

PROPOSED DECISION DOCUMENT

6157 South Transit Road Site
Brownfield Cleanup Program
Lockport, Niagara County
Site No. C932130
October 2011



Prepared by
Division of Environmental Remediation
New York State Department of Environmental Conservation

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SECTION 1: SUMMARY AND PURPOSE OF THE PROPOSED PLAN

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), is proposing a remedy for the above referenced site. The disposal of contaminants at the site resulted in threats to public health and the environment that were addressed by actions known as interim remedial measures (IRMs), which were undertaken at the site. An IRM is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the remedial investigation (RI) or alternative analysis (AA). The IRMs undertaken at this site are discussed in Section 6.2.

Based on the implementation of the IRM(s), the findings of the investigation of this site indicate that the site no longer poses a threat to human health or the environment; therefore No Further Action is the remedy proposed by this Proposed Decision Document (PDD). A No Further Action remedy may include continued operation of any remedial system installed during the IRM and the implementation of any prescribed institutional controls/engineering controls (ICs/ECs) that have been identified as being part of the proposed remedy for the site. This PDD identifies the IRM(s) conducted and discusses the basis for No Further Action.

The New York State Brownfield Cleanup Program (BCP) is a voluntary program. The goal of the BCP is to enhance private-sector cleanups of brownfields and to reduce development pressure on "greenfields." A brownfield site is real property, the redevelopment or reuse of which may be complicated by the presence or potential presence of a contaminant.

The Department has issued this document in accordance with the requirements of New York State Environmental Conservation Law and Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR) Part 375. This document is a summary of the information that can be found in the site-related reports and documents in the document repository identified below.

SECTION 2: CITIZEN PARTICIPATION

The Department seeks input from the community on all Proposed Decision Documents. This is an opportunity for public participation in the remedy selection process. The public is encouraged to review the reports and documents, which are available at the following repository:

Lockport Public Library
Attn: Marie Bindeman
23 East Avenue
Lockport, NY 14094
Phone:

A public comment period has been set from:

to

Written comments may be sent through to:

Timothy Dieffenbach
NYS Department of Environmental Conservation
Division of Environmental Remediation
270 Michigan Ave
Buffalo, NY 14203-2915
tedieffe@gw.dec.state.ny.us

The proposed remedy may be modified based on new information or public comments. Therefore, the public is encouraged to review and comment on the proposed remedy identified herein.

Receive Site Citizen Participation Information By Email

Please note that the Department's Division of Environmental Remediation (DER) is "going paperless" relative to citizen participation information. The ultimate goal is to distribute citizen participation information about contaminated sites electronically by way of county email listservs. Information will be distributed for all sites that are being investigated and cleaned up in a particular county under the State Superfund Program, Environmental Restoration Program, Brownfield Cleanup Program, Voluntary Cleanup Program, and Resource Conservation and Recovery Act Program. We encourage the public to sign up for one or more county listservs at <http://www.dec.ny.gov/chemical/61092.html>

SECTION 3: SITE DESCRIPTION AND HISTORY

Location:

The 6157 South Transit Road Site is located in a suburban area at 6157 South Transit Road, Lockport in Niagara County. It is an approximately 3.67 acre portion of a greater 27.38 acre parcel and is located in a commercially developed area.

Site Features:

Centered within the site was a former car dealership and service building surrounded by parking areas. The car dealership building has been demolished to make room for construction of a new dealership building. The site is bounded to the west by South Transit Road, to the north and south by commercial properties and to the east by the remaining portion of the parcel which

includes a 29,000 sq. ft. building and additional parking areas with the remaining two thirds of the parcel to the east consisting of vacant vegetated land.

Zoning:

The site is zoned for commercial use and is currently inactive pending final construction of a new dealership building. The adjacent portion of the parcel to the east is active.

Historic Use:

The Site was used as an automobile dealership and service facility from approximately 1962 to 2008. Former automobile service and repair operations impacted on-site soil/fill and groundwater with volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs) which required remediation. The site has been the subject of several former petroleum spill investigations as follows:

Spill #9214442 involved the removal of 3 underground storage tanks (USTs) and 1 aboveground storage tank (AST). Only low level exceedances of soil cleanup objectives (SCOs) were detected and the spill was closed on January 24, 1994.

Spill #9875213 involved the removal of 1 UST. Only low level exceedances of SCOs were detected and the spill was closed on November 19, 1998.

Spill #0650195 was assigned after Department receipt of a report of petroleum contamination detected during an environmental assessment completed in May 2006 at an adjacent property to the north at 6145 S. Transit Road. The assessment also identified chlorinated VOCs sourced at 6145 S. Transit Road near the property boundary with 6157 S. Transit Road. Supplemental site investigations were completed in September 2006 and July-August 2007 and included the installation of fifteen monitoring wells across both properties and sub-slab air sampling at 6145 S. Transit Road. Petroleum and chlorinated VOCs were detected in both the groundwater and air samples. In June 2007, a 500 gallon UST located along the south side of the building at 6145 S. Transit Road was removed along with 55 tons of petroleum impacted soil. A Remedial Action Plan for 6145 S. Transit Road was approved in April 2008. Subsequent monitoring of a sub-slab depressurization system through April 2009 showed no detectable VOCs and chlorinated VOCs in the groundwater were reduced to less than 10 parts per billion (ppb). The 6145 S. Transit Road site was closed on May 8, 2009.

Spill #0902040 was assigned after Department receipt of a report of exceedances of SCOs detected during a May 2009 Phase II Environmental Site Investigation at 6157 S. Transit Road. Petroleum-like odors were noted and elevated PID readings indicated on-site impacts. The spill was closed on October 27, 2010 after Department receipt of a BCP application for the site. A Brownfield Cleanup Agreement was fully executed on January 28, 2011.

Geology/Hydrogeology:

The overburden consists of reddish brown clayey silt with fine sand and traces of gravel. It extends to a depth of 7 to 12 feet below ground surface and overlies the Lockport Dolomite. Groundwater was encountered at a depth of 2 to 6 feet across the site and is reported to flow in a west and northwest direction across the site. The groundwater encountered most likely represents

perched pore water.

A site location map is attached as Figure 1.

SECTION 4: LAND USE AND PHYSICAL SETTING

The Department may consider the current, intended, and reasonably anticipated future land use of the site and its surroundings when evaluating a remedy for soil remediation. For this site, alternatives (or an alternative) that restrict(s) the use of the site to residential use (which allows for restricted-residential use, commercial use and industrial use) as described in Part 375-1.8(g) is/are being evaluated in addition to an alternative which would allow for unrestricted use of the site.

A comparison of the results of the investigation to the appropriate standards, criteria and guidance values (SCGs) for the identified land use and the unrestricted use SCGs for the site contaminants is available in the RI Report.

SECTION 5: ENFORCEMENT STATUS

The Applicant(s) under the Brownfield Cleanup Agreement is a/are Volunteer(s). The Applicant(s) does/do not have an obligation to address off-site contamination. However, the Department has determined that this site does not pose a significant threat to public health or the environment; accordingly, no enforcement actions are necessary.

SECTION 6: SITE CONTAMINATION

6.1: Summary of the Remedial Investigation

A remedial investigation (RI) serves as the mechanism for collecting data to:

- characterize site conditions;
- determine the nature of the contamination; and
- assess risk to human health and the environment.

The RI is intended to identify the nature (or type) of contamination which may be present at a site and the extent of that contamination in the environment on the site, or leaving the site. The RI reports on data gathered to determine if the soil, groundwater, soil vapor, indoor air, surface water or sediments may have been contaminated. Monitoring wells are installed to assess groundwater and soil borings or test pits are installed to sample soil and/or waste(s) identified. If other natural resources are present, such as surface water bodies or wetlands, the water and sediment may be sampled as well. Based on the presence of contaminants in soil and groundwater, soil vapor will also be sampled for the presence of contamination. Data collected in the RI influence the development of remedial alternatives. The RI report is available for review in the site document repository and the results are summarized in section 6.4.

6.1.1: Standards, Criteria, and Guidance (SCGs)

The remedy must conform to promulgated standards and criteria that are directly applicable or that are relevant and appropriate. The selection of a remedy must also take into consideration guidance, as appropriate. Standards, Criteria and Guidance are hereafter called SCGs.

To determine whether the contaminants identified in various media are present at levels of concern, the data from the RI were compared to media-specific SCGs. The Department has developed SCGs for groundwater, surface water, sediments, and soil. The NYSDOH has developed SCGs for drinking water and soil vapor intrusion. For a full listing of all SCGs see: <http://www.dec.ny.gov/regulations/61794.html>

6.1.2: RI Information

The analytical data collected on this site includes data for:

- groundwater
- soil

The data have identified contaminants of concern. A "contaminant of concern" is a contaminant that is sufficiently present in frequency and concentration in the environment to require evaluation for remedial action. Not all contaminants identified on the property are contaminants of concern. The nature and extent of contamination and environmental media requiring action are summarized below. Additionally, the RI Report contains a full discussion of the data. The contaminant(s) of concern identified at this site is/are:

1,2,4-trimethylbenzene	diethyl phthalate
acetone	fluoranthene
benzene, toluene, ethylbenzene and xylenes (btex)	fluorine
benzo(b)fluoranthene	naphthalene
benzo(a)pyrene	pyrene
benzo[k]fluoranthene	phenanthrene
benzo(ghi)perylene	methylene chloride
chrysene	cumene
dibenz[a,h]anthracene	dichloroethylene

Based on the investigation results, comparison to the SCGs, and the potential public health and environmental exposure routes, certain media and areas of the site required remediation. These media were addressed by the IRM(s) described in Section 6.2. More complete information can be found in the RI Report and the IRM Construction Completion Report.

6.2: Interim Remedial Measures

An interim remedial measure (IRM) is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before issuance of the Decision Document.

The following IRM(s) has/have been completed at this site based on conditions observed during the RI.

Building demolition and excavation of soil exceeding residential SCOs.

Three areas of the site were excavated: MW-7 and MW-9 in the north, within the footprint of the former building and along the south side of the former building where two abandoned USTs were uncovered and removed during building foundation removal and grading activities. Approximately 412.16-tons of non-hazardous VOC-impacted soil/fill was excavated along with 120-ft of petroleum-impacted pipe and bedding material from the northern (MW-7 and MW-9) area. Approximately 1,087.52-tons of non-hazardous petroleum impacted soil was excavated from the Bldg. #1 area along with the removal of five in-ground hydraulic lifts. Approximately 716.35-tons of non-hazardous petroleum-impacted soil was excavated from the UST area. Confirmatory post-excavation sidewall and bottom samples were taken at all 3 locations. All sample results were below Part 375 Unrestricted SCOs with the minor exception of acetone which was below Part 375 Residential SCOs.

6.3: Summary of Human Exposure Pathways

This human exposure assessment identifies ways in which people may be exposed to site-related contaminants. Chemicals can enter the body through three major pathways (breathing, touching or swallowing). This is referred to as *exposure*.

People are not drinking the groundwater because the area is served by a public water supply that is not affected by residual on-site groundwater contamination.

6.4: Summary of Environmental Assessment

This section summarizes the assessment of existing and potential future environmental impacts presented by the site. Environmental impacts may include existing and potential future exposure pathways to fish and wildlife receptors, wetlands, groundwater resources, and surface water. The RI report presents a detailed discussion of any existing and potential impacts from the site to fish and wildlife receptors.

Prior to Remediation:

The previous site investigations detected petroleum impacts to site soils and groundwater and low level chlorinated volatile organic compounds (VOCs) in site groundwater.

The highest concentration of petroleum impacts to soils was found within the footprint of the former car dealership and service building and ranged up to 102 ppm total petroleum VOCs. Though not represented in the soil analytical results, a second smaller area of low level petroleum impacts to soils was found at the north end of the site in the area of wells MW-7 and MW-9 as noted in the soil boring logs. The highest concentration of petroleum impacts to groundwater was detected in the area of wells MW-7 and MW-9 and ranged from 436 to 599 ug/l total petroleum VOCs. However, it should be noted that no groundwater data was available for the area within the footprint of the former car dealership.

The only area of chlorinated VOCs impacts to groundwater was in the north end of the site in wells MW-7 and MW-10 where total chlorinated VOCs ranged from 91.3 to 16.8 ug/l, respectively in 2007. In 2011 wells MW-7 and MW-10 were resampled (prior to removal of MW-7 during IRM excavation activities) and total chlorinated VOCs ranged from 56.7 to 2 ug/l, respectively.

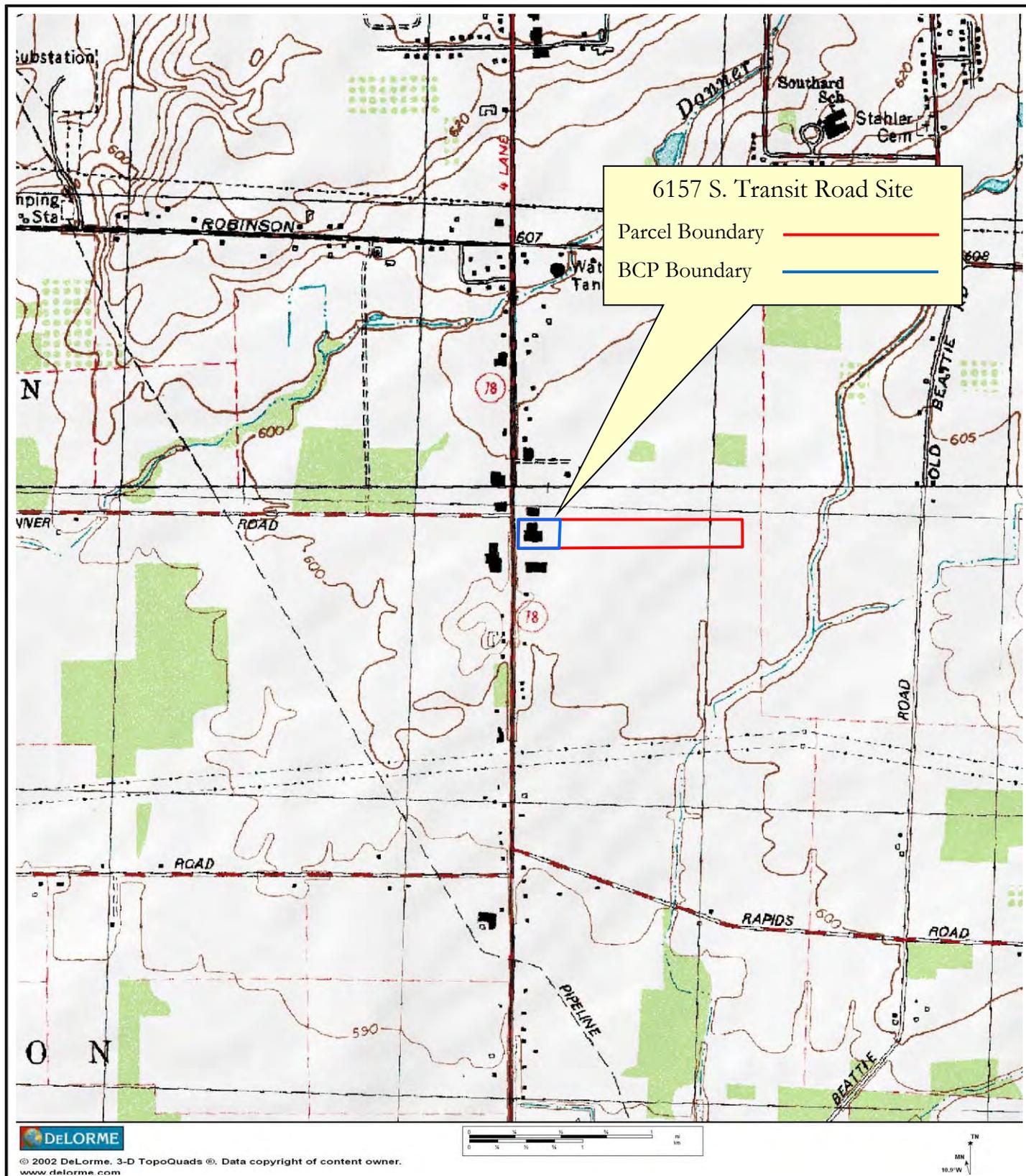
Post Remediation:

Remedial Investigation (RI) soil boring samples from outside the excavation areas and post-excavation confirmatory soil samples, collected from the excavated areas, indicated that all RI and confirmatory samples were below Part 375 Unrestricted SCOs with the minor exception of acetone. Acetone, which is a common laboratory contaminant, was reported at concentrations below Part 375 Residential SCOs.

Based on the groundwater data, most analytes were not detected or detected below groundwater quality standards. Well MW-7, and its contaminant source soil, were excavated and removed. No SVOCs were detected in the remaining wells. Only slight exceedances were detected for benzene, toluene and xylene at three well locations and Dichloroethene at one well location. Based on the extent of contaminated soils that were removed to levels that meet unrestricted SCOs, the remaining trace concentrations of organic constituents within the groundwater are expected to naturally decrease over time. Standards for metals were exceeded and pesticides were detected slightly above groundwater quality standards. However, there is a municipal restriction on groundwater use reducing any potential contact with or ingestion of groundwater.

SECTION 7: ELEMENTS OF THE PROPOSED REMEDY

Based on the Alternatives Analysis evaluation, the completed IRM fully satisfies the remedial action objectives and is fully protective of human health and the environment. Therefore no further action is required.



SITE LOCATION AND VICINITY MAP

RI/AAR/IRM REPORT
6157 SOUTH TRANSIT ROAD SITE

LOCKPORT, NEW YORK

PREPARED FOR
BASIL TOYOTA



2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0635

PROJECT NO.: 0218-001-300

DATE: SEPTEMBER 2011

DRAFTED BY: NTM



Property Information per Niagara County GIS

Not to Scale



Parcel Boundary ——— BCP Boundary - - - - -



2558 HAMBURG TURNPIKE
SUITE 300
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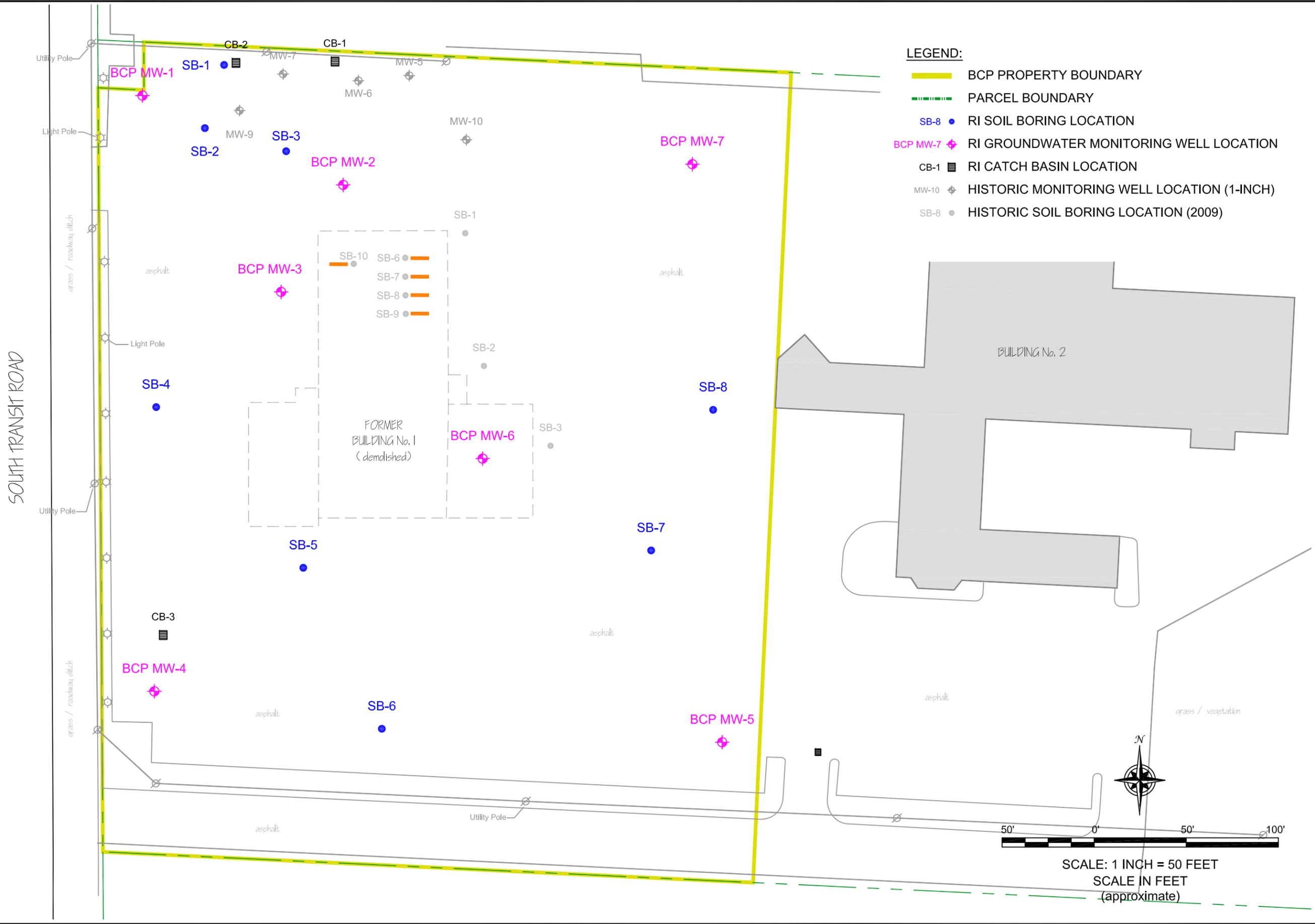
SITE PLAN (AERIAL)

RI/AAR/IRM REPORT
6157 SOUTH TRANSIT ROAD SITE

LOCKPORT, NEW YORK
PREPARED FOR
BASIL TOYOTA

FIGURE 2

DATE: SEPTEMBER 2011
DRAFTED BY: NTM



- LEGEND:**
- BCP PROPERTY BOUNDARY
 - - - PARCEL BOUNDARY
 - SB-8 ● RI SOIL BORING LOCATION
 - BCP MW-7 ◆ RI GROUNDWATER MONITORING WELL LOCATION
 - CB-1 ■ RI CATCH BASIN LOCATION
 - MW-10 ◆ HISTORIC MONITORING WELL LOCATION (1-INCH)
 - SB-8 ● HISTORIC SOIL BORING LOCATION (2009)

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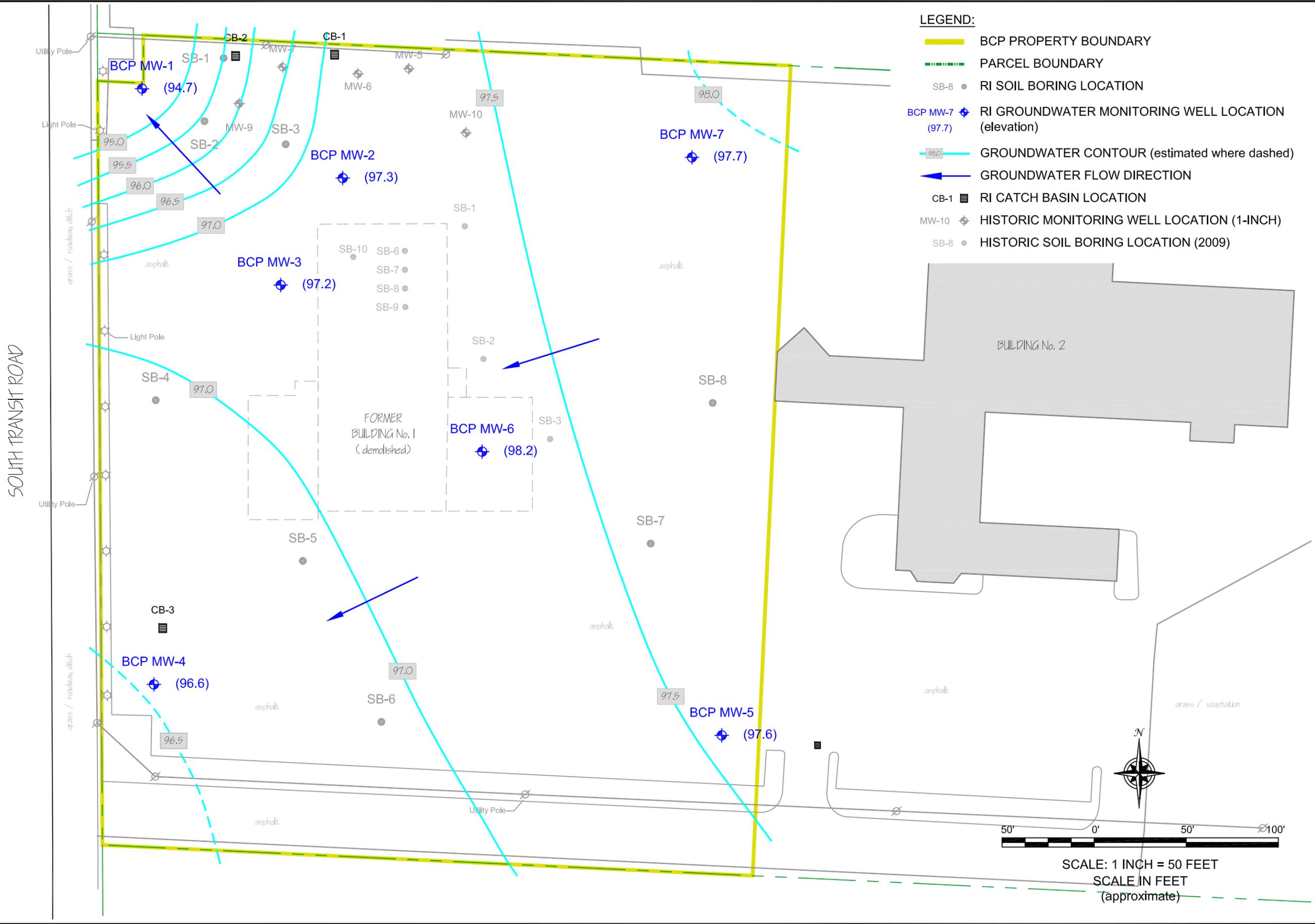
JOB NO.: 0218-001-300

REMEDIAL INVESTIGATION SAMPLE LOCATIONS

RI / AAR / IRM REPORT
6157 S. TRANSIT ROAD SITE
LOCKPORT, NEW YORK
PREPARED FOR
BASIL TOYOTA

FIGURE 3

DATE: SEPTEMBER 2011
DRAFTED BY: NTM



- LEGEND:**
- BCP PROPERTY BOUNDARY
 - - - PARCEL BOUNDARY
 - SB-8 ● RI SOIL BORING LOCATION
 - BCP MW-7 ◆ (97.7) RI GROUNDWATER MONITORING WELL LOCATION (elevation)
 - - - GROUNDWATER CONTOUR (estimated where dashed)
 - GROUNDWATER FLOW DIRECTION
 - CB-1 ■ RI CATCH BASIN LOCATION
 - MW-10 ◆ HISTORIC MONITORING WELL LOCATION (1-INCH)
 - SB-8 ● HISTORIC SOIL BORING LOCATION (2009)

50' 0' 50' 100'

SCALE: 1 INCH = 50 FEET
SCALE IN FEET
(approximate)

GROUNDWATER MONITORING WELL ELEVATION AND ISOPOTENTIAL MAP

RI / AAR / IRM REPORT
6157 S. TRANSIT ROAD SITE
LOCKPORT, NEW YORK
PREPARED FOR
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FIGURE 4



2558 HAMBURG TURNPIKE
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(716) 856-0635

JOB NO.: 0218-001-300

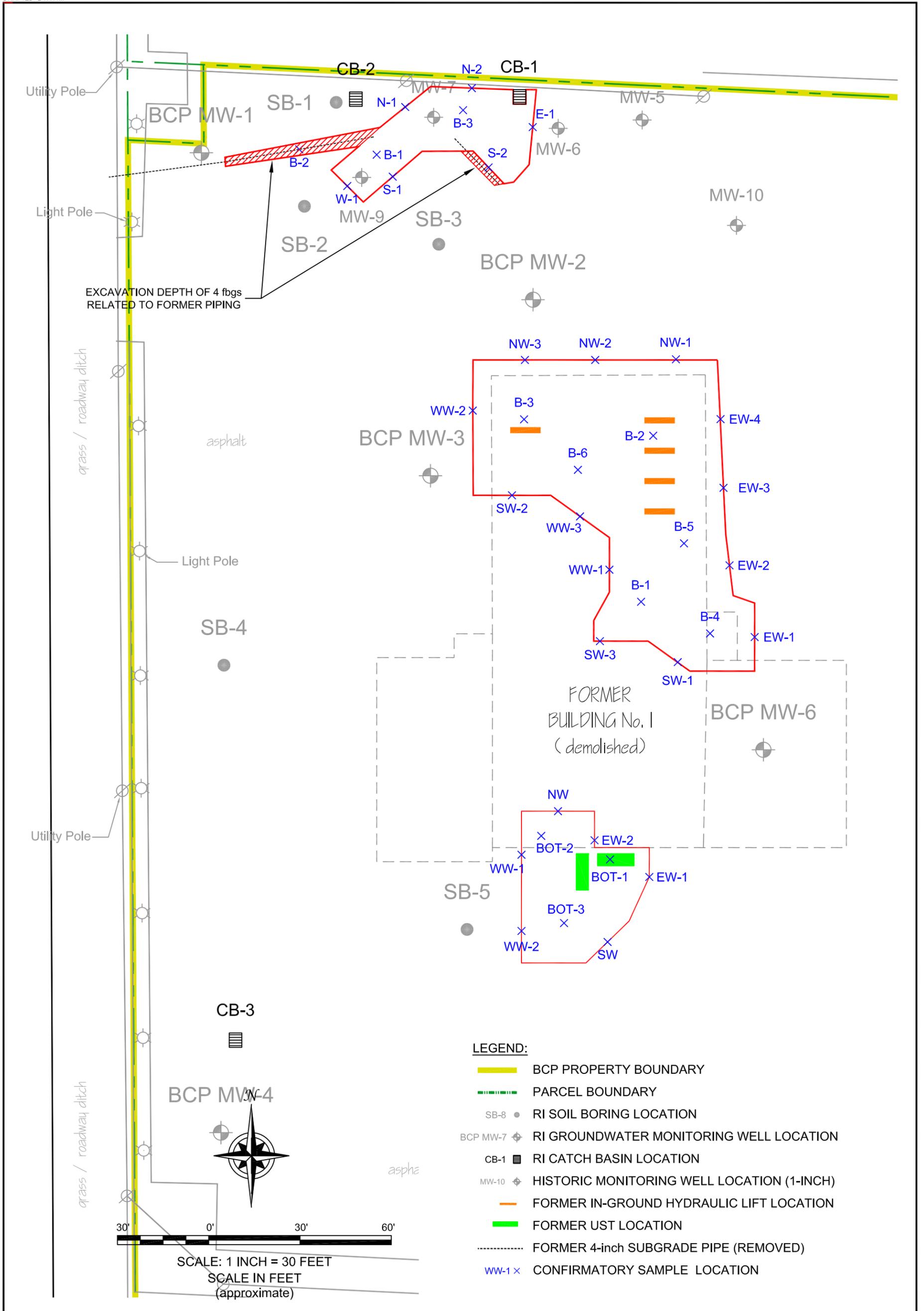


FIGURE 5

IRM EXCAVATION AREAS

RI / AAR / IRM REPORT
 6157 S. TRANSIT ROAD SITE
 LOCKPORT, NEW YORK
 PREPARED FOR
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2558 HAMBURG TURNPIKE
 SUITE 300
 BUFFALO, NY 14218
 (716) 856-0635

JOB NO.: 0218-001-300

TABLE 1
SUMMARY OF SOIL ANALYTICAL DATA
6157 SOUTH TRANSIT ROAD SITE
LOCKPORT, NEW YORK

Parameter ¹	Unrestricted SCOs ²	Residential SCOs ²	Conc. Range	
			Low	High
			Volatile Organic Compounds (VOCs) - mg/Kg ⁴	
1,2,4-Trimethylbenzene	3.6	47	ND	45
1,3,5-Trimethylbenzene	8.4	47	ND	32
2-Butanone (MEK) ⁴	100	100	ND	0.0055 J
p-Cymene	--	--	ND	2.2
Acetone	0.05	100	ND	0.43
Benzene	0.06	2.9	ND	0.0016 J
Carbon Disulfide ⁴	100	100	ND	0.044
cis-1,2-Dichloroethene	0.25	59	ND	0.095
Ethylbenzene	1	30	ND	0.38
Isopropylbenzene (Cumene)	100	100	ND	7.5
Methyl acetate	--	--	ND	0.23
Methylcyclohexane	--	--	ND	0.093
Methyl tert butyl ether (MTBE)	0.93	62	ND	0.15
Methylene Chloride	0.05	51	ND	0.024
n-Propylbenzene	3.9	100	ND	11
sec-Butylbenzene	11	100	ND	3
Toluene	0.7	100	ND	0.041
Total Xylenes	0.26	100	ND	3.9
Semi-Volatile Organic Compounds (SVOCs) - mg/Kg ³				
Acenaphthylene	100	100	ND	ND
Acenaphthene	20	100	ND	ND
Anthracene	100	100	ND	ND
Benzo(a)anthracene	1	1	ND	ND
Benzo(b)fluoranthene	1	1	ND	ND
Benzo(k)fluoranthene	0.8	1	ND	ND
Benzo(g,h,i)perylene	100	100	ND	ND
Benzo(a)pyrene	1	1	ND	ND
Bis(2-ethylhexyl) phthalate ⁴	50	50	ND	ND
Butyl benzyl phthalate ⁴	100	100	ND	ND
Carbazole	--	--	ND	ND
Chrysene	1	1	ND	0.082
Di-n-butyl phthalate ⁴	100	100	ND	ND
Dibenzo(a,h)anthracene	0.33	0.33	ND	ND
Dibenzofuran	--	--	ND	ND
Fluoranthene	100	100	ND	0.013
Fluorene	30	100	ND	0.057
Indeno(1,2,3-cd)pyrene	0.5	0.5	ND	ND
Naphthalene	12	100	ND	0.45
Phenanthrene	100	100	ND	0.034
Pyrene	100	100	ND	0.019
Metals - mg/Kg				
Aluminum ⁴	10000	--	6840	8140
Arsenic	13	16	2.9	5.2
Barium	350	350	43.3	74.1
Beryllium	7.2	14	0.4	0.44
Cadmium	2.5	2.5	0.53	0.9
Calcium ⁴	10000	--	41800	50900
Chromium	30	36	9.6	11.2
Cobalt ⁴	20	30	5.2	8.1
Copper	50	270	13.4	22.8
Iron ⁴	2000	2000	13700	16300
Lead	63	400	26.6	37.5
Magnesium	--	--	20200	35800
Manganese	1600	2000	510	668
Nickel	30	140	11.6	13.5
Potassium	--	--	493	1110
Sodium	--	--	ND	215
Vanadium ⁴	100	100	16.3	17.2
Zinc	109	2200	120	248
Mercury	0.18	0.81	0.025	0.025

Notes:

1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
2. Values per 6NYCRR Part 375 Soil Cleanup Objectives (December 2006).
3. Sample results were reported by the laboratory in ug/Kg and converted to mg/Kg for comparison to SCOs.
4. Values per NYSDEC Commissioner's Policy Soil Cleanup Guidance (CP-51); Supplemental Soil Cleanup Objectives (SSCO's) (October 2010).

Definitions:

ND = Parameter not detected above laboratory detection limit.

NA = Parameter not Analysed.

"--" = No SCO available.

J = Estimated value; result is less than the sample quantitation limit but greater than zero.

B = Analyte was detected in the associated blank as well as in the sample. Value is above the action level for consideration as being external contaminati

	= Exceedance of Part 375 - Unrestricted Soil Cleanup Objectives (SCOs)
	= Exceedance of Part 375 - Residential Use Soil Cleanup Objectives (SCOs)

TABLE 2
SUMMARY OF POST EXCAVATION CONFIRMATORY SOIL ANALYTICAL RESULTS
6157 SOUTH TRANSIT ROAD SITE
LOCKPORT, NEW YORK

Parameter ¹	Unrestricted SCOs ²	Residential SCOs ²	Conc. Range	
			Low	High
			Volatile Organic Compounds (VOCs) - mg/Kg ³	
2-Butanone (MEK) ⁴	100	100	ND	0.018 J
4-Isopropyltoluene	--	--	ND	0.011 J
Acetone	0.05	100	ND	0.11
Chlorobenzene	1.1	100	ND	0.0066
Ethylbenzene	1	30	ND	0.0019 J
Isopropylbenzene (Cumene) ⁴	100	100	ND	0.002 J
n-Butylbenzene	12	--	ND	0.0089
n-Propylbenzene	3.9	100	ND	0.0067
sec-Butylbenzene	11	100	ND	0.0017 J
tert-Butylbenzene	5.9	100	ND	0.0028 J
Tetrachloroethene	1.3	5.5	ND	0.0018 J
1,2,4-Trichlorobenzene	--	--	ND	0.00053 BJ
1,2,4-Trimethylbenzene	3.6	47	ND	0.12 B
1,2-Dichlorobenzene	1.1	100	ND	0.015 B
1,3,5-Trimethylbenzene	8.4	47	ND	0.019
1,3-Dichlorobenzene	2.4	17	ND	0.0067
1,4-Dichlorobenzene	1.8	9.8	ND	0.0039 J
Total Xylene	0.26	100	ND	0.026
Methylene Chloride	0.05	51	0.0074	0.011
Toluene	0.7	100	ND	0.00082 J
Semivolatile Organic Compounds (SVOCs) - mg/Kg ³				
2-Methylnaphthalene ⁴	0.41	0.41	ND	0.018 J
Acenaphthene	20	100	ND	0.0049 J
Benzo(a)anthracene	1	1	ND	0.047 J
Benzo(a)pyrene	1	1	ND	0.068 J
Benzo(b)fluoranthene	1	1	ND	0.09 J
Benzo(g,h,i)perylene	100	100	ND	0.06 J
Benzo(k)fluoranthene	0.8	1	ND	0.051 J
Carbazole	--	--	ND	0.0098 J
Chrysene	1	1	ND	0.076 J
Dibenz(a,h)anthracene	0.33	0.33	ND	0.0092 J
Diethyl phthalate ⁴	100	100	ND	0.031 J
Di-n-butyl phthalate ⁴	100	100	ND	0.089 BJ
Fluoranthene	100	100	ND	0.14 J
Fluorene	30	100	ND	0.016 J
Indeno(1,2,3-cd)pyrene	0.5	0.5	ND	0.051 J
Naphthalene	12	100	ND	0.018 J
Phenanthrene	100	100	ND	0.067 J
Pyrene	100	100	ND	0.94 J

Notes:

1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
2. Values per 6NYCRR Part 375 Soil Cleanup Objectives (December 2006)
3. Sample results were reported by the laboratory in ug/Kg and converted to mg/Kg for comparison to SCOs.
4. Values per NYSDEC Commissioner's Policy Soil Cleanup Guidance (CP-51); Supplemental Soil Cleanup Objectives (SSCO's).

Definitions:

- ND = Parameter not detected above laboratory detection limit.
 NA = Parameter not analysed.
 "--" = No SCO available.
 J = Estimated value; result is less than the sample quantitation limit but greater than zero.
 B = Indicates a value greater than or equal to the instrument detection limit, but less than the quantitation limit.

 = Exceedance of Part 375 - Unrestricted Soil Cleanup Objectives (SCOs)



TABLE 3
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
6157 SOUTH TRANSIT ROAD SITE
LOCKPORT, NEW YORK

Parameter ¹	Class GA GWQS ²	Groundwater Sample Locations											
		BCP MW 1	BCP MW 2	BCP MW 3	BCP MW 4	BCP MW 5	BCP MW 6	BCP MW 7	MW 5	MW 6	MW 7 ³	MW 9 ³	MW 10
Volatile Organic Compounds (VOCs) - ug/Kg													
2-Butanone (MEK)	50	ND	ND	ND	ND	2.4 J	6 J	ND	ND	ND	ND	ND	ND
2-Hexanone	50	ND	ND	ND	ND	1.3 J	3.1 J	ND	ND	ND	ND	ND	ND
Acetone	50	ND	ND	6.9 J	5.6 J	8.9 J	21	ND	ND	ND	ND	ND	ND
Benzene	1	ND	ND	3.7	3.2	ND	1.5	ND	ND	ND	ND	ND	ND
Chlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.2	ND	ND
cis-1,2-Dichloroethene	5	5.7	ND	3.5	ND	ND	ND	ND	ND	ND	ND	ND	2
Cyclohexane	--	ND	ND	3.3	2	ND	0.58 J	ND	ND	ND	3	ND	ND
Ethylbenzene	5	ND	ND	1.4	1.3	ND	ND	ND	ND	ND	14	ND	ND
Isopropylbenzene (Cumene)	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.7	ND	ND
n-Propylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	14	ND	ND
sec-Butylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	15	ND	ND
tert-Butylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.3	ND	ND
1,2,4-Trimethylbenzene	5	ND	ND	3	2.7	ND	1.3	ND	ND	ND	140	ND	ND
1,2-Dibromo-3-Chloropropane	0.04	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND
1,2-Dichlorobenzene	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	29	ND	ND
1,3,5-Trimethylbenzene	5	ND	ND	0.86 J	0.88 J	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	14	ND	ND
1,4-Dichlorobenzene	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.8	ND	ND
Total Xylene	5	ND	ND	7.4	6.8	ND	3.1	ND	ND	ND	45	ND	ND
Methyl tert butyl ether (MTBE)	10	1.7	9.7	1.7	ND	ND	ND	ND	ND	ND	ND	ND	1.1
Methylcyclohexane	--	ND	ND	4.3	2.6	ND	0.75 J	ND	ND	ND	2.3	ND	ND
Toluene	5	ND	ND	7.9	7.3	ND	2.9	0.77 J	ND	ND	2.1	ND	ND
Semi-Volatile Organic Compounds (SVOCs) - ug/Kg													
2-Methylnaphthalene	--	ND	ND	ND	ND	ND	ND	ND	NA	NA	1.7 J	NA	NA
4-Methylphenol	--	ND	ND	ND	ND	ND	1.8 J	ND	NA	NA	NA	ND	NA
Acenaphthene	20	ND	ND	ND	ND	ND	ND	ND	NA	NA	24	NA	NA
Acetophenone	--	ND	ND	ND	ND	ND	ND	ND	NA	NA	68	NA	NA
Anthracene	50	ND	ND	ND	ND	ND	ND	ND	NA	NA	2.1 J	NA	NA
Biphenyl	5	ND	ND	ND	ND	ND	ND	ND	NA	NA	4 J	NA	NA
Bis(2-ethylhexyl) phthalate	5	ND	ND	ND	ND	ND	ND	ND	NA	NA	2 J	NA	NA
Butyl benzyl phthalate	50	ND	ND	ND	ND	ND	ND	ND	NA	NA	3.2 J	NA	NA
Di-n-butyl phthalate	50	0.42 BJ	0.36 BJ	ND	0.63 BJ	0.79 BJ	0.67	0.55 BJ	NA	NA	1.8 BJ	NA	NA
Dibenzofuran	--	ND	ND	ND	ND	ND	ND	ND	NA	NA	16	NA	NA
Diethyl phthalate	50	ND	ND	ND	ND	ND	0.86 J	ND	NA	NA	ND	NA	NA
Fluoranthene	50	ND	ND	ND	ND	ND	ND	ND	NA	NA	1.8 J	NA	NA
Fluorene	50	ND	ND	ND	ND	ND	ND	ND	NA	NA	11	NA	NA
N-Nitrosodiphenylamine	50	ND	ND	ND	ND	ND	ND	ND	NA	NA	0.57 J	NA	NA
Naphthalene	10	ND	ND	ND	ND	ND	ND	ND	NA	NA	21	NA	NA
Phenanthrene	50	ND	ND	1.2 J	0.76 J	1.3 J	2.3 J	0.95 J	NA	NA	16	NA	NA
Pyrene	50	ND	ND	ND	ND	ND	ND	ND	NA	NA	1.2 J	NA	NA
Organochlorine Pesticides - ug/Kg													
4,4'-DDD	0.3	NA	0.036 J	NA	NA	0.11	NA	0.053	NA	NA	NA	NA	NA
Endosulfan II	--	NA	0.019 J	NA	NA	0.05	NA	0.02 J	NA	NA	NA	NA	NA
Endosulfan sulfate	--	NA	ND	NA	NA	0.022 J	NA	ND	NA	NA	NA	NA	NA
Endrin	ND	NA	ND	NA	NA	ND	NA	0.031 J	NA	NA	NA	NA	NA
Endrin aldehyde	5	NA	ND	NA	NA	0.056	NA	ND	NA	NA	NA	NA	NA
gamma-Chlordane	0.05	NA	0.082	NA	NA	0.14	NA	0.072	NA	NA	NA	NA	NA
Heptachlor epoxide	0.03	NA	ND	NA	NA	0.083	NA	0.023 J	NA	NA	NA	NA	NA
Methoxychlor	35	NA	ND	NA	NA	0.1	NA	0.036 J	NA	NA	NA	NA	NA
Metals - ug/Kg ⁴													
Aluminum	--	NA	1100	NA	NA	560	NA	70300	NA	NA	NA	NA	NA
Arsenic	25	NA	ND	NA	NA	ND	NA	32	NA	NA	NA	NA	NA
Barium	1000	NA	91	NA	NA	59	NA	790	NA	NA	NA	NA	NA
Beryllium	3	NA	ND	NA	NA	ND	NA	2.7	NA	NA	NA	NA	NA
Cadmium	5	NA	ND	NA	NA	ND	NA	4.4	NA	NA	NA	NA	NA
Calcium	--	NA	114000	NA	NA	200000	NA	664000	NA	NA	NA	NA	NA
Chromium	50	NA	ND	NA	NA	ND	NA	92	NA	NA	NA	NA	NA
Cobalt	--	NA	ND	NA	NA	ND	NA	50	NA	NA	NA	NA	NA
Copper	200	NA	ND	NA	NA	ND	NA	160	NA	NA	NA	NA	NA
Iron	300	NA	1000	NA	NA	450	NA	107000	NA	NA	NA	NA	NA
Lead	25	NA	ND	NA	NA	ND	NA	120	NA	NA	NA	NA	NA
Magnesium	35000	NA	56800	NA	NA	78000	NA	251000	NA	NA	NA	NA	NA
Manganese	300	NA	900	NA	NA	1500	NA	3400	NA	NA	NA	NA	NA
Nickel	100	NA	ND	NA	NA	ND	NA	110	NA	NA	NA	NA	NA
Potassium	--	NA	790	NA	NA	1800	NA	15900	NA	NA	NA	NA	NA
Sodium	20000	NA	58000	NA	NA	74400	NA	96900	NA	NA	NA	NA	NA
Vanadium	--	NA	ND	NA	NA	ND	NA	130	NA	NA	NA	NA	NA
Zinc	2000	NA	110	NA	NA	12	NA	900	NA	NA	NA	NA	NA

- Notes:**
1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
 2. Values per NYSDEC Division of Water Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations - GA Class (TOGS 1.1.1)
 3. Samples were collected prior to MW-7 and MW-9 being removed during IRM excavation activities.
 4. Sample results were reported by the laboratory in mg/L and converted to ug/L for comparison to GWQS.

Definitions:
 ND = Parameter not detected above laboratory detection limit.
 NA = Parameter not Analyzed.
 -- = No SCD available.
 J = Estimated value; result is less than the sample quantitation limit but greater than zero.
 B = Indicates a value greater than or equal to the instrument detection limit, but less than the quantitation limit.

 = Exceedance of GA Groundwater Quality Standards (GWQS)