



Department of Community Development

WILLIAM J. EVERT
Director

LOCKPORT MUNICIPAL BUILDING
ONE LOCKS PLAZA
LOCKPORT, N.Y. 14094
(716) 439-6687

June 15, 2004

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JUN 16 2004

NYSDEC REG 9
FOIL
REL UNREL

Mr. Dan King, Project Manager
NYS Department of Environmental Conservation
270 Michigan Street
Buffalo, New York 14203

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JUN 21 2004

NYS HEALTH DEPARTMENT
BUFFALO OFFICE

Re: Richmond Avenue Project
Soils Management Plan
Site Number B-00154-9

Dear Mr. King:

Enclosed please find the Richmond Avenue Project Soils Management Plan (SMP) dated June 7, 2004. This document is being submitted for your approval regarding this project.

If you have any questions regarding this matter, please do not hesitate to call me at 439-6687.

Sincerely,

William J. Evert
Director

WJE:bte
Enclosure



CITY OF LOCKPORT

*SOIL MANAGEMENT PLAN
RICHMOND AVENUE SITE
LOCKPORT, NEW YORK*

7 JUNE 2004

Prepared for:

The City of Lockport
One Locks Plaza
Lockport, New York 14094

Prepared by:

InteGreyted International, LLC
104 Jamesville Road
Syracuse, NY 13214

InteGreyted Project No. 0403002P

TABLE OF CONTENTS

1.0	OVERVIEW AND OBJECTIVES.....	1-1
2.0	NATURE AND EXTENT OF CONTAMINATION.....	2-1
3.0	CONTEMPLATED USE.....	3-1
4.0	PURPOSE AND DESCRIPTION OF SURFACE COVER SYSTEM.....	4-1
5.0	MANAGEMENT OF SOILS AND MAINTENANCE OF COVER SYSTEM.....	5-1
5.1	EXCAVATED AND STOCKPILED SOIL/FILL DISPOSAL.....	5-3
5.2	SUBGRADE MATERIAL.....	5-4

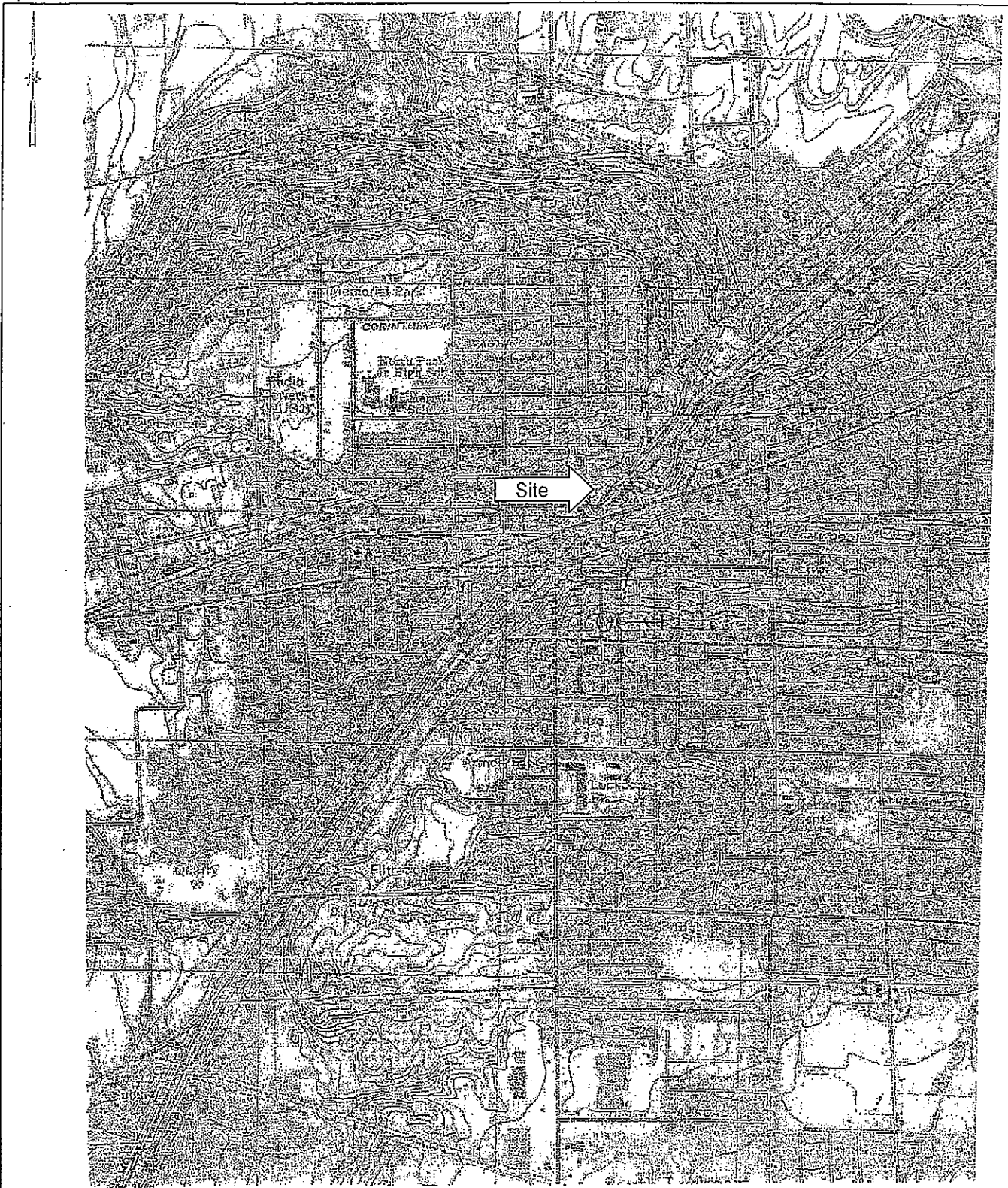
FIGURES

Figure 1-1	Site Location Map.....	1-2
Figure 1-2	Site Plan.....	1-3

1.0 OVERVIEW AND OBJECTIVES

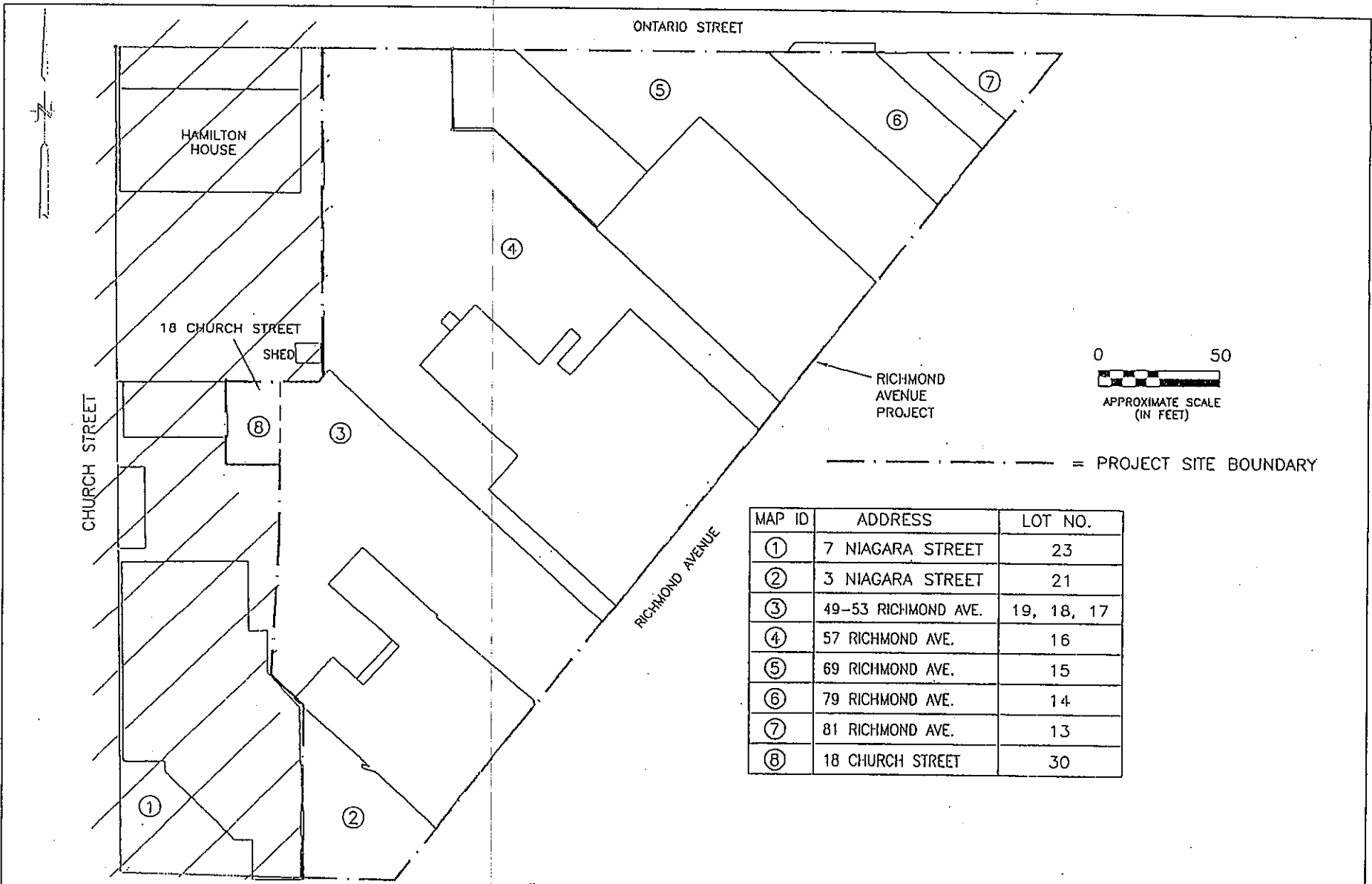
The Richmond Avenue Project Site (the Site) is located at Richmond Avenue and Niagara Street in the City of Lockport, Niagara County, New York (Figure 1-1). The Site is a triangular-shaped property consisting of nine separate tax parcels totaling 2 +/- acres, which are owned by the City of Lockport (Figure 1-2). Vacant land and four (4) unoccupied buildings currently occupy the Site. The Site is bounded by Richmond Avenue, Church Street and Ontario Street and is located immediately adjacent to the Erie Barge Canal. The Site has been characterized by previous site assessment and site investigation activities, which are summarized in the Site Investigation / Remedial Alternatives Report (SI/RAR) dated 14 March 2003. The user should refer to the SI/RAR for more detail, as needed.

The objective of this Soils Management Plan (SMP) is to set guidelines for management of soil/fill material during any future activities which would breach the cover system at the site. This SMP addresses environmental concerns related to soil management and has been reviewed and approved by the New York State Department of Environmental Conservation (NYSDEC) as shown in Attachment 1.



Lockport, NY (1980) Quadrangle

<p>InteGreyted International</p> <p>104 JAMESVILLE ROAD SYRACUSE, NY 13214 PHONE: (315) 445-0224 FAX: (315) 445-0793</p>	<p>DRAWN BY</p> <p>MJS</p>	<p>Site Location Map</p> <p>Richmond Avenue Project Site Lockport, New York</p>	
	<p>CAD FILE</p> <p>fig1</p>		
	<p>DATE</p> <p>5/04</p>	<p>PREPARED FOR:</p> <p>City of Lockport</p>	<p>FIGURE:</p> <p>1-1</p>
	<p>SCALE</p> <p>1"=2,000'</p>		



MAP ID	ADDRESS	LOT NO.
①	7 NIAGARA STREET	23
②	3 NIAGARA STREET	21
③	49-53 RICHMOND AVE.	19, 18, 17
④	57 RICHMOND AVE.	16
⑤	69 RICHMOND AVE.	15
⑥	79 RICHMOND AVE.	14
⑦	81 RICHMOND AVE.	13
⑧	18 CHURCH STREET	30

InteGreyted
International

104 JAMESVILLE ROAD
SYRACUSE, NY 13214
PHONE: (315) 445-0224
FAX: (315) 445-0793

DRAWN BY
MJS
CAD FILE
fig2
DATE
5/04
SCALE (approx)
1"=50"

Site Plan

Richmond Avenue Project Site
Lockport, New York

PREPARED FOR:
City of Lockport

FIGURE:
1-2

2.0 NATURE AND EXTENT OF CONTAMINATION

Based on data obtained from previous investigations and remediations performed at the Site, a SI/RAR, dated 14 March 2003, was developed by InteGreyted International, LLC (InteGreyted). As part of the SI/RAR, Interim Remedial Measures (IRMs) consisting of the removal and offsite disposal of approximately 195 tons of soil containing hazardous metals, the removal and offsite disposal of approximately 1,300 tons of soils containing non-hazardous metals, and the removal and offsite disposal of 600 tons of petroleum-contaminated soils were conducted at the Site. The completed IRMs provided for the following: the elimination of direct exposure threats from surface soil contamination; a reduction in contaminant concentrations in the upper two feet of soil to levels below or near New York State Department of Environmental Conservation (NYSDEC) TAGM 4046 recommended soil cleanup objectives; limited residual contamination in soils at depths greater than two feet below grade; elimination of soils designated as hazardous waste; and establishment of residual concentrations of site analytes which are acceptable for future planned use of the property.

Following completion of the soil removal IRMs, confirmation soil samples were collected from the bottom of the excavations (average depths of 2 feet to 3 feet below grade) to document the effectiveness of the IRMs and to establish the residual levels of analytes remaining at the site. A review of the analytical data from these soil samples indicated that the constituents of potential concern (COPCs) included up to three metals (arsenic, lead, and mercury) and up to five SVOCs (Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene and Chrysene). Concentrations of these COPCs were detected in confirmation soil samples at concentrations slightly exceeding NYSDEC TAGM 4046 recommended soil cleanup objectives.

Data developed during the SI/RAR indicate that post-IRM risk levels for both cancer- and non-cancer-related risks are within the traditionally accepted ranges without requiring the implementation of any further remedial alternative.

3.0 *CONTEMPLATED USE*

As part of the proposed redevelopment program, the Site has been identified for a combination of commercial and recreational usage. Preliminary plans for the Site include: limited commercial development, improved access to Locks 34 and 35, creation of a public gathering space (which may accommodate several uses including a farmers' market, community picnics, ethnic festivals or art shows); establishment of a museum catering to local and regional visitors. Parking areas and open space will account for a significant amount of the space utilized across the Site. Deed restrictions will allow for residential usage on the 2nd floor and above of any onsite building.

4.0 *PURPOSE AND DESCRIPTION OF SURFACE COVER SYSTEM*

The purpose of the surface cover system is to eliminate the potential for human contact with affected soil and/or fill material and eliminate the potential for contaminated runoff from the property. The cover system will consist of one of the following types of clean material:

- Soil: A minimum of 12 inches of vegetated soil cover underlain by a demarcation layer, in outdoor vegetated areas.
- Asphalt: A minimum of 6 inches of material (asphalt and subbase material) in areas that will become roads, sidewalks, and parking lots. Actual cross sections will be determined based on the intended use of the area.
- Concrete: A minimum of 6 inches of material (concrete and subbase material) in areas that will become slab-on-grade structures or for roads, sidewalks, and parking lots in lieu of asphalt. Actual cross sections will be determined based on the intended use of the area.
- Brick Pavers: A minimum of 6 inches of material (brick pavers and subbase material) in areas that will become walkways or landscaped areas. Actual cross sections will be determined based on the intended use of the area.

5.0 *MANAGEMENT OF SOILS AND MAINTENANCE OF COVER SYSTEM*

The purpose of this section is to provide environmental guidelines for management of subsurface soils/fill and the long-term maintenance of the cover system during any future intrusive work which breaches the cover system. The SMP includes the conditions listed below.

- Any breach of the cover system, including for the purposes of construction or utilities work, must be replaced or repaired using an acceptable borrow source free of industrial and/or other potential sources of chemical or petroleum contamination. The repaired area must be covered with clean soil and reseeded or covered with impervious product such as concrete or asphalt, as described in Section 4.0, to prevent erosion in the future.
- Control of surface erosion and run-off of the entire property at all times, including during construction activities. This includes proper maintenance of the vegetative cover established on the property.
- Site soil that is excavated and is intended to be removed from the property must be managed, characterized, and properly disposed of in accordance with NYSDEC regulations and directives (See Section 5.1).
- Soil excavated at the site may be reused as backfill material on-site provided it contains no visual or olfactory evidence of contamination, it is properly characterized, its location is documented and it is placed beneath a cover system component as described in Section 4.0.
- Any off-site fill material brought to the site for filling and grading purposes shall be from an acceptable borrow source free of industrial and/or other potential sources of chemical or petroleum contamination. As necessary, off-site borrow sources should be certified and/or subject to collection of one representative composite sample per source. The sample should be analyzed for TCL VOCs, SVOCs, pesticides, PCBs, and TAL metals plus cyanide. The soil will be

acceptable for use as cover material provided that all parameters meet the NYSDEC recommended soil cleanup objectives included in TAGM 4046.

- Prior to any construction activities, workers are to be notified of the site conditions with clear instructions regarding how the work is to proceed. Invasive work performed at the property will be performed in accordance with all applicable local, state, and federal regulations to protect worker health and safety.
- The Owner shall complete and submit to the NYSDEC an annual report by March 31st of each year. Such annual report shall contain certification that the institutional controls put in place, pursuant to the NYSDEC Record of Decision (ROD) related to this Site, are still in place, have not been altered and are still effective; that the remedy and protective cover have been maintained; and that the conditions at the site are fully protective of public health and the environment. The annual report will include a certification, prepared and submitted by a professional engineer or environmental professional acceptable to the Department, which certifies that the institutional control put in place is unchanged from the previous certification and nothing has occurred that would impair the ability of the control to protect public health or the environment or constitute a violation or failure to comply with any operation and maintenance or soil management plan.

If the cover system has been breached during the year covered by that Annual Report, the owner of the property shall include, in that annual report, a certification that all work was performed in conformance with this SMP.

In addition, deed restrictions have been implemented in accordance with the requirements of the New York State Brownfield Program, limiting the use and development of the property to commercial and industrial uses only. These deed restrictions will be maintained throughout the use of the Site as currently planned.

5.1 EXCAVATED AND STOCKPILED SOIL/FILL DISPOSAL

Soil/fill that is excavated as part of development and cannot be used as fill below the cover system will be further characterized prior to transportation off-site for disposal at a permitted facility. For excavated soil/fill with visual evidence of contamination (i.e., staining or elevated PID measurements), a minimum of one composite sample, or the number required by the accepting facility, will be collected for each 500 tons of stockpiled soil/fill. For excavated soil/fill that does not exhibit visual evidence of contamination but must be disposed offsite, a minimum of two composite samples, or the number required by the accepting facility, will be collected for each 2,000 tons of stockpiled soil. A minimum of two samples, or the number required by the accepting facility, will be collected for volumes less than 2,000 tons. The composite soil samples will be analyzed by a NYSDOH ELAP-certified laboratory for the parameter list required by the accepting offsite facility. The parameter list may include analysis for pH (EPA Method 9045C), flash point, Target Compound List (TCL) VOCs, TCL SVOCs, pesticides, PCBs, TAL metals, and cyanide.

Soil samples will be composited by placing equal portions of fill/soil from each of the five composite sample locations into a pre-cleaned, stainless steel (or Pyrex glass) mixing bowl. The soil/fill will be thoroughly homogenized using a stainless steel scope or trowel and transferred to pre-cleaned jars provided by the laboratory. Mixing will be conducted in a manner that will minimize loss of VOCs prior to analysis. Sample jars will then be labeled and a chain-of-custody form will be prepared.

To potentially reduce off-site disposal requirements/costs, the owner or site developer may also choose to characterize each stockpile individually. If the analytical results indicate that concentrations exceed the standards for RCRA characteristics, the material will be considered a hazardous waste and must be properly disposed off-site at a permitted disposal facility within 90 days of excavation. If the analytical results indicate that the soil is not a hazardous waste, the material will be properly disposed off-site at a

non-hazardous waste facility. Stockpiled soil cannot be transported on or off-site until the analytical results are received.

5.2 *SUBGRADE MATERIAL*

Subgrade material used to backfill excavations or placed to increase site grades or elevation shall meet the criteria listed below.

- Excavated on-site soil/fill, which appears to be visually impacted shall be sampled and analyzed. If analytical results indicate that the contaminants, if any, are present at concentrations below the Site Specific Action Levels (SSALs) the soil/fill can be used as backfill on-site. The primary SSALs for the Site are the NYSDEC TAGM 4046 recommended soil cleanup objectives and the EPA lead standard.
- Any off-site fill material brought to the site for filling and grading purposes shall be from an acceptable borrow source free of industrial and/or other potential sources of chemical or petroleum contamination.
- Off-site soils intended for use as site backfill cannot otherwise be defined as a solid waste in accordance with 6 NYCRR Part 360-1.2(a).
- If the contractor designates a source as "virgin" soil, it shall be further documented in writing to be native soil material from areas not having supported any known prior industrial or commercial development or agricultural use.
- Virgin soils should be subject to collection of one representative composite sample per source. The sample should be analyzed for TCL VOCs, SVOCs, pesticides, PCBs, TAL Metals and cyanide. The soil will be acceptable for use as backfill provided that all parameters meet the SSALs.
- Non-virgin soils will be tested via collection of one composite sample per 500 tons of material from each source area. If more than 1,000 tons of soil are borrowed from a given off-site non-virgin soil source area and both samples of the first 1,000 tons meet SSALs, the sample collection frequency will be reduced to

one composite for every 2,500 tons of additional soils from the same source, up to 5,000 tons. For borrow sources greater than 5,000 tons, sampling frequency may be reduced to one sample per 5,000 ton, provided all earlier samples met the SSALs.

ATTACHMENT 1
NYSDEC APPROVAL