work plan to NYSDEC.
October 5, 2011	Begin field work.
November 7 - 9, 2011	Groundwater Sampling
October 19, 2011 – December 28, 2011	Data reduction and validation
January 25, 2012	Draft Feasibility Study to National Grid
January 25, 2012	Draft revised RI report to National Grid
February 8, 2012	Draft Feasibility Study to NYSDEC
February 8, 2012	Draft revised RI report to NYSDEC

We look forward to approval of this work plan. Please call me (860.368.5404) if you have questions or require additional detail.

Sincerely,

Jerry Zak
Project Manager

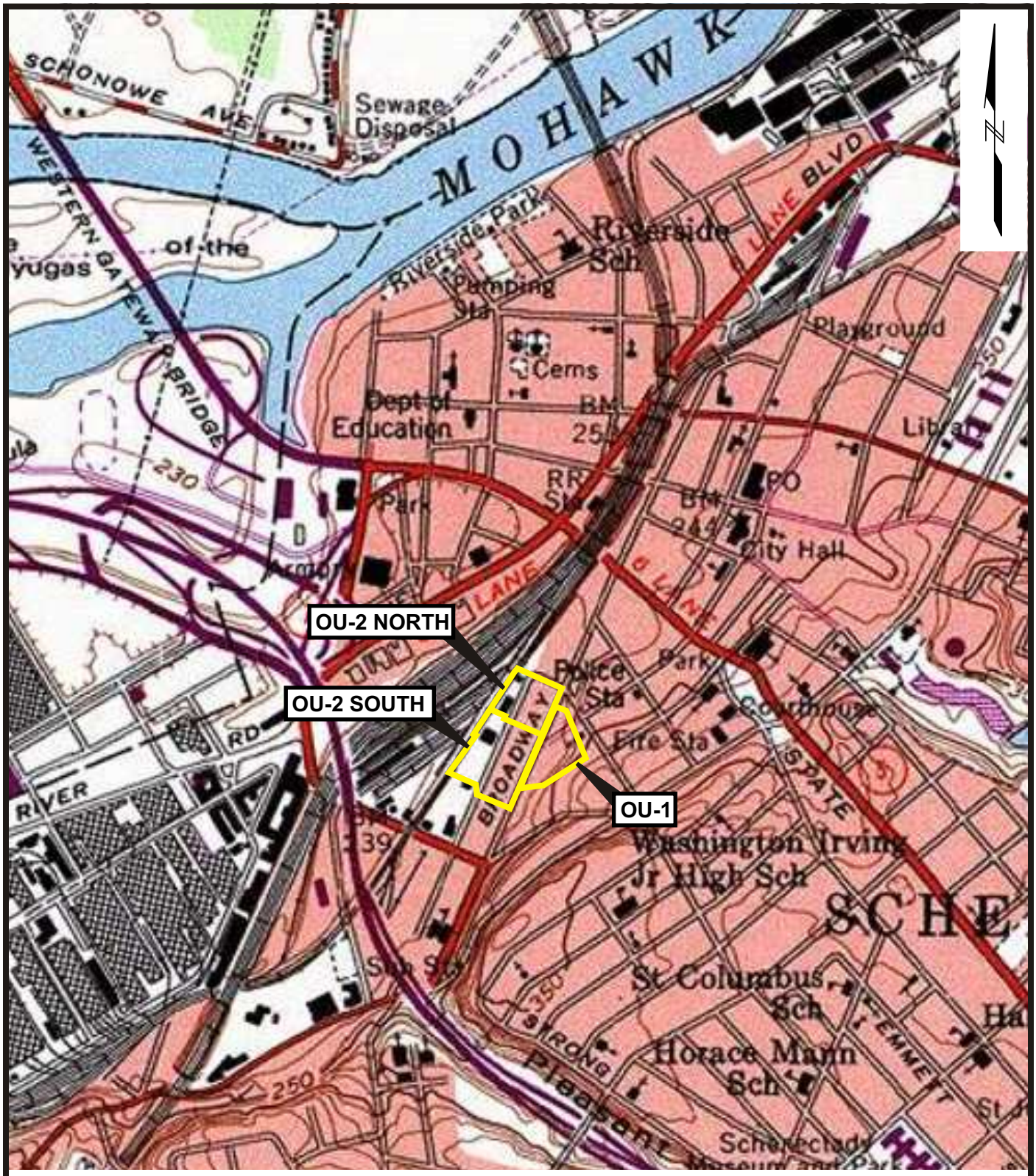
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Enclosures
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References

Langen, Tom A., M. Twiss, T. Young, K. Janoyan, J. C. Stager, J. Osso, Jr., H. Prutzman, B. Green. *Environmental Impacts of Winter Road at the Cascade Lakes and Chapel Pond, the Final Report.* June 2006. Clarkson Center for the Environment Report #1. Clarkson University, Potsdam, New York. Study funded by the New York State Department of Transportation.

Document available at:

https://www.nysdot.gov/divisions/engineering/environmental-analysis/repository/cascade_lakes_final_report.pdf



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SOURCE: Map created with TOPO! ® ©2001 National Geographic (www.nationalgeographic.com/topo)"

SUPPLEMENTAL INVESTIGATION WORK PLAN
CLINTON STREET FORMER MGP SITE
SCHENECTADY, NEW YORK

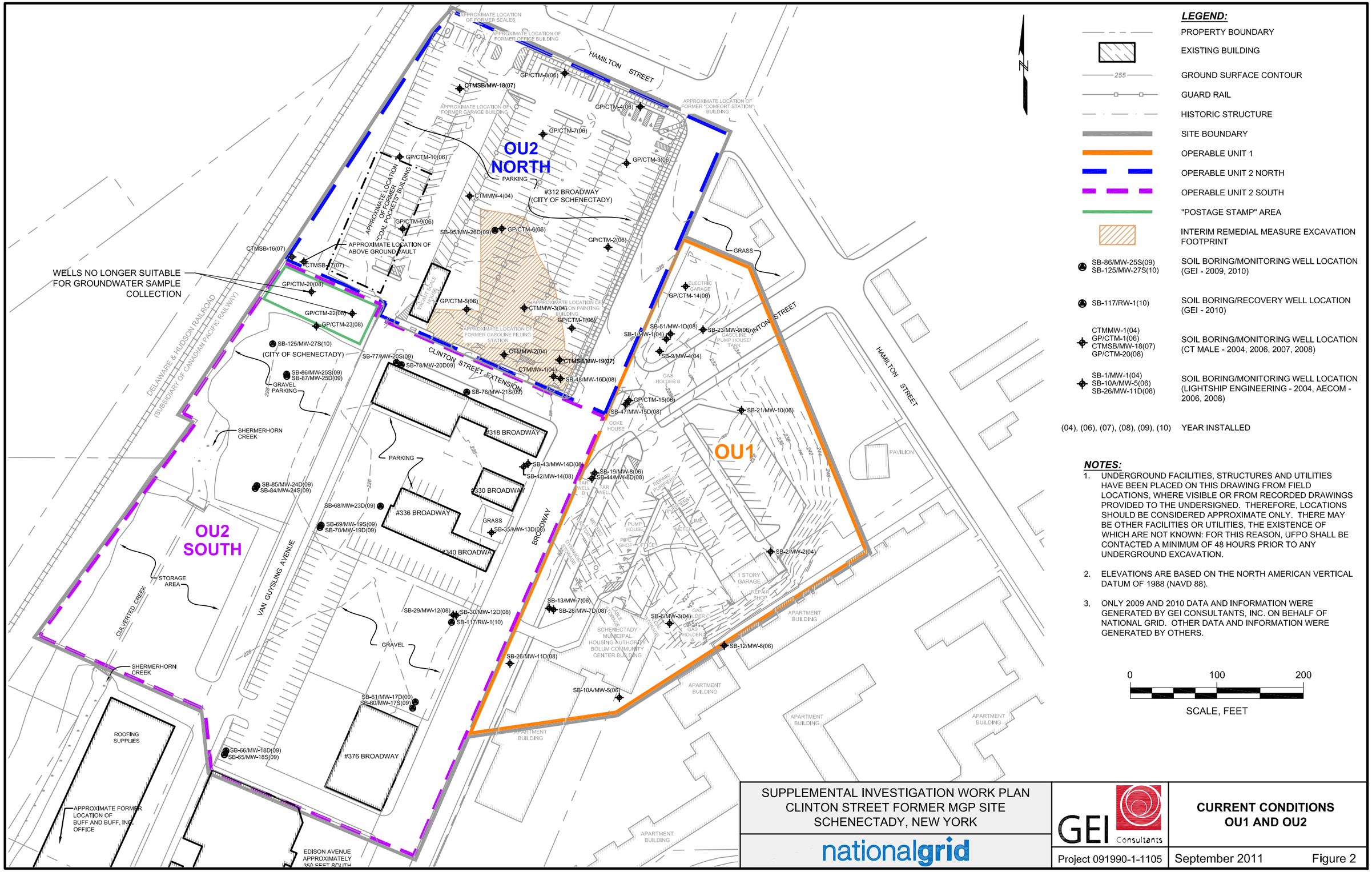
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SITE LOCATION MAP

Project 091990-1-1105 | September 2011 | Figure 1

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LEGEND:

- PROPERTY BOUNDARY
- EXISTING BUILDING
- 255 — GROUND SURFACE CONTOUR
- GUARD RAIL
- HISTORIC STRUCTURE
- SITE BOUNDARY
- OPERABLE UNIT 1
- OPERABLE UNIT 2 NORTH
- OPERABLE UNIT 2 SOUTH
- "POSTAGE STAMP" AREA
- INTERIM REMEDIAL MEASURE EXCAVATION FOOTPRINT
- SB-86/MW-25S(09), SB-125/MW-27S(10) — SOIL BORING/MONITORING WELL LOCATION (GEI - 2009, 2010)
- SB-117/RW-1(10) — SOIL BORING/RECOVERY WELL LOCATION (GEI - 2010)
- CTMMW-1(04), GP/CTM-1(06), CTMSB/MW-18(07), GP/CTM-20(08) — SOIL BORING/MONITORING WELL LOCATION (CT MALE - 2004, 2006, 2007, 2008)
- SB-1/MW-1(04), SB-10A/MW-5(06), SB-26/MW-11D(08) — SOIL BORING/MONITORING WELL LOCATION (LIGHTSHIP ENGINEERING - 2004, AECOM - 2006, 2008)
- (04), (06), (07), (08), (09), (10) — YEAR INSTALLED

NOTES:

1. UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLACED ON THIS DRAWING FROM FIELD LOCATIONS, WHERE VISIBLE OR FROM RECORDED DRAWINGS PROVIDED TO THE UNDERSIGNED. THEREFORE, LOCATIONS SHOULD BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE OTHER FACILITIES OR UTILITIES, THE EXISTENCE OF WHICH ARE NOT KNOWN: FOR THIS REASON, UFPO SHALL BE CONTACTED A MINIMUM OF 48 HOURS PRIOR TO ANY UNDERGROUND EXCAVATION.
2. ELEVATIONS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
3. ONLY 2009 AND 2010 DATA AND INFORMATION WERE GENERATED BY GEI CONSULTANTS, INC. ON BEHALF OF NATIONAL GRID. OTHER DATA AND INFORMATION WERE GENERATED BY OTHERS.

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CURRENT CONDITIONS OU1 AND OU2

Project 091990-1-1105 | September 2011 | Figure 2

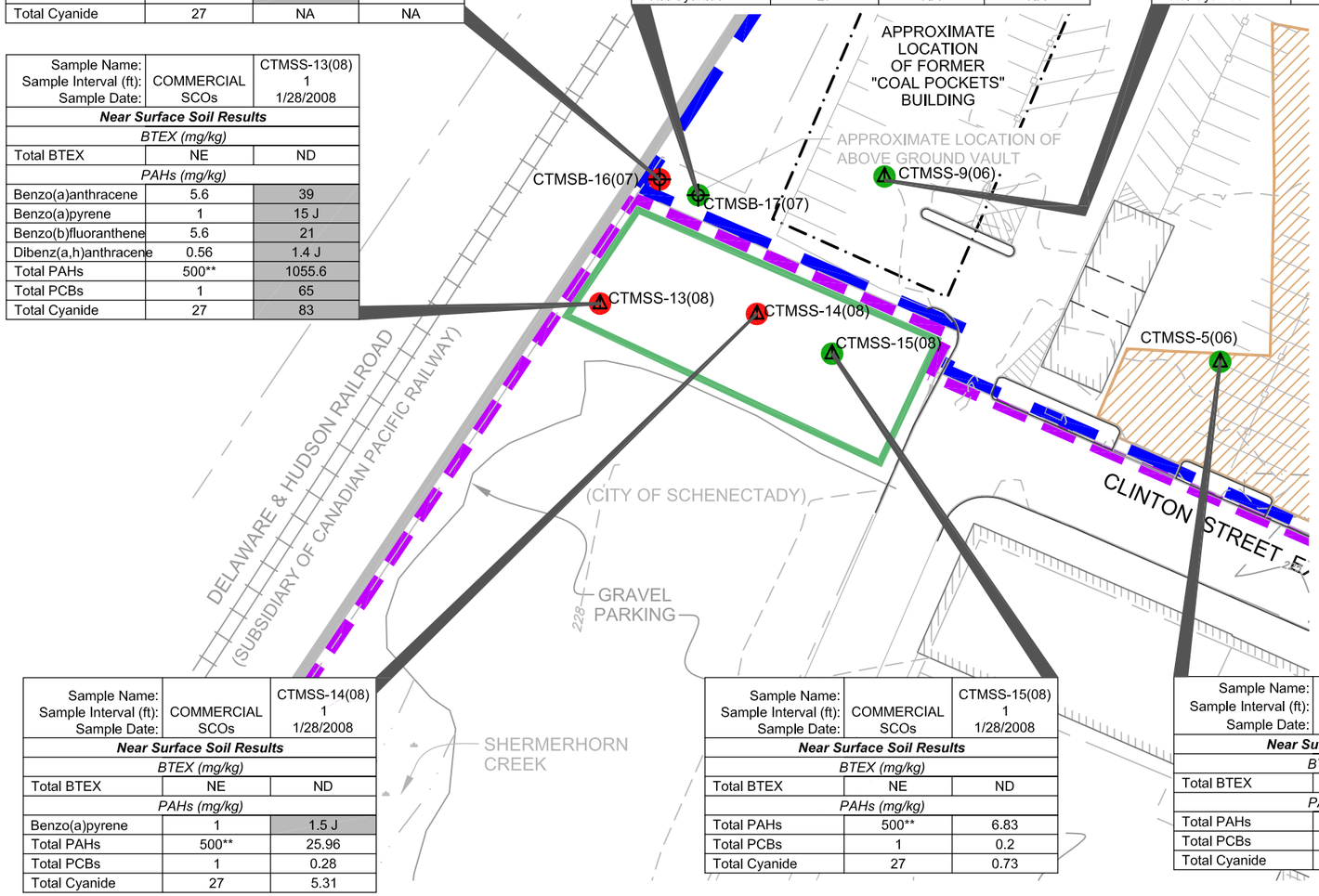
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Sample Name:		CTMSB-16(07)	CTMSB-16(07)
Sample Interval (ft):	COMMERCIAL	1-2	2-3
Sample Date:	SCOs	5/29/2007	5/29/2007
Near Surface Soil Results			
BTEX (mg/kg)			
Total BTEX	NE	ND	ND
PAHs (mg/kg)			
Benzo[a]pyrene	1	3.1	0.086 J
Total PAHs	500**	26.8	0.691
Total PCBs	1	20	0.17
Total Cyanide	27	NA	NA

Sample Name:		CTMSS-13(08)
Sample Interval (ft):	COMMERCIAL	1
Sample Date:	SCOs	1/28/2008
Near Surface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	ND
PAHs (mg/kg)		
Benzo(a)anthracene	5.6	39
Benzo(a)pyrene	1	15 J
Benzo(b)fluoranthene	5.6	21
Dibenz(a,h)anthracene	0.56	1.4 J
Total PAHs	500**	1055.6
Total PCBs	1	65
Total Cyanide	27	83

Sample Name:		CTMSB-17(07)	CTMSB-17(07)
Sample Interval (ft):	COMMERCIAL	1-2	2-3
Sample Date:	SCOs	5/29/2007	5/29/2007
Near Surface Soil Results			
BTEX (mg/kg)			
Total BTEX	NE	ND	ND
PAHs (mg/kg)			
Total PAHs	500**	0.471	ND
Total PCBs	1	0.025	ND
Total Cyanide	27	NA	NA

Sample Name:		CTMSS-9(06)
Sample Interval (ft):	COMMERCIAL	0.5
Sample Date:	SCOs	5/11/2006
Near Surface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	ND
PAHs (mg/kg)		
Total PAHs	500**	6.663
Total PCBs	1	ND
Total Cyanide	27	NA



Sample Name:		CTMSS-14(08)
Sample Interval (ft):	COMMERCIAL	1
Sample Date:	SCOs	1/28/2008
Near Surface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	ND
PAHs (mg/kg)		
Benzo(a)pyrene	1	1.5 J
Total PAHs	500**	25.96
Total PCBs	1	0.28
Total Cyanide	27	5.31

Sample Name:		CTMSS-15(08)
Sample Interval (ft):	COMMERCIAL	1
Sample Date:	SCOs	1/28/2008
Near Surface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	ND
PAHs (mg/kg)		
Total PAHs	500**	6.83
Total PCBs	1	0.2
Total Cyanide	27	0.73

Sample Name:		CTMSS-5(06)
Sample Interval (ft):	COMMERCIAL	0.5
Sample Date:	SCOs	5/11/2006
Near Surface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	ND
PAHs (mg/kg)		
Total PAHs	500**	ND
Total PCBs	1	ND
Total Cyanide	27	NA

LEGEND:

- PROPERTY BOUNDARY
- EXISTING BUILDING
- 255 — GROUND SURFACE CONTOUR
- GUARD RAIL
- HISTORIC STRUCTURE
- SITE BOUNDARY
- OPERABLE UNIT 2 NORTH
- OPERABLE UNIT 2 SOUTH
- "POSTAGE STAMP" AREA
- INTERIM REMEDIAL MEASURE EXCAVATION FOOTPRINT
- CTMSS-1(06) CTMSS-13(08) — NEAR SURFACE SOIL SAMPLE LOCATION (CT MALE - 2006, 2008)
- CTMSB-16(07) — NEAR SURFACE SOIL BORING LOCATION (CT MALE - 2007)
- CTMMW-4(04) CTMSB/MW-18(07) — NEAR SURFACE SOIL BORING/MONITORING WELL LOCATION (CT MALE - 2004, 2007)
- (04), (06), (07), (08) — YEAR INSTALLED

ANALYTICAL BOX NOTES

COMMERCIAL SCOs - Regulatory comparison against 6NYCRR, Chapter IV, Part 375-6 Restricted Use Commercial Soil Cleanup Objectives

32.3	COMPOUNDS THAT EXCEED PART 375 COMMERCIAL SCOs
mg/kg	MILLIGRAM PER KILOGRAM
PAHs	POLYCYCLIC AROMATIC HYDROCARBONS
BTEX	BENZENE, TOLUENE, ETHYLBENZENE, XYLENE
PCBs	POLYCHLORINATED BIPHENYLS
	ONE OR MORE BTEX OR PAH COMPOUND CONCENTRATIONS EXCEED THE ASSOCIATED PART 375 COMMERCIAL SCOs
	NO BTEX OR PAH COMPOUNDS DETECTED AT CONCENTRATIONS ABOVE THE ASSOCIATED PART 375 COMMERCIAL SCOs
NA	NOT AVAILABLE, NOT APPLICABLE, OR NOT ANALYZED
ND	NOT DETECTED
NE	NOT ESTABLISHED
J	ESTIMATED VALUE
**	ACCORDING TO NYSDEC CP-51, FOR COMMERCIAL SITES WHERE THE ECOLOGICAL STANDARDS ARE NOT APPLICABLE, DEC MAY APPROVE A REMEDIAL PROGRAM WHICH ACHIEVES A SOIL CLEANUP LEVEL OF 500 MG/KG FOR TOTAL PAHS FOR ALL SUBSURFACE SOIL. THE 500 MG/KG CLEANUP LEVEL IS IN LIEU OF ACHIEVING ALL OF THE PAH-SPECIFIC SCOS IN 6NYCRR 375-6.

NOTES:

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3. ONLY 2009 AND 2010 DATA AND INFORMATION WERE GENERATED BY GEI CONSULTANTS, INC. ON BEHALF OF NATIONAL GRID. OTHER DATA AND INFORMATION WERE GENERATED BY OTHERS.
4. 2007 LOCATIONS ARE APPROXIMATE.

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CLINTON STREET FORMER MGP SITE
SCHENECTADY, NEW YORK

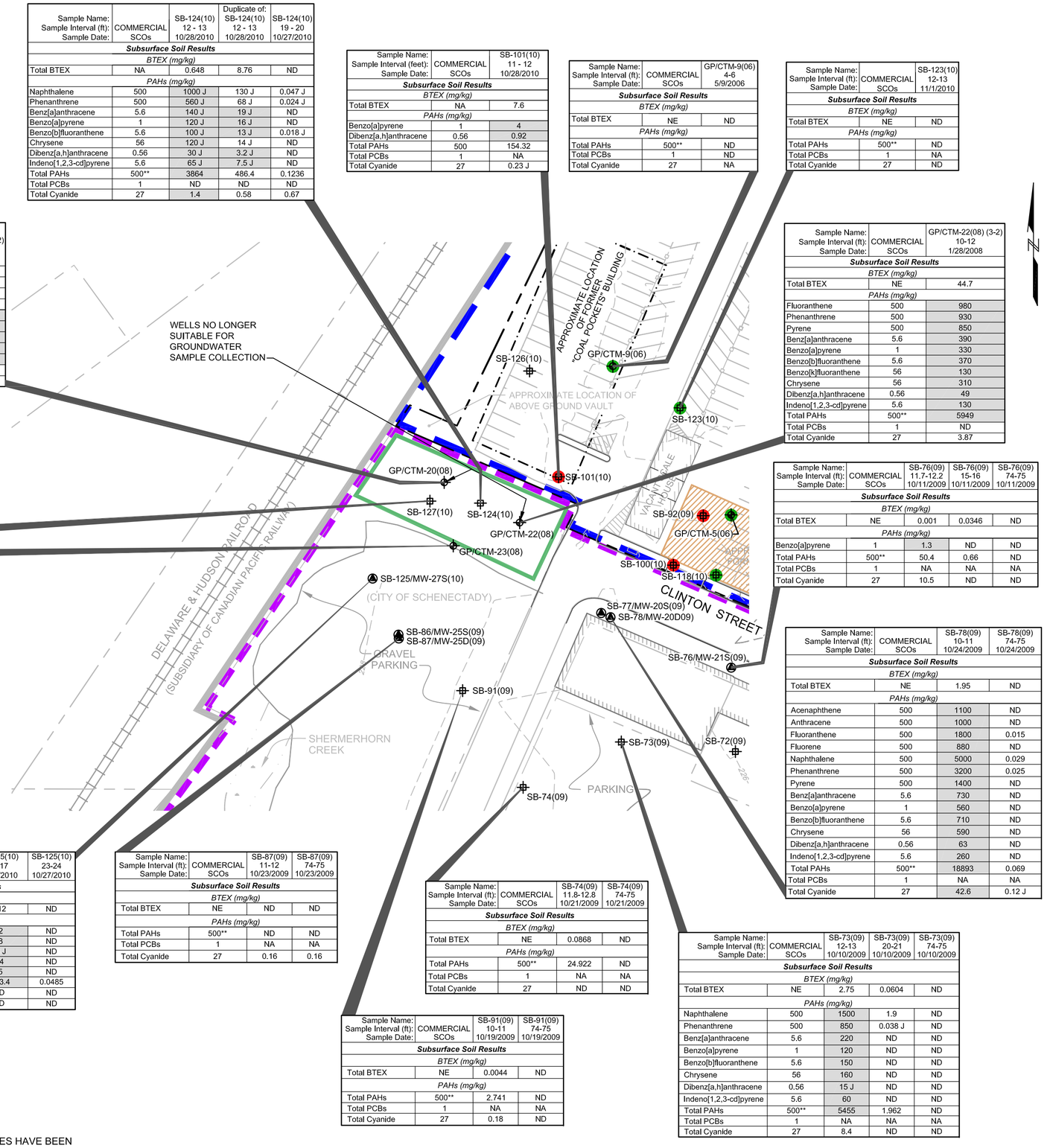
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OU2 NORTH AND "POSTAGE STAMP" PARCEL NEAR SURFACE SOIL SUMMARIZED ANALYTICAL RESULTS (mg/kg)

Project 091990-1-1105 | September 2011 | Figure 3

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Sample Name:		SB-124(10)	Duplicate of: SB-124(10)	SB-124(10)
Sample Interval (ft):	COMMERCIAL	12 - 13	12 - 13	19 - 20
Sample Date:	SCOs	10/28/2010	10/28/2010	10/27/2010
Subsurface Soil Results				
BTEX (mg/kg)				
Total BTEX	NA	0.648	8.76	ND
PAHs (mg/kg)				
Naphthalene	500	1000 J	130 J	0.047 J
Phenanthrene	500	560 J	68 J	0.024 J
Benz[a]anthracene	5.6	140 J	19 J	ND
Benzo[a]pyrene	1	120 J	16 J	ND
Benzo[b]fluoranthene	5.6	100 J	13 J	0.018 J
Chrysene	56	120 J	14 J	ND
Dibenz[a,h]anthracene	0.56	30 J	3.2 J	ND
Indeno[1,2,3-cd]pyrene	5.6	65 J	7.5 J	ND
Total PAHs	500**	3864	486.4	0.1236
Total PCBs	1	ND	ND	ND
Total Cyanide	27	1.4	0.58	0.67

Sample Name:		SB-101(10)
Sample Interval (feet):	COMMERCIAL	11 - 12
Sample Date:	SCOs	10/28/2010
Subsurface Soil Results		
BTEX (mg/kg)		
Total BTEX	NA	7.6
PAHs (mg/kg)		
Benzo[a]pyrene	1	4
Dibenz[a,h]anthracene	0.56	0.92
Total PAHs	500	154.32
Total PCBs	1	NA
Total Cyanide	27	0.23 J

Sample Name:		GP/CTM-9(06)
Sample Interval (ft):	COMMERCIAL	4-6
Sample Date:	SCOs	5/9/2006
Subsurface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	ND
PAHs (mg/kg)		
Total PAHs	500**	ND
Total PCBs	1	ND
Total Cyanide	27	NA

Sample Name:		SB-123(10)
Sample Interval (ft):	COMMERCIAL	12-13
Sample Date:	SCOs	11/1/2010
Subsurface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	ND
PAHs (mg/kg)		
Total PAHs	500**	ND
Total PCBs	1	NA
Total Cyanide	27	ND

Sample Name:		GP/CTM-20(08) (2-2)	Duplicate of: GP/CTM-20(08) (2-2)
Sample Interval (ft):	COMMERCIAL	6-8	6-8
Sample Date:	SCOs	1/28/2008	1/28/2008
Subsurface Soil Results			
BTEX (mg/kg)			
Total BTEX	NE	ND	ND
PAHs (mg/kg)			
Benzo(a)anthracene	5.6	5.8 J	39 J
Benzo(b)flouranthene	5.6	8.5 J	21 J
Benzo(a)pyrene	1	5.8 J	15 J
Dibenz(a,h)anthracene	0.56	1.1 J	1.2
Total PAHs	500**	71.02	1113.4
Total PCBs	1	ND	ND
Total Cyanide	27	1.77 J	4.39 J

Sample Name:		GP/CTM-22(08) (3-2)
Sample Interval (ft):	COMMERCIAL	10-12
Sample Date:	SCOs	1/28/2008
Subsurface Soil Results		
BTEX (mg/kg)		
Total BTEX	NE	44.7
PAHs (mg/kg)		
Fluoranthene	500	980
Phenanthrene	500	930
Pyrene	500	850
Benz[a]anthracene	5.6	390
Benzo[a]pyrene	1	330
Benzo[b]fluoranthene	5.6	370
Benzo[k]fluoranthene	56	130
Chrysene	56	310
Dibenz[a,h]anthracene	0.56	49
Indeno[1,2,3-cd]pyrene	5.6	130
Total PAHs	500**	5949
Total PCBs	1	ND
Total Cyanide	27	3.87

Sample Name:		SB-127(10)	SB-127(10)
Sample Interval (ft):	COMMERCIAL	12 - 13	20 - 21
Sample Date:	SCOs	10/27/2010	10/27/2010
Subsurface Soil Results			
BTEX (mg/kg)			
Total BTEX	NA	39	ND
PAHs (mg/kg)			
Benzo[a]pyrene	1	2.4	ND
Dibenz[a,h]anthracene	0.56	0.59	ND
Total PAHs	500**	63.98	ND
Total PCBs	1	ND	ND
Total Cyanide	27	ND	ND

Sample Name:		SB-76(09)	SB-76(09)	SB-76(09)
Sample Interval (ft):	COMMERCIAL	11.7-12.2	15-16	74-75
Sample Date:	SCOs	10/11/2009	10/11/2009	10/11/2009
Subsurface Soil Results				
BTEX (mg/kg)				
Total BTEX	NE	0.001	0.0346	ND
PAHs (mg/kg)				
Benzo[a]pyrene	1	1.3	ND	ND
Total PAHs	500**	50.4	0.66	ND
Total PCBs	1	NA	NA	NA
Total Cyanide	27	10.5	ND	ND

Sample Name:		GP/CTM-23(08) (3-2)
Sample Interval (ft):	COMMERCIAL	10-12
Sample Date:	SCOs	1/28/2008
Subsurface Soil Results		
BTEX (mg/kg)		
Benzene	44	160
Xylenes	500	1080 J
Total BTEX	NE	1800
PAHs (mg/kg)		
Acenaphthene	500	920
Anthracene	500	800
Fluorene	500	780
Fluoranthene	500	1600
Naphthalene	500	4400
Phenanthrene	500	2800
Pyrene	500	1400
Benz[a]anthracene	5.6	600 J
Benzo[a]pyrene	1	550
Benzo[b]fluoranthene	5.6	600
Benzo[k]fluoranthene	56	210 J
Chrysene	56	490 J
Dibenz[a,h]anthracene	0.56	89 J
Indeno[1,2,3-cd]pyrene	5.6	220 J
Total PAHs	500**	15969
Total PCBs	1	ND
Total Cyanide	27	2.53

Sample Name:		SB-78(09)	SB-78(09)
Sample Interval (ft):	COMMERCIAL	10-11	74-75
Sample Date:	SCOs	10/24/2009	10/24/2009
Subsurface Soil Results			
BTEX (mg/kg)			
Total BTEX	NE	1.95	ND
PAHs (mg/kg)			
Acenaphthene	500	1100	ND
Anthracene	500	1000	ND
Fluoranthene	500	1800	0.015
Fluorene	500	880	ND
Naphthalene	500	5000	0.029
Phenanthrene	500	3200	0.025
Pyrene	500	1400	ND
Benz[a]anthracene	5.6	730	ND
Benzo[a]pyrene	1	560	ND
Benzo[b]fluoranthene	5.6	710	ND
Chrysene	56	590	ND
Dibenz[a,h]anthracene	0.56	63	ND
Indeno[1,2,3-cd]pyrene	5.6	260	ND
Total PAHs	500**	18893	0.069
Total PCBs	1	NA	NA
Total Cyanide	27	42.6	0.12 J

Sample Name:		SB-125(10)	SB-125(10)
Sample Interval (ft):	COMMERCIAL	16-17	23-24
Sample Date:	SCOs	10/27/2010	10/27/2010
Subsurface Soil Results			
BTEX (mg/kg)			
Total BTEX	NA	5.12	ND
PAHs (mg/kg)			
Benz[a]anthracene	5.6	62	ND
Benzo[a]pyrene	1	38	ND
Benzo[b]fluoranthene	5.6	33 J	ND
Dibenz[a,h]anthracene	0.56	9.4	ND
Indeno[1,2,3-cd]pyrene	5.6	15	ND
Total PAHs	500**	1463.4	0.0485
Total PCBs	1	ND	ND
Total Cyanide	27	ND	ND

Sample Name:		SB-87(09)	SB-87(09)
Sample Interval (ft):	COMMERCIAL	11-12	74-75
Sample Date:	SCOs	10/23/2009	10/23/2009
Subsurface Soil Results			
BTEX (mg/kg)			
Total BTEX	NE	ND	ND
PAHs (mg/kg)			
Total PAHs	500**	ND	ND
Total PCBs	1	NA	NA
Total Cyanide	27	0.16	0.16

Sample Name:		SB-74(09)	SB-74(09)
Sample Interval (ft):	COMMERCIAL	11.8-12.8	74-75
Sample Date:	SCOs	10/21/2009	10/21/2009
Subsurface Soil Results			
BTEX (mg/kg)			
Total BTEX	NE	0.0868	ND
PAHs (mg/kg)			
Total PAHs	500**	24.922	ND
Total PCBs	1	NA	NA
Total Cyanide	27	ND	ND

Sample Name:		SB-91(09)	SB-91(09)
Sample Interval (ft):	COMMERCIAL	10-11	74-75
Sample Date:	SCOs	10/19/2009	10/19/2009
Subsurface Soil Results			
BTEX (mg/kg)			
Total BTEX	NE	0.0044	ND
PAHs (mg/kg)			
Total PAHs	500**	2.741	ND
Total PCBs	1	NA	NA
Total Cyanide	27	0.18	ND

Sample Name:		SB-73(09)	SB-73(09)	SB-73(09)
Sample Interval (ft):	COMMERCIAL	12-13	20-21	74-75
Sample Date:	SCOs	10/10/2009	10/10/2009	10/10/2009
Subsurface Soil Results				
BTEX (mg/kg)				
Total BTEX	NE	2.75	0.0604	ND
PAHs (mg/kg)				
Naphthalene	500	1500	1.9	ND
Phenanthrene	500	850	0.038 J	ND
Benz[a]anthracene	5.6	220	ND	ND
Benzo[a]pyrene	1	120	ND	ND
Benzo[b]fluoranthene	5.6	150	ND	ND
Chrysene	56	160	ND	ND
Dibenz[a,h]anthracene	0.56	15 J	ND	ND
Indeno[1,2,3-cd]pyrene	5.6	60	ND	ND
Total PAHs	500**	5455	1.962	ND
Total PCBs	1	NA	NA	NA
Total Cyanide	27	8.4	ND	ND

LEGEND:

- PROPERTY BOUNDARY
- EXISTING BUILDING
- 255 — GROUND SURFACE CONTOUR
- GUARD RAIL
- HISTORIC STRUCTURE
- SITE BOUNDARY
- OPERABLE UNIT 2 NORTH
- OPERABLE UNIT 2 SOUTH
- "POSTAGE STAMP" AREA
- INTERIM REMEDIAL MEASURE EXCAVATION FOOTPRINT
- SB-86/MW-25S(09) SB-125/MW-27S(10) — SOIL BORING/MONITORING WELL LOCATION (GEI - 2009, 2010)
- SB-117/RW-1(10) — SOIL BORING/RECOVERY WELL LOCATION (GEI - 2010)
- GP/CTM-1(06) GP/CTM-20(08) — SOIL BORING/MONITORING WELL LOCATION (CT MALE - 2006, 2008)
- SB-1/MW-1(04) SB-10A/MW-5(06) SB-26/MW-11D(08) — SOIL BORING/MONITORING WELL LOCATION (AECOM - 2004, 2006, 2008)
- SB-62(09) SB-124(10) — SOIL BORING LOCATION (GEI - 2009, 2010)
- SB-4(04) SB-17(06) CTMSB-16(07) SB-57(08) — SOIL BORING LOCATION (LIGHTSHIP ENGINEERING - 2004, CT MALE - 2007, AECOM - 2006, 2008)

ANALYTICAL BOX NOTES

COMMERCIAL SCOs - Regulatory comparison against 6NYCRR, Chapter IV, Part 375-6 Restricted Use COMMERCIAL Soil Cleanup Objectives

- 32.3 — COMPOUNDS THAT EXCEED PART 375 COMMERCIAL SCOs
- ONE OR MORE BTEX OR PAH COMPOUND CONCENTRATIONS EXCEED THE ASSOCIATED PART 375 COMMERCIAL SCOs
- NO BTEX OR PAH COMPOUNDS DETECTED AT CONCENTRATIONS ABOVE THE ASSOCIATED PART 375 COMMERCIAL SCOs

mg/kg	MILLIGRAM PER KILOGRAM
PAHs	POLYCYCLIC AROMATIC HYDROCARBONS
BTEX	BENZENE, TOLUENE, ETHYLBENZENE, XYLENE
PCBs	POLYCHLORINATED BIPHENYLS
NA	NOT AVAILABLE, NOT APPLICABLE, OR NOT ANALYZED
ND	NOT DETECTED
NE	NOT ESTABLISHED
J	ESTIMATED VALUE
**	ACCORDING TO NYSDEC CP-51, FOR COMMERCIAL SITES WHERE THE ECOLOGICAL STANDARDS ARE NOT APPLICABLE, DEC MAY APPROVE A REMEDIAL PROGRAM WHICH ACHIEVES A SOIL CLEANUP LEVEL OF 500 mg/kg FOR TOTAL PAHs FOR ALL SUBSURFACE SOIL. THE 500 mg/kg CLEANUP LEVEL IS IN LIEU OF ACHIEVING ALL OF THE PAH-SPECIFIC SCOs IN 6NYCRR 375-6.

NOTES:

1. UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLACED ON THIS DRAWING FROM FIELD LOCATIONS, WHERE VISIBLE OR FROM RECORDED DRAWINGS PROVIDED TO THE UNDERSIGNED. THEREFORE, LOCATIONS SHOULD BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE OTHER FACILITIES OR UTILITIES, THE EXISTENCE OF WHICH ARE NOT KNOWN: FOR THIS REASON, UFPO SHALL BE CONTACTED A MINIMUM OF 48 HOURS PRIOR TO ANY UNDERGROUND EXCAVATION.
2. ELEVATIONS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
3. ONLY 2009 AND 2010 DATA AND INFORMATION WERE GENERATED BY GEI CONSULTANTS, INC. ON BEHALF OF NATIONAL GRID. OTHER DATA AND INFORMATION WERE GENERATED BY OTHERS.

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SCALE, FEET

SUPPLEMENTAL INVESTIGATION WORK PLAN
CLINTON STREET FORMER MGP SITE
SCHENECTADY, NEW YORK

nationalgrid

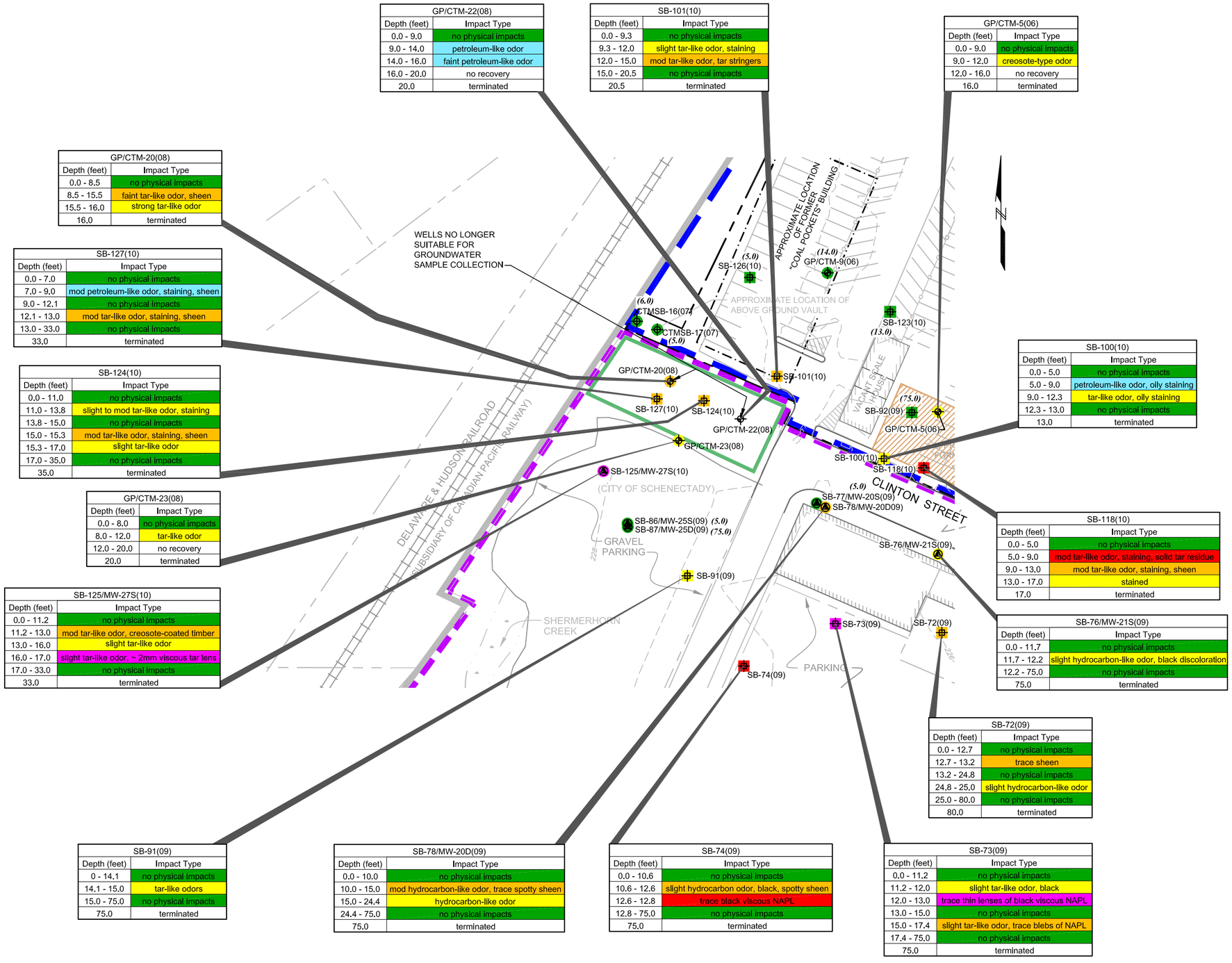
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OU2 NORTH AND "POSTAGE STAMP" PARCEL SUBSURFACE SOIL SUMMARIZED ANALYTICAL RESULTS (mg/kg)

September 2011 Figure 4

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GP/CTM-22(08)	
Depth (feet)	Impact Type
0.0 - 9.0	no physical impacts
9.0 - 14.0	petroleum-like odor
14.0 - 16.0	faint petroleum-like odor
16.0 - 20.0	no recovery
20.0	terminated

SB-101(10)	
Depth (feet)	Impact Type
0.0 - 9.3	no physical impacts
9.3 - 12.0	slight tar-like odor, staining
12.0 - 15.0	mod tar-like odor, tar stringers
15.0 - 20.5	no physical impacts
20.5	terminated

GP/CTM-5(06)	
Depth (feet)	Impact Type
0.0 - 9.0	no physical impacts
9.0 - 12.0	creosote-type odor
12.0 - 16.0	no recovery
16.0	terminated

GP/CTM-20(08)	
Depth (feet)	Impact Type
0.0 - 8.5	no physical impacts
8.5 - 15.5	faint tar-like odor, sheen
15.5 - 16.0	strong tar-like odor
16.0	terminated

SB-127(10)	
Depth (feet)	Impact Type
0.0 - 7.0	no physical impacts
7.0 - 9.0	mod petroleum-like odor, staining, sheen
9.0 - 12.1	no physical impacts
12.1 - 13.0	mod tar-like odor, staining, sheen
13.0 - 33.0	no physical impacts
33.0	terminated

SB-124(10)	
Depth (feet)	Impact Type
0.0 - 11.0	no physical impacts
11.0 - 13.8	slight to mod tar-like odor, staining
13.8 - 15.0	no physical impacts
15.0 - 15.3	mod tar-like odor, staining, sheen
15.3 - 17.0	slight tar-like odor
17.0 - 35.0	no physical impacts
35.0	terminated

GP/CTM-23(08)	
Depth (feet)	Impact Type
0.0 - 8.0	no physical impacts
8.0 - 12.0	tar-like odor
12.0 - 20.0	no recovery
20.0	terminated

SB-125/MW-27S(10)	
Depth (feet)	Impact Type
0.0 - 11.2	no physical impacts
11.2 - 13.0	mod tar-like odor, creosote-coated timber
13.0 - 16.0	slight tar-like odor
16.0 - 17.0	slight tar-like odor, ~ 2mm viscous tar lens
17.0 - 33.0	no physical impacts
33.0	terminated

SB-91(09)	
Depth (feet)	Impact Type
0 - 14.1	no physical impacts
14.1 - 15.0	tar-like odors
15.0 - 75.0	no physical impacts
75.0	terminated

SB-78/MW-20D(09)	
Depth (feet)	Impact Type
0.0 - 10.0	no physical impacts
10.0 - 15.0	mod hydrocarbon-like odor, trace spotty sheen
15.0 - 24.4	hydrocarbon-like odor
24.4 - 75.0	no physical impacts
75.0	terminated

SB-74(09)	
Depth (feet)	Impact Type
0.0 - 10.6	no physical impacts
10.6 - 12.6	slight hydrocarbon odor, black, spotty sheen
12.6 - 12.8	trace black viscous NAPL
12.8 - 75.0	no physical impacts
75.0	terminated

SB-73(09)	
Depth (feet)	Impact Type
0.0 - 11.2	no physical impacts
11.2 - 12.0	slight tar-like odor, black
12.0 - 13.0	trace thin lenses of black viscous NAPL
13.0 - 15.0	no physical impacts
15.0 - 17.4	slight tar-like odor, trace blebs of NAPL
17.4 - 75.0	no physical impacts
75.0	terminated

SB-72(09)	
Depth (feet)	Impact Type
0.0 - 12.7	no physical impacts
12.7 - 13.2	trace sheen
13.2 - 24.8	no physical impacts
24.8 - 25.0	slight hydrocarbon-like odor
25.0 - 80.0	no physical impacts
80.0	terminated

SB-100(10)	
Depth (feet)	Impact Type
0.0 - 5.0	no physical impacts
5.0 - 9.0	petroleum-like odor, oily staining
9.0 - 12.3	tar-like odor, oily staining
12.3 - 13.0	no physical impacts
13.0	terminated

SB-118(10)	
Depth (feet)	Impact Type
0.0 - 5.0	no physical impacts
5.0 - 9.0	mod tar-like odor, staining, solid tar residue
9.0 - 13.0	mod tar-like odor, staining, sheen
13.0 - 17.0	stained
17.0	terminated

SB-76/MW-21S(09)	
Depth (feet)	Impact Type
0.0 - 11.7	no physical impacts
11.7 - 12.2	slight hydrocarbon-like odor, black discoloration
12.2 - 75.0	no physical impacts
75.0	terminated

LEGEND:

- PROPERTY BOUNDARY
- EXISTING BUILDING
- 255 — GROUND SURFACE CONTOUR
- GUARD RAIL
- HISTORIC STRUCTURE
- SITE BOUNDARY
- OPERABLE UNIT 2 NORTH
- OPERABLE UNIT 2 SOUTH
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- INTERIM REMEDIAL MEASURE EXCAVATION FOOTPRINT
- SB-86/MW-25S(09) SB-125/MW-27S(10) — SOIL BORING/MONITORING WELL LOCATION (GEI - 2009, 2010)
- SB-117/RW-1(10) — SOIL BORING/RECOVERY WELL LOCATION (GEI - 2010)
- CTMMW-1(04) GP/CTM-1(06) CTMSB/MW-18(07) GP/CTM-20(08) — SOIL BORING/MONITORING WELL LOCATION (CT MALE - 2004, 2006, 2007, 2008)
- SB-19/MW-08D(06) SB-26/MW-11D(08) — SOIL BORING/MONITORING WELL LOCATION (AECOM - 2006, 2008)
- SB-62(09) SB-124(10) — SOIL BORING LOCATION (GEI - 2009, 2010)
- SB-17(06) CTMSB-16(07) SB-57(08) — SOIL BORING LOCATION (AECOM - 2006, 2008, CT MALE - 2007)
- (16.0) — BORING TERMINATED (DEPTH IN FEET)

PHYSICAL OBSERVATIONS

- TAR SATURATED
- COATED MATERIAL, LENSES
- BLEBS, GLOBS, SHEEN
- STAINING, ODORS
- PETROLEUM IMPACTS: SHEEN, STAINING, ODORS
- NO PHYSICAL IMPACTS OBSERVED

NOTES:

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2. ELEVATIONS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
3. ONLY 2009 DATA AND INFORMATION WERE GENERATED BY GEI CONSULTANTS, INC. ON BEHALF OF NATIONAL GRID. OTHER DATA AND INFORMATION WERE GENERATED BY OTHER CONTRACTORS.
4. THE COLORS INDICATE THE WORST PHYSICAL IMPACTS OBSERVED AT THAT LOCATION.

SUPPLEMENTAL INVESTIGATION WORK PLAN
CLINTON STREET FORMER MGP SITE
SCHENECTADY, NEW YORK

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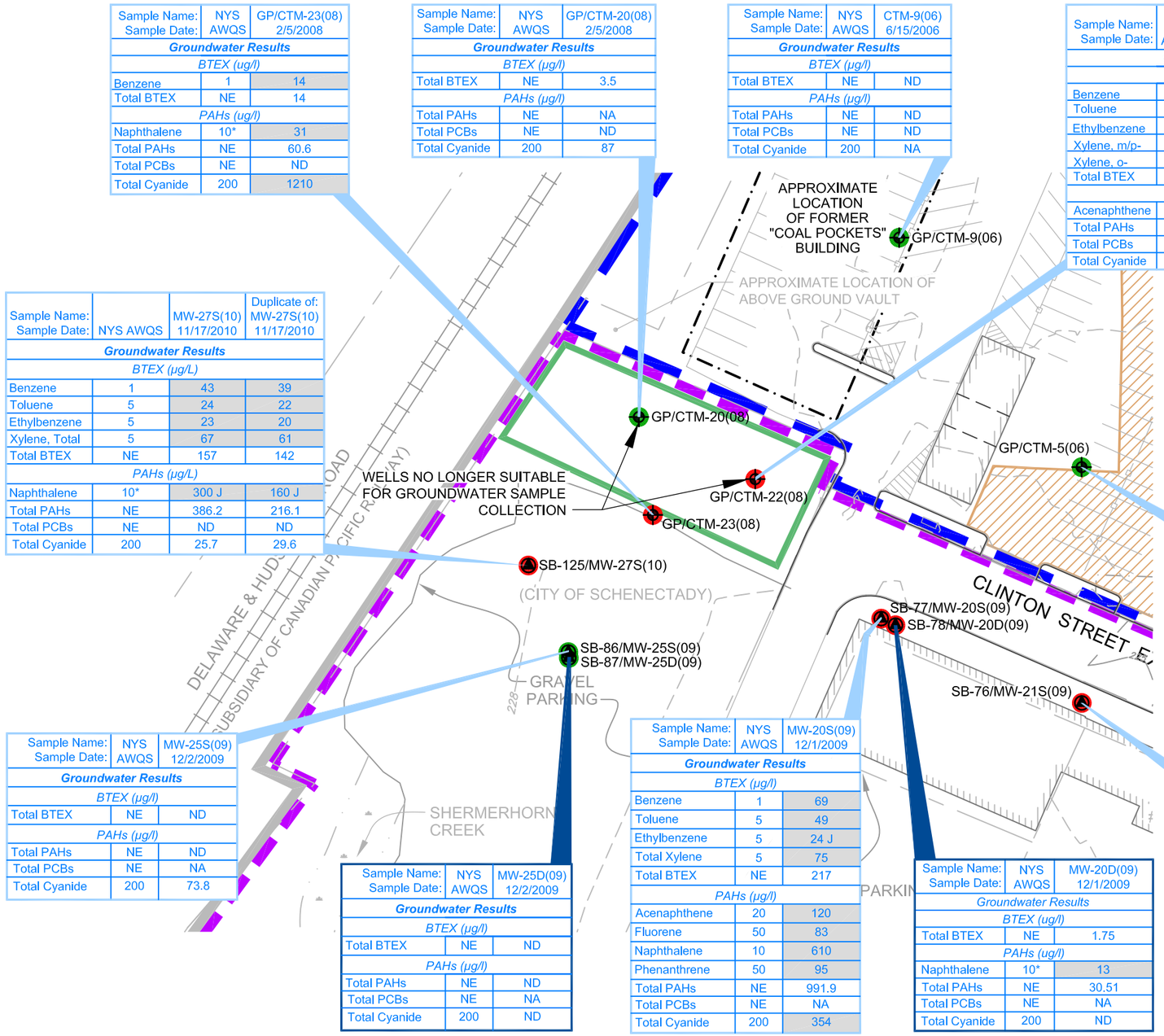
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SUBSURFACE SOIL PHYSICAL IMPACTS

September 2011 — Figure 5

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Sample Name: / Sample Date:	NYS AWQS	GP/CTM-23(08) 2/5/2008
Groundwater Results		
BTEX (ug/l)		
Benzene	1	14
Total BTEX	NE	14
PAHs (ug/l)		
Naphthalene	10*	31
Total PAHs	NE	60.6
Total PCBs	NE	ND
Total Cyanide	200	1210

Sample Name: / Sample Date:	NYS AWQS	GP/CTM-20(08) 2/5/2008
Groundwater Results		
BTEX (µg/l)		
Total BTEX	NE	3.5
PAHs (µg/l)		
Total PAHs	NE	NA
Total PCBs	NE	ND
Total Cyanide	200	87

Sample Name: / Sample Date:	NYS AWQS	CTM-9(06) 6/15/2006
Groundwater Results		
BTEX (µg/l)		
Total BTEX	NE	ND
PAHs (µg/l)		
Total PAHs	NE	ND
Total PCBs	NE	ND
Total Cyanide	200	NA

Sample Name: / Sample Date:	NYS AWQS	GP/CTM-22(08) 2/5/2008	Duplicate of: GP/CTM-22(08) 2/5/2008
Groundwater Results			
BTEX (ug/l)			
Benzene	1	15	8.2 J
Toluene	5	23	15 J
Ethylbenzene	5	7.4	6.4 J
Xylene, m/p-	5	21	18 J
Xylene, o-	5	8.5	7.3 J
Total BTEX	NE	74.9	54.9
PAHs (ug/l)			
Acenaphthene	20*	15	25 J
Total PAHs	NE	45.2	81.2
Total PCBs	NE	ND	ND
Total Cyanide	200	900	64

Sample Name: / Sample Date:	NYS AWQS	MW-27S(10) 11/17/2010	Duplicate of: MW-27S(10) 11/17/2010
Groundwater Results			
BTEX (µg/L)			
Benzene	1	43	39
Toluene	5	24	22
Ethylbenzene	5	23	20
Xylene, Total	5	67	61
Total BTEX	NE	157	142
PAHs (µg/L)			
Naphthalene	10*	300 J	160 J
Total PAHs	NE	386.2	216.1
Total PCBs	NE	ND	ND
Total Cyanide	200	25.7	29.6

Sample Name: / Sample Date:	NYS AWQS	CTM-5(06) 6/14/2006
Groundwater Results		
BTEX (µg/l)		
Total BTEX	NE	ND
PAHs (µg/l)		
Total PAHs	NE	ND
Total PCBs	NE	ND
Total Cyanide	200	NA

Sample Name: / Sample Date:	NYS AWQS	MW-25S(09) 12/2/2009
Groundwater Results		
BTEX (µg/l)		
Total BTEX	NE	ND
PAHs (µg/l)		
Total PAHs	NE	ND
Total PCBs	NE	NA
Total Cyanide	200	73.8

Sample Name: / Sample Date:	NYS AWQS	MW-25D(09) 12/2/2009
Groundwater Results		
BTEX (µg/l)		
Total BTEX	NE	ND
PAHs (µg/l)		
Total PAHs	NE	ND
Total PCBs	NE	NA
Total Cyanide	200	ND

Sample Name: / Sample Date:	NYS AWQS	MW-20S(09) 12/1/2009
Groundwater Results		
BTEX (µg/l)		
Benzene	1	69
Toluene	5	49
Ethylbenzene	5	24 J
Total Xylene	5	75
Total BTEX	NE	217
PAHs (µg/l)		
Acenaphthene	20	120
Fluorene	50	83
Naphthalene	10	610
Phenanthrene	50	95
Total PAHs	NE	991.9
Total PCBs	NE	NA
Total Cyanide	200	354

Sample Name: / Sample Date:	NYS AWQS	MW-20D(09) 12/1/2009
Groundwater Results		
BTEX (ug/l)		
Total BTEX	NE	1.75
PAHs (ug/l)		
Naphthalene	10*	13
Total PAHs	NE	30.51
Total PCBs	NE	NA
Total Cyanide	200	ND

Sample Name: / Sample Date:	NYS AWQS	MW-21S(09) 12/1/2009
Groundwater Results		
BTEX (µg/l)		
Benzene	1	66
Toluene	5	8.8 J
Ethylbenzene	5	24
Total Xylene	5	53 J
Total BTEX	NE	151.8
PAHs (µg/l)		
Naphthalene	10	420
Total PAHs	NE	437.08
Total PCBs	NE	NA
Total Cyanide	200	43.6

LEGEND:

- PROPERTY BOUNDARY
- EXISTING BUILDING
- 255 — GROUND SURFACE CONTOUR
- GUARD RAIL
- HISTORIC STRUCTURE
- SITE BOUNDARY
- OPERABLE UNIT 2 NORTH
- OPERABLE UNIT 2 SOUTH
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- SB-86/MW-25S(09) SB-125/MW-27S(10) — SOIL BORING/MONITORING WELL LOCATION (GEI - 2009, 2010)
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- CTMMW-1(04) GP/CTM-1(06) CTMSB/MW-18(07) GP/CTM-20(08) — SOIL BORING/MONITORING WELL LOCATION (CT MALE - 2004, 2006, 2007, 2008)
- SB-1/MW-1(04) SB-10A/MW-5(06) SB-26/MW-11D(08) — SOIL BORING/MONITORING WELL LOCATION (LIGHTSHIP ENGINEERING - 2004, AECOM - 2006, 2008)
- (04), (06), (07), (08), (09), (10) — YEAR INSTALLED

ANALYTICAL BOX NOTES

- 4284 — CONCENTRATION OF COMPOUND THAT EXCEEDS NEW YORK STATE AMBIENT WATER QUALITY STANDARDS (AWQS)
- ONE OR MORE BTEX OR PAH COMPOUNDS DETECTED ABOVE ASSOCIATED AWQS
- NO BTEX OR PAH COMPOUNDS DETECTED ABOVE ASSOCIATED AWQS
- SHALLOW WELLS (≤ 40 FEET BELOW GROUND SURFACE)
- DEEP WELLS (> 40 FEET BELOW GROUND SURFACE)

µg/l	MICROGRAMS PER LITER
PAHs	POLYCYCLIC AROMATIC HYDROCARBONS
BTEX	BENZENE, TOLUENE, ETHYLBENZENE, XYLENE
PCBs	POLYCHLORINATED BIPHENYLS
NA	NOT AVAILABLE, NOT APPLICABLE, OR NOT ANALYZED
ND	NOT DETECTED
NE	NOT ESTABLISHED
J	ESTIMATED VALUE
*	VALUE IS A GUIDANCE, NOT A STANDARD

NOTES:

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SCALE, FEET

SUPPLEMENTAL INVESTIGATION WORK PLAN
CLINTON STREET FORMER MGP SITE
SCHENECTADY, NEW YORK

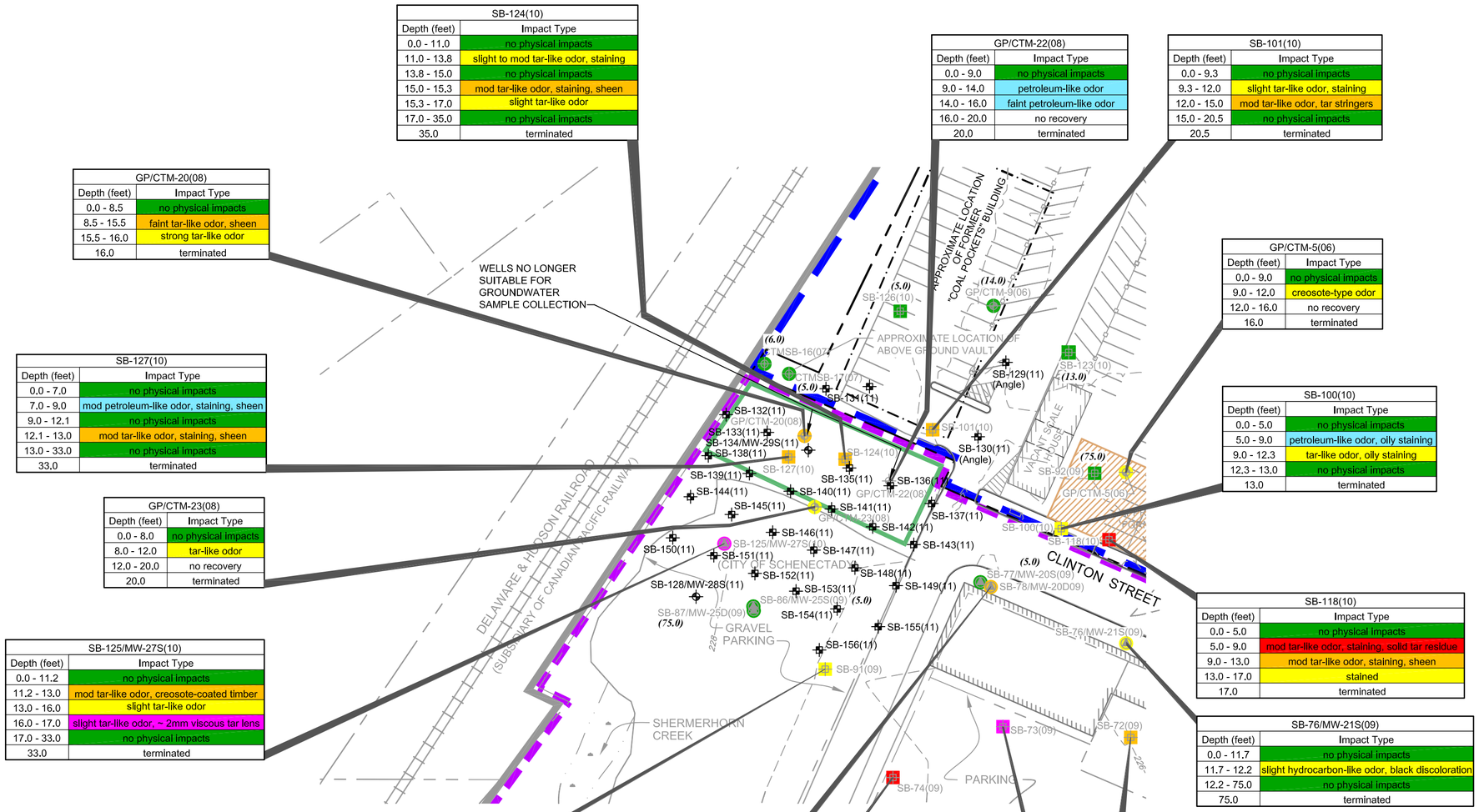
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SUMMARIZED GROUNDWATER ANALYTICAL RESULTS (µg/L)

Project 091990-1-1105 | September 2011 | Figure 6

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SB-124(10)	
Depth (feet)	Impact Type
0.0 - 11.0	no physical impacts
11.0 - 13.8	slight to mod tar-like odor, staining
13.8 - 15.0	no physical impacts
15.0 - 15.3	mod tar-like odor, staining, sheen
15.3 - 17.0	slight tar-like odor
17.0 - 35.0	no physical impacts
35.0	terminated

GP/CTM-22(08)	
Depth (feet)	Impact Type
0.0 - 9.0	no physical impacts
9.0 - 14.0	petroleum-like odor
14.0 - 16.0	faint petroleum-like odor
16.0 - 20.0	no recovery
20.0	terminated

SB-101(10)	
Depth (feet)	Impact Type
0.0 - 9.3	no physical impacts
9.3 - 12.0	slight tar-like odor, staining
12.0 - 15.0	mod tar-like odor, tar stringers
15.0 - 20.5	no physical impacts
20.5	terminated

GP/CTM-20(08)	
Depth (feet)	Impact Type
0.0 - 8.5	no physical impacts
8.5 - 15.5	faint tar-like odor, sheen
15.5 - 16.0	strong tar-like odor
16.0	terminated

GP/CTM-5(06)	
Depth (feet)	Impact Type
0.0 - 9.0	no physical impacts
9.0 - 12.0	creosote-type odor
12.0 - 16.0	no recovery
16.0	terminated

SB-127(10)	
Depth (feet)	Impact Type
0.0 - 7.0	no physical impacts
7.0 - 9.0	mod petroleum-like odor, staining, sheen
9.0 - 12.1	no physical impacts
12.1 - 13.0	mod tar-like odor, staining, sheen
13.0 - 33.0	no physical impacts
33.0	terminated

SB-100(10)	
Depth (feet)	Impact Type
0.0 - 5.0	no physical impacts
5.0 - 9.0	petroleum-like odor, oily staining
9.0 - 12.3	tar-like odor, oily staining
12.3 - 13.0	no physical impacts
13.0	terminated

GP/CTM-23(08)	
Depth (feet)	Impact Type
0.0 - 8.0	no physical impacts
8.0 - 12.0	tar-like odor
12.0 - 20.0	no recovery
20.0	terminated

SB-118(10)	
Depth (feet)	Impact Type
0.0 - 5.0	no physical impacts
5.0 - 9.0	mod tar-like odor, staining, solid tar residue
9.0 - 13.0	mod tar-like odor, staining, sheen
13.0 - 17.0	stained
17.0	terminated

SB-125/MW-27S(10)	
Depth (feet)	Impact Type
0.0 - 11.2	no physical impacts
11.2 - 13.0	mod tar-like odor, creosote-coated timber
13.0 - 16.0	slight tar-like odor
16.0 - 17.0	slight tar-like odor, ~ 2mm viscous tar lens
17.0 - 33.0	no physical impacts
33.0	terminated

SB-76/MW-21S(09)	
Depth (feet)	Impact Type
0.0 - 11.7	no physical impacts
11.7 - 12.2	slight hydrocarbon-like odor, black discoloration
12.2 - 75.0	no physical impacts
75.0	terminated

SB-72(09)	
Depth (feet)	Impact Type
0.0 - 12.7	no physical impacts
12.7 - 13.2	trace sheen
13.2 - 24.8	no physical impacts
24.8 - 25.0	slight hydrocarbon-like odor
25.0 - 80.0	no physical impacts
80.0	terminated

SB-91(09)	
Depth (feet)	Impact Type
0 - 14.1	no physical impacts
14.1 - 15.0	tar-like odors
15.0 - 75.0	no physical impacts
75.0	terminated

SB-78/MW-20D(09)	
Depth (feet)	Impact Type
0.0 - 10.0	no physical impacts
10.0 - 15.0	mod hydrocarbon-like odor, trace spotty sheen
15.0 - 24.4	hydrocarbon-like odor
24.4 - 75.0	no physical impacts
75.0	terminated

SB-74(09)	
Depth (feet)	Impact Type
0.0 - 10.6	no physical impacts
10.6 - 12.6	slight hydrocarbon odor, black, spotty sheen
12.6 - 12.8	trace black viscous NAPL
12.8 - 75.0	no physical impacts
75.0	terminated

SB-73(09)	
Depth (feet)	Impact Type
0.0 - 11.2	no physical impacts
11.2 - 12.0	slight tar-like odor, black
12.0 - 13.0	trace thin lenses of black viscous NAPL
13.0 - 15.0	no physical impacts
15.0 - 17.4	slight tar-like odor, trace blebs of NAPL
17.4 - 75.0	no physical impacts
75.0	terminated

0 50 100

SCALE, FEET

LEGEND:

- PROPERTY BOUNDARY
- EXISTING BUILDING
- 255 — GROUND SURFACE CONTOUR
- GUARD RAIL
- HISTORIC STRUCTURE
- SITE BOUNDARY
- OPERABLE UNIT 2 NORTH
- OPERABLE UNIT 2 SOUTH
- "POSTAGE STAMP" AREA
- INTERIM REMEDIAL MEASURE EXCAVATION FOOTPRINT
- SB-86/MW-25S(09) SB-125/MW-27S(10) — SOIL BORING/MONITORING WELL LOCATION (GEI - 2009, 2010)
- SB-117/RW-1(10) — SOIL BORING/RECOVERY WELL LOCATION (GEI - 2010)
- CTMMW-1(04) GP/CTM-1(06) CTMSB/MW-18(07) GP/CTM-20(08) — SOIL BORING/MONITORING WELL LOCATION (CT MALE - 2004, 2006, 2007, 2008)
- SB-19/MW-08D(06) SB-26/MW-11D(08) — SOIL BORING/MONITORING WELL LOCATION (AECOM - 2006, 2008)
- SB-128/MW-128(11) — PROPOSED SOIL BORING/MONITORING WELL LOCATION (GEI 2011)"
- SB-62(09) SB-124(10) — SOIL BORING LOCATION (GEI - 2009, 2010)
- SB-142(11) — PROPOSED SOIL BORING LOCATION (GEI- 2011)*
- SB-17(06) CTMSB-16(07) SB-57(08) — SOIL BORING LOCATION (AECOM - 2006, 2008, CT MALE - 2007)
- (16.0) — BORING TERMINATED (DEPTH IN FEET)

* SURFACE SOIL SAMPLES WILL BE COLLECTED AT ALL PROPOSED BORING LOCATIONS.

PHYSICAL OBSERVATIONS

- TAR SATURATED
- COATED MATERIAL, LENSES
- BLEBS, GLOBS, SHEEN
- STAINING, ODORS
- PETROLEUM IMPACTS: SHEEN, STAINING, ODORS
- NO PHYSICAL IMPACTS OBSERVED

NOTES:

1. UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLACED ON THIS DRAWING FROM FIELD LOCATIONS, WHERE VISIBLE OR FROM RECORDED DRAWINGS PROVIDED TO THE UNDERSIGNED. THEREFORE, LOCATIONS SHOULD BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE OTHER FACILITIES OR UTILITIES, THE EXISTENCE OF WHICH ARE NOT KNOWN: FOR THIS REASON, UFPO SHALL BE CONTACTED A MINIMUM OF 48 HOURS PRIOR TO ANY UNDERGROUND EXCAVATION.
2. ELEVATIONS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
3. ONLY 2009 DATA AND INFORMATION WERE GENERATED BY GEI CONSULTANTS, INC. ON BEHALF OF NATIONAL GRID. OTHER DATA AND INFORMATION WERE GENERATED BY OTHER CONTRACTORS.
4. THE COLORS INDICATE THE WORST PHYSICAL IMPACTS OBSERVED AT THAT LOCATION.

SUPPLEMENTAL INVESTIGATION WORK PLAN
CLINTON STREET FORMER MGP SITE
SCHENECTADY, NEW YORK

nationalgrid

PROJECT 091990-1-1105

GEI Consultants
455 WINDING BROOK DRIVE
SUITE 201
GLASTONBURY, CONNECTICUT 06033

PROPOSED BORING AND SURFACE SOIL SAMPLE LOCATIONS

September 2011 Figure 7

I:\Project\National Grid\Schenectady\091990\RI Report\CADD DRAWINGS\09-2011\ Schenectady-Surface Soil Sample Locations.dwg \Sep 22, 2011

February 13, 2012
Project 091990-1-1102

Geotechnical
Environmental
Water Resources
Ecological

John Spellman, P.E.
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway
Albany, NY 12233-7014

RE: Letter Work Plan
Soil Vapor Investigation
Operable Unit 1 and Operable Unit 2 Supplemental Remedial Investigations
Clinton Street Former Manufactured Gas Plant Site
Schenectady, New York
NYSDEC Site # V00474

Dear Mr. Spellman:

GEI Consultants, Inc. (GEI), on behalf on National Grid, has developed this letter work plan to conduct soil vapor, indoor air, and outdoor (ambient) air sampling at the Schenectady Clinton Street Former Manufactured Gas Plant (MGP) Site.

This letter work plan was developed in response to New York State Department of Environmental Conservation's (NYSDEC's) requests for additional soil vapor intrusion investigation in the February 10, 2011 and December 20, 2011 letters, recent correspondence with you, and the site walk that took place on January 23, 2012 that was attended by you, Maureen Schuck and Albert DeMarco (New York State Department of Health - NYSDOH), John Finn and Drew Blicharz (GEI), Rich Homenick and Mike Mannato (Schenectady Municipal Housing Authority - SMHA), and Ed Neuhauser and Bill Jones (National Grid).

We anticipate that the proposed soil vapor investigation at the SMHA building in Operable Unit 1 (OU1) will address the requirements necessary to finalize the OU1 Remedial Investigation (RI). We expect that the proposed soil vapor investigation near 318 Broadway in Operable Unit 2 (OU2) will address concerns related to potential soil vapor impacts at that location.

Results from the investigation will be summarized and reported as separate addenda to the Draft OU1 and OU2 RI reports.

Scope of Work

Figure 1 presents the site location. Figure 2 presents our proposed sample locations in OU1 and OU2. Field procedures will be followed in general accordance with the NYSDOH's *"Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York" (October 2006)* and National Grid's *"Draft Standard Operating Procedures for Soil Vapor Intrusion Evaluations at National Grid MGP Sites in New York State" (March 2008).* Dig Safely will locate utilities ahead of soil vapor point installation. Zebra Environmental, Inc. (Schenectady, NY) will install the soil vapor points.
Test America Laboratories (Knoxville, TN) will analyze the samples. Each sample will be collected in

GEI Consultants, Inc.
455 Winding Brook Drive, Suite 201, Glastonbury, Connecticut 06033
860.368.5300 fax: 860.368.5307

individual laboratory-certified clean SUMMA® canisters with a laboratory-calibrated flow controller that will not exceed 0.2 liters per minute. Samples will be analyzed for volatile organic compounds (VOCs) and naphthalene, indan, indene, thiophene, styrene, 2-methylpentane, isopentane, 2,3-dimethylpentane, isooctane, and methyl tert-butyl ether (MTBE) by Environmental Protection Agency (EPA) Method TO-15. Soil vapor samples will also be analyzed for helium, which we use as a tracer (quality assurance/quality control – QA/QC). Blind duplicates will be collected for quality QA/QC purposes. Analytical data will be validated per Analytical Services Protocol (ASP) category B requirements.

OU1 – Schenectady Municipal Housing Authority (SMHA)

Soil Vapor

Two soil vapor samples [SV10(12) and SV11(12)] will be collected to assess the soil vapor conditions beneath the SMHA building in OU1 (Figure 2).

Temporary sub-slab soil vapor points will be installed by drilling a hole through the concrete floor slab of the basement and advancing the drill bit 2 to 3 inches into the sub-slab material to create an open cavity. Dedicated Teflon tubing will be used and the inlet will be set just above the bottom of the cavity, or directly below the concrete slab. The sampling port will be sealed with an inert non-shrinking sealant such as inert clay.

Sample collection will begin at least 24 hours after soil vapor point installation. Helium will be used as a tracer gas to evaluate whether the tubing has been sealed from the ambient air above ground. Each soil vapor sample will be collected with a 6-liter SUMMA® canister with a flow controller that is calibrated for 8-hour sample duration.

After sampling is complete, soil vapor points will be decommissioned by removing the tubing and filling the hole in the slab with quick-setting concrete.

One blind duplicate soil vapor sample will be collected.

Indoor and Outdoor Air

Two indoor air samples [IA1(12) and IA2(12)] and one outdoor (ambient) air sample [AMB1(12)] will be collected (Figure 2). The indoor air samples will be placed adjacent to the sub-slab soil vapor points and the results will be used to assess the potential for soil vapor intrusion into the building. The outdoor air sample will be used to document background air conditions outside the building and upwind.

Each indoor and outdoor air sample will be collected with a 6-liter SUMMA® canister equipped with a flow controller that is calibrated for 8-hour sample duration. The canisters will be placed at an approximate breathing height (3 to 5 feet above ground).

OU2 – 318 Broadway

Soil Vapor

Two soil vapor sample pairs [SV12(12)A and SV12(12)B; SV13(12)A and SV13(12)B] will be collected to assess the soil vapor conditions adjacent to the 318 Broadway building in OU2 (Figure 2).

Temporary proxy sub-slab soil vapor sample point pairs will be installed approximately 10 feet away from the building through the asphalt parking lot or concrete sidewalk. The groundwater table is approximately 5 feet below ground at 318 Broadway and will be measured prior to vapor point installation. The points will be advanced to a depth that is approximately 1 and 3 feet above the apparent water table, or approximately 4 and 2 feet below ground surface. These temporary points will be constructed with a 6-inch stainless steel screen that is fitted to Teflon tubing. The annular space around the screen will be backfilled with inert silica or inert glass beads to a minimum of 6 inches above the screen. A bentonite seal will be placed above the sand and the remainder of the annulus will be filled with soil cuttings. The sampling port will be sealed with a 2-inch layer of bentonite paste at the surface.

Sample collection will begin at least 24 hours after soil vapor point installation. Helium will be used as a tracer gas to evaluate whether the tubing has been sealed from the ambient air above ground. Each soil vapor sample will be collected with a 6-liter SUMMA® canister with a flow controller that is calibrated for 2-hour sample duration.

One blind duplicate soil vapor sample will be collected.

Outdoor Air

One outdoor air sample [AMB2(12)] will be collected (Figure 2). The outdoor air sample will be used to document background air conditions outside the building and upwind.

The sample will be collected with a 6-liter SUMMA® canister with a flow controller that is calibrated for 2-hour sample duration. The canister will be placed at an approximate breathing height (3 to 5 feet above ground).

Property Information

Property information for the SMHA building will be collected in general accordance with the NYSDOH Center of Environmental Health's Indoor Air Quality Questionnaire and Building Form that is provided as Appendix B of the NYSDOH's *"Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York" (October 2006)* and National Grid's *"Draft Standard Operating Procedure- Soil Vapor Intrusion for MGP Sites in New York" (March 2008).*

Products containing chemicals will be removed from the SMHA basement several days in advance. The products will be inventoried to document other potential sources of air impacts.

Data Reduction and Validation

Laboratory analysis and data validation will require approximately five weeks.

SMHA Letter

Thirty (30) days after the ASP category B laboratory deliverable has been received, a letter that summarizes the findings at the SMHA property will be sent to Rick Homenick. Before the letter is finalized, a draft letter will be submitted to the NYSDEC and NYSDOH for review and comment. The actual date the SMHA receives the letter will be dependent upon the date samples are collected and received by Test America. Target dates have been proposed in the schedule below.

Schedule

We anticipate that the following schedule can be implemented:

January 23, 2012	Site visit and mark out
January 30, 2012	Draft work plan to NYSDEC
February 10, 2012	Final work plan to NYSDEC
Week of February 27, 2012	Soil vapor point installation, sampling, property owner questionnaire, and product inventory
March 5, 2012	Test America receives samples
March 5 – April 25, 2012	Sample analysis, data reduction, validation, letter preparation
March 26, 2012	GEI receives ASP category B package
April 6, 2012	NYSDEC and NYSDOH receive draft letter
April 25, 2012	Final letter sent to Rick Homenick at SMHA
May 18, 2012	Draft OU1 and OU2 RI Report soil vapor addenda to National Grid
June 22, 2012	Draft RI Report addenda to NYSDEC

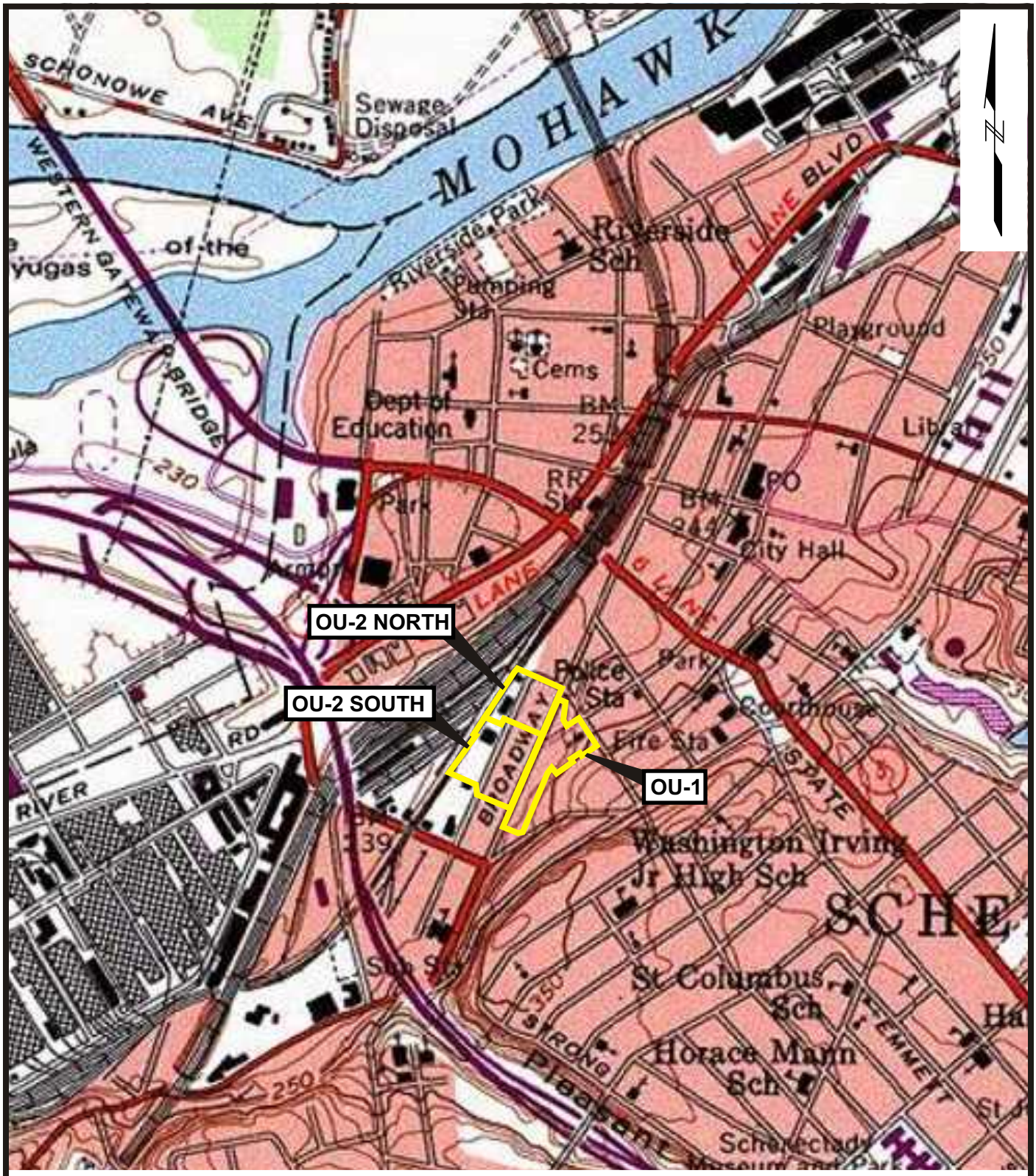
We look forward to your approval of this letter work plan. Please call me (860-368-5404) if you have any questions or require additional information.

Sincerely,

Jerry Zak
Project Manager
Enclosures

c: M. Schuck, Capital District Office, NYSDOH
W. R. Jones, National Grid
E. Neuhauser, National Grid
J. Finn, GEI
D. Blicharz, GEI

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SOURCE:
Map created with TOPO! ® ©2001 National Geographic
(www.nationalgeographic.com/topo)

0 1000 2000
SCALE, FEET

SOIL VAPOR INVESTIGATION
CLINTON STREET FORMER MGP SITE
SCHENECTADY, NEW YORK

nationalgrid

GEI Consultants

SITE LOCATION MAP

Project 091990-1-1102 | February 2012 | Figure 1

I:\Project\National Grid\Schenectady\091990\SVI\Schenectady-Site Loc.cdr

OU2 NORTH

OU2 SOUTH

OU1

CLINTON STREET EXTENSION

BROADWAY

CLINTON STREET

HAMILTON STREET

#461 CLINTON ST. EXTENSION

#318 BROADWAY

#330 BROADWAY

#336 BROADWAY

#340 BROADWAY

SV13(12)A

SV13(12)B

SV12(12)A

SV12(12)B

SV7(08)

AMB2(12)

SV8(08)

SV9(08)

GAS HOLDER B

GAS HOLDER C

GAS HOLDER A

TAR WELL B

TAR WELL A

PAVILION

AMB1(12)

AMB1(08)

1 STORY GARAGE

SV2(06)

SV6(08)

SV1(06)

IAIR2(12)

SV11(12)

SV5(08)

IAIR1(12)

SV10(12)

SCHENECTADY MUNICIPAL HOUSING AUTHORITY BOLUM COMMUNITY CENTER BUILDING

SV4(06)

SV3(06)

APARTMENT BUILDING

APARTMENT BUILDING

N

0 50 100

SCALE, FEET

LEGEND:

	APPROXIMATE PROPERTY BOUNDARY
	EXISTING BUILDING
	HISTORIC STRUCTURE
	GUARD RAIL
	APPROXIMATE SITE BOUNDARY
	APPROXIMATE OPERABLE UNIT 1
	OPERABLE UNIT 2 NORTH
	OPERABLE UNIT 2 SOUTH
SV1(06)	SOIL VAPOR SAMPLE (AECOM - 2006)
SV5(08)	SOIL VAPOR SAMPLE (AECOM - 2008)
AMB1(08)	AMBIENT AIR SAMPLE (AECOM - 2008)
SV10(12)	PROPOSED SOIL VAPOR SAMPLE (GEI - 2012)
AMB1(12)	PROPOSED AMBIENT AIR SAMPLE (GEI - 2012)
IAIR1(12)	PROPOSED INDOOR AIR SAMPLE (GEI - 2012)
(12)	YEAR INSTALLED

SOIL VAPOR INVESTIGATION
CLINTON STREET FORMER MGP SITE
SCHENECTADY, NEW YORK

nationalgrid

GEI Consultants

SAMPLE LOCATIONS AND PROPOSED SAMPLE LOCATION MAP

Project 091990-1-1102 | February 2012 | Figure 2

I:\Project\National Grid\Schenectady\091990\SVI\Schenectady-Proposed SVI Locations.dwg

Appendix B

Zoning Documentation Excerpts (Electronic Only)

Chapter 264
Zoning

ARTICLE I: Purpose and Intent
§ 264-1. General purpose and intent

ARTICLE II: Definitions
§ 264-2. Definitions

ARTICLE III: Districts, Boundaries and Regulations
§ 264-3. Districts established
§ 264-4. Boundaries
§ 264-5. Annexed territory
§ 264-6. OS Recreation and Open Space District
§ 264-7. R Single-Family Residential District
§ 264-8. RH-1 Historic Residential District
§ 264-9. R-2 Two-Family Residential District.
§ 264-10. RH-2 Stockade Historic Residential District
§ 264-11. R-3 Multiple-Family Residential District
§ 264-12. C-1 Neighborhood Retail Business District
§ 264-13. C-2 Mixed-Use Commercial District
§ 264-14. C-3 Waterfront Development District
§ 264-15. C-4 Downtown Commercial District
§ 264-16. C-5 Business District
§ 264-17. I Institutional District
§ 264-18. M-1 Light Manufacturing and Warehousing District
§ 264-19. M-2 Manufacturing and Warehousing District
§ 264-20. OH Overlay Historic District
§ 264-21. Planned Development Districts
§264-22. Reserved
§264-23. Reserved

ARTICLE IV: Applicability
§ 264-24. Compliance with requirements
§ 264-25. Exempted uses
§ 264-26. Area of applicability
§ 264-27. Previous authorizations

ARTICLE V: Supplemental Regulations
§ 264-28. Applicability of Supplemental Regulations
§ 264-29. Accessory structures and uses
§ 264-30. Additional height regulations
§ 264-31. Additional yard regulations
§ 264-32. Fences and walls
§ 264-33. Corner lots within residential districts

H. Docking requirements.

(1) Residential: A minimum of 10% of linear dock footage must be made available for public, day use.

(2) Commercial: docking requirements are flexible based upon the following considerations: parking adequacy, river width, navigation channel width, and water surface use.

§ 264-15. C-4 Downtown Commercial District.

A. Purpose. The Downtown Commercial (C-4) District is intended to represent the central business district of the City. It encourages a mix of commercial, civic, cultural and hospitality uses in a pedestrian-oriented setting. Increased densities and scale are encouraged in this district while creating a walkable, attractive downtown for residents and visitors.

B. Permitted and Special Permit Uses. See Schedule B, Schedule of Uses for Non-Residential Districts.

C. Bulk, space and yard requirements. See Schedule C, Lot Development Standards.

D. Additional limitations. The following limitations and conditions shall apply to and be complied with by all uses permitted and permissible in the C-4 District:

(1) No use shall be conducted in any manner which would render it noxious or offensive by reason of dust, refuse matter, odor, smoke, gas fumes, noise, vibration or glare.

§ 264-16. C-5 Business District.

A. Purpose. The Business (C-5) District is intended to provide a choice of locations for retail, service and wholesale uses serving a citywide clientele. The District is also intended to provide locations for small-scale assembly, processing and light manufacturing uses, which are generally compatible in scale and nature with other permitted uses and which may provide employment opportunities for community residents. The C-5 District is characterized by good highway accessibility and exposure afforded by location on major streets and highways.

B. Permitted and Special Permit Uses. See Schedule B, Schedule of Uses for Non-Residential Districts.

C. Bulk, space and yard requirements. See Schedule C, Lot Development Standards.

Schedule B: Use Regulations for Non-Residential Districts								
	Districts							
Principal Uses	C-1	C-2	C-3	C-4	C-5	M-1	M-2	I[4]
adult bookstores and entertainment, pursuant to §264-100	NP	NP	NP	NP	NP	P	P	NP
animal and veterinary clinics	NP	P	NP	P	P	P	P	NP
antique stores	P	P	P	P	P	P	P	NP
appliance sales (repair and retail)	NP	P	NP	P	P	P	P	NP
arenas and stadiums	NP	NP	SP	SP	SP	SP	SP	NP
art galleries and supply shops	NP	P	P	P	P	P	P	NP
artist and dance studios	P	P	P	P	P	P	P	P[4]
assembly and packaging of products and equipment	NP	P	NP	NP	P	P	P	NP
automobile wrecking establishments	NP	NP	NP	NP	NP	SP	SP	NP
banks, branch	NP	P	P	P	P	P	P	NP
bars, taverns, cocktail lounges, night club	NP	P	P	P	P	P	P	NP
bed and breakfasts, tourist homes	P	P	P	P	P	NP	NP	P[4]
boat launches, slips, docks,	NP	NP	P	SP	SP	SP	SP	NP
boat rental establishments	NP	NP	P	NP	P	P	P	NP
broadcasting stations	NP	P	P	P	P	P	P	NP
business incubator	NP	P	P	P	P	P	P	NP
car washes	NP	SP	NP	NP	SP	SP	P	NP
community centers and facilities	P	P	P	P	P	P	P	P[4]
cultural facilities and museums, nonprofit	NP	P	P	P	P	P	P	P[4]
daycare centers and nursery schools	P	P	P	P	P	NP	NP	P[4]
drive-in service facilities	NP	SP	NP	NP	SP	P	P	NP
dry cleaning collection stations	P	P	P	P	P	P	P	P[4]
dry-cleaning and dyeing establishments	NP	P	NP	NP	P	P	P	NP
entertainment facilities (bowling alleys, video arcades), indoor	NP	P	P	P	P	P	P	NP
family care homes	P	P	NP	P	P	NP	NP	P[4]
financial institutions and offices, excl. branch banks	SP	P	P	P	P	P	P	NP
food processing, canneries, bakeries and bottling facilities	NP	SP	NP	NP	SP	P	P	NP
funeral homes	SP	P	P	P	P	P	P	SP
gasoline service stations	NP	SP	NP	NP	SP	SP	SP	NP
government agency structure or use	NP	P	P	P	P	P	P	P[4]
group residences	P	P	NP	P	P	NP	NP	P[4]
hospital	NP	P	NP	P	P	NP	NP	P[4]
hotels and motels	NP	P	P	P	P	NP	NP	NP
Inns	NP	P	P	P	P	NP	NP	NP
junkyards	NP	NP	NP	NP	NP	NP	SP	NP
kennels	NP	SP	NP	SP	SP	P	P	NP
laundromats and laundry collection stations	P	P	P	P	P	P	P	P[4]
manufacturing	NP	NP	NP	NP	NP	NP	P	NP
manufacturing, light	NP	NP	NP	NP	SP	P	P	NP
marinas	NP	NP	P	SP	SP	P	P	NP
mass transportation terminals	NP	NP	NP	P	NP	NP	NP	NP
material recovery/ transfer centers, excl. recycling/redemption	NP	NP	NP	NP	NP	P	P	NP

Schedule B: Use Regulations for Non-Residential Districts								
	Districts							
Principal Uses	C-1	C-2	C-3	C-4	C-5	M-1	M-2	I[4]
medical and dental clinics and laboratories	NP	P	P	P	P	P	P	P[4]
metal and material reclaiming facilities	NP	NP	NP	NP	NP	P	P	NP
motor vehicle parts and supply sales	NP	P	NP	P	P	P	P	NP
motor vehicle rental	NP	P	NP	SP	P	P	P	NP
motor vehicle repair establishments, major	NP	NP	NP	NP	SP	P	P	NP
motor vehicle repair establishments, minor	NP	P	NP	SP	P	P	P	NP
motor vehicle sales	NP	NP	NP	NP	P	P	P	NP
nursing homes	NP	P	NP	P	P	NP	NP	P[4]
off-track betting parlors	NP	P	NP	P	P	P	P	NP
open space or greenspace	P	P	P	P	P	P	P	P[4]
parking lots or structures as a principal use	NP	P	SP[2]	P	P	P	P	SP
printing and binding establishments	NP	P	NP	P	P	P	P	NP
private clubs and lodges	SP	P	P	P	P	P	P	SP
professional and general business offices	NP	P	SP[1]	P	P	P	P	NP
professional/general business offices, limited pursuant to §264-106	SP	P	P	P	P	P	P	P[4]
recreation facilities, outdoor, commercial	NP	NP	P	NP	P	NP	NP	NP
recreation facilities, public	P	P	P	P	P	P	P	P[4]
recreational facilities, indoor, commercial	P	P	P	P	P	P	P	P[4]
recycling collection point and redemption centers	NP	P	NP	P	P	P	P	NP
religious institutions	P	P	P	P	P	P	P	P[4]
research and development facilities	NP	P	SP	P	P	P	P	P[4]
residential dwellings	P	P	P	P	P	NP	NP	P[4]
restaurants	P[3]	P	P	P	P	P	P	NP
retail sales w/ light manufacturing of products as accessory use	NP	P	P	P	P	P	P	NP
retail sales and services	NP	P	P	P	P	P	P	NP
retail sales and services, neighborhood	P	P	P	P	P	P	P	P[4]
schools, post-secondary	NP	P	SP	P	P	P	P	P[4]
schools, public and private	P	P	NP	P	P	NP	NP	P[4]
schools, vocational and trade	NP	SP	NP	P	P	P	P	P[4]
self-service storage warehouse structures	NP	NP	NP	NP	SP	P	P	NP
storage, motor vehicles	NP	NP	NP	NP	NP	P	P	NP
storage, outdoor	NP	NP	NP	NP	NP	P	P	NP
tour boat operators	NP	NP	P	NP	NP	P	P	NP
trucking, warehousing and storage establishments	NP	NP	NP	NP	SP	P	P	NP
waste incinerators	NP	NP	NP	NP	NP	NP	SP	NP
wholesale and distribution establishments, except bulk fuel	NP	NP	NP	NP	P	P	P	NP
wholesale establishments, permitted retail use	NP	NP	NP	SP	P	P	P	NP

Footnotes 1: Professional and business offices shall not be located on the ground floor. Retail and service-related uses on ground floor only.

2: Parking uses and structures as a principal use shall not be located within 100 feet of the River.

3: Maximum seating capacity of 30

4: Special Use Permit Required for any development within 150 feet of a Residential or Open Space District

Schedule B: Use Regulations for Non-Residential Districts								
	Districts							
Principal Uses	C-1	C-2	C-3	C-4	C-5	M-1	M-2	I[4]

P= Permitted Use
SP = Requires a Special Permit
NP = Not Permitted

C-1= Neighborhood Retail
C-2 = Mixed Use Commercial
C-3 Waterfront Mixed Use
C-4 = Downtown Commercial

C-5 = Business
I = Institutional
M-1 = Light Manufacturing/Warehousing
M-2 = Manufacturing/Warehousing

Appendix C

Historical Documents and Phase 1A Cultural Resources Assessment (Electronic Only)

(C)

(D)

STATE ST.

WARD

LINE

CARRIAGE FACTORY

H. Clute

John Brodie

E. Ellis

Dr. H. Switz

H. S. Edwards

Walker

W. I. Schermerhorn

R. Ellis

R. C. Dorn

G. J. Swartfigner

Fowler

Wm. Van Franklin

C. Thompson

Jas. D. Featherstone

McComber

Rieger

C. Campell

Robt. Ellis

CENTRE ST.

D. D. Campbell

H. DeForest

CORALLINE WORKS

Thos. M. Gough

SMITH

JAY ST.

J. Van Kleeck

W. McClyman

N. Vibbard

Jas. Clute

H. Rosa

T. Dormady

CLINTON

Barhydt & Est.

Draper

HAMILTON

PUMP WORKS

A. Devendorf

Peckham

Mrs. Barry

Daggett

Rob't. Clement

Buckman

James Fuller

Schenectady Gas Co.

GAS WORKS

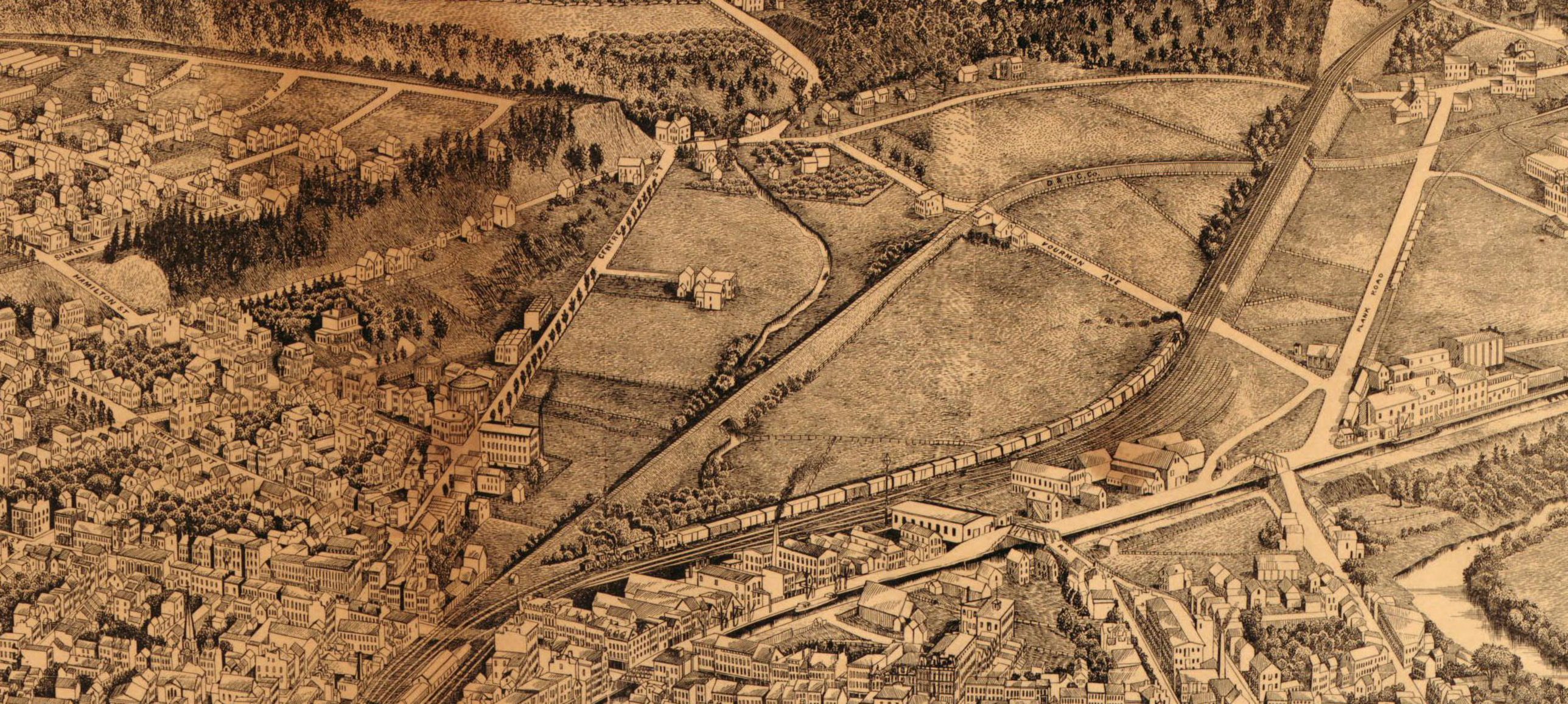
OOTHOUT ST.

N. Y. C. & H. R. R. R.

D. D. Campbell

Gas Co.

(H)


SUMMIT
HAMILTON ST
CENTRAL AVE
D & M C. Co.
VOURMAN AVE
PLANK ROAD

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SEE SHEET No 9.

SEP. 1884
SCHENECTADY
N.Y.

STATE

8" W. PIPE

18

19

20

21

22

23

24

25

26

SMITH

CENTRE

ANGLE (ARBITRARY)

CLINTON

LA FAYETTE

HAMILTON

Stream

SKATING RINK
135' long.
LIGHT GAS.

J. WIEDERHOLD & Co.
LADIES UNDERWEAR.

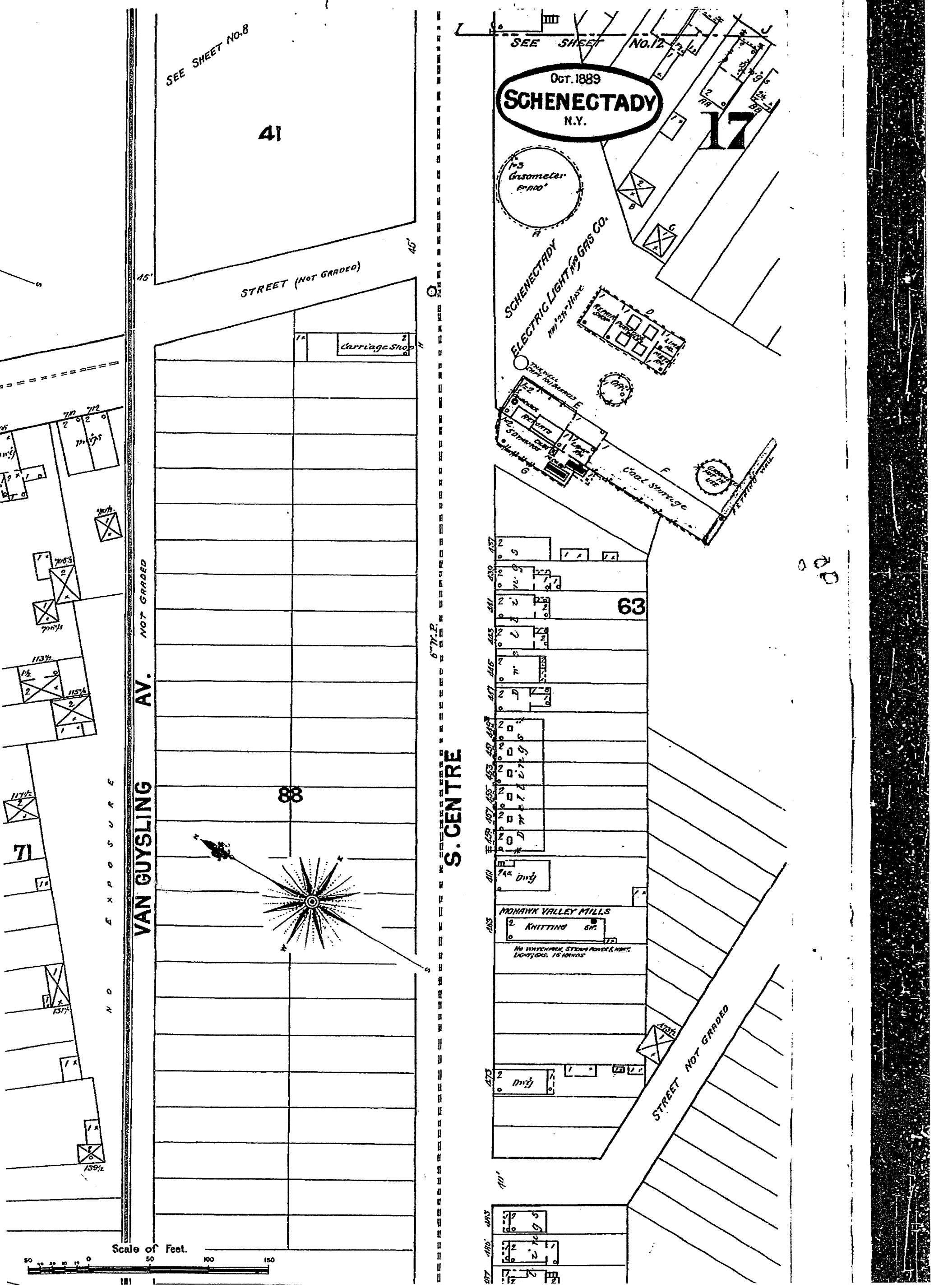
BOX FACTORY.
I. BLITTERSDORF.

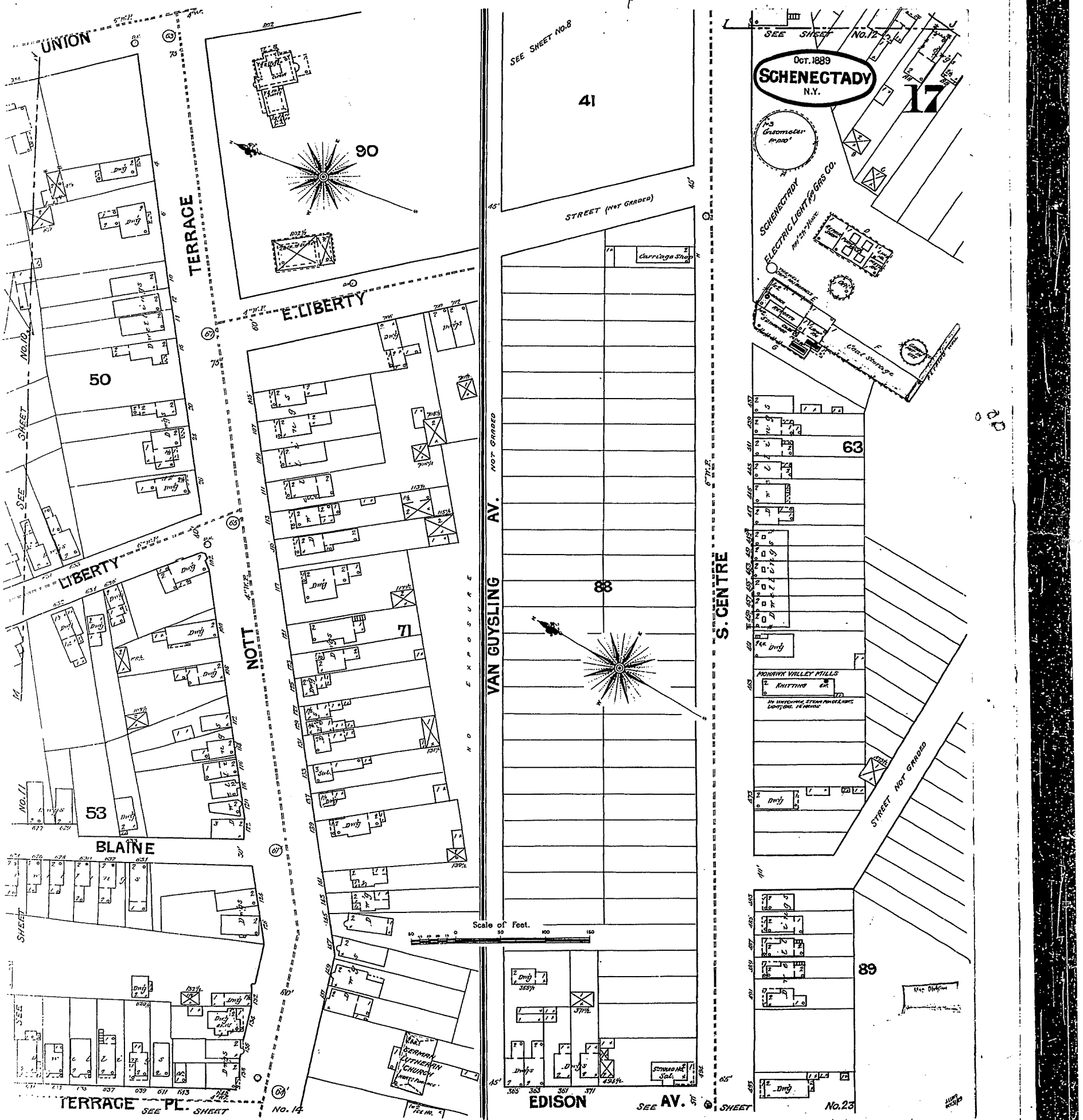
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Gas Holder GAS WORKS. BEYOND.

No exposure.

Scale of Feet.


SEE SHEET No.8
41
45'
STREET (NOT GRADED)
1x
2
Carriage Shop
H
6"W.P.
NOT GRADED
VAN GUYSLING AV.
88
NO EXPOSURE
S. CENTRE
E
7110
7112
7114
7116½
7118½
113½
115½
117½
71
131½
138½
Scale of Feet.
50 0 50 100 150
SEE SHEET NO.12
OCT. 1889
SCHENECTADY
N.Y.
17
1-3 Gasometer 60'00"
SCHENECTADY ELECTRIC LIGHT Mfg GAS CO.
Office
Purifiers
Meters
Tankwell
Exhaust
Retorts
Coal Storage
Gasometer not in use
63
437
439
441
445
446
447
449
451
453
455
457
459
Dwg
MOHAWK VALLEY MILLS
Knitting
No WATCHMAN, STEAM POWER, HOT. LIGHT, GAS. 18 HANDS
473½
473
STREET NOT GRADED
401'
403
405
407



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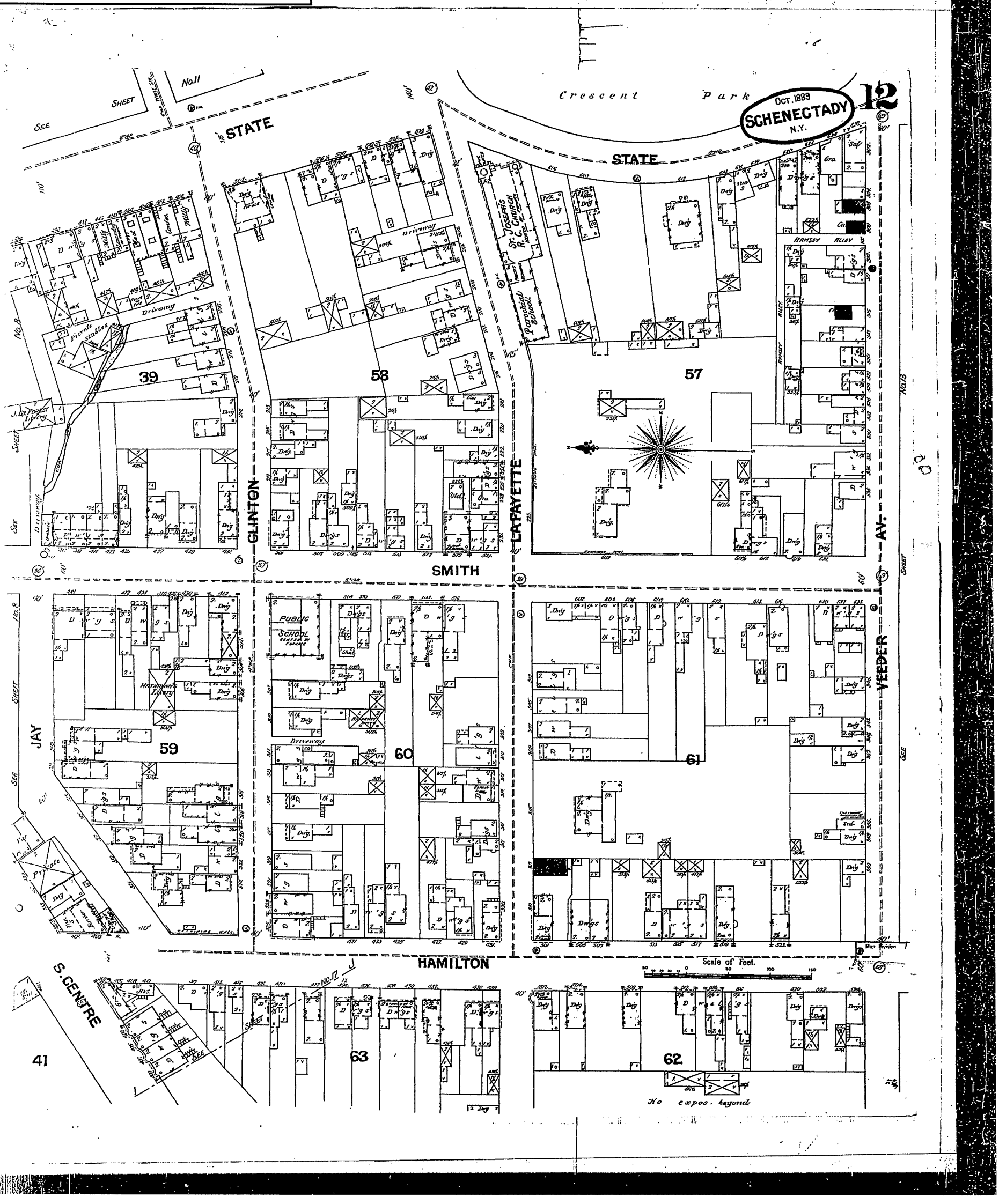
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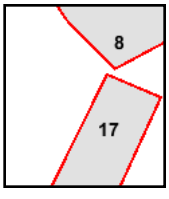
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Volume 1, Sheet 8
Volume 1, Sheet 17

OINS,

PLANING MILL

Vedder Luffman & Ackerman LUMBER YARD

LUMBER SHEDS

298

Wm. N. Whitley & Co.

1

2

3

4

Campbell Est
78

D. & H. C. CO. R. R.

Jno. Stever

Stevan Est

S. R. James

66

68

CENTER ST.

OPERA HOUSE

70

Col. D. D. Campbell Est

73

COAL YARD

75

Thos. McGeoy

R. T. Moore

76

Thos. McGeoy

Wiederhold & Co.

SMITH

Mrs. Swits

80

Mrs. Jno. Bradt

Fogarty

82

83

Miss Sanders

ST

Lyon Est

84

JAY

R. Hourigan

86

Jno. Hildebrand

87

Jno. Burns

P. Hourigan

E. Knauer

90

Mrs. Harriott

J. Kuhn

94

Rosa

96 H

J. Clute

97

Mrs. Dormady

92

HAMILTON

ST

J. B. Swits

112

Fred. H. Weston

114

99

M Hogan

100

H. Lyon

Devendorf

W. H. Peckham

Mrs. S. Berry

104

D. Daggett

N. G. Daggett

Mrs. A. Clements

107

Jas. Dunbar

821

A. Smith

C. Stevens

Geo. W. Morgan

817

Mrs. Hutchinson

Fred. H. Weston

SCHENECTADY GAS LIGHT CO.

115

Edw Lansing

110

SCHENECTADY GAS LIGHT CO.

809

384

381

305

PL

358

378

LAT

90

4

SCHENECTADY GAS LIGHT CO.

182

143

73

72

1

Brougham & Co.

139

78

68

J. Brougham

8

Furman

134

83

63

J. Lake

13

Welton

Stanford

120

88

ROBERT FURMAN PLAT

VAN GUYSLING AVE

Lewis

Phillips

19

58

124

93

53

23

119

98

T. Cushing

48

28

114

D. & H. C. CO. R. R.

CENTER ST

SOUTH

I. Teller

185

G Veeder

Hoffman

Mrs. M. Swits

G. Stoeckli

189

C. Harrod

F. Van Patten

T. Clements

193

C. Noltey

A. Davis

M. & Hart

200

Mrs. M. Cummings

Wm. Cunningham

Jno. Bauer

C. Roth

216

213

210

217

117

116

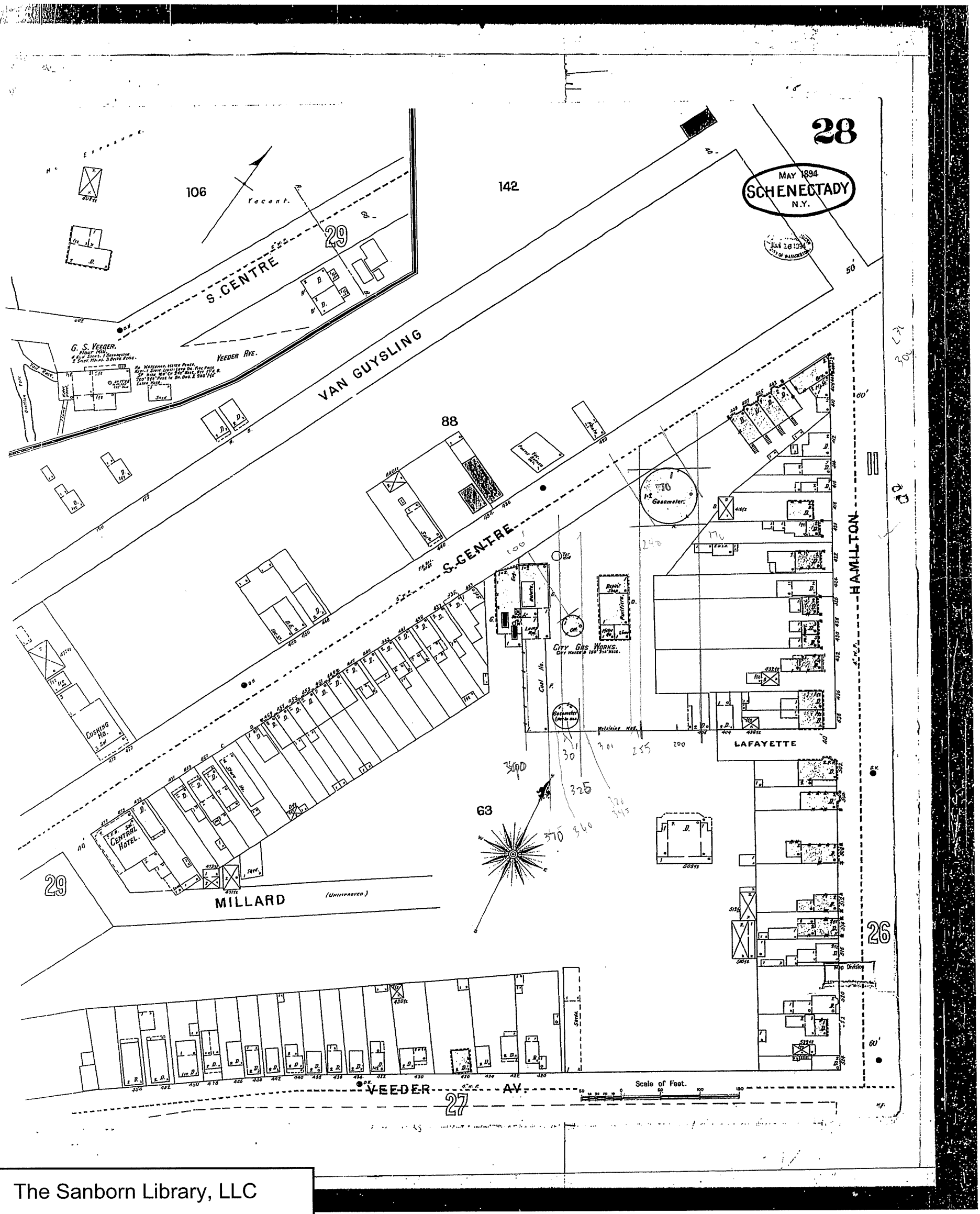
Jas. Fuller Est.

118

SECTION F ADJOINS

SECTION H ADJOINS

G ADJOINS



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13

0

142

O. N. R. R.

Coal Shed.

Wm G. Helmer Coal Yard

Frame No.

Builders Supplies

Shed.

Ice Ho.

50'

40'

HAMILTON

Elec. Light

VAN GUYSLING

6" W. Pipe

88

S. CENTRE

Gasometer

Cone'l No.

CITY GAS WORKS

City Meter, 1500 2" House Meter No.

Furniture

Meter

Office

Meter Lab.

Cond. No.

Gasometer

60'

Receiving Well

LAFAYETTE

Foundation

Vrooman House

Sal. 40'

Sal.

Shed.

Cap.

Pelletine Hotel

63

38

MILLARD Not Improved

6" W. Pipe

D.N.

VEEDER AV.

37

Scale of Feet.

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N
W
E
S

VAN GUYSLING

6" W. PIPE

S. CENTRE

6" W. PIPE

86

63

38

MILLARD NOT IMPROVED

GASOMETER

COKE HO.

CITY GAS WORKS
CITY METER, 1811 21 HOSE IN METER HO.

PURIFYING

PUMP HO.

METER HO.

COAL HO.

GASOMETER

RETORTING HALL

LAFAYETTE

HAMILTON

4" W. PIPE

VRDOMEN HOUSE

PALENTINE HOTEL

SHED

FOUNDATION

33

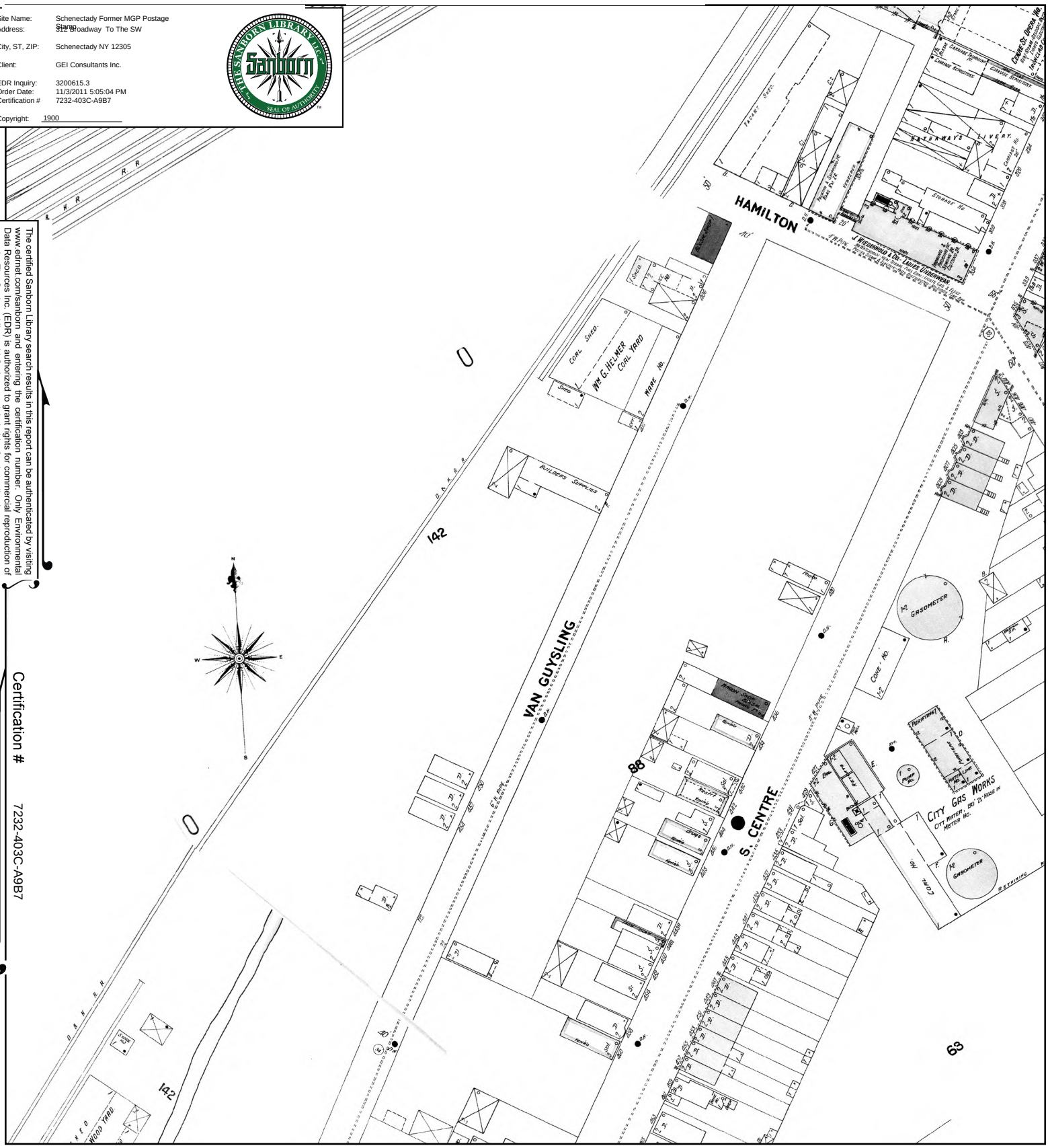
1900
SANBORN

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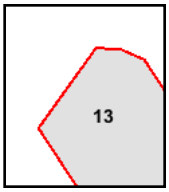
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PLATE 2

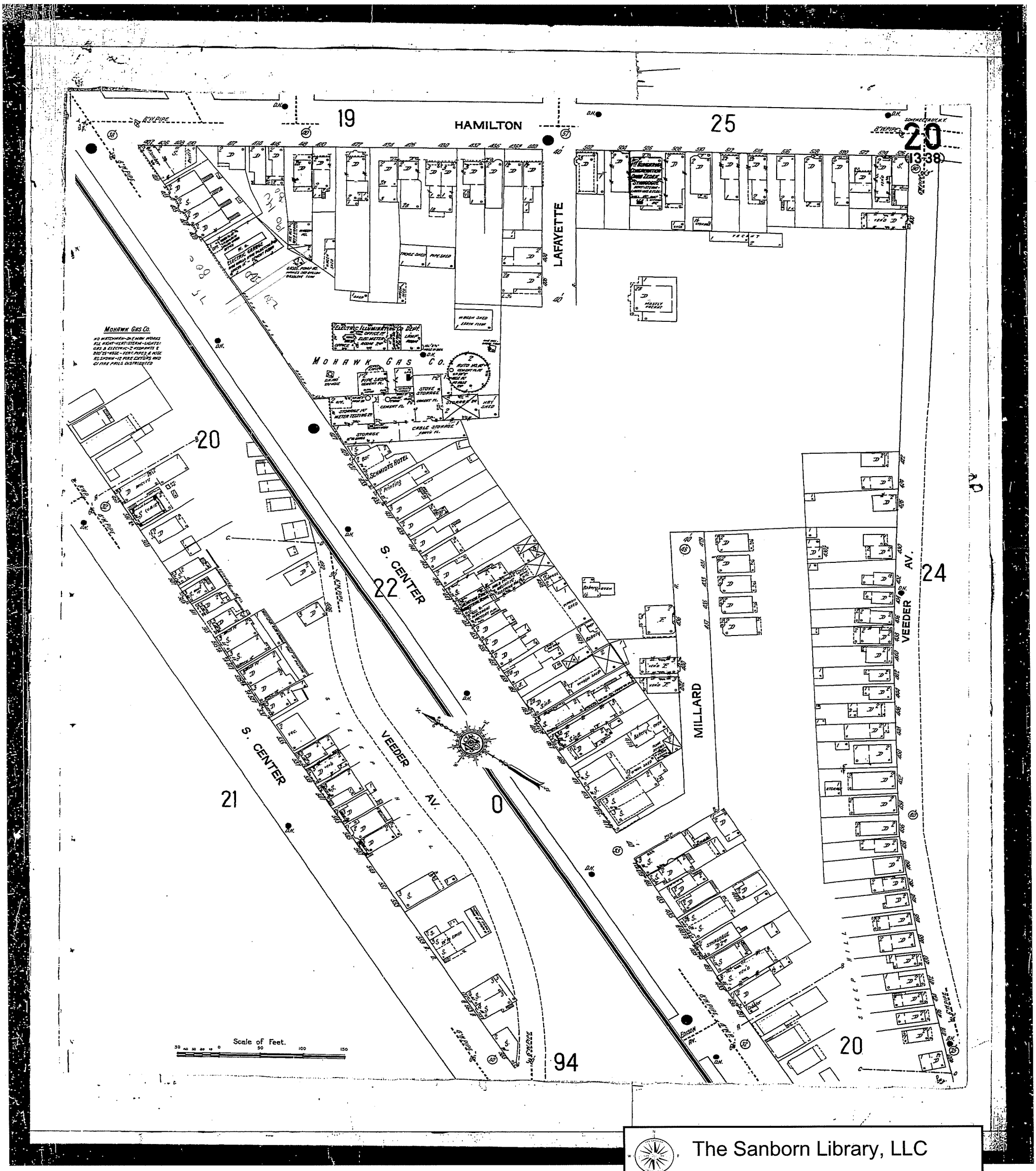
3

4

7

8

DOCK ST.
N. Y. C. & H. R. R. R.
D. & H. R. R.
CITY HOTEL
A. BROWN & SON LUMBER
A. BROWN & SON
SCHENECTADY TRUST CO.
ERIE CANAL
D. & H. R. R. FRT HO.
ARCADE BUILDING
WALL ST.
EDISON HOTEL
PASSENGER STATION UNION DEPOT
N. Y. C. R. R.
PINE ST.
D. & H. N. Y. C. & H. R. R. R.
N. CENTER ST.
1st BAPT. CH.
LIBERTY ST.
UNION ST.
WARREN ST.
YATES ST.
CONG. EVAN. CH.
N. JAY ST.
GAZETTE BUILDING
UNION NATIONAL BANK
MOHAWK BUILDING
BROAT BLOCK
McDONALD BLOCK
PARKER BLOG.
HOTEL VENDOME
ELLIS HOUSE
REEVES & HOFFMAN CO.
UNION HALL
SCHENECTADY RAILWAY CO.
FRANKLIN ST.
ST. JOHNS R.E. CH.
ST. JOHNS PARACHIAL SCHOOL
WM. HATHAWAY LIVERY
McDONALD BLDG.
VAN VALKENBURGH BLDG.
POST OFFICE
VAN CURLER OPERA HOUSE
CITY HALL ELLIS HOSPITAL
GER. EVAN CH.
2nd REFORM CH.
THE EMPIRE
HOSE CO. No. 1
GERMAN M.E. CH.
WARD 3
GLEASON ALLEY
MYERS ALLEY
SOUTH ST.
ROMEYN ST.
Campbell Est.
VAN GUYSLING AVE.
S. CENTER ST.
DAKOTA ST.
MOHAWK GAS CO.
CLINTON ST.
CLINTON ST. SCHOOL
BOWLING ALLEY
DAILY UNION
SCHENECTADY SAVGS BANK
ST. JOSEPH'S SCHOOL
ST. JOSEPH'S R.C. CH.
WARD 5
WARD 4
LAFAYETTE ST.
BARRETT ST.
LORRAINE BLDG.
HAMILTON ST.
SMITH ST.
Father Est.
Robt. Furman Est.
VEEDER AVE.
CENTRAL FIRE STA.
WARD 7
STATE ST.
CRESCENT PARK
SOLDIERS MONUMENT
FOUNTAIN
BAND STAND
STATE ST. M.E. CH.
CHAPEL ST.
I.O.O.F.
CHRIST. EPIS. CH.
EMMANUEL BAPT. ST. CH.
STATE ARMORY
SUMMIT AVE.
JOHNSON ST.
ALLEN PL.
TERRACE PL.
NOTT TERRACE SCHOOL
DOBORO AVE.
LAINE ST.
PARK PLACE
PARK AVE.
PUBLIC LIBRARY
SEWARD ST.
SCHENECTADY HIGH SCHOOL
WARD 2
PLACE



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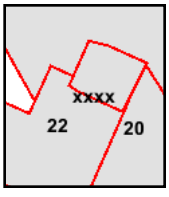
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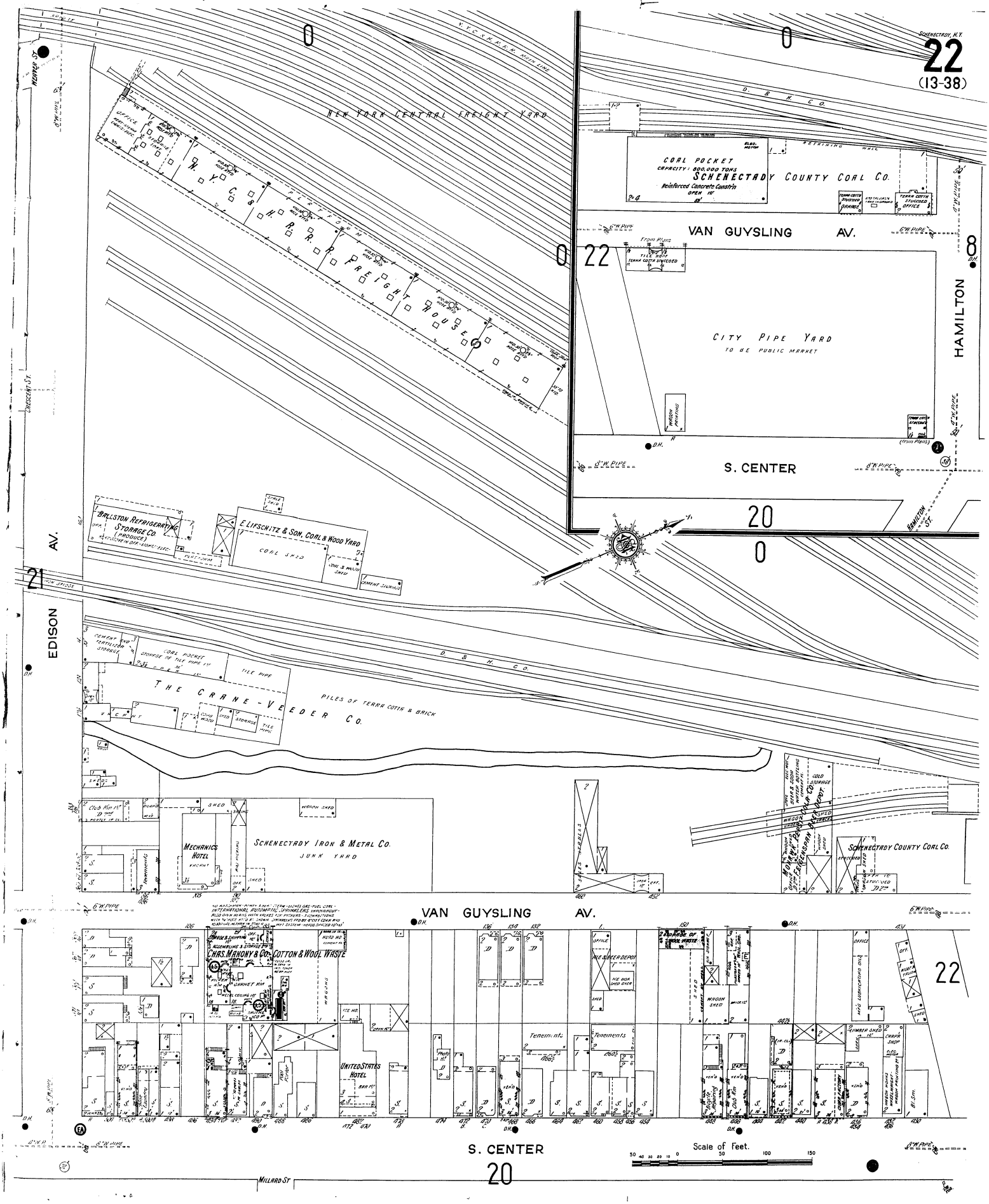
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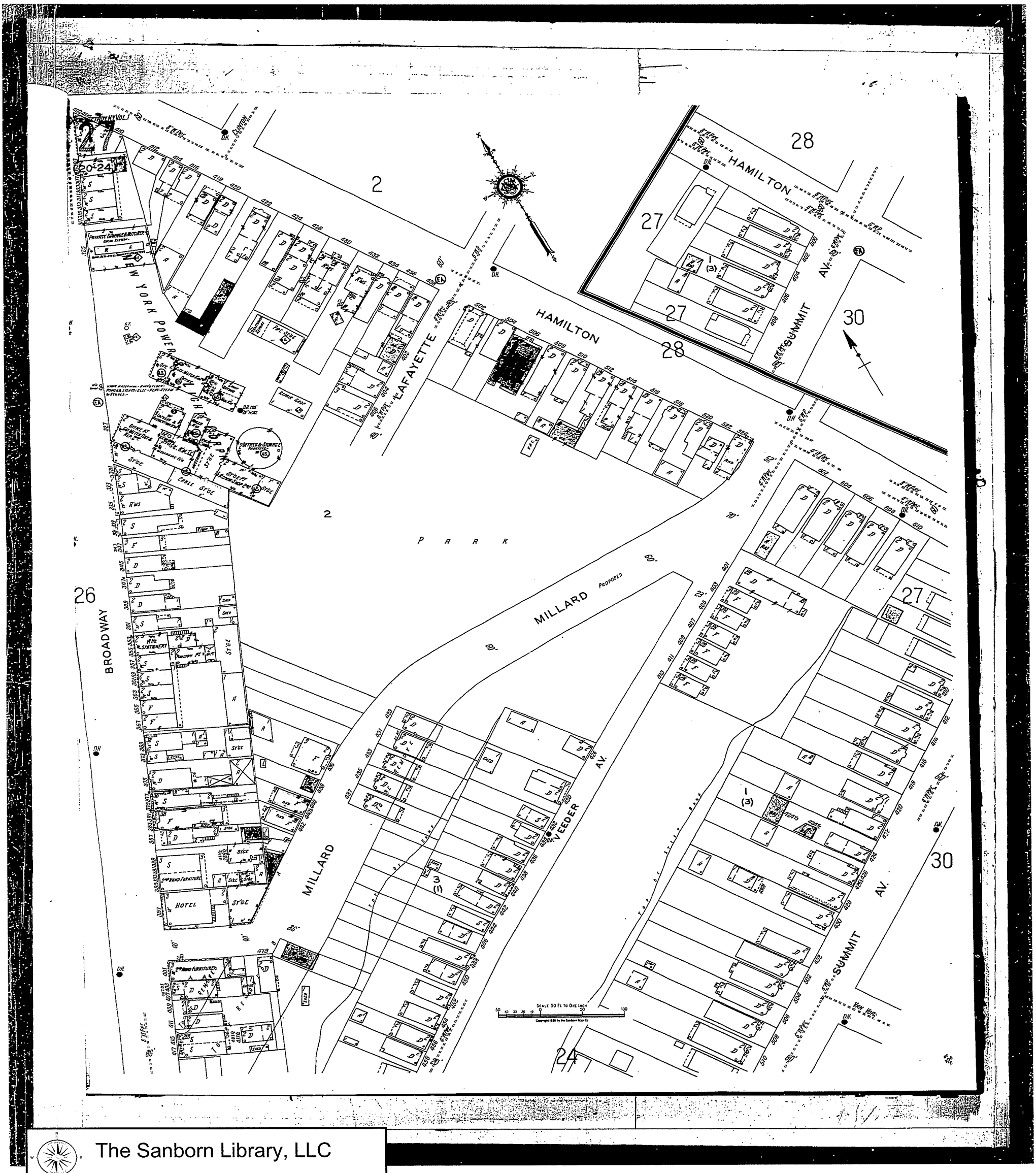
0 Feet 150 300 600





Volume 1, Sheet 20
Volume 1, Sheet 22
Volume 1, Sheet xxxx


SCHENECTADY, N.Y.
22
(13-38)
NEW YORK CENTRAL FREIGHT YARD
N. Y. C. & H. R. R. R. FREIGHT HOUSE
D. & H. CO.
COAL POCKET
CAPACITY: 800,000 TONS
SCHENECTADY COUNTY COAL CO.
Reinforced Concrete Constrn
VAN GUYSLING AV.
CITY PIPE YARD
TO BE PUBLIC MARKET
HAMILTON
S. CENTER
HAMILTON ST.
CROSSEN ST.
EDISON AV.
BALLSTON REFRIGERATING STORAGE CO.
(PRODUCE)
E. LIFSCHITZ & SON, COAL & WOOD YARD
COAL SHED
THE CRANE-VEEDER CO.
PILES OF TERRA COTTA & BRICK
MECHANIC HOTEL
SCHENECTADY IRON & METAL CO.
JUNK YARD
SCHENECTADY COUNTY COAL CO.
VAN GUYSLING AV.
CHAS. MAHONY & CO.
COTTON & WOOL WASTE
UNITED STATES HOTEL
Tenements
S. CENTER
Scale of Feet.
MILLARD ST
20
21
22



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Atlas N.Y. Vol. 1

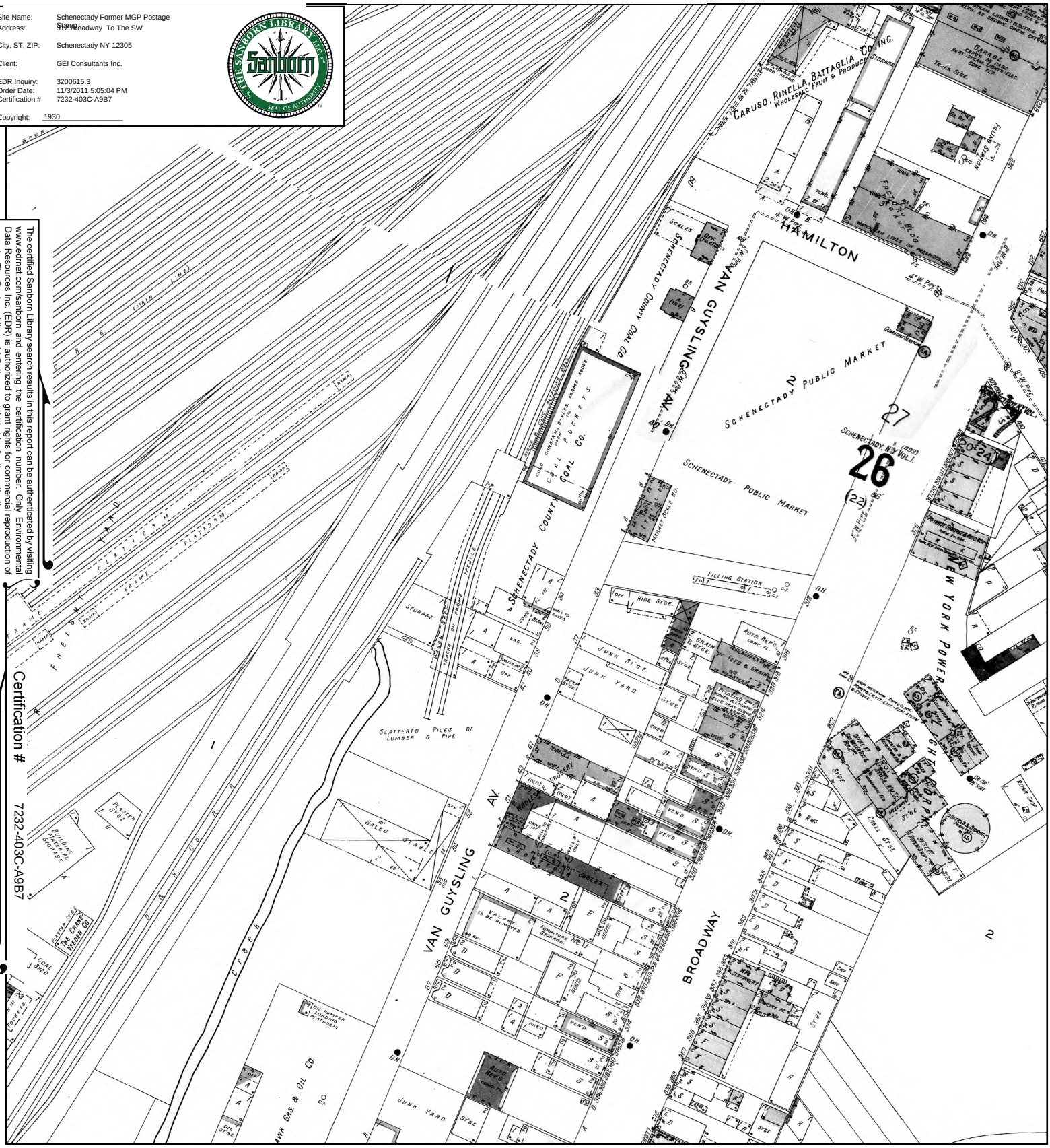
1930
-SANBORN

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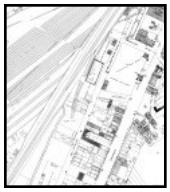
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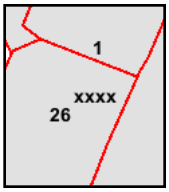
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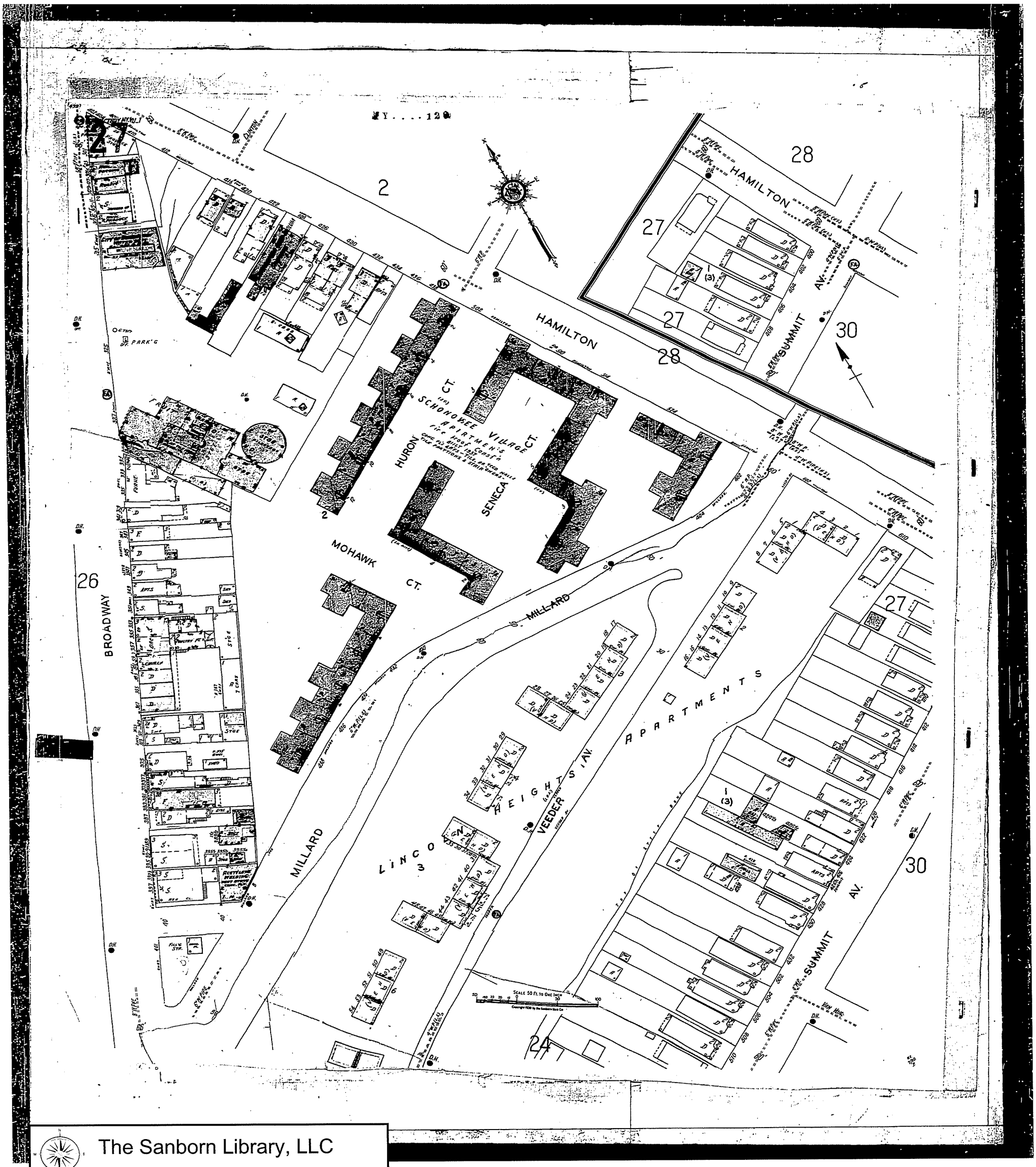
0 Feet 150 300 600





Volume 1, Sheet xxxx
Volume 1, Sheet 1
Volume 1, Sheet 26

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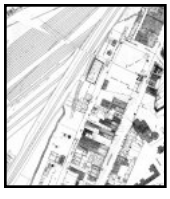
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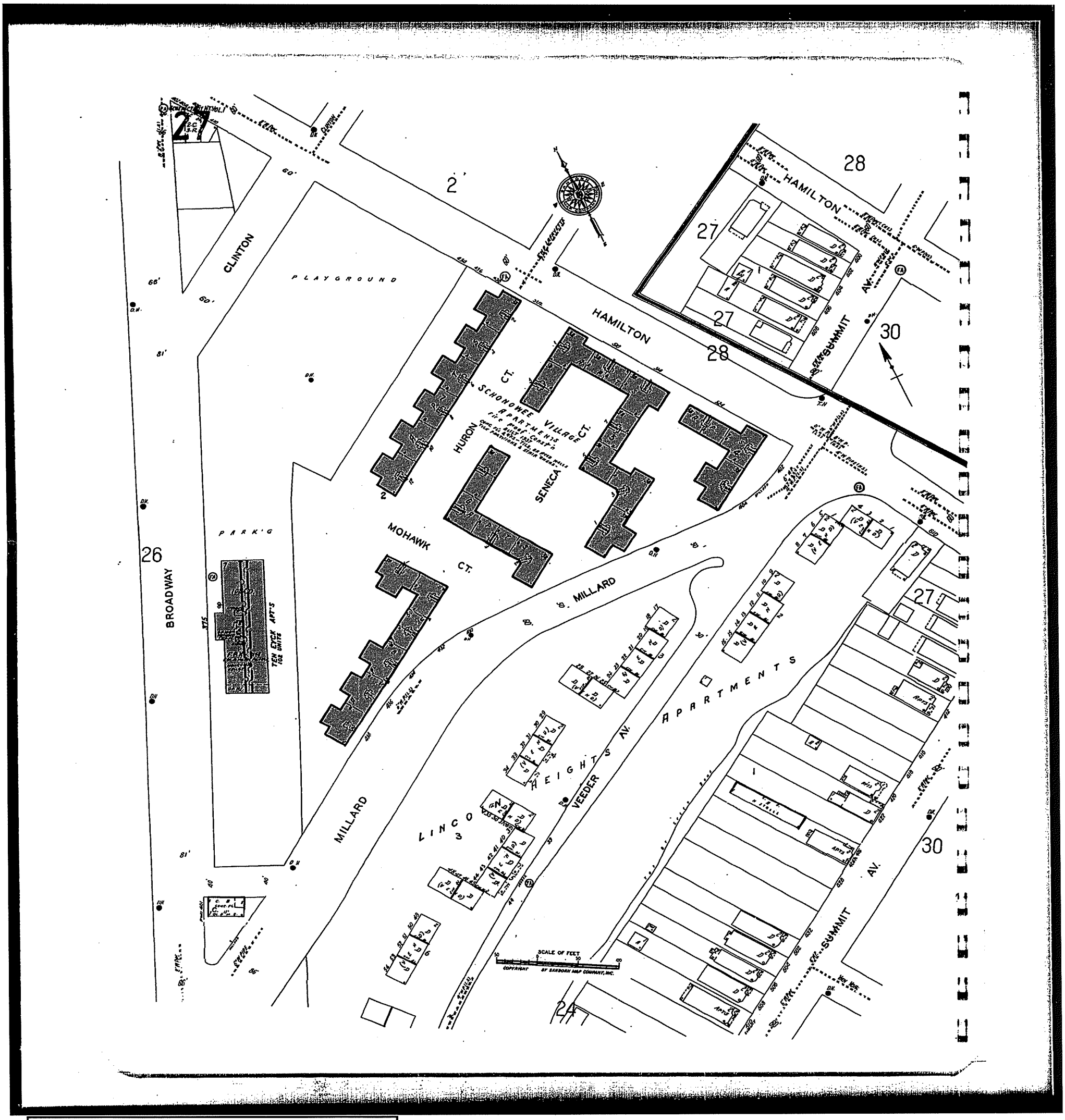
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Volume 1, Sheet 1
Volume 1, Sheet 26
Volume 1, Sheet 27



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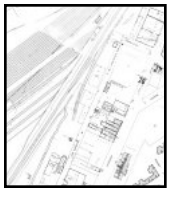
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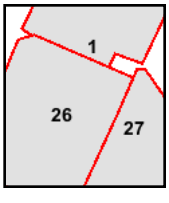
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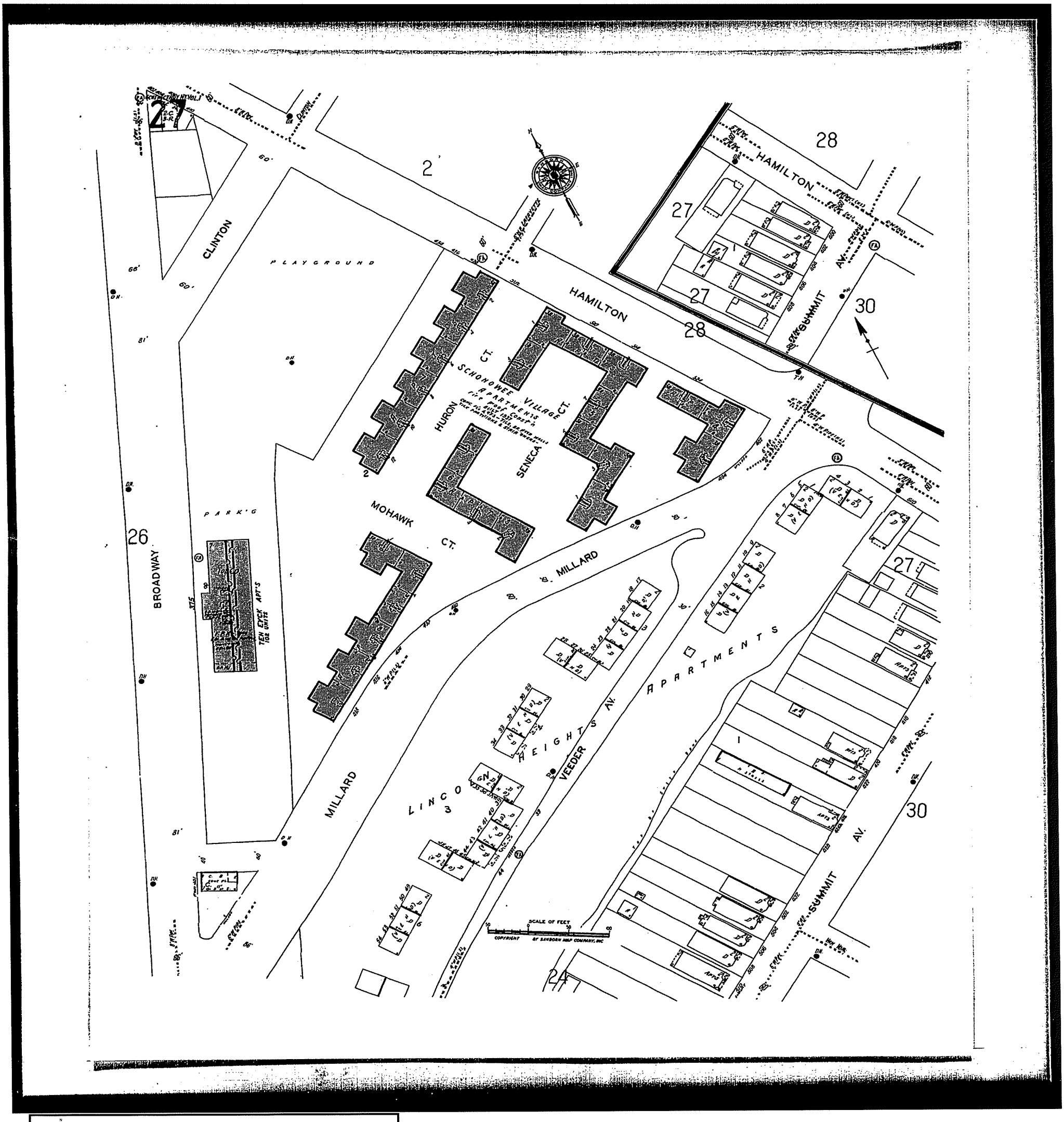
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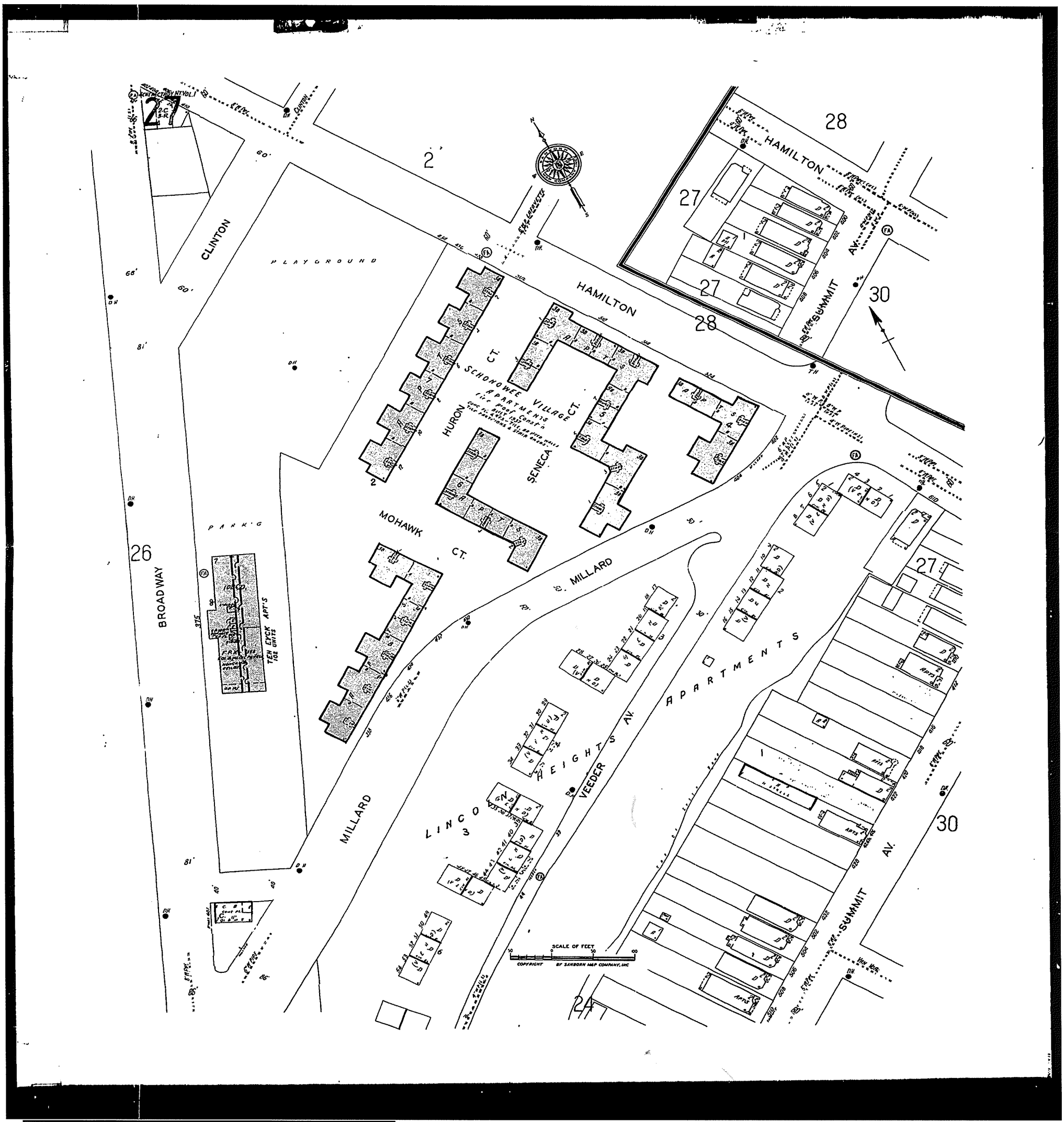


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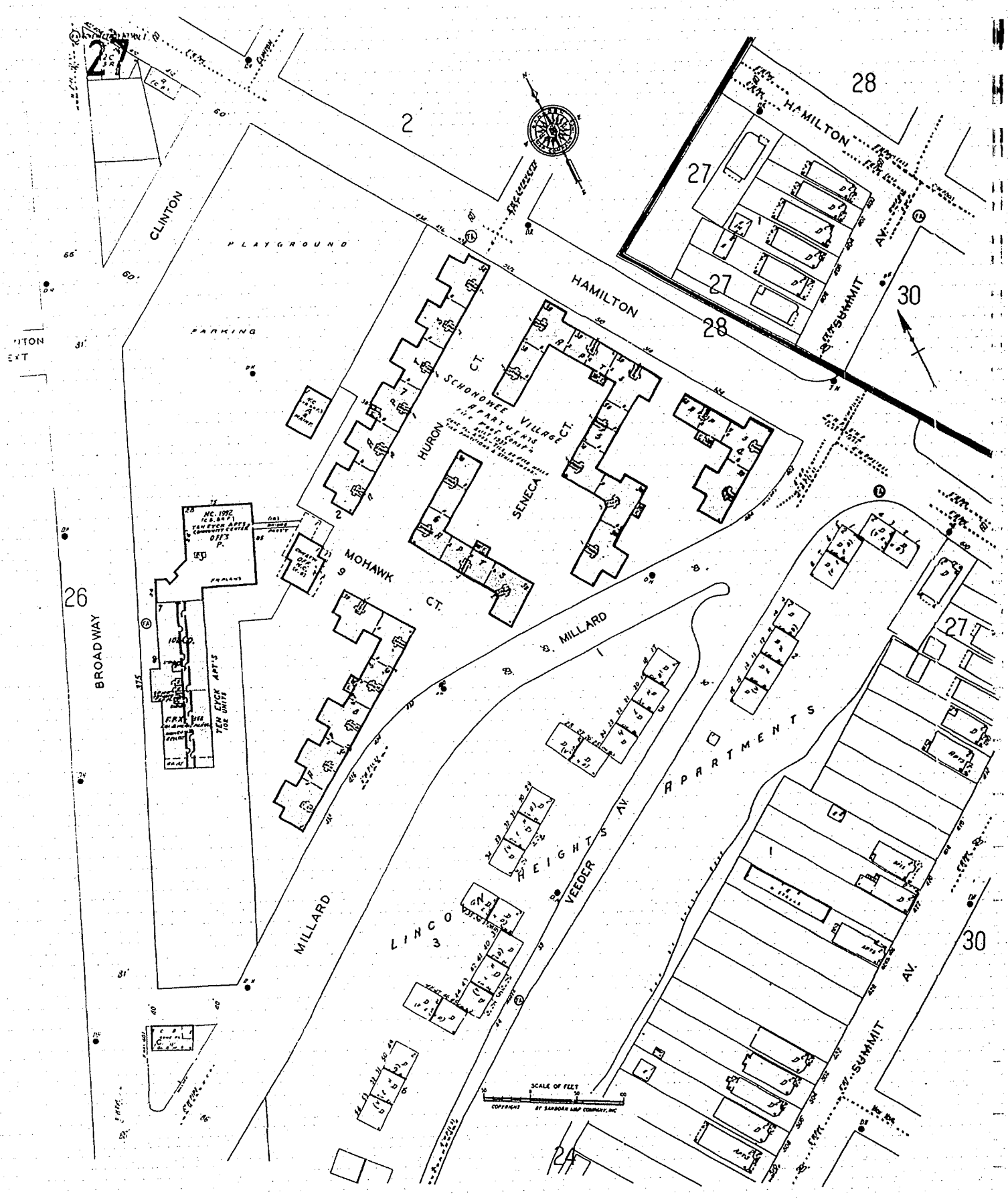


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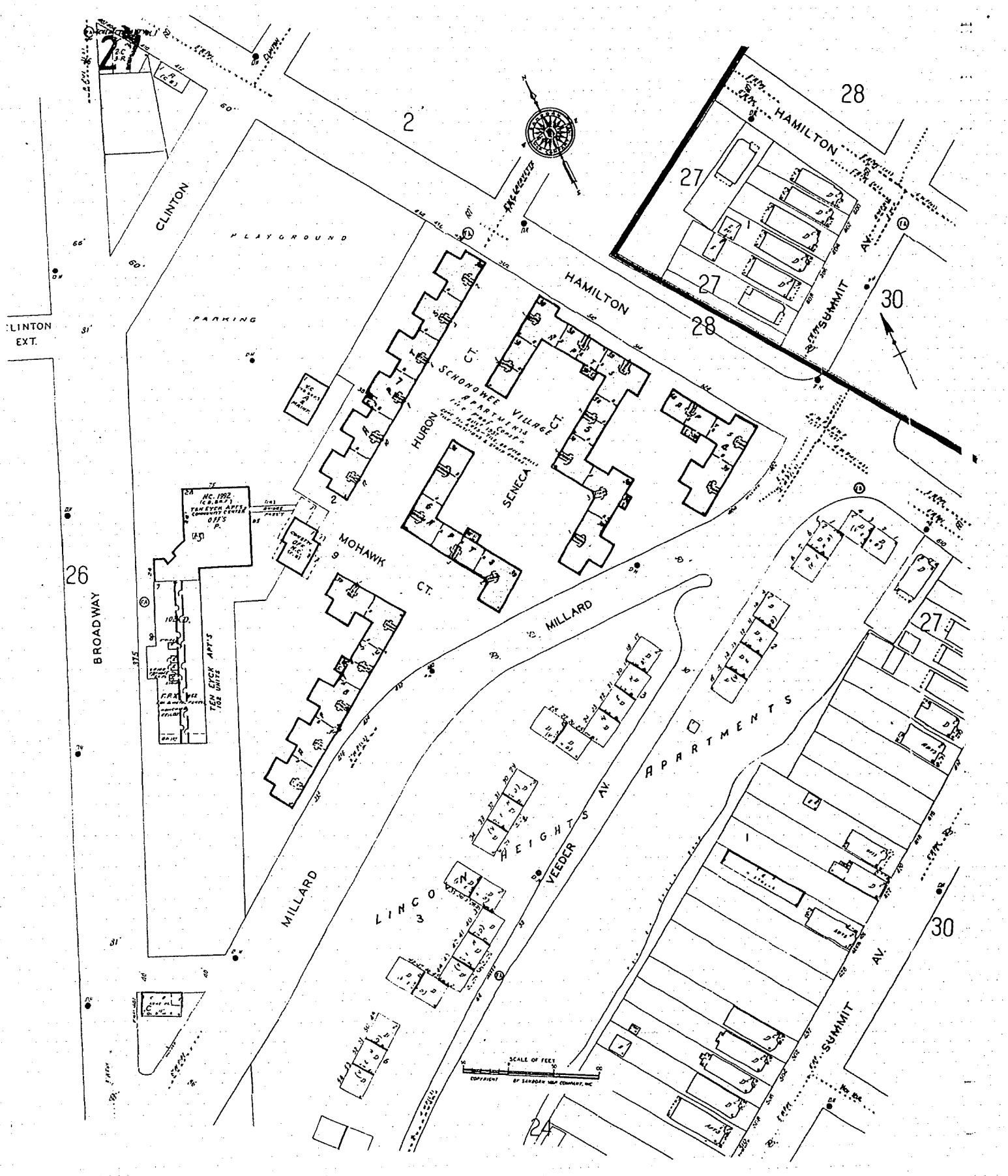
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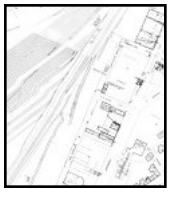
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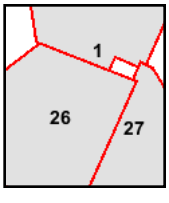
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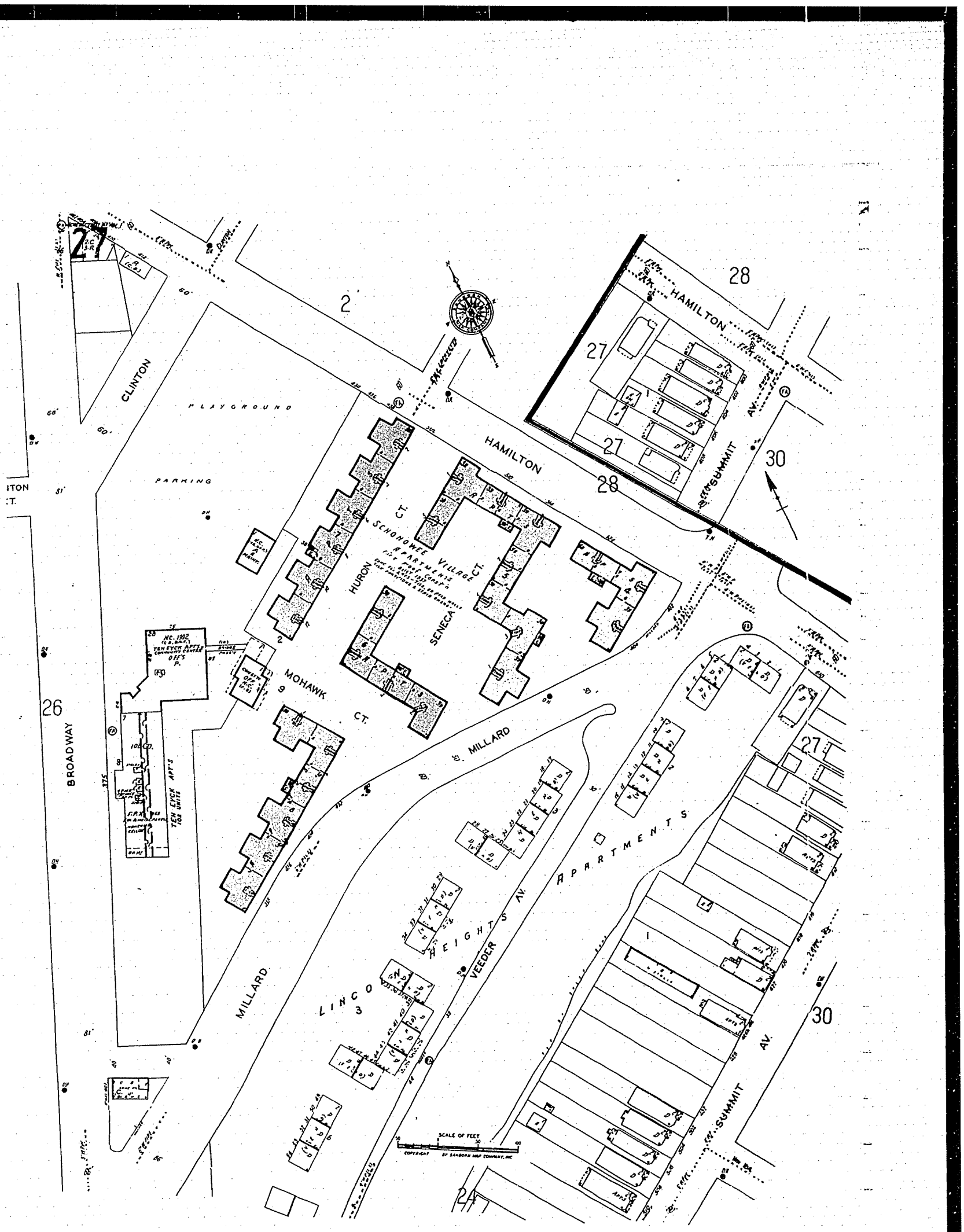
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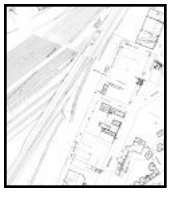
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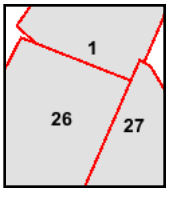
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27

2C
3R

CLINTON

60'

2

PLAYGROUND

PARKING

HAMILTON

28

27

AV. SUMMIT

30

SCHONOWEE VILLAGE APARTMENTS
Fire Proof Const'n
SENECA CT.
HURON CT.

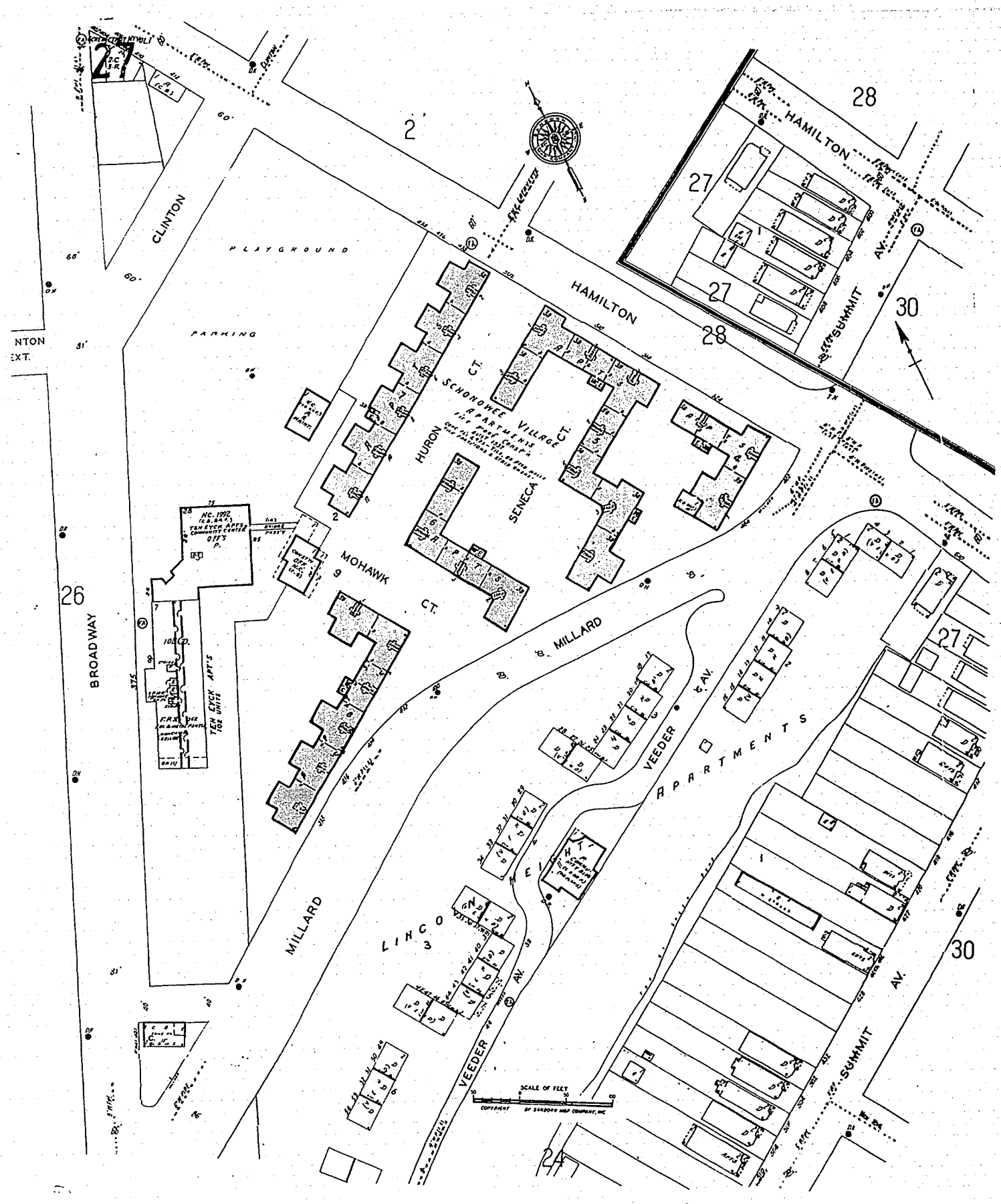
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(C.B.&P.)
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P.

MOHAWK

26

NTON
EXT.

1995
SANBORN



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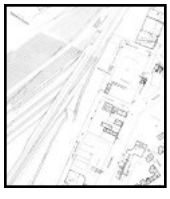
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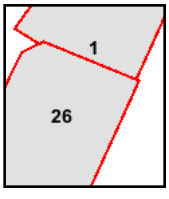
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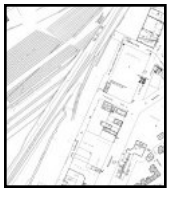
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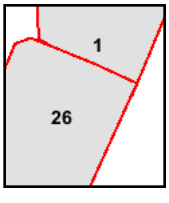
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11/03/11

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455 Winding Brook Drive
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Contact: Drew Blicharz / Jerry Zak

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Maps Provided:

1999	1989	1894
1995	1988	1889
1994	1951	1884
1993	1930	
1992	1914	
1990	1900	

Sanborn® Library search results
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The Sanborn Library includes more than 1.2 million Sanborn fire insurance maps, which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

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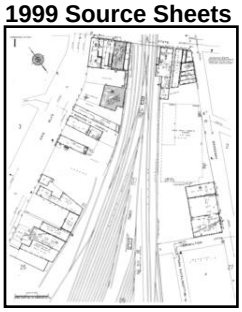
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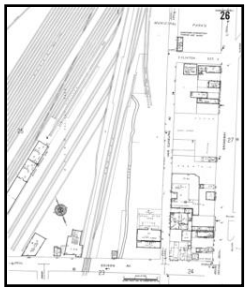
Sanborn Sheet Thumbnails

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1999 Source Sheets



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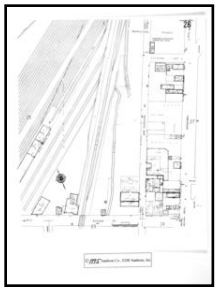


Volume 1, Sheet 26

1995 Source Sheets



Volume 1, Sheet 1



Volume 1, Sheet 26

1994 Source Sheets



Volume 1, Sheet 26



Volume 1, Sheet 27



Volume 1, Sheet 1

1993 Source Sheets



Volume 1, Sheet 1



Volume 1, Sheet 26



Volume 1, Sheet 27

1992 Source Sheets



Volume 1, Sheet 1



Volume 1, Sheet 26

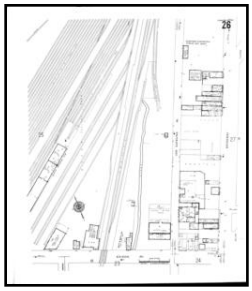


Volume 1, Sheet 27

1990 Source Sheets



Volume 1, Sheet 1



Volume 1, Sheet 26

1989 Source Sheets



Volume 1, Sheet 1

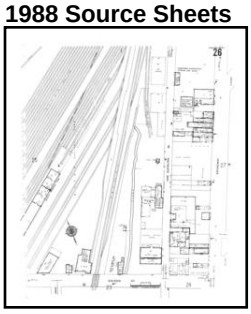


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Volume 1, Sheet 27

1988 Source Sheets



Volume 1, Sheet 26



Volume 1, Sheet 27



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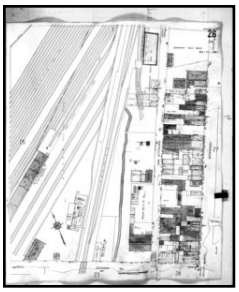
1951 Source Sheets



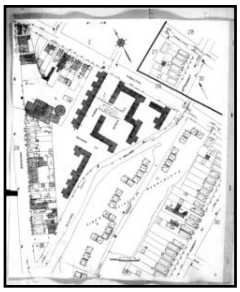
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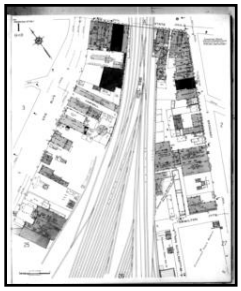


Volume 1, Sheet 27

1930 Source Sheets



Volume 1, Sheet xxxx

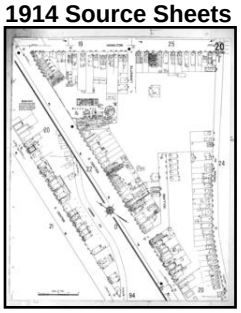


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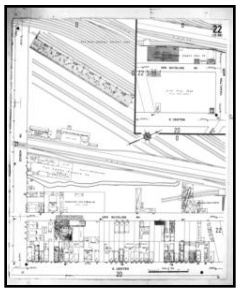


Volume 1, Sheet 26

1914 Source Sheets



Volume 1, Sheet 20

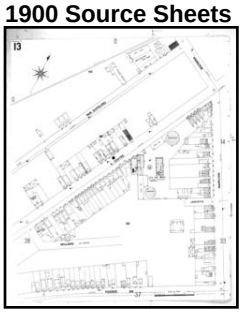


Volume 1, Sheet 22



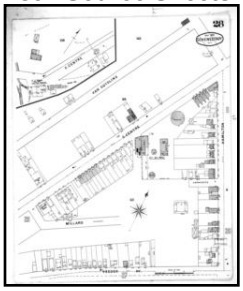
Volume 1, Sheet xxxx

1900 Source Sheets



Volume 1, Sheet 13

1894 Source Sheets



Volume 1, Sheet 28

1889 Source Sheets



Volume 1, Sheet 8



Volume 1, Sheet 17

1884 Source Sheets

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800.352.0050
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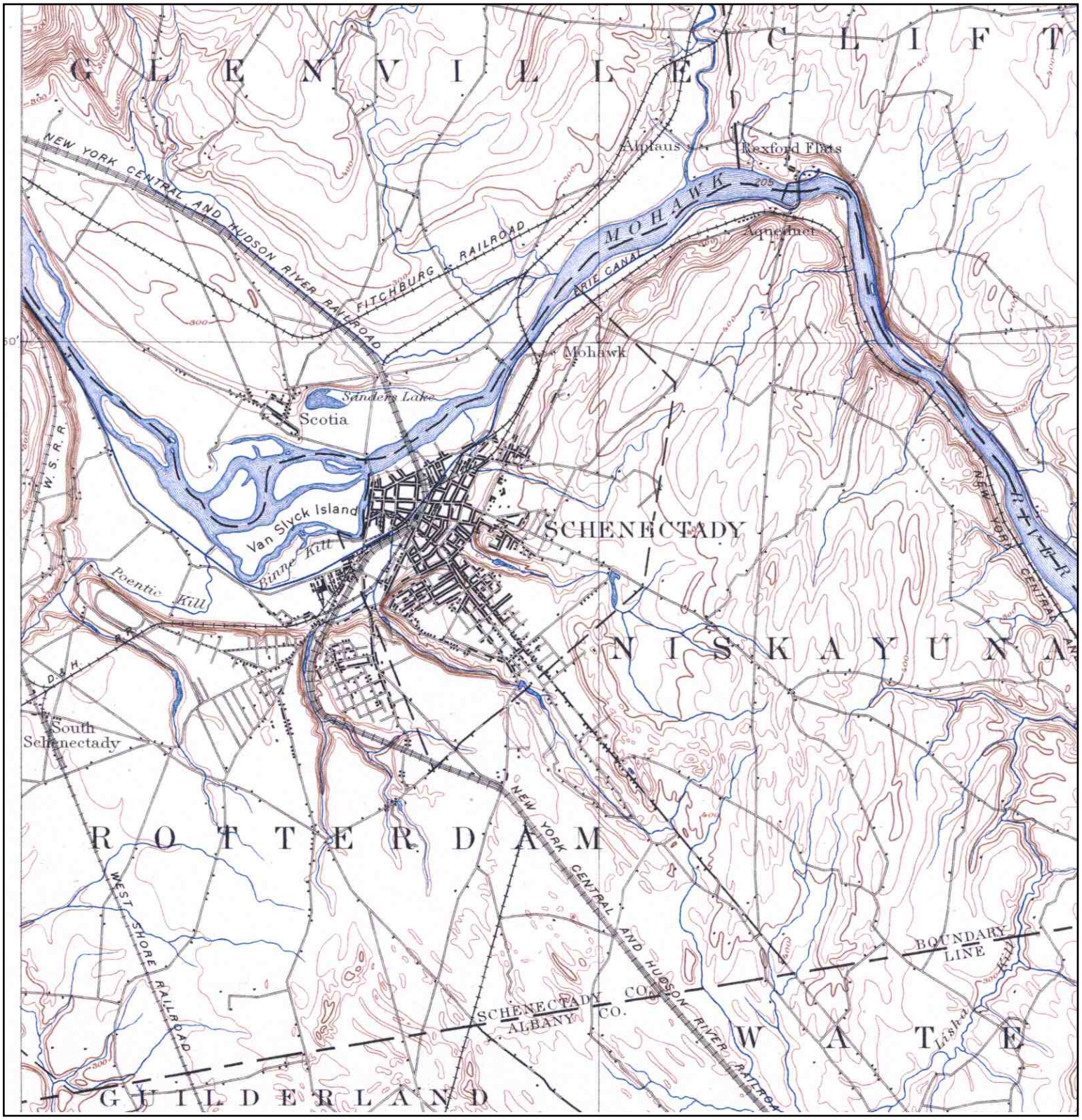
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Historical Topographic Map



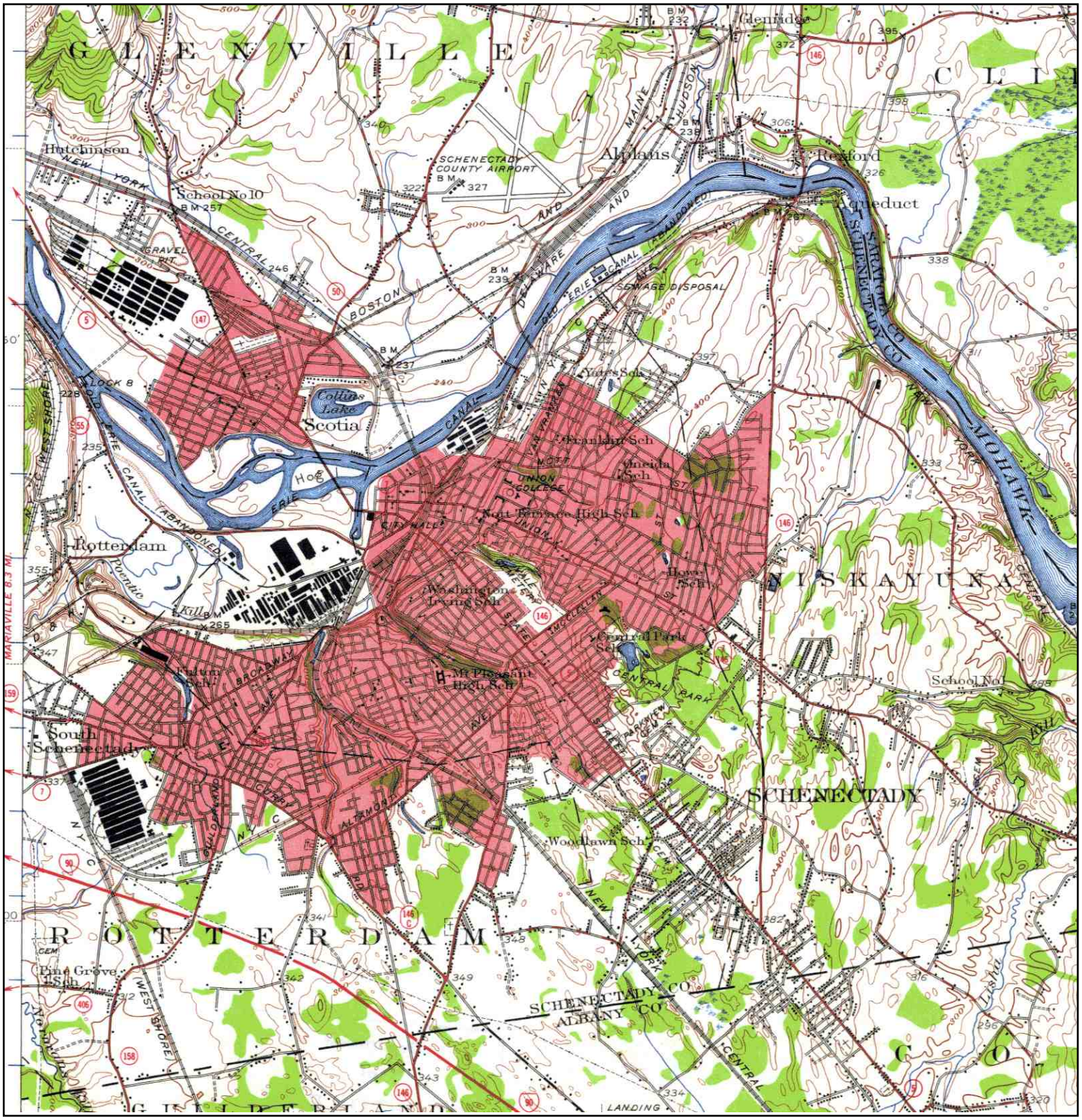
N	TARGET QUAD NAME: SCHENECTADY MAP YEAR: 1898 SERIES: 15 SCALE: 1:62500	SITE NAME: Schenectady Former MGP Postage Stamp ADDRESS: 312 Broadway To The SW Schenectady, NY 12305 LAT/LONG: 42.8102 / -73.9458	CLIENT: GEI Consultants Inc. CONTACT: Drew Blicharz / Jerry Zak INQUIRY#: 3200615.4 RESEARCH DATE: 11/03/2011

Historical Topographic Map



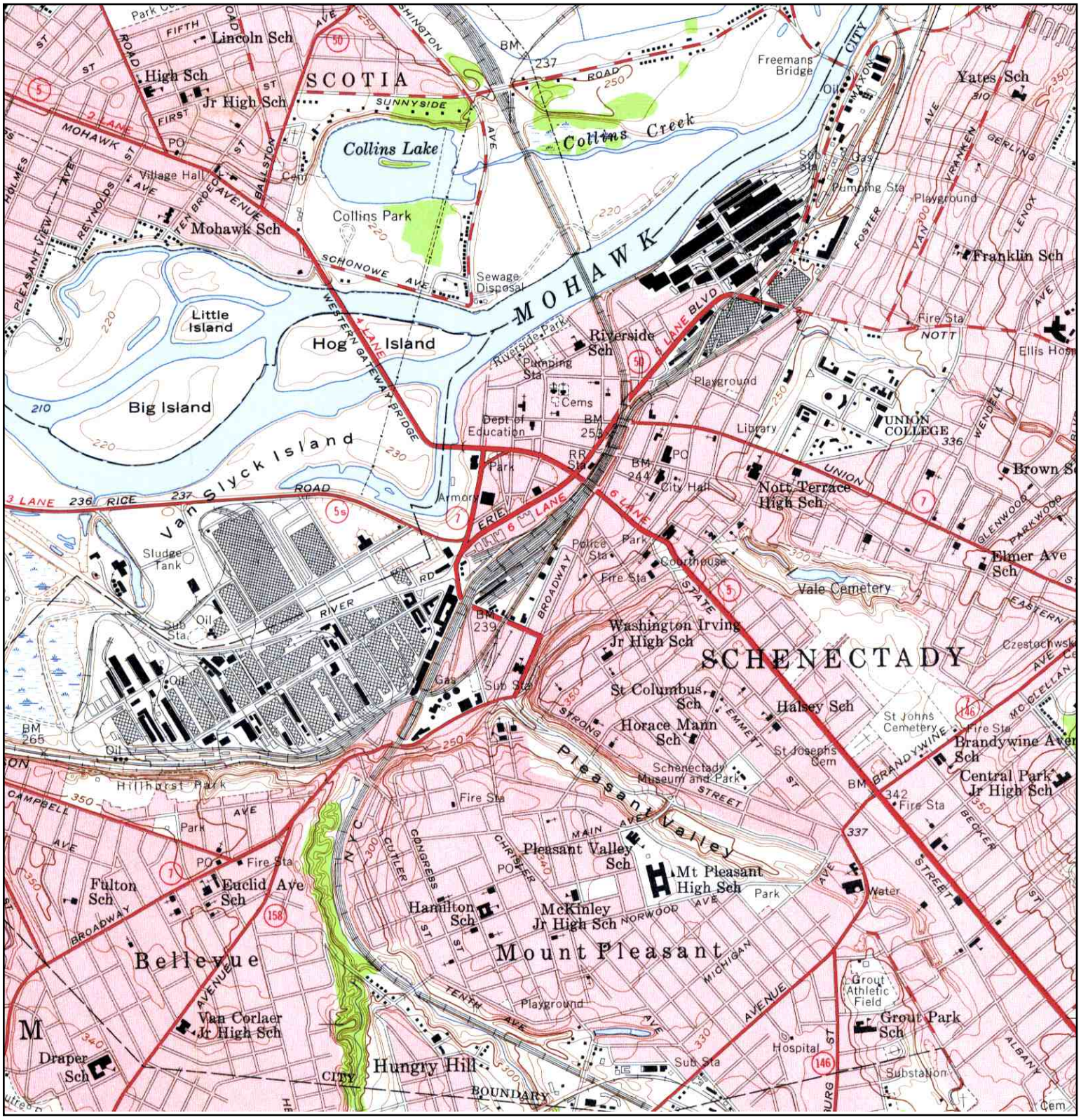
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Historical Topographic Map



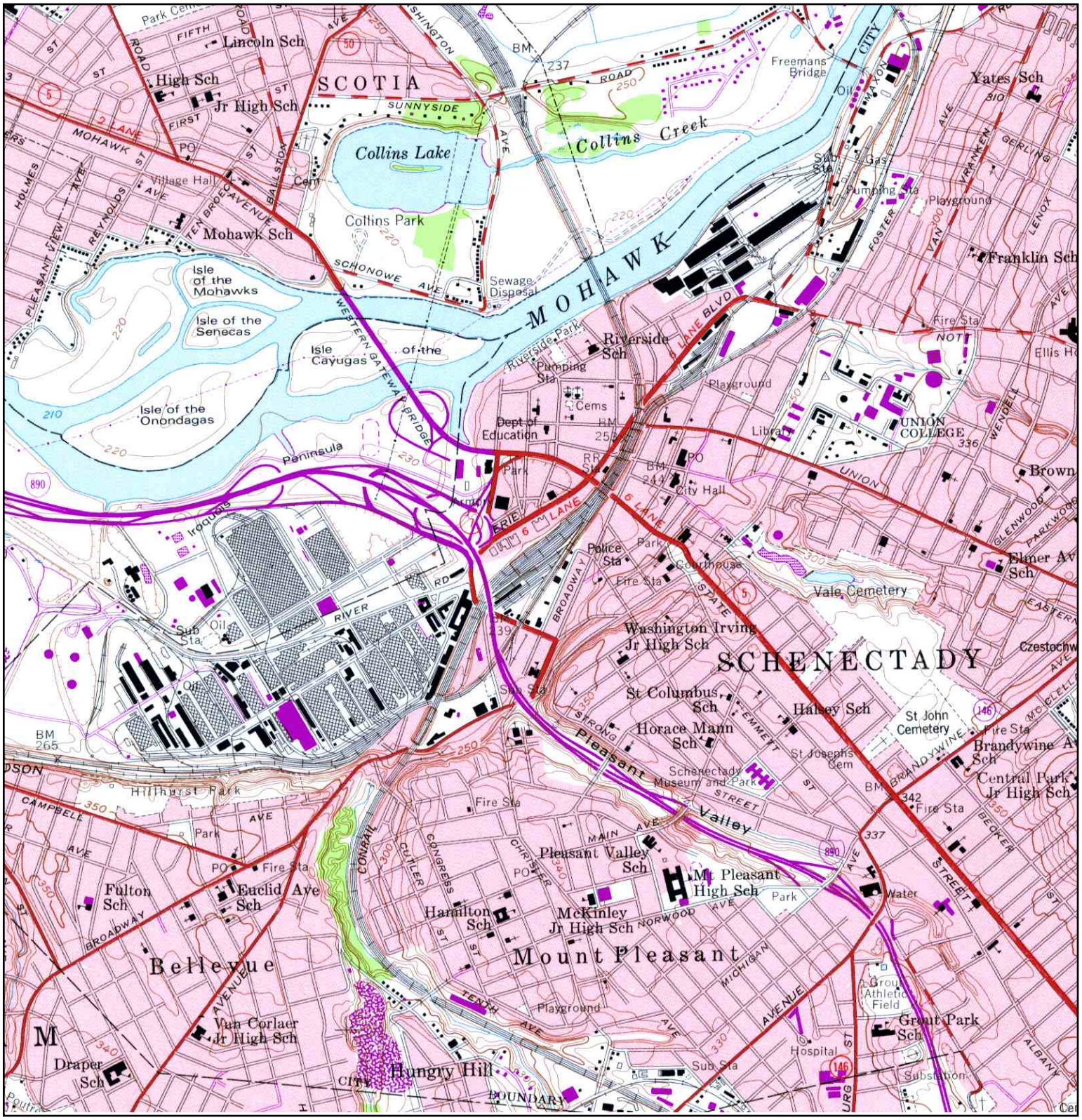
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Historical Topographic Map



N	TARGET QUAD NAME: SCHENECTADY MAP YEAR: 1954 SERIES: 7.5 SCALE: 1:24000	SITE NAME: Schenectady Former MGP Postage Stamp ADDRESS: 312 Broadway To The SW Schenectady, NY 12305 LAT/LONG: 42.8102 / -73.9458	CLIENT: GEI Consultants Inc. CONTACT: Drew Blicharz / Jerry Zak INQUIRY#: 3200615.4 RESEARCH DATE: 11/03/2011

Historical Topographic Map



N			
	TARGET QUAD NAME: SCHENECTADY MAP YEAR: 1980 PHOTOREVISED:1954 SERIES: 7.5 SCALE: 1:24000	SITE NAME: Schenectady Former MGP Postage Stamp ADDRESS: 312 Broadway To The SW Schenectady, NY 12305 LAT/LONG: 42.8102 / -73.9458	CLIENT: GEI Consultants Inc. CONTACT: Drew Blicharz / Jerry Zak INQUIRY#: 3200615.4 RESEARCH DATE: 11/03/2011

Schenectady Former MGP Postage Stamp
312 Broadway To The SW
Schenectady, NY 12305

Inquiry Number: 3200615.5
November 04, 2011

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Date EDR Searched Historical Sources:

Aerial Photography November 04, 2011

Target Property:

312 Broadway To The SW

Schenectady, NY 12305

Year	***Scale***	***Details***	***Source***
1952	Aerial Photograph. Scale: 1"=500'	Panel #: 42073-G8, Schenectady, NY;/Flight Date: May 01, 1952	EDR
1973	Aerial Photograph. Scale: 1"=500'	Panel #: 42073-G8, Schenectady, NY;/Flight Date: June 16, 1973	EDR
1978	Aerial Photograph. Scale: 1"=1000'	Panel #: 42073-G8, Schenectady, NY;/Flight Date: April 23, 1978	EDR
1986	Aerial Photograph. Scale: 1"=1000'	Panel #: 42073-G8, Schenectady, NY;/Flight Date: May 12, 1986	EDR
1995	Aerial Photograph. Scale: 1"=750'	Panel #: 42073-G8, Schenectady, NY;/Flight Date: May 07, 1995	EDR
1997,1995	Aerial Photograph. Scale: 1"=500'	Panel #: 42073-G8, Schenectady, NY;/Composite DOQQ - acquisition dates: April 30, 1997,May 07, 1995	EDR
1997	Aerial Photograph. Scale: 1"=750'	Panel #: 42073-G8, Schenectady, NY;/Flight Date: April 30, 1997	EDR
2006	Aerial Photograph. Scale: 1"=500'	Panel #: 42073-G8, Schenectady, NY;/Flight Year: 2006	EDR


INQUIRY #: 3200615.5
YEAR: 1952
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EDR Environmental Data Resources Inc

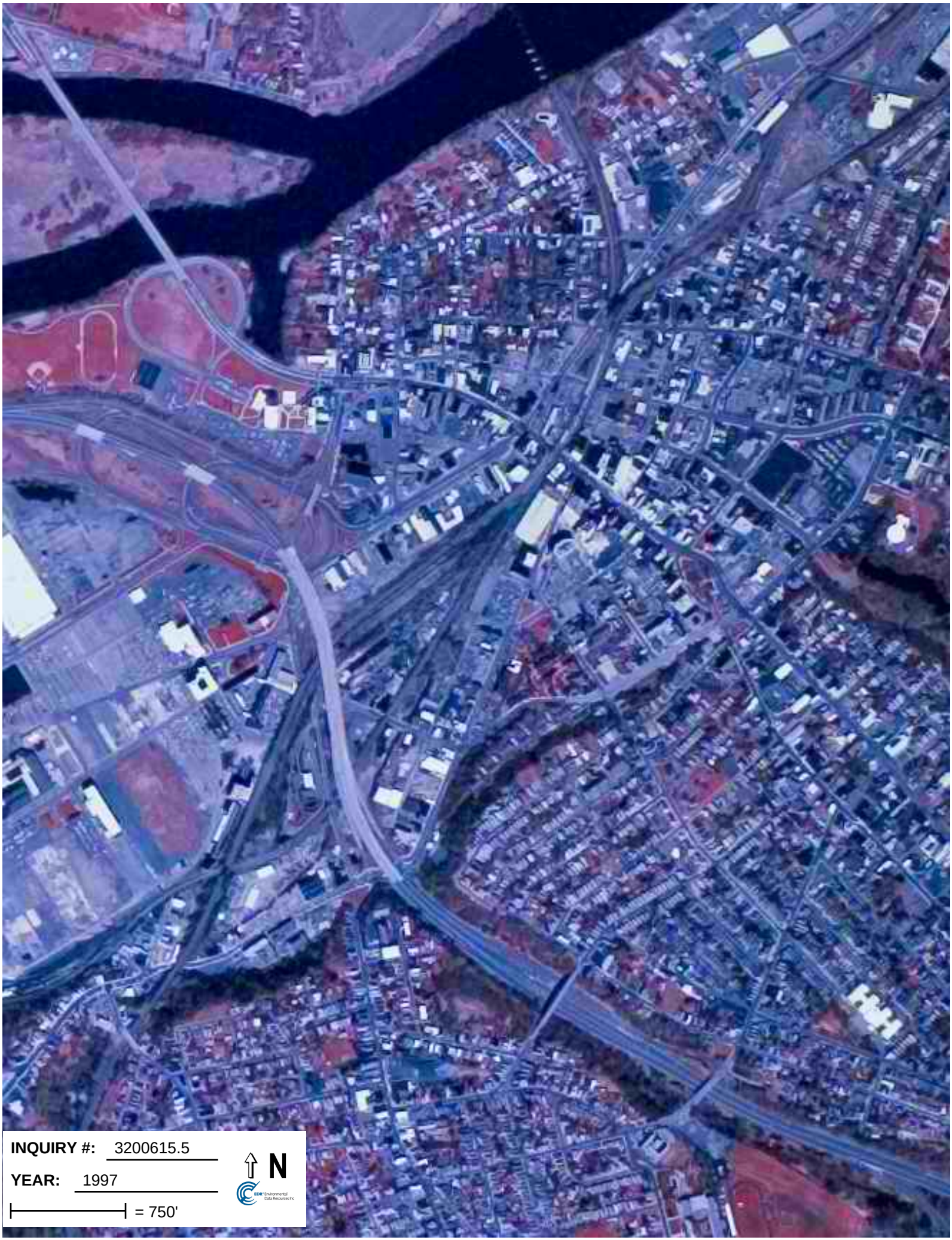

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YEAR: 1978
= 1000'
N


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YEAR: 1986
= 1000'
N


INQUIRY #: 3200615.5
YEAR: 1995
= 750'
N


INQUIRY #: 3200615.5
YEAR: 1997,1995 (DOQQ)
= 500'
N
EDR Environmental Data Resources Inc


INQUIRY #: 3200615.5
YEAR: 1997
= 750'
N


INQUIRY #: 3200615.5
YEAR: 2006
= 500'
N
EDR Environmental Data Resources Inc

HARTGEN
archeological associates inc

PHASE IA
LITERATURE REVIEW AND
ARCHEOLOGICAL SENSITIVITY ASSESSMENT
Schenectady Former Manufactured Gas Plant Site

Broadway and Clinton Street
City of Schenectady
Schenectady County, New York

HAA # 4344-11

Submitted to:
GEI Consultants, Inc.
455 Winding Brook Drive, Suite 201
Glastonbury, Connecticut 06033

Prepared by:
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Certified WBE/DBE

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www.acra-crm.org

August 2010

MANAGEMENT SUMMARY

SHPO Project Review Number: n/a
Involved State and Federal Agencies: New York State Department of Environmental Conservation
Phase of Survey: IA

LOCATION INFORMATION

Location: Broadway and Clinton Street
Minor Civil Division: City of Schenectady (09340)
County: Schenectady

SURVEY AREA

Length: approximately 750 ft (229 m)
Width: approximately 770 ft (235 m)
Number of Acres Surveyed: approximately 8 acres (3.2 ha)
7.5 Minute Quadrangle Map: Schenectady

RESULTS OF RESEARCH

Sites within one mile: 20
NR/NRE sites in or adjacent: 3 (2 NR, 1 NRE)
Precontact Sensitivity: high
Historic Sensitivity: moderate to high

RECOMMENDATIONS

The three extant historic structures (S 14, 54, and 71) will not be disturbed by the proposed remediation. No further documentation is recommended for these structures. Due to the potential for intact archeological sites in Priority 1 and 2 APEs, HAA recommends archeological monitoring during the next stage of environmental assessment or remediation. Once more detailed remediation plans showing the specific areas and depths of soil removal are available more specific recommendations can be developed.

Report Author: Tracy Shaffer Miller
Date of Report: August 30, 2010

TABLE *of* CONTENTS

Introduction 1
Project Information 1
Project Location 1
Description of the Project Area 1
Description of the Area of Potential Effects (APE) 2
Environmental Background 2
Present Land Use and Current Conditions 2
Soils 2
Bedrock Geology 3
Physiography and Hydrology 3
Documentary Research 3
Archeological Sites 3
State and National Register 4
Historical Map Review 5
Map-Documented and Existing Structures 5
Archeological Sensitivity Assessment 9
Precontact Archeological Sensitivity 9
Historic Archeological Sensitivity 9
Archeological Potential 10
APE 1 10
APE 2 12
Recommendations 12
Bibliography 13

MAPS

PHOTOGRAPHS

APPENDIX 1: OPRHP Project Review Cover Form

Map List

1. Project Location (USGS 1978)
2. Project Map (GEI Consultants, Inc. 2010)
3. Soil Map (USDA NRCS 2006)
4. Historical Map (Rocque 1765)
5. Historical Map (Dripps 1850)
6. Historical Map (Fagan 1856)
7. Historical Map (Sanborn 1889)
8. Historical Map (Sanborn 1900)
9. Historical Map (Sanborn 1914)
10. Historical Map (Sanborn 1953)
11. Historical Overlay (Sanborn 1914, NYS OC SCI 2004)

Photograph List

1. View northeast of the northeast corner of the project area near the intersection of Broadway and Clinton Street. The area on the left side of the photo is wooded green space.

2. View southeast of the Schenectady Municipal Housing Authority Ten Eyck Apartment building at 375 Broadway. The building was constructed in 1961.
3. View west of the Ten Eyck Apartments and landscaping surrounding the parking lots north of the building. The apartment building is built into the slope. Steep slopes rise just east of the building and parking lot. The former MGP was mainly located in the grassy area in the foreground before the building.
4. View east of the parking lot north of the Ten Eyck apartment building. Steep slopes rise to the southeast (behind the garage on the right side of the photo) and the northeast.
5. View southwest of the project area along the west side of Broadway.
6. View northwest of the parking lot in the northwest corner of the project area. The tile-roofed building in the parking lot is the c. 1914 Schenectady Public Market scale house (Structure 71).
7. View south of the c. 1914 Schenectady Public Market scale house (Structure 71) at the northeast corner of Van Guysling Avenue and Clinton Street Extension.
8. View north of 318 Broadway (building on the right) and 330 Broadway (building on the left), two of the three extant historical buildings in the project area. 318 Broadway was a carriage shop built and later paint manufacturer built c. 1889 (Structure 14). 330 Broadway was a store and cigar factory built c. 1914 (Structure 54).
9. View north of the building at 336/340 Broadway.
10. View north of a modern building at 376 Broadway.
11. View north of the vacant land and parking lots between 336/340 Broadway and 376 Broadway.
12. View south of Van Guysling Avenue from Clinton Street Extension. The east side of Van Guysling Avenue consists of parking lots.
13. View west of the modern building at the southeast corner of Van Guysling Avenue and Clinton Street Extension.
14. View southwest of the roofing supplies storage area along the west side of Van Guysling Avenue in the southwest corner of the project area.
15. View north of the gravel parking area along the west side of Van Guysling Avenue in the northwest portion of the project area.

Table List

1. Soils in the project area.
2. OPRHP/NYSM archeological sites within one-half mile (0.8 km) of the project area.
3. NR/NRE properties within or adjacent to the project area.
4. Summary of map-documented and existing structures within the project area.

Figure List

1. An 1870 view east of the Schenectady gas plant from Broadway. A large and small gas holder are shown near the right-center of the photo. The gas plant main building is on the right side of the photo. A shed or stable and other outbuilding are shown in the left side of the photo. A retaining wall is built into the slope along the eastern boundary of the gas plant yard. Wooden fences traverse the yard and appear to be holding back the yard piles of sediment or gas plant wastes. The James Fuller house stands on the hill in the background outside of the current project area (photo is courtesy of the Schenectady County Historical Society).

PHASE IA LITERATURE REVIEW AND ARCHEOLOGICAL SENSITIVITY ASSESSMENT

INTRODUCTION

GEI Consultants, Inc. retained Hartgen Archeological Associates, Inc. (HAA, Inc.) to complete a Phase IA literature review and sensitivity assessment for Operable Units 1 and 2 of the former manufactured gas plant site located near the intersection of Broadway and Clinton Street in the City of Schenectady, Schenectady County, New York. Operable Units 1 and 2 have been subject to remedial investigation by National Grid. This review and sensitivity assessment was conducted to comply with Section 14.09 of the New York State Historic Preservation Act. The investigation was conducted according to the New York Archaeological Council's (NYAC) Standards for Cultural Resource Investigations and the Curation of Archaeological Collections in New York State (NYAC 1994).

PROJECT INFORMATION

A site visit was conducted by Tracy Shaffer Miller on August 3, 2010 to observe and photograph existing conditions within the project area. The information gathered during the site visit is included within the Description of the Project Area section below.

Project Location

The former manufactured gas plant (MGP) site is located near the intersection of Broadway and Clinton Street in the City of Schenectady (Maps 1 and 2). Properties from about 318 to 376 Broadway on both sides of the street are included. The area also includes a portion of Clinton Street Extension and Van Guysling Avenue.

Description of the Project Area

The project area encompasses approximately 8 acres (3.2 ha) characterized as commercial, industrial, and residential properties. Extant buildings, parking lots, roadways, vacant lots, and green spaces are included in the project area (Map 2).

The eastern portion of the project area (Operable Unit [OU] 1) includes properties along the east side of Broadway from a vacant green space about 150 ft (46 m) northeast of the intersection with Clinton Street south to the Schenectady Municipal Housing Authority Ten Eyck Apartments building (Photos 1 and 2). The area north of Clinton Street is wooded green space. The Ten Eyck Apartments were built in 1961. The former MGP was located in what are now the parking lots north of the apartment building. The area has been heavily landscaped to manage the steep topography to the east of the project area (Photo 3). A retaining wall extends along the east side of the apartment building and parking lots north of the building (Photo 4). Slopes characterize the area northeast and southeast of the parking lots.

The western portion of the project area (Operable Unit [OU] 2) extends from about 200 ft (61 m) northeast of the intersection of Broadway and Clinton Street south to 376 Broadway (Photo 5). This area includes three extant historical buildings. They include two buildings located at 318 and 330 Broadway and the former Schenectady Public Market scale house at the northeast corner of Clinton Street Extension and Van Guysling Avenue. The northwest corner of the project area is a parking lot that includes the former Schenectady Public Market scale house (Photos 6 and 7). Buildings, parking lots, and vacant land are located along the west side of Broadway south of Clinton Street Extension between 318-376 Broadway. The building at 318 Broadway was a carriage manufacturing shop from about 1889-1914 and a paint manufacturer c. 1953 (Structure 14, Maps 8-11). The building at 330 Broadway was a store and cigar factory built c. 1914 (Structure 54) (Photo 8). Buildings at 336/340 Broadway and 376 Broadway were both recently constructed (Photos 9 and 10). Areas of land in between the buildings along the west side of Broadway were vacant or parking lots (Photo 11).

The western portion of the project area also includes a section of Van Guysling Avenue that extends parallel to Broadway (Map 2). The area along the east side of Van Guysling Avenue is mostly parking lots associated with businesses along Broadway (Photo 12). There is one modern building at the southeast corner of Van Guysling Avenue and Clinton Street Extension (Photo 13). The area west of Van Guysling Avenue is storage for a roofing supply business and a gravel parking area (Photos 14 and 15).

Description of the Area of Potential Effects (APE)

The area of potential effects (APE) includes all portions of OU 1 and OU 2 that will be directly or indirectly altered by the remedial activities in the future. The remediation work scope has not been finalized. However, it will likely focus on two areas defined as Priority 1 APE and Priority 2 APE. Priority APE 1 includes the parking lots and vacant land in the project area on the east side of Broadway. Priority APE 2 includes the vacant areas and parking lots along the west side of Broadway (Map 2).

ENVIRONMENTAL BACKGROUND

The environment of an area is significant for determining the sensitivity of the project area for archeological resources. Precontact and historic groups often favored level, well-drained areas near wetlands and waterways. Therefore, topography, proximity to wetlands, and soils are examined to determine if there are landforms in the project area that are more likely to contain archeological resources. In addition, bedrock formations may contain chert or other resources that may have been quarried by precontact groups. Soil conditions can provide a clue to past climatic conditions, as well as changes in local hydrology.

Present Land Use and Current Conditions

The project area is currently characterized as urban land with a mixture of residential apartment buildings, commercial, and industrial properties. Historical maps reveal that the project area has been developed for at least the past 160 years.

Soils

Soil surveys provide a general characterization of the types and depths of soils that are found in an area. The soils in the project area are characterized as Cut and Fill Land (Cu). Dense urban areas where considerable land modification has taken place are often characterized with this soil type. Pockets of intact natural soils may still exist in between historical buildings and underneath filled areas. Therefore, a few of the soil types from the surrounding area including Nunda soils and Colonie and Plainfield soils are also listed in Table 1 below (Map 3).

Table 1. Soils in and around the Project Area (USDA NRCS 2010)

Name and symbol	Soil Horizon Depth inches (cm)	Texture, Inclusions	Slope	Drainage	Landform
Cut and Fill Land (Cu)	Varies	Varies	1-15%	Somewhat excessively drained	urban areas
Nunda soils, very steep (NvF)	0-46 cm (0-18 in) 46-163 cm (18-64 in) 163-272 cm (64-107 in) 272-386 cm (107-152 in)	Channery Si lo Channery Si lo, Gra lo, very fine Sa lo Cl lo, channery Si cl lo, Gra si cl lo Channery Si lo, Gra lo, Si cl lo	25-45%	Moderately well drained	drumlinoid ridges, hills, till plains
Colonie and Plainfield soils, steep (CPE)	0-38 cm (0-15 in) 38-452 cm (15-178 in) 452-709 cm (178-279 in)	Lo fine sa Fine Sa, Lo fine sa Fine Sa, Lo fine sa	15-50%	Well drained	beach ridges, deltas

Name and symbol	Soil Horizon Depth inches (cm)	Texture, Inclusions	Slope	Drainage	Landform
Urban land-Colonie complex (Ur)	0-38 cm (0-15 in) 38-452 cm (15-178 in) 452-709 cm (178-279 in)	Lo fine sa Fine Sa, Lo fine sa Fine Sa, Lo fine sa	0-3%	Well drained	beach ridges, deltas

Key: Color: Br-Brown, Dk-Dark, Gr-Gray, Re-Red, Y-Yellow, Bk-Black, Ol-Olive
Texture: Co-Coarse, Fi-Fine, Gv-Gravel(ly), Lo-Loam, Sa-Sand, Si-Silt, Vy-Very

Bedrock Geology

The underlying bedrock consists of Schenectady Formation greywacke, sandstone, siltstone, and shale (Fisher et al. 1970). This formation is not chert-bearing. There are no bedrock outcroppings in the project area.

Physiography and Hydrology

Most of the project area is relatively level and slopes gently to the northwest. Steep banks rising to the east are held back by retaining walls along the eastern boundary of the project area. The project area is approximately 230 feet (70 m) above the National Geodetic Datum of 1929 (Map 1).

The project area is about 0.6 miles (1 km) south of the Mohawk River. Schemerhorn Creek historically extended through the western portion of the project area (Maps 4-6). This stream was culverted sometime in the late 19th or 20th century.

DOCUMENTARY RESEARCH

Archeological Sites

Previously reported archeological sites provide an overview of both the types of sites that may be present in the project area and relation of sites throughout the surrounding region.

An examination of the archeological site files at the Office of Parks, Recreation and Historic Preservation (OPRHP) and the New York State Museum (NYSM) identified 20 reported archeological sites within a one mile (1.6 km) radius of the project area. The 20 archeological sites included four precontact sites and 16 historic sites (Table 2).

The historic sites included 17th to 19th-century dikes, bridges, buildings, and portions of the Schenectady stockade.

Four precontact Native American sites in the NYSM records cover large areas along the banks of the Mohawk, two of which encompass the project area (NYSM 4747 and 6479). These sites were reported by NYSM archeologist Arthur C. Parker in 1922. Based on historical accounts and archeological evidence, he identified a large Native American village site occupying much of the modern downtown areas and Stockade District in Schenectady (NYSM 4747) and "traces of [precontact] occupation" throughout the Schenectady area (NYSM 4752 and 6479).

Table 2. OPRHP/NYSM archeological sites within one mile (1.6 km) of the project area.

OPRHP Site No.	NYSM Site No.	Site Identifier	Description	Proximity to Project Area
09341.000023	-	Old Burr Bridge	Brick paving leading to and covering the c. 1809 bridge entrance	0.8 miles (1.3 km) north northwest
09341.000020	-	Durham Project #101 Sanders	The Glen Sander's Mansion site	1 mile (1.6 km) northwest
09341.000011	-	The Dike	An early 19th-century dike road to cross the Mohawk River from Schenectady to Scotia	0.9 miles (1.4 km) northwest
09340.001230	-	Western Gateway Historic Site 3	19th-century historic site	0.2 (0.3 km) northeast

OPRHP Site No.	NYSM Site No.	Site Identifier	Description	Proximity to Project Area
09340.001229		Western Gateway Historic Site 2	18th to 19th-century historic site	0.2 (0.3 km) northeast
09340.001228	-	Western Gateway Historic Site 1	Mid-19th-century historic site	0.2 (0.3 km) northeast
09340.001198	-	Durham Project #44 Binnekill Harbor	No additional information	0.6 miles (1 km) north northwest
09340.001144	-	Stockade Site	Postmolds and associated artifacts relating to the Schenectady Stockade	0.6 miles (1 km) north northwest
09340.000720	6281	Schenectady Museum	Precontact site	0.5 miles (0.8 km) east
09340.000713	-	Stockade	Section of the 17th-18th-century wooden Schenectady Stockade	0.5 (0.8 km) north
09340.000104	-	ALCO Buildings Site	Site of the American Locomotive Works	0.9 miles (1.4 km) northeast
09340.000103	-	Old Erie Canal Wall	Portion of intact Old Erie Canal wall	0.5 miles (0.8 km) north
09340.000102	-	Old Erie Canal	Location of the Old Erie Canal in use from 1825-1915	0.1 to 1 mile (0.2 to 1.6 km) north
09340.000101		Van Velsen Mill Site	Site of an historic mill	0.2 miles (0.3 km) northwest
09340.000100	-	Old D & H Freight Yards	Site of the D & H Railroad freight yards	0.7 miles (1.1 km) northeast
09340.000014	-	Abraham (Robert) Yates House	The c. 1700 Abraham Yates house (NRL)	0.5 miles (0.8 km) north
-	4747	ACP STDY 13	Precontact Native American village site reported by A.C. Parker in 1922	Covers wide area along the south bank of the Mohawk River in Schenectady. **Includes project area.**
-	4752	ACP STDY	"Traces of [precontact Native American] occupation" reported by A.C. Parker in 1922	Covers wide area along the south bank of the Mohawk River in Schenectady.
-	4753	ACP STDY	Precontact Native American camp site reported by A.C. Parker in 1922	Covers wide area along the north bank of the Mohawk River in Scotia.
-	6479	ACP STDY	"Traces of [precontact Native American] occupation" reported by A.C. Parker in 1922	Covers wide area along the south bank of the Mohawk River in Schenectady. **Includes project area.**

State and National Register

A search of the computer files at OPRHP identified two properties listed on the State/National Registers of Historic Places (NR) located in the nearby vicinity of the project area. One property determined eligible

(NRE) for listing on the registers is also located within the current project area. The locations and a brief description of the three properties are provided below in Table 3.

Table 3. NR/NRE properties within or adjacent to the project area.

USN/NR Number	Property Name	Status	Description	Location and Proximity to Project Area
90NR02659	F.F. Proctor Theater and Arcade	NR	Elaborate theater and arcade built in 1925	432 State Street (~500 feet [152 m] east)
90NR03296	Foster Building	NR	Six-story commercial building with a white-glazed terracotta façade built in 1907	508 State Street (~800 feet [244 m] east)
09340.000506	The Public Market Building	NRE	The c. 1914 Schenectady Public Market scale house building	Van Guysling Avenue, **within project area**

HISTORICAL MAP REVIEW

Six historical maps dating from 1765 to 1953 were reviewed for this report. These maps depict the pattern of land use and development in the project area through time. Whenever possible, the historical maps were georeferenced, or aligned to the existing project area by linking to selected control points on the historical maps to their equivalent on a modern orthoimage of the project area. This process gives an accurate representation of the location of historic features relative to modern conditions.

The earliest depiction of the project area was produced by John Rocque in 1765 (Map 4). It shows the 18th-century Schenectady settlement and stockade along the Mohawk River. The project area was located in the periphery of the city, southwest of the road to Albany (now State Street) and south of a small stream that drained to the Mohawk River. Steep slopes appear to rise to the southeast and northeast. There is no development in the vicinity of the project area.

The 1850 Dripps *Map of the City of Schenectady* shows streets that will become Broadway and Lafayette Street extending through the project area (Map 5). There are a few houses along Hamilton Street outside of the east boundary of the project area. A small stream extends through the western portion of the project area. The map also shows that the western portion of the project area is wooded at this time.

Map-Documented and Existing Structures

Structures first appeared in the project area c. 1856. Each past or current structure within the Project Area was assigned a unique structure number, which was labeled on the map. Table 4 below lists 83 structures identified in the project area on the 1856, 1889, 1900, 1914, and 1953 historical maps.

The 1856 *Map of Schenectady County, New York* by L. Fagan shows two buildings associated with the manufactured gas plant ("Gass Works"): the apparent retort and purification building (Structure [S] 1) and one gas holder (S 2) (Map 6). A line east of the S 1 and S 2 appeared to define the gas plant property. Three outbuildings near the northeast corner of the project area (S 3) may have been associated with buildings along Hamilton Street. There were no other buildings in the project area. A proposed street extension extended through the middle of the project area. A small street was located along the northwest boundary of the project area.

The 1889 Sanborn fire insurance map of Schenectady shows more development in the eastern portion of the project area (Map 7). Twenty-one structures were depicted in 1889. The gas holder southeast of the gas plant (S 2) was labeled "not in use." A circular building northeast of S 1 was labeled as an office (S 3). The gas plant added a building (S 5) with a repair shop, purifying room, lime storage, and meter room northeast of S 1 and S 4. A larger gas holder was constructed along the east side of Broadway (formerly known as S. Centre Street) (S 6). Additional outbuildings were constructed along the eastern edge of the project area behind buildings facing Hamilton Street (S 7-10). Three dwellings were constructed near the northeast corner

of the project area along Broadway (S 11-13). A row of dwellings was also added along the east side of Broadway near the southern center of the project area (S 15-21). A carriage shop and outbuilding was also located near the southwest corner of Clinton Street Extension and Broadway (S 14). Most of the project area between Van Guysling Avenue and Broadway remained undeveloped at this time.

The 1900 Sanborn fire insurance map depicted 47 structures (Map 8). Most of the structures extant in 1889 are still depicted including S 1-6, and S 8-21. Twenty-six new structures were depicted in the project area. The gas plant Structures 1-2 and 4-6 were still extant. A new gas plant coke house (S 22) was added along the east side of Broadway. Businesses and dwellings were constructed along the west side of Broadway (S 23-36) and along Van Guysling Avenue (S 40-45). Two dwellings were also constructed near the southeast corner of the project area along the north side of Lafayette Street (S 46-47).

The 1914 Sanborn depicted 61 structures in the project area (Map 9). Twenty-four new structures were depicted in the project area. Ten structures from 1900 were no longer extant in 1914. The gas plant included at least four buildings: the main plant (S 1), gas holder (S 2), office building (S 5), and wagon shed (S 49). A tackle/pipe shed (S 50) northeast of the MGP may have been associated with the plant, but this is not certain. A small gasoline pump house (S 72) was also located in the northeast portion of the gas plant parcel. The round office structure (S 4) was incorporated into S 1. Several small sheds were located in the southern portion of the gas plant parcel. The map shows a brick wall also extended along the west side of the gas plant parcel on the east side of Broadway. An "electric garage" was built near the northeast corner of the project area (S 52). This may have been associated with the gas plant as well. The west side of Broadway south of Clinton Street Extension was almost completely populated with businesses and dwellings by this time. Two new tenements were constructed behind 460½ and 466½ Broadway (S 59 and 60). Several more dwellings and businesses were also constructed along Van Guysling Avenue including the Schenectady Public Market scale house (S 71) at the southwest corner of Van Guysling Avenue and Clinton Street Extension (USN 09340.000506, see Table 3 above).

The 1953 Sanborn fire insurance map depicted 58 structures in the project area. Forty-seven of the structures were also depicted on the 1914 map. Fourteen structures from the 1914 map were no longer extant in 1953. The gas plant buildings (S 1, 2, and 4) were a fruit and grocery warehouse. Most of the buildings in the project area were businesses in 1953.

Table 4. Summary of map-documented and existing structures within the project area.

Structure Number	Address/ Description	Map 5 (1850)	Map 6 (1856)	Map 7 (1889)	Map 8 (1900)	Map 9 (1914)	Map 10 (1953)	Extant (2010)
1	Gas works building (1856-1914), fruit and grocery warehouse (1953)	-	x	x	x	x	x	-
2	Gasholder/gasometer (1856-1914), storage (1953)	-	x	x	x	x	x	-
3	Outbuildings, 436 and 438 Hamilton Street	-	x	x	x	x	-	-
4	Gas works office (1889-1914), part of fruit and grocery warehouse (1953)	-	-	x	x	x	x	-
5	Gas works repair shop/purifying boxes/lime house/meter room	-	-	x	x	x	-	-
6	Gasholder/gasometer	-	-	x	x	-	-	-
7	Stable, 424 Hamilton Street	-	-	x	-	-	-	-
8	Stable and outbuilding, 422 Hamilton Street	-	-	x	x	-	-	-
9	Rear addition, 420 Hamilton Street	-	-	x	x	-	-	-
10	Rear addition, 414 Hamilton Street	-	-	x	x	-	-	-

Structure Number	Address/ Description	Map 5 (1850)	Map 6 (1856)	Map 7 (1889)	Map 8 (1900)	Map 9 (1914)	Map 10 (1953)	Extant (2010)
11	Dwelling (1889-1914), wholesale produce (1953), 405/317 Broadway	-	-	x	x	x	x	-
12	Dwelling (1889-1914), store (1953), 407/313 Broadway	-	-	x	x	x	x	-
13	Dwelling (1889-1914), restaurant (1953), 409/309 Broadway	-	-	x	x	x	x	-
14	Carriage Shop (front), carpenter shop (rear) (1889-1914), paint manufacturer (1953), 432/318-320 Broadway	-	-	x	x	x	x	x
15	Dwelling, 437/341 Broadway	-	-	x	x	x	x	-
16	Dwelling, 439/343 Broadway	-	-	x	x	x	x	-
17	Dwelling, 441/345 Broadway	-	-	x	x	x	x	-
18	Dwelling, 443/347 Broadway	-	-	x	x	x	x	-
19	Dwelling, 445/349 Broadway	-	-	x	x	x	x	-
20	Dwelling (1889-1914), store (1953), 447/351 Broadway	-	-	x	x	x	x	-
21	Dwelling (1889-1914), store (1953), 449/353 Broadway	-	-	x	x	x	x	-
22	Gas works coke house	-	-	-	x	-	-	-
23	"Photo" [developer?] (1900), Wagon Painting (1914), 420 Broadway	-	-	-	x	x	-	-
24	Dwelling (front), lumber shed (rear) (1900-1914), wholesale produce (1953), 434/324 Broadway	-	-	-	x	x	x	-
25	Stable (rear), 438 Broadway	-	-	-	x	x	-	-
26	Saloon/store (front), Stable (rear), 440/334 Broadway	-	-	-	x	x	x	-
27	Restaurant/store (front), Dwelling (rear), 442/338 Broadway	-	-	-	x	x	x	-
28	Store, 444/344 Broadway	-	-	-	x	x	x	-
29	Drug Store (1900), Club Room (1914), 446/344 Broadway	-	-	-	x	x	x	-
30	Store/Bicycle Repair, 448/348 Broadway	-	-	-	x	x	x	-
31	Dwelling/Store, 448A/454/356 Broadway	-	-	-	x	x	x	-
32	Store, 448B-450/456-458 Broadway	-	-	-	x	x	-	-
33	Store, 452/460 Broadway	-	-	-	x	x	-	-
34	Store (1900-1914), furniture factory (1953), 454/462/370 Broadway	-	-	-	x	x	x	-
35	Dwelling, 458/466/374 Broadway	-	-	-	x	x	x	-
36	Saloon/Store, 460/468/376 Broadway	-	-	-	x	x	x	-
37	Store (1900-1914), dwelling (1953), 429/331 Broadway	-	-	-	x	x	x	-
38	Saloon (1900-1914), furniture factory (1953), 431/333 Broadway	-	-	-	x	x	x	-
39	Dwelling (1900), Hotel (1914), furniture factory (1953) 433/335 Broadway	-	-	-	x	x	x	-
40	Builder's Supplies, Van Guysling Avenue	-	-	-	x	-	-	-
41	Dwelling, 450 Van Guysling Avenue	-	-	-	x	-	-	-
42	Dwelling, 452 Van Guysling Avenue	-	-	-	x	-	-	-

Structure Number	Address/ Description	Map 5 (1850)	Map 6 (1856)	Map 7 (1889)	Map 8 (1900)	Map 9 (1914)	Map 10 (1953)	Extant (2010)
43	Dwelling, 454 Van Guysling Avenue	-	-	-	x	-	-	-
44	Dwelling, 122 Van Guysling Avenue	-	-	-	x	-	-	-
45	Dwelling (1900-1914), store (1953), 132/63 Van Guysling Avenue	-	-	-	x	x	x	-
46	Dwelling, 406 Lafayette Street	-	-	-	x	x	-	-
47	Dwelling, 404 Lafayette Street	-	-	-	x	x	-	-
48	Stable/automobile garage, 418 Hamilton Street	-	-	-	x	x	-	-
49	Gas works wagon shed/automobile garage	-	-	-	-	x	x	-
50	Sheds/automobile garage, 426-430 Hamilton Street	-	-	-	-	x	x	-
51	Wagon shed/outbuilding/garage, 420 Hamilton Street	-	-	-	-	x	x	-
52	Electric garage (1914), Schenectady Water Dept., 325 Broadway	-	-	-	-	x	x	-
53	Blacksmith, 430 Broadway	-	-	-	-	x	x	-
54	Store/cigar factory (front), stable (rear), 438/330 Broadway	-	-	-	-	x	x	x (front portion)
55	Store, 464/372 Broadway	-	-	-	-	x	x	-
56	Dwelling (1914), store (1953), 470/382 Broadway	-	-	-	-	x	x	-
57	Store, 472/386 Broadway	-	-	-	-	x	x	-
58	Dwelling, 474 Broadway	-	-	-	-	x	-	-
59	Tenements, 460½ Broadway	-	-	-	-	x	-	-
60	Tenements, 466½ Broadway	-	-	-	-	x	x	-
61	Coal storage, Schenectady County Coal Company, Van Guysling Avenue	-	-	-	-	x	x	-
62	Wagon shed/dwelling, Schenectady County Coal Company, 34-36 Van Guysling Avenue	-	-	-	-	x	x	-
63	Mohawk Pepsi-Cola Company/Fergeson Beer Depot, 38-42 Van Guysling Avenue	-	-	-	-	x	x	-
64	Sales stables, 452-460 Van Guysling Avneue	-	-	-	-	x	-	-
65	Dwelling, 136/65 Van Guysling Avenue	-	-	-	-	x	x	-
66	Dwelling, 134/67 Van Guysling Avenue	-	-	-	-	x	x	-
67	Ale and beer depot, Van Guysling Avenue	-	-	-	-	x	-	-
68	Wool waste storage/shed/stables, 150/51 Van Guysling Avenue	-	-	-	-	x	x	-
69	Wholesale grocer, 47-49 Van Guysling Avenue	-	-	-	-	x	x	-
70	Manufacturer of lubricating oils (1914), junk storage (1953), Van Guysling Avenue	-	-	-	-	x	x	-
71	Schenectady Public Market scale house, Van Guysling Avenue	-	-	-	-	x	x	x
72	Gas works gasoline pump house	-	-	-	-	x	-	-
73	Automobile garages, 422 Hamilton Street	-	-	-	-	-	x	-

Structure Number	Address/ Description	Map 5 (1850)	Map 6 (1856)	Map 7 (1889)	Map 8 (1900)	Map 9 (1914)	Map 10 (1953)	Extant (2010)
74	Wholesale produce distributer, 316 Broadway	-	-	-	-	-	x	-
75	Store/slaughterhouse, 358-366 Broadway	-	-	-	-	-	x	-
76	Sheet metal shop, 388 Broadway	-	-	-	-	-	x	-
77	Hides and tallow factory, 33 Van Guysling Avenue	-	-	-	-	-	x	-
78	Junk yard, 37 Van Guysling Avenue	-	-	-	-	-	x	-
79	Junk yard shed, Van Guysling Avenue	-	-	-	-	-	x	-
80	Store, 59 Van Guysling Avenue	-	-	-	-	-	x	-
81	Junk yard sheds, 52 Van Guysling Avenue	-	-	-	-	-	x	-
82	Sheds, 64 Van Guysling Avenue	-	-	-	-	-	x	-
83	Woodworking factory, 71 Van Guysling Avenue	-	-	-	-	-	x	-

ARCHEOLOGICAL SENSITIVITY ASSESSMENT

Precontact Archeological Sensitivity

Sensitivity for precontact archeological sites is determined based on factors including historical topography, drainage, and proximity to water of the site as well as the frequency of previously reported archeological sites in the vicinity of the project area. The current project area lies on a well drained upland about 0.6 miles (1 km) south of the Mohawk River. Historically, the western potion of the project area may have been mostly level with slopes rising steeply to the southeast along the eastern boundary of the project area. The Schemerhorn Creek historiocally flowed through the western portion of the project area (Maps 4-6). The level topography, possible food resource (the small stream), and proximity to the Mohawk River each contribute to making this area attractive to Native American groups.

In addition, the area along the Mohawk River in Schenectady was historically known as a large Mohawk settlement. Indeed, most of the City of Schenectady, including the project area, is encompassed in two previously identified precontact sites reported by A.C. Parker in 1922 (NYSM Sites 4747 and 6479).

The Schenectady Former MGP Site is highly sensitive for the presence of precontact archeological remains.

Historic Archeological Sensitivity

Historic archeological sensitivity is determined by examining historical settlement patterns and structures on historical maps of the project area. The Dutch originally settled Schenectady in 1662, although the Mohawk Nation occupied the area for long before the arrival of Dutch (Howell and Munsell 1886:11). Early settlement in the late 17th and 18th century was mostly confined to within the Stockade (Map 4). The Stockade defenses fell into decay following the close of the French and Indian War around 1763 and development slowly spread from beyond initial confines (Howell and Munsell 1886: 38). The current project area was on the periphery of the Stockade.

The first development in the immediate vicinity of the project area began around 1850 when streets were laid out (Map 5). The first structures documented in the project area were the gas plant main building and gasholder house (S 1 and S 2) and outbuildings associated with structures along Hamilton Street (S 3) (Map 6). Twenty-one structures including the gas plant, dwellings, and businesses were depicted in the project area in 1889. Development continued to expand throughout the project area in the 20th century. By 1953, the project area was densely developed with mostly businesses and some dwellings. Over the period examined in historical maps for this report, 83 historical map-documented structures were identified in the project area.

The Schenectady manufactured gas plant itself was originally built in 1852 (Howell and Munsell 1886:146). Buildings and additions were added to the complex between 1856 and into the 20th century. Many of the alterations to the plant likely reflect changing technology in manufactured gas over this period. In 1953, the gas plant was used as a fruit and grocery warehouse. It was demolished c. 1961 when the Ten Eyck Apartments were built.

Potential remedial activities in OU 1 and OU 2 have a high sensitivity for encountering remains associated with the 83 historical map-documented structures identified in the project area. Often when historic buildings are razed, the superstructure is removed, but foundations and other below ground surface features are preserved. Deposits and features such as privies, wells, and cisterns behind these structures contain artifacts and information about the people who lived in here in the past and how they used this land. Although, some areas such as the Schenectady Public Market grounds in the northwest corner of the project area (Maps 8-10) were mostly vacant and have a low to moderate sensitivity for encountering historic archeological remains.

ARCHEOLOGICAL POTENTIAL

Priority 1 APE

The process of manufacturing gas generated waste products including tars, cinders, coke, and ash. Environmental borings and monitoring wells at the Schenectady Former MGP site have shown that soil and groundwater has been impacted by MGP residuals in Priority 1 and 2 APEs.

A photo of the gas plant site from 1870 shows that the yard surrounding the plant structures (Figure 1). The photo shows historical landscaping including a retaining wall and fences traversing the gas works yard perhaps to control the slope east of the site.

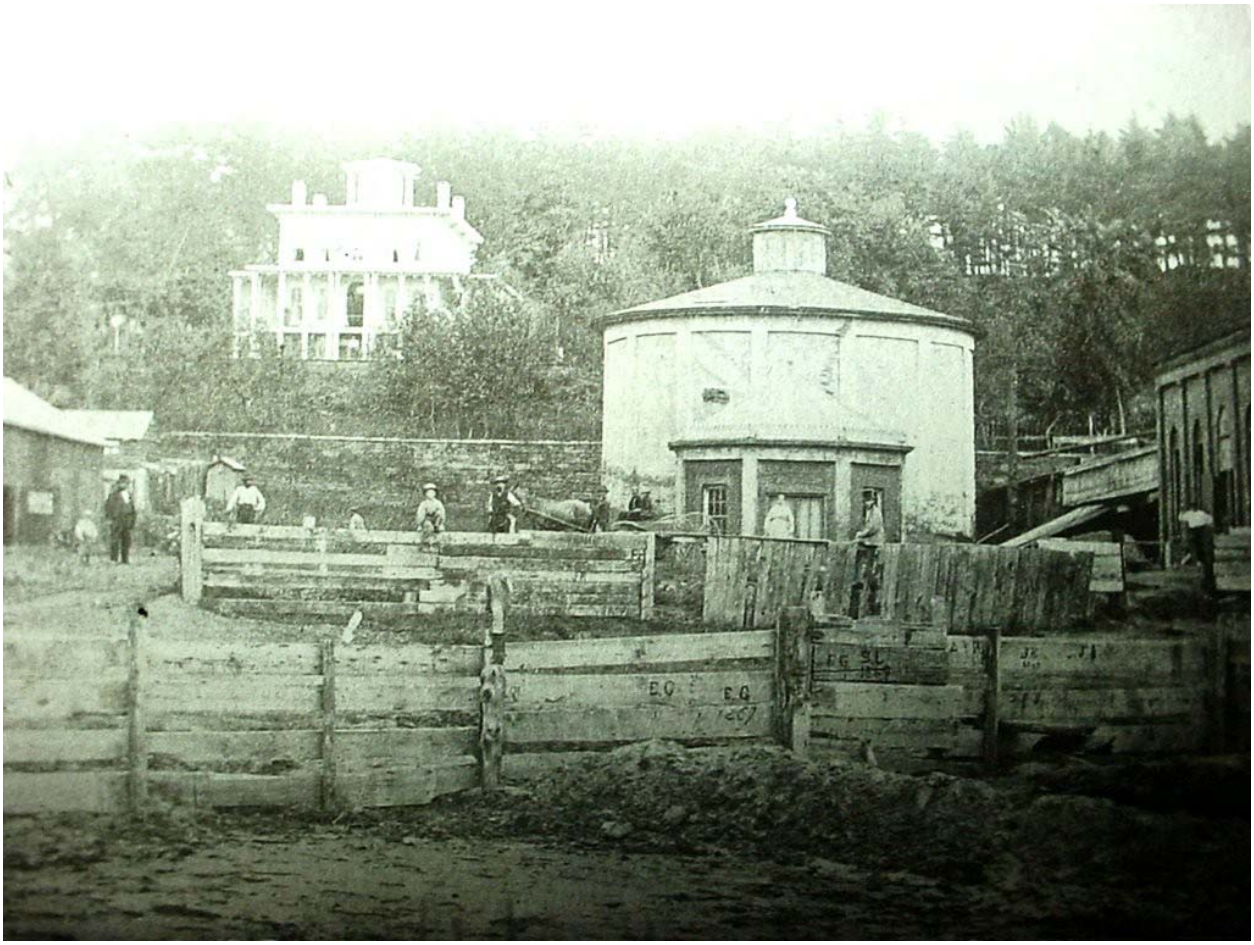


Figure 1. An 1870 view east of the Schenectady gas plant from Broadway. The large gasholder (S 2) and small office building (S 4) are shown near the right-center of the photo. The gas plant main building (S 1) is on the right side of the photo. A shed or stable and other outbuildings are shown in the left side of the photo (S 3). A retaining wall is built into the slope along the eastern boundary of the gas plant yard. Wooden fences traverse the yard. The James Fuller house stands on the hill in the background outside of the current project area (photo is courtesy of the Schenectady County Historical Society).

The former Schenectady MGP site is located entirely in Priority 1 APE. Remains of the plant may be buried beneath the parking lot north of the Ten Eyck Apartments (Map 11). The evolution of gas manufacturing technology over the period examined in the historical maps is evidenced by the numerous changes to the gas plant between 1856 and the 20th century. The earliest gasholder (S 2) was retired between 1856 and 1889, when it was labeled "not in use" on Map 7. A larger gasholder (S 6) was constructed in the northwest portion of the yard c. 1900. New buildings and additions were added over time as well. The plant began also generating electricity around 1889 when part of the main building was shown to contain dynamos (Map 7). By 1914, the plant seemed mostly focused on electricity generation (Map 9). The plant may have ceased generation s gas around this time.

Only portions of the plant may be physically intact below the ground surface in Priority 1 APE (Map 11). The construction of the Ten Eyck Apartments has impacted portions of the main building foundation. A garage associated with the apartments may have impacted parts of the original c. 1852 gasholder (S 2) and a wagon shed (S 49) (Maps 7-9 and 11). The c. 1889 larger gasholder near Broadway (S 6) is likely buried beneath Clinton Street. Modern landscaping and retaining walls along the southeastern and northeastern boundaries of the site may have impacted other outbuildings associated with the gas plant and dwellings along

Hamilton Street. Portions of the gas plant main building (S 1), original c. 1852 gasholder (S 2), the c. 1889 office (S 4), and repair shop/purifier building (S 5) may be intact below the Ten Eyck Apartments parking lot.

The potential remediation will involve removing soils from the existing parking lots and vacant spaces in Priority 1 APE. Although there was a high sensitivity for archeological remains, due to the impacts listed above there is a low to moderate potential for uncovering intact remains within Priority 1 APE.

Priority 2 APE

The area of Priority 2 APE has also been demonstrated to contain waste products from the gas plant. Current plans include some remediation in the parking lot at 312 Broadway and along the east side of Broadway. The parking lot in the northwest corner of the project area (312 Broadway) has been mostly a vacant parcel although it was used for various purposes including Schenectady's pipe yard (Map 9) and an open-air public market (Map 10). However, the lack of historical development in this portion of Priority 2 APE could have preserved buried precontact archeological sites.

The currently vacant parcels in the southern portion of Priority 2 APE were historically occupied by structures constructed between c. 1889-1914 (Maps 7-9, and 11). Most of the c. 1889-1914 structures were razed sometime after 1953.

The potential remediation area in Priority 2 APE has a low to high sensitivity for containing archeological deposits. Physical remains of some of the razed structures formerly located in the modern vacant lots along the west side of Broadway may be intact. Therefore, Priority 2 APE has a low to moderate potential for encountering archeological deposits.

RECOMMENDATIONS

Potential remedial actions may involve intrusive work and soil disturbances in Priority 1 and 2 APE. However, the exact work scope for the remediation has not been determined. Therefore, only general recommendations can be provided at this time.

The project area is sensitive for encountering precontact or historic archeological sites. However, historical impacts to the site, including contamination from operation of the MGP as well as historical development including construction and demolition activities, may have reduced the potential for encountering intact remains.

The remediation plan for the Schenectady former MGP is being formulated. Data from this literature review and archeological investigations of similar sites suggests that there is a low potential for encountering intact remains and a high potential for encountering contaminated soils at this site. These factors may make standard archeological investigation methods not feasible. Therefore, HAA recommends archeological monitoring during the next stage of environmental assessment or remediation. Once more detailed remediation plans showing the specific areas and depths of potential soil removal are available, more specific recommendations can be developed. The archeological monitoring activities will require that a site-specific health and safety plan be developed.

The three extant historic structures (S 14, 54, and 71) will not be disturbed by the proposed remediation. No further documentation is recommended for these structures.

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MAPS



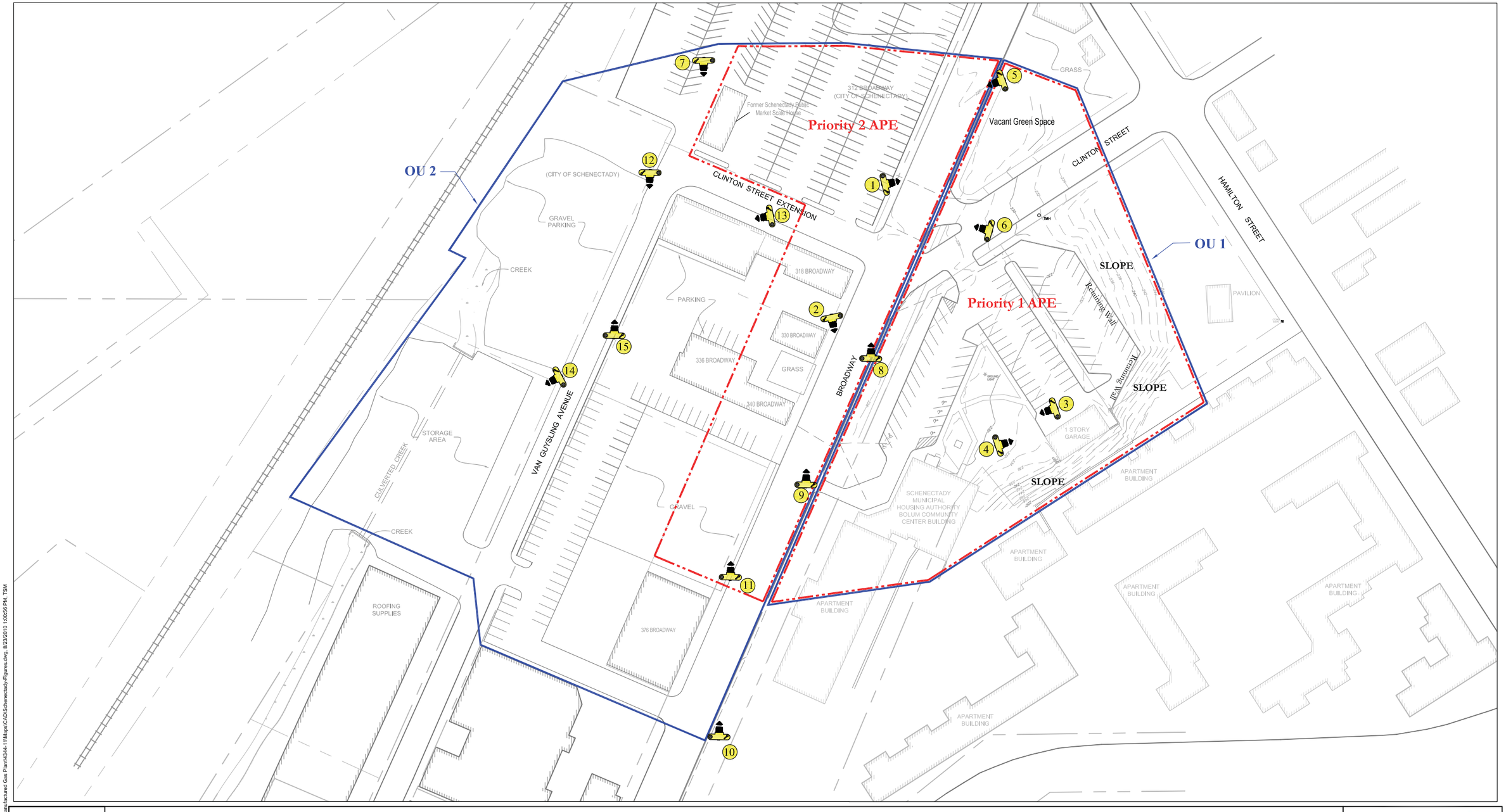
Note: Contour interval is 10 feet.

Project Location USGS 1978)

HARTGEN archeological associates inc

Map 1

TSM July 29, 2010 R:\Active Projects\4344 Schenectady Manufactured Gas Plant\4344-11\Maps\GIS\Map1.mxd



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Legend

Photograph Angle

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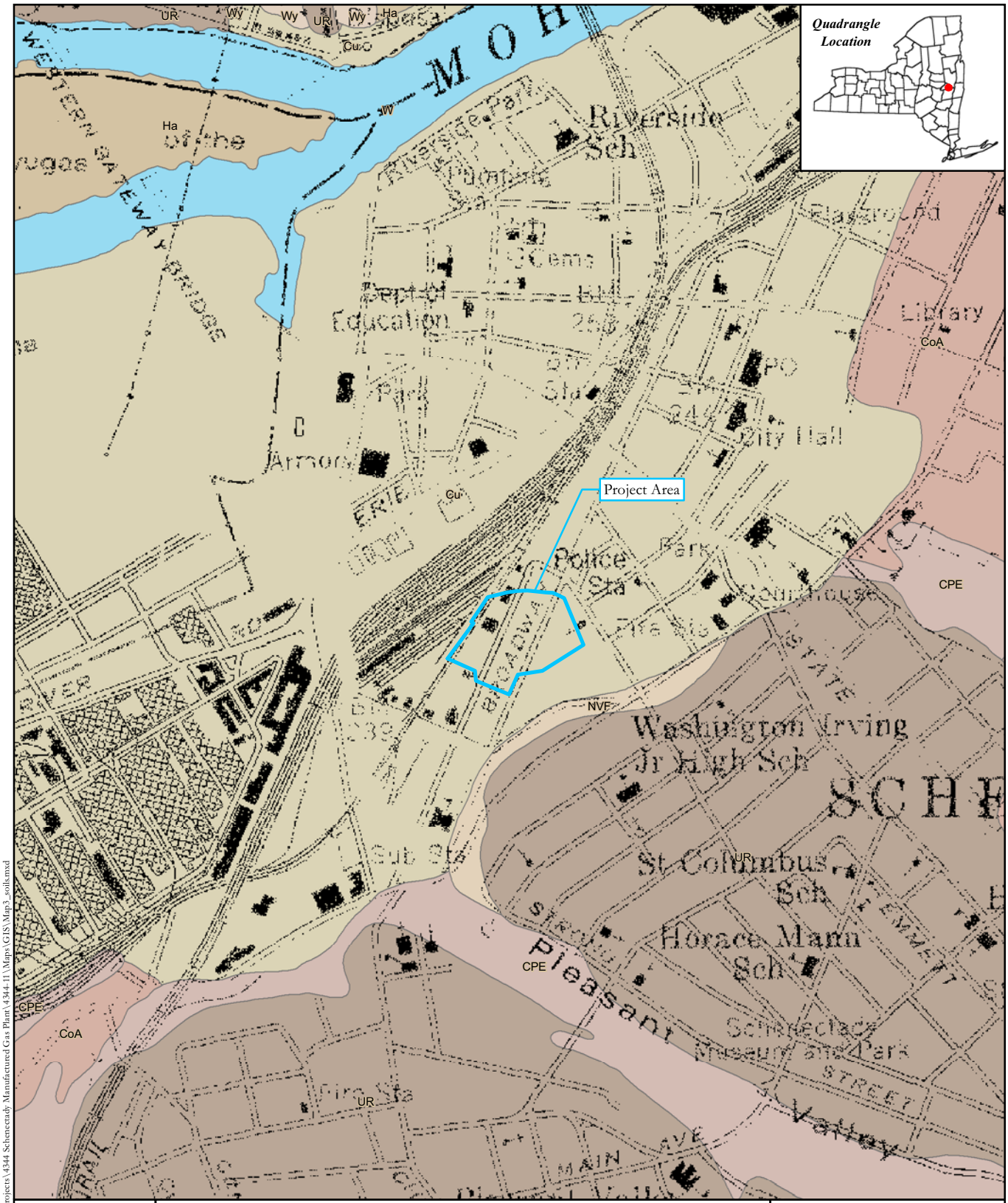
Project Area (OU 1 and OU 2)

Project Map
(GEI Consultants, Inc. 2010)

HARTGEN archeological associates inc

Map 2

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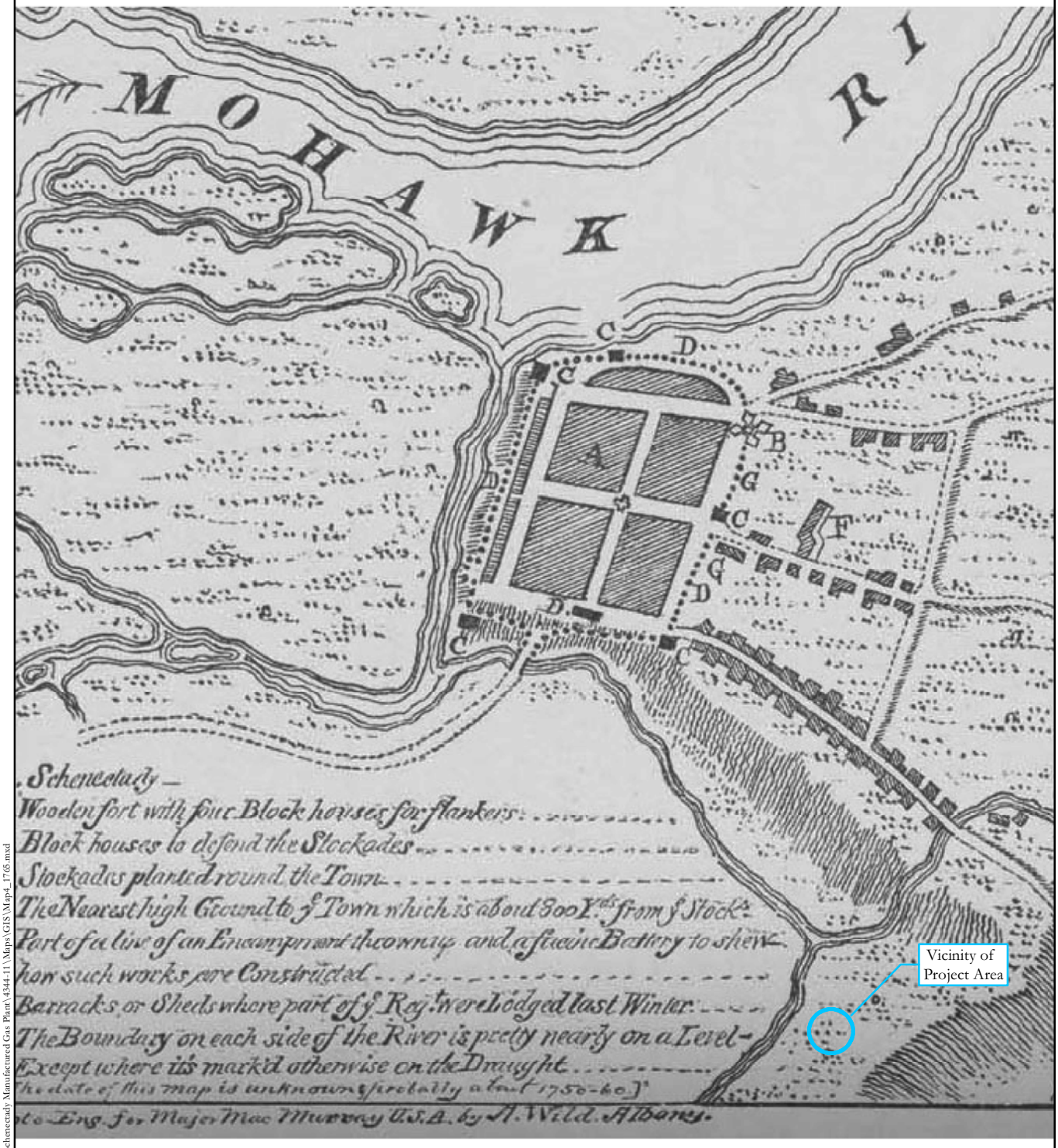


Soils Map (USDA NRCS 2006)

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Map 3

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Note: Graphic not to scale.

Historical Map (Rocque 1765)

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Map 4

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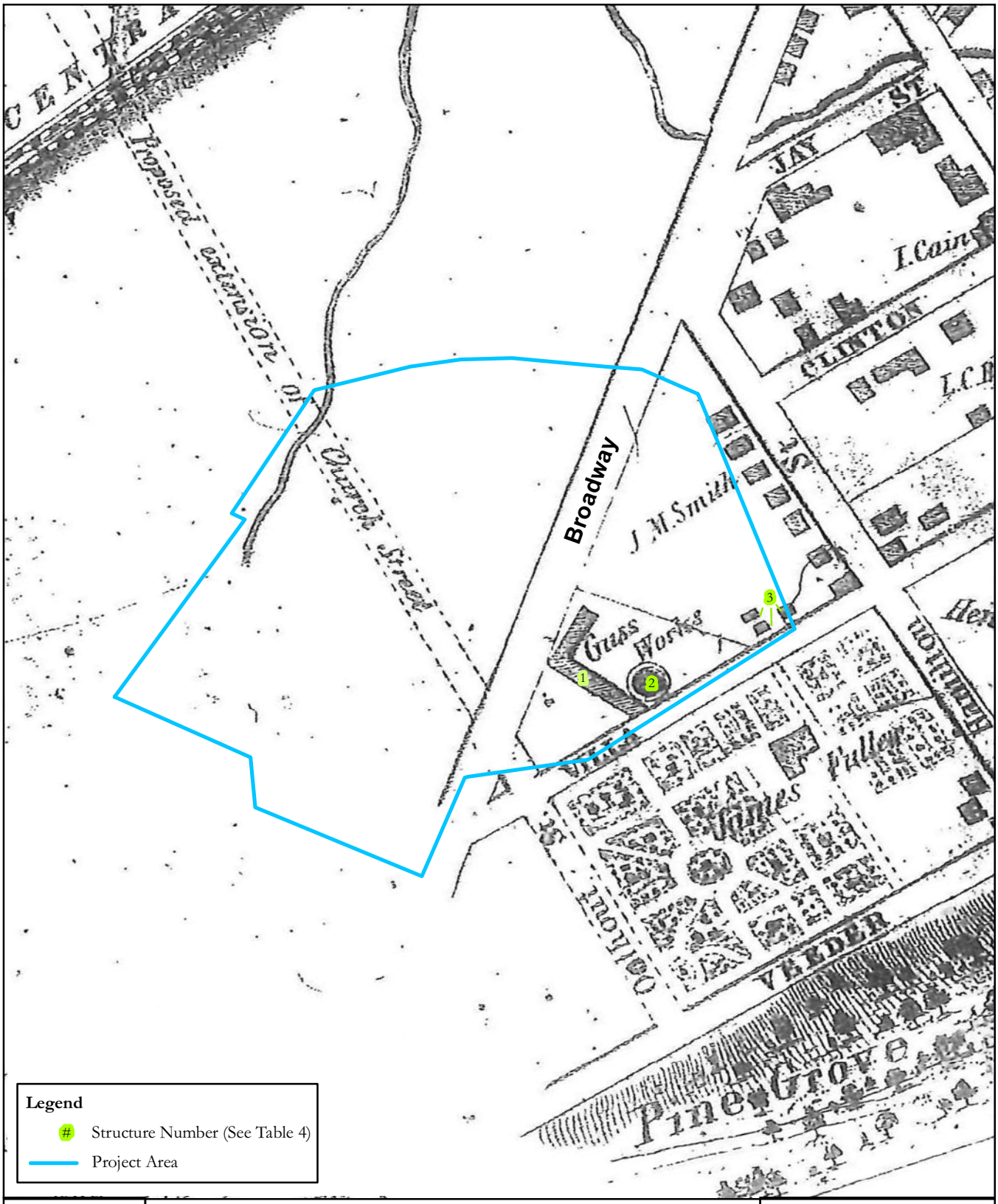
30 0 30 60
Meters

Historical Map (Dripps 1850)

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Map 5

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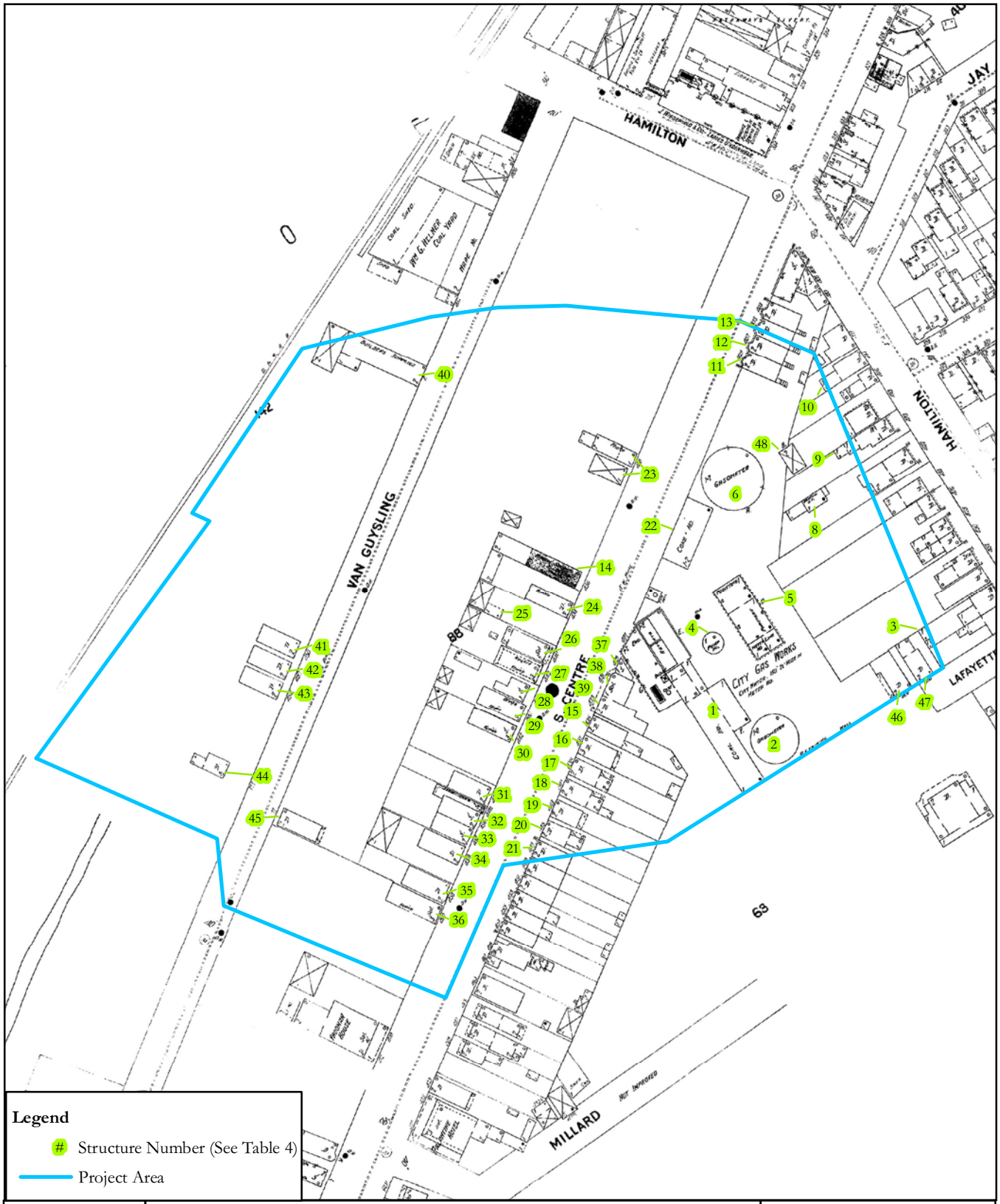


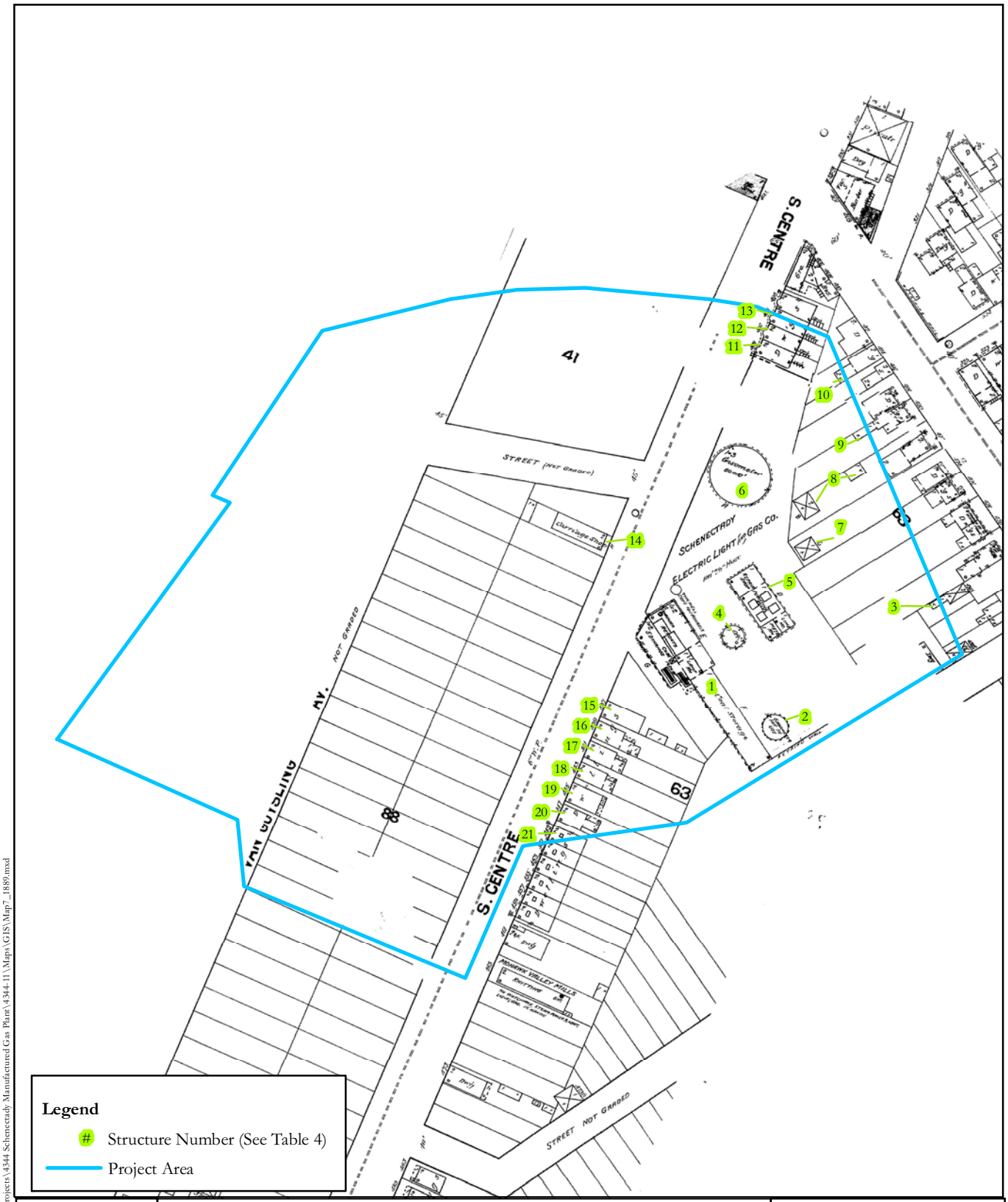
Historical Map (Fagan 1856)

HARTGEN archeological associates inc

Map 6

TSM August 6, 2010 R:\Active Projects\4344 Schenectady Manufactured Gas Plant\4344-11\Maps\GIS\Map6_1856.mxd


HAMILTON
JAY
HAMILTON
VAN GUYSLING
CENTRE
MILLARD
LAFAYETT
CITY GAS WORKS
GASOMETER
142
88
63
Legend
Structure Number (See Table 4)
Project Area
N
75 0 75 150
Feet
20 0 20 40
Meters
Historical Map (Sanborn 1900)
HARTGEN
archeological associates inc
Map 8
TSM August 6, 2010 R:\Active Projects\4344 Schenectady Manufactured Gas Plant\4344-11\Maps\GIS\Map8_1900.mxd



Legend

- # Structure Number (See Table 4)
- Project Area

N

75 0 75 150 Feet

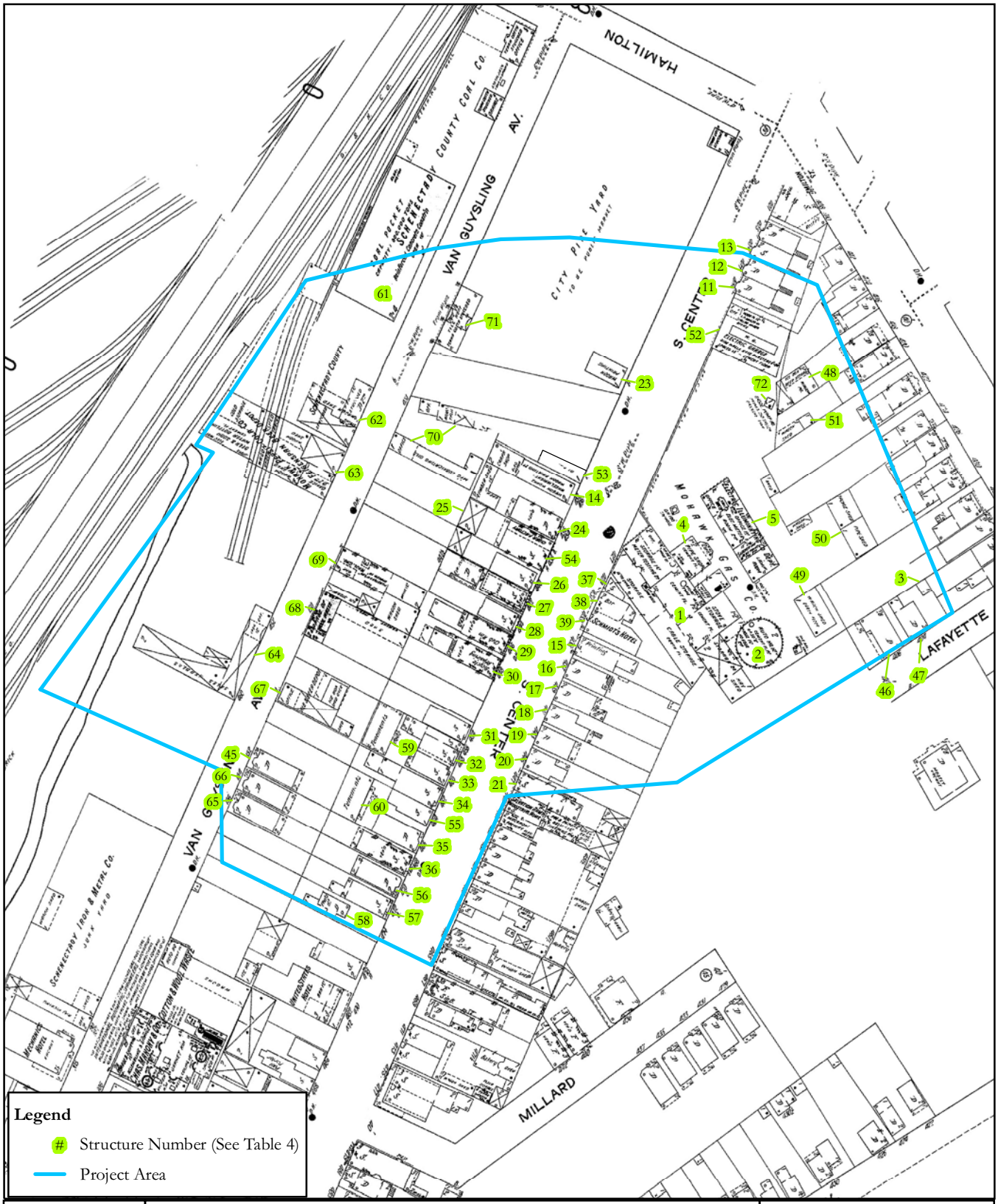
20 0 20 40 Meters

Historical Map (Sanborn 1889)

HARTGEN archeological associates inc

Map 7

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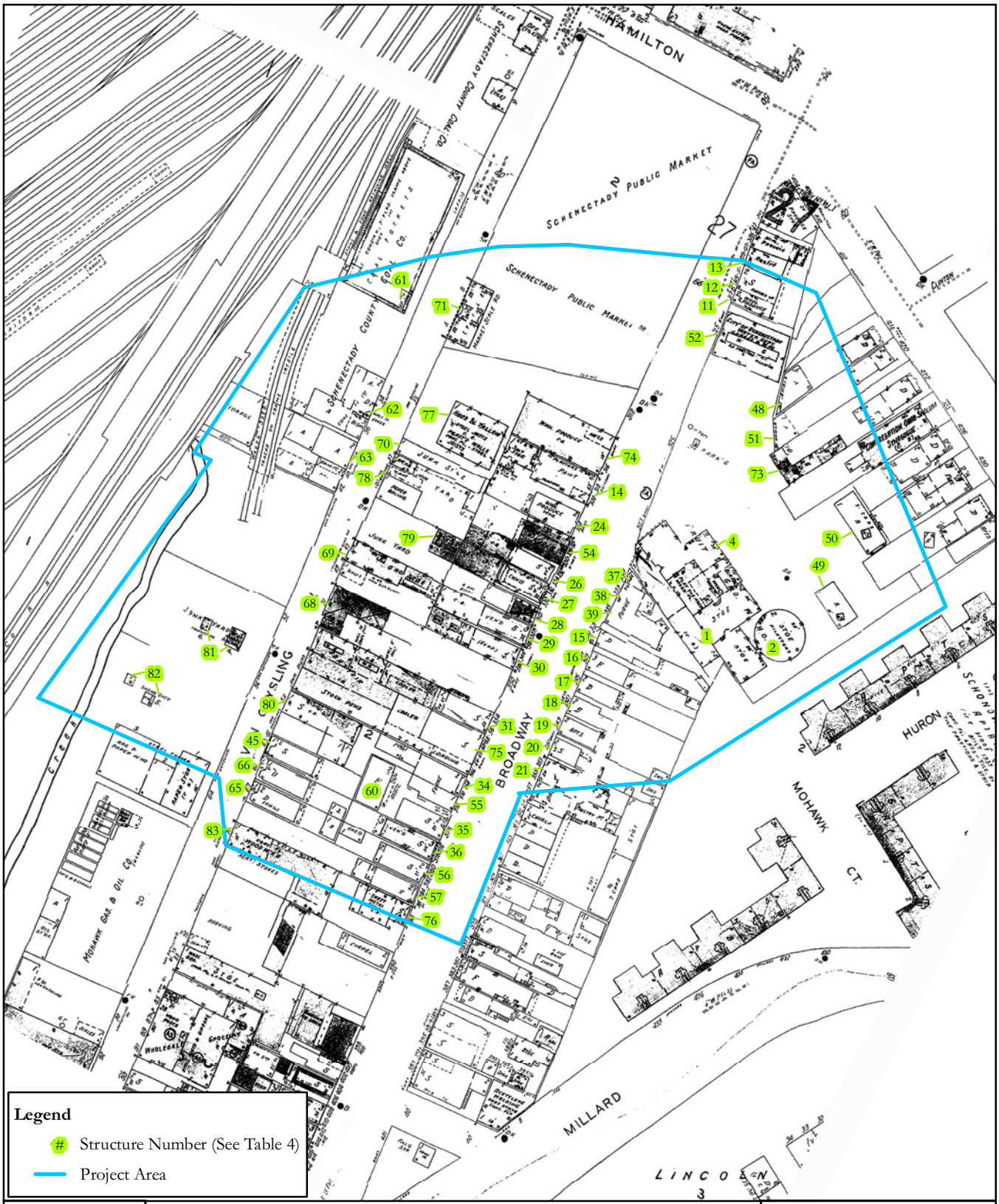


Historical Map (Sanborn 1914)

HARTGEN archeological associates inc

Map 9

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Historical Map (Sanborn 1953)

HARTGEN archeological associates inc

Map 10

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Historical Overlay
(Sanborn 1914, NYS OCSCI 2004)

HARTGEN
archeological associates inc

Map 11

TSM August 30, 2010 R:\Active Projects\4344 Schenectady Manufactured Gas Plant\4344-11\Maps\GIS\Map11_1914north.mxd

PHOTOGRAPHS

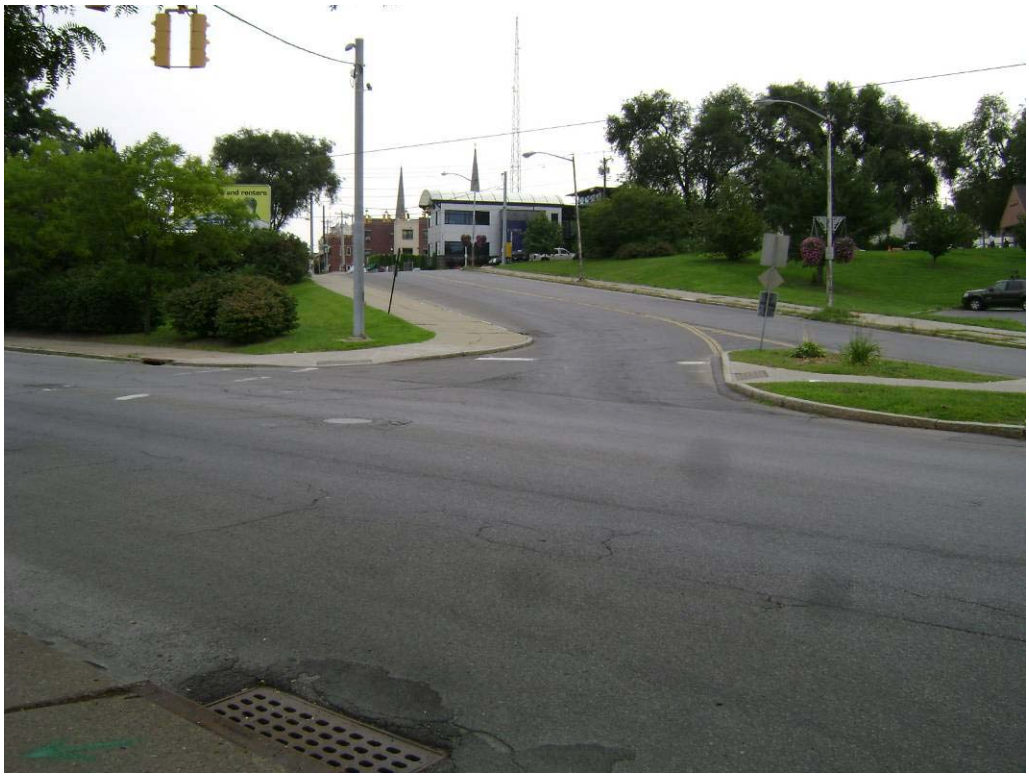


Photo 1. View northeast of the northeast corner of the project area near the intersection of Broadway and Clinton Street. The area on the left side of the photo is wooded green space.



Photo 2. View southeast of the Schenectady Municipal Housing Authority Ten Eyck Apartment building at 375 Broadway. The building was constructed in 1961.



Photo 3. View west of the Ten Eyck Apartments and landscaping surrounding the parking lots north of the building. The apartment building is built into the slope. Steep slopes rise just east of the building and parking lot. The former MGP was mainly located in the grassy area in the foreground before the building.

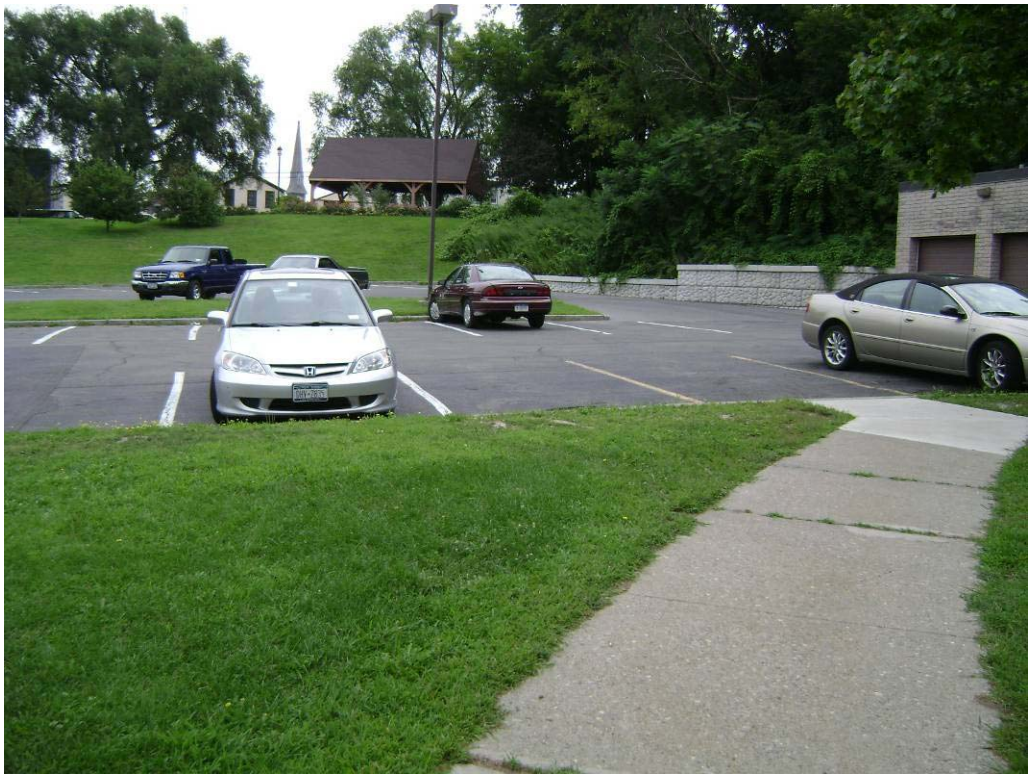


Photo 4. View east of the parking lot north of the Ten Eyck apartment building. Steep slopes rise to the southeast (behind the garage on the right side of the photo) and the northeast.



Photo 5. View southwest of the project area along the west side of Broadway.



Photo 6. View northwest of the parking lot in the northwest corner of the project area. The tile-roofed building in the parking lot is the c. 1914 Schenectady Public Market scale house (Structure 71).



Photo 7. View south of the c. 1914 Schenectady Public Market scale house (Structure 71) at the northeast corner of Van Guysling Avenue and Clinton Street Extension.



Photo 8. View north of 318 Broadway (building on the right) and 330 Broadway (building on the left), two of the three extant historical buildings in the project area. 318 Broadway was a carriage shop built and later paint manufacturer built c. 1889 (Structure 14). 330 Broadway was a store and cigar factory built c. 1914 (Structure 54).



Photo 9. View north of the building at 336/340 Broadway.



Photo 10. View north of a modern building at 376 Broadway.



Photo 11. View north of the vacant land and parking lots between 336/340 Broadway and 376 Broadway.



Photo 12. View south of Van Guysling Avenue from Clinton Street Extension. The east side of Van Guysling Avenue consists of parking lots.



Photo 13. View west of the modern building at the southeast corner of Van Guysling Avenue and Clinton Street Extension.



Photo 14. View southwest of the roofing supplies storage area along the west side of Van Guysling Avenue in the southwest corner of the project area.



Photo 15. View north of the gravel parking area along the west side of Van Guysling Avenue in the northwest portion of the project area.

APPENDIX 1: OPRHP Project Review Cover Form

New York State Office of Parks, Recreation and Historic Preservation
Historic Preservation Field Services Bureau
Peebles Island Resource Center, PO Box 189, Waterford, NY 12188-0189 (Mail)
Delaware Avenue, Cohoes 12047 (Delivery) **(518) 237-8643**

PROJECT REVIEW COVER FORM

Rev. 10-04

*Please complete this form and attach it to the top of **any and all information submitted to this office** for review. Accurate and complete forms will assist this office in the timely processing and response to your request.*

This information relates to a previously submitted project.

PROJECT NUMBER __ PR _____

COUNTY _____

☐ If you have checked this box and noted the previous Project Review (PR) number assigned by this office you do not need to continue unless any of the required information below has changed.

---

2. This is a new project. ☒ If you have checked this box you will need to complete ALL of the following information.

Project Name Schenectady Former Manufactured Gas Plant

Location Broadway & Clinton Street
You MUST include street number, street name and/or County, State or Interstate route number if applicable

City/Town/Village Schenectady
List the correct municipality in which your project is being undertaken. If in a hamlet you must also provide the name of the town.

County Schenectady
If your undertaking* covers multiple communities/counties please attach a list defining all municipalities/counties included.

TYPE OF REVIEW REQUIRED/REQUESTED (Please answer both questions)

A. Does this action involve a permit approval or funding, now or ultimately from any other governmental agency?

☐ No ☒ Yes

If Yes, list agency name(s) and permit(s)/approval(s)

Agency involved	Type of permit/approval	State	Federal
NYS DEC		☒	☐
		☐	☐
		☐	☐

B. Have you consulted the NYSHPO web site at http://www.nysparks.state.ny.us/shpo to determine the preliminary presence or absence of previously identified cultural resources within or adjacent to the project area? If yes: ☒ Yes ☐ No

Was the project site wholly or partially included within an identified archeologically sensitive area? ☒ Yes ☐ No

Does the project site involve or is it substantially contiguous to a property listed or recommended for listing in the NY State or National Registers of Historic Places? ☒ Yes ☐ No

CONTACT PERSON FOR PROJECT

Name Jerry Zak **Title** Senior Project Manager

Firm/Agency GEI Consultants, Inc

Address 455 Winding Brook Drive, Suite 201 **City** Glastonbury **STATE** CT **Zip** 06033

Phone (860) 368-5404 **Fax** (860) 368-5405 **E-Mail** _____

Appendix D

C.T. Male Environmental Investigation Reports and AECOM Analytical Data (Electronic Only)

May 21, 2004

Phase II
Environmental Site Assessment
Lower Broadway Parking Lot
312 Broadway
City of Schenectady
Schenectady County, New York

Prepared for:

SCHENECTADY METROPLEX DEVELOPMENT AUTHORITY
433 State Street
Schenectady, New York 12305

And:

CITY OF SCHENECTADY
City Hall, Room 205
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C.T. Male Project No: 04.9227

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PHASE II
ENVIRONMENTAL SITE ASSESSMENT REPORT
LOWER BROADWAY PARKING LOT
312 BROADWAY, SCHENECTADY, NEW YORK

TABLE OF CONTENTS

Page

1.0 INTRODUCTION 1

1.1 General 1
1.2 Project Background 1
1.3 Building Reconnaissance 1

2.0 METHOD OF INVESTIGATION 3

2.1 GPR Survey 3
2.2 Test Boring and Monitoring Well Locations 3
2.3 Drilling Method and Soil Sampling 3
2.4 Well Construction and Groundwater Sampling 4
2.5 Monitoring Well Location and Elevation Survey 5
2.6 Decontamination 5

3.0 FINDINGS 6

3.1 GPR Survey 6
3.2 Soil 6
3.3 Groundwater 6
3.4 Soil Screening Results 7
3.5 Analytical Results 7

4.0 CONCLUSIONS AND RECOMMENDATIONS 12

TABLES

TABLE 3.5.1-1: Summary of Soil Sampling Results and Regulatory Standards

TABLE 3.5.2-1 Summary of Groundwater Sampling Results and Regulatory Standards

APPENDICES

APPENDIX A: Figures / Maps

APPENDIX B: Subsurface Exploration Logs

APPENDIX C: Organic Vapor Headspace Analysis Logs

APPENDIX D: Laboratory Analysis Report for Soil

APPENDIX E: Laboratory Analysis Report for Groundwater

APPENDIX F: Ground Penetrating Radar Survey Report

1.0 INTRODUCTION

1.1 General

This report presents the findings of a Phase II Environmental Site Assessment conducted at the Lower Broadway Parking Lot Site, which is located at 312 Broadway in the City of Schenectady, Schenectady County, New York. The site is bordered by Hamilton Street to the north, Clinton Street Extension to the south and Broadway to the east. A site location map is included in Appendix A as Figure 1.

This Phase II ESA was conducted by C.T. Male Associates, P.C. (C.T. Male) as requested by Mr. Jayme Lahut, Executive Director of Schenectady Metroplex Development Authority in Schenectady, New York.

1.2 Project Background

The scope of the Phase II ESA was developed on the basis of the information and data gathered and evaluated as presented in the Phase I Environmental Site Assessment for the site dated February 27, 2004 as prepared by Professional Service Industries, Inc. (PSI) of Schenectady, New York. The site assessment identified the previous use of the southeastern portion of the site as a filling station. Staining from heavy equipment was identified within the central-western portion of the site. Off-site concerns included a leaking storage tank incident to the north of the site and a former manufactured gas plant (MGP) to the east of the site. The MGP was identified as potentially up-gradient relative to the subject site. Based on these observations and findings, the Phase II ESA was proposed to evaluate the site for potential impacts to soil and groundwater.

1.3 Building Reconnaissance

As requested by the client, the interior portions of the on-site building were observed on May 17, 2004 by C.T Male.

The interior portions included the first and second floor of the north and south side of the building. The first floor interior on the south side appeared to be a dilapidated locker room/bathroom with individual stalls and toilets. The room was occupied with numerous push lawn mowers and several empty 5 gallon and smaller

gas containers piled in the corner. Minimal petroleum staining was noted on the floor surface and no floor drains were observed within this room on the south side. The room on the north side of the building was generally empty except for miscellaneous stored items (i.e., snowblower, tables, garbage pails). Minimal petroleum staining was noted on the floor surface and one plugged floor drain was observed on the north side. There was no suspect asbestos containing materials observed within the first floor rooms other than the wall materials.

The second floor on the north and south side of the building were accessed from the west side of the building. An abundance of bird feces on the stairs and second floor interior were noted. The second floor rooms were empty except for pigeons nesting and some furniture. There was no suspect asbestos containing materials observed within the rooms other than the wall materials.

2.0 METHOD OF INVESTIGATION

2.1 GPR Survey

A ground penetrating radar (GPR) survey was completed by Sub-Surface Informational Surveys, Inc., of East Longmeadow, Massachusetts, under the observation of C.T. Male Associates. The GPR survey was conducted on the western portion of the site on Wednesday, April 28, 2004. The GPR survey was conducted on the eastern portion of the site on Thursday, April 29, 2004. The GPR survey was conducted across the ground surface of the site to identify the potential presence of underground storage tanks. Areas of the site where automobiles and heavy equipment were parked could not be assessed.

2.2 Test Boring and Monitoring Well Locations

The test boring locations (MW-1 through MW-4) were selected to assess the site's soil and groundwater conditions relative to the historical use of the site as a gasoline station and to assess the stained pavement area on-site. The test locations in the area of the former gasoline station were also used to assess the potential impacts from the historical off-site MGP.

Three test borings (MW-1 through MW-3) were located in the southeastern portion of the site near the entrances to Clinton Street Extension and the fourth test boring (MW-4) was advanced north of the site building in the central western portion of the site. The approximate locations of the completed test boring/monitoring wells are depicted on the Test Boring/Monitoring Well Locations Map, which is included as Figure 2 in Appendix A.

2.3 Drilling Method and Soil Sampling

The drilling activities were completed on Thursday, April 29, 2004 by SJB Services, Inc. under the observation of a C.T. Male environmental scientist. Geoprobe drilling techniques were utilized to complete the test borings and installation of the monitoring wells.

At each test boring location a two-inch diameter sampling barrel with an acetate liner was advanced at continuous four foot intervals to the termination depth of the

borings. The recovered soil samples were classified using the Unified Soil Classification System. The soil sample descriptions for the borings are presented on individual Geoprobe Subsurface Exploration Logs in Appendix B.

Following the recovery of the soil samples from the test boring, each sample was screened for the presence of detectable volatile organic compound vapors with a MiniRAE 2000 photo-ionization detector (PID) equipped with a 10.6 eV lamp. The PID meter was calibrated according to manufacturer recommendations prior to use utilizing isobutylene standard gas (100 parts per million). The PID soil screening results are presented on the Organic Vapor Headspace Analysis Logs in Appendix C.

On the basis of the soil screening, two soil samples were submitted for laboratory analysis. The samples were the 12 to 14 foot sample interval from test boring MW-1 and the 0 to 4 foot sample interval from test boring MW-4. Refer to Section 3.4 for further discussion regarding this sample.

2.4 Well Construction and Groundwater Sampling

Upon completion of sampling, the four borings were converted to 1 inch diameter (MW-1 and MW-3) and 1.25 inch diameter (MW-2 and MW-4) PVC groundwater monitoring wells for the collection of groundwater samples for laboratory analysis and gauging groundwater depths.

The monitoring wells were purged and sampled on May 3, 2004 (MW-4) and May 4, 2004 (MW-1, MW-2 and MW-3), five to six days after installation. A peristaltic pump and small diameter polyethylene tubing was utilized to collect laboratory samples. The wells were purged of five well volumes to reduce the turbidity at each well prior to sample collection. Laboratory samples were collected once the water levels recharged to near static water levels.

The groundwater samples were collected in new laboratory supplied glass jars while wearing new gloves. The samples were placed in a cooler with ice and transported to Phoenix Environmental Laboratories, Inc. of Manchester, Connecticut following proper chain of custody protocols.

2.5 Monitoring Well Location and Elevation Survey

The location of each well was located through tape measurements from existing site features and adjoining roadways. The elevation of the top of the PVC well casings at each location was determined using differential leveling techniques relative to an assumed benchmark elevation of 100.00 feet. The benchmark used was the top of a fire hydrant located along Broadway near Clinton Avenue Extension.

2.6 Decontamination

To preclude the potential for cross contamination between boring locations, the drilling tools and sampling equipment that would contact the site soils were decontaminated prior to the start of the drilling activities and between test boring locations utilizing a detergent/water wash and tap water rinse. All soil samples were handled with a new pair of gloves to eliminate cross contamination of the soil samples.

3.0 FINDINGS

3.1 GPR Survey

The GPR survey did not identify anomalies suggesting the presence of underground storage tanks. The GPR survey Report is included in Appendix F of this report.

3.2 Soil

Four test borings were advanced at the site with test boring MW-1 being advanced to a depth of twenty feet below ground surface and test borings MW-2 through MW-4 being advanced to sixteen feet below grade. The test borings generally disclosed fill materials and possible fill materials overlying sand and/or silt. The fill materials encountered were primarily fine to coarse sand or sand/gravel with traces of silt, ash, brick and organic material. Railroad tie splinters were also observed within the fill materials at test boring MW-1. It is inferred that the fill extends from the surface to approximately five to eight feet below grade. This determination is in part based on the presence of organic matter and a distinct difference in soil appearance at those inferred depths.

Otherwise, silt was the main soil constituent beneath the fill, to the termination depth of the borings. Exceptions to this condition were noted at test boring MW-1 which encountered brown clay at sixteen feet below grade, and fine to coarse sand was encountered beneath the fill at test boring MW-4. The soil classifications are summarized on the individual Subsurface Exploration Logs in Appendix B.

3.3 Groundwater

Groundwater was encountered at a depth of approximately six to seven feet below grade based on water level measurements collected on May 3 and 4, 2004. The groundwater collected from monitoring wells MW-1, MW-2 and MW-3 exhibited a creosote type odor and a sheen during groundwater sampling activities. The groundwater within monitoring well MW-4 did not exhibit a sheen, but did exhibit a petroleum odor.

Water level measurements were collected from the monitoring wells on May 3 and 4, 2004. The water level depths were converted to groundwater elevations using an

assumed benchmark elevation of 100.00. Utilizing the groundwater elevations at each well, the groundwater flow pattern is generally to the east. A groundwater contour map for the water level data collected on May 5, 2004 is included in Appendix A as Figure 3.

3.4 Soil Screening Results

The soil screening results for the recovered soil samples from test boring MW-1, MW-1, MW-2 and MW-3 differed from the soil screening results for the soil samples recovered from MW-4, as described below. The PID soil screening results are presented on the Organic Vapor Headspace Analysis Logs in Appendix C.

Screening of the soils did not reveal elevated PID readings that would be representative of volatile organic compound vapors from the surface to six to ten feet below grade at MW-1, MW-2 and MW-3. Starting at this depth, the recovered soil samples exhibited low level PID readings (i.e., generally less than 100 ppm) and a distinct creosote type odor. No staining was observed within any of the recovered soils from these locations.

At test boring MW-4, the soil screening revealed elevated PID readings and petroleum odor from the surface to four feet below grade. PID readings within the remaining soil sampling intervals (four to fourteen feet below grade) were slightly above background, but with the absence of petroleum odor and staining, the readings are not indicative of volatile organic compound vapors.

Based on the elevated PID readings and visual observations (petroleum odor and sheens) indicating evidence of a petroleum release, the NYSDEC Spill Hotline was contacted on April 29, 2004 and Spill #0401023 was assigned to the findings.

3.5 Analytical Results

3.5.1 Soil

Three soil samples were selected for laboratory analysis for the STARS Memo #1 list of volatile organic compounds by EPA Method 8021 and semi-volatile organic compounds (base neutral) by EPA Method 8270. The soil samples subjected to analysis were collected from the eight to ten foot interval from test boring MW-1,

and the zero to four foot interval from test boring MW-4. These sampling intervals were chosen on the basis of elevated PID readings; 67 ppm with a creosote type odor at MW-3 and 98.6 ppm with a petroleum odor at MW-4.

The following table presents a summary of soil sampling results for MW-1 and MW-4 along with regulatory standards for the compounds which were detected.

TABLE 3.5.1-1
SUMMARY OF SOIL SAMPLING RESULTS
AND REGULATORY STANDARDS
LOWER BROADWAY PARKING LOT SITE

PARAMETER	LOCATION AND CONCENTRATION (1)		NYSDEC RECOMMENDED SOIL CLEANUP OBJECTIVE(2)
	MW-1 (8-10') mg/kg	MW-4 (0-4') mg/kg	mg/kg
Volatile Organic Compounds by EPA Method 8021:			
1,2,4-Trimethylbenzene	Non Detect	1.7	10
1,3,5-Trimethylbenzene	Non Detect	0.85	3.3
N-Butylbenzene	Non Detect	0.91	10
P-Isopropyltoluene	Non Detect	0.76	10
Sec-Butylbenzene	Non Detect	0.41	10
Semi-volatile Organic Compounds by EPA Method 8270:			
Acenaphthene	0.36	Non Detect	50
Acenaphthylene	Non Detect	4.2	50
Anthracene	0.5	7.6	50
Benzo(a)anthracene	Non Detect	**26**	0.224 or Method Detection Limit
Benzo(b)fluoranthene	Non Detect	**31**	0.220 or Method Detection Limit
Benzo(g,h,i) perylene	Non Detect	16	50
Benzo(k)Fluoranthene	Non Detect	**16**	0.220 or Method Detection Limit
Chrysene	Non Detect	**24**	0.4
Dibenzo(a,h)anthracene	Non Detect	4.2	0.0143 or Method Detection Limit
Fluoranthene	0.63	44	50
Fluorene	Non Detect	3.9	50
Indeno(1,2,3-cd)pyrene	Non Detect	**15**	3.2
Naphthalene	0.9	Non Detect	13
Phenanthrene	1	22	50
Pyrene	0.47	**53**	50

(1) Only the compounds that were detected are listed.

(2) TAGM 4046, Determination of Soil Cleanup Levels, New York State Department of Environmental Conservation, January 24, 1994, Revised December 20, 2000.
(3) mg/kg denotes milligram per kilogram or parts per million.

There were no volatile organic compounds detected above the laboratory method detection limit within the soil sample collected from test boring MW-1. There were several semi-volatile organic compounds detected above the laboratory method detection limit within the soil sample collected from test boring MW-1. Of those six compounds detected, none of the compounds were detected at concentrations above their respective NYSDEC regulatory values.

There were a few volatile organic compounds and several semi-volatile organic compounds detected above the laboratory method detection limit at MW-4. Of those compounds detected, only six compounds (semi-volatile organic compounds only) were detected at concentrations above their respective NYSDEC regulatory values.

A copy of the laboratory analysis report is presented in Appendix D.

3.5.2 Groundwater

Groundwater samples were collected for laboratory analysis for the STARS Memo #1 list of volatile organic compounds by EPA Method 8021 and semi-volatile organic compounds (base neutral) by EPA Method 8270.

The following table presents a summary of groundwater sampling results for MW-2 along with regulatory standards for the compounds which were detected within the groundwater sample.

TABLE 3.5.2-1
SUMMARY OF GROUNDWATER SAMPLING RESULTS
AND REGULATORY STANDARDS
LOWER BROADWAY PARKING LOT SITE

PARAMETER	LOCATION AND CONCENTRATION (1)				6NYCRR PART 703.5 GROUNDWATER STANDARD (2)
	MW-1 ug/l	MW-2 ug/l	MW-3 ug/l	MW-4 ug/l	ug/l
Volatile Organic Compounds by EPA Method 8021:					
1,2,4-Trimethylbenzene	ND	**9.7**	ND	**11**	5
Benzene	**670**	**160**	ND	ND	1

TABLE 3.5.2-1
SUMMARY OF GROUNDWATER SAMPLING RESULTS
AND REGULATORY STANDARDS
LOWER BROADWAY PARKING LOT SITE

PARAMETER	LOCATION AND CONCENTRATION (1)				6NYCRR PART 703.5 GROUNDWATER STANDARD (2)
	MW-1 ug/l	MW-2 ug/l	MW-3 ug/l	MW-4 ug/l	ug/l
Volatile Organic Compounds by EPA Method 8021:					
Chloroethane	ND	**62**	ND	ND	5
Ethylbenzene	ND	**19**	ND	ND	5
m&p Xylene	**330**	**36**	ND	ND	5
n-Butylbenzene	ND	**94**	ND	ND	5
o-Xylene	ND	**13**	ND	ND	5
Toluene	ND	**10**	ND	ND	5
Total Xylenes	**330**	**49**	ND	ND	5
Semi-volatile Organic Compounds by EPA Method 8270:					
2,4-Dimethylphenol	ND	35	ND	ND	50 (Guidance Value
2-Methylnaphthalene	24	13	21	ND	No Standard
3&4-Methylphenol (M&P-cresol)	24	ND	ND	ND	No Standard
Acenaphthene	**160**	11	14	ND	20 (Guidance Value)
Acenaphthylene	ND	ND	10	ND	No Standard
Anthracene	**63**	ND	42	ND	50 (Guidance Value)
Benzo(a)anthracene	**21**	ND	**18**	ND	0.002 (Guidance Value)
Benzo(a)pyrene	**16**	ND	**15**	ND	ND
Benzo(b)fluoranthene	**18**	ND	**16**	ND	0.002 (Guidance Value)
Chrysene	**24**	ND	**15**	ND	0.002 (Guidance Value)
Dibenzofuran	82	13	15	ND	No Standard
Fluoranthene	**65**	12	**52**	13	50 (Guidance Value)
Fluorene	**75**	ND	**19**	ND	50 (Guidance Value)
Naphthalene	**5,300**	**280**	**200**	ND	10 (Guidance Value)
Phenanthrene	**130**	32	**95**	26	50 (Guidance Value)
Phenol	**91**	ND	ND	ND	1
Pyrene	**50**	ND	37	11	50 (Guidance Value)

ND denotes Non Detect

(1) Only the compounds that were detected are listed.

(2) TOGS 1.1.1, Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, New York State Department of Environmental Conservation, June 1998 and Addendum, April 2000.

As shown in the Table 3.5.2-1, the following summaries are provided:

At MW-1, volatile and semi-volatile organic compounds (only one volatile organic compound) were detected above the laboratory method detection limit, the majority of which were at concentrations above their respective NYSDEC groundwater standard or guidance values.

At MW-2, four volatile organic compounds were detected above the laboratory method detection limit, all of which were at concentrations above their respective NYSDEC groundwater standard values. Seven semi-volatile organic compounds were detected above the laboratory detection limit, only one of which was above its respective NYSDEC groundwater guidance value (naphthalene).

At MW-3, no volatile organic compounds were detected above the laboratory method detection limit. Several semi-volatile organic compounds were detected above the laboratory method detection limit, many of which were above their respective NYSDEC groundwater standard or guidance values.

At MW-4, no volatile organic compounds were detected above the laboratory method detection limit except for 1,2,4-trimethylbenzene. This compound was detected at a concentration slightly above its NYSDEC regulatory value. Three semi-volatile organic compounds were detected above the laboratory method detection limit, none of which were at concentrations that were above heir respective NYSDEC groundwater standard or guidance values.

A copy of the laboratory analysis report is presented in Appendix E.

4.0 CONCLUSIONS AND RECOMMENDATIONS

C.T. Male Associates, P.C. has completed a Phase II ESA of the Lower Broadway Parking Lot, which is located at 312 Broadway in the City of Schenectady, Schenectady County, New York. The purpose of the Phase II ESA was to conduct investigations to determine the quality of site soil and groundwater from previous site and off-site uses.

The Phase II ESA activities included a GPR survey, building reconnaissance, a subsurface investigation which included the advancement of four soil borings which were converted to groundwater monitoring wells, the collection of soil samples for field volatile organic compound vapor screening, and the collection and analysis of soil and groundwater samples for laboratory analysis.

The GPR survey did not identify any anomalies within the areas assessed. Based on these findings, it does not appear that underground storage tanks are located on the site.

Interior portions of the site building were reviewed for recognized environmental conditions. The first floor on the south side of the building contained numerous push lawn mowers and a pile of empty 5 gallon and smaller gasoline containers. Although minimal staining was observed on the floor surface, this de minimus condition does not appear to be a significant recognized environmental condition.

The PID soil screening results of the recovered soil samples revealed elevated readings indicative of petroleum impacts generally within the water table at test borings MW-1, MW-2 and MW-3 and near the surface (0 to 4 feet) at test boring MW-4. On the basis of this data, evidence of a release of petroleum or possible impacts by coal tar from the adjacent historic MGP was identified. Therefore, the NYSDEC Spill Hotline was contacted on Thursday, April 29, 2004 and Spill #04-01023 was assigned to the incident.

The laboratory analytical results for the soil collected from test boring MW-1 detected a few semi-volatile organic compounds above the laboratory method detection limits, none of which at concentrations above NYSDEC regulatory values. The laboratory analytical results for the soil collected from test boring MW-4 detected a few volatile and semi-volatile organic compounds above the laboratory

method detection limits with only a minority (six semi-volatile organic compounds) at concentrations above NYSDEC regulatory values.

Volatile organic compounds were detected at monitoring well MW-2 (n-butylbenzene, toluene and total xylenes) and MW-1 (total xylenes) at concentrations above their NYSDEC guidance values. No volatile organic compounds were detected above the laboratory detection limit within the other two monitoring well locations (MW-3 and MW-4).

Semi-volatile organic compounds were mainly detected at monitoring well MW-1 and MW-3, the majority of which were at concentrations above their NYSDEC guidance values. A few semi-volatile organic compounds were detected above the laboratory method detection limits at the other two locations (MW-2 and MW-4); however, only one compound was detected at a concentration above its NYSDEC groundwater guidance value (MW-2 only).

Based on the conclusions detailed above, the following recommendations are provided:

- Since evidence of volatile organic compound contamination was encountered at the subject site and a NYSDEC Spill Number was assigned to the findings, NYSDEC should be provided a copy of this report for review and comment.

If you have any questions regarding this report, please contact this office at (518) 786-7400.

Respectfully submitted,
C.T. MALE ASSOCIATES, P.C.

Reviewed and approved by:

Jeffrey Marx
Environmental Engineer

Kirk Moline
Project Manager

CTMA Project No. 04.9227
May 21, 2004

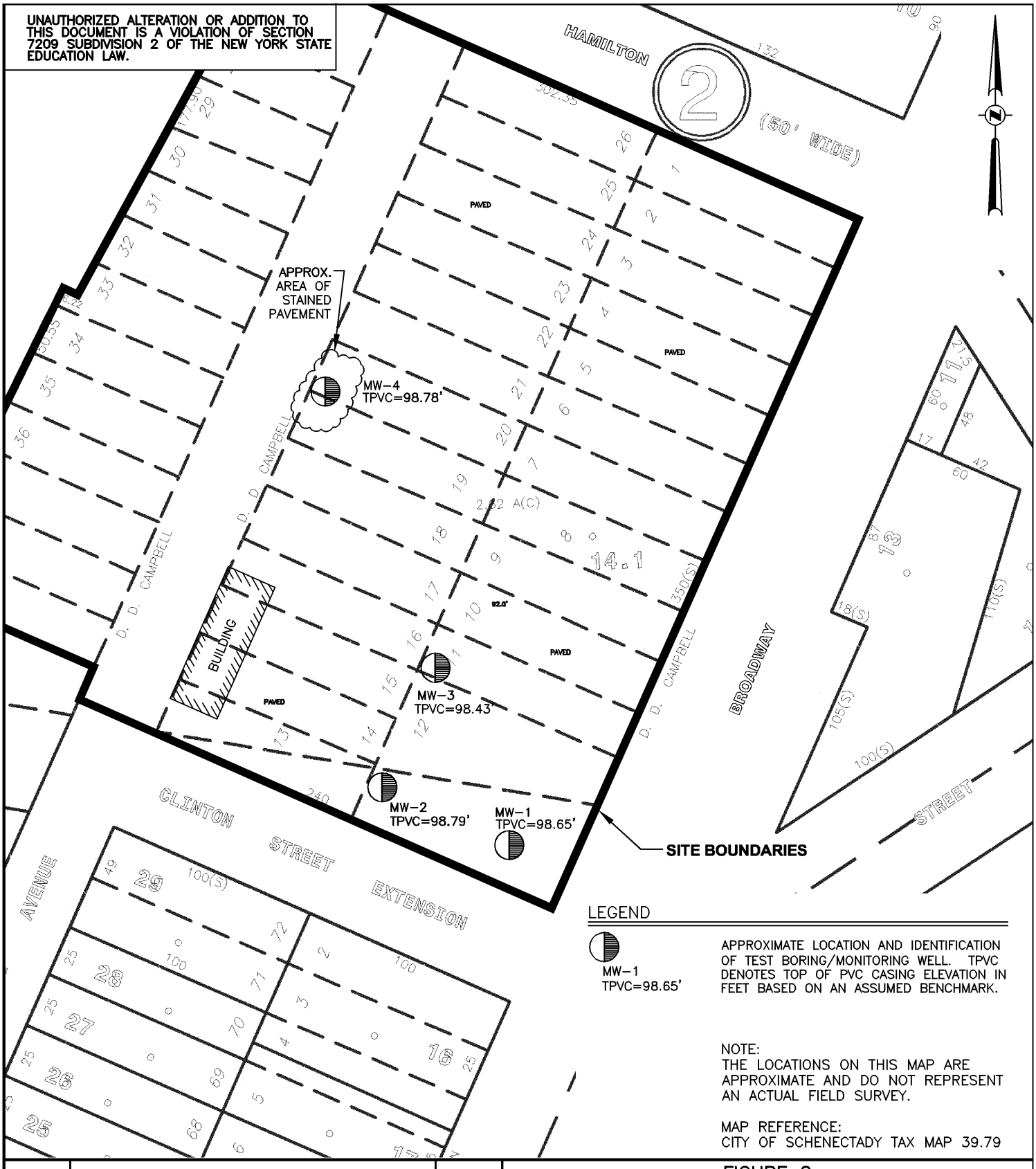
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APPENDIX A

Figures/Maps

NO XREFS

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LEGEND

MW-1
TPVC=98.65'

APPROXIMATE LOCATION AND IDENTIFICATION OF TEST BORING/MONITORING WELL. TPVC DENOTES TOP OF PVC CASING ELEVATION IN FEET BASED ON AN ASSUMED BENCHMARK.

NOTE:
THE LOCATIONS ON THIS MAP ARE APPROXIMATE AND DO NOT REPRESENT AN ACTUAL FIELD SURVEY.

MAP REFERENCE:
CITY OF SCHENECTADY TAX MAP 39.79

Date	RECORD OF WORK	Appr.

FIGURE 2
TEST BORING/MONITORING WELL LOCATIONS MAP
312 BROADWAY SITE

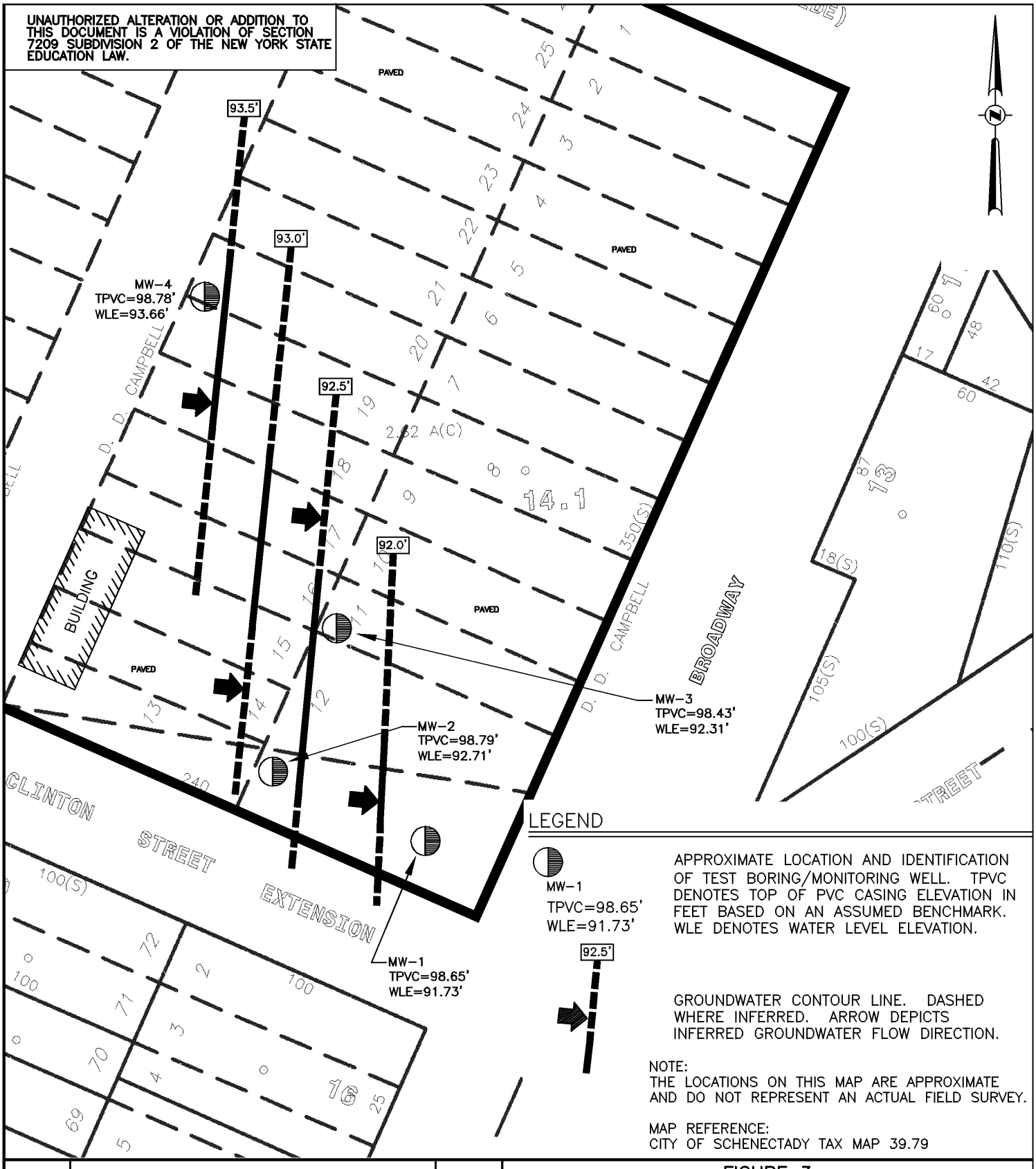
CITY OF SCHENECTADY | SCHENECTADY COUNTY, NY

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518.786.7400 * FAX 518.786.7299
Architecture & Building Systems Engineering * Civil Engineering
Environmental Services * Survey & Land Information Services

Drafter: JAM	Checker:
Appr. by:	Proj. No. 04.9227
SCALE: ±1"=60'	DATE: MAY 2004

CAD DWG. FILE NAME: 312 BROADWAY.DWG

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LEGEND

MW-1
TPVC=98.65'
WLE=91.73'

APPROXIMATE LOCATION AND IDENTIFICATION OF TEST BORING/MONITORING WELL. TPVC DENOTES TOP OF PVC CASING ELEVATION IN FEET BASED ON AN ASSUMED BENCHMARK. WLE DENOTES WATER LEVEL ELEVATION.

92.5'

GROUNDWATER CONTOUR LINE. DASHED WHERE INFERRED. ARROW DEPICTS INFERRED GROUNDWATER FLOW DIRECTION.

NOTE:
THE LOCATIONS ON THIS MAP ARE APPROXIMATE AND DO NOT REPRESENT AN ACTUAL FIELD SURVEY.

MAP REFERENCE:
CITY OF SCHENECTADY TAX MAP 39.79

Date	RECORD OF WORK	Appr.

FIGURE 3
GROUNDWATER CONTOUR MAP (MAY 4, 2004)
312 BROADWAY SITE

CITY OF SCHENECTADY | SCHENECTADY COUNTY, NY

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Drafter: JAM	Checker:
Appr. by:	Proj. No. 04.9227

SCALE: ±1"=50' | DATE: MAY 2004

CAD DWG. FILE NAME: TAX MAP.DWG

NO XREFS

APPENDIX B

Subsurface Exploration Logs

C.T. MALE ASSOCIATES, P.C.

GEOPROBE SUBSURFACE EXPLORATION LOG

a

BORING NO.: MW-1
ELEV.: **DATUM:**
START DATE: 4/2904 **FINISH DATE: 4/29/04**
SHEET 1 OF 1

PROJECT: Phase II ESA - Lower Broadway Parking Lot
CTM PROJECT NO.: 04.9227
LOCATION: 312 Broadway, Schenectady, NY
CTM OBSERVER: Jennifer Kotch

DEPTH (FT.)	SAMPLE INTERVAL	SAMPLE NUMBER	SAMPLE RECOVERY (FT)	SAMPLE CLASSIFICATION	NOTES
		1	2.8	6" Asphalt	
				6" Sub base GRAVEL	
4				FILL: Brown fine to medium SAND, Some Red Brick (Moist)	
		2	2.2	6'	
8				FILL: Dark Brown SILT and ORGANIC (Ash and RR Ties), trace red brick, trace gravel (Moist to Wet) 8'	
		3	2.1	Black SILT, Some Organics, trace fine to medium sand, trace gravel (Wet)	
12				12'	
		4	2.3	Brown SILT, trace clay (Moist)	Well set at 15'
16				16'	
		5	2.7	Brown CLAY, Some Organic, trace brown fine sand, trace silt (Moist)	
20					
				Boring Terminated at 20'	Well Construction: 1" PVC 10' 0.10 slot screen 10' riser w / PVC cap
24					Sand: Filpro # 00 20' - 1'
					Bentonite: Benseal Flakes
28					1' - Grade

DRILLING CONTRACTOR: SJB Services, Inc. GEOPROBE TYPE: Model 540 U Truck Mounted
METHOD OF SAMPLING: Direct Push w / Percussion Hammer, 4'X2" Macro Core Sampler with Acetate Liner

GROUNDWATER LEVEL READINGS

DATE	LEVEL	REFERENCE MEASURING POINT

THE SUBSURFACE INFORMATION SHOWN HEREON WAS OBTAINED FOR C.T. MALE ASSESSMENT PURPOSES. IT IS MADE AVAILABLE TO AUTHORIZED USERS ONLY THAT THEY MAY HAVE ACCESS TO THE SAME INFORMATION AVAILABLE TO C.T.MALE. IT IS PRESENTED IN GOOD FAITH, BUT IS NOT INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.

SAMPLE CLASSIFICATION BY: JK

C.T. MALE ASSOCIATES, P.C.

GEOPROBE SUBSURFACE EXPLORATION LOG

a

BORING NO.: MW-2
ELEV.: **DATUM:**
START DATE: 429//04 **FINISH DATE: 4/29/04**
SHEET 1 OF 1

PROJECT: Phase II ESA - Lower Broadway Parking Lot
CTM PROJECT NO.: 04.9227
LOCATION: 312 Broadway, Schenectady, NY
CTM OBSERVER: Jennifer Kotch

DEPTH (FT.)	SAMPLE INTERVAL	SAMPLE NUMBER	SAMPLE RECOVERY (FT)	SAMPLE CLASSIFICATION	NOTES
		1	2.8	7" Asphalt	
				5" Sub base	
				Brown medium SAND and GRAVEL, trace silt	
4				(Moist)	
		2	2.2	6'	
				Gray medium to coarse SAND and GRAVEL (limestone noted)	
8				(Moist to Wet) 8'	
		3	2.1	Gray SILT, Some Sand, Some Gravel	
				(Wet) 10'	
				Gray SILT, Some Clay, trace organics (Firm)	
12				(Wet) 12'	
		4	2.3	Gray SILT, little gravel, trace organic	
				(Wet)	
16					
				Boring Terminated at 16'	Well Construction: 1.25" PVC 10' 0.10 slot screen 5' riser w / PVC cap Sand: Filpro # 00 16' to 1' Bentonite: Benseal Flakes 1' - Grade
20					
24					
28					

DRILLING CONTRACTOR: SJB Services, Inc. GEOPROBE TYPE: Model 540 U Truck Mounted
METHOD OF SAMPLING: Direct Push w / Percussion Hammer, 4'X2" Macro Core Sampler with Acetate Liner

GROUNDWATER LEVEL READINGS

DATE	LEVEL	REFERENCE MEASURING POINT

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SAMPLE CLASSIFICATION BY: JK

C.T. MALE ASSOCIATES, P.C.

GEOPROBE SUBSURFACE EXPLORATION LOG

BORING NO.: MW-3
ELEV.: **DATUM:**
START DATE: 429//04 **FINISH DATE: 4/29/04**
SHEET 1 OF 1

PROJECT: Phase II ESA - Lower Broadway Parking Lot — CTM PROJECT NO.: 04.9227

LOCATION: 312 Broadway, Schenectady, NY — CTM OBSERVER: Jennifer Kotch

DEPTH (FT.)	SAMPLE INTERVAL	SAMPLE NUMBER	SAMPLE RECOVERY (FT)	SAMPLE CLASSIFICATION	NOTES
		1	2.8	6" Asphalt	
				1' Sub base GRAVEL	
				FILL: Brown fine SAND, little red brick, little organic ash	
4				(Moist)	
		2	2.2	5'	
				Brown SILT, little organic, little gravel (limestone noted)	
8				(Moist to Wet)	
				8'	
		3	2.1	Brown fine to medium SAND, trace silt, trace organics	
				(Moist) 10'	
				Black SILT, trace fine sand, trace organics	
12				(Wet) 12'	
		4	2.3	Black SILT, Some Clay, trace organics	
				(Wet)	
16					
				Boring Terminated at 16'	Well Construction: 1" PVC
					10' 0.10 slot screen
20					5' riser w / PVC cap
					Sand: Filpro # 00
					16' to 1'
24					Bentonite: Benseal Flakes
					1' - Grade
28					

DRILLING CONTRACTOR: SJB Services, Inc. GEOPROBE TYPE: Model 540 U Truck Mounted

METHOD OF SAMPLING: Direct Push w / Percussion Hammer, 4'X2" Macro Core Sampler with Acetate Liner

GROUNDWATER LEVEL READINGS

DATE	LEVEL	REFERENCE MEASURING POINT

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SAMPLE CLASSIFICATION BY: JK

C.T. MALE ASSOCIATES, P.C.

GEOPROBE SUBSURFACE EXPLORATION LOG

BORING NO.: MW-4
ELEV.: **DATUM:**
START DATE: 4/29/04 **FINISH DATE: 4/29/04**
SHEET 1 OF 1

PROJECT: Phase II ESA - Lower Broadway Parking Lot — CTM PROJECT NO.: 04.9227

LOCATION: 312 Broadway, Schenectady, NY — CTM OBSERVER: Jennifer Kotch

DEPTH (FT.)	SAMPLE INTERVAL	SAMPLE NUMBER	SAMPLE RECOVERY (FT)	SAMPLE CLASSIFICATION	NOTES
		1	2.8	6" Asphalt	
				1' Sub base Black Top and GRAVEL	
				FILL: Brown to Gray fine to coarse SAND and GRAVEL	
4					
		2	2.2	FILL: Brown medium SAND, Some Gravel, trave red brick (Moist)	
				Brown fine to coarse SAND, trace silt (Wet)	
8					
		3	2.1	Brown fine to medium SAND, trace clay, trace silt (Wet)	
12					
		4	2.3		
				Brown SILT, little fine sand, little clay (Wet)	
16					
				Boring Terminated at 16'	Well Construction: 1.25" PVC 10' 0.10 slot screen 5' riser w / PVC cap Sand: Filpro # 00 16' to 1' Bentonite: Benseal Flakes 1' - Grade
20					
24					
28					

DRILLING CONTRACTOR: SJB Services, Inc. GEOPROBE TYPE: Model 540 U Truck Mounted

METHOD OF SAMPLING: Direct Push w / Percussion Hammer, 4'X2" Macro Core Sampler with Acetate Liner

GROUNDWATER LEVEL READINGS

DATE	LEVEL	REFERENCE MEASURING POINT

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SAMPLE CLASSIFICATION BY: JK

APPENDIX C

Organic Vapor Headspace Analysis Logs

a

ORGANIC VAPOR HEADSPACE ANALYSIS LOG

PROJECT: Phase II ESA - Lower Broadway Parking Lot				PROJECT #: 04.9227		PAGE 1 OF 2
CLIENT: Schenectady Metroplex Development Authority						DATE
LOCATION: 312 Broadway Street, Schenectady, NY						COLLECTED: 4/29/04
INSTRUMENT USED: MiniRAE 2000			LAMP	10.6	EV	DATE
DATE INSTRUMENT CALIBRATED: 4/29/04 (PRIOR TO USE)				BY: JK		ANAYLZED: 4/29/04
TEMPERATURE OF SOIL: Ambient						ANALYST: Jennifer Kotch
				SAMPLE	BACKGROUND	
EXPLORATION	SAMPLE	DEPTH	SAMPLE	READING	READING	
NUMBER	NUMBER	(FT.)	TYPE	(PPM)**	(PPM)**	REMARKS
MW-1	1	0-2	Soil	0.0	0.0	No odor / No staining
	1	2-4	Soil	0.9	0.0	No odor / No staining
	2	4-6	Soil	2.5	0.0	No odor / No staining
	2	6-8	Soil	25.1	0.0	Slight creosote odor / No staining
	3	8-12	Soil	67	0.0	Strong creosote odor / No staining
	4	12-14	Soil	53.6	0.0	Strong creosote odor / No staining
	4	14-16	Soil	78.6	0.6	Strong creosote odor / No staining
	5	16-20	Soil	95.2	0.0	Creosote odor / No staining
MW-2	1	0-2	Soil	1.6	0.0	No odor / No staining
	1	2-4	Soil	1.9	0.0	No odor / No staining
	2	4-6	Soil	0.0	0.0	No odor / No staining
	2	6-8	Soil	0.0	0.0	Slight creosote odor / No staining
	3	8-10	Soil	0.0	0.0	Strong creosote odor / No staining
	3	10-12	Soil	44.9	0.0	Strong creosote odor / No staining
	4	12-14	Soil	21.9	0.0	Strong creosote odor / No staining
	4	14-16	Soil	23.1	0.2	No odor / No staining
MW-3	1	0-2	Soil	0.6	0.0	No odor / No staining
	1	2-4	Soil	0.1	0.0	No odor / No staining
	2	4-6	Soil	0.0	0.0	No odor / No staining

*Instrument was calibrated in accordance with manufacturer's recommended procedure using a calibration gas supplied by the manufacturer.
**PPM represents concentration of detectable volatile and gaseous compounds in parts per million of air.
***Due to poor sample recovery the sample is not sufficient enough to specify which portion of the recovered sample interval was collected .

Note: Soil samples collected for lab analysis (i.e., Lab) were secured first, then remaining soil collected for field screening with PID meter.

a

ORGANIC VAPOR HEADSPACE ANALYSIS LOG

PROJECT: Phase II ESA - Lower Broadway Parking Lot				PROJECT #: 04.9227		PAGE 2 OF 2
CLIENT: Schenectady Metroplex Development Authority						DATE
LOCATION: 312 Broadway Street, Schenectady, NY						COLLECTED: 4/29/04
INSTRUMENT USED: MiniRAE 2000			LAMP	10.6	EV	DATE
DATE INSTRUMENT CALIBRATED: 4/29/04 (PRIOR TO USE)				BY: JK		ANAYLZED: 4/29/04
TEMPERATURE OF SOIL: Ambient						ANALYST: Jennifer Kotch
				SAMPLE	BACKGROUND	
EXPLORATION	SAMPLE	DEPTH	SAMPLE	READING	READING	
NUMBER	NUMBER	(FT.)	TYPE	(PPM)**	(PPM)**	REMARKS
MW-3	2	6-8	Soil	0.0	0.0	Slight creosote odor / No staining
	3	8-12	Soil	14.3	0.0	Strong creosote odor / No staining
	4	12-14	Soil	27.9	0.0	Strong creosote odor / No staining
	4	14-16	Soil	36.1	0.6	Strong creosote odor / No staining
	5	16-20	Soil	11.3	0.0	Creosote odor / No staining
MW-4	1	0-4	Soil	98.6	0.0	Slight Petroleum odor / No staining
	2	4-6	Soil	16.3	0.0	No odor / No staining
	2	6-8	Soil	11.8	0.0	No odor / No staining
	3	8-10	Soil	0.6	0.0	No odor / No staining
	3	10-12	Soil	5.5	0.0	No odor / No staining
	4	12-14	Soil	6.9	0.0	No odor / No staining

*Instrument was calibrated in accordance with manufacturer's recommended procedure using a calibration gas supplied by the manufacturer.
**PPM represents concentration of detectable volatile and gaseous compounds in parts per million of air.
***Due to poor sample recovery the sample is not sufficient enough to specify which portion of the recovered sample interval was collected .

Note: Soil samples collected for lab analysis (i.e., Lab) were secured first, then remaining soil collected for field screening with PID meter.

APPENDIX D

Laboratory Analysis Report For Soil

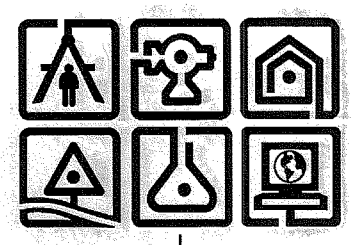
APPENDIX E

Laboratory Analysis Report For Groundwater

APPENDIX F

Ground Penetrating Radar Survey Report

January 2007



Draft Remedial Investigation Report

Environmental Restoration Project
Clean Water/Clean Air Bond Act of 1996

ERP Site #E-447035
Lower Broadway Parking Lot
312 Broadway
City of Schenectady
Schenectady County, New York

Prepared for:

Schenectady Metroplex Development Authority
433 State Street
Schenectady, New York 12305

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City Hall
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C.T. Male Project No.: 05.5550

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ENVIRONMENTAL RESTORATION PROJECT
REMEDIAL INVESTIGATION REPORT
LOWER BROADWAY PARKING LOT - 312 BROADWAY
CITY OF SCHENECTADY, NEW YORK

TABLE OF CONTENTS

Page

1.0 INTRODUCTION 1
- 1.1 Purpose 2
- 1.2 Report Organization 3
- 1.3 Project Background 3
  - 1.3.1 General 3

2.0 SITE DESCRIPTION AND UTILIZATION 5
- 2.1 Site Description 5
- 2.2 Area Property Utilization 5
- 2.3 Utilities 5
  - 2.3.1 Site 5
  - 2.3.2 Area Utilities 6
- 2.4 Site History 6
- 2.5 Previous Site Investigations 7

3.0 STUDY AREA INVESTIGATION 8
- 3.1 Site Characterization 8
- 3.2 Fish and Wildlife Impact Analysis (FWIA) 8
- 3.3 Survey of Public and Private Wells 8
- 3.4 Near-surface Soil Sampling and Analysis 8
- 3.5 Site Wide Subsurface/Hydrogeologic Evaluation 9
  - 3.5.1 Subsurface Soil Sampling and Monitoring Well Installation 9
  - 3.5.2 Dust Monitoring 11
  - 3.5.3 Well Development and Groundwater Sampling 12
- 3.6 Data Usability Summary Report (DUSR) 13
- 3.7 Investigative Derived Waste 13
- 3.8 Asbestos & Lead Sampling in Site Building 14

4.0 PHYSICAL CHARACTERISTICS OF THE STUDY AREA 15
- 4.1 Results of Study Area Investigation 15

ENVIRONMENTAL RESTORATION PROJECT
REMEDIAL INVESTIGATION REPORT
LOWER BROADWAY PARKING LOT - 312 BROADWAY
CITY OF SCHENECTADY, NEW YORK

TABLE OF CONTENTS (Cont'd)

Page

4.1.1 Surface Features 15
4.1.2 Surface Water Bodies 15
4.1.3 Surface Drainage Patterns 15
4.1.4 Regional Geology 16
4.1.5 Site Soils 16
4.1.6 Groundwater Characteristics 17

5.0 NATURE AND EXTENT OF CONTAMINATION 21
5.1 Sources 21
5.2 Determination of Project Standards, Criteria and Guidance (SCGs) 21
5.3 Near-surface Soils 22
5.3.1 General 22
5.3.2 Volatile Organic Compounds in Near-surface Soil 22
5.3.3 Semi-Volatile Organic Compounds in Near-surface Soils 22
5.3.4 Pesticides and PCBs in Near-surface Soils 23
5.3.5 Metals in Near-surface Soils 23
5.4 Subsurface Soils 23
5.4.1 General 23
5.4.2 Volatile Organic Compounds in Subsurface Soils 24
5.4.3 Semi-volatile Organic Compounds in Subsurface Soils 25
5.4.4 Pesticides and PCBs in Subsurface Soils 26
5.4.5 Metals in Subsurface Soils 26
5.5 Groundwater 26
5.5.1 General 26
5.5.2 Volatile Organic Compounds in Groundwater 26
5.5.3 Semi-volatile Organic Compounds in Groundwater 27
5.5.4 Pesticides and PCBs in Groundwater 28
5.5.5 Metals in Groundwater 29
5.6 Summary of Extent of Contamination 30
5.6.1 Near-Surface Soils 30
5.6.2 Subsurface Soils 30
5.6.3 Groundwater 31
5.7 Past Site Activities Relative to Site Contaminants 32
5.8 Fish and Wildlife Impact Analysis (FWIA) Results 32
5.9 Data Usability Summary Report 33

ENVIRONMENTAL RESTORATION PROJECT
REMEDIAL INVESTIGATION REPORT
LOWER BROADWAY PARKING LOT - 312 BROADWAY
CITY OF SCHENECTADY, NEW YORK

TABLE OF CONTENTS (Cont'd)

		Page
6.0	CONTAMINANT FATE AND TRANSPORT	34
	6.1 General Overview	34
	6.2 Definition of Relevant Properties	34
	6.3 Contaminant Persistence	35
	6.4 Contaminant Migration	37
	6.4.1 Groundwater Migration	37
	6.4.2 Atmospheric Migration	37
7.0	EXPOSURE ASSESSMENT	39
	7.1 Qualitative Exposure Assessment	39
8.0	SUMMARY AND CONCLUSIONS	41
	8.1 Summary	41
	8.1.1 Site Background	41
	8.1.2 Physical Characteristics of the Project Site	41
	8.1.3 Fish and Wildlife Impact Analysis (FWIA)	42
	8.1.4 Survey of Public and Private Wells	42
	8.1.5 Nature and Extent of Contamination	42
	8.1.6 Fate and Transport	44
	8.2 Conclusions	44
	8.2.1 Data Limitations and Disclaimer	46

FIGURES

Figure 1:	Site Location Map
Figure 2A:	Monitor Well/Sampling Location Map
Figure 2B :	Historical Site Features & Structures
Figure 3:	Groundwater Contour Map (6/13/2006)
Figure 4:	Groundwater Contour Map (8/2/2006)
Figure 5:	Groundwater Contour Map (9/1/2006)
Figure 6:	SVOCs Above SCGs in Subsurface Soil Samples Map
Figure 7:	VOCs Above SCGs in Groundwater Samples Map
Figure 8:	SVOCs Above SCGs in Groundwater Samples Map
Figure 9:	TAL Metals Above SCGs in Groundwater Samples Map

ENVIRONMENTAL RESTORATION PROJECT
REMEDIAL INVESTIGATION REPORT
LOWER BROADWAY PARKING LOT - 312 BROADWAY
CITY OF SCHENECTADY, NEW YORK

TABLE OF CONTENTS (Cont'd)

TABLES

Within Text

Table 3.6.1-1:	Soil Boring and Monitoring Well Summary
Table 4.1.6-1:	Summary of Groundwater Elevation Data
Table 4.1.6-2:	Groundwater Sampling Field Observations Summary
Table 5.4.1-1:	Summary of Subsurface Soil Samples Selected for Laboratory Analysis
Table 5.4.3-1:	SVOCs Exceeding SCGs in Subsurface Soils
Table 5.5.2-1:	VOCs Exceeding SCGs in Groundwater
Table 5.5.3-1:	SVOCs Exceeding SCGs in Groundwater
Table 5.5.5-1:	Metals Exceeding SCGs in Groundwater
Table 6.2-1:	Physical and Chemical Properties of Site Contaminants

Following Text

Table 1	Near-Surface Soil Results - VOCs (Detected Compounds)
Table 2	Near-Surface Soil Results - SVOCs (Detected Compounds)
Table 3	Near-Surface Soil Results - TAL Metals (Detected Metals)
Table 4	Subsurface Soil Results - VOCs (Detected Compounds)
Table 5	Subsurface Soil Results - SVOCs (Detected Compounds)
Table 6	Subsurface Soil Results - TAL Metals (Detected Metals)
Table 7	Groundwater Results - VOCs (Detected Compounds)
Table 8	Groundwater Results - SVOCs (Detected Compounds)
Table 9	Groundwater Results - TAL Metals (Detected Metals)

ENVIRONMENTAL RESTORATION PROJECT
REMEDIAL INVESTIGATION REPORT
LOWER BROADWAY PARKING LOT – 312 BROADWAY
CITY OF SCHENECTADY, NEW YORK

TABLE OF CONTENTS (Cont'd)

APPENDICES

Appendix A:	Subsurface Exploration Logs
Appendix B:	Organic Vapor Headspace Analysis Logs
Appendix C:	Monitoring Well Construction Logs
Appendix D:	Waste Disposal Documentation
Appendix E:	Scale House ACM/LBP Sampling Results (7/11/06 Letter)
Appendix F:	Groundwater Services Field Logs
Appendix G:	CDs of Laboratory Analytical Data (Unvalidated)

EXHIBITS

Exhibit 1:	NYSDEC Work Plan Approval Letter
Exhibit 2:	Data Usability Summary Reports

1.0 INTRODUCTION

The Schenectady Metroplex Development Authority (Metroplex) and the City of Schenectady (City) entered a State Assistance Contract (SAC) with the New York State Department of Environmental Conservation (DEC) pursuant to the NYS Environmental Restoration Program (ERP) with regard to the investigation of the Lower Broadway Parking Lot, located at 312 Broadway (the Site). The Site is currently owned by the City of Schenectady and leased and operated by Metroplex. A Site Location Map is provided as Figure 1 in this report.

To assist Metroplex and the City in the successful completion of the project, C.T. Male Associates, P.C. (C.T. Male) was retained to complete the technical aspects of the project in accordance with the New York State Department of Environmental Conservation (NYSDEC) December 2002 "Draft DER-10 Technical Guidance for Site Investigation and Remediation". The Draft DER-10 sets forth the administrative and technical requirements for the completion of site investigation and/or site remediation.

The Remedial Investigation (RI) was completed in substantial accordance with the Remedial Investigation/Alternatives Analysis (RI/AA) Work Plan for the Site, dated April 7, 2006, as prepared by C.T. Male for Metroplex and the City of Schenectady. The RI/AA Work Plan was reviewed and subsequently approved by the NYSDEC on April 24, 2006. The NYSDEC approval letter for the Work Plan is presented as Exhibit 1. Deviations from the Work Plan consisted of the following:

- Two of the proposed *on-site* groundwater monitoring wells were not completed. They were to have been in the northernmost portion of the property. In these areas, attempts were made (via Geoprobe) at multiple locations to advance test borings. However, refusal was encountered at each of the locations at a depth of 4 feet or less. The NYSDEC was notified of the inability to install monitoring wells at these locations using the Geoprobe, and agreed that the installation of wells at these locations utilizing alternative drilling methods would be evaluated following submittal and review of the draft RI Report.

  Further review of historical Sanborn Fire Insurance Maps during preparation of the RI Report resulted in the identification of a former gasoline underground storage tank (UST), depicted on the maps as being located north of the former

Schenectady County Coal Co. garage structure on the northern portion of the Site (see Section 2.4 and Figure 2B). This is the same general area referenced above, where shallow refusal precluded the advancement of a test boring and installation of a groundwater monitoring well. In light of the UST information, and with the concurrence of the NYSDEC, additional investigation is proposed for the northern portion of the Site in the vicinity of the tank location.

- One of the proposed *off-site* groundwater monitoring wells was not completed. It was to have been along the northeast side of Hamilton Street. Attempts were made (via Geoprobe) at multiple locations to advance this test boring. However, refusal was encountered at each of the locations at a depth of 4 feet or less. The NYSDEC was notified of the inability to install monitoring wells at this location using the Geoprobe, and agreed that the installation of a well at this location utilizing alternative drilling methods would be evaluated following submittal and review of the draft RI Report..

- The proposed targeted soil gas survey was not completed, based on preliminary findings. It was agreed that the need to complete this task would be evaluated by the NYSDOH following submittal and review of the draft RI report.

- An aboveground enclosed space (vault) with an earthen floor, containing numerous drums of metal turnings/cuttings, was discovered at the southwestern corner of the site, recessed in the concrete retaining wall which runs along the western property boundary. The discovery of the vault and drums prompted additional site activities to inventory the drums and identify their contents, characterize the contents of the drums for disposal, and assess surface soil conditions within the vault. The work conducted and findings from these supplemental activities were presented under separate cover.

1.1 Purpose

The purpose of the Remedial Investigation/Alternatives Analysis Report (RI/AAR) is to present and detail the findings of the investigations completed to aid in the development of an acceptable Proposed Remedial Action Plan (PRAP) and Record of Decision (ROD).

The goal of the RI is to identify and assess known and potential sources of contamination, develop site specific Standards, Criteria and Guidance (SCGs) for identified contaminants, and to develop a comprehensive strategy to address and/or remediate the identified contamination as necessary to protect the environment and human health. The overall goal of the site AAR is to outline various remedial strategies and associated costs which will achieve compliance with established regulatory clean up guidance levels and criteria.

1.2 Report Organization

The RI Report is subdivided into eight (8) sections. Section 1 is an introduction, which presents the purpose of the project and background information such as project work tasks and modifications to the work plan. Section 2 provides the description and utilization of the site with a discussion of former site usage activities, adjoining property utilization, site and area utilities, and site specific history. Section 3 relates to the study area investigation and consists of a description (i.e., dates of completion, number or sampling locations, etc.) of the investigative tasks completed. Section 4 presents the physical characteristics of the study area as obtained during the site investigation, including soils, groundwater, regional geology and surface features such as water bodies and drainage patterns. Section 5 discusses the nature and extent of the contamination in which the analytical results of soil and groundwater samples are compared to applicable regulatory standards and guidance values. Section 6 pertains to the contaminant fate and transport (routes of migration, and contaminant persistence and migration) for the remaining site contamination. Section 7 presents the exposure assessment to evaluate the potential for human exposure and adverse effects to human health and the environment from site related contamination. Section 8 presents the summary and conclusions of the project.

1.3 Project Background

1.3.1 General

Based on review of the history of the Site (described below in Section 2.4), and the conclusion that historical uses of the Site had the potential to degrade the Site's environmental quality, Metroplex and the City made application for inclusion into the New York State Environmental Restoration Program. The goal of inclusion into the

program was to sufficiently investigate and remediate potential site contaminants in anticipation of potential future development of the property.

The RI implemented at the Site involved the collection and laboratory analysis of near-surface soil and subsurface soil samples, the drilling and installation of monitoring wells, and the collection and laboratory analysis of groundwater samples. The investigative methods employed were derived in part from information presented within a limited subsurface investigation at the site conducted by C.T. Male in April, 2004 and from review of historical maps and regulatory databases. The field portion of the investigation was conducted in May and June 2006.

2.0 SITE DESCRIPTION AND UTILIZATION

2.1 Site Description

The Site is located in the City of Schenectady, Schenectady County, New York as depicted in Figure 1, Site Location Map. The Site consists of a square-shaped parcel, approximately 2.6 acres in size, located along the west side of Broadway, between Hamilton Street and Clinton Street Extension. The Site is currently developed as a parking lot, with asphalt paved parking areas, landscaped areas, and a vacant, two-story building (referred to in previous reports as the Market Scale House). An enclosed aboveground space (vault) with an earthen floor is present at the southwestern corner of the site, recessed in the concrete retaining wall which runs along the western property boundary. Surrounding land uses include city streets, a railroad right-of-way and commercial properties.

2.2 Area Property Utilization

The adjoining and surrounding land uses in the area of the subject site are described as follows:

North: Hamilton Street, a municipal parking garage, vacant lot, Villa Italia Bakery.

South: Clinton Street Extension; Van Guysling Avenue; Broadway; commercial properties.

East: Broadway; commercial property; municipal parking lot (Clinton South Parking Lot).

West: Delaware and Hudson Railroad right-of-way.

2.3 Utilities

2.3.1 Site

The Lower Broadway Parking Lot consists of a municipal parking lot with associated lighting fixtures. Power to the lights is provided by National Grid via underground

utility lines, assumed to traverse the site, between individual lights, although the exact configuration is unknown.

2.3.2 Area Utilities

Area utilities consist primarily of overhead and underground electrical power, and underground natural gas, supplied by National Grid. Municipal water and sanitary sewer are provided by the City of Schenectady.

2.4 Site History

The Site was reportedly developed for its current use as a parking lot between 1982 and 1988. According to a February 2004 Phase I Environmental Site Assessment (ESA) Report prepared for the Site by Professional Service Industries, Inc. (PSI), the northwestern portion of the Site was occupied by the Schenectady County Coal Company from the early 1900s to around 1970. Three prominent structures on the site were associated with operations of the Schenectady County Coal Company: a "coal pockets" building (the southernmost and largest of the three structures); a garage; and an office structure, with adjoining scales. During this period of time, the remainder of the Site was occupied by the City Pipe Yard, a wagon painting building, the public market, the "Market Scalehouse" building and a "comfort station" building. In 1930, a filling station with gasoline tanks occupied the south end of the public market; however by 1951 the filling station was no longer identified on the Site. In the 1970s the Schenectady County Coal Company was replaced with a warehouse and office, which were later replaced with the existing municipal parking lot.

During the preparation of the RI Report, C.T. Male conducted further review of copies of the historical Sanborn Fire Insurance Maps provided within the PSI Phase I ESA report. Digital versions of these maps obtained via the internet were also reviewed. C.T. Male noted that the 1914, 1930 and 1951 maps depict a gasoline underground storage tank (UST) to the north of the former garage structure (associated with the Schenectady County Coal Co.) on the northern portion of the Site. The approximate locations of this UST and the other historical buildings/structures noted above are shown on Figure 2B – Historical Site Features and Structures.

Based on historical Sanborn Fire Insurance Maps, a manufactured gas plant was formerly located to the south and southeast of the Site. The Sanborn Map dated 1900 shows a gas holder adjacent to the southwest side of Broadway (formerly known as S. Centre Street), directly across from the Site.

2.5 Previous Site Investigations

As referenced above, a Phase I ESA was performed for the Site in February 2004. During April 2004, C.T. Male conducted a limited Phase II ESA on the Site (based on the information presented in the Phase I ESA Report) including soil sampling, installation of groundwater monitoring wells, and groundwater sampling. Reports associated with both the Phase I and Phase II assessments were submitted to the NYSDEC along with the ERP application.

Laboratory analysis of soil and groundwater samples revealed the presence of volatile and semivolatile organic compounds at concentrations exceeding regulatory limits at sampling locations in the areas of the former gasoline filling station and in an area of observed surface staining.

Soils encountered to a depth of 16 feet below grade were generally fill materials overlying a mixture of silt and sand. The fill materials were observed to extend from directly beneath the asphalt to depths between 5 and 8 feet below grade. The fill consisted of sand, silt, gravel, ash, brick and organic material. Three of the test borings were completed on the southern "quadrant" of the site. At these locations, soil samples collected from a depth range of 6 to 20 feet were noted as having creosote odors.

Based on the findings of subsurface exploration conducted by CTM and others on properties in the vicinity of the Site, the mixed sand and silt lithology encountered on the Site is expected to extend to a depth of approximately 70 to 80 feet below grade. These soils are expected to be underlain by lacustrine silt and clay, and then glacial till. Depth to bedrock is expected to be in excess of 100 feet below grade.

3.0 STUDY AREA INVESTIGATION

3.1 Site Characterization

The investigation was conducted within the property boundaries of the subject site, which currently serves as an asphalt-paved parking lot, and off site at two boring/monitoring well locations. Investigation of the project site was performed through the completion of specific work tasks. The following sub-sections provide dates of work task completion and select work task results (i.e., number of borings advanced, monitoring wells installed, etc.) not presented elsewhere herein.

Investigative tasks performed by C.T. Male included sampling and analysis of near-surface soil, subsurface soil and groundwater. All of the analytical data for this project was validated in accordance with the Guidance for the Development of Data Usability Summary Report (DUSR). The DUSR provides an evaluation of the analytical data to determine whether or not the data meets the project specific criteria for data quality and data use.

3.2 Fish and Wildlife Impact Analysis (FWIA)

Based on the site's current use as a paved parking lot, its location and lack of any observable wildlife resources, the NYSDEC Project Manager determined that a Fish and Wildlife Impact Analysis (FWIA) was not required for this investigation.

3.3 Survey of Public and Private Wells

According to officials at the Schenectady County Health Department, the project site and its surrounding area are serviced by public water furnished by the City of Schenectady. Private water wells are reportedly not located on, or in the vicinity of the project site. The City utilizes water supply wells (located outside of the City limits) to draw water from the Schenectady-Niskayuna Aquifer System.

3.4 Near-surface Soil Sampling and Analysis

Near-surface soil samples were collected at twelve (12) individual locations on May 11, 2006. The sampling locations were determined by dividing the site into an approximate

100 by 100 foot grid system. The samples were then collected from each of the grid cells. Because the site was covered with asphalt pavement, the asphalt surface and granular sub base material (if present) were removed prior to sample collection. Samples were then collected in accordance with the procedures outlined in the RI/AA Work Plan. The collected samples were submitted to the laboratory of record (Chemtech) for the following analyses: TCL volatile and semi-volatile organic compounds; pesticides and PCBs; and TAL metals.

Quality Assurance/Quality Control (QA/QC) samples were collected during the surface soil sampling event, as follows.

- One equipment blank was collected of the stainless steel spoon and bowl prior to the collection of sample SS-9.
- One duplicate sample was collected of sample SS-8.
- MS/MSD analyses were performed on sample SS-9.

3.5 Site Wide Subsurface/Hydrogeologic Evaluation

3.5.1 Subsurface Soil Sampling and Monitoring Well Installation

The Subsurface/Hydrogeologic evaluation included the completion of exploratory test borings at twelve (12) locations (GP-1 through GP-10, GP-14, GP-15). Borings were also attempted at three additional locations (GP-11 through GP-13); however refusal was encountered at depths of 4 feet below grade or less at these locations, on what appeared to be concrete. Test borings that were advanced to depths below the water table were converted to groundwater monitoring wells upon completion of subsurface soil sampling. The locations of the test borings/monitoring wells are depicted in Figure 2 - Monitor Well/Sampling Locations Map. Two of the borings/monitoring wells (GP-14 and GP-15) were located off-site, along the eastern side of Broadway. Test borings and monitoring well installation activities occurred during the period from May 8 to May 10, 2006.

The test borings were advanced using direct-push (Geoprobe) methods. The test borings were advanced to depths ranging from 14 to 16 feet below grade, depending on the depth at which saturated soils were observed. During advancement of the borings,

soil samples were collected at continuous four-foot intervals for soil classification, PID screening, and potential laboratory analysis. Soil samples were collected and handled in accordance with the procedures outlined in the RI/AA Work Plan. The soil classification for each boring is presented on the Geoprobe Subsurface Exploration Logs in Appendix A. Recovered soil samples were screened for the presence of volatile organic compound vapors using a photoionization detector (PID). The PID screening results are presented on the Organic Vapor Headspace Analysis Logs in Appendix B. One soil sample from each test boring was retained for laboratory analysis, based in part on headspace screening results and organoleptic perception of suspect contamination. A total of 13 soil samples (including a duplicate sample collected from test boring GP-1) were submitted to the laboratory of record for analyses for TCL volatile and semi-volatile organic compounds, PCBs and pesticides, and TAL metals. The test borings were converted to permanent 1-inch diameter PVC monitoring wells, identified as CTM-1 through CTM-10 (on-site locations), and CTM-14 and CTM-15 (off-site locations). Each monitoring well was protected with a flush-mounted curb box with bolt down cover. Monitoring well construction details are provided in Appendix C.

QA/QC samples were collected during the soil boring sampling event, as follows.

- One equipment blank was collected of the MacroCore sampler prior to the collection of GP-10 (4-6').
- One duplicate sample was collected of GP-1 (4-6' bgs).
- MS/MSD analyses were performed on sample GP-2 (4-6').

Table 3.5.1-1 provides a summary of the boring and monitoring well identification numbers, boring depths, depths at which the monitoring wells were set, monitoring well screened interval depths, and the depth from which soil samples were collected for laboratory analysis.

TABLE 3.5.1-1: Soil Boring and Monitoring Well Summary					
Boring ID	Monitoring Well ID	Boring Depth (bgs)	MW Depth (bgs)	MW Screened Interval	Laboratory Soil Sample Depth (bgs)
GP-1	CTM-1	16′	15′	5 to 15′	4 to 6′
GP-2	CTM-2	14′	14′	4 to 14′	4 to 6′
GP-3	CTM-3	14′	14′	4 to 14′	4 to 8′
GP-4	CTM-4	15′	14′	4 to 14′	4 to 6′
GP-5	CTM-5	16′	14′	4 to 14′	10 to 12′
GP-6	CTM-6	15′	14′	4 to 14′	4 to 6′
GP-7	CTM-7	16′	14′	4 to 14′	4 to 6′
GP-8	CTM-8	16′	14′	4 to 14′	4 to 6′
GP-9	CTM-9	14′	14′	4 to 14′	4 to 6′
GP-10	CTM-10	15′	14′	4 to 14′	4 to 6′
GP-11	NA	4 locations attempted; refusal at 1′ to 3′ b.g.	NA	NA	None Submitted
GP-12	NA	1 location attempted; refusal at 3′ b.g.	NA	NA	None Submitted
GP-13	NA	3 locations attempted; refusal at 0.5′ to 4′ b.g.	NA	NA	None Submitted
GP-14	CTM-14	15′	14′	4 to 14′	4 to 6′
GP-15	CTM-15	15′	14′	4 to 14′	8 to 12′

Notes: bgs denotes below ground surface
NA denotes not applicable - no well installed

3.5.2 Dust Monitoring

During Geoprobe activities, C.T. Male utilized two TSI DustTRAK real-time particulate monitors, capable of continuously measuring concentrations of airborne dust, smoke, mists, haze, and fumes. These instruments are capable of detecting particles from 0.1 to

10 micrometers in size, and are capable of providing real-time data, and 15-minute time-weighted average exposure measurements. The instruments were placed on tripods located at temporary monitoring stations, selected each day based on the prevailing wind direction, one upwind and one downwind of the work area. Dust monitoring equipment was calibrated by the supplier and was zeroed in the field prior to each day's use. Based on field observations, little to no visible dust was generated during the course of Geoprobe drilling activities, and dust monitoring data indicated that established action levels were not exceeded.

3.5.3 Well Development and Groundwater Sampling

On May 24 and 30, 2006, wells CTM-1 through CTM-10, CTM-14 and CTM-15 were developed, using pumping and surging methods, to restore hydraulic connection with the surrounding formation. Each well was developed until a minimum of five well volumes of water were removed or until the well was dry. Well development water was pumped into 5-gallon buckets and then transferred to 55-gallon drums which were labeled and stored on site, pending proper disposal arrangements.

On June 8, 2006, C.T. Male surveyed the monitoring well and surface soil sampling locations for placement on the site plan, and the top of well casing elevations to aid in determining groundwater gradient across the site.

During the period of June 13-15, 2006, C.T. Male conducted groundwater monitoring activities on the site, including measurement of water levels and collection of groundwater samples. On June 13, 2006 (and again on August 2, and September 1, 2006) water levels were measured at each well location from the surveyed top of well casing, following the procedures outlined in the RI/AA Work Plan.

Prior to collection of groundwater samples, each well was purged using a peristaltic pump in accordance with the procedures outlined in the RI/AA Work Plan. Purge water was handled in the same manner as the water generated during well development. After allowing the water level in each well to recover to at least 80 percent of its initial static level, groundwater samples were collected employing low-flow techniques, using a peristaltic pump. Groundwater Services Field Logs are included in Appendix F. With the exception of utilizing low-flow pumping methods for sample collection, groundwater samples were handled in accordance with the

procedures outlined in the RI/AA Work Plan. The samples were forwarded to the laboratory of record (Chemtech) for the following analyses: TCL volatile and semi-volatile organic compounds; PCBs and pesticides; and TAL metals.

QA/QC samples were collected during the groundwater sampling event, as follows:

- One equipment blank of the peristaltic pump tubing was collected prior to collection of the groundwater sample from monitoring well CTM-5.
- One duplicate sample was collected of CTM-8.
- MS/MSD analyses were performed on CTM-4.

3.6 Data Usability Summary Report (DUSR)

Data Usability Summary Reports (DUSRs) were completed of the analytical data generated during this investigation to confirm that the data is of adequate quality for subsequent decision making purposes. All of the analytical data presented in the attached summary tables have been validated in accordance with Appendix 2B (Guidance for the Development of Data Usability Summary Reports) of the *Draft DER-10 Technical Guidance for Site Investigation and Remediation* (NYSDEC, December 2002). The DUSR reports for the RI are presented as Exhibit 2.

3.7 Investigative Derived Waste

Waste derived from investigative activities consisted of soil from drilling, groundwater from well development and sampling, and plastic sheeting/tubing and personal protective equipment (i.e. sampling gloves). The waste soil and groundwater were containerized in labeled 55-gallon drums, which were stored on site pending disposal arrangements. On September 7, 2006, C.T. Male's subcontractor, M.C. Environmental Services, Inc. mobilized personnel and equipment to the site to remove the waste for disposal, in conjunction with waste removal activities at the 314 Clinton Street site. Between the two sites, a total of 742 gallons of groundwater were removed from the drums using a vacuum truck, and were transported off site for disposal at Norlite Corporation in Cohoes, New York. The drums of soil were emptied, and a total of 4.59 tons of soil were loaded onto a dump truck and transported off site for disposal at Environmental Soil Management, Inc. in Fort Edward, New York. The empty drums

were transported off site for disposal as scrap metal at T.A. Predel & Co., Inc. in Schenectady, New York. Plastic sheeting/tubing and PPE were bagged and discarded in Metroplex's solid waste dumpster. Pertinent waste disposal documentation is included in Appendix D.

3.8 Asbestos & Lead Sampling in Site Building

In addition to the near-surface and subsurface investigative activities performed as part of the RI, C.T. Male also performed an evaluation of the existing site building (Scale House) for the presence of asbestos-containing materials (ACM) and lead-based paint. Bulk samples of suspected ACM and chips of suspected lead-based paint were collected and analyzed. Results of the sampling activities were presented in a letter to the Schenectady Metroplex Development Authority dated July 11, 2006. A copy of the letter is provided as Appendix E.

4.0 PHYSICAL CHARACTERISTICS OF THE STUDY AREA

4.1 Results of Study Area Investigation

A number of investigative tasks were completed by C.T. Male to characterize the project site. The results of the investigative tasks are supplemented with published literature including soil, bedrock, and aquifer mapping to further assess the physical characteristics of the project site. The physical characteristics of the site are discussed in the following sections.

4.1.1 Surface Features

Presently, the site consists of an asphalt paved parking lot. The site's surface topography is generally flat and non-sloping. The site has previously been occupied by commercial buildings and structures associated with the Schenectady County Coal Company, the City's public market, the City Pipe Yard, a wagon painting building, and a gasoline filling station. The approximate locations of these features are shown on Figure 2B – Historical Site Features & Structures.

4.1.2 Surface Water Bodies

Surface water bodies are not located on the site. The nearest surface water body is the Mohawk River, which is located approximately 0.5 mile northwest of the site. The river flows generally eastward to where it joins the Hudson River. The Cowhorn Creek traverses the adjoining property north of Hamilton Street (underground) and flows toward the Mohawk River.

4.1.3 Surface Drainage Patterns

Storm water generated during the course of precipitation events follows surface topography and is directed toward storm drains and catch basins located within the parking lot, which are connected to the City of Schenectady municipal storm sewer system.

4.1.4 Regional Geology

Based on a review of the Surficial Geologic Map of New York, Hudson-Mohawk Sheet, the surficial geology in the vicinity of the site is mapped as recent deposits, generally confined to floodplains within a valley, consisting of oxidized, non-calcareous fine sand to gravel.

According to the Geologic Map of New York, Hudson-Mohawk Sheet, bedrock in the vicinity of the site is mapped as the Normanskill Shale, which consists of minor mudstone and sandstone. As discussed herein, the published regional geology descriptions are consistent with the investigation findings.

4.1.5 Site Soils

The on-site and off-site soils were explored through the advancement of twelve (12) soil borings that were later converted to monitoring wells. The borings were advanced to depths ranging from 14 to 16 feet below grade. A subsurface exploration log for each test boring performed for this project was prepared, and is presented in Appendix B. The logs summarize and present the classifications of the subsurface soils, moisture content and other pertinent visual observations of the soil stratum for the site. The site soils, as visually classified using the Unified Soil Classification System at the time of test boring completion consist of the following: fill material of variable composition (sand, silt, gravel, cinders, ash, fragments of brick, concrete, glass and wood) from just below the asphalt subbase material to depths generally between 4 and 8 feet below grade; underlain by fine to coarse sand and silt to the termination depths of the test borings. Soils encountered at the two *off-site* boring/monitoring well locations adjacent to the eastern side of Broadway consisted predominantly of fine to coarse sand with gravel, cinders, ash and brick fragments (fill materials) to depths of 4 to 8 feet below grade, underlain by fine sand with silt. Bedrock was not encountered either on or off-site within the depth range explored.

At the location of GP-5, black silt with fine sand was observed from approximately 9 to 16 feet below grade, and a creosote-type odor was noted. At GP-6, a black asphalt-type material was observed at approximately 4 feet below grade. At GP-10, black silt and cinders were observed from approximately 6 to 8 feet below grade. At off-site locations GP-14 and GP-15, black soils were observed a tar odor was noted.

Photoionization detector (PID) readings for *on-site* soil samples ranged from 0.2 to 3.5 ppm above background levels, with the exception of four samples. The 0-2' and 4-6' samples at GP-4 exhibited readings of 12.4 and 8.0 ppm above background levels, respectively. The 10-12' sample at GP-5 exhibited a reading of 20.2 ppm above background level (tar/creosote odor noted). The 0-2' sample at GP-3 exhibited a reading of 52.9 ppm above the background level (petroleum odor noted). The subsurface soil sample selected for laboratory analysis from GP-3 was 4-8' (just above the water table). The GP-3 0-2' sample was not submitted for laboratory analysis, based on the collection and submittal of a near-surface soil sample at this location (SS-3).

PID readings for soil samples at *off-site* location GP-14 ranged from 3.1 to 26.1 ppm above background levels (tar/creosote odor and black staining noted), with the highest reading exhibited at 8-10'. PID readings for soil samples at *off-site* location GP-15 ranged from 4.4 to 79.4 ppm above background levels (tar/creosote odor and black staining noted), and increased with depth.

Specific PID readings for samples collected during the advancement of test borings are presented in Appendix B - Organic Vapor Headspace Analysis Logs.

4.1.6 Groundwater Characteristics

According to the map entitled "Potential Yields of Wells in Unconsolidated Aquifers in Update New York, Hudson-Mohawk Sheet" (Edward F. Bugliosi and Ruth A. Trudell, 1988), the subject site is located within an area designated as an unconfined aquifer with the potential to yield more than 100 gallons per minute.

Groundwater conditions on the site were assessed through the advancement of test borings and the subsequent installation of permanent monitoring wells. The installation of groundwater monitoring wells allowed for the collection of static water level data. Water level measurements were collected from the monitoring wells on June 13, August 2 and September 1, 2006. Based on the collected water level data, the water table across the site ranged in depth from approximately 5 to 7.5 feet below existing site grades. Water level data collected on these dates are summarized below in Table 4.1.6-1. The data were used to develop groundwater contour maps, which are presented as Figures 3, 4 and 5, respectively.

Based on the water level data obtained during the RI groundwater monitoring events, the water table did not exhibit significant gradient across the site. During each of the monitoring events, the observed water table elevations varied by less than 1.5 feet. Assuming hydraulic conductivity and porosity values typical of predominantly sandy soils, the groundwater flow velocity across the site is estimated to be in the range of 10^{-3} to 10^{-4} cm/second (or approximately 0.28 to 2.8 feet per day, or 102.2 to 1,022 feet per year). Based on local surface topography, and the groundwater elevation data collected from both the 312 Broadway and 314 Clinton Street sites, shallow groundwater flow direction in the vicinity of the site is expected to be generally to the west and/or northwest, toward the Mohawk River. The groundwater contour maps developed for the 312 Broadway site also indicate a southward component of groundwater flow on the southernmost portion of the site, in the area of GP/CTM-1, and a northward component of flow on the northern portion of the site. Shallow groundwater flow on the northern portion of the site may be influenced by the Cowhorn Creek, which flows west-northwestward across the adjacent property to the north of the site, ultimately to the Mohawk River.

TABLE 4.1.6-1: Summary of Groundwater Elevation Data

Well ID	TOC Elevation (feet amsl)	Date	Depth to Water (feet)	Groundwater Elev. (feet amsl)
CTM-1	227.25	06/13/06	5.15	222.10
		08/02/06	5.59	221.66
		09/01/06	6.09	221.16
CTM-2	228.28	06/13/06	5.56	222.72
		08/02/06	6.07	222.21
		09/01/06	6.44	221.84
CTM-3	228.69	06/13/06	5.83	222.86
		08/02/06	6.43	222.26
		09/01/06	6.68	222.01
CTM-4	229.35	06/13/06	6.70	222.65
		08/02/06	7.31	222.04
		09/01/06	7.46	221.89
CTM-5	227.44	06/13/06	4.79	222.65
		08/02/06	5.12	222.32
		09/01/06	5.55	221.89
CTM-6	228.11	06/13/06	5.38	222.73
		08/02/06	5.72	222.39
		09/01/06	5.99	222.12

TABLE 4.1.6-1: Summary of Groundwater Elevation Data				
Well ID	TOC Elevation (feet amsl)	Date	Depth to Water (feet)	Groundwater Elev. (feet amsl)
CTM-7	228.44	06/13/06	5.77	222.67
		08/02/06	6.21	222.23
		09/01/06	6.46	221.98
CTM-8	228.29	06/13/06	6.45	221.84
		08/02/06	6.28	222.01
		09/01/06	6.72	221.57
CTM-9	227.54	06/13/06	4.64	222.90
		08/02/06	5.30	222.24
		09/01/06	5.70	221.84
CTM-10	227.92	06/13/06	5.11	222.81
		08/02/06	5.75	222.17
		09/01/06	6.17	221.75
CTM-14	228.66	06/13/06	5.43	223.23
		08/02/06	5.83	222.83
		09/01/06	6.23	222.43
CTM-15	227.47	06/13/06	5.49	221.98
		08/02/06	5.43	222.04
		09/01/06	5.92	221.55

NM = Not Measured
Wells CTM-11 through 13 not installed

Field observations and parameters (pH, temperature, conductivity and turbidity) were recorded during groundwater sampling activities completed in June 2006. The pH values for the groundwater samples were relatively neutral with values ranging from 6.65 to 7.18 standard units. The groundwater sample temperatures ranged from 16.7 to 18.3 degrees Celsius. The conductivity for the groundwater samples ranged from 0.87 to 6.98 microsiemens per centimeter (µS/cm). Turbidity values for the sampled groundwater were monitored prior to collecting the analytical samples. Turbidity values ranged from 7.58 to 44 nephelometric turbidity units (NTUs). The table below lists the field parameter values for each well immediately prior to sample collection.

TABLE 4.1.6-2: Groundwater Field Observations Summary			
Well ID	Turbidity[1]	pH & Temp.	Specific Conductance
CTM-1	37 NTU	6.83 @ 16.7°C	3.75 µs/cm
CTM-2	17.9 NTU	6.82 @ 18.3°C	3.27µs/cm

TABLE 4.1.6-2: Groundwater Field Observations Summary			
Well ID	Turbidity[1]	pH & Temp.	Specific Conductance
CTM-3	7.58 NTU	6.93 @ 18°C	3.56 µs/cm
CTM-4	8.93 NTU	6.79 @ 16.7°C	3.61 µs/cm
CTM-5	2.22 NTU	6.7 @ 18.2°C	2.06 µs/cm
CTM-6	31.7 NTU	6.75 @ 17.6°C	2.74 µs/cm
CTM-7	33.5 NTU	6.94 @ 18.1°C	3.32 µs/cm
CTM-8	44 NTU	6.65 @ 16.8°C	3.54 µs/cm
CTM-9	36 NTU	6.88 @ 17.6°C	6.01 µs/cm
CTM-10	24 NTU	6.84 @ 18.2°C	3.38 µs/cm
CTM-14	43 NTU	7.18 @ 16.1°C	0.87 µs/cm
CTM-15	17 NTU	7.07 @ 17.6°C	6.98 µs/cm

Note: Turbidity readings were collected after purging, but before collecting laboratory samples.
Wells CTM-11 through 13 not installed

5.0 NATURE AND EXTENT OF CONTAMINATION

The nature and extent of contamination at the project site is based on subjective and quantitative analyses of samples collected during the RI. Samples collected during the RI included surface soil, subsurface soil and groundwater. The soil and groundwater samples were analyzed for TCL organics, Pesticides, PCBs and TAL metals. The analytical data for the RI are summarized in the following subsections, and are presented on Tables 1 through 9 following the report text.

5.1 Sources

Historical on-site potential sources of contamination consist of industrial operations associated with the Schenectady County Coal Company, a gasoline filling station and fill materials of unknown origin underlying the entirety of the site to depths up to 8 feet below grade. Additionally, a former manufactured gas plant, operated by Schenectady Electric Light & Gas Company, and later by City Gas Works, was located on the adjacent property to the east of the site, across Broadway.

5.2 Determination of Project Standards, Criteria and Guidance (SCGs)

Project SCGs were established for comparison of analytical results of the different media types that were sampled. The media types were surface and subsurface soils, and groundwater.

Laboratory analyses for soil and groundwater sampled as part of the RI were TCL organics (which include volatile and semi-volatile organic compounds), pesticides and PCBs, and TAL metals. Analytical results for soil samples were compared to 6NYCRR Part 375 Restricted Use (Commercial) Soil Cleanup Objectives. Analytical results for groundwater samples were compared to NYSDEC Groundwater Standards and Guidance Values, promulgated in the NYSDEC Division of Water Technical and Operational Guidance Series (TOGS).

5.3 Near-surface Soils

5.3.1 General

Twelve (12) near-surface soil samples, identified as SS-1 through SS-12 on Figure 2, were collected across the Site from the first few inches beneath the gravel subbase underlying the asphalt. Soil comprising the near-surface soil samples was similar at each of the sample locations, and consisted of fine to coarse sand with minor components of silt and gravel. The near-surface soil samples were collected on May 11, 2006, and were forwarded to the laboratory of record for analysis for TCL volatile and semi-volatile organic compounds, pesticides and PCBs, and TAL metals. QA/QC samples were also collected and consisted of one equipment blank and one duplicate sample (duplicate of SS-8).

Summary tables of near-surface soil sampling results (which include detected compounds only) are presented as Tables 1 to 3 in the Tables section of the report.

5.3.2 Volatile Organic Compounds in Near-surface Soil

The analytical results for volatile organic compounds identified two VOCs at concentrations exceeding laboratory detection limits, but below their respective SCGs. Acetone was detected in the DUP-2 sample (a duplicate sample of SS-8) at an estimated concentration of 63 ug/Kg. Carbon disulfide was detected in sample SS-2 at an estimated concentration of 7.7 ug/Kg. Methylene chloride was also detected in three samples (SS-2, SS-3 and SS-6) at concentrations ranging from 130 to 170 ug/Kg, which are orders of magnitude below its applicable SCG. It should be noted that methylene chloride was also identified in the laboratory blank, indicating possible laboratory contamination of the environmental sample.

5.3.3 Semi-Volatile Organic Compounds in Near-surface Soils

Analytical results showed that one or more SVOCs were detected at concentrations above laboratory method detection limits in ten of the twelve near-surface soil samples collected. However, none of these compounds was detected at concentrations above applicable SCGs. Detected SVOCs are listed in Table 2, included in the Tables section of the report. The samples exhibiting the largest number and highest concentrations of SVOCs included SS-4, located adjacent to the northeastern site boundary (along

Hamilton Street), and SS-9 through SS-12, located on the westernmost portion of the site.

5.3.4 Pesticides and PCBs in Near-surface Soils

Pesticides and PCBs were not detected above the laboratory method detection limits in near-surface soil samples.

5.3.5 Metals in Near-surface Soils

A total of twenty (20) Target Analyte List metals were detected in near-surface soil samples at concentrations above laboratory method detection limits. However, none of these metals was detected at concentrations above applicable SCGs. Detected metals are listed in Table 3, included in the Tables section of the report. The various metals detected in near-surface soil samples were not limited to a particular area (or areas) of the site, but rather were exhibited throughout the site at all of the sampling locations.

5.4 Subsurface Soils

5.4.1 General

Subsurface soil samples were retained for laboratory analysis from twelve (12) soil borings advanced using Geoprobe methods at the locations identified on Figure 2 as GP/CTM-1 to GP/CTM-10, and GP/CTM-14 and GP/CTM-15. A total of 12 subsurface soil samples, plus one field duplicate sample were submitted for laboratory analysis. The selection of soil samples for laboratory analysis was based on PID screening results and organoleptic (i.e., sight and smell) perception. At locations where no apparent evidence of contamination was observed, the sample interval immediately above the water table was retained for analysis. The samples were analyzed for TCL organics, pesticides, PCBs and TAL metals.

TABLE 5.4.1-1: Summary of Subsurface Soil Samples Selected for Laboratory Analysis

Test Boring ID	Depth Interval (feet b.g.)	PID Reading (ppm)	Comments/Observations
GP-1	4 - 6	1.0	No odors or staining
GP-2	4 - 6	1.1	No odors or staining
GP-3	4 - 8	2.3	No odors or staining

TABLE 5.4.1-1: Summary of Subsurface Soil Samples Selected for Laboratory Analysis			
GP-4	4 - 6	8.0	No odors or staining
GP-5	10 - 12	20.2	Tar/creosote odor; no staining
GP-6	4 - 6	1.6	No odors or staining
GP-7	4 - 6	1.4	No odors or staining
GP-8	4 - 6	0.4	No odors or staining
GP-9	4 - 6	2.5	No odors or staining
GP-10	4 - 6	1.5	No odors or staining
GP-14	4 - 8	3.8	No odor or staining
GP-15	8 - 12	51.7	Tar/creosote odor; black staining

Summary tables of subsurface soil sampling results, which include detected compounds only, are presented as Tables 4 to 6 in the Tables section of the report.

5.4.2 Volatile Organic Compounds in Subsurface Soils

One or more VOCs were detected at concentrations above the laboratory method detection limits, but *below* their respective SCGs, at eight boring locations. Acetone was detected at GP-1 (in the duplicate sample from GP-1), GP-3, GP-6, GP-10 and GP-14 at estimated concentrations ranging from 69 to 130 ug/Kg. Benzene was detected at GP-7 at an estimated concentration of 27 ug/Kg, and at GP-15 (off-site, along the southeast side of Broadway) at 1,900 ug/Kg. 2-butanone (methyl ethyl ketone) was detected at GP-3, GP-5 and GP-10 at estimated concentrations ranging from 31 to 120 ug/Kg. Ethylbenzene was detected at GP-5 at an estimated concentration of 250 ug/Kg, and at GP-15 at 5,800 ug/Kg. Xylenes were detected at GP-5 and GP-6 at estimated concentrations of 350 and 11 ug/Kg, respectively, and at GP-15 at 3,900 ug/Kg. Methylcyclohexane was detected at GP-15 at an estimated concentration of 200 ug/Kg. Isopropylbenzene was detected at GP-5 at an estimated concentration of 130 ug/Kg, and at GP-15 at 1,700 ug/Kg.

The largest overall number and highest concentrations of VOCs detected in subsurface soil were exhibited at GP-15, which is located off-site along the southeast side of Broadway, in the vicinity of the former manufactured gas plant. The sample interval analyzed from this location was from 8 to 12 feet below grade.

5.4.3 Semi-volatile Organic Compounds in Subsurface Soils

A total of twenty (20) SVOCs were detected at concentrations above the laboratory method detection limits in the subsurface soil samples submitted for analysis. SVOCs detected above their applicable SCGs are summarized below in Table 5.4.3-1, are identified in bold on Table 5 in the Tables section of the report, and are also identified on the SVOCs Above SCGs in Subsurface Soil Samples map in Figure 6.

TABLE 5.4.3-1 SVOCs Exceeding SCGs in Subsurface Soils

SVOC	SCG (ug/kg)	Frequency of Exceeding SCGs	Concentration Range Exceeding SCGs (ug/kg)	Sampling Location(s) Exceeding SCGs
Benzo(a)anthracene	5,600	2 of 12	13,000 to 33,000	GP-6, GP-14
Benzo(b)fluoranthene	5,600	2 of 12	16,000 (J) to 33,000 (J)	GP-6, GP-14
Benzo(a)pyrene	1,000	5 of 12	1,500 to 23,000	GP-1, GP-6, GP-7, GP-14, GP-15
Dibenz(a,h)anthracene	560	2 of 12	580 (J) to 900 (J)	GP-6, GP-14

(J) – Denotes an estimated value.

The SVOCs detected above SCGs were generally within soils sampled from the 4 to 8 foot depth interval (within the depth range of the fill material), with the exception of location GP-15, where SVOCs above SCGs were exhibited at a depth intervals of 8 to 12 feet below grade. At this location, tar/creosote-type odors were noted within the sampled depth interval, and a PID reading of 51.7 ppm was exhibited.

The locations exhibiting the largest numbers and highest concentrations of SVOCs were on-site location GP-6 (from 4 to 6 feet below grade), on the central portion of the site, and off-site location GP-14 (from 4 to 8 feet below grade), located east of the site along the southeastern side of Broadway, in the vicinity of the former manufactured gas plant. The PID readings exhibited by these samples were 1.6 and 3.8 ppm, respectively, and staining was not observed in either sample. However, the subsurface exploration log for GP-6 indicated the presence of a "black asphalt type material" at approximately 4

feet below grade. The subsurface exploration log for GP-14 did not indicate the presence of obvious SVOC-contributing materials within the sampled depth interval; however at depths below 8 feet at this location, black soils were observed and a tar odor was noted.

5.4.4 Pesticides and PCBs in Subsurface Soils

Pesticides and PCBs were not detected at concentrations above the laboratory method detection limits in subsurface soil samples.

5.4.5 Metals in Subsurface Soils

Twenty-one (21) metals were detected in the subsurface soil samples above the laboratory method and/or instrument detection limits. However, none of these metals was detected at concentrations above applicable SCGs. Detected metals are listed in Table 6, included in the Tables section of the report. Metals detected in subsurface soil samples were not limited to a particular area (or areas) of the site, but rather were exhibited throughout the site at all of the sampling locations.

5.5 Groundwater

5.5.1 General

Twelve (12) groundwater monitoring wells, identified on Figure 2 as GP/CTM-1 to GP/CTM-10, GP/CTM-14 and GP/CTM-15, were installed as part of the sitewide subsurface/hydrogeologic investigation. Groundwater samples were collected from the wells and analyzed for TCL organics, pesticides, PCBs and TAL metals. The analytical results are discussed in the following subsections.

Summary tables of groundwater sampling results (which include detected compounds only) are presented as Tables 7 to 9 in the Tables section of the report.

5.5.2 Volatile Organic Compounds in Groundwater

VOCs were detected above the laboratory method detection limits in only one sample, CTM-15. A total of seven (7) VOCs were detected in this sample, six of which were at concentrations above their respective SCGs. VOCs detected above SCGs are summarized below in Table 5.5.2-1, are depicted in bold on Table 7 in the Tables section

of the report, and are also identified on the VOCs Above SCGs in Groundwater Samples map in Figure 11.

TABLE 5.5.2-1 VOCs Exceeding SCGs in Groundwater

VOC	SCG (ug/L)	Frequency of Exceeding SCGs	Concentration Range Exceeding SCGs (ug/L)	Sampling Location(s) Exceeding SCGs
Benzene	1	1 of 12	94	CTM-15
Toluene	5	1 of 12	5.1	CTM-15
Ethylbenzene	5	1 of 12	55	CTM-15
m/p-Xylenes	5	1 of 12	27	CTM-15
o-Xylene	5	1 of 12	22	CTM-15
Isopropylbenzene	5	1 of 12	13	CTM-15

(J) – Denotes an estimated value.

As shown in the table, VOCs exceeding SCGs were exhibited at CTM-15 only, located off-site, adjacent to the southeastern side of Broadway. This well is located in the vicinity of a former manufactured gas plant. Soils below the water table at this location were observed to contain black staining, and were noted as having a tar/creosote odor.

5.5.3 Semi-volatile Organic Compounds in Groundwater

One or more (up to fifteen) SVOCs were detected above the laboratory method detection limits in seven groundwater samples. Seven (7) SVOCs were detected above their respective SCGs, and are summarized below in Table 5.5.3-1, are depicted in bold on Table 8 in the Tables section of the report, and are also identified on the SVOCs Above SCGs in Groundwater Samples map in Figure 12.

TABLE 5.5.3-1 SVOCs Exceeding SCGs in Groundwater				
SVOC	SCG (ug/L)	Frequency of Exceeding SCGs	Concentration Range Exceeding SCGs (ug/L)	Sampling Location(s) Exceeding SCGs
Naphthalene	10	1 of 12	88	CTM-15
Acenaphthene	20	1 of 12	44	CTM-15
Benzo(a)anthracene	0.002	1 of 12	7.7 (J)	CTM-6
Chrysene	0.002	1 of 12	7.3 (J)	CTM-6
Benzo(b)fluoranthene	0.002	1 of 12	8.3 (J)	CTM-6
Benzo(k)fluoranthene	0.002	3 of 12	2.3 (J) to 4.5 (J)	CTM-6, CTM-8, CTM-15
Benzo(a)pyrene	ND	1 of 12	5.8 (J)	CTM-6

(J) - Denotes an estimated value.
ND denotes non-detect

As shown in the table, SVOCS in groundwater exceeding SCGs were limited to on-site locations CTM-6 and CTM-8 (on the central and northeastern portions of the site, respectively), and off-site location CTM-15. The location exhibiting the highest number of SVOCs above SCGs was CTM-6, followed by CTM-15, and then CTM-8, with only one compound above its SCG. Several SVOCs were also identified in the groundwater sample from CTM-14, though not above SCGs.

5.5.4 Pesticides and PCBs in Groundwater

Pesticides and PCBs were not detected above the method and instrument detection limits in any of the samples analyzed.

5.5.5 Metals in Groundwater

Eighteen (18) of the twenty-three (23) metals included in the TAL methodology were detected in groundwater samples at concentrations above the laboratory method detection limits. Eight (8) of these metals were detected at concentrations above their respective SCGs. Metals detected above SCGs are summarized below in Table 5.5.5-1, are shown in bold in Table 9 located in the Tables section of the report, and are also identified on the Metals Above SCGs in Groundwater Samples map in Figure 13.

TABLE 5.5.5-1: Metals Exceeding SCGs in Groundwater

Metal	SCG (ug/L)	Frequency of Exceeding SCGs	Concentration Range Exceeding SCGs (ug/L)	Sampling Location(s) Exceeding SCGs
Aluminum	100	6 of 12	144 (J) to 2,140	CTM-1, CTM-2, CTM-6, CTM-7 CTM-8, CTM-14
Antimony	3	3 of 12	10.7 (J) to 35.7 (J)	CTM-2, CTM-6, CTM-10
Cobalt	5	1 of 12	5.57 (J)	CTM-5
Iron	300	12 of 12	866 to 45,400	All Sample Locations
Lead	25	2 of 12	29.7 (J) to 56.8	CTM-6, CTM-8
Manganese	300	12 of 12	368 to 3,390	All Sample Locations
Mercury	0.7	1 of 12	6.22 (J)	CTM-8
Sodium	20,000	12 of 12	61,200 to 1,380,000	All Sample Locations

(J) - Denotes an estimated value.

5.6 Summary of Extent of Contamination

5.6.1 Near-Surface Soils

Pesticides and PCBs were not detected at concentrations above laboratory method detection limits in the analyzed near-surface soil samples.

One (1) volatile organic compound (methylene chloride) was detected at concentrations above the applicable SCG. It should be noted, however, that methylene chloride was also identified in the laboratory blank, indicating possible laboratory contamination of the environmental sample.

A total of six (6) semivolatile organic compounds (phenol, benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, and benzo(a)pyrene) were detected at concentrations exceeding their respective SCGs.

A total of eight (8) metals (calcium, copper, iron, magnesium, mercury, nickel and zinc) were detected at concentrations exceeding SCGs. Five (5) of the metals (calcium, copper, magnesium, mercury and zinc) were detected at concentrations exceeding their respective Eastern USA Background levels.

Exceedences of SVOC SCGs were most prevalent at sampling locations on the northwestern portion of the site (SS-9 through SS-12). Exceedences of metals SCGs were not exhibited in any particular area of the site, but rather at various locations across the site.

5.6.2 Subsurface Soils

Pesticides and PCBs were not detected at concentrations above laboratory method detection limits in the analyzed subsurface soil samples.

A total of three (3) volatile organic compounds (benzene, ethylbenzene and xylenes) were detected at concentrations exceeding their respective SCGs. The exceedences were limited to *off-site* location GP-15, adjacent to the southeastern side of Broadway.

A total of twelve (12) semi-volatile organic compounds (naphthalene, dibenzofuran, phenanthrene, fluoranthene, pyrene, benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)-fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene,

and dibenz(a,h)anthracene) were detected at concentrations exceeding their respective SCGs. Exceedences were exhibited at six locations on the site, and at both off-site locations. The largest number of individual SVOCs and highest concentrations were exhibited at on-site location GP-6 (4 to 6 feet below grade) and off-site location GP-14 (4 to 8 feet below grade).

A total of nine (9) metals (arsenic, beryllium, chromium, copper, iron, mercury, nickel, selenium, zinc) were detected at concentrations exceeding their respective SCGs. Three of the metals (copper, mercury, zinc) were at concentrations that also exceeded their corresponding Eastern USA Background levels at one or more locations. Exceedences of metals SCGs were not exhibited in any particular area of the site, but rather at various locations across the site.

5.6.3 Groundwater

Pesticides and PCBs were not detected in groundwater samples at concentrations above laboratory method detection limits.

Volatile organic compounds were not detected in groundwater at concentrations above laboratory method detection limits at *on-site* monitoring well locations. A total of six (6) volatile organic compounds were detected at concentrations exceeding their SCGs at *off-site* well location CTM-15, adjacent to the southeastern side of Broadway.

Semivolatile organic compounds were detected in groundwater at concentrations exceeding SCGs at two *on-site* locations (CTM-6, CTM-8) and one *off-site* location (CTM-15). Although these compounds were most numerous at CTM-6, located on the central portion of the site, the highest total concentration of these compounds was exhibited at CTM-15. Only one (1) SVOC was detected and was above its SCG at CTM-8.

A total of eight (8) metals (aluminum, antimony, cobalt, iron, lead, manganese, mercury, sodium) were detected in groundwater at concentrations exceeding SCGs. Metals SCGs were not exhibited in any particular area of the site, but rather at various locations across the site. Of particular interest, lead exceeded its SCG at CTM-6 and CTM-8, on the central and northeastern portions of the site, respectively. Mercury exceeded its SCG at CTM-8. Sodium exceeded its SCG at all sampled locations.

5.7 Past Site Activities Relative to Site Contaminants

Historical usages of the site have been commercial in nature. The site was once occupied by the Schenectady County Coal Company (central and western portions of the site), and a gasoline filling station (southernmost portion of the site). Historically, the site also once contained a building used for wagon painting. The site was also used as a pipe yard and public market. The site is underlain by various amounts of fill material, which consists primarily of sand, silt, gravel, ash, cinders and fragments of brick and concrete from just below the asphalt subbase material to depths of up to 8 feet below grade. The origin of the fill material is unknown. It should also be noted that a manufactured gas plant formerly existed on the adjacent property to the east of the site, across Broadway.

The following relates past site activities to contaminants identified during the RI.

- Fill materials on the site containing ash, cinders and tar-like material are a likely contributor to SVOC detections within this media, subsurface soil and groundwater.

- The former gasoline filling station represents a potential contributor to the organic contaminants identified on the southern portion of the site.

- Metals detected above SCGs and Eastern USA Background levels may be associated with application of road salt to the parking lot surface, may be naturally occurring in the environment and/or may be constituents of the site's underlying fill material.

- Former manufactured gas plant operations immediately east of Broadway represent a potential source of the VOCs and SVOCs detected in subsurface soil/fill and groundwater at CTM-14 and CTM-15.

5.8 Fish and Wildlife Impact Analysis (FWIA) Results

Based on the site's current use as a paved parking lot, its location and lack of any observable wildlife resources, the NYSDEC Project Manager determined that a Fish and Wildlife Impact Analysis (FWIA) was not required for this investigation.

5.9 Data Usability Summary Report

All of the site investigation analytical data has been independently validated in accordance with NYSDEC DUSR requirements. The analytical results tabulated herein reflect the results of the DUSRs and have been appropriately qualified. The DUSRs are presented in Exhibit 6 of this report.

6.0 CONTAMINANT FATE AND TRANSPORT

6.1 General Overview

The site-related contaminants, defined as those compounds exceeding SCGs, include: SVOCs in *on-site* and *off-site* (GP/CTM-14, GP/CTM-15) subsurface soil, and VOCs, SVOCs and metals in *on-site* and *off-site* groundwater. The contaminants are believed to be associated with the historic emplacement of fill on the site, the former commercial uses of the site, and the former presence of a manufactured gas plant immediately east of the site.

The fate and transport of the contaminants are based on the physical and chemical properties of the compounds and the site characteristics. This section defines and discusses the general characteristics of the contaminants which affect the fate and transport, the specific characteristics of the contaminants identified within the site, the site conditions which impact fate and transport, the transport off-site of the contaminants within the subsurface soils/fill, groundwater and soil vapor, and the fate of the contaminants in terms of transformation and degradation.

6.2 Definition of Relevant Properties

Characteristics which affect fate and transport include the compound's or analyte's density, organic carbon/water partition coefficient, solubility in water, volatility, and degradability. The following table (Table 6.2-1) presents various properties of the known contaminants of concern identified on the Site. The specific gravity of a contaminant describes the weight of the contaminant relative to water, where one is the weight of water. The semi-volatile organic compounds and metals identified in Table 6.2-1 have specific gravity values greater than one.

TABLE 6.2-1 - Physical and Chemical Properties of Site Contaminants

Compound	Density	Kow(1)	Koc(2)	Water Solubility(3)	Henry's Law Constant(4)
Semi-Volatile Organic Compounds:					
Acenaphthene	1.024	NDA	NDA	Insoluble	NDA
Benzo(a)anthracene	1.274	5.90	6.14	1.4E-02	2.30E-06

TABLE 6.2-1 - Physical and Chemical Properties of Site Contaminants					
Compound	Density	Kow(1)	Koc(2)	Water Solubility(3)	Henry's Law Constant(4)
Benzo(a)pyrene	1.3510	6.00	6.00	3.8E-03	2.4E-06
Benzo(b)fluoranthene	NDA	6.57	5.74	1.40E-02	1.20E-05
Benzo(k)fluoranthene	NDA	6.85	550,000	5.50E-04	1.04E-03
Chrysene	1.274	5.61	5.39	6E-03	7.26E-20
Naphthalene	1.145	3.30	NDA	Insoluble	4.83E-04
Metals:					
Aluminum	2.70	NA	NA	NDA	NA
Antimony	6.68	NA	NA	NDA	NA
Cobalt	8.9	NA	NA	NDA	NA
Lead	11.35	NA	NA	0.001	NA
Magnesium	1.74	NA	NA	NDA	NA
Mercury	13.53	NA	NA	2.0E-21	NA
Sodium	0.97	NA	NA	Decomposes	NA

References: Superfund Public Health Evaluation Manual; EPA/540/189/002; Hawley's Condensed Chemical Dictionary, Twelfth Edition; Howard, Philip H., Fate and Exposure Data for Organic Chemicals. Vols. 1&2. 1989; and Robert C. Knox and others, Subsurface Transport and Fate Processes, 1993; Wilson & Clarke, Hazardous Waste Site Soil Remediation, Theory and Application of Innovative Technologies, 1994.

NDA denotes no data available in cited references.

NA denotes not applicable.

(1) Log octanol/water partition coefficient.

(2) Organic carbon partition coefficient. Often a range is available rather than a single number.

(3) mg/l at 25 degrees C.

(4) Henry's Law constant, atm-m^3 / mole.

6.3 Contaminant Persistence

The organic carbon/water partition coefficient (Koc) indicates the tendency of an organic contaminant (VOCs and SVOCs) to sorb onto soil or sediment particles. Where the Koc is not experimentally available, it can be calculated based on the log octanol/water partition coefficient. The Koc multiplied by the organic carbon content of a given soil gives the estimated absorption partition coefficient (K_d) for that soil. Some absorption may occur between contaminants and inorganic soil or sediment particles, particularly clay. However, experimental data indicates that the absorption of nonionic, undissociated chemicals to inorganic soil or sediment is low. Once the sorption sites in soil are used up, mobility will usually increase to some extent.

Mobility is expected to be lowest in surface soils, which tend to have some organic

carbon. Below several feet in depth, the organic carbon content of soils is likely to be very low, and even a compound with a high Koc will be moderately mobile. However, fill containing organic materials such as ash, cinder or building rubble may have organic carbon levels that equal or exceed surface soils. The SVOCs have a wide range of organic carbon partition coefficient values that range from 5.39 for chrysene, indicating low sorption and high mobility, to 550,000 for benzo(k)fluoranthene, indicating medium to high sorption and low to medium mobility in soil.

The mobility of metals is affected by geologic conditions, and is often gauged by the environment's oxidation/reduction (redox) potential. As the pH and dissolved oxygen vary, the solubility of metals can change substantially. Generally, but not always, reductive conditions favor the solid phase of the metal, so a change toward reducing conditions can precipitate soluble metals, making them immobile.

Water solubility indicates the tendency of a compound to dissolve in and travel in water. The site contaminants (except for metals) have a wide range of solubilities, but are generally soluble. When contaminant concentrations are above approximately ten percent of the water solubility, a separate phase will tend to form. The water solubility values of the semi-volatile organic contaminants in groundwater vary, but are on the order of 0.00055 to 0.3 mg/l. Since the concentration of contaminants detected at the site are less than their corresponding water solubility values, separate phase layers are not likely to exist within the site. The majority of the metals of concern are nearly insoluble in water, with the exception of sodium, which readily dissolves in water.

Volatility in diffuse aqueous conditions such as those that occur in groundwater at the site is quantified by Henry's constant (K_h). The rate of volatilization increases as K_h increases. Volatility increases with decreases in atmospheric pressure, increase in temperature and when the compound vapor pressure is low relative to saturation. The contaminants of concern (with the exception of metals, which are not volatile) include semivolatile organic compounds, which will volatilize to some degree when unsaturated vapor, such as soil gas or the open atmosphere, are present.

Due to the composition of metals, they do not typically biodegrade. Lighter petroleum hydrocarbon contaminants biodegrade readily. The heavier, semi-volatile organic compounds biodegrade at a slower rate, primarily under anaerobic conditions. Biodegradation of SVOCs in soil/groundwater has been found to occur under aerobic

and to a lesser extent anaerobic conditions, such as occurs in groundwater. The presence of acclimatized microbes, which are likely to occur within the site, enhances biodegration of SVOCs. Acclimatized microbes are soil micro-organisms which have adapted themselves to the contaminants by producing enzymes to withstand toxic effects and to allow metabolism of the contaminants. Addition of nutrients and oxygen would be expected to increase the rate of biotic degradation.

6.4 Contaminant Migration

The potential routes of contaminant migration are through groundwater and the atmosphere. Depending on their solubility, contaminants could dissolve in groundwater and be transported in the direction of groundwater flow. Contaminants potentially present in the vapor phase of the unsaturated soil/fill zone could vertically migrate to the open atmosphere. VOCs, SVOCs and metals in near-surface soils/fill material could be transported to the atmosphere in the form of dust particulates should the asphalt surface cover be removed and this media be disturbed.

6.4.1 Groundwater Migration

Due to the presence of heavier than water semi-volatile organic compounds, migration of these contaminants may be occurring within lower portions of the aquifer. It is expected that these compounds will migrate in the direction of groundwater flow. The majority of the detected metals (with the exception of calcium and sodium) are insoluble in water and tend to adsorb and/or absorb to surrounding soil and fill particles; indicating a low propensity to migrate in the direction of groundwater.

Groundwater beneath the site generally flows towards the Mohawk River. Physical and chemical factors affecting the migration rate of contaminants include: the historical disposition of fill materials; natural biodegradation; bio-accumulation by organic materials; sorption onto soil and fill particles; and volatilization into the vadose zone and the unsaturated soils.

6.4.2 Atmospheric Migration

Site contaminants (SVOCs) in soil vapor will diffuse slowly upward and horizontally to unsaturated soil vapor. Although the site is almost entirely covered with asphalt pavement, it is possible that contaminants would migrate upward in the fill/near-

surface soil and diffuse to the atmosphere through cracks in the pavement and in areas were the pavement is absent. The rate of diffusion into the atmosphere depends on the differential in vapor saturation and on the atmospheric pressure. Under natural conditions, the differential is expected to be low within the soil. At the soil/atmosphere interface, the differential can change frequently, with great increases in differential causing contaminants to transport rapidly from surface soil to the atmosphere. Site contaminants which may volatilize from the site soils/fill to the atmosphere will disperse or abiotically degrade, with rates dependent on wind speed and levels of atmospheric radicals. Since the levels of contaminants are at relatively low levels, SVOC contaminants in the atmosphere are not expected to accumulate at detectable levels under existing conditions. Metals do not typically exhibit volatility and therefore would not likely enter the atmosphere unless site soils/fill were disturbed such that dust particles with metals adhered to them enter the atmosphere.

7.0 EXPOSURE ASSESSMENT

7.1 Qualitative Exposure Assessment

The purpose of the qualitative exposure assessment is to evaluate the potential for human exposure from site related contamination without any additional remediation. In performing the qualitative exposure assessment, the potential site related contaminants and the actual or potential exposure pathways were identified. The potentially exposed populations and the extent of actual or potential exposure were also evaluated.

The potential site-related contaminants were identified as those contaminants detected in various media at the site above SCGs. Potential exposure pathways for site contaminants are a function of the contaminant, the affected media, contaminant location and the potentially impacted population. The present potential exposure routes and pathways include the following:

- dermal contact and/or ingestion of potentially contaminated soil on-site;
- dermal contact and/or ingestion of contaminated groundwater generated from potential leaching of contaminants during storm water infiltration/percolation and then migrating with groundwater; and
- inhalation of dust and/or vapor emissions transported by wind.

The potential impacted populations at the site and vicinity include residents in the neighboring community, site visitors, trespassers on the site, workers engaged in subsurface excavation or other ground disturbance activity and construction workers during future site development.

Multiple semivolatile organic compounds were detected in subsurface soils/fill materials at concentrations exceeding SCGs. Disturbance of the subsurface soils/fill materials during future construction activities could potentially create airborne contaminants that may be inhaled and/or ingested. The potential for dermal contact, inhalation and ingestion of the impacted subsurface soil/fill material is, therefore,

anticipated to be high during construction activities but remains low at present, as the site is entirely covered with asphalt.

SVOCs were detected in groundwater at concentrations exceeding SCGs at two locations on the Site. Metals were detected at concentrations exceeding SCGs at locations across the Site. Considering that the depth to groundwater is greater than 4 feet below grade, the potential for dermal contact through exposure to groundwater and the associated impact is anticipated to be low, unless groundwater is encountered and subsequently disturbed during construction activities, where it may need to be evacuated and treated. Ingestion of the contaminated groundwater is unlikely since the area surrounding and downgradient of the Site is serviced by public water and no private water supply wells are known to exist on or in the vicinity of the Site.

8.0 SUMMARY AND CONCLUSIONS

8.1 Summary

The site investigation work tasks have been completed in substantial conformance with the Remedial Investigation/Alternatives Analysis (RI/AA) Work Plan for the Site, dated April 7, 2006. Any deviations to the Work Plan have been discussed within the body of this report.

8.1.1 Site Background

The site is currently developed as a municipal parking lot along the northwestern side of Broadway, between Clinton Street Extension and Hamilton Street. In addition to parking areas, the site also includes a vacant two-story building (referred to as the "Scale House" and an enclosed aboveground space (vault), with an earthen floor, at the southwestern corner of the site, recessed in a concrete retaining wall which runs along the western property boundary. A review of historical sources shows that prior to its current usage as a parking lot, the site was historically occupied by commercial buildings including stores, warehouses, garages, a gasoline filling station.

Based on the results of a Phase I Environmental Site Assessment (ESA) conducted by others in February 2004, a limited Phase II ESA was conducted on the site by C.T. Male in April 2004. Soil and groundwater samples submitted for laboratory analysis as part of the assessment showed the presence of volatile organic compounds at concentrations exceeding regulatory limits at sampling locations in the areas of the former gasoline filling station

8.1.2 Physical Characteristics of the Project Site

The project site consists of an asphalt-paved parking lot, with landscaped areas, guardrails and pole-mounted lights. The site is generally flat and level. Subsurface lithology on the site consists of fill material of variable composition (sand, silt, gravel, ash, cinders, fragments of brick and concrete) from just below the asphalt subbase material to depths up to 8 feet below grade, underlain by fine to coarse sand and silt to depths up to 16 feet below grade (explored depth range). Bedrock was not encountered within the explored depth range.

Surface water bodies are not located on the site. The Mohawk River is approximately 0.6 mile northwest of the site, and flows generally eastward to where it joins the Hudson River.

Storm water generated during the course of precipitation events is directed toward on-site storm drains and catch basins which are connected to the City of Schenectady municipal storm sewer system.

Groundwater was encountered on the site at depths ranging from approximately 5 to 7 feet below existing grades, and overall shallow groundwater flow direction across the site is inferred to be generally toward the west or northwest, toward the Mohawk River.

8.1.3 Fish and Wildlife Impact Analysis (FWIA)

Based on the site's current use as a paved parking lot, its location and lack of any observable wildlife resources, the NYSDEC Project Manager determined that a Fish and Wildlife Impact Analysis (FWIA) was not required as part of this investigation.

8.1.4 Survey of Public and Private Wells

According to information from the City of Schenectady and the Schenectady County Health Department, the area of the project site is served by the City of Schenectady's municipal water supply system. Private water supply wells are reportedly not located on or in the vicinity of the project site.

8.1.5 Nature and Extent of Contamination

The primary contaminants of concern *on* the Site are SVOCs in subsurface soil/fill material, and SVOCs and metals in groundwater. Contaminants of concern at the *off-site* locations (GP/CTM-14, CP/CTM-15) include SVOCs in subsurface soil/fill material, and VOCs, SVOCs and metals in groundwater. The following summarizes the nature and extent of contamination for the project site per media type.

Near-Surface Soils

Twelve (12) near-surface soil samples were collected as part of the RI. Pesticides and PCBs were not detected at concentrations above laboratory method detection limits in near-surface soil samples. Although some VOCs, SVOCs and metals were detected in near-surface soil samples at concentrations above the laboratory method detection limits, the detected concentrations were not above applicable SCGs.

Subsurface Soils and Fill Material

Twelve (12) samples of subsurface soils/fill were submitted for laboratory analyses during the RI.

Pesticides, PCBs, VOCs and metals were not detected in subsurface soil samples at concentrations exceeding SCGs.

Four (4) SVOCs were detected above SCGs at varying frequencies in subsurface soil samples from three (3) *on-site* locations (GP/CTM-1, GP/CTM-6, GP/CTM-7) and the two *off-site* locations (GP/CTM-14, GP/CTM-15). The highest numbers of individual SVOCs and the highest concentrations were exhibited at GP-6, on the central portion of the site. The subsurface exploration log for this location indicated the presence of a black asphalt type material near the top of the sample depth interval. The locations exhibiting the next highest concentrations of SVOCs were off-site locations GP-14 and GP-15. The subsurface exploration logs for these locations noted the presence of black soils and tar/creosote odors within the sampled depth intervals.

Groundwater

Twelve (12) groundwater samples were collected and submitted for laboratory analyses during the RI.

Pesticides and PCBs were not detected at concentrations above SCGs in groundwater samples. VOCs were not detected above SCGs at *on-site* locations; however, five (5) VOCs were detected above SCGs at *off-site* location CTM-15.

A total of six (6) SVOCs were detected above SCGs. Exceedences of SCGs were exhibited at three monitoring well locations: on-site locations CTM-6 (five SVOCs) and CTM-8 (one SVOC); and off-site location CTM-15 (3 SVOCs).

Five (5) metals were detected above SCGs at varying frequencies at monitoring well locations across the site. Of particular interest, the concentration of mercury was abnormally elevated at the location of CTM-8, on the northeastern portion of the site.

8.1.6 Fate and Transport

The primary contaminants of concern on the Site are SVOCs in subsurface soils/fill material on the central and southern portion of the Site, SVOCs in groundwater on the central and northeastern portions of the Site, and metals in groundwater across the Site.

The SVOCs in subsurface soil/fill will tend to adhere to surrounding soil and fill particles, and may volatilize to the atmosphere should the soils/fill be disturbed.

Metals in groundwater (except calcium and sodium, which decompose in water) are expected to adhere to surrounding soil and fill particles and will not necessarily follow groundwater flow direction nor volatilize to the vadose zone.

The transport mechanisms for the contaminants present at the site are migration within the groundwater and/or volatilization into the atmosphere. The SVOCs identified within the soil and fill materials may be dispersed to the atmosphere should this media be disturbed. However, should the SVOCs migrate downward into the groundwater, they will tend to sink to the bottom of the aquifer to a less permeable soil type (silt/clay) and migrate in the direction of groundwater flow and/or the surface of the less permeable unit. Most metals are strongly held, reducing their migration and extent of contamination, with the exception of calcium and sodium, which readily dissolve in groundwater.

8.2 Conclusions

Analytical results from sampling of near-surface soil, subsurface soil and groundwater at locations on the southern portion of the Site (general vicinity of the former gasoline filling station) indicated that gasoline-related VOCs were not detected in these media at concentrations above laboratory method detection limits.

Subsurface soil analytical results indicate that detected SVOCs on the Site, and in particular, those above SCGs, are most prevalent within the depth range of the fill material (up to 8 feet below grade) on the Site. SVOCs above SCGs appear to be most

concentrated on the central/southern portion of the Site (GP-1, GP-6, GP-7), and at the two *off-site* locations adjacent to the southeastern side of Broadway (GP-14 and GP-15).

Groundwater analytical results indicate the presence of VOCs and SVOCs above SCGs at one of the *off-site* locations (CTM-15). SVOCs above SCGs in groundwater on the Site were limited to the central portion of the Site (CTM-6), and the northeastern portion of the Site (CTM-8). The presence of only trace levels of these compounds in groundwater at the locations on the southeastern portion of the Site (CTM-1 through CTM-4) suggests fill materials as a likely source of the SVOCs in groundwater in the vicinity of CTM-6. The presence of creosote-type odors in soils on the southern portion of the Site (GP-5) is consistent with previous investigation findings. The report of the 2004 limited Phase II assessment indicated that soil samples collected at three test boring/monitoring well locations on the southern portion of the Site, from a depth range of 6 to 20 feet below grade, were noted as having a creosote-type odor. Groundwater sampling results from monitoring wells MW-3 (on the south-central portion of the Site, south of CTM-6), and MW-1 (in the southern corner of the Site, south-southeast of CTM-6), showed the presence of several SVOCs at concentrations above SCGs. Based on the recent groundwater elevation data, the apparent southward component of shallow groundwater flow on the southern portion of the Site further suggests on-site fill materials as a source of the SVOCs in groundwater in the vicinity of CTM-6.

Based upon the findings of this site investigation, additional subsurface investigative activities are warranted for two areas of the Site: 1) within the aboveground vault at the western corner of the Site, based on the results of recent surface soil sampling, which indicated the presence of PCBs, SVOCs and metals at concentrations above SCGs; and 2) on the northwestern portion of the Site, in the area of the former garage structure, based on further review of historical Sanborn Fire Insurance Maps (subsequent to submittal of the RI Work Plan) which indicate the former presence of a gasoline UST in this area (see section 2.4). Multiple attempts were made to complete a test boring/monitoring well in the area to the south and west of the tank location during the RI (GP-11); however refusal was encountered at depths of 4 feet below grade or less at these locations. The additional investigative efforts will be focused on the area in the immediate vicinity of the tank location, as depicted on the historical maps. The findings of the additional investigative activities will be submitted as an addendum to this report.

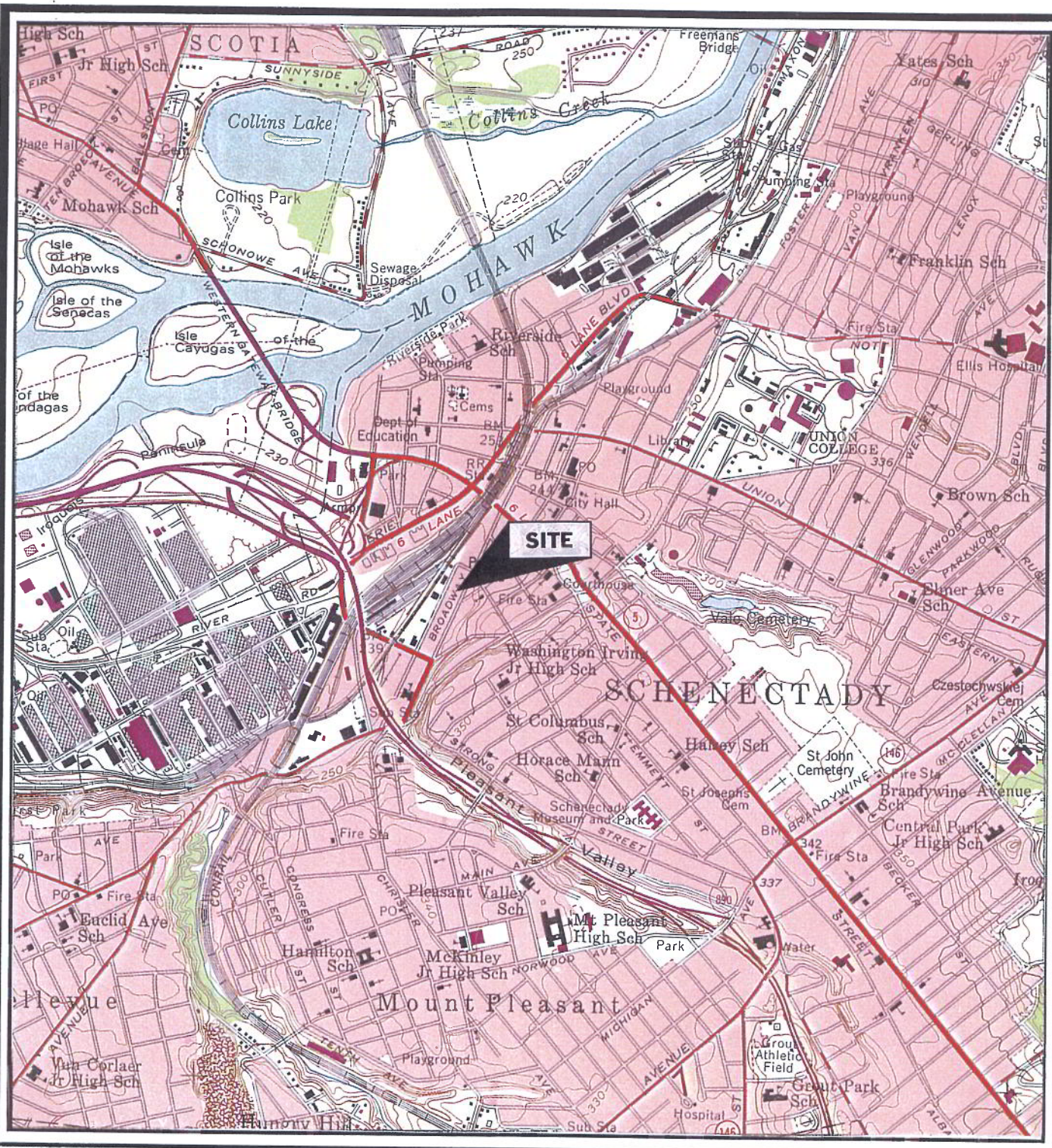
With the exception of the aboveground vault and the area in the vicinity of the former garage structure, as noted above, the site investigation has adequately delineated the presence and extent of the contaminants of concern identified for the site. Further investigations may be necessary during the design phase of the selected remedial actions to refine the areas of concern and gather additional information necessary to complete the remedial design. However, the existing data is considered to be sufficient for the preparation of the Alternatives Analysis Report (AAR). The AAR presents and discusses potential options for addressing the contaminants of concern.

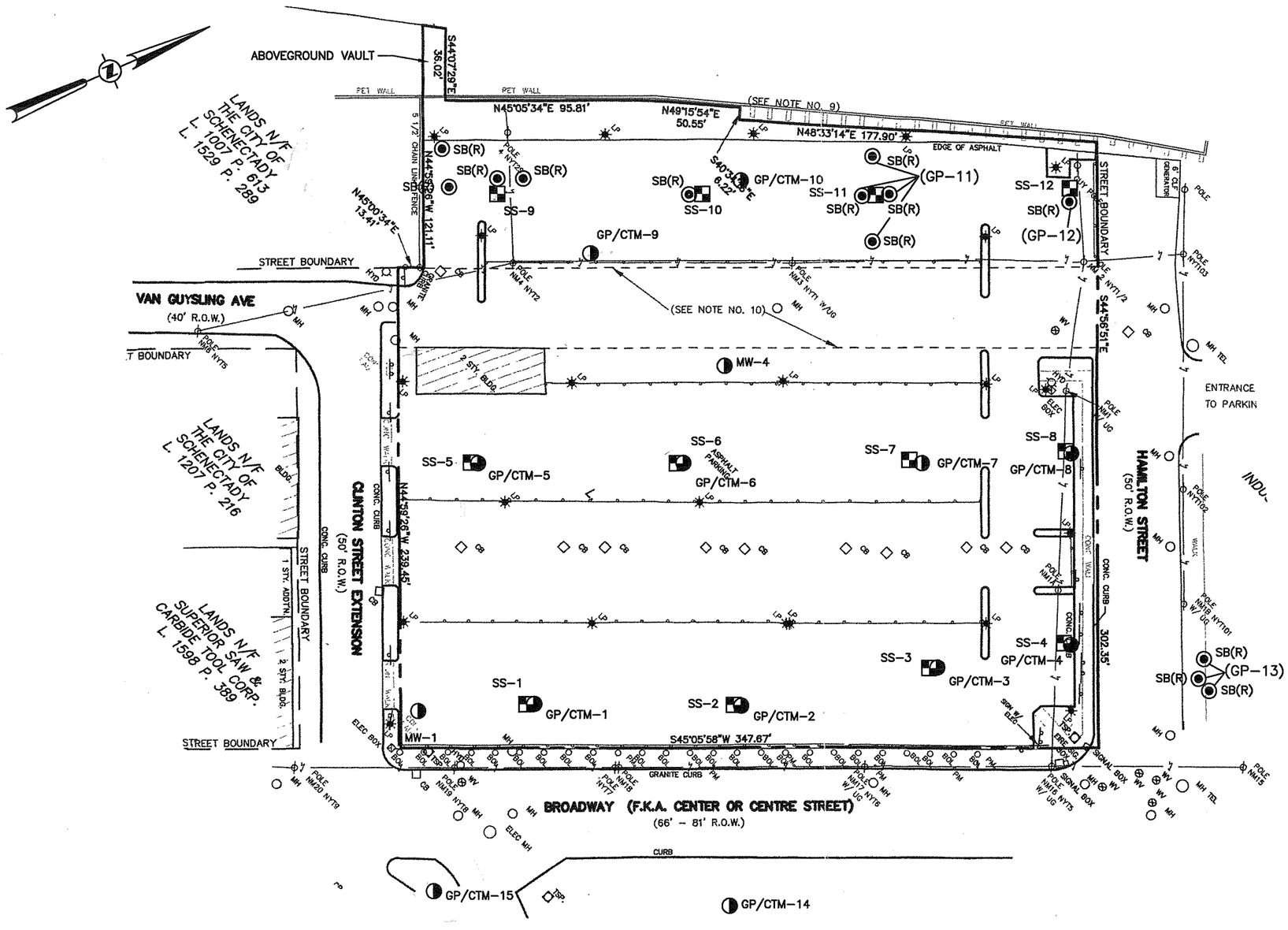
8.2.1 Data Limitations and Disclaimer

All of the site investigation analytical data has been independently validated in accordance with NYSDEC DUSR requirements. The DUSRs did not reject any of the analytical data and declared that all analytical results are considered usable with minor edits/qualifications. Modifications of analytical results pursuant to review of the DUSRs have been incorporated where necessary on the analytical summary tables. The narrative portions of the DUSRs are presented in Exhibit 2 of this report.

FIGURES

Figure 1 Site Location Map
Figure 2A Monitoring Well/Sampling Locations
Figure 2B Historical Site Features & Structures
Figure 3 Groundwater Contour Map (June 13, 2006)
Figure 4 Groundwater Contour Map (August 2, 2006)
Figure 5 Groundwater Contour Map (September 1, 2006)
Figure 6 SVOCs Above SCGs In Subsurface Soil Samples Map
Figure 7 VOCs Above SCGs In Groundwater Samples Map
Figure 8 SVOCs Above SCGs In Groundwater Samples Map
Figure 9 TAL Metals Above SCGs In Groundwater Samples Map


SCOTIA
SCHENECTADY
Mount Pleasant
MOHAWK
Collins Lake
Collins Creek
Collins Park
Mohawk Sch
Isle of the Mohawks
Isle of the Senecas
Isle of the Cayugas
Sewage Disposal
Riverside Park
Riverside Sch
Pumping Sta
Cems
Dept of Education
Peninsula
Iroquois
SITE
City Hall
Courthouse
Fire Sta
Library
UNION COLLEGE
Ellis Hospital
Franklin Sch
Brown Sch
Elmer Ave Sch
Vale Cemetery
Washington Irving Jr High Sch
St Columbus Sch
Horace Mann Sch
Hadley Sch
St John Cemetery
St Joseph's Cem
Schenectady Museum and Park
Brandywine Avenue Sch
Central Park Jr High Sch
Pleasant Valley Sch
Mt Pleasant High Sch
McKinley Jr High Sch
Hamilton Sch
Euclid Ave Sch
Van Corlaer Jr High Sch
Grout Athletic Field
Grout Park Sch
Hospital
Playground
Park
Water
Sub Sta
Oil
Freemans Bridge
Xates Sch
Jr High Sch
Western Gateway Bridge
Sunnyside
Schonowe Ave
Lane Blvd
Union
Broadway
State
Erie
River
Strong
Pleasant
Valley
Main Ave
Norwood Ave
Michigan Avenue
Tenth Ave
Van Vranken
Foster
Van Vranken
Lenox
Wendell
Glenwood
Parkwood
Eastern
Brandywine
Becker
Emmett
Conrail
Cutler
Congress
Christopher
Ten Broeck Avenue
Nelson
First
Oil
Sub Sta
Pumping Sta
Playground
Fire Sta
Library
Cems
Dept of Education
Courthouse
Water
Hospital
Park
Sub Sta
Oil
Sub Sta
Oil
Sub Sta
Oil



MAP NOTES

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2. Boundary and planimetric features shown are images taken from map reference No. 1., not a result of an actual field survey.
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4. Soil borings shown are approximate and not a result of an actual field location.

MAP REFERENCE

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LEGEND

BOL	BOLLARD
CB	CATCH BASIN
GV	GAS VALVE
HYD	HYDRANT
LP	LIGHT POLE
MH	MISCELLANEOUS MANHOLE
NM15	UTILITY POLE
WV	WATER VALVE
CTM-1	MONITORING WELL LOCATION (WELLS INSTALLED BY C.T. MALE APRIL 2006)
MW-1	MONITORING WELL LOCATION (WELLS INSTALLED BY C.T. MALE APRIL/MAY 2004)
SB(R)	SOIL BORING WHERE REFUSAL WAS ENCOUNTERED AT APPROX. 4 FEET OR LESS (C.T. MALE MAY 2004)
SS	NEAR-SURFACE SOIL SAMPLE LOCATION (SAMPLES COLLECTED BY C.T. MALE MAY 2006)

BAR SCALE

60 0 30 60 120

1 inch = 60 ft.

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PROJ. NO: 05.5550

SCALE : 1"=60'

DATE : JUNE 6, 2006

FIGURE 2A
MONITOR WELL/SAMPLING LOCATIONS

ENVIRONMENTAL RESTORATION PROGRAM INVESTIGATION
LOWER BROADWAY PARKING LOT/312 BROADWAY

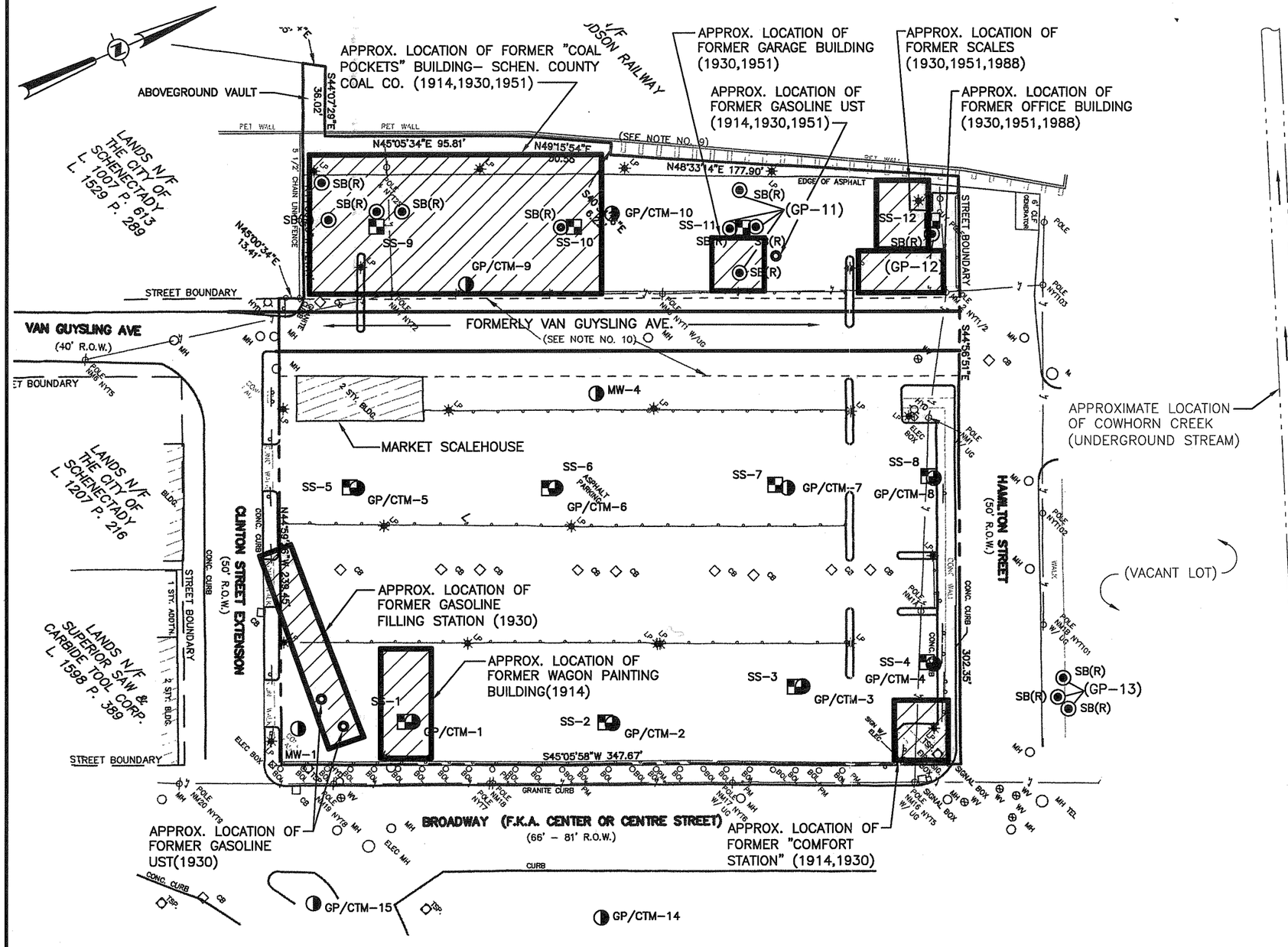
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DWG. NO: 07-140

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5. The locations of historical site features & structures are approximate, and are based on review of historical Sanborn Fire Insurance Maps.

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SS	NEAR–SURFACE SOIL SAMPLE LOCATION (SAMPLES COLLECTED BY C.T. MALE MAY 2006)

BAR SCALE
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1 inch = 60 ft.

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PROJ. NO: 05.5550
SCALE : 1"=60'
DATE : NOV 30, 2006

FIGURE 2B
HISTORICAL SITE FEATURES & STRUCTURES

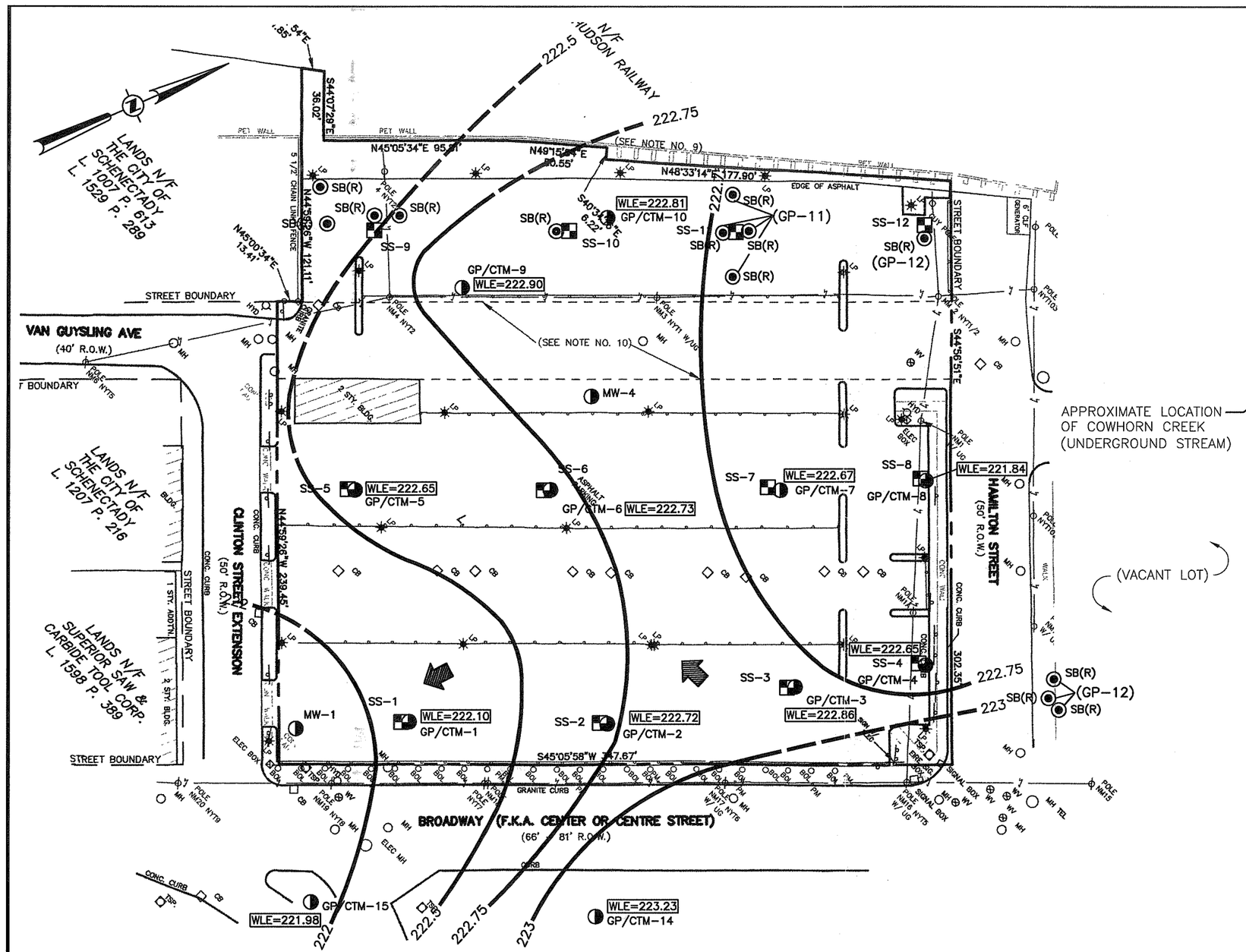
ENVIRONMENTAL RESTORATION PROGRAM INVESTIGATION LOWER BROADWAY PARKING LOT/312 BROADWAY

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▪ SS	NEAR–SURFACE SOIL SAMPLE LOCATION (SAMPLES COLLECTED BY C.T. MALE MAY 2006)
WLE=222.86	DENOTES WATER LEVEL ELEVATION (FEET ABOVE MEAN SEA LEVEL)
—— 222 ——	GROUNDWATER CONTOUR (DASHED WHERE INFERRED)
	INDICATES INFERRED DIRECTION OF GROUNDWATER FLOW

BAR SCALE

60 0 30 60 120

1 inch = 60 ft.

CAD DWG. FILE NAME: I_FINAL_GW_CONTOURS.DWG

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SCALE : 1"=60'

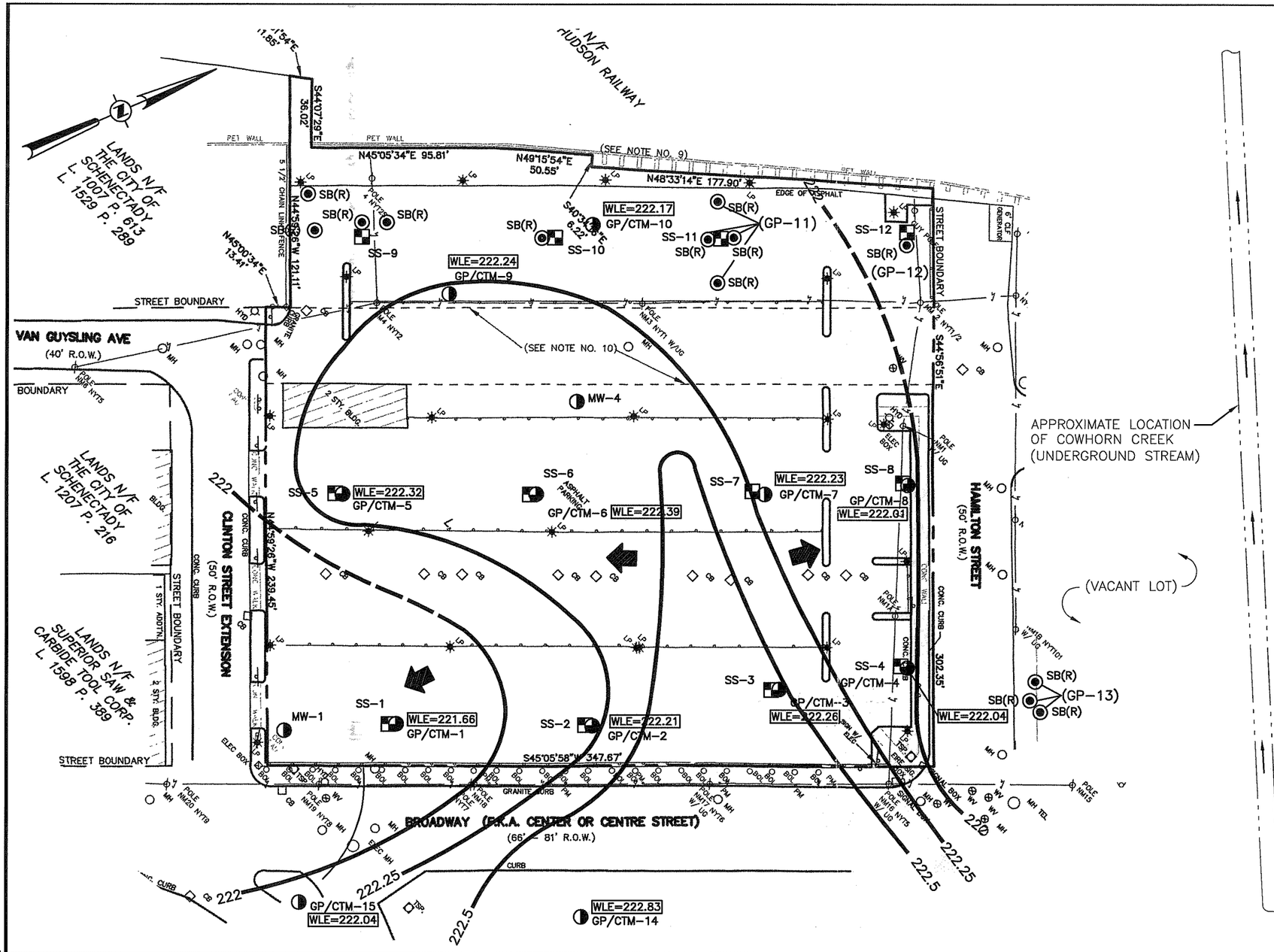
DATE : NOV 8, 2006

FIGURE 3
GROUNDWATER COUNTOUR MAP - JUNE 13, 2006

ENVIRONMENTAL RESTORATION PROGRAM INVESTIGATION LOWER BROADWAY PARKING LOT/312 BROADWAY

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○ WV	WATER VALVE
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MW–1	MONITORING WELL LOCATION (WELLS INSTALLED BY C.T. MALE APRIL/MAY 2004)
SB(R)	SOIL BORING WHERE REFUSAL WAS ENCOUNTERED AT APPROX. 4 FEET OR LESS (C.T. MALE MAY 2006)
SS	NEAR–SURFACE SOIL SAMPLE LOCATION (SAMPLES COLLECTED BY C.T. MALE MAY 2006)
WLE=222.86	DENOTES WATER LEVEL ELEVATION (FEET ABOVE MEAN SEA LEVEL)
222	GROUNDWATER CONTOUR (DASHED WHERE INFERRED)
	INDICATES INFERRED DIRECTION OF GROUNDWATER FLOW

BAR SCALE
60 0 30 60 120
1 inch = 60 ft.

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SCALE : 1"=60'
DATE : NOV 8, 2006

FIGURE 4
GROUNDWATER COUNTOUR MAP - AUGUST 2, 2006

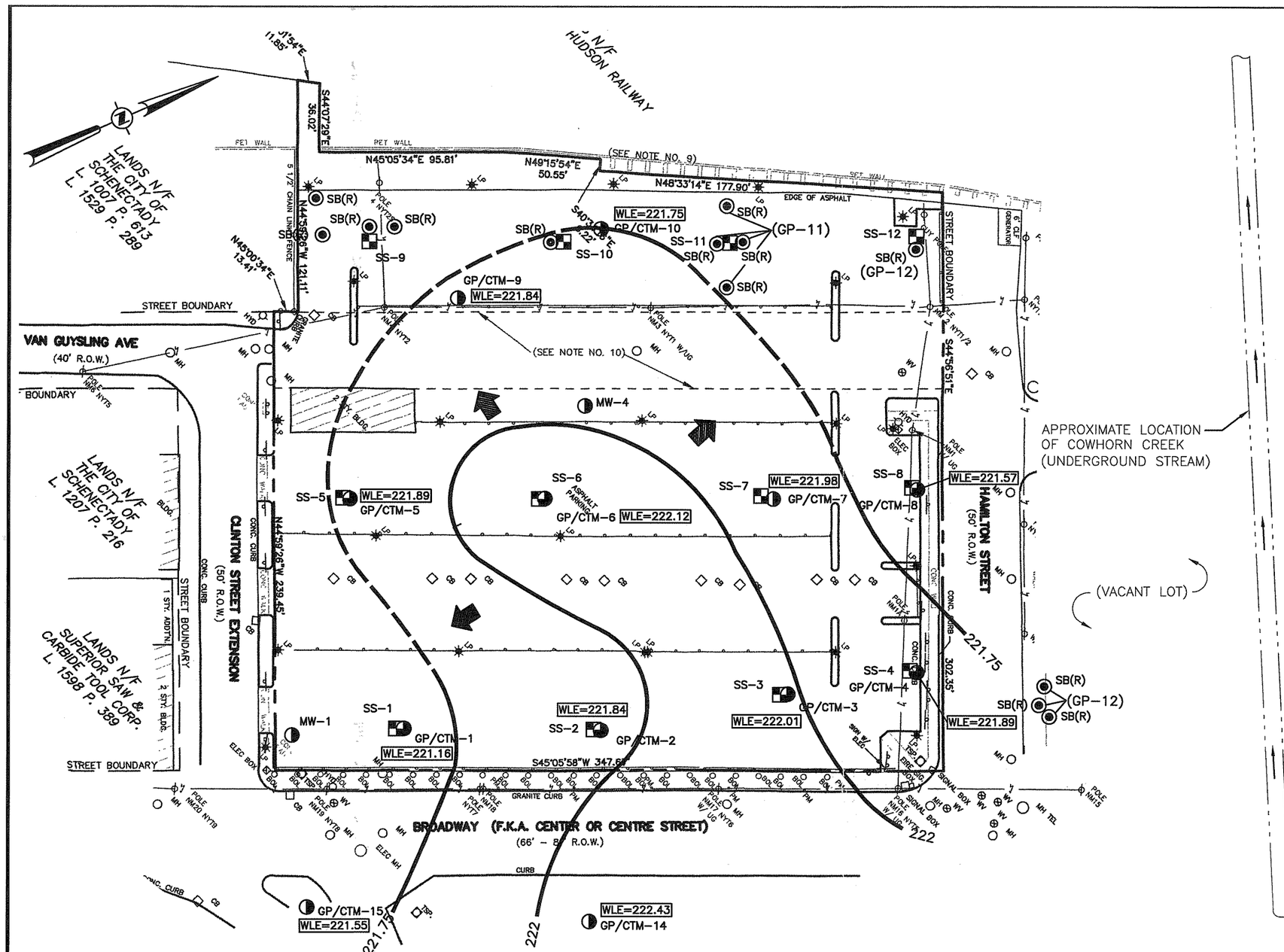
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LOWER BROADWAY PARKING LOT/312 BROADWAY

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SHEET 4 OF 9
DWG. NO: 07–140

CAD DWG. FILE NAME:I_FINAL_GW_CONTOURS.DWG



MAP NOTES

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LEGEND

○ BOL	BOLLARD
□ CB	CATCH BASIN
○ GV	GAS VALVE
◁ HYD	HYDRANT
✳ LP	LIGHT POLE
○ MH	MISCELLANEOUS MANHOLE
⌀ NM15	UTILITY POLE
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	INDICATES INFERRED DIRECTION OF GROUNDWATER FLOW

BAR SCALE
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1 inch = 60 ft.

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CHECKED : J.FAVREAU
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SCALE : 1"=60'
DATE : NOV 8, 2006

FIGURE 5
GROUNDWATER COUNTOUR MAP - SEPTEMBER 1, 2006

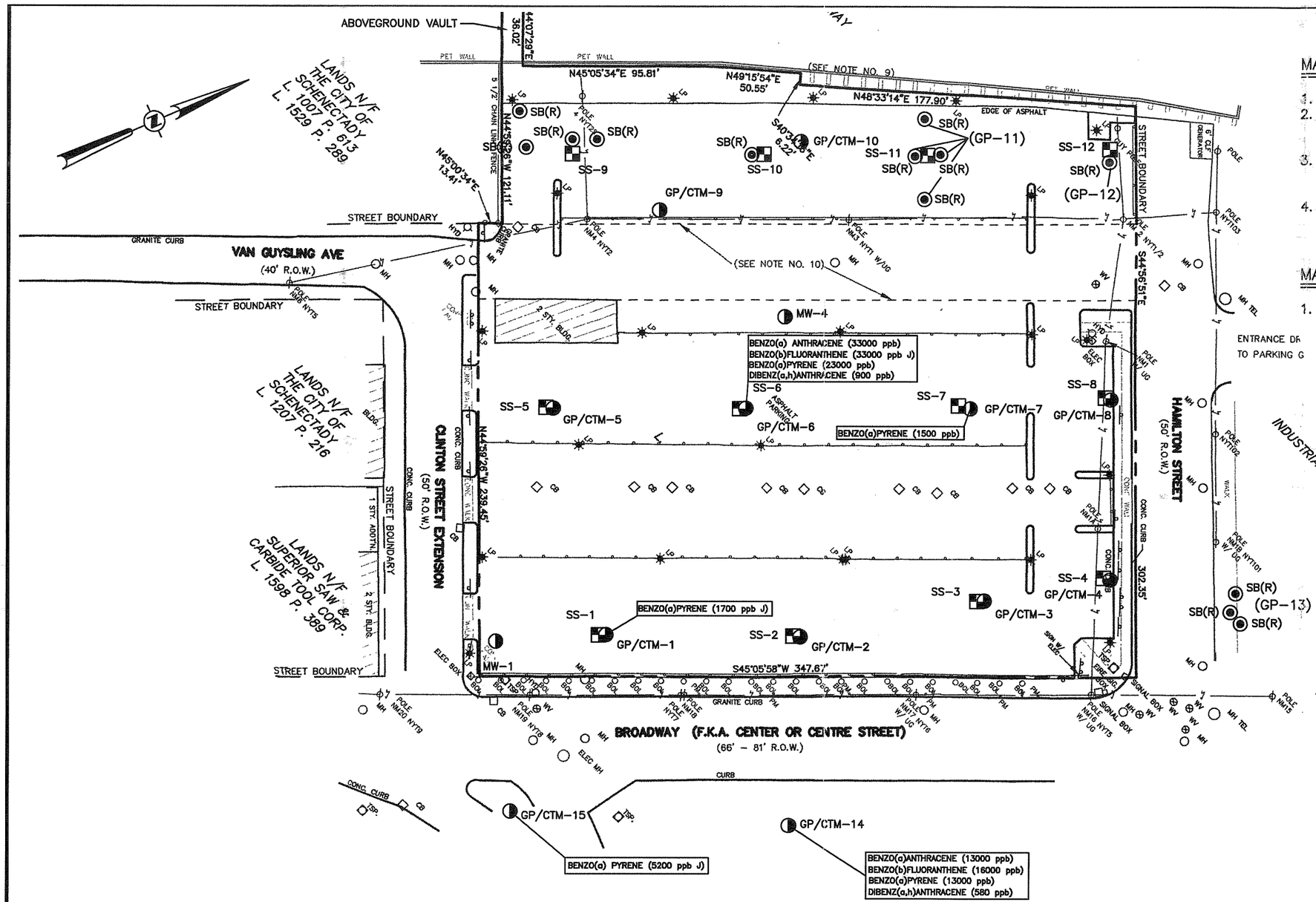
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LOWER BROADWAY PARKING LOT/312 BROADWAY

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DWG. NO: 07–140

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CB	CATCH BASIN
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HYD	HYDRANT
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SS	NEAR-SURFACE SOIL SAMPLE LOCATION (SAMPLES COLLECTED BY C.T. MALE MAY 2006)
PPB	PARTS PER BILLION
J	ESTIMATED CONCENTRATION

BAR SCALE

60 0 30 60 120

1 inch = 60 ft.

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CHECKED : J.FAVREAU

PROJ. NO: 05.5550

SCALE : 1"=60'

DATE : JAN 15, 2007

FIGURE 6
SVOCs ABOVE SCGs IN SUBSURFACE SOIL SAMPLES

ENVIRONMENTAL RESTORATION PROGRAM INVESTIGATION
LOWER BROADWAY PARKING LOT/312 BROADWAY

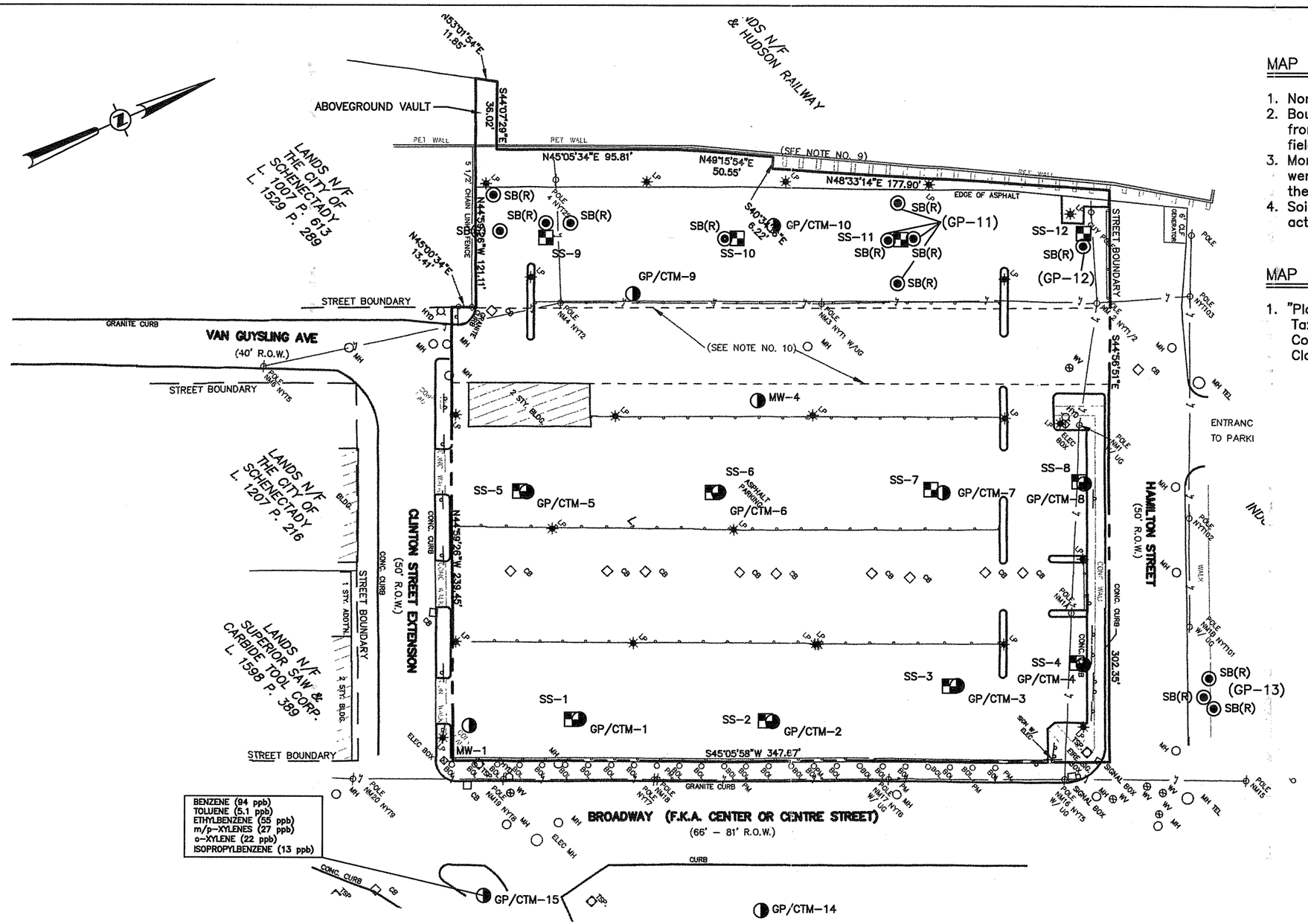
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DWG. NO: 07-140

CAD DWG. FILE NAME: I_FINAL_HAMILTON.DWG



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PPB	PARTS PER BILLION

BAR SCALE
60 0 30 60 120
1 inch = 60 ft.

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PROJ. NO: 05.5550
SCALE : 1"=60'
DATE : SEPT 15, 2006

FIGURE 7
VOCs ABOVE SCGs IN GROUNDWATER SAMPLES

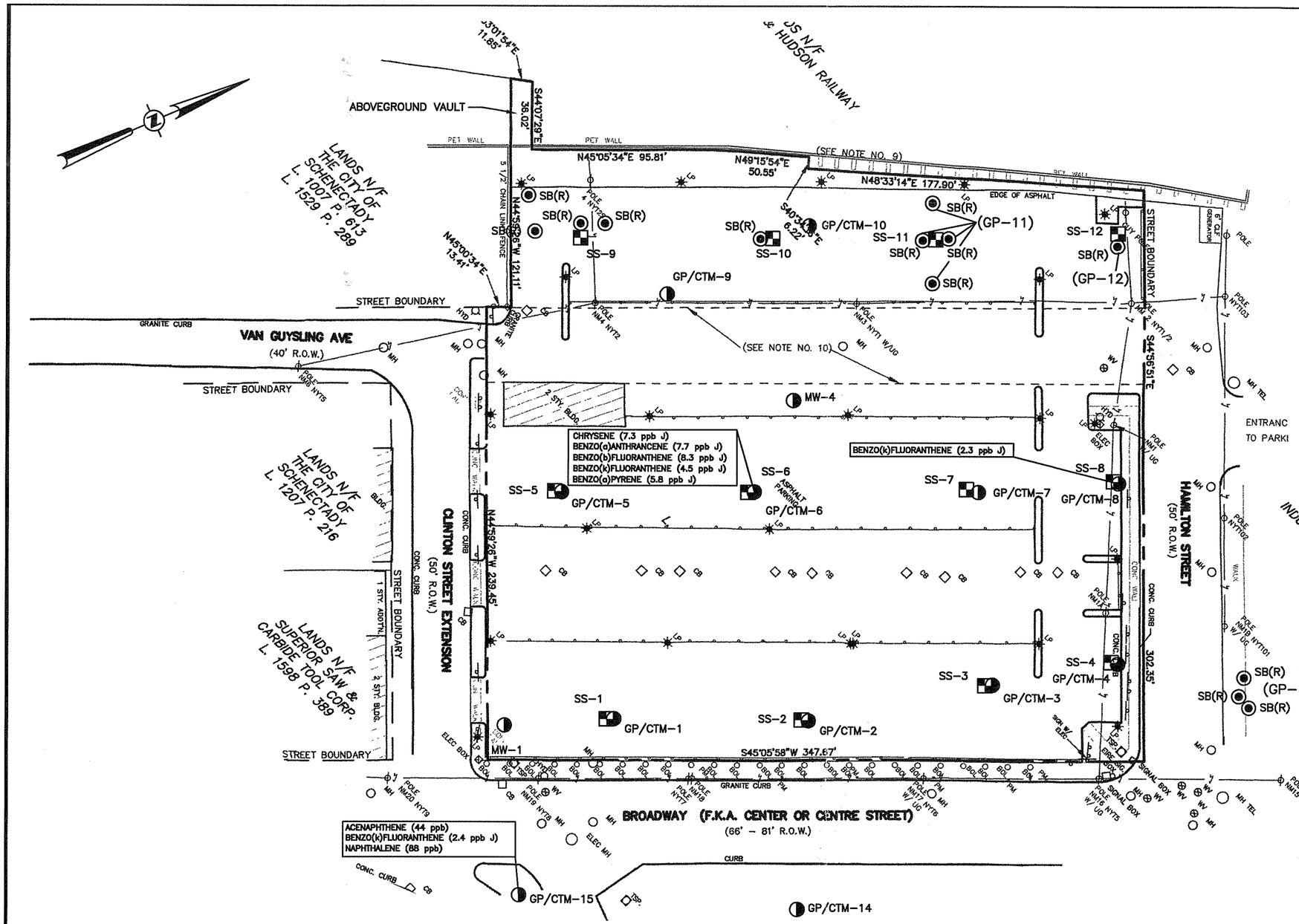
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PPB	PARTS PER BILLION
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BAR SCALE

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CHECKED : J.FAVREAU

PROJ. NO: 05.5550

SCALE : 1"=60'

DATE : SEPT 15, 2006

FIGURE 8
SVOCs ABOVE SCGs IN GROUNDWATER SAMPLES

ENVIRONMENTAL RESTORATION PROGRAM INVESTIGATION
LOWER BROADWAY PARKING LOT/312 BROADWAY

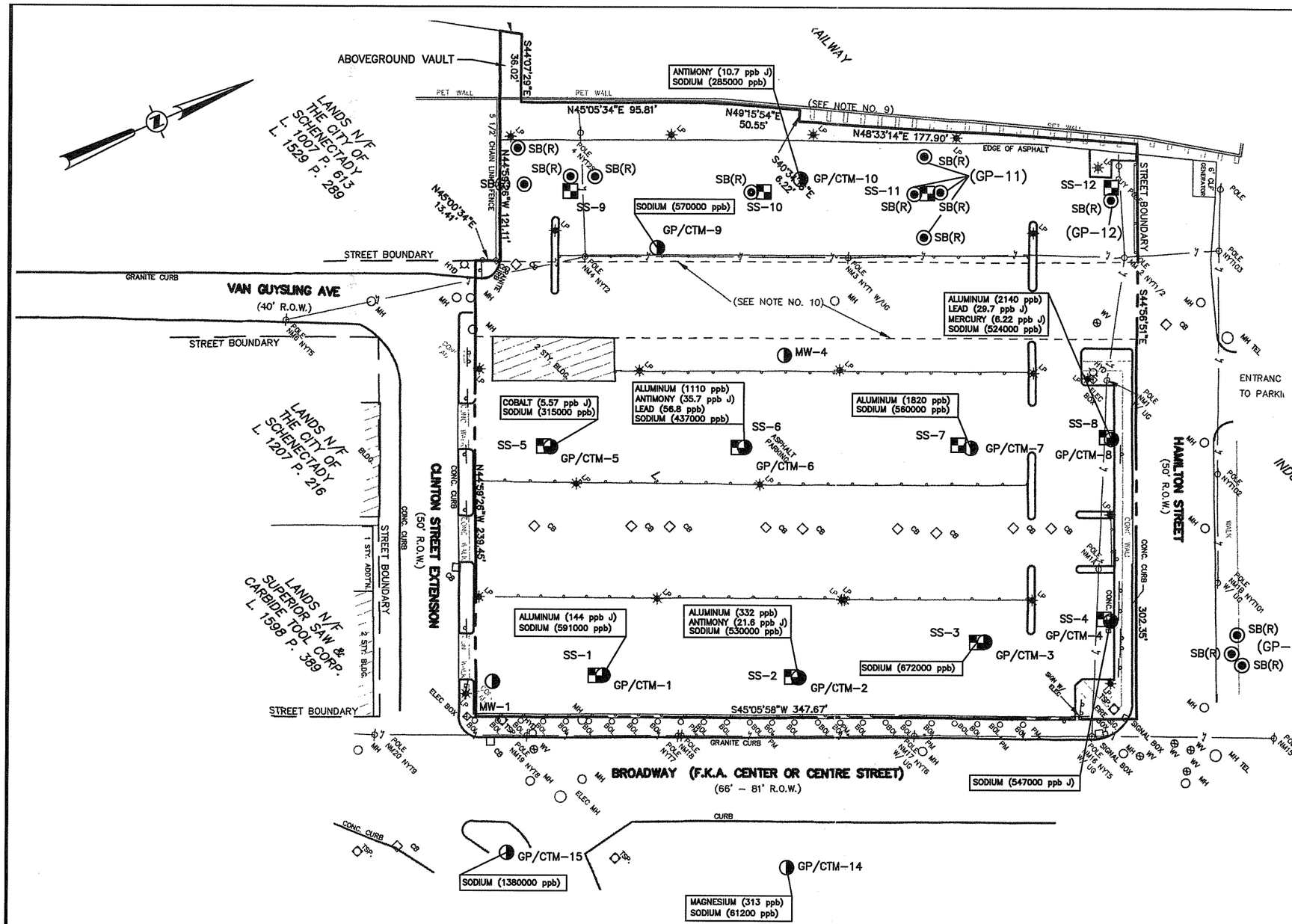
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SHEET 8 OF 9

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SCALE : 1"=60'
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FIGURE 9
TAL METALS ABOVE SCGs IN GROUNDWATER

ENVIRONMENTAL RESTORATION PROGRAM INVESTIGATION LOWER BROADWAY PARKING LOT/312 BROADWAY

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SHEET 9 OF 9
DWG. NO: 07–140

CAD DWG. FILE NAME:BI_FINAL_HAMILTON.DWG

TABLES

Table 1	Near-Surface Soil Results – VOCs (Detected Compounds)
Table 2	Near-Surface Soil Results – SVOCs (Detected Compounds)
Table 3	Near-Surface Soil Results – TAL Metals (Detected Metals)
Table 4	Subsurface Soil Results – VOCs (Detected Compounds)
Table 5	Subsurface Soil Results – SVOCs (Detected Compounds)
Table 6	Subsurface Soil Results – TAL Metals (Detected Metals)
Table 7	Groundwater Results – VOCs (Detected Compounds)
Table 8	Groundwater Results – SVOCs (Detected Compounds)
Table 9	Groundwater Results – TAL Metals (Detected Metals)

TABLE 1
LOWER BROADWAY PARKING LOT / 312 BROADWAY
SCHENECTADY, NEW YORK

REMEDIAL INVESTIGATION
NEAR-SURFACE SOIL ANALYTICAL RESULTS - VOLATILE ORGANIC COMPOUNDS
(DETECTED COMPOUNDS ONLY)

Sample ID		SS-1	SS-2	SS-3	SS-4	SS-5	SS-6	SS-7	SS-8	DUP-2	SS-9	SS-10	SS-11	SS-12	EQUIPBLANK-2
Lab Sample Number		**X2764-01**	**X2764-02**	**X2764-03**	**X2764-04**	**X2764-05**	**X2764-06**	**X2764-07**	**X2764-08**	**X2764-15**	**X2764-09**	**X2764-12**	**X2764-13**	**X2764-14**	**X2764-16**
Sampling Date		**05/11/06**	**05/11/06**	**05/11/06**	**05/11/06**	**05/11/06**	**05/11/06**	**05/11/06**	**05/11/06**	**05/11/06**	**05/11/06**	**05/11/06**	**05/11/06**	**05/11/06**	**05/11/06**
Matrix		**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**WATER**
Dilution Factor		**1.0**	**1.0**	**1.0**	**1.0**	**1.0**	**1.0**	**1.0**	**1.0**	**1.0**	**1.0**	**1.0**	**1.0**	**1.0**	**1.0**
Units		**ug/Kg**	**ug/Kg**	**ug/Kg**	**ug/Kg**	**ug/Kg**	**ug/Kg**	**ug/Kg**	**ug/Kg**	**ug/Kg**	**ug/Kg**	**ug/Kg**	**ug/Kg**	**ug/Kg**	**ug/L**
COMPOUND	Part 375 SCG (ug/Kg)														
Acetone	500,000	19 U	18 U	19 U	20 U	20 U	19 U	18 U	19 U	63 J	20 U	19 U	18 U	19 U	2.3 U
Carbon Disulfide	n/a	2.1 U	7.7 J	2.1 U	2.2 U	2.2 U	2.1 U	2.0 U	2.0 U	2.1 U	2.1 U	2.1 U	2.0 U	2.0 U	0.40 UJ
Methylene Chloride	500,000	140 UJ	170 B	170 B	74 UJ	130 UJ	130 B	68 UJ	130 UJ	100 UJ	100 UJ	150 UJ	88 UJ	120 UJ	0.43 UJ
Total Confident Conc. VOC		0	177.7	170	0	0	130	0	0	63	0	0	0	0	0

Qualifiers and Notes
U - The compound was not detected at the indicated concentration.
UJ - Data indicates the presence of a compound that meets the identification criteria; however the result is less than the quantitation limit but greater than zero.
J - Indicates an estimated value
B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.
SCG - Standards, Criteria & Guidance levels (Reference: 6NYCRR Part 375 Restricted Use (Commercial) Soil Cleanup Objectives)
Values in **BOLD** denote exceedence of SCG
n/a - Not Applicable (no established standard)
ug/Kg - Micrograms per Kilogram
ug/L - Micrograms per Liter

TABLE 2
LOWER BROADWAY PARKING LOT / 312 BROADWAY
SCHENECTADY, NEW YORK

REMEDIAL INVESTIGATION
NEAR-SURFACE SOIL ANALYTICAL RESULTS - SEMIVOLATILE ORGANIC COMPOUNDS
(DETECTED COMPOUNDS ONLY)

Sample ID		SS-1	SS-2	SS-3	SS-4	SS-5	SS-6	SS-7	SS-8	DUP-2	SS-9	SS-10	SS-11	SS-12	EQUIPBLANK-2
Lab Sample Number		X2764-01	X2764-02	X2764-03	X2764-04	X2764-05	X2764-06	X2764-07	X2764-08	X2764-15	X2764-09	X2764-12	X2764-13	X2764-14	X2764-16
Sampling Date		05/11/06	05/11/06	05/11/06	05/11/06	05/11/06	05/11/06	05/11/06	05/11/06	05/11/06	05/11/06	05/11/06	05/11/06	05/11/06	05/11/06
Matrix		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	WATER
Dilution Factor		10.0	1.0	1.0	5.0	5.0	5.0	1.0	1.0	1.0	1.0	1.0	1.0	5.0	1.0
Units		ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/L
COMPOUND	Part 375 SCG (ug/Kg)														
Phenol	500,000	560 U	56 U	56 U	300 U	2900 U	280 U	75 J	56 U	55 U	57 U	56 U	53 U	280 U	1.3 U
Naphthalene	500,000	630 U	63 U	63 U	330 U	3200 U	320 U	62 U	63 U	63 U	120 J	140 J	60 U	310 U	1.4 U
Acenaphthylene	500,000	600 U	60 U	60 U	320 U	3100 U	300 U	59 U	60 U	59 U	88 J	200 J	72 J	300 U	1.3 U
Fluorene	500,000	620 U	63 U	62 U	330 U	3200 U	310 U	61 U	62 U	62 U	75 J	62 U	60 U	310 U	1.4 U
Phenanthrene	500,000	590 U	390	170 J	950 J	3000 U	300 U	69 J	170 J	230 J	710	490	190 J	290 U	1.5 U
Anthracene	500,000	560 U	60 J	56 U	300 U	2900 U	280 U	54 U	56 U	55 U	180 J	150 J	54 J	280 U	1.4 U
Carbazole	n/a	560 U	57 U	56 U	300 U	2900 U	280 U	55 U	56 U	56 U	60 J	56 U	54 U	280 U	1.3 U
Fluoranthene	500,000	550 U	550	220 J	1500 J	2800 U	280 U	130 J	230 J	310 J	820	1000	500	540 J	1.2 U
Pyrene	500,000	650 U	810	300 J	2100	3400 U	360 J	280 J	590	600	1500	1900	1200	850 J	1.5 U
Benzo(a)anthracene	5,600	520 U	320 J	130 J	810 J	2700 U	260 U	110 J	160 J	210 J	590	770	420	340 J	1.1 U
Chrysene	56,000	660 U	380	150 J	850 J	3400 U	330 U	120 J	200 J	240 J	610	800	430	420 J	1.7 U
bis(2-Ethylhexyl)phthalate	n/a	710 U	110 J	110 J	380 U	3700 U	360 U	89 J	76 J	70 U	100 J	100 J	140 J	350 U	1.6 U
Benzo(b)fluoranthene	5,600	410 UJ	500 J	170 J	1200 J	2100 UJ	230 J	160 J	280 J	290 J	1100 J	1500 J	710 J	530 J	0.770 U
Benzo(k)fluoranthene	56,000	810 UJ	210 J	84 J	520 J	4200 UJ	410 UJ	79 UJ	100 J	140 J	450 J	680 J	320 J	400 UJ	1.9 UJ
Benzo(a)pyrene	1,000	590 UJ	330 J	130 J	870 J	3000 UJ	300 UJ	100 J	180 J	210 J	590 J	840 J	460 J	360 J	1.2 U
Indeno(1,2,3-cd)pyrene	5,600	470 U	47 UJ	47 U	250 U	2400 U	240 U	46 U	47 UJ	46 U	120 J	110 J	49 J	230 U	0.850 UJ
Benzo(g,h,i)perylene	500,000	610 UJ	85 J	61 UJ	320 UJ	3100 UJ	310 UJ	60 UJ	82 J	87 J	320 J	400 J	210 J	300 UJ	1.1 UJ
Total Confident Conc. SVOC		0	3745	1464	8800	0	590	1133	2068	2317	7433	9080	4755	3040	0

Qualifiers and Notes
U - The compound was not detected at the indicated concentration.
UJ - Data indicates the presence of a compound that meets the identification criteria; however the result is less than the quantitation limit but greater than zero.
J - Indicates an estimated value
SCG - Standards, Criteria & Guidance levels (Reference: 6NYCRR Part 375 Restricted Use (Commercial) Soil Cleanup Objectives)
n/a - Not Applicable (no established standard)
ug/Kg - Micrograms per Kilogram
ug/L - Micrograms per Liter

TABLE 3
LOWER BROADWAY PARKING LOT / 312 BROWADWAY
SCHENECTADY, NEW YORK

REMEDIAL INVESTIGATION
NEAR-SURFACE SOIL ANALYTICAL RESULTS - TAL METALS
(DETECTED METALS ONLY)

Sample ID		SS-1	SS-2	SS-3	SS-4	SS-5	SS-6	SS-7	SS-8	DUP-2	SS-9	SS-10	SS-11	SS-12	EQUIPBLANK-2
Lab Sample Number		X2764-01	X2764-02	X2764-03	X2764-04	X2764-05	X2764-06	X2764-07	X2764-08	X2764-15	X2764-09	X2764-12	X2764-13	X2764-14	X2764-16
Sampling Date		05/11/06	05/11/06	05/11/06	05/11/06	05/11/06	05/11/06	05/11/06	05/11/06	05/11/06	05/11/06	05/11/06	05/11/06	05/11/06	05/11/06
Matrix		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	WATER
Dilution Factor		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Units		mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/L
COMPOUND	Part 375 SCG (ug/Kg)														
Aluminum	n/a	8440	8060	5520	4470	7340	4710	8130	4550	4330	4130	4920	4550	3930	0.0166 J
Antimony	n/a	0.369 U	13.2 U	0.360 U	0.381 U	0.383 U	0.371 U	11.8 U	15.9 J	0.363 U	0.379 UJ	0.369 U	0.347 U	12.0 U	0.0524 J
Barium	400	132	89.9	43.6	75.9	150	128	52.3	155	168	86.3	81.1	62.6	40.0	0.0039 J
Beryllium	590	0.366 U	0.447 U	0.333 U	0.296 U	0.356 U	0.300 U	0.438 U	0.292 UJ	0.263 U	0.277 U	0.322 U	0.305 U	0.259 U	0.001 J
Cadmium	9.3	0.037 U	0.037 U	0.036 U	0.146 J	0.038 U	0.037 U	0.035 U	0.062 J	0.037 UJ	0.038 U	0.142 J	0.041 J	0.771	0.00033 U
Calcium	n/a	60500	18900	31100	30400	75200	39900	41700	19500 J	35700 J	40700 J	35700	47800	20800	0.0531 J
Cobalt	n/a	3.680 U	12.4	6.950 U	5.290 U	3.860 U	4.280 U	10.4	4.700 U	3.790 U	11.6 J	6.420 U	6.100 U	4.070 U	0.0154 J
Copper	270	11.7	28.2	23.6	55.9	19.0	17.6	27.8	106 J	69.6 J	33.4	35.4	28.1	30.8	0.0044 J
Iron	n/a	8130 J	16700 J	11200 J	10700 J	7790 J	8150 J	15800 J	10200 J	10000 J	17400 J	14100 J	11800 J	10500 J	0.03 UJ
Lead	1,000	17.6	61.3	38.9	270	26.2	35.2	41.5	222 J	446 J	89.2 J	99.2	74.3	64.3	0.0028 U
Magnesium	n/a	7510	3650	5140	2540	4600	2440	4930	2990 J	8460 J	11500 J	2970	19900	8040	0.0443 J
Manganese	10,000	293	432	263	222	240	138	344	209	241	180 J	264	325	219	0.0096 J
Mercury	2.8	0.040 UJ	0.143 J	0.333 J	0.453 J	0.081 J	0.082 J	0.191 J	0.245 J	0.226	0.311 J	0.008	0.198	0.132	0.00023 J
Nickel	310	8.060	21.0	14.0	10.1	8.450	10.2	17.6	9.620	8.190	23.4 J	13.0	12.5	13.2	0.0122 J
Potassium	n/a	977	1110	1170	1010	1010	702	1310	837	817	909 J	923	1010	695	0.226 J
Selenium	1,500	0.383 U	0.654 J	0.374 U	1.200	0.398 U	0.386 U	0.366 U	0.384 UJ	0.564 J	0.523 J	0.552 J	0.361 U	0.375 U	0.003 U
Silver	1,500	1.450	3.130	1.960	1.940	1.150 J	1.350	2.890	2.030	1.780	3.290 J	2.590	2.020	2.030	0.0016 U
Sodium	n/a	1780 J	576 UJ	1020 UJ	540 UJ	496 UJ	575 UJ	381 UJ	364 UJ	288 UJ	416 UJ	1220 UJ	176 UJ	261 UJ	2.35 J
Vanadium	n/a	14.1	17.9	14	14.2	15.5	13.1	17.2	13.2	11.6	12.5	13.5	11.8	12.3	0.01 J
Zinc	10,000	32.3	56.9	45.4	175	42.1	32.2	54.4	157	62.4	104	74.2	112	138	0.0341

Qualifiers and Notes
U - The compound was not detected at the indicated concentration.
UJ - Data indicates the presence of a compound that meets the identification criteria; however the result is less than the quantitation limit but greater than zero.
J - Indicates an estimated value
SCG - Standards, Criteria & Guidance levels (Reference: 6NYCRR Part 375 Restricted Use (Commercial) Soil Cleanup Objectives)
mg/Kg - Milligrams per Kilogram
mg/L - Milligram per Liter
n/a - Not Applicable (no established standard)

TABLE 4
LOWER BROADWAY PARKING LOT
SCHENECTADY, NEW YORK

REMEDIAL INVESTIGATION
SUBSURFACE SOIL ANALYTICAL RESULTS - VOLATILE ORGANIC COMPOUNDS
(DETECTED COMPOUNDS ONLY)

Sample ID		GP-1(4-6)	DUP-1	GP-2(4-6)	GP-3(4-8)	GP-4(4-6)	GP-5(10-12)	GP-6(4-6)	GP-7(4-6)	GP-8(4-6)	GP-9(4-6)	GP-10(4-6)	GP-14(4-8)	GP-15(8-12)	EQUIPBLANK-1
Lab Sample Number		X2731-01	X2731-08	X2731-02	X2731-05	X2731-06	X2731-07	X2731-09	X2731-10	X2731-11	X2731-12	X2747-03	X2747-04	X2747-05	X2747-06
Sampling Date		05/08/06	05/08/06	05/08/06	05/08/06	05/08/06	05/08/06	05/09/06	05/09/06	05/09/06	05/09/06	05/10/06	05/10/06	05/10/06	05/10/06
Matrix		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	WATER
Dilution Factor		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Units		ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/L
COMPOUND	Part 375 SCG (ug/Kg)														
Acetone	500,000	18 UJ	100 J	20 UJ	95 J	18 UJ	320 UJ	69 J	21 UJ	18 U	20 U	130 J	51 J	540 UJ	2.3 U
2-Butanone (MEK)	500,000	15 U	17 U	17 U	31 J	15 U	120 J	17 U	17 U	15 U	17 U	31 J	17 U	460 U	1.1 U
Methylcyclohexane	n/a	2.3 U	2.5 U	2.5 U	2.5 U	2.3 U	2.9 U	2.5 U	2.6 U	2.3 U	2.5 U	2.4 U	2.6 U	200 J	0.34 U
Benzene	44,000	2.2 U	2.4 U	2.4 U	2.4 U	2.2 U	43 UJ	2.3 U	27 J	2.2 U	2.4 U	2.3 U	2.5 U	1900	0.39 U
Ethyl Benzene	390,000	1.9 U	2.1 U	2.1 U	2.1 U	1.9 U	250 J	2.1 U	2.2 U	1.9 U	2.1 U	2.1 U	2.2 U	5800	0.45 U
m/p-Xylenes	500,000	4.7 U	5.2 U	5.2 U	5.1 U	4.7 U	350 J	11 J	5.3 U	4.7 U	5.2 U	5.0 U	5.4 U	3900	1.2 U
Isopropylbenzene	n/a	2.3 U	2.5 U	2.5 U	2.5 U	2.3 U	130 J	2.4 U	2.6 U	2.3 U	2.5 U	2.4 U	2.6 U	1700	0.44 U
Total Confident Conc. VOC		0	100	0	126	0	1409	141	33.7	20	0	257	181	17970	0

Qualifiers and Notes
U - The compound was not detected at the indicated concentration.
UJ - Data indicates the presence of a compound that meets the identification criteria; however the result is less than the quantitation limit but greater than zero.
J - Indicates an estimated value
SCG - Standards, Criteria & Guidance levels (Reference: 6NYCRR Part 375 Restricted Use (Commercial) Soil Cleanup Objectives)
n/a - Not Applicable (no established standard)
ug/Kg - Micrograms per Kilogram
ug/L - Micrograms per Liter

TABLE 5
LOWER BROADWAY PARKING LOT / 312 BROADWAY
SCHENECTADY, NEW YORK

REMEDIAL INVESTIGATION
SUBSURFACE SOIL ANALYTICAL RESULTS - SEMIVOLATILE ORGANIC COMPOUNDS
(DETECTED COMPOUNDS ONLY)

Sample ID		GP-1(4-6)	DUP-1	GP-2(4-6)	GP-3(4-8)	GP-4(4-6)	GP-5(10-12)	GP-6(4-6)	GP-7(4-6)	GP-8(4-6)	GP-9(4-6)	GP-10(4-6)	GP-14(4-8)	GP-15(8-12)	EQUIPBLANK-1
Lab Sample Number		X2731-01	X2731-08	X2731-02	X2731-05	X2731-06	X2731-07	X2731-09	X2731-10	X2731-11	X2731-12	X2747-03	X2747-04	X2747-05	X2747-06
Sampling Date		05/08/06	05/08/06	05/08/06	05/08/06	05/08/06	05/08/06	05/09/06	05/09/06	05/09/06	05/09/06	05/10/06	05/10/06	05/10/06	05/10/06
Matrix		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	WATER
Dilution Factor		1.0	2.0	5.0	1.0	1.0	1.0	10.0	1.0	1.0	1.0	10.0	10.0	10.0	1.0
Units		ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/L
COMPOUND	Part 375 SCG (ug/Kg)														
Naphthalene	500,000	89 J	130 UJ	330 U	67 U	64 U	13000	11000	120 J	61 U	69 U	680 U	13000	6000	1.5 U
2-Methylnaphthalene	n/a	63 U	130 U	330 U	66 U	63 U	1000	5200	68 U	60 U	68 U	660 U	3000 J	1600 J	1.1 U
1,1-Biphenyl	n/a	62 U	130 U	320 U	65 U	62 U	180 J	1800 J	67 U	59 U	67 U	650 U	1600 J	710 U	1.5 U
Acenaphthylene	500,000	300 J	130 J	320 U	64 U	61 U	150 J	3300 J	180 J	58 U	66 U	640 U	6000	700 U	1.4 U
Acenaphthene	500,000	72 J	140 UJ	350 U	70 U	67 U	1500	14000	120 J	64 U	72 U	710 U	2000 J	3300 J	1.4 U
Dibenzofuran	n/a	210 J	130 UJ	320 U	65 U	62 U	740	15000	98 J	59 U	67 U	660 U	5600	1900 J	1.4 U
Fluorene	500,000	410 UJ	130 UJ	330 U	66 U	63 U	850	20000	180 J	60 U	68 U	670 U	6200	3300 J	1.5 U
Phenanthrene	500,000	2700 J	670 J	310 U	520	130 J	3100	110000	1800	57 U	65 U	760 J	33000	8000	1.5 U
Anthracene	500,000	950 J	290 J	300 U	110 J	57 U	830	27000	500	54 U	61 U	600 U	9000	3200 J	1.5 U
Carbazole	n/a	120 J	120 UJ	300 U	60 U	57 U	420 J	16000	120 J	55 U	62 U	610 UJ	8300 J	650 UJ	1.3 U
Fluoranthene	500,000	3900 E	2200	290 U	810	280 J	2400	88000	2400	71 J	60 U	1000 J	30000	4700	1.3 U
Pyrene	500,000	3800 J	2700 J	350 U	750	330 J	2100	110000	6600	80 J	72 U	1700 J	40000	11000	1.5 U
Benzo(a)anthracene	5,600	2200 J	1300 J	270 U	370 J	160 J	900	**33000**	2000	50 U	57 U	560 U	**13000**	4600	1.2 U
Chrysene	56,000	1800 J	1200 J	350 U	330 J	150 J	740	31000	1600	64 U	73 U	710 U	13000	4300	1.8 U
Benzo(b)fluoranthene	5,600	1900 J	1600 J	220 UJ	410 J	280 J	790 UJ	**33000** J	1700 J	110 J	45 UJ	440 UJ	**16000** J	5100 J	0.790 U
Benzo(k)fluoranthene	56,000	800 J	650 J	430 UJ	160 J	140 J	360 J	14000 J	680 J	93 J	89 UJ	870 UJ	5400 J	1400 J	2.0 U
Benzo(a)pyrene	1,000	**1700** J	**1100** J	310 UJ	260 J	150 J	710	**23000**	**1500**	57 UJ	65 U	630 UJ	**13000** J	**5200** J	1.2 U
Indeno(1,2,3-cd)pyrene	5,600	410 J	240 J	250 UJ	190 J	48 U	460	4700	490	45 U	52 U	500 UJ	3200 J	1000 J	0.870 UJ
Dibenz(a,h)anthracene	560	71 J	96 UJ	250 UJ	49 U	47 UJ	57 U	**900** J	64 J	45 UJ	51 U	500 UJ	**580** J	540 UJ	0.910 U
Benzo(g,h,i)perylene	500,000	410 J	360 J	320 UJ	140 J	62 UJ	360 J	8000 J	450	59 UJ	67 U	660 UJ	8700 J	2900 J	1.1 UJ
Total Confident Conc. SVOC		21842	30440	0	4050	1620	32590	693750	19002	354	0	3460	243580	67500	0

Qualifiers and Notes
U - The compound was not detected at the indicated concentration.
UJ - Data indicates the presence of a compound that meets the identification criteria; however the result is less than the quantitation limit but greater than zero.
J - Indicates an estimated value
E - Indicates a compound whose concentration exceeds the calibration range of the instrument for this analysis.
SCG - Standards, Criteria & Guidance levels (Reference: 6NYCRR Part 375 Restricted Use (Commercial) Soil Cleanup Objectives)
Values in **BOLD** denote exceedence of SCG
n/a - Not Applicable (no established standard)
ug/Kg - Micrograms per Kilogram
ug/L - Micrograms per Liter

TABLE 6
LOWER BROADWAY PARKING LOT / 312 BROADWAY
SCHENECTADY, NEW YORK

REMEDIAL INVESTIGATION
SUBSURFACE SOIL ANALYTICAL RESULTS - TAL METALS
(DETECTED METALS ONLY)

Sample ID		GP-1(4-6)	DUP-1	GP-2(4-6)	GP-3(4-8)	GP-4(4-6)	GP-5(10-12)	GP-6(4-6)	GP-7(4-6)	GP-8(4-6)	GP-9(4-6)	GP-10(4-6)	GP-14(4-8)	GP-15(8-12)	EQUIPBLANK-1
Lab Sample Number		X2731-01	X2731-08	X2731-02	X2731-05	X2731-06	X2731-07	X2731-09	X2731-10	X2731-11	X2731-12	X2747-03	X2747-04	X2747-05	X2747-06
Sampling Date		05/08/06	05/08/06	05/08/06	05/08/06	05/08/06	05/08/06	05/09/06	05/09/06	05/09/06	05/09/06	05/10/06	05/10/06	05/10/06	05/10/06
Matrix		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	WATER
Dilution Factor		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Units		mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	ug/L
COMPOUND	Part 375 SCG (ug/Kg)														
Aluminum	n/a	3780	4070	6510 J	4570	4470	8340	4860	4060	4520	4170	3900	4650	5160	21.5 J
Antimony	n/a	5.9 J	3.5 J	8.8 J	6.2 J	0.37 U	1.9 J	3.3 J	13.3	6.7	8.7	0.387 U	9.400 U	0.427 U	27.8 J
Arsenic	16	3.2 J	4.1 J	1.6 J	2.4	3.3	6.2	8.1	3.7	3.9	3.0	4.610	9.430	2.680	3.3 U
Barium	400	29.1	32.4	24.9	32.4	33.2	52.7	53.3	35.3	52.5	12.0 J	55.8	60.9	53.5	1.0 J
Beryllium	590	0.16 J	0.17 J	0.23 J	0.14 J	0.12 U	0.34 J	0.32 J	0.22 J	0.19 J	0.17 J	0.237 U	0.309 U	0.516 J	0.84 J
Calcium	n/a	14100	16700	5180 J	6810	7280	14300	15700	26300	9790	5940	18600	18500	10300	119 J
Chromium	1,900	6.3	6.9	8.7	8.9	6.1	10.8	9.1	9.5	8.5	7.2	11.3	6.630	5.960	2.0 J
Cobalt	n/a	3.4 J	3.5 J	4.9 J	4.4 J	2.5 J	6.3 J	5.0 J	5.0 J	4.0 J	5.4 J	3.440 U	5.160 U	3.480 U	10.3 J
Copper	270	12.8	10.8	19.5 J	31.6	56.0	16.6	35.5	22.4	40.5	9.3	35.4	56.4	14.3	5.7 J
Iron	n/a	9240 J	8860 J	11800 J	12800 J	11200 J	18600 J	11700 J	12800 J	8530 J	11300 J	9540	15700	13100	37.9 J
Lead	1,000	27.7 J	55.9 J	35.9 J	142	125	22.8	110	172	139	7.5	125	240	41.7	2.8 U
Magnesium	n/a	2230	1960	2290 J	1680	1810	4910	1310	3270	1870	1830	4160	2570	1320	8.3 U
Manganese	10,000	190	161	132	203	168	345	124	305	119	363	179	318	161	10.4 J
Mercury	2.8	0.095 J	0.117 J	0.195 J	0.201 J	0.539 J	0.061 J	0.302 J	0.533 J	0.426 J	0.032 J	0.325	0.719	0.133	0.1400 J
Nickel	310	6.4	6.3	9.2	6.7	7.4	13.7	11.7	7.0	6.1	8.1	7.540	9.690	7.650 U	12.2 J
Potassium	N/A	656	730	817 J	577 J	687	992	553 J	884	657	797	641 J	642 J	450 J	85.4 J
Selenium	1,500	1.5 U	1.6 U	0.40 U	3.7	1.2 U	1.3 U	1.8 U	0.70 U	1.2 U	1.0 U	0.795 J	0.543 J	0.831 J	3.0 U
Silver	1,500	0.09 U	0.09 U	0.09 UJ	0.09 U	0.10 J	0.29 J	0.20 J	0.11 J	0.09 U	0.10 U	1.340 J	2.290 J	1.750 J	1.6 U
Sodium	n/a	419 J	611 J	831 J	608 J	60.9 J	285 J	649 J	809 J	505 J	644 J	442 U	361 U	525 U	427 J
Vanadium	n/a	10.7	12.5	14.0	10.6	10.3	18.9	27.8	9.6	10.7	9.3	14.2	16.0	13.0	10.8 J
Zinc	10,000	25.9 J	35.0 J	50.2 J	70.7	94.0	51.2	182	87.5	80.0	28.1	250	134	28.8	30.0

Qualifiers and Notes
U - The compound was not detected at the indicated concentration.
UJ - Data indicates the presence of a compound that meets the identification criteria; however the result is less than the quantitation limit but greater than zero.
J - Indicates an estimated value
SCG - Standards, Criteria & Guidance levels (Reference: 6NYCRR Part 375 Restricted Use (Commercial) Soil Cleanup Objectives)
Values in **BOLD** denote exceedence of SCG
n/a - Not Applicable (no established standard)
mg/Kg - Milligrams per Kilogram
mg/L - Milligrams per Liter

TABLE 7
LOWER BROADWAY PARKING LOT / 312 BROADWAY
SCHENECTADY, NEW YORK

REMEDIAL INVESTIGATION
GROUNDWATER ANALYTICAL RESULTS - VOLATILE ORGANIC COMPOUNDS
(DETECTED COMPOUNDS ONLY)

Sample ID		CTM-1	CTM-2	CTM-3	CTM-4	CTM-5	CTM-6	CTM-7	CTM-8	G.W.DUPLICATE	CTM-9	CTM-10	CTM-14	CTM-15	EQUIPBLANK
Lab Sample Number		X3264-01	X3264-02	X3317-01	X3317-02	X3317-05	X3317-06	X3317-07	X3358-01	X3358-07	X3358-02	X3358-03	X3358-04	X3358-05	X3317-09
Sampling Date		06/13/06	06/13/06	06/14/06	06/14/06	06/14/06	06/14/06	06/14/06	06/15/06	06/15/06	06/15/06	06/15/06	06/15/06	06/15/06	06/14/06
Matrix		WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
Dilution Factor		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Units		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
COMPOUND	**SCG (ug/L)**														
Cyclohexane	n/a	0.36 U	0.36 U	0.36 UJ	0.36 UJ	0.36 UJ	0.36 UJ	0.36 UJ	0.36 UJ	0.36 UJ	0.36 UJ	0.36 UJ	0.36 UJ	1.1 J	0.36 UJ
Benzene	1	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 UJ	0.39 UJ	**94**	0.39 U
Toluene	5	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	**5.1**	0.36 U
Ethyl Benzene	5	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	**55**	0.45 U
m/p-Xylenes	5	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	**27**	1.2 U
o-Xylene	5	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	**22**	0.46 U
Isopropylbenzene	5	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	**13**	0.44 U
Total Confident Conc. VOC		0	0	0	0	0	0	0	0	0	0	0	0	313.2	

Qualifiers and Notes
U - The compound was not detected at the indicated concentration.
UJ - Data indicates the presence of a compound that meets the identification criteria; however the result is less than the quantitation limit but greater than zero.
J - Indicates an estimated value
B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.
P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.
* - For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference.
SCG - Standards, Criteria & Guidance levels (Reference: 6 NYCRR part 703 - Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations.
Values in **BOLD** denote exceedence of SCG
ug/L - Micrograms per Liter
n/a - Not Appliable (no established standard)

TABLE 8
LOWER BROADWAY PARKING LOT / 312 BROADWAY
SCHENECTADY, NEW YORK

REMEDIAL INVESTIGATION
GROUNDWATER ANALYTICAL RESULTS - SEMIVOLATILE ORGANIC COMPOUNDS
(DETECTED COMPOUNDS ONLY)

Sample ID		CTM-1	CTM-2	CTM-3	CTM-4	CTM-5	CTM-6	CTM-7	EQUIPBLANK	CTM-8	G.W.DUPLICATE	CTM-9	CTM-10	CTM-14	CTM-15
Lab Sample Number		X3264-01	X3264-02	X3317-01	X3317-02	X3317-05	X3317-06	X3317-07	X3317-09	X3358-01	X3358-07	X3358-02	X3358-03	X3358-04	X3358-05
Sampling Date		06/13/06	06/13/06	06/14/06	06/14/06	06/14/06	06/14/06	06/14/06	06/14/06	06/15/06	06/15/06	06/15/06	06/15/06	06/15/06	06/15/06
Matrix		WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
Dilution Factor		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Units		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
COMPOUND	SCG (ug/L)														
Naphthalene	10	3.3 J	3.0 U	1.4 U	1.4 U	1.5 U	4.1 J	1.4 U	1.6 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	**88**
2-Methylnaphthalene	4.7**	1.2 U	2.4 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.7 J
Acenaphthene	20**	8.7 J	3.2 J	1.4 U	1.4 U	1.4 U	3.0 J	1.4 U	1.5 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	**44**
Dibenzofuran	n/a	2.3 J	2.8 U	1.3 U	1.3 U	1.4 U	2.7 J	1.3 U	1.5 U	1.3 U	1.3 U	1.3 U	1.3 U	2.0 J	26
Fluorene	50**	5.5 J	3.1 U	1.4 U	1.4 U	1.5 U	3.6 J	1.4 U	1.6 U	1.4 U	1.4 U	1.4 U	1.4 U	2.5 J	28
Phenanthrene	50**	9.4 J	3.1 U	1.5 U	1.5 U	1.5 U	22	1.5 U	1.6 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	16
Anthracene	50**	1.6 J	3.0 U	1.4 U	1.4 U	1.5 U	6.6 J	1.4 U	1.6 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	5.3 J
Carbazole	n/a	1.4 U	2.8 U	1.3 U	1.3 U	1.3 U	4.2 J	1.3 U	1.4 U	1.3 U	1.3 U	1.3 U	1.3 U	6.2 J	35
Di-n-butylphthalate	n/a	1.4 U	2.8 U	1.4 J	1.7 J	1.4 U	1.4 U	1.3 U	1.5 U	1.3 UJ	1.4 J	1.3 U	1.3 U	1.3 U	1.3 U
Fluoranthene	50**	1.7 J	2.6 U	1.2 U	1.2 U	1.3 U	20	1.2 U	1.4 U	1.2 U	1.2 U	1.2 U	1.2 U	1.8 J	6.5 J
Pyrene	50**	1.6 U	3.2 U	1.5 U	1.5 U	1.5 U	17	1.5 U	1.6 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 J	4.3 J
Benzo(a)anthracene	0.002**	1.2 UJ	2.4 U	1.1 U	1.1 U	1.2 U	**7.7** J	1.1 U	1.3 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
Chrysene	0.002**	1.8 U	3.6 U	1.7 U	1.7 U	1.8 U	**7.3** J	1.7 U	1.9 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
Benzo(b)fluoranthene	0.002**	0.810 U	1.6 U	0.770 U	0.770 U	0.790 U	**8.3** J	0.770 U	0.850 U	0.770 U	0.770 U	0.770 U	0.770 U	0.770 U	0.770 U
Benzo(k)fluoranthene	0.002**	2.0 U	4.1 U	1.9 U	1.9 U	2.0 U	**4.5** J	1.9 U	2.1 U	**2.3** J	1.9 UJ	1.9 U	1.9 U	1.9 U	**2.4** J
Benzo(a)pyrene	ND	1.3 U	2.5 U	1.2 U	1.2 U	1.2 U	**5.8** J	1.2 U	1.3 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Benzo(g,h,i)perylene	n/a	1.2 U	2.4 U	1.1 U	1.1 U	1.1 U	2.3 J	1.1 U	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
Total Confident Conc. SVOC		32.5	3.2	1.4	1.7	0	119.1	0	0	2.3	1.4	0	0	14	266.2
Total TICs		22.9	52.6	59	75	64	20	69	73	60	69	76	64	63	240.3

Qualifiers and Notes
U - The compound was not detected at the indicated concentration.
UJ - Data indicates the presence of a compound that meets the identification criteria; however the result is less than the quantitation limit but greater than zero.
J - Indicates an estimated value
B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.
P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.
* - For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference.
SCG - Standards, Criteria & Guidance levels (Reference: 6 NYCRR part 703 - Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations.
Values in **BOLD** denote exceedence of SCG
** - Indicates guidance values
n/a - Not Applicable (no established standard or guidance value)

TABLE 9
LOWER BROADWAY PARKING LOT / 312 BROADWAY
SCHENECTADY, NEW YORK

REMEDIAL INVESTIGATION
GROUNDWATER ANALYTICAL RESULTS - TAL METALS
(DETECTED METALS ONLY)

Sample ID		CTM-1	CTM-2	CTM-3	CTM-4	CTM-5	CTM-6	CTM-7	CTM-8	G.W.DUPLICATE	CTM-9	CTM-10	CTM-14	CTM-15
Lab Sample Number		X3264-01	X3264-02	X3317-01	X3317-02	X3317-05	X3317-06	X3317-07	X3358-01	X3358-07	X3358-02	X3358-03	X3358-04	X3358-05
Sampling Date		06/13/06	06/13/06	06/14/06	06/14/06	06/14/06	06/14/06	06/14/06	06/15/06	06/15/06	06/15/06	06/15/06	06/15/06	06/15/06
Matrix		WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
Dilution Factor		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Units		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
COMPOUND	SCG (ug/L)													
Aluminum	100	**144** J	**332**	70.4 U	45.0 U	22.2 U	**1110**	**1820**	**2140**	**2240**	253 U	219 U	**313**	61.6 U
Antimony	3	3.170 U	**21.6** J	3.17 U	3.17 U	3.17 U	**35.7** J	3.17 U	3.17 U	3.170 U	3.170 U	**10.7** J	3.170 U	3.170 U
Arsenic	25	4.880 J	18.7	11.3	16.8	3.32 U	3.32 U	17.7	3.970 J	3.850 J	3.320 U	3.320 U	3.320 U	3.320 U
Barium	1,000	253	222	239	347	472	377	304	279	278	93.7 J	265	88.8 J	321
Calcium	n/a	218000	219000	197000	266000	179000	243000	234000	243000	238000	521000	409000	133000	252000
Chromium	50	0.343 U	10.7	1.54 U	1.58 U	1.14 U	3.85 U	2.26 U	3.740 U	3.880 U	1.580 U	3.220 U	1.930 U	2.180 U
Cobalt	5	0.370 U	0.370 U	0.37 U	0.37 U	**5.57** J	0.59 U	0.37 U	0.370 U	0.660 U	2.460 U	1.980 U	0.370 U	0.370 U
Copper	200	3.640 U	3.640 U	3.64 U	3.64 U	4.93 J	66.8	9.08 J	7.120 J	9.720 J	4.970 J	3.640 U	8.760 J	3.640 U
Iron	300	**28400**	**38800**	**32300**	**43800**	**1300**	**35300**	**45400**	**40600**	**39900**	**866**	**15600**	**3010**	**3150**
Lead	25	2.180 U	2.180 U	2.18 U	2.18 U	2.18 U	**56.8**	6.58	**29.7** J	**41.6**	2.180 U	7.530	2.180 U	2.180 U
Magnesium	35,000	17000	19900	22800 U	25500	13400 U	17600 U	26900 U	26300	25700	21000	22600	12700	23000
Manganese	300	**1260**	**3390**	**906**	**1390**	**1030**	**1210**	**1200**	**1550**	**1510**	**418**	**2180**	**368**	**731**
Mercury	0.7	0.0300 UJ	0.0300 U	0.21 J	0.05 J	0.03 UJ	0.29 J	0.03 UJ	**6.22** J	0.0400 J	0.0300 UJ	0.1900 J	0.0300 UJ	0.0300 UJ
Nickel	100	1.560 U	3.190 J	1.56 U	1.56 U	2.57 J	1.56 U	1.56 U	1.560 U	1.560 U	1.560 U	1.560 U	1.560 U	1.560 U
Potassium	n/a	20300	19800	36200 J	33900 J	18700 J	25300 J	39900 J	37400 J	36900 J	125000 J	48600 J	26700 J	55000 J
Sodium	20,000	**591000**	**530000**	**672000**	**547000** J	**315000**	**437000**	**560000**	**524000**	**520000**	**570000**	**285000**	**61200**	**1380000**
Vanadium	14	2.200 J	3.260 J	4.43 U	4.66 U	2.52 U	7.79 U	7.76 U	9.980 J	10.6 J	1.070 U	3.870 U	3.880 U	1.140 U
Zinc	2,000	12.5 J	12.0 J	16.6 U	21.2 U	595	73.6 U	35.2 U	41.2	39.7	22.8	40.6	26.5	15.5 J

Qualifiers and Notes
U - The compound was not detected at the indicated concentration.
UJ - Data indicates the presence of a compound that meets the identification criteria; however the result is less than the quantitation limit but greater than zero.
J - Indicates an estimated value
B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.
SCG - Standards, Criteria & Guidance levels (Reference: 6 NYCRR part 703 - Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations.)
Values in **BOLD** denote exceedence of SCG
n/a - Not Applicable (no established standard or guidance value)
ug/L - Micrograms per Liter

APPENDIX A

GEOPROBE SUBSURFACE EXPLORATION LOGS

C.T. MALE ASSOCIATES, P.C.

GEOPROBE SUBSURFACE EXPLORATION LOG

BORING NO.: GP-1
ELEV.: **DATUM:**
START DATE: 5/8/06 **FINISH DATE: 5/8/06**
SHEET 1 OF 1

PROJECT: 312 Broadway CTM PROJECT NO.: 05.5550

LOCATION: Schenectady, NY CTM OBSERVER: N. Freeman

DEPTH (FT.)	SAMPLE INTERVAL	SAMPLE NO.	SAMPLE RECOVERY (FT)	SAMPLE CLASSIFICATION	NOTES
4		1	2.4	3" ASPHALT Fill: Brown fine to coarse SAND, Some Silt, Gravel and concrete	Moist
8		2	3.8	Fill: Gray fine to coarse SAND, Some Gravel, trace silt and red brick	Wet
12		3	4.0	Brown fine to coarse SAND, little silt and gravel	
				becomes Gray/Black fine to coarse SAND, little silt	Wet
16		4	4.0	Brown SILT and fine SAND, Some Organics (in sample tip)	Wet
20				Boring Terminated at 16'	
24					
28					

DRILLING CONTRACTOR: Precision Env, GEOPROBE TYPE: Bobcat-Mounted
METHOD OF SAMPLING: 2" by 4' Macrocore Sampler

GROUNDWATER LEVEL READINGS

DATE	LEVEL	REFERENCE MEASURING POINT

THE SUBSURFACE INFORMATION SHOWN HEREON WAS OBTAINED FOR C.T. MALE ASSESSMENT PURPOSES. IT IS MADE AVAILABLE TO AUTHORIZED USERS ONLY THAT THEY MAY HAVE ACCESS TO THE SAME INFORMATION AVAILABLE TO C.T.MALE. IT IS PRESENTED IN GOOD FAITH, BUT IS NOT INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.

SAMPLE CLASSIFICATION BY: N. Freeman

C.T. MALE ASSOCIATES, P.C.

GEOPROBE SUBSURFACE EXPLORATION LOG

BORING NO.: GP-2
ELEV.: **DATUM:**
START DATE: 5/8/06 **FINISH DATE: 5/8/06**
SHEET 1 OF 1

PROJECT: 312 Broadway CTM PROJECT NO.: 05.5550

LOCATION: Schenectady, NY CTM OBSERVER: N. Freeman

DEPTH (FT.)	SAMPLE INTERVAL	SAMPLE NO.	RECOVERY (FT)	SAMPLE CLASSIFICATION	NOTES
4		1	3.0	5" ASPHALT and 6" SUB-BASE (sand and gravel) Fill: Brown fine to coarse SAND, Some Silt, trace red brick	Moist
8		2	4.0	Brown fine to coarse SAND, Some Silt becomes Gray fine to coarse SAND and SILT, Some Organics	Wet
12		3	3.8	Gray fine to coarse SAND, Some Silt, trace organics becomes Gray SILT, Some fine Sand and Organics (wood and rootlets)	Wet
16		4	NR	Boring Terminated at 14'	
20					
24					
28					

DRILLING CONTRACTOR: Precision Env. GEOPROBE TYPE: Bobcat-Mounted
METHOD OF SAMPLING: 2" by 4' Macrocore Sampler

GROUNDWATER LEVEL READINGS

DATE	LEVEL	REFERENCE MEASURING POINT

THE SUBSURFACE INFORMATION SHOWN HEREON WAS OBTAINED FOR C.T. MALE ASSESSMENT PURPOSES. IT IS MADE AVAILABLE TO AUTHORIZED USERS ONLY THAT THEY MAY HAVE ACCESS TO THE SAME INFORMATION AVAILABLE TO C.T.MALE. IT IS PRESENTED IN GOOD FAITH, BUT IS NOT INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.

SAMPLE CLASSIFICATION BY: N. Freeman

C.T. MALE ASSOCIATES, P.C.

GEOPROBE SUBSURFACE EXPLORATION LOG

BORING NO.: GP-3
ELEV.: **DATUM:**
START DATE: 5/8/06 **FINISH DATE: 5/8/06**
SHEET 1 OF 1

PROJECT: 312 Broadway CTM PROJECT NO.: 05.5550

LOCATION: Schenectady, NY CTM OBSERVER: N. Freeman

DEPTH (FT.)	SAMPLE INTERVAL	SAMPLE NO.	SAMPLE RECOVERY (FT)	SAMPLE CLASSIFICATION	NOTES
4		1	3.0	5" ASPHALT Fill: Brown/Gray fine to coarse SAND and GRAVEL, Some Silt, trace glass and red brick	
8		2	2.0	Gray fine to coarse SAND, trace silt	Wet
12		3	2.7		Wet
		4	0.6		
16				Boring Terminated at 14'	
20					
24					
28					

DRILLING CONTRACTOR: Precision Env. GEOPROBE TYPE: Bobcat-Mounted
METHOD OF SAMPLING: 2" by 4' Macrocore Sampler

GROUNDWATER LEVEL READINGS

DATE	LEVEL	REFERENCE MEASURING POINT

THE SUBSURFACE INFORMATION SHOWN HEREON WAS OBTAINED FOR C.T. MALE ASSESSMENT PURPOSES. IT IS MADE AVAILABLE TO AUTHORIZED USERS ONLY THAT THEY MAY HAVE ACCESS TO THE SAME INFORMATION AVAILABLE TO C.T.MALE. IT IS PRESENTED IN GOOD FAITH, BUT IS NOT INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.

SAMPLE CLASSIFICATION BY: N. Freeman

C.T. MALE ASSOCIATES, P.C.

GEOPROBE SUBSURFACE EXPLORATION LOG

BORING NO.: GP-4
ELEV.: **DATUM:**
START DATE: 5/8/06 **FINISH DATE: 5/8/06**
SHEET 1 OF 1

PROJECT: 312 Broadway CTM PROJECT NO.: 05.5550

LOCATION: Schenectady, NY CTM OBSERVER: N. Freeman

DEPTH (FT.)	SAMPLE INTERVAL	SAMPLE NO.	SAMPLE RECOVERY (FT)	SAMPLE CLASSIFICATION	NOTES
4		1	3.0	5" ASPHALT Fill: Brown/Black SAND and GRAVEL, Some Cinder, trace red brick	
8		2	3.0	Gray fine to coarse SAND, Some Silt	Wet
12		3	4.0	becomes Brown SILT, Some fine Sand, trace organics	Wet
16		4	3.0	Gray fine to coarse SAND, Some Silt Brown SILT and fine SAND, trace organics Boring Terminated at 15'	Wet (formation collapse)
20					
24					
28					

DRILLING CONTRACTOR: Precision Env. GEOPROBE TYPE: Bobcat-Mounted
METHOD OF SAMPLING: 2" by 4' Macrocore Sampler

GROUNDWATER LEVEL READINGS

DATE	LEVEL	REFERENCE MEASURING POINT

THE SUBSURFACE INFORMATION SHOWN HEREON WAS OBTAINED FOR C.T. MALE ASSESSMENT PURPOSES. IT IS MADE AVAILABLE TO AUTHORIZED USERS ONLY THAT THEY MAY HAVE ACCESS TO THE SAME INFORMATION AVAILABLE TO C.T.MALE. IT IS PRESENTED IN GOOD FAITH, BUT IS NOT INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.

SAMPLE CLASSIFICATION BY:
N. Freeman

C.T. MALE ASSOCIATES, P.C.

GEOPROBE SUBSURFACE EXPLORATION LOG

BORING NO.: GP-5
ELEV.: **DATUM:**
START DATE: 5/8/06 **FINISH DATE: 5/8/06**
SHEET 1 OF 1

PROJECT: 312 Broadway CTM PROJECT NO.: 05.5550

LOCATION: Schenectady, NY CTM OBSERVER: N. Freeman

DEPTH (FT.)	SAMPLE INTERVAL	SAMPLE NO.	SAMPLE RECOVERY (FT)	SAMPLE CLASSIFICATION	NOTES
		1	2.0	6" ASPHALT Fill: Brown and Black CINDER, Some fine to coarse Gravel, little brick	
4		2	1.0	Fill: Coarse GRAVEL and CONCRETE, Some fine to coarse sand	Wet
8		3	4.0	Gray fine to coarse SAND, trace silt Brown/Black SILT, Some fine Sand	Wet Cresote type odor
12		4	NR		
16				Boring Terminated at 16'	
20					
24					
28					

DRILLING CONTRACTOR: Precision Env. GEOPROBE TYPE: Bobcat-Mounted
METHOD OF SAMPLING: 2" by 4' Macrocore Sampler

GROUNDWATER LEVEL READINGS

DATE	LEVEL	REFERENCE MEASURING POINT

THE SUBSURFACE INFORMATION SHOWN HEREON WAS OBTAINED FOR C.T. MALE ASSESSMENT PURPOSES. IT IS MADE AVAILABLE TO AUTHORIZED USERS ONLY THAT THEY MAY HAVE ACCESS TO THE SAME INFORMATION AVAILABLE TO C.T.MALE. IT IS PRESENTED IN GOOD FAITH, BUT IS NOT INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.

SAMPLE CLASSIFICATION BY: N. Freeman

C.T. MALE ASSOCIATES, P.C.

GEOPROBE SUBSURFACE EXPLORATION LOG

BORING NO.: GP-6
ELEV.: **DATUM:**
START DATE: 5/9/06 **FINISH DATE: 5/9/06**
SHEET 1 OF 1

PROJECT: 312 Broadway CTM PROJECT NO.: 05.5550

LOCATION: Schenectady, NY CTM OBSERVER: N. Freeman

DEPTH (FT.)	SAMPLE INTERVAL	SAMPLE NO.	SAMPLE RECOVERY (FT)	SAMPLE CLASSIFICATION	NOTES
4		1	3.0	5" ASPHALT Fill: White ASH, Black CINDER, Red BRICK, Some Glass and Gravel (Black Asphalt type material in sample shoe)	
8		2	3.0		Wet
				becomes Gray fine to coarse SAND, Some Silt	
12		3	4.0	becomes Gray SILT, Some fine Sand and organics	Wet
16		4	NR	Boring Terminated at 15'	
20					
24					
28					

DRILLING CONTRACTOR: Precision Env. GEOPROBE TYPE: Bobcat-Mounted
METHOD OF SAMPLING: 2" by 4' Macrocore Sampler

GROUNDWATER LEVEL READINGS

DATE	LEVEL	REFERENCE MEASURING POINT

THE SUBSURFACE INFORMATION SHOWN HEREON WAS OBTAINED FOR C.T. MALE ASSESSMENT PURPOSES. IT IS MADE AVAILABLE TO AUTHORIZED USERS ONLY THAT THEY MAY HAVE ACCESS TO THE SAME INFORMATION AVAILABLE TO C.T.MALE. IT IS PRESENTED IN GOOD FAITH, BUT IS NOT INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.

SAMPLE CLASSIFICATION BY:
N. Freeman

C.T. MALE ASSOCIATES, P.C.

GEOPROBE SUBSURFACE EXPLORATION LOG

BORING NO.: GP-7
ELEV.: **DATUM:**
START DATE: 5/9/06 **FINISH DATE: 5/9/06**
SHEET 1 OF 1

PROJECT: 312 Broadway CTM PROJECT NO.: 05.5550

LOCATION: Schenectady, NY CTM OBSERVER: N. Freeman

DEPTH (FT.)	SAMPLE INTERVAL	SAMPLE NO.	SAMPLE RECOVERY (FT)	SAMPLE CLASSIFICATION	NOTES
4		1	3.1	6" ASPHALT Fill: Brown fine to coarse SAND and GRAVEL, Some Cinder, Red Brick, Ash and Concrete	
8		2	3.0	Fill: Brown fine to coarse SAND, Some Silt, trace gravel and ash	Wet
				becomes Brown/Gray fine to coarse SAND, Some Silt	
12		3	4.0	Gray fine to coarse SAND, Some Silt	Wet
				becomes Gray SILT, Some fine Sand	
16		4	4.0	Gray fine to coarse SAND, trace silt and fine gravel	Wet
				Gray SILT, little fine sand	
20				Boring Terminated at 16'	
24					
28					

DRILLING CONTRACTOR: Precision Env. GEOPROBE TYPE: Bobcat-Mounted
METHOD OF SAMPLING: 2" by 4' Macrocore Sampler

GROUNDWATER LEVEL READINGS

DATE	LEVEL	REFERENCE MEASURING POINT

THE SUBSURFACE INFORMATION SHOWN HEREON WAS OBTAINED FOR C.T. MALE ASSESSMENT PURPOSES. IT IS MADE AVAILABLE TO AUTHORIZED USERS ONLY THAT THEY MAY HAVE ACCESS TO THE SAME INFORMATION AVAILABLE TO C.T.MALE. IT IS PRESENTED IN GOOD FAITH, BUT IS NOT INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.

SAMPLE CLASSIFICATION BY: N. Freeman

C.T. MALE ASSOCIATES, P.C.

GEOPROBE SUBSURFACE EXPLORATION LOG

BORING NO.: GP-8
ELEV.: **DATUM:**
START DATE: 5/9/06 **FINISH DATE: 5/9/06**
SHEET 1 OF 1

PROJECT: 312 Broadway CTM PROJECT NO.: 05.5550

LOCATION: Schenectady, NY CTM OBSERVER: N. Freeman

DEPTH (FT.)	SAMPLE INTERVAL	SAMPLE NO.	SAMPLE RECOVERY (FT)	SAMPLE CLASSIFICATION	NOTES
4		1	2.0	5" ASPHALT Fill: Brown fine to coarse SAND and GRAVEL, Some Cinder, Ash, Wood and Brick	
8		2	2.8	Fill: Gray fine to coarse SAND, Some Silt, trace gravel, ash, and brick	Wet
12		3	3.0	Gray fine to coarse SAND, Some Silt Gray SILT and fine SAND	Wet
16		4	NR	becomes Gray fine to coarse SAND, trace silt	Wet
20				Boring Terminated at 16'	
24					
28					

DRILLING CONTRACTOR: Precision Env. GEOPROBE TYPE: Bobcat-Mounted
METHOD OF SAMPLING: 2" by 4' Macrocore Sampler

GROUNDWATER LEVEL READINGS

DATE	LEVEL	REFERENCE MEASURING POINT

THE SUBSURFACE INFORMATION SHOWN HEREON WAS OBTAINED FOR C.T. MALE ASSESSMENT PURPOSES. IT IS MADE AVAILABLE TO AUTHORIZED USERS ONLY THAT THEY MAY HAVE ACCESS TO THE SAME INFORMATION AVAILABLE TO C.T.MALE. IT IS PRESENTED IN GOOD FAITH, BUT IS NOT INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.

SAMPLE CLASSIFICATION BY: N. Freeman

C.T. MALE ASSOCIATES, P.C.

GEOPROBE SUBSURFACE EXPLORATION LOG

BORING NO.: GP-9
ELEV.: **DATUM:**
START DATE: 5/9/06 **FINISH DATE: 5/9/06**
SHEET 1 OF 1

PROJECT: 312 Broadway CTM PROJECT NO.: 05.5550

LOCATION: Schenectady, NY CTM OBSERVER: N. Freeman

DEPTH (FT.)	SAMPLE INTERVAL	SAMPLE NO.	SAMPLE RECOVERY (FT)	SAMPLE CLASSIFICATION	NOTES
4		1	1.5	4" ASPHALT Fill: Black SILT, SAND and GRAVEL (Stone in sample shoe)	
8		2	4.0	Fill: Brown fine to medium SAND, Some Silt, trace black cinders	Wet
12		3	4.0	Gray fine to coarse SAND, Some Silt	Wet
16		4	NR	Boring Terminated at 14'	
20					
24					
28					

DRILLING CONTRACTOR: Precision Env. GEOPROBE TYPE: Bobcat-Mounted
METHOD OF SAMPLING: 2" by 4' Macrocore Sampler

GROUNDWATER LEVEL READINGS

DATE	LEVEL	REFERENCE MEASURING POINT

THE SUBSURFACE INFORMATION SHOWN HEREON WAS OBTAINED FOR C.T. MALE ASSESSMENT PURPOSES. IT IS MADE AVAILABLE TO AUTHORIZED USERS ONLY THAT THEY MAY HAVE ACCESS TO THE SAME INFORMATION AVAILABLE TO C.T.MALE. IT IS PRESENTED IN GOOD FAITH, BUT IS NOT INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.

SAMPLE CLASSIFICATION BY: N. Freeman

C.T. MALE ASSOCIATES, P.C.

GEOPROBE SUBSURFACE EXPLORATION LOG

BORING NO.: GP-10
ELEV.: **DATUM:**
START DATE: 5/10/06 **FINISH DATE: 5/10/06**
SHEET 1 OF 1

PROJECT: 312 Broadway CTM PROJECT NO.: 05.5550

LOCATION: Schenectady, NY CTM OBSERVER: N. Freeman

DEPTH (FT.)	SAMPLE INTERVAL	SAMPLE NO.	SAMPLE RECOVERY (FT)	SAMPLE CLASSIFICATION	NOTES
		1	3.6	4" ASPHALT	
				Fill: Brown fine to coarse SAND and GRAVEL, some silt, Black Cinder, Concrete and Brick	Moist
4					
		2	3.0		
				Fill: becomes Black SILT, Some Cinder, Ash, Wood and fine to coarse Sand	Wet
8					
		3	2.0	Gray fine to coarse SAND, trace silt, little fine gravel	Wet
12					
		4	0.6	Cave-in. Black CINDER/ASH, some fine to coarse sand, silt	Wet
				Gray fine to coarse SAND, trace silt, little fine gravel	
16				Boring Terminated at 15'	
20					
24					
28					

DRILLING CONTRACTOR: Precision Env. GEOPROBE TYPE: Bobcat-Mounted
METHOD OF SAMPLING: 2" by 4' Macrocore Sampler

GROUNDWATER LEVEL READINGS

DATE	LEVEL	REFERENCE MEASURING POINT

THE SUBSURFACE INFORMATION SHOWN HEREON WAS OBTAINED FOR C.T. MALE ASSESSMENT PURPOSES. IT IS MADE AVAILABLE TO AUTHORIZED USERS ONLY THAT THEY MAY HAVE ACCESS TO THE SAME INFORMATION AVAILABLE TO C.T.MALE. IT IS PRESENTED IN GOOD FAITH, BUT IS NOT INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.

SAMPLE CLASSIFICATION BY: N. Freeman

C.T. MALE ASSOCIATES, P.C.

GEOPROBE SUBSURFACE EXPLORATION LOG

BORING NO.: GP-11
ELEV.: **DATUM:**
START DATE: 5/10/06 **FINISH DATE: 5/10/06**
SHEET 1 OF 1

PROJECT: 312 Broadway CTM PROJECT NO.: 05.5550

LOCATION: Schenectady, NY CTM OBSERVER: N. Freeman

DEPTH (FT.)	SAMPLE INTERVAL	SAMPLE NO.	SAMPLE RECOVERY (FT)	SAMPLE CLASSIFICATION	NOTES
4		1	2.6	4" Asphalt Fill: Brown fine to coarse SAND, some silt, concrete in sampler shoe Termination depth of boring (refusal)	Total of four attempts made to advance boring in this area. On the first, second and fourth attempts, encountered refusal at 1', 1' and 2' below grade, respectivley.
8					
12					
16					
20					
24					
28					

DRILLING CONTRACTOR: Precision Env. GEOPROBE TYPE: Bobcat-Mounted
METHOD OF SAMPLING: 2" by 4' Macrocore Sampler

GROUNDWATER LEVEL READINGS

DATE	LEVEL	REFERENCE MEASURING POINT

THE SUBSURFACE INFORMATION SHOWN HEREON WAS OBTAINED FOR C.T. MALE ASSESSMENT PURPOSES. IT IS MADE AVAILABLE TO AUTHORIZED USERS ONLY THAT THEY MAY HAVE ACCESS TO THE SAME INFORMATION AVAILABLE TO C.T.MALE. IT IS PRESENTED IN GOOD FAITH, BUT IS NOT INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.

SAMPLE CLASSIFICATION BY: N. Freeman

C.T. MALE ASSOCIATES, P.C.

GEOPROBE SUBSURFACE EXPLORATION LOG

BORING NO.: GP-12
ELEV.: **DATUM:**
START DATE: 5/10/06 **FINISH DATE: 5/10/06**
SHEET 1 OF 1

PROJECT: 312 Broadway CTM PROJECT NO.: 05.5550

LOCATION: Schenectady, NY CTM OBSERVER: N. Freeman

DEPTH (FT.)	SAMPLE INTERVAL	SAMPLE NO.	SAMPLE RECOVERY (FT)	SAMPLE CLASSIFICATION	NOTES
4		1	2.6	4" Asphalt Fill: Brown fine to coarse SAND, some silt, concrete in sampler shoe Termination depth of boring (refusal)	Refusal encountered on concrete at 3' below grade.
8					
12					
16					
20					
24					
28					

DRILLING CONTRACTOR: Precision Env. GEOPROBE TYPE: Bobcat-Mounted
METHOD OF SAMPLING: 2" by 4' Macrocore Sampler

GROUNDWATER LEVEL READINGS

DATE	LEVEL	REFERENCE MEASURING POINT

THE SUBSURFACE INFORMATION SHOWN HEREON WAS OBTAINED FOR C.T. MALE ASSESSMENT PURPOSES. IT IS MADE AVAILABLE TO AUTHORIZED USERS ONLY THAT THEY MAY HAVE ACCESS TO THE SAME INFORMATION AVAILABLE TO C.T.MALE. IT IS PRESENTED IN GOOD FAITH, BUT IS NOT INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.

SAMPLE CLASSIFICATION BY: N. Freeman

C.T. MALE ASSOCIATES, P.C.

GEOPROBE SUBSURFACE EXPLORATION LOG

BORING NO.: GP-13
ELEV.: **DATUM:**
START DATE: 5/10/06 **FINISH DATE: 5/10/06**
SHEET 1 OF 1

PROJECT: 312 Broadway CTM PROJECT NO.: 05.5550

LOCATION: Schenectady, NY CTM OBSERVER: N. Freeman

DEPTH (FT.)	SAMPLE INTERVAL	SAMPLE NO.	SAMPLE RECOVERY (FT)	SAMPLE CLASSIFICATION	NOTES
4		1	2.0	4" Concrete Fill: Brown fine to coarse SAND & GRAVEL, some concrete, little red brick	Total of three attempts made to advance boring in this area. On first and second attempts, refusal was encountered at 0.5' and 3' below grade, respectively. No samples collected at the first and second locations.
				Termination depth of boring (refusal)	
8					
12					
16					
20					
24					
28					

DRILLING CONTRACTOR: Precision Env. GEOPROBE TYPE: Bobcat-Mounted
METHOD OF SAMPLING: 2" by 4' Macrocore Sampler

GROUNDWATER LEVEL READINGS

DATE	LEVEL	REFERENCE MEASURING POINT

SAMPLE CLASSIFICATION BY: N. Freeman

THE SUBSURFACE INFORMATION SHOWN HEREON WAS OBTAINED FOR C.T. MALE ASSESSMENT PURPOSES. IT IS MADE AVAILABLE TO AUTHORIZED USERS ONLY THAT THEY MAY HAVE ACCESS TO THE SAME INFORMATION AVAILABLE TO C.T.MALE. IT IS PRESENTED IN GOOD FAITH, BUT IS NOT INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.

C.T. MALE ASSOCIATES, P.C.

GEOPROBE SUBSURFACE EXPLORATION LOG

BORING NO.: GP-14
ELEV.: **DATUM:**
START DATE: 5/10/06 **FINISH DATE: 5/10/06**
SHEET 1 OF 1

PROJECT: 312 Broadway CTM PROJECT NO.: 05.5550

LOCATION: Schenectady, NY CTM OBSERVER: N. Freeman

DEPTH (FT.)	SAMPLE INTERVAL	SAMPLE NO.	SAMPLE RECOVERY (FT)	SAMPLE CLASSIFICATION	NOTES
		1	3.0	6" Topsoil	
				Fill: Brown fine to coarse SAND and GRAVEL,	
4				Some Silt, trace cinder, ash and brick	Moist
		2	2.0	Fill: Brown fine to coarse SAND, Some Silt and Gravel,	
8				trace brick	Wet
		3	4.0	Fill: Gray fine SAND, Some Silt	
				Fill: becomes white ASH, Some fine to coarse Sand	Wet
12				becomes Black fine SAND, Some Silt	Tar Odor
		4	NR		
16				Boring Terminated at 15'	
20					
24					
28					

DRILLING CONTRACTOR: Precision Env. GEOPROBE TYPE: Bobcat-Mounted
METHOD OF SAMPLING: 2" by 4' Macrocore Sampler

GROUNDWATER LEVEL READINGS

DATE	LEVEL	REFERENCE MEASURING POINT

THE SUBSURFACE INFORMATION SHOWN HEREON WAS OBTAINED FOR C.T. MALE ASSESSMENT PURPOSES. IT IS MADE AVAILABLE TO AUTHORIZED USERS ONLY THAT THEY MAY HAVE ACCESS TO THE SAME INFORMATION AVAILABLE TO C.T.MALE. IT IS PRESENTED IN GOOD FAITH, BUT IS NOT INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.

SAMPLE CLASSIFICATION BY: N. Freeman

C.T. MALE ASSOCIATES, P.C.

GEOPROBE SUBSURFACE EXPLORATION LOG

BORING NO.: GP-15
ELEV.: **DATUM:**
START DATE: 5/10/06 **FINISH DATE: 5/10/06**
SHEET 1 OF 1

PROJECT: 312 Broadway CTM PROJECT NO.: 05.5550

LOCATION: Schenectady, NY CTM OBSERVER: N. Freeman

DEPTH (FT.)	SAMPLE INTERVAL	SAMPLE NO.	SAMPLE RECOVERY (FT)	SAMPLE CLASSIFICATION	NOTES
		1	3.2	4" Topsoil	
				Fill: Brown fine to coarse SAND and SILT, Some Gravel, little brick, cinder and ash	Moist
4					
		2	4.0	Fill: White ASH	
				becomes Black fine to coarse SAND and GRAVEL	Wet Tar Odor
8					
		3	2.0	Black fine to coarse SAND and GRAVEL	Wet (Sheen on sample water)
12					
		4	0.6	Gray fine SAND and SILT, Some Organics	
16				Boring Terminated at 15'	
20					
24					
28					

DRILLING CONTRACTOR: Precision Env. GEOPROBE TYPE: Bobcat-Mounted
METHOD OF SAMPLING: 2" by 4' Macrocore Sampler

GROUNDWATER LEVEL READINGS

DATE	LEVEL	REFERENCE MEASURING POINT

THE SUBSURFACE INFORMATION SHOWN HEREON WAS OBTAINED FOR C.T. MALE ASSESSMENT PURPOSES. IT IS MADE AVAILABLE TO AUTHORIZED USERS ONLY THAT THEY MAY HAVE ACCESS TO THE SAME INFORMATION AVAILABLE TO C.T.MALE. IT IS PRESENTED IN GOOD FAITH, BUT IS NOT INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.

SAMPLE CLASSIFICATION BY: N. Freeman

APPENDIX B

ORGANIC VAPOR HEADSPACE ANALYSIS LOGS

ORGANIC VAPOR HEADSPACE ANALYSIS LOG

PROJECT:	312 Broadway		**PROJECT #:**	05.5550	**PAGE 1 OF 5**
CLIENT:	Schenectady Metroplex Development Authority				**DATE**
LOCATION:	Schenectady, NY				**COLLECTED: 5/8/06**
INSTRUMENT USED:	Photovac	**LAMP**	10.6	**eV**	**DATE**
DATE INSTRUMENT CALIBRATED:	5/8/2006	**BY:**	NF		**ANALYZED: 5/8/06**
TEMPERATURE OF SOIL:	Ambient				**ANALYST: N.Freeman**

EXPLORATION NUMBER	SAMPLE NUMBER	DEPTH (FT.)***	SAMPLE TYPE	SAMPLE READING (PPM)**	BACKGROUND READING (PPM)**	REMARKS
GP-1		0-4'	SOIL	1.3	0.4	No odor or stains
GP-1 (Dup#1)		4-6'	SOIL	1.3	0.3	No odor or stains
GP-1		6-8'	SOIL	0.6	0.3	No odor or stains
GP-1		8-10'	SOIL	0.5	0.3	No odor or stains
GP-1		10-12'	SOIL	1.1	0.3	No odor or stains
GP-1		12-14'	SOIL	0.5	0.3	No odor or stains
GP-1		14-16'	SOIL	1.3	0.4	No odor or stains
GP-2		0-2'	SOIL	0.7	0.4	No odor or stains
GP-2		2-4'	SOIL	0.8	0.4	No odor or stains
GP-2 (ms/msd)		4-6'	SOIL	1.5	0.4	No odor or stains
GP-2		6-8'	SOIL	1	0.5	No odor or stains
GP-2		8-10'	SOIL	1.6	0.5	No odor or stains
GP-2		10-12'	SOIL	1.3	0.4	No odor or stains
GP-3		0-2'	SOIL	53.4	0.5	Petro odor / No stains
GP-3		2-4'	SOIL	2.4	0.4	No odor or stains
GP-3		4-8'	SOIL	2.7	0.4	No odor or stains
GP-3		8-10'	SOIL	2.3	0.4	No odor or stains
GP-3		10-12'	SOIL	2.3	0.4	No odor or stains
GP-3		12-14'	SOIL	3.8	0.4	No odor or stains

*Instrument was calibrated in accordance with manufacturer's recommended procedure using a calibration gas supplied by the manufacturer.
**PPM represents concentration of detectable volatile and gaseous compounds in parts per million of air.

ORGANIC VAPOR HEADSPACE ANALYSIS LOG

PROJECT:	312 Broadway		**PROJECT #:**	05.5550	**PAGE 2 OF 5**
CLIENT:	Schenectady Metroplex Development Authority				**DATE**
LOCATION:	Schenectady, NY				**COLLECTED: 5/8/06**
INSTRUMENT USED:	Photovac	**LAMP**	10.6	**eV**	**DATE**
DATE INSTRUMENT CALIBRATED:	5/8/2006	**BY:**	NF		**ANALYZED: 5/8/06**
TEMPERATURE OF SOIL:	Ambient				**ANALYST: N.Freeman**

EXPLORATION NUMBER	SAMPLE NUMBER	DEPTH (FT.)***	SAMPLE TYPE	SAMPLE READING (PPM)**	BACKGROUND READING (PPM)**	REMARKS
GP-4		0-2'	SOIL	12.5	0.1	Asphalt odor / No stains
GP-4		2-4'	SOIL	3.3	0.6	No odor or stains
GP-4		4-6'	SOIL	8.5	0.5	No odor or stains
GP-4		6-8'	SOIL	3.2	0.6	No odor or stains
GP-4		8-10'	SOIL	2.8	0.6	No odor or stains
GP-4		10-12'	SOIL	1.9	0.6	No odor or stains
GP-4		12-15'	SOIL	1.4	0.6	No odor or stains
GP-5		0-4'	SOIL	1.6	0.5	No odor or stains
GP-5		4-8'	SOIL	1.5	0.5	No odor or stains
GP-5		8-10'	SOIL	1.3	0.5	No odor or stains
GP-5		10-12'	SOIL	20.7	0.5	Tar/creosote odor/no staining

*Instrument was calibrated in accordance with manufacturer's recommended procedure using a calibration gas supplied by the manufacturer.
**PPM represents concentration of detectable volatile and gaseous compounds in parts per million of air.

ORGANIC VAPOR HEADSPACE ANALYSIS LOG

PROJECT:	312 Broadway		**PROJECT #:**	05.5550	**PAGE 3 OF 5**
CLIENT:	Schenectady Metroplex Development Authority				**DATE**
LOCATION:	Schenectady, NY				**COLLECTED: 5/9/06**
INSTRUMENT USED:	Photovac	**LAMP**	10.6	**eV**	**DATE**
DATE INSTRUMENT CALIBRATED:	5/9/2006	**BY:**	NF		**ANALYZED: 5/9/06**
TEMPERATURE OF SOIL:	Ambient				**ANALYST: N.Freeman**

EXPLORATION NUMBER	SAMPLE NUMBER	DEPTH (FT.)***	SAMPLE TYPE	SAMPLE READING (PPM)**	BACKGROUND READING (PPM)**	REMARKS
GP-6		0-2'	SOIL	0.8	0.4	No odor or stains
GP-6		2-4'	SOIL	1.6	0.4	No odor or stains
GP-6		4-6'	SOIL	2.1	0.5	No odor or stains
GP-6		6-8'	SOIL	0.7	0.4	No odor or stains
GP-6		8-10'	SOIL	0.7	0.5	No odor or stains
GP-6		10-12'	SOIL	0.5	0.4	No odor or stains
GP-7		0-2'	SOIL	2.6	0.7	No odor or stains
GP-7		2-4'	SOIL	1.8	0.6	No odor or stains
GP-7		4-6'	SOIL	2	0.6	No odor or stains
GP-7		6-8'	SOIL	1	0.6	No odor or stains
GP-7		8-10'	SOIL	1	0.6	No odor or stains
GP-7		10-12'	SOIL	0.8	0.6	No odor or stains
GP-7		12-14'	SOIL	0.7	0.6	No odor or stains
GP-7		14-16'	SOIL	0.9	0.6	No odor or stains
GP-8		0-4'	SOIL	1.6	0.4	No odor or stains
GP-8		4-6'	SOIL	1	0.6	No odor or stains
GP-8		6-8'	SOIL	0.9	0.6	No odor or stains
GP-8		8-10'	SOIL	3.2	0.6	No odor or stains
GP-8		10-12'	SOIL	2.6	0.6	No odor or stains

*Instrument was calibrated in accordance with manufacturer's recommended procedure using a calibration gas supplied by the manufacturer.
**PPM represents concentration of detectable volatile and gaseous compounds in parts per million of air.

ORGANIC VAPOR HEADSPACE ANALYSIS LOG

PROJECT:	312 Broadway		**PROJECT #:**	05.5550	**PAGE 4 OF 5**
CLIENT:	Schenectady Metroplex Development Authority				**DATE**
LOCATION:	Schenectady, NY				**COLLECTED: 5/9/06**
INSTRUMENT USED:	Photovac	**LAMP**	10.6	**eV**	**DATE**
DATE INSTRUMENT CALIBRATED:	5/9/2006	**BY:**	NF		**ANALYZED: 5/9/06**
TEMPERATURE OF SOIL:	Ambient				**ANALYST: N.Freeman**

EXPLORATION NUMBER	SAMPLE NUMBER	DEPTH (FT.)***	SAMPLE TYPE	SAMPLE READING (PPM)**	BACKGROUND READING (PPM)**	REMARKS
GP-9		0-4'	SOIL	2.2	0.6	No odor or stains
GP-9		4-6'	SOIL	3.1	0.6	No odor or stains
GP-9		6-8'	SOIL	3.6	0.5	No odor or stains
GP-9		8-10'	SOIL	2.5	0.6	No odor or stains
GP-9		10-12'	SOIL	4.1	0.6	No odor or stains

*Instrument was calibrated in accordance with manufacturer's recommended procedure using a calibration gas supplied by the manufacturer.
**PPM represents concentration of detectable volatile and gaseous compounds in parts per million of air.

ORGANIC VAPOR HEADSPACE ANALYSIS LOG

PROJECT:	312 Broadway		**PROJECT #:**	05.5550	**PAGE 5 OF 5**
CLIENT:	Schenectady Metroplex Development Authority				**DATE**
LOCATION:	Schenectady, NY				**COLLECTED: 5/10/06**
INSTRUMENT USED:	Photovac	**LAMP**	10.6	**eV**	**DATE**
DATE INSTRUMENT CALIBRATED:	5/10/2006	**BY:**	NF		**ANALYZED: 5/10/06**
TEMPERATURE OF SOIL:	Ambient				**ANALYST: N.Freeman**

EXPLORATION NUMBER	SAMPLE NUMBER	DEPTH (FT.)***	SAMPLE TYPE	SAMPLE READING (PPM)**	BACKGROUND READING (PPM)**	REMARKS
GP-10		0-2'	SOIL	2.6	0.6	No odor or stains
GP-10		2-4'	SOIL	2.4	0.6	No odor or stains
GP-10		4-6'	SOIL	2.2	0.7	No odor or stains
GP-10		6-8'	SOIL	2.4	0.6	No odor or stains
GP-10		8-12'	SOIL	2.4	0.6	No odor or stains
GP-13		0-4'	SOIL	3.2	0.8	No odor or stains
GP-14		0-2'	SOIL	4	0.7	No odor or stains
GP-14		2-4'	SOIL	3.8	0.7	No odor or stains
GP-14		6-8'	SOIL	4.6	0.8	No odor or stains
GP-14		8-10'	SOIL	26.8	0.7	Tar/cresote odor - white ash
GP-14		10-12'	SOIL	6.2	0.7	Tar/cresote odor - black sand
GP-15		0-2'	SOIL	5.6	0.8	No odor or stains
GP-15		2-4'	SOIL	5.2	0.8	No odor or stains
GP-15		4-6'	SOIL	15.1	0.8	Tar/cresote odor - black stained
GP-15		6-8'	SOIL	25.6	0.9	Tar/cresote odor - black stained
GP-15		8-12'	SOIL	52.6	0.9	Tar/cresote odor - black stained
GP-15		12-15'	SOIL	80.4	1	Tar/cresote odor - black stained

*Instrument was calibrated in accordance with manufacturer's recommended procedure using a calibration gas supplied by the manufacturer.
**PPM represents concentration of detectable volatile and gaseous compounds in parts per million of air.

APPENDIX C

MONITORING WELL CONSTRUCTION LOGS

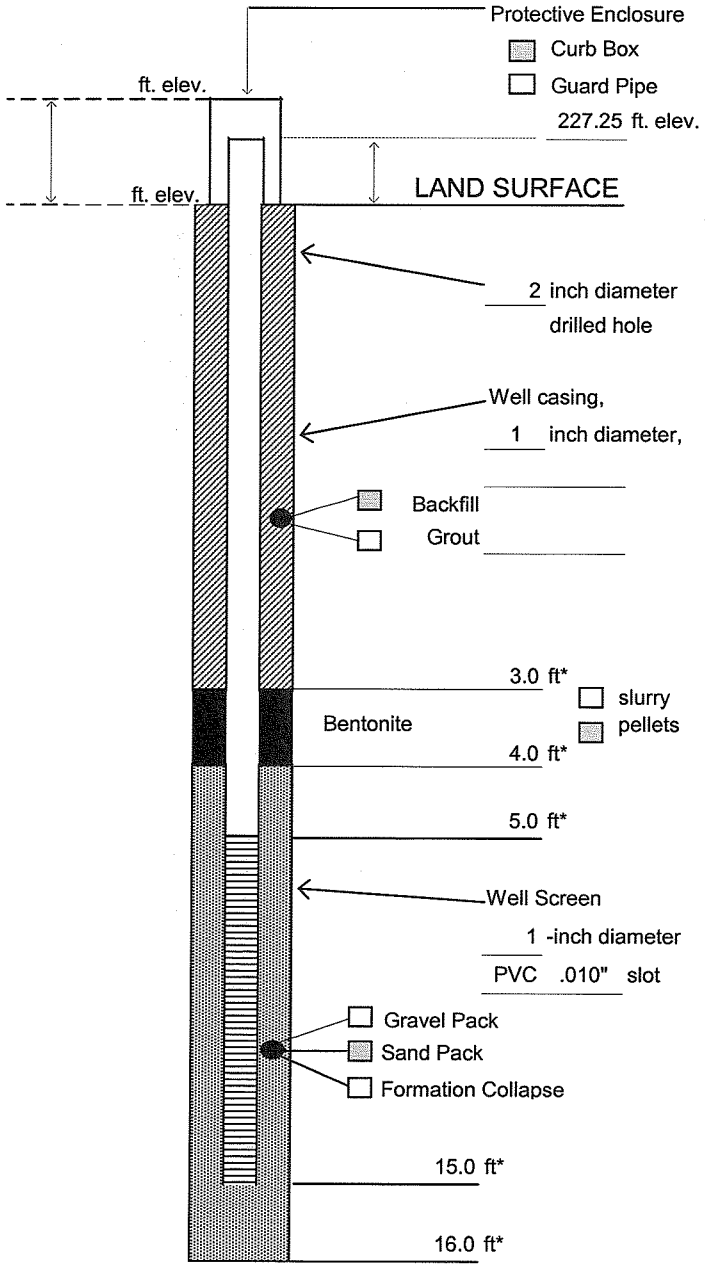
APPENDIX C

MONITORING WELL CONSTRUCTION LOGS

Well No. CTM-1

MONITORING WELL CONSTRUCTION LOG

C.T. MALE ASSOCIATES, P.C.



* Depth below land surface.

Project Number 05.5550

Project Name 312 Broadway

Well No. CTM-1 Boring No. GP-1

Town/City Schenectady

County Schenectady State NY

Installation Date(s) 5.8.06

Drilling Contractor Precision Environmental Services

Drilling Method 4' Macro Core Sampler

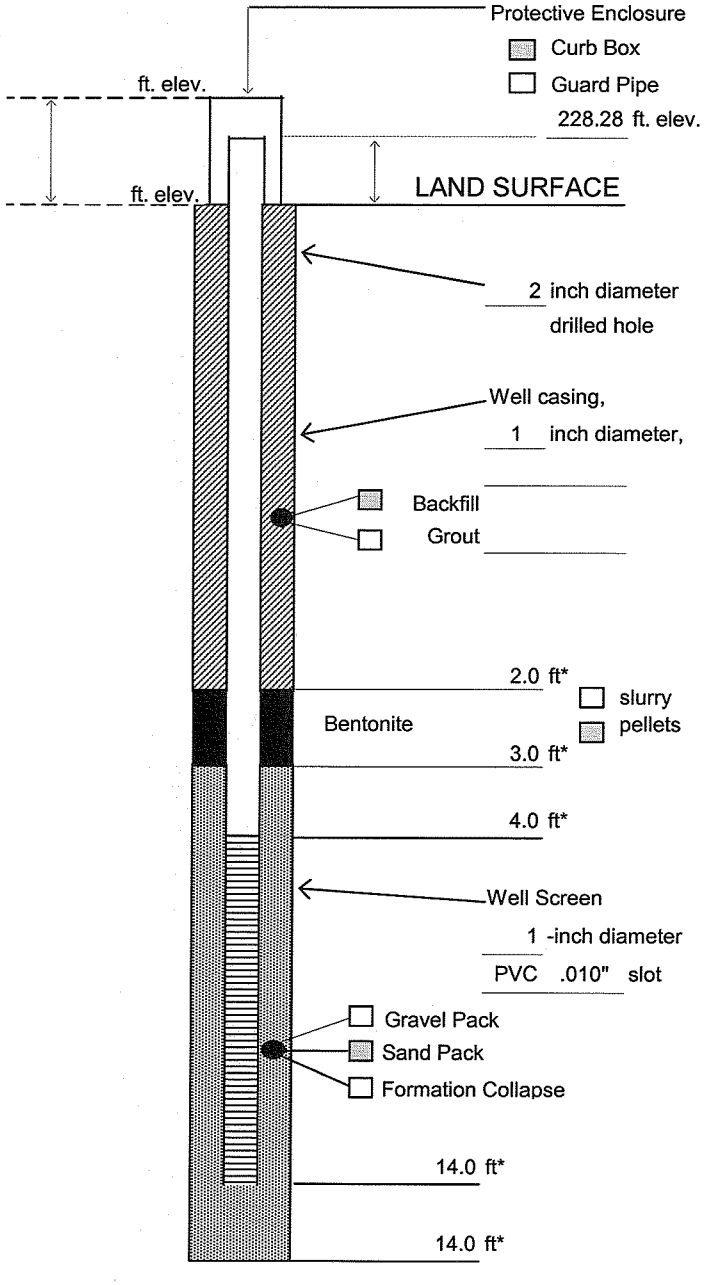
C.T. Male Observer N. Freeman

Notes:

Well No. CTM-2

MONITORING WELL CONSTRUCTION LOG

C.T. MALE ASSOCIATES, P.C.



* Depth below land surface.

Project Number 05.5550

Project Name 312 Broadway

Well No. CTM-2 Boring No. GP-2

Town/City Schenectady

County Schenectady State NY

Installation Date(s) 5.8.06

Drilling Contractor Precision Environmental Services

Drilling Method 4' Macro Core Sampler

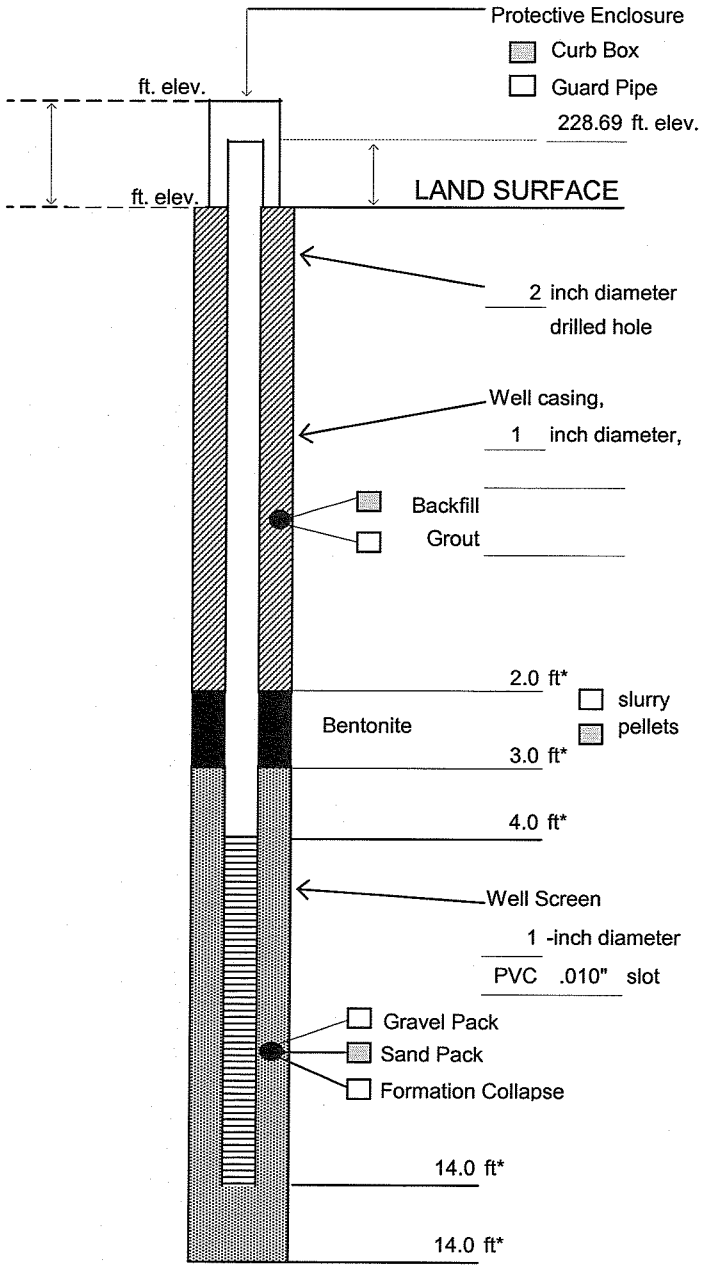
C.T. Male Observer N. Freeman

Notes:

Well No. CTM-3

MONITORING WELL CONSTRUCTION LOG

C.T. MALE ASSOCIATES, P.C.



* Depth below land surface.

Project Number 05.5550

Project Name 312 Broadway

Well No. CTM- Boring No. GP-

Town/City Schenectady

County Schenectady State NY

Installation Date(s) 5.8.06

Drilling Contractor Precision Environmental Services

Drilling Method 4' Macro Core Sampler

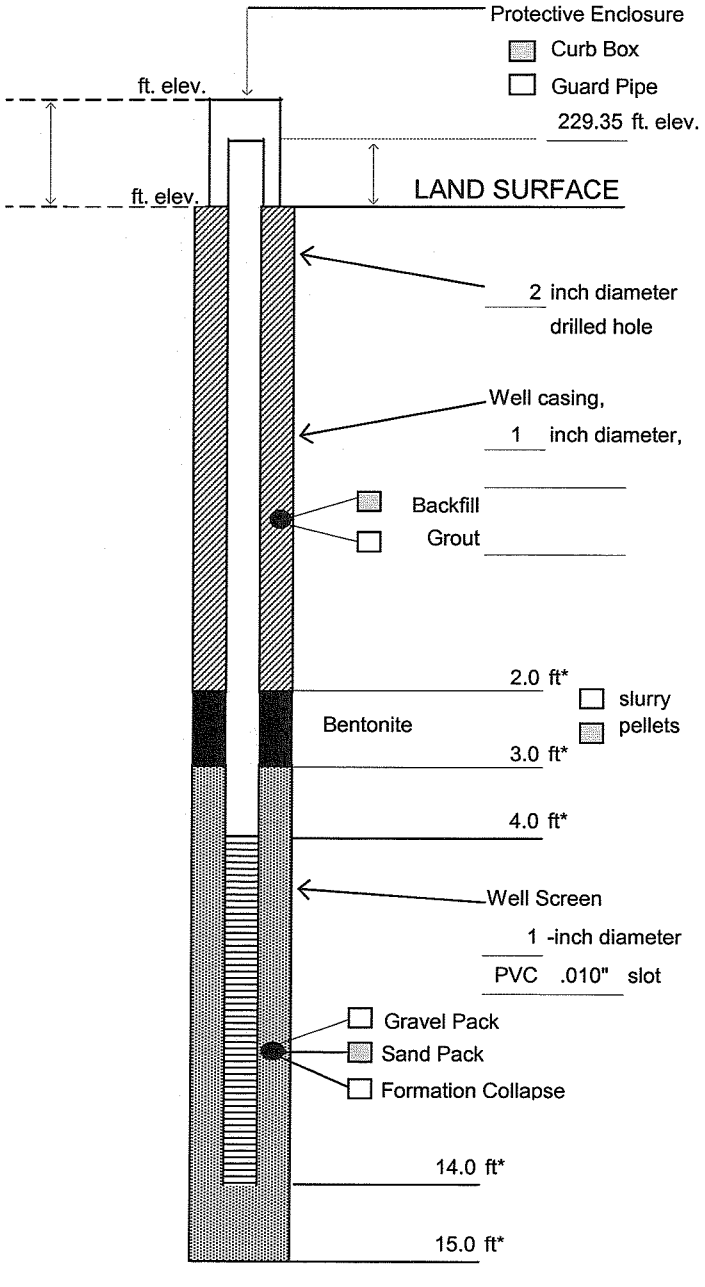
C.T. Male Observer N. Freeman

Notes:

Well No. CTM-4

MONITORING WELL CONSTRUCTION LOG

C.T. MALE ASSOCIATES, P.C.



* Depth below land surface.

Project Number 05.5550

Project Name 312 Broadway

Well No. CTM-4 Boring No. GP-4

Town/City Schenectady

County Schenectady State NY

Installation Date(s) 5.8.06

Drilling Contractor Precision Environmental Services

Drilling Method 4' Macro Core Sampler

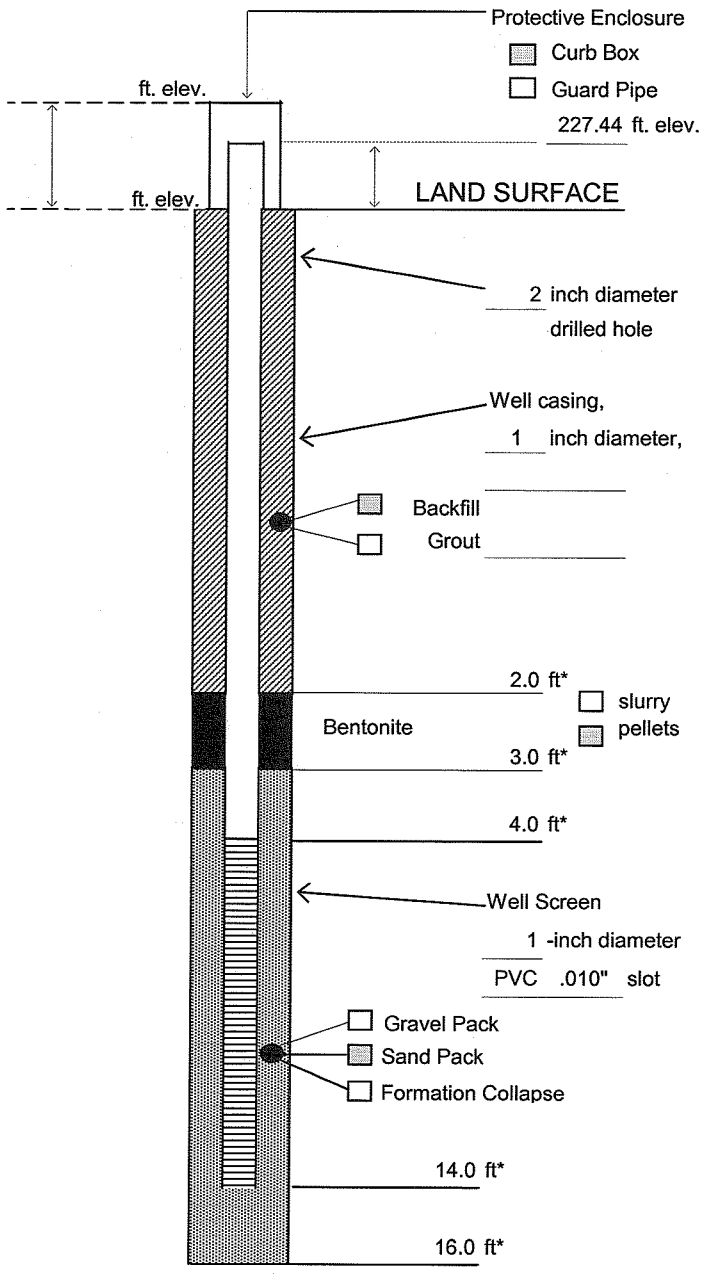
C.T. Male Observer N. Freeman

Notes:

Well No. CTM-5

MONITORING WELL CONSTRUCTION LOG

C.T. MALE ASSOCIATES, P.C.



* Depth below land surface.

Project Number 05.5550

Project Name 312 Broadway

Well No. CTM-5 Boring No. GP-5

Town/City Schenectady

County Schenectady State NY

Installation Date(s) 5.8.06

Drilling Contractor Precision Environmental Services

Drilling Method 4' Macro Core Sampler

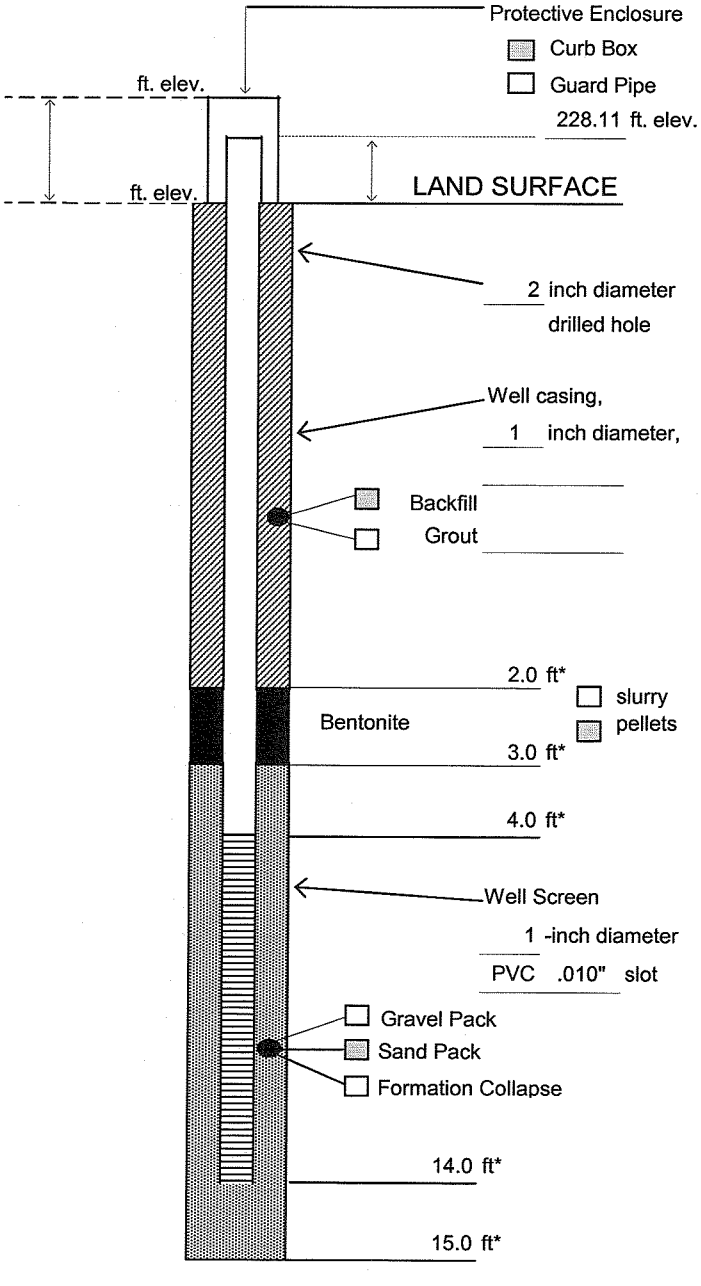
C.T. Male Observer N. Freeman

Notes:

Well No. CTM-6

MONITORING WELL CONSTRUCTION LOG

C.T. MALE ASSOCIATES, P.C.



* Depth below land surface.

Project Number 05.5550

Project Name 312 Broadway

Well No. CTM-6 Boring No. GP-6

Town/City Schenectady

County Schenectady State NY

Installation Date(s) 5.9.06

Drilling Contractor Precision Environmental Services

Drilling Method 4' Macro Core Sampler

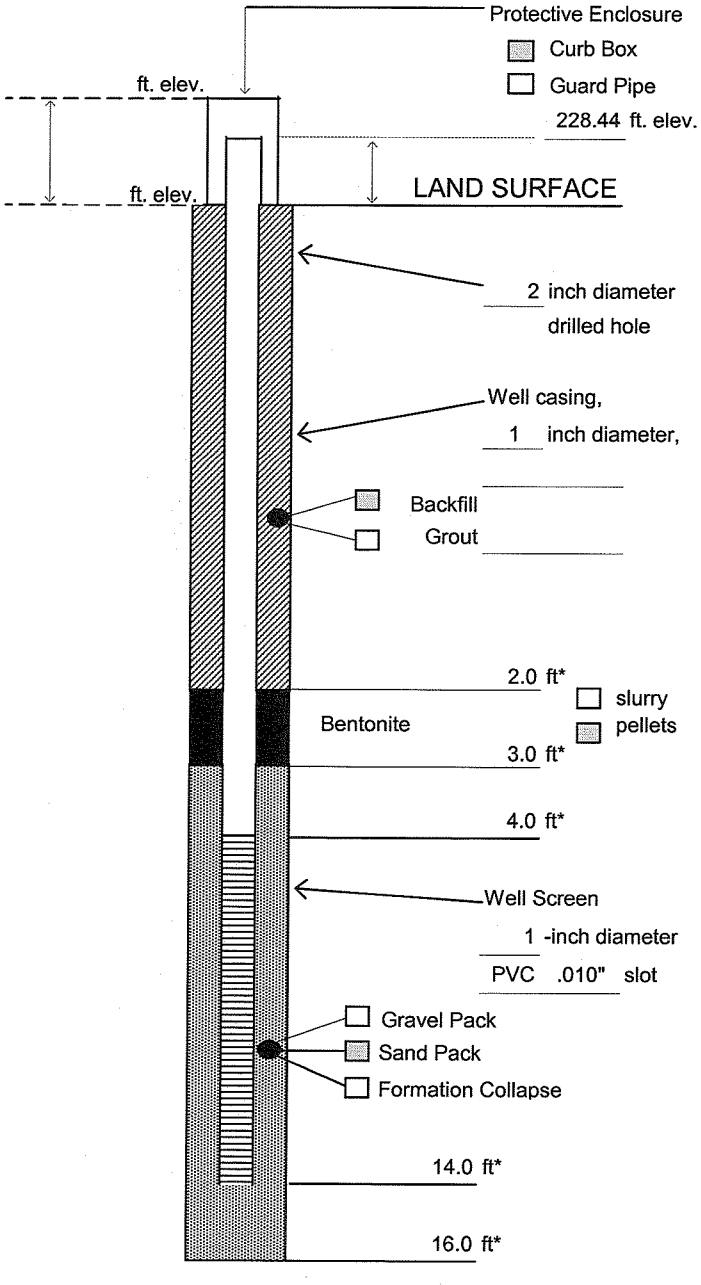
C.T. Male Observer N. Freeman

Notes:

Well No. CTM-7

MONITORING WELL CONSTRUCTION LOG

C.T. MALE ASSOCIATES, P.C.



* Depth below land surface.

Project Number 05.5550

Project Name 312 Broadway

Well No. CTM-7 Boring No. GP-7

Town/City Schenectady

County Schenectady State NY

Installation Date(s) 5.9.06

Drilling Contractor Precision Environmental Services

Drilling Method 4' Macro Core Sampler

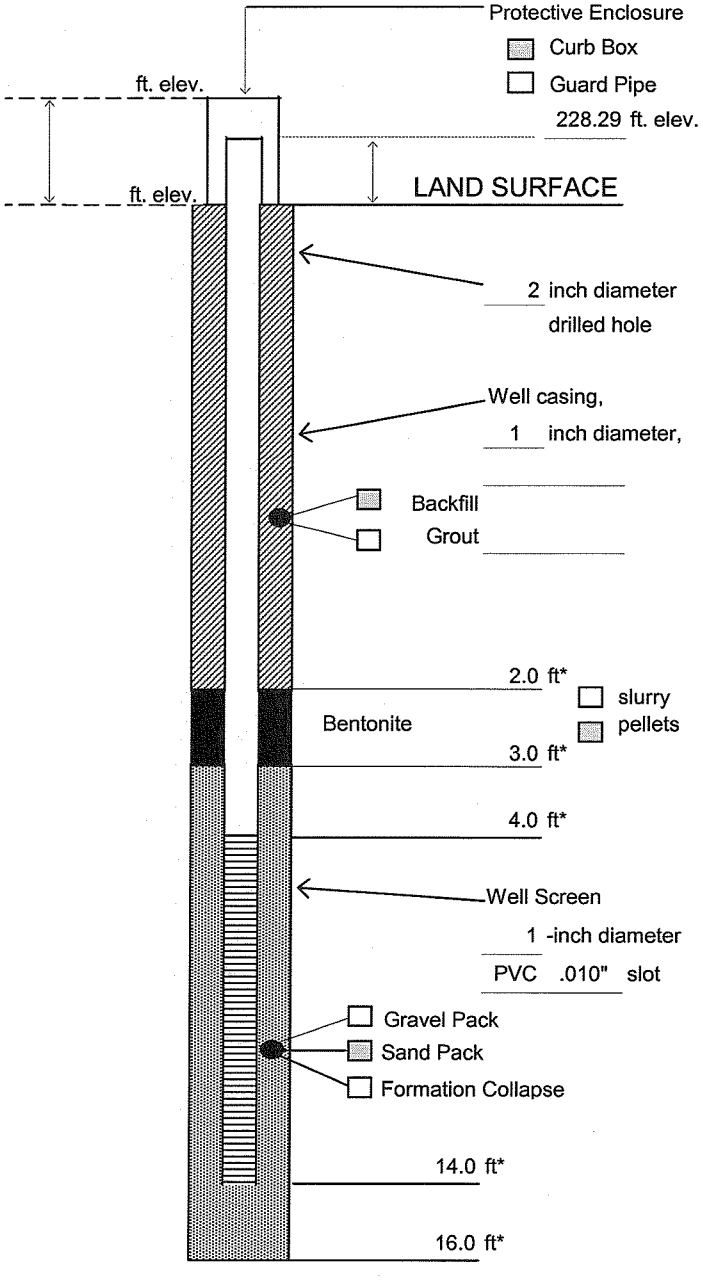
C.T. Male Observer N. Freeman

Notes:

Well No. CTM-8

MONITORING WELL CONSTRUCTION LOG

C.T. MALE ASSOCIATES, P.C.



* Depth below land surface.

Project Number 05.5550

Project Name 312 Broadway

Well No. CTM-8 Boring No. GP-8

Town/City Schenectady

County Schenectady State NY

Installation Date(s) 5.9.06

Drilling Contractor Precision Environmental Services

Drilling Method 4' Macro Core Sampler

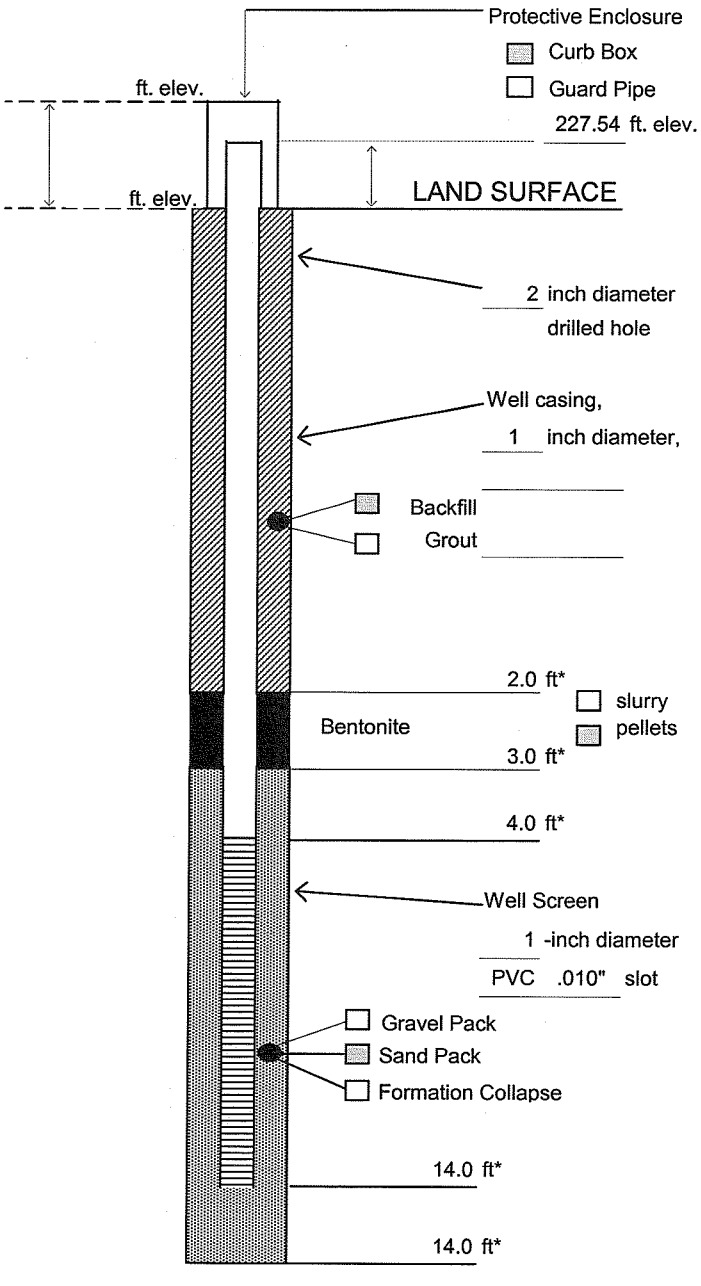
C.T. Male Observer N. Freeman

Notes:

Well No. CTM-9

MONITORING WELL CONSTRUCTION LOG

C.T. MALE ASSOCIATES, P.C.



* Depth below land surface.

Project Number 05.5550

Project Name 312 Broadway

Well No. CTM-9 Boring No. GP-9

Town/City Schenectady

County Schenectady State NY

Installation Date(s) 5.9.06

Drilling Contractor Precision Environmental Services

Drilling Method 4' Macro Core Sampler

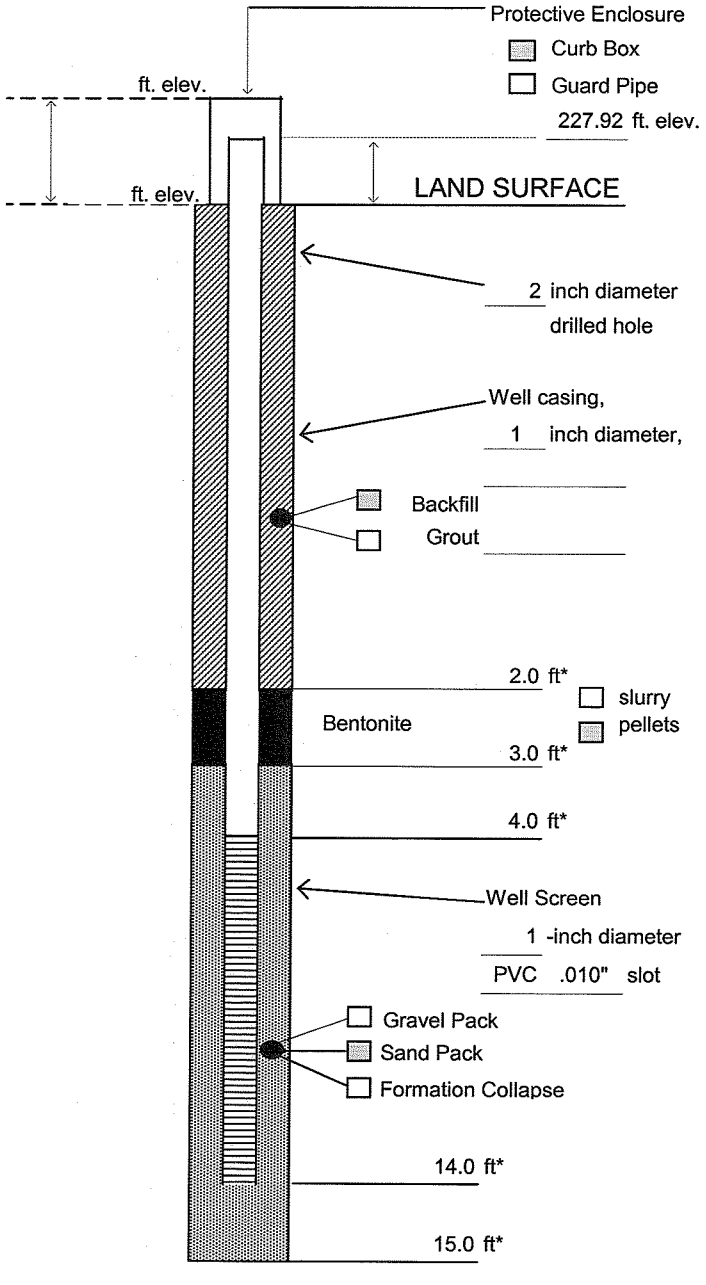
C.T. Male Observer N. Freeman

Notes:

Well No. CTM-10

MONITORING WELL CONSTRUCTION LOG

C.T. MALE ASSOCIATES, P.C.



* Depth below land surface.

Project Number 05.5550

Project Name 312 Broadway

Well No. CTM-10 Boring No. GP-10

Town/City Schenectady

County Schenectady State NY

Installation Date(s) 5.10.06

Drilling Contractor Precision Environmental Services

Drilling Method 4' Macro Core Sampler

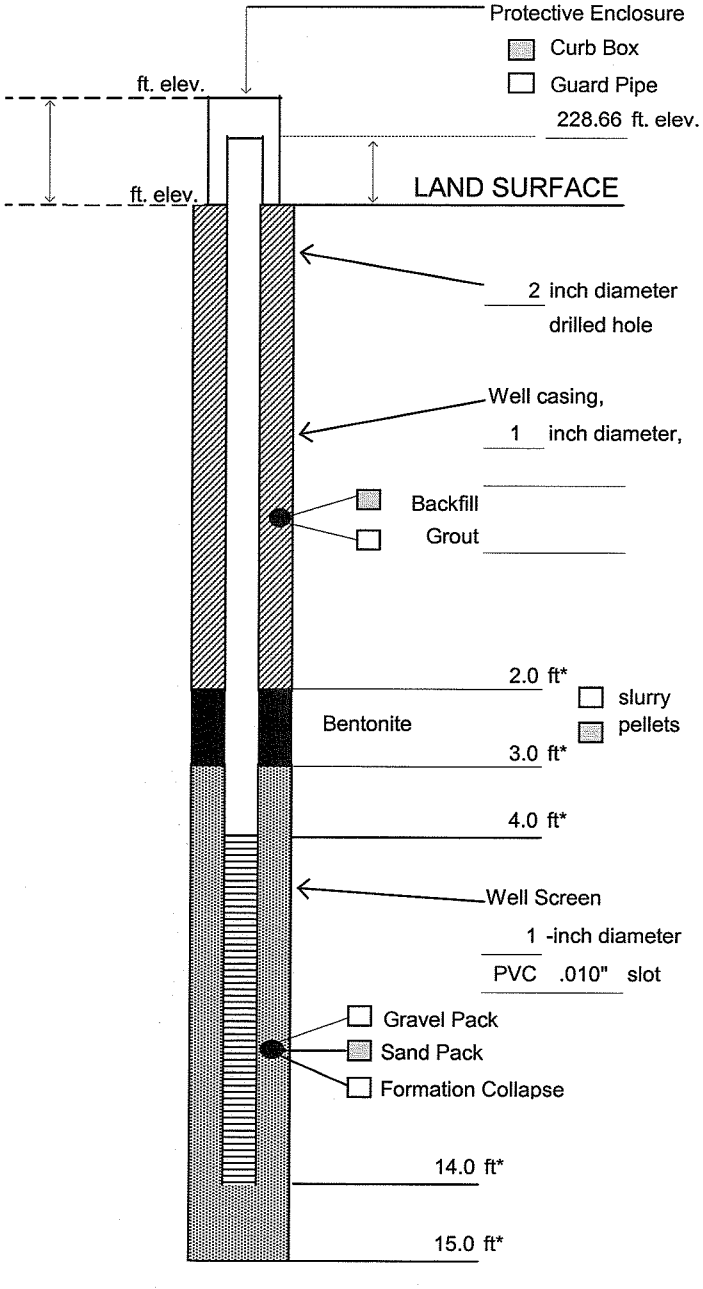
C.T. Male Observer N. Freeman

Notes:

Well No. CTM-14

MONITORING WELL CONSTRUCTION LOG

C.T. MALE ASSOCIATES, P.C.



* Depth below land surface.

Project Number 05.5550

Project Name 312 Broadway

Well No. CTM-14 Boring No. GP-14

Town/City Schenectady

County Schenectady State NY

Installation Date(s) 5.10.06

Drilling Contractor Precision Environmental Services

Drilling Method 4' Macro Core Sampler

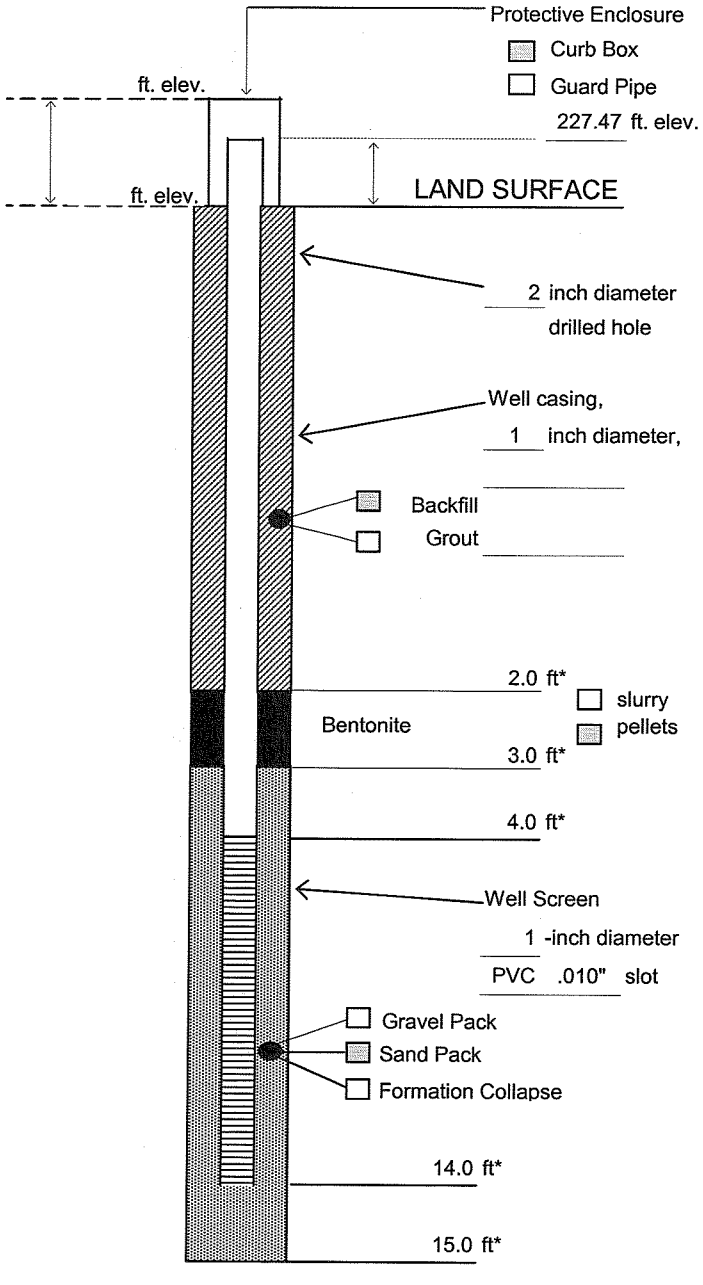
C.T. Male Observer N. Freeman

Notes:

Well No. CTM-15

MONITORING WELL CONSTRUCTION LOG

C.T. MALE ASSOCIATES, P.C.



* Depth below land surface.

Project Number 05.5550

Project Name 312 Broadway

Well No. CTM-15 Boring No. GP-15

Town/City Schenectady

County Schenectady State NY

Installation Date(s) 5.10.06

Drilling Contractor Precision Environmental Services

Drilling Method 4' Macro Core Sampler

C.T. Male Observer N. Freeman

Notes:

APPENDIX D

WASTE DISPOSAL DOCUMENTATION

MCES
MC ENVIRONMENTAL SERVICES, INC.

526 Queensbury Avenue
Queensbury, NY 12804

518-615-0349 Fax: 615-0355

Fax Transmittal

Date: 9-7-06

# of Pages: 5
(including cover sheet)

To: Brian Baulsir
CT Male Associates, PC

From: DeeDee Diccicco-Craft

Re: BOL, weight Tickets

Message:

Per your request, I'm faxing copies of:

1) BOL for Gasoline/Water

2) weight Ticket + Non Haz Waste manifest for Soil

3) weight ticket for drums that went to Scrap metal dealer.

Please let us know if you need anything else. We appreciate the opportunity to be of service!

This Memorandum

is an acknowledgment that a Bill of Lading has been issued and is not Original Bill of Lading, nor a copy or duplicate, covering the property named herein, and is intended solely for filing or record.

Shipper No. _____

Carrier No. SN-175

Page 1 of 1

MC Environmental Services, Inc.
(Name of carrier) (SCAC)

Date 9/7/06

On Collect on Delivery shipments, the letters "COD" must appear before consignee's name or as otherwise provided in Item 430, Sec.1.

TO: Consignee Norlite Corporation

Street 628 South Saratoga Rd

City Cohoes State NY Zip Code

FROM: Shipper Metro Plex

Street 312 Broadway

City Schenectady State NY Zip Code

24 hr. Emergency Contact Tel. No. (800) 451-8984

Route Best Way

Vehicle Number 051

No. of Units & Container Type	HM	BASIC DESCRIPTION Proper Shipping Name, Hazard Class, UN or NA Number, Packing Group or UN or NA Number, Proper Shipping Name, Hazard Class, Packing Group	TOTAL QUANTITY (Weight, Volume, Gallons, etc.)	WEIGHT (Subject to Correction)	RATE	CHARGES (For Carrier Use Only)
1TT		Gasoline & Water Mixture	742	gallons		
		3 NA1203 PG III				

PLACARDS TENDERED: YES ☐ NO ☐

Note — (1) Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property, as follows: "The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding _____ per _____."
(2) Where the applicable tariff provisions specify a limitation of the carrier's liability absent a release or a value declaration by the shipper and the shipper does not release the carrier's liability or declare a value, the carrier's liability shall be limited to the extent provided by such provisions. See NMFC Item 172.
(3) Commodities requiring special or additional care or attention in handling or stowing must be so marked and packaged as to ensure safe transportation. See Section 2(a) of Item 360, Bills of Lading, Freight Bills and Statements of Charges and Section 1(a) of the Contract Terms and Conditions for a list of such articles.

I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labelled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

_____ Signature

REMIT C.O.D. TO: ADDRESS

COD Amt: $

C.O.D. FEE: PREPAID ☐ COLLECT ☐ $

TOTAL CHARGES $

FREIGHT CHARGES
FREIGHT PREPAID Check box if charges are to be collect except when box at right is checked ☐

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

_____ (Signature of Consignor)

RECEIVED, subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.
Shipper hereby certifies that he is familiar with all the lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

SHIPPER James D Kuhl

PER

CARRIER MCE

PER A Shaw

DATE 9/7/06

3

Permanent post-office address of shipper.

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ESMI OF NEW YORK
304 TOWPATH ROAD
FORT EDWARD, NEW YORK 12828

(518)747-5500

TICKET NO : 2025257
DATE : 9/7/2006

MAX. ACCEPTABLE SOIL: 150.00

CUSTOMER: MCE10
MC ENVIRONMENTAL SERVICES
526 QUEENSBURY AVE.

QUEENSBURY,NY 12804

JOB NO :7720
MULTIPLEX
314 CLINTON ST
SCHENECTADY NY
RUNNING TONNAGE: 4.59

TRUCKER:
MC-001 MC ENVIRONMENTAL

GROSS : 39820 SCALE 1 IN 3:01:53PM
TARE : 30640 STORED OUT

NET : 9180 LB
4.590

MX01 02 MIX GAS & DIESEL

WEIGH MASTER: KIM MATTESON #530022

DRIVER:

REMARKS:

MATERIAL $
DELIVERY $
MISC $
TAX $

TOTAL $

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. N/A

Manifest Document No.

2. Page 1 of 1

3. Generator's Name and Mailing Address
Metro Plz
312 Broadway
Schuylerville, NY

4. Generator's Phone ( )

5. Transporter 1 Company Name
M C ENVIRONMENTAL SERVICES, INC.

6. US EPA ID Number
NYR000021071

A. State Transporter's ID 5A-175

B. Transporter 1 Phone (518) ~~747-3050~~

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID 1045-0349

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
ESMI OF NEW YORK
304 TOWPATH ROAD
FORT EDWARD, NY 12828

10. US EPA ID Number

E. State Facility's ID

F. Facility's Phone (518) 747-5500

11. WASTE DESCRIPTION	12. Containers No.	Type	13. Total Quantity	14. Unit Wt./Vol.
a. PETROLEUM CONTAMINATED SOIL	XX1	DT	4 59	T
b.				
c.				
d.				

G. Additional Descriptions for Materials Listed Above

H. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

GENERATOR

16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name: Jaime B Lahut
Signature: Jaime B Lahut
Date: Month 9 Day 7 Year 06

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name:
Signature:
Date: Month / Day 7 Year 06

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name
Signature
Date: Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name:
Signature:
Date: Month 7 Day 7 Year 06

NON-HAZARDOUS WASTE

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Rev 3/95

Phone: 518-346-3445
Fax: 518-346-5393

T. A. PREDEL & CO., INC.

DEALERS IN WASTE MATERIALS
PAPER - HYGRADES - IRON - METALS

RECYCLING CENTER
201 Edison Ave. Schenectady, N. Y. 12301

ID# 7002768

Customer's Order No. _____ Phone No. _____ Date 9-7-06

Name MCES

Address Drums - CT mate - Metroplex Job

SOLD BY	CASH	C. O. D.	CHARGE	ON ACCT.	MDSE. RET'D	PAID OUT	

QUAN.	DESCRIPTION	PRICE	AMOUNT
780	Iron		
	Thank You!		
		Tax	
		Total	

ALL claims and returned goods MUST be accompanied by this bill.

093260

Rec'd by _____

NATIONAL ASSOCIATION SUPPLY COOP., INC. NEW PHILADELPHIA, OH 199501-BS

APPENDIX E

SCALE HOUSE ACM/LBP SAMPLING RESULTS (JULY 11, 2006 LETTER)

C.T. MALE ASSOCIATES, P.C.

50 Century Hill Drive, P.O. Box 727, Latham, New York 12110-0727
518.786.7400 FAX 518.786.7299 ctmale@ctmale.com

July 11, 2006

Mr. Jayme B. Lahut,
Executive Director
Schenectady Metroplex Development Authority
433 State Street, Suite 401
Schenectady, NY 12305

Re: Asbestos Containing Materials and Lead-Based Paint
Survey and Sampling Services
The Scale House – 312 Broadway

Dear Mr. Lahut;

C.T. Male has performed sample collection and analysis of materials suspected to contain either asbestos or lead from the Scale House building prior to demolition activities. The Scale House building is a two story structure with two equal sides divided by an arched drive, built in a concrete slab. The roof is ceramic tile, the siding is a concrete like stucco in two layers, the lower floor is concrete and the upper floor is wood. Suspect materials included the exterior stucco, interior plasters and window glazings. Paint in the structure was deteriorated and mainly limited to remaining trimwork. The following are results of the current sample analysis. (See attached for lab results):

ASBESTOS

Sample #	Location	Material	Results
070506MS01	Exterior	Textured Concrete (outer)	No Asbestos Detected
070506MS02	Exterior	Textured Concrete (inner)	No Asbestos Detected
070506MS03	Exterior	Textured Concrete (outer)	No Asbestos Detected
070506MS04	Exterior	Textured Concrete (inner)	No Asbestos Detected
070506MS05	Exterior	Textured Concrete (outer)	No Asbestos Detected
070506MS06	Exterior	Textured Concrete (inner)	No Asbestos Detected
070506MS07	Exterior	Window Glazing	1.4% Chrysotile
070506MS08	Interior	Plasters (finish)	No Asbestos Detected
070506MS09	Interior	Plasters (scratch)	No Asbestos Detected
070506MS10	Interior	Plasters (finish)	No Asbestos Detected
070506MS11	Interior	Plasters (scratch)	No Asbestos Detected
070506MS12	Interior	Plasters (finish)	No Asbestos Detected
070506MS13	Interior	Plasters (scratch)	No Asbestos Detected
070506MS14	Exterior	Window Glazing	2.1% Chrysotile

ASBESTOS (cont.)

Sample #	Location	Material	Results
070506MS15	Interior	Plasters (finish)	No Asbestos Detected
070506MS16	Interior	Plasters (scratch)	No Asbestos Detected
070506MS17	Interior	Plasters (finish)	No Asbestos Detected
070506MS18	Interior	Plasters (scratch)	No Asbestos Detected

LEAD-BASED PAINT

Sample #	Sample Location	Substrate	Color	% Lead	(ppm)
021506MS01	Interior	Door Frame*	Green	2.10	21,000

ND – Not Detected * Positive for lead

CONCLUSIONS

ASBESTOS CONTAINING MATERIALS

Based on this survey and sample analysis the following materials are considered asbestos containing.

Exterior – Remaining glazings associated with 8 small windows and 4 larger windows. (Some of these are boarded over so the presence of actual windows is unknown.) Quantity of asbestos containing glazing materials is approximately 16 Sq. Ft.

The estimated cost to abate these windows is $3500.00.

LEAD-BASED PAINT

The paint sample results were positive for lead. Based on the sample result and the age of the structure, all painted surfaces should be assumed to be lead containing.

The following is a brief overview of the regulatory requirements that will be triggered by normal renovation or demolition activities.

- The main determinant of concern is the fact that the building will be undergoing renovation/demolition activities, therefore the paint is *not* being removed in such a way that will trigger lead "abatement" regulations. New York State has adopted the HUD federal guidelines when lead based paint is to be *abated.* This regulation should not be triggered under normal renovation or demolition activities.
- Any contractor performing the actual renovation activities WILL be required to follow 29 CFR 1926.62 OSHA's Lead Construction Standard. This standard is designed to protect workers from lead exposures above those deemed acceptable. This requirement should be noted in any bid documents or specifications.

- Disposal of construction debris containing lead-based paint is governed by the NYS DEC. There are separate disposal issues. Metals with lead-based paint can be recycled under a DEC exemption. All other demolition debris can be disposed of as C&D debris in a municipal landfill as long as TCLP analysis (Toxic Chemical Leaching Properties) is acceptable.

Please call me with any questions at (518) 786-7480.

Sincerely,

C.T. MALE ASSOCIATES, P.C.



Michael F. Sawyer
Senior Industrial Hygienist

AmeriSci Job #: **206071574**

Client Name: C. T. Male & Associates

07/07/2006 10:58 2126799392 AMERISCI NY BULK LAB PAGE 02/03

Table I
Summary of Bulk Asbestos Analysis Results

05.5550; 312 Broadway

AmeriSci Sample #	Client Sample# Location	HG Area	Sample Weight (gram)	Heat Sensitive Organic %	Acid Soluble Inorganic %	Insoluble Non-Asbestos Inorganic %	** Asbestos % by PLM/DS	** Asbestos % by TEM
01	070506MS01 Bulk Sample		---	---	---	---	NAD	NA
02	070506MS02 Bulk Sample		---	---	---	---	NAD	NA
03	070506MS03 Bulk Sample		---	---	---	---	NAD	NA
04	070506MS04 Bulk Sample		---	---	---	---	NAD	NA
05	070506MS05 Bulk Sample		---	---	---	---	NAD	NA
06	070506MS06 Bulk Sample		---	---	---	---	NAD	NA
07	070506MS07 Bulk Sample		0.409	13.0	72.9	12.8	NAD	Chrysotile 1.4
08	070506MS08 Bulk Sample		---	---	---	---	NAD	NA
09	070506MS09 Bulk Sample		---	---	---	---	NAD	NA
10	070506MS10 Bulk Sample		---	---	---	---	NAD	NA
11	070506MS11 Bulk Sample		---	---	---	---	NAD	NA
12	070506MS12 Bulk Sample		---	---	---	---	NAD	NA
13	070506MS13 Bulk Sample		---	---	---	---	NAD	NA

See Reporting notes on last page

Client Name: C. T. Male & Associates

Table I
Summary of Bulk Asbestos Analysis Results

05.5550; 312 Broadway

AmeriSci Sample #	Client Sample# Location	HG Area	Sample Weight (gram)	Heat Sensitive Organic %	Acid Soluble Inorganic %	Insoluble Non-Asbestos Inorganic %	** Asbestos % by PLM/DS	** Asbestos % by TEM
14	070506MS14 Bulk Sample		0.395	12.4	73.7	13.9	Chrysotile 2.1	NA
15	070506MS15 Bulk Sample		----	----	----	----	NAD	NA
16	070506MS16 Bulk Sample		----	----	----	----	NAD	NA
17	070506MS17 Bulk Sample		----	----	----	----	NAD	NA
18	070506MS18 Bulk Sample		--	----	----	----	NAD	NA

Analyzed by: Marik Peysakhov_____; Date Analyzed 7/9/06

Quantitative Analysis (Semi/Full); Bulk Asbestos Analysis - PLM by EPA 600/M4-82-020 per 40 CFR (NVLAP Lab#200546-0); TEM (Semi/Full) by EPA 600/R-93/116 (not covered by NVLAP

for beginning weights of <0.1 grams should be considered as qualitative only; Qualitative Analysis: Asbestos analysis results of "Present" or 'NVA = No Visible Asbestos' represents results for Qualitative PLM or TEM Analysis only (no accreditation coverage available from any regulatory agency for qualitative analyses); AIHA Lab#102843. NVLAP# 200546-0

Warning Note: PLM limitation, only TEM will resolve fibers <0.25 micrometers in diameter. TEM bulk analysis is representative of the fine grained matrix material and may not be representative of non-uniformly dispersed debris for which PLM evaluation is recommended (i.e. soils and other heterogenous materials).

Reviewed By:_____

07/09/2006 10:58 2126799392 AMERISCI NY BULK LAB PAGE 03/03

AMERISCI NEW YORK
117 East 30th Street
New York, NY 10016
Toll Free (800) 705-5227
Phone (212) 679-8600
Fax (212) 679-9392

AMERISCI
www.amerisci.com

CHAIN OF CUSTODY RECORD

AMERISCI JOB #: -3 06071574

COMPANY: C.T. Male Associates	ADDRESS: 50 Century Hill Dr. Latham								P.O.#:	
PROJECT INFORMATION	ANALYSIS TYPE	TURNAROUND TIME (X) 6-8 HR	12 HR	24 HR	48 HR	72 HR	5 DAY	OTHER	AIR FILTER INFORMATION:	
JOB NAME: 312 Broadway	TEM/AHERA								MCE	
JOB NUMBER: 05.5550	TEM/LEVEL II								PC	
JOB MANAGER: Mike Sawyer	TEM/BULK								25 mm	
JOB DESCRIPTION:	TEM/DUST								37 mm	
	TEM/WATER								0.45 um	
	PCM	RUSH							0.80 um	
	PLM	RUSH				X			TEMP:	
	OTHER:								OTHER:	

RESULTS TO: Mike Sawyer
EMAIL TO:
INVOICE TO: Mike Sawyer
COMMENTS: no B as needed

RETURN SAMPLES YES_____ NO X
PHONE: 518-786-7400
FAX: 518-786-7299
SITE FAX:
PAGER/CELL:

SAMPLE ID	SAMPLE LOCATION	START TIME	STOP TIME	TOTAL TIME	X LITERS /MIN.	= TOTAL VOLUME	DATE COLLECTED
Blank							
070506MS01							
070506MS18							

SAMPLED BY: MS DATE/TIME: 7/5/06
RELINQUISHED BY: MS DATE/TIME:
RECEIVED BY: DATE/TIME: 7/6/06 12:55
RECEIVED IN LAB BY: DATE/TIME:

AmeriSci Boston
Eight School Street
Weymouth, MA 02189
781-337-9334

Laboratory Report

Report Date 07/11/2006
Workorder No. 0607-00022

Customer: C.T. Male Associates
50 Century Hill Drive
P.O. Box 727
Latham, NY 12110

Attention: M. Sawyer

Subject: 312 BROADWAY: LEAD IN PAINT

Sample: 001 070506MS01
Collection Date: 07/05/2006 **Received Date:** 07/06/2006 **Time:** 10:15:00AM
Matrix: CHIP

Parameter	Method	Results	Units	PQL	Tech	Analysis Date/Time	Qual
Lead, Chip	7420, SW-846	2.10	%	0.209	JS	07/11/2006 / 14:22	

To the best of my knowledge this report is true and accurate.

Authorized By: _____ Date: 7-11-06

Robert Bell, Environmental Laboratory Manager

NOTE: All solid results are reported on a dry weight basis unless otherwise noted.

Certifications: MA: MA059 NY:10982 CT: PH0119 RI:A45 NJ: 59744

ND = Not Detected PQL= Practical Quantitation Limit

AMERISCI
www.amerisci.com

CHAIN OF CUSTODY RECORD

AMERISCI BOSTON
8 School Street ~Weymouth, MA 02189
888.724.5221 Toll Free
781.337.9334 Phone~781.337.7642 Fax

AMERISCI JOB NO:

PAGE _____ OF _____

DUE DATE:

TEMP UPON RECEIPT:

☐ 1 DAY ☐ 2 DAY ☐ 3 DAY ☐ 5 DAY ☐ 7 DAY ☐ 10 DAY

DATA PACKAGE: 0607-022

P.O.#

COMPANY: C.T. Male Associates P.C.

ADDRESS: 50 Century Hill Drive, Latham NY

PHONE: 518-786-7480 FAX 1: 518-265-3119 FAX 2: —

CLIENT CONTACT:

EMAIL: M.Sawyer@CTMALE.COM

PROJECT NAME: 312 Broadway

PROJECT NUMBER: 05.5550

PROJECT STATE:

MATRIX: A-WATER S-SOIL/SOLIDS SL-SLUDGE OIL-OIL CH-CHIPS WI-WIPES C-CASSETTES W-WASTE O-OTHER

CONTAINER: P-PLASTIC G-GLASS V-VOA

LAB ID	CLIENT SAMPLE IDENTIFICATION	MATRIX	CONTAINER SIZE	CONTAINER TYPE	CONTAINER #	SAMPLING INFORMATION DATE	SAMPLING INFORMATION TIME	SAMPLING INFORMATION TECH	GRAB (G) OR COMPOSITE (C)	PRESERVATIVES	SAMPLE PH AT LOGIN	AAS for Lead						Notes:
	070506MS01	Clt																

SAMPLED BY: (PRINT) Mike Sawyer	DATE: 7/5/06	RECEIVED BY: (PRINT)	DATE:		
(SIGN) MJS	TIME:	(SIGN)	TIME:		
RELINQUISHED BY: (PRINT) Mike Sawyer	DATE:	RECEIVED BY: (PRINT)	DATE:		
(SIGN) MJS	TIME:	(SIGN)	TIME:		
RELINQUISHED BY: (PRINT)	DATE:	RECEIVED FOR LABORATORY BY: Martin Ponta	DATE: 7/6/06		
(SIGN)	TIME:	(SIGN) MJS	TIME: 10:15		

APPENDIX F

GROUNDWATER SERVICES FIELD LOGS

Groundwater Services Field Log

DATE: 6/13/06 PROJECT NAME: 312 Broadway

PROJECT NO.: 05.5550 PROJECT LOCATION: Schenectady, NY

SAMPLING PERSONNEL: B.Baulsir

MONITORING WELL ID#: CTM-1 NOTES TAKEN BY: B.Baulsir

DEPTH TO WATER: 5.15′ FROM: Tpvc BAILER ID: NA

DEPTH TO BOTTOM: 14.55′ FROM: Tpvc BAILER: LAB CLEANED / FIELD CLEANED

WATER COLUMN HEIGHT: 9.60′ BAILER: STAINLESS STEEL NA

OTHER NA

CONVERSION FACTORS LINEAR FEET TO GALLONS

WELL CASING DIAMETER

1″ = 0.041 GALLONS 3" = 0.38 GALLONS

1.25" = 0.064 GALLONS 4" = 0.66 GALLONS

WELL VOLUME: .614 GALLONS 2" = 0.16 GALLONS 6" = 1.47 GALLONS

VOLUMES PURGED: 7.0 GALLONS PURGE METHOD: Peristaltic Pump

TIME STARTED: 1107 ; TIME FINISHED: 1335

OBSERVATIONS: COLOR Gray brown to clear ; ODOR none

SHEEN none ; TURBIDITY 1 NTU

OTHER NA

WATER RECOVERY HEIGHT: Continuous ; RECOVERY TIME IN MINUTES: Cont.

FIELD PARAMETERS: pH 6.83 SU , TEMPERATURE 16.7 Celsius

CONDUCTIVITY 3.75 ms/cm UMHO/CM, OTHER NA

SAMPLE COLLECTION TIME: 1320

NOTES: Negative Numbers obtained with turbidity monitor. After recalibration, negative numbers still obtained. All other parameters have stabilized.

Groundwater Services Field Log

DATE: 6/13/06 PROJECT NAME: 312 Broadway

PROJECT NO.: 05.5550 PROJECT LOCATION: Schenectady, NY

SAMPLING PERSONNEL: B.Baulsir

MONITORING WELL ID#: CTM-2 NOTES TAKEN BY: B.Baulsir

DEPTH TO WATER: 5.56′ FROM: Tpvc BAILER ID: NA

DEPTH TO BOTTOM: 13.60′ FROM: Tpvc BAILER: LAB CLEANED / FIELD CLEANED

WATER COLUMN HEIGHT: 7.69′ BAILER: STAINLESS STEEL NA

OTHER NA

CONVERSION FACTORS LINEAR FEET TO GALLONS

1″ = 0.041 GALLONS 3" = 0.38 GALLONS

1.25" = 0.064 GALLONS 4" = 0.66 GALLONS

2" = 0.16 GALLONS 6" = 1.47 GALLONS

WELL CASING DIAMETER

WELL VOLUME: .32 GALLONS

VOLUMES PURGED: 3.5 / DRY GALLONS PURGE METHOD: Peristaltic Pump

TIME STARTED: 1420 ; TIME FINISHED: 1450

OBSERVATIONS: COLOR Yellow Brown to Clear ; ODOR None

SHEEN None ; TURBIDITY 11.83 NTU

OTHER NA

WATER RECOVERY HEIGHT: 5.69 ; RECOVERY TIME IN MINUTES: 8 minute

FIELD PARAMETERS: pH 6.82 SU , TEMPERATURE 18.3 Celsius

CONDUCTIVITY 3.27 ms/cm UMHO/CM, OTHER NA

SAMPLE COLLECTION TIME: 1435

NOTES:

Groundwater Services Field Log

DATE: 6/15/06 PROJECT NAME: 312 Broadway

PROJECT NO.: 05.5550 PROJECT LOCATION: Schenectady, NY

SAMPLING PERSONNEL: B.Baulsir

MONITORING WELL ID#: CTM-2 NOTES TAKEN BY: B.Baulsir

DEPTH TO WATER: 5.56' FROM: Tpvc BAILER ID: NA

DEPTH TO BOTTOM: 13.60' FROM: Tpvc BAILER: LAB CLEANED / FIELD CLEANED

WATER COLUMN HEIGHT: 8.04' BAILER: STAINLESS STEEL NA

OTHER NA

CONVERSION FACTORS LINEAR FEET TO GALLONS

WELL CASING DIAMETER

1" = 0.041 GALLONS 3" = 0.38 GALLONS

1.25" = 0.064 GALLONS 4" = 0.66 GALLONS

WELL VOLUME: .33 GALLONS 2" = 0.16 GALLONS 6" = 1.47 GALLONS

VOLUMES PURGED: 1.5 GALLONS PURGE METHOD: Peristaltic Pump

TIME STARTED: 1510 ; TIME FINISHED: 1536

OBSERVATIONS: COLOR Light Brown to clear ; ODOR None

SHEEN None ; TURBIDITY 25 NTU

OTHER NA

WATER RECOVERY HEIGHT: 5.73' ; RECOVERY TIME IN MINUTES: Cont.

FIELD PARAMETERS: pH 6.68 SU , TEMPERATURE 17.5 Celsius

CONDUCTIVITY 4.27 ms/cm UMHO/CM, OTHER NA

SAMPLE COLLECTION TIME: 1530

NOTES:

Groundwater Services Field Log

DATE: 6/14/06 PROJECT NAME: 312 Broadway

PROJECT NO.: 05.5550 PROJECT LOCATION: Schenectady, NY

SAMPLING PERSONNEL: B.Baulsir

MONITORING WELL ID#: CTM-3 NOTES TAKEN BY: B.Baulsir

DEPTH TO WATER: 5.86' FROM: Tpvc BAILER ID: NA

DEPTH TO BOTTOM: 13.9' FROM: Tpvc BAILER: LAB CLEANED / FIELD CLEANED

WATER COLUMN HEIGHT: 8.04' BAILER: STAINLESS STEEL NA

OTHER NA

CONVERSION FACTORS LINEAR FEET TO GALLONS

WELL CASING DIAMETER

1" = 0.041 GALLONS 3" = 0.38 GALLONS

1.25" = 0.064 GALLONS 4" = 0.66 GALLONS

WELL VOLUME: .33 GALLONS 2" = 0.16 GALLONS 6" = 1.47 GALLONS

VOLUMES PURGED: 4.0 GALLONS PURGE METHOD: Peristaltic Pump

TIME STARTED: 0835 ; TIME FINISHED: 0924

OBSERVATIONS: COLOR Yellow Brown to Clear ; ODOR Slight Sulfur odor

SHEEN None ; TURBIDITY 16.10 NTU

OTHER NA

WATER RECOVERY HEIGHT: 6.35' ; RECOVERY TIME IN MINUTES: 20 min.

FIELD PARAMETERS: pH 6.93 SU , TEMPERATURE 18.0 Celsius

CONDUCTIVITY 3.56 ms/cm UMHO/CM, OTHER NA

SAMPLE COLLECTION TIME: 0915

NOTES:

Groundwater Services Field Log

DATE: 6/14/06 PROJECT NAME: 312 Broadway

PROJECT NO.: 05.5550 PROJECT LOCATION: Schenectady, NY

SAMPLING PERSONNEL: B.Baulsir and N.Freeman

MONITORING WELL ID#: CTM-4 (MS/MSD) NOTES TAKEN BY: B.Baulsir

DEPTH TO WATER: 6.71′ FROM: Tpvc BAILER ID: NA

DEPTH TO BOTTOM: 13.8′ FROM: Tpvc BAILER: LAB CLEANED / FIELD CLEANED

WATER COLUMN HEIGHT: 7.09 BAILER: STAINLESS STEEL NA

OTHER NA

CONVERSION FACTORS LINEAR FEET TO GALLONS

WELL CASING DIAMETER

1″ = 0.041 GALLONS 3" = 0.38 GALLONS

1.25" = 0.064 GALLONS 4" = 0.66 GALLONS

WELL VOLUME: .29 GALLONS 2" = 0.16 GALLONS 6" = 1.47 GALLONS

VOLUMES PURGED: 4.0 GALLONS PURGE METHOD: Peristaltic Pump

TIME STARTED: 0946 ; TIME FINISHED: 1050

OBSERVATIONS: COLOR Light gray to clear ; ODOR Slight Sulfur Odor

SHEEN None ; TURBIDITY 11.96 NTU

OTHER NA

WATER RECOVERY HEIGHT: 7.01′ ; RECOVERY TIME IN MINUTES: Cont.

FIELD PARAMETERS: pH 6.79 SU , TEMPERATURE 16.7 Celsius

CONDUCTIVITY 3.61 ms/cm UMHO/CM, OTHER NA

SAMPLE COLLECTION TIME: 1020

NOTES: MS/MSD obtained

Groundwater Services Field Log

DATE: 6/14/06 PROJECT NAME: 312 Broadway

PROJECT NO.: 05.5550 PROJECT LOCATION: Schenectady, NY

SAMPLING PERSONNEL: B.Baulsir

MONITORING WELL ID#: CTM-5 NOTES TAKEN BY: B.Baulsir

DEPTH TO WATER: 4.80′ FROM: Tpvc BAILER ID: NA

DEPTH TO BOTTOM: 14.83′ FROM: Tpvc BAILER: LAB CLEANED / FIELD CLEANED

WATER COLUMN HEIGHT: 10.03′ BAILER: STAINLESS STEEL NA

OTHER NA

CONVERSION FACTORS LINEAR FEET TO GALLONS

WELL CASING DIAMETER

1″ = 0.041 GALLONS 3" = 0.38 GALLONS

1.25" = 0.064 GALLONS 4" = 0.66 GALLONS

WELL VOLUME: .41 GALLONS 2" = 0.16 GALLONS 6" = 1.47 GALLONS

VOLUMES PURGED: 3.75 GALLONS PURGE METHOD: Peristaltic Pump

TIME STARTED: 1129 ; TIME FINISHED: 1159

OBSERVATIONS: COLOR Light brown to clear ; ODOR None

SHEEN None ; TURBIDITY 4.80 NTU

OTHER NA

WATER RECOVERY HEIGHT: 4.81′ ; RECOVERY TIME IN MINUTES: Cont.

FIELD PARAMETERS: pH 6.70 SU , TEMPERATURE 18.2 Celsius

CONDUCTIVITY 2.06 UMHO/CM, OTHER NA

SAMPLE COLLECTION TIME: 1150

NOTES:

Groundwater Services Field Log

DATE: 6/14/06 PROJECT NAME: 312 Broadway

PROJECT NO.: 05.5550 PROJECT LOCATION: Schenectady, NY

SAMPLING PERSONNEL: B.Baulsir

MONITORING WELL ID#: CTM-6 NOTES TAKEN BY: B.Baulsir

DEPTH TO WATER: 5. 41′ FROM: Tpvc BAILER ID: NA

DEPTH TO BOTTOM: 13.87′ FROM: Tpvc BAILER: LAB CLEANED / FIELD CLEANED

WATER COLUMN HEIGHT: 8.46′ BAILER: STAINLESS STEEL NA

OTHER NA

CONVERSION FACTORS LINEAR FEET TO GALLONS

WELL CASING DIAMETER

1″ = 0.041 GALLONS 3" = 0.38 GALLONS

1.25" = 0.064 GALLONS 4" = 0.66 GALLONS

WELL VOLUME: .35 GALLONS 2" = 0.16 GALLONS 6" = 1.47 GALLONS

VOLUMES PURGED: 4.0 GALLONS PURGE METHOD: Peristaltic Pump

TIME STARTED: 1214 ; TIME FINISHED: 1305

OBSERVATIONS: COLOR Gray Brown to Clear ; ODOR None

SHEEN None ; TURBIDITY 31.7 NTU

OTHER NA

WATER RECOVERY HEIGHT: 5.62′ ; RECOVERY TIME IN MINUTES: Cont.

FIELD PARAMETERS: pH 6.75 SU , TEMPERATURE 17.6 Celsius

CONDUCTIVITY 2.74 ms/cm UMHO/CM, OTHER NA

SAMPLE COLLECTION TIME: 1255

NOTES:

Groundwater Services Field Log

DATE: 6/14/06 PROJECT NAME: 312 Broadway

PROJECT NO.: 05.5550 PROJECT LOCATION: Schenectady, NY

SAMPLING PERSONNEL: B.Baulsir

MONITORING WELL ID#: CTM-7 NOTES TAKEN BY: B.Baulsir

DEPTH TO WATER: 5.75' FROM: Tpvc BAILER ID: NA

DEPTH TO BOTTOM: 13.63' FROM: Tpvc BAILER: LAB CLEANED / FIELD CLEANED

WATER COLUMN HEIGHT: 7.88' BAILER: STAINLESS STEEL NA

OTHER NA

CONVERSION FACTORS LINEAR FEET TO GALLONS

WELL CASING DIAMETER

1" = 0.041 GALLONS 3" = 0.38 GALLONS

1.25" = 0.064 GALLONS 4" = 0.66 GALLONS

WELL VOLUME: .32 GALLONS 2" = 0.16 GALLONS 6" = 1.47 GALLONS

VOLUMES PURGED: 4.0 GALLONS PURGE METHOD: Peristaltic Pump

TIME STARTED: 1353 ; TIME FINISHED: 1436

OBSERVATIONS: COLOR Yellow Brown to Clear ; ODOR None

SHEEN None ; TURBIDITY 6.03 NTU

OTHER NA

WATER RECOVERY HEIGHT: 7.00' ; RECOVERY TIME IN MINUTES: Cont.

FIELD PARAMETERS: pH 6.94 SU , TEMPERATURE 18.1 Celsius

CONDUCTIVITY 3.32 ms/cm UMHO/CM, OTHER NA

SAMPLE COLLECTION TIME: 1425

NOTES:

Groundwater Services Field Log

DATE: 6/15/06 PROJECT NAME: 312 Broadway

PROJECT NO.: 05.5550 PROJECT LOCATION: Schenectady, NY

SAMPLING PERSONNEL: B.Baulsir

MONITORING WELL ID#: CTM-8 NOTES TAKEN BY: B.Baulsir

DEPTH TO WATER: 6.23′ FROM: Tpvc BAILER ID: NA

DEPTH TO BOTTOM: 13.90′ FROM: Tpvc BAILER: LAB CLEANED / FIELD CLEANED

WATER COLUMN HEIGHT: 7.67′ BAILER: STAINLESS STEEL NA

OTHER NA

CONVERSION FACTORS LINEAR FEET TO GALLONS

WELL CASING DIAMETER

1″ = 0.041 GALLONS 3" = 0.38 GALLONS

1.25" = 0.064 GALLONS 4" = 0.66 GALLONS

WELL VOLUME: .31 GALLONS 2" = 0.16 GALLONS 6" = 1.47 GALLONS

VOLUMES PURGED: 3.0 GALLONS PURGE METHOD: Peristaltic Pump

TIME STARTED: 0917 ; TIME FINISHED: 1010

OBSERVATIONS: COLOR Gray Brown to Clear ; ODOR None

SHEEN None ; TURBIDITY 20 NTU

OTHER NA

WATER RECOVERY HEIGHT: 6.62′ ; RECOVERY TIME IN MINUTES: Cont.

FIELD PARAMETERS: pH 6.65 SU , TEMPERATURE 16.8 Celsius

CONDUCTIVITY 3.54 ms/cm UMHO/CM, OTHER NA

SAMPLE COLLECTION TIME: 0945

NOTES:

Groundwater Services Field Log

DATE: 6/15/06 PROJECT NAME: 312 Broadway

PROJECT NO.: 05.5550 PROJECT LOCATION: Schenectady, NY

SAMPLING PERSONNEL: B.Baulsir

MONITORING WELL ID#: CTM-9 NOTES TAKEN BY: B.Baulsir

DEPTH TO WATER: 4.67' FROM: Tpvc BAILER ID: NA

DEPTH TO BOTTOM: 13.77' FROM: Tpvc BAILER: LAB CLEANED / FIELD CLEANED

WATER COLUMN HEIGHT: 9.1' BAILER: STAINLESS STEEL NA

OTHER NA

CONVERSION FACTORS LINEAR FEET TO GALLONS

WELL CASING DIAMETER

1" = 0.041 GALLONS 3" = 0.38 GALLONS

1.25" = 0.064 GALLONS 4" = 0.66 GALLONS

WELL VOLUME: .37 GALLONS 2" = 0.16 GALLONS 6" = 1.47 GALLONS

VOLUMES PURGED: 2.75 GALLONS PURGE METHOD: Peristaltic Pump

TIME STARTED: 1032 ; TIME FINISHED: 1132

OBSERVATIONS: COLOR Brown Gray to Clear ; ODOR None

SHEEN None ; TURBIDITY 35 NTU

OTHER NA

WATER RECOVERY HEIGHT: 4.93' ; RECOVERY TIME IN MINUTES: Cont.

FIELD PARAMETERS: pH 6.88 SU , TEMPERATURE 17.6 Celsius

CONDUCTIVITY 6.01ms/cm UMHO/CM, OTHER NA

SAMPLE COLLECTION TIME: 1115

NOTES:

Groundwater Services Field Log

DATE: 6/15/06 PROJECT NAME: 312 Broadway

PROJECT NO.: 05.5550 PROJECT LOCATION: Schenectady, NY

SAMPLING PERSONNEL: B.Baulsir

MONITORING WELL ID#: CTM-10 NOTES TAKEN BY: B.Baulsir

DEPTH TO WATER: 5.11′ FROM: Tpvc BAILER ID: NA

DEPTH TO BOTTOM: 13.75′ FROM: Tpvc BAILER: LAB CLEANED / FIELD CLEANED

WATER COLUMN HEIGHT: 8.64′ BAILER: STAINLESS STEEL NA

OTHER NA

CONVERSION FACTORS LINEAR FEET TO GALLONS

WELL CASING DIAMETER

1″ = 0.041 GALLONS 3" = 0.38 GALLONS

1.25" = 0.064 GALLONS 4" = 0.66 GALLONS

WELL VOLUME: .35 GALLONS 2" = 0.16 GALLONS 6" = 1.47 GALLONS

VOLUMES PURGED: 4.5 GALLONS PURGE METHOD: Peristaltic Pump

TIME STARTED: 1205 ; TIME FINISHED: 1255

OBSERVATIONS: COLOR Dark Gray Brown ; ODOR Slight Sulfur Odor

SHEEN None ; TURBIDITY 14 NTU

OTHER NA

WATER RECOVERY HEIGHT: 5.32′ ; RECOVERY TIME IN MINUTES: Cont

FIELD PARAMETERS: pH 6.84 SU , TEMPERATURE 18.2 Celsius

CONDUCTIVITY 3.38 ms/cm UMHO/CM, OTHER NA

SAMPLE COLLECTION TIME: 1240

NOTES:

Groundwater Services Field Log

DATE: 6/15/06 PROJECT NAME: 312 Broadway

PROJECT NO.: 05.5550 PROJECT LOCATION: Schenectady, NY

SAMPLING PERSONNEL: B.Baulsir

MONITORING WELL ID#: CTM-14 NOTES TAKEN BY: B.Baulsir

DEPTH TO WATER: 5.43' FROM: Tpvc BAILER ID: NA

DEPTH TO BOTTOM: 13.89' FROM: Tpvc BAILER: LAB CLEANED / FIELD CLEANED

WATER COLUMN HEIGHT: 8.46' BAILER: STAINLESS STEEL NA

OTHER NA

CONVERSION FACTORS LINEAR FEET TO GALLONS

WELL CASING DIAMETER

1" = 0.041 GALLONS 3" = 0.38 GALLONS

1.25" = 0.064 GALLONS 4" = 0.66 GALLONS

WELL VOLUME: .35 GALLONS 2" = 0.16 GALLONS 6" = 1.47 GALLONS

VOLUMES PURGED: 4.0 GALLONS PURGE METHOD: Peristaltic Pump

TIME STARTED: 1345 ; TIME FINISHED: 1430

OBSERVATIONS: COLOR Yellow brown to clear ; ODOR None

SHEEN None ; TURBIDITY 40 NTU

OTHER NA

WATER RECOVERY HEIGHT: 5.83' ; RECOVERY TIME IN MINUTES: Cont.

FIELD PARAMETERS: pH 7.18 SU , TEMPERATURE 16.1 Celsius

CONDUCTIVITY .871 ms/cm UMHO/CM, OTHER NA

SAMPLE COLLECTION TIME: 1410

NOTES:

Groundwater Services Field Log

DATE: 6/15/06 PROJECT NAME: 312 Broadway

PROJECT NO.: 05.5550 PROJECT LOCATION: Schenectady, NY

SAMPLING PERSONNEL: B.Baulsir

MONITORING WELL ID#: CTM-15 NOTES TAKEN BY: B.Baulsir

DEPTH TO WATER: 4.71′ FROM: Tpvc BAILER ID: NA

DEPTH TO BOTTOM: 13.73′ FROM: Tpvc BAILER: LAB CLEANED / FIELD CLEANED

WATER COLUMN HEIGHT: 9.02′ BAILER: STAINLESS STEEL NA

OTHER NA

CONVERSION FACTORS LINEAR FEET TO GALLONS

WELL CASING DIAMETER

1″ = 0.041 GALLONS 3" = 0.38 GALLONS

1.25" = 0.064 GALLONS 4" = 0.66 GALLONS

WELL VOLUME: .37 GALLONS 2" = 0.16 GALLONS 6" = 1.47 GALLONS

VOLUMES PURGED: 2.5 GALLONS PURGE METHOD: Peristaltic Pump

TIME STARTED: 1610 ; TIME FINISHED: 1700

OBSERVATIONS: COLOR Dark Gray to clear ; ODOR Slight Petroleum odor

SHEEN Slight Sheen ; TURBIDITY 19 NTU

OTHER NA

WATER RECOVERY HEIGHT: 4.97′ ; RECOVERY TIME IN MINUTES: Cont.

FIELD PARAMETERS: pH 7.07 SU , TEMPERATURE 17.6 Celsius

CONDUCTIVITY 6.98 ms/cm UMHO/CM, OTHER NA

SAMPLE COLLECTION TIME: 1645

NOTES:

APPENDIX G

CDs of LABORATORY ANALYTICAL DATA (UNVALIDATED)

EXHIBIT 1

NYSDEC WORK PLAN APPROVAL LETTER

New York State Department of Environmental Conservation
Division of Environmental Remediation
Remedial Bureau D, 12th Floor
625 Broadway, Albany, New York 12233-7013
Phone: (518) 402-9818 • **FAX:** (518) 402-9819
Website: www.dec.state.ny.us

Denise M. Sheehan
Commissioner

APR 24 2006

Mr. Kirk Moline
C.T. Male Associates, P.C.
50 Century Hill Drive
Latham, New York 12110-0727

APR 2 0 2006

RE: Remedial Investigation/Alternatives Analysis Work Plan
April 7, 2006
312 Broadway, Site No. E447035
Schenectady (C), Schenectady County

Dear Mr. Moline:

I have reviewed the final Remedial Investigation/Alternatives Analysis Work Plan that you submitted based on comments of the draft work plan from the New York State Department of Environmental Conservation (Department) and New York State Department of Health (NYSDOH). I have also reviewed the proposed budget that was submitted with the final work plan. Both documents are acceptable and approved.

Please be aware the proposed budget is equal to the amount allowed under the State Assistance Contract (SAC) for this project. Without a contract amendment, the City of Schenectady (City) cannot be reimbursed for any additional costs.

I have asked that a copy of the contract between C.T. Male Associates, P.C., (C.T. Male) and the City be submitted to the Department. It is my understanding that the contract multiplier is 2.997. This multiplier accounts for direct and indirect costs as well as the fixed fee negotiated with the City. This figure is greater than 2.8, the maximum figure determined to be eligible for reimbursement by the Department. However, based on the information in a letter to Mr. Bernard Sisson, P.E., from the Department regarding the "714 Broadway" ERP project on September 26, 2005, I will allow the higher multiplier.

The work plan and budget will be incorporated into SAC No.C302802. Arrangements should be made to deposit the final work plans in the document repositories as outlined in the Citizen Participation Plan and noted in the project fact sheet.

If you have any questions regarding this letter or any other issues related to this project, please do not hesitate to contact me at (518) 402-9818.

Sincerely,

Ian Beilby, P.E.
Project Manager
Remedial Bureau D
Division of Environmental Remediation

cc. T. Girard, DOH
J. Lahut, Schenectady Metroplex
A. Goldberger, City of Schenectady

EXHIBIT 2

DATA USABILITY SUMMARY REPORTS

C.T. MALE ASSOCIATES, P.C.

SUBJECT: Data Usability Summary Report (DUSR)
Metroplex – 312 Broadway Surface Soil Investigation
Chemtech SDG No.: X2764
C.T. Male Project No.: 05.5550

DATE: June 15, 2006

On May 11, 2006, C.T. Male Associates, P.C. (C. T. Male) collected thirteen (13) surface soil samples from the Metroplex site at 312 Broadway. The samples were submitted, along with an equipment blank and a trip blank to Chemtech Laboratories (Chemtech) in Mountainside, NJ for the following analyses:

Parameter	Sample Date	VOC, SW-846 8260B	SVOC , SW-846 8270C	Pesticides, SW-846 8081A	PCBs, SW-846 8082	TAL Metals, SW-846 6010 and 7471
Sample Ids						
SS-1	5/11/2006	1	1	1	1	1
SS-2	5/11/2006	1	1	1	1	1
SS-3	5/11/2006	1	1	1	1	1
SS-4	5/11/2006	1	1	1	1	1
SS-5	5/11/2006	1	1	1	1	1
SS-6	5/11/2006	1	1	1	1	1
SS-7	5/11/2006	1	1	1	1	1
SS-8	5/11/2006	1	1	1	1	1
SS-9	5/11/2006	1	1	1	1	1
SS-10	5/11/2006	1	1	1	1	1
SS-11	5/11/2006	1	1	1	1	1
SS-12	5/11/2006	1	1	1	1	1
Dup #2[1]	5/11/2006	1	1	1	1	1
Equipment Blank #2	5/11/2006	1	1	1	1	1
Trip Blank	-	1	0	0	0	0
Total Samples		**15**	**14**	**14**	**14**	**14**

VOC – Volatile organic compounds
SVOC – Semi-volatile organic compounds
PCBs – Polychlorinated Biphenyls

C. T. Male evaluated the data reported by the laboratory to determine usability per Appendix 2B of the *Draft DER-10 Technical Guidance for Site Investigation and Remediation* (NYSDEC, December 2002), with guidance from the *USEPA CLP National Functional Guidelines for Organic and Inorganic Data Review* (October 1999 and 2004, respectively). The following criteria were reviewed:

- Completeness of data package as defined under the requirements for the NYSDEC ASP Category B or USEPA CLP deliverables;
- Holding time compliance for chemical analysis;

[1] Field duplicate of SS-8.

- Protocol required limits and specification compliance for quality control (QC) data (e.g., instrument tuning, calibration standards, blank results, spike results, duplicate results, etc);
- Contract compliance for analytical protocols;
- Omissions and transcription errors; and
- Data qualification.

Data Completeness

Documentation required by the project was included in the data package. There were no discrepancies found between the raw data and summary forms. The laboratory Case Narratives (Attachment A) identified deviations from laboratory analytical specifications. C.T. Male reviewed these QC results to determine if sample results should be qualified based on the criteria provided in Appendix 2B of the *Technical Guidance for Site Investigation and Remediation*. QC exceedences and data qualification recommendations are presented in the Data Evaluation Checklist (Attachment B). Qualified sample results are presented in the laboratory summary forms, which are located in Attachment C.

QC exceedences and data qualification recommendations are summarized below. It is recommended that results from the initial analyses of each sample be reported as the representative results for that sample except where noted below.

Sample Condition upon Receipt and Holding Times

Chemtech received all the samples listed on the chain of custody (COC) records intact and in good condition. The temperature of samples was within laboratory specification limits of 2 to 6°C upon receipt.

Project samples were prepared and analyzed within EPA-established holding times.

Volatile Organic Analysis (VOA) by SW-846 8260B

All samples were analyzed within 12 hours of the performance check standard, BFB. Percent relative abundance of all ions met the criteria specified in Table 4 of the EPA SW-846 Method 8260B. Laboratory specifications were met during the initial and continuing calibrations associated with the project samples. In addition the average relative response factor (RRF) was greater than or equal to 0.05 for target analytes during the initial and continuing calibrations. The percent relative standard deviation (%RSD) between RRF was less than or equal to 30% during the initial calibration, and the percent difference (%D) between the initial calibration average RRF and continuing calibration RRF was less than or equal to 25% for target analytes except trichlorofluoromethane (31.58%RSD) during the initial calibration associated with the analyses of samples Trip Blank and Equipment Blank #2; methylene chloride (33.2%RSD) and trans-1,2-dichloroethene (33.4%RSD) during the initial calibration associated with the analyses of samples SS-1, SS-2RE, SS-3RE, SS-4, SS-5, SS-6RE, SS-7, SS-8, SS-9, SS-10, SS-11, SS-12 and Dup#2; carbon disulfide (32.8%D), methylene chloride (26.3%D) and trans-1,2-dichloroethene (26.3%D) during the continuing calibration associated with the analyses of samples Trip Blank and Equipment Blank #2; methylene chloride (47.9%D) during the continuing calibration associated with the analysis of sample SS-9; bromomethane (34.2%D), chloroethane (59.8%D) and methylene chloride (67.1%D) during the continuing calibration associated with the analysis of samples SS-1, SS-4, SS-5 and SS-10; and bromomethane (31.9%D), chloroethane (56.8%D) and methylene

chloride (78.2%D) during the continuing calibration associated with the analysis of samples SS-11, SS-12, Dup#2 and the reanalysis of samples SS-2, SS-3 and SS-6. The associated results have been qualified as estimated (J/UJ) due to poor correlation in the calibration standards.

Surrogate recovery and internal standard results met laboratory specifications for project samples except the percent recovery (%R) for the surrogate 4-bromofluorobenzene was below specifications during the initial analysis of samples SS-2 and SS-3, and the initial and reanalysis of SS-6. The associated results have been qualified as estimated (J/UJ) due to analytical inaccuracy. The internal standard 1,4-dichlorobenzene-d4 was below specifications during the initial and reanalysis of samples SS-2, SS-3 and SS-6. Also, the internal standard chlorobenzene-d5 was below specifications during the initial analysis of sample SS-6. The associated results have been qualified as estimated (J/UJ) due to low machine sensitivity. It is recommended that the reanalysis of samples SS-2, SS-3 and SS-6 be reported as the representative results for those samples.

The %R results for laboratory control sample (LCS) analyses were within laboratory specifications for the target analytes except methylene chloride exceeded specifications during the LCS analyses associated with the analyses of samples SS-2RE, SS-3RE, SS-6RE, SS-7, SS-8, SS-9, SS-11, SS-12 and Dup#2; methyl tert-butyl ether, methylene chloride, and trans-1,2-dichloroethene exceeded specifications and chloroethane was below specifications during the LCS associated with the analyses of samples SS-1, SS-4, SS-5 and SS-10. Associated detected results have been qualified as estimated (J) due to analytical inaccuracy.

A method blank was reported for each analytical batch. A trip blank and an equipment blank were also submitted to the laboratory for VOA. Target analytes and tentatively identified compounds (TICs) were not detected during the analysis of the trip blank. Target analytes were not detected during the analysis of the equipment blank, however the TIC methane,dibromfluoro- was detected at a concentration of 26 µg/L during the analysis of the equipment blank. Methylene chloride was detected during the anlayses of the method blanks associated with the project samples. An action level was developed by multiplying the highest concentration observed among the associated blanks by a factor of 10 for common laboratory contaminants (methylene chloride) and a factor of 5 for other analytes. Results in the associated samples reported below the action level have been have been qualified as non-detect (U) and the detection limit has been elevated to the amount detected in the sample.

Criteria for accuracy and precision were met during the matrix spike (MS) and MS duplicate (MSD) analysis of sample SS-9 for target analytes except the relative percent difference (%RPD) between MS and MSD results exceeded laboratory specifications for chloroethane and methyl acetate. The associated results have been qualified as estimated (J/UJ) due to analytical imprecision.

A field duplicate evaluation was performed on samples Dup#2 (blind field duplicate) and SS-8. Refer to Attachment B-3 for the duplicate evaluation. Toluene and m&p-xylenes were detected in Dup #2 and were not detected in SS-9, and tetrachloroethene was detected in SS-9 but was not detected in Dup#2. The associated results have been qualified as estimated (J/UJ) due to analytical imprecision.

SVOA by SW-846 8270C

Project samples were analyzed within 12 hours of the performance check standard, DFTPP. Percent relative abundance of ions met the criteria specified in Table 3 of the EPA SW-846 Method 8270C. Laboratory specifications were met during the initial and continuing calibrations associated with the

project samples. In addition the average RRF was greater than or equal to 0.05 for target analytes during the initial and continuing calibrations. The %RSD between RRF was less than or equal to 30% during the initial calibration, and the %D between the initial calibration average RRF and continuing calibration RRF was less than or equal to 25% for target analytes except 2,4-dinitrophenol (31.9%RSD) during the initial calibration associated with the analyses of samples SS-1, SS-2, SS-3, SS-4, SS-5, SS-6, SS-7, SS-8, SS-9, SS-10, SS-11, SS-12 and Dup#2; benzaldehyde (36.94%RSD) and 2,4-dinitrophenol (44.32%RSD) during the initial calibration associated with the analysis of sample Equipment Blank #2; indeno(1,2,3-cd)pyrene (45.8%D), dibenz(a,h)anthracene (37.8%D) and benzo(g,h,i)perylene (47%D) during the continuing calibration associated with the analyses of samples SS-2, SS-3, SS-8, SS-10 and SS-11; and 2,2-oxybis(1-chloropropane) (33.3%D), n-nitroso-di-n-propylamine (26.1%D), caprolactam (25.7%D), 4-nitrophenol (77.1%D), indeno(1,2,3-cd)pyrene (42.9%D), dibenz(a,h)anthracene (29.3%D) and benzo(g,h,i)perylene (33.6%D) during the continuing calibration associated with the analysis of sample Equipment Blank #2. The associated results have been qualified as estimated (J/UJ) due to poor correlation in the calibration standards.

Surrogate recoveries and internal standard results met laboratory specifications for project samples except the %R for the surrogate terphenyl-d14 exceeded laboratory specifications during the analyses of samples SS-8, SS-11 and Dup#2. However, qualification was not warranted as the remaining surrogates were within specifications. The internal standard perylene-d12 was below laboratory specifications during the analyses of samples SS-1, SS-2, SS-3, SS-4, SS-5, SS-6, SS-7, SS-8, SS-9, SS-10, SS-11, SS-12 and Dup#2. The associated results have been qualified as estimated (J/UJ) due to low machine sensitivity.

The %R results for LCS analyses were within laboratory specifications for target analytes except caprolactam, 4-nitrophenol and benzo(k)fluoranthene were below specifications and pyrene exceeded specifications during the LCS associated with the analysis of Equipment Blank #2. The associated detected pyrene results have been qualified as estimated (J), and the associated caprolactam, 4-nitrophenol and benzo(k)fluoranthene results have been qualified as estimated (J/UJ) due to analytical inaccuracy.

A method blank was reported for each analytical batch. An equipment blank was also submitted to the laboratory for SVOA. Di-n-butylphthalate was detected during the analysis of a method blank associated with the analysis of the project samples. Several TICs were detected during the anlalyses of the method blanks and equipment blank associated with the analyses of the project samples with retention times ranging from 2.56 to 32.98. Action levels were developed by multiplying the highest concentration observed among the associated blank by a factor of 5. Results in the associated sample reported below the action level have been have been qualified as non-detect (U) and the detection limit has been elevated to the amount detected in the sample.

Criteria for accuracy and precision were met for target analytes during the MS and MSD analysis of sample SS-9 except the %R for hexachlorocyclopentadiene, 2,4-dinitrophenol, 4,6-dinitro-2-methylphenol and indeno(1,2,3-cd)pyrene were below specifications and bis(2-ethylhexyl)phthalate exceeded specifications during the MS and MSD analysis. Hexachlorocyclopentadiene, 2,4-dinitrophenol, 4,6-dinitro-2-methylphenol and indeno(1,2,3-cd)pyrene results have been qualified as estimated (J/UJ), and detected results for bis(2-ethylhexyl)phthalate have been qualified as estimated (J) in the associated sample due to analytical inaccuracy.

A field duplicate evaluation was performed on samples Dup#2 (blind field duplicate) and SS-8. Refer to Attachment B-3 for the duplicate evaluation. Phenanthrene and fluoranthene results have been qualified as estimated (J) in the associated samples due to analytical imprecision.

Pesticide Analysis by SW-846 8081

Laboratory specifications were met during the initial and continuing calibrations. The %RSD between RRF was less than or equal to 30% during the initial calibration, and the %D between the initial calibration average RRF and continuing calibration RRF was less than or equal to 25% for target analytes except 4,4'-DDT (53%RSD) and methoxychlor (32%RSD) during the initial calibration associated with the analyses of the project samples and 4,4'-DDT (34%D) during the continuing calibration associated with the analysis of sample SS-10. The associated results have been qualified as estimated (J/UJ) due to poor correlation in the calibration standards.

Surrogate recoveries met laboratory specifications for project samples.

The %R results for LCS analysis were within laboratory specifications for target analytes.

A method blank was reported for each analytical batch. An equipment blank was also submitted to the laboratory for pesticide analysis. Target compounds were not detected during the analysis of the method blank or the equipment blank.

Criteria for accuracy and precision were met for target analytes during the MS and MSD analysis of sample SS-9.

A field duplicate evaluation was performed on samples Dup#2 (blind field duplicate) and SS-8. Criteria for precision was achieved as target analytes were not detected in the associated samples.

PCB Analysis by SW-846 8082

Laboratory specifications were met during the initial and continuing calibrations. The %RSD between RRF was less than or equal to 30% during the initial calibration, and the %D between the initial calibration average RRF and continuing calibration RRF was less than or equal to 25% for target analytes.

Surrogate recoveries met laboratory specifications for project samples except the %R for decachlorobiphenyl was below specifications during the analyses of samples SS-7 and SS-8 and exceeded specifications during the diluted analysis of SS-10. Qualification was not warranted as the remaining surrogate was within specifications.

The %R results for LCS analysis were within laboratory specifications for the target analyte aroclor 1016 and aroclor 1260.

A method blank was reported for each analytical batch. An equipment blank was also submitted to the laboratory for PCB analysis. Target compounds were not detected during the analysis of the method blank or the equipment blank.

Criteria for accuracy and precision were met during the MS/MSD analysis of sample SS-9 for target analytes aroclor 1016 and aroclor 1260.

A field duplicate evaluation was performed on samples Dup#2 (blind field duplicate) and SS-8. Criteria for precision was achieved as target analytes were not detected in the associated samples.

Metals and Mercury Analysis by SW-846 6010B and 7471A

The inductively coupled plasma (ICP) instrument was calibrated according to the SW-846 Methods 6010B and 7471A. All samples were bracketed by ICV/CCV with recoveries that were within 80-120% for mercury and 90-110% of the true value for all other target metals.

Recovery of the ICP interference check sample fell within 80-120% of the true standard concentration for all target analytes.

Laboratory specifications (80-120%R) were met during the LCS analysis for target metals.

The %R of the contract required detection limit (CRDL) standard fell within 75-125% of the true value for target metals except the %R of mercury was below 75% during the analysis of the CRDL standard associated with the analysis of samples SS-1, SS-2, SS-3, SS-4, SS-5, SS-6, SS-7, SS-8 and SS-9 and exceeded 125% during the analysis of the CRDL standard associated with the analysis of sample Equipment Blank#2. The %R of iron and potassium were below 75% during the analysis of the CRDL standard associated with the analyses of sample Equipment Blank#2. The %R of iron and sodium were below 75% during the analysis of the CRDL standard associated with the analyses of samples SS-1, SS-2, SS-3, SS-4, SS-5, SS-6, SS-7, SS-8, SS-9, SS-10, SS-11, SS-12 and Dup#2. Associated detected results in Equipment Blank#2 for mercury have been qualified as estimated (J), and associated results for mercury, iron, potassium and sodium have been qualified as estimated (J/UJ) due to analytical inaccuracy.

A method blank was reported for each batch, and a calibration blank was analyzed at the beginning, after every 10 samples, and at the end of each batch. An equipment blank was also submitted to the laboratory for metals analysis. Refer to Attachment B-1 for an evaluation of blank contamination. Action levels were developed by multiplying the highest concentration observed among all associated blanks by a factor of 5. Samples with results reported below the action level have been have been qualified as non-detect (U) and the detection limit has been elevated to the amount detected in the sample.

Criteria for accuracy and precision were met during the MS/MSD analysis of sample SS-9 for target metals except the %R for antimony, cobalt, nickel and silver were below specifications during the MS and MSD analysis. The associated antimony, cobalt, nickel and silver results have been qualified as estimated (J/UJ) in the associated sample due to analytical inaccuracy.

Significant chemical and matrix interference were observed during the serial dilution analysis of sample SS-9. The %D between initial and serially diluted results was less than 10% for those target metals with results greater than fifty times the detection limit except calcium, iron, lead, magnesium, manganese and potassium. Calcium, iron, lead, magnesium, manganese and potassium results have been qualified as estimated (J) due to chemical and matrix interference.

A laboratory duplicate evaluation was performed on sample SS-9. Criteria for precision was achieved for detected results except selenium was detected in the sample and was not detected during the duplicate analysis. Refer to Attachment B-2 for the duplicate evaluation. Selenium results have been qualified as estimated (J) due analytical imprecision.

A field duplicate evaluation was performed on samples Dup#2 (blind field duplicate) and SS-8. Refer to Attachment B-3 for the duplicate evaluation. Antimony, cadmium, calcium, copper, lead, magnesium and selenium results have been qualified as estimated (J/UJ) in the associated samples due to analytical imprecision.

Summary

Overall, data quality objectives for the Metroplex site at 312 Broadway were met, as there were no data deficiencies that would indicate the need for re-sampling. The analytical results are usable with the qualification of results as described in this DUSR. No analytical data has been rejected.

Megan Drosky
Environmental Scientist

C.T. MALE ASSOCIATES, P.C.

SUBJECT: Data Usability Summary Report (DUSR)
Metroplex – 312 Broadway Subsurface Soil Investigation
Chemtech SDG Nos.: X2731 and X2747
C.T. Male Project No.: 05.5550

DATE: June 15, 2006

Between May 8 and 10, 2006, C.T. Male Associates, P.C. (C. T. Male) collected thirteen (13) subsurface soil samples from the Metroplex site at 312 Broadway The samples were submitted, along with an equipment blank and a trip blank to Chemtech Laboratories (Chemtech) in Mountainside, NJ for the following analyses:

Parameter	Sample Date	VOC, SW-846 8260B	SVOC , SW-846 8270C	Pesticides, SW-846 8081A	PCBs, SW-846 8082	TAL Metals, SW-846 6010 and 7471
Sample Ids						
GP-1 (4-6')	5/8/2006	1	1	1	1	1
GP-2 (4-6')	5/8/2006	1	1	1	1	1
GP-3 (4-8')	5/8/2006	1	1	1	1	1
GP-4 (4-6')	5/8/2006	1	1	1	1	1
GP-5 (10-12')	5/8/2006	1	1	1	1	1
GP-6 (4-6')	5/9/2006	1	1	1	1	1
GP-7 (4-6')	5/9/2006	1	1	1	1	1
GP-8 (4-6')	5/9/2006	1	1	1	1	1
GP-9 (4-6')	5/9/2006	1	1	1	1	1
GP-10 (4-6')	5/10/2006	1	1	1	1	1
GP-14 (4-6')	5/10/2006	1	1	1	1	1
GP-15 (8-12')	5/10/2006	1	1	1	1	1
Dup #1[1]	5/8/2006	1	1	1	1	1
Equipment Blank	5/10/2006	1	1	1	1	1
Trip Blank	-	1	0	0	0	0
Total Samples		**15**	**14**	**14**	**14**	**14**

VOC – Volatile organic compounds
SVOC – Semi-volatile organic compounds
PCBs – Polychlorinated Biphenyls

C. T. Male evaluated the data reported by the laboratory to determine usability per Appendix 2B of the *Draft DER-10 Technical Guidance for Site Investigation and Remediation* (NYSDEC, December 2002), with guidance from the *USEPA CLP National Functional Guidelines for Organic and Inorganic Data Review* (October 1999 and 2004, respectively). The following criteria were reviewed:

- Completeness of data package as defined under the requirements for the NYSDEC ASP Category B or USEPA CLP deliverables;
- Holding time compliance for chemical analysis;

[1] Field duplicate of GP-1 (4-6').

- Protocol required limits and specification compliance for quality control (QC) data (e.g., instrument tuning, calibration standards, blank results, spike results, duplicate results, etc);
- Contract compliance for analytical protocols;
- Omissions and transcription errors; and
- Data qualification.

Data Completeness

Documentation required by the project was included in the data package. The laboratory report for SDG X2731 did not include semivolatile organic analysis (SVOA) results for the diluted analysis of sample GP-6 (4-6'). The laboratory made the appropriate corrections and reissued the associated pages on June 15, 2006. The revised pages have been inserted in to the original laboratory report and copies are included in Attachment A. The laboratory Case Narratives (Attachment B) identified deviations from laboratory analytical specifications. C.T. Male reviewed these QC results to determine if sample results should be qualified based on the criteria provided in Appendix 2B of the *Technical Guidance for Site Investigation and Remediation*. QC exceedences and data qualification recommendations are presented in the Data Evaluation Checklists (Attachment C). Qualified sample results are presented in the laboratory summary forms, which are located in Attachment D.

QC exceedences and data qualification recommendations are summarized below. It is recommended that results from the initial analyses of each sample be reported as the representative results for that sample.

It is recommended that sample results which were reported by the laboratory as exceeding the calibration range (E-flagged), be reported from the analysis at the lowest dilution with results within calibration range.

Sample Condition upon Receipt and Holding Times

Chemtech received all the samples listed on the chain of custody (COC) records intact and in good condition. The temperature of samples was within laboratory specification limits of 2 to 6°C upon receipt.

Project samples were prepared and analyzed within EPA-established holding times.

Volatile Organic Analysis (VOA) by SW-846 8260B

All samples were analyzed within 12 hours of the performance check standard, BFB. Percent relative abundance of all ions met the criteria specified in Table 4 of the EPA SW-846 Method 8260B. Laboratory specifications were met during the initial and continuing calibrations associated with the project samples. In addition the average relative response factor (RRF) was greater than or equal to 0.05 for target analytes during the initial and continuing calibrations. The percent relative standard deviation (%RSD) between RRF was less than or equal to 30% during the initial calibration, and the percent difference (%D) between the initial calibration average RRF and continuing calibration RRF was less than or equal to 25% for target analytes except methylene chloride (33.2%RSD) and trans-1,2-dichloroethene (33.4%RSD) during the initial calibration associated with the analysis of samples GP-1 (4-6'), GP-2 (4-6'), GP-3 (4-8'), GP-4 (4-6'), GP-6 (4-6'), GP-7 (4-6'), GP-8 (4-6'), GP-9 (4-6'), Dup#1,

GP-10 (4-6') and GP-14 (4-8'); trichlorofluoromethane (31.58%RSD) during the initial calibration associated with the analysis of samples GP-5 (10-12')RE, Trip Blank and Equipment Blank; trichlorofluoromethane (31%RSD) and acetone (31.5%RSD) during the initial calibration associated with the analysis of sample GP-15 (8-12'); chloroethane (41.2%D), acetone (25.7%D), methylene chloride (35.3%D) and trans-1,2-dichloroethene (31.9%D) during the continuing calibration associated with the analyses of samples GP-1 (4-6'), GP-2 (4-6'), GP-3 (4-8'), GP-4 (4-6'), GP-7 (4-6'), GP-9 (4-6') and Dup#1; chloroethane (55.4%D), methylene chloride (63.2%D), and tetrachloroethene (26.1%D) during the continuing calibration associated with the analyses of samples GP-6 (4-6') and GP-8 (4-6'); methylene chloride (25.8%D) and bromoform (25.8%D) during the continuing calibration associated with the reanalysis of sample GP-5 (10-12'); carbon disulfide (32.8%D) and methylene chloride (26.3%D) during the continuing calibration associated with the analyses of samples Trip Blank and Equipment Blank; Dichlorodifluoromethane (32.2%D) and tetrachloroethane (32.1%D) during the continuing calibration associated with the analysis of sample GP-15 (8-12'); and chloroethane (41.6%D), trichlorofluoromethane (38.2%D) and methylene chloride (57.4%D) during the continuing calibration associated with the analyses of samples GP-10 (4-6') and GP-14 (4-8'). The associated results have been qualified as estimated (J/UJ) due to poor correlation in the calibration standards.

Surrogate recovery and internal standard results met laboratory specifications for project samples except toluene-d8 and 4-bromofluorobenzene exceeded specifications during the initial analysis of GP-5 (10-12'). It is recommended that the reanalysis of sample GP-5 (10-12') be reported as the representative results for that sample.

The percent recovery (%R) results for laboratory control sample (LCS) analysis were within laboratory specifications for the target analytes except trichlorofluoromethane exceeded specifications and tetrachloroethene was below specifications during the LCS associated with the reanalysis of sample GP-5 (10-12'); the %R for acetone, methyl tert-butyl ether, methylene chloride and trans-1,2-dichloroethene exceeded specifications during the LCS associated with the analyses of samples GP-1 (4-6'), GP-2 (4-6'), GP-3 (4-8'), GP-4 (4-6'), GP-7 (4-6'), GP-9 (4-6') and Dup#1; the %R for methylene chloride exceeded specifications during the LCS associated with the analyses of samples GP-6 (4-6') and GP-8 (4-6'); the %R for methylene chloride and trans-1,2-dichloroethene exceeded specifications and chloroethane was below specifications during the LCS associated with the analyses of samples GP-10 (4-6') and GP-14 (4-8'); and the %R for acetone exceeded specifications and trichlorofluoromethane was below specifications during the LCS associated with the analysis of sample GP-15 (8-12'). Associated detected results have been qualified as estimated (J) for those analytes that exceeded specifications, and associated results have been qualified as estimated (J/UJ) for those analytes that were below specifications, due to analytical inaccuracy.

A method blank was reported for each analytical batch. A trip blank and an equipment blank were also submitted to the laboratory for VOA. Target analytes and tentatively identified compounds (TICs) were not detected during the analysis of the trip or equipment blanks. Methylene chloride was detected during the analysis of the method blank associated with the analyses of project samples. 2- Hexanone was detected in a method blank associated with the analyses of samples GP-1 (4-6'), GP-2 (4-6'), GP-3 (4-8'), GP-4 (4-6'), GP-7 (4-6'), GP-9 (4-6') and Dup#1. Action levels were developed by multiplying the highest concentration observed among the associated blanks by a factor of 5 or a factor of 10 for common laboratory contaminants, such as methylene chloride. Results in the associated samples reported below the action level have been have been qualified as non-detect (U) and the detection limit has been elevated to the amount detected in the sample.

Criteria for accuracy and precision were met for target analytes during the matrix spike (MS) and MS duplicate (MSD) analysis of sample GP-2 (4-6') except the %RSD between the MS and MSD exceeded specifications for chloroethene during the MS/MSD analysis. Chloroethene results have been qualified as estimated (UJ) in the associated sample due to analytical imprecision.

A field duplicate evaluation was performed on samples Dup #1 (blind field duplicate) and GP-1 (4-6'). Refer to Attachment C-3 for the duplicate evaluation. Acetone results have been qualified as estimated (J/UJ) in the associated samples due to analytical imprecision.

SVOA by SW-846 8270C

Project samples were analyzed within 12 hours of the performance check standard, DFTPP. Percent relative abundance of ions met the criteria specified in Table 3 of the EPA SW-846 Method 8270C. Laboratory specifications were met during the initial and continuing calibrations associated with the project samples. In addition the average RRF was greater than or equal to 0.05 for target analytes during the initial and continuing calibrations. The %RSD between RRF was less than or equal to 30% during the initial calibration, and the %D between the initial calibration average RRF and continuing calibration RRF was less than or equal to 25% for target analytes except benzaldehyde (36.49%RSD) and 2,4-dinitrophenol (44.32%RSD) during the initial calibration associated with the analyses of samples GP-1 (4-6'), GP-2 (4-6'), GP-3 (4-8'), GP-4 (4-6'), GP-5 (10-12'), GP-6 (4-6'), GP-7 (4-6'), GP-8 (4-6'), GP-9 (4-6'), Dup#1, Trip Blank and Equipment Blank; benzaldehyde (38.53%RSD) and 2,4-dinitrophenol (40.21%RSD) during the initial calibration associated with the analyses of samples GP-10 (4-6'), GP-14 (4-8') and GP-15 (8-12'); 2,2-oxibis(1-chloropropane) (34.9%D), n-nitroso-di-n-propylamine (32.2%D), 2,4-dinitrophenol (54.8%D), 4-nitrophenol (73.3%D), 4,6-dinitro-2-methylphenol (28.1%D), benzo(b)fluoranthene (28.3%D) and benzo(k)fluoranthene (36.1%D) during the continuing calibration associated with the analyses of samples GP-1 (4-6'), GP-2 (4-6'), GP-3 (4-8'), GP-4 (4-6'), GP-5 (10-12'), GP-6 (4-6'), GP-7 (4-6'), GP-8 (4-6'), GP-9 (4-6') and Dup#1, as well as the diluted analysis of GP-6 (4-6'); benzaldehyde (32.4%D), 3-nitroanaline (45.4%D), 2,4-dinitrophenol (28.7%D), carbazole (27.8%D), 3,3-dichlorobenzidine (39.8%D), indeno(1,2,3-cd)pyrene (51.8%D), dibenz(a,h)anthracene (34.6%D) and benzo(g,h,i)perylene (40.5%D) during the continuing calibration associated with the analyses of samples GP-10 (4-6'), GP-14 (4-8') and GP-15 (8-12'); and 2,2-oxybis(1-chloropropane) (31.2%D), n-nitroso-di-n-propylamine (27.7%D), caprolactam (66.2%D), 2,4-dinitrophenol (30.4%D), 4-nitrophenol (75%D), indeno(1,2,3-cd)pyrene (28%D) and benzo(g,h,i)perylene (28.5%D) during the continuing calibration associated with the analysis of sample Equipment Blank. The associated results have been qualified as estimated (J/UJ) due to poor correlation in the calibration standards.

Surrogate recoveries and internal standard results met laboratory specifications for project samples except the internal standard perylene-d12 was below laboratory specifications during the initial and reanalysis of GP-1 (4-6'), GP-2 (4-6'), GP-4 (4-6'), GP-6 (4-6'), GP-8 (4-6'), Dup#1, GP-10 (4-6'), GP-14 (4-8') and GP-15 (8-12'). The associated results have been qualified as estimated (J/UJ) due to low machine sensitivity.

The percent recovery results for LCS analyses were within laboratory specifications for target analytes except 4-nitrophenol was below specifications during the LCS associated with the analysis of GP-1 (4-6'), GP-2 (4-6'), GP-3 (4-8'), GP-4 (4-6'), GP-5 (10-12'), GP-6 (4-6'), GP-7 (4-6'), GP-8 (4-6'), GP-9 (4-6') and Dup#1; the %R for 3-nitoanaline, 4-nitroanaline, carbazole and 3,3-dichlorobenzidine exceeded specifications and benzo(k)fluoranthene was below specifications during the LCS associated with the analyses of samples GP-10 (4-6'), GP-14 (4-8') and GP-15 (8-12'); and the %R for caprolactam

was below specifications during the LCS associated with the analysis of sample Equipment Blank. The associated detected 3-nitoanaline, 4-nitroanaline, carbazole and 3,3-dichlorobenzidine results have been qualified as estimated (J) and the associated benzo(k)fluoranthene and caprolactam results have been qualified as estimated (J/UJ) due to analytical inaccuracy.

A method blank was reported for each analytical batch. An equipment blank was also submitted to the laboratory for SVOA. Target analytes were not detected during the analysis of the method or equipment blanks. Several TICs were detected during the anlalysis of the method blanks and equipment blank associated with the analyses of the project samples with retention times ranging from 2.58 to 17.82. Action levels were developed by multiplying the highest concentration observed among the associated blanks by a factor of 5. Results in the associated sample reported below the action level have been have been qualified as non-detect (U) and the detection limit has been elevated to the amount detected in the sample.

Criteria for accuracy and precision were met for target analytes during the MS and MSD analysis of sample GP-2 (4-6') except the %R for hexachloroethane, 2-nitrophenol, 4-nitrophenol, 2,4-dinitrotoluene and indeno(1,2,3-cd)pyrene were below specifications during the MS and MSD analysis. The associated results have been qualified as estimated (J/UJ) in the associated sample due to analytical imprecision.

A field duplicate evaluation was performed on samples Dup #1 (blind field duplicate) and GP-1 (4-6'). Refer to Attachment C-3 for the duplicate evaluation. Naphthalene, acenaphthylene, acenaphthene, dibenzofuran, fluorene, phenanthrene, anthracene, carbazole, pyrene, benzo(a)anthracene, chrysene, bis(2-ethylhexyl)phthalate, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene and dibenz(a,h)anthracene results have been qualified as estimated (J/UJ) in the associated samples due to analytical imprecision.

Pesticide Analysis by SW-846 8081

Laboratory specifications were met during the initial and continuing calibrations. The %RSD between RRF was less than or equal to 30% during the initial calibration, and the %D between the initial calibration average RRF and continuing calibration RRF was less than or equal to 25% for target analytes except 4,4'-DDT (34.19%RSD) during the initial calibration associated with the analyses of samples GP-1 (4-6'), GP-2 (4-6'), GP-3 (4-8'), GP-4 (4-6'), GP-5 (10-12'), GP-6 (4-6'), GP-7 (4-6'), GP-8 (4-6'), GP-9 (4-6'), Dup#1, GP-10 (4-6'), GP-14 (4-8'), GP-15 (8-12') and Equipment Blank.

Surrogate recoveries met laboratory specifications for project samples except tetrachloro-m-xylene was below specifications during the analyses of samples GP-5 (10-12') and GP-15 (8-12'). Qualification was not warranted as the remaining surrogate was within specifications.

The percent recovery results for LCS analysis were within laboratory specifications for target analytes.

A method blank was reported for each analytical batch. Target compounds were not detected during the analysis of the method blank.

Criteria for accuracy and precision were met for target analytes during the MS and MSD analysis of sample GP-2 (4-6').

A field duplicate evaluation was performed on samples Dup #1 (blind field duplicate) and GP-1 (4-6'). Criteria for precision was achieved as target analytes were not detected in the associated samples.

PCB Analysis by SW-846 8082

Laboratory specifications were met during the initial and continuing calibrations. The %RSD between RRF was less than or equal to 30% during the initial calibration, and the %D between the initial calibration average RRF and continuing calibration RRF was less than or equal to 25% for target analytes.

Surrogate recoveries met laboratory specifications for project samples.

The percent recovery results for LCS analysis were within laboratory specifications for the target analyte aroclor 1016 and aroclor 1260.

A method blank was reported for each analytical batch. An equipment blank was also submitted to the laboratory for PCB analysis. Target compounds were not detected during the analysis of the method blank or the equipment blank.

Criteria for accuracy and precision were met during the MS/MSD analysis of sample GP-2 (4-6') for target analytes aroclor 1016 and aroclor 1260 except the %R for aroclor 1016 was below specifications during the MS and MSD analysis. The associated results have been qualified as estimated (UJ) in the associated sample due to analytical imprecision.

A field duplicate evaluation was performed on samples Dup #1 (blind field duplicate) and GP-1 (4-6'). Criteria for precision was achieved as target analytes were not detected in the associated samples.

Metals and Mercury Analysis by SW-846 6010B and 7471A

The inductively coupled plasma (ICP) instrument was calibrated according to the SW-846 Methods 6010B and 7471A. All samples were bracketed by ICV/CCV with recoveries that were within 80-120% for mercury and 90-110% of the true value for all other target metals.

Recovery of the ICP interference check sample fell within 80-120% of the true standard concentration for all target analytes.

Laboratory specifications (80-120%R) were met during the LCS analysis for target metals.

The %R of the contract required detection limit (CRDL) standard fell within 75-125% of the true value for target metals except the %R for mercury, iron and sodium were below 75% during the CRDL standard associated with the analyses of samples GP-1 (4-6'), GP-2 (4-6'), GP-3 (4-8'), GP-4 (4-6'), GP-5 (10-12'), GP-6 (4-6'), GP-7 (4-6'), GP-8 (4-6'), GP-9 (4-6') and Dup#1; the %R for iron was below 75% during the CRDL standard associated with the analysis of sample Equipment Blank; and the %R for potassium and silver exceeded 125% during the CRDL standard associated with the analyses of samples GP-10 (4-6'), GP-14 (4-8') and GP-15 (8-12'). Associated results for mercury, iron and sodium have been qualified as estimated (J/UJ) and associated detected results for potassium and silver have been qualified as estimated (J) due to analytical inaccuracy.

A method blank was reported for each batch, and a calibration blank was analyzed at the beginning, after every 10 samples, and at the end of each batch. An equipment blank was also submitted to the laboratory for metals analysis. Refer to Attachments C-1 and C-4 for an evaluation of blank contamination. Action levels were developed by multiplying the highest concentration observed among all associated blanks by a factor of 5. Samples with results reported below the action level have been have been qualified as non-detect (U) and the detection limit has been elevated to the amount detected in the sample.

Criteria for accuracy and precision were met during the MS/MSD analysis of sample GP-2 (4-6') for target metals except the %R for copper, lead, mercury and zinc exceeded specifications and potassium and silver were below specifications during the MS and MSD analysis. The associated results have been qualified as estimated (J/UJ) in the associated sample due to analytical imprecision.

A laboratory duplicate evaluation was performed on sample GP-2 (4-6'). Refer to Attachment C-2 for the duplicate evaluation. Antimony, arsenic, cobalt and silver results have been qualified as estimated (J/UJ) in the associated sample due to analytical imprecision.

A field duplicate evaluation was performed on samples Dup#1 (blind field duplicate) and GP-1 (4-6'). Refer to Attachment C-3 for the duplicate evaluation. Antimony, arsenic, lead, mercury, sodium and zinc results have been qualified as estimated (J/UJ) in the associated samples due to analytical imprecision.

Summary

Overall, data quality objectives for the Metroplex site at 312 Broadway were met, as there were no data deficiencies that would indicate the need for re-sampling. The analytical results are usable with the qualification of results as described in this DUSR. No analytical data has been rejected.

Megan Drosky
Environmental Scientist

C.T. MALE ASSOCIATES, P.C.

SUBJECT: Data Usability Summary Report (DUSR)
Metroplex – 312 Broadway Groundwater
Chemtech SDG Nos.: X3264, X3317 and X3358
C.T. Male Project No.: 05.5550

DATE: July 28, 2006

Between June 13 and 15, 2006, C.T. Male Associates, P.C. (C. T. Male) collected fourteen (14) groundwater samples from the Metroplex site at 312 Broadway. The samples were submitted, along with an equipment blank and trip blanks to Chemtech Laboratories (Chemtech) in Mountainside, NJ for the following analyses:

SDG #	Parameter	Sample Date	VOC, SW-846 8260B	SVOC , SW-846 8270C	Pesticides, SW-846 8081A	PCBs, SW-846 8082	TAL Metals, SW-846 6010 and 7470
	Sample Ids						
X3264	CTM-1	6/13/2006	1	1	1	1	1
X3264	CTM-2	6/13/2006	1	1	0	1	1
X3317	CTM-3	6/14/2006	1	1	1	1	1
X3317	CTM-4	6/14/2006	1	1	1	1	1
X3317	CTM-5	6/14/2006	1	1	1	1	1
X3317	CTM-6	6/14/2006	1	1	1	1	1
X3317	CTM-7	6/14/2006	1	1	1	1	1
X3358	CTM-8	6/15/2006	1	1	1	1	1
X3358	CTM-9	6/15/2006	1	1	1	1	1
X3358	CTM-10	6/15/2006	1	1	1	1	1
X3358	CTM-14	6/15/2006	1	1	1	1	1
X3358	CTM-15	6/15/2006	1	1	1	1	1
X3358	CTM-2	6/15/2006	0	1	1	1	0
X3358	GW-Duplicate[1]	6/15/2006	1	1	1	1	1
X3317	Equipment Blank	6/14/2006	1	1	1	1	1
X3264	Trip Blank	-	1	0	0	0	0
X3317	Trip Blank	-	1	0	0	0	0
X3358	Trip Blank	-	1	0	0	0	0
Total Samples			**17**	**15**	**14**	**15**	**14**

VOC – Volatile organic compounds
SVOC – Semi-volatile organic compounds
PCBs – Polychlorinated Biphenyls

C. T. Male evaluated the data reported by the laboratory to determine usability per Appendix 2B of the *Draft DER-10 Technical Guidance for Site Investigation and Remediation* (NYSDEC, December 2002), with guidance from the *USEPA CLP National Functional Guidelines for Organic and Inorganic Data Review* (October 1999 and 2004, respectively). The following criteria were reviewed:

- Completeness of data package as defined under the requirements for the NYSDEC ASP Category B or USEPA CLP deliverables;

[1] Field duplicate of CTM-8.

- Holding time compliance for chemical analysis;
- Protocol required limits and specification compliance for quality control (QC) data (e.g., instrument tuning, calibration standards, blank results, spike results, duplicate results, etc);
- Contract compliance for analytical protocols;
- Omissions and transcription errors; and
- Data qualification.

Data Completeness

Documentation required by the project was included in the data package. There were no discrepancies found between the raw data and summary forms. The laboratory Case Narratives (Attachment A) identified deviations from laboratory analytical specifications. C.T. Male reviewed these QC results to determine if sample results should be qualified based on the criteria provided in Appendix 2B of the *Technical Guidance for Site Investigation and Remediation*. QC exceedences and data qualification recommendations are presented in the Data Evaluation Checklists (Attachment B). Qualified sample results are presented in the laboratory summary forms, which are located in Attachment C.

QC exceedences and data qualification recommendations are summarized below.

It is recommended that organic and inorganic sample results which were reported by the laboratory as exceeding the calibration range (E-flagged and OR-flagged, respectively), be reported from the analysis at the lowest dilution with results within calibration range.

Sample Condition upon Receipt and Holding Times

Chemtech received all the samples listed on the chain of custody (COC) records intact and in good condition except there was an insufficient amount of sample CTM-2, collected on June 13, 2006, to perform pesticide analysis, due to broken sample containers. CTM-2 was recollected on June 15, 2006 for the analyses of SVOCs, pesticides and PCBs. The temperature of samples were within laboratory specification limits of 2 to 6°C upon receipt.

Project samples were prepared and analyzed within EPA-established holding times.

Volatile Organic Analysis (VOA) by SW-846 8260B

All samples were analyzed within 12 hours of the performance check standard, BFB. Percent relative abundance of all ions met the criteria specified in Table 4 of the EPA SW-846 Method 8260B. Laboratory specifications were met during the initial and continuing calibrations associated with the project samples. In addition the average relative response factor (RRF) was greater than or equal to 0.05 for target analytes during the initial and continuing calibrations. The percent relative standard deviation (%RSD) between RRF was less than or equal to 30% during the initial calibration, and the percent difference (%D) between the initial calibration average RRF and continuing calibration RRF was less than or equal to 25% for target analytes except the following:

- SDG X3264 – Chloromethane (41.2%D), chloroethane (69.4%D), trichlorofluoromethane (29.1%D), 1,1,2-trichlorotrifluoroethane (26.3%D), methyl acetate (30.8%D), methylene chloride (31.2%D), 2-butanone (42.8%D), methylcyclohexane (36.6%D), 4-methyl-2-pentanone (46.7%D), trans-1,3-dichloropropene (44.3%D), 2-hexanone (53.6%D), 1,2-dibromoethane

(59.9%D), tetrachloroethene (38.4%D) and 1,2,4-trichlorobenzene (43.5%D) during the continuing calibration associated with the analyses of the samples in this SDG.

- SDG X3317 – Chloroethane (55.6%D), trichlorofluoromethane (32.5%D), methyl acetate (63%D), cyclohexane (35.9%D), 2-butanone (52.1%D), carbon tetrachloride (32.9%D), methylcyclohexane (25.7%D), 1,2-dichloroethane (35.1%D), bromodichloromethane (30.6%D), 4-methyl-2-pentanone (50.5%D), trans-1,3-dichloropropene (38.7%D), 2-hexanone (55.7%D), 1,2-dibromoethane (36.5%D), tetrachloroethene (36.8%D) and 1,2,4-trichlorobenzene (36.8%D) during the continuing calibration associated with the analyses of samples CTM-3, CTM-4, CTM-5, CTM-6 and CTM-7; Bromomethane (30.9%D), chloroethane (55%D), trichlorofluoromethane (31.4%D), MTBE (25.7%D), methyl acetate (66.6%D), cyclohexane (30.3%D), 2-butanone (46.2%D), 1,2-dichloroethane (29.5%D), 4-methyl-2-pentanone (50.8%D), trans-1,3-dichloropropene (33%D), 2-hexanone (55.7%D), 1,2-dibromoethane (36.9%D), tetrachloroethene (37.5%D) and 1,2,4-trichlorobenzene (43.8%D) during the continuing calibration associated with the analyses of samples Equipment Blank and Trip Blank.
- SDG X3358 – Dichlorodifluoromethane (29.7%D), trichlorofluoromethane (46.4%D), acetone (40%D), methyl acetate (33.3%D), cyclohexane (60.3%D), 2-butanone (71.1%D), methylcyclohexane (25.8%D), 1,2-dichloroethane (26.2%D), bromodichloromethane (34.9%D) and tetrachloroethene (31.6%D) during the continuing calibration associated with the analyses of samples CTM-8, CTM-9, CTM-15, GW-Duplicate and Trip Blank; Chloromethane (27.7%D), vinyl chloride (29.2%D), bromomethane (26.3%D), chloroethane (58.7%D), 1,1,2-trichlorotrifluoroethane (34.4%D), acetone (47%D), carbon disulfide (53.2%D), methyl acetate (44.5%D), cyclohexane (36.8%D), 2-butanone (63.5%D), benzene (26.1%D), bromodichloromethane (32.2%D), 4-methyl-2-pentanone (32%D) and tetrachloroethene (46.8%D) during the continuing calibration associated with the analyses of samples CTM-10 and CTM-14.

The associated results have been qualified as estimated (J/UJ) due to poor correlation in the calibration standards.

Surrogate recovery and internal standard results met laboratory specifications for project samples.

The percent recovery (%R) results for laboratory control sample (LCS) analysis were within laboratory specifications for the target analytes except the following:

- SDG X3264 – Chloroethane, trichlorofluoromethane, 1,1,2-trichlorotrifluoroethane, methylene chloride, trans-1,3-dichloropropene, cis-1,3-dichloropropene and 1,2-dibromoethane exceeded specifications and 2-butanone, 4-methyl-2-pentanone, 2-hexanone and 1,2,4-trichlorobenzene were below specifications during the LCS associated with the analyses of the samples in this SDG.
- SDG X3317 – Chloromethane, 1,1-dichloroethene, carbon disulfide, trans-1,2-dichloroethene, 2-butanone, cis-1,2-dichloroethene, 4-methyl-2-pentanone, 2-hexanone, tetrachloroethene, 1,1,2,2-tetrachloroethane, 1,4-dichlorobenzene, 1,2-dibromo-3-chloropropane and 1,2,4-trichlorobenzene were below specifications during the LCS associated with the analyses of samples CTM-3, CTM-4, CTM-5, CTM-6 and CTM-7; Dichlorodifluoromethane, vinyl chloride, bromomethane, chloroethane, trichlorofluoromethane, acetone, methyl acetate, carbon tetrachloride, 1,2-dichloroethane, bromodichloromethane, trans-1,3-dichloropropene, cis-1,3-dichloropropene, 1,1,2-trichloroethane, dibromochloromethane and bromomethane exceeded specifications and 2-butanone, 4-methyl-2-pentanone, 2-hexanone, 1,2-dibromoethane, 1,2-dibromo-3-chloropropane

and 1,2,4-trichlorobenzene were below specifications during the LCS associated with the analyses of samples Equipment Blank and Trip Blank.

- SDG X3358 – Dichlorodifluoromethane, chloromethane, vinyl chloride, bromomethane, chloroethane, trichlorofluoromethane, acetone, cyclohexane and 2-butanone exceeded specifications and bromodichloromethane was below specifications during the LCS associated with the analyses of samples CTM-8, CTM-9, CTM-15, GW-Duplicate and Trip Blank; Chloroethane, vinyl chloride, bromomethane, chloroethane, 1,1,2-trichlorotrifluoroethane, acetone, cyclohexane, 2-butanone and 4-methyl-2-pentanone exceeded specifications during the LCS associated with the analyses of samples CTM-10 and CTM-14.

Associated detected results for those analytes which exceeded specifications for LCS %R have been qualified as estimated (J) and associated results for those analytes which were below specifications for LCS %R have been qualified as estimated (J/UJ) due to analytical inaccuracy.

A method blank was reported for each analytical batch. Trip blanks were also submitted to the laboratory for VOA with the samples in each SDG and an equipment blank was submitted to the laboratory for VOA with the samples in SDG X3317. Tentatively identified compounds (TICs) were not detected during the analyses of the method, trip or equipment blanks. Target analytes were not detected during the analyses of the method, trip or equipment blanks except acetone was detected during the analysis of the method blank associated with SDG X3317. An action level was developed by multiplying the highest concentration observed among the associated blank by a factor of 10 for this common laboratory blank contaminate. Results in the associated samples reported below the action level have been have been qualified as non-detect (U) and the detection limit has been elevated to the amount detected in the sample.

Criteria for accuracy and precision were met during the matrix spike (MS) and MS duplicate (MSD) analysis of sample CTM-4 for target analytes except the %R during the MS and MSD was below specifications for trichlorofluoromethane, cyclohexane, 1,2-dichloroethane, bromodichloroethane, 4-methyl-2-pentanone, 1,1,2-trichloroethane and 1,2,4-trichlorobenzene. The associated results have been qualified as estimated (J/UJ) due to analytical inaccuracy.

A field duplicate evaluation was performed on samples GW-Duplicate (blind field duplicate) and CTM-8. Criteria for precision was achieved as target analytes were not detected in the associated samples.

SVOA by SW-846 8270C

Project samples were analyzed within 12 hours of the performance check standard, DFTPP. Percent relative abundance of ions met the criteria specified in Table 3 of the EPA SW-846 Method 8270C. Laboratory specifications were met during the initial and continuing calibrations associated with the project samples. In addition the average RRF was greater than or equal to 0.05 for target analytes during the initial and continuing calibrations. The %RSD between RRF was less than or equal to 30% during the initial calibration, and the %D between the initial calibration average RRF and continuing calibration RRF was less than or equal to 25% for target analytes except the following:

- SDG X3264 – 2,4-Dinitrophenol (43.02%RSD) and 4,6-dinitro-2-methylphenol (26.85%RSD) during the initial calibration associated with the analysis of the samples in this SDG. Benzo(a)anthracene (46.3%D) and indeno(1,2,3-cd)pyrene (33%D) during the continuing calibration associated with the analyses of the samples in this SDG.

- SDG X3317 – 2,4-Dinitrophenol (34.39%RSD) during the initial calibration associated with the analyses of the samples in this SDG. 2,4-Dinitrophenol (38.7%D) during the continuing calibration associated with the analyses of samples CTM-3, CTM-4, CTM-5 and CTM-7.
- SDG X3358 – 2,4-Dinitrophenol (34.39%RSD) during the initial calibration associated with the analyses of the samples in this SDG.

The associated results have been qualified as estimated (J/UJ) due to poor correlation in the calibration standards.

Surrogate recoveries and internal standard results met laboratory specifications for project samples.

The %R results for LCS analyses were within laboratory specifications for target analytes except the following:

- SDG X3264 – Phenol and carbazole exceeded specifications during the LCS associated with the analysis of the samples in this SDG.
- SDG X3317 – Caprolactam was below specifications during the LCS associated with the analysis of the samples in this SDG.
- SDG X3358 – Caprolactam was below specifications during the LCS associated with the analysis of the samples in this SDG.

Associated detected results for those analytes which exceeded specifications for LCS %R have been qualified as estimated (J) and associated results for those analytes which were below specifications for LCS %R have been qualified as estimated (J/UJ) due to analytical inaccuracy.

A method blank was reported for each analytical batch. An equipment blank was also submitted to the laboratory for SVOA with the samples in SDG X3317. Target analytes were not detected during the analyses of the method or equipment blanks. Several TICs were detected during the anlalyses of the method blanks and equipment blank associated with the analysis of the project samples. Action levels were developed by multiplying the highest concentration observed among the associated blank by a factor of 5. Results in the associated samples reported below the action level have been have been qualified as non-detect (U) and the detection limit has been elevated to the amount detected in the sample.

Criteria for accuracy and precision were met for target analytes during the MS and MSD analysis of sample CTM-4 except the %R during the MS and MSD was below specifications for phenol and caprolactam. The associated results have been qualified as estimated (UJ) due to analytical inaccuracy.

A field duplicate evaluation was performed on samples GW-Duplicate (blind field duplicate) and CTM-8. Refer to Attachment B-2 for the duplicate evaluation. Di-n-butylphthalate and benzo(k)fluoranthene results have been qualified as estimated (J/UJ) due to analytical imprecision.

Pesticide Analysis by SW-846 8081

Laboratory specifications were met during the initial and continuing calibrations. The %RSD between RRF was less than or equal to 30% during the initial calibration, and the %D between the initial calibration average RRF and continuing calibration RRF was less than or equal to 25% for target analytes.

Surrogate recoveries met laboratory specifications for project samples except the %R exceeded specifications for tetrachloro-m-xylene during the analysis of sample CTM-15. Associated detected results have been qualified as estimated (J) due to inteference.

The %D between methoxychlor results from the first and second columns during the initial and diluted analysis of sample CTM-15 exceeded 25%D. High surrogate recoveries indicate interference was detected during the analysis. The associated methoxychlor results have been qualified as tentatively identified (N) due to matrix interference.

The %R results for LCS analysis were within laboratory specifications for target analytes.

A method blank was reported for each analytical batch. An equipment blank was also submitted to the laboratory for pesticide analysis with the samples in SDG X3317. Target compounds were not detected during the analysis of the method blanks or the equipment blank.

Criteria for accuracy and precision were met for target analytes during the MS and MSD analysis of sample CTM-4.

A field duplicate evaluation was performed on samples GW-Duplicate (blind field duplicate) and CTM-8. Criteria for precision was achieved as target analytes were not detected in the associated samples.

PCB Analysis by SW-846 8082

Laboratory specifications were met during the initial and continuing calibrations. The %RSD between RRF was less than or equal to 30% during the initial calibration, and the %D between the initial calibration average RRF and continuing calibration RRF was less than or equal to 25% for target analytes.

Surrogate recoveries met laboratory specifications for project samples except decachlorobiphenyl exceeded specifications during the analysis of CTM-14 and tetrachloro-m-xylene was below specifications during the analysis of CTM-15. Qualification was not warranted as the remaining surrogates were within specifications.

The %R results for LCS analysis were within laboratory specifications for the target analyte aroclor 1016 and aroclor 1260.

A method blank was reported for each analytical batch. An equipment blank was also submitted to the laboratory for PCB analysis with the samples in SDG X3317. Target compounds were not detected during the analysis of the method blank or the equipment blank.

Criteria for accuracy and precision were met during the MS/MSD analysis of sample CTM-4 for target analytes aroclor 1016 and aroclor 1260.

A field duplicate evaluation was performed on samples GW-Duplicate (blind field duplicate) and CTM-8. Criteria for precision was achieved as target analytes were not detected in the associated samples.

Metals and Mercury Analysis by SW-846 6010B and 7470A

The inductively coupled plasma (ICP) instrument was calibrated according to the SW-846 Methods 6010B and 7470A. All samples were bracketed by ICV/CCV with recoveries that were within 80-120% for mercury and 90-110% of the true value for all other target metals.

Recovery of the ICP interference check sample fell within 80-120% of the true standard concentration for all target analytes.

Laboratory specifications (80-120%R) were met during the LCS analysis for target metals.

The %R of the contract required detection limit (CRDL) standard fell within 70-130% of the true value for target metals except potassium and mercury were below 70% during the analysis of the CRDL standard associated with the analyses of the samples in SDGs X3317 and X3358. Associated results for potassium and mercury have been qualified as estimated (J/UJ) due to analytical inaccuracy.

A method blank was reported for each batch, and a calibration blank was analyzed at the beginning, after every 10 samples, and at the end of each batch. An equipment blank was also submitted to the laboratory for metals analysis with the samples in SDG X3317. Target metals were not detected in the associated blanks except the follwing:

- SDG X3264 – Beryllium and sodium were detected above the detection limit during the analysis of the blanks associated with this SDG.
- SDG X3317 – Aluminum, barium, beryllium, calcium, chromium, cobalt, iron, magnesium, silver, sodium, vanadium and zinc were detected above the detection limit during the analysis of the blanks associated with this SDG.
- SDG X3358 – Aluminum, beryllium, calcium, chromium, cobalt, magnesium, silver, sodium and vanadium were detected above the detection limit during the analysis of the blanks associated with this SDG.

Action levels were developed by multiplying the highest concentration observed among all associated blanks within the SDG by a factor of 5. Samples with results reported below the action level have been have been qualified as non-detect (U) and the detection limit has been elevated to the amount detected in the sample.

Criteria for accuracy and precision were met during the MS/MSD analysis of samples CTM-1 (mercury only) and CTM-4 for target metals except the %R during the MS, MSD and post digestion spike for CTM-4 exceeded specifications for potassium. The associated results have been qualified as estimated (J) due to analytical inaccuracy.

Significant chemical and matrix interference were not observed during the serial dilution analysis of sample CTM-1 (mercury only) and CTM-4. The %D between initial and serially diluted results was less than 10% for those target metals with results greater than fifty times the detection limit except potassium and sodium exceeded 10% during the serial dilution analysis of CTM-4. Potassium and sodium results have been qualified as estimated (J) due to chemical and matrix interference.

A laboratory duplicate evaluation was performed on samples CTM-1 (mercury only) and CTM-4. Refer to Attachment B-1 for the duplicate evaluation of CTM-4. Criteria for precision was achieved for

detected results in sample CTM-4 except results for mercury have been qualified as estimated (J) due to analytical imprecision. Results for mercury have been qualified as estimated (UJ) in sample CTM-1 due to analytical imprecision.

A field duplicate evaluation was performed on samples GW-Duplicate (blind field duplicate) and CTM-8. Refer to Attachment B-2 for the duplicate evaluation. Lead and mercury results have been qualified as estimated (J) in the associated samples due to analytical imprecision.

Summary

Overall, data quality objectives for the Metroplex site at 312 Broadway were met, as there were no data deficiencies that would indicate the need for re-sampling. The analytical results are usable with the qualification of results as described in this DUSR. No analytical data has been rejected.

Megan Drosky
Environmental Scientist

July 7, 2008

Remedial Investigation Report

Environmental Restoration Project
Clean Water/Clean Air Bond Act
1996

ERP Site #E-447035
Lower Broadway Parking Lot/
312 Broadway – Adjacent Parcel Site

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Schenectady County, New York

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ENVIRONMENTAL RESTORATION PROJECT
SUPPLEMENTAL REMEDIAL INVESTIGATION REPORT
LOWER BROADWAY PARKING LOT/312 BROADWAY - ADJACENT PARCEL
CITY OF SCHENECTADY, SCHENECTADY COUNTY, NEW YORK

TABLE OF CONTENTS

Page

1.0 INTRODUCTION 1
- 1.1 General 1
- 1.2 Project Background 1

2.0 INVESTIGATION METHODS 2
- 2.1 Test Boring and Monitoring Well Locations 2
- 2.2 Drilling Methods and Subsurface Soil Sampling 2
- 2.3 Monitoring Well Installation 3
- 2.4 Near-Surface Soil Sampling 5
- 2.5 Groundwater Sampling 6

3.0 FINDINGS 7
- 3.1 Soil 7
- 3.2 Groundwater 9
  - 3.2.1 Groundwater Elevation Data 9
  - 3.2.2 Groundwater Analytical Data Summary 10

4.0 SUMMARY AND CONCLUSIONS 12

FIGURES

Figure 1: Site Location Map
Figure 2: Monitoring Well/Soil Sampling Locations Map
Figure 3: VOCs Above SCGs in Soil
Figure 4: SVOCs Above SCGs in Soil
Figure 5: Metals Above SCGs in Soil
Figure 6: PCBs Above SCGs in Soil
Figure 7: Cyanide Above SCG in Soil
Figure 8: VOCs Above SCGs in Groundwater
Figure 9: SVOCs Above SCGs in Groundwater
Figure 10: Metals Above SCGs in Groundwater
Figure 11: Cyanide Above SCG in Groundwater
Figure 12: Groundwater Contour Map - February 5, 2008

ENVIRONMENTAL RESTORATION PROJECT
SUPPLEMENTAL REMEDIAL INVESTIGATION REPORT
LOWER BROADWAY PARKING LOT/312 BROADWAY - ADJACENT PARCEL
CITY OF SCHENECTADY, SCHENECTADY COUNTY, NEW YORK

TABLE OF CONTENTS (Cont'd.)

APPENDICES

APPENDIX A:	Analytical Data Summary Tables
APPENDIX B:	Subsurface Exploration Logs & Monitoring Well Construction Logs
APPENDIX C:	Organic Vapor Headspace Analysis Logs
APPENDIX D:	Data Usability Summary Report

1.0 INTRODUCTION

1.1 General

This report presents the findings of remedial investigation (RI) activities conducted at the Lower Broadway Parking Lot/312 Broadway - Adjacent Parcel Site in the City of Schenectady, Schenectady County, New York. A site location map is included as Figure 1. The RI activities were conducted based on the expansion of the 312 Broadway site to include an adjacent parcel of land to the southwest of the site. The boundaries of the Adjacent Parcel Site are shown on Figure 2. The RI activities were performed in accordance with C.T. Male Associates, P.C.'s (C.T. Male) scope of work dated June 15, 2007, which was approved by the New York State Department of Environmental Conservation (NYSDEC) in January 2008.

1.2 Project Background

C.T. Male conducted a remedial investigation on the 312 Broadway site during 2006 under the NYSDEC's Environmental Restoration Program (ERP). The findings of the investigation were presented in C.T. Male's *Draft Remedial Investigation Report* dated January 2007. During the summer of 2007, the Schenectady Metroplex Development Authority (Metroplex) and the City of Schenectady (City) submitted an Amended ERP Application to the NYSDEC for including an adjacent City-owned parcel into the 312 Broadway ERP Remedial Investigation already completed. The approximate one-quarter acre parcel adjoins the southwestern portion of the 312 Broadway site (to the west-southwest of the Scale House structure). Based on review of historical Sanborn Fire Insurance Maps and aerial photographs, it appears that this parcel has historically been occupied by the Schenectady County Coal Company, and has also been utilized as a scrap yard and construction laydown area. The Amended ERP Application was approved by the NYSDEC in January 2008.

2.0 INVESTIGATION METHODS

Investigation activities consisted of the collection and laboratory analysis of near-surface soil samples, advancement of test borings, collection and laboratory analysis of subsurface soil samples, installation of groundwater monitoring wells, and collection and laboratory analysis of groundwater samples. Field activities were performed in accordance with the NYSDEC approved Field Sampling Plan and Quality Assurance Project Plan prepared for the 312 Broadway site.

2.1 Test Boring and Monitoring Well Locations

The test boring/monitoring well locations (GP/CTM-20 through GP/CTM-23) and near-surface soil sampling locations (SS-13 through SS-15) were selected to evaluate soil and groundwater conditions across the site, and are shown on Figure 2. Site topography to the west of the retaining wall prevented drilling equipment access to this area, and as a result, only near-surface soil sampling was conducted on this portion of the site. The scope of work was expanded at the time of drilling to include subsurface investigation at the location of GP/CTM-23, following consultation with the NYSDEC, based on observations of subjective evidence of soil contamination at the initial boring/well locations.

2.2 Drilling Methods and Subsurface Soil Sampling

The drilling activities were completed on January 28, 2008 by Precision Environmental Services, Inc. under the observation of a C.T. Male representative. Geoprobe (direct-push) drilling techniques were utilized to complete the test borings, collect soil samples and install the monitoring wells. At each test boring location a 2.25-inch diameter Macro-Core sampling barrel, containing a disposable acetate liner, was advanced at continuous 4-foot intervals to the termination depth of the boring. The recovered soil samples were visually classified, and their descriptions were recorded on individual Geoprobe Subsurface Exploration Logs, included in Appendix B.

Boring GP/CTM-20 was advanced to 16 feet below grade, approximately 9 feet into the observed water table. Borings GP/CTM-22 and GP/CTM-23 were advanced to a depth of 20 feet below grade, with the intent of further exploring subjective evidence of contamination observed at these locations at the time of drilling. However, sampling of the 16 to 20 foot interval at these locations was unsuccessful in recovering soil due to

subsurface conditions. Boring GP-21 was advanced to a depth of approximately 9 feet below grade, where refusal was encountered on concrete, based on observations of the shoe-piece of the sampling barrel. This boring was backfilled with bentonite and boring GP/CTM-22 was advanced approximately 5 feet to the northwest.

Following the recovery of each soil sample, a portion of the sample was placed in a plastic bag and sealed, and was subsequently screened for the presence of detectable volatile organic compounds with a MiniRAE 2000 photo-ionization detector (PID) equipped with a 10.6 eV lamp. The PID meter was calibrated according to manufacturer recommendations prior to use utilizing isobutylene standard gas (100 parts per million). The PID soil screening results are presented on the Organic Vapor Headspace Analysis Logs in Appendix C. Based on the PID soil screening results and field observations, one soil sample from each boring, exhibiting the highest PID reading, was retained for laboratory analysis for NYSDEC Target Compound List (TCL) volatile organic compounds (VOCs), TCL semi-volatile compounds (SVOC), TCL Pesticides, TCL PCBs, TAL metals, and total cyanide. Samples submitted for laboratory analysis included: GP/CTM-20(2-2) (the 6 to 8 foot interval); GP/CTM-22(3-2) (the 10 to 12 foot interval); and GP/CTM-23(3-2) (the 10 to 12 foot interval). Quality Assurance/Quality Control (QA/QC) samples including a field duplicate of the GP/CTM-20(2-2) sample, an equipment blank (collected before sampling at GP/CTM-22), and matrix spike/matrix spike duplicate samples were submitted and analyzed for the same parameters. The subsurface soil and QA/QC samples were placed in a cooler with ice and later were shipped under chain-of-custody protocol via overnight courier to Chemtech of Mountainside, New Jersey for analysis.

Each soil sample was handled using a new pair of disposable nitrile gloves. The drilling tools and sampling equipment were decontaminated prior to the start of the drilling activities, and between test boring locations and individual samples, using a detergent/water wash and tap water rinse. The decontamination wash and rinse water were containerized in a labeled 55-gallon drum, stored on site for subsequent disposal.

2.3 Monitoring Well Installation

Upon completion of soil sampling at each boring location, a 1-inch diameter, PVC monitoring well was installed in the borehole to facilitate the collection of groundwater samples for laboratory analysis. Monitoring well GP/CTM-20 was installed to a depth

of 15 feet below grade, extending approximately 8 feet into the observed water table; and monitoring wells GP/CTM-22 and GP/CTM-23 were installed to a depth of 18 feet below grade, extending approximately 11 feet into the water table. The wells were constructed of slotted PVC well screen (.010-inch slot size) and PVC riser pipe above the screen. A graded silica sandpack was placed in the annulus around the well screen to approximately one foot above the screen, and a bentonite seal was placed above the sandpack. Flush-mounted curb boxes, set in concrete, were installed over each well. Monitoring Well Construction Logs are included in Appendix C.

Table 2.3-1 provides a summary of the boring and monitoring well identification numbers, boring depths, depths at which the monitoring wells were set, monitoring well screened interval depths, and the depth from which soil samples were collected for laboratory analysis.

TABLE 2.3-1: Soil Boring and Monitoring Well Summary

Boring ID	Monitoring Well ID	Boring Depth (bgs)	MW Depth (bgs)	MW Screened Interval	Laboratory Soil Sample Depth (bgs)
GP-20	CTM-20	16′	16′	6 to 16′	6 to 8′
GP-21	NA (No Well Installed)	9′	NA	NA	NA (No Sample)
GP-22	CTM-22	20′	15′	5 to 15′	10 to 12′
GP-23	CTM-23	20′	18′	3 to 18′	10 to 12′

Notes: bgs denotes below ground surface
NA denotes not applicable

At each new well location, the elevation of the top of the well casing was surveyed relative to an existing monitoring well, using differential leveling techniques to determine groundwater elevations and hydraulic gradient in the area of investigation.

C.T. Male visited the site the following day to perform well development activities to remove fine sediments from the wells and enhance the hydraulic connection between

the wells and the surrounding aquifer. The depth to groundwater at each well was measured using a water level indicator. The wells were then developed with new disposable polyethylene bailers using surging and bailing methods to remove a minimum of five well volumes of water from each well. Well development water was containerized in a 5-gallon bucket and transferred to a labeled 55-gallon drum stored on site for subsequent disposal.

2.4 Near-Surface Soil Sampling

On January 28, 2008, following completion of the test borings/monitoring well installation activities, near-surface soil samples were collected at three locations at the site (SS-13, SS-14, SS-15). Near-surface soil samples were collected from just below the vegetation root zone to a depth of approximately 1 foot below grade. Geoprobe methods were utilized to collect two of the three near-surface soil samples due to the thickness of the frost layer. At each Geoprobe near-surface soil sampling location a Macro-Core sampling barrel containing a disposable acetate liner was advanced to a depth of 1 foot below grade. The third near-surface soil sample was collected manually using a pick-axe and disposable nitrile gloves.

The drilling tools and sampling equipment were decontaminated prior to the start of the drilling/sampling activities, and between near-surface soil sampling locations, using a detergent/water wash and tap water rinse. Additionally, each sample was handled with a new pair of disposable sampling gloves.

Following the recovery of each near-surface soil sample, a portion of the sample was placed in a plastic bag and sealed, and subsequently screened for the presence of detectable volatile organic compounds with a MiniRAE 2000 photo-ionization detector (PID) equipped with a 10.6 eV lamp. The PID meter was calibrated according to manufacturer recommendations prior to use utilizing isobutylene standard gas (100 parts per million). The PID soil screening results are presented on the Organic Vapor Headspace Analysis Logs in Appendix C. The samples were retained for laboratory analysis for TCL VOCs, SVOCs, pesticides, PCBs, TAL metals, and total cyanide. The samples were placed in a cooler with ice and were later shipped under chain-of-custody protocol via overnight courier to Chemtech of Mountainside, New Jersey for analysis.

2.5 Groundwater Sampling

On February 5, 2008, C.T. Male personnel visited the site to perform groundwater monitoring activities including measurement of water levels and collection of groundwater samples from the three new wells (GP/CTM-20, GP/CTM-22, GP/CTM-23). In addition, water levels were also measured at accessible wells previously installed on the 312 Broadway site (GP/CTM-1 through GP/CTM-10, GP/CTM-14, GP/CTM-15, MW-18, and MW-19) to develop a sitewide groundwater contour map.

Following measurement and documentation of water levels, each of the new wells was purged of a minimum of three well volumes of water using a peristaltic pump and disposable polyethylene tubing. Purge water was containerized and transferred to a labeled 55-gallon drum, stored on site for subsequent disposal. Field parameters including temperature, pH, conductivity, and turbidity were measured during purging and just before lab sample collection. Once the water levels were observed to recover to within 90 percent of static conditions, groundwater samples were collected from each well using the peristaltic pump with new disposable polyethylene tubing. The groundwater samples were placed into new laboratory-supplied glass containers, labeled, and stored in a cooler with ice. The groundwater samples, along with a laboratory-provided trip blank sample, were submitted under chain of custody protocol to Chemtech for analysis for TCL VOCs, SVOCs, pesticides, PCBs, TAL metals.

Following the submittal of the groundwater samples to the laboratory, C.T. Male consulted with the NYSDEC regarding analysis of the samples for cyanide, which was not part of the original scope of work. With the concurrence of the NYSDEC, C.T. Male returned to the site on February 8, 2008 and collected groundwater samples from the three new wells for total cyanide analysis. The groundwater samples were collected and submitted to Chemtech using the same protocols implemented during the initial sampling event.

3.0 FINDINGS

3.1 Soil

The soil within the depths explored consisted generally of fine- to medium-grained sand with trace amounts of gravel and fill material (coal, ash/cinders, glass) to depths of approximately 8 to 15 feet below grade, underlain by fine grained sand and silt. Soil descriptions are summarized on the individual Subsurface Exploration Logs in Appendix B.

Results of field screening using the PID showed that the near-surface soil samples collected at locations SS-13, SS-14 and SS-15 did not exhibit PID readings above background levels. Similarly, the subsurface soil samples collected at the locations of test borings GP/CTM-20 and GP/CTM-21 did not exhibit elevated PID readings, although petroleum and/or coal tar type odors were exhibited by soil samples at these locations, beginning at a depth of approximately 6 feet below grade. Soil samples from test borings GP/CTM-22 and GP/CTM-23 exhibited PID readings ranging from 0.8 to 207 parts per million (ppm) above background levels from depths of 6 to 16 feet below grade. The highest PID readings at these boring locations were 168 and 207 ppm, exhibited at the 10'-12' depth interval at both locations. Soil samples from 6 feet below grade to the boring termination depths at these locations exhibited black staining and either coal tar or petroleum odors. Organic Vapor Headspace Analysis Logs are included in Appendix C.

The soil sampling laboratory analytical results (detected compounds only) are summarized in Tables 1 through 5 in Appendix A. Concentrations of compounds/analytes that exceeded the applicable NYSDEC Part 375 Standards, Criteria and Guidance (SCG) values are shown in bold print in the tables, and are also shown on Figures 3 through 7 in Appendix B. Analytical results were subjected to data validation in accordance with NYSDEC Data Usability Summary Report (DUSR) requirements. No analytical data was rejected as a result of the data validation process. The results presented in Tables 1 through 5 (Appendix A) have been qualified where necessary, based on data validation. The DUSR, dated March 3, 2008, is included as Appendix D.

Analytical results showed that VOCs were not detected at concentrations above laboratory method detection limits in the subsurface soil samples submitted from test boring GP/CTM-20 and near-surface soil samples SS-13, SS-14 and SS-15. Multiple VOCs were detected in the soil sample from GP/CTM-22, but at concentrations below applicable SCG values. Similar VOCs were detected in the subsurface soil sample from GP/CTM-23. Only two of these compounds, benzene and m/p-xylenes, were at concentrations above the applicable SCG values.

Multiple SVOCs were detected at concentrations above laboratory method detection limits in each of the near-surface and subsurface soil samples submitted for analysis. Concentrations of SVOCs in the near-surface soil sample SS-15 were below the applicable SCG values. However, the other soil samples submitted for analysis contained one to fourteen SVOCs at concentrations above the applicable SCG values. The sample from the 10 to 12 foot interval boring GP/CTM-23 (near the southern boundary of the parcel) exhibited the highest total number and highest concentrations of SVOCs above SCG values.

Several TAL metals were detected above the laboratory method detection limits in each of the subsurface and near-surface soil samples submitted for analysis. Only one metal (lead) exceeded its applicable SCG in one sample. Lead was detected in the near-surface sample SS-13 at a concentration of 2,800 mg/Kg, exceeding its SCG value of 1,000 mg/Kg.

PCBs were not detected at concentrations above laboratory method detection limits in the three subsurface soil samples collected at the locations of the borings/monitoring wells. However, PCBs were detected at concentrations above laboratory method detection limits in the three near-surface soil samples collected. Detected concentrations were below the applicable SCG value of 1 mg/Kg in near-surface soil samples SS-14 and SS-15. In near-surface soil sample SS-13, PCBs (Aroclor-1260) were detected at a concentration of 65 mg/Kg, exceeding the applicable SCG value.

Cyanide was detected above the laboratory method detection limit in each of the subsurface and near-surface soil samples submitted for analysis. However, detected concentrations were below the applicable SCG value in five of the six samples. In surface soil sample SS-13, cyanide was detected at a concentration of 0.083 mg/Kg, exceeding the SCG value of 0.027 mg/Kg.

3.2 Groundwater

3.2.1 Groundwater Elevation Data

Based on water level measurements obtained on February 5, 2008 the depth to groundwater at the new well locations was approximately 7 feet below grade. Groundwater depths at the previously installed wells on the 312 Broadway site ranged from approximately 4 to 6 feet below grade. The groundwater elevation data are summarized below in table 3.2-1, and were used to develop a groundwater contour map, which is included as Figure 12 in Appendix B.

TABLE 3.2-1: Summary of Groundwater Elevation Data – February 5, 2008

Well ID	TOC Elevation (feet amsl)	Depth to Water (feet)	Groundwater Elevation (feet amsl)
CTM-1	227.25	5.56	221.69
CTM-2	228.28	5.48	222.80
CTM-3	228.69	5.37	223.32
CTM-4	229.35	6.02	223.33
CTM-5	227.44	Not Measured	-
CTM-6	228.11	4.89	223.22
CTM-7	228.44	4.52	223.92
CTM-8	228.29	4.18	224.11
CTM-9	227.54	Not Measured	-
CTM-10	227.92	5.49	222.43
CTM-14	228.66	5.58	223.08
CTM-15	227.47	5.26	222.21
MW-18	228.01	5.56	222.45
MW-19	227.44	5.80	221.64
CTM-20	228.14	6.92	221.22
CTM-22	228.21	6.87	221.34
CTM-23	228.17	7.18	220.99

Wells CTM-5 and CTM-9 were not accessible for gauging on 02/05/08. (CTM-5 was beneath a large snow bank; CTM-9 was beneath construction equipment.)

The groundwater contour map developed based on the February 5, 2008 data indicates groundwater flow direction generally to the west and/or southwest across the western

portion of the 312 Broadway site, toward the Adjacent Parcel site. The map also indicates a southward component of groundwater flow on the eastern portion of 312 Broadway site.

Based on local surface topography, and historical groundwater elevation data collected from both the 312 Broadway site and the 314 Clinton Street ERP site to the east (across Broadway), groundwater flow direction in the vicinity is expected to be generally to the west, northwest and/or southwest toward the Mohawk River.

3.2.2 Groundwater Analytical Data Summary

The groundwater sampling laboratory analytical results (detected compounds only) are summarized in Tables 6 through 9 in Appendix A. Concentrations of compounds/analytes that exceeded the applicable NYSDEC Part 375 Standards, Criteria and Guidance (SCG) values are shown in bold print in the tables, and are also shown on Figures 8 through 11 in Appendix B. Analytical results were subjected to data validation in accordance with NYSDEC Data Usability Summary Report (DUSR) requirements. No analytical data was rejected as a result of the data validation process. The results presented in Tables 6 through 9 (Appendix A) have been qualified where necessary, based on data validation. The DUSR is included as Appendix D.

Laboratory analytical results showed that four VOCs (benzene, toluene, ethylbenzene and mixed xylenes) were detected at concentrations above the applicable SCG values in the groundwater sample collected at the location of GP/CTM-22. One VOC (benzene) was detected above the applicable SCG value in the groundwater sample at GP/CTM-23. VOCs (acetone and mixed xylenes) were detected at concentrations above laboratory method detection limits, but below applicable SCG values in the groundwater sample collected at GP/CTM-20.

One SVOC, acenaphthene, was detected at a concentration above the applicable SCG value in the groundwater sample collected at the location of GP/CTM-20. Two SVOCs, naphthalene and 2-methylnaphthalene, were detected at concentrations above the applicable SCG values in the groundwater sample collected at GP/CTM-23.

Several TAL metals were detected above the laboratory method detection limits in each of the groundwater samples submitted for analysis. Three metals, iron, manganese and

sodium, were detected at concentrations above the applicable SCG values in groundwater samples collected from the three new well locations. Aluminum was also detected above its SCG value in the groundwater sample collected at GP/CTM-20.

PCBs were not detected at concentrations above laboratory method detection limits in the groundwater samples collected at the three new well locations.

Cyanide was detected above its SCG value in groundwater samples collected at the locations of GP/CTM-22 and GP/CTM-23. Cyanide was detected above the laboratory method detection limit at the location of GP/CTM-20, but below its SCG value.

4.0 SUMMARY AND CONCLUSIONS

C.T. Male Associates, P.C. has completed remedial investigation activities at the 312 Broadway - Adjacent Parcel site, located in the City of Schenectady, Schenectady County, New York. The purpose of the RI activities was to evaluate near-surface soil, subsurface soil and groundwater conditions. The investigation activities consisted of advancement of four soil borings, three of which were converted to 1-inch diameter groundwater monitoring wells; the collection of near-surface and subsurface soil samples for field volatile organic compound vapor screening and laboratory analysis; and the collection of groundwater samples for laboratory analysis.

Subjective evidence of contamination, including black staining and petroleum and/or coal tar type odor, was noted in subsurface soil samples at the four test boring/monitoring well locations beginning at a depth of approximately 6 feet below grade and extending to the termination depths of the borings (9 to 20 feet below grade). Based on field screening of soil samples for the presence of volatile organic compounds, the highest PID readings were exhibited by soil samples collected from the 10-12 foot interval at the locations of GP/CTM-22 (located on the eastern portion of the parcel) and GP/CTM-23 (located near the southern boundary of the site).

Laboratory analytical results of near-surface soil samples showed that VOCs were not detected at concentrations above applicable SCG values. The near-surface soil sample collected at SS-13, on the western portion of the site (west of the retaining wall) contained multiple SVOCs, lead, PCBs and cyanide at concentrations above the applicable SCG values. One SVOC (benzo(a)pyrene) was also detected above the applicable SCG value in the near-surface sample collected at SS-14, on the central portion of the site.

Laboratory analytical results of subsurface soil samples showed that two VOCs (benzene, xylenes) were detected at concentrations above applicable SCG values in the 10-12' interval at the location of GP/CTM-23, near the southern boundary of the site. Numerous SVOCs were detected above applicable SCG values the three subsurface soil samples analyzed. The highest concentrations of SVOCs were detected in the 10-12' interval at the location of GP/CTM-23, and were generally one to two orders of magnitude above the applicable SCG values. Metals, pesticides, PCBs and cyanide

were not detected in the subsurface soil samples at concentrations exceeding applicable SCG values.

The depth to groundwater at the three new monitoring well locations (as measured on February 5, 2008) was approximately 7 feet below grade. Based on groundwater gauging data that included previously installed wells on the 312 Broadway site, groundwater flow direction in the vicinity of the Adjacent Parcel Site is generally toward the west and/or southwest.

Laboratory analytical results of groundwater samples showed that one or more VOCs (including benzene, toluene, ethylbenzene and xylenes) were detected above the applicable SCG values in samples from GP/CTM-22 and GP/CTM-23. One or more SVOCs (including acenaphthene, naphthalene and 2-methylnaphthalene) and one or more metals (including aluminum, antimony, iron, manganese and sodium) were detected above the applicable SCG values in samples from the three new wells. Cyanide was detected above the applicable SCG value in samples from GP/CTM-22 and GP/CTM-23. Pesticides and PCBs were not detected above laboratory method detection limits in any of the groundwater samples analyzed.

Based on field observations and laboratory analytical results of soil and groundwater samples collected during the RI activities, contamination has been identified in near-surface soil, subsurface soil and groundwater on the Adjacent Parcel Site at levels exceeding applicable regulatory cleanup criteria. Contaminants of concern include: SVOCs, metals (lead), PCBs and cyanide in surface soil; VOCs, SVOCs and metals in subsurface soil, and VOCs, SVOCs, metals and cyanide in groundwater.

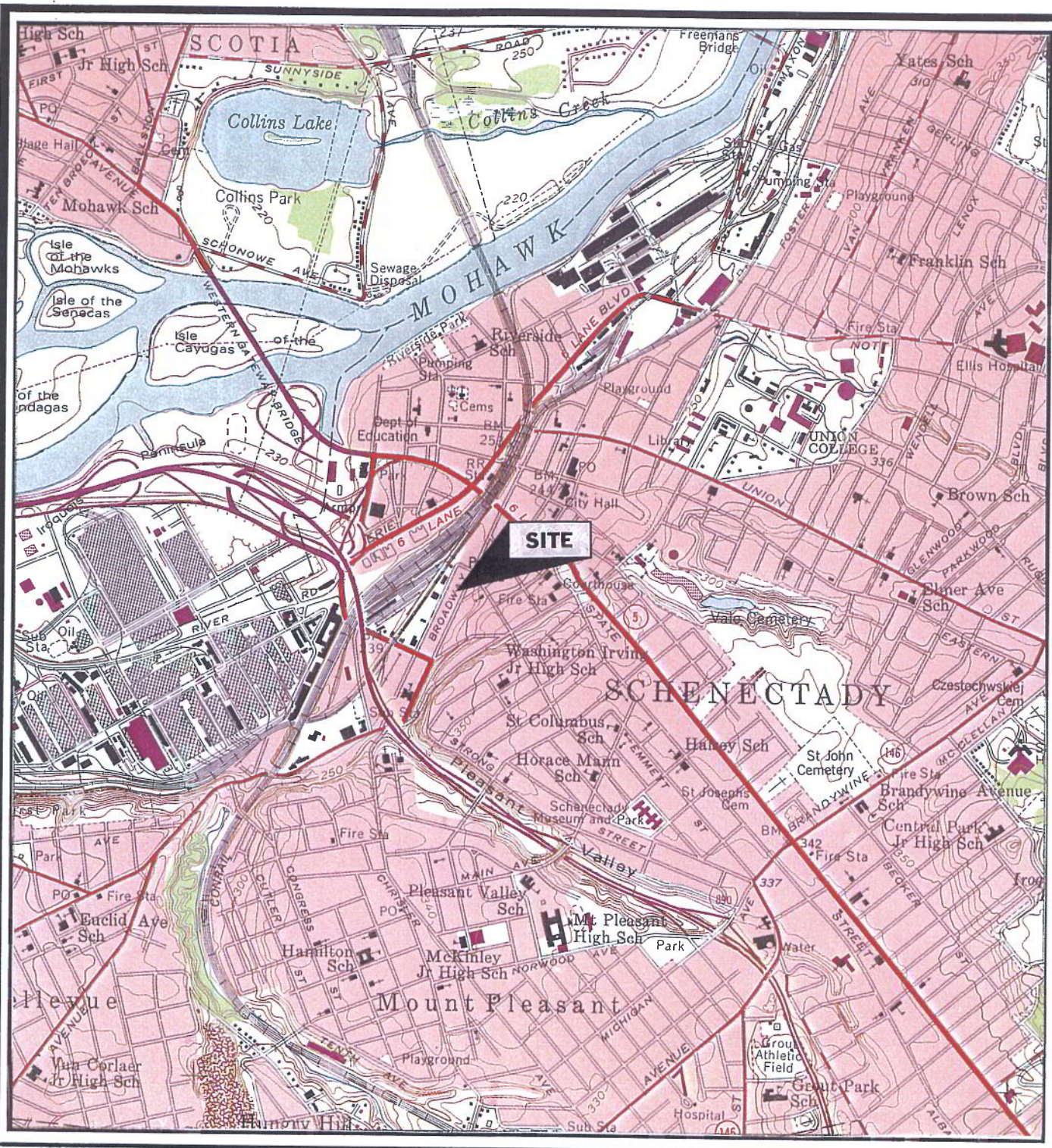
The black staining and coal tar type odors noted in subsurface soil and groundwater were similar to staining and odors noted in some areas on the southern portion of the 312 Broadway site. Based on the subjective evidence observed and the analytical data indicating the presence of cyanide and numerous SVOCs typically associated with coal tar, the contamination is potentially related to the documented impacts to soil and groundwater from the former manufactured gas plant facility to the east of Broadway. The sources of the contaminants (SVOCs, PCBs, lead and cyanide) identified in surface soil on the western portion of the parcel are unknown.

The contamination identified on the Adjacent Parcel will be evaluated as part of the remedial activities being considered for implementation at the 312 Broadway site. C.T. Male will develop an Alternatives Analysis Report, inclusive of both properties, which will present and discuss various alternatives to remediate soil and groundwater in support of future property redevelopment.

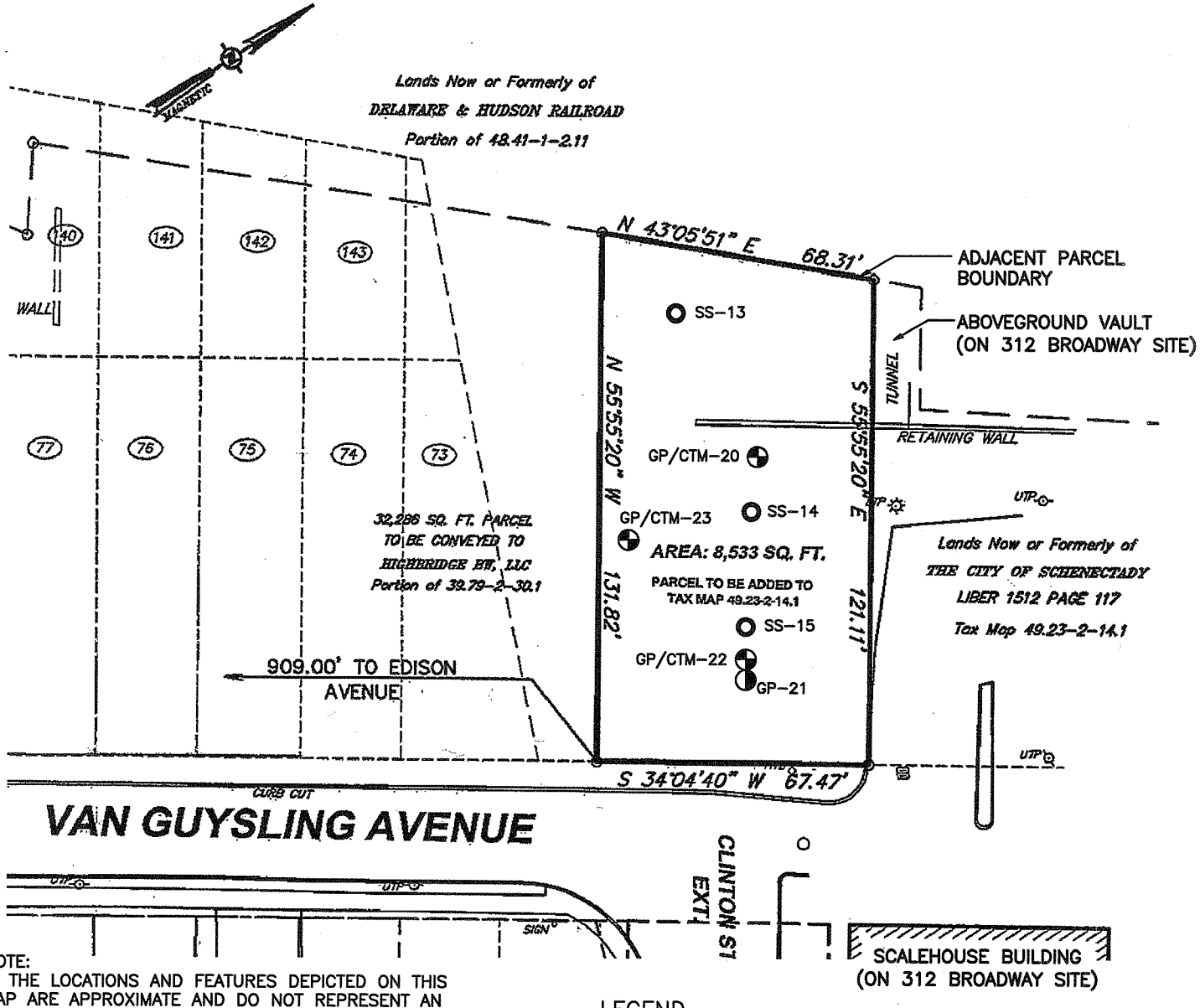
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FIGURES

Figure 1: Site Location Map
Figure 2: Monitoring Well/Soil Sampling Locations Map
Figure 3: VOCs Above SCGs in Soil
Figure 4: SVOCs Above SCGs in Soil
Figure 5: Metals Above SCGs in Soil
Figure 6: PCBs Above SCGs in Soil
Figure 7: Cyanide Above SCG in Soil
Figure 8: VOCs Above SCGs in Groundwater
Figure 9: SVOCs Above SCGs in Groundwater
Figure 10: Metals Above SCGs in Groundwater
Figure 11: Cyanide Above SCG in Groundwater
Figure 12: Groundwater Contour Map - February 5, 2008


SCOTIA
SCHENECTADY
Mount Pleasant
MOHAWK
Collins Lake
Collins Creek
Collins Park
Mohawk Sch
Isle of the Mohawks
Isle of the Senecas
Isle of the Cayugas
Sewage Disposal
Riverside Park
Riverside Sch
Pumping Sta
Cems
Dept of Education
Peninsula
Iroquois
SITE
City Hall
Courthouse
Fire Sta
Library
UNION COLLEGE
Ellis Hospital
Franklin Sch
Brown Sch
Elmer Ave Sch
Vale Cemetery
Washington Irving Jr High Sch
St Columbus Sch
Horace Mann Sch
Hadley Sch
St John Cemetery
St Joseph's Cem
Schenectady Museum and Park
Brandywine Avenue Sch
Central Park Jr High Sch
Pleasant Valley Sch
Mt Pleasant High Sch
McKinley Jr High Sch
Hamilton Sch
Euclid Ave Sch
Van Corlaer Jr High Sch
Grout Athletic Field
Grout Park Sch
Hospital
Playground
Park
Water
Sub Sta
Oil
Freemans Bridge
Xates Sch
Jr High Sch
Western Gateway Bridge
Sunnyside
Schonowe Ave
Lane Blvd
Union
Broadway
State
Erie
River
Strong
Pleasant
Valley
Main Ave
Norwood Ave
Michigan Avenue
Tenth Ave
Van Vranken
Foster
Van Vranken
Lenox
Wendell
Glenwood
Parkwood
Eastern
Brandywine
Becker
Emmett
Conrail
Cutler
Congress
Christopher
Ten Broeck Avenue
Nelson
First
Oil
Sub Sta
Pumping Sta
Playground
Fire Sta
Library
Cems
Dept of Education
Courthouse
Water
Hospital
Park
Sub Sta
Oil
Sub Sta
Oil
Sub Sta
Oil

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BAR SCALE
40 0 20 40 80
1 inch = 40 ft.

LEGEND

SB/MW	SOIL BORING/MONITORING WELL (APPROX.)
SS	SURFACE SOIL SAMPLING LOCATION (APPROX.)
GP-21	SOIL BORING (APPROX.)

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FIGURE 2
MONITORING WELL/SOIL SAMPLING LOCATIONS MAP
312 BROADWAY – ADJACENT PARCEL

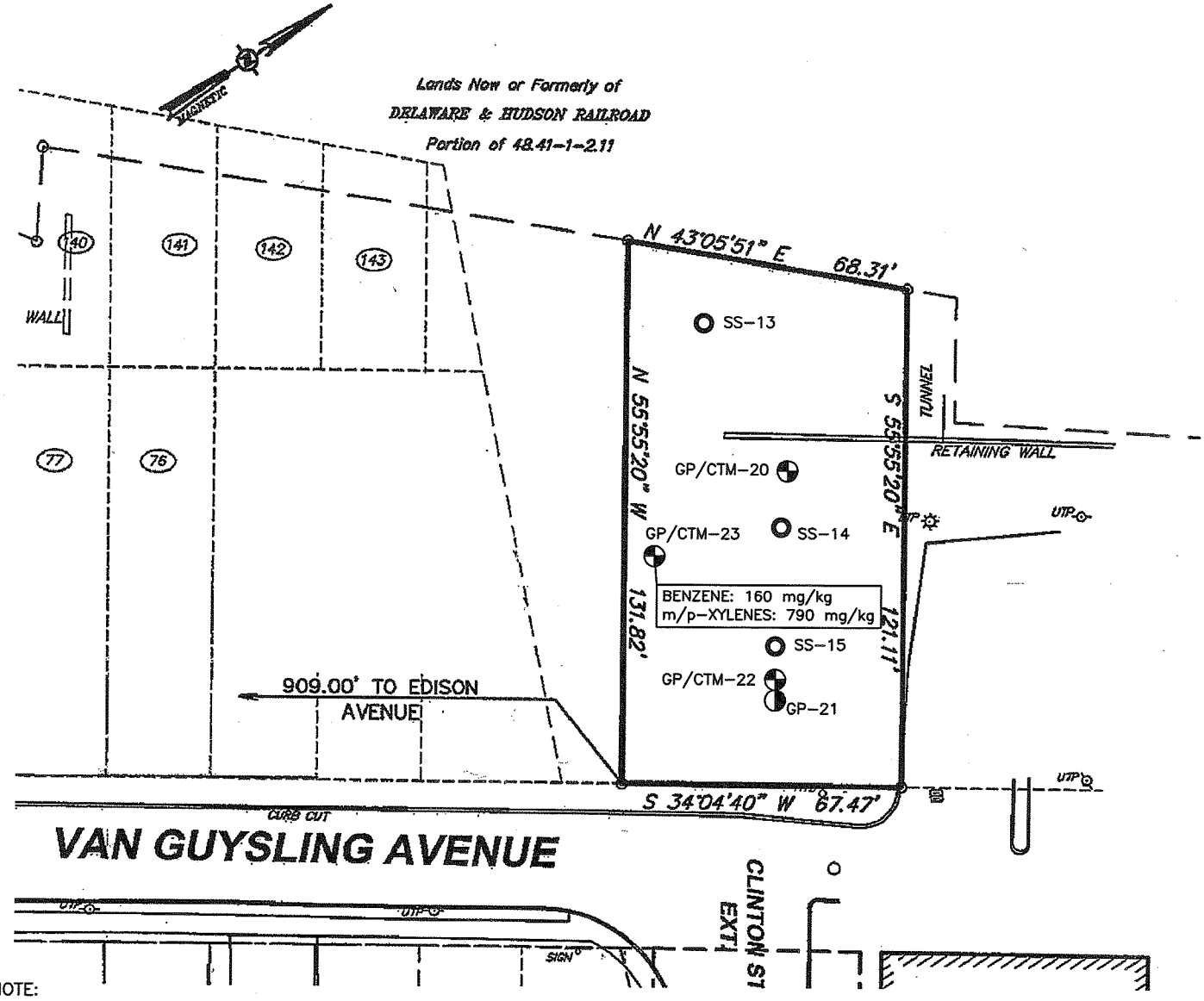
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FIGURE 3
VOCs ABOVE SCGs IN SOIL
312 BROADWAY – ADJACENT PARCEL

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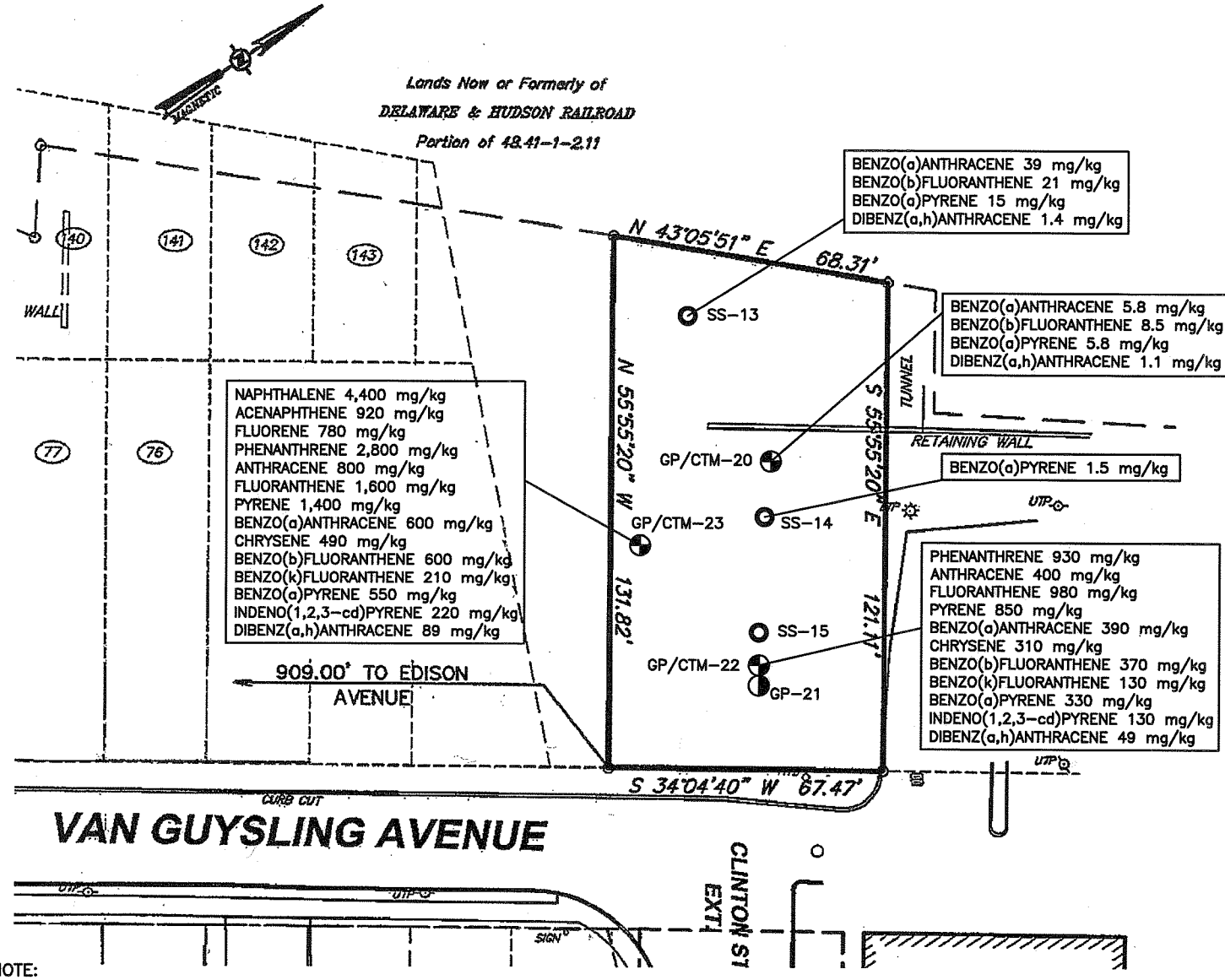
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FIGURE 4
SVOCs ABOVE SCGs IN SOIL
312 BROADWAY – ADJACENT PARCEL

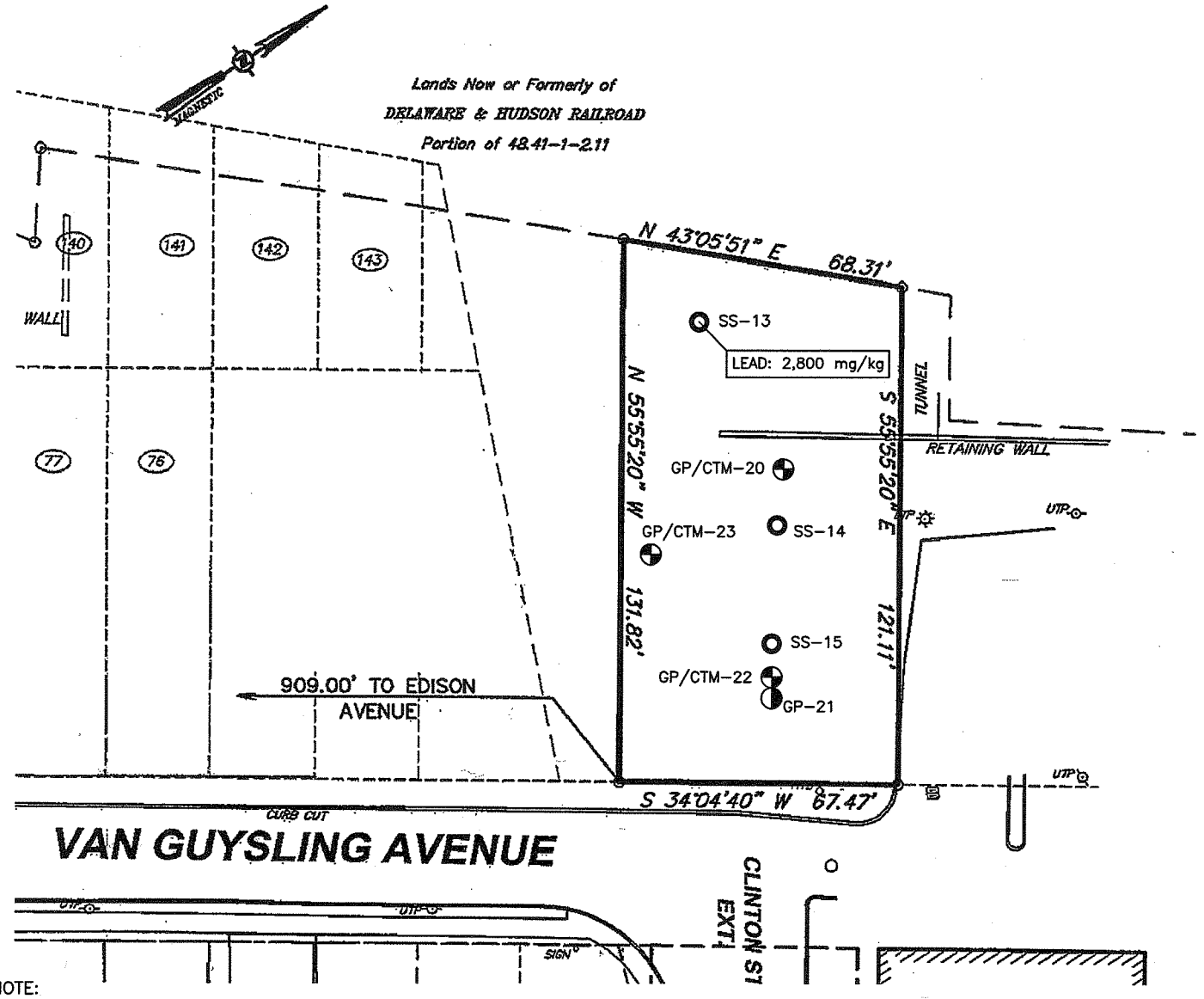
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FIGURE 5
METALS ABOVE SCGs IN SOIL
312 BROADWAY – ADJACENT PARCEL

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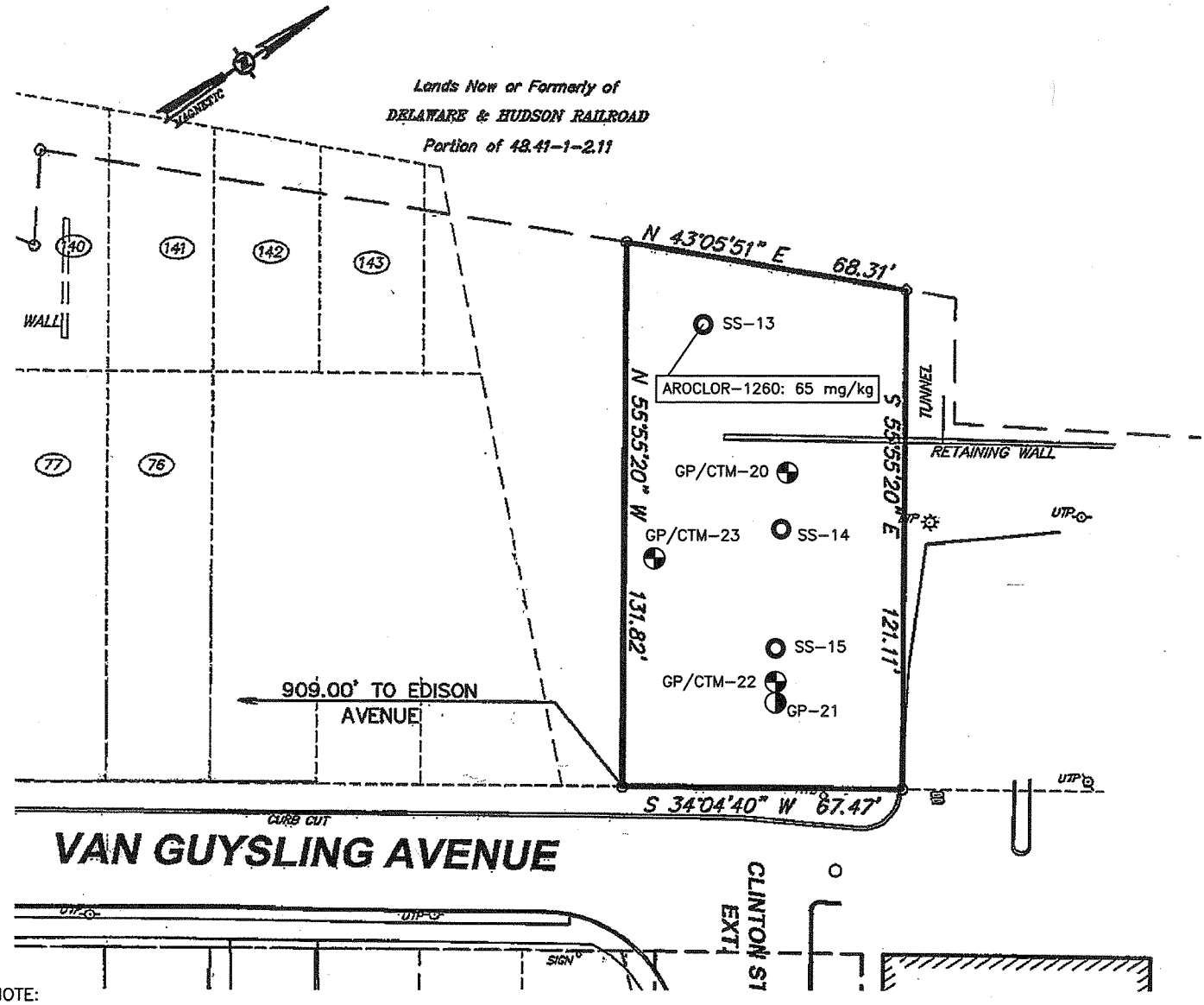
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FIGURE 6
PCBs ABOVE SCGs IN SOIL
312 BROADWAY – ADJACENT PARCEL

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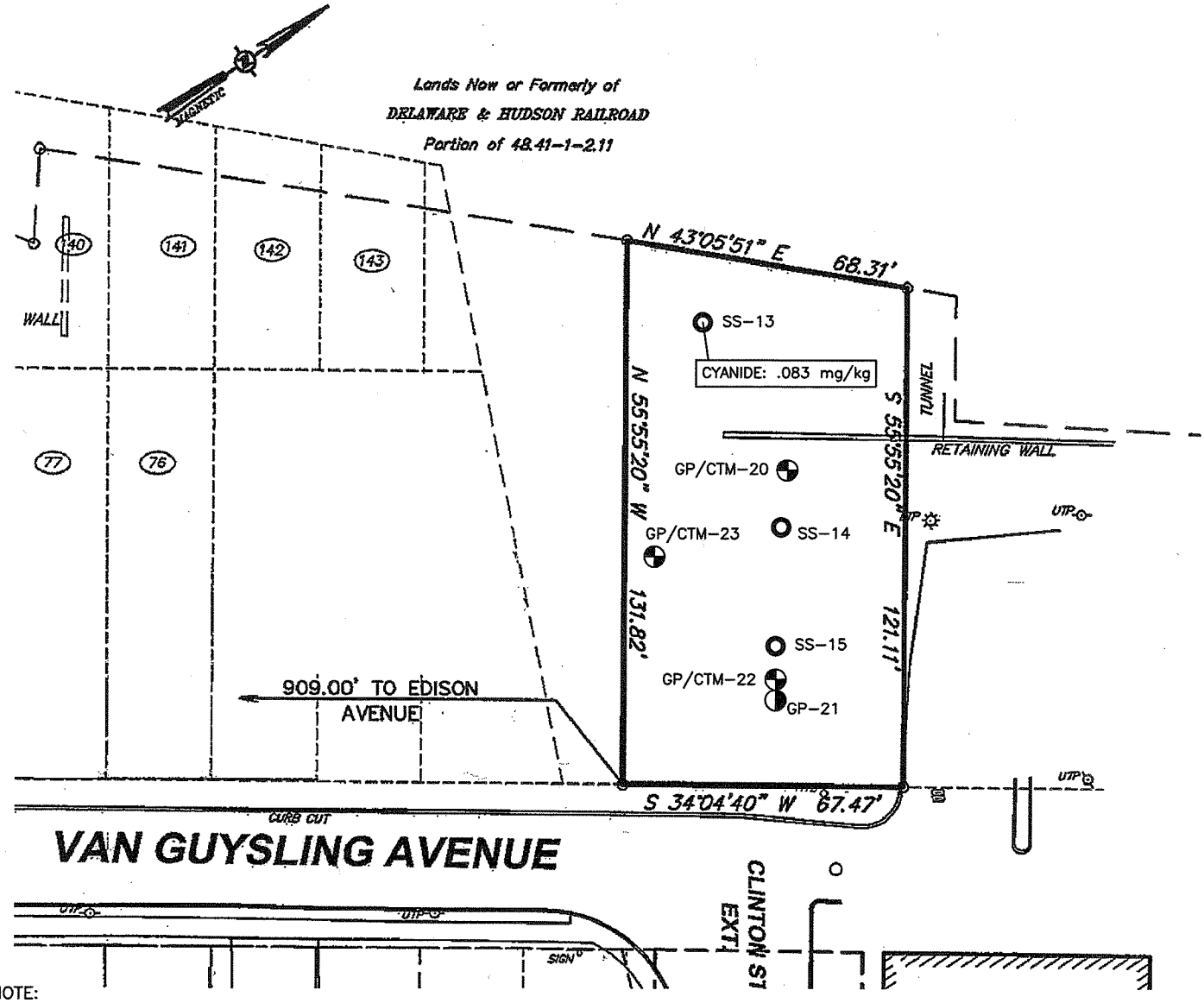
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FIGURE 7
CYANIDE ABOVE SCG IN SOIL
312 BROADWAY – ADJACENT PARCEL

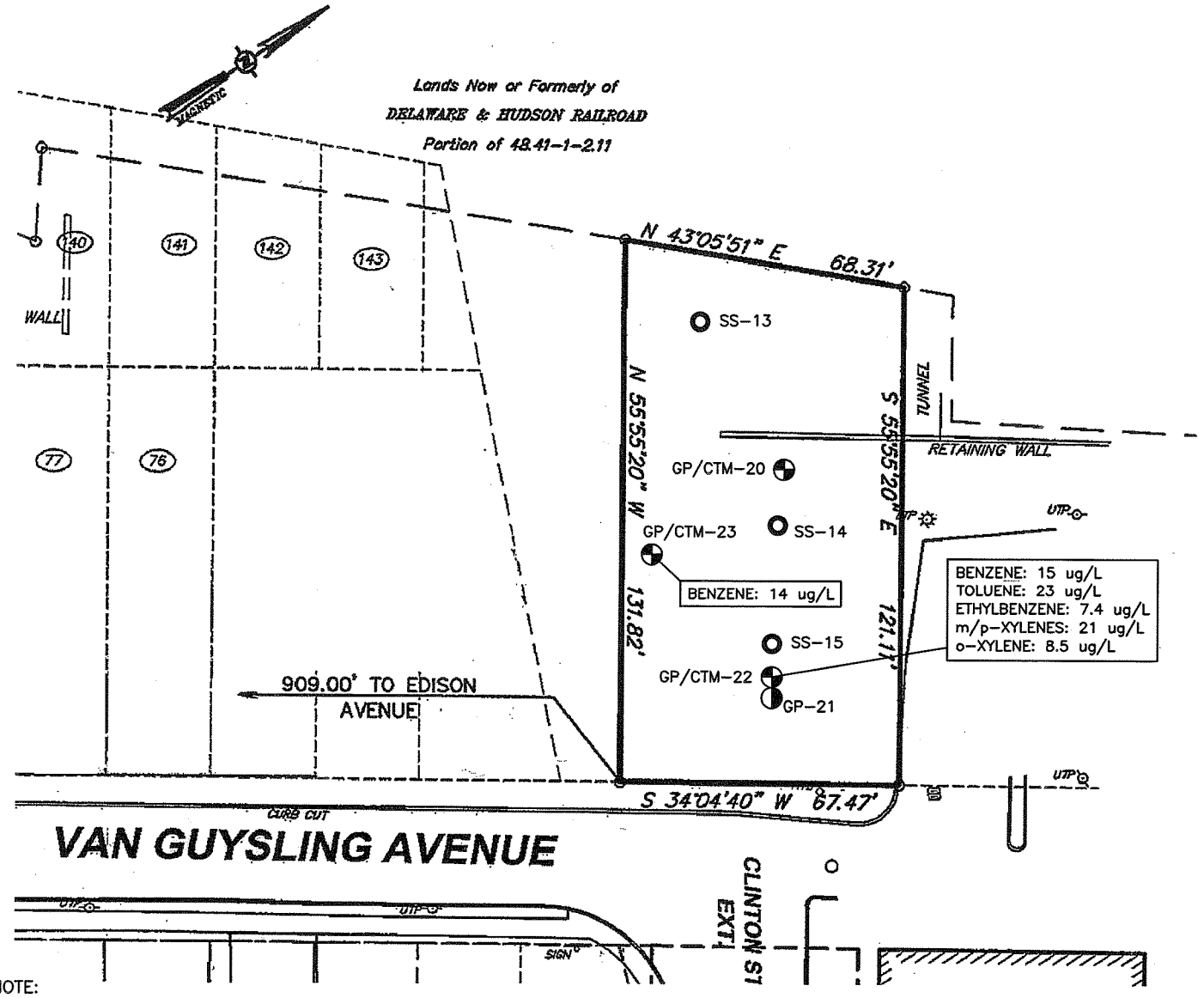
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GP-21	SOIL BORING (APPROX.)

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FIGURE 8
VOCs ABOVE SCGs IN GROUNDWATER
312 BROADWAY – ADJACENT PARCEL

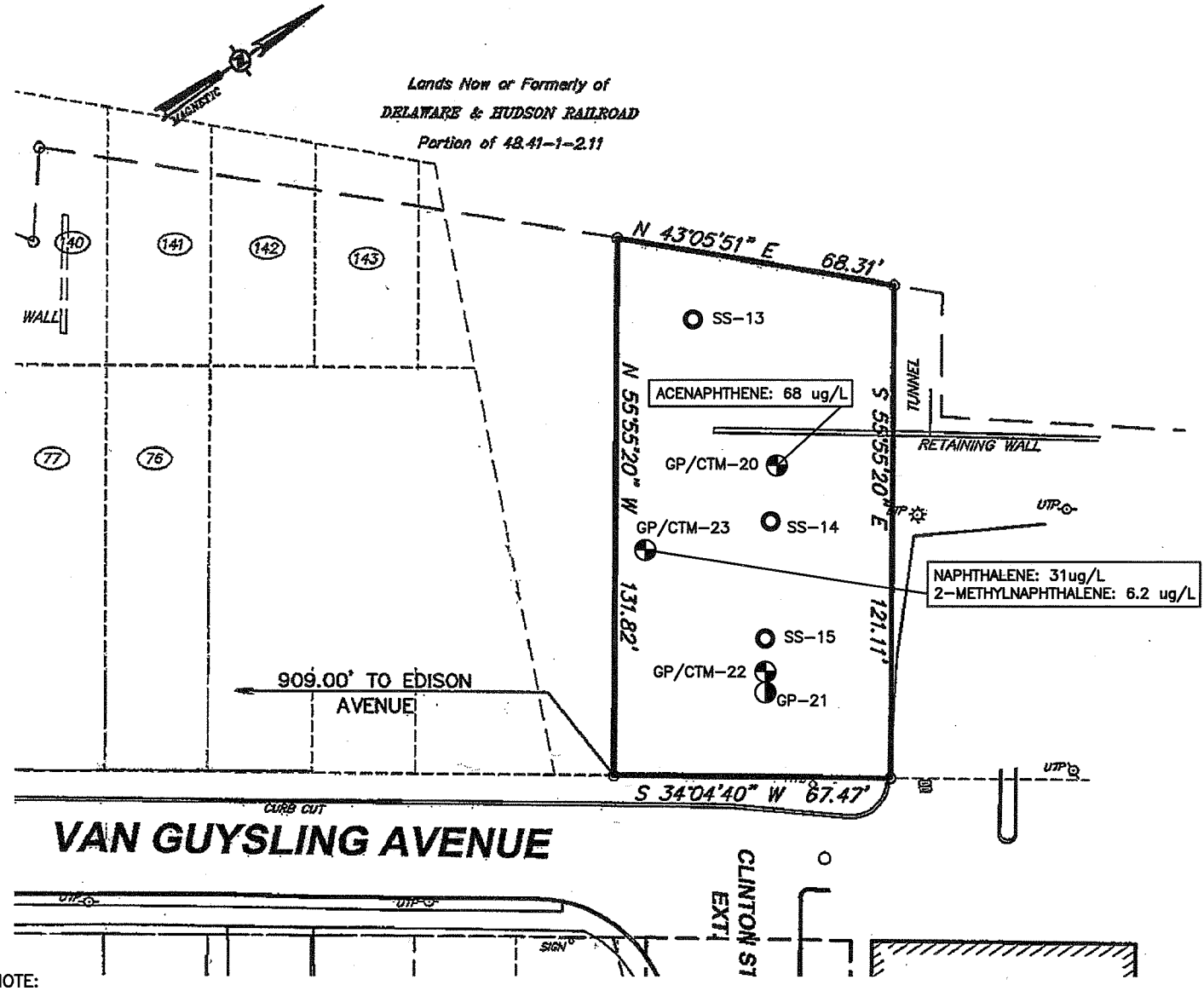
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FIGURE 9
SVOCs ABOVE SCGs IN GROUNDWATER
312 BROADWAY – ADJACENT PARCEL

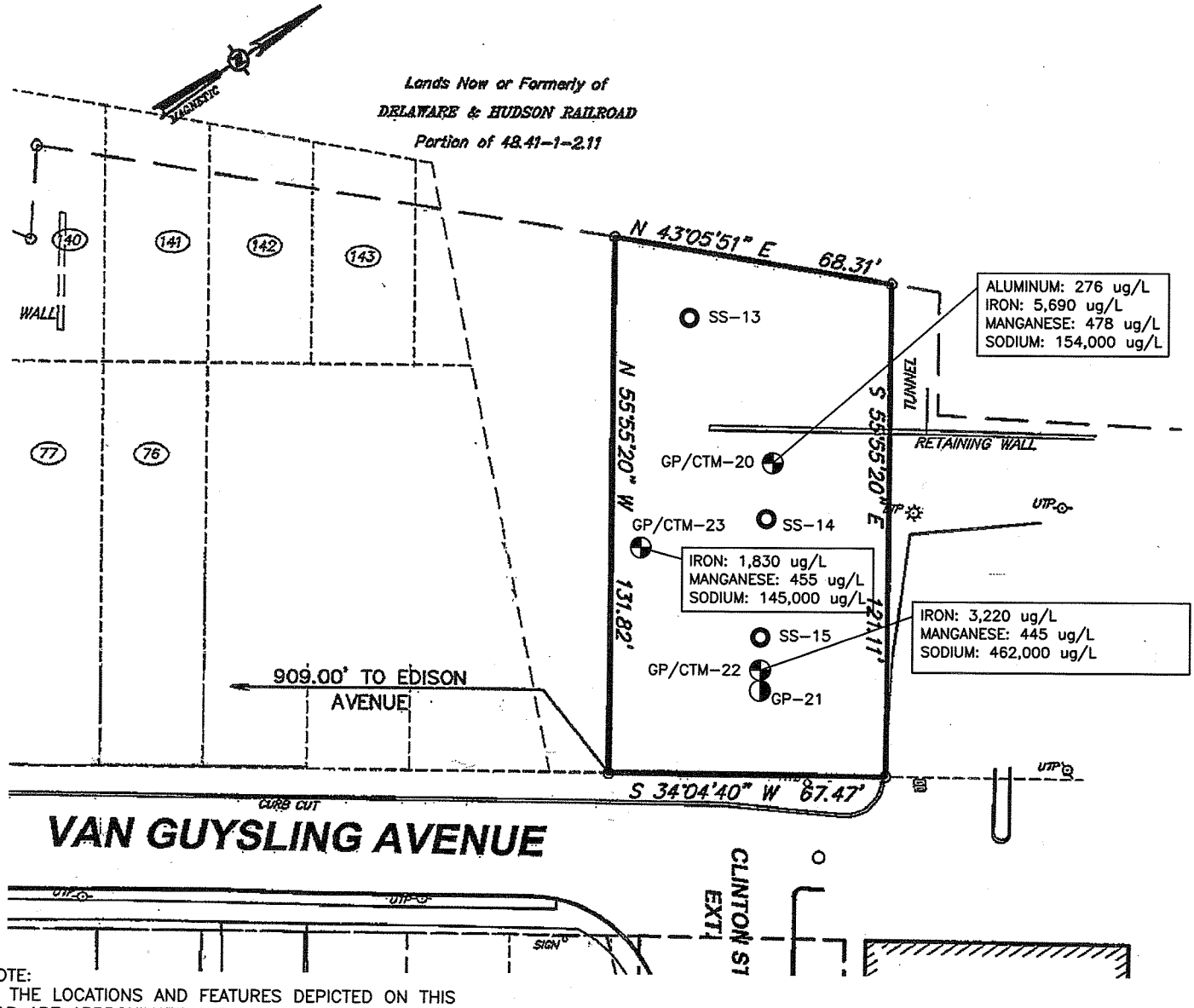
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FIGURE 10
METALS ABOVE SCGs IN GROUNDWATER
312 BROADWAY – ADJACENT PARCEL

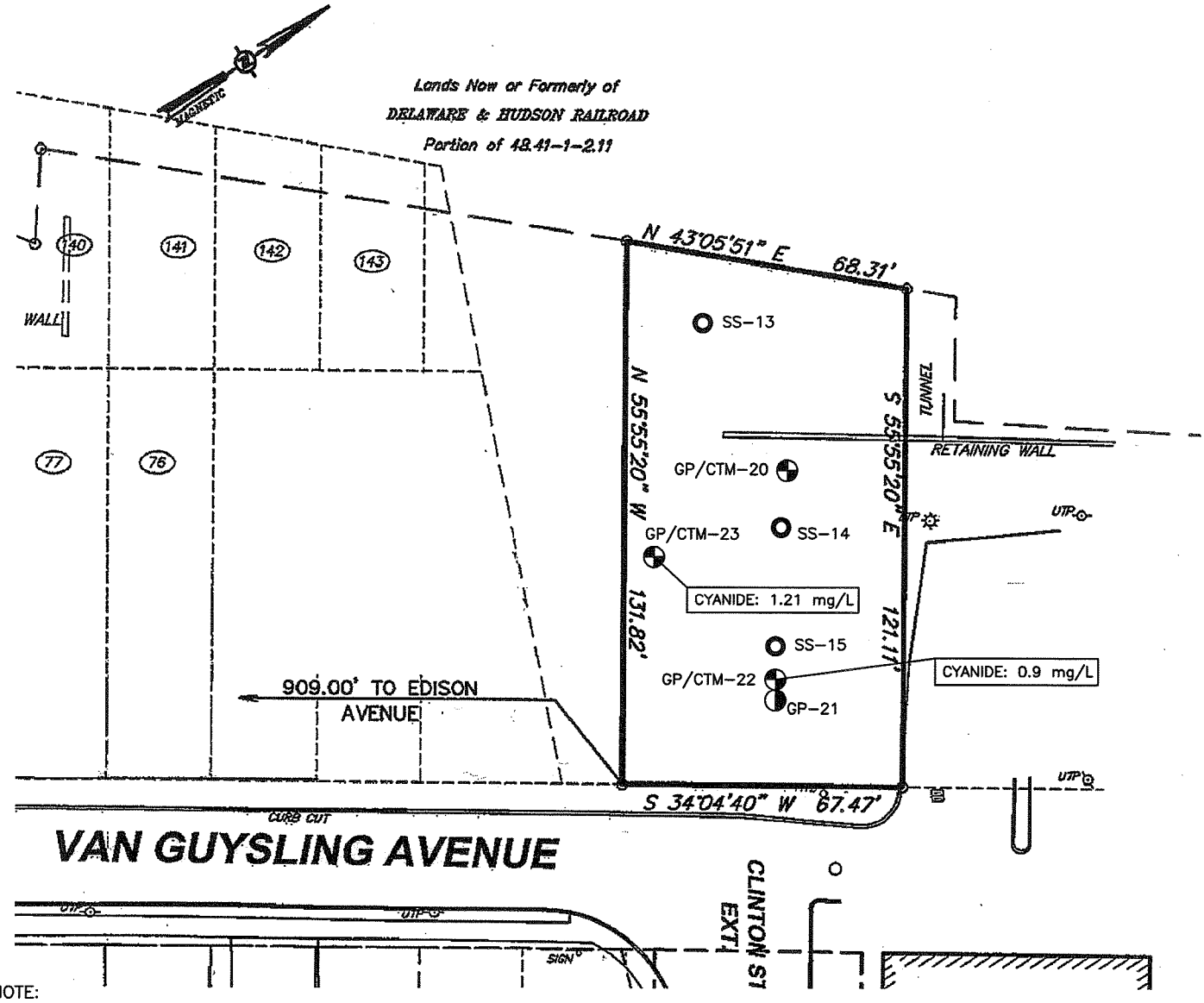
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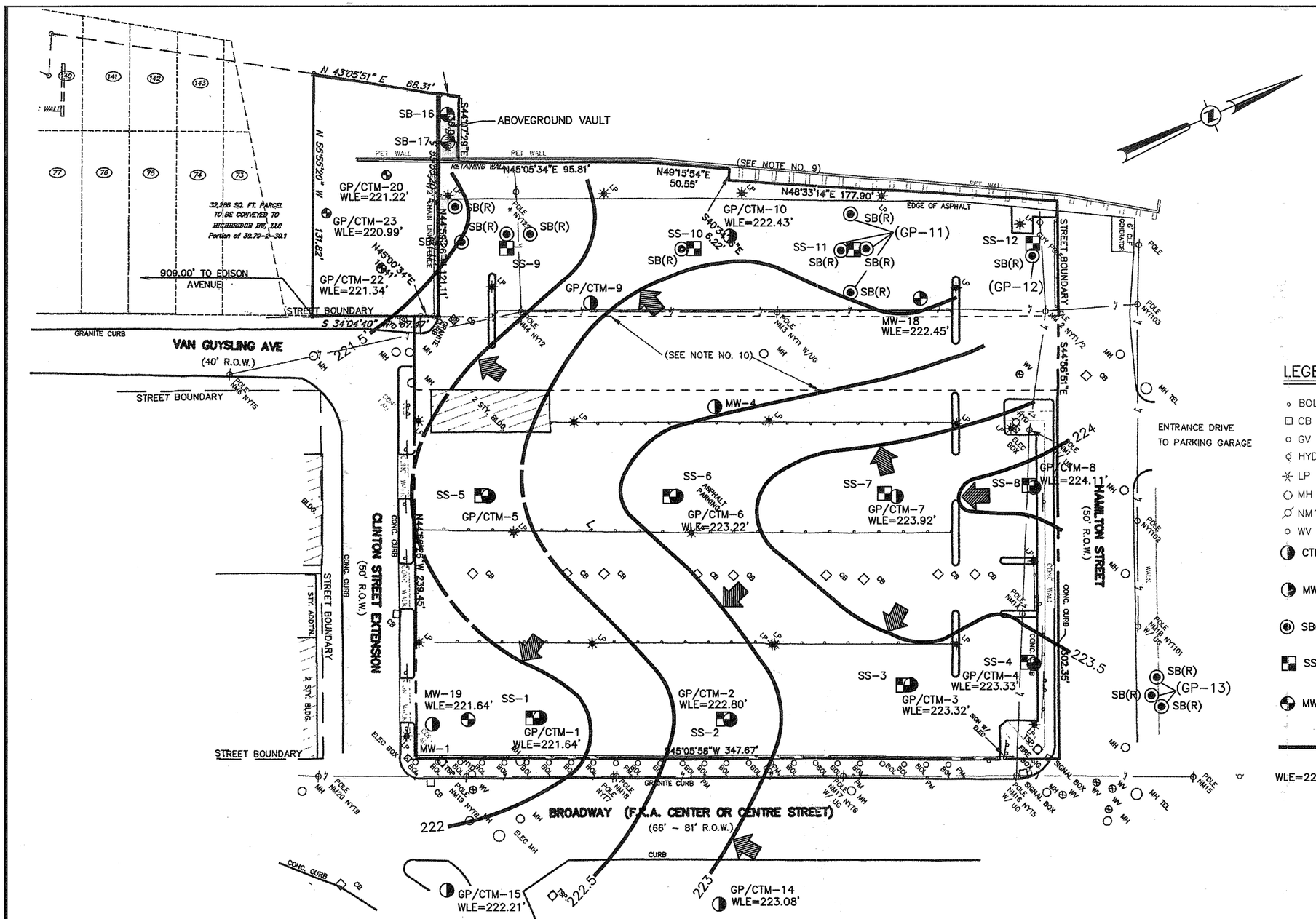
FIGURE 11
CYANIDE ABOVE SCG IN GROUNDWATER
312 BROADWAY – ADJACENT PARCEL

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LEGEND

○ BOL	BOLLARD
□ CB	CATCH BASIN
○ GV	GAS VALVE
◇ HYD	HYDRANT
✳ LP	LIGHT POLE
○ MH	MISCELLANEOUS MANHOLE
⌀ NM15	UTILITY POLE
○ WV	WATER VALVE
◑ CTM-1	MONITORING WELL LOCATION (WELLS INSTALLED BY C.T. MALE APRIL 2006)
◑ MW-1	MONITORING WELL LOCATION (WELLS INSTALLED BY C.T. MALE APRIL/MAY 2004)
◉ SB(R)	SOIL BORING WHERE REFUSAL WAS ENCOUNTERED AT APPROX. 4 FEET OR LESS (C.T. MALE MAY 2004)
■ SS	NEAR-SURFACE SOIL SAMPLE LOCATION (SAMPLES COLLECTED BY C.T. MALE MAY 2006)
◑ MW-18	SOIL BORING/MONITORING WELL LOCATION (INSTALLED BY C.T. MALE MAY 29, 2007)
———	GROUNDWATER CONTOUR (DASHED WHERE INFERRED)
WLE=223.33'	WATER LEVEL ELEVATION IN FEET

BAR SCALE

60 0 30 60 120

1 inch = 60 ft.

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2. FIGURE 1, MONITORING WELL LOCATIONS, SUPPLEMENTAL INVESTIGATION ACTIVITIES, DATED MAY 14, 2008, DWG. NO. 08-0341.

DATE		REVISIONS RECORD/DESCRIPTION	DRAFTED	CHECK	APPR.
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DESIGNED :
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CHECKED : J.FAVREAU
PROJ. NO: 05.5550
SCALE : 1"=60'
DATE : JUNE 25, 2008

FIGURE 12
GROUNDWATER CONTOUR MAP (FEBRUARY 5, 2008)

ENVIRONMENTAL RESTORATION PROGRAM INVESTIGATION
LOWER BROADWAY PARKING LOT/312 BROADWAY

CITY OF SCHENECTADY — SCHENECTADY COUNTY, NY.

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SHEET 1 OF 1
DWG. NO: 08-0412

CAD DWG. FILE NAME: 20508 GW CONTOUR.DWG

APPENDIX A

Analytical Data Summary Tables

Table 1: Soil Analytical Results – VOCs
Table 2: Soil Analytical Results – SVOCs
Table 3: Soil Analytical Results – TAL Metals
Table 4: Soil Analytical Results – PCBs
Table 5: Soil Analytical Results – Cyanide
Table 6: Groundwater Analytical Results – VOCs
Table 7: Groundwater Analytical Results – SVOCs
Table 8: Groundwater Analytical Results – TAL Metals
Table 9: Groundwater Analytical Results - Cyanide

TABLE 1
LOWER BROADWAY PARKING LOT (312 BROADWAY) - ADJACENT PARCEL
SCHENECTADY, NEW YORK

REMEDIAL INVESTIGATION
SOIL ANALYTICAL RESULTS - VOLATILE ORGANIC COMPOUNDS
(DETECTED COMPOUNDS ONLY)

Sample ID		GP/CTM-20 (2-2)	GPFD01	GP/CTM-22 (3-2)	GP/CTM-23 (3-2)	SS-13	SS-14	SS-15
Lab Sample Number		Z1346-01	Z1346-03	Z1346-02DL	Z1346-04	Z1346-10	Z1346-13	Z1346-14
Sampling Date		1/28/2008	1/28/2008	1/28/2008	1/28/2008	1/28/2008	1/28/2008	1/28/2008
Matrix		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Dilution Factor		1.0	1.0	10.0	50.0	1.0	1.0	1.0
Units		mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	ug/Kg
COMPOUND	Part 375 SCG (mg/Kg)							
Acetone	500	0.1 UJ	0.11 UJ	0.12 J	17 U	0.098 UJ	0.091 UJ	0.092 UJ
Benzene	44	0.004 U	0.0049 U	6.8 J	**160**	0.0042 U	0.0038 U	0.0039 U
Toluene	500	0.0054 U	0.0059 U	8.2	260	0.0051 U	0.0047 U	0.0047 U
Ethyl Benzene	390	0.0049 U	0.0054 U	7.3 J	300 J	0.0046 U	0.0043 U	0.0043 U
m/p-Xylenes	500	0.011 U	0.0130 U	16.0 J	**790** J	0.011 U	0.0099 U	0.01 U
o-Xylene	500	0.0047 U	0.0051 U	6.4 J	290 J	0.0044 U	0.004 U	0.0041 U
Styrene	n/a	0.0038 U	0.0042 U	0.069 J	1.5 U	0.0036 U	0.0033 U	0.0033 U
Isopropylbenzene	n/a	0.0051 U	0.0055 U	0.26 J	49 J	0.0047 U	0.0044 U	0.0044 U
Total Confident Conc. VOC		0	0	45.149	1,849	0	0	0

Qualifiers and Notes
U - The compound was not detected at the indicated concentration.
UJ - Data indicates the presence of a compound that meets the identification criteria; however the result is less than the quantitation limit but greater than zero.
J - Indicates an estimated value
SCG - Standards, Criteria & Guidance levels (Reference: 6NYCRR Part 375 Restricted Use (Commercial) Soil Cleanup Objectives)
n/a - Not Applicable (no established standard)
ug/Kg - Micrograms per Kilogram
Values in **BOLD** denote exceedence of SCG
Note: GPFD01 is a field duplicate sample of GP/CTM-20 (2-2)

TABLE 2
LOWER BROADWAY PARKING LOT (312 BROADWAY) - ADJACENT PARCEL
SCHENECTADY, NEW YORK

REMEDIAL INVESTIGATION
SOIL ANALYTICAL RESULTS - SEMIVOLATILE ORGANIC COMPOUNDS
(DETECTED COMPOUNDS ONLY)

Sample ID		GP/CTM-20 (2-2)	GPFD01	GP/CTM-22 (3-2)	GP/CTM-23 (3-2)	SS-13	SS-14	SS-15
Lab Sample Number		Z1346-01	Z1346-03	Z1346-02	Z1346-04DL2	Z1346-10DL2	Z1346-13	Z1346-14
Sampling Date		1/28/2008	1/28/2008	1/28/2008	1/28/2008	1/28/2008	1/28/2008	1/28/2008
Matrix		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Dilution Factor		20.0	125.0	100.0	500.0	125.0	5.0	10.0
Units		mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	ug/Kg
COMPOUND	Part 375 SCG (mg/Kg)							
Naphthalene	500	3.3 J	34 J	370	**4,400**	37	1.1 J	1.3 J
2-Methylnaphthalene	n/a	0.94 J	21 J	83	1,000	20	0.26 J	0.1 U
1,1-Biphenyl	n/a	0.24 UJ	18 J	26 J	210	19	0.053 U	0.11 U
Acenaphthylene	500	1.1 J	2.8 J	110	240 J	3.3 J	0.24 J	0.054 U
Acenaphthene	500	0.88 J	110 J	180	**920**	110	0.34 J	0.079 U
Dibenzofuran	n/a	0.25 UJ	87 J	190	750	93	0.22 J	0.11 U
Fluorene	500	0.94 J	120 J	270	**780**	110	0.38 J	0.099 U
Phenanthrene	500	5.6 J	360 J	**930**	**2,800**	340	3.3	1.1 J
Anthracene	500	1.9 J	44 J	**400**	**800**	35	0.93 J	0.12 U
Carbazole	n/a	0.62 UJ	17 J	68	300 J	15	0.3 J	0.28 U
Fluoranthene	500	9.6 J	200 J	**980**	**1,600**	170	4.9	1 J
Pyrene	500	11.0 J	120 J	**850**	**1,400**	130	4.3	0.96 J
Benzo(a)anthracene	5.6	**5.8** J	**39** J	**390**	**600** J	**39**	2.1	0.45 J
Chrysene	56	4.7 J	30 J	**310**	**490** J	28	2	0.44 J
bis(2-Ethylhexyl)phthalate	n/a	0.31 U	0.017 UJ	1.6 U	1.6 UJ	0.22 U	0.11 U	0.14 U
Benzo(b)fluoranthene	5.6	**8.5** J	**21** J	**370**	**600**	**21**	2.1	0.61 J
Benzo(k)fluoranthene	56	2.5 J	9.5	**130**	**210** J	9.5 J	0.8 J	0.17 U
Benzo(a)pyrene	1	**5.8** J	**15** J	**330**	**550**	**15** J	**1.5** J	0.51 J
Indeno(1,2,3-cd)pyrene	5.6	3.5 J	3.3	**130**	**220** J	3 J	0.68 J	0.093 U
Dibenz(a,h)anthracene	0.56	**1.1** J	**1.2**	**49**	**89** J	**1.4** J	0.29 J	0.27 U
Benzo(g,h,i)perylene	500	4.8 J	3.6	150	270 J	3.4 J	1 J	0.46 J
Total Confident Conc. SVOC		71.96	1,256.4	6,316	17,780	1,181.5	26.74	6.83

Qualifiers and Notes
U - The compound was not detected at the indicated concentration.
UJ - Data indicates the presence of a compound that meets the identification criteria; however the result is less than the quantitation limit but greater than zero.
J - Indicates an estimated value
SCG - Standards, Criteria & Guidance levels (Reference: 6NYCRR Part 375 Restricted Use (Commercial) Soil Cleanup Objectives)
Values in **BOLD** denote exceedence of SCG
n/a - Not Applicable (no established standard)
ug/Kg - Micrograms per Kilogram
Note: GPFD01 is a field duplicate sample of GP/CTM-20 (2-2)

TABLE 3
LOWER BROADWAY PARKING LOT (312 BROADWAY) - ADJACENT PARCEL
SCHENECTADY, NEW YORK

REMEDIAL INVESTIGATION
SOIL ANALYTICAL RESULTS - METALS
(DETECTED METALS ONLY)

Sample ID		GP/CTM-20 (2-2)	GPFD01	GP/CTM-22 (3-2)	GP/CTM-23 (3-2)	SS-13	SS-14	SS-15
Lab Sample Number		Z1346-01	Z1346-03	Z1346-02	Z1346-04	Z1346-10	Z1346-13	Z1346-14
Sampling Date		1/28/2008	1/28/2008	1/28/2008	1/28/2008	1/28/2008	1/28/2008	1/28/2008
Matrix		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Dilution Factor		1.0	1.0	1.0	1.0	1.0	1.0	1.0
Units		mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
COMPOUND	Part 375 SCG (mg/Kg)							
Aluminum	n/a	4490	4270	2060	5460	5350	2930	3390
Arsenic	16	2.11 J	3.87 J	1.69	3.53	10.3	2.93	2.24
Barium	400	33.4 J	57.4 J	13.3	40.6 J	160	30.8	28.3
Beryllium	590	0.312	0.349	0.108 U	0.305	0.402 J	0.176 U	0.225
Cadmium	9.3	0.049 U	0.054 U	0.051 U	0.051 U	2.42 J	0.043 U	0.045 U
Calcium	n/a	2410 J	6000 J	15100	18900 J	18600 J	23500	28000
Chromium	1,900	6.4	6.95	2.96	8.17	20.8 J	9.69	5.69
Cobalt	n/a	4.4	5.27	1.47	3.84	7.03 J	2.86	2.39
Copper	270	28.7	28.2	3.32	12.7	178	15.7	9.24
Iron	n/a	7880	7600	5980	9680	28600 J	18500	6400
Lead	1,000	37.3 J	70.1 J	19.5	75.5 J	**2800** J	28.9	22.9
Magnesium	n/a	1080 J	760 J	1810	3250 J	7180	6350	7120
Manganese	10,000	74.6	72.4	95.8	236	306	329	157
Nickel	310	9.05 J	11.7 J	2.95	8.07	27.1 J	8.9	6.85
Potassium	N/A	655 J	500 J	414	1110 J	1120 J	583	663
Selenium	1,500	0.148 UJ	0.525 J	0.154 U	0.152 U	0.141 U	0.13 U	0.134 U
Vanadium	n/a	13 J	16.1 J	5.56	14.7	20.9 J	7.62	14
Zinc	10,000	116 J	95.1 J	18.3	47.7 J	1020 J	117	80.9

Sample ID		GP/CTM-20 (2-2)	GPFD01	GP/CTM-22 (3-2)	GP/CTM-23 (3-2)	SS-13	SS-14	SS-15
Lab Sample Number		Z1346-01	Z1346-03	Z1346-02	Z1346-04	Z1346-10	Z1346-13	Z1346-14
Sampling Date		1/28/2008	1/28/2008	1/28/2008	1/28/2008	1/28/2008	1/28/2008	1/28/2008
Matrix		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Dilution Factor		1.0	1.0	1.0	1.0	5.0	1.0	1.0
Units		mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
COMPOUND	Part 375 SCG (mg/Kg)							
Mercury	2.8	0.134	0.135	0.051	0.113 J	1.1 J	0.064	0.115

Qualifiers and Notes
U - The compound was not detected at the indicated concentration.
UJ - Data indicates the presence of a compound that meets the identification criteria; however the result is less than the quantitation limit but greater than zero.
J - Indicates an estimated value
SCG - Standards, Criteria & Guidance levels (Reference: 6NYCRR Part 375 Restricted Use (Commercial) Soil Cleanup Objectives)
Values in **BOLD** denote exceedence of SCG
n/a - Not Applicable (no established standard)
mg/Kg - Milligrams per Kilogram
Note: GPFD01 is a field duplicate sample of GP/CTM-20 (2-2)

TABLE 4
LOWER BROADWAY PARKING LOT (312 BROADWAY) - ADJACENT PARCEL
SCHENECTADY, NEW YORK

REMEDIAL INVESTIGATION
SOIL ANALYTICAL RESULTS - PCBs
(DETECTED PCBs ONLY)

Sample ID		GP/CTM-20 (2-2)	GPFD01	GP/CTM-22 (3-2)	GP/CTM-23 (3-2)	SS-13	SS-14	SS-15
Lab Sample Number		Z1346-01	Z1346-03	Z1346-02	Z1346-04	Z1346-10DL	Z1346-13	Z1346-14
Sampling Date		1/28/2008	1/28/2008	1/28/2008	1/28/2008	1/28/2008	1/28/2008	1/28/2008
Matrix		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Dilution Factor		20.0	20.0	20.0	20.0	200.0	1.0	1.0
Units		mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
COMPOUND	Part 375 SCG (mg/Kg)							
Aroclor-1260	1	0.1 U	0.11 U	0.11 UJ	0.0053 UJ	**65**	0.28	0.2

TABLE 5
LOWER BROADWAY PARKING LOT (312 BROADWAY) - ADJACENT PARCEL
SCHENECTADY, NEW YORK

REMEDIAL INVESTIGATION
SOIL ANALYTICAL RESULTS - CYANIDE

Sample ID		GP/CTM-20 (2-2)	GPFD01	GP/CTM-22 (3-2)	GP/CTM-23 (3-2)	SS-13	SS-14	SS-15
Lab Sample Number		Z1346-01	Z1346-03	Z1346-02	Z1346-04	Z1346-10	Z1346-13	Z1346-14
Sampling Date		1/28/2008	1/28/2008	1/28/2008	1/28/2008	1/28/2008	1/28/2008	1/28/2008
Matrix		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Dilution Factor		1.0	1.0	1.0	1.0	10.0	1.0	1.0
Units		mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
COMPOUND	Part 375 SCG (mg/Kg)							
Cyanide	0.027	0.00177 J	0.00439 J	0.00387	0.00253	**0.083**	0.00531	0.00073

Qualifiers and Notes
U - The compound was not detected at the indicated concentration.
UJ - Data indicates the presence of a compound that meets the identification criteria; however the result is less than the quantitation limit but greater than zero.
J - Indicates an estimated value
SCG - Standards, Criteria & Guidance levels (Reference: 6NYCRR Part 375 Restricted Use (Commercial) Soil Cleanup Objectives)
Values in **BOLD** denote exceedence of SCG
n/a - Not Applicable (no established standard)
ug/Kg - Micrograms per Kilogram
Note: GPFD01 is a field duplicate sample of GP/CTM-20 (2-2)

TABLE 6
LOWER BROADWAY PARKING LOT (312 BROADWAY) - ADJACENT PARCEL
SCHENECTADY, NEW YORK

REMEDIAL INVESTIGATION
GROUNDWATER ANALYTICAL RESULTS - VOLATILE ORGANIC COMPOUNDS
(DETECTED COMPOUNDS ONLY)

Sample ID		GP/CTM-20	GP-CTM-22	GWFD020508	GP-CTM-23	GWEB020508	TRANSPORT BLANK
Lab Sample Number		Z1439-01	Z1439-02	Z1439-06	Z1439-03	Z1439-07	Z1439-08
Sampling Date		2/5/2008	2/5/2008	2/5/2008	2/5/2008	2/5/2008	2/5/2008
Matrix		WATER	WATER	WATER	WATER	WATER	WATER
Dilution Factor		1.0	1.0	1.0	1.0	1.0	1.0
Units		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
COMPOUND	SCG (ug/L)						
Acetone	50*	12 J	2.2 U	2.2 UJ	8.3 J	2.2 U	2.2 U
Benzene	1	0.35 UJ	**15**	**8.2** J	**14**	0.35 U	0.35 U
Toluene	5	0.16 UJ	**23**	**15** J	0.16 U	0.16 U	0.16 U
Ethyl Benzene	5	0.05 UJ	**7.4**	**6.4** J	0.05 U	0.05 U	0.05 U
m/p-Xylenes	5	2.3 J	**21**	**18** J	0.47 U	0.47 U	0.47 U
o-Xylene	5	1.2 J	**8.5**	**7.3** J	0.16 U	0.16 U	0.16 U
Total Confident Conc. VOC		15.5	74.9	54.9	22.3	0	0

Qualifiers and Notes
U - The compound was not detected at the indicated concentration.
UJ - Data indicates the presence of a compound that meets the identification criteria; however the result is less than the quantitation limit but greater than zero.
J - Indicates an estimated value
* - Indicates guidance value
SCG - Standards, Criteria & Guidance levels (Reference: 6 NYCRR part 703 - Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations)
Values in **BOLD** denote exceedence of SCG
ug/L - Micrograms per Liter
n/a - Not Appliable (no established standard)
Note: GWFD020508 is a field duplicate sample of GP/CTM-22

TABLE 7
LOWER BROADWAY PARKING LOT (312 BROADWAY) - ADJACENT PARCEL
SCHENECTADY, NEW YORK

REMEDIAL INVESTIGATION
GROUNDWATER ANALYTICAL RESULTS - SEMIVOLATILE ORGANIC COMPOUNDS
(DETECTED COMPOUNDS ONLY)

Sample ID		GP-CTM-20	GP-CTM-22	GWFD020508	GP-CTM-23	GWEB020508
Lab Sample Number		Z1439-01	Z1439-02	Z1439-06	Z1439-03	Z1439-07
Sampling Date		2/5/2008	2/5/2008	2/5/2008	2/5/2008	2/5/2008
Matrix		WATER	WATER	WATER	WATER	WATER
Dilution Factor		1.0	1.0	1.0	1.0	1.0
Units		ug/L	ug/L	ug/L	ug/L	ug/L
COMPOUND	SCG (ug/L)					
2-Methylphenol	n/a	0.38 UJ	0.36 U	2.3 J	0.37 U	0.37 U
3+4-Methylphenols	n/a	0.41 UJ	0.39 U	2.7 J	0.4 U	0.4 U
2,4-Dimethylphenol	n/a	0.8 UJ	2.6 J	6.8 J	0.78 U	0.78 U
Naphthalene	10	0.29 U	0.28 U	0.29 U	**31**	0.29 U
2-Methylnaphthalene	4.7*	0.39 UJ	0.37 U	1.7 J	**6.2** J	0.38 U
1,1-Biphenyl	5	0.34 UJ	0.32 U	2.7 J	1.4 J	0.33 U
Acenaphthylene	n/a	1.2 J	3.1 J	7.1 J	3.9 J	0.36 U
Acenaphthene	20*	**68** J	15	**25** J	13	0.33 U
Dibenzofuran	n/a	3.4 J	8.6 J	15 J	7.1 J	0.32 U
Fluorene	50*	39 J	11	19 J	6.2 J	0.29 U
Phenanthrene	50*	6.9 J	6.2 J	16 J	4.8 J	1.4 U
Anthracene	50*	1.5 UJ	2.2 J	3.9 J	1.4 U	1.5 U
Carbazole	n/a	1.6 J	5.3 J	12 J	8.6 J	0.25 U
Fluoranthene	50*	8.3 J	4.3 J	5.9 J	1.7 J	0.21 U
Pyrene	50*	4.6 J	3.4 J	4.3 J	1.4 U	1.5 U
Total Confident Conc. SVOC		133	61.7	124.4	83.9	0

Qualifiers and Notes
U - The compound was not detected at the indicated concentration.
UJ - Data indicates the presence of a compound that meets the identification criteria; however the result is less than the quantitation limit but greater than zero.
J - Indicates an estimated value
* - Indicates guidance value
SCG - Standards, Criteria & Guidance levels (Reference: 6 NYCRR part 703 - Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations)
Values in **BOLD** denote exceedence of SCG
n/a - Not Applicable (no established standard or guidance value)
Note: GWFD020508 is a field duplicate sample of GP/CTM-22

TABLE 8
LOWER BROADWAY PARKING LOT (312 BROADWAY) - ADJACENT PARCEL
SCHENECTADY, NEW YORK

REMEDIAL INVESTIGATION
GROUNDWATER ANALYTICAL RESULTS - TAL METALS
(DETECTED METALS ONLY)

Sample ID		GP-CTM-20	GP-CTM-22	GWFD020508	GP-CTM-23	GWEB020508
Lab Sample Number		Z1439-01	Z1439-02	Z1439-06	Z1439-03	Z1439-07
Sampling Date		2/5/2008	2/5/2008	2/5/2008	2/5/2008	2/5/2008
Matrix		WATER	WATER	WATER	WATER	WATER
Dilution Factor		1.0	1.0	1.0	1.0	1.0
Units		ug/L	ug/L	ug/L	ug/L	ug/L
COMPOUND	SCG (ug/L)					
Aluminum	100	**276** J	35.1 J	17.2 UJ	17.2 U	17.2 U
Antimony	3	3.1 UJ	3.1 U	**7.09** J	3.1 U	3.1 U
Arsenic	25	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U
Barium	1,000	153 J	102	108 J	114	3.1 U
Beryllium	3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Cadmium	5	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U
Calcium	n/a	188,000	210,000	225,000	228,000	466 J
Chromium	50	0.6 UJ	26.7	31.6 J	0.6 U	0.6 U
Cobalt	5	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Copper	200	1.81 J	0.5 U	2.83 J	0.5 U	0.5 U
Iron	300	**5,690** J	**3,220**	**3,310** J	**1,830**	47.7 U
Lead	25	1.98 J	1.9 U	1.9 UJ	1.9 U	1.9 U
Magnesium	35,000	10,100 J	14,300	15,500 J	20,000	34.3 J
Manganese	300	**478**	**445**	**473**	**455**	0.8 U
Mercury	0.7	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Nickel	100	1.8 UJ	9.85 J	16.5 J	1.8 U	1.8 U
Potassium	n/a	17,600	13,800	15,000	6,840	236 U
Selenium	10	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
Silver	50	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Sodium	20,000	**154,000** J	**462,000**	**498,000** J	**145,000**	1,240
Thallium	0.5*	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U
Vanadium	14	1 U	1 U	1 U	1 U	1 U
Zinc	2,000	33.2 U	23 U	25.8 U	22.6 U	27.7

Qualifiers and Notes
U - The compound was not detected at the indicated concentration.
UJ - Data indicates the presence of a compound that meets the identification criteria; however the result is less than the quantitation limit but greater than zero.
J - Indicates an estimated value
* - Indicates guidance value
SCG - Standards, Criteria & Guidance levels (Reference: 6 NYCRR part 703 - Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations.)
Values in **BOLD** denote exceedence of SCG
n/a - Not Applicable (no established standard or guidance value)
ug/L - Micrograms per Liter
Note: GWFD020508 is a field duplicate sample of GP/CTM-22

TABLE 9
LOWER BROADWAY PARKING LOT (312 BROADWAY) - ADJACENT PARCEL
SCHENECTADY, NEW YORK

REMEDIAL INVESTIGATION
GROUNDWATER ANALYTICAL RESULTS - CYANIDE

Sample ID		GP-CTM-20	GP-CTM-22	GWFD020808	GP-CTM-23	GWEB020808
Lab Sample Number		Z1488-04	Z1488-05	Z1488-06	Z1488-01	Z1488-07
Sampling Date		2/8/2008	2/8/2008	2/8/2008	2/8/2008	2/8/2008
Matrix		WATER	WATER	WATER	WATER	WATER
Dilution Factor		1.0	2.0	1.0	10.0	1.0
Units		mg/L	mg/L	mg/L	mg/L	mg/L
COMPOUND	**SCG (mg/L)**					
Cyanide	0.2	0.087 J	**0.9**	0.064 J	**1.21** J	0.01

Qualifiers and Notes
U - The compound was not detected at the indicated concentration.
UJ - Data indicates the presence of a compound that meets the identification criteria; however the result is less than the quantitation limit but greater than zero.
J - Indicates an estimated value
SCG - Standards, Criteria & Guidance levels (Reference: 6 NYCRR part 703 - Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations.)
Values in **BOLD** denote exceedence of SCG
n/a - Not Applicable (no established standard or guidance value)
mg/L - Milligrams per Liter
Note: GWFD020508 is a field duplicate sample of GP/CTM-22

APPENDIX B

Subsurface Exploration Logs
&
Monitoring Well Construction Logs

C.T. MALE ASSOCIATES, P.C.

GEOPROBE SUBSURFACE EXPLORATION LOG

BORING NO.: GP/CTM - 20
ELEV.: DATUM:
START DATE: 1/28/08 FINISH DATE: 1/28/08
SHEET 1 OF 1

PROJECT: 312 Broadway - Adjacent Parcel CTM PROJECT NO.: 05.5550

LOCATION: Schenectady, NY CTM OBSERVER: Jonathan Dippert

DEPTH (FT.)	SAMPLE INTERVAL	SAMPLE NO.	SAMPLE RECOVERY (FT)	SAMPLE CLASSIFICATION	NOTES
4	1	1	3	Fill: Brown very fine to fine SAND, little fine to medium gravel, trace coal	Damp to moist
		2			
8	2	1	2		Wet @ ~6' bgs
		2		7.0' Fill: Gray very fine to fine SAND, Some Coal Ash, little coal, trace glass 8.5'	
12	3	1	2.5	Brown fine to medium SAND	Sheen on water Faint coal tar odor
		2			
16	4	1	3.5	15.5' Black very fine SAND and SILT	Strong coal tar odor
		2		Boring Terminated at 16' bgs	
20					
24					
28					

DRILLING CONTRACTOR: Precision Env. Svcs. GEOPROBE TYPE: Bobcat-mounted
METHOD OF SAMPLING: 4' MacroCore

GROUNDWATER LEVEL READINGS

DATE	LEVEL	REFERENCE MEASURING POINT

SAMPLE CLASSIFICATION BY: DIPPERT

THE SUBSURFACE INFORMATION SHOWN HEREON WAS OBTAINED FOR C.T. MALE ASSESSMENT PURPOSES. IT IS MADE AVAILABLE TO AUTHORIZED USERS ONLY THAT THEY MAY HAVE ACCESS TO THE SAME INFORMATION AVAILABLE TO C.T.MALE. IT IS PRESENTED IN GOOD FAITH, BUT IS NOT INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.

C.T. MALE ASSOCIATES, P.C.

GEOPROBE SUBSURFACE EXPLORATION LOG

BORING NO.: GP-21
ELEV.: DATUM:
START DATE: 1/28/08 FINISH DATE: 1/28/08
SHEET 1 OF 1

PROJECT: 312 Broadway - Adjacent Parcel | CTM PROJECT NO.: 05.5550

LOCATION: Schenectady, NY | CTM OBSERVER: Jonathan Dippert

DEPTH (FT.)	SAMPLE INTERVAL	SAMPLE NO.	SAMPLE RECOVERY (FT)	SAMPLE CLASSIFICATION	NOTES
4	1	1	3.2	Fill: Brown fine SAND, Some fine to medium Gravel, trace coal	Damp to moist
		2			
8	2	1	2	Fill: Brown and orange-brown fine to medium SAND, Some fine to medium Gravel, little coal	Moist
		2		8.5'	Wet @ 8' bgs
12	3	1	0.75	Black very fine SAND and SILT, petroleum odor 9.0'	
				Boring Terminated at 9' bgs - refusal	
16					
20					
24					
28					

DRILLING CONTRACTOR: Precision Env. Svcs. GEOPROBE TYPE: Bobcat-mounted
METHOD OF SAMPLING: 4' MacroCore

GROUNDWATER LEVEL READINGS

DATE	LEVEL	REFERENCE MEASURING POINT

SAMPLE CLASSIFICATION BY: DIPPERT

THE SUBSURFACE INFORMATION SHOWN HEREON WAS OBTAINED FOR C.T. MALE ASSESSMENT PURPOSES. IT IS MADE AVAILABLE TO AUTHORIZED USERS ONLY THAT THEY MAY HAVE ACCESS TO THE SAME INFORMATION AVAILABLE TO C.T.MALE. IT IS PRESENTED IN GOOD FAITH, BUT IS NOT INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.

C.T. MALE ASSOCIATES, P.C.

GEOPROBE SUBSURFACE EXPLORATION LOG

BORING NO.: GP/CTM - 22
ELEV.: DATUM:
START DATE: 1/28/08 FINISH DATE: 1/28/08
SHEET 1 OF 1

PROJECT: 312 Broadway - Adjacent Parcel | CTM PROJECT NO.: 05.5550

LOCATION: Schenectady, NY | CTM OBSERVER: Jonathan Dippert

DEPTH (FT.)	SAMPLE INTERVAL	SAMPLE NO.	SAMPLE RECOVERY (FT)	SAMPLE CLASSIFICATION	NOTES
4	1	1	3	Fill: Brown fine SAND, some fine to medium gravel, little coal, trace white fine sand	Moist
		2			
8	2	1	1.5		
		2			
	3	1	2.8	9.0'	Wet @ 8' bgs
12		2		Black very fine SAND and SILT	Petroleum odor
	4	1	3	14.0'	
16		2		Gray SILT, trace organic material	Faint petroleum odor
	5		0		No recovery 16-20'
20					
24				Boring Terminated at 20' bgs	
28					

DRILLING CONTRACTOR: Precision Env. Svcs. GEOPROBE TYPE: Bobcat-mounted
METHOD OF SAMPLING: 4' MacroCore

GROUNDWATER LEVEL READINGS

DATE	LEVEL	REFERENCE MEASURING POINT

THE SUBSURFACE INFORMATION SHOWN HEREON WAS OBTAINED FOR C.T. MALE ASSESSMENT PURPOSES. IT IS MADE AVAILABLE TO AUTHORIZED USERS ONLY THAT THEY MAY HAVE ACCESS TO THE SAME INFORMATION AVAILABLE TO C.T.MALE. IT IS PRESENTED IN GOOD FAITH, BUT IS NOT INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.

SAMPLE CLASSIFICATION BY: DIPPERT

C.T. MALE ASSOCIATES, P.C.

GEOPROBE SUBSURFACE EXPLORATION LOG

BORING NO.: GP/CTM-23
ELEV.: DATUM:
START DATE: 1/28/08 FINISH DATE: 1/28/08
SHEET 1 OF 1

PROJECT: 312 Broadway - Adjacent Parcel | CTM PROJECT NO.: 05.5550

LOCATION: Schenectady, NY | CTM OBSERVER: Jonathan Dippert

DEPTH (FT.)	SAMPLE INTERVAL	SAMPLE NO.	RECOVERY (FT)	SAMPLE CLASSIFICATION	NOTES
4	1	1	2	Fill: Brown fine SAND, medium to coarse GRAVEL, trace pulverized rock	Moist
		2		4.0'	
8	2	1	1.6	Fill: Brown fine to medium SAND, Some medium to coarse Gravel, trace coal, glass pieces, and coal ash 6.0'	
		2		Brown fine to medium SAND (Possible Fill) 8.0'	
12	3	1	2	Black very fine SAND and SILT, trace organic material	Wet @ 8' bgs Coal tar odor
		2			
16	4		0		No recovery 12-16'
20	5		0		No recovery 16-20'
24				Boring Terminated at 20' bgs	
28					

DRILLING CONTRACTOR: Precision Env. Svcs. GEOPROBE TYPE: Bobcat-mounted
METHOD OF SAMPLING: 4' MacroCore

GROUNDWATER LEVEL READINGS

DATE	LEVEL	REFERENCE MEASURING POINT

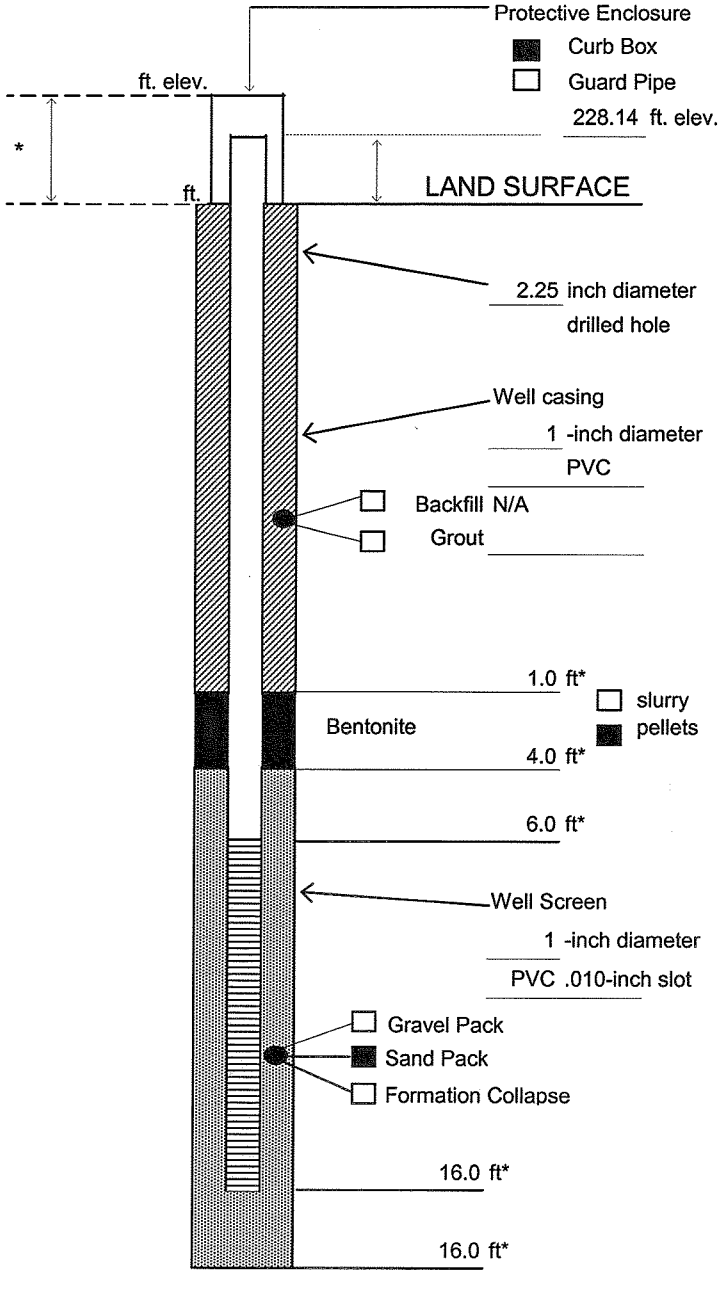
SAMPLE CLASSIFICATION BY: DIPPERT

THE SUBSURFACE INFORMATION SHOWN HEREON WAS OBTAINED FOR C.T. MALE ASSESSMENT PURPOSES. IT IS MADE AVAILABLE TO AUTHORIZED USERS ONLY THAT THEY MAY HAVE ACCESS TO THE SAME INFORMATION AVAILABLE TO C.T.MALE. IT IS PRESENTED IN GOOD FAITH, BUT IS NOT INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.

Well No. GP/CTM-20

MONITORING WELL CONSTRUCTION LOG

C.T. MALE ASSOCIATES, P.C.



* Depth below land surface.

Project Number 05.5550

Project Name 312 Broadway - Adjacent Parcel

Well No. GP/CTM - 20 Boring No. GP/CTM - 20

Town/City Schenectady

County Schenectady State NY

Installation Date(s) 1/28/2008

Drilling Contractor Precision Env. Services, Inc.

Drilling Method Geoprobe

Water Depth From Top of Riser _____ ft _____ Date

C.T. Male Observer Jonathan Dippert

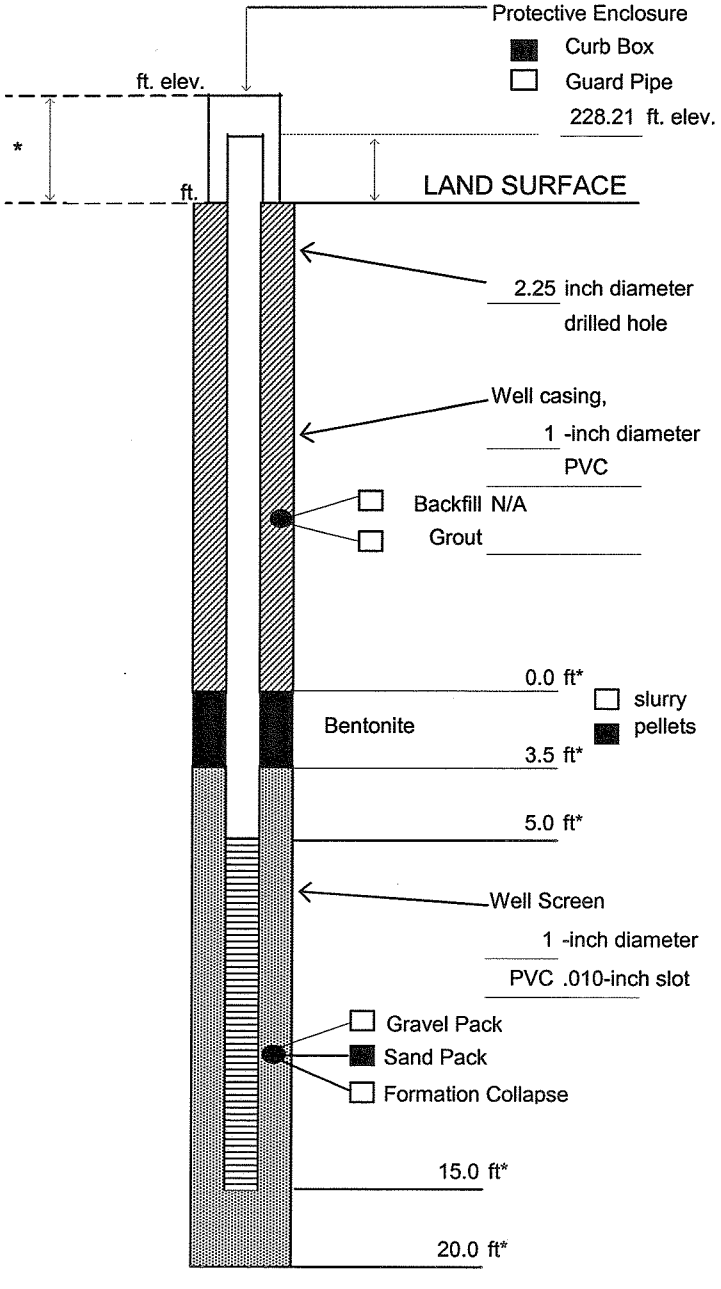
Notes:

#1 sand used in sand pack

Well No. GP/CTM-22

MONITORING WELL CONSTRUCTION LOG

C.T. MALE ASSOCIATES, P.C.



* Depth below land surface.

Project Number 05.5550

Project Name 312 Broadway - Adjacent Parcel

Well No. GP/CTM - 22 Boring No. GP/CTM - 22

Town/City Schenectady

County Schenectady State NY

Installation Date(s) 1/28/2008

Drilling Contractor Precision Env. Services, Inc.

Drilling Method Geoprobe

Water Depth From Top of Riser ____ ft ____
Date

C.T. Male Observer Jonathan Dippert

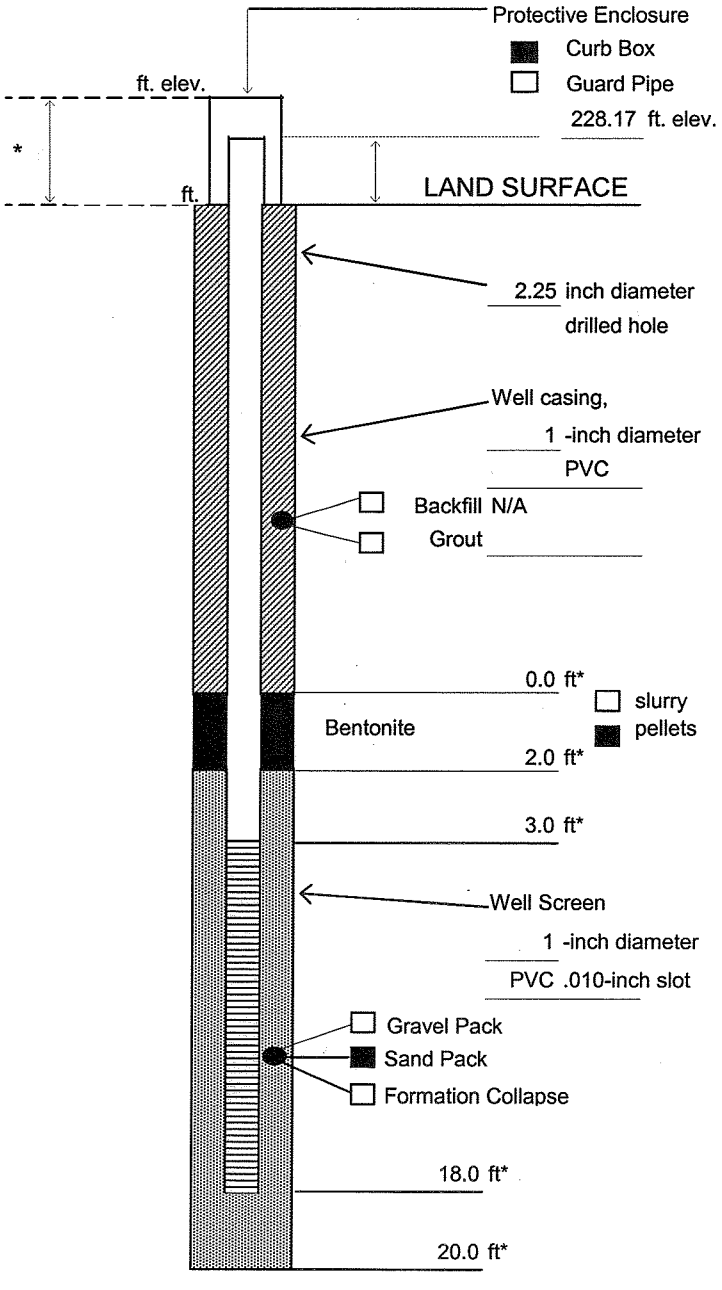
Notes:

#1 sand used in sand pack

Well No. GP/CTM-23

MONITORING WELL CONSTRUCTION LOG

C.T. MALE ASSOCIATES, P.C.



* Depth below land surface.

Project Number 05.5550

Project Name 312 Broadway

Well No. GP/CTM - 23 Boring No. GP/CTM - 23

Town/City Schenectady

County Schenectady State NY

Installation Date(s) 1/28/2008

Drilling Contractor Precision Env. Services, Inc.

Drilling Method Geoprobe

Water Depth From Top of Riser _____ ft _____
Date

C.T. Male Observer Jonathan Dippert

Notes:

#1 sand used in sand pack

APPENDIX C

Organic Vapor Headspace Analysis Logs

ORGANIC VAPOR HEADSPACE ANALYSIS LOG

PROJECT:	312 Broadway - Adjacent Parcel	**PROJECT #:** 05.5550	**PAGE 2 OF 2**
CLIENT:	Schenectady Metroplex Development Authority		**DATE**
LOCATION:	Schenectady, NY		**COLLECTED: 1/28/08**
INSTRUMENT USED:	Mini Rae 2000 **LAMP**	**eV**	**DATE**
DATE INSTRUMENT CALIBRATED:	1/28/08 **BY:** JD		**ANALYZED: 1/28/08**
TEMPERATURE OF SOIL:	ambient		**ANALYST: Jonathan Dippert**

EXPLORATION NUMBER	SAMPLE NUMBER	DEPTH (FT.)***	SAMPLE TYPE	SAMPLE READING (PPM)**	BACKGROUND READING (PPM)**	REMARKS
GP/CTM - 23	1-1	0-2	soil	0.0	0.0	NO/NS
	1-2	2-4	soil	0.0	0.0	NO/NS
	2-1	4-6	soil	0.0	0.0	NO/NS
	2-2	6-8	soil	1.0	0.0	some black staining, faint coal tar odor
	3-1	8-10	soil	5.4	0.0	Black staining, coal tar odor
	3-2	10-12	soil	207	0.0	Black staining, coal tar odor
SS - 13		0-.5	soil	0.0	0.0	NO/NS
SS - 14		0-.5	soil	0.0	0.0	NO/NS
SS - 15		0-.5	soil	0.0	0.0	NO/NS

*Instrument was calibrated in accordance with manufacturer's recommended procedure using a calibration gas supplied by the manufacturer.
**PPM represents concentration of detectable volatile and gaseous compounds in parts per million of air.
NO - No Odor
NS - No Staining

ORGANIC VAPOR HEADSPACE ANALYSIS LOG

PROJECT:	312 Broadway - Adjacent Parcel	**PROJECT #:** 05.5550	**PAGE 1 OF 2**
CLIENT:	Schenectady Metroplex Development Authority		**DATE**
LOCATION:	Schenectady, NY		**COLLECTED: 1/28/08**
INSTRUMENT USED:	Mini Rae 2000 **LAMP**	**eV**	**DATE**
DATE INSTRUMENT CALIBRATED:	1/28/08 **BY:** JD		**ANALYZED: 1/28/08**
TEMPERATURE OF SOIL:	ambient		**ANALYST: Jonathan Dippert**

EXPLORATION NUMBER	SAMPLE NUMBER	DEPTH (FT.)***	SAMPLE TYPE	SAMPLE READING (PPM)**	BACKGROUND READING (PPM)**	REMARKS
GP/CTM - 20	1-1	0-2	soil	0.0	0.0	NO/NS
	1-2	2-4	soil	0.0	0.0	NO/NS
	2-1	4-6	soil	0.0	0.0	NO/NS
	2-2	6-8	soil	8.3	0.3	NS, strong coal tar odor
	3-1	8-10	soil	0.7	0.1	NS, faint coal tar odor
	3-2	10-12	soil	0.0	0.0	NS, faint coal tar odor
	4-1	12-14	soil	0.0	0.0	NS, faint coal tar odor
	4-2	14-16	soil	15.7	0.0	NS, strong coal tar odor
GP/CTM - 21	1-1	0-2	soil	0.1	0.1	NO, NS
	1-2	2-4	soil	0.1	0.1	NO, NS
	2-1	4-6	soil	0.1	0.1	NO, NS
	2-2	6-8	soil	1.0	0.0	some black staining, faint petroleum odor
	3-1	8-9	soil	6.1	0.0	Black staining, faint petroleum odor
GP/CTM - 22	1-1	0-2	soil	0.0	0.0	NO, NS
	1-2	2-4	soil	0.1	0.1	NO, NS
	2-1	4-6	soil	0.2	0.1	NO, NS
	2-2	6-8	soil	0.3	0.3	NO, NS
	3-1	8-10	soil	1.2	0.4	Black staining, petroleum odor
	3-2	10-12	soil	168	0.2	Black staining, petroleum odor
	4-1	12-14	soil	14.4	0.3	Black staining, petroleum odor
	4-2	14-16	soil	18.3	0.0	little black staining, faint petroleum odor

*Instrument was calibrated in accordance with manufacturer's recommended procedure using a calibration gas supplied by the manufacturer.
**PPM represents concentration of detectable volatile and gaseous compounds in parts per million of air.
NO - No Odor
NS - No Staining

APPENDIX D

Data Usability Summary Report

C.T. MALE ASSOCIATES, P.C.

SUBJECT: Data Usability Summary Report (DUSR)
Metroplex – 312 Broadway
Chemtech SDG Nos.: Z1346, Z1439 and Z1488
C.T. Male Project No.: 05.5550

DATE: March 3, 2008

On January 28, 2008, C.T. Male Associates, P.C. (C. T. Male) collected seven (7) soil samples, including one (1) sample duplicate. On February 5 and 8, 2008 C. T. Male collected four (4) groundwater samples, including one (1) sample duplicate, from the Metroplex site at 312 Broadway in the city of Schenectady, NY. The samples were submitted, along with three (3) equipment blanks and two (2) trip blanks to Chemtech Laboratories (Chemtech) in Mountainside, NJ for the following analyses:

Parameter	Sample Date	Matrix	VOC, SW-846 8260B	SVOC, SW-846 8270C	Pesticides, SW-846 8081A	PCBs, SW-846 8082	TAL Metals, SW-846 6010 and 7470/7471	Cyanide SW-846 9012B
Sample Ids								
GP/CTM-20(2-2)	1/28/2008	Solid	1	1	1	1	1	1
GP/CTM-22(3-2)	1/28/2008	Solid	1	1	1	1	1	1
GP/CTM-23(3-2)	1/28/2008	Solid	1	1	1	1	1	1
SS-13	1/28/2008	Solid	1	1	1	1	1	1
SS-14	1/28/2008	Solid	1	1	1	1	1	1
SS-15	1/28/2008	Solid	1	1	1	1	1	1
GPFD01[1]	1/28/2008	Solid	1	1	1	1	1	1
GPEB01	1/28/2008	Aqueous	1	1	1	1	1	1
SSEB01	1/28/2008	Aqueous	1	1	1	1	1	1
Transport Blank	-	Aqueous	1	0	0	0	0	0
GP/CTM-20	2/5/2008[2]	Aqueous	1	1	1	1	1	1
GP/CTM-22	2/5/2008[2]	Aqueous	1	1	1	1	1	1
GP/CTM-23	2/5/2008[2]	Aqueous	1	1	1	1	1	1
GWFD[3]	2/5/2008[2]	Aqueous	1	1	1	1	1	1
GWEB	2/5/2008[2]	Aqueous	1	1	1	1	1	1
Transport Blank	-	Aqueous	1	0	0	0	0	0
Total Samples			**16**	**14**	**14**	**14**	**14**	**14**

VOC – Volatile organic compounds
SVOC – Semi-volatile organic compounds
PCBs – Polychlorinated Biphenyls
TAL – Target analyte list

C. T. Male evaluated the data reported by the laboratory to determine usability per Appendix 2B of the *Draft DER-10 Technical Guidance for Site Investigation and Remediation* (NYSDEC, December 2002), with guidance from the *USEPA CLP National Functional Guidelines for Organic and Inorganic Data Review* (October 1999 and 2004, respectively). The following criteria were reviewed:

---

[1] Field duplicate of GP/CTM-20(2-2)
[2] Samples for cyanide analysis were collected on 02/08/08
[3] Field duplicate of GP/CTM-20

- Completeness of data package as defined under the requirements for the NYSDEC ASP Category B or USEPA CLP deliverables;
- Holding time compliance for chemical analysis;
- Protocol required limits and specification compliance for quality control (QC) data (e.g., instrument tuning, calibration standards, blank results, spike results, duplicate results, etc);
- Contract compliance for analytical protocols;
- Omissions and transcription errors; and
- Data qualification.

Data Completeness

Documentation required by the project was included in the data package. There were no discrepancies found between the raw data and summary forms. The laboratory Case Narratives (Attachment A) identified deviations from laboratory analytical specifications. C.T. Male reviewed these QC results to determine if sample results should be qualified based on the criteria provided in Appendix 2B of the *Technical Guidance for Site Investigation and Remediation*. QC exceedences and data qualification recommendations are presented in the Data Evaluation Checklists (Attachment B). Qualified sample results are presented in the laboratory summary forms, which are located in Attachment C.

QC exceedences and data qualification recommendations are summarized below. It is recommended that results from the initial analyses of each sample be reported as the representative results for that sample.

It is recommended that sample results which were reported by the laboratory as exceeding the calibration range (E-flagged), be reported from the analysis at the lowest dilution with results within calibration range.

Sample Condition upon Receipt and Holding Times

Chemtech received all the samples listed on the chain of custody (COC) records intact and in good condition.

The temperature of samples was within laboratory specification limits of 2 to 6°C upon receipt. Project samples were prepared and analyzed within EPA-established holding times.

Volatile Organic Analysis (VOA) by SW-846 8260B

All samples were analyzed within 12 hours of the performance check standard, BFB. Percent relative abundance of all ions met the criteria specified in Table 4 of the EPA SW-846 Method 8260B. Laboratory specifications were met during the initial and continuing calibrations associated with the project samples. In addition the average relative response factor (RRF) was greater than or equal to 0.05 for target analytes during the initial and continuing calibrations. The percent relative standard deviation (%RSD) between RRF was less than or equal to 30% during the initial calibration, and the percent difference (%D) between the initial calibration average RRF and continuing calibration RRF was less than or equal to 25% for target analytes except the following:

- Initial Calibrations – Acetone during the initial calibration associated with the analyses of samples SS-13, SS-14, SS-15, GP/CTM-22(3-2) and GP/CTM-20(2-2). The associated results have been qualified as estimated (J/UJ) due to poor correlation in the initial calibration standards.

- Continuing Calibrations – Dichlorofluoromethane and chloromethane during the continuing calibration associated with the analyses of samples Transport Blank, GPEB01 and SSEB01; methyl acetate and acetone during the continuing calibration associated with the analyses of samples SS-13, SS-14, SS-15, GP/CTM-22(3-2), GP/CTM-20(2-2) and GPFD01; and bromoform during the continuing calibration associated with the analysis of sample GP/CTM-23(3-2) and the diluted analysis of GP/CTM-22(3-2). The associated results have been qualified as estimated (J/UJ) due to poor correlation in the calibration standards.

Surrogate recovery and internal standard results met laboratory specifications for project samples except the following:

- SS-13, Internal Standard – The internal standard recovery of 1,4-dichlorobenzene-d4 was below laboratory specifications during the initial and reanalysis. The associated results have been qualified as estimated (J/UJ) due to analytical inaccuracy.
- SS-15, Internal Standard – The internal standard recovery of 1,4-dichlorobenzene-d4 was below laboratory specifications during the initial and reanalysis. The associated results have been qualified as estimated (J/UJ) due to analytical inaccuracy.
- GP/CTM-22(3-2), Internal Standard – The internal standard recovery of pentafluorobenzene, 1,4-difluorobenzene, chlorobenzene-d5 and 1,4-dichlorobenzene-d4 were below laboratory specifications during the initial analysis. The associated results have been qualified as estimated (J/UJ) due to analytical inaccuracy.

The percent recovery (%R) results for laboratory control sample (LCS) analyses were within laboratory specifications for the target analytes except the following:

- The %R of carbon tetrachloride, trichloroethene, methylcyclohexane, 1,1,2-trichloroethene, tetrachloroethene, chlorobenzene, ethyl benzene, m&p-xylenes, o-xylene, styrene, isopropylbenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, 1,2-dichlorobenzene and 1,2,4-trichlorobenzene exceeded specifications during the LCS analysis associated with the analysis of sample GP/CTM-23(3-2) and the diluted analysis of GP/CTM-22(3-2). Associated detected results have been qualified as estimated/biased high (J) due to analytical inaccuracy.
- The %R of 1,2-dibromoethane exceeded specifications during the LCS analysis associated with the analyses of samples GP/CTM-20, GP/CTM-22, GP/CTM-23, GWFD, GWEB and Transport Blank. Associated detected results have been qualified as estimated/biased high (J) due to analytical inaccuracy.

A method blank was reported for each analytical batch. Two transport blanks and three equipment blanks were also submitted to the laboratory for VOA. Target analytes and tentatively identified compounds (TICs) were not detected during the analyses of the method, transport or equipment blanks associated with the analyses of the solid and aqueous samples.

Criteria for accuracy and precision were met during the matrix spike (MS) and MS duplicate (MSD) analyses of samples SS-13, GP/CTM-23(3-2) and GP/CTM-23 for target analytes except the following:

- GP/CTM-23(3-2) – The relative percent difference (%RPD) between MS and MSD exceeded laboratory specifications for ethyl benzene and m&p-xylenes. The associated results have been qualified as estimated (J) due to analytical imprecision.

- GP/CTM-23 – The %R was below laboratory specifications for the MS and MSD for dichlorodifluoromethane. The associated results have been qualified as estimated/biased low (UJ) due to analytical inaccuracy.

A field duplicate evaluation was performed on samples GPFD01 (blind field duplicate) and GP/CTM-20(2-2). Criteria for precision was achieved as target analytes were not detected in the associated samples.

A field duplicate evaluation was performed on samples GWFD (blind field duplicate) and GP/CTM-20. Refer to Attachment B-7 for the duplicate evaluation. Acetone, benzene, toluene, ethyl benzene, m&p-xylenes and o-xylene results have been qualified as estimated (J/UJ) due to analytical imprecision.

SVOA by SW-846 8270C

Project samples were analyzed within 12 hours of the performance check standard, DFTPP. Percent relative abundance of ions met the criteria specified in Table 3 of the EPA SW-846 Method 8270C. Laboratory specifications were met during the initial and continuing calibrations associated with the project samples. In addition the average RRF was greater than or equal to 0.05 for target analytes during the initial and continuing calibrations. The %RSD between RRF was less than or equal to 30% during the initial calibration, and the %D between the initial calibration average RRF and continuing calibration RRF was less than or equal to 25% for target analytes except the following:

- Continuing Calibrations – Benzaldehyde during the continuing calibration associated with the analyses of samples GPEB01 and SSEB01; and hexachlorocyclopentadiene during the continuing calibration associated with the diluted analyses of samples GP/CTM-22(3-2), GP/CTM-23(3-2) and SS-13. The associated results have been qualified as estimated (J/UJ) due to poor correlation in the calibration standards.

Surrogate recoveries and internal standard results met laboratory specifications for project samples except the following:

- GP/CTM-23(3-2), Surrogate Recoveries – The %R exceeded specifications for the base/neutral (B/N) surrogates nitrobenzene-d5, 2-fluorobiphenyl and terphenyl-d14. The associated B/N results have been qualified as estimated (J/UJ) due to analytical inaccuracy.
- GPFD01, Internal Standards – The internal standard recovery of phenanthrene-d10 and chrysene-d12 were below laboratory specifications during the initial and reanalysis. The associated results have been qualified as estimated (J/UJ) due to analytical inaccuracy

The %R results for LCS analyses were within laboratory specifications for target analytes except the following:

- The %R of benzaldehyde, hexachloroethane, hexachlorobutadiene, 2-methylnaphthalene, hexachlorocyclopentadiene, 1,1-biphenyl and 2-chloronaphthalene were below specifications during the LCS analysis associated with the analyses of samples SSEB01 and GPEB01. Associated results have been qualified as estimated/biased low (J/UJ) due to analytical inaccuracy.
- The %R of hexachlorocyclopentadiene exceeded specifications and the %R of benzaldehyde was below specifications during the LCS analysis associated with the analyses of the soil samples.

Associated detected hexachlorocyclopentadiene results have been qualified as estimated/biased high (J) and associated benzaldehyde results have been qualified as estimated/biased low (J/UJ) due to analytical inaccuracy.

- The %R of 4-chloroaniline and 1,1-biphenyl exceeded specifications and the %R of hexachloroethane was below specifications during the LCS analysis associated with the analyses of the groundwater samples. Associated detected 4-chloroaniline and 1,1-biphenyl results have been qualified as estimated/biased high (J) and associated hexachloroethane results have been qualified as estimated/biased low (J/UJ) due to analytical inaccuracy.

A method blank was reported for each analytical batch. Three equipment blanks were also submitted to the laboratory for SVOA. Target analytes were not detected during the analyses of the associated equipment blanks. Bis(2-ethylhexyl)phthalate was detected during the analysis of a method blank associated with the analyses of the solid samples. Several TICs were detected during the analyses of the method blanks and equipment blanks associated with the analyses of the project samples. Action levels were developed by multiplying the highest concentration observed among the associated blank by a factor of 5. Results in the associated samples reported below the action level have been have been qualified as non-detect (U) and the detection limit has been elevated to the amount detected in the sample.

Criteria for accuracy and precision were met for target analytes during the MS and MSD analyses of samples SS-13, GP/CTM-23(3-2) and GP/CTM-23 for target analytes except the following:

- GP/CTM-23(3-2) – The %R was below laboratory specifications for the MS and MSD for phenol, bis(2-chloroethyl)ether, 2-chlorophenol, 2-methylphenol, 2,2-oxybis(1-chloropropane), n-nitroso-di-n-propylamine, hexachloroethane, nitrobenzene, isophrone, 2-nitrophenol, 2,4-dimethylphenol, bis(2-chloroethoxy)methane, 2,4-dichlorophenol, 4-chloroaniline, caprolactam, 4-chloro-3-methylphenol, hexachlorocyclopentadiene, 2,4,6-trichlorophenol, 2,4,5-trichlorophenol, 1,1-biphenyl, 2-chloronaphthalene, 2-nitroaniline, dimethylphthalate, acenaphthylene, 2,6-dinitrotoluene, 3-nitroaniline, 2,4-dinitrophenol, 4-nitrophenol, 2,4-dinitrotoluene, diethylphthalate, 4-chlorophenyl-phenylether, 4-nitroaniline, 4,6-dinitro-2-methylphenol, 4-bromophenyl-phenylether, hexachlorobenzene, atrazine, pehtachlorophenol, carbazole, di-n-butylphthalate, butylbenzylphthalate 3,3-dichlorobenzidine, benzo(a)anthracene, chrysene, di-n-octyl phthalate, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, dibenz(a,h)anthracene and benzo(g,h,i)perylene. The associated results have been qualified as estimated/biased low (J/UJ) due to analytical inaccuracy. The %RPD between MS and MSD exceeded laboratory specifications for hexachloroethane, 4-chloroaniline, n-nitrosodiphenlyamine, 4-bromophenyl-phenylether, hexachlorobenzene and di-n-butylphthalate. The associated results have been qualified as estimated (J) due to analytical imprecision.
- SS-13 – The %R was below laboratory specifications for the MS and MSD for benzaldehyde, naphthalene, 2-methylnaphthalene, hexachlorocyclopentadiene, 1,1-biphenyl, acenaphthylene, acenaphthene, 2,4-dinitrophenol, dibenzofuran, fluorene, 4,6-dinitro-2-methylphenol, phenanthrene, anthracene, carbazole, fluoranthene, pyrene, benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene and benzo(a)pyrene. The associated results have been qualified as estimated/biased low (J/UJ) due to analytical inaccuracy. The %RPD between MS and MSD exceeded laboratory specifications for acenaphthylene, 2,4-dinitrophenol, 4,6-dinitro-2-methylphenol, indeno(1,2,3-cd)pyrene, benzo(k)fluoranthene, benzo(a)pyrene, dibenz(a,h)anthracene and benzo(g,h,i)perylene. The associated results have been qualified as estimated (J/UJ) due to analytical imprecision.

- GP/CTM-23 – The %R exceeded laboratory specifications for the MS and MSD for dibenzofuran. The associated results have been qualified as estimated/biased high (J) due to analytical inaccuracy.

A field duplicate evaluation was performed on samples GPFD01 (blind field duplicate) and GP/CTM-20(2-2). Refer to Attachment B-5 for the duplicate evaluation. Naphthalene, 2-methylnaphthalene, 1,1-biphenyl, acenaphthene, dibenzofuran, fluorine, phenanthrene, anthracene, carbazole, fluoranthene, pyrene, benzo(a)anthracene, chrysene, benzo(b)fluoranthene and benzo(a)pyrene results have been qualified as estimated (J/UJ) due to analytical imprecision.

A field duplicate evaluation was performed on samples GWFD (blind field duplicate) and GP/CTM-20. Refer to Attachment B-7 for the duplicate evaluation. 2-Methylphenol, 3&4-methylphenols, 2,4-dimethylphenol, 2-methylnaphthalene, 1,1-biphenyl, acenaphthylene, acenaphthene, dibenzofuran, fluorene, phenanthrene, anthracene, carbazole and fluoranthene results have been qualified as estimated (J/UJ) due to analytical imprecision.

Pesticide Analysis by SW-846 8081

Laboratory specifications were met during the initial and continuing calibrations. The %RSD between RRF was less than or equal to 30% during the initial calibration, and the %D between the initial calibration average RRF and continuing calibration RRF was less than or equal to 25% for target analytes.

Surrogate recoveries met laboratory specifications for project samples.

The %R results for LCS analysis were within laboratory specifications for target analytes.

A method blank was reported for each analytical batch. Three equipment blanks were also submitted to the laboratory for pesticide analysis. Target compounds were not detected during the analysis of the method blanks or the equipment blanks.

Criteria for accuracy and precision were met during the MS and MSD analyses of samples SS-13, GP/CTM-23(3-2) and GP/CTM-23 for target analytes except the following:

- GP/CTM-23(3-2) – The %R was below laboratory specifications for the MS and MSD for beta-BHC, delta-BHC, heptachlor epoxide, Endoslfan I, gamma-chlordane, 4,4'-DDE, dieldrin, Endosulfan II, endrin aldehyde, endosulfan sulfate, methoxychlor and endrin ketone. The associated results have been qualified as estimated/ biased low (J/UJ) due to analytical inaccuracy. The %RPD between MS and MSD exceeded laboratory specifications for heptachlor epoxide, alpha-chlordane, 4,4'-DDD and endrin aldehyde. The associated results have been qualified as estimated (UJ) due to analytical imprecision.
- SS-13 – The %R was below laboratory specifications for the MS and MSD for gamma-BHC, beta-BHC, delta-BHC, Endosulfan I, gamma-chlordane, alpha-chlordane, 4,4'-DDE, Endosulfan II, endosulfan sulfate and methoxychlor. The associated results have been qualified as estimated/biased low (J/UJ) due to analytical inaccuracy. The %RPD between MS and MSD exceeded laboratory specifications for alpha-BHC, gamma-BHC, heptachlor, delta-BHC, heptachlor epoxide, dieldrin, endrin, 4,4'-DDD, 4,4'-DDT, endrin aldehyde and endrin ketone. The associated results have been qualified as estimated (UJ) due to analytical imprecision.

- GP/CTM-23 – The %RPD between MS and MSD exceeded laboratory specifications for beta-BHC. The associated results have been qualified as estimated (UJ) due to analytical imprecision.

A field duplicate evaluation was performed on samples GPFD01 (blind field duplicate) and GP/CTM-20(2-2). Criteria for precision was achieved as target analytes were not detected in the associated samples.

A field duplicate evaluation was performed on samples GWFD (blind field duplicate) and GP/CTM-20. Criteria for precision was achieved as target analytes were not detected in the associated samples.

PCB Analysis by SW-846 8082

Laboratory specifications were met during the initial and continuing calibrations. The %RSD between RRF was less than or equal to 30% during the initial calibration, and the %D between the initial calibration average RRF and continuing calibration RRF was less than or equal to 25% for target analytes.

Surrogate recoveries met laboratory specifications for project samples except tetrachloro-m-xylene exceeded specifications and decachlorophenyl was below specifications during the analysis of sample GP/CTM-23(3-2). The associated results have been qualified as estimated (J/UJ) due to analytical inaccuracy.

The %R results for LCS analysis were within laboratory specifications for the target analytes Aroclor 1016 and Aroclor 1260.

A method blank was reported for each analytical batch. Three equipment blanks were also submitted to the laboratory for PCB analysis. Target compounds were not detected during the analysis of the method blanks or the equipment blanks.

Criteria for accuracy and precision were met during the MS/MSD analyses of samples SS-13, GP/CTM-22(3-2), GP/CTM-23(3-2) and GP/CTM-23 for target analytes Aroclor 1016 and Aroclor 1260 except the following:

- GP/CTM-22(3-2) – The %RPD between MS and MSD exceeded laboratory specifications for Aroclor 1260. The associated results have been qualified as estimated (UJ) due to analytical imprecision.
- GP/CTM-23(3-2) – The %RPD between MS and MSD exceeded laboratory specifications for Aroclor 1016 and Aroclor 1260. The associated results have been qualified as estimated (UJ) due to analytical imprecision.

A field duplicate evaluation was performed on samples GPFD01 (blind field duplicate) and GP/CTM-20(2-2). Criteria for precision was achieved as target analytes were not detected in the associated samples.

A field duplicate evaluation was performed on samples GWFD (blind field duplicate) and GP/CTM-20. Criteria for precision was achieved as target analytes were not detected in the associated samples.

Metals and Mercury Analysis by SW-846 6010B and 7470/7471A

The inductively coupled plasma (ICP) instrument was calibrated according to the SW-846 Methods 6010B and 7470/7471A. All samples were bracketed by ICV/CCV with recoveries that were within 80-120% for mercury and 90-110% of the true value for all other target metals.

Recovery of the ICP interference check sample (ICS) fell within 80-120% of the true standard concentration for target analytes.

Laboratory specifications (80-120%R) were met during the LCS analysis for target metals.

The %R of the contract required detection limit (CRDL) standard fell within 75-125% of the true value for target metals.

A method blank was reported for each batch, and a calibration blank was analyzed at the beginning, after every 10 samples, and at the end of each batch. Three equipment blanks were also submitted to the laboratory for metals analysis. Refer to Attachments B-1 and B-2 for evaluation of blank contamination associated with solid samples. Calcium, magnesium, potassium, silver, sodium and zinc were detected in the blanks associated with the analysis of the aqueous samples. Action levels were developed by multiplying the highest concentration observed among all associated blanks by a factor of 5. Samples with results reported below the action level have been have been qualified as non-detect (U) and the detection limit has been elevated to the amount detected in the sample.

Criteria for accuracy and precision were met during the MS/MSD analyses of samples SS-13, GP/CTM-23(3-2) and GP/CTM-23 for target metals except the following:

- SS-13 – The %R was below laboratory specifications for the MS and MSD for cadmium, chromium, cobalt, nickel and vanadium. The associated results have been qualified as estimated/biased low (J) due to analytical inaccuracy. The %R exceeded laboratory specifications for the MS and MSD for mercury and potassium. The associated detected results have been qualified as estimated/biased high (J) due to analytical inaccuracy.
- GP/CTM-23(3-2) – The %R was below laboratory specifications for the MS and MSD for barium, lead and zinc. The associated results have been qualified as estimated/biased low (J) due to analytical inaccuracy.

Chemical and matrix interference were observed during the serial dilution analysis of samples SS-13, GP/CTM-23(3-2) and GP/CTM-23. The %D between initial and serially diluted results was less than 10% for those target metals with results greater than fifty times the detection limit except the following:

- SS-13 – Beryllium, cadmium, calcium, iron, lead, potassium and zinc results have been qualified as estimated (J) due to chemical and matrix interference.
- GP/CTM-23(3-2) – Calcium, magnesium, mercury and potassium results have been qualified as estimated (J) due to chemical and matrix interference.

A laboratory duplicate evaluation was performed on samples GP/CTM-23(3-2), SS-13 and GP/CTM-23. Refer to Attachments B-3, B-4 and B-6, respectively for the duplicate evaluations. Criteria for precision was achieved for detected results.

A field duplicate evaluation was performed on samples GPFD01 (blind field duplicate) and GP/CTM-20(2-2). Refer to Attachment B-5 for the duplicate evaluation. Arsenic, barium, calcium, lead, magnesium, nickel, potassium, selenium, vanadium and zinc results have been qualified as estimated (J/UJ) due to analytical imprecision.

A field duplicate evaluation was performed on samples GWFD (blind field duplicate) and GP/CTM-20. Refer to Attachment B-7 for the duplicate evaluation. Aluminum, antimony, barium, chromium, copper, iron, lead, magnesium, nickel and sodium results have been qualified as estimated (J/UJ) due to analytical imprecision.

Cyanide Analysis by SW-846 9012B

Laboratory specifications were met during the initial and continuing calibrations. All samples were bracketed by ICV/CCV with recoveries that were within 90-110% of the true value.

Laboratory specifications were met during the LCS analysis for cyanide.

A method blank was reported for each batch, and a calibration blank was analyzed at the beginning, after every 10 samples, and at the end of each batch. Three equipment blanks were also submitted to the laboratory for cyanide analysis. Cyanide was not detected in the associated blanks.

Criteria for accuracy and precision were met during the MS analyses of samples SS-13, GP/CTM-23(3-2) and GP/CTM-23 for cyanide except the %R was below laboratory specifications during the MS analysis of sample GP/CTM-23. The associated results have been qualified as estimated/biased low (J) due to analytical inaccuracy.

A field duplicate evaluation was performed on samples GPFD01 (blind field duplicate) and GP/CTM-20(2-2). Refer to Attachment B-5 for the duplicate evaluation. Cyanide results have been qualified as estimated (J) due to analytical imprecision.

A field duplicate evaluation was performed on samples GWFD (blind field duplicate) and GP/CTM-20. Refer to Attachment B-7 for the duplicate evaluation. Cyanide results have been qualified as estimated (J) due to analytical imprecision.

Summary

Overall, data quality objectives for the Metroplex site at 312 Broadway in the city of Schenectady, NY were met, as there were no data deficiencies that would indicate the need for re-sampling. The analytical results are usable with the qualification of results as described in this DUSR. No analytical data has been rejected.

Megan Drosky
Environmental Scientist

Table 2-2
Subsurface Soil VOC Results - 2008
Schenectady Clinton Street MGP Site

Location ID Sample Designation Sample Date Lab Sample ID	CAS #	NYSDEC Part 375-6 Restricted Residential Cleanup Objectives	NYSDEC Part 375-6 Commercial Use Cleanup Objectives	SB30 SB30(41.5-43.5) 10/27/2008 C8J290111007	SB30 SB300(41.5-43.5) DUPLICATE C8J290111008	SB30 SB30(50-52.5) 10/27/2008 C8J290111009	SB35 SB35(40-41.5) 11/2/2008 C8K040347003	SB35 SB35(45-47.5) 11/2/2008 C8K040347004	SB43 SB43(40-42.5) 11/1/2008 C8K040347001	SB43 SB43(50-52.5) 11/1/2008 C8K040347002	SB48 SB48(9-10) 10/31/2008 C8K010195002	SB48 SB48(27.5-30) 10/31/2008 C8K010195003
BTEX Compounds (mg/Kg)												
Benzene	71-43-2	4.8	44	1.5 U	1.5 U	0.0059 U	3.1 U	0.0062 U	28 U	0.0062 U	1.1 J	0.0022 J
Ethylbenzene	100-41-4	41	390	3.2	3.3	0.0059 U	36	0.0062 U	**590**	0.0062 U	21	0.0059 U
Toluene	108-88-3	100	500	0.3 J	0.28 J	0.0059 U	1.9 J	0.0014 J	**160**	0.0062 U	7	0.0059 U
Xylenes (total)	1330-20-7	100	500	64	62	0.018 U	41	0.019 U	**770**	0.019 U	51	0.018 U
Total BTEX (mg/Kg)	NA	NL	NL	67.5	65.58	--- U	78.9	0.0014	1520	--- U	80.1	0.0022
Other VOCs (mg/Kg)												
1,1,1-Trichloroethane	71-55-6	100	500	1.5 U	1.5 U	0.0059 U	3.1 U	0.0062 U	28 U	0.0062 U	1.5 U	0.0059 U
1,1,2,2-Tetrachloroethane	79-34-5	NL	NL	1.5 U	1.5 U	0.0059 U	3.1 U	0.0062 U	28 U	0.0062 U	1.5 U	0.0059 U
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	NL	NL	1.5 U	1.5 U	0.0059 U	3.1 U	0.0062 U	28 U	0.0062 U	1.5 U	0.0059 U
1,1,2-Trichloroethane	79-00-5	NL	NL	1.5 U	1.5 U	0.0059 U	3.1 U	0.0062 U	28 U	0.0062 U	1.5 U	0.0059 U
1,1-Dichloroethane	75-34-3	26	240	1.5 U	1.5 U	0.0059 U	3.1 U	0.0062 U	28 U	0.0062 U	1.5 U	0.0059 U
1,1-Dichloroethene	75-35-4	100	500	1.5 U	1.5 U	0.0059 U	3.1 U	0.0062 U	28 U	0.0062 U	1.5 U	0.0059 U
1,2,4-Trichlorobenzene	120-82-1	NL	NL	0.98 J	1.5 U	0.0059 UJ	3.1 U	0.0062 U	28 U	0.0062 U	0.93 J	0.0059 U
1,2-Dibromo-3-chloropropane	96-12-8	NL	NL	1.5 U	1.5 U	0.0059 U	3.1 U	0.0062 U	28 U	0.0062 U	1.5 U	0.0059 U
1,2-Dibromoethane	106-93-4	NL	NL	1.5 U	1.5 U	0.0059 U	3.1 U	0.0062 U	28 U	0.0062 U	1.5 U	0.0059 U
1,2-Dichlorobenzene	95-50-1	100	500	1.5 U	1.5 U	0.0059 U	3.1 U	0.0062 U	28 U	0.0062 U	1.5 U	0.0059 U
1,2-Dichloroethane	107-06-2	3.1	30	1.5 U	1.5 U	0.0059 U	3.1 U	0.0062 U	28 U	0.0062 U	1.5 U	0.0059 U
1,2-Dichloropropane	78-87-5	NL	NL	1.5 U	1.5 U	0.0059 U	3.1 U	0.0062 U	28 U	0.0062 U	1.5 U	0.0059 U
1,3-Dichlorobenzene	541-73-1	49	280	1.5 U	1.5 U	0.0059 U	3.1 U	0.0062 U	28 U	0.0062 U	1.5 U	0.0059 U
1,4-Dichlorobenzene	106-46-7	13	130	1.5 U	1.5 U	0.0059 U	3.1 U	0.0062 U	28 U	0.0062 U	1.5 U	0.0059 U
2-Butanone	78-93-3	100	500	1.5 U	1.5 U	0.0059 U	3.1 U	0.0062 U	28 U	0.0062 U	1.5 U	0.0059 U
2-Hexanone	591-78-6	NL	NL	1.5 U	1.5 U	0.0059 U	3.1 U	0.0062 U	28 U	0.0062 U	1.5 U	0.0059 U
4-Methyl-2-pentanone	108-10-1	NL	NL	1.5 U	1.5 U	0.0059 U	3.1 U	0.0062 U	28 U	0.0062 U	1.5 U	0.0059 U
Acetone	67-64-1	100	500	6.1 U	5.9 U	0.023 U	12 U	0.025 UJ	110 U	0.025 UJ	6.1 U	0.024 UJ
Bromodichloromethane	75-27-4	NL	NL	1.5 U	1.5 U	0.0059 U	3.1 U	0.0062 U	28 U	0.0062 U	1.5 U	0.0059 U
Bromoform	75-25-2	NL	NL	1.5 U	1.5 U	0.0059 U	3.1 U	0.0062 U	28 U	0.0062 U	1.5 U	0.0059 U
Bromomethane	74-83-9	NL	NL	1.5 U	1.5 U	0.0059 U	3.1 U	0.0062 U	28 U	0.0062 U	1.5 U	0.0059 U
Carbon disulfide	75-15-0	NL	NL	1.5 U	1.5 U	0.0059 U	3.1 U	0.0062 U	28 U	0.0062 U	1.5 U	0.0059 U
Carbon tetrachloride	56-23-5	2.4	22	1.5 U	1.5 U	0.0059 U	3.1 U	0.0062 U	28 U	0.0062 U	1.5 U	0.0059 U
Chlorobenzene	108-90-7	100	500	1.5 U	1.5 U	0.0059 U	3.1 U	0.0062 U	28 U	0.0062 U	1.5 U	0.0059 U
Chloroethane	75-00-3	NL	NL	1.5 U	1.5 U	0.0059 U	3.1 U	0.0062 U	28 U	0.0062 U	1.5 U	0.0059 U
Chloroform	67-66-3	49	350	1.5 U	1.5 U	0.0059 U	3.1 U	0.0062 U	28 U	0.0062 U	1.5 U	0.0059 U
Chloromethane	74-87-3	NL	NL	1.5 U	1.5 U	0.0059 U	3.1 U	0.0062 U	28 U	0.0062 U	1.5 U	0.0059 U
cis-1,2-Dichloroethene	156-59-2	100	500	1.5 U	1.5 U	0.0059 U	3.1 U	0.0062 U	28 U	0.0062 U	1.5 U	0.0059 U
cis-1,3-Dichloropropene	10061-01-5	NL	NL	1.5 U	1.5 U	0.0059 U	3.1 U	0.0062 U	28 U	0.0062 U	1.5 U	0.0059 U
Cyclohexane	110-82-7	NL	NL	1.5 U	1.5 U	0.0059 U	3.1 U	0.0062 U	28 U	0.0062 U	0.19 J	0.0059 U
Dibromochloromethane	124-48-1	NL	NL	1.5 U	1.5 U	0.0059 U	3.1 U	0.0062 U	28 U	0.0062 U	1.5 U	0.0059 U
Dichlorodifluoromethane	75-71-8	NL	NL	1.5 U	1.5 U	0.0059 U	3.1 UJ	0.0062 UJ	28 UJ	0.0062 UJ	1.5 U	0.0059 UJ
Isopropylbenzene	98-82-8	NL	NL	14	13	0.0059 U	8.9	0.0062 U	70	0.0062 U	4.7	0.0059 U
Methyl acetate	79-20-9	NL	NL	1.5 U	1.5 U	0.0059 U	3.1 U	0.0062 U	28 U	0.0062 U	1.5 U	0.0059 U
Methyl tert-butyl ether	1634-04-4	100	500	1.5 U	1.5 U	0.0059 U	3.1 U	0.0062 U	28 U	0.0062 U	1.5 U	0.0059 U
Methylcyclohexane	108-87-2	NL	NL	0.56 J	0.43 J	0.0059 U	3.1 U	0.0062 U	28 U	0.0062 U	0.62 J	0.0059 U
Methylene chloride	75-09-2	100	500	1.5 U	1.5 U	0.0059 U	3.1 U	0.0062 U	28 U	0.0062 U	1.5 U	0.0059 U
Styrene	100-42-5	NL	NL	1.5 U	1.5 U	0.0059 U	3.1 U	0.0062 U	28 U	0.0062 U	1.5 U	0.0059 U
Tetrachloroethene	127-18-4	19	150	1.5 U	1.5 U	0.0059 U	3.1 U	0.0062 U	28 U	0.0062 U	1.5 U	0.0059 U
trans-1,2-Dichloroethene	156-60-5	100	500	1.5 U	1.5 U	0.0059 U	3.1 U	0.0062 U	28 U	0.0062 U	1.5 U	0.0059 U
trans-1,3-Dichloropropene	10061-02-6	NL	NL	1.5 U	1.5 U	0.0059 U	3.1 U	0.0062 U	28 U	0.0062 U	1.5 U	0.0059 U
Trichloroethene	79-01-6	21	200	1.5 U	1.5 U	0.0059 U	3.1 U	0.0062 U	28 U	0.0062 U	1.5 U	0.0059 U
Trichlorofluoromethane	75-69-4	NL	NL	1.5 U	1.5 U	0.0059 U	3.1 U	0.0062 U	28 U	0.0062 U	1.5 U	0.0059 U
Vinyl chloride	75-01-4	0.9	13	1.5 U	1.5 U	0.0059 U	3.1 U	0.0062 U	28 U	0.0062 U	1.5 U	0.0059 U
Total VOCs (mg/Kg)	NA	NL	NL	83.04	79.01	--- U	87.8	0.0014	1590	--- U	86.54	0.0022

Notes:
NL = Not Listed
NA = Not Applicable
U = The material was analyzed for but not detected at or above the reporting limit. The associated numerical value is the sample quantitation limit.
J = The associated numerical value is an estimated quantity.
Bold value - compound detected at concentration greater than the Restricted Residential SCO.
Yellow Shading = Compound detected in concentration greater than the Commercial SCO.
NYSDEC Subpart 375-6, Remedial Program Soil Cleanup Objectives, December 14, 2006.
(Note 1) - Total VOCs includes all of the BTEX and other VOC compounds.

Table 2-3
Subsurface Soil SVOC Results - 2008
Schenectady Clinton Street MGP Site

Location ID Sample Designation Sample Date Lab Sample ID	CAS #	NYSDEC Part 375-6 Restricted Residential Cleanup Objectives	NYSDEC Part 375-6 Commercial Use Cleanup Objectives	SB30 SB30(41.5-43.5) 10/27/2008 C8J290111007	SB30 SB300(41.5-43.5) DUPLICATE C8J290111008	SB30 SB30(50-52.5) 10/27/2008 C8J290111009	SB35 SB35(40-41.5) 11/2/2008 C8K040347003	SB35 SB35(45-47.5) 11/2/2008 C8K040347004	SB43 SB43(40-42.5) 11/1/2008 C8K040347001	SB43 SB43(50-52.5) 11/1/2008 C8K040347002	SB48 SB48(9-10) 10/31/2008 C8K010195002	SB48 SB48(27.5-30) 10/31/2008 C8K010195003
PAH Compounds (mg/Kg)												
2-Methylnaphthalene	91-57-6	NL	NL	450	310	0.05 J	13	0.036 J	920	0.028 J	620	0.072 J
Acenaphthene	83-32-9	100	500	62	44	0.078 U	13	0.045 J	**540**	0.021 J	**1000**	0.16
Acenaphthylene	208-96-8	100	500	**290**	**220**	0.075 J	2.2	0.15	79	0.083 U	**150**	0.058 J
Anthracene	120-12-7	100	500	**210**	**140**	0.023 J	8.6	0.083 U	**270**	0.083 U	**920**	0.19
Benzo(a)anthracene	56-55-3	1	5.6	**120**	**89**	0.078 U	**5.4**	0.083 U	**150**	0.083 U	**770**	0.16
Benzo(a)pyrene	50-32-8	1	1	**93**	**60**	0.078 U	**3.9**	0.083 U	**99**	0.083 U	**600**	0.13
Benzo(b)fluoranthene	205-99-2	1	5.6	**69**	**47**	0.078 U	**3.2**	0.083 U	**88**	0.083 U	**810**	0.15
Benzo(ghi)perylene	191-24-2	100	500	33	21	0.078 U	1.5	0.083 U	38	0.083 U	**360**	0.075 J
Benzo(k)fluoranthene	207-08-9	3.9	56	1.6 U	1.6 U	0.078 U	0.083 U	0.083 U	7.5 U	0.083 U	8.1 U	0.08 U
Chrysene	218-01-9	3.9	56	**97**	**62**	0.078 U	3.9	0.083 U	**110**	0.083 U	**570**	0.12
Dibenz(a,h)anthracene	53-70-3	0.33	0.56	**5.2**	**6.2**	0.078 U	**0.42**	0.083 U	**10**	0.083 U	**91**	0.08 U
Fluoranthene	206-44-0	100	500	**210**	**140**	0.078 U	8.4	0.083 U	**260**	0.083 U	**1900**	0.36
Fluorene	86-73-7	100	500	**240**	**160**	0.078 U	8.8	0.083 U	**290**	0.083 U	**810**	0.14
Indeno(1,2,3-cd)pyrene	193-39-5	.5	5.6	**26**	**16**	0.078 U	**1.1**	0.083 U	**27**	0.083 U	**320**	0.062 J
Naphthalene	91-20-3	100	500	**490**	**330**	0.068 J	10	0.077 J	**2200**	0.056 J	**2000**	0.16
Phenanthrene	85-01-8	100	500	**400**	**290**	0.05 J	32	0.039 J	**850**	0.026 J	**2700**	0.58
Pyrene	129-00-0	100	500	**220**	**170**	0.078 U	13	0.028 J	**360**	0.083 U	**1300**	0.3
Total PAHs (mg/Kg)	NA	NL	NL	3015.2	2105.2	0.266	128.42	0.375	6291	0.131	14921	2.717
Other SVOCs (mg/Kg)												
1,1'-Biphenyl	92-52-4	NL	NL	85	59	0.38 U	2.8	0.07 J	120	0.035 J	190	0.032 J
2,2'-oxybis(1-Chloropropane)	108-60-1	NL	NL	1.6 U	1.6 U	0.078 U	0.083 U	0.083 U	7.5 U	0.083 U	8.1 U	0.08 U
2,4,5-Trichlorophenol	95-95-4	NL	NL	8.1 U	7.8 U	0.38 U	0.41 U	0.41 U	37 U	0.41 U	40 U	0.39 U
2,4,6-Trichlorophenol	88-06-2	NL	NL	8.1 U	7.8 U	0.38 U	0.41 U	0.41 U	37 U	0.41 U	40 U	0.39 U
2,4-Dichlorophenol	120-83-2	NL	NL	1.6 U	1.6 U	0.078 U	0.083 U	0.083 U	7.5 U	0.083 U	8.1 U	0.08 U
2,4-Dimethylphenol	105-67-9	NL	NL	8.1 U	7.8 U	0.38 U	0.41 U	0.41 U	37 U	0.41 U	40 U	0.39 U
2,4-Dinitrophenol	51-28-5	NL	NL	42 UJ	40 UJ	2 UJ	2.1 U	2.1 U	190 U	2.1 U	210 U	2 U
2,4-Dinitrotoluene	121-14-2	NL	NL	8.1 U	7.8 U	0.38 U	0.41 U	0.41 U	37 U	0.41 U	40 U	0.39 U
2,6-Dinitrotoluene	606-20-2	NL	NL	8.1 U	7.8 U	0.38 U	0.41 U	0.41 U	37 U	0.41 U	40 U	0.39 U
2-Chloronaphthalene	91-58-7	NL	NL	1.6 U	1.6 U	0.078 U	0.083 U	0.083 U	7.5 U	0.083 U	8.1 U	0.08 U
2-Chlorophenol	95-57-8	NL	NL	8.1 U	7.8 U	0.38 U	0.41 U	0.41 U	37 U	0.41 U	40 U	0.39 U
2-Methylphenol	95-48-7	100	500	8.1 U	7.8 U	0.38 U	0.41 U	0.41 U	37 U	0.41 U	40 U	0.39 U
2-Nitroaniline	88-74-4	NL	NL	42 U	40 U	2 U	2.1 U	2.1 U	190 U	2.1 U	210 U	2 U
2-Nitrophenol	88-75-5	NL	NL	8.1 U	7.8 U	0.38 U	0.41 U	0.41 U	37 U	0.41 U	40 U	0.39 U
3,3'-Dichlorobenzidine	91-94-1	NL	NL	8.1 U	7.8 UJ	0.38 UJ	0.41 U	0.41 U	37 U	0.41 U	40 U	0.39 U
3-Nitroaniline	99-09-2	NL	NL	42 U	40 U	2 U	2.1 U	2.1 U	190 U	2.1 U	210 U	2 U
4,6-Dinitro-2-methylphenol	534-52-1	NL	NL	42 UJ	40 UJ	2 UJ	2.1 U	2.1 U	190 U	2.1 U	210 U	2 U
4-Bromophenyl phenyl ether	101-55-3	NL	NL	8.1 U	7.8 U	0.38 U	0.41 U	0.41 U	37 U	0.41 U	40 U	0.39 U
4-Chloro-3-methylphenol	59-50-7	NL	NL	8.1 U	7.8 U	0.38 U	0.41 U	0.41 U	37 U	0.41 U	40 U	0.39 U
4-Chloroaniline	106-47-8	NL	NL	8.1 U	7.8 U	0.38 U	0.41 U	0.41 U	37 U	0.41 U	40 U	0.39 U
4-Chlorophenyl phenyl ether	7005-72-3	NL	NL	8.1 U	7.8 U	0.38 U	0.41 U	0.41 U	37 U	0.41 U	40 U	0.39 U
4-Methylphenol	106-44-5	100	500	8.1 U	7.8 U	0.38 U	0.41 U	0.41 U	37 U	0.41 U	40 U	0.39 U
4-Nitroaniline	100-01-6	NL	NL	42 U	40 U	2 U	2.1 U	2.1 U	190 U	2.1 U	210 U	2 U
4-Nitrophenol	100-02-7	NL	NL	42 U	40 U	2 U	2.1 U	2.1 U	190 U	2.1 U	210 U	2 U
Acetophenone	98-86-2	NL	NL	8.1 U	7.8 U	0.38 U	0.41 U	0.41 U	37 U	0.41 U	40 U	0.39 U
Atrazine	1912-24-9	NL	NL	8.1 UJ	7.8 UJ	0.38 UJ	0.41 U	0.41 U	37 U	0.41 U	40 U	0.39 U
Benzaldehyde	100-52-7	NL	NL	8.1 UJ	7.8 UJ	0.38 UJ	0.41 U	0.41 U	37 U	0.41 U	40 UJ	0.39 UJ
bis(2-Chloroethoxy)methane	111-91-1	NL	NL	8.1 U	7.8 U	0.38 U	0.41 U	0.41 U	37 U	0.41 U	40 U	0.39 U
bis(2-Chloroethyl) ether	111-44-4	NL	NL	1.6 U	1.6 U	0.078 U	0.083 U	0.083 U	7.5 U	0.083 U	8.1 U	0.08 U
bis(2-Ethylhexyl) phthalate	117-81-7	NL	NL	8.1 U	7.8 U	0.38 U	0.41 U	0.41 U	37 U	0.41 U	40 U	0.39 U
Butyl benzyl phthalate	85-68-7	NL	NL	8.1 U	7.8 U	0.38 U	0.41 U	0.41 U	37 U	0.41 U	40 U	0.39 U
Caprolactam	105-60-2	NL	NL	42 U	40 U	2 U	2.1 U	2.1 U	190 U	2.1 U	210 U	2 U
Carbazole	86-74-8	NL	NL	2.1	1.2 J	0.078 U	0.083 U	0.083 U	7.5 U	0.083 U	280	0.042 J
Dibenzofuran	132-64-9	59	350	26	18	0.38 U	0.72	0.41 U	25 J	0.41 U	**660**	0.083 J
Diethyl phthalate	131-11-3	NL	NL	8.1 U	7.8 U	0.38 U	0.41 U	0.41 U	37 U	0.41 U	40 U	0.39 U
Dimethyl phthalate	84-66-2	NL	NL	8.1 U	7.8 U	0.38 U	0.41 U	0.41 U	37 U	0.41 U	40 U	0.39 U
Di-n-butyl phthalate	84-74-2	NL	NL	8.1 U	7.8 U	0.38 U	0.41 U	0.41 U	37 U	0.41 U	40 U	0.39 U
Di-n-octyl phthalate	117-84-0	NL	NL	8.1 U	7.8 U	0.38 U	0.41 U	0.41 U	37 U	0.41 U	40 U	0.39 U
Hexachlorobenzene	118-74-1	1.2	6	1.6 U	1.6 U	0.078 U	0.083 U	0.083 U	7.5 U	0.083 U	8.1 U	0.08 U
Hexachlorobutadiene	87-68-3	NL	NL	1.6 U	1.6 U	0.078 U	0.083 U	0.083 UJ	7.5 U	0.083 U	8.1 U	0.08 U
Hexachlorocyclopentadiene	77-47-4	NL	NL	8.1 UJ	7.8 UJ	0.38 UJ	0.41 UJ	0.41 U	37 UJ	0.41 UJ	40 UJ	0.39 UJ
Hexachloroethane	67-72-1	NL	NL	8.1 U	7.8 U	0.38 U	0.41 U	0.41 U	37 U	0.41 U	40 U	0.39 U
Isophorone	78-59-1	NL	NL	8.1 U	7.8 U	0.38 U	0.41 U	0.41 U	37 U	0.41 U	40 U	0.39 U
Nitrobenzene	98-95-3	NL	NL	1.6 U	1.6 U	0.078 U	0.083 U	0.083 U	7.5 U	0.083 U	8.1 U	0.08 U
N-Nitrosodi-n-propylamine	621-64-7	NL	NL	1.6 U	1.6 U	0.078 U	0.083 U	0.083 U	7.5 U	0.083 U	8.1 U	0.08 U
N-Nitrosodiphenylamine	86-30-6	NL	NL	1.6 U	1.6 U	0.078 U	0.083 U	0.083 U	7.5 U	0.083 U	8.1 U	0.08 U
Pentachlorophenol	87-86-5	6.7	6.7	8.1 U	7.8 U	0.38 U	0.41 U	0.41 U	37 U	0.41 U	40 U	0.39 U
Phenol	108-95-2	100	500	1.6 U	0.6 J	4.1	0.083 U	0.083 U	7.5 U	0.083 U	8.1 U	0.08 U
Total SVOCs (mg/Kg) (Note 1)	NA	NL	NL	3128.3	2184	4.366	131.94	0.445	6436	0.166	16051	2.874

Notes:
NL = Not Listed
NA = Not Applicable
U = The material was analyzed for but not detected at or above the reporting limit. The associated
J = The associated numerical value is an estimated quantity.
Bold value - compound detected at concentration greater than the Restricted Residential SCO.
Yellow Shading = Compound detected in concentration greater than the Commercial SCO.
NYSDEC Subpart 375-6, Remedial Program Soil Cleanup Objectives, December 14, 2006.
(Note 1) - Total SVOCs includes all of the PAH and other SVOC compounds.

Table 2-4
Subsurface Soil Metals and Cyanide Results - 2008
Schenectady Clinton Street MGP Site

Location ID Sample Designation Sample Date Lab Sample ID	CAS #	NYSDEC Part 375-6 Restricted Residential Cleanup Objectives	NYSDEC Part 375-6 Commercial Use Cleanup Objectives	SB30 SB30(41.5-43.5) 10/27/2008 C8J290111007		SB30 SB300(41.5-43.5) DUPLICATE C8J290111008		SB30 SB30(50-52.5) 10/27/2008 C8J290111009		SB35 SB35(40-41.5) 11/2/2008 C8K040347003		SB35 SB35(45-47.5) 11/2/2008 C8K040347004		SB43 SB43(40-42.5) 11/1/2008 C8K040347001		SB43 SB43(50-52.5) 11/1/2008 C8K040347002		SB48 SB48(9-10) 10/31/2008 C8K010195002		SB48 SB48(27.5-30) 10/31/2008 C8K010195003	
Metals (mg/Kg)																					
Aluminum	7429-90-5	NL	NL	2730		3180		3580		3760		2850		2350		3680		3920		2940	
Antimony	7440-36-0	NL	NL	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.1	U	1.2	U	1.2	U	1.2	U
Arsenic	7440-38-2	16	16	3.4		2.9		4.2		1.8		3		2.3		2		3.9		1	J
Barium	7440-39-3	400	400	11	J	11.4	J	15.6	J	16.3	J	9	J	22.4	U	19.9	J	25.1		9.6	J
Beryllium	7440-41-7	72	590	0.49	U	0.47	U	0.47	U	0.5	U	0.49	U	0.45	J	0.49	U	0.28	J	0.19	J
Cadmium	7440-43-9	4.3	9.3	0.14	J	0.17	J	0.26	J	0.22	J	0.2	J	0.12	J	0.27	J	0.17	J	0.049	J
Calcium	7440-70-2	NL	NL	1830		1800		27500		10800		24300		2390		31000		13600		3160	
Chromium	7440-47-3	180	1500	4.7		5.3		6.5		6.5		5.6		3.8		6.4		6		4.4	
Cobalt	7440-48-4	NL	NL	3.3	J	3.9	J	3.9	J	4	J	3.2	J	2.4	J	4	J	3	J	3.1	J
Copper	7440-50-8	270	270	4		5.7		9.6		7.1		6.7		3.5		9.8		13.5		3.2	
Iron	7439-89-6	NL	NL	7510		8510		10300		11400		9900		6810		10900		10000		7530	
Lead	7439-92-1	400	1000	2.4		2.7		3.8		3		2.9		2		4		33.3		2.4	
Magnesium	7439-95-4	NL	NL	1590		1740		6440		3140		5260		1260		7100		1940		1940	
Manganese	7439-96-5	2000	10000	62.7		71.9		164		115		148		169		222		145		70.9	
Mercury	7439-97-6	0.81	2.8	0.0082	J	0.0067	J	0.0092	J	0.041	U	0.0072	J	0.006	J	0.0066	J	0.25		0.0051	J
Nickel	7440-02-0	310	310	6.8		7.9		9.1		8.2		7.9		5		8.9		6.8		6.3	
Potassium	7440-09-7	NL	NL	438	J	471	J	703		614	J	517	J	412	J	720		550	J	415	J
Selenium	7782-49-2	180	1500	0.84		0.84		0.59	U	0.62	U	0.62	U	0.36	J	0.62	U	0.45	J	0.3	J
Silver	7440-22-4	180	1500	0.61	U	0.59	U	0.59	U	0.62	U	0.62	U	0.56	U	0.62	U	0.61	U	0.59	U
Sodium	7440-23-5	NL	NL	55.5	J	54.7	J	91.9	J	67.6	J	69.3	J	27.6	J	79.2	J	229	J	59.6	J
Thallium	7440-28-0	NL	NL	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.1	U	1.2	U	1.2	U	1.2	U
Vanadium	7440-62-2	NL	NL	8.8		8.2		12.7		13.8		12.2		5.7		12.6		10.7		7.2	
Zinc	7440-66-6	10000	10000	28.3		26.5		29.5		25.4		21.6		19.1		26.7		31.9		21.4	
		NL	NL																		
Total Cyanide (mg/Kg)	57-12-5	27	27	0.61	U	0.13	J	0.59	U	0.91	U	1.7	U	0.58	U	0.62	U	13.5	J+	0.95	U

Notes:
NL = Not Listed
NA = Not Applicable
U = The material was analyzed for but not detected at or above the reporting limit. The associated numerical value is the sample quantitation limit.
J = The associated numerical value is an estimated quantity.
J- = The result is an estimated quantity, likely to be biased low. The associated numerical value is the approximate concentration of the analyte in the sample.
J+ = The result is an estimated quantity, likely to be biased high. The associated numerical value is the approximate concentration of the analyte in the sample.
Bold value - compound detected at concentration greater than the Restricted Residential SCO.
Yellow Shading = Compound detected in concentration greater than the Commercial SCO.
NYSDEC Subpart 375-6, Remedial Program Soil Cleanup Objectives, December 14, 2006.

Table 2-5
Groundwater VOC Results - 2008
Schenectady Clinton Street MGP Site

Location ID Sample Date Lab Sample ID	CAS #	NYSDEC Groundwater Guidance or Standard Value (Note 1)	MW12 12/10/2008 C8L110371002	MW12D 12/10/2008 C8L110371003	MW13D 12/10/2008 C8L110371009	MW14 12/11/2008 C8L120342003	MW14 DUPLICATE C8L120342004	MW14D 12/11/2008 C8L120342002	MW16D 12/10/2008 C8L110371011	MW16D DUPLICATE C8L110371012
BTEX Compounds (ug/L)										
Benzene	71-43-2	1 s	**0.35 J**	**1700**	**140**	1 U	1 U	**60**	1 U	1 U
Ethylbenzene	100-41-4	5 s	1 U	**1900**	**1200**	1 U	1 U	**910**	1 U	1 U
Toluene	108-88-3	5 s	1 U	**170**	**460**	1 U	1 U	**710**	1 U	1 U
Xylenes (total)	1330-20-7	5 s	**1.8 J**	**2700**	**1200**	**1.5 J**	**1.6 J**	**1200**	3 U	3 U
Total BTEX Compounds (ug/L)	NA	NL	2.15	6470	3000	1.5	1.6	2880	--- U	--- U
Other VOCs (ug/L)										
1,1,1-Trichloroethane	71-55-6	5 s	1 U	100 U	50 U	1 U	1 U	25 U	1 U	1 U
1,1,2,2-Tetrachloroethane	79-34-5	5 s	1 U	100 U	50 U	1 U	1 U	25 U	1 U	1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	5 s	1 U	100 U	50 U	1 U	1 U	25 U	1 U	1 U
1,1,2-Trichloroethane	79-00-5	1 s	1 U	100 U	50 U	1 U	1 U	25 U	1 U	1 U
1,1-Dichloroethane	75-34-3	5 s	1 U	100 U	50 U	1 U	1 U	25 U	1 U	1 U
1,1-Dichloroethene	75-35-4	5 s	1 U	100 U	50 U	1 U	1 U	25 U	1 U	1 U
1,2,4-Trichlorobenzene	120-82-1	5 s	1 U	100 U	50 U	1 U	1 U	25 U	1 U	1 U
1,2-Dibromo-3-chloropropane	96-12-8	0.04 s	1 U	100 U	50 U	1 U	1 U	25 U	1 U	1 U
1,2-Dibromoethane	106-93-4	0.0006 s	1 U	100 U	50 U	1 U	1 U	25 U	1 U	1 U
1,2-Dichlorobenzene	95-50-1	3 s	1 U	100 U	50 U	1 U	1 U	25 U	1 U	1 U
1,2-Dichloroethane	107-06-2	0.6 s	1 U	100 U	50 U	1 U	1 U	25 U	1 U	1 U
1,2-Dichloropropane	78-87-5	1 s	1 U	100 U	50 U	1 U	1 U	25 U	1 U	1 U
1,3-Dichlorobenzene	541-73-1	3 s	1 U	100 U	50 U	1 U	1 U	25 U	1 U	1 U
1,4-Dichlorobenzene	106-46-7	3 s	1 U	100 U	50 U	1 U	1 U	25 U	1 U	1 U
2-Butanone	78-93-3	50 g	5 U	500 U	250 U	5 U	5 U	120 UJ	5 U	5 U
2-Hexanone	591-78-6	50 g	5 U	500 U	250 U	5 U	5 U	120 UJ	5 U	5 U
4-Methyl-2-pentanone	108-10-1	NL	5 U	500 U	250 U	5 U	5 U	120 UJ	5 U	5 U
Acetone	67-64-1	50 g	5 U	500 U	250 U	5 U	5 U	120 UJ	5 U	5 U
Bromodichloromethane	75-27-4	50 g	1 U	100 U	50 U	1 U	1 U	25 U	1 U	1 U
Bromoform	75-25-2	50 g	1 U	100 U	50 U	1 U	1 U	25 U	1 U	1 U
Bromomethane	74-83-9	5 s	1 U	100 U	50 U	1 U	1 U	25 U	1 U	1 U
Carbon disulfide	75-15-0	60 g	**0.33 J**	100 U	50 U	1 U	1 U	25 U	1 U	1 U
Carbon tetrachloride	56-23-5	5 s	1 U	100 U	50 U	1 U	1 U	25 U	1 U	1 U
Chlorobenzene	108-90-7	5 s	1 U	100 U	50 U	1 U	1 U	25 U	1 U	1 U
Chloroethane	75-00-3	5 s	1 U	100 U	50 U	1 U	1 U	25 U	1 U	1 U
Chloroform	67-66-3	7 s	1 U	100 U	50 U	1 U	1 U	**11 J**	1 U	1 U
Chloromethane	74-87-3	5 s	1 U	100 U	50 U	1 U	1 U	25 U	1 U	1 U
cis-1,2-Dichloroethene	156-59-2	5 s	1 U	100 U	50 U	1 U	1 U	25 U	1 U	1 U
cis-1,3-Dichloropropene	10061-01-5	0.4 s	1 U	100 U	50 U	1 U	1 U	25 U	1 U	1 U
Cyclohexane	110-82-7	NL	1 U	100 U	50 U	1 U	1 U	25 U	1 U	1 U
Dibromochloromethane	124-48-1	50 g	1 U	100 U	50 U	1 U	1 U	25 U	1 U	1 U
Dichlorodifluoromethane	75-71-8	5 s	1 U	100 U	50 U	1 U	1 UJ	25 UJ	1 U	1 U
Isopropylbenzene	98-82-8	5 s	1 U	**100**	**70**	1 U	1 U	**45 J**	1 U	1 U
Methyl acetate	79-20-9	NL	1 U	100 U	50 U	1 U	1 U	25 UJ	1 U	1 U
Methyl tert-butyl ether	1634-04-4	10 g	1 U	100 U	50 U	1 U	1 U	25 U	1 U	1 U
Methylcyclohexane	108-87-2	NL	1 U	100 U	50 U	1 U	1 U	25 U	1 U	1 U
Methylene chloride	75-09-2	5 s	1 U	100 U	50 U	1 U	1 U	25 U	1 U	1 U
Styrene	100-42-5	5 s	1 U	100 U	50 U	1 U	1 U	25 U	1 U	1 U
Tetrachloroethene	127-18-4	5 s	1 U	100 U	50 U	1 U	1 U	25 U	1 U	1 U
trans-1,2-Dichloroethene	156-60-5	5 s	1 U	100 U	50 U	1 U	1 U	25 U	1 U	1 U
trans-1,3-Dichloropropene	10061-02-6	0.4 s	1 U	100 U	50 U	1 U	1 U	25 U	1 U	1 U
Trichloroethene	79-01-6	5 s	1 U	100 U	50 U	1 U	1 U	25 U	1 U	1 U
Trichlorofluoromethane	75-69-4	5 s	1 U	100 U	50 U	1 U	1 U	25 U	1 U	1 U
Vinyl chloride	75-01-4	2 s	1 U	100 U	50 U	1 U	1 U	25 UJ	1 U	1 U
Total VOCs (ug/L)	NA	NL	2.48	6570	3070	1.5	1.6	2936	--- U	--- U

Notes:
NL = Not Listed
NA = Not Applicable
U = The material was analyzed for but not detected at, or above, the reporting limit. The associated numerical value is the sample quantitation limit.
J = The associated numerical value is an estimated quantity.
Bold value - compound detected at concentration greater than the reporting limit
Yellow Shading = Compound detected at a concentration greater than the standard or guidance value.
s = Standard Value
g = Guidance Value
Note 1 - Guidance or Standard Values - NYSDEC, Division of Water, TOGS (1.1.1) [NYSDEC, 1998, with addenda through 2004].
Note 2 - Total VOCs includes BTEX compounds.

Table 2-6
Groundwater SVOC Results - 2008
Schenectady Clinton Street MGP Site

Location ID Sample Date Lab Sample ID	CAS #	NYSDEC Groundwater Guidance or Standard Value (Note 1)	MW12 12/10/2008 C8L110371002		MW12D 12/10/2008 C8L110371003		MW13D 12/10/2008 C8L110371009		MW14 12/11/2008 C8L120342003		MW14 DUPLICATE C8L120342004		MW14D 12/11/2008 C8L120342002		MW16D 12/10/2008 C8L110371011		MW16D DUPLICATE C8L110371012	
PAH Compounds (ug/L)																		
2-Methylnaphthalene	91-57-6	NL	2	U	**360**		**120**		1.9	U	1.9	U	**370**		2	U	2.1	U
Acenaphthene	83-32-9	20 g	2	U	**81**		**160**		**1.5**	**J**	**1.6**	**J**	**140**		2	U	2.1	U
Acenaphthylene	208-96-8	NL	2	U	**74**		20	U	1.9	U	1.9	U	**14**		2	U	2.1	U
Anthracene	120-12-7	50 g	2	U	**7.1**		**11**	**J**	1.9	U	1.9	U	**20**		2	U	2.1	U
Benzo(a)anthracene	56-55-3	0.002 g	2	U	**0.54**	**J**	20	U	1.9	U	1.9	U	**10**		2	U	2.1	U
Benzo(a)pyrene	50-32-8	ND	2	U	1.9	U	20	U	1.9	U	1.9	U	**8.9**		2	U	2.1	U
Benzo(b)fluoranthene	205-99-2	0.002 g	2	U	1.9	U	20	U	1.9	U	1.9	U	**7.4**		2	U	2.1	U
Benzo(ghi)perylene	191-24-2	NL	2	U	1.9	U	20	U	1.9	U	1.9	U	**6.5**		2	U	2.1	U
Benzo(k)fluoranthene	207-08-9	0.002 g	2	U	1.9	U	20	U	1.9	U	1.9	U	**6.2**		2	U	2.1	U
Chrysene	218-01-9	0.002 g	2	U	**0.42**	**J**	20	U	1.9	U	1.9	U	**10**		2	U	2.1	U
Dibenz(a,h)anthracene	53-70-3	NL	2	U	1.9	U	20	U	1.9	U	1.9	U	**4.9**		2	U	2.1	U
Fluoranthene	206-44-0	50 g	2	U	**2.9**		20	U	1.9	U	1.9	U	**15**		2	U	2.1	U
Fluorene	86-73-7	50 g	2	U	**34**		**32**		**0.38**	**J**	1.9	U	**56**		2	U	2.1	U
Indeno(1,2,3-cd)pyrene	193-39-5	0.002 g	2	U	1.9	U	20	U	1.9	U	1.9	U	**5.9**		2	U	2.1	U
Naphthalene	91-20-3	10 g	2	U	**4400**		**1600**		1.9	U	1.9	U	**2500**		**1.4**	**J**	2.1	U
Phenanthrene	85-01-8	50 g	2	U	**39**		**56**		**0.45**	**J**	**0.4**	**J**	**82**		2	U	2.1	U
Pyrene	129-00-0	50 g	2	U	**3.2**		20	U	1.9	U	1.9	U	**20**		2	U	2.1	U
Total PAHs (ug/L)	NA	NL	---	U	5002.16		1979		2.33		2		3276.8		1.4		---	U
Other SVOCs (ug/L)																		
1,1'-Biphenyl	92-52-4	5 s	9.8	U	**29**		**34**	**J**	9.7	U	9.6	U	**39**		10	U	10	U
2,2'-oxybis(1-Chloropropane)	108-60-1	NL	2	U	1.9	U	20	U	1.9	U	1.9	U	1.9	U	2	U	2.1	U
2,4,5-Trichlorophenol	95-95-4	NL	9.8	U	9.4	U	98	U	9.7	U	9.6	U	9.5	U	10	U	10	U
2,4,6-Trichlorophenol	88-06-2	NL	9.8	U	9.4	U	98	U	9.7	U	9.6	U	9.5	U	10	U	10	U
2,4-Dichlorophenol	120-83-2	5 s	2	U	1.9	U	20	U	1.9	U	1.9	U	1.9	U	2	U	2.1	U
2,4-Dimethylphenol	105-67-9	50 g	9.8	U	9.4	U	98	U	9.7	U	9.6	U	9.5	U	10	U	10	U
2,4-Dinitrophenol	51-28-5	10 g	49	UJ	47	UJ	490	UJ	48	UJ	48	UJ	48	UJ	51	UJ	52	UJ
2,4-Dinitrotoluene	121-14-2	5 s	9.8	U	9.4	U	98	U	9.7	U	9.6	U	9.5	U	10	U	10	U
2,6-Dinitrotoluene	606-20-2	5 s	9.8	U	9.4	U	98	U	9.7	U	9.6	U	9.5	U	10	U	10	U
2-Chloronaphthalene	91-58-7	10 g	2	U	1.9	U	20	U	1.9	U	1.9	U	1.9	U	2	U	2.1	U
2-Chlorophenol	95-57-8	NL	9.8	U	9.4	U	98	U	9.7	U	9.6	U	9.5	U	10	U	10	U
2-Methylphenol	95-48-7	NL	9.8	U	9.4	U	98	U	9.7	U	9.6	U	9.5	U	10	U	10	U
2-Nitroaniline	88-74-4	5 s	49	U	47	U	490	U	48	U	48	U	48	U	51	U	52	U
2-Nitrophenol	88-75-5	NL	9.8	U	9.4	U	98	U	9.7	U	9.6	U	9.5	U	10	U	10	U
3,3'-Dichlorobenzidine	91-94-1	5 s	9.8	UJ	9.4	UJ	98	U	9.7	U	9.6	U	9.5	U	10	U	10	UJ
3-Nitroaniline	99-09-2	5 s	49	UJ	47	UJ	490	UJ	48	U	48	U	48	U	51	UJ	52	UJ
4,6-Dinitro-2-methylphenol	534-52-1	NL	49	UJ	47	UJ	490	UJ	48	U	48	U	48	U	51	UJ	52	UJ
4-Bromophenyl phenyl ether	101-55-3	NL	9.8	U	9.4	U	98	U	9.7	U	9.6	U	9.5	U	10	U	10	U
4-Chloro-3-methylphenol	59-50-7	NL	9.8	U	9.4	U	98	U	9.7	U	9.6	U	9.5	U	10	U	10	U
4-Chloroaniline	106-47-8	5 s	9.8	UJ	9.4	UJ	98	UJ	9.7	U	9.6	U	9.5	U	10	UJ	10	UJ
4-Chlorophenyl phenyl ether	7005-72-3	NL	9.8	U	9.4	U	98	U	9.7	U	9.6	U	9.5	U	10	U	10	U
4-Methylphenol	106-44-5	NL	9.8	U	**0.88**	**J**	98	U	9.7	U	9.6	U	9.5	U	10	U	10	U
4-Nitroaniline	100-01-6	5 s	49	UJ	47	UJ	490	UJ	48	U	48	U	48	U	51	UJ	52	UJ
4-Nitrophenol	100-02-7	NL	49	U	47	U	490	U	48	U	48	U	48	U	51	U	52	U
Acetophenone	98-86-2	NL	9.8	U	**12**		98	U	9.7	U	9.6	U	9.5	U	10	U	10	U
Atrazine	1912-24-9	7.5 s	9.8	U	9.4	U	98	U	9.7	U	9.6	U	9.5	U	10	U	10	U
Benzaldehyde	100-52-7	NL	9.8	UJ	9.4	UJ	98	UJ	9.7	U	9.6	U	9.5	U	10	UJ	10	UJ
bis(2-Chloroethoxy)methane	111-91-1	5 s	9.8	U	9.4	U	98	U	9.7	U	9.6	U	9.5	U	10	U	10	U
bis(2-Chloroethyl) ether	111-44-4	1 s	2	U	1.9	U	20	U	1.9	U	1.9	U	1.9	U	2	U	2.1	U
bis(2-Ethylhexyl) phthalate	117-81-7	5 s	9.8	UJ	**1**	**J**	98	UJ	9.7	U	9.6	U	**4**	**J**	10	UJ	10	UJ
Butyl benzyl phthalate	85-68-7	50 g	9.8	U	9.4	U	98	U	9.7	U	9.6	U	9.5	U	10	U	10	U
Caprolactam	105-60-2	NL	49	U	47	U	490	U	48	U	48	U	48	U	51	U	52	U
Carbazole	86-74-8	NL	2	U	**5.2**		20	U	1.9	U	1.9	U	**7.6**		2	U	2.1	U
Dibenzofuran	132-64-9	NL	9.8	U	**4.8**	**J**	98	U	9.7	U	9.6	U	**5.6**	**J**	10	U	10	U
Diethyl phthalate	131-11-3	50 g	9.8	U	9.4	U	98	U	9.7	U	9.6	U	9.5	U	10	U	10	U
Dimethyl phthalate	84-66-2	50 g	9.8	U	**1.8**	**J**	**27**	**J**	9.7	U	9.6	U	**5.3**	**J**	10	U	10	U
Di-n-butyl phthalate	84-74-2	50 s	9.8	U	9.4	U	98	U	9.7	U	9.6	U	**0.74**	**J**	10	U	10	U
Di-n-octyl phthalate	117-84-0	NL	9.8	U	9.4	U	98	U	9.7	U	9.6	U	**2.7**	**J**	10	U	10	U
Hexachlorobenzene	118-74-1	0.4 s	2	U	1.9	U	20	U	1.9	U	1.9	U	1.9	U	2	U	2.1	U
Hexachlorobutadiene	87-68-3	0.5 s	2	U	1.9	U	20	U	1.9	U	1.9	U	1.9	U	2	U	2.1	U
Hexachlorocyclopentadiene	77-47-4	5 s	9.8	UJ	9.4	UJ	98	UJ	9.7	U	9.6	U	9.5	U	10	UJ	10	UJ
Hexachloroethane	67-72-1	5 s	9.8	U	9.4	U	98	U	9.7	U	9.6	U	9.5	U	10	U	10	U
Isophorone	78-59-1	50 g	9.8	U	9.4	U	98	U	9.7	U	9.6	U	9.5	U	10	U	10	U
Nitrobenzene	98-95-3	0.4	2	U	1.9	U	20	U	1.9	U	1.9	U	1.9	U	2	U	2.1	U
N-Nitrosodi-n-propylamine	621-64-7	50 g	2	U	1.9	U	20	U	1.9	U	1.9	U	1.9	U	2	U	2.1	U
N-Nitrosodiphenylamine	86-30-6	50 g	2	U	1.9	U	20	U	1.9	U	1.9	U	1.9	U	2	U	2.1	U
Pentachlorophenol	87-86-5	1 s	9.8	U	9.4	U	98	U	9.7	U	9.6	U	9.5	U	10	U	10	U
Phenol	108-95-2	1 s	2	U	**7.9**		20	U	1.9	U	1.9	U	1.9	U	2	U	2.1	U
Total SVOCs (ug/L) (Note 2)	NA	NL	---	U	5064.74		2040		2.33		2		3341.74		1.4		---	U

Notes:
NL = Not Listed
NA = Not Applicable
U = The material was analyzed for but not detected at, or above, the reporting limit. The associated numerical value is the sample quantitation limit.
J = The associated numerical value is an estimated quantity.
Bold value - compound detected at concentration greater than the reporting limit
Yellow Shading = Compound detected at a concentration greater than the standard or guidance value.
s = Standard Value
g = Guidance Value
Note 1 - Guidance or Standard Values - NYSDEC, Division of Water, TOGS (1.1.1) [NYSDEC, 1998, with addenda through 2004].
Note 2 - Total SVOCs includes PAH compounds.

Table 2-7
Groundwater Metals and Cyanide Results - 2008
Schenectady Clinton Street MGP Site

Location ID Sample Date Lab Sample ID	CAS #	NYSDEC Groundwater Guidance or Standard Value (Note 1)	MW12 12/10/2008 C8L110371002		MW12D 12/10/2008 C8L110371003		MW13D 12/10/2008 C8L110371009		MW14 12/11/2008 C8L120342003		MW14 DUPLICATE C8L120342004		MW14D 12/11/2008 C8L120342002		MW16D 12/10/2008 C8L110371011		MW16D DUPLICATE C8L110371012	
Metals (ug/L)																		
Aluminum	7429-90-5	NL	**914**	**J+**	200	U	200	U	**35.2**	**J**	**31**	**J**	**306**		**235**	**J+**	**204**	**J+**
Antimony	7440-36-0	3 s	10	U	10	U	10	U	**1.8**	**J**	10	U	10	U	10	U	10	U
Arsenic	7440-38-2	25 s	**10**		**5.4**	**J**	10	U	**11**		**9.9**	**J**	**2.2**	**J**	10	U	10	U
Barium	7440-39-3	1,000 s	200	U	200	U	200	U	**164**	**J**	**166**	**J**	**36.1**	**J**	200	U	200	U
Beryllium	7440-41-7	3 g	4	U	4	U	4	U	4	U	4	U	4	U	4	U	4	U
Cadmium	7440-43-9	5 s	5	U	**0.23**	**J**	5	U	5	U	5	U	5	U	5	U	5	U
Calcium	7440-70-2	NL	**150000**		**175000**		**187000**		**122000**		**121000**		**61000**		**175000**		**175000**	
Chromium	7440-47-3	50 s	**1.3**	**J**	**1.1**	**J**	5	U	5	U	5	U	5	U	5	U	5	U
Cobalt	7440-48-4	NL	50	U	**0.48**	**J**	50	U	50	UJ	50	UJ	50	U	50	U	**0.56**	**J**
Copper	7440-50-8	200 s	25	U	25	U	25	U	25	U	25	U	25	U	25	U	25	U
Iron	7439-89-6	300 s	**17100**		**14500**		**2110**		**14700**		**14800**		**614**		**435**		**371**	
Lead	7439-92-1	25 s	**3.4**		3	U	3	U	3	U	3	U	3	U	3	U	3	U
Magnesium	7439-95-4	35,000 s	**23500**		**42400**		**36000**		**14400**		**14300**		**10800**		**36800**		**37000**	
Manganese	7439-96-5	300 s	**2070**		**2610**		**1460**		**1300**		**1290**		**254**		**561**		**560**	
Mercury	7439-97-6	0.7 s	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Nickel	7440-02-0	100 s	**1.9**	**J**	**1.5**	**J**	**1.2**	**J**	40	U	40	U	**7.2**	**J**	**1**	**J**	**0.89**	**J**
Potassium	7440-09-7	NL	**12900**		**14800**		**6060**		**5400**		**5410**		**4470**	**J**	**16600**		**16700**	
Selenium	7782-49-2	10 s	5	U	5	U	5	U	**4.5**	**J**	5	U	5	U	5	U	5	U
Silver	7440-22-4	50 s	5	U	**0.85**	**J**	5	U	5	U	5	U	5	U	5	U	5	U
Sodium	7440-23-5	20,000 s	**152000**		**154000**		**116000**		**287000**		**288000**		**53900**		**157000**		**158000**	
Thallium	7440-28-0	0.5 g	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Vanadium	7440-62-2	NL	50	U	50	U	50	U	50	U	50	U	50	U	**2.9**	**J**	**2.6**	**J**
Zinc	7440-66-6	2,000 g	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U
Total Cyanide (ug/L)	57-12-5	200 s	10	U	**26.2**		**14.5**		**5.7**	**J**	**5.7**	**J**	**3.2**	**J**	**34.7**		**36.1**	

Notes:
NL = Not Listed
NA = Not Applicable
U = The material was analyzed for but not detected at, or above, the reporting limit. The associated numerical value is the sample quantitation limit.
J = The associated numerical value is an estimated quantity.
J+ = The result is an estimated quantity, likely to be biased high. The associated numerical value is the approximate concentration of the analyte in the sample.
Bold value - compound detected at concentration greater than the reporting limit
Yellow Shading = Compound detected at a concentration greater than the standard or guidance value.
s = Standard Value
g = Guidance Value
Note 1 - Guidance or Standard Values - NYSDEC, Division of Water, TOGS (1.1.1) [NYSDEC, 1998, with addenda through 2004].

Appendix E

2011 NAPL Removal Program Report (Electronic Only)

March 2, 2012

Mr. John Spellman
New York State Department of Environmental Conservation
Bureau of Remedial Action
Division of Environmental Remediation
625 Broadway, 11th Floor
Albany, New York 12233-7010

Geotechnical
Environmental
Water Resources
Ecological

Subject: Pilot NAPL Recovery Program, Annual Report
Schenectady Clinton Street Former MGP Site, OU1 and OU2
NYSDEC Site #V00474
Voluntary Consent Order Index #: D0-0001-0011

Dear Mr. Spellman:

National Grid, pursuant to a Voluntary Consent Order between National Grid and the New York State Department of Environmental Conservation (NYSDEC), is conducting Remedial Investigations (RI) at the Clinton Street Non-Owned Former Manufactured Gas Plant (MGP) Site in Schenectady, New York (Figure 1).

At the request of the NYSDEC, in a letter dated June 23, 2010 (NYSDEC, 2010), National Grid gauges, monitors, and recovers non-aqueous phase liquid (NAPL) in wells in Operable Units 1 and 2 (OU1 and OU2) at the Site (Figure 2). This effort is required to establish the feasibility and practicality of a more formal NAPL recovery program.

This letter report describes NAPL gauging, monitoring, and recovery from October 2010 through December 2011 (since the Pre-Design Investigation [PDI] Report of Findings [GEI, 2011b], and the June 24, 2011 Pilot NAPL Recovery Program Progress Report [GEI, 2011a]).

Site Background and Description

The Clinton Street, Non-Owned Manufactured Gas Plant (MGP) operated for about 48 years (ca. 1866 to 1914) on the east side of Broadway (Figure 2), using coal to produce gas, which was distributed to consumers through buried mains. Several residuals could be generated during gas production process including coal tar, coke, and ash. All three residuals have been observed in limited amounts at the site.

OU1 consists of the area of the former MGP process operations, which is now occupied by the Schenectady Municipal Housing Authority (SMHA) and a portion of Clinton Street. The SMHA provides subsidized public housing for elderly or handicapped adults in several buildings at the site. One NAPL recovery well (SB-44/MW-8D (08)) is located on the east side of Broadway in OU1 (Figure 2).

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OU2 consists of several roadways and portions of two city blocks to the west of the SMHA property. The NAPL recovery area in OU2 is on the 318, 330, and 340 Broadway properties. Depth to groundwater ranges from 7 to 8 feet below ground surface (bgs), with groundwater flow generally from east to west. Two monitoring wells with accumulated NAPL (SB-30/ MW12D(08) and SB-43/MW14D(08)) and one NAPL recovery well (SB-117/RW-1(10)) are located on the west side of Broadway in OU2 (Figure 2).

Previous Investigations

The OU1 RI was substantially completed by AECOM in June 2009 (AECOM, 2009). NYSDEC approval of the OU1 RI report is pending. The OU1 RI found MGP impacts beneath the parking lot area of the SMHA property, and the remnants of several subsurface MGP structures. The OU2 RI is on-going, but MGP impacts are present at depth under Broadway and west of Broadway. NAPL has accumulated in wells SB-44/MW-8D (08), SB-19/MW-8S(06), SB-30/MW-12D(08), SB-43/MW-14D(08), and SB-117/RW-1(10). SB-117/RW-1(10) is a pilot NAPL recovery well that was installed near SB-30/MW-12D (08) as part of the PDI for the NAPL Recovery Interim Remedial Measure (IRM). The PDI results were provided to NYSDEC in the Report of Findings (GEI, 2011b).

Objective

The objective was to continue NAPL gauging and recovery in the wells along Broadway that have accumulated NAPL, in order to assess the feasibility of a more formal NAPL recovery program. The gauging and recovery was continued through 2011, in accordance with the PDI Report of Findings for NAPL Recovery (GEI, 2011b).

Field Work

NAPL gauging and recovery was performed as many as 18 times (depending on the recharge rates at NAPL wells). Each monitoring well was gauged with an oil/water interface probe for groundwater level, water/NAPL interface, and bottom of the well. Measureable NAPL was then pumped with a peristaltic pump at approximately 1/4 gallons per minute through 3/8-inch tubing, which remained in the well. The NAPL was pumped into a 5 gallon bucket until the discharge became more water than NAPL. Recently, we have begun to switch from the 3/8-inch tubing to a 1/2-inch Teflon™ lined tubing, which does not clog as easily as the 3/8-inch tubing.

All NAPL collected over the time period was placed in a 55-gallon drum and stored in the secure investigation-derived waste (IDW) area. The drummed NAPL was subsequently transported from the site for treatment and disposal by Clean Harbors, Inc.

Gauging and recovery data for the pilot NAPL recovery wells are included in Tables 1 through 4 and are detailed below. Volume and foot recoveries for each well are shown in Figures 3 and 4, respectively.

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- **Table 1 - SB-44/MW-8D(08)** – This well contained 2.25 feet of NAPL the first time it was gauged in October 2010. The NAPL was removed at that time, as was additional NAPL until November 2010. Continuous gauging since then has not resulted in the presence of measurable NAPL. This well now has little or no NAPL recharge.
- **Table 2 - SB-30/MW-12D(08)** – This well is close to well SB-117/RW-1(10). It has not been pumped since June 2011 to avoid any potential effect at well SB-117/RW-1(10). However, it exhibited moderate potential for NAPL recharge, prior to June 2011, taking approximately 1 month to fully recharge.
- **Table 3 - SB-43/MW-14D(08)** – This well showed high potential for recharge; almost fully recharged in 3 hours between gauging and recovery events on June 9, 2011. Recharge curves (Figures 5 and 6) were developed for this well. Figure 5 depicts four NAPL recovery cycles after removal on October 4, 2011. Figure 6 depicts three NAPL recovery cycles after removal on October 6, 2011.
- **Table 4 - SB-117/RW-1(10)** – This well was installed specifically as a NAPL recovery well in a location where tar saturation was apparent in the subsurface. It has not, however, generated recoverable NAPL in volumes that were expected based on tar saturation in the subsurface. In addition, sediment mixing in the sump has made it difficult to determine NAPL thickness. NAPL blebs have been observed with well cameras.

  In September 2011, the well was developed with jetting and pumping. This resulted in a reduction of sediment in the well sump. Further gauging will need to be performed in order to assess the effectiveness of the development.
- **SB-19/MW-8S(06)** – This well was gauged in 2010, and contained a very thick, tar-like NAPL. The NAPL is so viscous it is not recoverable. Gauging and recovery are no longer being attempted at this well.

Conclusions and Recommendations

Conclusions

The 6-inch recovery well, SB-117/RW-1(10), did not produce as much NAPL as anticipated. Additional well development was conducted at SB-117/RW-1(10) in September 2011 to attempt to increase the rate of flow of NAPL into the well. The development activities included pumping out sediment collected in the sump and surging the well to remove additional fine-grained material that was thought to be present in the sand pack surrounding the screen.

The NYSDEC has suggested that there may be a relationship between SB-44/MW-8D(08) and SB-43/MW-14D(08). SB-43/MW-14D(08) is located on the west side of Broadway, and SB-44/MW-8D(08) is located on the east side of Broadway. The zone of NAPL saturation for each well is at approximately the same depth.

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Preliminary results indicate a high potential for recharge from SB-43/MW-14D (08). During September, frequent gauging and recovery of SB-43/MW-14D (08) was performed over 2 consecutive days. This allowed the development of short-term recharge curves (Figures 5 and 6). The curves indicate the potential exists for a more rigorous recovery program for MW-14, perhaps with the implementation of a more advanced recovery system.

Recommendations

- We recommend continued gauging of SB-117/RW-1(10) through 2012 to evaluate the effectiveness of the well development. If NAPL begins to accumulate in this well, then recovery will proceed.
- We recommend continued gauging and NAPL removal through 2012 at wells SB-30/MW-12D(08) and SB-43/MW-14D(08), both of which have shown adequate recovery potential.
- Monitoring should continue at SB-44/MW-8D(08) in order to evaluate if a relationship exists between SB-43/MW-14D(08) and SB-44/MW-8D(08).
- Additional longer term recharge recovery curves should be developed through 2012 for SB-43/MW-14D(08) prior to discussion of advanced recovery technologies.

An annual report of findings will be prepared in early 2013, with further conclusions and recommendations.

Please feel free to contact me at (607) 216-8956 with any questions you may have regarding the information provided in this report. Please direct the Department's official comments or response to Bill Jones, P.E., National Grid's Project Coordinator for the site.

Sincerely,

GEI CONSULTANTS, INC.

John T. Finn

John T. Finn, P.E.
Senior Engineer

JTF:mlr

Attachments: Table 1 – NAPL Recovery Logs - SB-44/MW-8D(08)
Table 2 – NAPL Recovery Logs - SB-30/MW-12D(08)
Table 3 – NAPL Recovery Logs - SB-43/MW-14D(08)
Table 4 – NAPL Recovery Logs - SB-117/RW-1(10)
Figure 1 – Site Location
Figure 2 – Boring Locations
Figure 3 – NAPL Recovery Graph
Figure 4 – NAPL Gauging Graph
Figure 5 – SB-43/MW-14D(08) NAPL Recharge Curve (October 4, 2011)
Figure 6 – SB-43/MW-14D(08) NAPL Recharge Curve (October 6, 2011)

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References

AECOM, 2009. Remedial Investigation Report, Operable Unit 1, Schenectady (Clinton Street) Non-Owned Former MGP Site, June 28, 2009.

GEI, 2011a. Pilot NAPL Recovery Program, Schenectady (Clinton Street) OU2 Non-Owned Former MGP Site, June 24, 2011.

GEI, 2011b. Pre-Design Investigation Report of Findings – NAPL Recovery, Schenectady (Clinton Street) OU2 Non-Owned Former MGP Site, March 25, 2011.

NYSDEC, 2010. Letter from Charles Post of NYSDEC to Edward Neuhauser of National Grid. "NAPL Extraction form Monitoring Wells Located in Operable Unit 1 and 2", June 23, 2010.

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Tables

Table 1
Schenectady Clinton Street Non-Owned Former MGP Site
NAPL Recovery Logs
SB-44/MW-8D(08)

Date	Measured Thickness (feet)	Volume Removed (gallons)	Time Between Events (days)	Cumulative volume (gallons)	Notes
10/25/2010	2.25	1.00	-	1	
11/2/2010	0.75	0.00	8	1	
11/10/2010	1.22	0.53	8	1.53	
11/11/2010	0.75	1.00	1	2.53	
11/12/2010	2.58	1.00	1	3.53	
12/16/2010	0.20	0.00	34	3.53	Recharge Diminished
3/25/2011	0.25	0.00	99	3.53	Recharge Diminished
5/9/2011	0.25	0.00	45	3.53	Recharge Diminished
6/9/2011	0.20	0.00	31	3.53	Recharge Diminished

Table 2
Schenectady Clinton Street Non-Owned Former MGP Site
NAPL Recovery Logs
SB-30/MW-12D(08)

Date	Measured Thickness (feet)	Volume Removed (gallons)	Time Between Events (days)	Cumulative volume (gallons)	Notes
10/25/2010	3.50	1.00	-	1	
11/2/2010	2.84	0.00	8	1	
11/10/2010	0.96	0.75	8	1.75	
11/11/2010	2.20	1.05	1	2.8	
11/12/2010	1.30	0.00	1	2.8	
12/16/2010	3.50	1.25	34	4.05	
3/25/2011	3.60	1.25	99	5.3	
5/9/2011	3.40	1.25	45	6.55	
6/9/2011	3.70	1.00	31	7.55	
10/4/2011	3.50	0.00	117	7.55	Not recovered to allow RW-1 to develop
10/6/2011	3.70	0.00	2	7.55	Not recovered to allow RW-1 to develop
12/1/2011	3.70	0.00	56	7.55	Not recovered to allow RW-1 to develop

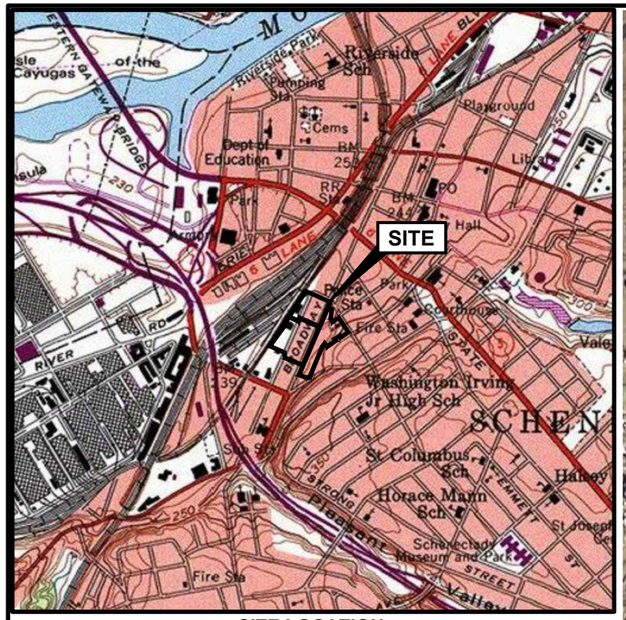
Table 3
Schenectady Clinton Street Non-Owned Former MGP Site
NAPL Recovery Logs
SB-43/MW-14D(08)

Date	Measured Thickness (feet)	Volume Removed (gallons)	Time Between Events (days)	Cumulative volume (gallons)	Notes
10/25/2010	3.9	2.54	-	2.54	
11/2/2010	5.28	3.44	8	5.99	
11/10/2010	4.4	2.87	8	8.86	
11/11/2010	6	3.91	1	12.77	
11/12/2010	5.5	3.59	1	16.36	
12/16/2010	5.29	3.45	34	19.81	
3/25/2011	5.60	3.65	99	23.47	
5/9/2011	5.40	3.52	45	26.99	
6/9/2011	5.31	3.46	32	30.46	
6/9/2011	4.60	3.00	0.11	33.46	
10/4/2011	5.30	3.46	116.36	36.91	Developing NAPL Recover Curve 1-See Fig 5
10/4/2011	3.80	2.48	0	39.39	Developing NAPL Recover Curve 1-See Fig 5
10/4/2011	4.00	2.61	0	42.00	Developing NAPL Recover Curve 1-See Fig 5
10/4/2011	2.40	1.57	0	43.57	Developing NAPL Recover Curve 1-See Fig 5
10/6/2011	4.20	2.74	2	46.31	Developing NAPL Recover Curve 2-See Fig 6
10/6/2011	3.90	2.54	0	48.85	Developing NAPL Recover Curve 2-See Fig 6
10/6/2011	3.50	2.28	0	51.14	Developing NAPL Recover Curve 2-See Fig 6
12/1/2011	4.20	2.74	56	53.88	

Table 4
Schenectady Clinton Street Non-Owned Former MGP Site
NAPL Recovery Logs
SB-117/RW-1(10)

Date	Measured Thickness (feet)	Volume Removed (gallons)	Time Between Events (days)	Cumulative volume (gallons)	Notes
11/12/2010	0	0	-	0	
12/16/2010	0.3	0.5	34	0.5	
3/25/2011	0.10	0.00	99	0.5	
5/9/2011	0.10	0.00	45	0.5	
6/9/2011	0.10	0.0	31	0.5	
10/4/2011	0.10	0.00	117	0.5	Well Development
12/1/2011	0.30	0.00	58	0.5	

Figures



SITE LOCATION

0 200

SCALE, FEET



0 120 240

SCALE, FEET

SOURCES:

1. SURVEY TITLED: *LANDS OF NIAGARA MOHAWK POWER CORPORATION (FORMER MGP SITE),* BROADWAY, CITY OF SCHENECTADY - SCHENECTADY COUNTY, STATE OF NEW YORK, PREPARED BY DELTA ENGINEERS, ARCHITECTS, & LAND SURVEYORS, VERNON, NY, SCALE: 1" = 50', DATE: NOVEMBER 12, 2009, LAST REVISED: NOVEMBER 23, 2010.
2. AERIAL PHOTOGRAPH OBTAINED FROM NEW YORK INTERACTIVE MAPPING GATEWAY (www1.nysgis.state.ny.us), PHOTO TAKEN APRIL 2007, RESOLUTION: 1 FOOT, ACCESSED ON 03/16/11.
3. TOPOGRAPHIC MAP CREATED WITH TOPO! ® © 2001 NATIONAL GEOGRAPHIC (www.nationalgeographic.com/topo)

OU2 PILOT NAPL RECOVERY PROGRAM
CLINTON STREET FORMER MGP SITE
SCHENECTADY, NEW YORK

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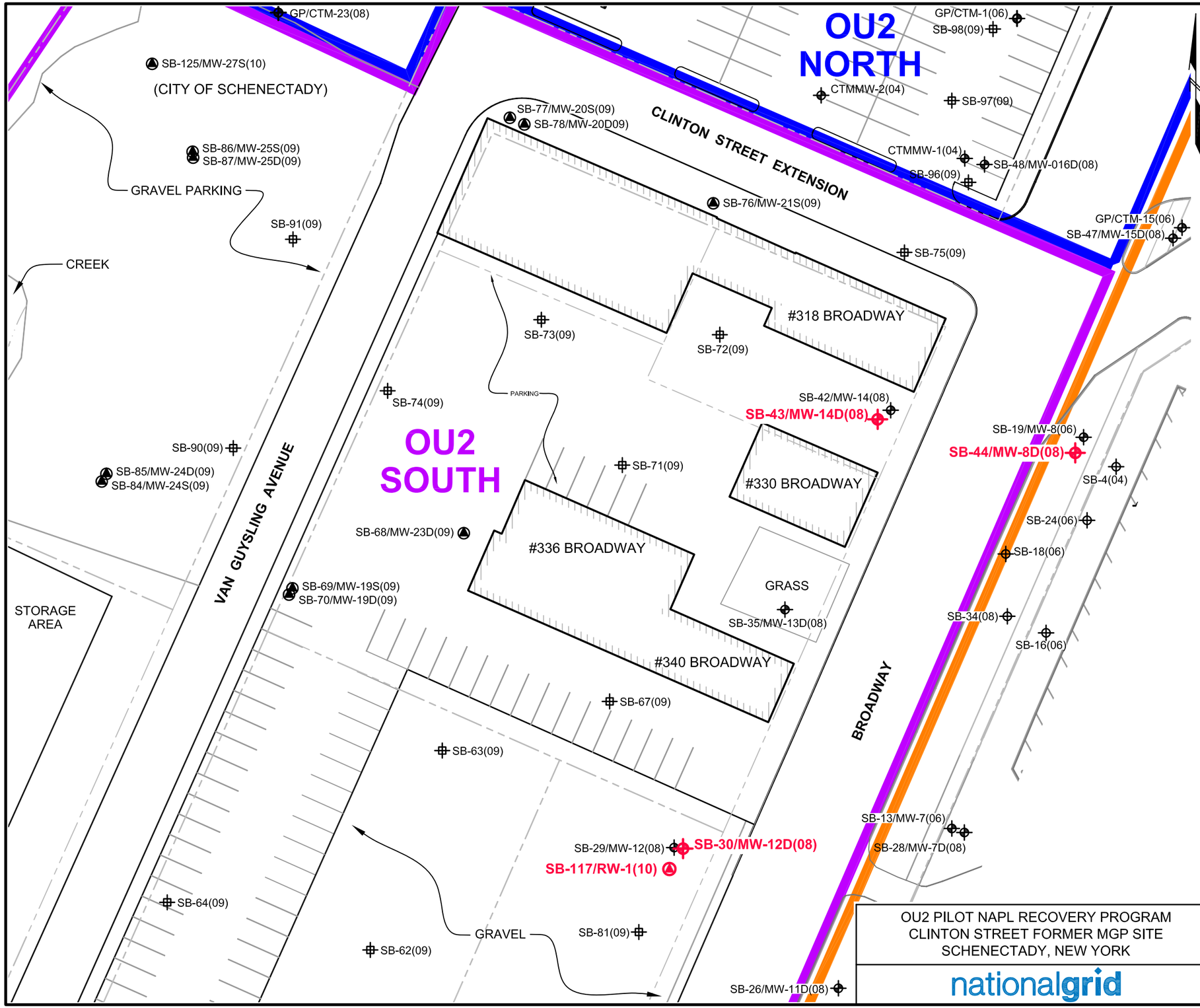
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SITE LOCATION MAP

January 2012 Figure 1

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LEGEND:

	PROPERTY BOUNDARY
	EXISTING BUILDING
SB-29/MW-12(08) SB-117/RW-1(10)	PILOT NAPL RECOVERY WELLS
SB-100(10)	PRE-DESIGN INVESTIGATION SOIL BORING (GEI)
SB-84/MW-24S(09)	SOIL BORING/MONITORING WELL (GEI)
CTMMW-1(04) GP/CTM-20(08)	SOIL BORING/MONITORING WELL (CT MALE)
SB-48/MW-016D(08)	SOIL BORING/MONITORING WELL (AECOM)
SB-96(09)	SOIL BORING (GEI)
SB-16(06)	SOIL BORING (LIGHTSHIP ENGINEERING)
(04), (06), (08), (09), (10)	YEAR INSTALLED

NOTE:

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SOURCE:

SURVEY TITLED: *LANDS OF NIAGARA MOHAWK POWER CORPORATION (FORMER MGP SITE)*, BROADWAY, CITY OF SCHENECTADY - SCHENECTADY COUNTY, STATE OF NEW YORK, PREPARED BY DELTA ENGINEERS, ARCHITECTS, & LAND SURVEYORS, VERNON, NY, SCALE: 1" = 50',
DATE: NOVEMBER 12, 2009, LAST REVISED: NOVEMBER 23, 2010.

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SCALE, FEET

OU2 PILOT NAPL RECOVERY PROGRAM
CLINTON STREET FORMER MGP SITE
SCHENECTADY, NEW YORK

nationalgrid

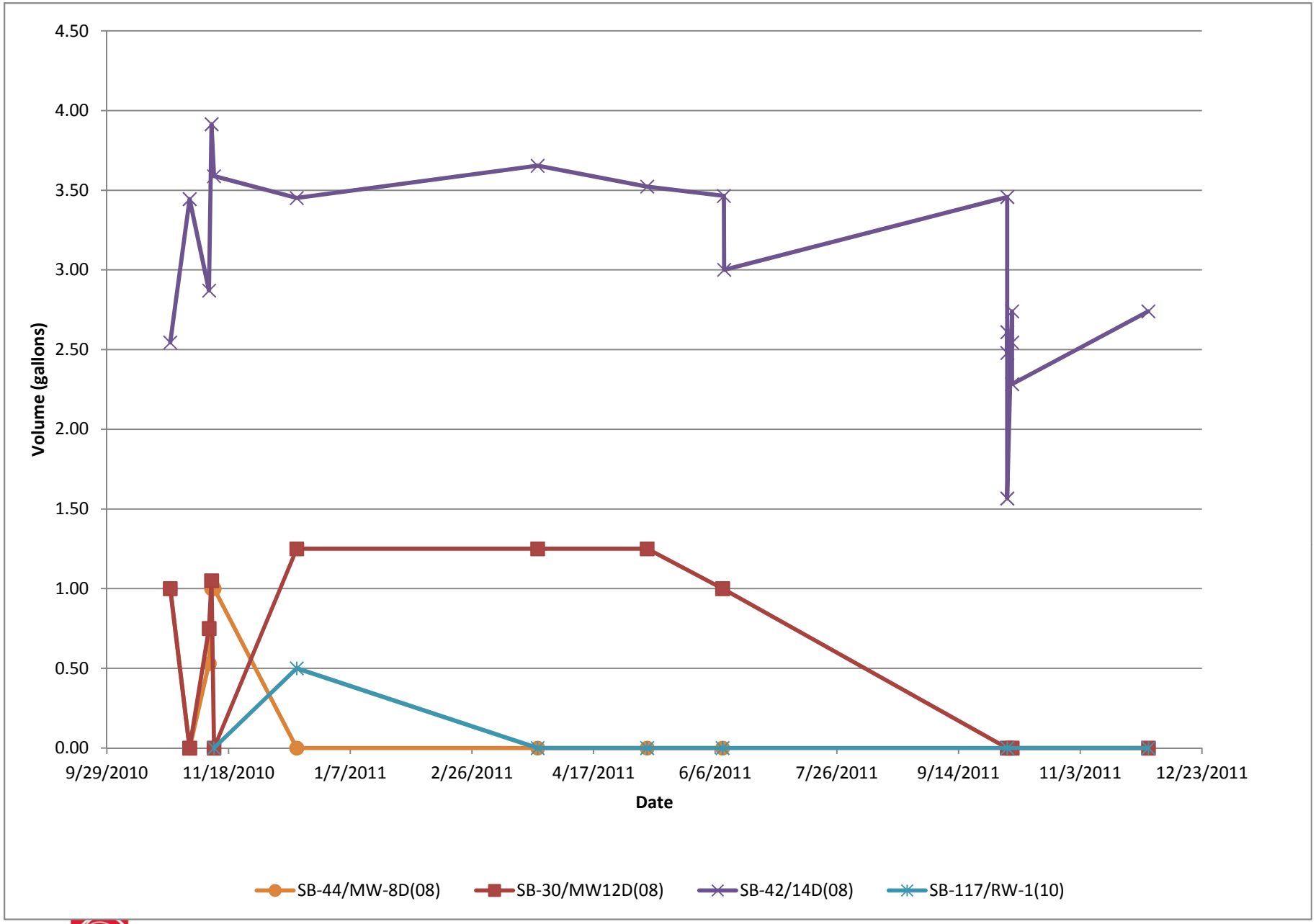
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PILOT NAPL RECOVERY - WELL LOCATIONS

Project 102780-4-1404 | January 2012 | Figure 2

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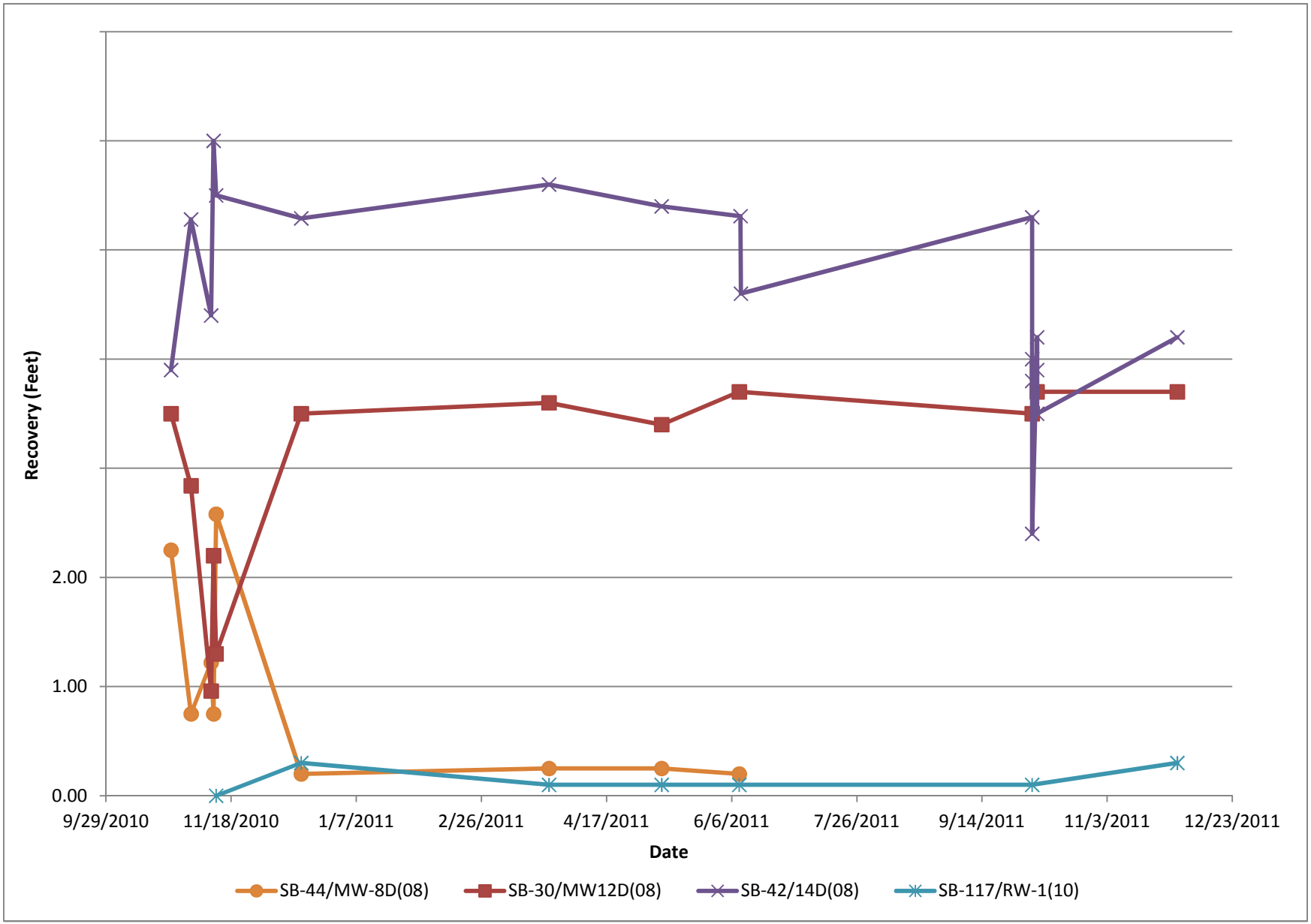
Figure 3
Schenectady Clinton Street Non-Owned Former MGP Site
NAPL Recovery
Time vs Volume



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Fugure 3 NAPL recovery

Figure 4
Schenectady Clinton Street Non-Owned Former MGP
NAPL Gauging
Time vs Recovery



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Copy of NG Schenec NAPL recovery field data AJG
Figure 4 NAPL Gauging

Figure 5
Schenectady Clinton Street Former MGP
SB-42/MW-14D (08) Recharge Curve 2
Recharge vs Time
10/4/11

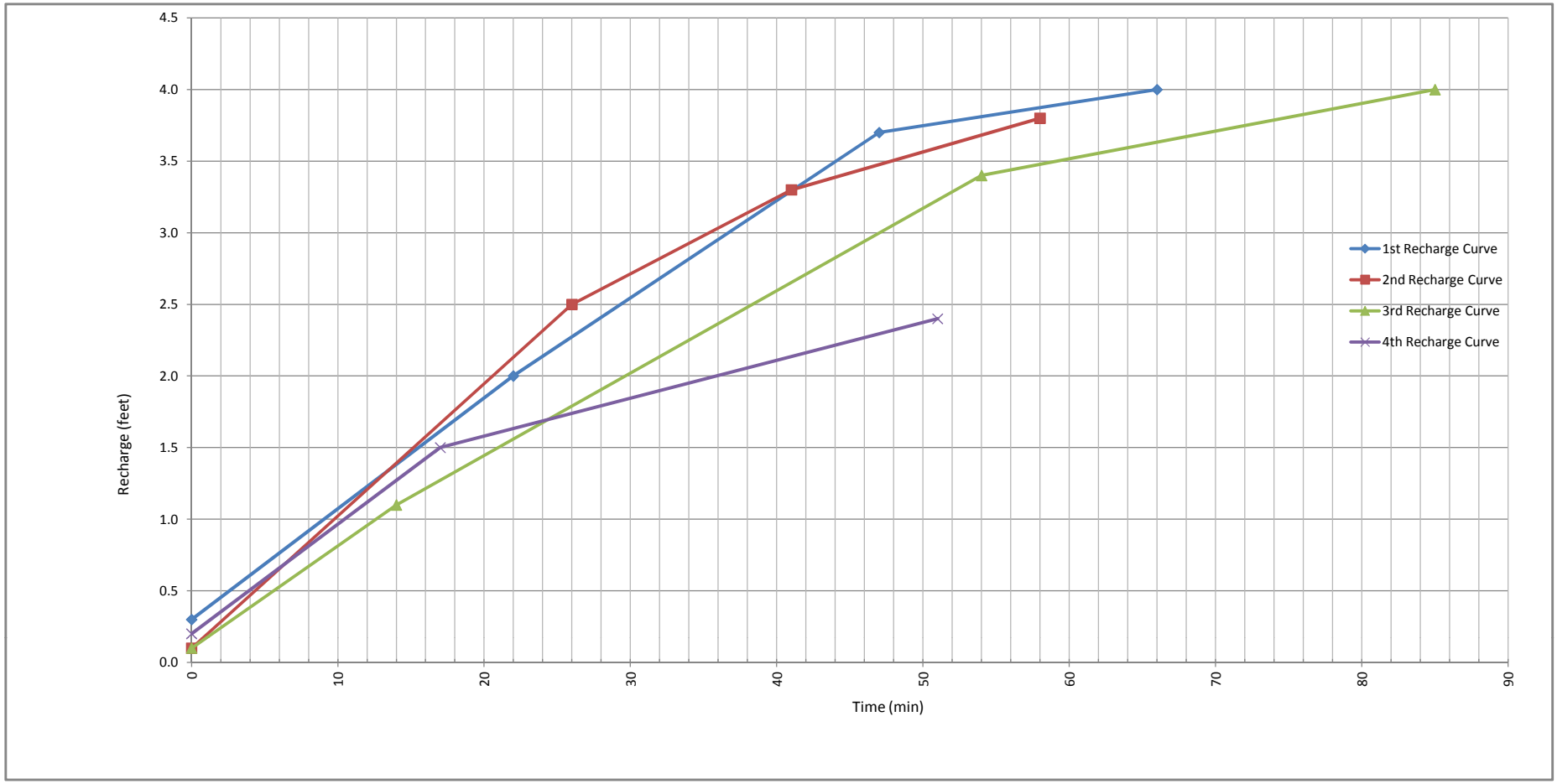


Figure 6
Schenectady Clinton Street Former MGP
SB-42/MW-14D (08) Recharge Curve 2
Recharge vs Time
10/4/11

