ETE SANITATION AND LANDFILL SITE
GAINESVILLE, WYOMING COUNTY, NEW YORK

SITE MANAGEMENT PLAN

NYSDEC Site No.: 961005

Prepared for

New York State Department of Environmental Conservation
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Albany, New York 12233

Prepared by

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Revisions to Final Approved Site Management Plan

Revision #	Submitted Date	Summary of Revision	DEC Approval Date

November 2015
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EA Project No. 14907.27

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CERTIFICATION STATEMENT

I James C. Hayward certify that I am currently a New York State registered Professional Engineer as in defined in 6 NYCRR Part 375 and that this Site Management Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10) and that all activities were performed in full accordance with the DER-approved work plan and any DER-approved modifications.

James C Hayward
NAME

11/30/2015
DATE

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LIST OF ACRONYMS AND ABBREVIATIONS

amsl	Above mean sea level
AWQS	Ambient water quality standards
bgs	Below ground surface
CAMP	Community air monitoring plan
CDM	Camp Dresser & McKee
CY	Cubic yards
EA	EA Engineering, P.C. and Its Affiliate EA Science and Technology
ECs	Engineering controls
EPA	United States Environmental Protection Agency
EWP	Excavation Work Plan
ft	Feet
FS	Feasibility Study
GS	Gas vents
HASP	Health and Safety Plan
ICs	Institutional controls
in.	Inch(es)
LEL	Lowest effect level
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
PCBs	Polychlorinated biphenyls
ppb_v	Parts per billion by volume
PSA	Preliminary site assessment
QA	Quality assurance
QAPP	Quality Assurance Project Plan
QC	Quality control
RI	Remedial Investigation
ROD	Record of Decision
SCGs	Soil cleanup guidelines
SEL	Severe effect level
SMP	Site Management Plan

SVOCs	Semi-volatile organic compounds
TAGM	Technical and Administrative Guidance Memorandum
TCL	Target compound list
TAL	Target analyte list
VOCs	Volatile organic compounds

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EXECUTIVE SUMMARY

The following provides a brief summary of the controls implemented for the Site, as well as the inspections, monitoring, maintenance, and reporting activities required by this Site Management Plan.

Site Identification	Site Identification No.961005 ETE Sanitation and Landfill Broughton Road, Gainesville, New York
Institutional Controls	1. The property may be used for landfill use only. 2. Compliance with the Environmental Notice and this Site Management Plan by the Grantor and the Grantor's successors and assigns. 3. Groundwater monitoring and other environmental or public health monitoring must be performed as defined in this Site Management Plan. 4. All engineering controls must be inspected at a frequency and in a manner defined in the SMP. This statement is to be included here if there are engineering controls per the site's remedial program.
Engineering Controls	1. Landfill Cap. 2. Composite cover system. 3. Groundwater monitoring wells.
Inspections	**Frequency**
Cover inspection	Annually
Monitoring	**Frequency**
Groundwater Monitoring Wells: MW-2S/2D, -3S/3D, -6S/6D, -7S/7D, -9S/9D, -10S/10D, and -11S/11D	Annually
Maintenance	**Frequency**
Swale maintenance	As needed
Cover mowing	Annually, after August 15th each year
Reporting	**Frequency**
Periodic Review Report	Annually

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1. INTRODUCTION AND DESCRIPTION OF REMEDIAL PROGRAM

1.1 INTRODUCTION

This Site Management Plan (SMP) is a required element of the remedial program for the ETE Sanitation and Landfill located in Gainesville, New York (hereafter referred to as the "Site" (Figure 1). The Site is currently in the New York State Inactive Hazardous Waste Disposal Site Remedial Program, Site No. 961005, which is administered by New York State Department of Environmental Conservation (NYSDEC).

1.1.1 General

The NYSDEC entered into an Inactive Hazardous Waste Disposal Remedial Program to remediate 20 acres of property. A figure showing the site location and boundaries of this site is provided in Figure 2. The boundaries of the site are more fully described in the metes and bounds site description which is part of the Environmental Notice provided in Appendix A.

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

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

It is important to note:

- This SMP details the site-specific implementation procedures that are required by the Environmental Notice. Failure to properly implement the SMP is a violation of the Environmental Notice, which is grounds for revocation of the Certificate of Completion.

- Failure to comply with this SMP is also a violation of Environmental Conservation Law, 6NYCRR Part 375, and the Record of Decision (ROD) (#D002925-24, Site #961005) for the site, and thereby subject to applicable penalties.

All reports associated with the site can be viewed by contacting the NYSDEC or its successor agency managing environmental issues in New York State. A list of contacts for persons involved with the site is provided in the Notifications Contact List (Table 1).

This SMP was prepared by EA Engineering, P.C. and its affiliate EA Science and Technology

(EA), on behalf of NYSDEC, in accordance with the requirements of the NYSDEC's DER-10 (NYSDEC 2010) and the revised SMP guidelines (NYSDEC 2015). This SMP addresses the means for implementing the ICs and ECs that are required by the Environmental Notice for the Site.

1.1.2 Revisions

Revisions to this plan will be proposed in writing to the NYSDEC's Project Manager (Table 1). Revisions will be necessary upon, but not limited to, the following occurring: a change in media monitoring requirements, upgrades to or removal of a remedial system, post-remedial removal of contaminated sediment or soil, or other significant change to the Site conditions. In accordance with the Environmental Notice for the Site, the NYSDEC will provide a notice of any approved changes to the SMP, and append these notices to the SMP that is retained in its files.

2. SITE BACKGROUND

2.1 SITE LOCATION AND DESCRIPTION

The site is located in the Town of Gainesville, Wyoming County, New York, in a rural agricultural area on Broughton Road approximately 2 miles west of Silver Springs and 1 mile north of the Village of Gainesville. The Site is identified as part of #121 Block 1, and Lots 55 and 54 on the Wyoming County Tax Map. The Site occupies an approximately 25.48-acre area, and consists of a 7-acre landfill area situated on two parcels: (1) 20.57-acre parcel SBL 121-1-54 owned by the estate of the defunct ETE Sanitation and Landfill Corporation to the north, east and west and (2) 4.91-acre parcel SBL 121-1-55 owned by a local private resident to the south (Figure 2). The boundaries of the site are more fully described in the metes and bounds site description in the Environmental Notice (Appendix A). The owner(s) of the site parcel(s) at the time of issuance of this SMP is/are:

- Parcel ID: 121-1-54

  — ETE Sanitation and Landfill (reputed owner)

- Parcel ID: 121-1-55

  — David Kennan.

According to the 1994 Preliminary Site Investigation Report (Engineering-Science, Inc. 1994), the ETE Landfill Site was owned and operated by ETE Corporation from 1972 – 1979; however, the Site may have been in operation prior to 1972. The ETE Landfill Site was a non-permitted private landfill which accepted municipal and industrial waste from surrounding towns in Wyoming County. Almor Corporation of Warsaw, New York, disposed approximately 150 tons of leaded paint sludge onsite. Plating wastes from Mallory Timers in Warsaw, New York, may also have been disposed onsite. Additional industrial waste included halite (salt), and possibly other salts produced by Morton Salt, located in the nearby community of Silver Springs.

2.2 PHYSICAL SETTING

2.2.1 Land Use

The 25.48-acre Site is surrounded by woodland buffer which separates the landfill from undeveloped agricultural land on all sides. The southern boundary is situated on private, undeveloped land. Broughton Road runs east to west to the south of the landfill, and Route 19 runs north to south to the west side of the landfill. The property to the southeast is owned by Broughton Farms LLC, and contains buildings for the storage of farm equipment.

Two constructed ponds were previously located within the subject area, including the upgradient South Pond (3.5 acres) formerly situated at the southern property line, and the downgradient North Pond (0.5 acres, also known as the leachate collection pond) located along the northern

property line. South Pond was drained as part of the remedial construction activities North Pond receives water from the western drainage channel and groundwater discharge. Surface water from North Pond discharges via the North Pond overflow stream in the northeast corner, with flow offsite and north towards Cotton Creek, located approximately 0.75 miles north of the site.

2.2.2 Geology

The landfill appears to have been constructed in a natural depression running north to south between North and South Ponds (Camp Dresser & McKee [CDM] 2000a). Fill material is primarily composed of municipal solid waste. Based on previous investigations, the thickness of waste was approximately 15 feet (ft) at the center of the landfill, with the thickness decreasing to approximately 5 ft toward the perimeter. Approximately 6 to 8 ft of waste was believed to underlie the northern portion of South Pond. Waste was covered with a silty clay soil approximately 1- to 2- ft thick, with waste exposed within portions of the northern slope of the landfill.

The landfill was constructed on top of unconsolidated glacial sediments which are primarily composed of clay rich glacial tills (poorly stratified deposits composed of poorly sorted very fine sands, silts, gravels, and occasional clay lenses) with minor beds of more permeable sand and gravel. A well log from a municipal well located 3 miles west of the site indicates that overburden is approximately 160-ft thick (CDM 2008). The bedrock of Wyoming County is comprised of flat lying to gently dipping (approximately 40–50 ft/miles to the southwest) shale and siltstone of the Genesee, Sonyea, West Falls and Canadaway groups deposited during the middle-to-late-Devonian period. The groups are described as a thick layer of black shale underlying greenish gray shale. A geologic cross section of the site is provided in Figure 3.

2.2.3 Hydrogeology

Surface water drainage from the landfill is generally south to north, with surface water flowing into a small tributary of Cotton Creek located 0.75 miles north of the Site (CDM 2000b). The hydraulic conductivity of native soils ranges from $1x10^{-4}$ to $1x10^{-6}$ centimeters per second. The depth to water at the site is shallow, with water encountered in shallow wells ranging from approximately 1 to 17 ft below ground surface (bgs). Groundwater flow direction is controlled by regional topography and local hydrology, with flow generally north-northeast towards Cotton Creek Valley, with South Pond located upgradient and North Pond is downgradient of the landfill.

Local hydrogeologic effects on groundwater flow direction included local groundwater recharge due to the hydraulic head of South Pond, and the slight mounding of water which occurs within the saturated waste. As a result, groundwater flow direction within the western portion of the site appeared to be north-northwest. The South Pond was removed and drained as part of the remedial action. Present groundwater elevations and interpolated contour maps for shallow and deep groundwater are depicted in Figure 4 and Figure 5, respectively, and indicate groundwater flows in a north-northeasterly direction. Depth to water ranged from 16.15 ft amsl in upgradient

monitoring well MW-2S to 3.71 ft amsl in the furthest downgradient well MW-10S in December 2013. Available groundwater monitoring well construction logs are provided in Appendix D.

2.3 INVESTIGATION AND REMEDIAL HISTORY

The following narrative provides a remedial history timeline, and a brief summary of the available project records to document key investigative and remedial milestones for the Site. Full titles for each of the reports referenced and provided in Section 6.0 References.

The landfill was in violation of NYSDEC regulations for sanitary landfills for the entire time of its operation. A number of violations cited by NYSDEC included: (1) refuse burned onsite, (2) refuse not spread, compacted or covered, (3) refuse protruding through the cover soils, and (4) insufficient grading, uncontrolled release of leachate, and blowing litter. The ETE Corporation declared bankruptcy in 1979 after a complaint was brought against the corporation for defying a New York State Supreme Court Order to cease all landfill operations.

2.3.1 Investigation History

The NYSDEC and New York State Department of Health (NYSDOH) conducted a number of site inspections between 1987 and 1990, during which soil, surface water, waste, and tap water samples from nearby residences were collected and analyzed for hazardous waste compounds. A preliminary site assessment (PSA) was performed in 1990. As a result of the PSA, approximately 25 drums were removed in a drum removal activity completed in September 1991. Drums were found to contain leaded paint sludge, and industrial solvents including 1, 2-dichloroethane, carbon tetrachloride, trichloroethane, and 2-butanone. A Phase Two PSA was completed in February 1994. The PSA included collection of onsite sediment, leachate, and soil samples in addition to the installation and sampling of seven groundwater monitoring wells.

The investigations confirmed that hazardous waste was present at the Site, and waste constituents were being released to the environment. In addition, groundwater was used for potable water by local people. The Site was listed as Class 2 (which indicates a significant threat, and the need to take action) in March 1995 because of the continuing releases to the environment, and the potential threats to public health. Since the Department was not able to identify responsible parties who could undertake additional investigations, work was begun using the State Superfund in August 1997.

To further evaluate the contamination present at the site, evaluate alternatives to address the significant threat to public health, and the environment posed by the presence of hazardous wastes, the NYSDEC conducted a remedial investigation (RI)/feasibility study (FS) of the Site between March and June 1998. A Final RI/FS report was issued September 1998. The results of the RI indicated that approximately 7 acres of the Site contain landfilled wastes, with a maximum thickness of 15 ft (Section 2.2.2). A portion of the waste was believed to extend under the northern slope of South Pond.

2.3.2 Summary of Remedial Investigation

The RI was performed from March to June 1998 to characterize the nature and extent of contamination at the site. The results of the RI are described in detail in the Final Remedial Investigation Report, ETE Sanitation and Landfill Site (CDM 1998) as prepared by CDM for the NYSDEC. RI sampling locations are provided on Figure 6.

The RI reported that approximately 7 acres of the Site contain landfilled waste, with a maximum thickness of 15 ft. A portion of the waste is believed to extend under the northern slope of the South Pond. Municipal wastes and industrial wastes were observed in test pits conducted to investigate potential drum disposal areas, define the boundaries of the landfill, with co-mingled wastes in the northern portion, and predominantly municipal wastes (i.e., household trash items including plastic bags, food containers, and paper waste) in the southern portion of the landfill. It was estimated that the landfill contained roughly 2.5 million cubic ft of waste.

Analytical results from the RI revealed the presence of metals, volatile organic compounds (VOCs), and semi-volatile organic compounds (SVOCs) in site-related soil, surface water, sediment, and groundwater. The most significant contamination within the site was identified in the west-central portion of the landfill where high levels of VOCs were identified within groundwater/leachate and landfill gas. The majority of VOCs detected at the Site were reported to be associated with paint manufacturing, paint solvents, and were attributed to disposal of drummed paint sludge. Additional VOCs identified at the Site were used as industrial solvents and/or constituents of petroleum products. High levels of sodium and other inorganic contaminants present were attributed to waste salt landfilled at the Site.

Data indicated that landfill contaminants impacted surface water quality downgradient (north) of the Site, primarily by aluminum, iron, and zinc. Sediment downgradient of the site was impacted by VOCs (including acetone, methylene chloride, 2-butanone, ethylbenzene, and xylenes), and metals (iron, manganese, and zinc).

The following is a summary of site conditions reported in the RI.

2.3.2.1 Surface Soil at Leachate Seeps

Leachate seeps were observed emanating from the north toe of the landfill and flowing overland to North Pond. Visibly impacted vegetation, discolored soil, uncovered garbage, and salt precipitate were observed in the area. Four surface soil samples (SU-1 to SU-4) were collected downgradient of the leachate seeps, and analyzed for target compound list organics (TCL), target analyte list (TAL) metals, and cyanide (Figure 6). Analytical results are summarized in Table 2.

TCL SVOCs were not detected above NYSDEC Technical and Administrative Guidance Memorandum (TAGM) 4046 soil cleanup guidelines (SCGs) in any of the soil samples. Xylene was detected above the SCG (1,200 µg/kg) at SU-1, with a concentration of 1,224 micrograms per liter (µg/L). Inorganic compounds detected in excess of NYSDEC recommended soil cleanup objectives included aluminum, arsenic, beryllium, calcium, copper, iron, magnesium,

nickel, sodium, and zinc, with concentrations generally decreasing from west to east (SU-1 to SU-3). However, the easternmost sample, SU-4, exhibited an increase in concentrations and also contained elevated concentrations of barium, cobalt, manganese, and selenium, indicating a potential source of metals contamination in the northeastern portion of the landfill.

2.3.2.2 Subsurface Soil

A total of 17 test pits (TP1 to TP-17) and one soil boring (SB-1) were installed during the RI to determine waste material and thickness. Subsurface soils were collected from four test pits (TP-2, TP-4, TP-9, and TP-13) as based on the nature of waste encountered during excavation, visual observations, and photoionization detector readings (Figure 6). Samples were analyzed for VOCs, SVOCs, TAL metals, cyanide, pesticides, and polychlorinated biphenyls (PCBs). Analytical results were compared to the NYSDEC TAGM 4046 SCGs (NYSDEC 1994), and are summarized in Table 3.

No pesticides or PCBs were detected in any soil samples. While VOCs and SVOCs were detected in soil, concentrations were below SCGs. Metals were detected in all soil samples, with arsenic, beryllium, calcium, copper, iron, magnesium, nickel, and zinc detected above SCGs. Based on metals concentrations, shallow subsurface soils showed evidence of having been impacted by landfilled materials; however, soil samples taken from different areas of the landfill showed similar concentrations, and concentrations in excess of SCGs, and concentrations were not indicative of an industrial waste hazardous waste source area.

2.3.2.2 Surface Water

Five surface water samples were collected at the site, including one sample from the North Pond outfall (SW-1), two samples collected from North Pond (SW-2 and SW-3), one sample from South Pond (SW-4, upgradient), and one sample from the eastern drainage channel along the northeast perimeter of the landfill and downstream from leachate seeps observed along the eastern slope of the landfill (SW-7) (Figure 6). Samples were analyzed for TCL volatile organics, TAL metals, cyanide, and hardness. Analytical results were screened against the New York State Ambient Water Quality Standards for Class C waters, defined as surface waters suitable for fish propagation and are summarized in Table 4.

VOCs were not detected above surface water standards in any of the samples collected. Metals were not detected at upgradient location SW-4 at concentrations above the Standard for Class C water; however, sodium was detected at this location at a concentration of 32,700 µg/L. Inorganic analytical results of downstream samples indicated impacts to surface water quality, with concentrations of aluminum, sodium, and zinc in North Pond, and the eastern drainage channel was at least ten times higher than those observed at South Pond. Aluminum and iron were detected above the standard for Class C water at all locations downgradient of the waste mass. Manganese was detected above the standard for Class C water at SW-1 and SW-2, while zinc was detected above the standard at SW-1, SW-2, and SW-3. In addition, field parameters showed that downgradient surface water was potentially impacted by leachate, with increases in salinity and conductivity levels at downgradient sample locations.

2.3.2.3 Sediment

Seven sediment samples were collected from the Site, including one sample from the tributary outfall draining North Pond (SD-1), four samples from within North Pond (SD-2, SD-3, SD-5, and SD-6), one sample from South Pond (SD-4, background/upgradient), and one sample from the seasonal stream running along the northeast perimeter of the landfill (SD-7) (Figure 6).

VOCs including acetone, methylene chloride, 2-butanone, ethylbenzene, and xylenes, were detected in the four samples collected from the North Pond and the sample from the seasonal stream indicating the landfill may be impacting sediment downgradient through the release of VOCs (Table 5). Acetone and methylene chloride were also detected in the sample from South Pond, indicating impacts from landfill wastes.

Inorganic analytical results were compared to the lowest effect level (LEL), which indicates a level of sediment contamination that can be tolerated by the majority of benthic organisms, and severe effect level (SEL), which indicates the concentration at which pronounced disturbance of the sediment dwelling community can be exposed. Arsenic, copper, iron, lead, manganese, nickel and/or zinc exceeded the LEL in all sediment samples, including the sample collected from South Pond. Sediment samples collected from North Pond and the eastern drainage channel indicated increased levels of iron and zinc with concentrations exceeding severe effect levels. Heavy metals including chromium, cadmium, and lead were also detected in landfill sediments; however concentrations varied, making it difficult to determine a discrete source of contamination. Sediments downgradient from North Pond showed a reduction in frequency and inorganic exceedances suggesting the North Pond acts as a settling basin for inorganic contaminants.

2.3.2.4 Groundwater

One round of groundwater sampling was conducted, with samples collected from seven existing wells (MW-1S/D, MW-2S/D, MW3-S/D, and MW-4S) analyzed for TCL volatile organics and TAL metals, and samples collected from eight newly installed RI monitoring wells (MW-6S/D, MW-7S/D, MW-8S/D, and MW-9S/D) analyzed for TCL organics, TAL metals, and cyanide (Figure 6). Groundwater sample results were compared with the NYSDEC criteria for the protection of class GA water, suitable for human consumption, as defined in "Ambient Water Quality Standards and Guidance Values," (NYSDEC 1998). Analytical results are summarized in Table 6.

PCBs were not detected in any of the groundwater samples collected. Heptachlor was the only pesticide detected in the groundwater samples, with concentrations less than the groundwater standard (0.04 µg/L).

Groundwater analytical results indicated that the groundwater beneath and surrounding the ETE Landfill contained VOCs, SVOCs, and inorganic compounds greater than groundwater standards, with the greatest concentrations observed at MW-8S within the municipal/industrial waste. Exceedances were most frequently observed in wells screened within the landfill wastes

and shallow groundwater. However, several VOCs were detected above groundwater standards in shallow downgradient wells, indicating offsite migration. In addition, several VOCs were detected below groundwater standards in all deep, downgradient monitoring wells, indicating vertical migration. The principal VOC contaminants of concern identified within groundwater, as based on mobility and observed concentrations were acetone, 2-butanone, benzene, 4-Methyl-2-pentanone, 2-hexanone, toluene, trichloroethene, 1,2-dichloroethene, chlorobenzene, ethylbenzene, xylenes, phenol, 2-methylphenol, 4-methylphenol, and 2,4-Dimethylphenol.

Metals detected above groundwater standards in shallow wells included antimony, barium, cadmium, iron, lead, magnesium, manganese, sodium, and thallium, with the highest concentrations detected within and immediately downgradient of the landfill. Only sodium, iron, magnesium, manganese were detected in the deep monitoring wells, indicating that landfill inorganic contaminants were not significantly impacting deep groundwater. In addition, heavy metals (i.e., cadmium and lead) were not detected above groundwater standards in downgradient wells, indicating that these metals were not migrating offsite.

2.3.2.5 Soil Vapor

Soil vapor samples were collected from four locations (GP-1 to GP-4) at a depth of 3 to 4 ft below grade, and analyzed for VOCs by United States Environmental Protection Agency (EPA) method TO-14 (Figure 6). VOC concentrations were detected in all four locations, with the highest concentrations detected at GP-4, located in the west-central portion of the landfill (total VOC concentration of 113,490 parts per billion by volume (ppb_v) (Table 7).

Soil vapor field screening was also conducted to determine the percent concentration of carbon dioxide, methane, and oxygen. The results indicated that the western portion of the landfill was actively producing landfill gas, indicating this area was in the methane fermentation phase of landfill gas production. Concentrations detected in the eastern section indicated that landfill gas production was either not occurring or was not capable of upward migration. The west-central portion of the landfill contained the most significant VOC contamination observed within the site.

2.3.2.6 Underground Storage Tanks

No underground storage tanks were found during the remedial investigation; however, during the excavation of one of the test pits (TP-4), a drum containing solidified paint sludge was uncovered (Figure 6). According to toxic characteristic leaching procedure parameters, the waste was not considered characteristically hazardous. Several other empty, crushed drums were detected across the site with no detectable contaminant concentrations.

2.3.3 Remedial Action Objectives

Based upon the information presented in the RI/FS, the NYSDEC, in consultation with the NYSDOH, selected a remedy to address the threat to public health and/or the environment

created by the presence of hazardous waste at the site. The remedial action objectives for the Site as listed in the ROD dated 21 March 1999 are as follows:

- Isolate the landfill waste material in order to provide adequate protection to public health and the environment from direct contact or ingestion of hazardous constituents in wastes or surface soil from the landfill.

- Remove landfill wastes from the South Pond and contaminated sediments from the North Pond.

- Consolidate wastes within the landfill property.

- Reduce the production of leachate and offsite migration of contaminants by restricting the amount of surface water and groundwater flowing through the landfill.

- Eliminate or significantly reduce the quantity of leachate discharging to groundwater and/or surface water.

- Control emissions of landfill gases that could pose a risk to current and/or future residents.

- Control surface water runoff and erosion.

2.3.4 Proposed Remedy

The selected remedy is presented in the 1999 ROD, and included the construction of a modified 6 NYCRR Part 360 cover system and implementation of a long-term monitoring plan as follows:

- Permanent drainage of South Pond
- Consolidation of waste and fill, regrading waste and fill, and capping of the wastes
- Excavation of impacted soils outside the cap limits
- Improved storm water drainage
- Long-term monitoring of the site.

An Operations and Maintenance Manual was finalized in July 2000 (CDM 2000a), and provided direction for implementation of the remedy presented in the ROD (NYSDEC 1999). Remedial design for the selected remedy was completed in July 2000. A contract for the remedial construction was to be following competitive bidding; however, the owner of the privately held parcel would not allow NYSDEC access to complete the remedial construction. An order was subsequently issued by the Wyoming County Supreme Court allowing the NYSDEC access to complete the remedial action in December 2005. The construction project was competitively bid, and a contract was awarded for remedial action construction in 2006.

2.3.5 Remedial Action Construction

The site was remediated from 2006 through 2007 in accordance with the NYSDEC approved Remedial Design which was revised prior to construction in 2006/2007 and is documented in the Design Basis Report (URS 2007). The results of the Remedial Action are described in detail in the Remedial Action Report, ETE Sanitation and Landfill Site State Superfund Remediation, dated July 2008, and prepared by NYSDEC Region 9 Division of Environmental Remediation.

The following is a summary of the remedial actions performed at the site through September 2007:

- Clearing and grubbing the site prior to remedial construction activities.
- Site grading to conform to design grades, including excavation of the drainage channel west of the landfill to drain waters previously filling South Pond to provide a path for upland storm water runoff diversion around the landfill, expansion of the basin north of the landfill, and grading of the west side of the site to maintain positive surface water drainage from the site.
- Topsoil stripping and stockpiling, and excavation of borrow material primarily from the west side of the landfill, including the west drainage ditch, for use in landfill cap subgrade preparation and cap cover.
- Cap subgrade preparation, including consolidation of contaminated sediments from North Pond, wastes found outside the landfill cap perimeter, impacted soils from designated areas, soils from the west ditch excavation, and soils from the excavation that expanded the North Pond.
- Permanent drainage of South Pond to prevent infiltration of waters through the landfill wastes.
- Temporary drainage of North Pond and excavation of impacted sediments.
- Excavation of waste and debris from designated areas (including the southeast portion of the landfill), and excavation of impacted soils between the existing landfill and North Pond.
- Installation of a multi-layered capping system with a geomembrane barrier layer over the 7-acre landfill cap area.
- Installation of a passive landfill gas venting system.
- Expansion and reconstruction of North Pond, including the construction of an overflow structure and habitat enhancement, and wetland restoration/mitigation.

- Installation of limited site security measures consisting of a gate across the access road, a barrier adjacent to the access road gate, and a barrier berm across a former site access path.

- Stormwater drainage improvements and erosion control measures.

- Execution and recording of an Environmental Notice to restrict land use and prevent future exposure to any contamination remaining at the site.

2.3.5.1 Remedial Action Construction

A total of approximately 10,595 cubic yards (CY) of contaminated soil and 42,000 CY of uncontaminated soil were excavated. Most of the waste and debris were at the surface; however, an 18-inch (in.) thick layer from scrap/debris areas was also excavated and consolidated under the landfill cap area as part of the contract requirements. Waste white goods and metal debris were segregated and collected by a scrap metal operator. Approximately 400 waste tires of various sizes were collected, stockpiled, and disposed of at a permitted offsite disposal facility. The balance of waste at the site was excavated and consolidated under the landfill cap area.

An additional area requiring excavation of impacted soils included the area between the existing landfill and north pond. An approximate 18-in. thick layer of suspected impacted soil was excavated from this area and consolidated under the landfill cap area.

Following the drainage of the North Pond, sediments in the pond were excavated and consolidated under the landfill cap. Upon completion of sediment removal from this area, confirmation soil samples were collected to assure that all impacted sediments and soils were removed and consolidated under the landfill cap.

During subgrade preparation, two additional areas of buried waste were discovered outside the cap limits of the landfill, with one situated along the southeast perimeter of the cap, and the other along the southwest perimeter of the cap. In order to comply with the existing grading design and design plans for the landfill cap, the waste in these areas were excavated and consolidated under the landfill cap. Following excavation, the areas were backfilled with soil from borrow areas at the site and compacted in place. The as-built drawing is presented in Figure 7.

2.3.5.2 Landfill Cover and Cap System

The cover was installed in accordance with the Remedial Design and consists of the following from top to bottom:

- Six-in. topsoil layer consisting of material stripped from the site prior to grade work, and stabilized with a turf-type grass and wildflower seed mixture.

- Six-in. soil barrier protection layer consisting of unscreened, onsite borrow soils.

- Twelve-in. soil layer soil barrier protection consisting of onsite borrow soils screened to less than three-in. to remove larger stones.

- Geonet composite drainage layer consisting of double-sided nonwoven geotextile fabric/geonet composite installed to drain cover soil pore water and ensure stability of the slopes. Water transmitted along the geonet layer is accommodated through a relief under drain.

- Forty-mil linear low density polyethylene geomembrane. Smooth membrane was used on the gently sloped top areas, and textured membrane was used on the steeper side sloped areas along the northern end of the landfill area.

- Combination geotextile – geonet composite gas venting layer, with the geotextile layer consisting of non-woven polypropylene fabric and geonet composite networked between the gas vents and the edge of the landfill cap. Geonet strips were an addition to the final design plans to ensure positive venting of landfill gas through the gas vents.

- Six-in. sub-base soil layer with a gradation requirement of 3 in. and less.

2.3.5.3 Passive Gas Vent System

Nine gas vents (GV) consisting of 6-in. diameter PVC pipe extending a minimum of 8 ft into the waste were installed on the landfill prior to installation of the cover system components (Figure 8). The vents extended above the subgrade through the landfill geomembrane cover system and were terminated with an inverted "U" to prevent rainwater from entering the vent.

During the January 2015 site inspection, the passive GV were monitored for oxygen, hydrogen sulfide, carbon monoxide, volatile organic compounds, and LEL using a multi-gas meter. Passive GV are located within the landfill boundaries and serve to vent gases that accumulate under the landfill cap.

Based on soil vapor data collected on 5 January 2015, the following observations were noted:

- Oxygen measurements from the eight GVs were all 20.9 percent (atmospheric oxygen is 20.8 percent).

- The lower explosive limit was observed to be 0 percent methane at each of the GV locations.

- Carbon monoxide was not detected.

- VOCs were not detected.

2.3.5.4 Site Related Treatment Systems

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

2.4 REMAINING CONTAMINATION

Contaminated materials remaining onsite are under a multi-layered geomembrane landfill cover system placed over the 7-acre landfill area to minimize the infiltration of precipitation, and prevent exposure to the site waste. The cap covers approximately 18 ft of consolidated waste totaling an estimated 200,000 CY of remaining waste. The capped landfill represents the sole source area remaining at the Site. Exposure to remaining contamination in soil at the Site is prevented by the cap at the Site. There are no buildings, storage tanks (underground or aboveground), or other critical infrastructure. Additionally, there are no utilities (overhead or subsurface) located at the site.

2.4.1 Remaining Impacts to Soil

Under the remedial action performed at the ETE Sanitation and Landfill Site, potential impacts to soil were addressed as part of the Remedial Design. Based on the previous soil sampling data and remedial actions including the removal of 10,595 CY of impacted soil, and consolidation beneath the engineered cap, residual contamination in subsurface soil is expected to be minimal. Future groundwater monitoring will identify the potential and significance of residual soil contamination. If groundwater monitoring results indicate a potential for a continuing soil source, additional soil investigation may be warranted under this SMP.

2.4.2 Remaining Impacts to Groundwater

Groundwater analytical results detected prior to the December 2014 sampling event are presented in Table 8.

Groundwater – Volatile Organic Compounds

VOCs were detected in MW-03S and MW-03D. Vinyl chloride was detected in MW-03D at a concentration of 2.0 µg/L, which is equal to the NYSDEC Ambient Water Quality Standards (AWQS). Trichloroethene was detected in MW-03S at a concentration of 9.2 µg/L which exceeded the NYSDEC AWQS of 5 µg/L. Analytical results associated with groundwater samples that were collected in December 2014, and January 2015, and submitted for analysis of VOCs, are summarized in Table 9 and shown on Figure 9.

Groundwater – Semi Volatile Organic Compounds

SVOCs were detected in MW-02D, MW-03D, MW-07S, and MW-10S. 4-Methylphenol was detected at a value of 4.1µg/L in MW-02D, which exceeds the NYSDEC AWQS of 1.0 µg/L. Analytical results associated with groundwater samples that were collected in December 2014

and January 2015, and submitted for analysis of SVOCs, are summarized in Table 9 and shown on Figure 10.

Groundwater – Inorganic Parameters

Chromium was detected in the groundwater samples collected from MW-02D and MW-03S at concentrations of 52.7 µg/L and 125 µg/L, respectively, exceed that NYSDEC AWQS of 50 µg/L. Iron was detected in exceedance of the NYSDEC AWQS of 300 µg/L in groundwater samples collected from all monitoring wells with concentrations ranging from 470 µg/L to 11,100 µg/L. Sodium was reported at concentrations that exceed the NYSDEC AWQS (20,000 µg/L) in monitoring wells MW-03D, MW-07S, MW-07D, MW-09S, MW-10S and MW-11D; concentrations ranged from 22,000 µg/L in MW-11D to 3,300,000 µg/L in MW-09S. Analytical results associated with groundwater samples that were collected in December 2014, and January 2015, and submitted for analysis of inorganic parameters, are summarized in Table 9 and shown on Figure 11.

Groundwater – Leachate Indicator Parameters

Analytical results associated with groundwater samples that were collected in December 2014 and January 2015 and submitted for analysis of leachate indicator parameters, are summarized in Table 9. Phenolics, chloride, sulfate, bromide and ammonia were detected at concentrations exceeding guidance values in monitoring wells MW-02D, MW-03D, MW-06S, MW-07D and MW-09S respectively. Concentrations of chloride ranged from 1,300 µg/L in MW-06S to 4,800,000 µg/L in MW-09S. Bromide was detected in MW-07D at a concentration of 3,100 µg/L, which exceeded the NYSDEC AWQS of 2,000 µg/L. Sulfate was detected in MW-06S at a concentration of 310,000 µg/L, which exceeded the NYSDEC AWQS of 250,000 µg/L. Leachate indicator parameters were detected in monitoring wells MW-03S, MW-06D, MW-07S, MW-09D, MW-10S, MW-11S and MW-11D but did not exceed NYSDEC guidance values.

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3. ENGINEERING AND INSTITUTIONAL CONTROL PLAN

3.1 INTRODUCTION

3.1.1 General

Since remaining contaminated soil and groundwater exists at the site, EC/ICs are required to protect human health and the environment. This EC/IC 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, as necessary.

3.1.2 Purpose

This plan provides:

- A description of all EC/ICs on the site.
- The basic implementation and intended role of each EC/IC.
- A description of the key components of the ICs set forth in the Environmental Notice(s).
- A description of the controls to be evaluated during each required inspection and periodic review.
- A description of plans and procedures to be followed for implementation of EC/ICs, such as the implementation of the Excavation Work Plan (EWP) (Appendix B) for the proper 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.

3.2 ENGINEERING CONTROLS

3.2.1 Engineering Control Systems

3.2.1.1 Landfill Cap

Exposure to remaining contamination in soil/fill at the site is prevented by a landfill cover system placed over the site as described in Section 2.3.4. The cover system consists of a 6-in. rough grading soil cover layer over the waste, a geotextile gas venting layer, a 40-mil geomembrane, a composite drainage layer, an 18-in.-thick barrier soil protection layer, a 6-in. thick vegetative layer and vegetative cover material (i.e., grasses).

The purpose of this system is to:

- Eliminate the potential for direct human or animal contact with fill material and contaminated site soils.
- Mitigate migration of contaminants from the landfill.
- Aid the gas venting system in the controlling of gas generated by the fill material.

The EWP in Appendix B 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 3 of this SMP.

3.2.1.2 Composite Cover System

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

3.2.1.3 Groundwater Monitoring Wells

Groundwater monitoring activities to assess natural attenuation will continue, as determined by the NYSDEC with consultation with NYSDOH, until residual groundwater concentrations are found to be consistently below AWQS, the site SCGs, or have become asymptotic at an acceptable level over an extended period. In the event that monitoring data indicates that monitoring for natural attenuation may no longer be required, a proposal to discontinue the system will be submitted by the remedial party. Monitoring will continue until permission to discontinue is granted in writing by the NYSDEC. If groundwater contaminant levels become asymptotic at a level that is not acceptable to the NYSDEC, additional source removal, treatment and/or control measures will be evaluated.

3.2.2 Criteria for Completion of Remediation/Termination of Remedial Systems

Generally, remedial processes are considered complete when effectiveness monitoring indicates the remedy has achieved the remedial action objectives identified by the decision document. The framework for determining when remedial processes are complete is provided in Section 6.6 of NYSDEC DER-10.

3.3 INSTITUTIONAL CONTROLS

A series of ICs is required by the ROD (NYSDEC 1999) include: (1) implement, maintain, and monitor EC systems, (2) prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination, and (3) limit the use and development of the site. Adherence to these ICs on the site is required by the Environmental Notice and will be implemented under this SMP.

These ICs are:

- Compliance with the Environmental Notice and this SMP by the Grantor and the Grantor's successors and assigns.
- All ECs must be operated and maintained as specified in this SMP.
- All ECs on the Controlled Property must be inspected at a frequency and in a manner defined in the SMP.
- Groundwater monitoring, and other environmental or public health monitoring, must be performed as defined in this SMP.
- Data and information pertinent to site management of the Controlled Property must be reported at the frequency and in a manner defined in this SMP.

ICs identified in the Environmental Notice may not be discontinued without an amendment to or extinguishment of the Environmental Notice.

The site has a series of ICs in the form of site restrictions. Adherence to these ICs is required by the Environmental Notice. Site restrictions that apply to the Controlled Property are:

- The property may only be used for commercial and industrial use provided that the long-term ECs/ICs included in this SMP are employed.
- All ECs must be operated and maintained as specified in this SMP.
- The property may not be used for a higher level of use, such as unrestricted use without additional remediation and amendment of the Environmental Notice(s), as approved by the NYSDEC.
- All ECs must be inspected at a frequency and in a manner defined in the SMP.
- The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH, or the Wyoming County Department of Health, to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department.
- Groundwater and other environmental or public health monitoring must be performed as defined in this SMP.
- Data and information pertinent to site management must be reported at the frequency and in a manner as defined in this SMP.

- All future activities that will disturb remaining contaminated material must be conducted in accordance with this SMP.

- Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in this SMP.

- Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical component of the remedy shall be performed as defined in this SMP.

- Access to the Site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by the Environmental Notice.

- The site owner or remedial party will submit to NYSDEC a written statement that certifies, under penalty of perjury: (1) controls employed at the Controlled 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 Controlled 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.

3.3.1 Excavation Work Plan

The site has been remediated for restricted land use. Any future intrusive work that will penetrate the landfill cover system/cap, and encounter or disturb the remaining contamination, including any modifications or repairs to the existing cover system, will be performed in compliance with the EWP (Appendix B to this SMP). Any work conducted pursuant to the EWP must also be conducted in accordance with the procedures defined in the EA Generic Health and Safety Plan (HASP) (EA 2011), and Site-Specific Community Air Monitoring Plan (CAMP). A HASP addendum (Appendix C to this SMP) that is in current compliance with DER-10, and 29 Code of Federal Regulations (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 resubmitted with the notification provided in Section C-1 of the EWP. Any intrusive construction work will be performed in compliance with the EWP, HASP, and CAMP, and will be included in the periodic inspection and certification reports submitted under the Site Management Reporting Plan (Section 5).

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 intrusive work, the structural integrity of excavations, proper disposal of excavation de-water, control of runoff from open excavations into remaining contamination, 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, the ECs described in this SMP.

3.4 INSPECTIONS AND NOTIFICATIONS

3.4.1 Inspections

Inspections of all remedial components installed at the site will be conducted at the frequency specified in the SMP Monitoring Plan schedule. 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 ECs continue to perform as designed
- If these controls continue to be protective of human health and the environment
- Compliance with requirements of this SMP and the Environmental Notice
- Achievement of remedial performance criteria
- Sampling and analysis of appropriate media during monitoring events
- If site records are complete and up-to-date
- 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). The reporting requirements are outlined in the Periodic Review Reporting section of this Plan (Section 5).

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 five 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.

3.4.2 Notifications

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

- Sixty-day advance notice of any proposed changes in site use that are required under the terms of the Order on Consent, 6 NYCRR Part 375, and/or Environmental Conservation Law.

- Seven-day advance notice of any proposed ground-intrusive activities pursuant to the EWP.

- Notice within 48-hours of any damage or defect that reduces or has the potential to reduce the effectiveness of other ECs and likewise any action to be taken to mitigate the damage or defect.

- Verbal notice by noon of the following day of any emergency, such as a fire, flood, or earthquake that reduces or has the potential to reduce the effectiveness of ECs in place at the site, with written confirmation within seven days that includes a summary of actions taken, or to be taken, and the potential impact to the environment and the public.

- Follow-up status reports on actions taken to respond to any emergency event requiring ongoing responsive action shall be submitted to the NYSDEC within 45 days and shall describe and document actions taken to restore the effectiveness of the ECs.

Any change in the ownership of the Site or the responsibility for implementing this SMP will include the following notifications:

- At least 60 days prior to the change, the NYSDEC will be notified in writing of the proposed change. This will include a certification that the prospective purchaser has been provided with a copy of the Order on Consent, and all approved work plans and reports, including this SMP

- Within 15 days after the transfer of all or part of the site, the new owner's name, contact representative, and contact information will be confirmed in writing.

3.5 CONTINGENCY PLAN

Emergencies may include injury to personnel, fire or explosion, environmental release, or serious weather conditions.

3.5.1 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 the NYSDEC. These emergency contact lists must be maintained in an easily accessible location at the site.

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

CONTACT NUMBERS*	
Dave Chiusano, NYSDEC	Office: 518-402-9814
*Contact numbers subject to change and should be updated as necessary.	

3.5.2 Map and Directions to Nearest Health Facility

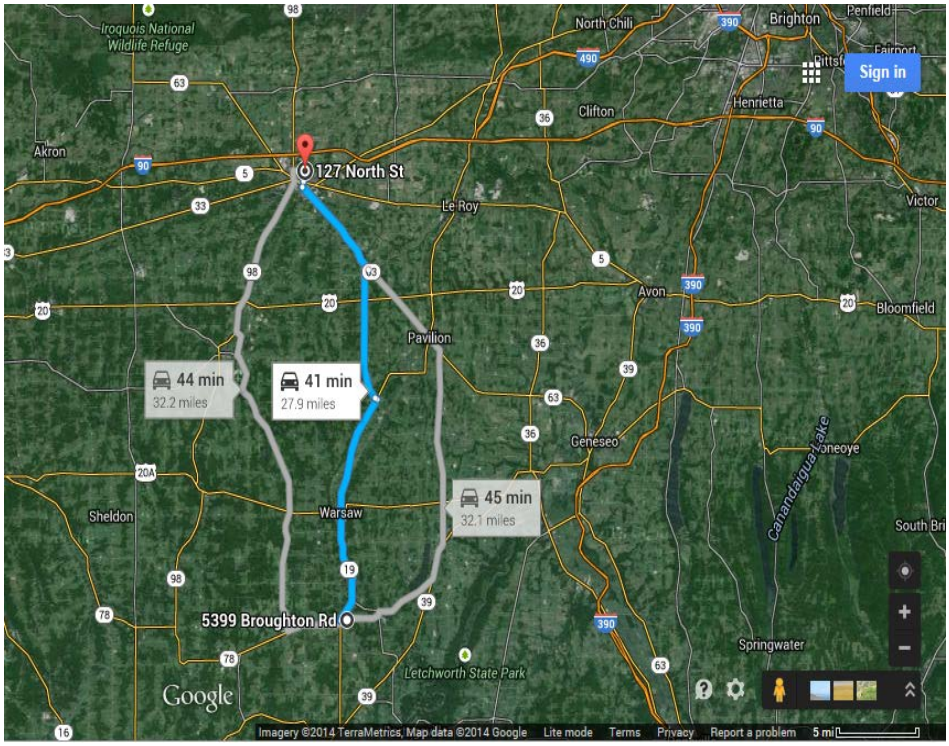
Site location: 5399 Broughton Road, Town of Gainesville, New York
Nearest hospital name: United Memorial Medical Center
Hospital location: 127 North Street, Batavia, New York
Hospital telephone: 585-275-2100

Directions to the Hospital:

1. Head west on Broughton Rd toward NY-19 S
2. Take the 1st right onto NY-19 N
3. Turn left onto Gulf Road/East Bethany Road (Route 7)
4. Continue East Bethany Road (Route 7)
5. Route 7 becomes Route 35
6. Turn left on to Ellicott Street (NY-63 N)
7. Turn right onto Liberty Street
8. Continue onto Liberty Street and cross NY-5. Liberty Street becomes Summit Street
9. Turn right on North Street
10. Destination will be on the left.

Total Distance: 27.8 miles
Total Estimated Time: 42 minutes

3.5.3 Map Showing Route from the Site to the Hospital



3.5.4 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 (Section 3.5.1). The list will also posted prominently at the site and made readily available to all personnel at all times.

3.5.3.1 Spill Procedures

In the event that a hazardous substance is released on the site, all site personnel shall be notified immediately. If the substance poses an immediate threat to human health and the environment, evacuation and notification of the appropriate authorities (Table 1) including the NYSDEC Spill Response team may be necessary. If the release is minimal (< 5 gallons), is contained and under control, will not potentially reach the State's water or any land, and does not pose a health risk, the leak shall be contained within 2 hours of discovery, and the spilled material shall be cleaned up with appropriately sized absorbent pads. Materials used to contain the substance shall be disposed of properly.

3.5.3.2 Evacuation Plan

If site evacuation is necessary, site personnel shall exit the site on Broughton Road. All site personnel shall be notified of the evacuation.

4. SITE MONITORING

4.1 SITE MONITORING AND SAMPLING PLAN

4.1.1 General

This Monitoring Plan describes the measures for evaluating the performance and effectiveness of the remedy to reduce or mitigate contamination at the site, the soil cover system, and all affected site media identified below. This Monitoring Plan may only be revised with the approval of NYSDEC.

4.1.2 Purpose and Schedule

This Monitoring Plan describes the methods to be used for:

- Sampling and analysis of all appropriate media (e.g., groundwater).
- Assessing compliance with applicable NYSDEC standards, criteria, and guidance, particularly ambient groundwater standards.
- Assessing achievement of the remedial performance criteria.
- Evaluating site information periodically to confirm the remedy continues to be effective in protecting public health and the environment.
- Preparing the necessary reports for the various monitoring activities.

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

- Sampling locations, protocol, and frequency
- Information on all designed monitoring systems (e.g., well logs)
- Analytical sampling program requirements
- Reporting requirements
- Quality assurance (QA)/quality control (QC) requirements
- Inspection and maintenance requirements for monitoring wells
- Monitoring well decommissioning procedures
- Annual inspection and periodic certification.

Trends in contaminant levels in groundwater in the affected areas will be evaluated to determine if the remedy continues to be effective in achieving remedial goals. Monitoring programs are summarized in the Monitoring/Inspection Schedule and outlined in detail in Sections 4.2 and 4.3.

Monitoring/Inspection Schedule

Monitoring Program	Frequency[1]	Matrix	Analysis
Site Inspection	Annually	NA	NA
Groundwater	Annually	Water	VOCs (8260B), SVOCs (8270C), Metals (6010), and leachate indicators.

1. The frequency of events will be conducted as specified until otherwise approved by NYSDEC and NYSDOH.

4.2 SITE WIDE INSPECTION

A site-wide inspection will be performed annually to monitor the integrity of the final landfill cover materials, the site drainage structures, and gas venting risers. Modification to the frequency or duration of the inspections will require approval from the NYSDEC. Site-wide inspections will also be performed after all severe weather conditions that may affect ECs or monitoring devices. During these inspections, an inspection form will be completed as provided in Appendix F. The form will compile sufficient information to assess the following:

- Compliance with all ICs, including site usage
- An evaluation of the condition and continued effectiveness of ECs
- General site conditions at the time of the inspection
- The site management activities being conducted including, where appropriate, confirmation sampling, and a health and safety inspection.
- Confirm that site records are up-to-date.

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

- Whether ECs continue to perform as designed.
- If these controls continue to be protective of human health and the environment.
- Compliance with requirements of this SMP and the Environmental Notice.
- Achievement of remedial performance criteria.
- If site records are complete and up-to-date.
- Reporting requirements are outlined in Section 5.0 of this Plan.

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

4.2.1 Drainage Structures

The inspections will include visual checks of drainage swales, and berms/benches to identify any erosion control issues. Any material defects and erosion occurrences discovered at the facility will be reported to NYSDEC personnel within 48 hours. An action plan detailing the remedial measures to be taken to rectify the problem will be developed and submitted to NYSDEC for approval, prior to implementation of the remedy.

The stormwater system consists of swales, ditches, culverts, and detention ponds, both around the landfill and in the northern portion of the site where waste has been relocated. The purpose of this system is to:

- Direct stormwater away from the cover
- Minimize erosion potential
- Reduce the production of leachate
- Reduce the impact of site improvements to offsite areas.

Inspection of the stormwater system should focus on the following areas:

- Ditches and swales (including those in the former fill areas)
- Cover system drainage
- Culverts
- Detention ponds (i.e., the North Pond).

4.2.2 Landfill Cover System

The landfill cover system is to be inspected for signs of erosion, exposure of geosynthetics, loss of vegetative cover, settlement, sliding, or cracking on the top or side slopes of the landfill. During each inspection, the cover system will be inspected and subsequent layers will be inspected for observable deficiencies and records will be maintained.

In the event that major erosion, sloughing, or slumping is noted during an inspection, NYSDEC personnel will be notified within 48 hours of the problems observed. An action plan detailing the remedial measures to be taken to rectify the problem will be developed and submitted to NYSDEC for approval, prior to implementation of the remedy. Any repairs requiring patching

or seaming of the very flexible polyethylene geomembrane or geocomposite drainage layer will be conducted in accordance with manufacturer's construction specifications and outlined in the action plan.

4.2.3 Treatment System Monitoring and Sampling

There are no active treatment systems in place.

4.3 ENVIRONMENTAL MEDIA MONITORING PROGRAM

4.3.1 Groundwater Sampling

Annual groundwater monitoring events will be performed to assess the performance of the remedy. The sampling frequency may be modified with the approval NYSDEC. The SMP will be modified to reflect changes in sampling plans approved by NYSDEC.

The network of monitoring wells has been installed to monitor both upgradient and downgradient groundwater conditions at the site. The network of onsite wells has been designed based on the requirements put forth in NYSDEC Part 360 subpart 2-11(c). Monitoring well screens were installed within the first water-bearing unit in the overburden soils (i.e., till) to depths ranging from 15 to 74.5 ft bgs. Monitoring well construction logs are included in Appendix D. The monitoring well network information is presented below and well locations were previously presented in Figure 9.

Well Identification	Northing	Easting	Ground Surface Elevation	Top of PVC Casing Elevation	Depth to Water (ft bgs)	Total Gauged Depth (ft bgs)	Groundwater Elevation (Above mean sea level)
MW-02D	1270986.19	968091.25	1682.00	1684.29	18.47	46.75	1665.82
MW-02S	1270982.54	968099.91	1681.90	1684.63	16.15	19.80	1668.48
MW-03D	1271239.47	969080.83	1646.10	1648.80	17.45	41.44	1631.35
MW-03S	1271231.50	969086.10	1646.10	1648.90	15.05	19.74	1633.85
MW-06D	1271353.90	968922.14	1655.24	1657.63	20.46	76.44	1637.17
MW-06S	1271347.04	968910.91	1653.33	1655.69	15.70	21.92	1639.99
MW-07D	1270885.47	969407.96	1632.43	1634.60	14.65	46.80	1619.95
MW-07S	1270897.88	969409.15	1632.12	1634.60	6.80	17.65	1627.80
MW-09D	1270925.80	969067.90	1641.96	1644.32	10.91	75.87	1633.41
MW-09S	1270954.46	969048.87	1642.67	1645.07	8.24	NG	1636.83
MW-10D[(a)]	1270975.16	970090.86	1585.66	1587.03	NG	NG	—
MW-10S	1270970.74	970090.86	1584.98	1588.04	3.71	17.80	1584.33
MW-11D	1272782.10	970595.38	1581.13	1583.84	30.96	42.82	1552.88
MW-11S	1272771.63	970601.72	1579.95	1583.62	6.50	17.77	1577.12

NG = Not gauged.
(a) The well was not gauged during the last monitoring event due to ice buildup within the casing.

Groundwater monitoring will take place at the site. Fourteen wells, including all locatable and functional existing site-related monitoring wells will be sampled. Actual wells to be sampled

will be determined following location and inspection of the existing monitoring well network. The wells currently reported onsite and expected to be sampled as part of the groundwater monitoring program are listed in the Groundwater Monitoring Well Construction Information table.

Groundwater monitoring well sampling procedures include collection of water level measurements, well purging, field water quality measurements, and sample collection at each monitoring well location. A copy of the purging and sampling log form used to record well purging, water quality measurements, and sampling flow rates is provided in Appendix E. The objective of the groundwater sampling protocol is to obtain samples that are representative of the aquifer in the well vicinity so that analytical results reflect the composition of the groundwater as accurately as possible. Water level measurements and analytical results will be included in the Periodic Review Report discussed in Section 4.5 of this Plan. Groundwater samples will be collected annually from the monitoring wells noted and analyzed for VOCs by EPA Method 8260B, SVOCs by EPA Method 8270C, and target analyte list metals by EPA Method 6010, in accordance with the NYSDEC Analytical Services Protocol.

Rapid and significant changes can occur in groundwater samples upon exposure to sunlight, temperature, and pressure changes at ground surface. Therefore, groundwater sampling will be conducted in a manner that will minimize interaction of the sample and the surface environment. The equipment and protocol for collecting groundwater samples by each method are described in Section 4.3.1.1. Groundwater samples will be collected after 3-5 well volumes are purged or water quality measurements are stabilized (variation of less than 10 percent in three consecutive readings), and turbidity is recorded below 50 nephelometric turbidity units.

Deliverables for the groundwater monitoring program are specified in Section 4.5.

4.3.1.1 Sampling Protocol

All monitoring well sampling activities will be recorded in a field book and a groundwater sampling log presented in Appendix E. Other observations (e.g., well integrity, etc.) will be noted on the well sampling log. The well sampling log will serve as the inspection form for the groundwater monitoring well network. Due to the potential presence of explosive (methane) or organic vapors, ambient air in the well must be checked for their presence before the well is evacuated.

Groundwater Elevation Monitoring

In order to evaluate the groundwater flow direction at the site, groundwater level gauging will be performed on the onsite wells and piezometers. The wells currently reported onsite and expected to be gauged as part of the groundwater elevation monitoring program are presented in Section 4.3.1. Depth to groundwater measurements will be collected prior to groundwater sample collection. An electronic water level meter will be used for this field task capable of recording water elevations to within +/- 0.01-in. accuracy. The depth to groundwater measurements will be used to generate groundwater elevation/flow direction maps.

Purging and Sampling Equipment

Standing water will be purged from the well, allowing formation water representative of *in situ* conditions to flow into the well for sampling. Well purging may be performed by using submersible pumps or by using dedicated polyethylene bailers.

Equipment for sampling includes the following:

- Submersible and peristaltic pump, and dedicated polyethylene and silicone tubing
- Electronic water level measurement unit with accuracy of 0.01 ft
- Flow measurement device (containers graduated in milliliters) and stop watch
- Horiba U-52 water quality meter (or similar) with a flow-through cell, which includes probes for measurement of pH, reduction-oxidation potential, turbidity, dissolved oxygen, temperature, and conductivity
- Photoionization detector.

Each piece of equipment will be checked to be in proper working order before its use and calibrated as required by the manufacturer. Prior to each use, field analytical equipment probe(s) will be decontaminated. After each use, the instrument will be checked and stored in an area shielded from weather conditions.

The calibration of each instrument will be checked at the beginning of each day of groundwater sampling.

Groundwater Sampling Purge Method

The following procedures will be used for monitoring well groundwater sampling:

- Wear appropriate personal protective equipment as specified in the EA generic Health HASP and HASP Addendum (Appendix C). In addition, samplers will use new sampling gloves for the collection of each sample.
- Unlock and remove the well cap.
- Obtain photoionization detector readings and record them in the field logbook.
- Measure the static water level in the well with an electronic water level indicator. The water level indicator will be washed with Alconox detergent and water, then rinsed with deionized water between individual wells to prevent cross-contamination.

- Purge 3–5 well volumes of water from the well, or allow field parameters of pH, reduction-oxidation potential, dissolved oxygen, specific conductivity, and temperature to stabilize before sampling. Purging will be complete if the following conditions are met:

  — Consecutive pH readings are ±0.2 pH units of each other
  — Consecutive water temperatures are ±0.5°C of each other
  — Consecutive measured specific conductance is ±10 percent of each other.

- Use one of the methods described below for purging:

  — Bail with a dedicated, disposable polyethylene bailer.
  — Pump with a peristaltic pump at a rate of 0.25 liters per minute.

- If these parameters are not met after purging a volume equal to 3-5 times the volume of standing water in the well, the Project Manager will be contacted to determine the appropriate action(s):

  — If the well goes dry before the required volumes are removed, the well may be sampled when it recovers (recovery period up to 24 hours).

  — Obtain the sample from well with a bailer suspended on new, clean nylon twine. The sampling will be performed with a new bailer dedicated to each individual well.

  — Collect the sample aliquot for VOC analysis, first by lowering and raising the bailer slowly to avoid agitation and degassing, and then collect sample aliquots for the SVOC analysis, and carefully pour directly into the appropriate sample bottles. Sample bottles containing appropriate preservative for the parameter to be analyzed will be obtained from the laboratory.

  — Place the analytical samples in cooler and chill to 4°C. The samples will be shipped to the analytical laboratories within 24 hours.

  — If a peristaltic pump is used the polyethylene and silicone tubing will be properly discarded.

  — Re-lock well cap.

  — Fill out the field logbook, sample log sheet, labels, custody seals, and chain-of-custody forms.

Sample Analysis and Quality Control

Groundwater samples will be placed in appropriate sample containers, sealed, and submitted to the laboratory for analysis. The samples will be labeled, handled, and packaged following the procedures described in EA Generic Quality Assurance Project Plan (QAPP). QA/QC samples will be collected at the frequency detailed in the QAPP. Sample forms to be completed during groundwater sampling activities are included in Appendix E.

4.3.1.2 Monitoring Well Repairs, Replacement and Decommissioning

If biofouling or silt accumulation occurs in the onsite and/or offsite monitoring wells, the wells will be physically agitated/surged and redeveloped. Additionally, monitoring wells will be properly decommissioned, and replaced (as per the Monitoring Plan), if an event renders the wells unusable.

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

The NYSDEC will be notified prior to any repair or decommissioning of monitoring wells for the purpose of replacement, and the repair or decommissioning and replacement process will be documented in the subsequent periodic report. Well decommissioning without replacement will be done only with the prior approval of NYSDEC. Well abandonment will be performed in accordance with NYSDEC CP-43 Groundwater Monitoring Well Decommissioning Procedures (NYSDEC 2009). Monitoring wells that are decommissioned because they have been rendered unusable will be reinstalled in the nearest available location, unless otherwise approved by the NYSDEC.

4.4 MONITORING QUALITY ASSURANCE/QUALITY CONTROL

All sampling and analyses will be performed in accordance with the requirements of the EA Generic QAPP (EA 2011). Main components of the QAPP include:

- QA/QC objectives for data measurement
- Sampling Program:
  - — Sample containers will be properly washed, decontaminated, and appropriate preservative will be added (if applicable) prior to their use by the analytical laboratory. Containers with preservative will be tagged as such.
  - — Sample holding times will be in accordance with the NYSDEC Analytical Services Protocol requirements.

— Field QC samples (e.g., trip blanks, coded field duplicates, and matrix spike/matrix spike duplicates) will be collected as necessary.

- Sample tracking and custody
- Calibration procedures:

  — All field analytical equipment will be calibrated immediately prior to each day's use. Calibration procedures will conform to manufacturer's standard instructions.

  — The laboratory will follow all calibration procedures and schedules as specified in EPA SW-846 and subsequent updates that apply to the instruments used for the analytical methods.

- Analytical procedures
- Preparation of a Data Usability Summary Report, which will present the results of data validation, including a summary assessment of laboratory data packages, sample preservation, and chain-of-custody procedures, and a summary assessment of precision, accuracy, representativeness, comparability, and completeness for each analytical method
- Internal QC and checks
- QA performance and system audits
- Preventative maintenance procedures and schedules
- Corrective action measures
- QA/QC for field procedures involve collection and analysis of an adequate number of trip blanks, equipment blanks, and duplicate samples. Trip blanks are used to test cleaning procedures for sample containers, and laboratory glassware as well as for determining the purity of reagents. Equipment blanks test the effectiveness of field cleaning procedures for sampling equipment. Duplicate samples provide a check for variability caused by the method of sample collection and laboratory performance and are an important element of laboratory QA/QC.
- Duplicate samples will be collected by filling separate sample containers in immediate succession, without shutting off the pump. Duplicate samples will not be identified as duplicates when sending them to the laboratory, as this will provide a check on the quality of the laboratory analyses. However, field notes will specify the special sample number of the duplicate. One duplicate sample is collected per every 20 samples of that media collected. When analyzing VOCs, the laboratory that prepares pre-cleaned sample containers will be requested to fill one VOC bottle set with organic-free water, using the

same source of water used in laboratory operations. Trip blanks will be carried to the site and returned unopened to the laboratory for analysis with the other samples. One trip blank per shipment of VOCs will be implemented.

- If non-dedicated sampling equipment is required, equipment blanks will be obtained for groundwater samples collected with portable sampling equipment. All sampling equipment will be cleaned following standard procedures used between wells before collecting the equipment blank. One equipment blank per sampling event will be completed.

- Equipment used to measure pH, conductivity, and temperature in the field will be calibrated prior to field use. Equipment calibration will be as per the manufacturer's recommendation and will be recorded as being performed in the logbook.

- The laboratory performing the analyses for the groundwater monitoring program will have a laboratory QA/QC plan that will provide the use of standards, laboratory blanks, duplicates, and spiked samples for calibration.

4.5 MONITORING REPORTING REQUIREMENTS

Forms and any other information generated during regular monitoring events and inspections will be kept on file. 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 5.3 of this SMP.

All monitoring results will be reported to NYSDEC in the Annual Periodic Review Report. The report will include, at a minimum:

- Date of event

- Personnel conducting sampling

- Description of the activities performed

- Type of samples collected (e.g., groundwater, surface water, sediment)

- Copies of all field forms completed (e.g., inspection forms, well sampling logs, chain-of-custody documentation, etc.)

- Sampling results in comparison to appropriate standards/criteria

- A figure illustrating sample type and sampling locations

- Copies of all laboratory data sheets and the required laboratory data deliverables required for all points sampled (to be submitted electronically in the NYSDEC-identified format)

- Any observations, conclusions, or recommendations

- A determination as to whether groundwater conditions have changed since the last reporting event.

Data will be reported in hard copy or digital format as determined by NYSDEC.

4.6 OPERATION AND MAINTENANCE PLAN

The site remedy does not rely on any mechanical systems, such as groundwater treatment systems, 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.

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5. INSPECTIONS, REPORTING AND CERTIFICATIONS

5.1 SITE INSPECTIONS

5.1.1 Inspection Frequency

All inspections will be conducted at the frequency specified in the schedules provided in Section 3 and Section 4 of this SMP. At a minimum, a site-wide inspection will be conducted annually. Inspections of remedial components will also be conducted when a breakdown of any treatment system component has occurred or whenever a severe condition has taken place, such as an erosion or flooding event that may affect the ECs.

5.1.2 Inspection Forms, Sampling Data, and Maintenance Reports

All inspections and monitoring events will be recorded on the appropriate forms contained in Appendix E. These forms are subject to NYSDEC revision.

All applicable inspection forms and other records, including all media sampling data and system maintenance reports, generated for the site during the reporting period will be provided in electronic format in the Periodic Review Report.

5.1.3 Evaluation of Records and Reporting

The results of the inspection and site monitoring data will be evaluated as part of the EC/IC certification to confirm:

- 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 Remedial Action Report (NYSDEC 2008).

5.2 CERTIFICATION OF ENGINEERING AND INSTITUTIONAL CONTROLS

After the last inspection of the reporting period, a Professional Engineer licensed to practice in New York State will prepare the following certification:

- For each IC/EC identified for the site, I certify that all of the following statements are true:

  — The inspection of the Site to confirm the effectiveness of the IC/ECs required by the remedial program was performed under my direction.

  — The IC and/or EC employed at this Site is unchanged from the date the control was put in place, or last approved by the Department.

  — Nothing has occurred that would impair the ability of the control to protect the public health and environment.

  — Nothing has occurred that would constitute a violation or failure to comply with any site management plan for this control.

  — Access to the Site will continue to be provided to the Department to evaluate the remedy, including access to evaluate the continued maintenance of this control.

  — If a financial assurance mechanism is required under the oversight document for the site, the mechanism remains valid and sufficient for the intended purpose under the document.

  — Use of the Site is compliant with the Environmental Notice.

  — The EC systems are performing as designed and are effective.

  — To the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the Site remedial program and generally accepted engineering practices.

  — The information presented in this report is accurate and complete.

  — I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class “A” misdemeanor, pursuant to Section 210.45 of the Penal Law. I, [name], of [business address], am certifying as [Owner or Owner’s Designated Site Representative] (and if the site consists of multiple properties): [I have been authorized and designated by all site owners to sign this certification] for the site.

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

If the remedy requires only an institutional control, include the following:

- For each IC identified for the Site, I certify that all of the following statements are true:

  — The IC employed at this Site is unchanged from the date the control was put in place, or last approved by the Department.

  — Nothing has occurred that would impair the ability of the control to protect the public health and environment.

  — Nothing has occurred that would constitute a violation or failure to comply with any site management plan for this control.

  — Access to the site will continue to be provided to the Department to evaluate the remedy, including access to evaluate the continued maintenance of this control.

  — If a financial assurance mechanism is required under the oversight document for the site, the mechanism remains valid and sufficient for the intended purpose under the document.

  — Use of the Site is compliant with the Environmental Notice.

  — The information presented in this report is accurate and complete.

  — I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law. I, [name], of [business address], am certifying as [Owner or Owner's Designated Site Representative] (and if the site consists of multiple properties): [and I have been authorized and designated by all site owners to sign this certification] for the site.

Every 5 years the following certification will be added:

- The assumptions made in the qualitative exposure assessment remain valid.

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

5.3 PERIODIC REVIEW REPORT

A Periodic Review Report will be submitted to the Department annually. In the event that the Site is subdivided into separate parcels with different ownership, a single Periodic Review Report will be prepared that addresses the site described in Appendix A. The report will be

prepared in accordance with NYSDEC DER-10, and submitted within 45 days of the end of each certification period. Media sampling results will also incorporated into the Periodic Review Report.

The report will include:

- Identification, assessment and certification of all ECs/ICs required by the remedy for the site.
- Results of the required annual site inspections and severe condition inspections, if applicable.
- All applicable inspection forms and other records generated for the site during the reporting period in electronic format.
- A summary of any discharge monitoring data and/or information generated during the reporting period with comments and conclusions.
- Data summary tables and graphical representations of contaminants of concern by media (e.g., groundwater, soil vapor), which include a listing of all compounds analyzed, along with the applicable standards, with all exceedances highlighted. These will include a presentation of past data as part of an evaluation of contaminant concentration trends
- Results of all analyses, copies of all laboratory data sheets, and the required laboratory data deliverables for all samples collected during the reporting period will be submitted electronically in a NYSDEC-approved format.
- A site evaluation, which includes the following:
    - The compliance of the remedy with the requirements of the site-specific Remedial Action Work Plan, ROD, or Decision Document.
    - The operation and the effectiveness of all treatment units, etc., including identification of any needed repairs or modifications.
    - Any new conclusions or observations regarding site contamination based on inspections or data generated by the Monitoring Plan for the media being monitored.
    - Recommendations regarding any necessary changes to the remedy and/or Monitoring Plan.
    - The overall performance and effectiveness of the remedy.

The Periodic Review Report will be submitted, in hard-copy format, to the NYSDEC Central Office and Region 9 Office, and in electronic format to NYSDEC Central Office, Region 9 Office, and the NYS Department of Health Bureau of Environmental Exposure Investigation.

5.4 CORRECTIVE MEASURES PLAN

If any component of the remedy is found to have failed, or if the periodic certification cannot be provided due to the failure of an IC/EC, a corrective measures plan will be submitted to the NYSDEC for approval. This plan will explain the failure, and provide the details and schedule for performing work necessary to correct the failure. Unless an emergency condition exists, no work will be performed pursuant to the corrective measures plan until it is approved by the NYSDEC.

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6. REFERENCES

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Figures

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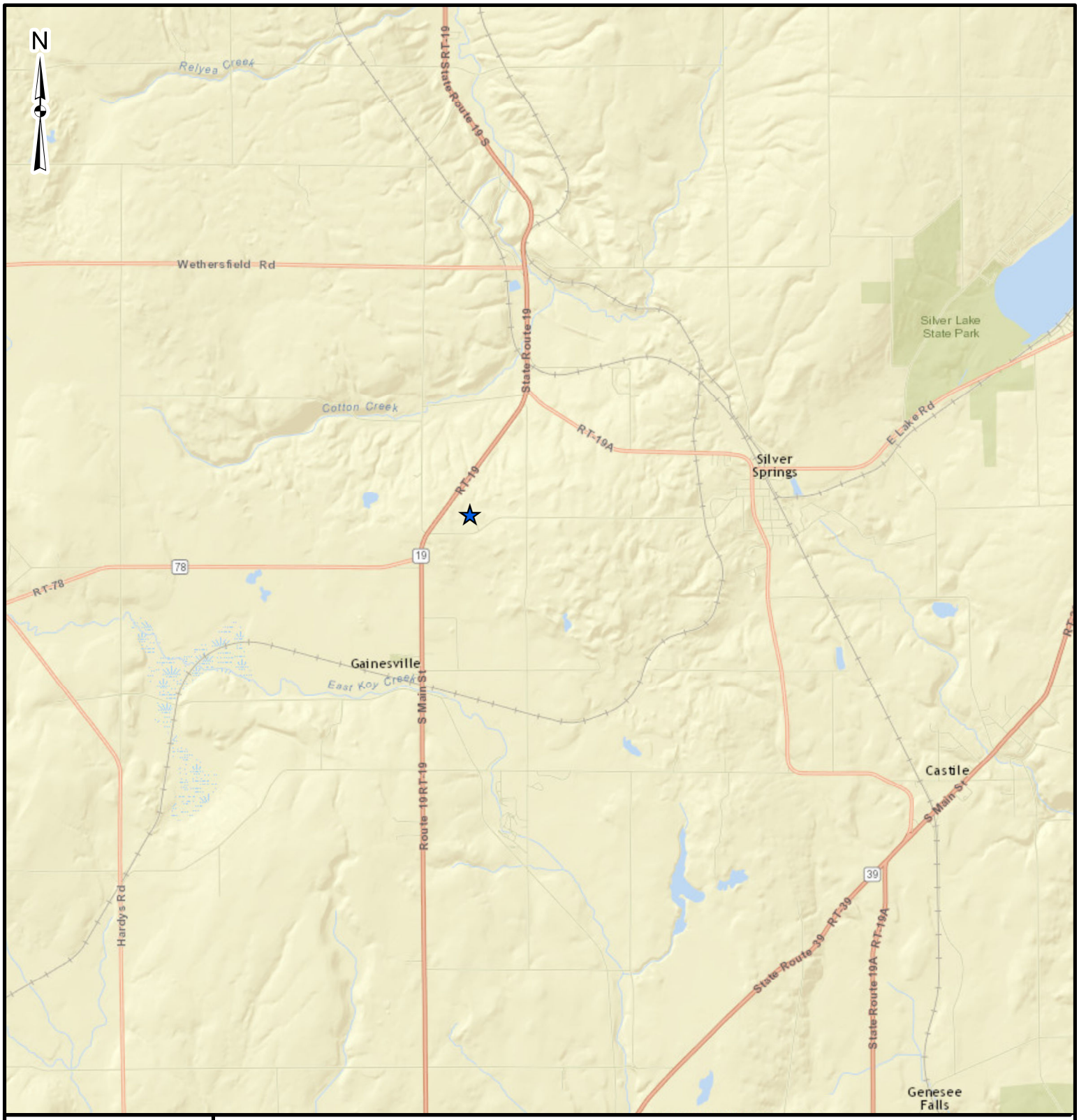

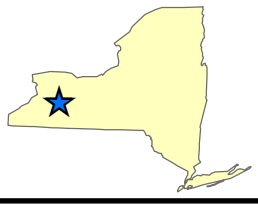

Legend

★ ETE Sanitation and Landfill Location

Miles

0 0.5 1 2

1 in = 1 miles

Service Layer Credits: Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, MapmyIndia, © OpenStreetMap contributors, and the GIS

NEW YORK STATE OF OPPORTUNITY Department of Environmental Conservation

ETE SANITATION AND LANDFILL
(SITE NO. 961005)
GAINESVILLE, NEW YORK

FIGURE 1
SITE LOCATION

PROJECT MGR:	DESIGNED BY:	CREATED BY:	CHECKED BY:	SCALE:	DATE:	PROJECT NO:	FILE NO:
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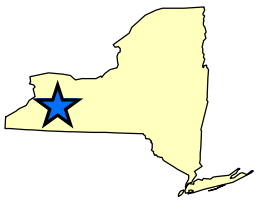

Legend

Site Boundary

Feet
0 150 300 600
1 in = 300 feet

Source: NYSDEC Region 9, 2008. Remedial Action Report. Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

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ETE SANITATION AND LANDFILL
(SITE NO. 961005)
GAINESVILLE, NEW YORK

FIGURE 2
SITE LAYOUT

PROJECT MGR:	DESIGNED BY:	CREATED BY:	CHECKED BY:	SCALE:	DATE:	PROJECT NO:	FILE NO:
CJS	CJS	ALK	JCH	AS SHOWN	NOVEMBER 2015	14907.27	GIS\FIGURES\14907.27 ETE\GIS\MXDs

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South

North

ELEVATION
(Feet above mean sea level)

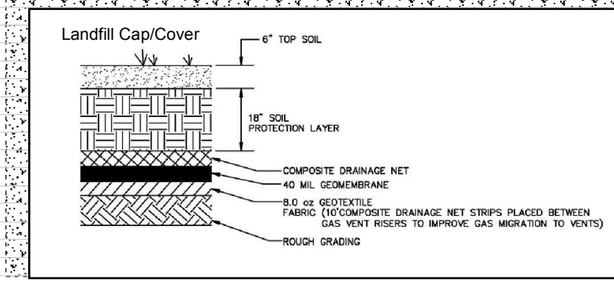
1690
1670
1650
1630
1610
1590
1570
1550

PZ-1
PZ-2
MW-2D
MW-2S
SB-2/PZ-4
PZ-3
MW-8S
MW-8D
MW-9S
MW-9D
MW-7D
MW-7S

Former South Pond

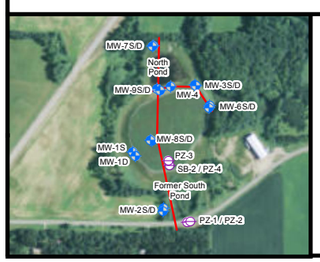
North Pond

Landfill Cap/Cover



Ft AMSL

Note: Piezometers and MW-8S/D were abandoned during Remedial Action



Legend

- Landfill Cap / Cover
- Former South Pond
- Monitoring Well
- Well Screen
- Groundwater Elevation January 2015
- Surface Water
- Consolidated Waste
- Coarse-Grained Till (Poorly Sorted Gravelly / Sandy / Clayey Silt)
- Gravel with Silt/Clay Matrix
- Fine-Grained Till (Sandy Silt to Silty Sand)
- Sand to Sand and Gravel

ETE SANITATION AND LANDFILL
(SITE NO. 961005)
GAINESVILLE, NEW YORK

FIGURE 3
CROSS SECTION

Feet
0 55 110 220
1 inch = 110 feet

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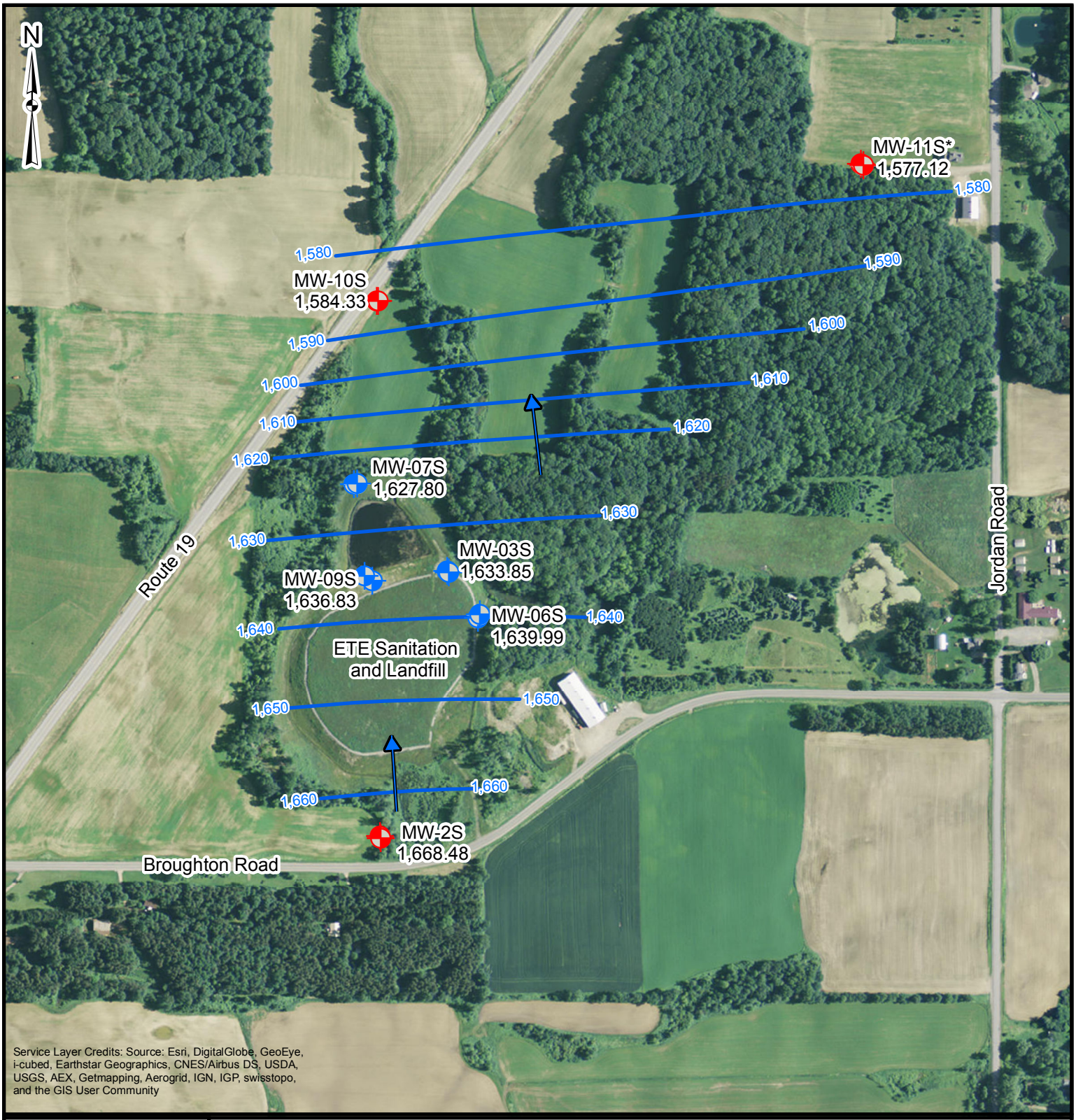

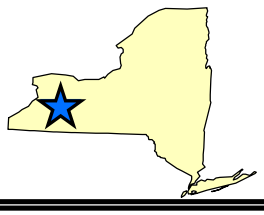

Offsite Groundwater Monitoring Well

Onsite Groundwater Monitoring Well

Inferred Groundwater Contour (ft AMSL)

Groundwater Flow Direction

1 in = 500 feet

0 250 500 1,000 Feet

* MW-11S Gauged in January 2015

NEW YORK STATE OF OPPORTUNITY Department of Environmental Conservation

ETE SANITATION AND LANDFILL
(SITE NO. 961005)
GAINESVILLE, NEW YORK

FIGURE 4
SHALLOW GROUNDWATER
CONTOURS (DECEMBER 2014)

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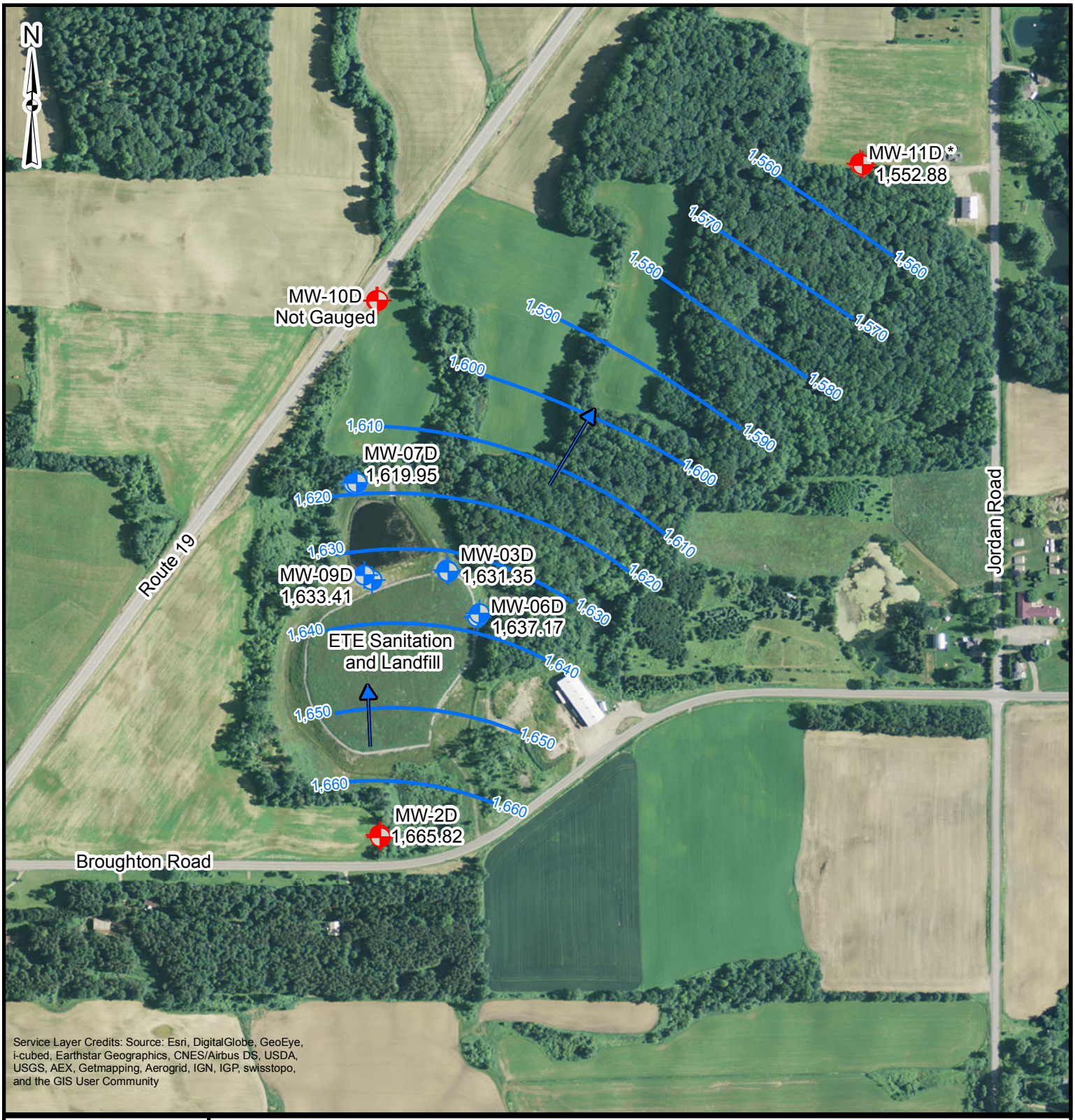

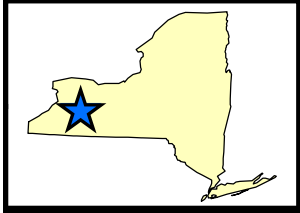

Offsite Groundwater Monitoring Well

Onsite Groundwater Monitoring Well

Inferred Groundwater Contour (ft AMSL)

Groundwater Flow Direction

1 in = 500 feet

0 250 500 1,000 Feet

* MW-11D Gauged in January 2015

NEW YORK STATE OF OPPORTUNITY Department of Environmental Conservation

ETE SANITATION AND LANDFILL
(SITE NO. 961005)
GAINESVILLE, NEW YORK

FIGURE 5
DEEP GROUNDWATER
CONTOURS (DECEMBER 2014)

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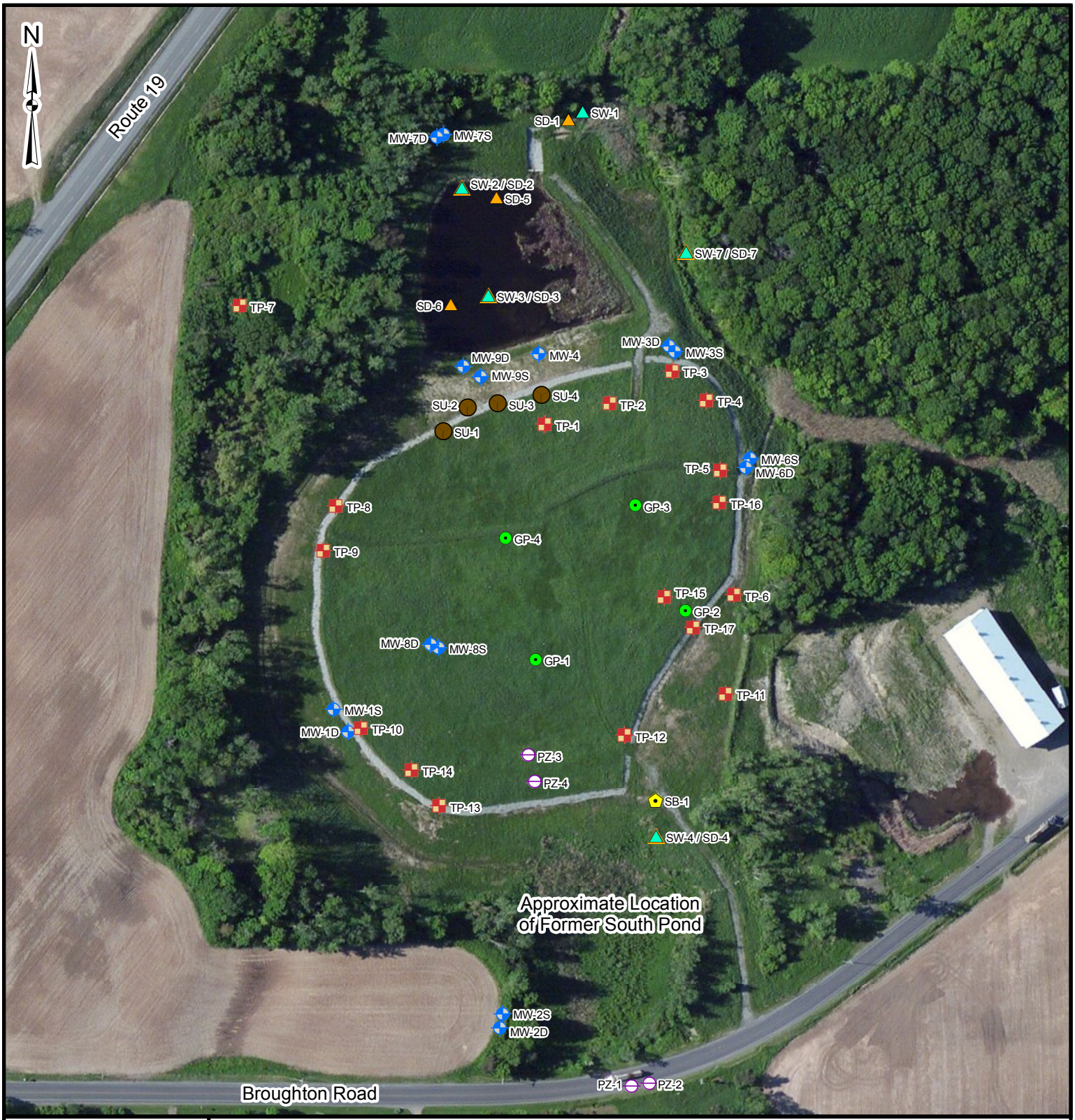

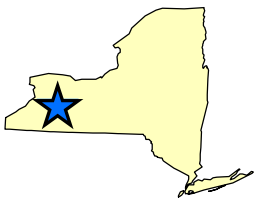

Monitoring Well | Soil Boring | Surface Water
Piezometer | Soil Gas | Test Pit
Sediment | Surface Soil

Feet
0 100 200 400
1 in = 200 feet

Source: CDM 1998. Final Remedial Investigation Report. Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

NEW YORK STATE OF OPPORTUNITY Department of Environmental Conservation

ETE SANITATION AND LANDFILL
(SITE NO. 961005)
GAINESVILLE, NEW YORK

FIGURE 6
RI SAMPLING LOCATIONS

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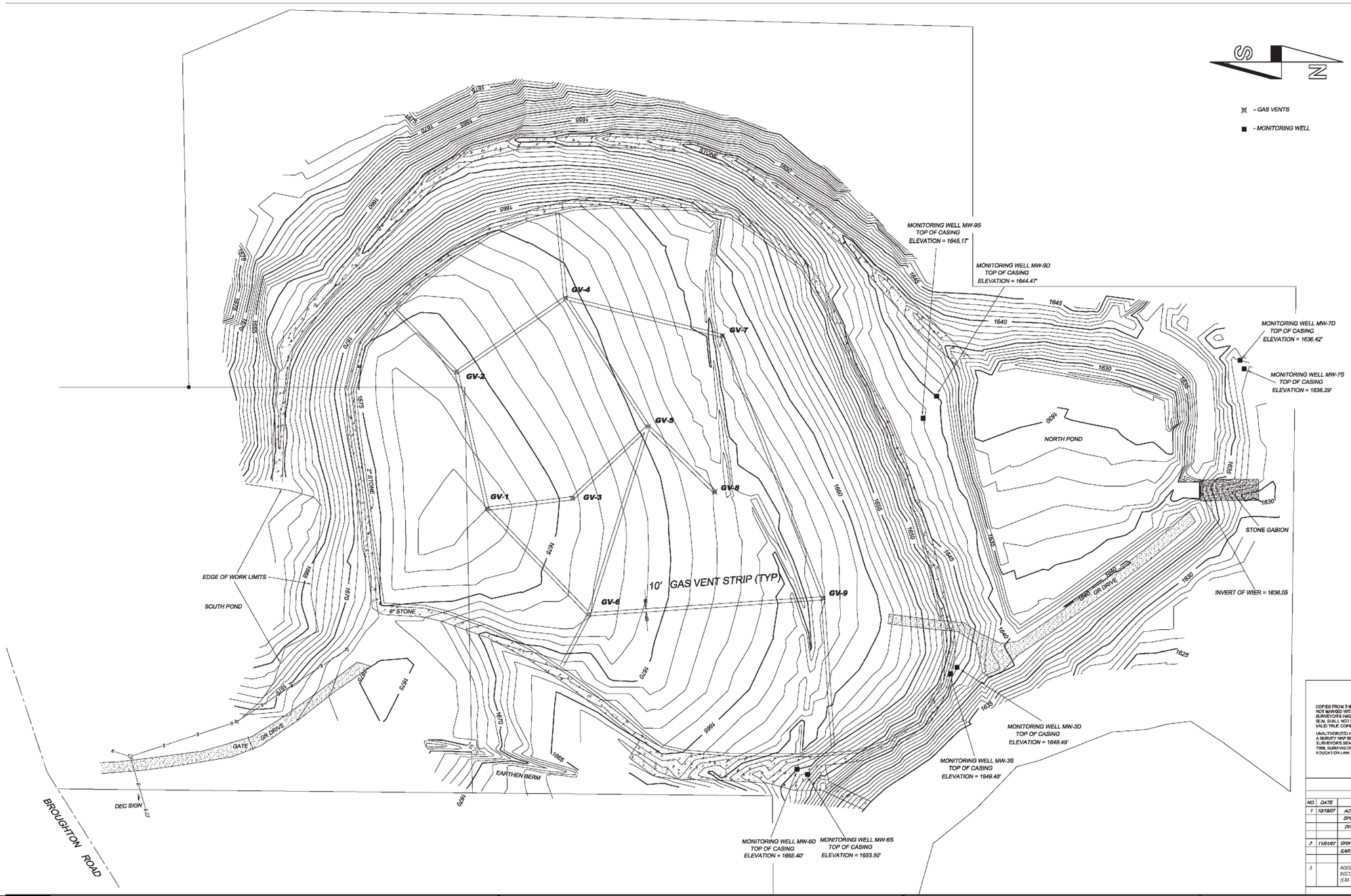

COPIES FROM THE ORIGINAL OF THIS SURVEY NOT MARKED WITH AN ORIGINAL OF THE LAND SURVEYOR'S INKED SEAL OR HIS EMBOSSED SEAL SHALL NOT BE CONSIDERED TO BE VALID TRUE COPIES.

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

REVISIONS		
NO.	DATE	DESCRIPTION
1	10/18/07	ACCESS ROADWAY, STONE SPILLWAY AND STONE IN WEST DITCH ADDED
2	11/01/07	GRAVEL ROADWAY TO SPILLWAY, EARTHEN BERM ADDED
3		ADDED GAS VENT IDs AND INSTALLED VENT STRIPS (EM - NYSDEC)

Figure reproduced from Remedial Action Report - Volume 2 Appendices.
ETE Sanitation and Landfill Site State Superfund Remediation
NYSDEC Site No. 9-61-005.
Asbuilt Survey Sheet GB-3. July 2008.

ETE SANITATION AND LANDFILL
(SITE NO. 961005)
GAINESVILLE, NEW YORK

FIGURE 7
LANDFILL
POST-REMEDIAL ACTION

PROJECT MGR:	DESIGNED BY:	CREATED BY:	CHECKED BY:	SCALE:	DATE:	PROJECT NO:	FILE NO:
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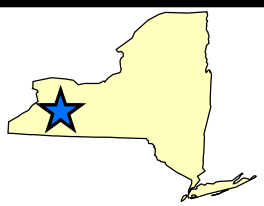

GasVents

10ft Gas Vent Strip

Feet
0 100 200 400
1 in = 200 feet

Source: NYSDEC Region 9, 1998. Remedial Action Report. Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

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ETE SANITATION AND LANDFILL
(SITE NO. 961005)
GAINESVILLE, NEW YORK

FIGURE 8
GAS VENT LOCATIONS

PROJECT MGR:	DESIGNED BY:	CREATED BY:	CHECKED BY:	SCALE:	DATE:	PROJECT NO:	FILE NO:
CJS	CJS	ALK	JCH	AS SHOWN	NOVEMBER 2015	14907.27	GIS\FIGURES\14907.27 ETE\GIS\MXDs

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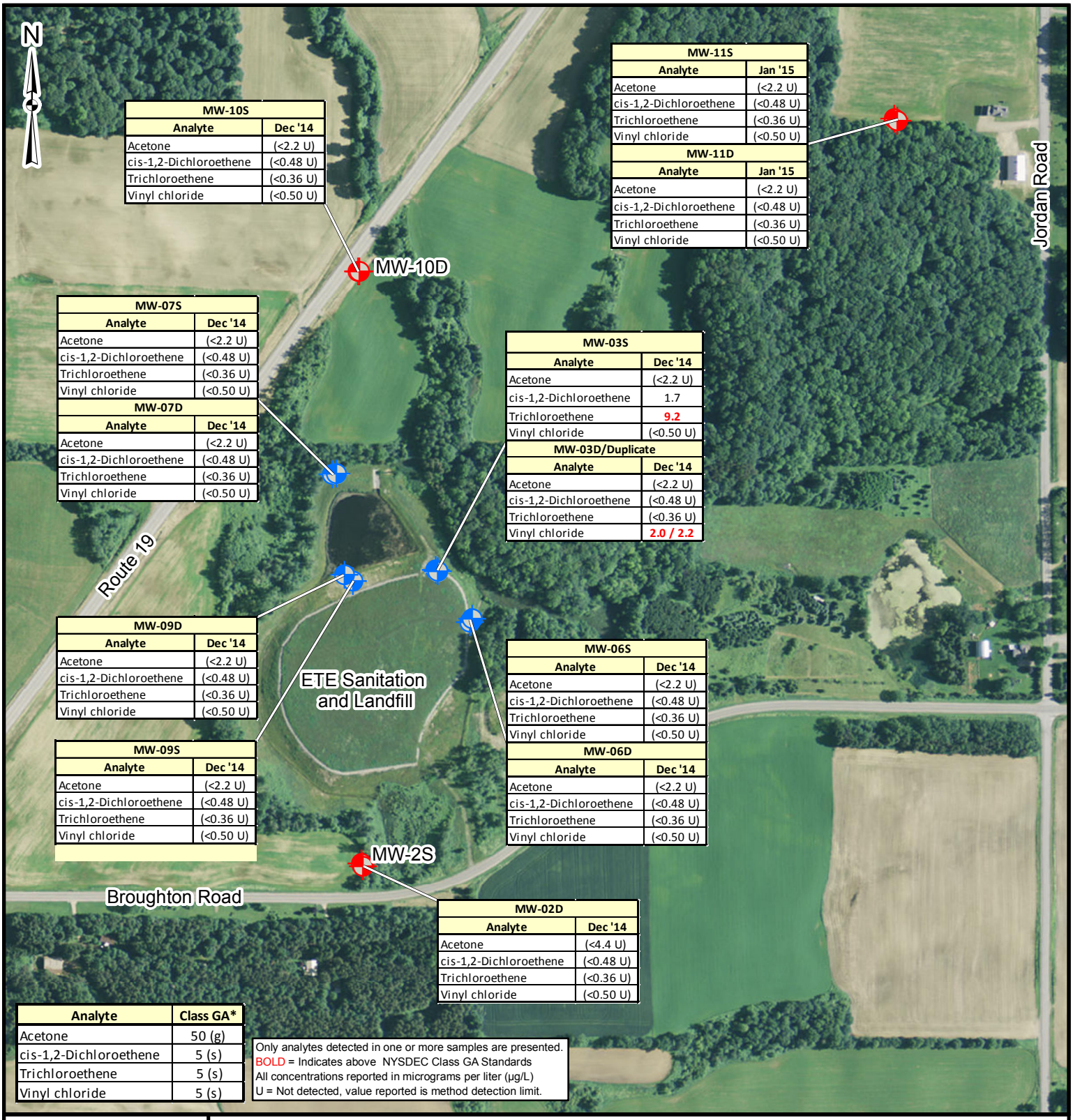

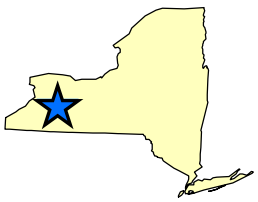

Offsite Groundwater Monitoring Well

Onsite Groundwater Monitoring Well

Feet
0 225 450 900
1 in = 450 feet

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

NEW YORK STATE OF OPPORTUNITY Department of Environmental Conservation

ETE SANITATION AND LANDFILL
(SITE NO. 961005)
GAINESVILLE, NEW YORK

FIGURE 9
GROUNDWATER VOC
ANALYTICAL RESULTS

PROJECT MGR:	DESIGNED BY:	CREATED BY:	CHECKED BY:	SCALE:	DATE:	PROJECT NO:	FILE NO:
CJS	CJS	CJS	JCH	AS SHOWN	NOVEMBER 2015	14907.27	GIS\FIGURES\14907.27 ETE\GIS\MXDs

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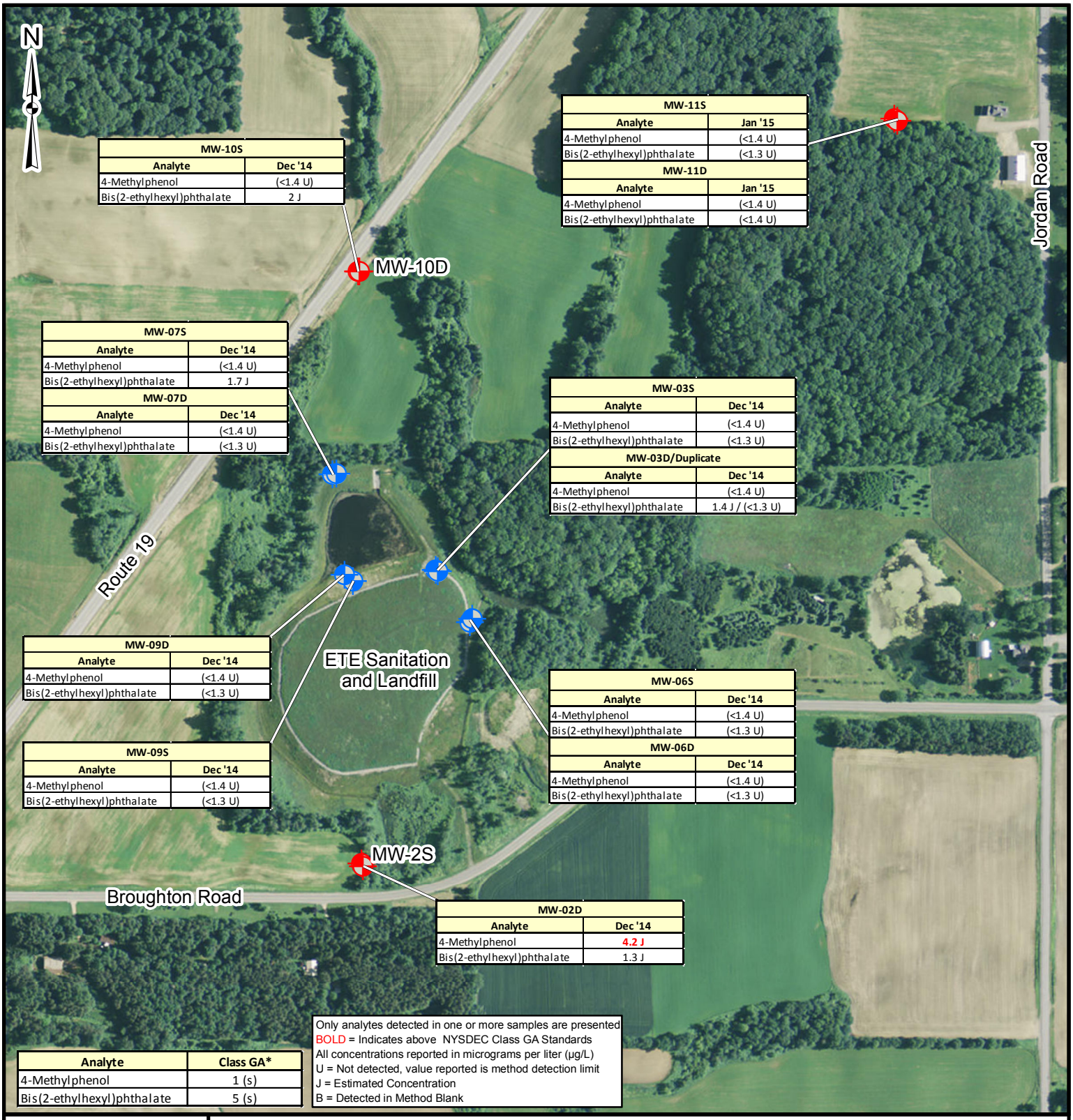

NEW YORK STATE OF OPPORTUNITY Department of Environmental Conservation

ETE SANITATION AND LANDFILL (SITE NO. 961005) GAINESVILLE, NEW YORK

FIGURE 10 GROUNDWATER SVOC ANALYTICAL RESULTS

PROJECT MGR:	DESIGNED BY:	CREATED BY:	CHECKED BY:	SCALE:	DATE:	PROJECT NO:	FILE NO:
CJS	CJS	CJS	JCH	AS SHOWN	NOVEMBER 2015	14907.27	GIS\FIGURES\14907.27 ETE\GIS\MXDs

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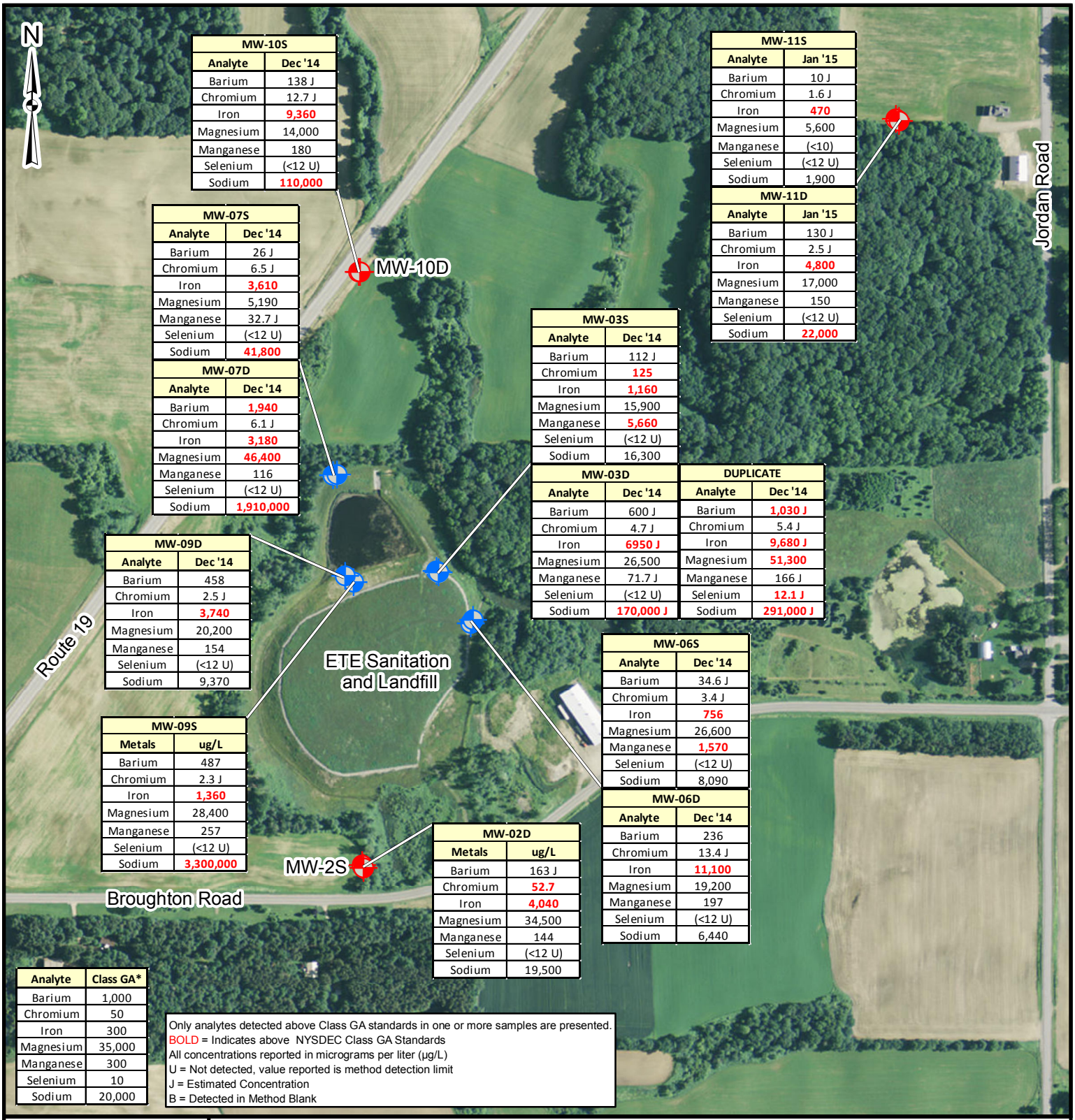

NEW YORK STATE OF OPPORTUNITY Department of Environmental Conservation

ETE SANITATION AND LANDFILL
(SITE NO. 961005)
GAINESVILLE, NEW YORK

FIGURE 11
GROUNDWATER METALS
ANALYTICAL RESULTS

PROJECT MGR:	DESIGNED BY:	CREATED BY:	CHECKED BY:	SCALE:	DATE:	PROJECT NO:	FILE NO:
CJS	CJS	CJS	JCH	AS SHOWN	NOVEMBER 2015	14907.27	GIS\FIGURES\14907.27 ETE\GIS\MXDs

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Tables

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Table 1 Notifications Contact List

Name	Contact Information
David Chiusano Project Manager	Division of Environmental Remediation Bureau E, Section A 625 Broadway, Albany, New York 12233-7017 518-402-9814 david.chiusano@dec.ny.gov
Eugene Melnyk, PE Remediation Engineer Region 9 Project Manager	270 Michigan Avenue Buffalo, New York 14203 716-851-7220 eugene.melnyk@dec.ny.gov
Note: Notifications are subject to change and will be updated as necessary.	

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Table 2 Remedial investigation Leachate Seep Surface Soil Analytical Results (March 1998)

Parameter List	SU-1	SU-1 (DUP)	SU-2	SU-3	SU-4	NYSDEC Rec. Soil Cleanup Objectives NYSDEC, TAGM 4046 [a]	6 NYCRR Part 375 Soil Cleanup Objectives - Unrestricted Use	6 NYCRR Part 375 Soil Cleanup Objectives - Restricted Use - Commercial
TCL Volatiles								
Acetone	0.118	0.109 J	0.116	0.018 J	0.011 J	0.2	---	500
2-Butanone	<0.033 U	<0.03 U	0.121	<0.013 U	<0.024 U	0.3	---	---
1,2-Dichloropropane	0.038 J	<0.01 U	<0.01 U	<0.01 U	<0.01 U	---	---	---
1,2-Trichloroethane	<0.01 U	0.061 J	<0.01 U	<0.01 U	<0.01 U	---	---	---
4-Metbyl-2-Pentanone	<0.033 U	<0.03 U	0.0095 J	<0.013 U	<0.024 U	1.0	---	---
Ethylbenzene	0.43 DJ	0.31 J	<0.015 U	0.048	<0.024 U	5.5	1	390
Xylenes(total)	**1.206 DJ**	**1.224 J**	<0.015 U	0.111 J	<0.024 U	1.2	0.26	500
TCL Semivolatile								
Di-n-butyl phthalate	<1.1 U	0.35 J	0.11 J	0.05 J	0.12 J	8.1	---	---
Flouranthene	<1.1 U	<0.97 U	0.5 J	<0.41 U	<0.79 U	---	100	500
bis(2-Ethylhexyl)phthalate	1.29	1.9	11.15 D	<0.41 U	<0.79 U	50	---	---
Di-n-octylphthalate	0.4 J	<0.97 U	<0.49 U	<0.41 U	<0.79 U	50	---	---
TCL Inorganics								
Aluminum	**35,114.67**	22,285.55	2,887.7	7,812.25	14,017.7	33,000 [b]	---	---
Antimony	2.49 B	<1.7 U	3.16 B	<0.72 U	1.9 B	---	---	---
Arsenic	**13.53**	**7.69**	**7.53**	5.12	**16.28**	8	13	16
Barium	248.35	251.38	95.74	15.37 B	**4,118.56**	300	350	400
Beryllium	**0.87 B**	<0.58 U	**0.37 B**	<0.24 U	**0.81 B**	0.16	7.2	590
Cadmium	1.69 B	0.91 B	<0.29 U	0.25 B	<0.46 U	10	2.5	9.3
Calcium	**39,512.67**	**88,542.8**	**45,410.4**	22,048.25	10,592.82	130- 35,000 [b]	---	---
Chromium	41.29	39.66	12.77	12.7	22.41	50	30	1,500
Cobalt	23.94 B	12.2 B	4.69 B	5.46 B	77.24	30	---	---
Copper	**165.82**	**146.02**	17.38	**39.94**	**46.7**	25	50	270
Iron	**120,260**	**126,366**	**111,313**	**22,922**	**55,842.1**	2,000.00	---	---
Lead	156.29	153.76	17.54	33.6	24.92	400 [c]	63	1,000
Magnesium	**6,071.2**	3,380.06	3,620.74	**6,878**	4,706.03	100- 5,000 [b]	---	---
Manganese	1,028.07	1,369.32	2,548.36	407.78	**42,076.2**	50- 5,000 [b]	1,600	10,000
Mercury	<0.32 U	<0.3 U	<0.13 U	<0.12 U	<0.24 U	0.10	30	2.8
Nickel	**60.81**	**39.33**	**15.16**	**18.72**	**56.31**	13	---	310
Potassium	3123.07 B	1424.01 B	1194.16 B	1242.6 B	2,495.6	8,500- 43,000 [b]	---	---
Selenium	<2.6 U	<2.3 U	<1.2 U	<0.96 U	**23.08**	2	3.9	1,500
Silver	7.57	1.81 B	<0.29 U	<0.24 U	1.33 B	---	2	1,500
Sodium	**17,538.67**	**16,104.4**	4.7	1,302.13	**8,405.74**	6,000 - 8,000	---	---
Thallium	<32 U	<2.9 U	1.48 B	<1.2 U	<2.3 U	---	---	---
Vandium	37.62	17.5 B	15.9	16.56	29.73	150	---	---
Zinc	**1,888.93**	**1,024.07**	**99.61**	**81.55**	**128.84**	20	109	10,000
Cyanide	<0.83 U	<0.72 U	<0.37 U	<0.31 U	<0.6 U	Site specific	27	27

All units are in milligrams per kilogram (mg/kg)

a) NYSDEC, TAGM #4046, "Determination of Soil Cleanup Objectives and Cleanup Levels", 24 January 1994.

b) Natural range of soils for eastern United States, McGovern, NYSDEC, 1984 as given in TAGM #4046.

c) USEPA's Interim Lead Hazard Guidance for residential screening levels.

NOTE: B = The reported value was obtained from a reading that was less than the Contract Required Detection Limit, but equal or greater to the instrument detection limit.
U = Not detected above the associated method detection limit.
J = The value reported is an estimated concentration.
Concentration values in **bold** indicate the concentration was above the NYSDEC Rec. Soil Cleanup Objectives, NYSDEC, TAGM 4046
Concentration values in **bold and highlighted** indicate the concentration was above the 6 NYCRR Part 375 Soil Cleanup Objectives - Restricted Use (Commercial).
All data is reproduced from "ETE Sanitation and Landfill - Final Remedial Investigation Report" October 1998.

Table 2 Remedial Investigation Leachate Seep Surface Soil Analytical Results
(March 1998)

Parameter List	SU-1	SU-1 (DUP)	SU-2	SU-3	SU-4	NYSDEC Rec. Soil Cleanup Objectives NYSDEC, TAGM 4046 [a]	6 NYCRR Part 375 Soil Cleanup Objectives - Unrestricted Use	6 NYCRR Part 375 Soil Cleanup Objectives - Restricted Use - Commercial
TCL Volatiles								
Acetone	0.118	0.109 J	0.116	0.018 J	0.011 J	0.2	---	500
2-Butanone	<0.033 U	<0.03 U	0.121	<0.013 U	<0.024 U	0.3	---	---
1,2-Dichloropropane	0.038 J	<0.01 U	<0.01 U	<0.01 U	<0.01 U	---	---	---
1,2-Trichloroethane	<0.01 U	0.061 J	<0.01 U	<0.01 U	<0.01 U	---	---	---
4-Metbyl-2-Pentanone	<0.033 U	<0.03 U	0.0095 J	<0.013 U	<0.024 U	1.0	---	---
Ethylbenzene	0.43 DJ	0.31 J	<0.015 U	0.048	<0.024 U	5.5	1	390
Xylenes(total)	**1.206 DJ**	**1.224 J**	<0.015 U	0.111 J	<0.024 U	1.2	0.26	500
TCL Semivolatiles								
Di-n-butylphthalate	<1.1 U	0.35 J	0.11 J	0.05 J	0.12 J	8.1	---	---
Flouranthene	<1.1 U	<0.97 U	0.5 J	<0.41 U	<0.79 U	---	100	500
bis(2-Ethylhexyl)phthalate	1.29	1.9	11.15 D	<0.41 U	<0.79 U	50	---	---
Di-n-octylphthalate	0.4 J	<0.97 U	<0.49 U	<0.41 U	<0.79 U	50	---	---

All units are in milligrams per kilogram (mg/kg)

a) NYSDEC, TAGM #4046, "Determination of Soil Cleanup Objectives and Cleanup Levels", 24 January 1994.

NOTE: B = The reported value was obtained from a reading that was less than the Contract Required Detection Limit, but equal or greater to the instrument detection limit.
U = Not detected above the associated method detection limit.
J = The value reported is an estimated concentration.
Concentration values in **bold** indicate the concentration was above the NYSDEC Rec. Soil Cleanup ObjectivesNYSDEC, TAGM 4046
Concentration values in **bold and highlighted** indicate the concentration was above the 6 NYCRR Part 375 Soil Cleanup Objectives - Restricted Use (Commercial).

Table 2 Remedial Investigation Leachate Seep Surface Soil Analytical Results
(March 1998)

Parameter List	SU-1	SU-1 (DUP)	SU-2	SU-3	SU-4	NYSDEC Rec. Soil Cleanup Objectives NYSDEC, TAGM 4046 [a]	6 NYCRR Part 375 Soil Cleanup Objectives - Unrestricted Use	6 NYCRR Part 375 Soil Cleanup Objectives - Restricted Use - Commercial
TCL Inorganics								
Aluminum	**35,114.67**	22,285.55	2,887.7	7,812.25	14,017.7	33,000 [b]	---	---
Antimony	2.49 B	<1.7 U	3.16 B	<0.72 U	1.9 B	---	---	---
Arsenic	**13.53**	**7.69**	**7.53**	5.12	**16.28**	8	13	16
Barium	248.35	251.38	95.74	15.37 B	**4,118.56**	300	350	400
Beryllium	**0.87 B**	<0.58 U	**0.37 B**	<0.24 U	**0.81 B**	0.16	7.2	590
Cadmium	1.69 B	0.91 B	<0.29 U	0.25 B	<0.46 U	10	2.5	9.3
Calcium	**39,512.67**	**88,542.8**	**45,410.4**	22,048.25	10,592.82	130- 35,000 [b]	---	---
Chromium	41.29	39.66	12.77	12.7	22.41	50	30	1,500
Cobalt	23.94 B	12.2 B	4.69 B	5.46 B	77.24	30	---	---
Copper	**165.82**	**146.02**	17.38	**39.94**	**46.7**	25	50	270
Iron	**120,260**	**126,366**	**111,313**	**22,922**	**55,842.1**	2,000.00	---	---
Lead	156.29	153.76	17.54	33.6	24.92	400 [c]	63	1,000
Magnesium	**6,071.2**	3,380.06	3,620.74	**6,878**	4,706.03	100- 5,000 [b]	---	---
Manganese	1,028.07	1,369.32	2,548.36	407.78	**42,076.2**	50- 5,000 [b]	1,600	10,000
Mercury	<0.32 U	<0.3 U	<0.13 U	<0.12 U	<0.24 U	0.10	30	2.8
Nickel	**60.81**	**39.33**	**15.16**	**18.72**	**56.31**	13	---	310
Potassium	3123.07 B	1424.01 B	1194.16 B	1242.6 B	2,495.6	8,500- 43,000 [b]	---	---
Selenium	<2.6 U	<2.3 U	<1.2 U	<0.96 U	**23.08**	2	3.9	1,500
Silver	7.57	1.81 B	<0.29 U	<0.24 U	1.33 B	---	2	1,500
Sodium	**17,538.67**	**16,104.4**	4.7	1,302.13	**8,405.74**	6,000 - 8,000	---	---
Thallium	<32 U	<2.9 U	1.48 B	<1.2 U	<2.3 U	---	---	---
Vandium	37.62	17.5 B	15.9	16.56	29.73	150	---	---
Zinc	**1,888.93**	**1,024.07**	**99.61**	**81.55**	**128.84**	20	109	10,000
Cyanide	<0.83 U	<0.72 U	<0.37 U	<0.31 U	<0.6 U	Site specific	27	27

All units are in milligrams per kilogram (mg/kg)

a) NYSDEC, TAGM #4046, "Determination of Soil Cleanup Objectives and Cleanup Levels", 24 January 1994.

b) Natural range of soils for eastern United States, McGovern, NYSDEC, 1984 as given in TAGM #4046.

c) USEPA's Interim Lead Hazard Guidance for residential screening levels.

NOTE: B = The reported value was obtained from a reading that was less than the Contract Required Detection Limit, but equal or greater to the instrument detection limit.

U = Not detected above the associated method detection limit.

Concentration values in **bold** indicate the concentration was above the NYSDEC Rec. Soil Cleanup ObjectivesNYSDEC, TAGM 4046

Concentration values in **bold and highlighted** indicate the concentration was above the 6 NYCRR Part 375 Soil Cleanup Objectives - Restricted Use (Commercial).

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Table 3 Remedial Investigation Subsurface Soil (Test Pit) Analytical Results
(March 1998)

Parameter List	TP-9 2 feet	TP-9 (DUP) 2 feet	TP-13 6 feet	TP-2 5 feet	TP-4 6 feet	NYSDEC Rec. Soil Cleanup Objectives NYSDEC, TAGM 4046 [a]	6 NYCRR Part 375 Soil Cleanup Objectives - Unrestricted Use	6 NYCRR Part 375 Soil Cleanup Objectives - Restricted Use - Commercial
TCL Volatiles								
Methylene Chloride	<0.012 U	<0.012 U	<0.014 U	<0.013 U	<0.012 U	0.1	0.05	500
Acetone	0.028 JN	0.024 JN	0.13 J	0.067 JN	0.016 JN	0.2	---	500
2-Butanone	<0.012 U	<0.012 U	<0.014 U	0.018	<0.012 U	0.3	---	---
Ethylbenzene	<0.012 U	<0.012 U	0.043	0.015	<0.012 U	5.5	1	390
Xylenes (total)	<0.01 U	0.012	0.361	0.085	<0.012 U	1.2	0.26	500
TCL Semivolatiles								
Naphthalene	<0.4 U	<0.4 U	<0.46 U	0.05 J	<0.4 U	13	12	500
Di-n-butylphthalate	<0.4 U	<0.4 U	<0.46 U	0.42	<0.4 U	8.1	---	---
bis(2-Ethylhexyl)phthalate	<0.4 U	<0.4 U	<0.46 U	0.05 J	<0.4 U	50	---	---
TCL Inorganics								
Aluminum	13,362.88	14,287.33	12,773.65	6,116.5	14,450.61	33,000 [b]	---	---
Antimony	<0.81 U	1.1 B	<0.7 U	1.5 B	0.83 B	---	---	---
Arsenic	**9.64**	6.94	6.80	**14.58**	**10.32**	7.5	13	16
Barium	47.76 B	66.72	62.57	74.86	49.85	300	350	400
Beryllium	**0.56 B**	**0.59 B**	**0.63 B**	**0.3 B**	**0.66 B**	0.16	7.20	590
Cadmium	0.33 B	<0.24 U	<0.23 U	2.14	<0.24 U	10	3	9.3
Calcium	12,882.83	2,514.84	2,323.76	**76,073.60**	2,145.3	130- 35,000 [b]	---	---
Chromium	19.12	20.09	18.40	17.52	18.27	50	30	1,500
Cobalt	9.11 B	8.97 B	8.13 B	4.82 B	11.1 B	30	---	---
Copper	**33.47**	23.05	22.01	**29.89**	**30.27**	25	50	270
Iron	**26,786.7**	**24,362**	**23,112.1**	**28,093.9**	**27,486.6**	2,000	---	---
Lead	36.68	13.78	16.07	121.17	42.18	400 [c]	63	1,000
Magnesium	**5,352.63**	4,145.72	3,699.4	**23,966.20**	4,303.16	100- 5,000 [b]	---	---
Manganese	546.18	554.74	509.34	472.56	339.25	50- 5,000 [b]	1,600	10,000
Mercury	<0.14 U	<0.12 U	<0.12 U	<0.13 U	<0.12 U	0.1	30.00	2.8
Nickel	**25.07**	**24.23**	**22.75**	**17.59**	**25.8**	13	---	310
Potassium	1,455.76	2,106.92	2,048.22	1,662.77	1,459.27	8,500- 43,000 [b]	---	---
Selenium	<1.1 U	<0.95 U	<0.94 U	<0.99 U	<0.94 U	2	4	1,500
Silver	<0.27 U	<0.24 U	<0.23 U	0.31B	<0.24 U	---	2.00	1,500
Sodium	233.53 BEJ	298.02 BEJ	287.23 BEJ	452.87 BEJ	366.03 BEJ	6,000 - 8,000	---	---
Thallium	1.41 B	1.38 BJ	<1.2 U	<1.2 U	<1.2 U	---	---	---
Vandium	24.47	24.69	22.96	13.65	25.51	150	---	---
Zinc	**143.62**	**144.93**	**129.77**	**362.39**	**91.02**	20	109	10,000
Cyanide	<0.34 U	<0.3 U	<0.3 U	<0.31 U	<0.3 U	Site specific	27.00	27

All units are in milligrams per kilogram (mg/kg)

a) NYSDEC, TAGM #4046, "Determination of Soil Cleanup Objectives and Cleanup Levels", 24 January 1994.

b) Natural range of soils for eastern United States, McGovern, NYSDEC, 1984 as given in TAGM #4046.

c) USEPA's Interim Lead Hazard Guidance for residential screening levels.

NOTE: B = The reported value was obtained from a reading that was less than the Contract Required Detection Limit, but equal or greater to the instrument detection limit.
E = The reported value is estimated because of the presence of interference.
J = The reported value was determined to be estimated following QA/QC review.
U = Not detected above the associated method detection limit.
N = The value reported was less than 5 times (10 times of the common EPA contaminants) the value in the field or trip blank. The reported value was negated due to probably contamination.
Concentration values in **bold** indicate the concentration was above the NYSDEC Rec. Soil Cleanup Objectives, NYSDEC, TAGM 4046
Concentration values in **bold and highlighted** indicate the concentration was above the 6 NYCRR Part 375 Soil Cleanup Objectives - Restricted Use (Commercial).
All data is reproduced from "ETE Sanitation and Landfill - Final Remedial Investigation Report" October 1998.

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Table 4 Remedial Investigation Surface Water Analytical Results (March 1998)

Parameter List	SW-1	SW-2	SW-3	SW-4 (Background)	SW-7	SW-7 (DUP)	NYSDEC Standard for Class C Water [a/b]
TCL Volatile Organics							
Methylene Chloride	4.3 JN	4.1 JN	5.7 JN	5.7 NJ	3.8 JN	6 JN	5
Acetone	4.2 JN	16 N	<10 U	6.1 JN	<10 U	8.4 JN	50
TCL Inorganics							
Aluminum	**423.23**	**271.39**	**511.77**	15.9	**246.17**	250	100
Barium	75.23 BEJ	69.07 BEJ	50.6 BEJ	4.7 BEJ	59.09 BEJ	56.6 BEJ	1,000 [c]
Calcium	46,096	45,635	42,111	22,900	66,847	67,762	---
Chromium	1.69 B	1.65 B	1.55 B	<1 U	1.49 B	<1 U	11
Iron	**3,244**	**4,798.9**	**4,248**	122	**751.3**	**716.52**	300
Magnesium	8,503.6	8,310	8,690	3,600	11,367	11,416	35,000 [c]
All units are in micrograms per liter (ug/L), except hardness	**464.2**	**311.37**	246.34	65	235.43	230.41	300 [c]
Potassium	6,637.3	6,828.7	3,046.7 B	1,030 B	6,880.4	6,026	---
Sodium	**258,120**	**286,860**	**85,045**	**32,700**	**655,080**	**596,430**	20,000 [d]
Vandium	1.51 B	1.4 B	1.96 B	<1 U	1.29 B	<1 U	14
Zinc	**42.1**	**39.26**	**37.09**	13.7 B	22.7	13.46 B	30

All units are in micrograms per liter (µg/L)

a) NYSDEC, T.O.G.S 1.1.1, "Ambient Water Quality Standards and Guidance Values", October 1993

b) Cotton Creek, which receives all surface water discharging from the ETE Sanitation and Landfill site, is classified by New York State as a class C water body.

c) Standard is for Class A water. Class C water standard does not exist.

d) Standard is for Class GA water. No surface water standard exists.

NOTE: J= The value is an estimated concentration.

E = Estimated vale. Analyte concentration exceeds the calibrated range of the GC/MS instrument.

B = The reported value was obtained from a reading that was less than the Contract Required Detection Limit, but equal to or greater than the instrument detection limit.

U = Not detected above the associated method detection limit.

Concentration values in **bold** exceeds the NYSDEC Standard for Class C Water.

All data is reproduced from "ETE Sanitation and Landfill - Final Remedial Investigation Report" October 1998.

Table 4 Remedial Investigation Surface Water Analytical Results (March 1998)

Parameter List	SW-1	SW-2	SW-3	SW-4 (Background)	SW-7	SW-7 (DUP)
Hardness (ppm)						
Hardness	150	149	142	72	214.5	215
TCL Inorganics						
Copper	**21.1 B**	**25.70**	**22.5 B**	**18.1 B**	**89.20**	19.6 B
Lead	2.3 BJ	<2 U	2.2 BJ	<2 U	4.2 J	<2 U
Nickel	3.4 B	3.1 B	2.8 B	1.6 B	1.7 B	1.8 B
NYSDEC Standard for Class C Water (Hardness Dependent)						
Copper	17	16.6	16	9	22.7	22.74
Lead	5.4	5	5	2	8	8
Nickel	130.1	129.41	124.76	74	170.70	171.00

All units are in micrograms per liter (µg/L), except hardness, which is in milligrams per liter (mg/L).

NOTE: J= The value is an estimated concentration.

B = The reported value was obtained from a reading that was less than the Contract Required Detection Limit, but equal to or greater than the instrument detection limit.

U = Not detected above the associated method detection limit.

All units are in m Concentration values in **bold** exceeds the NYSDEC Criteria.

All data is reproduced from "ETE Sanitation and Landfill - Final Remedial Investigation Report" October 1998.

Table 5 Remedial Investigation Sediment Analytical Results
(March 1998)

Parameter List	SD-1	SD-2	SD-3	SD-4 (Background)	SD-5	SD-6	SD-7	SD-7 (DUP)	NYSDEC Rec. Soil Cleanup Objectives NYSDEC, TAGM 4046 [(a)]	6 NYCRR Part 375 Soil Cleanup Objectives - Unrestricted Use	6 NYCRR Part 375 Soil Cleanup Objectives - Restricted Use - Commercial
TCL Volatiles											
Methylene Chloride	<10 UJ	<10 U	<10 U	14 J	<10 U	<10 UJ	<10 U	<10 U	0.1	0.05	500
Acetone	<10 UJ	84 J	53	57	339	538 J	112	<10 U	0.2	---	500
2-Butanone	<10 UJ	23 J	12 J	<10 U	68	104 J	23 J	<10 U	0.3	---	---
Ethylbenzene	<10 UJ	9.5 J	<10 U	<10 U	56	12 J	<10 U	<10 U	5.5	1	390
Xylenes (total)	<10 UJ	41	<10 U	<10 U	254	62 J	<10 U	<10 U	1.2	0.26	500
Level of Protection: Benthic Acute Toxicity [(a/b)]											
Ethylbenzene	N/A	417.96	N/A	N/A	27,625.14	25,091.58	N/A	N/A	---	---	---
Xylenes (total)	N/A	2,435.83	N/A	N/A	160,996.72	146,231.37	N/A	N/A	---	---	---
Level of Protection: Benthic Chronic Toxicity [(a/b)]											
Ethylbenzene	N/A	46.66	N/A	N/A	3,083.74	2,800.92	N/A	N/A	---	---	---
Xylenes (total)	N/A	270.22	N/A	N/A	17,859.97	16,222.00	N/A	N/A	---	---	---
TCL Semivolatiles											
Di-n-butylphthalate	60 J	ND	ND	140 J	110 J	80 J	140 J	ND	8.1	---	---

All units are in milligrams per kilogram (mg/kg)

a) Levels of protection for ethylbenzene and xylene based on NYSDEC "Technical Guidance for Screening Contaminated Sediments", 22 November 1993.

b) For all other volatile and semivolatile compounds, no screening criteria exist.

NOTE: J = The reported value was determined to be estimated following QA/QC review.
U = Not detected above the associated method detection limit.
N/A = Not applicable. Analyte was not detected above associated method detection limit, and therefore level of protection was not calculated.
ND = Not detected. No method detection limit available.
All data is reproduced from "ETE Sanitation and Landfill - Final Remedial Investigation Report" October 1998.

Table 5 Remedial Investigation Sediment Analytical Results
(March 1998)

Parameter List	SD-1	SD-2	SD-3	SD-4 (Background)	SD-5	SD-6	SD-7	SD-7 (DUP)	Lowest Level Effect [a]	Severe Level Effect [a]	NYSDEC Rec. Soil Cleanup Objectives NYSDEC, TAGM 4046 [b]	6 NYCRR Part 375 Soil Cleanup Objectives - Unrestricted Use (mg/kg)	6 NYCRR Part 375 Soil Cleanup Objectives - Restricted Use - Commercial (mg/kg)
TCL Inorganics													
Aluminum	12,336.73	27,511.37	9,504.96	15,255.80	23,711.71	17,587.04	17,344.83	14,477.93	---	---	33,000 [c]	---	---
Antimony	<0.87 U	1.87 B	1.84 B	<1.6 U	<1.3 U	1.81 B	<2.1 U	<2 U	2.0	25.0	---	---	---
Arsenic	**7.30**	5.75	**6.54**	**7.86**	3.07 B	**6.46**	**22.19**	**20.68**	6.0	33.0	8	13	16
Barium	63.81	137.64	74.96	61.04 B	107.33	75.08 B	818.14	970.07	---	---	300	350	400
Beryllium	0.62 B	1.27 B	0.5 B	0.81	0.95 B	0.81 B	0.91 B	0.87 B	---	---	0.16	7.20	590
Cadmium	<0.29 U	**1.46 B**	<0.27 U	<0.53 U	<0.44 U	0.59 B	**0.69 B**	**0.77 B**	0.6	9.0	10	3	9.3
Calcium	2,202.95	11,978.82	17,118.87	7,087.85	9,275.23	7,400.00	16,667.59	17,905.52	---	---	130- 35,000 [c]	---	---
Chromium	15.73	**32.38**	15.20	21.69	**28.68**	25.87	22.66	18.48	26.0	110.0	50	30	1,500
Cobalt	7.73 B	11.04 B	6.5 B	10.57 B	9.35 BJ	10.53 B	12.67 B	11.84 B	---	---	30	---	---
Copper	**20.36 EJ**	**38.55 EJ**	**26.36 EJ**	**50.52 EJ**	**35.02 EJ**	**32 EJ**	**36.14 EJ**	**32.66 EJ**	16.0	110.0	25	50	270
Iron	**25,194.10**	**51,274.51**	**49,611.35**	**31,990.06**	**42,594.14**	**37,546.87**	**61,220.69**	**53,917.93**	20,000.0	40,000.0	2,000.00	---	---
Lead	12.75	22.99	18.64	**32.70**	23.56	26.29	**31.44**	28.68	31.0	110.0	400 [d]	63	1,000
Magnesium	2,866.11	4,290.59	3,283.40	5,698.34	4,636.94	4,488.12	4,115.03	3,720.55	---	---	100- 5,000 [b]	---	---
Manganese	**929.50**	**1,067.10**	**1,007.69**	**664.36**	**594.95**	**760.99**	**22,991.03**	**23,608.28**	460.0	1,100.0	50- 5,000 [c]	1,600	10,000
Mercury	<0.14 U	<0.18 U	<0.14 U	<0.28 U	<0.2 U	<0.21 U	<0.34 U	<0.31 U	0.2	1.3	0.10	30.00	2.8
Nickel	**18.87**	**38.00**	**18.91**	**32.09**	**29.46 J**	**30.38**	**29.37**	**26.48 B**	16.0	50.0	13	---	310
Potassium	12,40.56 BEJ	23,41.45 EJ	1,142.33 BEJ	1681.88 BEJ	2,136.53 BEJ	2,121.43 BEJ	2,180.14 BEJ	1,795.93 BEJ	---	---	8,500- 43,000 [c]	---	---
Selenium	<1.2 U	<1.5 U	<1.1 U	<2.1 U	<1.7 U	<1.7 U	14.09 J	15.48 J	---	---	2	4	1,500
Silver	<0.29 U	<0.38 U	<0.27 U	<0.53 U	<0.44 U	<0.42 U	<0.69 U	<0.68 U	1.0	2.2	---	2.00	1,500
Sodium	969.59 BEJ	8,325.10 EJ	2,479.83 EJ	463.15 BEJ	6,870.27 E	5,156.17 EJ	4,334.41 EJ	4,409.38 EJ	---	---	6,000 - 8,000	---	---
Thallium	<1.4 U	<1.9 U	1.81 B	<2.7 U	<2.2 U	<2.1 U	<3.4 U	<3.4 U	---	---	---	---	---
Vandium	24.98	35.05	18.44	33.30	33.18	30.98	32.96 B	27.42 B	---	---	150	---	---
Zinc	91.85	**687.88**	**390.16**	**139.26**	**302.63**	**349.55**	**213.73**	**186.45**	120.0	270.0	20	109	10,000
Cyanide	<0.37 U	<0.48 U	<0.35 U	<0.69 U	<0.56 U	<0.54 U	<0.85 U	<0.86 U	---	---	Site specific	27.00	27

All units are in milligrams per kilogram (mg/kg)

a) NYSDEC, "Technical Guidance for Screening Contaminated Sediment", 22 November 1993.

b) NYSDEC, TAGM #4046, "Determination of Soil Cleanup Objectives and Cleanup Levels", 24 January 1994.

c) Natural range of soils for eastern United States, McGovern, NYSDEC, 1984 as given in TAGM #4046.

d) USEPA's Interim Lead Hazard Guidance for residential screening levels.

NOTE: B = The reported value was obtained from a reading that was less than the Contract Required Detection Limit, but equal or greater to the instrument detection limit.
E = The reported value is estimated because of the presence of interference.
J = The reported value was determined to be estimated following QA/QC review.
U = Not detected above the associated method detection limit.
Concentration values in **bold** indicate the concentration was above the NYSDEC Rec. Soil Cleanup ObjectivesNYSDEC, TAGM 4046
Concentration values in **bold and highlighted** indicate the concentration was above the 6 NYCRR Part 375 Soil Cleanup Objectives - Restricted Use (Commercial).
All data is reproduced from "ETE Sanitation and Landfill - Final Remedial Investigation Report" October 1998.

Table 6 Remedial Investigation Groundwater Analytical Results (April 1998)

Parameter List	MW-1S	MW-1D	MW-2S (Background)	MW-2D (Background)	MW-3S	MW-3D	MW-4S	Screening Standard for Class GA water [a]
TCL Volatiles								
Vinyl Chloride	<10 U	<10 U	<10 U	<10 U	**16**	<10 U	<10 U	2
Chloroethane	<10 U	<10 U	<10 U	<10 U	10	<10 U	<10 U	50.0 [b]
Methylene Chloride	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	5
Acetone	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	50
Carbon Disulfide	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	50
1,2-Dichloroethene (total)	<10 U	<10 U	<10 U	<10 U	**108**	<10 U	<10 U	0.6 [b]
2-Butanone	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	50
Trichloroethene	<10 U	<10 U	<10 U	<10 U	**50**	<10 U	<10 U	5
Benzene	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	1.0 [b]
4-Methyl-2-Pentanone	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	50
2-Hexanone	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	50
Tetrachloroethene	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	5
Toluene	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	5
Chlorobenzene	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	5
Ethylbenzene	2.1 J	2.1 J	<10 U	<10 U	<10 U	<10 U	<10 U	5
Styrene	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	5
Xylenes (total)	4.7 JN	4.8 JN	4.8 JN	<10 U	4.5 JN	4.5 JN	2.3 JN	5

All units are in micrograms per liter (µg/L)

a) New York State DEC Water Quality Standards and Guidance Values

b) NYSDEC Revised Parts 6 NYCRR Parts 700-706, "Groundwater Standards," March 1998.

NOTE: U = Not detected above the associated method detection limit.

J = Estimated Value

N = The value reported was less than 5 times (10 times for the common EPA contaminants) the value in the field or trip blank. The reported value was negated due to probable contamination.

Concentration values in **bold** exceed NYSDEC criteria for Class GA groundwater.

All data is reproduced from "ETE Sanitation and Landfill - Final Remedial Investigation Report" October 1998.

Table 6 Remedial Investigation Groundwater Analytical Results
(April 1998)

Parameter List	MW-6S	MW-6D	MW-7S	MW-7D	MW-8S	MW-8D	MW-9S	MW-9D	MW-9D (Dup)	Screening Standard for Class GA water [a]
TCL Volatiles										
Chloroethane	<10 U	<10 U	<10 U	<10 U	4 J	<10 U	<10 U	<10 U	<10 U	50.0 [b]
Methylene Chloride	<10 U	<10 U	<10 U	2.4 J	**56 J**	<10 U	**5.2 J**	<10 U	<10 U	5
Acetone	<10 U	10	33	9.8 J	1,009 E	11	**64**	<10 U	<10 U	50
Carbon Disulfide	<10 U	<10 U	<10 U	<10 U	<10 U	2.2 J	<10 U	<10 U	<10 U	50
1,2-Dichloroethene (total)	<10 U	<10 U	<10 U	<10 U	**8.8 J**	<10 U	<10 U	<10 U	<10 U	0.6 [b]
2-Butanone	<10 U	35	**89**	<10 U	**2,231 ED**	14	**129**	<10 U	<10 U	50
Benzene	<10 U	<10 U	<10 U	<10 U	**15 J**	<10 U	<10 U	<10 U	<10 U	1.0 [b]
4-Methyl-2-Pentanone	<10 U	9.9 J	8.1 J	<10 U	**316 D**	<10 U	<10 U	<10 U	<10 U	50
2-Hexanone	<10 U	2.7 J	<10 U	<10 U	**68**	<10 U	<10 U	<10 U	<10 U	50
Toluene	<10 U	<10 U	<10 U	<10 U	**245 D**	<10 U	<10 U	<10 U	<10 U	5
Ethylbenzene	<10 U	<10 U	<10 U	<10 U	60	<10 U	<10 U	<10 U	<10 U	5
Xylenes (total)	5.3 JN	4.7 JN	<10 U	2.5 JN	**219 J**	2.6 JN	2.3 JN	2.1 JN	4.5 JN	5
TCL Semivolatiles										
All units are in micrograms per liter (µg/L)	<10 U	<10 U	<10 U	<10 U	**79**	<10 U	**100 EJ**	<10 U	<10 U	1
2-Methylphenol	<10 U	<10 U	<10 U	<10 U	21	<10 U	<10 U	<10 U	<10 U	50.0 [b]
4-Methylphenol	<10 U	<10 U	<10 U	<10 U	**995 D**	<10 U	49 J	<10 U	<10 U	50.0 [b]
2,4-Dimethylphenol	<10 U	<10 U	<10 U	<10 U	**19 J**	<10 U	<10 U	<10 U	<10 U	1
Dimethylphthalate	<10 U	<10 U	<10 U	<10 U	<10 U	2.3 J	<10 U	<10 U	<10 U	50
Diethylphthalate	<10 U	<10 U	<10 U	<10 U	43	14	<10 U	<10 U	1.4 J	50
Di-n-butylphthalate	<10 U	<10 U	<10 U	<10 U	<10 U	2.3 J	<10 U	1.2 J	1.1 J	50
bis(2-Ethylhexyl)phthalate	<10 U	2.3 J	<10 U	<10 U	**5.9 J**	1.1 J	1.9 J	2.6 J	2.3 J	5.0 [b]
Pesticides										
Heptachlor	0.012 JP	0.016 JP	<0.05 U	<0.05 U	0.005 JP	0.034 JP	<0.05 U	0.017 JP	<0.05 U	

All units are in micrograms per liter (µg/L)

a) New York State DEC TOGS 1.1.1, "Ambient Water Quality Standards and Guidance Values," October 1993.

b) NYSDEC Revised Parts 6 NYCRR Parts 700-706, "Groundwater Standards," March 1998.

NOTE: U = Not detected above the associated method detection limit.
J = Estimated Value
D = Identifies all compounds identified in an analysis at a secondary dilution factor.
P = Indicates a >25% difference for detected concentrations between the two GC columns. The lower of the two values is reported.
E = Estimated value. Analyte concentration exceeds the calibrated range of the GC/MS instrument.
N = The value reported was less than 5 times (10 times for the common EPA contaminants) the value in the field or trip blank. The reported value was negated due to probable contamination.
Concentration values in **bold** exceed NYSDEC criteria for Class GA group<10 Uwater.
All data is reproduced from "ETE Sanitation and Landfill - Final Remedial Investigation Report" October 1998.

Table 6 Remedial Investigation Groundwater Analytical Results (April 1998)

Parameter List	MW-1S	MW-1D	MW-2S (Background)	MW-2D (Background)	MW-3S	MW-3D	MW-4S	Screening Standard for Class GA water (a)
TCL Inorganics								
Aluminum	306	152 B	779	504	**73.4 B**	1,530	38.2 B	---
Antimony	**7 B**	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	3
Arsenic	<6 U	<6 U	<6 U	<6 U	<6 U	<6 U	<6 U	25
Barium	10.7 B	150 B	32 B	102 B	69 B	**2,250**	679	1,000
Beryllium	1.2 B	1 B	1.5 B	1.3 B	<1 U	<1 U	<1 U	3
Cadmium	1 B	<1 U	<1 U	<1 U	<1 U	<1 U	**8.9**	5 (b)
Calcium	44,300	87,500	86,500	69,900	110,000	318,000	230,000	---
Chromium	2.6 B	<1 U	1.3 B	1.2 B	19.1	4.6 B	<1 U	50
Cobalt	<1 U	<1 U	<1 U	<1 U	<1 U	3.9 B	9.1 B	---
Copper	6.8 B	8.1 B	38.5	23.9 B	12.2 B	30.2	30.5	200
Iron	**667**	**1,780**	**1,730**	**943**	161	**6,500**	**525**	300
Lead	<2 U	<2 U	3.3	2. B	<2 U	5.9	<2 U	25
Magnesium	1,500	14,000	18,200	18,100	19,800	**88,400**	**74,000**	35,000
Manganese	33.6	**409**	36	72.1	903	**578**	**10,200**	300
Nickel	2.8 B	2.9 B	2.7 B	1.4 B	4 B	9.8 B	16.8 B	100 (b)
Potassium	291 B	1,730 B	754 B	2,220 B	21,100	18,300	140,000	---
All units are in micrograms per liter (µg/L)	<4 U	<4 U	<4 U	<4 U	<4 U	<4 U	7.6	10
Sodium	10,300	**43,500**	13,200	12,700	**303,000**	**2,000,000**	**4,220,000**	20,000
Thallium	<6 U	<6 U	<6 U	<6 U	<6 U	<6 U	<6 U	0.5 (b)
Vandium	1.7 B	<1 U	1.4 B	1.4 B	<1 U	2.3 B	<1 U	---
Zinc	7.2 B	13.2 B	15.4 B	9.9 B	4 B	18.5 B	3.3 B	2,000 (b)

All units are in micrograms per liter (µg/L)

a) New York State DEC TOGS 1.1.1, "Ambient Water Quality Standards and Guidance Values," October 1993.

b) NYSDEC Revised Parts 6 NYCRR Parts 700-706, "Groundwater Standards," March 1998.

NOTE: U = Not detected above the associated method detection limit.

B = The reported value was obtained from a reading that was less than the Contract Required Detection Limit, but equal or greater than the instrument detection limit.

Concentration values in **bold** exceed NYSDEC criteria for Class GA groundwater.

All data is reproduced from "ETE Sanitation and Landfill - Final Remedial Investigation Report" October 1998.

Table 6 Remedial Investigation Groundwater Analytical Results
(April 1998)

Parameter List	MW-6S	MW-6D	MW-7S	MW-7S (Filtered)	MW-7D	MW-8S	MW-8D	MW-9S	MW-9D	MW-9D (Dup)	Screening Standard for Class GA water [a]
TCL Inorganics											
Aluminum	2,016.8	1,044.9	4,120	158	236.13	23,555.1	1,038.3	<6 U	1,132.9	943.9	---
Antimony	<5 U	<5 U	<5 U	<5 U	<5 U	**5.64**	<5 U	<5 U	<5 U	<5 U	3
Arsenic	<6 U	<6 U	9.8 B	<6 UB	<6 U	<6 U	<6 U	<6 U	<6 U	<6 U	25
Barium	28.6 B	122.07 B	53.4 B	50 B	467.1	**1,198.80**	59.88 B	**5,217**	298	296.83	1,000
Beryllium	1.3 B	1.3 B	<1 U	<1 U	1.32 B	<1 U	1.23 B	<1 U	1.13 B	1.1 B	3
Cadmium	<1 U	<1 U	<1 U	<1 U	<1 U	**8.86**	<1 U	1.6 B	<1 U	<1 U	5 [b]
Calcium	64,439	47,121	15,200	21,000	429,150	155,590	27,614	299	74,159	75,574	---
Chromium	4.7 B	5.26 B	5.7 B	<1 UB	17.9	3.35 B	9.98 B	<1 U	3.61 B	3.51 B	50
Cobalt	1.1 B	<1 U	2.8 B	<1 UB	<1 U	3.34 B	<1 U	8.73 B	<1 U	<1 U	---
Copper	25.9	33.14	38.9	43.2	4.9 B	<1 U	44	20.82 B	65.64	72.92	200
Iron	**4,062**	**2,235**	**7,920**	284	247	**181,040**	**597.03**	**6,673.5**	**3,982**	**3,851.5**	300
Lead	4.7	16.1	6.7	2.5 B	2 B	**51.92**	12.4	<2 U	15.45	18.53	25
Magnesium	14,109	12,140	2,340	2,190 B	1,669 B	**43,710**	7,479	**58,497**	15,713	16,015	35,000
Manganese	121.35	104.78	**381**	**266**	5.5 B	**7,514.8**	16.24	**2,721.2**	144.19	146	300
Nickel	4.6 B	5.05 B	12.7 B	5.3 B	2.26 B	11.5 B	2.3 B	22.51 B	4.39 B	4.23 B	100 [b]
Potassium	2,156.4 B	2,586.8 B	4,160 B	5,020	80,000	248,290	16,079	286,320	2,715.5 B	2,822.5 B	---
All units are in micrograms per liter (µg/L)	<4 U	<4 U	4.5 B	<4 U	<4 U	<4 U	<4 U	<4 U	<4 U	<4 U	10
Silver	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	50
Sodium	**33,994**	13,557	**444,000**	**603,000**	**2,390,700**	**16,635,500**	**112,730**	**31,054,500**	**26,373**	**27,822**	20,000
Thallium	<6 U	<6 J	<6 U	7.6 B	<6 U	<6	<6 U	**11.89**	<6 U	<6 U	0.5 [b]
Vandium	3.97	1.65 B	6.5 B	1.5 B	10.4 B	16.23 B	6.52 B	4.59 B	1.45 B	1.92 B	---
Zinc	24.37	35.11	78.4	41	<2 U	22.88	26	<2 U	47.92	52.47	2,000 [b]

All units are in micrograms per liter (µg/L)

a) New York State DEC TOGS 1.1.1, "Ambient Water Quality Standards and Guidance Values," October 1993.

b) NYSDEC Revised Parts 6 NYCRR Parts 700-706, "Groundwater Standards," March 1998.

NOTE: U = Not detected above the associated method detection limit.
B = The reported value was obtained from a reading that was less than the Contract Required Detection Limit, but equal or greater than the instrument detection limit.
Concentration values in **bold** exceed NYSDEC criteria for Class GA groundwater.
All data is reproduced from "ETE Sanitation and Landfill - Final Remedial Investigation Report" October 1998.

Table 7 Remedial Investigation Soil Vapor Analytical Results (May 1998)

Parameter List	GP-1	GP-2	GP-3	GP-4
Freon 12	1.2	<0.82 U	<0.81 U	<150 U
Chloroethane	2	<0.82 U	<0.81 U	<150 U
Chloromethane	<0.94 U	0.85	0.86	<150 U
Methylene Chloride	<0.94 U	1	<0.81 U	<150 U
Benzene	19	<0.82 U	<0.81 U	<150 U
Toluene	4.1	3.5	1.2	1,600
Ethyl Benzene	160	<0.82 U	2.7	6,300
m,p-Xylene	500	1	8.5	19,000
o-Xylene	13	<0.82 U	4.6	11,000
1,3,5-Trimethylbenzene	11	<0.82 U	4.9	10,000
1,2,4-Trimethylbenzene	24	<0.82 U	12	25,000
Propylene	42	<0.82 U	<0.81 U	<150 U
Acetone	<3.7 U	9.2	7.5	<580 U
Hexane	17	<3.3 U	<3.2 U	<580 U
Cyclohexane	10	<3.3 U	<3.2 U	590
4-Ethyltoluene	21	<3.3 U	19	40,000
Ethanol	<3.7 U	22	<3.2 U	<580 U
Heptane	13.00	<3.3 U	<3.2 U	<580 U
Total VOCs	837.30	37.55	61.26	113,490.00

All units are in parts per billion volume (ppb_v)

NOTE: U = Not detected above the associated method detection limit.

VOC = Volatile organic compound

All data is reproduced from "ETE Sanitation and Landfill - Final Remedial Investigation Report" October 1998.

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Table 8 Summary of Groundwater Analytical Results Inorganic Compounds

Parameters List USEPA Method 8260B	MW ID	MW-02D		MW-03S		MW-03D		MW-06S		MW-06D		MW-07S		MW-07D		NYSDEC AWQS (µg/L)
	Lab ID	N2474-12		N2474-01		N2474-02		N2474-05		N2474-06		N2474-08		N2474-09		
	Sample Type	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		
	Sample Date	12/29/2014		12/30/2014		12/30/2014		12/30/2014		12/30/2014		12/29/2014		12/29/2014		
Acetone	µg/L	(<4.4)	U	(<2.2)	U	(<2.2)	U	(<2.2)	U	(<2.2)	U	(<2.2)	U	(<2.2)	U	*50 (g)*
cis-1,2- Dichloroethene	(µg/L)	(<0.48)	U	1.7		(<0.48)	U	(<0.48)	U	(<0.48)	U	(<0.48)	U	(<0.48)	U	*5 (s)*
Trichloroethene	(µg/L)	(<0.36)	U	**9.2**		(<0.36)	U	(<0.36)	U	(<0.36)	U	(<0.36)	U	(<0.36)	U	*5 (s)*
Vinyl chloride	(µg/L)	(<0.50)	U	(<0.5)	U	**2.0**		34.6	U	(<0.50)	U	(<0.50)	U	(<0.50)	U	*2 (s)*

Parameters List USEPA Method 8260B	MW ID	MW-09S		MW-09D		MW-10S		MW-11S		MW-11D		DUPLICATE		RINSE BLANK		NYSDEC AWQS (µg/L)
	Lab ID	N2474-03		N2474-04		N2474-13		P0007-01A		P0007-02A		N2474-07		N2474-11		
	Sample Type	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater				
	Sample Date	12/30/2014		12/30/2014		12/29/2014		1/5/2015		1/5/2015		12/30/2014		12/29/2014		
Acetone	(µg/L)	(<2.2)	U	(<2.2)	U	(<2.2)	U	(<2.2)	U	(<2.2)	U	(<2.2)	U	4.9	J	*50 (g)*
cis-1,2- Dichloroethene	(µg/L)	(<0.48)	U	(<0.48)	U	(<0.48)	U	(<0.48)	U	(<0.48)	U	(<0.48)	U	(<0.48)	U	*5 (s)*
Trichloroethene	(µg/L)	(<0.36)	U	(<0.36)	U	(<0.36)	U	(<0.36)	U	(<0.36)	U	(<0.36)	U	(<0.36)	U	*5 (s)*
Vinyl chloride	(µg/L)	(<0.50)	U	(<0.50)	U	(<0.50)	U	(<0.50)	U	(<0.50)	U	**2.2**		(<0.50)	U	*2 (s)*

NOTE: NYSDEC = New York State Department of Environmental Conservation
AWQS = Ambient Water Quality Standard
µg/L = Micrograms per liter
J = Analyte detected below the practical quantification limit (PQL)
U = Analyte was analyzed for, but not detected above the associated method detection limit.
(g) = guidance value
(s) = standard
Analytical data results provided by Spectrum Analytical. Validation services are provided by Meridian Consultant Group, Inc.
Bold values indicate that the analyte was detected greater than the NYSDEC Ambient Water Quality Standards.
DUPLICATE sample was collected at MW-03D.

Table 8 Summary of Groundwater Analytical Results Inorganic Compounds

Parameters List USEPA Method 8270C	MW ID	MW-02D		MW-03S		MW-03D		MW-06S		MW-06D		MW-07S		MW-07D		NYSDEC AWQS (µg/L)
	Lab ID	N2474-12		N2474-01		N2474-02		N2474-05		N2474-06		N2474-08		N2474-09		
	Sample Type	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		
	Sample Date	12/29/2014		12/30/2014		12/30/2014		12/30/2014		12/30/2014		12/29/2014		12/29/2014		
4- Methylphenol	µg/L	**4.2**	J	(<1.4)	U	(<1.4)	U	(<1.4)	U	(<1.4)	U	(<1.4)	U	(<1.4)	U	*1 (s)*
Bis(2-ethylhexyl)phthalate	(µg/L)	1.3	J	(<1.3)	U	1.4	J	(<1.3)	U	(<1.3)	U	1.7	J	(<1.3)	U	*5 (s)*

Parameters List USEPA Method 8270C	MW ID	MW-09S		MW-09D		MW-10S		MW-11S		MW-11D		DUPLICATE		RINSE BLANK		NYSDEC AWQS (µg/L)
	Lab ID	N2474-03		N2474-04		N2474-13		P0007-01A		P0007-02A		N2474-07		N2474-11		
	Sample Type	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater				
	Sample Date	12/30/2014		12/30/2014		12/29/2014		1/5/2015		1/5/2015		12/30/2014		12/29/2014		
4- Methylphenol	(µg/L)	(<1.4)	U	(<1.4)	U	(<1.4)	U	(<1.4)	U	(<1.4)	U	(<1.4)	U	(<1.4)	U	*1 (s)*
Bis(2-ethylhexyl)phthalate	(µg/L)	(<1.3)	U	(<1.3)	U	2	J	(<1.3)	U	(<1.4)	U	(<1.3)	U	(<1.3)	U	*5 (s)*

NOTE: NYSDEC = New York State Department of Environmental Conservation
AWQS = Ambient Water Quality Standard
µg/L = Micrograms per liter
J = Analyte detected below the practical quantification limit (PQL).
U = Analyte was analyzed for, but not detected above the associated method detection limit.
(g) = NYSDEC Ambient Water Quality Standards guidance value
(s) = NYSDEC Ambient Water Quality Standards standard value
Analytical data results provided by Spectrum Analytical. Validation services are provided by Meridian Consultant Group, Inc.
Bold values indicate that the analyte was detected greater than the NYSDEC Ambient Water Quality Standards.
DUPLICATE sample was collected at MW-03D.

Table 8 Summary Of Groundwater Analytical Results Inorganic Compounds

PaA2:Q55rameters List USEPA Method 6010 / 7470	MW ID	MW-02D		MW-03S		MW-03D		MW-06S		MW-06D		MW-07S		MW-07D		NYSDEC AWQS (µg/L)
	Lab ID	N2474-12		N2474-01		N2474-02		N2474-05		N2474-06		N2474-08		N2474-09		
	Sample Type	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		
	Sample Date	12/29/2014		12/30/2014		12/30/2014		12/30/2014		12/30/2014		12/29/2014		12/29/2014		
Aluminum	µg/L	498		170	J	163	J	(<66)	U	4,830		2,270		189	J	---
Arsenic	µg/L	(<5.6)	U	(<4.3)	U	(<8.8)	U	(<4.3)	U	(<4.3)	U	(<4.3)	U	(<4.3)	U	---
Barium	µg/L	163	J	112	J	600	J	34.6	J	236		26.0	J	**1,940**		*1,000 (s)*
Beryllium	µg/L	(<0.26)	U	(<0.26)	U	(<0.26)	U	(<0.26)	U	0.26	J	(<0.26)	U	(<0.26)	U	*3 (g)*
Cadmium	µg/L	(<0.89)	U	(<0.89)	U	(<0.89)	U	(<0.89)	U	(<0.89)	U	(<0.89)	U	(<0.89)	U	*5 (s)*
Calcium	µg/L	141,000		124,000		132,000	J	192,000		67,900		47,200		195,000		---
Chromium	µg/L	**52.7**		**125**		4.7	J	3.4	J	13.4	J	6.5	J	6.1	J	*50 (s)*
Cobalt	µg/L	0.8	J	14.2	J	(<0.67)	U	1.6	J	3.8	J	1.4	J	(<0.67)	U	---
Copper	µg/L	18.3	J	15.4	J	(<3.6)	U	4.3	J	11.7	J	14.3	J	6.3	J	*200 (s)*
Iron	µg/L	**4,040**		**1,160**		**6,950**	J	**756**		**11,100**		**3,610**		**3,180**		*300 (s)*
Magnesium	µg/L	34,500		15,900		26,500	J	26,600		19,200		5,190		**46,400**		*35,000 (g)*
Manganese	µg/L	144		**5,660**		71.7	J	**1,570**		197		32.7	J	116		*300 (s)*
Mercury	µg/L	(<0.028)	U	(<0.17)	U	(<0.16)	U	(<0.028)	U	(<0.028)	U	(<0.032)	U	(<0.028)	U	*0.7 (s)*
Nickel	µg/L	30.9	J	83.3		3.1	J	3.0	J	12.4	J	6.1	J	6.0	J	*100 (s)*
Potassium	µg/L	1,750		4,430		5,780	J	2,450		2,170		1,770		4,340		---
Selenium	µg/L	(<12)	U	(<12)	U	(<12)	U	(<12)	U	(<12)	U	(<12)	U	(<12)	U	*10 (s)*
Sodium	µg/L	19,500		16,300		**170,000**	J	8,090		6,440		**41,800**		**1,910,000**		*20,000(s)*
Thallium	µg/L	(<6.2)	U	**7.2**	J	(<6.2)	U	(<6.2)	U	(<6.2)	U	(<6.2)	U	(<6.2)	U	*0.5(g)*
Vanadium	µg/L	(<1.1)	U	1.2	J	(<1.1)	U	(<1.1)	U	8.6	J	3.5	J	(<1.1)	U	---
Zinc	µg/L	112	J+	(<27.8)	U	(<45.5)	U	(<36.6)	U	(<44.9)	U	(<30)	U	(<46)	U	*2,000 (g)*

Parameters List USEPA Method 6010 / 7470	MW ID	MW-09S		MW-09D		MW-10S		MW-11S		MW-11D		DUPLICATE		RINSE BLANK		NYSDEC AWQS (µg/L)
	Lab ID	N2474-03		N2474-04		N2474-13		P0007-01A		P0007-02A		N2474-07		N2474-11		
	Sample Type	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater				
	Sample Date	12/30/2014		12/30/2014		12/29/2014		1/5/2015		1/5/2015		12/30/2014		12/29/2014		
Aluminum	µg/L	110	J	476		214		150	J	540		185	J	(<66)	U	---
Arsenic	µg/L	(<4.3)	U	(<4.3)	U	(<9.8)	U	(<4.3)	U	4.5	J	(<4.3)	U	(<4.3)	U	---
Barium	µg/L	487		458		138	J	10	J	130	J	**1,030**	J	(<1.1)	U	*1,000 (s)*
Beryllium	µg/L	(<0.26)	U	(<0.26)	U	(<0.26)	U	(<0.26)	U	(<0.26)	U	(<0.26)	U	(<0.26)	U	*3 (g)*
Cadmium	µg/L	(<0.89)	U	(<0.89)	U	1.5	J	(<0.89)	U	(<0.89)	U	(<0.89)	U	(<0.89)	U	*5 (s)*
Calcium	µg/L	155,000		89,200		58,100				76,000		201,000	J	(<110)	U	---
Chromium	µg/L	2.3	J	2.5	J	12.7	J	1.6	J	2.5	J	5.4	J	(<0.64)	U	*50 (s)*
Cobalt	µg/L	0.9	J	(<0.67)	U	(<0.67)	U	(<0.67)	U	1.2	J	0.8	J	(<0.67)	U	---
Copper	µg/L	9.0	J	(<3.6)	U	4.1	J	(<3.6)	U	(<3.6)	U	(<3.6)	U	(<3.6)	U	*200 (s)*
Iron	µg/L	**1,360**		**3,740**		**9,360**		**470**		**4,800**		**9,680**	J	(<31)	U	*300 (s)*
Magnesium	µg/L	28,400		20,200		14,000		5,600		17,000		**51,300**	J	(<76)	U	*35,000 (g)*
Manganese	µg/L	257		154		180		(<10)	U	150		166	J	(<10)	U	*300 (s)*
Mercury	µg/L	(<0.14)	U	(<0.028)	U	(<0.057)	U	0.140	J	0.032	J	(<0.028)	U	(<0.028)	U	*0.7 (s)*
Nickel	µg/L	14.8	J	1.0	J	6.8	J	(<0.85)	U	1.7	J	4.8	J	(<0.85)	U	*100 (s)*
Potassium	µg/L	17,200		1,210		742	J	110	J	1,100		4,160	J	(<76)	U	---
Selenium	µg/L	(<12)	U	(<12)	U	(<12)	U	(<12)	U	(<12)	U	**12.1**	J	(<12)	U	*10 (s)*
Sodium	µg/L	**3,300,000**		9,370		**110,000**		1,900		**22,000**		**291,000**	J	551	J	*20,000(s)*
Thallium	µg/L	(<6.2)	U	(<6.2)	U	(<6.2)	U	(<6.2)	U	(<6.2)	U	(<6.2)	U	(<6.2)	U	*0.5(g)*
Vanadium	µg/L	(<1.1)	U	(<1.1)	U	(<1.1)	U	(<1.1)	U	1.5	J	1.2	J	(<1.1)	U	---
Zinc	µg/L	(<16.9)	U	(<9.4)	U	67.5	J+	7.1	J	10.0	J	(<34)	U	6.4	J	*2,000 (g)*

NOTE: NYSDEC = New York State Department of Environmental Conservation
AWQS = Ambient Water Quality Standard
µg/L = Micrograms per liter
--- = no applicable screening value.
J = Analyte detected below the practical quantification limit (PQL).
U = Analyte was analyzed for, but not detected below the laboratory reporting limit.
J+ = Analyte present. Reported value may be biased high. Result is estimated high.
(g) = NYSDEC Ambient Water Quality Standards guidance value
(s) = NYSDEC Ambient Water Quality Standards standard value
Analytical data results provided by Spectrum Analytical. Validation services are provided by Meridian Consultant Group, Inc.
Bold values indicate that the analyte was detected greater than the NYSDEC Ambient Water Quality Standards.
DUPLICATE sample was collected at MW-03D.

Table 8 Summary of Groundwater Analytical Results
Groundwater Quality Parameters

Parameters List USEPA Method	MW ID	MW-02D		MW-03S		MW-03D		MW-06S		MW-06D		MW-07S		MW-07D		NYSDEC AWQS (µg/L)
	Lab ID	N2474-12		N2474-01		N2474-02		N2474-05		N2474-06		N2474-08		N2474-09		
	Sample Type	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		
	Sample Date	12/29/2014		12/30/2014		12/30/2014		12/30/2014		12/30/2014		12/29/2014		12/29/2014		
Organic Carbon, Total	µg/L	16,000	J-	(<5,000)	U	(<2,500)	U	(<6,100)	U	(<2,200)	U	(<6,500)	U	(<9,200)	U	---
Chemical Oxygen Demand	µg/L	71,000		(<10,000)	U	13,000	J	11,000	J	(<10,000)	U	12,000	J	70,000		---
Nitrogen, Kjeldahl, Total	µg/L	8,890		420		840		350		280		350		1,330		---
Ammonia	µg/L	1,960	J+	(<210)	U	(<420)	U	(<210)	U	(<210)	U	(<140)	U	(<770)	U	2,000 (s)
Total Dissolved Solids	µg/L	441,000		457,000		1,540,000		688,000		185,000		212,000		4,420,000		---
Total Hardness	µg/L	490,000		380,000		440,000	J	590,000		550,000		140,000		680,000		---
Phenolics, Total Recoverable	µg/L	**21**		(<5.0)	U	(<5.0)	U	(<5.0)	U	(<5.0)	U	(<5.0)	U	(<5.0)	U	1 (s)
Nitrogen, Nitrate-Nitrite	µg/L	(<990)		(<500)	U	(<2,020)	U	(<1,020)	U	(<990)	U	(<495)	U	(<990)	U	10,000 (s)
Bromide	µg/L	69	J	(<60)	U	730	J	(<60)	U	(<60)	U	(<60)	U	**3,100**		2,000 (g)
Chloride	µg/L	59,000		2,300		**510,000**	J	1,300	J	17,000		3,100		**2,800,000**		250,000 (s)
Sulfate	µg/L	58,000		72,000		9,300	J	**310,000**		20,000		44,000		27,000		250,000 (s)
Alkalinity, Total (As $CaCO_3$)	µg $CaCO_3$/L	320,000		350,000		230,000		250,000		170,000		220,000		500,000		---
Color	color unit	15		(<10)	U	35	J	10		25		85		35		---

Parameters List USEPA Method	MW ID	MW-09S		MW-09D		MW-10S		MW-11S		MW-11D		DUPLICATE		RINSE BLANK		NYSDEC AWQS (µg/L)
	Lab ID	N2474-03		N2474-04		N2474-13		P0007-01A		P0007-02A		N2474-07		N2474-11		
	Sample Type	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater				
	Sample Date	12/30/2014		12/30/2014		12/29/2014		1/5/2015		1/5/2015		12/30/2014		12/29/2014		
Organic Carbon, Total	µg/L	12,000	J-	(<7,300)	U	(<2,800)	U	(<2.0)	U	(<2,000)	U	(<3,400)	U	(<2,000)	U	---
Chemical Oxygen Demand	µg/L	49,000		11,000	J	(<10,000)	U	(<10)	U	(<10,000)	U	12,000	J	(<10,000)	U	---
Nitrogen, Kjeldahl, Total	µg/L	3,780		490		(<166)	U	210	J	350	J	980		(<166)	U	---
Ammonia	µg/L	**3,150**	J+	(<280)	U	(<210)	U	(<118)	U	(<118)	U	(<700)	U	210		2,000 (s)
Total Dissolved Solids	µg/L	7,920		336,000		422,000		87,000		251,000		1,590,000		13,000		---
Total Hardness	µg/L	500,000		310,000		200,000		89,000		260,000		710,000	J	(<300)	U	---
Phenolics, Total Recoverable	µg/L	(<5.0)	U	(<5.0)	U	(<5.0)	U	(<5.0)	U	(<5.0)	U	(<5.0)	U	(<5.0)	U	1 (s)
Nitrogen, Nitrate-Nitrite	µg/L	(<495)		(<495)		(<495)		1,390		(<248)	U	(<406)	U	657		10,000 (s)
Bromide	µg/L	880		88	J	130		(<60)	U	(<60)	U	210	J	(<60)	U	2,000 (g)
Chloride	µg/L	**4,800,000**		61,000		82,000		1,900	J	24,000		**650,000**	J	(<280)	U	250,000 (s)
Sulfate	µg/L	54,000		(<1,000)	U	44,000		7,100		36,000		5,300	J	370	J	250,000 (s)
Alkalinity, Total (As $CaCO_3$)	µg $CaCO_3$/L	670,000		250,000		240,000		75,000		180,000		260,000		(<20,000)	U	---
Color	color unit	45		55		(<10)	U	(<10)	U	35		(<10)	U	(<10)	U	---

NOTE:
NYSDEC = New York State Department of Environmental Conservation
AWQS = Ambient Water Quality Standard
µg/L = Micrograms per liter
J = Analyte detected below the practical quantification limit (PQL).
J+ = Analyte present. Reported value my be biased high. Result is estimated high.
U = Analyte was analyzed for, but not detected below the laboratory reporting limit.
J- = Analyte present. Reported value my be biased low. Result is estimated low.
D = Indicates the compound concentration is the result of a dilution.
(g) = NYSDEC Ambient Water Quality Standards guidance value
(s) = NYSDEC Ambient Water Quality Standards standard value
Analytical data results provided by Spectrum Analytical. Validation services are provided by Meridian Consultant Group, Inc.
Bold values indicate that the analyte was detected greater than the NYSDEC Ambient Water Quality Standards.
DUPLICATE sample was collected at MW-03D.

Appendix A

Environmental Notice

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REFERENCES

1. SURVEY BY JAMES F. GILLEN, DATED FEBRUARY 17, 1981. THE DEED BEARINGS AND JAMES F. GILLEN'S SURVEY BEARINGS ON WHICH THEY ARE BASED; THEIR NORTH EQUALS N.00°14'46"E. BASED ON THIS SURVEYS REFERENCE TO THE NEW YORK STATE PLANE COORDINATE SYSTEM, WITH A BEARING BASIS OF TRUE NORTH AT NORTH 78°35'00" MERIDIAN OF WEST LONGITUDE.

2. PART OF LARGER LOT OF 58 ACRES AS DESCRIBED IN DEED DATED APRIL 16, 1969, RECORDED IN THE WYOMING COUNTY CLERK'S OFFICE IN LIBER 370 AT PAGE 784

3. NOTICE OF APPROPRIATION, PROJECT S.H. NO.5400, WARSAW–GAINESVILLE, DATED AUGUST 24, 1955, RECORDED UNDER LIBER 309, PAGE 445

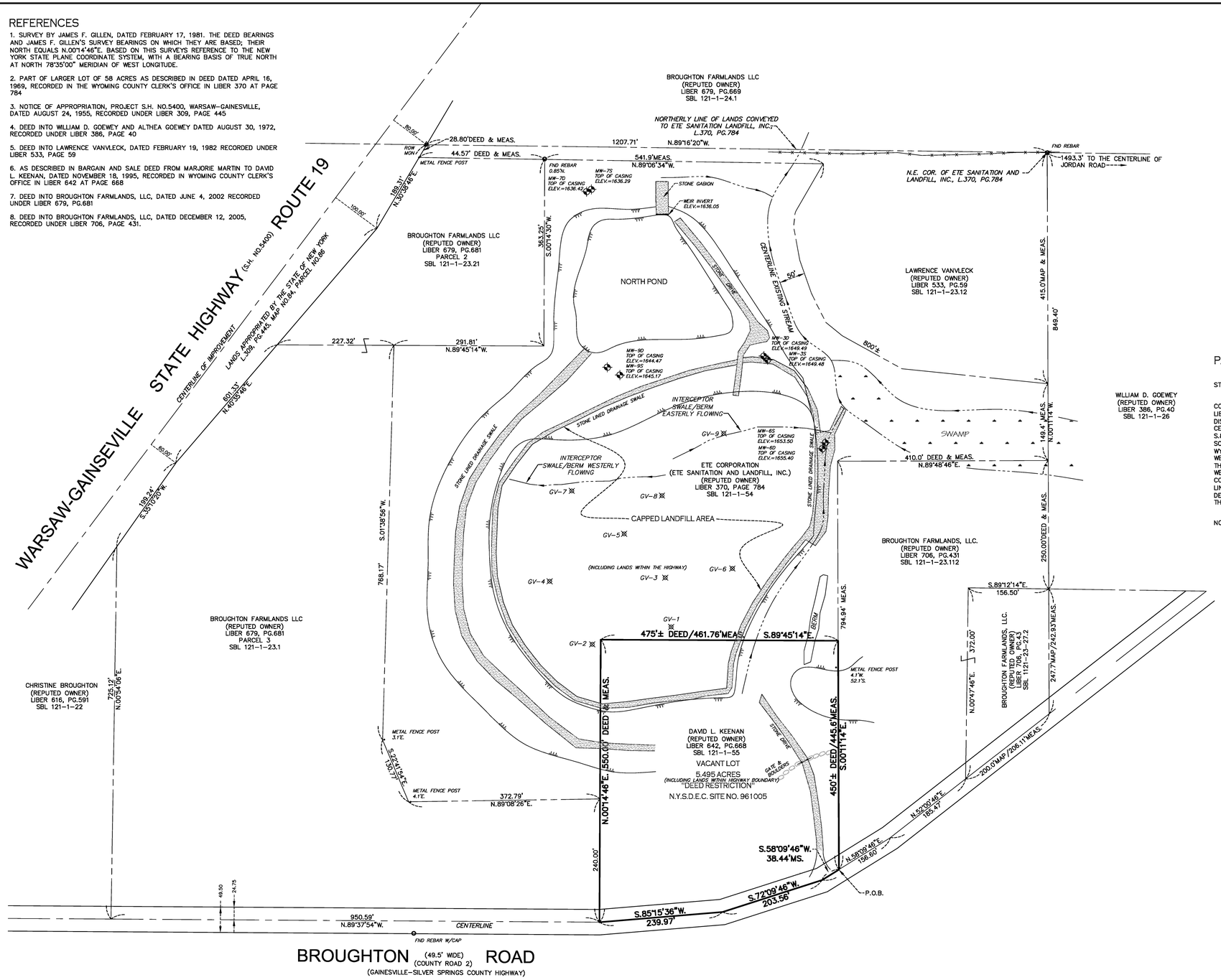
4. DEED INTO WILLIAM D. GOEWEY AND ALTHEA GOEWEY DATED AUGUST 30, 1972, RECORDED UNDER LIBER 386, PAGE 40

5. DEED INTO LAWRENCE VANVLECK, DATED FEBRUARY 19, 1982 RECORDED UNDER LIBER 533, PAGE 59

6. AS DESCRIBED IN BARGAIN AND SALE DEED FROM MARJORIE MARTIN TO DAVID L. KEENAN, DATED NOVEMBER 18, 1995, RECORDED IN WYOMING COUNTY CLERK'S OFFICE IN LIBER 642 AT PAGE 668

7. DEED INTO BROUGHTON FARMLANDS, LLC, DATED JUNE 4, 2002 RECORDED UNDER LIBER 679, PG.681

8. DEED INTO BROUGHTON FARMLANDS, LLC, DATED DECEMBER 12, 2005, RECORDED UNDER LIBER 706, PAGE 431.



PARCEL DESCRIPTION OF DECLARATION OF COVENANTS AND RESTRICTIONS

ALL THAT TRACT OR PARCEL OF LAND SITUATE IN THE TOWN OF GAINESVILLE, COUNTY OF WYOMING, AND STATE OF NEW YORK, BEING PART OF LOT 29, TOWNSHIP 8, RANGE 1, BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT IN THE CENTERLINE OF BROUGHTON ROAD AT THE SOUTHWEST CORNER OF LANDS CONVEYED TO BROUGHTON FARMLANDS, LLC AS RECORDED IN THE WYOMING COUNTY CLERK'S OFFICE UNDER LIBER 706 OF DEEDS AT PAGE 431; THENCE S.58°09'46"W. ALONG THE CENTERLINE OF BROUGHTON ROAD A DISTANCE OF 38.44 FEET TO AN ANGLE POINT THEREIN; THENCE S.72°09'46"W. CONTINUING ALONG THE CENTERLINE OF BROUGHTON ROAD A DISTANCE OF 203.56 FEET TO AN ANGLE POINT THEREIN; THENCE S.85°15'36"W. CONTINUING ALONG THE CENTERLINE OF BROUGHTON ROAD A DISTANCE OF 239.97 FEET TO THE SOUTHEAST CORNER OF LANDS CONVEYED TO BROUGHTON FARMLANDS, LLC (PARCEL 3) AS RECORDED IN THE WYOMING COUNTY CLERK'S OFFICE UNDER LIBER 679 OF DEEDS AT PAGE 681; THENCE N.00°14'46"E. ALONG THE WESTERLY LINE OF SAID LANDS CONVEYED TO BROUGHTON FARMLANDS, LLC A DISTANCE OF 550.00 FEET; THENCE S.89°45'14"E. ALONG A LINE A MEASURED DISTANCE OF 461.76 FEET (475'±DEED) TO A POINT ON THE WESTERLY LINE OF SAID LANDS CONVEYED TO BROUGHTON FARMLANDS, LLC AS RECORDED IN THE WYOMING COUNTY CLERK'S OFFICE UNDER LIBER 706 OF DEEDS AT PAGE 431; THENCE S.00°11'14"E. ALONG THE WESTERLY LINE OF SAID LANDS CONVEYED TO BROUGHTON FARMLANDS, LLC A MEASURED DISTANCE OF 445.6 FEET (450'± DEED) TO THE POINT OF BEGINNING, CONTAINING 5.495 ACRES MORE OR LESS INCLUDING THOSE LANDS WITHIN THE HIGHWAY.

SUBJECT TO A RIGHT OF WAY OF INGRESS AND EGRESS ALONG THE EXISTING DRIVEWAY TO VACANT LAND NORTH OF THE ABOVE DESCRIBED PARCEL.

LEGEND

- GV-1 ⊠ GAS VENT
- ⊕ MONITORING WELL
- • IRON FENCE POST
- ROW MON ▲ CONCRETE R.O.W. MONUMENT
- ○ IRON PIPE (PROPERTY)
- GRADE BREAK
- CENTERLINE OF ROAD
- CENTERLINE OF DITCH
- FENCE (CHAINLINK)
- LOT LINE
- PARCEL LINE
- RIGHT OF WAY LINE

GENERAL NOTES

1. ON FEBRUARY 22, 2011, THIS SURVEY WAS PERFORMED UNDER WINTER WEATHER CONDITIONS WITH GENERAL SNOW AND ICE COVER ON THE SURVEYED PREMISES AND IS SUBJECT TO SUCH VARIATIONS AS MAY BE REVEALED AT A LATER DATE.

2. TOPOGRAPHIC AND LANDFILL DESIGN INFORMATION AS SHOWN HEREON WAS DERIVED FROM AS–BUILT TOPOGRAPHIC SURVEY & DESIGN DRAWINGS.

NYSDEC NOTE

"THE ENGINEERING AND INSTITUTIONAL CONTROLS FOR THIS EASEMENT ARE SET FORTH IN THE SITE MANAGEMENT PLAN (SMP). A COPY OF THE SMP MUST BE OBTAINED BY ANY PARTY WITH AN INTEREST IN THE PROPERTY. THE SMP CAN BE OBTAINED FROM NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION, DIVISION OF ENVIRONMENTAL REMEDIATION, SITE CONTROL SECTION, 625 BROADWAY, ALBANY, NY 12233 OR AT derweb@gw.dec.state.ny.us."

CERTIFICATION

TO NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, AND TO THEIR SUCCESSORS AND ASSIGNS, THAT:

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE "MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/ACSM LAND TITLE SURVEYS," JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS IN 2005, AND INCLUDES ITEMS OF TABLE A THEREOF. PURSUANT TO THE ACCURACY STANDARDS AS ADOPTED BY ALTA AND NSPS AND IN EFFECT ON THE DATE OF THIS CERTIFICATION, UNDERSIGNED FURTHER CERTIFIES THAT IN MY PROFESSIONAL OPINION, AS A LAND SURVEYOR REGISTERED IN THE STATE OF NEW YORK, THE RELATIVE POSITIONAL ACCURACY OF THIS SURVEY DOES NOT EXCEED THAT WHICH IS SPECIFIED THEREIN.

SIGNED: DATE:

REGISTRATION NO.050193

NO PHYSICAL ADDRESS IS ASSIGNED TO THIS PARCEL ON DATE OF SURVEY

MEMBER OF: NEW YORK STATE ASSOCIATION OF PROFESSIONAL LAND SURVEYORS

MEMBER OF: NIAGARA FRONTIER LAND SURVEYORS ASSOCIATION INC.

THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF AN UP-TO-DATE ABSTRACT OF TITLE AND IS SUBJECT TO ANY STATE OF FACTS THAT MAY BE REVEALED BY AN EXAMINATION OF SUCH.

0 100 150 200 300 400

SCALE: 1"=100'
GRAPHIC SCALE IN FEET

DRAWING REVISIONS

ITEM	DATE	DESCRIPTION
1	04/05/2011	REVISED PER NYSDEC COMMENTS

DESIGNED BY:
DRAWN BY: GCW
CHECKED BY: GCW
DATE: 02/22/2011

WARNING:
ALTERING THIS DOCUMENT IS IN VIOLATION OF THE LAW EXCEPTING AS PROVIDED IN SECTION 7209, PART 2 OF THE NEW YORK STATE EDUCATION LAW. © 2011 WM. SCHUTT & ASSOCIATES P.C.

ONLY COPIES FROM THE ORIGINAL OF THIS SURVEY MAP MARKED WITH AN ORIGINAL OF THE LAND SURVEYOR'S EMBOSSED SEAL AND SIGNATURE SHALL BE CONSIDERED TO BE VALID THEREOF.

WM SCHUTT ASSOCIATES
37 CENTRAL AVE.
LANCASTER, NY 14086-2143
PH. 716-683-5961
FAX 716-683-0169
WWW.WMSCHUTT.COM

TOWN OF GAINESVILLE
COUNTY OF WYOMING, STATE OF NEW YORK
PART OF LOT 29, TOWNSHIP 8, RANGE 1
DEED RESTRICTION MAP NYSDEC SITE NO.

VACANT LOT BROUGHTON ROAD
ALTA LAND TITLE SURVEY

1

DRAWING SCALE: 1"=100'

SURVEY FILE:D/11018-01
WSA PROJECT NO. 11018

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REFERENCES

1. SURVEY BY JAMES F. GILLEN, DATED FEBRUARY 17, 1981. THE DEED BEARINGS AND JAMES F. GILLEN'S SURVEY BEARINGS ON WHICH THEY ARE BASED; THEIR NORTH EQUALS N.00°14'46"E. BASED ON THIS SURVEYS REFERENCE TO THE NEW YORK STATE PLANE COORDINATE SYSTEM, WITH A BEARING BASIS OF TRUE NORTH AT NORTH 78°35'00" MERIDIAN OF WEST LONGITUDE.

2. PART OF LARGER LOT OF 58 ACRES AS DESCRIBED IN DEED DATED APRIL 16, 1969, RECORDED IN THE WYOMING COUNTY CLERK'S OFFICE IN LIBER 370 AT PAGE 784

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4. DEED INTO WILLIAM D. GOEWEY AND ALTHEA GOEWEY DATED AUGUST 30, 1972, RECORDED UNDER LIBER 386, PAGE 40

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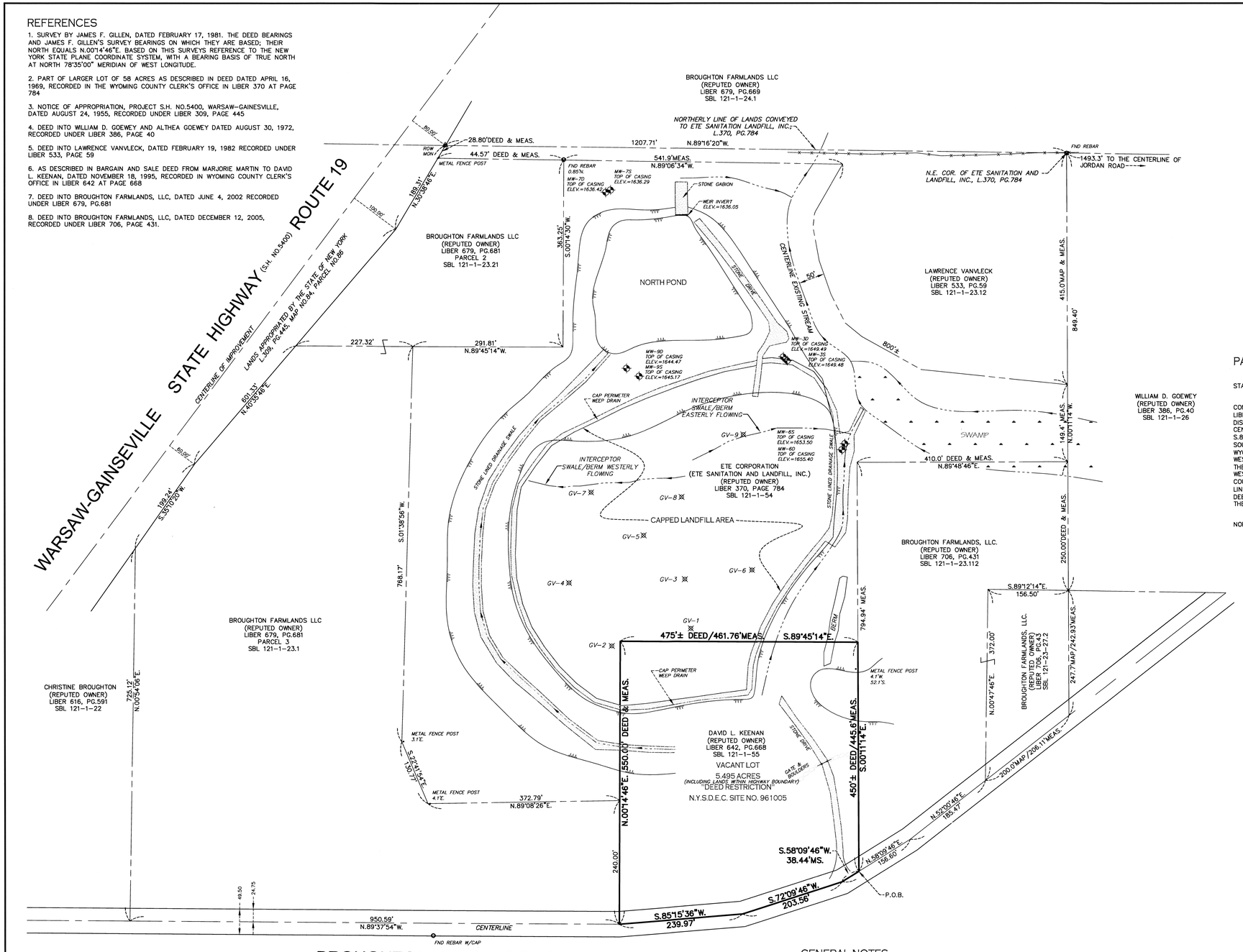

PARCEL DESCRIPTION OF DECLARATION OF COVENANTS AND RESTRICTIONS

ALL THAT TRACT OR PARCEL OF LAND SITUATE IN THE TOWN OF GAINESVILLE, COUNTY OF WYOMING, AND STATE OF NEW YORK, BEING PART OF LOT 29, TOWNSHIP 8, RANGE 1, BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT IN THE CENTERLINE OF BROUGHTON ROAD AT THE SOUTHWEST CORNER OF LANDS CONVEYED TO BROUGHTON FARMLANDS, LLC AS RECORDED IN THE WYOMING COUNTY CLERK'S OFFICE UNDER LIBER 706 OF DEEDS AT PAGE 431; THENCE S.58°09'46"W. ALONG THE CENTERLINE OF BROUGHTON ROAD A DISTANCE OF 38.44 FEET TO AN ANGLE POINT THEREIN; THENCE S.72°09'46"W. CONTINUING ALONG THE CENTERLINE OF BROUGHTON ROAD A DISTANCE OF 203.56 FEET TO AN ANGLE POINT THEREIN; THENCE S.85°15'36"W. CONTINUING ALONG THE CENTERLINE OF BROUGHTON ROAD A DISTANCE OF 239.97 FEET TO THE SOUTHEAST CORNER OF LANDS CONVEYED TO BROUGHTON FARMLANDS, LLC (PARCEL 3) AS RECORDED IN THE WYOMING COUNTY CLERK'S OFFICE UNDER LIBER 679 OF DEEDS AT PAGE 681; THENCE N.00°14'46"E. ALONG THE WESTERLY LINE OF SAID LANDS CONVEYED TO BROUGHTON FARMLANDS, LLC A DISTANCE OF 550.00 FEET; THENCE S.89°45'14"E. ALONG A LINE A MEASURED DISTANCE OF 461.76 FEET (475'±DEED) TO A POINT ON THE WESTERLY LINE OF SAID LANDS CONVEYED TO BROUGHTON FARMLANDS, LLC AS RECORDED IN THE WYOMING COUNTY CLERK'S OFFICE UNDER LIBER 706 OF DEEDS AT PAGE 431; THENCE S.00°11'14"E. ALONG THE WESTERLY LINE OF SAID LANDS CONVEYED TO BROUGHTON FARMLANDS, LLC A MEASURED DISTANCE OF 445.6 FEET (450'± DEED) TO THE POINT OF BEGINNING, CONTAINING 5.495 ACRES MORE OR LESS INCLUDING THOSE LANDS WITHIN THE HIGHWAY.

SUBJECT TO A RIGHT OF WAY OF INGRESS AND EGRESS ALONG THE EXISTING DRIVEWAY TO VACANT LAND NORTH OF THE ABOVE DESCRIBED PARCEL.

GENERAL NOTES

1. ON FEBRUARY 22, 2011, THIS SURVEY WAS PERFORMED UNDER WINTER WEATHER CONDITIONS WITH GENERAL SNOW AND ICE COVER ON THE SURVEYED PREMISES AND IS SUBJECT TO SUCH VARIATIONS AS MAY BE REVEALED AT A LATER DATE

2. TOPOGRAPHIC AND LANDFILL DESIGN INFORMATION AS SHOWN HEREON WAS DERIVED FROM AS–BUILT TOPOGRAPHIC SURVEY & DESIGN DRAWINGS.

NYSDEC NOTE

1. THIS PROPERTY IS SUBJECT TO A DECLARATION OF COVENANTS AND RESTRICTIONS BY THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION PURSUANT TO TITLE 36 OF ARTICLE 21 OF NEW YORK ENVIRONMENTAL CONSERVATION LAW.

2. "THE ENGINEERING AND INSTITUTIONAL CONTROLS FOR THIS DECLARATION OF COVENANTS AND RESTRICTIONS ARE SET FORTH IN THE SITE MANAGEMENT PLAN (SMP). A COPY OF THE SMP MUST BE OBTAINED BY ANY PARTY WITH AN INTEREST IN THE PROPERTY. THE SMP CAN BE OBTAINED FROM NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION, DIVISION OF ENVIRONMENTAL REMEDIATION, SITE CONTROL SECTION, 625 BROADWAY, ALBANY, NY 12233 OR AT derweb@gw.dec.state.ny.us."

LEGEND

- GV–1 ⊠ GAS VENT
- ⊕ MONITORING WELL
- • IRON FENCE POST
- ROW MON △ CONCRETE R.O.W. MONUMENT
- ○ IRON PIPE (PROPERTY)
- GRADE BREAK
- CENTERLINE OF ROAD
- CENTERLINE OF DITCH
- FENCE (CHAINLINK)
- LOT LINE
- PARCEL LINE
- RIGHT OF WAY LINE

CERTIFICATION

TO NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, AND TO THEIR SUCCESSORS AND ASSIGNS, THAT:

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE "MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/ACSM LAND TITLE SURVEYS," JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS IN 2005, AND INCLUDES ITEMS OF TABLE A THEREOF. PURSUANT TO THE ACCURACY STANDARDS AS ADOPTED BY ALTA AND NSPS AND IN EFFECT ON THE DATE OF THIS CERTIFICATION, UNDERSIGNED FURTHER CERTIFIES THAT IN MY PROFESSIONAL OPINION, AS A LAND SURVEYOR REGISTERED IN THE STATE OF NEW YORK, THE RELATIVE POSITIONAL ACCURACY OF THIS SURVEY DOES NOT EXCEED THAT WHICH IS SPECIFIED THEREIN.

4/8/11

SIGNED: DATE:

REGISTRATION NO.050193

NO PHYSICAL ADDRESS IS ASSIGNED TO THIS PARCEL ON DATE OF SURVEY

MEMBER OF: NEW YORK STATE ASSOCIATION OF PROFESSIONAL LAND SURVEYORS

MEMBER OF: NIAGARA FRONTIER LAND SURVEYORS ASSOCIATION INC.

THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF AN UP-TO-DATE ABSTRACT OF TITLE AND IS SUBJECT TO ANY STATE OF FACTS THAT MAY BE REVEALED BY AN EXAMINATION OF SUCH.

0 100 150 200 300 400

SCALE: 1"=100'
GRAPHIC SCALE IN FEET

DRAWING REVISIONS

ITEM	DATE	DESCRIPTION
1	04/06/2011	REVISED PER NYSDEC COMMENTS

DESIGNED BY:
DRAWN BY: GCW
CHECKED BY: GCW
DATE: 02/22/2011

STATE OF NEW YORK — GREGORY C. WILLIAMS — 050193 — LICENSED LAND SURVEYOR

ONLY COPIES FROM THE ORIGINAL OF THIS SURVEY MAP MARKED WITH AN ORIGINAL SIGNATURE AND ORIGINAL EMBOSSED SEAL AND SIGNATURE SHALL BE CONSIDERED TO BE VALID TRUE COPIES

WM SCHUTT ASSOCIATES
37 CENTRAL AVE.
LANCASTER, NY 14086-2143
PH. 716-683-5961
FAX 716-683-0169
WWW.WMSCHUTT.COM

TOWN OF GAINESVILLE
COUNTY OF WYOMING, STATE OF NEW YORK
PART OF LOT 29, TOWNSHIP 8, RANGE 1
DEED RESTRICTION MAP NYSDEC SITE NO.

VACANT LOT BROUGHTON ROAD
ALTA LAND TITLE SURVEY

1

DRAWING SCALE: 1"=100'

SURVEY FILE:D/11018-01
WSA PROJECT NO. 11018

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ENVIRONMENTAL NOTICE

To be issued in lieu of an Environmental Easement/Deed Restriction as referenced in DER-33

THIS ENVIRONMENTAL NOTICE is made the 25th day of February 2014, by the New York State Department of Environmental Conservation (Department), having an office for the transaction of business at 625 Broadway, Albany, New York 12233.

WHEREAS, a parcel of real property identified as ETE Sanitation and Landfill, Inc. (Site No. 961005), located on 5399 Broughton Road in the Town of Gainesville, County of Wyoming, State of New York, which is part of the lands conveyed by Edward and Ethel Herbert to RTR Sanitation and Landfill, Inc. by deed dated November 22, 1961 and recorded in the Wyoming County Clerk's Office on April 17, 1969 in Book 370 of Deeds at Page 784 and being more particularly described in Appendix "A", attached to this Notice and made a part hereof, and hereinafter referred to as "the Property", and as identified as Wyoming County Tax Map Section Block Lot No. 121-1-54: and

WHEREAS, the Department approved a cleanup to address contamination disposed at the Property and such cleanup was conditioned under certain limitations.

NOW, THEREFORE, the Department provides notice that:

FIRST, the Property subject to this Environmental Notice is as shown on a map attached to this Notice as Appendix "B" and made a part hereof.

SECOND, unless prior written approval by the Department or, if the Department shall no longer exist, any New York State agency or agencies subsequently created to protect the environment of the State and the health of the State's citizens, hereinafter referred to as "the Relevant Agency," is first obtained, where contamination remains at the Property subject to the provisions of the Site Management Plan ("SMP"), there shall be no disturbance or excavation of the Property which threatens the integrity of the engineering controls or which results may or may result in a significantly increased threat of harm or damage, at any site as a result of exposure to soils. A violation of this provision is a violation of 6 NYCRR 375-1.11(b)(2).

THIRD, no person shall disturb, remove, or otherwise interfere with the installation, use, operations, and maintenance of engineering controls required for the Remedy, including but not limited to those engineering controls described in the SMP and listed below, unless in each instance they first obtain a written waiver of such prohibition from the Department or Relevant Agency:

- Engineered multi-layered soil/synthetic membrane cap system;
- Storm water management system including armored swales and retention pond; and
- Site monitoring system.

FOURTH, the remedy was designed to be protective for the following uses: **Commercial as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and industrial as described in 6 NYCRR Part 375-1.8(g)(2)(iv)**. Therefore, any use for purposes other than Commercial or Industrial without the express written waiver of such prohibition by the Relevant Agency may result in a significantly increased threat of harm or damage at the site.

FIFTH, no person shall use the groundwater underlying the Property without treatment rendering it safe for drinking water or industrial purposes, as appropriate, unless the user first obtains permission to do so from the Department or Relevant Agency. Use of the groundwater without appropriate treatment may result in a significantly increased threat of harm or damage at any site.

SIXTH, it is a violation of 6 NYCRR 375-1.11(b) to use the Property in a manner inconsistent with this environmental notice.

IN WITNESS WHEREOF, the undersigned has executed this instrument the day written below.

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

STATE OF NEW YORK) ss:
COUNTY OF ALBANY)

On the 25th day of February in the year 2014, before me, the undersigned, personally appeared Robert W. Schick, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/ executed the same in his/her/ capacity as Designee of the Commissioner of the State of New York Department of Environmental Conservation, and that by his/her/ signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

_____
Notary Public – State of New York

David J. Chiusano
Notary Public, State of New York
No. 01CH5032146
Qualified in Schenectady County
Commission Expires August 22, 2014

APPENDIX A

ETE Sanitation and Landfill, Inc, Site
5399 Broughton Rod
Wyoming County, New York
Section Block Lot No, 121-1-54

Parcel Description of ENVIRONMENTAL NOTICE AREA for the Main Parcel of the former ETE Landfill

All that tract or parcel of land situate in the Town of Gainesville, County of Wyoming, and State of New York, being part of Lot 29, Township 8, Range 1, bounded and described as follows:

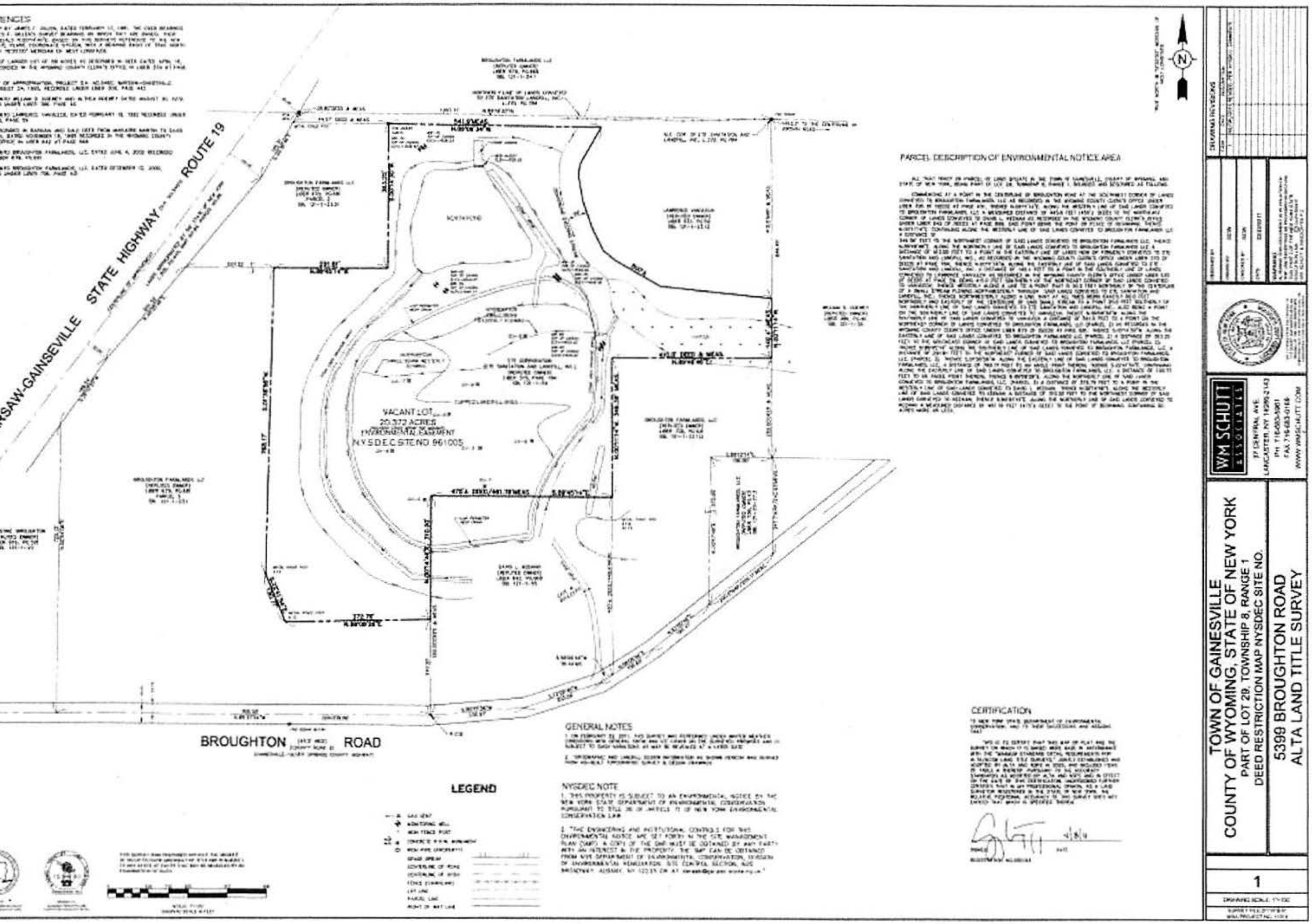
1) Commencing at a point in the centerline of Broughton Road at the southwest corner of lands conveyed to Broughton Farmlands, LLC. as recorded in the Wyoming County Clerk's Office under Liber 706 of Deeds at Page 431;
2) Thence N.00°11'14"E. along the westerly line of said lands conveyed to Broughton Farmlands, LLC a measured distance of 445.6 feet (450'+/- deed) to the northeast corner of lands conveyed to David L. Keenan as recorded in the Wyoming County Clerk's Office under Liber 642 of Deeds at Page 668, said point being the Point or Place of Beginning;
3) Thence N.00°11'14"E. continuing along the westerly line of said lands conveyed to Broughton Farmlands, LLC a distance 349.38 feet to the northwest corner of said lands conveyed to Broughton Farmlands, LLC;
4) Thence N.89°48'46"E. along the northerly line of said lands conveyed to Broughton Farmlands, LLC a distance of 410.00 feet to a point in the easterly line of lands now or formerly conveyed to ETE Sanitation and Landfill, Inc., as recorded in the Wyoming County Clerk's Office under Liber 370 of Deeds at Page 784;
5) Thence N.00°11'14"W. along the easterly line of said lands conveyed to ETE Sanitation and Landfill, Inc. a distance of 149.4 feet to a point in the southerly line of lands conveyed to Lawrence Vanvleck as recorded in the Wyoming County Clerk's Office under Liber 533 of Deeds at Page 59, being 415.0 feet southerly of the northeast corner of said lands conveyed to Vanvleck;
6) Thence westerly along a line to a point that is 50.0 feet northerly of the centerline of a small stream flowing northwesterly through said lands conveyed to ETE Sanitation and Landfill, Inc.;
7) Thence northwesterly along a line that at all times being exactly 50.0 feet northerly and easterly of the centerline of said small stream to a point 25.0 feet southerly of the northerly line of said lands conveyed to ETE Sanitation and Landfill, Inc., also being a point on the southerly line of said lands conveyed to Vanvleck;
8) Thence N.89°06'34"W. along the southerly line of said lands conveyed to Vanvleck a distance of 541.9 feet to appoint on the northeast corner of lands conveyed to Broughton Farmlands, LLC (Parcel 2) as recorded in the Wyoming County Clerk's Office under Liber 679 of Deeds at Page 681;
9) Thence S.00°14'30"W. along the easterly line of said lands conveyed to Broughton Farmlands, LLC (Parcel 2) a distance of 363.25 feet to the southeasterly corner of said lands conveyed to Broughton Farmlands, LLC (Parcel 2);
10) Thence N.89°45'14" along the southerly line of said lands conveyed to Broughton Farmlands, LLC, a distance of 291.81 feet to the northeast corner of said lands conveyed to Broughton Farmlands, LLC (Parcel 3);
11) Thence S.01°38'56"W. along the easterly line of said lands conveyed to Broughton Farmlands, LLC. a distance of 768.17 feet to an angle point therein; Thence S.22°41'54"E. continuing

along the easterly line of said lands conveyed to Broughton Farmlands, LLC a distance of 130.77 feet to an angle point therein;

12) Thence N.89°08'26"E. along the northerly line of said lands conveyed to Broughton Farmlands, LLC (Parcel 3) a distance of 372.79 feet to a point in the westerly line of said lands conveyed to David L. Keenan;
13) Thence N.00°14'46"E. along the westerly line of said lands conveyed to Keenan a distance of 310.00 feet to the northwest corner of said lands conveyed to Keenan;
14) Thence S.89°45'14"E. along the northerly line of said lands conveyed to Keenan a measured distance of 461.76 feet (475'+/- deed) to the Point of Beginning,

Containing 20 acres more or less.

APPENDIX B – SURVEY MAP



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ENVIRONMENTAL NOTICE

To be issued in lieu of an Environmental Easement/Deed Restriction as referenced in DER-33

THIS ENVIRONMENTAL NOTICE is made the 25th day of February 2014, by the New York State Department of Environmental Conservation (Department), having an office for the transaction of business at 625 Broadway, Albany, New York 12233.

WHEREAS, a parcel of real property indentified as Subdivided Parcel of former ETE Sanitation and Landfill, Inc. (Site 961005), located on Broughton Road in the Town of Gainesville, County of Wyoming, State of New York, which is part of lands conveyed by Marjorie Martin to David L. Keenan by deed dated November 18, 1995 and recorded in the Wyoming County Clerk's Office on November 24, 1995 in Book 642 of Deeds at Page 668 and being more particularly described in Appendix "A" and attached to this noticed and made a part hereof, and hereinafter referred to as " the Property" and as identified as Wyoming County Tax Map Section Block Lot No. 121-1-55; and

WHEREAS, the Department approved a cleanup to address contamination disposed at the Property and such cleanup was conditioned upon certain limitations.

NOW, THEREFORE, the Department provides notice that:

FIRST, the Property subject to this Environmental Notice is as shown on a map attached to this Notice as Appendix "B" and made a part hereof.

SECOND, unless prior written approval by the Department or, if the Department shall no longer exist, any New York State agency or agencies subsequently created to protect the environment of the Sate and the health of the State's citizens, hereinafter referred to as "the Relevant Agency," is first obtained, where contamination remains at the Property subject to the provisions of the Site Management Plan ("SMP"), there shall be no disturbance or excavation of the Property which threatens the integrity of the engineering controls or which results or may result in a significantly increased threat of harm or damage at any site as a result of exposure to soils. A violation of this provision is a violation of 6 NYCRR 375-1.11(b)(2).

THIRD, no person shall disturb, remove, or otherwise interfere with the installation, use, operations, and maintenance of engineering controls required for the Remedy, including but not limited to those engineering controls described in the SMP and listed below, unless in each instance they first obtain a written waiver of such prohibition from the Department or Relevant Agency.

- Engineered multi-layered soil/synthetic membrane cap system;
- Stormwater management system including armored swales and retention pond; and
- Site monitoring system.

FOURTH, the remedy was designed to be protective for the following uses: **Commercial as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and Industrial as described in 6 NYCRR Part 375-1.8(g)(2)(iv).** Therefore, any use for purposes other than Commercial and Industrial without the express written waiver of such prohibition by the Relevant Agency may result in a significantly increased threat of harm or damage at any site.

FIFTH, no person shall use the groundwater underlying the Property without treatment rendering it safe for drinking water or industrial purposes, as appropriate, unless the user first obtains permission to do so from the Department or Relevant Agency. Use of the groundwater without appropriate treatment may result in a significantly increased threat of harm or damage at any site.

SIXTH, it is a violation of 6 NYCRR 375-1.11(b) to use the Property in a manner inconsistent with this environmental notice.

IN WITNESS WHEREOF, the undersigned, acting by and though the Department of Environmental Conservation as Designee of the Commissioner, has executed this instrument the day written below.

By: _____

Robert W. Schick, P E.
Director, Division of Environmental Remediation

STATE OF NEW YORK) ss:
COUNTY OF ALBANY)

On the 25th day of February, in the year 2014, before me, the undersigned, personally appeared Robert W. Schick, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/ executed the same in his/her/ capacity as Designee of the Commissioner of the State of New York Department of Environmental Conservation, and that by his/her/ signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

_____

Notary Public – State of New York

David J. Chiusano
Notary Public, State of New York
No. 01CH5032146
Qualified in Schenectady County
Commission Expires August 22, 2014

APPENDIX A

ETE Sanitation and Landfill, Inc. Site
Broughton Road
Wyoming County, New York
Section Block Lot No, 121-1-55

Parcel Description of ENVIRONMENTAL NOTICE AREA for the Subdivided Parcel of the former ETE Landfill

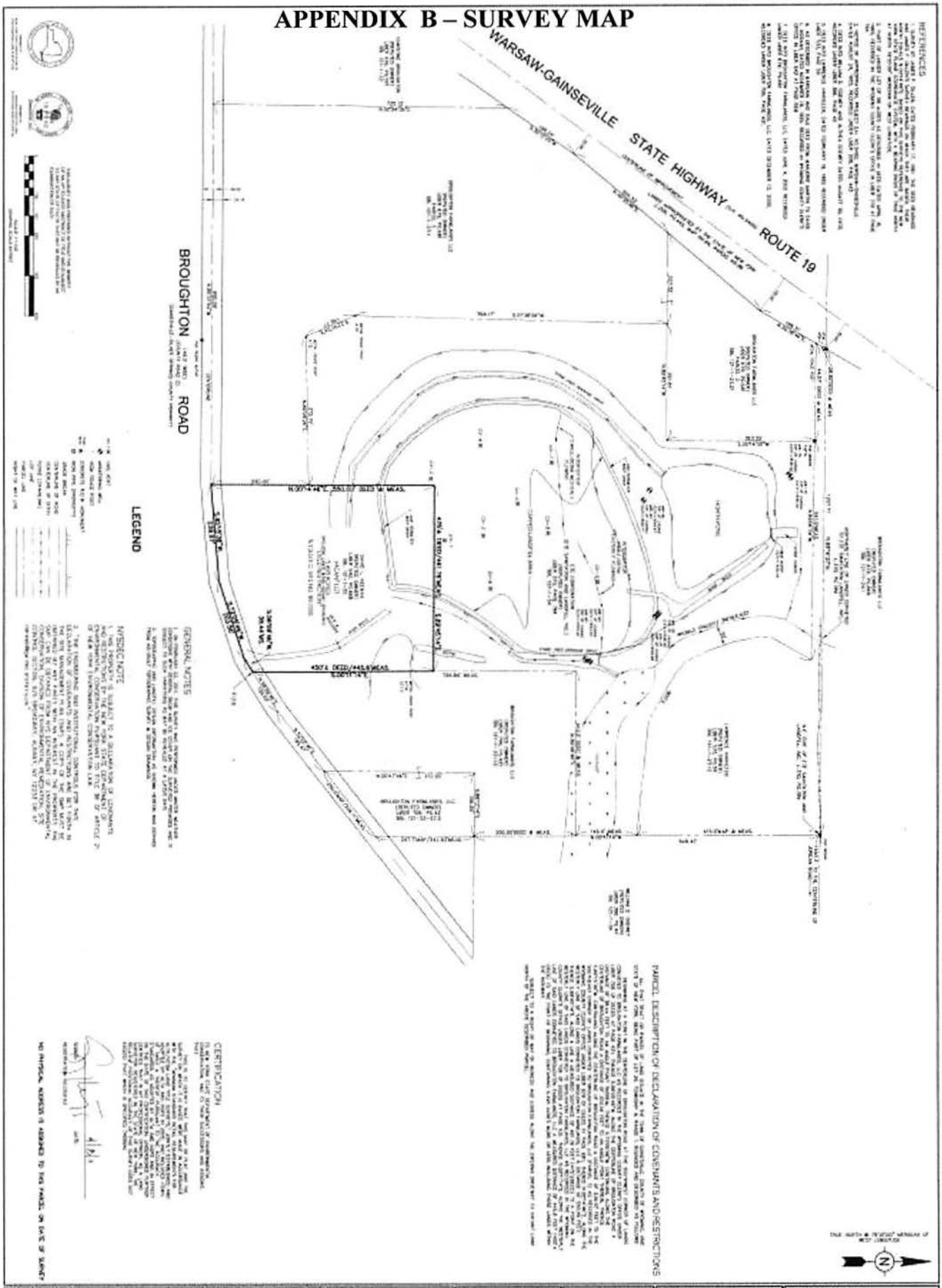
All that tract or parcel of land situate in the Town of Gainesville, County of Wyoming, and State of New York, being part of Lot 29, Township 8, Range 1, bounded and described as follows:

1) Beginning at a point in the centerline of Broughton Road at the southwest corner of lands conveyed to Broughton Farmlands, LLC as recorded in the Wyoming County Clerk's Office under Liber 706 of Deeds at Page 431;
2) Thence S.58°09'46"W. along the centerline of Broughton Road a distance of 38.44 feet to an angle point therein;
3) Thence S.72°09'46"W. continuing along the centerline of Broughton Road a distance of 203.56 feet to an angle point therein;
4) Thence S.85 °15'36"W continuing along the centerline of Broughton Road a distance of 239.97 feet to the southeast corner of lands conveyed to Broughton Farmlands, LLC (Parcel 3) as recorded in the Wyoming County Clerk's Office under Liber 679 of Deeds at page 681;
5) Thence N.00 °14'46"E. along the westerly line of said lands conveyed to Broughton Farmlands, LLC a distance of 550.00 feet;
6) Thence S.89 °45'14"E. along a line a measured distance of 461.76 feet (475'+/- deed) to a point on the westerly line of said lands conveyed to Broughton Farmlands, LLC as recorded in the Wyoming County Clerk's Office under Liber 706 of Deeds at page 431;
7) Thence S.00 °11'14"E. along the westerly line of said lands conveyed to Broughton Farmlands, LLC a measured distance of 445.6 feet (450'+/- deed) to the Point of Beginning,

Containing 5.495 acres more or less including those lands within the highway.

Subject to a Right of Way of Ingress and Egress along the existing driveway to vacant land north of the above described parcel.

APPENDIX B – SURVEY MAP



TOWN OF GAINESVILLE
COUNTY OF WYOMING, STATE OF NEW YORK
PART OF LOT 29, TOWNSHIP 8, RANGE 1
DEED RESTRICTION MAP NYSDEC SITE NO.

VACANT LOT BROUGHTON ROAD
ALTA LAND TITLE SURVEY

WM SCHUTT ASSOCIATES
37 CENTRAL AVE.
LANCASTER, NY 14086-2143
PH. 716-683-5861
FAX 716-683-0169
WWW.WMSCHUTT.COM

DRAWING REVISIONS

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LIBER 642 PAGE 668

T 691

Standard N.Y.B.T.U. Form 8002: Bargain & sale deed, with covenant against grantor's acts—Ind. or Corp. single sheet

JULIUS BLUMBERG, INC., LAW BLANK PUBLISHERS

CONSULT YOUR LAWYER BEFORE SIGNING THIS INSTRUMENT – THIS INSTRUMENT SHOULD BE USED BY LAWYERS ONLY

4919

THIS INDENTURE, made the 18th day of November, nineteen hundred and ninety-five

BETWEEN

MARJORIE MARTIN, residing at
42 Church Street
Delevan, New York 14042

party of the first part, and

DAVID L. KEENAN, residing at
3457 East Main Street
Bliss, New York 14024

party of the second part,

WITNESSETH, that the party of the first part, in consideration of Ten Dollars and other valuable consideration paid by the party of the second part, does hereby grant and release unto the party of the second part, the heirs or successors and assigns of the party of the second part forever,

ALL that certain plot, piece or parcel of land. with the buildings and improvements thereon erected, situate, lying and being in the

Town of Gainesville,

County of Wyoming, State of New York, being part of Lot 29, Township 8, Range 1, bounded as follows: Beginning at a point in the centerline of Broughton Road at the southwest corner of property described in a deed to the Town of Gainesville from the party of the first part; thence south 57° 55' west along the centerline to a point; thence south 71° 55' west 203.56 feet to a point; thence 85° 50' 40" west 239.97 feet to a point; thence west 550 feet; thence east 475 feet to the west line of property described in the aforesaid deed to the Town of Gainesville; thence southerly on said west line 450 feet more or less to the point of beginning.

Subject to a right of way of ingress and egress along the existing driveway to vacant land north of the above described parcel.

TOGETHER with all right, title and interest, if any, of the party of the first part in and to any streets and roads abutting the above described premises to the center lines thereof; TOGETHER with the appurtenances and all the estate and rights of the party of the first part in and to said premises; TO HAVE AND TO HOLD the premises herein granted unto the party of the second part, the heirs or successors and assigns of the party of the second part forever.

AND the party of the first part covenants that the party of the first part has not done or suffered anything whereby the said premises have been encumbered in any way whatever, except as aforesaid.
AND the party of the first part, in compliance with Section 13 of the Lien Law, covenants that the party of the first part will receive the consideration for this conveyance and will hold the right to receive such consideration as a trust fund to be applied first for the purpose of paying the cost of the improvement and will apply the same first to the payment of the cost of the improvement before using any part of the total of the same for any other purpose.
The word "party" shall be construed as if it read "parties" whenever the sense of this indenture so requires.

IN WITNESS WHEREOF, the party of the first part has duly executed this deed the day and year first above written.

IN PRESENCE OF:

RECEIVED
$ 24.00
NOV 24 1995
533
REAL ESTATE TRANSFER TAX
WYOMING COUNTY

Marjorie Martin
MARJORIE MARTIN

Appendix B

Excavation Work Plan

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APPENDIX B– EXCAVATION WORK PLAN

B-1 NOTIFICATION

At least 15 days prior to the start of any activity that is anticipated to penetrate the landfill cap system and encounter remaining contamination, the site owner or their representative will notify the Department. Currently, this notification will be made to:

David Chiusano, Project Manager
Site Remediation Engineer
New York State Department of Conservation
625 Broadway 12th Floor
Albany, New York 12233-7017
Email: djchiusa@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, estimated volumes of contaminated soil to be excavated and 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 summary of the applicable components of this Excavation Work Plan (EWP).
- A statement that the work will be performed in compliance with this EWP and 29 CFR 1910.120.
- A copy of the contractor's health and safety plan (HASP), in electronic format, if it differs from the HASP provided in Appendix C of the Site Management Plan (SMP).
- Identification of disposal facilities for potential waste streams.
- Identification of sources of any anticipated backfill, along with all required chemical testing results.

B-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, after issuance of the Certificate of Completion. Concurrent with the excavation, a log of observations will be maintained for the purpose of establishing a record of the general character of the materials encountered. The log will include the date, location, excavation depth, depth to groundwater, nature of material (i.e., sand, silt, waste), and unusual features.

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

B-3 STOCKPILE METHODS

Soil stockpiles will be continuously encircled with a berm and/or silt fence. Hay bales will be used as needed near 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 New York State Department of Environmental Conservation (NYSDEC).

B-4 MATERIALS EXCAVATION AND LOAD OUT

Contaminated materials remaining onsite are under a Part 360 landfill cap, consisting of 6 in. of topsoil, an 18 in. barrier protection soil layer, a geocomposite drainage layer, a 40 mil linear low density polyethylene geomembrane, and a geocomposite gas venting layer. Excavation will be carried out so that barrier soils are segregated from contaminated materials and re-used onsite. Geomembrane and geocomposite layers shall be cut cleanly so as to preserve the integrity of the contiguous portions of the cap. Following the removal of the cap, contaminated materials will be excavated and disposed of at the approved facility. 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 the SMP is posed by utilities or easements on the site.

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

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. 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.

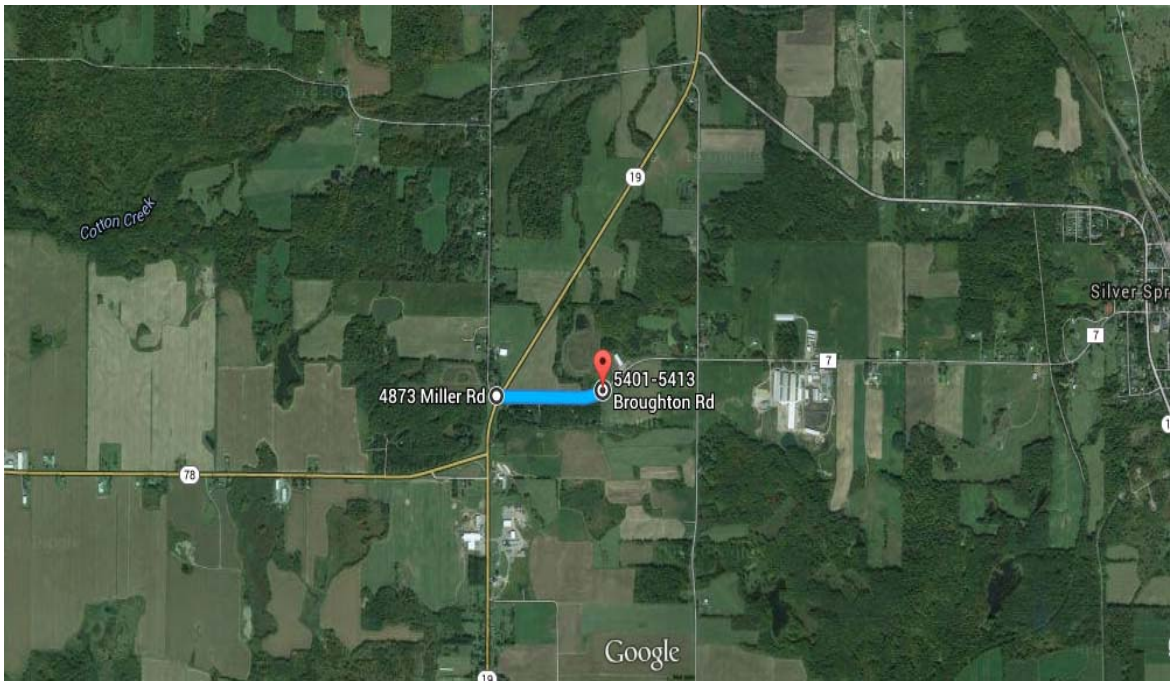
B-5 MATERIALS TRANSPORT OFF-SITE

All transport of materials will be performed by licensed haulers in accordance with appropriate local, State, and Federal regulations, including 6 New York Code of Rules and Regulations (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.

Trucks leaving the site shall head west on Broughton Road toward NY State Route 19 and turn either left or right onto NY State Route 19 before continuing to their final destination.



Map courtesy of maps.google.com

All trucks loaded with site materials will exit the vicinity of the site using only these approved truck routes. This is the most appropriate route and takes into account: (a) limiting transport through residential areas and past sensitive sites; (b) use of city mapped truck routes; (c) prohibiting off-site queuing of trucks entering the facility; (d) limiting total distance to major highways; (e) promoting safety in access to highways; and (f) overall safety in transport.

Egress points for truck and equipment transport from the site will be kept clean of dirt and other materials during site remediation and development. Trucks will be prohibited from stopping and idling in the neighborhood outside the project site. Queuing of trucks will be performed on-site in order to minimize off-site disturbance. Off-site queuing will be prohibited.

B-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 6 NYCRR 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 per 6 NYCRR Part 360-1.2. Material that does not meet Track 1 unrestricted soil cleanup objectives is prohibited from being taken to a New York State recycling facility (6 NYCRR Part 360-16 Registration Facility).

B-7 MATERIALS REUSE ON-SITE

Topsoil and barrier protection material taken from the landfill cap may be reused onsite without sampling. This material is to be segregated from all other materials. Materials from under the existing cap shall either be removed from the site or re-covered with the landfill cap system. Materials from elsewhere on the site shall be sampled at a frequency of one per 500 yd^3 for metals by U.S. Environmental Protection Agency (EPA) Method 6010, pesticides by EPA Method 8081, semivolatile organic compunds (SVOCs) by EPA Method 8270, and volatile organic compounds (VOCs) by EPA Method 8260.

Analytical results from soil screening activities which are completed in accordance with Section B-2 of this EWP will be used to determine if reuse is appropriate. Chemical criteria for on-site reuse of material have been approved by NYSDEC and are listed in Table B-1. The qualified environmental professional will ensure that procedures defined for materials reuse in the SMP are followed and that unacceptable material does not remain on-site. Soil slated for reuse is to be stockpiled distinctly separate from soil to be disposed off-site.

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.

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.

B-8 FLUIDS MANAGEMENT

The Contractor shall construct temporary berms, swales, and other facilities required to prevent surface water and liquids from entering or leaving the open excavations.

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 (e.g., a local pond, stream, or river) will be performed under a State Pollutant Discharge Elimination System permit.

B-9 COVER SYSTEM RESTORATION

After the completion of soil removal and any other invasive activities the cover system will be restored in a manner that complies with the Record of Decision. The demarcation layer, consisting of a Part 360 cap will be replaced to provide a visual reference to the top of the 'Remaining Contamination Zone', the zone that requires adherence to special conditions for disturbance of remaining contaminated soils defined in the SMP. If the type of cover system changes from that which exists prior to the excavation (i.e., a soil cover is replaced by asphalt), this will constitute a modification of the cover element of the remedy and the upper surface of the 'Remaining Contamination. A figure showing the modified surface will be included in the subsequent Periodic Review Report and in any updates to the Site Management Plan.

B-10 BACKFILL FROM OFF-SITE SOURCES

All materials proposed for import onto the site will be approved by the qualified environmental professional and will be in compliance with provisions in this SMP prior to receipt at the site. Prior to delivery of soil to the site from an off-site source, the source of supply is to be approved by the NYSDEC. Materials from off-site sources obtained from a mining area will be from a facility operating under a valid NYSDEC Mining Permit or other applicable regulatory authority for the duration of the site work. Material from industrial sites, spill sites, or other environmental remediation sites or potentially contaminated sites will not be imported to the site.

Material from industrial sites, spill sites, or other environmental remediation sites or potentially contaminated sites will not be imported to the site. Material shall not contain man-made fills, trash, refuse, backfills from previous construction, root or other organic matter, frozen material, or any other deleterious materials. Material shall not contain free liquids when delivered, or placed and compacted.

All materials proposed for use on site will be sampled for target compound list (TCL) VOCs by EPA Method 8260, TCL SVOCs by EPA Method 8270, TCL pesticides/polychlorinated biphenyls (PCBs) by EPA Method 8081/8082, and target analyte list (TAL) metals by EPA Method 6010 at a minimum frequency of one per source and must meet the Allowable Constituent Levels for imported fill or soil as

tabulated in Appendix 5 of DER-10, dated May 2010. All imported soils must also meet the backfill and cover soil quality standards established in 6 NYCRR 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 are listed in Table B-1. 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.

B-11 STORMWATER POLLUTION PREVENTION

A Stormwater Pollution Prevention Plan will be developed and submitted to NYSDEC for approval prior to any intrusive activities at the ETE Sanitation and Landfill site. During any excavation or intrusive work activities, 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 construction area.

B-12 CONTINGENCY PLAN

If underground storage tanks (USTs) 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.

If a drum is encountered and found intact, liquid contents will either be transferred to a new closed drum or the existing drum will be placed in an overpack drum. Drums containing solids will be placed in an overpack drum.

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 full a full list of analytes (i.e., TAL metals, TCL volatiles and semivolatiles, TCL pesticides and PCBs), unless the site history and previous sampling results provide a sufficient justification to limit the list of analytes. In this case, a reduced list of analytes will be proposed to the NYSDEC for approval prior to sampling.

Identification of unknown or unexpected contaminated media identified by screening during invasive site work will be promptly communicated by phone to NYSDEC's Project Manager. Reportable quantities of petroleum product will also be reported to the NYSDEC spills hotline. These findings will be also included in the periodic reports prepared pursuant to Section 5 of the SMP.

B-13 COMMUNITY AIR MONITORING PLAN

Community air monitoring will be implemented to monitor for VOC and particulate levels at the perimeter of the work area, in accordance with Appendix 1 of DER-10, dated May 2010. Total VOCs will be monitored continuously at the downwind perimeter of the work area daily using approved instrumentation. If total VOC levels exceed 5 parts per million above background at the work area perimeter, work activities will be halted and monitoring continued. All readings will be recorded and be made available to the NYSDEC and New York State Department of Health (NYSDOH) personnel to review.

A figure showing the location of air sampling stations based on generally prevailing wind conditions is shown in Figure B-1. 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 Community Air Monitoring Plan will be reported to NYSDEC and NYSDOH Project Managers.

B-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 odor masking agents. If nuisance odors are identified at the site boundary, or if odor complaints are received, work will be halted and the source of odors will be identified and corrected. Work will not resume until all nuisance odors have been abated. NYSDEC and NYSDOH will be notified of all odor events and of any other complaints about the project. Implementation of all odor controls, including the halt of work, is the responsibility of the 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 on- and off-site nuisances. At a minimum, these measures will include: (a) limiting the area of open excavations and size of soil stockpiles; (b) shrouding open excavations with tarps and other covers; and (c) using foams to cover exposed odorous soils. If odors develop and cannot be otherwise

controlled, additional means to eliminate odor nuisances will include: (d) direct load-out of soils to trucks for off-site disposal; (e) use of chemical odorants in spray or misting systems; and, (f) use of staff to monitor odors in surrounding neighborhoods.

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

B-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 through the use of a dedicated on-site water truck for road wetting. The truck will be equipped with a water cannon capable of spraying water directly onto off-road areas including excavations and stockpiles.

- Clearing and grubbing of larger sites will be done in stages to limit the area of exposed, unvegetated soils vulnerable to dust production.

- Gravel will be used on roadways to provide a clean and dust-free road surface.

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

B-16 OTHER NUISANCES

A plan for rodent control will be developed and utilized by the contractor prior to and during site clearing and site grubbing, and during all remedial work. A plan will be developed and utilized by the contractor for all remedial work to ensure compliance with local noise control ordinances.

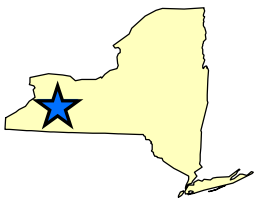
Table B-1 Soil Remedial Action Objectives

Contaminant	Maximum Concentration[(a)] (ppm) for soils to be placed beneath cap or 2 ft of clean soil cover	Maximum Concentration [(b)] (ppm) for soils placed on the surface of the ETE Sanitation and Landfill site
Metals		
Arsenic	16	13
Barium	10,000	350
Beryllium	2,700	7.2
Cadmium	60	2.5
Chromium, hexavalent	800	1
Chromium, trivalent	6,800	30
Copper	10000	50
Total Cyanide	10,000	27
Lead	3900	63
Manganese	10,000	1,600
Total Mercury	5.7	0.18
Nickel	10,000	30
Selenium	6800	3.9
Silver	6,800	2
Zinc	10000	109
Volatiles		
1,1,1-Trichloroethane	1,000	0.68
1,1-Dichloroethane	480	0.27
1,1-Dichloroethene	1000	0.33
1,2-Dichlorobenzene	1000	1.1
1,2-Dichloroethane	60	0.02
cis-1,2-Dichloroethene	1,000	0.25
trans-1,2-Dichloroethene	1,000	0.19
1,3-Dichlorobenzene	560	2.4
1,4-Dichlorobenzene	250	1.8
1,4-Dioxane	250	0.1
Acetone	1,000	0.05
Benzene	89	0.06
Butylbenzene	1000	12
Carbon tetrachloride	44	0.76
Chlorobenzene	1,000	1.1
Chloroform	700	0.37
Ethylbenzene	780	1
Hexachlorobenzene	12	0.33
Methyl ethyl ketone	1000	0.12
Methyl tert-butyl ether	1,000	0.93
Methylene chloride	1,000	0.05
n-Propylbenzene	1,000	3.9
sec-Butylbenzene	1000	11
tert-Butylbenzene	1000	5.9
Tetrachloroethene	300	1.3
Toluene	1,000	0.7
Trichloroethene	400	0.47
1,2,4-Trimethylbenzene	380	3.6
1,3,5-Trimethylbenzene	380	8.4
Vinyl chloride	27	0.02
Xylene (mixed)	1,000	0.26

(a) Values are from NYCRR Part 375 Table 375-6.8(b) Restricted Use- Industrial Soil Cleanup Objectives
(b) Values are from NYCRR Part 375 Table 375-6.8(a) Unrestricted Use Soil Cleanup Objectives
NOTE: ppm = Parts per million (mg/kg)

Table B-1 Soil Remedial Action Objectives

Contaminant	Maximum Concentration[a] (ppm) for soils to be placed beneath cap or 2 ft of clean soil cover	Maximum Concentration [b] (ppm) for soils placed on the surface of the ETE Sanitation and Landfill site
Polychlorinated Biphenyls/Pesticides		
2,4,5-TP Acid (Silvex)	1,000	3.8
4,4'-DDE	120	0.0033
4,4'-DDT	94	0.0033
4,4'-DDD	180	0.0033
Aldrin	1.4	0.005
alpha-BHC	7	0.02
beta-BHC	14	0.036
Chlordane (alpha)	47	0.094
delta-BHC	1,000	0.04
Dibenzofuran	1,000	7
Dieldrin	2.8	0.005
Endosulfan I	920	2.4
Endosulfan II	920	2.4
Endosulfan sulfate	920	2.4
Endrin	410	0.014
Heptachlor	29	0.042
Lindane	23	0.1
Polychlorinated biphenyls	25	0.1
Semi-volatiles		
Acenaphthene	1000	20
Acenapthylene	1,000	100
Anthracene	1,000	100
Benz(a)anthracene	11	1
Benzo(a)pyrene	1.1	1
Benzo(b)fluoranthene	11	1
Benzo(g,h,i)perylene	1,000	100
Benzo(k)fluoranthene	110	0.8
Chrysene	110	1
Dibenz(a,h)anthracene	1	0.33
Fluoranthene	1,000	100
Fluorene	1000	30
Indeno(1,2,3-cd)pyrene	11	0.5
m-Cresol	1,000	0.33
Naphthalene	1,000	12
o-Cresol	1000	0.33
p-Cresol	1000	0.33
Pentachlorophenol	55	0.8
Phenanthrene	1,000	100
Phenol	1000	0.33
Pyrene	1000	100



Legend

- Offsite Groundwater Monitoring Well
- Onsite Groundwater Monitoring Well
- Prevailing Wind Direction
- Air Monitoring Location

Feet
0 225 450 900
1 in = 450 feet

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

EA®

NEW YORK STATE OF OPPORTUNITY Department of Environmental Conservation

ETE SANITATION AND LANDFILL
(SITE NO. 961005)
GAINESVILLE, NEW YORK

FIGURE B-1
AIR MONITORING LOCATIONS

PROJECT MGR:	DESIGNED BY:	CREATED BY:	CHECKED BY:	SCALE:	DATE:	PROJECT NO:	FILE NO:
CJS	CJS	ALK	CJS	AS SHOWN	NOV 2015	14907.27	GIS\FIGURES\14907.27 ETE\GIS\MXDs

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STATE OF NEW YORK, COUNTY OF ss:

On the 18 day of November 1995, before me personally came

MARJORIE MARTIN

to me known to be the individual described in and who executed the foregoing instrument, and acknowledged that she executed the same.

Mark A. Lillenstein
Notary Public

MARK A. LILLENSTEIN
NOTARY PUBLIC, STATE OF NEW YORK
QUALIFIED IN CATTARAUGUS COUNTY
MY COMMISSION EXPIRES 9/30/97

STATE OF NEW YORK, COUNTY OF ss:

On the day of 19 , before me personally came

to me known to be the individual described in and who executed the foregoing instrument, and acknowledged that executed the same.

STATE OF NEW YORK, COUNTY OF ss:

On the day of 19 , before me personally came
to me known, who, being by me duly sworn, did depose and say that he resides at No. ;

that he is the of , the corporation described in and which executed the foregoing instrument; that he knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the board of directors of said corporation, and that he signed h name thereto by like order.

STATE OF NEW YORK, COUNTY OF ss:

On the day of 19 , before me personally came
the subscribing witness to the foregoing instrument, with whom I am personally acquainted, who, being by me duly sworn, did depose and say that he resides at No. ;

that he knows to be the individual described in and who executed the foregoing instrument; that he, said subscribing witness, was present and saw execute the same; and that he, said witness, at the same time subscribed h name as witness thereto.

Bargain and Sale Deed
WITH COVENANT AGAINST GRANTOR'S ACTS

TITLE No.

MARJORIE MARTIN

TO

DAVID L. KEENAN

SECTION 121.
BLOCK 1
LOT 55
COUNTY OR TOWN Gainesville
Wyoming County

RETURN BY MAIL TO:

DAVID L. KEENAN
3457 East Main Street
Bliss, New York 14024

Zip No.

D95-5597-L

Reserve this space for use of Recording Office.

95 NOV 24 AM 11:39
WYOMING COUNTY CLERK
WARSAW, N.Y.

STATE OF NEW YORK
COUNTY OF WYOMING
Recorded NOVEMBER 24, 1995
at 11:39 A.M. In Liber 642
page 668 of DEEDS
and Examined
Jean M. Kretz, Clerk

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Health and Safety Plan Addendum
ETE Sanitation and Landfill (961005)
Gainesville, New York

Prepared for

New York State Department of Environmental Conservation
625 Broadway
Albany, New York 12233

Prepared by

EA Engineering, P.C., and Its Affiliate
EA Science and Technology
6712 Brooklawn Parkway, Suite 104
Syracuse, New York 13211
(315) 431-4610

November 2015
Version: FINAL
EA Project No. 14907.27

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Health and Safety Plan Addendum
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EA Engineering, P.C. and Its Affiliate
EA Science and Technology
6712 Brooklawn Parkway, Suite 104
Syracuse, New York 13211-2158
(315) 431-4610

30 November 2015
Christopher J. Canonica, P.E., Program Manager — Date
EA Engineering, P.C.

30 November 2015
Robert S. Casey, Project Manager — Date
EA Science and Technology

November 2015
Version: FINAL
EA Project No. 14907.27

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LIST OF ACRONYMS

°F	Degrees in Fahrenheit
CFR	Code of Federal Regulations
EA	EA Engineering, P.C. and Its Affiliate EA Science and Technology
FS	Feasibility study
HASP	Health and Safety Plan
NYSDEC	New York State Department of Conservation
PSA	Preliminary site assessment
RI	Remedial investigation

1. INTRODUCTION

1.1 GENERAL

A Generic Health and Safety Plan (HASP) (EA 2006)[1] was developed for field activities performed under the New York State Department of Environmental Conservation (NYSDEC) Standby Contract No. D007624. This HASP Addendum is to supplement the Generic HASP with site-specific information to protect the health and safety of personnel while performing field investigation activities during the site management activities for the ETE Sanitation and Landfill site, Wyoming County, Gainesville, New York (NYSDEC Site No. 961005).

This HASP Addendum describes the safety organization, procedures, and protective equipment that have been established based on an analysis of potential physical, chemical, and biological hazards. Specific hazard control methodologies have been evaluated and selected to minimize the potential for accidents or injuries to occur. One copy of the Generic HASP (EA 2006)[1] and this HASP Addendum will be maintained for use during the scheduled field investigation activities. The copies will be made available for site use and employee review at all times.

This HASP Addendum addresses regulations and guidance practices set forth in the Occupational Safety and Health Administration Standards for Construction Industry, 29 Code of Federal Regulations (CFR) 1926, including 29 CFR 1926.65, Hazardous Waste Operations and Emergency Response and 29 CFR 1926.59, Hazardous Communications.

The following are provided as attachments:

- **Attachment A**—Health and Safety Plan Addendum Review Record
- **Attachment B**—Site Entry and Exit Log
- **Attachment C**—Accident/Loss Report
- **Attachment D**—Emergency Telephone Numbers and Hospital Directions
- **Attachment E**—Emergency Equipment Available Onsite
- **Attachment F**—Map to Hospital
- **Attachment G**—Personal Protective Equipment Activity Record.

NOTE: This site-specific HASP Addendum should be left open to display Attachment D (Emergency Telephone Numbers and Hospital Directions) and made available to all site personnel in a conspicuous location for the duration of field investigation activities in the event of an emergency.

1. EA Engineering, P.C. 2006. Generic Health and Safety Plan for Work Assignments under New York State Department of Environmental Conservation Contract Nos. D004438 and D004441. June.

1.2 SITE DESCRIPTION

The subject site is located on Broughton Road near the intersection of New York State Route 19 in the Town of Gainesville, Wyoming County, New York (Figure 1). The property is approximately 25.48-acre area consisting of a 7-acre landfill area situated on two parcels—a 20.57-acre parcel and a 4.91-acre parcel. The ETE Sanitation and Landfill site is located in a rural agricultural area on Broughton Road approximately 2 miles west of Silver Springs and 1 mile north of the Village of Gainesville. The site is surrounded by woodland buffer which separates the landfill from undeveloped agricultural land on all sides. Broughton Road runs east to west to the south of the landfill, and Route 19 runs north to south to the west side of the landfill. One pond is currently located within the subject area, along the northern property line, and is referred to as North Pond. A second pond previously existed at the site but was drained during remedial activities. The pond was situated along the southern property line and was referred to as South Pond. The Town of Gainesville Highway Department Garage is located in the southeast corner of the subject area.

1.3 SITE HISTORY

According to the 1994 Preliminary Site Investigation Report, the ETE Landfill site was owned and operated by ETE Corporation from 1972-1979. The site may have been in operation prior to 1972. The ETE Landfill site was a non-permitted private landfill which accepted municipal and industrial waste from surrounding towns in Wyoming County. The ETE Corporation declared bankruptcy in 1979 after a complaint was brought against the corporation for defying a New York State Supreme Court Order to cease all landfill operations.

The landfill was in violation of various NYSDEC which included refuse burned onsite, refuse not spread, compacted or covered, refuse protruding through the cover soils, insufficient grading, uncontrolled release of leachate, and blowing litter. Almor Corporation of Warsaw, New York disposed approximately 150 tons of leaded paint sludge onsite. Plating wastes from Mallory Timers in Warsaw, New York may also have been disposed onsite. Additional industrial waste included halite (salt) and possibly other salts produced by Morton Salt located in nearby community of Silver Springs.

The NYSDEC and New York State Department of Health conducted a number of site inspections between 1987 and 1990 during which soil, surface water, waste and tap water samples from nearby residences were collected and analyzed for hazardous waste compounds. A Preliminary Site Assessment (PSA) of the site was performed in 1990. As a result of the PSA, approximately 25 drums were removed in a drum removal activity completed in September 1991. Drums were found to contain leaded paint sludge and industrial solvents. A Phase Two PSA was completed in February 1994, and included collection of onsite sediment, leachate, and soil samples in addition to the installation and sampling of seven groundwater monitoring wells.

Over all, the investigations confirmed the presence of hazardous waste at the site and that waste constituents are being released to the environment. In addition, local groundwater is consumed

by people in the area. Because of the continuing releases to the environment and the potential threats to public health, the site was listed as Class 2 (indicates a significant threat and the need to take action) in March 1995. Since the Department was not able to identify responsible parties who could undertake additional investigations, work was begun using the State Superfund in August 1997.

The NYSDEC conducted a Remedial Investigation/Feasibility Study (RI/FS) of the site between March and June 1998. The results of the RI indicated that approximately seven acres of the site contain landfilled wastes, with a maximum thickness of 15 feet. A portion of the waste was believed to extend under the northern slope of the south pond. Based upon the information presented in the RI/FS, the NYSDEC identified a selected remedy. Remedial design for the selected remedy was completed in July 2000. A contract for the remedial construction was to be following competitive bidding; however, the owner of the privately held parcel would not allow NYSDEC access to complete the remedial construction. An order was subsequently issued by the Wyoming County Supreme Court allowing the NYSDEC access to complete the remedial action in December 2005. The remedial action construction was substantially complete by September 2007.

1.4 POLICY STATEMENT

EA Engineering, P.C. and its affiliate EA Science and Technology (EA) will take every reasonable step to provide a safe and healthy work environment, and to eliminate or control hazards in order to minimize the possibility of injuries, illnesses, or accidents to site personnel. EA and EA subcontractor employees will be familiar with this HASP Addendum for the project activities they are involved in. Prior to entering the site, the HASP Addendum will be reviewed, and an agreement to comply with the requirements will be signed by EA personnel, subcontractors, and visitors (Attachment A).

Operational changes that could affect the health and safety of the site personnel, community, or environment will not be made without approval from the Project Manager and the Program Health and Safety Officer. This document will be periodically reviewed to ensure that it is current and technically correct. Any changes in site conditions and/or the scope of work will require a review and modification to the HASP Addendum. Such changes will be documented in the form of a revision to this addendum.

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2. KEY PERSONNEL

This table contains information on key project personnel:

Title	Name	Telephone No.
Officer-in-Charge/Program Manager	Christopher Canonica, P.E.	315-431-4610
Program Health and Safety Officer	Peter Garger, CIH	732-404-9370
Quality Assurance/Quality Control Officer	Frank Baranco	315-431-4610
Project Manager	Christopher Schroer	315-431-4610
Quality Assurance/Quality Control Coordinator	James Hayward, P.E.	315-431-4610
Site Manager/Site Health and Safety Officer	James Peterson	315-431-4610
Site Geologist/Scientist	Justin Marra	315-431-4610
NYSDEC Project Manager	David Chiusano	518-402-9814

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3. SCOPE OF WORK

This HASP Addendum was developed to designate and define site-specific health and safety protocols applicable to project activities to be implemented and followed during field activities and consulting work at the ETE Sanitation and Landfill, Gainesville, New York. The scope of work covered by this HASP Addendum includes the following:

- Site inspection
- Groundwater monitoring
- Surface water and sediment sampling.

Each of these activities is summarized below, and additional detail for each activity is provided in the NYSDEC RI/FS Scope of Work and letter Work Plan.

3.1 SITE INSPECTION

Site inspections shall be performed at the ETE Sanitation and Landfill site in conjunction with scheduled groundwater monitoring events unless otherwise requested by NYSDEC. The purpose of the inspections is to ensure that the sub-slab depressurization system is operating, no modifications have been made to the sub-slab depressurization system, the soil at the site is undisturbed, and no unauthorized uses of the site are in place.

3.2 GROUNDWATER MONITORING

Groundwater samples will be collected during annual sampling events unless otherwise requested by NYSDEC. Fourteen wells in the network of existing monitoring wells are included in the groundwater sampling program.

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4. POTENTIAL HAZARD ANALYSIS

Based on the field activities detailed in Section 3, the following potential hazard conditions may be anticipated:

- Personnel may be injured during physical lifting and handling of heavy equipment, construction materials, or containers. Additionally, personnel may encounter slip, trip, and fall hazards associated with sampling activities. Precautionary measures should be taken in accordance with the Generic HASP (EA 2006)[1] and this HASP Addendum.

- Field operations conducted during the winter months can impose excessive heat loss to personnel conducting strenuous activities during unseasonably cold weather days, and can impose cold-related illness symptoms during unseasonably cold weather days or when the wind chill is high. In addition, heavy rains, electrical storms, and high winds may create extremely dangerous situations for employees.

- Entry into a confined space in support of this project is forbidden. However, it is not anticipated that confined space entry will be required during the completion of the field activities.

- Field investigation activities intended to define potential sources of environmental contamination often require employees to be in direct proximity or contact with hazardous substances. Employees may be exposed through inhalation of toxic dusts, vapors, or gases. Normal dust particulates from surficial soil may have adsorbed or absorbed toxic solvents, petroleum compounds, or toxic metal salts or metal particulates. Air monitoring equipment will be used to monitor airborne organic vapors and particulates. Toxic materials contained in dusts or particulates can be ingested if eating, smoking, drinking, and gum chewing are permitted prior to personnel washing their hands and face, or removing contaminated work clothing and personal protective equipment. Some chemicals may be absorbed directly through the skin. Personal protective equipment, properly designed for the chemicals of concern, will always be provided and worn when a potential for skin contact is present.

The potential chemicals of concern that may be present at the site include, but are not limited to, volatile organic compounds.

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5. PERSONAL PROTECTIVE EQUIPMENT

Based upon currently available information, it is anticipated that Level D personal protective equipment will be required for currently anticipated conditions and activities. If, at any time, the sustained level of total organic vapors in the worker breathing zone exceeds 5 parts per million above background, site workers will evacuate the area, and the condition will be brought to the attention of the Site Health and Safety Officer. Efforts will be undertaken to mitigate the source of the vapors. Once the sustained level of total organic vapors decreases to below 5 parts per million above background, site workers will be allowed to continue activities at the direction of the Site Health and Safety Officer. If dust levels exceed the Occupational Safety and Health Administration Permissible Exposure Limit levels, a dust mask will be worn by all onsite personnel until water methods reduce the levels.

The personal protective equipment components for use during this project are detailed in the Generic HASP (EA 2006)[1]. The components of Level D personal protective equipment are summarized below.

Level D will be worn for initial entry onsite and initially for all activities and will consist of the following:

- Coveralls or appropriate work clothing
- Steel-toe, steel-shank safety boots/shoes
- Hard hats (when overhead hazards are present or as required by the Site Health and Safety Officer)
- Chemical resistant gloves (nitrile/neoprene) when contact with potentially contaminated soil or water is expected
- Safety glasses with side shields
- Hearing protectors (during operations producing excessive noise)
- Boot covers (optional unless in contact with visually contaminated soil or water).

Insulated clothing, hats, etc. must be worn when temperatures or wind chill fall below 40°F.

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6. SITE CONTROL AND SECURITY

Only authorized personnel will be permitted to conduct field activities. Authorized personnel include those who have completed hazardous waste operations initial training, as defined under Occupational Safety and Health Administration Regulation 29 CFR 1910.120/29 CFR 1926.65, have completed their training or refresher training within the past 12 months, and have been certified by a physician as fit for hazardous waste operations.

6.1 SAFE WORK PRACTICES

Safe work practices that will be followed by site workers include, but are not limited to, the following rules:

- Working before or after daylight hours without special permission is prohibited.
- Do not enter restricted or posted areas without permission from the Site Health and Safety Officer.
- Smoking is limited to designated areas.
- Possessing, using, purchasing, distributing, or having controlled substances in their system throughout the day or during meal breaks is prohibited.
- Consuming or possessing alcoholic beverages is prohibited.
- Good housekeeping – employees will be instructed about housekeeping throughout field activities.
- Sitting or kneeling in areas of obvious contamination is prohibited.
- Avoid overgrown vegetation and tall grass areas.

6.2 DAILY STARTUP AND SHUTDOWN PROCEDURES

The following protocols will be followed daily prior to start of work activities:

- The Site Health and Safety Officer will review site conditions to determine if modification of work and safety plans is needed.
- Personnel will be briefed and updated on new safety procedures as appropriate.
- Safety equipment will be checked for proper function.

- The Site Health and Safety Officer will ensure that the first aid kit is adequately stocked and readily available.

- Onsite equipment and supplies will be locked and secure.

Figures

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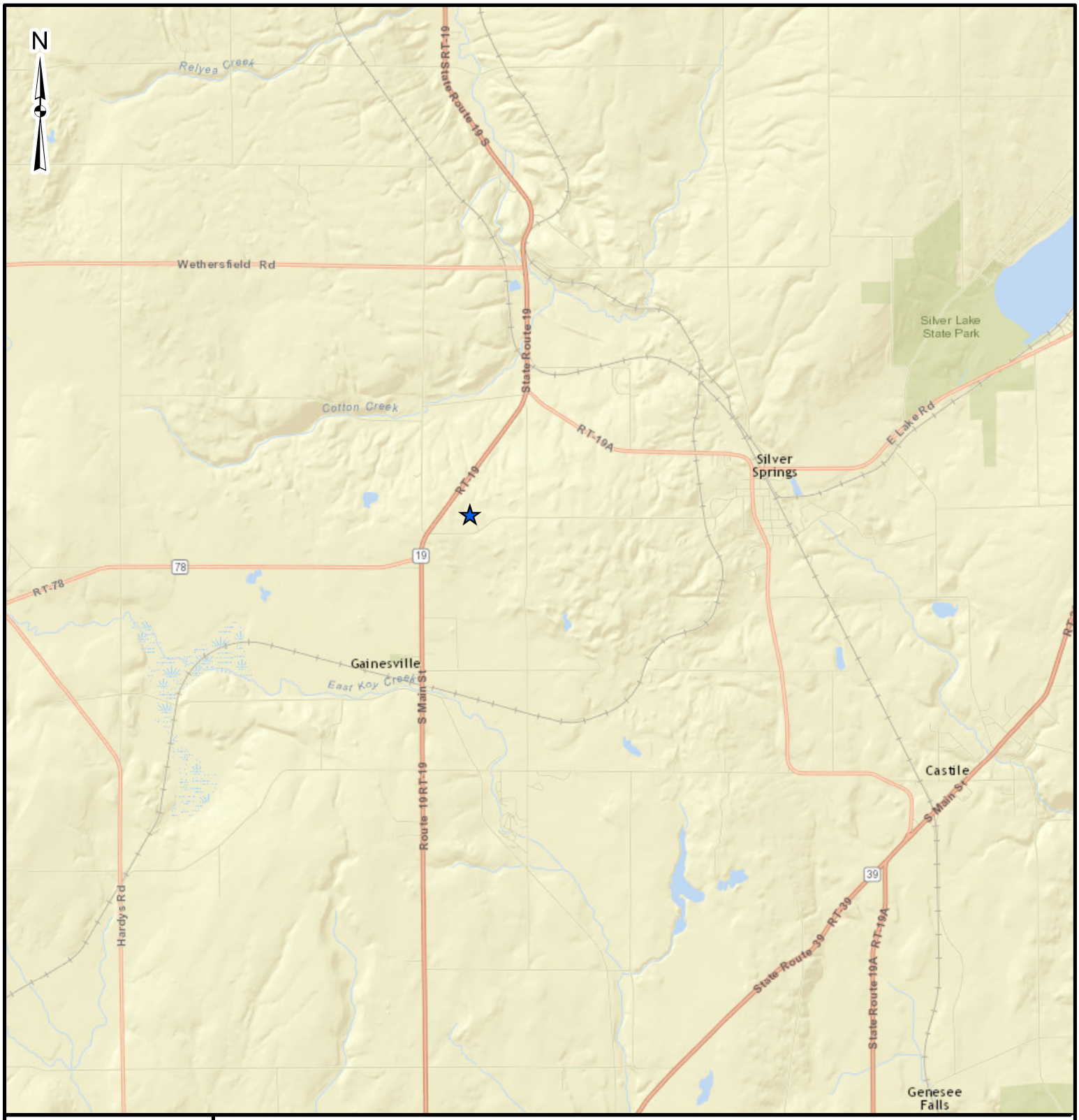

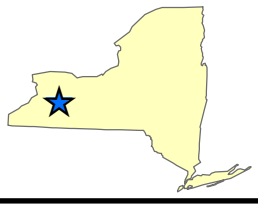

Legend

★ ETE Sanitation and Landfill Location

Miles

0 0.5 1 2

1 in = 1 miles

Service Layer Credits: Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, MapmyIndia, © OpenStreetMap contributors, and the GIS

NEW YORK STATE OF OPPORTUNITY Department of Environmental Conservation

ETE SANITATION AND LANDFILL
(SITE NO. 961005)
GAINESVILLE, NEW YORK

FIGURE 1
SITE LOCATION

PROJECT MGR:	DESIGNED BY:	CREATED BY:	CHECKED BY:	SCALE:	DATE:	PROJECT NO:	FILE NO:
CJS	CJS	ALK	JCH	AS SHOWN	NOVEMBER 2015	14907.27	GIS\FIGURES\14907.27 ETE\GIS\MXDs

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Tables

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Table 1 Notifications Contact List

Name	Contact Information
David Chiusano Project Manager	Division of Environmental Remediation Bureau E, Section A 625 Broadway, Albany, New York 12233-7017 518-402-9814 david.chiusano@dec.ny.gov
Eugene Melnyk, PE Remediation Engineer Region 9 Project Manager	270 Michigan Avenue Buffalo, New York 14203 716-851-7220 eugene.melnyk@dec.ny.gov
Note: Notifications are subject to change and will be updated as necessary.	

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Attachment A

Health and Safety Plan Addendum
Review Record

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ATTACHMENT A

HEALTH AND SAFETY PLAN ADDENDUM REVIEW RECORD

I have read the Health and Safety Plan Addendum for this site and have been briefed on the nature, level, and degree of exposure likely as a result of participation in this project. I agree to conform to all the requirements of this Plan.

SITE: ETE Sanitation and Landfill, Gainesville, New York			
Name	Signature	Affiliation	Date

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Attachment B

Site Entry and Exit Log

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ATTACHMENT B

SITE ENTRY AND EXIT LOG

SITE: ETE Sanitation and Landfill, Gainesville, New York				
Name	**Date**	**Time of Entry**	**Time of Exit**	**Initials**

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Attachment C

Accident/Loss Report

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ACCIDENT/LOSS REPORT

THIS REPORT MUST BE COMPLETED BY THE INJURED EMPLOYEE OR SUPERVISOR AND FAXED TO EA CORPORATE HUMAN RESOURCES WITHIN 24 HOURS OF ANY ACCIDENT. THE FAX NUMBER IS **(410) 771-1780**.

NOTE: WHENEVER AN EMPLOYEE IS SENT FOR MEDICAL TREATMENT FOR A WORK RELATED INJURY OR ILLNESS, PAGE 4 OF THIS REPORT MUST ACCOMPANY THAT INDIVIDUAL TO ENSURE THAT ALL INVOICES/BILLS/CORRESPONDENCE ARE SENT TO HUMAN RESOURCES FOR TIMELY RESPONSE.

A. DEMOGRAPHIC INFORMATION:

NAME OF INJURED EMPLOYEE:_____
HOME ADDRESS:_____
HOME PHONE:_____ DATE OF BIRTH:
AGE:_____ SEX: M F
MARITAL STATUS:_____ NAME OF SPOUSE (if applicable):_____
SOCIAL SECURITY NUMBER:_____ DATE OF HIRE:_____
NUMBER OF DEPENDENTS:_____
EMPLOYEES JOB TITLE:_____
DEPT. REGULARLY EMPLOYED:_____
WAS THE EMPLOYEE INJURED ON THE JOB: Y N
PRIMARY LANGUAGE OF THE EMPLOYEE:_____

B. ACCIDENT/INCIDENT INFORMATION:

DATE OF ACCIDENT:_____ TIME OF ACCIDENT:_____
REPORTED TO WHOM:_____ NAME OF SUPERVISOR:_____
EXACT LOCATION WHERE ACCIDENT OCCURRED (including street, city, state and County): _____
_____
_____
EXPLAIN WHAT HAPPENED (include what the employee was doing at the time of the accident and how the accident occurred):_____
_____
_____
_____
_____
DESCRIBE THE INJURY AND THE SPECIFIC PART OF THE BODY AFFECTED (i.e., laceration, right hand, third finger):_____
_____
_____

OBJECT OR SUBSTANCE THAT DIRECTLY INJURED EMPLOYEE:_____

_____

NUMBER OF DAYS AND HOURS EMPLOYEE USUALLY WORKS PER WEEK:_____
IS THE EMPLOYEE EXPECTED TO LOSE AT LEAST ONE FULL DAY OF WORK?_____
DOES THE EMPLOYEE HAVE A PREVIOUS CLAIM? Y N If yes, STATUS Open Closed
WAS THE EMPLOYEE ASSIGNED TO RESTRICTED DUTY?_____

C. ACCIDENT INVESTIGATION INFORMATION

WAS SAFETY EQUIPMENT PROVIDED? Y N If yes, was it used? Y N
WAS AN UNSAFE ACT BEING FORMED ? Y N If yes, describe_____
WAS A MACHINE PART INVOLVED? Y N If yes, describe_____
WAS THE MACHINE PART DEFECTIVE? Y N If yes, in what way_____
WAS A 3RD PARTY RESPONSIBLE FOR THE ACCIDENT/INCIDENT? Y N
If yes, list name, address, and phone number_____

_____

WAS THE ACCIDENT/INCIDENT WITNESSED? Y N
If yes, list name, address, and phone number:_____

_____

D. PROVIDER INFORMATION

WAS FIRST AID GIVEN ONSITE? Y N
If yes, what type of medical treatment was given_____
PHYSICIAN INFORMATION (if medical attention was administered)
NAME:_____
ADDRESS (include city, state, and zip):_____
PHONE:_____

HOSPITAL ADDRESS (include name, address, city, state, zip code, and phone)

_____

_____

WAS THE EMPLOYEE HOSPITALIZED? Y N If yes, on what date_____
WAS THE EMPLOYEE TREATED AS AN OUTPATIENT, RECEIVE EMERGENCY TREATMENT OR AMBULANCE SERVICE?_____

PLEASE ATTACH THE PHYSICIANS WRITTEN RETURN TO WORK SLIP

NOTE: A PHYSICIAN'S RETURN TO WORK SLIP IS REQUIRED PRIOR TO ALLOWING THE WORKER TO RETURN TO WORK.

E. AUTOMOBILE ACCIDENT INFORMATION (complete if applicable)

AUTHORITY CONTACTED AND REPORT #_____
EA EMPLOYEE VEHICLE YEAR, MAKE AND MODEL_____

V.I.N. _____ PLATE/TAG# _____
OWNER'S NAME AND ADDRESS: _____

_____
DRIVER'S NAME AND ADDRESS: _____

_____
RELATION TO INSURED: _____ DRIVER'S LICENSE # _____
DESCRIBE DAMAGE TO YOUR PROPERTY: _____

_____

_____
DESCRIBE DAMAGE TO OTHER VEHICLE OR PROPERTY: _____

_____

_____
OTHER DRIVER'S NAME AND ADDRESS: _____

_____
OTHER DRIVER'S PHONE: _____
OTHER DRIVER'S INSURANCE COMPANY AND PHONE: _____

_____
LOCATION OF OTHER VEHICLE: _____
NAME, ADDRESS, AND PHONE OF OTHER INJURED PARTIES: _____

_____

_____
WITNESSES

NAME: _____ PHONE: _____
ADDRESS: _____
STATEMENT: _____

_____
SIGNATURE: _____

NAME: _____ PHONE: _____
ADDRESS: _____
STATEMENT: _____

_____
SIGNATURE: _____

F. ACKNOWLEDGEMENT

NAME OF SUPERVISOR: _____
DATE OF THIS REPORT: _____ REPORT PREPARED BY: _____

I have read this report and the contents as to how the accident/loss occurred are accurate to the best of my knowledge.

Signature: _____ Date: _____
Injured Employee

I am seeking medical treatment for a work related injury/illness.

Please forward all bills/invoices/correspondence to:

EA ENGINEERING, SCIENCE, AND TECHNOLOGY, INC.
11019 McCORMICK ROAD
HUNT VALLEY, MD 21031

ATTENTION: Michele Bailey
HUMAN RESOURCES

(410) 584-7000

Attachment D

Emergency Telephone Numbers and Hospital Directions

ATTACHMENT D

EMERGENCY TELEPHONE NUMBERS AND HOSPITAL DIRECTIONS

SITE: ETE Sanitation and Landfill, Gainesville, New York	
Police: Wyoming County Police Department	9-1-1
Fire: Gainesville Fire Department	9-1-1
Ambulance:	9-1-1
Hospital:	United Memorial Medical Center
New York Regional Poison Control Center: 750 E. Adams St., Syracuse, New York, 13210	(315) 464-5424 800-222-1222 (emergency)
Directions to United Memorial Medical Center, Batavia : 1. Head west on Broughton Rd toward NY-19 S. 2. Take the 1st right onto NY-19 N. 3. Turn left onto Gulf Rd. 4. Continue E Rd/ E Bethany Rd. 5. Turn right onto Liberty St. 6. Continue onto Summit St. 7. Turn right. Destination will be on the left. Total Distance: 27.9 miles Total Estimated Time: 41 minutes	
Program Safety and Health Officer: ***Pete Garger, CIH***	(732) 404-9370
Program Manager: ***Robert S. Casey***	(315) 431-4610
EA Project Manager ***Christopher Schroer***	(315) 431-4610
In case of spill, contact ***NYSDEC Spill Response***	
EA Medical Services EMR 4360 Chamblee Dunwoody Road, Suite 202 Atlanta, Georgia 30341 ***Contact: Dr. Elayne F. Theriault***	(800) 229-3674
Field Manager/Site Health and Safety Officer: ***Sarah Nelson***	(315) 431-4610
Site Geologist/Scientist: ***Justin Marra***	(315) 857-6406
In case of accident or exposure incident, contact Corporate Health and Safety Officer ***Peter Garger, CIH***	(410) 584-7000

Attachment E

Emergency Equipment Available Onsite

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ATTACHMENT E

EMERGENCY EQUIPMENT AVAILABLE ONSITE

Type of Equipment	Location
Communications Equipment	
Mobile Telephone	EA Personnel
Medical Support Equipment	
First Aid Kits	In EA vehicle
Eye Wash Station	In EA vehicle
Firefighting Equipment	
Fire Extinguishers	In EA vehicle

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Attachment F

Map to Hospital

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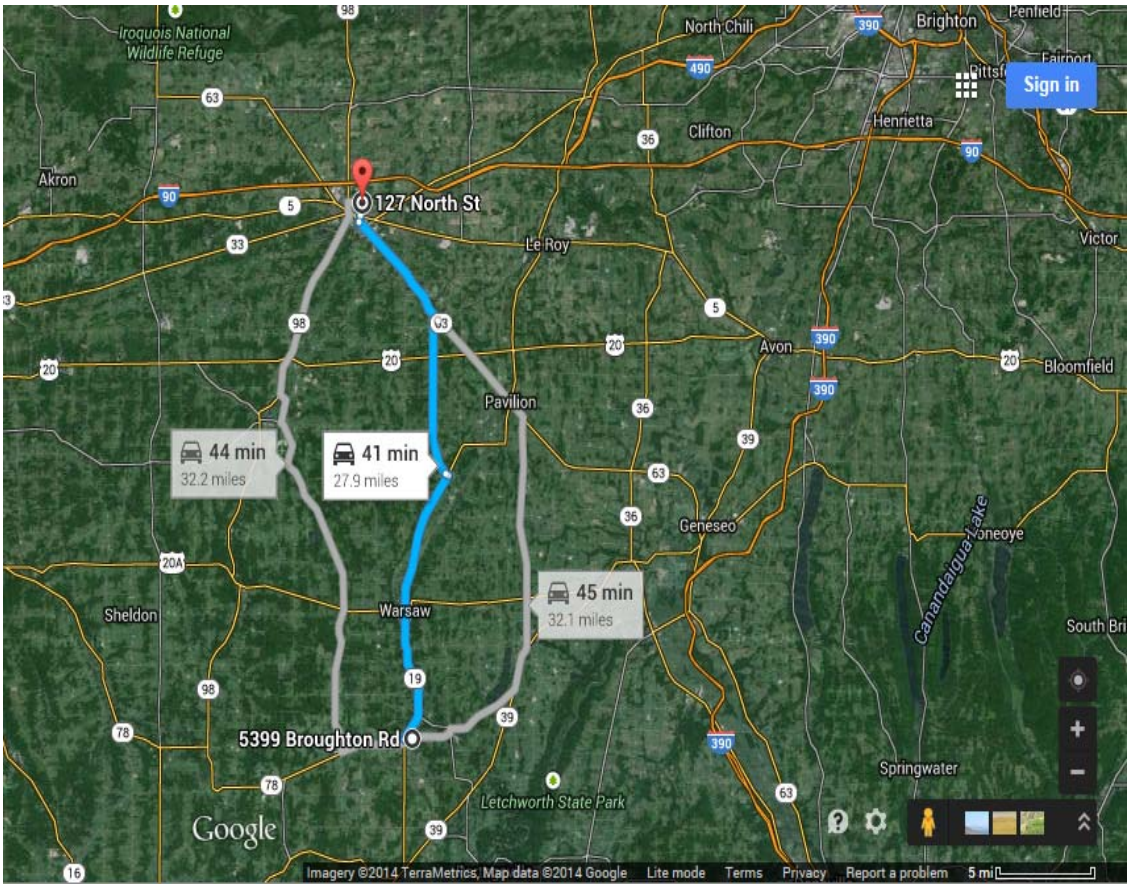
ATTACHMENT F

MAP TO HOSPITAL

Directions to United Memorial Medical Center, Batavia:
1. Head west on Broughton Rd toward NY-19 S.
2. Take the 1st right onto NY-19 N.
3. Turn left onto Gulf Rd.
4. Continue E Rd/ E Bethany Rd.
5. Turn right onto Liberty St.
6. Continue onto Summit St.
7. Turn right.

Destination will be on the left.
Total Distance: 27.9 miles Total Estimated Time: 41 minutes



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Attachment G

Personal Protective Equipment
Activity Record

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ATTACHMENT G

PERSONAL PROTECTIVE EQUIPMENT ACTIVITY RECORD

SITE: ETE Sanitation and Landfill, Gainesville, New York		
Weather Condition:		Onsite Hours: From To
Changes in Personal Protective Equipment Levels[(a)]	Work Operations	Reasons for Change
Site Health and Safety Plan Violations	Corrective Action Specified	Corrective Action Taken (yes/no)
Observations and Comments:		
Completed by: _____ Site Health and Safety Officer		Date
(a) Only the Site Health and Safety Officer may change personal protective equipment levels, using only criteria specified in the Health and Safety Plan Addendum.		

Appendix D

Monitoring Well Boring and Construction Logs

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environmental engineers, scientists,
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BORING #: **SB-1**
Page 1 of 1
Permit #:
Job #: 0897-22149

LOG OF BORING

Project ETE Landfill
Location Gainesville, New York
Date Drilled 3/25/98
Drilling Co.: SJB Drilling Services
Total Depth 8 ft.
Method Used: Hollow Stem Augering
Inspector Brian Murtagh
Organic Vapor Inst: OVM Model 580B TEI Inc.
Water elv: approx. 3 ft.

Depth (feet)	Sample No.	Blows/6" 140 lbs.	Sample Inter.	Adv/Rec	Org. Vap (ppm)	Sample Description	Strata Change	Remarks (time)
1		1 4	0-2'	19"	0.0	moist tan brown slightly gray SILTY med.-cr. SAND, little-trace gravel, trace clay, low plasticity-no plasticity,		this boring completed to investigate the limits of solid waste
2		4 4						
3		1 2	2-4'	6"	0.0	wet brown slightly tan SILTY SAND, little-trace clay and gravel, poor sorting		
4		3 2						
5		1 1	4-6'	12"	0.0	wet medium-coarse SILTY SAND, little gravel, loose, no plasticity, native material		
6		1 1						
7		1 1	6-8'	18"	0.0	tan brown very fine to fine SILTY SAND trace gravel, moderate sorting, definitely native material		
8		1 2						
						End of Borehole		

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LOG OF BORING

BORING # **SB-2 (PZ-4)**
Page 1 of 3
Permit #:
Job #: 0897-22149

Project ETE Landfill | Location Gainesville, New York
Date Drilled 3/4/98 | Drilling Co.: SJB Drilling Services
Total Depth 50' | Method Used: Hollow Stem Augering
Inspector Brian Murtagh | Organic Vapor Inst: OVM Model 580B TEI Inc. | Water elv: approx. 7 ft.

Depth (feet)	Sample No.	Blows/6" 140 lbs.	Sample Inter.	Adv/Rec	Org. Vap (ppm)	Sample Description	Strata Change	Remarks (time)
		1	0-2'	21"	0.0	0-1':moist-wet brown CLAY, little to		
		2				some silt, tr. sand & very fn. gravels		No piezometer
		4				1-2':moist-wet gray olive green SILT		installed at this
2		8				little to tr. clay, tr. angular fn. gravels		location
		8	2-4'	12"	0.0	2-3':moist-wet brown SILTY CLAY,		
		6				little sand & gravel, med. plastic.		
		4						
4		3				3-4':MSW (paper, plastic, wood)		
		2	4-6'	18"	0.0	4-6':moist brown-olive-gray CLAY		
		2				w/ silt, tr. fine angular gravel, tr. MSW		
		5				med. to low plastic.		
6		9						
		8	6-8'	8"	0.0	very wet MSW and brown SILT		
		18				w/ fn.-cr. sand, tr. gravels		At 8' below grade,
		11						2.5 - 5.0 OVM
8		11						reading in the
		8	8-10'					breathing zone
		4						
		50						
10		50/0"				8-12: wet MSW and black organic		
		50/4"	10-12'	3"	0.0	SILT, very loose material		
12								
		11	12-14'	14"	0.0			[possibly native]
		5						
		12						
14		1				12-14 :moist to wet dark olive green brown		
		11	14-16'	4"	0.0	CLAY w/ silt, little fn. sand		
		3						
		8						
16		2						
		3	16-18'	8"	0.0	moist lt. brown-olive gray SILTY CLAY		
		3				and dk. ang. shale GRAVEL, matrix is		
		4				med. plastic., v. poorly sorted		
18		3						
		2	18-20'	15"	0.0	18-18.25':dry moist gray SILTY CLAY		
		3				w/ ang. gravel		
		6						
20		16						
		5	20-22'	14"	0.0	18.25-24':moist brn. olive gray SILTY		
		16				CLAY and ang. GRAVEL,		
		16				little fn.-med. sand		
22		9				v. poor sort. matrix has med-high		
		2	22-24'	2"	0.0	plasticity., firm		
		2						
		6						
		9						

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BORING #: **SB-2 (PZ-4)**
Page 2 of 3
Permit #:

LOG OF BORING
Project ETE Landfill Location Gainesville, New York

Depth (feet)	Sample No.	Blows/6" 140 lbs.	Sample Inter.	Adv/Rec	Org. Vap (ppm)	Sample Description	Strata Change	Remarks (time)
		3	24-26'	12"	0.0	moist gray to olive gray CLAYEY		
		2				fn.-med. SAND and FN. GRAVEL,		No piezometer
		3				little silt [gravels are dk. gray siltstone		installed at
26		5				and dolomite]		this location.
		4	26-28'	15"	0.0	moist gray SILTY CLAY and angular		
		7				GRAVEL, tr. to little fn. sand, v. poorly		
		8				sorted, no bedding, matrix is high plast.		
28		9						
		4	28-30'	18"	0.0	wet gray to dk. gray SILTY fn.-med		
		4				SAND and GRAVEL ang. to sub ang.,		
		4				tr. clay, v. poorly sorted, soft		
30		4						
		3	30-32'	10"	0.0	gray to dk. gray CLAY and subrnd. to		
		5				subangular GRAVEL, little fn. sand,		
		5				little silt, firm, v. poorly sorted		
32		5						
		13	32-34'	15"'	0.0			
		13						
		11				32-36: moist gray SILTY CLAY and subrn.		
34		8				GRAVEL, little fn.-med sands, v. poor		
		8	34-36'	10"	0.0	sorting, firm		
		9						
		11						
36		48						
		22	36-38'	13"	0.0	damp gray subang. to ang. GRAVEL		
		9				w/ clay and silt matrix		
		8						
38		4						
		2	38-40'	16"	0.0	moist gray SILT and v. fn. GRAVEL,		
		5				w/ fn. sand, little clay, low plasticity,		
		4				v. poorly sorted		
40		5						
		6	40-42'	18"	0.0			
		8						
		6						
42		6				40-46:		
		11	42-44'	15"	0.0	moist gray to dk. gray SILT w/ to little		
		8				fn. subang. gravels, little clay and sand		
		9				v. poorly sorted		
44		9						
			44-46'		0.0			
46								
		2	46-48'	16"	0.0	moist gray v. fn. SANDY SILT, little		
		6				v. fn. black gravel, little clay, v. poorly		
		9				sorted, low plastic.		
		10						

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LOG OF BORING

BORING #: **SB-2 (PZ-4)**
Page 3 of 3
Permit #:

Project ETE Landfill Location Gainesville, New York

Depth (feet)	Sample No.	Blows/6" 140 lbs.	Sample Inter.	Adv/Rec	Org. Vap (ppm)	Sample Description	Strata Change	Remarks (time)
50		6 8 16 18	48-50'	20"	0.0	v. wet gray SILT and v. fn. GRAVEL, little fn.-med. sand, little clay, tacky v. poorly sorted		
						End of Borehole No piezometer installed at this location.		

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BORING # **PZ-1 / PZ-2**

LOG OF BORING

Page 1 of 3

Project ETE Landfill | Location Gainesville, New York | Permit #:
Date Drilled 3/23/98 | Drilling Co.: SJB Drilling Services | Job #: 0897-22149
Total Depth 58' | Method Used: Hollow Stem Augering
Inspector Brian Murtagh | Organic Vapor Inst: OVM Model 580B TEI Inc. | Water elv: approx. 6 ft.

Depth (feet)	Sample No.	Blows/6" 140 lbs.	Sample Inter.	Adv/Rec	Org. Vap (ppm)	Sample Description	Strata Change	Remarks (time)
		1	0-2'	20"	0.0	0 - 1.85:brown-lt.brn. gray SILT, trace		
		3				clay, tr. sand, tr. organics, low plast.		
		4				1.85-2.5:black dry SHALE derived		
2		50/4"				ASPHALT		
		45	2-4'	21"	0.0	2.5-3.5:dry gray SILTSTONE GRAVEL		
		23				fill material		
		14				3.5-4:moist brown SILT, little med. sand,		
4		11				tr. fine gravels, v.poor sort, fill		
		3	4-6'	15"	0.0	4-5:wet brown to rust brn. SILTY SAND		
		4				tr. clay, tr. gravel, low plast., poor sort.		
		3				5-6:moist brn to rust brn CLAY, some		
6		3				silt, little gravel, tr. fn. sand, hi-med. plast.		
		2	6-8'	22"	0.0	6-6.25:v. wet brn.-rust brn. fn.-med.		
		2				SILTY SAND, tr. gravel, tr. clay		
		4				6.25-8:moist brn-rust brn. SILT w/clay		
8		9				little v. fn. snad, tr. fn. grav, med-hi plast		
		6	8-10'	15"	0.0	wet brown-tan brn. v. fn. SANDY SILT		
		8				little fn.-cr. gravel, tr. clay, low to no		
		15				plasticity		PZ-1 screen:
10		19						18'-8' b.g.
		8	10-12'	4"	0.0	10-13.5: wet brown SILT, little clay, w/		
		9				v.fn-cr. sand, tr. gravel, med plasticity,		
		8				v. poor sorting, loose, tacky		
12		9						
		7	12-14'	10"	0.0			
		12				13.5-14:moist to damp gray brown		
		15				SILT, w/clay, tr. black shale gravels,		
14		16				med.-high plast., mod.-poor sorting		
		12	14-16'	18"	0.0			
		8						
		7				14-17.5: moist brn.-rust brn. SILT,		
16		12				some v. fn.-med. sand (.25" lenses),		
		12	16-18'	20"	0.0	little subrnd.-subang. gravel, tr. clay		
		29						
		16				17.5-18: moist gray SILTSTONE, little		drilling through
18		14				to trace. gray brn. silt matrix		large gravel
		7	18-20'	18"	0.0	damp to wet gray SILT, little-some v. fn.		
		6				sand, little clay, tr. rnd-subrnd gravel,		
		7				low to no plasticity, v. poor sorting		
20		12						
		12	20-22'	2"	0.0	wet light gray SILTSTONE in nose of		
		15				split spoon		
		18						
22		15						
		12	22-24'	8"	0.0	wet gray SILT-V.FN. SAND, some		
		14				to w/clay, little subrnd-subang. gravel		
		13				med.-low plasticity		
		20						

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LOG OF BORING

BORING #: **PZ-1 / PZ-2**

Page 2 of 3

Project ETE Landfill Location Gainesville, New York Permit #:

Depth (feet)	Sample No.	Blows/6" 140 lbs.	Sample Inter.	Adv/Rec	Org. Vap (ppm)	Sample Description	Strata Change	Remarks (time)
26		5 7 9 11	24-26'	8"	0.0			
28		9 13 12 21	26-28'	10"	0.0	24-30: damp to wet gray SILT, with very fine to coarse sand, little to some gravel, little to trace clay, very low plasticity, very poor sorting		
30		16 18 20 17	28-30'	3"	0.0			
32		8 7 8 10	30-32'	20"	0.0	30-34: damp-wet gray SILT-V.FN. SAND, trace medium sand lens (.15"), little fine gravel, trace to no clay, very low plasticity		
34		7 10 11 17	32-34'	18"	0.0			
36		9 9 11 13	34-36'	19"	0.0	damp-wet very fine SANDY SILT, some fine gravel, trace-little fn.-cr. sand, trace clay, v. low plast., poor sorting		
38		11 11 10 13	36-38'	19"	0.0	damp-wet gray SILT, some to w. v.fn. sand, little subang. gravel, trace clay, low plasticity, occasional 0.15" lens of med-cr. sand		
40		4 9 11 10	38-40'	18"	0.0	38-42: moist gray SILT, little-trace clay, little-trace ang.-subang. gravel, low plasticity		
42		3 10 10 12	40-42'	19"	0.0			
44		12 15 18 16	42-44'	16"	0.0	moist-damp gray SILT, some-little clay, little subang-ang. gravel, little v.fn. to med. sand		
46		8 8 12 14	44-46'	20"	0.0	moist-wet gray SILT, little-trace clay, little-trace subang. gravel (dk. shale) with occasional .25"-1" med-cr. sand lenses		
		22 17 19 25	46-48'	24"	0.0	wet gray v.fine to coarse SAND, little silt, trace to no clay, moderate sorting, no plasticity		

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LOG OF BORING

BORING #: **PZ-1 / PZ-2**
Page 3 of 3
Permit #:

Project ETE Landfill Location Gainesville, New York

Depth (feet)	Sample No.	Blows/6" 140 lbs.	Sample Inter.	Adv/Rec	Org. Vap (ppm)	Sample Description	Strata Change	Remarks (time)
		22	48-50'	16"	0.0	moist-damp gray v.fn.-med. SILTY SAND		
		25				some fine ang.-subang. gravel, little-tr.		
		28				clay, v. poor sorting, v. low plasticity		
50		26						
		12	50-52'	6"	0.0	damp gray SILT and GRAVEL, trace to		
		16				little clay, some to with v.fine-fine sand,		
		15				very low plasticity, v. poor sorting,		
52		15				gravel is angular to subangular		
		20	52-54'	22"	0.0	moist gray SILTY CLAY, little-some		
		18				gravel, little-trace v.fn.-fn. sand,		
		22				poor sorting, med-high plasticity		
54		23						
		11	54-56'	0"		no sample recovered		
		12						
		15						
56		20						
		26	56-58'	16"	0.0	moist gray SILTY CLAY, little-trace		PZ-2 screen:
		34				very fine-fine sand, little subangular-		54'-44' b.g.
		26				angular gravel.		
58		35						
						End of Borehole		

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LOG OF BORING

BORING #: **PZ-3**
Page 1 of 1
Permit #:
Job #: 0897-22149

Project ETE Landfill
Location Gainesville, New York
Date Drilled 3/4/98
Drilling Co.: SJB Drilling Services
Total Depth 10 ft.
Method Used: Hollow Stem Augering
Inspector Brian Murtagh
Organic Vapor Inst: OVM Model 580B TEI Inc.
Water elv: approx. 3 ft.

Depth (feet)	Sample No.	Blows/6" 140 lbs.	Sample Inter.	Adv/Rec	Org. Vap (ppm)	Sample Description	Strata Change	Remarks (time)
1		1 6	0-2'	13"	8.6	0-0.5':brownish red SILTY CLAY, trace sand, med. plast. 0.5-2':moist gray to olive green CLAY and SHALE GRAVEL fragments		
2		3 3						
3		5 4	2-4'	17"	0.0	wet MSW (plastic, newpaper)		
4		3 3						
5		2 2	4-6'	17"	0.0	wet MSW (paper), w/ brown CLAY matrix, trace sand		
6		2 9						
7		8 9	6-8'	18"	40.0	6-7': moist to wet MSW (plastic, glass) little gray silt matrix		10 ppm
8		11 9				7-7.5: moist to wet brown SILTY CLAY, tr. sand, low plasticity, cover material 7.5-8': wet MSW (plastic, paper, glass)		40 ppm
9		8 9	8-10'	18"	0.0	very wet MSW, some black organic silt, some brown clayey silt matrix		Oxygen level in augers= 15.2%
10		11 9						
						End of Borehole		

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LOG OF BORING

BORING # **MW-6**
Page 1 of 4

Project ETE Landfill | Location Gainesville, New York | Permit #:
Date Drilled 3/10/98 | Drilling Co.: SJB Drilling Services | Job #: 0897-22149
Total Depth 80' | Method Used: Hollow Stem Augering
Inspector Brian Murtagh | Organic Vapor Inst: OVM Model 580B TEI Inc. | Water elv: approx. 14'

Depth (feet)	Sample No.	Blows/6" 140 lbs.	Sample Inter.	Adv/Rec	Org. Vap (ppm)	Sample Description	Strata Change	Remarks (time)
2		1 1 1 1	0-2'	12"	0.0	dry brn. to rusty brn. SILT, tr. organics tr. clay, well sorted, cover material		
4		3 7 6 6	2-4'	14"	0.0	dry light tan brn. SILT, tr. organics, well sorted		
6		6 8 6 10	4-6'	8"	0.0	tan brn. to dk. brn. SILT, tr. gravel (green gray siltstone ang.-subang.)		
8		6 6 12 14	6-8'	6"	0.0	dry rust brn. SILT, little tr. fn. sand, tr. qtz. gravel in nose of split spoon		
10		3 4 3 4	8-10'	14"	0.0	8-8.5:dk. brn. v. fn. SANDY SILT, tr. grav. . 8.5-9':moist-wet tan brn. SILTY v. fn. SAND, tr. grav. 9-10:dk. brn. to brn. SILT, tr.-little v. fn. sand, tr. gravel (red brn siltstone)		
12		3 4 3 4	10-12'	7"	0.0	moist damp brn SILTY CLAY, little-fn. sand, tr.-little sub ang. gravels, v. poor sorting, med. plasticity		
14		4 3 2 2	12-14'	14"	0.0	12-13.5: moist-damp brn.-tan brn. CLAYEY SILT, little fn.-med. sand, tr. gravels, low plast. 13.5-14: damp tn. brn. fn.-med. SAND, w/ some silt		
16		1 1 1 2	14-16'	12"	0.0	14-14.75: wet tan brn. SILTY SAND & GRAVEL, tr. clay, loose, poor sort. 14.75-15.5: SILTY CLAY, tr. grav & sand 15.5-16:tan v. fn. SANDY SILT, well sort.		
18		3 4 4 4	16-18'	18"	0.0	16-19: v. wet tan brn. SILTY v. fn. SAND well sorted		
20		9 6 7 8	18-20'	14"	0.0	19-20: moist to damp tan red brn. SILT, tr. to little clay & gravel, tr. sand, low plast.		
22		Not recorded	20-22'	Not recorded	0.0	moist to wet tan brown SILTY v. fn. SAND, little grn. gray ang.-subang. siltstone, mod sort., v. low plast.		MW-6S screened: 20'-10' b.g.
		15 50/4"	22-24'	8"	0.0	moist to damp brown olive grn. gray CLAYEY SAND and GRAVEL, some silt, med. plast., v. poor sort.		cuttings turning brown gray around 23.5'

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LOG OF BORING

BORING #: **MW-6**
Page 2 of 4
Permit #:

Project ETE Landfill Location Gainesville, New York

Depth (feet)	Sample No.	Blows/6" 140 lbs.	Sample Inter.	Adv/Rec	Org. Vap (ppm)	Sample Description	Strata Change	Remarks (time)
		12	24-26'	18"	0.0	24-25.5:dry-moist brn. to rust brn. SILT		
		15				some med. sand and gravel, low plast.		
		15				25.5-26:dry gray-olive gray SILT		
26		12				little shale gravel, tr. v. fn. sands		
		3	26-28'	19"	0.0	moist to wet SILTY v. fn. SAND, tr.		
		10				little clay, tr. fn. gravels, low plast, poor		
		10				to mod sorting		
28		8						
		1	28-30'	17"	0.0	moist to damp bm v. fn SANDY SILT,		
		3				little clay, tr. gravels, then fn.-v.fn.		
		6				sand and silty clay lenses		
30		7						
		3	30-32'	16"	0.0	30-33: moist gray SILTY v. fn. SAND,		
		6				little gravel, tr. clay, poor-mod. sort.,		
		7				v. low plast.		
32		8						
		8	32-34'	15"	0.0			
		10						
		20				moist gray v. fn. SANDY SILT, little grav.		
34		18				tr. clay		
		3	34-36'	17"	0.0	moist gray v. fn.-fn. SANDY SILT, little		
		6				v. fn. submd gravels, tr. clay, low plast.		
		8				poor sorting		
36		11						
		8	36-38'	6"	0.0	wet to moist gray CLAYEY v.fn. -fn.		
		11				SAND, some silt, little fn. gravels, low		
		17				plast., v. poor sorting		
38		13						
		9	38-40'	13"	0.0	moist gray SILTY fn.-med. SAND, some		
		7				clay, little rnd to submd gravel, low		
		9				plasticity, v. poor sorting, firm		
40		9					3/11/98	
		18	40-42'	12"	0.0	dry gray SILT, little-tr. submd. gravel,		
		13				tr. med-fn. sand, v. low plastic.		
		18						
42		21						
		18	42-44'	24"	0.0	saturated gray SILT, little-tr. med. sand		
		15				tr. gravels, tr. clay, no plasticity		
		16						
44		18						
		1	44-46'	10"	0.0	same as above w/clay, low-high		
		5				plasticity		
		8						
46		10						
		18	46-48'	16"	0.0	moist gray v.fn. SANDY SILT, little-tr.		
		12				fn. rnd. gravels, tr. clay, poor to mod.		
		11				sorting		
		15						

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LOG OF BORING

BORING #: **MW-6**

Page 3 of 4

Project ETE Landfill Location Gainesville, New York Permit #:

Depth (feet)	Sample No.	Blows/6" 140 lbs.	Sample Inter.	Adv/Rec	Org. Vap (ppm)	Sample Description	Strata Change	Remarks (time)
		3	48-50'	6"	0.0	wet-moist gray SILT, some v. fn. sand		
		8				tr. ang.-subang. gravels, no plast.,		
		13				poor-mod sorting		
50		8						
		1	50-52'	6"	0.0	damp gray CLAYEY SILT, some ang.		
		10				gravels, low plast. firm.		
		31						
52		25						
		12	52-54'	19"	0.0	damp gray CLAYEY v. fn. SAND to		
		12				SILT, some-little subrnd-subang.		
		15				gravels, low plast., v. poorly sorted		
54		49						
		10	54-56'	8"	0.0	moist gray v. fn. SANDY SILT, tr. clay		
		14				little md.-submd. gravel, v. poor sort.		
		8				low plasticity		
56		11						
		8	56-58'	12"	0.0	56-56.75: wet gray fn.-cr. SAND and		
		10				FN. GRAVEL, w/silt, tr. clay, loose		
		9				56.75-58: moist-dry gray SILT, tr. - little		
58		11				v. fn. sand, tr. fn. gravels		
		3	58-60'	14"	0.0	moist gray SILTY v.fn-med. SAND,		
		7				little gravel, tr. sand, no plast., poor		
		10				sorting		
60		10						
		3	60-62'	6"	0.0	damp-wet gray CLAYEY v. fn. SAND		
		12				to SILT, tr. gravels, low plast., v. poor		
		11				sorting.		
62		15						
		10	62-64'	12"	0.0	moist-dry gray CLAYEY SILT, some		
		15				v. fn. sand, tr. gravel, low-med. plast.		
		16				v. poor sorting		
64		18						
		8	64-66'	14"	0.0	64-65.75:moist gray SILT w/ clay, little		
		8				v. fn. sand, tr. gravel, med. plast., v. poor sorting		
		12				65.75-66:wet gray fn.-cr. SAND w/		
66		16				silt, tr. clay & gravel, loose, no plast.		
		15	66-68'	14"	0.0	dry gray SILT, little v. fn. sand, little		
		11				clay, little gravel, low-v.low plast.		
		11						
68		15						
		4	68-70'	2"	0.0	moist gray CLAYEY SILT to V. FN.		
		12				SAND, tr. gravel, med-high plast., poor		
		5				sorting		
70		5						
		4	70-72'	12"	0.0	70-74: damp gray SILT, little v. fn. sand,		
		7				tr.-little clay, tr. submd gravels, poor		MW-6D screen
		7				sorting, v. low plasticity		setting 74.5'-64.5'
		12						below grade.

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BORING #: **MW-6**
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LOG OF BORING

Project ETE Landfill Location Gainesville, New York

Depth (feet)	Sample No.	Blows/6" 140 lbs.	Sample Inter.	Adv/Rec	Org. Vap (ppm)	Sample Description	Strata Change	Remarks (time)
72		4 8 12 12	72-74'	3"	0.0	70-74: damp gray SILT, little v. fn. sand, tr.-little clay, tr. submd gravels, poor sorting, v. low plasticity		MW-6D screen setting 74.5'-64.5' below grade.
74		1 1 9 7	74-76'	14"	0.0	74-75.5:wet gray SILTY fn.-med. SAND some clay, tr. gravels, v. poor sort. 75.5-76:wet gray v.fn.-med. SAND, w/silt, little gravel, tr. clay		
76		5 7 14 13	76-78'	16"	0.0	damp to wet gray SILT w/ some clay little v.fn. sand, tr. gravel, med.-high plasticity, v. poor sorting		
78		1 5 9 17	78-80'	20"	0.0	dry gray CLAY, little silt, tr. gravel high plasticity, mod.-well sorted		
80						End of borehole		

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LOG OF BORING

BORING # **MW-7**
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Project ETE Landfill | Location Gainesville, New York | Permit #:
Date Drilled 3/13/98 | Drilling Co.: SJB Drilling Services | Job #: 0897-22149
Total Depth 72' | Method Used: Hollow Stem Augering
Inspector Brian Murtagh / Tom Hom | Organic Vapor Inst: OVM Model 580B TEI Inc. | Water elv: approx. 3 ft.

Depth (feet)	Sample No.	Blows/6" 140 lbs.	Sample Inter.	Adv/Rec	Org. Vap (ppm)	Sample Description	Strata Change	Remarks (time)
		2	0-2'	8"	0.0	0-1: damp rusty brown SILT, tr. v. fn.		
		3				sand, tr. organics, low plast.		
		4				1-2: moist rusty brn. fn.-cr. SAND		
2		5				well sorted, black pepparing of sand		
		6	2-4'	6"	0.0	2-4.5: damp to wet brn. SILT,		@3' cuttings are
		7				some-little fn.-cr. sand, tr. fn. gravel		wet.
		6				poor sort., low plast.		
4		5						
		1	4-6'	12"	0.0			
		1				moist-wet gray brn. SILT & med. SAND,		MW-7S well screen:
		1				w/ thin 1/4" gray clay lenses, v. poor		15'-5' b.g.
6		3				sorting, med. plasticity		
		2	6-8'	15"	0.0	damp gray-olive brn. SILT, w/ clay,		appears to be
		2				some fn.-cr. sand, tr. gravel,		mixed fill material
		11				low-high plasticity, v. poor sorting		from 6-8'.
8		10						
		8	8-10'	12"	0.0	damp-wet brown to rust brn. fn.-med.		
		15				SANDY SILT, tr. gravels (gray-grn.		
		40				siltstone/dolomite), poor sorting.		
10		19						
		14	10-12'	8"	0.0	damp-moist olive gray SILTSTONE		
		43				GRAVEL & fn.-v.cr. SAND		
		19						
12		10						
		16	12-14'	18"	0.0	12-12.5': moist-dry gray SILT, little-tr.		
		26				v.fn. sand, tr. gravel, poor-mod sorting		
		29				12.5-14: moist brn. to rust brn. SILT,		
14		27				fn.-v.cr. sand, some gravel, v. poor sort.		
		4	14-16'	17"	0.0	14-15:moist brn. olive SILT, little-tr.		
		9				v. fn. sand, tr. gravel, tr. clay, low plast.		
		9				15-16:moist gray SILT, little-tr. v.fn. sand		
16		10				tr. gravel and clay, low-no plasticity		
		10	16-18'	19"	0.0			
		12						
		9				16-24: moist gray SILT, trace gravel,		
18		12				trace very fine sand, trace clay, mod.-		
		4	18-20'	20"	0.0	poor sorting, thin 1/8"-1/2" lenses of		
		7				v. fn. sand from 16-20'		
		8						
20		10						
		5	20-22'	22"	0.0			
		9						
		11						
22		13						
		5	22-24'	24"	0.0			
		9						
		12						
		20						

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BORING #: **MW-7**
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LOG OF BORING

Project ETE Landfill Location Gainesville, New York

Depth (feet)	Sample No.	Blows/6" 140 lbs.	Sample Inter.	Adv/Rec	Org. Vap (ppm)	Sample Description	Strata Change	Remarks (time)
		5	24-26'	23"	0.0	moist-wet gray brn. SILT, trace clay,		
		8				trace fine sand		
		10						
26		14						
		14	26-28'	22"	0.0	moist wet gray brn. SILT		
		13						
		15						
28		20						
		14	28-30'	20"	0.0			
		16						
		18						
30		21				28-32: moist-wet gray brn. SILT, trace		
		11	30-32'	15"	0.0	small angular gravel		
		11						
		10						
32		12						
		5	32-34'	16"	0.0	wet gray brown SILT & CR. SAND,		
		8				trace small angular gravel		
		11						MW-7D well screen:
34		14						45'-35' b.g.
		3	34-36'	14"	0.0	wet gray brn SANDY SILT & CLAY,		
		8				trace large subang. gravel		
		17						
36		20						
		26	36-38'	18"	0.0	wet gray brn. SILT, small-large		
		27				GRAVEL (siltstone)		
		12						
38		11						
		9	38-40'	2"	0.0	wet gray brn. CLAYEY SILT, moderate		
		9				plasticity.		
		12						
40		12						
		1	40-42'	22"	0.0	wet gray brn. SILT, some v. fn. sand		
		3						
		6						
42		10						
		10	42-44'	24"	0.0	same as above except 2" lense of		
		14				lt. gray CLAYEY SILT		
		13						
44		15						
		4	44-46'	10"	0.0	wet gray brn. SILT, trace clay, 1" lens		
		12				of lt. gray CLAY & GRAVEL, low plast.		
		32						
46		31						
		26	46-48'	22"	0.0	wet gray brn. SILT, tr. clay, tr. small		
		14				gravels, low plasticity		
		10						
		19						

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LOG OF BORING

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Project ETE Landfill Location Gainesville, New York

Depth (feet)	Sample No.	Blows/6" 140 lbs.	Sample Inter.	Adv/Rec	Org. Vap (ppm)	Sample Description	Strata Change	Remarks (time)
		26	46-48'	22"	0.0	wet gray brn. SILT, trace clay, lens of		
		14				clay & gravel, low plasticity		
		10						
48		19						
		11	48-50'	18"	0.0			
		11						
		13						
50		26						
		8	50-52'	17"	0.0			
		12						
		15						
52		16						
		13	52-54'	20"	0.0			
		18						
		21						
54		20						
		31	54-56'	8"	0.0	48-58': wet gray brn. SILT, trace clay,		
		24				trace small rnd-subrnd black gravels		
		16						
56		17						
		12	56-58'	24"	0.0			
		19						
		58/3"						
58								
		6	58-60'	11"	0.0	wet gray brn. SILT, little clay, some sm.		
		9				to med. rnd. gravel		
		12						
60		9						
		3	60-62'	17"	0.0			
		6						
		8						
62		10				60-66': wet gray brn. SILT tr. clay, trace		
		3	62-64'	18"	0.0	small subang. gravels, med plasticity		
		6						
		9						
64		12						
		2	64-66'	4"	0.0			
		3						
		2						
66		3						
		7	66-68'	24"	0.0	wet gray brn. SANDY SILT, 2" lens of		organic odor noted
		15				gray grn. silt and gravel, 1" lens of black		
		20				organics, 2" silty sand and med. gravels		
68		21						
		23	68-70'	24"	0.0	damp gray green SILT, low plasticity,		
		44				friable, dense		
		45						
		50/4"				End of Borehole @ 70'		

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LOG OF BORING

BORING # **MW-8**
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Project ETE Landfill | Location Gainesville, New York | Permit #:
Date Drilled 3/5/98 | Drilling Co.: SJB Drilling Services | Job #: 0897-22149
Total Depth 78' | Method Used: Hollow Stem Augering
Inspector Brian Murtagh | Organic Vapor Inst: OVM Model 580B TEI Inc. | Water elv: approx. 12 ft.

Depth (feet)	Sample No.	Blows/6" 140 lbs.	Sample Inter.	Adv/Rec	Org. Vap (ppm)	Sample Description	Strata Change	Remarks (time)
		1	0-2'	14"	0.0	moist lt. brn. to olive SILT, w. very fn.		black staining @ 2'
		4				to fn. sand, little clay, tr. gravel		
		1						
2		2						
		8	2-4'	19"	6.0	2-2.5': wet MSW; 2.5-3':dry gray olive		
		4				green SILT, little v. fn. sand, tr. gravel		
		3				3'-3.5': MSW (plastic, newpaper)		
4		2				3.5-4': dry gray olive green SILT, little v. fn. sand, tr. gravel		
		5	4-6'	6"	0.0	moist MSW w/ silty matrix, red paint		LEL=50%
		2				staining on split spoon		O2=15.5%
		3						H2S=0.0 ppm
6		4						
		6	6-8'	4"	0.0	MSW w/ olive gray SILT w/ clay		
		7				matrix		
		9						
8		8						
		5	8-10'	12"	7.0	8-8.25: dry olive green SANDY SILT		
		5				tr. clay, tr. gravel, loose fill.		
		9				8.25-9.75: black stained MSW		
10		8				9.75-10: dry rusty brn. olive v. fn. SANDY SILT, tr. clay		
		5	10-12'	15"	1.0	moist brn. to olive SILT, tr. fn.-med.		
		4				sand, tr. MSW (styrofoam, wood, etc.)		
		4						
12		3						
		3	12-14'	16"	2.0	14-15.75': wet MSW (plastic, metal,		apparent
		4				paper), oil staining noted		water table @ 12'
		5						
14		5						
		6	14-16'	18"	1.0			
		4				15.75'-16': dry gray olive green SILT		
		5				tr. clay, may be native material		
16		3						
		3	16-18'	12"	0.0	16-17.75': moist-dry tan brn. SILT,		
		4				tr.-little clay, tr. subrnd. gravel,		
		5				tr. root frag; 17.75-18': grading		
18		4				to a SANDY SILT		
		4	18-20'	14"	0.0	moist-dry tan orange brn. SILT, little		
		3				sand, tr. clay, tr. blk. shale frag., poor		Install MW-8s
		5				sorting, mottle with v. fn. gray sand		screen: 20'-10' b.g.
20		7						
		4	20-22'	12"	0.0	moist-damp lt. brn-olive tan		3/6/98 cont'd
		6				v. fn. SANDY SILT, tr. subang. gravel		sampling
		4				and clay, low plast., poorly sorted		
22		5				[TILL: no bedding visible]		
		5	22-24'	18"	0.0	Same as above except grading to		
		7				med-cr. SANDY SILT, some gravel		
		7						
		6						

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LOG OF BORING

BORING #: **MW-8**
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Project ETE Landfill Location Gainesville, New York

Depth (feet)	Sample No.	:ows/6" :0 lbs.	Sample Inter.	Adv/Rec	Org. Vap (ppm)	Sample Description	Strata Change	Remarks (time)
		5	24-26'	12"	0.0	moist brn. to dk. olive brn. SILTY CLAY		
		5				some v. fn. sand, little subrnd-subang.		
		6				gravels, poorly sorted, matrix has med.		
26		6				plastic.		
		6	26-28'	14"	0.0	Same as above, except grades to a		
		9				sandy silt for a 2" thickness		
		9						
28		9						
		7	28-30'	10"	0.0			
		7						
		13				28-32: moist brn to rusty olive brn. SILTY		
30		17				V. FN. -CR. SAND, little ang. to subang.		
		4	30-32'	4"	0.0	gravel, tr. clay, no plast., poorly sort.		
		10						
		11						
32		12						
		7	32-34'	20"	0.0	32-32.5: v. wet brn peppared black		
		8				fn.-cr. SAND, little silt, little fn. gravels		
		8				32.5-33:wet multicolored fn.-cr.		
34		10				SAND and GRAVEL, tr. silt, no plast.		
		6	34-36'	12"	0.0	33-38': moist gray v. fn. SANDY SILT		strange odor noted
		8				tr. to little clay, tr. subang. gravels,		at 36'. Check inside
		9				low-med. plast., v. poorly sort., fining		augers. LEL=75%
36		14				downward grading		H2S=2 ppm,
		10	36-38'	12"	0.0			O2=17.8%,
		13						venting augers
		20						
38		20						
		10	38-40'	15"	0.0	moist-damp gray to slightly brn. SILTY		gravels are shale,
		12				FN-CR. SAND, tr. clay, some-little ang.		siltstone, dolomite
		38				to subrnd. gravels, v. low plast, poor		
40		15				sorting		
		13	40-42'	14"	0.0	40-43: wet gray v.fn.-fn. SAND,		
		14				w/silt, little to some gravels,		
		14				no plast., poor sort.		
42		14						
		8	42-44'	17"	0.0			
		26						
		10				43-46: gray SILTY v.fn.-cr. SAND, little		
44		12				gravel, little clay, stiff, low plast., v. poor		
		8	44-46'	13"	0.0	sorting		
		14						
		40						
46		12						
		8	46-48'	24"	0.0	46-46.5: wet gray v. fn. SANDY SILT		
		10				tr. grav., firm, v. poor sort.		
		11				46.5-48: wet gray SILTY SAND, tr. clay		
		12				tr. fn. ang. grav., loose to firm, fining downward.		

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LOG OF BORING

BORING #: **MW-8**
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Project ETE Landfill Location Gainesville, New York

Depth (feet)	Sample No.	Blows/6" 140 lbs.	Sample Inter.	Adv/Rec	Org. Vap (ppm)	Sample Description	Strata Change	Remarks (time)
		7	48-50'	19"	0.0	moist gray v. fn. SANDY SILT, some		
		7				clay, tr. to no gravel, med. plast.		
		7				poor sorting.		
50		8						
		1	50-52'	14"	0.0	50-51:moist gray CLAYEY SILT, tr. v.		
		2				fn. sand, tr. grav.,med plast, poor sort.		
		8				51-52:moist gray SILTY v.fn.-fn. SAND		
52		4				tr. gravels, tr. clay, v. low plast., poor sorting		
		15	52-54'	3"	0.0	v. wet gray CLAYEY fn.-med. SAND		
		20				and SILT, w/ gravel, loose material,		
		20				low plast, v. poor sort., tacky		
54		23						
		7	54-56'	15"	0.0	moist-dry gray SILTY v.fn-fn. SAND,		
		13				little-tr. gravel, tr. clay, poor sorting,		
		18				v. low plast., compacted material.		
56		26						
		19	56-58'	12"	0.0	56-57:dry gray-red brn. SILT, tr. clay		
		22				tr. gravel and v. fn. sand, low plast.		
		22				57-58:dry gray-dk. gray SILT, little clay		
58		22				little grav, tr. sand, low plast, stiff		
		4	58-60'	14"	0.0	moist gray SILTY CLAY, tr. to little		
		6				gravel, tr. v. fn sand, med-high plast		
		7						
60		9						
		2	60-62'	8"	0.0	60-62.75: v. wet gray fn.-cr. SAND &		
		6				GRAVEL some silt, loose		
		8						
62		9						
		9	62-64'	15"	0.0	62.75-63: red brn. v. fn. SILTY SAND		
		10				tr.-little clay, low plast.		
		9				63-64: moist-dry gray SILTY v.fn.-fn.		
64		11				SAND, little gravel, tr. clay		
		2	64-66'	10"	0.0	wet gray to black gray fn.-cr. SAND		
		1				w/ silt, well sort.		
		2						
66		5						
		9	66-68'	17"	0.0	66-67:moist gray v. fn. SANDY SILT		
		12				tr.-little clay, tr. gravels, poor sort		
		11				67-68: moist to wet gray SILT, little clay		thin lamination
68		11				tr. v. fn. sand, med-well sort.		bedding visible
		1	68-70'	12"	0.0	wet gray SILT, some clay, med-high		
		6				plast., well sort., v. thin lamination bed.		
		7						
68		11						
		30	70-72'	8"	0.0	70-71:gray wet GRAVEL, little clay and		
		32				silt matrix, poor sort, loose		MW-8D screen
		14				71-72:moist gray CLAYEY fn.-med.		setting 72'-62' b.g.
72		10				SAND, some silt, med. plast, mod. sort.		

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BORING #: **MW-8**
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Project ETE Landfill Location Gainesville, New York

Depth (feet)	Sample No.	Blows/6" 140 lbs.	Sample Inter.	Adv/Rec	Org. Vap (ppm)	Sample Description	Strata Change	Remarks (time)
		13	72-74'	12"	0.0	saturated tacky wet gray v. fn. SANDY		
		14				SILT, some clay, tr. gravels, med.-		
		15				high plast, poor-mod. sort.		
74		16						
		1	74-76'	13"	0.0	74-78: moist gray v. fn. SILTY SAND, little		
		4				little-tr. clay, little fn. gravels, med.-low		
		7				plast., poor-mod. sort.		
76		7						
		5	76-78'	14"	0.0			
		8						
		9						
78		8						
						End of borehole		

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LOG OF BORING

BORING # **MW-9**
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Permit #:
Job #: 0897-22149

Project ETE Landfill
Location Gainesville, New York
Date Drilled 3/19/98
Drilling Co.: SJB Drilling Services
Total Depth 76'
Method Used: Hollow Stem Augering
Inspector Tom Horn
Organic Vapor Inst: OVM Model 580B TEI Inc.
Water elv: approx.4 ft.

Depth (feet)	Sample No.	Blows/6" 140 lbs.	Sample Inter.	Adv/Rec	Org. Vap (ppm)	Sample Description	Strata Change	Remarks (time)
2		1 2 2 1	0-2'	6"	0.0	wet dk. brown SANDY SILT, trace organics, tr. clay		
4		1 2 4 3	2-4'	20"	0.0	wet brown SANDY SILT, medium plasticity		
6		1 7 12 12	4-6'	12"	0.0	wet brown SANDY SILT, trace small angular gravel		MW-9S screen: 15'-5' b.g.
8		10 9 10 10	6-8'	14"	0.0	damp brown SANDY SILT, some red brown subrnd. gravel		
10		17 12 10 11	8-10'	6"	0.0	damp brown SANDY SILT and brown red GRAVEL		
12		5 7 9 11	10-12'	20"	0.0	damp brown SILT, little very fine sand, some small-med. gravel		
14		5 7 10 11	12-14'	24"	0.0	12-13: wet lt. brown-orange-brown SILT, little fine sand 13-14: wet lt. brn. SILT and angular GRAVEL, little v. fine sand,		
16		14 10 10 10	14-16'	24"	0.0	wet brown-light brown SILT and med. SAND, tr. coarse sand		
18		6 8 9 9	16-18'	22"	0.0	wet brown-light brown SILT and med. to cr. SAND		
20		5 6 8 11	18-20'	18"	0.0	damp light brown SILT and med.-cr. SAND, trace clay		
22		6 8 9 10	20-22'	15"	0.0	damp brown SILT and med. SAND, tr. clay, tr. angular med. gravel, medium plasticity		
		12 30 48 21	22-24'	20"	0.0	moist tan-lt. gray SILT, dense, low plasticity, 3" diam. siltstone gravel		

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BORING #: **MW-9**

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Project ETE Landfill Location Gainesville, New York Permit #:

Depth (feet)	Sample No.	Blows/6" 140 lbs.	Sample Inter.	Adv/Rec	Org. Vap (ppm)	Sample Description	Strata Change	Remarks (time)
26		12 10 10 10	24-26'	14"	0.0	damp lt. gray SILT, dense, low plast. tr. sm. rnd-submd gravel		
28		4 6 9 9	26-28'	14"	0.0	26-30: wet pale lavender-red-tan SILT		
30		6 8 9 11	28-30'	2"	0.0			
32		5 11 13 12	30-32'	18"	0.0	damp tan gray SILT, trace small gravel trace siltstone		
34		22 22 22 18	32-34'	20"	0.0	damp tan gray SILT, trace subrnd. gravel, tr. brick red gravel		
36		11 15 23 24	34-36'	15"	0.0	wet tan-gray SILT, trace siltstone, trace small rounded gravel		
38		11 14 14 17	36-38'	18"	0.0	wet gray brown SILT and med. angular GRAVEL		
40		10 12 9 10	38-40'	12"	0.0	damp gray SILT, trace fine sand, trace med. subangular gravel		
42		14 14 16 20	40-42'	10"	0.0	wet gray brown SILT, little very fine sand, trace fine sand		
44		19 18 23 22	42-44'	0"	0.0	no recovery		
46		8 9 10 12	44-46'	10"	0.0	wet gray brown SILT, some med. angular gravel		
		9 12 11 12	46-48'	12"	0.0	wet gray brown SILT, some small-med. angular gravel		

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LOG OF BORING

BORING #: **MW-9**
Page 3 of 4
Permit #:

Project ETE Landfill Location Gainesville, New York

Depth (feet)	Sample No.	Blows/6" 140 lbs.	Sample Inter.	Adv/Rec	Org. Vap (ppm)	Sample Description	Strata Change	Remarks (time)
50		13 10 9 9	48-50'	12"	0.0	wet gray brown SILT, trace fine sand, trace small angular gravel		
52		1 3 7 6	50-52'	18"	0.0	wet gray brown SILT, some clay, trace coarse gravel		
54		10 13 13 11	52-54'	20"	0.0	wet gray brown SILT, trace very fine sand, trace clay		
56		8 10 10 11	54-56'	24"	0.0	wet gray brown SILT, with sm. - med. subrounded gravel, dense		
58		8 10 18 22	56-58'	10"	0.0	wet gray brown SILT, some sm.-med. subrounded gravels		
60		8 19 17 13	58-60'	0"	0.0			no recovery
62		6 4 7 9	60-62'	0"	0.0			no recovery
64		9 10 12 13	62-64'	8"	0.0	wet gray brown SILT, trace medium subangular gravel		
66		1 5 11 19	64-66'	12"	0.0	wet brown gray SILT, trace small rounded gravels		
68		29 33 35 50	66-68'	8"	0.0	wet brown CLAYEY SILT		
70		4 16 18 18	68-70'	14"	0.0	wet brown clay SILT with olive green siltstone gravel, some med. sand.		
		3 15 45 41	70-72'	12"	0.0	wet gray very fine to coarse SAND		

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LOG OF BORING

Project ETE Landfill Location Gainesville, New York

BORING #: **MW-9**
Page 4 of 4
Permit #:

Depth (feet)	Sample No.	ws/6" 0 lbs.	Sample Inter.	Adv/Rec	Org. Vap (ppm)	Sample Description	Strata Change	Remarks (time)
		26 32 50 53	72-74'	19"	0.0	wet gray very fine to coarse SAND, trace small subangular gravel		MW-9D screen: 74'-64' b.g.
74								
		29 50/3"	74-76'	4"	0.0	wet green gray SILT and SILTSTONE		
76								
						End of borehole		

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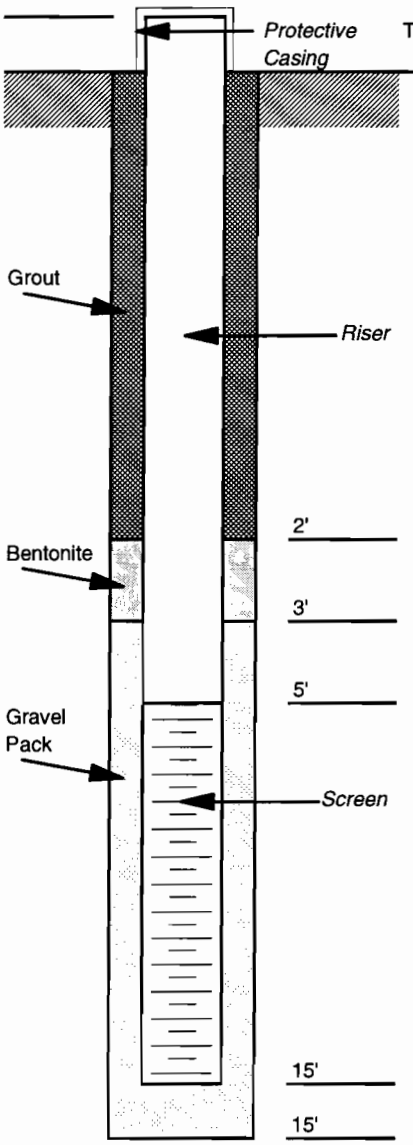
WELL CONSTRUCTION SUMMARY

Project: ETE Landfill Location: Gainesville, New York Well No.: **PZ-1**
Permit No.:

TOC elev.:



Type Monitoring Well

DRILLING SUMMARY

Drilling Company: SJB Drilling Services Drillers: Art and Dale
Drill Rig/Model: Central Mine Equip. Comp. FN160
Borehole Diameters: 7.5" Drilling Fluid: None
Bits/Depths: Drill bit is 7" in diam.
Total Depth: 18' Depth To Water: 3.22'
Supervisor Geologist: Brian Murtagh

WELL DESIGN

Casing Material:	sched. 40 PVC	Diameter:	2"
Screen Size:	10 foot	Diameter:	2"
Slot Size:	.010"	Setting:	18'-8'
Filter Material:	Granusil 2400 (single 0)	Setting:	18'-6'
Seals Material:	Med. Bentonite Chips	Setting:	6'-4'
Grout:	Portland-Bentonite Mix	Setting:	4'-grade
Surface Casing Material:	flush mount	Setting:	at grade

TIME LOG

	Started	Completed
Drilling:	3/24/98	3/24/98
Installation:	3/24/98	3/24/98
Development:	3/27/98	3/27/98

WELL DEVELOPMENT

Method: Handbail (2 hrs. total)
Static Depth to Water: 3.22'
Pumping Depth To Water:
Pumping Rate: Spec. Capacity:
Volume Pumped: approx. 30 gal.

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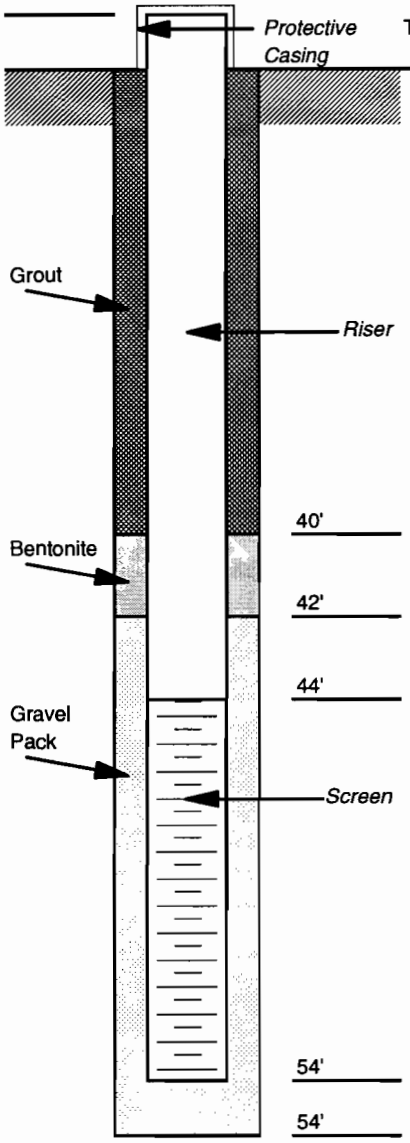
WELL CONSTRUCTION SUMMARY

Project: ETE Landf Location: Gainesville, New York Well No.: **PZ-2**
Permit No.:

TOC elev.:



Type Monitoring Well

DRILLING SUMMARY

Drilling Company: SJB Drilling Services Drillers: Art and Dale
Drill Rig/Model: Central Mine Equip. Comp. FN160
Borehole Diameters: 7.5" Drilling Fluid: None
Bits/Depths: Drill bit is 7" in diam.
Total Depth: 58' Depth To Water:
Supervisor Geologist: Brian Murtagh

WELL DESIGN

Casing Material:	sched. 40 PVC	Diameter:	2"
Screen Size:	10 foot	Diameter:	2"
Slot Size:	.010"	Setting:	54'-44'
Filter Material:	Granusil 2400 (single 0)	Setting:	54'-42'
Seals Material:	Med. Bentonite Chips	Setting:	42'-39'
Grout:	Portland-Bentonite Mix	Setting:	39'-grade
Surface Casing Material:	flush mount	Setting:	at grade

TIME LOG

	Started	Completed
Drilling:	3/23/98	3/26/98
Installation:	3/26/98	3/26/98
Development:	3/27/98	3/27/98

WELL DEVELOPMENT

Method: Handbail (2 hrs. total)
Static Depth to Water: 4.0'
Pumping Depth To Water:
Pumping Rate: Spec. Capacity:
Volume Pumped: approx. 30 gal.

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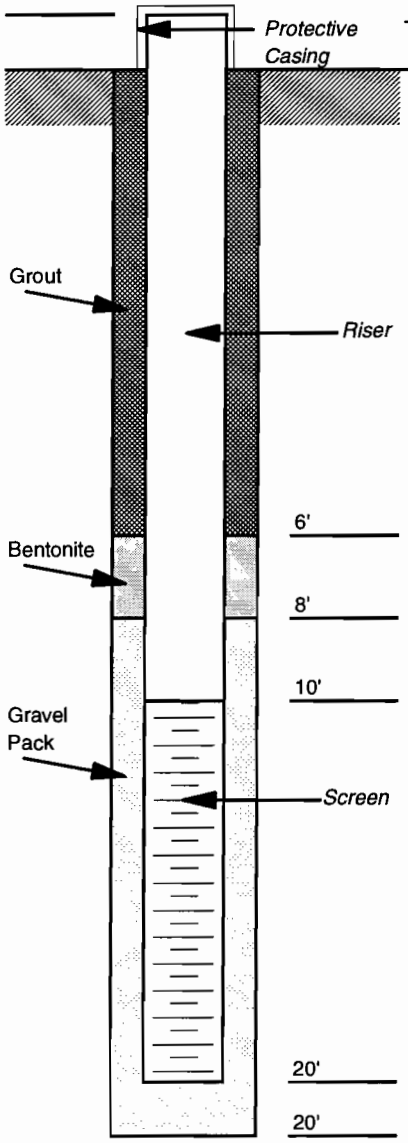
WELL CONSTRUCTION SUMMARY

Project: ETE Landfill Location: Gainesville, New York Well No.: **PZ-3**
Permit No.:

TOC elev.:



Type Monitoring Well

DRILLING SUMMARY

Drilling Company: SJB Drilling Services Drillers: Art and Dale
Drill Rig/Model: Central Mine Equip. Comp. FN160
Borehole Diameters: 7.5" Drilling Fluid: None
Bits/Depths: Drill bit is 7" in diam.
Total Depth: 20' Depth To Water:
Supervisor Geologist: Brian Murtagh

WELL DESIGN

Casing Material:	sched. 40 PVC	Diameter:	2"
Screen Size:	10 foot	Diameter:	2"
Slot Size:	.010"	Setting:	20'-10'
Filter Material:	Granusil 2400 (single 0)	Setting:	20'-8'
Seals Material:	Med. Bentonite Chips	Setting:	8'-6'
Grout:	Portland-Bentonite Mix	Setting:	6'-grade
Surface Casing Material:	Procasing stickup	Setting:	above grade

TIME LOG

	Started	Completed
Drilling:	3/5/98	3/5/98
Installation:	3/5/98	3/5/98
Development:	3/16/98	3/16/98

WELL DEVELOPMENT

Method: Handbail and submersible pump (2 hrs. total)
Static Depth to Water: 4.35'
Pumping Depth To Water:
Pumping Rate: 1 gpm Spec. Capacity:
Volume Pumped: 51 gal.

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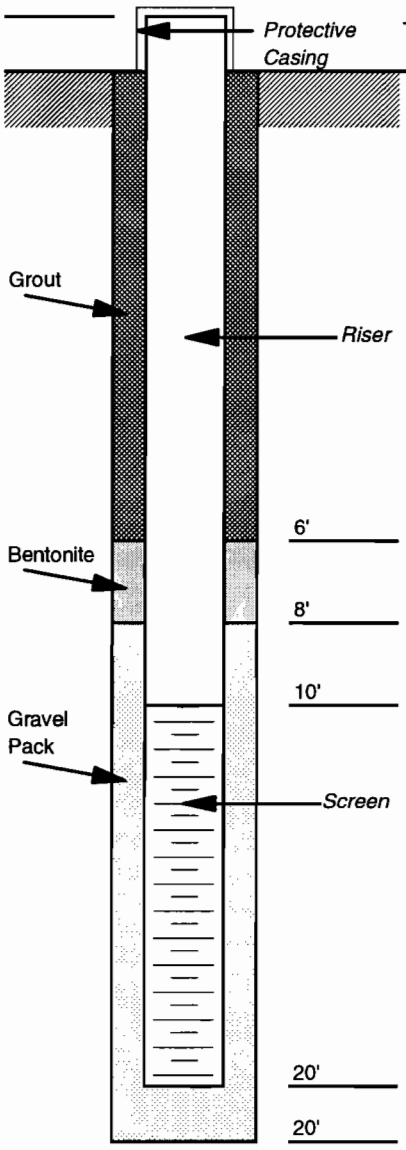
WELL CONSTRUCTION SUMMARY

Project: ETE Landfill Location: Gainesville, New York Well No.: **MW-6S**
Permit No.:

TOC elev.:



Type Monitoring Well

DRILLING SUMMARY

Drilling Company: SJB Drilling Services Drillers: Art and Dale
Drill Rig/Model: Central Mine Equip. Comp. FN160
Borehole Diameters: 7.5" Drilling Fluid: None
Bits/Depths: Drill bit is 7" in diam.
Total Depth: 20' Depth To Water:
Supervisor Geologist: Brian Murtagh

WELL DESIGN

Casing Material:	sched. 40 PVC	Diameter:	2"
Screen Size:	10 foot	Diameter:	2"
Slot Size:	.010"	Setting:	20'-10'
Filter Material:	Granusil 2400 (single 0)	Setting:	20'-8'
Seals Material:	Med. Bentonite Chips	Setting:	8'-6'
Grout:	Portland-Bentonite Mix	Setting:	6'-grade
Surface Casing Material:	Procasing stickup	Setting:	above grade

TIME LOG

	Started	Completed
Drilling:	3/10/98	3/10/98
Installation:	3/10/98	3/10/98
Development:	3/16/98	3/16/98

WELL DEVELOPMENT

Method: Handbail and submersible pump (2 hrs. total)
Static Depth to Water: 14.0'
Pumping Depth To Water:
Pumping Rate: 0.2 gpm Spec. Capacity:
Volume Pumped: 15 gal.

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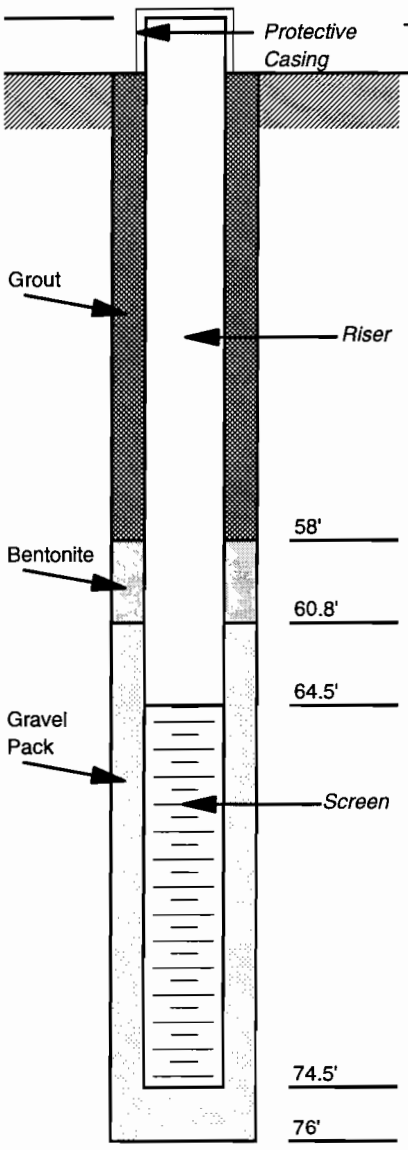
WELL CONSTRUCTION SUMMARY

Project: ETE Landfill Location: Gainesville, New York Well No.: **MW-6D**
Permit No.:

TOC elev.:



Type Monitoring Well

DRILLING SUMMARY

Drilling Company: SJB Drilling Services Drillers: Art and Dale
Drill Rig/Model: Central Mine Equip. Comp. FN160
Borehole Diameters: 7.5" Drilling Fluid: None
Bits/Depths: Drill bit is 7" in diam.
Total Depth: 76' Depth To Water:
Supervisor Geologist: Brian Murtagh

WELL DESIGN

Casing Material:	sched. 40 PVC	Diameter:	2"
Screen Size:	10 foot	Diameter:	2"
Slot Size:	.010"	Setting:	74.5'-64.5'
Filter Material:	Granusil 2400 (single 0)	Setting:	76'-60.8'
Seals Material:	Med. Bentonite Chips	Setting:	60.8-58.0'
Grout:	Grout/Bentonite Mix	Setting:	58'-grade
Surface Casing Material:	Procasing stickup	Setting:	above grade

TIME LOG

	Started	Completed
Drilling:	3/10/98	3/12/98
Installation:	3/12/98	3/12/98
Development:	3/16/98	3/16/98

WELL DEVELOPMENT

Method: Handbail and submersible pump (2 hrs. total)
Static Depth to Water: 12.0'
Pumping Depth To Water:
Pumping Rate: 0.5 gpm Spec. Capacity:
Volume Pumped: 62 gal.

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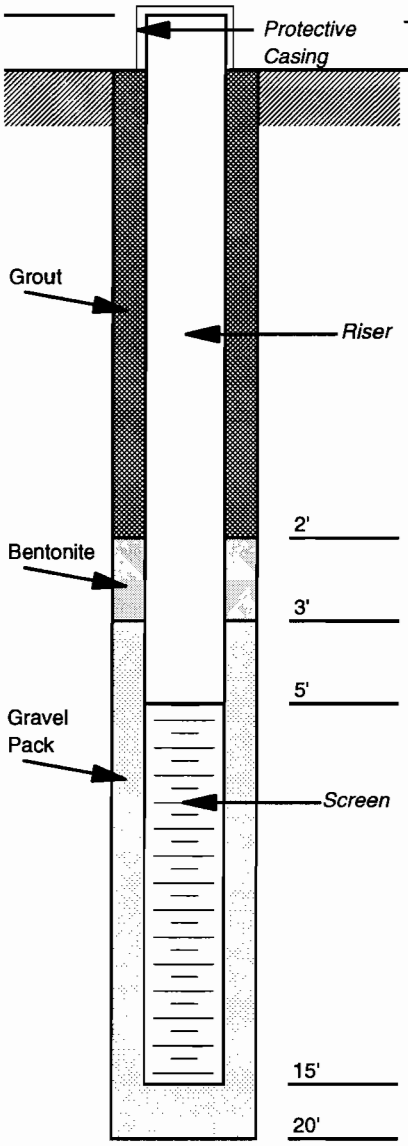
WELL CONSTRUCTION SUMMARY

Project: ETE Landfill Location: Gainesville, New York Well No.: **MW-7S**
Permit No.:

TOC elev.:



Type Monitoring Well

DRILLING SUMMARY

Drilling Company: SJB Drilling Services Drillers: Art and Dale
Drill Rig/Model: Central Mine Equip. Comp. FN160
Borehole Diameters: 7.5" Drilling Fluid: None
Bits/Depths: Drill bit is 7" in diam.
Total Depth: 20' Depth To Water:
Supervisor Geologist: Brian Murtagh

WELL DESIGN

Casing Material:	sched. 40 PVC	Diameter:	2"
Screen Size:	10 foot	Diameter:	2"
Slot Size:	.010"	Setting:	15'-5'
Filter Material:	Granusil 2400 (single 0)	Setting:	20'-3'
Seals Material:	Med. Bentonite Chips	Setting:	3'-2'
Grout:	Portland-Bentonite Mix	Setting:	2'-grade
Surface Casing Material:	Procasing stickup	Setting:	above grade

TIME LOG

	Started	Completed
Drilling:	3/17/98	3/17/98
Installation:	3/17/98	3/17/98
Development:	3/25/98	3/25/98

WELL DEVELOPMENT

Method: Handbail (2 hrs. total)
Static Depth to Water: 3.3'
Pumping Depth To Water:
Pumping Rate: Spec. Capacity:
Volume Pumped: 35 gal.

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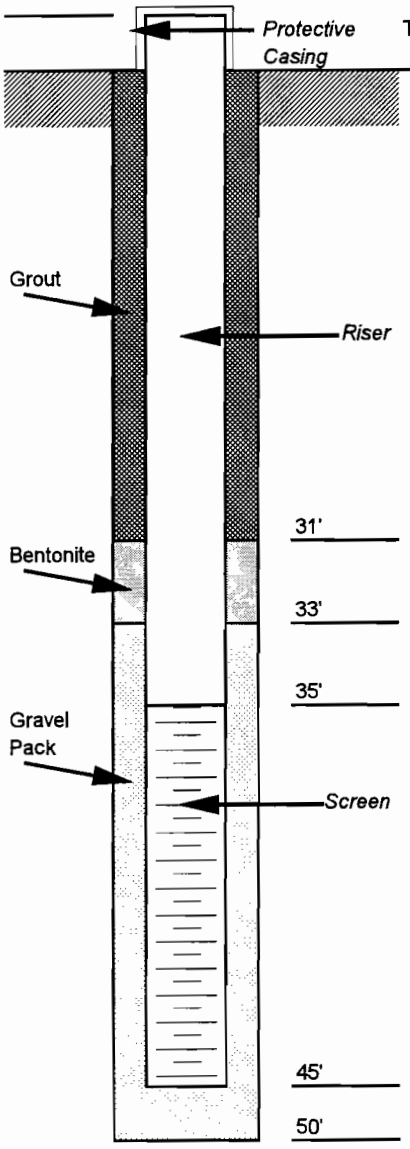
WELL CONSTRUCTION SUMMARY

Project: ETE Landfill Location: Gainesville, New York Well No.: **MW-7D**
Permit No.:

TOC elev.:



Typ Monitoring Well

DRILLING SUMMARY

Drilling Company: SJB Drilling Services Drillers: Art and Dale
Drill Rig/Model: Central Mine Equip. Comp. FN160
Borehole Diameters: 7.5" Drilling Fluid: None
Bits/Depths: Drill bit is 7" in diam.
Total Depth: 72.5' Depth To Water:
Supervisor Geologist: Tom Horn

WELL DESIGN

Casing Material:	sched. 40 PVC	Diameter:	2"
Screen Size:	10 foot	Diameter:	2"
Slot Size:	.010"	Setting:	45'-35'
Filter Material:	Granusil 2400 (single 0)	Setting:	50'-33'
Seals Material:	Med. Bentonite Chips	Setting:	33'-31'
Grout:	Grout/Bentonite Mix	Setting:	31'-grade
Surface Casing Material:	Procasing stickup	Setting:	above grade

TIME LOG

	Started	Completed
Drilling:	3/13/98	3/17/98
Installation:	3/17/98	3/18/98
Development:	3/25/98	3/25/98

WELL DEVELOPMENT

Method: Handbail and submersible pump (2 hrs. total)
Static Depth to Water: 9.7'
Pumping Depth To Water:
Pumping Rate: Spec. Capacity:
Volume Pumped: 33 gal.

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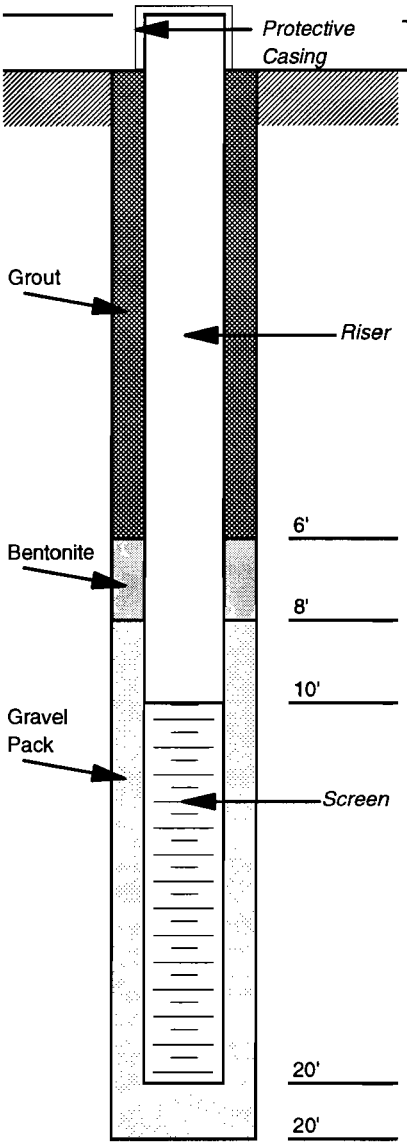
WELL CONSTRUCTION SUMMARY

Project: ETE Landfill Location: Gainesville, New York Well No.: **MW-8S**
Permit No.:

TOC elev.:



Type Monitoring Well

DRILLING SUMMARY

Drilling Company: SJB Drilling Services Drillers: Art and Dale
Drill Rig/Model: Central Mine Equip. Comp. FN160
Borehole Diameters: 7.5" Drilling Fluid: None
Bits/Depths: Drill bit is 7" in diam.
Total Depth: 20' Depth To Water:
Supervisor Geologist: Brian Murtagh

WELL DESIGN

Casing Material:	sched. 40 PVC	Diameter:	2"
Screen Size:	10 foot	Diameter:	2"
Slot Size:	.010"	Setting:	20'-10'
Filter Material:	Granusil 2400 (single 0)	Setting:	20'-8'
Seals Material:	Med. Bentonite Chips	Setting:	8'-6'
Grout:	Portland-Bentonite Mix	Setting:	6'-grade
Surface Casing Material:	Procasing stickup	Setting:	above grade

TIME LOG

	Started	Completed
Drilling:	3/5/98	3/5/98
Installation:	3/5/98	3/5/98
Development:	3/13/98	3/13/98

WELL DEVELOPMENT

Method: Handbail (1.5 hrs. total)
Static Depth to Water: 7.0'
Pumping Depth To Water:
Pumping Rate: Spec. Capacity:
Volume Pumped: 30 gal.

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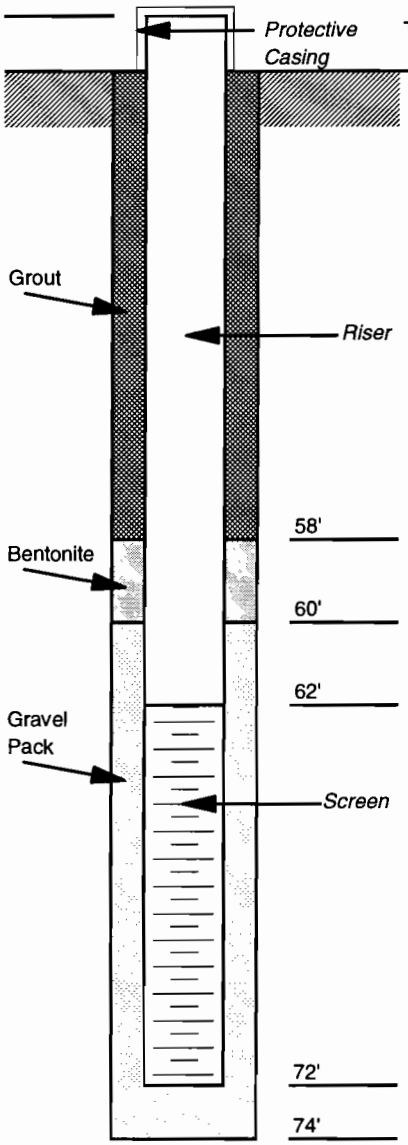
WELL CONSTRUCTION SUMMARY

Project: ETE Landfill Location: Gainesville, New York Well No.: **MW-8D**
Permit No.:

TOC elev.:



Type Monitoring Well

DRILLING SUMMARY

Drilling Company: SJB Drilling Services Drillers: Art and Dale
Drill Rig/Model: Central Mine Equip. Comp. FN160
Borehole Diameters: 7.5" Drilling Fluid: None
Bits/Depths: Drill bit is 7" in diam.
Total Depth: 72' Depth To Water:
Supervisor Geologist: Brian Murtagh

WELL DESIGN

Casing Material:	sched. 40 PVC	Diameter:	2"
Screen Size:	10 foot	Diameter:	2"
Slot Size:	.010"	Setting:	72'-62'
Filter Material:	Granusil 2400 (single 0)	Setting:	74'-60'
Seals Material:	Med. Bentonite Chips	Setting:	60'-58'
Grout:	Grout/Bentonite Mix	Setting:	58'-grade
Surface Casing Material:	Procasing stickup	Setting:	above grade

TIME LOG

	Started	Completed
Drilling:	3/6/98	3/9/98
Installation:	3/9/98	3/9/98
Development:	3/13/98	3/13/98

WELL DEVELOPMENT

Method: Handbail and submersible pump (2 hrs. total)
Static Depth to Water: 7.0'
Pumping Depth To Water:
Pumping Rate: 1.66 gpm Spec. Capacity:
Volume Pumped: 140 gal.

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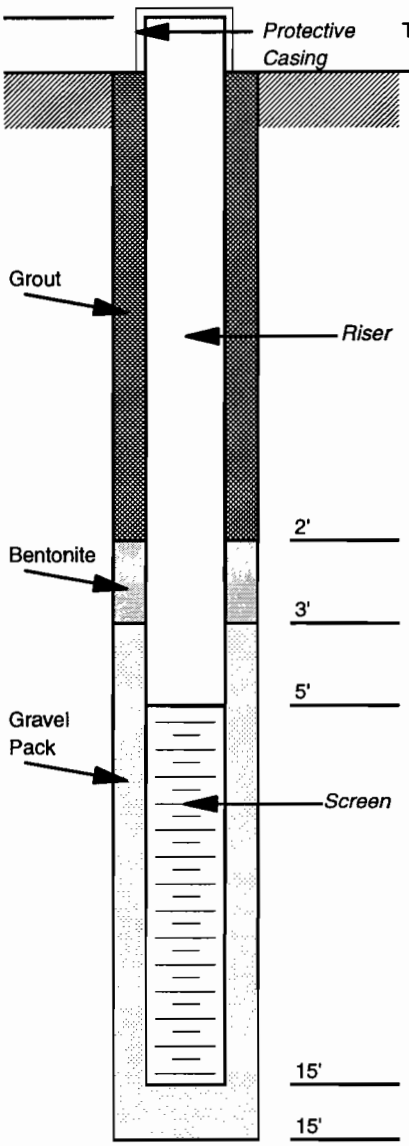
WELL CONSTRUCTION SUMMARY

Project: ETE Landfill Location: Gainesville, New York Well No.: **MW-9S**
Permit No.:

TOC elev.:



Type Monitoring Well

DRILLING SUMMARY

Drilling Company: SJB Drilling Services Drillers: Art and Dale
Drill Rig/Model: Central Mine Equip. Comp. FN160
Borehole Diameters: 7.5" Drilling Fluid: None
Bits/Depths: Drill bit is 7" in diam.
Total Depth: 15' Depth To Water: 1.7'
Supervisor Geologist: Tom Horn

WELL DESIGN

Casing Material:	sched. 40 PVC	Diameter:	2"
Screen Size:	10 foot	Diameter:	2"
Slot Size:	.010"	Setting:	15'-5'
Filter Material:	Granusil 2400 (single 0)	Setting:	15'-3'
Seals Material:	Med. Bentonite Chips	Setting:	3'-2'
Grout:	Portland-Bentonite Mix	Setting:	2'-grade
Surface Casing Material:	Procasing stickup	Setting:	above grade

TIME LOG

	Started	Completed
Drilling:	3/20/98	3/20/98
Installation:	3/20/98	3/20/98
Development:	3/25/98	3/26/98

WELL DEVELOPMENT

Method: Handbail (4.5 hrs. total)
Static Depth to Water: 1.7'
Pumping Depth To Water:
Pumping Rate: Spec. Capacity:
Volume Pumped: 31 gal.

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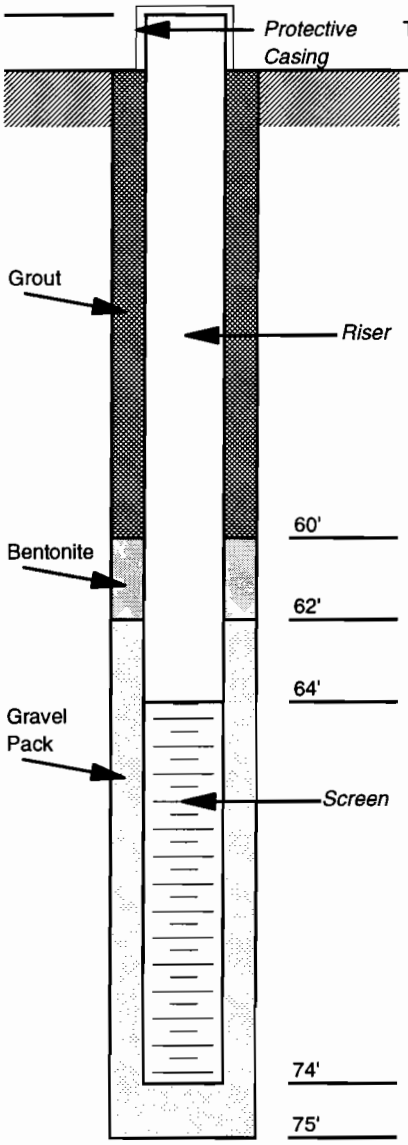
WELL CONSTRUCTION SUMMARY

Project: ETE Landfill Location: Gainesville, New York Well No.: **MW-9D**
Permit No.:

TOC elev.:



Type: Monitoring Well

DRILLING SUMMARY

Drilling Company: SJB Drilling Services Drillers: Art and Dale
Drill Rig/Model: Central Mine Equip. Comp. FN160
Borehole Diameters: 7.5" Drilling Fluid: None
Bits/Depths: Drill bit is 7" in diam.
Total Depth: 75' Depth To Water: 0.7'
Supervisor Geologist: Tom Horn

WELL DESIGN

Casing Material:	sched. 40 PVC	Diameter:	2"
Screen Size:	10 foot	Diameter:	2"
Slot Size:	.010"	Setting:	74'-64'
Filter Material:	Granusil 2400 (single 0)	Setting:	75'-62'
Seals Material:	Med. Bentonite Chips	Setting:	62'-60'
Grout:	Grout/Bentonite Mix	Setting:	60'-grade
Surface Casing Material:	Procasing stickup	Setting:	above grade

TIME LOG

	Started	Completed
Drilling:	3/18/98	3/20/98
Installation:	3/20/98	3/20/98
Development:	3/25/98	3/26/98

WELL DEVELOPMENT

Method: Handbail and submersible pump (4.5 hrs. total)
Static Depth to Water: 0.7'
Pumping Depth To Water:
Pumping Rate: .10 gpm Spec. Capacity:
Volume Pumped: 99 gal.

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Appendix E

Field Forms

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LANDFILL INSPECTION REPORT **Day:_____ Date: _____**

EA®	NYSDEC		Temperature: (F)		(am)		(pm)
			Wind Direction:		(am)		(pm)
ETE SANITATION AND LANDFILL			Weather:	(am) (pm)			
NYSDEC Site # 9-61-005							
Contract # 14907.27			Arrive at site				
Gainesville, New York			Leave site:				

Site Security

Evidence of vandalism (wells, vents, protective cover damage):

Evidence of cover system intrusion (ruts, burrows, excavations):

Evidence of penetrations (poles, posts, stakes):

Evidence of human encroachment (trash, fire pits, tire/footprints):

General site condition:

Additional Comments:

Vegetative Cover and Geosynthetics
Evidence of erosion, settlement, rutting, potholes, slippage:
Evidence of stressed vegetation or bare spots:
Exposed geosynthetics, if so, any visible signs of damage to geosynthetics:
Additional Comments:
Gas Venting System & Groundwater Monitoring Points
Evidence of damage to wells/vents or surrounding area (cracking, misalignment, missing pieces):
Evidence of cover system subsidence or upheaval near wells/vents:
Evidence of wildlife intrusion (nests, burrows, wasp nests):
Evidence of spilled liquids (well tampering/vent blowout):
GAS VENTS: Unusual conditions – belching, whistling, excessive gas (odor) production:
MONITORING WELLS: Well covers in place and secure:
Additional Comments:
Landfill/Gas Vent Monitoring Data

LANDFILL INSPECTION REPORT

Day:_____ Date: _____

Landfill Monitoring			Gas Vent Monitoring		
Area	CO %LEL	FID Reading (ppm) O_2	Gas Vent	CO %LEL	FID Reading (ppm) O_2
South			1		
West			2		
North			3		
East			4		
Top of Landfill			5		
			6		
			7		
			8		
			9		

Inspection Photolog

DAILY OBSERVATION REPORT **Day:_____ Date:_____**

NYSDEC

Temperature: (F) (am) (pm)

Wind Direction: (am) (pm)

Weather: (am)

(pm)

Project Name

NYSDEC Site #

Contract # Arrive at site (am)

Location, New York Leave site: (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan? Yes ( ) No ( )
(If yes, list the deviation under items for concern)

Are monitoring results at acceptable levels?

Soil	Yes ( )	n/a ( )	* No ( )
Waters	Yes ( )	n/a ( )	* No ( )
Air	Yes ( )	n/a ( )	* No ( )

- *If No, provide comments*

OTHER ITEMS:

Site Sketch Attached: Yes ( ) No ( )
Photos Taken: Yes ( ) No ( )

DESCRIPTION OF DAILY WORK PERFORMED:

PROJECT TOTALS:

SAMPLING (Soil/Water/Air)

Contractor Sample ID:	DEC Sample ID:	Description:

DAILY OBSERVATION REPORT Day:_____ Date:_____

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel:

(Name of Subcontractor) personnel:

(Name of contractor) equipment:

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1.

PROJECT SCHEDULE ISSUES:

PROJECT BUDGET ISSUES:

None.

ITEMS OF CONCERN:

COMMENTS:

ATTACHMENT(S) TO THIS REPORT:

SITE REPRESENTATIVE:

Name: (*signature*)
cc:

DAILY PHOTOLOG

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EA Engineering PC and its Affliate,
EA Science and Technology

GROUNDWATER SAMPLING
PURGE FORM

Well I.D.:	**EA Personnel:**	**Client:** NYSDEC
Location: ETE Sanitation & Landfill	**Well Condition:**	**Weather:**
Sounding Method:	**Gauge Date:**	**Measurement Ref:**
Stick Up/Down (ft):	**Gauge Time:**	**Well Diameter (in):**

Purge Date:	**Purge Time:**
Purge Method:	**Field Technician:**

Well Volume

A. Well Depth (ft):	**D. Well Volume (ft):**	**Depth/Height of Top of PVC:**
B. Depth to Water (ft):	**E. Well Volume (gal) C*D):** 0.00	**Pump Type:**
C. Liquid Depth (ft) (A-B): 0	**F. Three Well Volumes (gal) (E3):** 0.00	**Pump Designation:**

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (Lpm)	pH (pH units)	ORP (mV)	Temp. (^{o}C)	Cond. (mS/cm)	DO (mg/L)	Turbidity (NTU)

Total Quantity of Water Removed (gal): _____
Samplers: _____
Sampling Date: _____

Sampling Time: _____
Split Sample With: _____
Sample Type: _____

COMMENTS AND OBSERVATIONS: _____

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Appendix F

Notification and Telephone Log

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EA Engineering, P.C.
EA Science and Technology

6712 Brooklawn Parkway, Suite 104
Syracuse, New York 13211-2158
Telephone: 315-431-4610
www.eaest.com

XX DATE 2015

Mr. Property Owner
5399 Broughton Road
Gainesville, NY 14066

RE: ETE Sanitation and Landfill Inspection
Site Number 961005

Dear Mr. Property Owner:

This letter serves as written notification that EA Engineering, P.C. and its affiliate, EA Science and Technology intends to perform the inspection at the ETE Sanitation and Landfill, Town of Gainesville, New York. The sampling event is scheduled for DATE. The field sampling team will consist of John Smith and Jane Doe.

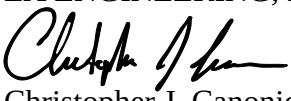
Please call me at (315) 431-4610 if you have any questions or require additional information.

Respectfully yours,

EA SCIENCE AND TECHNOLOGY

Christopher Schroer,
Project Manager

EA ENGINEERING, P.C.



Christopher J. Canonica, P.E.
Program Manager

cc: Dave Chiusano, NYSDEC

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TELEPHONE LOG

Date Called	Business Phone:	House Phone:	Cell Phone:	Other
EXAMPLE: 12/12/12	No answer	No answer	No answer left message	

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