Lockport State Road Former MGP Site

CITY OF LOCKPORT, NIAGARA COUNTY, NEW YORK

Site Management Plan

NYSDEC Site Number: 932109

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TABLE OF CONTENTS

TABLE OF CONTENTS 1

1.0 INTRODUCTION AND DESCRIPTION OF REMEDIAL PROGRAM 5

1.1 INTRODUCTION 5

1.1.1 General 5
1.1.2 Purpose 6

1.2 SITE BACKGROUND 7

1.2.1 Site Location and Description 7
1.2.2 Site History 7
1.2.3 Geologic Conditions 9

1.3 SUMMARY OF REMEDIAL INVESTIGATION FINDINGS 10

1.3.1 Soil 10
1.3.2 On-Site and Off-Site Groundwater 11
1.3.3 On-Site and Off-Site Soil Vapor 11
1.3.4 Underground Structures 11

1.4 SUMMARY OF REMEDIAL ACTIONS 11

1.4.1 Removal of Contaminated Materials from the Site 12
1.4.2 Quality of Backfill Placed in Excavated Areas 12
1.4.3 On-Site and Off-Site Treatment Systems 12
1.4.4 Remaining Contamination 12
1.4.5 Engineering and Institutional Controls 13

2.0 ENGINEERING AND INSTITUTIONAL CONTROL PLAN 16

2.1 INTRODUCTION 16

2.1.1 General 16
2.1.2 Purpose 16

2.2 ENGINEERING CONTROLS 17

2.2.1 Engineering Control Systems 18
2.2.1.1 Soil Cover System 18
2.2.1.2 Potential for Additional Soil Cover System 18
2.2.1.3 Potential for Fencing 18
2.2.2 Criteria for Completion of Remediation/Termination of Remedial Systems 18
2.2.2.1 Soil Cover System 19

2.3 INSTITUTIONAL CONTROLS 19

2.3.1 Soil Vapor Intrusion Evaluation 20

2.4 EXCAVATION PLAN 21

2.4.1 Notification 21
2.4.2 Soil Screening Methods 22
2.4.3 Stockpile Methods 23
2.4.4 Materials Excavation and Load Out 23
2.4.5 Materials Transport Off-Site 24
2.4.6 Materials Disposal Off-Site 25
2.4.7 Materials Reuse On-Site 25
2.4.8 Fluids Management 26
2.4.9 Soil Cover System Restoration 26
2.4.10 Backfill from Off-Site Sources 27
2.4.11 Stormwater Pollution Prevention 27
2.4.12 Contingency Plan 28
2.4.13 Community Air Monitoring Plan 29
2.4.14 Odor Control Plan 29
2.4.15 Dust Control Plan 30

2.5 INSPECTIONS AND NOTIFICATIONS 31

2.5.1 Periodic Inspections 31
2.5.2 Notifications 32
2.5.3 Evaluation and Reporting 33

2.6 REPORTING PLAN 33

2.6.1 Introduction 33
2.6.2 Certification of Engineering and Institutional Controls 34
2.6.3 Periodic Review Report 35

3.0 MONITORING PLAN 37

3.0 MONITORING PLAN 37

3.1 INTRODUCTION 37

3.1.1 General 37
3.1.2 Purpose and Schedule 37

3.2 ENGINEERING CONTROL SYSTEM MONITORING 37

3.2.1 Soil Cover System Monitoring 37
3.2.2 Additional Soil Cover System Monitoring 38
3.2.3 Future Fencing 38
3.2.4 Inspection Schedule 38
3.2.5 General Soil Cover System Inspection 38

3.3 MONITORING REPORTING REQUIREMENTS 39

4.0 OPERATION AND MAINTENANCE PLAN 40

4.1 INTRODUCTION 40

4.2 ENGINEERING CONTROL SYSTEM MAINTENANCE 40

4.2.1 Soil Cover System Maintenance 40
4.2.1.1 Scope 40
4.2.2 Fencing 40
4.2.2.1 Scope 40

4.3 MAINTENANCE REPORTING REQUIREMENTS 41

4.3.1 Routine Maintenance Reports 41
4.3.2 Non-Routine Maintenance Reports 41

4.4 CONTINGENCY PLAN 42

4.4.1 Emergency Telephone Numbers 42
4.4.2 Map and Directions to Emergency Health Facility 44
4.4.3 Response Procedures 46
4.4.3.1 Contingency Procedures 46
4.4.3.1.1 Contingency Procedures for Fire/Explosion 46

4.4.3.1.2 Contingency Procedures for Spills or Material Releases 47
4.4.3.1.3 Contingency Procedures for Severe Weather..... 48
4.4.3.1.4 Contingency Procedures for Physical Injury to Workers..... 48
4.4.3.1.5 Contingency Procedures for Chemical Injury to Workers 49

4.4.4 EMERGENCY EVACUATION PROCEDURES 50

4.4.4.1 Site Evacuation Procedures 50
4.4.4.2 Off-Site Evacuation Procedures 51

LIST OF TABLES 53

LIST OF FIGURES 54

LIST OF APPENDICES 55

1.0 INTRODUCTION AND DESCRIPTION OF REMEDIAL PROGRAM

1.1 INTRODUCTION

This document is required as an element of the remedial program at the Lockport-State Road former manufactured gas plant site (hereinafter referred to as the "Site") under the New York State (NYS) Inactive Hazardous Waste Disposal Site Remedial Program administered by New York State Department of Environmental Conservation (NYSDEC). The site was remediated in accordance with Order on Consent Index # D0-0002-9309, which was executed on March 30, 1994.

1.1.1 General

NYSEG entered into an Order on Consent with the NYSDEC to remediate a 1.92 acre property located in City of Lockport, Niagara County, New York. This Order on Consent requires NYSEG to investigate and remediate contaminated media at the site. A map showing the site location and boundaries of this 1.92-acre site is provided in Figure 1A. The boundaries of the site are more fully described in the metes and bounds site description that accompanies the deed restriction, and are attached as an appendix (Appendix A) to this plan.

After completion of the remedial work described in the Record of Decision, some contamination was left in the subsurface at this site, which is hereafter referred to as "remaining contamination." This Site Management Plan (SMP) was prepared to manage remaining contamination at the site in perpetuity or until extinguishment of the deed restriction in accordance with ECL Article 71, Title 36. Remedial action work on the site began in May 2008 and was completed the same month. All reports associated with the site can be viewed by contacting the NYSDEC or its successor agency managing environmental issues in New York State.

This SMP was prepared by NYSEG in accordance with the requirements in NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation, dated June 2009 and the guidelines provided by NYSDEC. This SMP addresses the means for implementing the Institutional Controls (ICs) and Engineering Controls (ECs) that are required for the site.

1.1.2 Purpose

The site contains remaining contamination after completion of the remedial action. Engineering Controls have been incorporated into the site remedy to provide proper management of remaining contamination in the future to ensure protection of public health and the environment. A deed restriction will be granted to the NYSDEC, and recorded with the Niagara County Clerk, that provides an enforceable legal instrument to ensure compliance with this SMP and all ECs and ICs placed on the site. The ICs places a deed restriction on the site. . This SMP specifies the methods and mandates operation, maintenance, monitoring and reporting measures necessary ensure compliance with all ECs and ICs required by the deed restriction for contamination that remains at the site. This plan has been approved by the NYSDEC, and compliance with this plan is required by the grantor of the deed restriction and the grantor's successors and assigns. This SMP may only be revised with the approval of the NYSDEC.

This SMP provides a detailed description of all procedures required to manage remaining contamination at the site after completion of the Remedial Action, including: (1) implementation and management of all Engineering and Institutional Controls; (2) media monitoring; (3) operation and maintenance of all treatment, collection, containment, or recovery systems; (4) performance of periodic inspections, certification of results, and submittal of Periodic Review Reports; and (5) defining criteria for termination of treatment system operations.

To address these needs, this SMP includes three plans: (1) an Engineering and Institutional Control Plan for implementation and management of EC/ICs, which includes a reporting plan for the submittal of data, information, recommendations, and certifications to NYSDEC; (2) a Monitoring Plan for implementation of Site Monitoring;

and (3) an Operation and Maintenance Plan for implementation of remedial collection, containment, treatment, and recovery systems (including, where appropriate, preparation of an Operation and Maintenance Manual for complex systems).

It is important to note that:

- This SMP details the site-specific implementation procedures that are required by the deed restriction. Failure to properly implement the SMP is a violation of Environmental Conservation Law and the deed restriction, which is grounds for revocation of the site closure documents;
- Failure to comply with this SMP is also a violation of 6NYCRR Part 375 and the Order on Consent for the site and thereby subject to applicable penalties.

At the time the SMP was prepared, the SMP and all site documents related to Remedial Investigation and Remedial Action were maintained at the NYSDEC office in Albany, New York.

1.2 SITE BACKGROUND

1.2.1 Site Location and Description

The site is located in the City of Lockport, County of Niagara, New York and is identified as Block 4 and Lot 5 on the City of Lockport Tax Map number 109.17. The site is an approximately 1.92-acre area bounded by privately-owned property to the north, High Street to the south, State Road to the east, and the New York State Barge Canal to the west (see Figure 1B). The boundaries of the site are more fully described in Appendix A – Metes and Bounds.

1.2.2 Site History

The State Road Tar Works operated from approximately 1900 to 1911 as a processing plant for tar generated at the Transit Street Former MGP Site. The Transit Street Former MGP Site (currently occupied by a NYSEG electrical substation) is located

approximately 700 feet northeast of the State Road Site and is being investigated separately as Site No. 9-32-098.

The State Road Site included a 500,000 cubic foot gas holder, tar tanks, a tar still, a warehouse and office. These building were demolished between 1948 and 1969.

Previous investigation of this site include a 1990 Site Screening and additional sampling conducted in 2000 associated with an interim remedial measure (IRM) to support the construction of the High Street Bridge. Construction of this bridge required excavation of contaminated soils in areas on and near the site.

The Site Screening investigation included the collection of three surface water samples, three sediment samples, and five surface soil samples. No MGP related contamination was noted in the sediment or surface water samples. One of the surface soil samples (SS-05) did contain MGP related contamination at levels above guidance levels, with total carcinogenic polycyclic aromatic hydrocarbons (PAHs) of 109.5 parts per million (ppm). This sample was collected from a location where visible purifier waste was observed (i.e., iron impregnated wood chips used to remove impurities from gas after production). This material was not present during subsequent site visits.

Four surface soil samples and 45 subsurface soil samples were collected and submitted for analysis in 2000 in association with the High Street Bridge IRM. Total PAH levels in the surface soil samples ranged from 6 to 8 ppm. Subsurface soil PAHs ranged from 0.2 to 1,103 ppm.

The IRM involved the removal of contaminated material in the vicinity of the High Street Bridge construction project. From July 21 to August 12, 2003, approximately 4,500 tons of soil was removed and transported to Modern Landfill in Lewiston, NY for disposal. Coal tar was observed in one location during the IRM. Petroleum contamination unrelated to this site was also identified during the work, and is being addressed separately as NYSDEC Spill # 0375238. Other than the one area of coal tar, locations where screening samples showed elevated levels of PAHs were generally observed to contain fill material including ash and cinders. This material exhibited some

moderate odors but did not exhibit elevated levels of volatile organic compounds (VOCs).

1.2.3 Geologic Conditions

Lithology

- The thickness of the overburden at the site ranges from 5 to 25 feet and is comprised primarily of fill materials containing brown to red brown, silt, clayey silt, and silty clay with varying amounts of coal fragments, degraded concrete, and brick fragments.
- The underlying bedrock is flat-lying dolomite and shale of Silurian age. Figure 2 depicts the top of bedrock elevation in the site vicinity. The uppermost bedrock unit observed at the site is the Gothic Hill Member of the Gasport Dolomite of the Lockport Group. The Gasport Dolomite ranges from not present (i.e., excavated away) to 17.3 feet thick at the site. A sharp contact separates the Gasport member from the underlying DeCew Member of the Clinton Group. The DeCew Dolomite ranges from not present to 6.35 feet thick nearby the site. It grades into the Rochester Shale Member of the Clinton Group. The Rochester Shale is estimated to have a total thickness of approximately 60 to 90 feet and is divided into two members, the upper Burleigh Hill Member and the Lewiston Member. The Burleigh Hill was observed to be approximately 40 feet thick at the site. The Lewiston Member was never fully penetrated at the site but is estimated to be up to 30-50 feet thick. The upper portion of the bedrock sequence (i.e., the Gasport, DeCew, and Burleigh Hill) is exposed in the sidewalls of the adjacent New York State Barge Canal. The floor of the canal adjacent to the site is excavated in the Burleigh Hill Member. Figure 2 depicts the location of the geologic cross-section shown in Figure 3.

Hydrogeology

- On the site, saturated fill materials/soils were encountered in only four of the twelve soil boring at depths ranging from 11 to 22 feet. There appears to be

localized perched water in the overburden as evidenced from the absence of water in many of the overburden soil borings. No overburden wells were installed on the State Road site as part of the RI because they would likely be dry most of the time (i.e., except immediately after a heavy rain).

- Overburden groundwater flow at the site is likely towards the northwest where it either infiltrates into the bedrock or discharges directly into the canal. Groundwater flow maps for the shallow, intermediate, and deep bedrock are depicted in Figures 4A, 4B, and 4C.

1.3 SUMMARY OF REMEDIAL INVESTIGATION FINDINGS

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

Former State Road Manufactured Gas Plant, Lockport, NY
Final Remedial Investigation Report
September 2006.

The RI determined that operations at the former coal tar processing facility and gas holder have resulted in the disposal of hazardous wastes, including coal tar, which have contaminated soils at the site resulting in a potential threat to human health associated with potential exposure to surface soil and a potential threat to the environment associated with potential erosion of contaminated soils into the adjacent canal.

Below is a summary of site conditions when the RI was performed from 2005-2006 (i.e., prior to the remedial action completed in 2008):

1.3.1 Soil

- Surface soil (0-2 inches) - PAH levels ranged from 4 to 151 ppm. No VOCs were detected at levels above applicable standards, criteria and guidance (SCGs).

Based on the results of the RI and observations made during the IRM, it appears that the PAHs observed are associated with historic, urban fill and not site-related activities.

- Subsurface soil; PAH levels ranged from non-detect to 1,103 ppm. No VOCs were detected at levels above applicable SCGs.

1.3.2 On-Site and Off-Site Groundwater

- No site-related groundwater contamination of concern was identified during the RI.

1.3.3 On-Site and Off-Site Soil Vapor

- No site-related soil vapor contamination of concern was identified during the RI.

1.3.4 Underground Structures

No underground structures were identified during the RI. Portions of the former gasholder pad and warehouse foundation are partially visible at the site. Other portions of the gasholder pad are covered by up to 15 feet of fill material placed there subsequent to the demolition of the gasholder (which originally was an at-grade structure).

1.4 SUMMARY OF REMEDIAL ACTIONS

The site was remediated in accordance with the NYSDEC-approved Remedial Design dated November 15, 2007.

The following is a summary of the Remedial Actions for the site:

1. Construction and maintenance of a soil cover system consisting of placement of crushed stone or topsoil over portions of the site, as shown on Figure 5, to prevent human exposure to remaining contaminated soil/fill remaining at the site;

2. Execution and recording of a deed restriction to restrict land use and prevent future exposure to any contamination remaining at the site;

3. Development and implementation of a Site Management Plan for long term management of remaining contamination as required by the deed restriction, which includes plans for: (1) Institutional and Engineering Controls; (2) monitoring; (3) operation and maintenance; and (4) reporting;

Remedial activities were completed at the site in May 2008.

1.4.1 Removal of Contaminated Materials from the Site

No soil was removed from the site as part of the remedial action. In areas where crushed stone or topsoil was placed, some woody vegetation was removed and disposed at a local yard waste composting facility.

1.4.2 Quality of Backfill Placed in Excavated Areas

As described in Section 1.4.1 above, no soil was excavated or removed from the site as part of the remedial action. Imported crushed stone and topsoil were placed over existing site soils to create a barrier suitable to prevent exposure to the existing site soils. 58 tons of #1 stone and 110 cubic yards of topsoil were placed and spread on the areas identified in Figure 5. Stone and topsoil were obtained from local New York State Department of Transportation approved sources.

1.4.3 On-Site and Off-Site Treatment Systems

No long-term treatment systems were installed as part of the site remedy.

1.4.4 Remaining Contamination

- The area of soil cover was decreased during the remedial design as compared to the area shown in the ROD. At that time it was agreed that the trees and roots in the heavily wooded area shown would provide a natural restriction to contact with contamination present 5 to 6 feet below ground surface. The

NYSDEC has indicated that if these trees are removed in the vicinity of the former MGP structures, a soil cover and demarcation layer must be installed.

- No demarcation layer exists at the site. Due to an oversight during the remedial action, the Remedial Design specified demarcation layer was not installed as required. NYSEG proposes to provide quarterly notifications to their real estate division and operations personnel who visit the site to remind them of the IC/ECs. The NYSDEC concurs that this measure provides an awareness of the underlying contamination comparable with the demarcation layer.
- On Figure 5 in the area identified "improved gravel drive/parking" approximately 6 inches of #1 crushed stone was placed on top of existing crushed stone or existing site soil. In the area identified "topsoil & seed" approximately 6 inches of topsoil was placed on top of existing site soils. However, since no demarcation layer was installed, excavations to any depth in either of those areas will have to assume that all excavated material is potentially impacted with PAHs exceeding SCGs.

Table 1 (for surface soils) and Table 2 (for subsurface soils) summarize results of all soil samples remaining at the site after completion of Remedial Action that exceed the SCOs as identified in NYSDEC TAGM Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

1.4.5 Engineering and Institutional Controls

Since remaining contamination is present at this site, Engineering Controls and Institutional Controls have been implemented to protect public health and the environment for the applicable future use. The property has the following Engineering Controls:

1. A cover system consisting of a crushed stone or topsoil cover.
2. If evidence of foot or vehicular traffic is reported, or if changes of land use significantly increase the potential for public access to this site, then the

NYSDEC and NYSDOH will assess whether there is a need for a fence to limit access. Any fence determined necessary would be erected and maintained in compliance with all applicable City codes and/or zoning requirements that apply to such fences.

An Institutional Control in the form of a deed restriction is required for the site. The deed restriction requires compliance to ensure that:

- All ECs must be operated and maintained as specified in this SMP;
- All ECs on the site must be inspected and certified at a frequency and in a manner defined in this SMP;
- Monitoring of the soil cover system must be performed as defined in this SMP;
- Data and information pertinent to Site Management for the property must be reported at the frequency and in a manner defined in this SMP; and
- On-site environmental monitoring devices, including but not limited to, groundwater monitoring wells must be protected and replaced as necessary to ensure continued functioning in the manner specified in this SMP.

In addition, the deed restriction places the following restrictions on the property:

- Vegetable gardens and farming on the property are prohibited;
- All future activities on the property that would disturb remaining contaminated material must be conducted in accordance with the Excavation Plan included in this SMP;
- The potential for vapor intrusion must be evaluated for any buildings developed on the site, and any potential impacts that are identified must be mitigated;
- The property may be used for commercial or industrial use, provided that the long-term Engineering and Institutional Controls described in the SMP remain in use.

These EC/ICs are designed to:

- Prevent ingestion/direct contact with contaminated soil;
- Prevent environmental exposures of flora or fauna to PAHs with contaminated soil;
- Prevent inhalation of or exposure to contaminants volatilizing from contaminated soil;
- Prevent the discharge of contaminants to surface water; and
- Prevent migration of contaminants that would result in off-site groundwater or surface water contamination.

2.0 ENGINEERING AND INSTITUTIONAL CONTROL PLAN

2.1 INTRODUCTION

2.1.1 General

Remedial activities completed at the site were conducted in accordance with the NYSDEC-approved ROD for the Lockport-State Road Former MGP Site, dated November 15, 2007 or as noted in Section 1.4.4. The remedial goals included eliminating or reducing, to the extent practicable, exposure of persons at or around the site to PAHs in surface and subsurface soil and environmental exposures of flora and fauna to PAHs in surface and subsurface soil. The remedial goals were approved by NYSDEC.

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

2.1.2 Purpose

The purpose of this Plan is to provide:

- A description of all EC/ICs on the site;
- The basic operation and intended role of each implemented EC/IC;
- A description of the deed restriction;
- A description of the features that should be evaluated and inspected for inclusion in the Periodic Review Reports;

- A description of plans and procedures to be followed for implementation of EC/ICs, such as the implementation of an Excavation Plan for the safe handling of remaining contamination that may be disturbed during maintenance or redevelopment work on the site;
- Any other provisions necessary to identify or establish methods for implementing the EC/ICs required by the site remedy, as determined by the NYSDEC; and
- A description of the reporting requirements for these controls.

2.2 ENGINEERING CONTROLS

Engineering Control systems are included to prevent future exposure to remaining contamination through the existing and potentially additional soil cover system and/or fencing. Adherence to these Engineering Controls on the site will be implemented under this Site Management Plan and will include:

- Compliance with the deed restriction by the Grantor and the Grantor's successors and assigns with all elements of this SMP;
- All ECs must be operated and maintained as specified in this SMP;
- All ECs on the Controlled Property must be inspected and certified at a frequency and in a manner defined in the SMP.
- Data and information pertinent to Site Management for the Controlled Property must be reported at the frequency and in a manner defined in this SMP; and
- On-site environmental monitoring devices, including but not limited to, [groundwater monitoring wells], must be protected and replaced as necessary to ensure the devices function in the manner specified in this SMP.

2.2.1 Engineering Control Systems

2.2.1.1 Soil Cover System

Exposure to remaining contamination in soil/fill at the site is prevented by a soil cover system placed over the site. This cover system is comprised of a minimum of 6 inches of clean topsoil or #1 crushed stone. The Excavation Plan that appears in Section 2.4 outlines the procedures required to be implemented in the event the cover system is breached, penetrated or temporarily removed, and any underlying remaining contamination is disturbed. Procedures for the inspection and maintenance of this cover are provided in the Monitoring Plan included in Section 4 of this SMP.

2.2.1.2 Potential for Additional Soil Cover System

The area of soil cover was decreased during the remedial design as compared to the areas shown in the ROD. It was agreed at that time that the trees and roots in the heavily wooded area would provide a natural restriction to contact with contamination present 5 to 6 feet below ground surface. If these trees are removed in the vicinity of the former MGP structures, a soil cove rand demarcation layer must be installed.

2.2.1.3 Potential for Fencing

If evidence of foot or vehicular traffic is reported, or if changes of land use significantly increase the potential for public access to this site, then the NYSDEC and NYSDOH will assess whether there is a need for a fence to limit access. Any fence determined necessary would be erected and maintained in compliance with all applicable City codes and/or zoning requirements that apply to such fences.

2.2.2 Criteria for Completion of Remediation/Termination of Remedial Systems

Generally, the remedial processes will be considered to be completed when effectiveness monitoring indicates that the remedy has achieved the remedial action objectives identified by the decision document. The specific determination of when the

following remedial processes are complete will be made in compliance with Section 6.6 of NYSDEC DER-10.

2.2.2.1 Soil Cover System

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

2.3 INSTITUTIONAL CONTROLS

The site has an Institutional Control in the form of a deed restriction. Site restrictions that apply to the property and which may not be discontinued without an amendment to or extinguishment of the deed restriction are:

- Vegetable gardens and farming, including cattle and dairy farming, on the property are prohibited.
- All future activities on the property that will disturb remaining contaminated material are prohibited unless they are conducted in accordance with the Excavation Plan included in this SMP.
- The potential for vapor intrusion must be evaluated for any buildings developed on the site, and any potential impacts that are identified must be mitigated.
- The property may only be used for commercial or industrial use provided that the long-term Engineering and Institutional Controls included in this SMP are employed.
- The property may not be used for a less restrictive use, such as restricted or unrestricted residential use without additional remediation and amendment of the deed restriction by the Commissioner of NYSDEC.
- The site owner or remedial party will submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the property are unchanged from the previous certification or that any changes to

the controls were approved by the NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP. NYSDEC retains the right to access such property at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow and will be made by an expert that the NYSDEC finds acceptable.

2.3.1 Soil Vapor Intrusion Evaluation

Prior to the construction of any enclosed structures located over areas that contain remaining contamination, a soil vapor intrusion (SVI) evaluation would be performed to determine whether any mitigation measures are necessary to eliminate potential exposure to volatile organic vapors in the proposed structure. Alternatively, an SVI mitigation system would be installed as an element of the building foundation without first conducting an investigation. This mitigation system would include a vapor barrier and passive sub-slab depressurization system that is capable of being converted to an active system.

Prior to conducting an SVI investigation or installing a mitigation system, a work plan would be developed and submitted to the NYSDEC and NYSDOH for approval. This work plan would be developed in accordance with the most recent NYSDOH "Guidance for Evaluating Vapor Intrusion in the State of New York". Measures to be employed to mitigate potential vapor intrusion would be evaluated, selected, designed, installed, and maintained based on the SVI evaluation, the NYSDOH guidance, and construction details of the proposed structure.

Preliminary (unvalidated) SVI sampling data would be forwarded to the NYSDEC and NYSDOH for initial review and interpretation. Upon validation, the final data would be transmitted to the agencies, along with a recommendation for follow-up action, such as mitigation.

SVI sampling results, evaluations, and follow-up actions would also be

summarized in the next Periodic Review Report.

2.4 EXCAVATION PLAN

The site remedy allows for commercial or industrial use. Any future intrusive work that will penetrate, encounter or disturb the remaining contamination, and any modifications or repairs to the existing cover system will be performed in compliance with this Excavation Plan (EP). Intrusive construction work must also be conducted in accordance with the procedures defined in a Health and Safety Plan (HASP) and Community Air Monitoring Plan (CAMP) prepared for the site. A sample HASP is attached as Appendix C to this SMP that is in current compliance with DER-10, and 29 CFR 1910, 29 CFR 1926, and all other applicable Federal, State and local regulations. Based on future changes to State and federal health and safety requirements, and specific methods employed by future contractors, the HASP and CAMP will be updated and re-submitted with the notification provided in Section 2.4.1. Any intrusive construction work will be performed in compliance with the EP, HASP and CAMP, and will be included in the periodic inspection and certification reports submitted under the Site Management Reporting Plan (See Section 2.6).

The site owner and associated parties preparing the remedial documents submitted to the State, and parties performing this work, are completely responsible for the safe performance of all invasive work, the structural integrity of excavations, and for structures that may be affected by excavations (such as building foundations and bridge footings).

The site owner will ensure that site development activities will not interfere with, or otherwise impair or compromise, remedial activities proposed in this EP.

2.4.1 Notification

At least 10 days prior to the start of any activity that is reasonably anticipated to encounter remaining contamination, the site owner or their representative will notify the Department. Currently, this notification will be made to:

William Ottaway, PE
Division of Environmental Remediation, 11th Floor
NYSDEC
625 Broadway
Albany, NY 12233-7014
518-402-9662 or wsottawa@gw.dec.state.ny.us

This notification will include:

- A detailed description of the work to be performed, including the location and areal extent, plans for site re-grading, intrusive elements or utilities to be installed below the soil cover, or any work that may impact an engineering control;
- A summary of environmental conditions anticipated in the work areas, including the nature and concentration levels of contaminants of concern, potential presence of grossly contaminated media, and plans for any pre-construction sampling;
- A schedule for the work, detailing the start and completion of all intrusive work;
- A statement that the work will be performed in compliance with this EP and 29 CFR 1910.120;
- A copy of the contractor's health and safety plan, in electronic format;
- Identification of disposal facilities for potential waste streams; and
- Identification of sources of any anticipated backfill, along with all required chemical testing results.

2.4.2 Soil Screening Methods

Visual, olfactory and instrument-based soil screening will be performed by a qualified environmental professional during all remedial and development excavations into known or potentially contaminated material (remaining contamination). Soil screening will be performed regardless of when the invasive work is done and will include all excavation and invasive work performed during development, such as excavations for foundations and utility work, following the filing of the deed restriction.

Soils will be segregated based on previous environmental data and screening results into material that requires off-site disposal, material that requires testing, material that can be returned to the subsurface, and material that can be used as cover soil.

2.4.3 Stockpile Methods

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

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

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

2.4.4 Materials Excavation and Load Out

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

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

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

A truck wash will be operated on-site. The qualified environmental professional will be responsible for ensuring that all outbound trucks will be washed at the truck wash before leaving the site until the activities performed under this section are complete.

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

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

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

2.4.5 Materials Transport Off-Site

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

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

All trucks will be washed prior to leaving the site. Truck wash waters will be collected and disposed of off-site in an appropriate manner.

Truck transport routes will be identified that will: (a) limit transport through residential areas and past sensitive sites; (b) use city-mapped truck routes; (c) minimize off-site queuing of trucks entering the facility; (d) limit total distance to major highways; and (e) promote safety in access to highways.

Trucks will be prohibited from stopping and idling in the neighborhood outside the project site. Egress points for truck and equipment transport from the site will be kept clean of dirt and other materials during site remediation and development.

Due to limited available space at the site, some off-site queuing of trucks may be necessary. The number and duration of trucks lined up outside the site entrance will be minimized through efficient scheduling and staging at a remote location.

2.4.6 Materials Disposal Off-Site

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

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

Non-hazardous historic fill and contaminated soils taken off-site will be handled, at minimum, as a Municipal Solid Waste pursuant to 6NYCRR Part 360-1.2. Material that does not meet the lower of the SCOs for residential use or groundwater protection will not be taken to a New York State recycling facility (6NYCRR Part 360-16 Registration Facility) without a beneficial use determination issued by NYSDEC.

2.4.7 Materials Reuse On-Site

Chemical criteria for on-site reuse of material have been approved by NYSDEC and are listed in Table 3. The qualified environmental professional will ensure that procedures defined for materials reuse in this SMP are followed and that unacceptable material does not remain on-site. Contaminated on-site material, including historic fill and contaminated soil, that is acceptable for re-use on-site will be placed below the demarcation layer or impervious surface, and will not be reused within a cover soil layer, within landscaping berms, or as backfill for subsurface utility lines.

Soil stockpiles will be limited to approximately 500 cubic yards in size. Stockpiles will be placed on a minimum of 20-mil plastic sheeting. Bottom plastic will be draped over 6-inch by 6-inch timbers to form a berm all the way around the stockpile. Piles will be covered with a minimum of 20-mil plastic sheeting when not actively being worked. Cover plastic will be anchored down with sandbags or similar devices. Stockpile locations will be dependent upon the size and location of the intrusive project.

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

2.4.8 Fluids Management

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

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

2.4.9 Soil Cover System Restoration

After the completion of soil removal and any other invasive remedial activities, the soil cover system will be restored in a manner that complies with the Record of Decision. A demarcation layer currently does not exist at the site. A demarcation layer, consisting of orange plastic snow fence will be installed in restored areas to provide a visual reference to the top of the 'Remaining Contamination Zone', the zone that requires adherence to special conditions for disturbance of remaining contaminated soils defined in this Site Management Plan. If the type of cover system changes from that which exists

prior to the excavation (i.e., a soil cover is replaced by asphalt), this will constitute a modification of the cover element of the remedy and the upper surface of the remaining contamination. A figure showing the modified surface will be included in the subsequent Periodic Review Report and in any updates to the Site Management Plan.

2.4.10 Backfill from Off-Site Sources

All materials proposed for import onto the site will be approved by the qualified environmental professional and will be in compliance with provisions in this SMP, applicable regulations (6NYCRR 375-6.7(d)) and guidance (DER-10) prior to receipt at the site.

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

All imported soils will meet the backfill and cover soil quality standards established in 6NYCRR 375-6.7(d). Based on an evaluation of the land use, protection of groundwater and protection of ecological resources criteria, the resulting soil quality standards for imported backfill are listed in Table 4. Soils that meet 'exempt' fill requirements under 6 NYCRR Part 360, but do not meet backfill or cover soil objectives for this site, will not be imported onto the site without prior approval by NYSDEC. Solid waste will not be imported onto the site.

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

2.4.11 Stormwater Pollution Prevention

Because the remedial work disturbed less than one surface acre, a stormwater pollution prevention plan (SWPPP) was not required, and one will not be required in the future unless planned activities will disturb more than one surface acre. For work that will disturb more than one surface acre, a site-specific SWPPP will be prepared and

submitted to NYSDEC for approval. For work that will disturb less than one surface acre, the following protections will be employed:

Barriers and hay bale checks will be installed and inspected once a week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the site and available for inspection by NYSDEC. All necessary repairs shall be made immediately.

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

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

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

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

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

2.4.12 Contingency Plan

If underground tanks or other previously unidentified contaminant sources are found during post-remedial subsurface excavations or development related construction, excavation activities will be suspended until sufficient equipment is mobilized to address the condition.

Sampling will be performed on product, sediment and surrounding soils, etc. as necessary to determine the nature of the material and proper disposal method. Chemical analysis will be performed for a full list of analytes (TAL metals; TCL volatiles and semi-volatiles, TCL pesticides and PCBs), unless the site history and previous sampling

results provide a sufficient justification to limit the list of analytes. In this case, a reduced list of analytes will be proposed to the NYSDEC for approval prior to sampling.

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

2.4.13 Community Air Monitoring Plan

Community Air Monitoring will be consistent with the guidance provided in the New York State Department of Health's Generic Community Air Monitoring Plan. Monitoring will be conducted for VOCs and particulates during intrusive activities. Action levels will be as specified in the CAMP.

A map showing the location of air sampling stations based on generally prevailing wind conditions is shown in Figure 5. These locations will be adjusted on a daily or more frequent basis based on actual wind directions to provide an upwind and at least two downwind monitoring stations.

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

2.4.14 Odor Control Plan

This odor control plan is capable of controlling emissions of nuisance odors off-site. Specific odor control methods to be used on a routine basis will include the following, listed in order of application: reducing excavation size; covering soil piles and/or portions of the excavation with plastic sheeting; application of Biosolve over the excavation area and onto excavated soils; and application of foam (e.g., Rusmar or similar) to soil piles and open portions of the excavation. If nuisance odors are identified at the site boundary, or if odor complaints are received, work will be halted and the source of odors will be identified and corrected. Work will not resume until all nuisance

odors have been abated. NYSDEC and NYSDOH will be notified of all odor complaints and of any other complaints about the project. Implementation of all odor controls, including the halt of work, is the responsibility of the property owner's Remediation Engineer, and any measures that are implemented will be discussed in the Periodic Review Report.

All necessary means will be employed to prevent off-site nuisances. If odors develop and cannot be otherwise controlled, additional means to eliminate odor nuisances will include: (a) direct load-out of soils to trucks for off-site disposal; (b) use of chemical odorants in spray or misting systems; and (c) use of staff to monitor odors in surrounding neighborhoods.

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

2.4.15 Dust Control Plan

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

- Dust suppression will be achieved though the use of a dedicated on-site water truck for road wetting. The truck will be equipped with a water cannon or hose of sufficient length to be capable of spraying water directly onto off-road areas including excavations and stockpiles.
- Clearing and grubbing of larger areas will be done in stages to limit the area of exposed, unvegetated soils vulnerable to dust production.
- Gravel will be used on roadways to provide a clean and dust-free road surface.

- On-site roads will be limited in total area to minimize the area required for water truck sprinkling.

2.5 INSPECTIONS AND NOTIFICATIONS

2.5.1 Periodic Inspections

Periodic inspections of all remedial components installed at the site will be conducted at the frequency specified in SMP Monitoring Plan schedule (Table 5). A comprehensive site-wide inspection will be conducted annually, regardless of the frequency of the Periodic Review Report. The inspections will determine and document the following:

- Whether Engineering Controls continue to perform as designed;
- If these controls continue to be protective of human health and the environment;
- If evidence of tree cutting, erosion, or foot and/or vehicular traffic indicates that additional ECs are necessary (i.e., fencing, additional soil cover);
- Compliance with requirements of this SMP and the deed restriction;
- Achievement of remedial performance criteria;
- Sampling and analysis of appropriate media during monitoring events;
- If site records are complete and up to date; and
- Changes, or needed changes, to the remedial or monitoring system;

Inspections will be conducted in accordance with the procedures set forth in the Monitoring Plan of this SMP (Section 3), using the Site-Wide Inspection Form included in Appendix D. The reporting requirements are outlined in the Site Management Reporting Plan (Section 2.6).

If an emergency, such as a natural disaster or an unforeseen failure of any of the ECs occurs, an inspection of the site will be conducted within 5 days of the event to

verify the effectiveness of the EC/ICs implemented at the site by a qualified environmental professional as determined by NYSDEC.

2.5.2 Notifications

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

- 60-day advance notice of any proposed changes in site use that are required under the terms of the Order on Consent, 6NYCRR Part 375, and/or Environmental Conservation Law.
- 10-day advance notice of any proposed ground-intrusive activities.
- Notice within 48-hours of any damage or defect to the foundations structures that reduces or has the potential to reduce the effectiveness of other Engineering Controls and likewise any action to be taken to mitigate the damage or defect.
- Notice within 48-hours of any emergency, such as a fire, flood, or earthquake that reduces or has the potential to reduce the effectiveness of Engineering Controls in place at the site, including a summary of actions taken, or to be taken, and the potential impact to the environment and the public.
- Follow-up status reports on actions taken to respond to any emergency event requiring ongoing responsive action shall be submitted to the NYSDEC within 45 days and shall describe and document actions taken to restore the effectiveness of the ECs.

Notifications will be made to:

William Ottaway, PE
Division of Environmental Remediation, 11th Floor
NYSDEC
625 Broadway
Albany, NY 12233-7014
518-402-9662 or wsottawa@gw.dec.state.ny.us

In the event that NYSDEC develops a centralized notification system, that system will be used instead.

2.5.3 Evaluation and Reporting

The results of the site inspection and monitoring data will be evaluated as part of the periodic review process to confirm that the:

- EC/ICs are in place, are performing properly, and remain effective;
- The Monitoring Plan is being implemented;
- Operation and maintenance activities are being conducted properly; and,
- Based on the above items, the Site remedy continues to be protective of public health and the environment and is performing as designed in the Remedial Action Work Plan and Final Engineering Report.

2.6 REPORTING PLAN

2.6.1 Introduction

A Periodic Review Report will be submitted to NYSDEC every year, beginning one year after the filing of the deed restrictions is issued. The Periodic Review Report will be prepared in accordance with NYSDEC DER-10 "Technical Guidance for Site Investigation and Remediation". The frequency of submittal of the Periodic Review Report may be modified with the approval of the NYSDEC.

This report will include the following:

- Identification of all EC/ICs required by the Remedial Action Work Plan for the site;
- An assessment of the effectiveness of all Institutional and Engineering Controls for the site;

- An evaluation of the Engineering and Institutional Control Plan and the Monitoring Plan for adequacy in meeting remedial goals;
- Results of the required annual site inspections and severe condition inspections, if any;
- A discussion of any changed conditions at the site; in particular (1) evidence of foot or vehicle traffic; (2) indication of erosion; or (3) evidence of tree removal from the vicinity of former MGP structures;
- A presentation of additional ECs (e.g., fencing soil cover) that may be necessary to meet the remedial goals in light of the changed conditions;
- Documentation that NYSEG management on a quarterly basis, informed via e-mail, all NYSEG employees who may enter the site of the existence and requirements of the SMP. The quarterly e-mail notifications will be printed and attached to the Periodic Review Report.
- A compilation of all deliverables generated during the reporting period, as specified in Section 2 EC/IC Plan, Section 3 Monitoring Plan and Section 4 Operation and Maintenance Plan; and
- Certification of the EC/ICs.

2.6.2 Certification of Engineering and Institutional Controls

Inspection of the EC/ICs will occur at the frequency described in Section 3 (Monitoring Plan) and Section 4 (Operation and Maintenance Plan). After the last inspection of the reporting period, a qualified environmental professional will prepare a Periodic Review Report which certifies that:

- On-site ECs/ICs are unchanged from the previous certification;
- They remain in-place and are effective;
- The soil cover system is performing as designed;

- Nothing has occurred that would impair the ability of the controls to protect the public health and environment;
- Nothing has occurred that would constitute a violation or failure to comply with any operation and maintenance plan for such controls;
- Access is available to the site by NYSDEC and NYSDOH to evaluate continued maintenance of such controls; and
- Site use is compliant with the deed restriction.

2.6.3 Periodic Review Report

A Periodic Review Report will be submitted every year, beginning one year after the filing of the deed restriction. The report will be submitted within 45 days of the end of each certification period. The report will include:

- EC/IC certification;
- All applicable inspection forms and other records generated for the site during the reporting period;
- A summary of any discharge monitoring data and/or information generated during the reporting period with comments and conclusions;
- Documentation that NYSEG management on a quarterly basis, informed via e-mail, all NYSEG employees who may enter the site of the existence and requirements of the SMP. The documentation of the quarterly e-mail notifications will be printed and attached to the Periodic Review Report.
- A site evaluation, which includes the following:
    - The compliance of the remedy with the requirements of the site-specific RAWP, ROD or Decision Document;
    - Any new conclusions or observations regarding site contamination based on inspections;

- Recommendations regarding any necessary changes to the remedy; and
- The overall performance and effectiveness of the remedy.

The Periodic Review Report should be submitted, in hard-copy format, to:

NYSDEC Region 9 Office
270 Michigan Avenue
Buffalo, New York 14203

And in electronic format to:

NYSDEC Central Office
625 Broadway
Albany, New York 12233
Attn: William Ottaway, wsottawa@gw.dec.state.ny.us

NYSDOH Bureau of Environmental Exposure Investigation
Flannigan Square
547 River Street
Troy, New York 12180
Attn: Rich Fedigan, rjf01@health.state.ny.us

NYSDOH, Western Field Office
525 Delaware Avenue
Buffalo, New York 14203
Attn: Matt Forcucci, mjf13@health.state.ny.us

3.0 MONITORING PLAN

3.1 INTRODUCTION

3.1.1 General

The Monitoring Plan describes the measures for evaluating the performance and effectiveness of the implemented ECs to reduce or mitigate contamination at the site. ECs at the site include topsoil and stone cover. This Monitoring Plan may only be revised with the approval of NYSDEC.

3.1.2 Purpose and Schedule

This Monitoring Plan describes the methods to be used for:

- Evaluating site information periodically to confirm that the remedy continues to be effective in protecting public health and the environment; and
- Preparing the necessary reports for the various inspection activities;
- Reporting requirements;
- Annual inspection and periodic certification.

Annual monitoring of the performance of the remedy and overall reduction in contamination on-site will be conducted for the first 10 years. The frequency thereafter will be determined by NYSDEC. The integrity of the soil cover system will be inspected annually and as needed if emergency conditions warrant determining if the remedy continues to be effective in achieving remedial goals.

3.2 ENGINEERING CONTROL SYSTEM MONITORING

3.2.1 Soil Cover System Monitoring

The soil cover system consists of a minimum of 6 inches of clean topsoil or #1 crushed stone. Figure 5 depicts the location of the soil cover system installed in 2008. An as-built drawing for the soil cover system is included in Appendix E.

3.2.2 Additional Soil Cover System Monitoring

If an additional soil cover system is warranted at the site it will be installed in a manner similar to the existing soil cover system and consist of a minimum of 6 inches of clean topsoil or #1 crushed stone. The additional soil cover would be placed over a suitable demarcation layer. Any additional soil cover system will be monitored at on the same inspection schedule and utilizing the same procedures as for the existing soil cover system.

3.2.3 Future Fencing

If fencing is warranted at the site it will be erected and maintained in compliance with all applicable City codes and/or zoning requirement that apply to such fences. Any fencing installed will be inspected and maintained on the same inspection schedule as for the existing soil cover system.

3.2.4 Inspection Schedule

The baseline inspection will be conducted within 30 days after filing of the deed restriction. Subsequent inspection events will be conducted annually.

Inspection frequency is subject to change with the approval of the NYSDEC. Unscheduled inspections and/or sampling may take place when a suspected failure of the soil cover system has been reported or an emergency occurs that is deemed likely to affect the operation of the system. Monitoring deliverables for the soil cover system are specified in this Plan.

3.2.5 General Soil Cover System Inspection

A visual inspection of the soil cover system will be conducted during the monitoring event. The integrity of the soil cover system will be monitored for erosion and signs of trespassing.

A complete list of components to be checked is provided in the Inspection Checklist, presented in Appendix F. If any portion of the soil cover system is damaged or

eroded, maintenance and repair as per the Operation and Maintenance Plan will be performed immediately.

3.3 MONITORING REPORTING REQUIREMENTS

Forms and any other information generated during regular monitoring events and inspections will be kept on file with NYSDEC. All forms, and other relevant reporting formats used during the monitoring/inspection events, will be: (1) subject to approval by NYSDEC; and (2) submitted at the time of the Periodic Review Report, as specified in Section 2.6.

The soil cover system monitoring results will be reported to NYSDEC on a periodic basis in the Periodic Review Report. The report will include, at a minimum:

- Date of event;
- Personnel conducting the inspection;
- Description of the activities performed;
- Copies of all field forms completed (e.g., inspection checklists, etc.);
- A figure illustrating any tree removal, damaged or eroded areas of the soil cover system; and
- Any observations, conclusions, or recommendations.

4.0 OPERATION AND MAINTENANCE PLAN

4.1 INTRODUCTION

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

4.2 ENGINEERING CONTROL SYSTEM MAINTENANCE

4.2.1 Soil Cover System Maintenance

4.2.1.1 Scope

The maintenance requirements for the existing and any future soil cover system includes repair of areas of the cover that may be damaged as a result of weather conditions, erosion, or other factors. Repair will consist of replacing material (stone or topsoil) over eroded or damaged areas with clean topsoil or #1 crushed stone as appropriate.

4.2.2 Fencing

4.2.2.1 Scope

The maintenance requirements for any future fencing needed to limit access to the site will be necessary to maintain the fence in compliance with all applicable City codes and/or zoning requirements that apply to such fences and as required by the manufacturer specifications.

4.3 MAINTENANCE REPORTING REQUIREMENTS

Maintenance reports and any other information generated during regular operations at the site will be kept on-file by NYSEG. All reports, forms, and other relevant information generated will be available upon request to the NYSDEC and will be submitted as part of the Periodic Review Report, as specified in the 2.6.3 of this SMP.

4.3.1 Routine Maintenance Reports

Checklists or forms (see Appendix F) will be completed during each routine maintenance event. Checklists/forms will include, but not be limited to the following information:

- Date;
- Name, company, and position of person(s) conducting maintenance activities;
- Maintenance activities conducted;
- Where appropriate, color photographs or sketches showing the approximate location of any problems or incidents noted (included either on the checklist/form or on an attached sheet); and,
- Other documentation such as copies of invoices for maintenance work, etc. will be attached to the checklist/form.

4.3.2 Non-Routine Maintenance Reports

During each non-routine maintenance event, a form (See Appendix F) will be completed which will include, but not be limited to, the following information:

- Date;
- Name, company, and position of person(s) conducting non-routine maintenance/repair activities;

- Where appropriate, color photographs or sketches showing the approximate location of any problems or incidents (included either on the form or on an attached sheet); and,
- Other documentation such as copies of invoices for repair work etc. will be attached to the checklist/form.

4.4 CONTINGENCY PLAN

Emergencies may include injury to personnel, fire or explosion, environmental release, or serious weather conditions. The objectives during any emergency shall be to protect human health and safety and then the environment. A qualified environmental professional or Site Safety Office will determine the best course of action for dealing with the emergency and possible follow-up requirements that may result from implementing those actions (e.g., erosion of soil cover due to severe weather conditions, injury to site inspection workers).

4.4.1 Emergency Telephone Numbers

In the event of any environmentally related situation or unplanned occurrence requiring assistance the Owner or Owner's representative(s) should contact the appropriate party from the contact list below. For emergencies, appropriate emergency response personnel should be contacted. Prompt contact should also be made to qualified environmental professional. These emergency contact lists must be maintained in the site vehicle by inspection and/or maintenance personnel.

Table 6: Emergency Contact Numbers

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

Table 7: Other Contact Numbers

NYSEG Project Manager - Tracy Blazicek, CHMM	(607) 762-8839
NYSDEC Project Manager – William Ottaway, P.E.	(518) 402-9662

* Note: Emergency contact numbers are subject to change and will be updated whenever a change in personnel occurs

4.4.2 Map and Directions to Emergency Health Facility

Site Location: 73 State Road, Lockport, New York

Nearest Hospital Name: Lockport Memorial Hospital

Hospital Location: 521 East Avenue

Hospital Telephone: (716) 514-5700

Directions to the Hospital: To reach hospital from the site, head east on State Road to Transit Street, turn left on Transit Street and head north, turn right onto NY Route 31/Walnut Street. Take a left onto NY Route 31/Washburn Street. Turn right onto NY Route 31/East Avenue. Lockport Memorial Hospital is located on the left. Approximate trip distance is 1.5 miles.

Total Distance: 1.5 miles

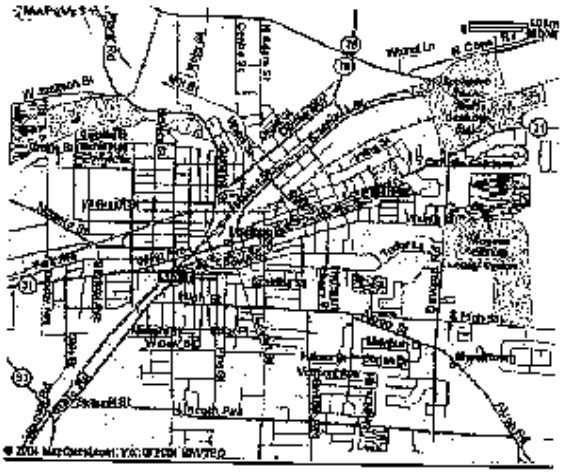
Total Estimated Time: less than 5 minutes

Map Showing Route from the site to the Hospital:

Figure 6 – Hospital Route

Map

HOSPITAL ROUTE MAP



HOSPITAL DIRECTIONS:

Lockport Memorial Hospital
521 East Ave
Lockport, NY 14094-3299

To reach the hospital from the site, head north on Transit Street, turn right onto NY Route 31/Walnut Street. Take a left onto NY Route 31/Washburn Street. Turn right onto NY Route 31/East Avenue. Lockport Memorial Hospital is located on the left. Approximate trip distance is 1.5 miles.

4.4.3 Response Procedures

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

4.4.3.1 Contingency Procedures

If any of the aforementioned conditions for implementing the Contingency Plan are met, the appropriate following contingency procedure(s) shall be performed.

4.4.3.1.1 Contingency Procedures for Fire/Explosion

When fire or explosion appear imminent or have occurred, all normal activity in affected areas will cease. The Project Emergency Coordinator (PEC) will make an assessment of the potential risk and severity of the situation to decide whether the emergency event will or will not be readily controllable with existing portable fire extinguishers or site equipment and materials at hand. Fire fighting will not be done at the risk to site workers. Local fire departments will be contacted in all situations in which fires and/or explosions have occurred. The following steps will be taken for localized fire.

- contact local fire departments;
- move all personnel to an upwind location at an appropriately safe distance away;
- determine if fire is within on-site personnel capabilities to attempt initial fire fighting;
- determine if smoke and/or fumes from fire are potentially impacting offsite areas;

- if the fire is not impacting offsite areas and is within on-site personnel capabilities, utilize most appropriate means of extinguishing fire (e.g., fire extinguishers, water, covering with soil, etc.); and
- once fire is extinguished, containerize and properly dispose of any spilled material, runoff, or soil.

If the situation appears uncontrollable and poses a direct threat to human life, fire departments will be contacted and the Emergency Evacuation Procedures identified in Section 4.4.4 will be implemented. If the chances of an impending explosion are high, the entire area within a 1,000-foot radius of the fire source will be evacuated. The PEC will alert personnel when all danger has passed, as determined by the chief fire fighter from the responding fire department. All equipment used in the emergency will be cleaned and refurbished as soon as possible after the emergency has passed so that it will be ready for use in the event of any future emergency.

4.4.3.1.2 Contingency Procedures for Spills or Material Releases

If a hazardous waste spill or material release or process upset resulting in probable vapor release is identified, the PEC will immediately assess the magnitude and potential seriousness of the spill or release based upon;

- MSDS for the material spilled or released;
- source of the release or spillage of hazardous material;
- an estimate of the quantity released and the rate at which it is being released;
- the direction in which the spill or air release is moving;
- personnel who may be or may have been in contact with the material, or air release, and possible injury or sickness as a result;
- potential for fire and/or explosion resulting from the situation; and
- estimates of area under influence of the release.

If the spill or release is determined to be within the on-site emergency response capabilities, the PEC will ensure implementation of the necessary remedial action. If the accident is beyond the capabilities of the operating crew, all personnel not involved with emergency response activity will be evacuated from the immediate area and the appropriate emergency response group(s) will be contacted.

4.4.3.1.3 Contingency Procedures for Severe Weather

When severe weather occurs, such as a tornado is sighted in the area, when a tornado warning has been issued, or when a lightning storm occurs, the information will be immediately relayed to the PEC. In the case of a tornado sighting, the PEC will then institute emergency shutdown procedures, and all personnel will be directed to proceed indoors after completing appropriate shutdown procedures. In the case of a tornado warning, or lightning storm, the PEC will have operations stopped and direct all personnel to stand by for emergency procedures. Other types of weather or weather induced conditions (e.g., hurricane or flooding) for which long range prediction is available may also require positive action as identified herein.

When the severe weather has passed, the PEC will direct all contractors to inspect on-site equipment to ensure its readiness for operation prior to restarting operations.

If an inspection indicates a fire, explosion, or release has occurred as the result of a severe weather condition, the procedures for those events will be followed.

4.4.3.1.4 Contingency Procedures for Physical Injury to Workers

Regardless of the nature and degree of the injury, the PEC will be apprised of **all** injuries requiring first aid of any kind. A report of the injury or incident will be completed as required by the Health and Safety Plan.

Upon notification that a worker has been injured, the PEC will immediately determine the severity of the accident, and whether the victim can be safely moved from the incident site. Appropriate medical assistance will be summoned immediately.

Minor injuries sustained by workers will be treated on-site using materials from the first aid kits. Whenever possible, such treatment will be administered by trained personnel in a "clean zone". Examples of minor injuries include small scrapes and blisters. Minor injuries would not be expected to trigger implementation of the contingency plan.

Major injuries sustained by workers will require professional medical attention at a hospital. The PEC will immediately summon an ambulance and contact the hospital to which the injured worker will be transported. The PEC will notify the NYSEG project manager as soon as practical. The hospital and ambulance should be advised of:

- the nature of the injury;
- whether the injured worker will be decontaminated prior to transport;
- when and where the injury was sustained; and
- the present condition of the injured worker (e.g., conscious, breathing).

4.4.3.1.5 Contingency Procedures for Chemical Injury to Workers

Injuries involving hazardous chemicals or symptoms of severe chemical overexposure will automatically trigger implementation of the contingency plan. Upon notification that a chemical injury has been sustained or severe symptoms of chemical exposure are being experienced, the PEC will notify the hospital and ambulance of the occurrence. The PEC will provide, to the extent possible, the following information:

- the nature of the injury (e.g., eyes contaminated);
- the chemical(s) involved;
- the present condition of the injured worker (e.g., conscious, breathing);
- whether the injured worker will be decontaminated prior to transport; and
- when and where the injury was sustained.

Steps will immediately be taken to remove the victim from the incident site using whatever personal protective equipment (PPE) and safety equipment is necessary.

Rescuers will check for vital signs and, if possible, remove contaminated outer clothing. If the victim's eyes have been contaminated, personnel trained in administering first aid will flush the victim's eyes with eyewash solution until the emergency response team arrives.

Details on the nature of the contaminant and methods for treating exposure or injury can be obtained from the MSDSs or Occupational Health Guidelines as provided in the Health and Safety Plan.

4.4.4 EMERGENCY EVACUATION PROCEDURES

4.4.4.1 Site Evacuation Procedures

If an emergency occurs that requires the evacuation of an area to ensure personnel safety, including (but not limited to) fire, explosion, severe weather or hazardous waste/material spills, or a significant release of vapors into the atmosphere, an air horn will be sounded on the site by the nearest person aware of the event. The horn will sound continuously for approximately 15 seconds, signaling that immediate evacuation of all personnel from the area is necessary as a result of some existing or impending danger. In areas where only two or three people are working side by side, and the need to evacuate can be communicated verbally by the nearest person aware of the event, the air horn will not be necessary.

All heavy equipment in the area will be shutdown. Under no circumstances will incoming visitors (other than emergency response personnel) be allowed to enter any area where an emergency is occurring. Visitors or observers and all non-essential personnel present in the area of an emergency will be instructed to evacuate the area immediately.

Contractor and subcontractor emergency coordinators and/or health and safety officers (as designated) will be responsible for ensuring that emergency response requirements specific to their own operations are carried out. These parties will report their activities to the PEC. The PEC, however, has final authority regarding all emergency response activities.

All non-essential personnel shall evacuate the emergency areas and notify personnel in adjacent areas to evacuate also. The evacuated workers will assemble at the primary assembly area at the site construction office trailer, where the PEC will give directions for implementing necessary actions. In the event that the primary assembly area is involved, unapproachable, or unsafe due to the event, evacuated workers shall assemble at the alternate assembly area at the intersection of Transit Street and State Road. The PEC will phone for backup assistance.

Personnel are to avoid encountering smoke/gas plumes as practicable during evacuation and assembling.

The PEC will take charge of all emergency response activities and dictate the procedures that will be followed until emergency personnel arrive. The PEC will assess the seriousness of the situation, and direct whatever efforts are necessary until the emergency response units arrive.

After initiating emergency response procedures, the PEC will assign appropriate personnel to check and attempt to ensure that access roads are not obstructed. If traffic control is necessary, as in the event of a fire or explosion, personnel who have been trained in these procedures and designated at the project safety meeting will take over these duties until emergency units arrive.

The PEC will remain at the site to provide any assistance requested by emergency-response squads as they arrive to deal with the situation. The PEC will have the authority to shut down any part or the entire project after an emergency until he deems it safe to continue operations. He will dictate any changes in project safety practices which are made necessary by the emergency that has occurred or are required for preventing further emergencies.

4.4.4.2 Off-Site Evacuation Procedures

If the PEC deems that humans outside of the site are at risk, he will notify the appropriate agencies and departments (e.g., NYSEG project manager, Niagara County Health Department, Lockport Police Department, New York State Department of

Environmental Conservation and New York State Department of Health, etc.) of the need, or potential need, to institute off-site evacuation procedures. The PEC will provide, at a minimum, the following information:

- his or her name and telephone number;
- name and address of facility;
- time and type of incident (e.g., release, fire, etc.)
- name and quantity of materials or materials involved, to the extent this information is known;
- the extent of injuries, if any; and
- the possible hazards to human health or environment, and cleanup procedures.

LIST OF TABLES

Table 1 – Summary of RI Surface Soil Analytical Results

Table 2 – Summary of RI Subsurface Soil Analytical Results

Table 3 - Criteria for On-site Re-use of Excavated Material

Table 4 - Criteria for Imported Soils

Table 5 – Schedule of Routine Inspections

Table 6 - Emergency Contact Numbers

Table 7 - Other Contact Numbers

Table 1
Summary of RI Surface Soil Analytical Results
State Road Former MGP Site - Site Management Plan

Location ID				SS-01	SS-02	SS-02	SS-03	SS-04
Sample ID				SS-01	DUP-07	SS-02	SS-03	SS-04
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				0.0-0.5	0.0-0.5	0.0-0.5	0.0-0.5	0.0-0.5
Date Sampled				06/02/05	06/02/05	06/02/05	06/02/05	06/02/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**		Field Duplicate (1-1)			
Semivolatile Organic Compounds								
2-Methylnaphthalene	MG/KG	36.4	-	12 U	5.3 U	11 U	10 U	0.45 J
Acenaphthene	MG/KG	50	-	12 U	0.46 J	0.60 J	10 U	2.6 J
Acenaphthylene	MG/KG	41	-	12 U	5.3 U	11 U	10 U	0.76 J
Anthracene	MG/KG	50	-	1.6 J	0.85 J	1.6 J	10 U	5.3 J
Benzo(a)anthracene	MG/KG	0.224 or MDL	-	5.1 J	2.7 J	5.2 J	1.1 J	13
Benzo(a)pyrene	MG/KG	0.061 or MDL	-	4.9 J	2.4 J	4.3 J	0.91 J	10
Benzo(b)fluoranthene	MG/KG	1.1	-	7.2 J	3.3 J	7.5 J	1.7 J	16
Benzo(g,h,i)perylene	MG/KG	50	-	2.2 J	0.99 J	1.9 J	10 U	3.7 J
Benzo(k)fluoranthene	MG/KG	1.1	-	1.9 J	1.2 J	7.9 J	1.7 J	4.8 J
bis(2-Ethylhexyl)phthalate	MG/KG	50	-	12 U	5.3 U	11 U	10 U	0.88 J
Carbazole	MG/KG	50	-	0.62 J	0.45 J	0.68 J	10 U	3.3 J
Chrysene	MG/KG	0.4	-	4.4 J	2.6 J	4.8 J	0.83 J	12
Dibenz(a,h)anthracene	MG/KG	0.014 or MDL	-	0.84 J	0.32 J	11 U	10 U	1.2 J
Dibenzofuran	MG/KG	6.2	-	12 U	5.3 U	11 U	10 U	2.0 J
Fluoranthene	MG/KG	50	-	10 J	6.1	12	1.9 J	32
Fluorene	MG/KG	50	-	12 U	5.3 U	11 U	10 U	2.9 J
Indeno(1,2,3-cd)pyrene	MG/KG	3.2	-	2.4 J	0.98 J	1.7 J	10 U	3.7 J
Naphthalene	MG/KG	13	-	12 U	5.3 U	11 U	10 U	7.9 U
Pentachlorophenol	MG/KG	1 or MDL	-	59 U	4.8 J	2.7 J	49 U	38 U
Phenanthrene	MG/KG	50	-	5.1 J	3.6 J	6.1 J	0.81 J	22

Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

U - Not detected above the reported quantitation limit. ; J - The reported concentration is an estimated value.
NA - Not Analyzed, ND - Not Detected
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Only Detected Results Reported.

Detection Limits shown are PQL

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Table 1
Summary of RI Surface Soil Analytical Results
State Road Former MGP Site - Site Management Plan

Location ID				SS-01	SS-02	SS-02	SS-03	SS-04
Sample ID				SS-01	DUP-07	SS-02	SS-03	SS-04
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				0.0-0.5	0.0-0.5	0.0-0.5	0.0-0.5	0.0-0.5
Date Sampled				06/02/05	06/02/05	06/02/05	06/02/05	06/02/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**		Field Duplicate (1-1)			
Semivolatile Organic Compounds								
Pyrene	MG/KG	50	-	6.8 J	4.4 J	9.2 J	1.4 J	21
Total Carcinogenic PAHs	MG/KG	-	-	26.74	13.5	31.4	6.24	60.7
Total Non-Carcinogenic PAHs	MG/KG	-	-	25.7	16.4	31.4	4.11	90.71
Total Polycyclic Aromatic Hydrocarbons	MG/KG	-	-	52.44	29.9	62.8	10.35	151.41
Total Semivolatile Organic Compounds	MG/KG	500	-	53.06	35.15	66.18	10.35	157.59
Polychlorinated Biphenyls								
Aroclor 1254	MG/KG	1	-	0.030 U	1.3 U	0.58 U	0.023 J	0.055
Total Polychlorinated Biphenyls	MG/KG	1	-	ND	ND	ND	0.023	0.055
Metals								
Aluminum	MG/KG	SB	33000	6,650 J	4,920 J	4,550 J	3,470 J	3,000 J
Arsenic	MG/KG	7.5	3-12	5.1 J	4.2 J	4.0 J	4.0 J	2.4 UJ
Barium	MG/KG	300	15-600	68.4 J	59.5 J	52.6 J	31.6 J	34.9 J
Beryllium	MG/KG	0.16	0-1.75	0.44 J	0.33 UJ	0.34 UJ	0.32 UJ	0.24 UJ
Cadmium	MG/KG	1	0.1-1	0.36 UJ	0.33 UJ	1.0 J	0.32 UJ	0.24 UJ
Calcium	MG/KG	SB	130-35000	133,000	63,400	62,700	110,000	14,600
Chromium	MG/KG	10	1.5-40	9.7 J	16.8 J	16.5 J	6.6 J	6.6 J
Cobalt	MG/KG	30	2.5-60	8.5 J	5.9 J	6.4 J	3.7 J	3.2 J
Copper	MG/KG	25	1-50	23.7 J	32.5 J	28.5 J	20.0 J	12.8 J
Iron	MG/KG	2000	2000-550000	14,000 J	12,100 J	11,700 J	10,900 J	5,410 J
Lead	MG/KG	SB	500	100 J	170 J	152 J	62.7 J	95.3 J

Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

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Table 1
Summary of RI Surface Soil Analytical Results
State Road Former MGP Site - Site Management Plan

Location ID				SS-01	SS-02	SS-02	SS-03	SS-04
Sample ID				SS-01	DUP-07	SS-02	SS-03	SS-04
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				0.0-0.5	0.0-0.5	0.0-0.5	0.0-0.5	0.0-0.5
Date Sampled				06/02/05	06/02/05	06/02/05	06/02/05	06/02/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**		Field Duplicate (1-1)			
Metals								
Magnesium	MG/KG	SB	100-5000	41,600 J	29,800 J	29,600 J	42,800 J	3,280 J
Manganese	MG/KG	SB	50-5000	862 J	682 J	644 J	773 J	278 J
Mercury	MG/KG	0.1	0.001-0.2	0.220	0.685	0.460	0.068	0.382
Nickel	MG/KG	13	0.5-25	17.6 J	43.0 J	42.8 J	20.7 J	16.2 J
Potassium	MG/KG	SB	8500-43000	1,410 J	927 J	887 J	1,020 J	523 J
Vanadium	MG/KG	150	1-300	16.2 J	11.8 J	10.6 J	7.9 J	6.4 J
Zinc	MG/KG	20	9-50	112 J	174 J	325 J	84.2 J	100 J
Miscellaneous Parameters								
Total Cyanide	MG/KG	-	-	1.0 U	1.1 U	1.1 U	1.0 U	1.2 U
Total Cyanide (Secondary Lab)	MG/KG	-	-	NA	NA	NA	NA	NA
Free Cyanide	MG/KG	-	-	NA	NA	NA	NA	NA
Ferric/Ferrous Iron Cyanide Complex	MG/KG	-	-	NA	NA	NA	NA	NA

Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

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Only Detected Results Reported.

Detection Limits shown are PQL

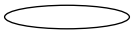
Table 1
Summary of RI Surface Soil Analytical Results
State Road Former MGP Site - Site Management Plan

Location ID				SS-05	SS-06
Sample ID				SS-05	SS-06
Matrix				Soil	Soil
Depth Interval (ft)				0.0-0.5	0.0-0.5
Date Sampled				06/02/05	06/02/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**		
Semivolatile Organic Compounds					
2-Methylnaphthalene	MG/KG	36.4	-	3.6 U	0.29 J
Acenaphthene	MG/KG	50	-	3.6 U	0.65 J
Acenaphthylene	MG/KG	41	-	3.6 U	0.83 J
Anthracene	MG/KG	50	-	0.56 J	1.8 J
Benzo(a)anthracene	MG/KG	0.224 or MDL	-	2.0 J	6.9
Benzo(a)pyrene	MG/KG	0.061 or MDL	-	1.9 J	7.4
Benzo(b)fluoranthene	MG/KG	1.1	-	3.0 J	13
Benzo(g,h,i)perylene	MG/KG	50	-	0.71 J	3.2 J
Benzo(k)fluoranthene	MG/KG	1.1	-	0.80 J	14
bis(2-Ethylhexyl)phthalate	MG/KG	50	-	3.6 U	3.7 U
Carbazole	MG/KG	50	-	3.6 U	0.72 J
Chrysene	MG/KG	0.4	-	1.9 J	6.8
Dibenz(a,h)anthracene	MG/KG	0.014 or MDL	-	0.26 J	0.96 J
Dibenzofuran	MG/KG	6.2	-	3.6 U	0.41 J
Fluoranthene	MG/KG	50	-	4.3	14
Fluorene	MG/KG	50	-	3.6 U	0.68 J
Indeno(1,2,3-cd)pyrene	MG/KG	3.2	-	0.73 J	2.9 J
Naphthalene	MG/KG	13	-	3.6 U	0.62 J
Pentachlorophenol	MG/KG	1 or MDL	-	18 U	18 U
Phenanthrene	MG/KG	50	-	2.1 J	7.0

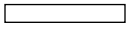
Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria (1)



Concentration Exceeds Criteria (2)

U - Not detected above the reported quantitation limit. ; J - The reported concentration is an estimated value.
NA - Not Analyzed, ND - Not Detected
Surface soil samples analyzed for: SW8270C, SW8082, SW6010B/SW7471A, SW9012A AND SW9065

Only Detected Results Reported.

Detection Limits shown are PQL

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Printed: 6/3/2009 11:08:07 AM
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Table 1
Summary of RI Surface Soil Analytical Results
State Road Former MGP Site - Site Management Plan

Location ID				SS-05	SS-06
Sample ID				SS-05	SS-06
Matrix				Soil	Soil
Depth Interval (ft)				0.0-0.5	0.0-0.5
Date Sampled				06/02/05	06/02/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**		
Semivolatile Organic Compounds					
Pyrene	MG/KG	50	-	2.8 J	9.7
Total Carcinogenic PAHs	MG/KG	-	-	10.59	51.96
Total Non-Carcinogenic PAHs	MG/KG	-	-	10.47	38.77
Total Polycyclic Aromatic Hydrocarbons	MG/KG	-	-	21.06	90.73
Total Semivolatile Organic Compounds	MG/KG	500	-	21.06	91.86
Polychlorinated Biphenyls					
Aroclor 1254	MG/KG	1	-	0.055	0.019 U
Total Polychlorinated Biphenyls	MG/KG	1	-	0.055	ND
Metals					
Aluminum	MG/KG	SB	33000	6,550 J	3,840 J
Arsenic	MG/KG	7.5	3-12	4.9 J	6.9 J
Barium	MG/KG	300	15-600	51.1 J	58.9 J
Beryllium	MG/KG	0.16	0-1.75	0.34 J	0.34 J
Cadmium	MG/KG	1	0.1-1	0.23 UJ	0.23 UJ
Calcium	MG/KG	SB	130-35000	20,000	22,200
Chromium	MG/KG	10	1.5-40	12.2 J	11.1 J
Cobalt	MG/KG	30	2.5-60	6.3 J	5.4 J
Copper	MG/KG	25	1-50	19.9 J	55.0 J
Iron	MG/KG	2000	2000-550000	12,100 J	9,150 J
Lead	MG/KG	SB	500	45.5 J	140 J

Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

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NA - Not Analyzed, ND - Not Detected
Surface soil samples analyzed for: SW8270C, SW8082, SW6010B/SW7471A, SW9012A AND SW9065

Only Detected Results Reported.

Detection Limits shown are PQL

Table 1
Summary of RI Surface Soil Analytical Results
State Road Former MGP Site - Site Management Plan

Location ID				SS-05	SS-06
Sample ID				SS-05	SS-06
Matrix				Soil	Soil
Depth Interval (ft)				0.0-0.5	0.0-0.5
Date Sampled				06/02/05	06/02/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**		
Metals					
Magnesium	MG/KG	SB	100-5000	7,500 J	7,780 J
Manganese	MG/KG	SB	50-5000	507 J	339 J
Mercury	MG/KG	0.1	0.001-0.2	0.102	0.424
Nickel	MG/KG	13	0.5-25	27.3 J	28.8 J
Potassium	MG/KG	SB	8500-43000	975 J	619 J
Vanadium	MG/KG	150	1-300	13.0 J	9.9 J
Zinc	MG/KG	20	9-50	62.6 J	95.4 J
Miscellaneous Parameters					
Total Cyanide	MG/KG	-	-	1.6	2.2
Total Cyanide (Secondary Lab)	MG/KG	-	-	0.17	2.93
Free Cyanide	MG/KG	-	-	0.1	0.08
Ferric/Ferrous Iron Cyanide Complex	MG/KG	-	-	0.03	1.58

Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

U - Not detected above the reported quantitation limit. ; J - The reported concentration is an estimated value.
NA - Not Analyzed, ND - Not Detected
Surface soil samples analyzed for: SW8270C, SW8082, SW6010B/SW7471A, SW9012A AND SW9065

Only Detected Results Reported.

Detection Limits shown are PQL

Table 2
Summary of RI Subsurface Soil Analytical Results
State Road Former MGP Site - Site Management Plan

Location ID				GB-28	GB-29	GB-29	GB-30	GB-30
Sample ID				GB-28 (7-9)	GB-29 (12-13)	GB-29 (13-14)	GB-30 (12.5-13.5)	GB-30 (13.6-14.6)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				7.0-9.0	12.0-13.0	13.0-14.0	12.5-13.5	13.6-14.6
Date Sampled				05/31/05	05/26/05	05/26/05	05/26/05	05/26/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Volatile Organic Compounds								
Acetone	MG/KG	0.2	-	0.032	NA	0.027 U	NA	0.029 U
Benzene	MG/KG	0.06	-	0.006 U	NA	0.005 U	NA	0.006 U
Chloromethane	MG/KG	-	-	0.006 U	NA	0.003 J	NA	0.006 U
Methyl ethyl ketone (2-Butanone)	MG/KG	0.3	-	0.036	NA	0.027 U	NA	0.029 U
Tetrachloroethene	MG/KG	1.4	-	0.004 J	NA	0.005 U	NA	0.006 U
Toluene	MG/KG	1.5	-	0.006 U	NA	0.005 U	NA	0.004 J
Total BTEX	MG/KG	-	-	ND	NA	ND	NA	0.004
Total Volatile Organic Compounds	MG/KG	10	-	0.072	NA	0.003	NA	0.004
Semivolatile Organic Compounds								
2-Methylnaphthalene	MG/KG	36.4	-	7.4 U	NA	0.36 U	NA	0.38 U
Acenaphthene	MG/KG	50	-	7.4 U	NA	0.36 U	NA	0.38 U
Acenaphthylene	MG/KG	41	-	7.4 U	NA	0.36 U	NA	0.38 U
Anthracene	MG/KG	50	-	0.61 J	NA	0.36 U	NA	0.38 U
Benzo(a)anthracene	MG/KG	0.224 or MDL	-	1.4 J	NA	0.36 U	NA	0.38 U
Benzo(a)pyrene	MG/KG	0.061 or MDL	-	1.2 J	NA	0.36 U	NA	0.38 U
Benzo(b)fluoranthene	MG/KG	1.1	-	1.8 J	NA	0.36 U	NA	0.38 U
Benzo(g,h,i)perylene	MG/KG	50	-	0.76 J	NA	0.36 U	NA	0.38 U
Benzo(k)fluoranthene	MG/KG	1.1	-	2.0 J	NA	0.36 U	NA	0.38 U
bis(2-Ethylhexyl)phthalate	MG/KG	50	-	7.4 U	NA	0.033 J	NA	0.38 U
Carbazole	MG/KG	50	-	7.4 U	NA	0.36 U	NA	0.38 U

Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

U - Not detected above the reported quantitation limit. ; J - The reported concentration is an estimated value.

NA - Not Analyzed, ND - Not Detected

Subsurface soil samples analyzed for: SW8260B, SW8270C, SW8082, SW6010B/SW7471A, SW9012A and SW9065, and TOC by Region II Lloyd Kahn Method.

Only Detected Results Reported.

Detection Limits shown are PQL

Table 2
Summary of RI Subsurface Soil Analytical Results
State Road Former MGP Site - Site Management Plan

Location ID				GB-28	GB-29	GB-29	GB-30	GB-30
Sample ID				GB-28 (7-9)	GB-29 (12-13)	GB-29 (13-14)	GB-30 (12.5-13.5)	GB-30 (13.6-14.6)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				7.0-9.0	12.0-13.0	13.0-14.0	12.5-13.5	13.6-14.6
Date Sampled				05/31/05	05/26/05	05/26/05	05/26/05	05/26/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Semivolatile Organic Compounds								
Chrysene	MG/KG	0.4	-	1.4 J	NA	0.36 U	NA	0.38 U
Dibenz(a,h)anthracene	MG/KG	0.014 or MDL	-	7.4 U	NA	0.36 U	NA	0.38 U
Dibenzofuran	MG/KG	6.2	-	7.4 U	NA	0.36 U	NA	0.38 U
Fluoranthene	MG/KG	50	-	3.5 J	NA	0.36 U	NA	0.38 U
Fluorene	MG/KG	50	-	7.4 U	NA	0.36 U	NA	0.38 U
Indeno(1,2,3-cd)pyrene	MG/KG	3.2	-	0.69 J	NA	0.36 U	NA	0.38 U
Naphthalene	MG/KG	13	-	7.4 U	NA	0.36 U	NA	0.38 U
Phenanthrene	MG/KG	50	-	2.6 J	NA	0.36 U	NA	0.38 U
Pyrene	MG/KG	50	-	2.3 J	NA	0.36 U	NA	0.38 U
Total Carcinogenic PAHs	MG/KG	-	-	8.49	NA	ND	NA	ND
Total Non-Carcinogenic PAHs	MG/KG	-	-	9.77	NA	ND	NA	ND
Total Polycyclic Aromatic Hydrocarbons	MG/KG	-	-	18.26	NA	ND	NA	ND
Total Semivolatile Organic Compounds	MG/KG	500	-	18.26	NA	0.033	NA	ND
Metals								
Aluminum	MG/KG	SB	33000	4,920	NA	2,520 J	NA	3,350 J
Arsenic	MG/KG	7.5	3-12	2.6 J	NA	2.4 U	NA	2.5 U
Barium	MG/KG	300	15-600	53.0 J	NA	26.6 J	NA	22.7 J
Beryllium	MG/KG	0.16	0-1.75	0.27 J	NA	0.24 UJ	NA	0.27 J
Calcium	MG/KG	SB	130-35000	35,500	NA	49,800	NA	21,000
Chromium	MG/KG	10	1.5-40	7.4 J	NA	3.6 J	NA	3.8 J

Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

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Subsurface soil samples analyzed for: SW8260B, SW8270C, SW8082, SW6010B/SW7471A, SW9012A and SW9065, and TOC by Region II Lloyd Kahn Method.

Only Detected Results Reported.

Detection Limits shown are PQL

Table 2
Summary of RI Subsurface Soil Analytical Results
State Road Former MGP Site - Site Management Plan

Location ID				GB-28	GB-29	GB-29	GB-30	GB-30
Sample ID				GB-28 (7-9)	GB-29 (12-13)	GB-29 (13-14)	GB-30 (12.5-13.5)	GB-30 (13.6-14.6)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				7.0-9.0	12.0-13.0	13.0-14.0	12.5-13.5	13.6-14.6
Date Sampled				05/31/05	05/26/05	05/26/05	05/26/05	05/26/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Metals								
Cobalt	MG/KG	30	2.5-60	4.0 J	NA	2.7 J	NA	2.7 J
Copper	MG/KG	25	1-50	12.0 J	NA	9.6 J	NA	6.0 J
Iron	MG/KG	2000	2000-550000	8,460 J	NA	5,330 J	NA	5,460 J
Lead	MG/KG	SB	500	108	NA	1.9 J	NA	1.6 J
Magnesium	MG/KG	SB	100-5000	14,700	NA	4,700 J	NA	3,970 J
Manganese	MG/KG	SB	50-5000	457 J	NA	446 J	NA	254 J
Mercury	MG/KG	0.1	0.001-0.2	0.189	NA	0.017 U	NA	0.018 U
Nickel	MG/KG	13	0.5-25	8.9 J	NA	5.0 J	NA	5.7 J
Potassium	MG/KG	SB	8500-43000	718	NA	634 J	NA	654 J
Silver	MG/KG	SB	-	0.53 UJ	NA	0.61 UJ	NA	0.63 UJ
Sodium	MG/KG	SB	6000-8000	147 UJ	NA	171 UJ	NA	175 UJ
Vanadium	MG/KG	150	1-300	9.5 J	NA	5.4 J	NA	6.0 J
Zinc	MG/KG	20	9-50	63.5 J	NA	13.0 J	NA	19.7 J
Miscellaneous Parameters								
Total Cyanide	MG/KG	-	-	1.1 UJ	NA	1.1 U	NA	1.1 U
Total Organic Carbon (TOC)	MG/KG	-	-	NA	24,400	NA	386	NA
Total Cyanide (Secondary Lab)	MG/KG	-	-	NA	NA	NA	NA	NA
Free Cyanide	MG/KG	-	-	NA	NA	NA	NA	NA
Ferric/Ferrous Iron Cyanide Complex	MG/KG	-	-	NA	NA	NA	NA	NA
Unknown Iron Cyanide Complex	MG/KG	-	-	NA	NA	NA	NA	NA

Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

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Subsurface soil samples analyzed for: SW8260B, SW8270C, SW8082, SW6010B/SW7471A, SW9012A and SW9065, and TOC by Region II Lloyd Kahn Method.

Only Detected Results Reported.

Detection Limits shown are PQL

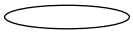
Table 2
Summary of RI Subsurface Soil Analytical Results
State Road Former MGP Site - Site Management Plan

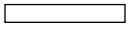
Location ID				GB-28	GB-29	GB-29	GB-30	GB-30
Sample ID				GB-28 (7-9)	GB-29 (12-13)	GB-29 (13-14)	GB-30 (12.5-13.5)	GB-30 (13.6-14.6)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				7.0-9.0	12.0-13.0	13.0-14.0	12.5-13.5	13.6-14.6
Date Sampled				05/31/05	05/26/05	05/26/05	05/26/05	05/26/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Miscellaneous Parameters								
Natural Oxdiant Demand (Low Dose)	G/KG	-	-	NA	0.7	NA	0.9	NA
Natural Oxdiant Demand (Medium Dose)	G/KG	-	-	NA	1.2	NA	1.6	NA
Natural Oxdiant Demand (High Dose)	G/KG	-	-	NA	1.3	NA	1.5	NA

Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.


Concentration Exceeds Criteria (1)


Concentration Exceeds Criteria (2)

U - Not detected above the reported quantitation limit. ; J - The reported concentration is an estimated value.

NA - Not Analyzed, ND - Not Detected

Subsurface soil samples analyzed for: SW8260B, SW8270C, SW8082, SW6010B/SW7471A, SW9012A and SW9065, and TOC by Region II Lloyd Kahn Method.

Only Detected Results Reported.

Detection Limits shown are PQL

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Table 2
Summary of RI Subsurface Soil Analytical Results
State Road Former MGP Site - Site Management Plan

Location ID				GB-31	GB-32	GB-33	GB-34	GB-34
Sample ID				GB-31 (9.5-10.5)	GB-32 (4-5)	GB-33 (3-4)	GB-34 (14-16)	GB-34 (17-18)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				9.5-10.5	4.0-5.0	3.0-4.0	14.0-16.0	17.0-18.0
Date Sampled				05/23/05	05/23/05	05/23/05	05/27/05	05/27/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Volatile Organic Compounds								
Acetone	MG/KG	0.2	-	0.027 U	0.027 U	0.028 U	0.027 U	0.029 U
Benzene	MG/KG	0.06	-	0.005 U	0.005 U	0.006 U	0.005 U	0.006 U
Chloromethane	MG/KG	-	-	0.005 U	0.005 U	0.006 U	0.005 U	0.006 U
Methyl ethyl ketone (2-Butanone)	MG/KG	0.3	-	0.027 U	0.027 U	0.028 U	0.027 U	0.029 U
Tetrachloroethene	MG/KG	1.4	-	0.005 U	0.005 U	0.006 U	0.005 U	0.006 U
Toluene	MG/KG	1.5	-	0.002 J	0.005 U	0.003 J	0.005	0.002 J
Total BTEX	MG/KG	-	-	0.002	ND	0.003	0.005	0.002
Total Volatile Organic Compounds	MG/KG	10	-	0.002	ND	0.003	0.005	0.002
Semivolatile Organic Compounds								
2-Methylnaphthalene	MG/KG	36.4	-	0.26 J	0.36 U	0.36 U	1.6 J	7.2 U
Acenaphthene	MG/KG	50	-	3.7 U	0.36 U	0.028 J	5.2 J	0.83 J
Acenaphthylene	MG/KG	41	-	0.76 J	0.024 J	0.019 J	1.4 J	7.2 U
Anthracene	MG/KG	50	-	1.0 J	0.029 J	0.064 J	13	2.6 J
Benzo(a)anthracene	MG/KG	0.224 or MDL	-	3.0 J	0.13 J	0.20 J	17	4.6 J
Benzo(a)pyrene	MG/KG	0.061 or MDL	-	2.6 J	0.15 J	0.20 J	12	3.8 J
Benzo(b)fluoranthene	MG/KG	1.1	-	3.5 J	0.18 J	0.23 J	16	4.8 J
Benzo(g,h,i)perylene	MG/KG	50	-	2.0 J	0.10 J	0.13 J	8.7	2.9 J
Benzo(k)fluoranthene	MG/KG	1.1	-	1.2 J	0.061 J	0.075 J	5.8 J	1.5 J
bis(2-Ethylhexyl)phthalate	MG/KG	50	-	0.44 J	0.086 J	0.031 J	7.3 U	7.2 U
Carbazole	MG/KG	50	-	0.34 J	0.36 U	0.020 J	6.8 J	0.92 J

Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

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Concentration Exceeds Criteria (1)

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Subsurface soil samples analyzed for: SW8260B, SW8270C, SW8082, SW6010B/SW7471A, SW9012A and SW9065, and TOC by Region II Lloyd Kahn Method.

Only Detected Results Reported.

Detection Limits shown are PQL

Table 2
Summary of RI Subsurface Soil Analytical Results
State Road Former MGP Site - Site Management Plan

Location ID				GB-31	GB-32	GB-33	GB-34	GB-34
Sample ID				GB-31 (9.5-10.5)	GB-32 (4-5)	GB-33 (3-4)	GB-34 (14-16)	GB-34 (17-18)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				9.5-10.5	4.0-5.0	3.0-4.0	14.0-16.0	17.0-18.0
Date Sampled				05/23/05	05/23/05	05/23/05	05/27/05	05/27/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Semivolatile Organic Compounds								
Chrysene	MG/KG	0.4	-	2.7 J	0.12 J	0.18 J	14	4.1 J
Dibenz(a,h)anthracene	MG/KG	0.014 or MDL	-	0.57 J	0.032 J	0.038 J	2.9 J	0.92 J
Dibenzofuran	MG/KG	6.2	-	0.34 J	0.36 U	0.36 U	6.8 J	0.60 J
Fluoranthene	MG/KG	50	-	5.8	0.16 J	0.36	48	11
Fluorene	MG/KG	50	-	0.41 J	0.36 U	0.024 J	13	1.4 J
Indeno(1,2,3-cd)pyrene	MG/KG	3.2	-	1.9 J	0.098 J	0.13 J	8.2	2.6 J
Naphthalene	MG/KG	13	-	0.67 J	0.019 J	0.36 U	1.3 J	7.2 U
Phenanthrene	MG/KG	50	-	4.0	0.10 J	0.26 J	57	9.4
Pyrene	MG/KG	50	-	4.4	0.14 J	0.29 J	28	7.4
Total Carcinogenic PAHs	MG/KG	-	-	15.47	0.771	1.053	75.9	22.32
Total Non-Carcinogenic PAHs	MG/KG	-	-	19.3	0.572	1.175	177.2	35.53
Total Polycyclic Aromatic Hydrocarbons	MG/KG	-	-	34.77	1.343	2.228	253.1	57.85
Total Semivolatile Organic Compounds	MG/KG	500	-	35.89	1.429	2.279	266.7	59.37
Metals								
Aluminum	MG/KG	SB	33000	5,450	2,880	5,430	6,180 J	6,580 J
Arsenic	MG/KG	7.5	3-12	8.8	2.4 U	2.5	4.5 J	4.9 J
Barium	MG/KG	300	15-600	44.9 J	21.3 J	62.0 J	51.7 J	56.7 J
Beryllium	MG/KG	0.16	0-1.75	0.50 J	0.39 J	0.32 J	0.34 J	0.36 J
Calcium	MG/KG	SB	130-35000	74,300	224,000	48,000	38,400	42,300
Chromium	MG/KG	10	1.5-40	9.4 J	4.5 J	7.0 J	8.1 J	10.9 J

Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

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Table 2
Summary of RI Subsurface Soil Analytical Results
State Road Former MGP Site - Site Management Plan

Location ID				GB-31	GB-32	GB-33	GB-34	GB-34
Sample ID				GB-31 (9.5-10.5)	GB-32 (4-5)	GB-33 (3-4)	GB-34 (14-16)	GB-34 (17-18)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				9.5-10.5	4.0-5.0	3.0-4.0	14.0-16.0	17.0-18.0
Date Sampled				05/23/05	05/23/05	05/23/05	05/27/05	05/27/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Metals								
Cobalt	MG/KG	30	2.5-60	5.2	1.7	4.3	5.2 J	4.9 J
Copper	MG/KG	25	1-50	75.9 J	8.8 J	13.8 J	22.1 J	35.4 J
Iron	MG/KG	2000	2000-550000	18,700	4,720	8,600	10,100 J	12,600 J
Lead	MG/KG	SB	500	85.9 J	13.3 J	11.7 J	35.8 J	74.9 J
Magnesium	MG/KG	SB	100-5000	26,600	29,500	7,230	7,900	11,800
Manganese	MG/KG	SB	50-5000	442	337	395	612 J	493 J
Mercury	MG/KG	0.1	0.001-0.2	0.137 J	0.020 J	0.029 J	0.080	0.293
Nickel	MG/KG	13	0.5-25	189	4.9	9.0	18.3 J	15.4 J
Potassium	MG/KG	SB	8500-43000	797 J	1,470 J	887 J	908 J	879 J
Silver	MG/KG	SB	-	0.56 UJ	1.3 J	0.55 UJ	0.55 UJ	0.59 UJ
Sodium	MG/KG	SB	6000-8000	157 U	442	154 U	153 UJ	165 UJ
Vanadium	MG/KG	150	1-300	9.9 J	4.7 J	9.5 J	11.5 J	13.4 J
Zinc	MG/KG	20	9-50	66.6 J	12.0 J	59.2 J	46.6 J	61.4 J
Miscellaneous Parameters								
Total Cyanide	MG/KG	-	-	2.0 J	4.0 J	2.1 J	1.1 UJ	1.1 UJ
Total Organic Carbon (TOC)	MG/KG	-	-	NA	NA	NA	NA	NA
Total Cyanide (Secondary Lab)	MG/KG	-	-	17	1.39	8.44	NA	NA
Free Cyanide	MG/KG	-	-	0.33	0.04 U	0.05 U	NA	NA
Ferric/Ferrous Iron Cyanide Complex	MG/KG	-	-	14.6	0.46	7.76	NA	NA
Unknown Iron Cyanide Complex	MG/KG	-	-	0.82	2.71	0.1	NA	NA

Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

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Table 2
Summary of RI Subsurface Soil Analytical Results
State Road Former MGP Site - Site Management Plan

Location ID				GB-31	GB-32	GB-33	GB-34	GB-34
Sample ID				GB-31 (9.5-10.5)	GB-32 (4-5)	GB-33 (3-4)	GB-34 (14-16)	GB-34 (17-18)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				9.5-10.5	4.0-5.0	3.0-4.0	14.0-16.0	17.0-18.0
Date Sampled				05/23/05	05/23/05	05/23/05	05/27/05	05/27/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Miscellaneous Parameters								
Natural Oxdiant Demand (Low Dose)	G/KG	-	-	NA	NA	NA	NA	NA
Natural Oxdiant Demand (Medium Dose)	G/KG	-	-	NA	NA	NA	NA	NA
Natural Oxdiant Demand (High Dose)	G/KG	-	-	NA	NA	NA	NA	NA

Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

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Subsurface soil samples analyzed for: SW8260B, SW8270C, SW8082, SW6010B/SW7471A, SW9012A and SW9065, and TOC by Region II Lloyd Kahn Method.

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Detection Limits shown are PQL

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Printed: 6/3/2009 11:13:05 AM
[SITEID] = '02' AND [MATRIX] = 'SO' AND [LOCID] LIKE 'GB-*' AND [LOGDATE] >= #1/1/2005

Table 2
Summary of RI Subsurface Soil Analytical Results
State Road Former MGP Site - Site Management Plan

Location ID				GB-35	GB-36	GB-36	GB-37	GB-37
Sample ID				GB-35 (3-5)	GB-36 (11-12)	GB-36 (18-19)	GB-37 (13-14)	GB-37 (14-16)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				3.0-5.0	11.0-12.0	18.0-19.0	13.0-14.0	14.0-16.0
Date Sampled				05/31/05	05/27/05	05/27/05	05/27/05	05/27/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Volatile Organic Compounds								
Acetone	MG/KG	0.2	-	0.025 U	0.045	0.045	NA	0.028 U
Benzene	MG/KG	0.06	-	0.005 U	0.002 J	0.006 U	NA	0.006 U
Chloromethane	MG/KG	-	-	0.005 U	0.006 U	0.006 U	NA	0.006 U
Methyl ethyl ketone (2-Butanone)	MG/KG	0.3	-	0.025 U	0.006 J	0.006 J	NA	0.028 U
Tetrachloroethene	MG/KG	1.4	-	0.005 U	0.006 U	0.006 U	NA	0.006 U
Toluene	MG/KG	1.5	-	0.005 U	0.003 J	0.006 U	NA	0.002 J
Total BTEX	MG/KG	-	-	ND	0.005	ND	NA	0.002
Total Volatile Organic Compounds	MG/KG	10	-	ND	0.056	0.051	NA	0.002
Semivolatile Organic Compounds								
2-Methylnaphthalene	MG/KG	36.4	-	0.17 J	0.38 J	0.38 U	NA	2.3 J
Acenaphthene	MG/KG	50	-	0.10 J	0.97 J	0.38 U	NA	3.0 J
Acenaphthylene	MG/KG	41	-	0.26 J	7.6 U	0.38 U	NA	0.84 J
Anthracene	MG/KG	50	-	0.41	3.3 J	0.041 J	NA	10
Benzo(a)anthracene	MG/KG	0.224 or MDL	-	1.6	4.6 J	0.18 J	NA	11
Benzo(a)pyrene	MG/KG	0.061 or MDL	-	1.5	3.4 J	0.12 J	NA	7.6
Benzo(b)fluoranthene	MG/KG	1.1	-	2.4	4.0 J	0.14 J	NA	9.6
Benzo(g,h,i)perylene	MG/KG	50	-	0.98	1.8 J	0.071 J	NA	4.7 J
Benzo(k)fluoranthene	MG/KG	1.1	-	2.6	1.3 J	0.040 J	NA	3.7 J
bis(2-Ethylhexyl)phthalate	MG/KG	50	-	0.36 U	7.6 U	0.048 J	NA	7.0 U
Carbazole	MG/KG	50	-	0.20 J	1.7 J	0.037 J	NA	3.9 J

Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

U - Not detected above the reported quantitation limit. ; J - The reported concentration is an estimated value.

NA - Not Analyzed, ND - Not Detected

Subsurface soil samples analyzed for: SW8260B, SW8270C, SW8082, SW6010B/SW7471A, SW9012A and SW9065, and TOC by Region II Lloyd Kahn Method.

Only Detected Results Reported.

Detection Limits shown are PQL

Table 2
Summary of RI Subsurface Soil Analytical Results
State Road Former MGP Site - Site Management Plan

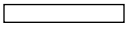
Location ID				GB-35	GB-36	GB-36	GB-37	GB-37
Sample ID				GB-35 (3-5)	GB-36 (11-12)	GB-36 (18-19)	GB-37 (13-14)	GB-37 (14-16)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				3.0-5.0	11.0-12.0	18.0-19.0	13.0-14.0	14.0-16.0
Date Sampled				05/31/05	05/27/05	05/27/05	05/27/05	05/27/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Semivolatile Organic Compounds								
Chrysene	MG/KG	0.4	-	1.6	4.2 J	0.16 J	NA	9.6
Dibenz(a,h)anthracene	MG/KG	0.014 or MDL	-	0.30 J	0.77 J	0.027 J	NA	1.7 J
Dibenzofuran	MG/KG	6.2	-	0.15 J	1.2 J	0.38 U	NA	5.6 J
Fluoranthene	MG/KG	50	-	3.6	11	0.33 J	NA	29
Fluorene	MG/KG	50	-	0.14 J	2.4 J	0.38 U	NA	10
Indeno(1,2,3-cd)pyrene	MG/KG	3.2	-	0.92	2.0 J	0.069 J	NA	4.4 J
Naphthalene	MG/KG	13	-	0.26 J	0.81 J	0.38 U	NA	3.1 J
Phenanthrene	MG/KG	50	-	2.2	10	0.20 J	NA	38
Pyrene	MG/KG	50	-	2.5	6.9 J	0.25 J	NA	18
Total Carcinogenic PAHs	MG/KG	-	-	10.92	20.27	0.736	NA	47.6
Total Non-Carcinogenic PAHs	MG/KG	-	-	10.62	37.56	0.892	NA	118.94
Total Polycyclic Aromatic Hydrocarbons	MG/KG	-	-	21.54	57.83	1.628	NA	166.54
Total Semivolatile Organic Compounds	MG/KG	500	-	21.89	60.73	1.713	NA	176.04
Metals								
Aluminum	MG/KG	SB	33000	3,770	8,750 J	9,870 J	NA	7,250 J
Arsenic	MG/KG	7.5	3-12	6.2 J	3.4 J	2.4 J	NA	3.1 J
Barium	MG/KG	300	15-600	51.3 J	96.9 J	54.5 J	NA	79.0 J
Beryllium	MG/KG	0.16	0-1.75	0.26 J	0.42 J	0.36 J	NA	0.37 J
Calcium	MG/KG	SB	130-35000	59,200	24,200	3,650	NA	15,100
Chromium	MG/KG	10	1.5-40	6.3 J	11.1 J	9.1 J	NA	9.0 J

Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.


Concentration Exceeds Criteria (1)


Concentration Exceeds Criteria (2)

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Subsurface soil samples analyzed for: SW8260B, SW8270C, SW8082, SW6010B/SW7471A, SW9012A and SW9065, and TOC by Region II Lloyd Kahn Method.

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[SITEID] = '02' AND [MATRIX] = 'SO' AND [LOCID] LIKE 'GB-*' AND [LOGDATE] >= #1/1/2005

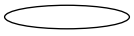
Table 2
Summary of RI Subsurface Soil Analytical Results
State Road Former MGP Site - Site Management Plan

Location ID				GB-35	GB-36	GB-36	GB-37	GB-37
Sample ID				GB-35 (3-5)	GB-36 (11-12)	GB-36 (18-19)	GB-37 (13-14)	GB-37 (14-16)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				3.0-5.0	11.0-12.0	18.0-19.0	13.0-14.0	14.0-16.0
Date Sampled				05/31/05	05/27/05	05/27/05	05/27/05	05/27/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Metals								
Cobalt	MG/KG	30	2.5-60	3.3 J	7.3 J	10.1 J	NA	5.3 J
Copper	MG/KG	25	1-50	18.1 J	12.9 J	11.0 J	NA	17.7 J
Iron	MG/KG	2000	2000-550000	8,810 J	13,500 J	11,600 J	NA	10,800 J
Lead	MG/KG	SB	500	71.0	16.1 J	26.4 J	NA	85.9 J
Magnesium	MG/KG	SB	100-5000	10,000	5,430	2,500	NA	4,040
Manganese	MG/KG	SB	50-5000	280 J	325 J	478 J	NA	273 J
Mercury	MG/KG	0.1	0.001-0.2	0.100	0.065	0.082	NA	0.057
Nickel	MG/KG	13	0.5-25	10.3 J	14.4 J	22.5 J	NA	11.1 J
Potassium	MG/KG	SB	8500-43000	688	1,230 J	570 J	NA	1,010 J
Silver	MG/KG	SB	-	0.54 UJ	0.61 UJ	0.54 UJ	NA	0.57 UJ
Sodium	MG/KG	SB	6000-8000	152 UJ	170 UJ	153 UJ	NA	166 J
Vanadium	MG/KG	150	1-300	6.9 J	16.3 J	15.4 J	NA	13.6 J
Zinc	MG/KG	20	9-50	46.1 J	46.0 J	31.3 J	NA	57.5 J
Miscellaneous Parameters								
Total Cyanide	MG/KG	-	-	3.4 J	1.1 UJ	1.2 UJ	NA	1.0 UJ
Total Organic Carbon (TOC)	MG/KG	-	-	72,600	NA	NA	14,900	NA
Total Cyanide (Secondary Lab)	MG/KG	-	-	13.8	NA	NA	NA	NA
Free Cyanide	MG/KG	-	-	0.33	NA	NA	NA	NA
Ferric/Ferrous Iron Cyanide Complex	MG/KG	-	-	10.1	NA	NA	NA	NA
Unknown Iron Cyanide Complex	MG/KG	-	-	0.68	NA	NA	NA	NA

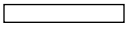
Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria (1)



Concentration Exceeds Criteria (2)

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Subsurface soil samples analyzed for: SW8260B, SW8270C, SW8082, SW6010B/SW7471A, SW9012A and SW9065, and TOC by Region II Lloyd Kahn Method.

Only Detected Results Reported.

Detection Limits shown are PQL

Table 2
Summary of RI Subsurface Soil Analytical Results
State Road Former MGP Site - Site Management Plan

Location ID				GB-35	GB-36	GB-36	GB-37	GB-37
Sample ID				GB-35 (3-5)	GB-36 (11-12)	GB-36 (18-19)	GB-37 (13-14)	GB-37 (14-16)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				3.0-5.0	11.0-12.0	18.0-19.0	13.0-14.0	14.0-16.0
Date Sampled				05/31/05	05/27/05	05/27/05	05/27/05	05/27/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Miscellaneous Parameters								
Natural Oxdiant Demand (Low Dose)	G/KG	-	-	3.1 E	NA	NA	3.2 E	NA
Natural Oxdiant Demand (Medium Dose)	G/KG	-	-	15.5 E	NA	NA	11.3	NA
Natural Oxdiant Demand (High Dose)	G/KG	-	-	30.3	NA	NA	14.0	NA

Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

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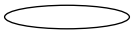
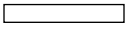


Concentration Exceeds Criteria (1)



Concentration Exceeds Criteria (2)

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Subsurface soil samples analyzed for: SW8260B, SW8270C, SW8082, SW6010B/SW7471A, SW9012A and SW9065, and TOC by Region II Lloyd Kahn Method.

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[SITEID] = '02' AND [MATRIX] = 'SO' AND [LOCID] LIKE 'GB-*' AND [LOGDATE] >= #1/1/2005

Table 2
Summary of RI Subsurface Soil Analytical Results
State Road Former MGP Site - Site Management Plan

Location ID				GB-37	GB-38	GB-38	GB-39	GB-39
Sample ID				GB-37 (18.5-19.5)	GB-38 (14-16)	GB-38 (22-23)	DUP-05	GB-39 (6-8)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				18.5-19.5	14.0-16.0	22.0-23.0	6.0-8.0	6.0-8.0
Date Sampled				05/27/05	05/27/05	05/27/05	05/27/05	05/27/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**				Field Duplicate (1-1)	
Volatile Organic Compounds								
Acetone	MG/KG	0.2	-	0.029 U	0.032 U	0.028 U	0.028 U	0.14 U
Benzene	MG/KG	0.06	-	0.006 U	0.006 U	0.006 U	0.006 U	0.028 U
Chloromethane	MG/KG	-	-	0.006 U	0.006 U	0.006 U	0.006 U	0.028 U
Methyl ethyl ketone (2-Butanone)	MG/KG	0.3	-	0.029 U	0.032 U	0.028 U	0.028 U	0.14 U
Tetrachloroethene	MG/KG	1.4	-	0.001 J	0.001 J	0.006 U	0.006 U	0.028 U
Toluene	MG/KG	1.5	-	0.004 J	0.006 U	0.003 J	0.002 J	0.028 U
Total BTEX	MG/KG	-	-	0.004	ND	0.003	0.002	ND
Total Volatile Organic Compounds	MG/KG	10	-	0.005	0.001	0.003	0.002	ND
Semivolatile Organic Compounds								
2-Methylnaphthalene	MG/KG	36.4	-	1.2 J	4.2 U	0.37 U	0.38 J	7.5 U
Acenaphthene	MG/KG	50	-	1.9 J	4.2 U	0.37 U	1.8 J	7.5 U
Acenaphthylene	MG/KG	41	-	0.62 J	4.2 U	0.37 U	7.5 U	7.5 U
Anthracene	MG/KG	50	-	5.3 J	0.49 J	0.37 U	4.3 J	0.52 J
Benzo(a)anthracene	MG/KG	0.224 or MDL	-	11	2.5 J	0.37 U	4.9 J	1.0 J
Benzo(a)pyrene	MG/KG	0.061 or MDL	-	8.9	3.0 J	0.37 U	3.6 J	0.82 J
Benzo(b)fluoranthene	MG/KG	1.1	-	11	3.8 J	0.37 U	4.7 J	1.2 J
Benzo(g,h,i)perylene	MG/KG	50	-	6.4 J	3.5 J	0.37 U	2.7 J	0.66 J
Benzo(k)fluoranthene	MG/KG	1.1	-	3.8 J	1.8 J	0.37 U	1.4 J	7.5 U
bis(2-Ethylhexyl)phthalate	MG/KG	50	-	7.7 U	4.2 U	0.37 U	7.5 U	7.5 U
Carbazole	MG/KG	50	-	2.2 J	4.2 U	0.37 U	1.4 J	7.5 U

Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

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Table 2
Summary of RI Subsurface Soil Analytical Results
State Road Former MGP Site - Site Management Plan

Location ID				GB-37	GB-38	GB-38	GB-39	GB-39
Sample ID				GB-37 (18.5-19.5)	GB-38 (14-16)	GB-38 (22-23)	DUP-05	GB-39 (6-8)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				18.5-19.5	14.0-16.0	22.0-23.0	6.0-8.0	6.0-8.0
Date Sampled				05/27/05	05/27/05	05/27/05	05/27/05	05/27/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**				Field Duplicate (1-1)	
Semivolatile Organic Compounds								
Chrysene	MG/KG	0.4	-	9.5	2.5 J	0.37 U	4.3 J	0.88 J
Dibenz(a,h)anthracene	MG/KG	0.014 or MDL	-	1.9 J	0.92 J	0.37 U	0.86 J	7.5 U
Dibenzofuran	MG/KG	6.2	-	2.4 J	0.28 J	0.37 U	1.3 J	7.5 U
Fluoranthene	MG/KG	50	-	24	2.9 J	0.37 U	12	2.3 J
Fluorene	MG/KG	50	-	4.3 J	0.34 J	0.37 U	2.7 J	7.5 U
Indeno(1,2,3-cd)pyrene	MG/KG	3.2	-	5.5 J	2.9 J	0.37 U	2.3 J	0.51 J
Naphthalene	MG/KG	13	-	2.6 J	4.2 U	0.37 U	7.5 U	7.5 U
Phenanthrene	MG/KG	50	-	23	2.3 J	0.37 U	13	2.1 J
Pyrene	MG/KG	50	-	17	2.8 J	0.37 U	7.7	1.5 J
Total Carcinogenic PAHs	MG/KG	-	-	51.6	17.42	ND	22.06	4.41
Total Non-Carcinogenic PAHs	MG/KG	-	-	86.32	12.33	ND	44.58	7.08
Total Polycyclic Aromatic Hydrocarbons	MG/KG	-	-	137.92	29.75	ND	66.64	11.49
Total Semivolatile Organic Compounds	MG/KG	500	-	142.52	30.03	ND	69.34	11.49
Metals								
Aluminum	MG/KG	SB	33000	9,850 J	3,370 J	3,410 J	9,100 J	5,410 J
Arsenic	MG/KG	7.5	3-12	3.4 J	4.5 J	2.2 UJ	3.4 J	2.6 J
Barium	MG/KG	300	15-600	104 J	30.8 J	40.0 J	99.3 J	57.8 J
Beryllium	MG/KG	0.16	0-1.75	0.51 J	0.26 UJ	0.22 UJ	0.44 J	0.27 J
Calcium	MG/KG	SB	130-35000	26,900	109,000	43,300	17,100	37,100
Chromium	MG/KG	10	1.5-40	12.4 J	3.4 J	4.0 J	10.8 J	7.0 J

Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

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Table 2
Summary of RI Subsurface Soil Analytical Results
State Road Former MGP Site - Site Management Plan

Location ID				GB-37	GB-38	GB-38	GB-39	GB-39
Sample ID				GB-37 (18.5-19.5)	GB-38 (14-16)	GB-38 (22-23)	DUP-05	GB-39 (6-8)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				18.5-19.5	14.0-16.0	22.0-23.0	6.0-8.0	6.0-8.0
Date Sampled				05/27/05	05/27/05	05/27/05	05/27/05	05/27/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**				Field Duplicate (1-1)	
Metals								
Cobalt	MG/KG	30	2.5-60	6.9 J	1.9 J	3.0 J	6.4 J	4.5 J
Copper	MG/KG	25	1-50	25.2 J	7.5 J	7.0 J	17.6 J	19.4 J
Iron	MG/KG	2000	2000-550000	14,100 J	4,880 J	5,650 J	12,800 J	8,860 J
Lead	MG/KG	SB	500	165 J	35.1	3.1 J	66.1 J	48.6 J
Magnesium	MG/KG	SB	100-5000	6,720	9,930	5,400	5,530	11,700
Manganese	MG/KG	SB	50-5000	376 J	285 J	346 J	458 J	412 J
Mercury	MG/KG	0.1	0.001-0.2	0.059	0.437	0.017 U	0.092	0.142
Nickel	MG/KG	13	0.5-25	15.5 J	4.2 J	5.6 J	14.4 J	9.5 J
Potassium	MG/KG	SB	8500-43000	1,380 J	534 J	580 J	1,020 J	731 J
Silver	MG/KG	SB	-	0.62 UJ	0.65 UJ	0.55 UJ	0.63 UJ	0.54 UJ
Sodium	MG/KG	SB	6000-8000	192 J	182 UJ	154 UJ	176 UJ	152 UJ
Vanadium	MG/KG	150	1-300	16.8 J	5.7 J	6.6 J	16.1 J	10.1 J
Zinc	MG/KG	20	9-50	70.9 J	20.0 J	15.8 J	65.9 J	64.0 J
Miscellaneous Parameters								
Total Cyanide	MG/KG	-	-	1.1 UJ	118 J	1.2 UJ	1.7 J	1.7 J
Total Organic Carbon (TOC)	MG/KG	-	-	NA	NA	NA	NA	NA
Total Cyanide (Secondary Lab)	MG/KG	-	-	NA	13.2	NA	2.59	2.95
Free Cyanide	MG/KG	-	-	NA	0.13	NA	0.04 U	0.04 U
Ferric/Ferrous Iron Cyanide Complex	MG/KG	-	-	NA	9.65	NA	2.24	2.81
Unknown Iron Cyanide Complex	MG/KG	-	-	NA	2.06	NA	0 U	0.1

Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

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Subsurface soil samples analyzed for: SW8260B, SW8270C, SW8082, SW6010B/SW7471A, SW9012A and SW9065, and TOC by Region II Lloyd Kahn Method.

Only Detected Results Reported.

Detection Limits shown are PQL

Table 2
Summary of RI Subsurface Soil Analytical Results
State Road Former MGP Site - Site Management Plan

Location ID				GB-37	GB-38	GB-38	GB-39	GB-39
Sample ID				GB-37 (18.5-19.5)	GB-38 (14-16)	GB-38 (22-23)	DUP-05	GB-39 (6-8)
Matrix				Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)				18.5-19.5	14.0-16.0	22.0-23.0	6.0-8.0	6.0-8.0
Date Sampled				05/27/05	05/27/05	05/27/05	05/27/05	05/27/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**				Field Duplicate (1-1)	
Miscellaneous Parameters								
Natural Oxdiant Demand (Low Dose)	G/KG	-	-	NA	NA	NA	NA	NA
Natural Oxdiant Demand (Medium Dose)	G/KG	-	-	NA	NA	NA	NA	NA
Natural Oxdiant Demand (High Dose)	G/KG	-	-	NA	NA	NA	NA	NA

Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

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Concentration Exceeds Criteria (2)

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NA - Not Analyzed, ND - Not Detected

Subsurface soil samples analyzed for: SW8260B, SW8270C, SW8082, SW6010B/SW7471A, SW9012A and SW9065, and TOC by Region II Lloyd Kahn Method.

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Detection Limits shown are PQL

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Table 2
Summary of RI Subsurface Soil Analytical Results
State Road Former MGP Site - Site Management Plan

Location ID				GB-39	GB-39
Sample ID				GB-39 (14-16)	GB-39 (21-22)
Matrix				Soil	Soil
Depth Interval (ft)				14.0-16.0	21.0-22.0
Date Sampled				05/27/05	05/27/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**		
Volatile Organic Compounds					
Acetone	MG/KG	0.2	-	NA	0.026 U
Benzene	MG/KG	0.06	-	NA	0.005 U
Chloromethane	MG/KG	-	-	NA	0.005 U
Methyl ethyl ketone (2-Butanone)	MG/KG	0.3	-	NA	0.026 U
Tetrachloroethene	MG/KG	1.4	-	NA	0.002 J
Toluene	MG/KG	1.5	-	NA	0.003 J
Total BTEX	MG/KG	-	-	NA	0.003
Total Volatile Organic Compounds	MG/KG	10	-	NA	0.005
Semivolatile Organic Compounds					
2-Methylnaphthalene	MG/KG	36.4	-	NA	0.34 U
Acenaphthene	MG/KG	50	-	NA	0.34 U
Acenaphthylene	MG/KG	41	-	NA	0.34 U
Anthracene	MG/KG	50	-	NA	0.34 U
Benzo(a)anthracene	MG/KG	0.224 or MDL	-	NA	0.031 J
Benzo(a)pyrene	MG/KG	0.061 or MDL	-	NA	0.023 J
Benzo(b)fluoranthene	MG/KG	1.1	-	NA	0.048 J
Benzo(g,h,i)perylene	MG/KG	50	-	NA	0.024 J
Benzo(k)fluoranthene	MG/KG	1.1	-	NA	0.052 J
bis(2-Ethylhexyl)phthalate	MG/KG	50	-	NA	0.043 J
Carbazole	MG/KG	50	-	NA	0.34 U

Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

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Summary of RI Subsurface Soil Analytical Results
State Road Former MGP Site - Site Management Plan

Location ID				GB-39	GB-39
Sample ID				GB-39 (14-16)	GB-39 (21-22)
Matrix				Soil	Soil
Depth Interval (ft)				14.0-16.0	21.0-22.0
Date Sampled				05/27/05	05/27/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**		
Semivolatile Organic Compounds					
Chrysene	MG/KG	0.4	-	NA	0.027 J
Dibenz(a,h)anthracene	MG/KG	0.014 or MDL	-	NA	0.34 U
Dibenzofuran	MG/KG	6.2	-	NA	0.34 U
Fluoranthene	MG/KG	50	-	NA	0.059 J
Fluorene	MG/KG	50	-	NA	0.34 U
Indeno(1,2,3-cd)pyrene	MG/KG	3.2	-	NA	0.020 J
Naphthalene	MG/KG	13	-	NA	0.34 U
Phenanthrene	MG/KG	50	-	NA	0.027 J
Pyrene	MG/KG	50	-	NA	0.045 J
Total Carcinogenic PAHs	MG/KG	-	-	NA	0.201
Total Non-Carcinogenic PAHs	MG/KG	-	-	NA	0.155
Total Polycyclic Aromatic Hydrocarbons	MG/KG	-	-	NA	0.356
Total Semivolatile Organic Compounds	MG/KG	500	-	NA	0.399
Metals					
Aluminum	MG/KG	SB	33000	NA	3,090 J
Arsenic	MG/KG	7.5	3-12	NA	2.2 UJ
Barium	MG/KG	300	15-600	NA	41.3 J
Beryllium	MG/KG	0.16	0-1.75	NA	0.22 UJ
Calcium	MG/KG	SB	130-35000	NA	73,300
Chromium	MG/KG	10	1.5-40	NA	3.5 J

Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

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Summary of RI Subsurface Soil Analytical Results
State Road Former MGP Site - Site Management Plan

Location ID				GB-39	GB-39
Sample ID				GB-39 (14-16)	GB-39 (21-22)
Matrix				Soil	Soil
Depth Interval (ft)				14.0-16.0	21.0-22.0
Date Sampled				05/27/05	05/27/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**		
Metals					
Cobalt	MG/KG	30	2.5-60	NA	3.2 J
Copper	MG/KG	25	1-50	NA	16.3 J
Iron	MG/KG	2000	2000-550000	NA	5,630 J
Lead	MG/KG	SB	500	NA	2.3 J
Magnesium	MG/KG	SB	100-5000	NA	6,110
Manganese	MG/KG	SB	50-5000	NA	422 J
Mercury	MG/KG	0.1	0.001-0.2	NA	0.017
Nickel	MG/KG	13	0.5-25	NA	6.3 J
Potassium	MG/KG	SB	8500-43000	NA	787 J
Silver	MG/KG	SB	-	NA	0.56 UJ
Sodium	MG/KG	SB	6000-8000	NA	156 UJ
Vanadium	MG/KG	150	1-300	NA	5.2 J
Zinc	MG/KG	20	9-50	NA	19.0 J
Miscellaneous Parameters					
Total Cyanide	MG/KG	-	-	NA	1.2 J
Total Organic Carbon (TOC)	MG/KG	-	-	17,800	NA
Total Cyanide (Secondary Lab)	MG/KG	-	-	NA	NA
Free Cyanide	MG/KG	-	-	NA	NA
Ferric/Ferrous Iron Cyanide Complex	MG/KG	-	-	NA	NA
Unknown Iron Cyanide Complex	MG/KG	-	-	NA	NA

Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

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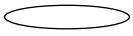
State Road Former MGP Site - Site Management Plan

Location ID				GB-39	GB-39
Sample ID				GB-39 (14-16)	GB-39 (21-22)
Matrix				Soil	Soil
Depth Interval (ft)				14.0-16.0	21.0-22.0
Date Sampled				05/27/05	05/27/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**		
Miscellaneous Parameters					
Natural Oxdiant Demand (Low Dose)	G/KG	-	-	2.3	NA
Natural Oxdiant Demand (Medium Dose)	G/KG	-	-	3.5	NA
Natural Oxdiant Demand (High Dose)	G/KG	-	-	4.4	NA

Criteria (1)- NYSDEC TAGM: Determination of Soil Cleanup Objectives and Cleanup Levels; HWR-94-4046 January 24, 1994 (Revised).

Criteria (2)- Eastern USA Background Concentrations from NYSDEC TAGM: HWR-94-4046 January 24, 1994 (Revised).

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria (1)

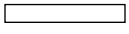


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Table 3
Criteria for On-site Re-use of Excavated Material
State Road Former MGP Site - Site Management Plan

Analyte Group	Analyte	Units	Criteria	
			Commercial SCO[1]	Industrial SCO[2]
Volatile Organic Compounds	1,1,1-Trichloroethane	MG/KG	500	1000
	1,1-Dichloroethane	MG/KG	240	480
	1,1-Dichloroethene	MG/KG	500	1000
	1,2,4-Trimethylbenzene	MG/KG	190	380
	1,2-Dichlorobenzene	MG/KG	500	1000
	1,2-Dichloroethane	MG/KG	30	60
	1,2-Dichloroethene (cis)	MG/KG	500	1000
	1,2-Dichloroethene (trans)	MG/KG	500	1000
	1,3,5-Trimethylbenzene (Mesitylene)	MG/KG	190	380
	1,3-Dichlorobenzene	MG/KG	280	560
	1,4-Dichlorobenzene	MG/KG	130	250
	1,4-Dioxane	MG/KG	130	250
	Acetone	MG/KG	500	1000
	Benzene	MG/KG	44	89
	Carbon tetrachloride	MG/KG	22	44
	Chlorobenzene	MG/KG	500	1000
	Chloroform	MG/KG	350	700
	Ethylbenzene	MG/KG	390	780
	Methyl ethyl ketone (2-Butanone)	MG/KG	500	1000
	Methyl tert-butyl ether	MG/KG	500	1000
	Methylene chloride	MG/KG	500	1000
	Naphthalene	MG/KG	500	1000
	n-Butylbenzene	MG/KG	500	1000
	n-Propylbenzene	MG/KG	500	1000
	sec-Butylbenzene	MG/KG	500	1000
	tert-Butylbenzene	MG/KG	500	1000
	Tetrachloroethene	MG/KG	150	300
	Toluene	MG/KG	500	1000
	Trichloroethene	MG/KG	200	400
	Vinyl chloride	MG/KG	13	27
	Xylene (total)	MG/KG	500	1000
Semivolatile Organic Compounds	1,2-Dichlorobenzene	MG/KG	500	1000
	1,3-Dichlorobenzene	MG/KG	280	560
	1,4-Dichlorobenzene	MG/KG	130	250
	2-Methylphenol (o-cresol)	MG/KG	500	1000
	3&4-Methylphenol	MG/KG	500	1000
	3-Methylphenol (m-cresol)	MG/KG	500	1000
	4-Methylphenol (p-cresol)	MG/KG	500	1000
	Acenaphthene	MG/KG	500	1000
	Acenaphthylene	MG/KG	500	1000
	Anthracene	MG/KG	500	1000
	Benzo(a)anthracene	MG/KG	5.6	11
	Benzo(a)pyrene	MG/KG	1	1.1
	Benzo(b)fluoranthene	MG/KG	5.6	11
	Benzo(g,h,i)perylene	MG/KG	500	1000
	Benzo(k)fluoranthene	MG/KG	56	110
	Chrysene	MG/KG	56	110
	Dibenz(a,h)anthracene	MG/KG	0.56	1.1
	Dibenzofuran	MG/KG	350	1000
	Fluoranthene	MG/KG	500	1000
	Fluorene	MG/KG	500	1000
	Hexachlorobenzene	MG/KG	6	12
	Indeno(1,2,3-cd)pyrene	MG/KG	5.6	11
	Naphthalene	MG/KG	500	1000
	Pentachlorophenol	MG/KG	6.7	55
	Phenanthrene	MG/KG	500	1000
	Phenol	MG/KG	500	1000
	Pyrene	MG/KG	500	1000

Table 3
Criteria for On-site Re-use of Excavated Material
State Road Former MGP Site - Site Management Plan

Analyte Group	Analyte	Units	Criteria	
			Commercial SCO[1]	Industrial SCO[2]
Pesticides/Herbicides/PCBs	4,4'-DDD	MG/KG	92	180
	4,4'-DDE	MG/KG	62	120
	4,4'-DDT	MG/KG	47	94
	Aldrin	MG/KG	0.68	1.4
	alpha-BHC	MG/KG	3.4	6.8
	alpha-Chlordane	MG/KG	24	47
	beta-BHC	MG/KG	3	14
	delta-BHC	MG/KG	500	1000
	Dieldrin	MG/KG	1.4	2.8
	Endosulfan (total)	MG/KG	200	920
	Endosulfan I	MG/KG	200	920
	Endosulfan II	MG/KG	200	920
	Endosulfan sulfate	MG/KG	200	920
	Endrin	MG/KG	89	410
	gamma-BHC (Lindane)	MG/KG	9.2	23
	Heptachlor	MG/KG	15	29
	2,4,5-TP (Silvex)	MG/KG	500	1000
	Total Polychlorinated Biphenyls	MG/KG	1	25
Metals/Inorganics	Arsenic	MG/KG	16	16
	Barium	MG/KG	400	10000
	Beryllium	MG/KG	590	2700
	Cadmium	MG/KG	9.3	60
	Chromium	MG/KG	1500	6800
	Chromium VI	MG/KG	400	800
	Copper	MG/KG	270	10000
	Lead	MG/KG	1000	3900
	Manganese	MG/KG	10000	10000
	Mercury	MG/KG	2.8	5.7
	Nickel	MG/KG	310	10000
	Selenium	MG/KG	1500	6800
	Silver	MG/KG	1500	6800
	Zinc	MG/KG	10000	10000
	Cyanide (total)	MG/KG	27	10000

[1] 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Table 375.6-8(b), Restricted Use Soil Cleanup Objectives - Commercial.

[2] 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Table 375.6-8(b), Restricted Use Soil Cleanup Objectives - Industrial.

Table 4
Criteria for Imported Soils
State Road Former MGP Site - Site Management Plan

Analyte Group	Analyte	Units	Criteria	
			Commercial SCO[1]	Industrial SCO[2]
Volatile Organic Compounds	1,1,1-Trichloroethane	MG/KG	500	1000
	1,1-Dichloroethane	MG/KG	240	480
	1,1-Dichloroethene	MG/KG	500	1000
	1,2,4-Trimethylbenzene	MG/KG	190	380
	1,2-Dichlorobenzene	MG/KG	500	1000
	1,2-Dichloroethane	MG/KG	30	60
	1,2-Dichloroethene (cis)	MG/KG	500	1000
	1,2-Dichloroethene (trans)	MG/KG	500	1000
	1,3,5-Trimethylbenzene (Mesitylene)	MG/KG	190	380
	1,3-Dichlorobenzene	MG/KG	280	560
	1,4-Dichlorobenzene	MG/KG	130	250
	1,4-Dioxane	MG/KG	130	250
	Acetone	MG/KG	500	1000
	Benzene	MG/KG	44	89
	Carbon tetrachloride	MG/KG	22	44
	Chlorobenzene	MG/KG	500	1000
	Chloroform	MG/KG	350	700
	Ethylbenzene	MG/KG	390	780
	Methyl ethyl ketone (2-Butanone)	MG/KG	500	1000
	Methyl tert-butyl ether	MG/KG	500	1000
	Methylene chloride	MG/KG	500	1000
	Naphthalene	MG/KG	500	1000
	n-Butylbenzene	MG/KG	500	1000
	n-Propylbenzene	MG/KG	500	1000
	sec-Butylbenzene	MG/KG	500	1000
	tert-Butylbenzene	MG/KG	500	1000
	Tetrachloroethene	MG/KG	150	300
	Toluene	MG/KG	500	1000
	Trichloroethene	MG/KG	200	400
	Vinyl chloride	MG/KG	13	27
	Xylene (total)	MG/KG	500	1000
Semivolatile Organic Compounds	1,2-Dichlorobenzene	MG/KG	500	1000
	1,3-Dichlorobenzene	MG/KG	280	560
	1,4-Dichlorobenzene	MG/KG	130	250
	2-Methylphenol (o-cresol)	MG/KG	500	1000
	3&4-Methylphenol	MG/KG	500	1000
	3-Methylphenol (m-cresol)	MG/KG	500	1000
	4-Methylphenol (p-cresol)	MG/KG	500	1000
	Acenaphthene	MG/KG	500	1000
	Acenaphthylene	MG/KG	500	1000
	Anthracene	MG/KG	500	1000
	Benzo(a)anthracene	MG/KG	5.6	11
	Benzo(a)pyrene	MG/KG	1	1.1
	Benzo(b)fluoranthene	MG/KG	5.6	11
	Benzo(g,h,i)perylene	MG/KG	500	1000
	Benzo(k)fluoranthene	MG/KG	56	110
	Chrysene	MG/KG	56	110
	Dibenz(a,h)anthracene	MG/KG	0.56	1.1
	Dibenzofuran	MG/KG	350	1000
	Fluoranthene	MG/KG	500	1000
	Fluorene	MG/KG	500	1000
	Hexachlorobenzene	MG/KG	6	12
	Indeno(1,2,3-cd)pyrene	MG/KG	5.6	11
	Naphthalene	MG/KG	500	1000
	Pentachlorophenol	MG/KG	6.7	55
	Phenanthrene	MG/KG	500	1000
	Phenol	MG/KG	500	1000
	Pyrene	MG/KG	500	1000

Table 4
Criteria for Imported Soils
State Road Former MGP Site - Site Management Plan

Analyte Group	Analyte	Units	Criteria	
			Commercial SCO[1]	Industrial SCO[2]
Pesticides/Herbicides/PCBs	4,4'-DDD	MG/KG	92	180
	4,4'-DDE	MG/KG	62	120
	4,4'-DDT	MG/KG	47	94
	Aldrin	MG/KG	0.68	1.4
	alpha-BHC	MG/KG	3.4	6.8
	alpha-Chlordane	MG/KG	24	47
	beta-BHC	MG/KG	3	14
	delta-BHC	MG/KG	500	1000
	Dieldrin	MG/KG	1.4	2.8
	Endosulfan (total)	MG/KG	200	920
	Endosulfan I	MG/KG	200	920
	Endosulfan II	MG/KG	200	920
	Endosulfan sulfate	MG/KG	200	920
	Endrin	MG/KG	89	410
	gamma-BHC (Lindane)	MG/KG	9.2	23
	Heptachlor	MG/KG	15	29
	2,4,5-TP (Silvex)	MG/KG	500	1000
	Total Polychlorinated Biphenyls	MG/KG	1	25
Metals/Inorganics	Arsenic	MG/KG	16	16
	Barium	MG/KG	400	10000
	Beryllium	MG/KG	590	2700
	Cadmium	MG/KG	9.3	60
	Chromium	MG/KG	1500	6800
	Chromium VI	MG/KG	400	800
	Copper	MG/KG	270	10000
	Lead	MG/KG	1000	3900
	Manganese	MG/KG	10000	10000
	Mercury	MG/KG	2.8	5.7
	Nickel	MG/KG	310	10000
	Selenium	MG/KG	1500	6800
	Silver	MG/KG	1500	6800
	Zinc	MG/KG	10000	10000
	Cyanide (total)	MG/KG	27	10000

[1] 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Table 375.6-8(b), Restricted Use Soil Cleanup Objectives - Commercial.

[2] 6 NYCRR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Table 375.6-8(b), Restricted Use Soil Cleanup Objectives - Industrial.

TABLE 5

STATE ROAD FORMER MGP SITE - SITE MANAGEMENT PLAN

SCHEDULE OF ROUTINE INSPECTIONS

Component	**Years After Substantial Completion**		
	1 - 2	**3 - 5**	**6+**
Soil Cover System	annually	annually	annually
Fence, Gate and Access Road	annually	annually	annually

Table 6: Emergency Contact Numbers

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

Table 7: Other Contact Numbers

NYSEG Project Manager - Tracy Blazicek, CHMM	(607) 762-8839
NYSDEC Project Manager – William Ottaway, P.E.	(518) 402-9662

* Note: Emergency contact numbers are subject to change and will be updated whenever a change in personnel occurs

LIST OF FIGURES

Figure 1A – Site Location Map

Figures 1B- Map of Site

Figure 2 – Top of Bedrock Elevation Map

Figure 3 - Geologic Cross Section

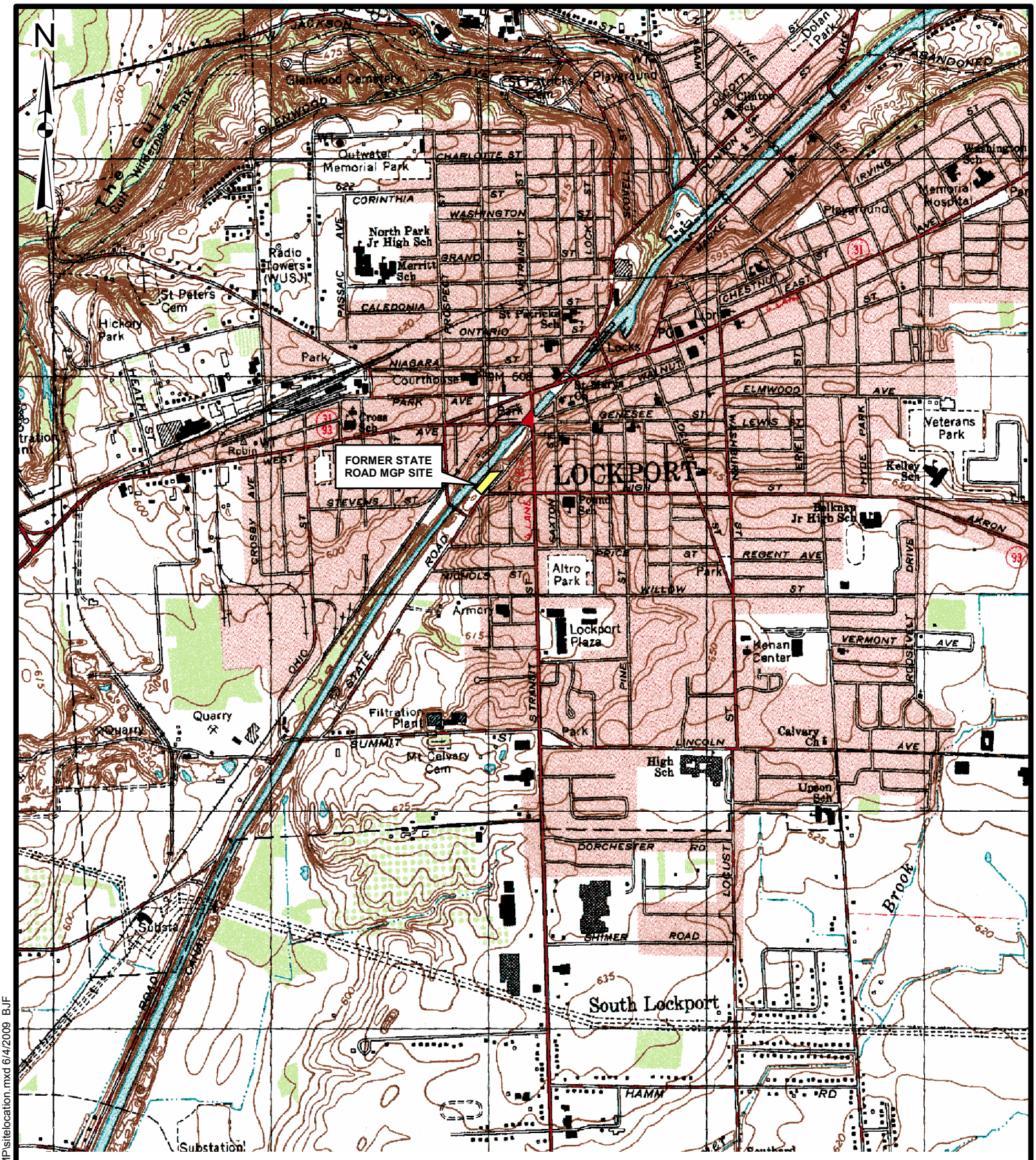
Figure 4A - Groundwater Flow Map – Shallow Bedrock

Figure 4B – Groundwater Flow Map – Intermediate Bedrock

Figure 4C – Groundwater Flow Map – Deep Bedrock

Figure 5 – Soil Cover System Location

Figure 6 - Map of Route from Site to Hospital



SOURCE: USGS 7.5' Quadrangle: Lockport, New York - 1995

URS	NYSEG - STATE ROAD FORMER MGP SITE SITE LOCATION MAP	FIGURE 1A

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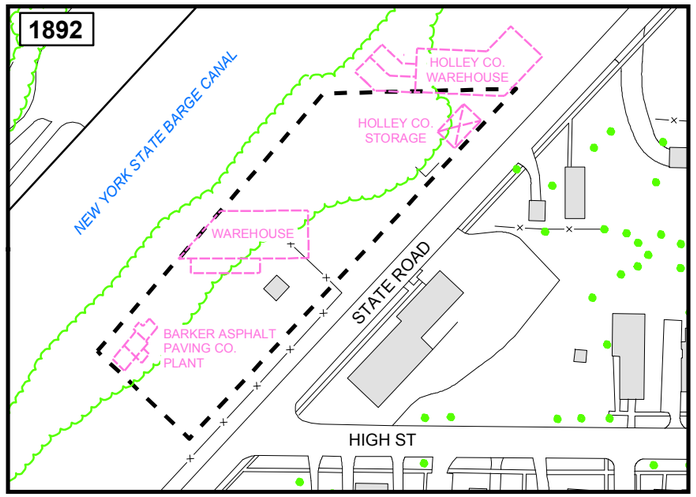

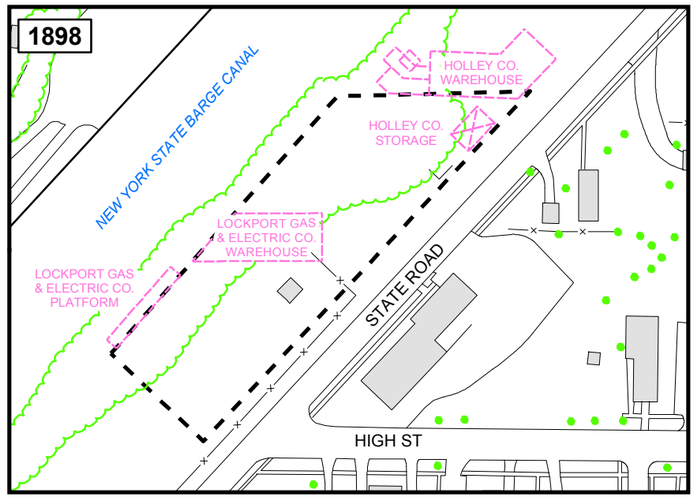

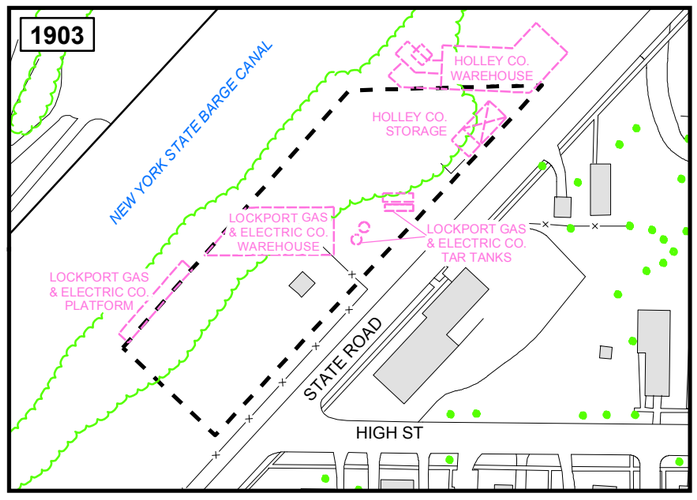

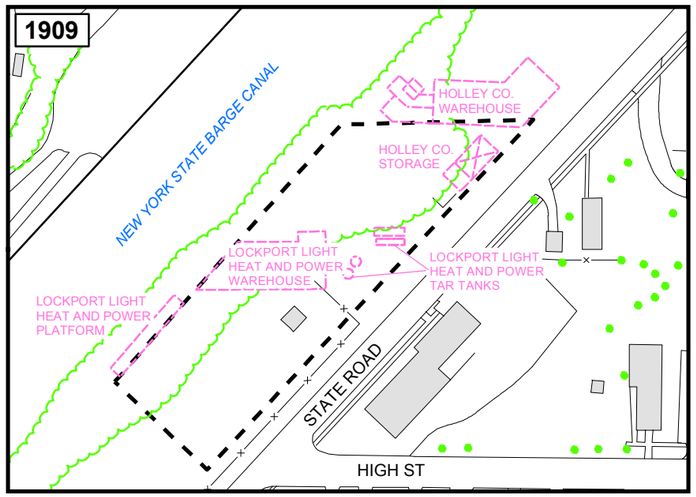

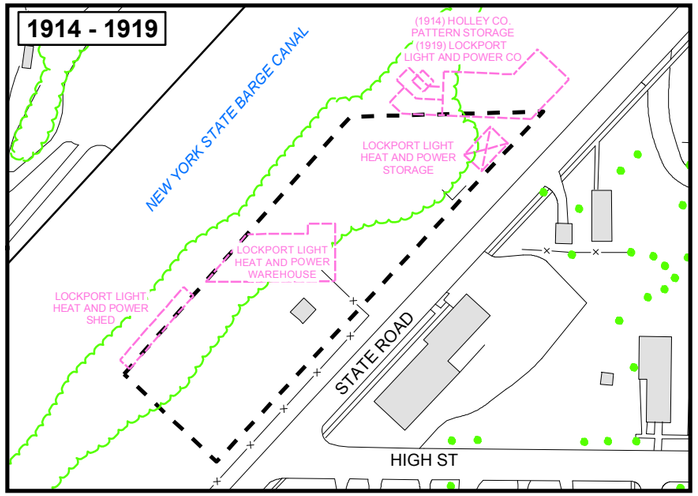

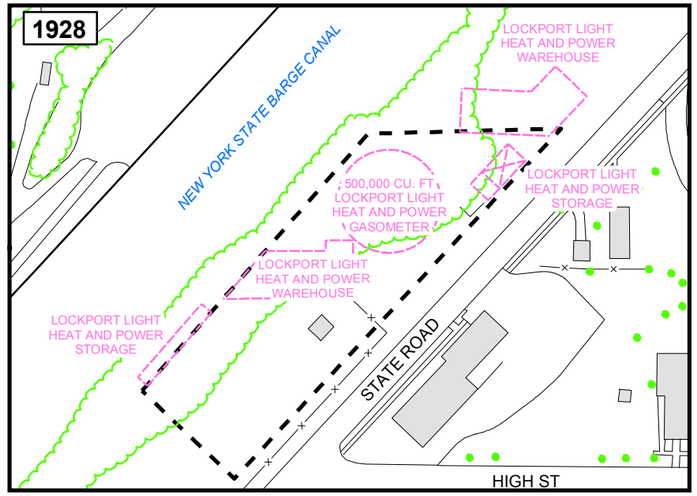

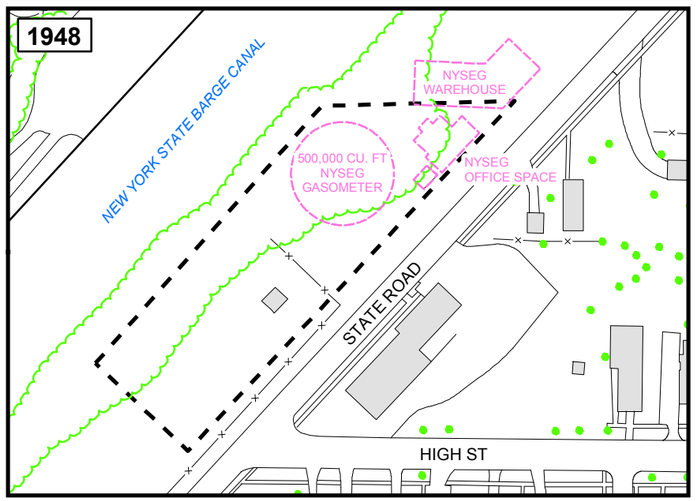

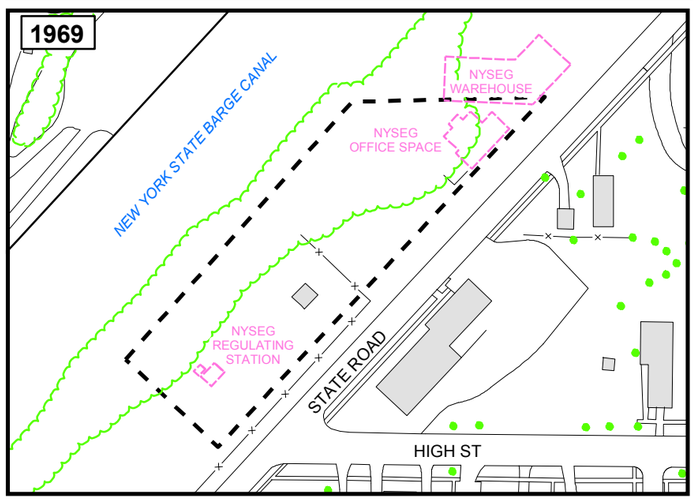

Legend

- Former MGP Structure
- Site Boundary

0 75 150 300 Feet

NYSEG - STATE ROAD FORMER MGP SITE
SITE FEATURES OVER TIME 1892 THROUGH 1969

URS

FIGURE 1B

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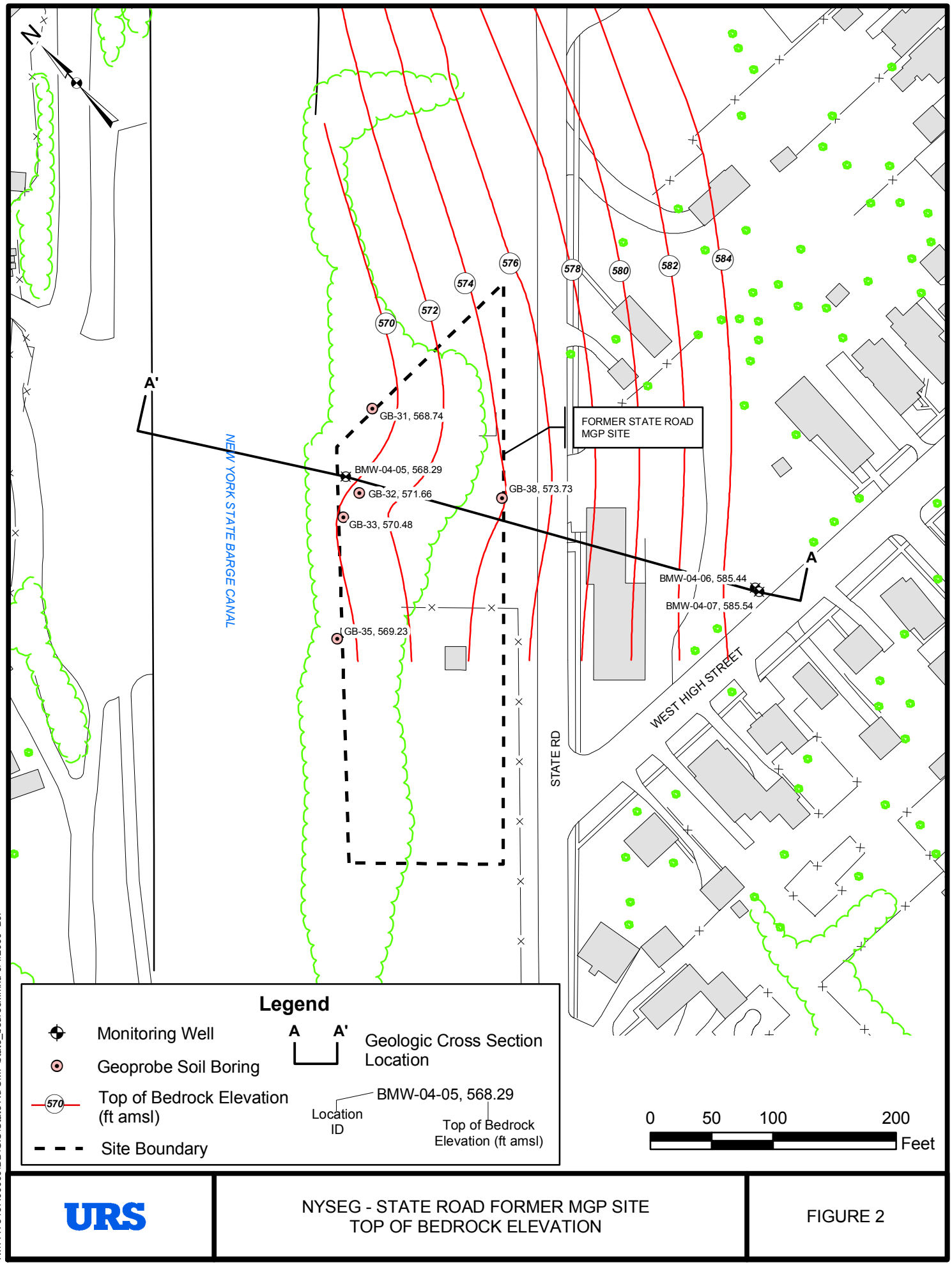

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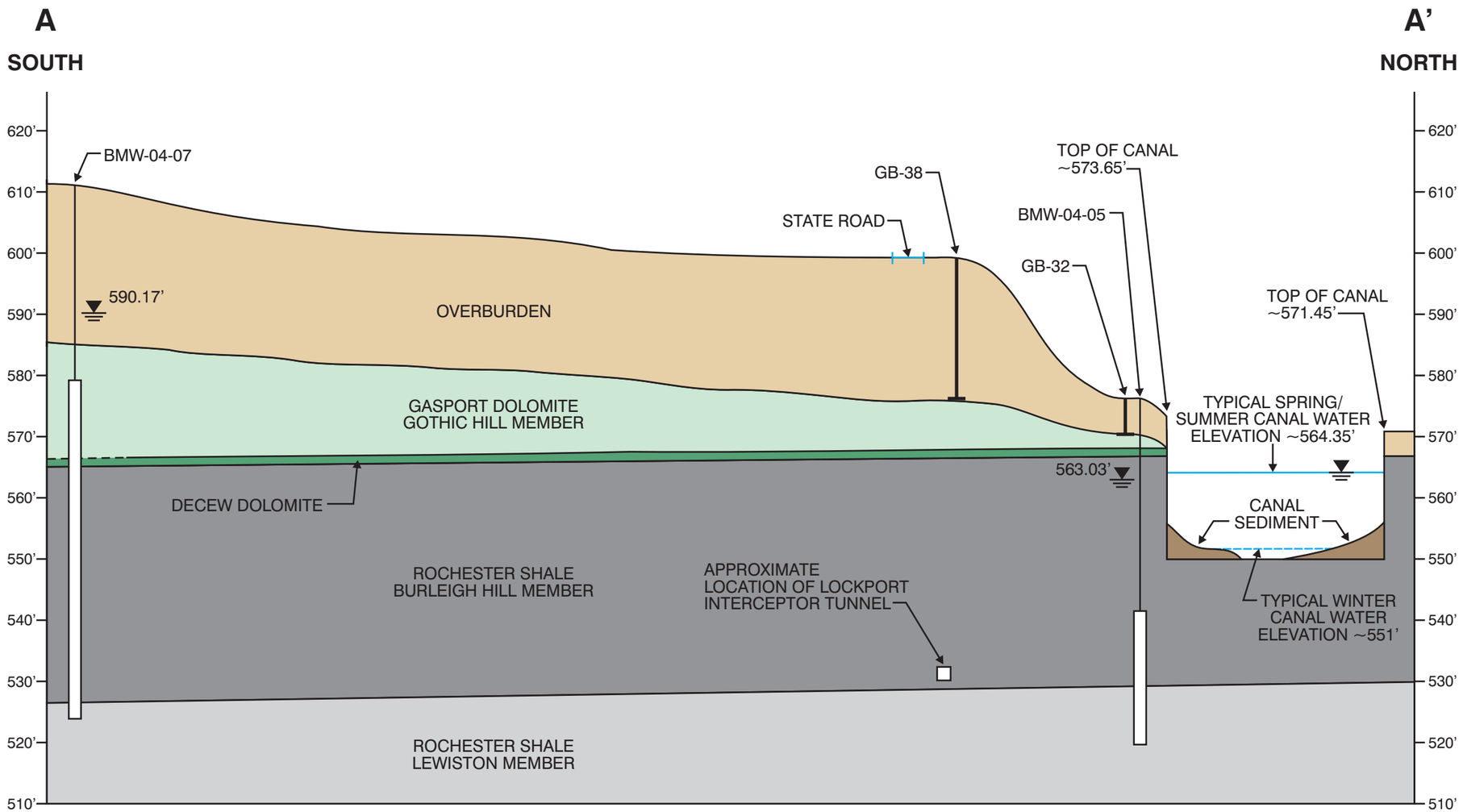
URS

NYSEG - STATE ROAD FORMER MGP SITE
TOP OF BEDROCK ELEVATION

FIGURE 2



LEGEND

- BEDROCK MONITORING WELL
- GEOPROBE SOIL BORING
- GROUNDWATER ELEVATION (JUNE 10, 2005)

VERTICAL EXAGGERATION ~ 5.0
HORIZONTAL 1" = 100'
VERTICAL 1" = 20'

100 50 0 50 100
APPROXIMATE SCALE IN FEET

NYSEG - STATE ROAD
FORMER MGP SITE
CROSS SECTION A-A'

URS

FIGURE 3

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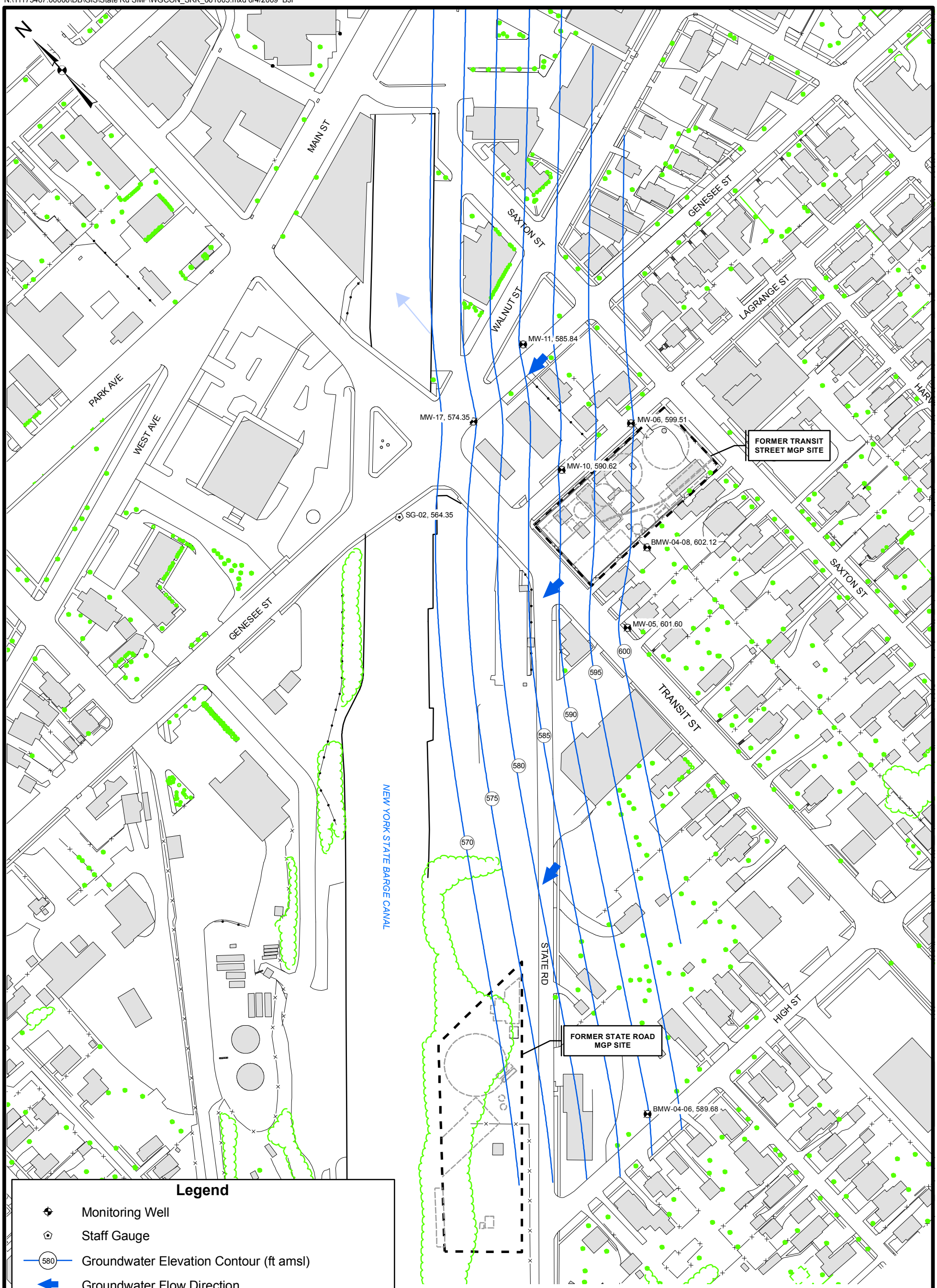

URS

NYSEG - STATE ROAD FORMER MGP SITE
GROUNDWATER POTENTIOMETRIC SURFACE MAP
JUNE 10, 2005 - SHALLOW BEDROCK ZONE

FIGURE 4A

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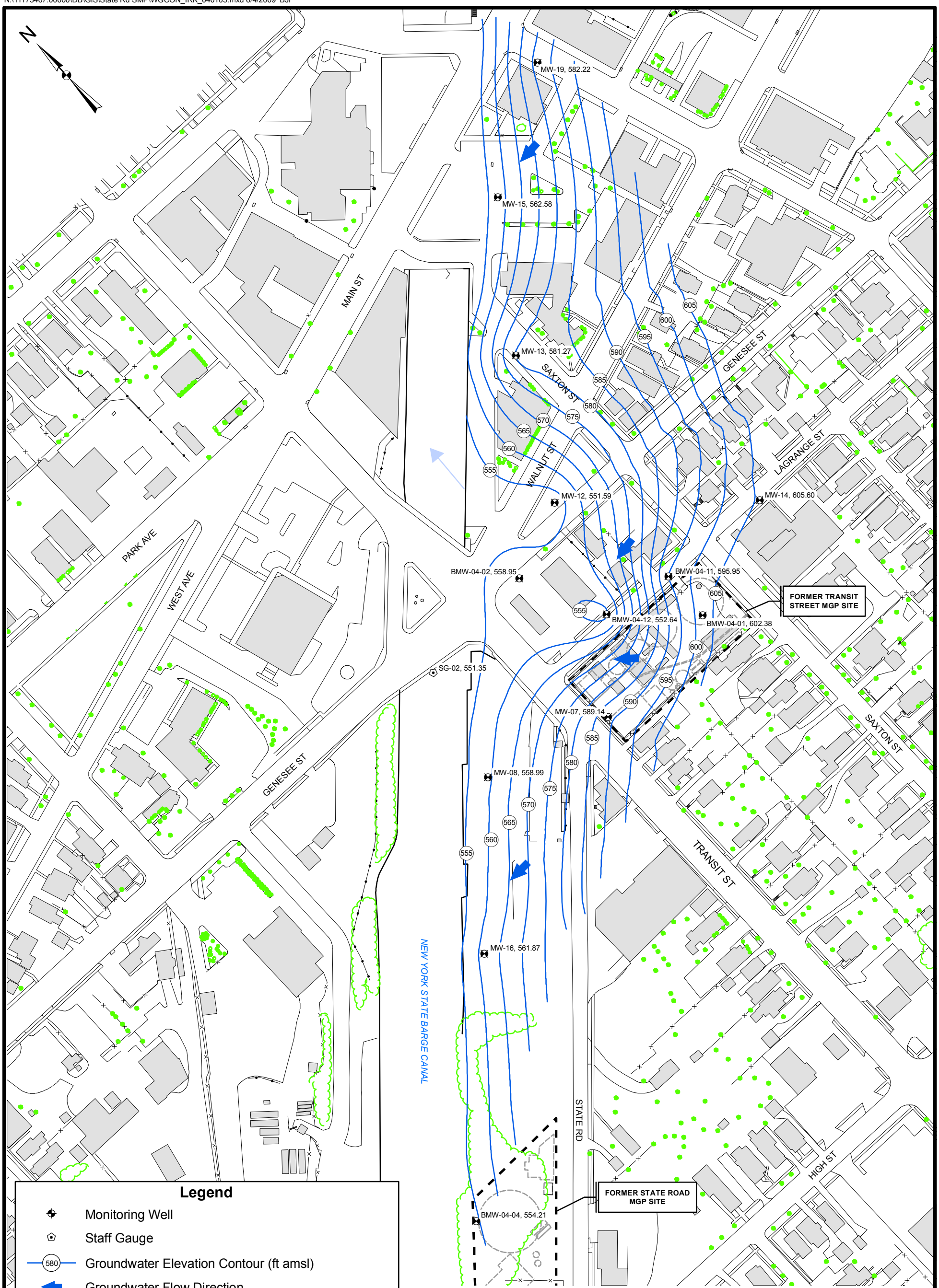

URS

NYSEG - STATE ROAD FORMER MGP SITE
GROUNDWATER POTENTIOMETRIC SURFACE MAP
APRIL 1, 2005 - INTERMEDIATE BEDROCK ZONE

FIGURE 4B

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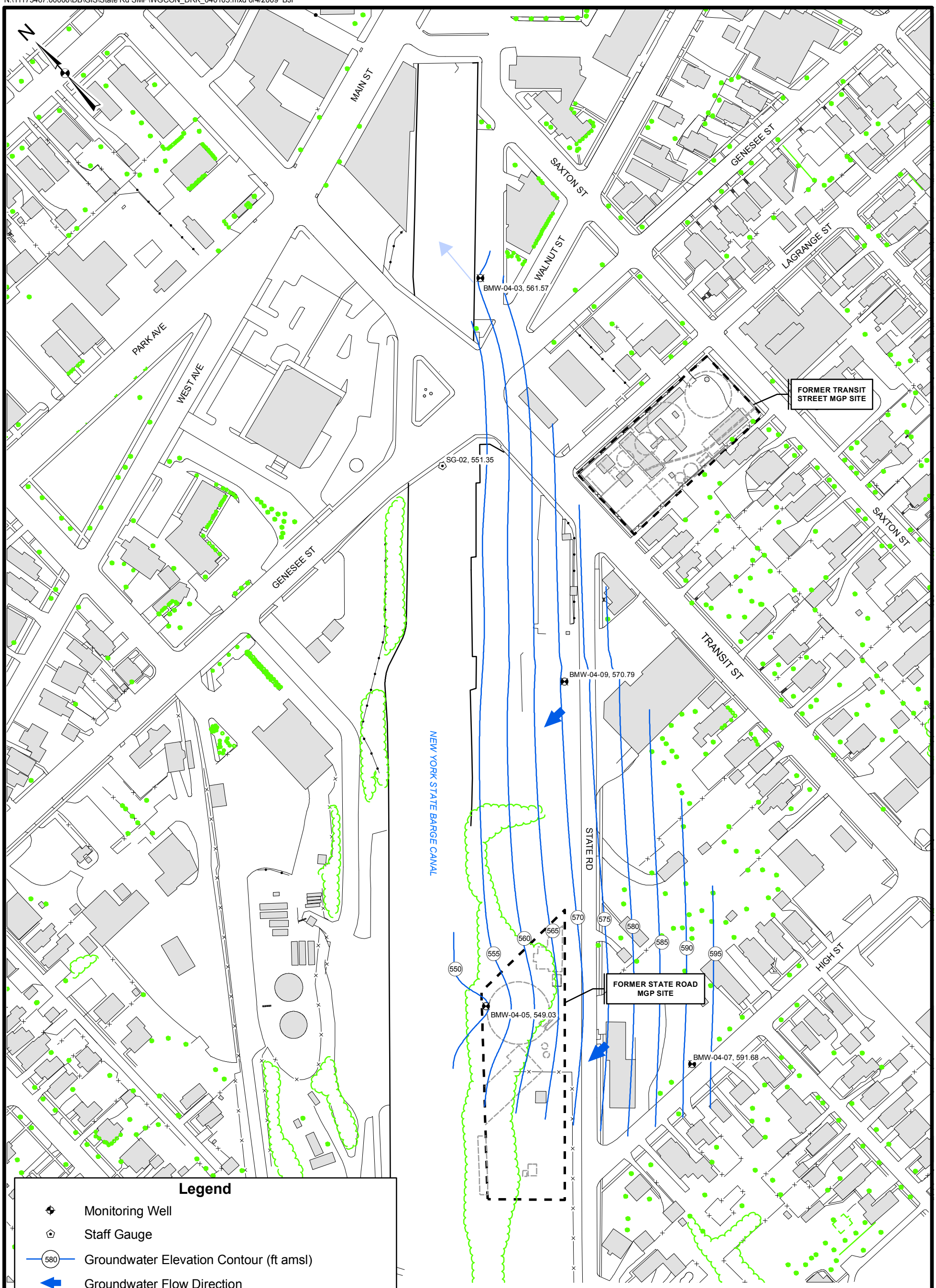
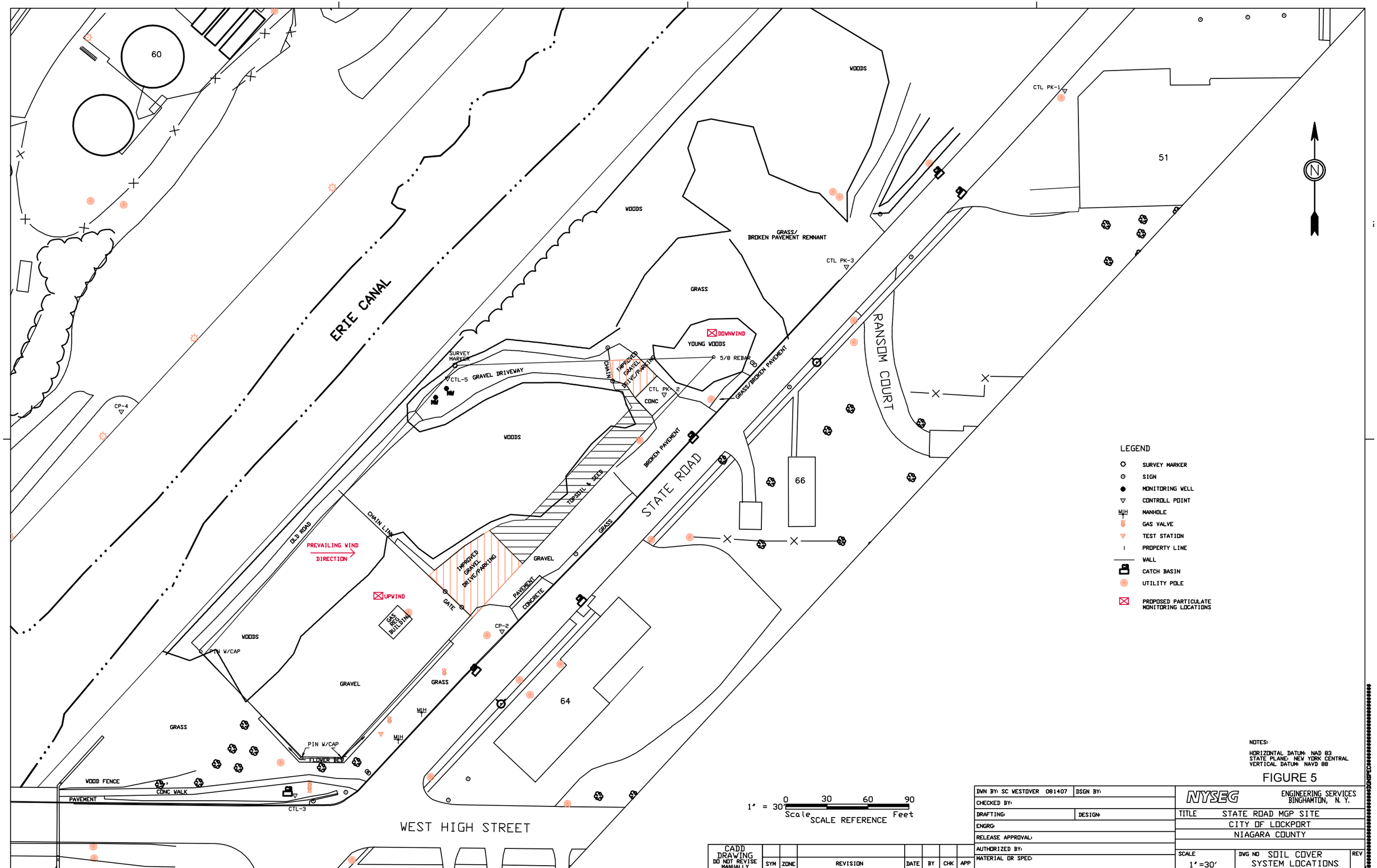


URS

NYSEG - TRANSIT STREET AND STATE ROAD FORMER MGP SITES
GROUNDWATER POTENTIOMETRIC SURFACE MAP
APRIL 1, 2005 - DEEP BEDROCK ZONE

FIGURE 4C



LEGEND

- SURVEY MARKER
- SIGN
- MONITORING WELL
- CONTROLL POINT
- MLH MANHOLE
- GAS VALVE
- TEST STATION
- PROPERTY LINE
- WALL
- CATCH BASIN
- UTILITY POLE
- PROPOSED PARTICULATE MONITORING LOCATIONS

NOTES:

HORIZONTAL DATUM: NAD 83
STATE PLANE: NEW YORK CENTRAL
VERTICAL DATUM: NAVD 88

FIGURE 5

1" = 30' Scale 0 30 60 90 Feet SCALE REFERENCE

CADD DRAWING DO NOT REVISE MANUALLY	SYM	ZONE	REVISION	DATE	BY	CHK	APP

DWN BY: SC WESTOVER 081407	DSGN BY:
CHECKED BY:	
DRAFTING:	DESIGN:
ENGRG:	
RELEASE APPROVAL:	
AUTHORIZED BY:	
MATERIAL OR SPEC:	

NYSEG ENGINEERING SERVICES BINGHAMTON, N. Y.

TITLE STATE ROAD MGP SITE
CITY OF LOCKPORT
NIAGARA COUNTY

SCALE 1"=30' | DWG NO SOIL COVER SYSTEM LOCATIONS | REV

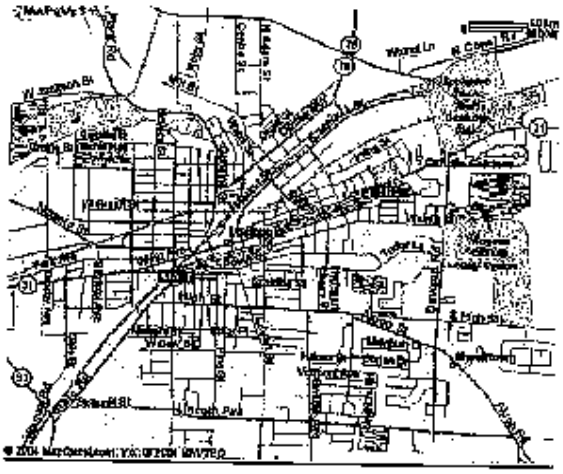
Date/Time Plotted

Map Showing Route from the site to the Hospital:

Figure 6 – Hospital Route

Map

HOSPITAL ROUTE MAP



HOSPITAL DIRECTIONS:

Lockport Memorial Hospital
521 East Ave
Lockport, NY 14094-3299

To reach the hospital from the site, head north on Transit Street, turn right onto NY Route 31/Walnut Street. Take a left onto NY Route 31/Washburn Street. Turn right onto NY Route 31/East Avenue. Lockport Memorial Hospital is located on the left. Approximate trip distance is 1.5 miles.

LIST OF APPENDICES

Appendix A - Metes and Bounds

Appendix B - Deed Restriction (Not yet completed)

Appendix C - Health and Safety Plan and Community Air Monitoring Plan

Appendix D - Site-wide Inspection Form

Appendix E - EC As-Built Drawings

Appendix F – EC Cover System Inspection Form

Appendix A

"PARCEL B – PARCEL OF LAND, situate in the City of Lockport, and being part of farm Lot number fifty-eight (58) Township Fourteen (14), and Range Seven (7) of the Holland Land Survey (so-called) bounded and described as follows; viz: COMMENCING at a point in the middle of the State Road as laid down on a map of the Village of Lockport (now City) made by Jesse P. Haines, Surveyor, and filed in Niagara County Clerk's Office, November 21, 1866, at a point which is one hundred forty (140) feet and six (6) inches southwesterly from its intersection with the north line of said Lot fifty-eight (58); thence westerly parallel with the north line of said lot about three (3) chains, ninety-seven and one-half (97 ½) links to the Erie Canal; thence southwesterly along the easterly line of said Canal, nine (9) chains and fourteen (14) links; thence south parallel to the east line of said Lot fifty-eight, fifty (50) links; thence east parallel to the north line of said lot fifty-eight, three (3) chains, thirty-five and one-fourth (35 ¼) links to the middle of the State Road aforesaid; thence northeasterly along the middle of said road about ten (10) chains and ten (10) links to the place of beginning, be the same more of less; said tract of land hereinbefore described being subject, however, to a roadway along the north side thereof agreeably to the covenant contained in a certain warranty deed made by the Lockport Gas Light Company to the Holly Manufacturing Company under date of February 15, 1873, and recorded July 10, 1873 in Liber 130 of Deeds at Page 373 (by which deed said Lockport Gas Light Company conveyed to said Holly Manufacturing Company certain premises adjoining said here-inabove last described premises on the north, said covenant being as follows: "And said parties to these presents do hereby in consideration of the premises herein contained, covenant and agree each with the other that a road shall be constructed and forever maintained, twenty feet in width extending from the State Road aforesaid to the Erie Canal, the center line of said road to be the south line of the premises hereby conveyed, the one-half of said road to be upon the premises hereby conveyed, and the other half there-of on the premises of the party hereto of the first part, south of and adjoining the premises hereby conveyed, and that said road shall be constructed and forever hereafter maintained at the joint and equal expense of the parties to these presents, their successors and assigns, and to be used as and for a road, highway and passageway, in common, by said parties to these presents, their successors and assigns and for their joint and common use and benefit as owners of said premises now owned by them respectively, or any part thereof").

"Excepting lands and rights appropriated by the State of New York for Canal purposes on or about July 2, 1901, being 0.731 acres of land. Also, excepting the rights of the State of New York, if any, its successors or assigns, in connection with the Erie or Barge Canal. Also excepting so much of said premises as extend to the centre of and are within the borders of the State Road adjoining said premises."

"ALL THAT TRACT OR PARCEL OF LAND, situate in the City of Lockport, County of Niagara and State of New York, known as and being part of Farm Lot 58, Township 14, Range 7 of the Holland Land Company's Land, so called, which is bounded and described as follows:

"BEGINNING at a point in the middle of State Road as shown on a map of the Village (now City) of Lockport, made by Jesse P. Haines, Surveyor, and filed in Niagara County Clerk's Office November 21st, 1866, which point is 639.29 feet southwesterly from the intersection of said center line with the northerly line of said Lot 58 and running thence northwesterly at right angles 160.33 feet to the Blue Line, so-called, of the New York State Barge Canal; thence southwesterly along said Blue Line 148.5 feet; thence southwesterly deflecting one (1) degree fifty-eight (58) minutes to the right 164.4 feet; thence easterly parallel with the northerly line of said Lot 58, 221.26 feet to the middle line of said State Road; thence northeasterly along the said middle line to the point or place of beginning, be the same more or less.

"EXCEPTING, however, the rights of the State of New York, if any, its successors or assigns, in connection with the Erie or Barge Canal, as well as so much of said premises as extend to the center of and are within the borders of the State Road adjoining the same.

"It being hereby intended to convey the lands and rights referred to in an exception set forth in a deed from Lockport Light, Heat and Power Company to New York State Electric & Gas Corporation, dated May 1, 1930, and recorded in the County Clerk's Office of Niagara County September 8, 1930, in Book 563 of Deeds at Page 445, the said exception being to that certain parcel or tract of land designated in the said deed as, A (15) Parcel B, and being written as follows: "Excepting lands and rights appropriated by the State of New York for Canal purposes on or about July 2, 1901, being 0.731 acres of land."

APPENDIX B

DEED RESTRICTION

APPENDIX C

HEALTH AND SAFETY PLAN AND
COMMUNITY AIR MONITORING PLAN
NYSEG - STATE ROAD FORMER MGP SITE
LOCKPORT, NEW YORK

HEALTH AND SAFETY PLAN

Emergency Excavation: Immediate excavation activities are necessary to protect human health, the environment or major property damage (i.e., major natural gas leak or distribution system failure), see Attachment A.

1.1 Site Location and Description

The former MGP site is located on State Road just northeast of High Street in the City of Lockport. The site is bounded by private property on the north, High Street on the south, the New York State Barge Canal on the west, and State Road on the east. The site is owned by NYSEG and presently contains a natural gas regulator station with underground natural gas distribution system piping and overhead electric transmission and distribution lines. This site management plan is designed and written with the knowledge that NYSEG owns and controls the site and the activities that occur upon it. This site management plan will have to be revised to reflect any future changes in ownership.

A remedial investigation was completed in 2007. Low levels of MGP related contaminants have been identified in overburden soil and bedrock at the site. In 2008 clean imported soil and crushed stone were placed over portions of the site to prevent direct exposure to low levels of potentially MGP related contaminants in surface soils.

1.2 Potential MGP Residues

Despite the fact that the site is called an MGP, it never produced gas. The site was used to store gas and process tar that was produced at the Transit Street site located approximately one-half mile to the northeast. MGP byproducts which present a potential public safety and environment concern that are or may be present at the site are:

Coal Tar - a black, viscous liquid characterized by a strong odor similar to railroad ties, moth balls or driveway sealer. Coal tar contains a variety of organic compounds which, in sufficient quantities present both short term and long term exposure risks. Coal tar is heavier than water so it tends to sink, but it does contain a fraction that may float on the groundwater surface. Coal tar contains volatile organic compounds (VOCs) which can present an inhalation risk if present in high enough concentrations and semi volatile compounds which can present an inhalation risk from breathing contaminated dust.

Purifier Waste - Purifier Waste is typically found as a dark mixture of wood chips with a very strong, unpleasant burnt odor. Once exposed at the ground surface, the waste will often develop an iridescent blue color known as "Prussian Blue." Purifier waste often contains significant quantities of chemically complexed cyanide compounds. Some cyanide can leach from the waste and contaminate groundwater, which can move through the subsurface away from the burial location. Although some cyanide compounds are highly toxic, there is evidence that the cyanide compounds typically leached from purifier waste are in a chemically complexed form which is significantly less toxic. In addition to containing complexed cyanide, water which comes into contact with purifier waste, is often highly acidic.

2.0 OVERVIEW OF PRECAUTIONS TO ENSURE THE SAFETY OF HUMAN HEALTH AND THE ENVIRONMENT

The following precautions must be considered for any excavation work on the MGP site. The applicability and extent of each precaution will need to be determined based upon the actual work location and depth of excavation.

Workers should proceed with caution at all depths and evaluate soil handling, personal protective equipment, equipment decontamination and backfilling requirements based on the guidance provided below. In all circumstances, workers should err on the side of caution and treat any suspected contamination as possible MGP waste.

- **Notification** to NYSEG's Compliance Department and New York State Department of Environmental Conservation (NYSDEC) as soon as practical, preferably prior to excavation (see Contact List). Staff of the Compliance Department will make the notification to NYSDEC.

- **Personal Hygiene**, at a minimum, should consist of workers washing hands prior to leaving area of excavation, smoking, eating, drinking and/or using toilets. Eating and/or drinking are not permitted in the vicinity of the excavation. Smoking is not permitted anywhere on the property.

- **Personal Protective Equipment (PPE)**, at minimum, workers should don long sleeve shirt, long pants, work boots and work gloves. If soil is stained or coal tar is visible, then workers should don rubber boots, tyvek suits or rain suits and nitrile or other chemical resistant inner gloves.

- **OSHA 40-Hour Hazardous Waste Operator (HAZWOPER)** trained workers will be required to perform excavation in highly contaminated areas. (This requirement will be determined by NYSEG's Compliance Department and NYSDEC and exceptions will be granted for emergency work).

- **Air Monitoring** is required for worker and community safety for volatile organic compounds (VOCs) and dust if excavations encounter heavily contaminated soils. Exception will be granted for emergency work. The

NYSDOH's Community Air Monitoring Plan shall be followed. This plan is included in this document as Attachment D - Community Air Monitoring Plan.

- **Soil Handling**. Contaminated or stained soil should be handled to minimize contaminating adjacent areas. Contaminated or stained soil should be placed on polyethylene sheeting (poly) or in either 55-gallon drums or waste wranglers. If sidewall and bottom of excavation is heavily stained, then the excavation should be lined with poly prior to workers entering excavation.

- **Dewatering Excavation**. Water that contains sheen should not be discharged to storm sewers or the barge canal. Contaminated or stained water should be placed in storage containers (i.e. 55-gallon drums or larger containers).

- **Dust Control** should be accomplished by wetting soil with water.

- **Equipment Decontamination**, prior to leaving the work area, soil that has accumulated on equipment should be removed. Tar contaminated equipment will require washing prior to leaving the area of excavation. Washing should be conducted over the open excavation (at the conclusion of excavating contaminated soils and prior to the equipment contacting clean backfill materials). Wash water should be allowed to infiltrate the soil in the open excavation. At no time shall rinse water or contaminated soil removed from equipment be allowed to contact surface soils or clean backfill material.

- **Personnel Decontamination**, at a minimum, should consist of removing soil from footwear and removing any clothing with coal tar on it prior to leaving area of excavation. Workers should wash hands prior to leaving area of excavation, smoking, eating, drinking and/or using toilets.

- **Material Storage**. Bulk Soil and containerized waste materials (i.e., soil, water, PPE and poly) should be placed in a designated area at the site. NYSEG's Compliance Department will be responsible for coordinating disposal.

- **Backfilling Requirements**. Soils that are not contaminated or stained may be used for backfill. Those soils should be placed back into the excavation first. If additional soils are required to bring the excavation back to grade, they should be clean material imported from a non-contaminated site.

CONTACT LIST

NYSEG: Primary
Mr. Tracy L. Blazicek: Compliance Department
NYSEG
Corporate Drive, Kirkwood Industrial Park, P.O. Box 5224
Binghamton, New York 13902-5224

Office Phone: (607) 762-8839
After Hours Phone: (607) 237-5325
E-mail: tlblazicek@nyseg.com

NYSEG: Secondary
Mr. Bert W Finch: Compliance Department
NYSEG
Corporate Drive, Kirkwood Industrial Park, P.O. Box 5224
Binghamton, New York 13902-5224
Office Phone: (607) 762-8683
E-mail: bwfinch@nyseg.com

NYSDEC: Mr. William Ottaway: Division of Environmental Remediation
NYSDEC
625 Broadway
Albany, New York 12233-7014
Office Phone: (518) 402-9662
E-mail: wsottawa@gw.dec.state.ny.us

ATTACHMENT A

EMERGENCY EXCAVATION PROTOCOL

For the State Road Former Manufactured Gas Plant Site

Emergency Excavation: Immediate excavation activities are necessary to ensure the safety of human health, the environment or major property damage (i.e., major natural gas leak or distribution system failure).

PROCEDURES IN ORDER OF IMPORTANCE

1. **Do not endanger your own life. Survey the situation before taking any action.** Take whatever action is necessary to ensure the safety of human health and the environment.

2. **Personal Hygiene**, at a minimum, should consist of workers washing hands prior to leaving area of excavation, smoking, eating, drinking and/or using toilets. Eating and/or drinking are not permitted in the vicinity of the excavation. Smoking is not permitted anywhere on the property.

3. **Personal Protective Equipment (PPE)**, at a minimum, workers should don long sleeve shirt, long pants, work boots and work gloves. If soil is stained or coal tar is visible, then workers should don rubber boots, tyvek suits or rain suits and nitrile or other chemical resistant inner gloves.

4. **Soil Handling**. Contaminated or stained soil should be handled to minimize contaminating adjacent areas. Contaminated or stained soil should be placed on polyethylene sheeting (poly) or in either 55-gallon drums or waste wranglers. If sidewall and bottom of excavation is heavily stained, then the excavation should be lined with poly prior to workers entering excavation.

5. **Dewatering Excavation**. Water that contains sheen should not be discharged to storm sewers or the creek. Contaminated or stained water should be placed in storage containers (i.e. 55-gallon drums or larger containers).

6. **Equipment Decontamination**, prior to leaving the work area, soil that has accumulated on equipment should be removed. Tar contaminated equipment will require washing prior to leaving the area of excavation. Washing should be conducted over the open excavation (at the conclusion of excavating contaminated soils and prior to the equipment contacting clean backfill materials). Wash water should be allowed to infiltrate the soil in the open excavation. At no time shall rinse water or contaminated soil removed from equipment be allowed to contact surface soils or clean backfill material.

7. **Personnel Decontamination**, at a minimum, should consist of removing soil from footwear and removing any clothing with coal tar on it prior to leaving area of excavation. Workers should wash hands prior to leaving area of excavation, smoking, eating, drinking and/or using toilets.

8. **Material Storage**. Bulk Soil and containerized waste materials (i.e., soil, water, PPE and poly) should be placed in a designated area at the site. NYSEG's Compliance Department will coordinate disposal.

9. **Backfilling Requirements**. Soils that are not contaminated or stained may be used for backfill. Those soils should be placed back into the excavation first. If additional soils are required to bring the excavation back to grade, they should be clean material imported from a non-contaminated site.

10. **Notify NYSEG Compliance Department as soon as practical after emergency is under adequate control.**

Primary: Tracy L. Blazicek
Normal working hours phone: (607) 762-8839

After hours phone: (607) 237-5325
E-mail: tlblazicek@nyseg.com

Secondary: Bert W Finch
Normal working hours phone: (607) 762-8683

After hours phone: (607) 725-4312
E-mail: bwfinch@nyseg.com

11. **NYSEG Compliance Department will notify NYSDEC Division of Environmental Remediation**

COMMUNITY AIR MONITORING PLAN

Real-time air monitoring for volatile organic compounds will be conducted at the perimeter of the Exclusion Zone during the drilling program as follows:

- Volatile organic compounds and dust particulates will be monitored at the downwind perimeter of the exclusion zone on a continuous basis. If total organic vapor levels exceed 5 parts per million (ppm) above background, work activities will be halted and monitoring continued under the provisions of a Vapor Emission Response Plan. All readings will be recorded and be available for NYSDEC and NYSDOH personnel to review if requested.

- If particulate levels at the downwind station exceed particulate levels at the upwind station by more than 100 micrograms per cubic meter (mcg/m3), work activities will be halted and appropriate dust suppression measures will be employed. All readings will be recorded and be available for NYSDEC and NYSDOH personnel to review if requested.

Vapor Emission Response Plan

If the ambient air concentration of total organic vapors at the downwind perimeter of the Work Area or Exclusion Zone exceed 5 ppm above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities will resume with continued monitoring. If the organic vapor levels are greater than 5 ppm over background but less than 25 ppm over background at the perimeter of the Exclusion Zone, activities can resume provided the organic vapor level 200 feet downwind of the Exclusion Zone or half the distance to the nearest residential or commercial structure, whichever is less, is below 5 ppm over background.

If the organic vapor level is above 10 ppm at the perimeter of the Exclusion Zone, activities must be shut down. When work shutdown occurs, downwind air monitoring as directed by the Site HSO will be implemented to ensure that vapor emission does not impact the nearest residential or commercial structure at levels exceeding those specified in the Major Vapor Emission Response Plan.

If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.

Major Vapor Emission Response Plan

If any organic vapor levels greater than 5 ppm over background are identified 200 feet downwind from the Exclusion Zone or half the distance to the nearest residential or commercial property, whichever is less, all work activities will be halted.

If, following the cessation of work activities, or as the result of an emergency, organic vapor levels persist above 5 ppm above background 200 feet downwind from the Exclusion Zone or half the distance to the nearest residential or commercial property, then the air quality will be monitored within 20 feet of the perimeter of the nearest residential or commercial structure (20-foot zone).

If efforts to abate the emission source are unsuccessful and organic vapor levels approaching 5

ppm persist for more than 30 minutes in the 20-foot zone, then the Major Vapor Emission Response Plan shall automatically be placed into effect. Also, the Major Vapor Emission Response Plan shall be immediately placed into effect if 20-foot zone organic vapor levels are greater than 10 ppm above background.

Upon activation of the Major Vapor Emission Response Plan, the following activities will be undertaken:

- All Emergency Response authorities will immediately be contacted by the Site HSO and advised of the situation.
- Air monitoring will be conducted at 30 minute intervals within the 20-foot zone. If two successive readings below action levels are measured, air monitoring may be halted or modified by the Site HSO.

Particulate Monitoring, Response Levels and Actions

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

If the downwind PM-10 particulate is 100 mcg/m3 greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques will be employed. Work may continue with dust suppression techniques provided that either of the downwind stations report PM-10 particulate levels do not exceed 150 mcg/m3 above the up wind
level and provided that no visible dust is migrating from the work area.

If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m3 above the up wind level, work will be stopped and a re-evaluation of activities initiated. Work will resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m3 above the upwind level and preventing visible dust migration.

All readings will be recorded and available for NYSDEC and NYSDOH personnel to review.

APPENDIX D

SITE-WIDE INSPECTION FORM

APPENDIX D

STATE ROAD FORMER MGP SITE – POST CLOSURE

NYSDEC SITE NO. 9-32-109

SITE-WIDE INSPECTION FORM

Date: _____ **Inspector:** _____

Weather: _____ **Signature:** _____

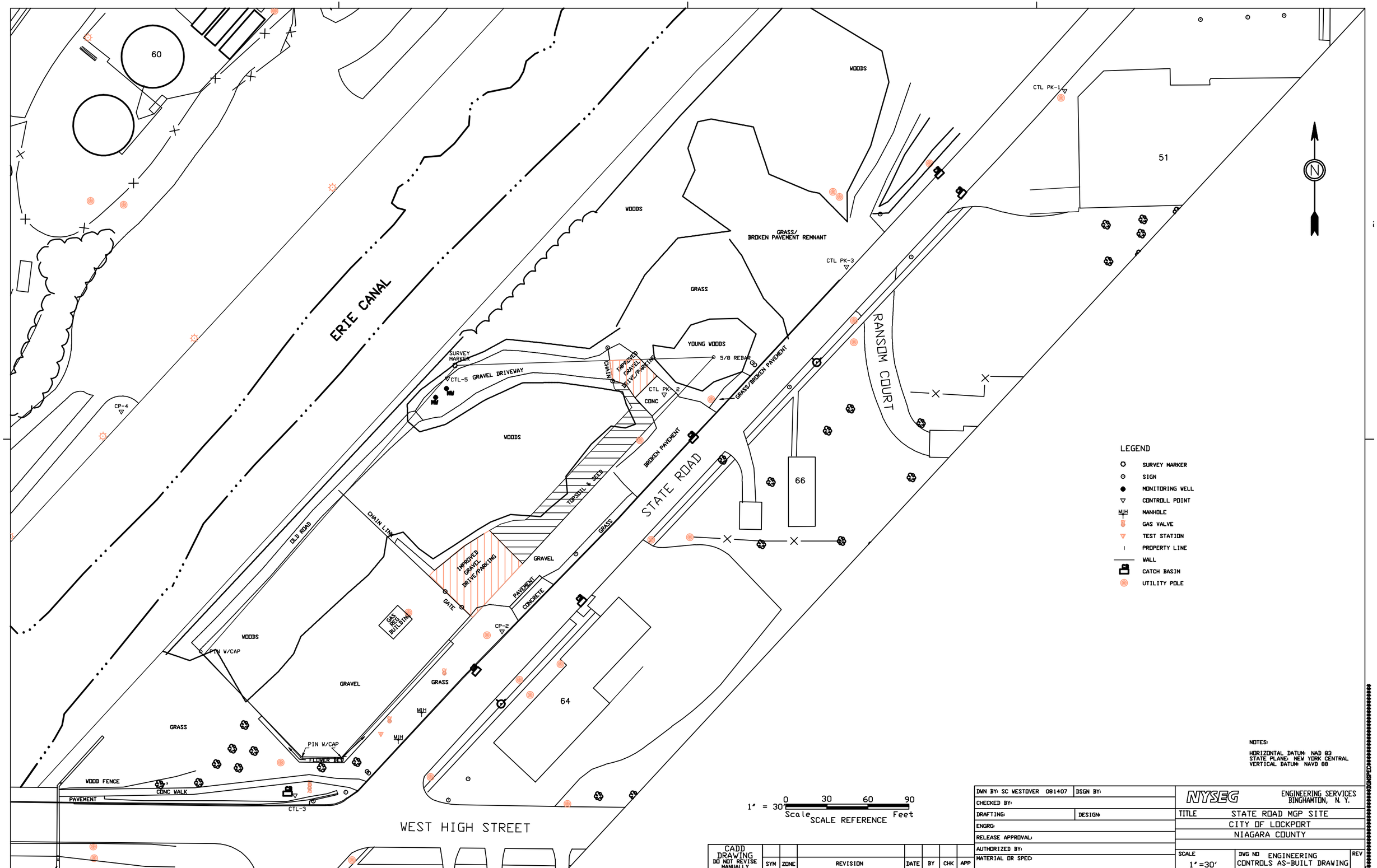
Temperature: _____ **Company:** _____

Type: Winter Spring Summer Fall
(Circle One)

Item Inspected	Maintenance Needed (Y/N)	Comments	Inspector's Initials
Soil Cover Area			
Stone Cover Area			
Access Road			
Gate to Access Road			
Other Items: (Specify)			
Other Items: (Specify)			

APPENDIX E

EC AS-BIULT DRAWING



NOTES:

HORIZONTAL DATUM: NAD 83
STATE PLANE: NEW YORK CENTRAL
VERTICAL DATUM: NAVD 88

1" = 30' Scale 0 30 60 90 Feet
SCALE REFERENCE

CADD DRAWING DO NOT REVISE MANUALLY	SYM	ZONE	REVISION	DATE	BY	CHK	APP

DWN BY: SC WESTOVER 081407	DSGN BY:
CHECKED BY:	
DRAFTING:	DESIGN:
ENGRG:	
RELEASE APPROVAL:	
AUTHORIZED BY:	
MATERIAL OR SPEC:	

NYSEG ENGINEERING SERVICES BINGHAMTON, N. Y.

TITLE STATE ROAD MGP SITE
CITY OF LOCKPORT
NIAGARA COUNTY

SCALE 1"=30' | DWG NO ENGINEERING CONTROLS AS-BUILT DRAWING | REV

Date/Time Plotted

APPENDIX F

EC COVER SYSTEM INSPECTION FORM

APPENDIX F

STATE ROAD FORMER MGP SITE – SITE MANAGEMENT PLAN

EC COVER SYSTEM INSPECTION FORM

MINIMUM CHECKLIST FOR ROUTINE INSPECTIONS

Component	Item	Area Checked	Condition
Soil Cover System Grading	Obvious subsidences, depressions, or cracks Evidence of ponded water Stressed vegetation Signs of erosion occurring at a localized change in grade Evidence of Breaching soil/stone cover Animal burrows Other:		
Access road and gate	Missing lock, hinges, etc. from gate Other signs of access or vandalism Condition of access road surface Evidence of trespass Other:		