APPENDIX A

GENERIC HEALTH AND SAFETY PLAN

FOR THE HIGHLAND PLAZA OFF-SITE AREA

This Health and Safety Plan was developed for use by all personnel involved in the investigation of the Highland Plaza Off-Site Area. This plan provides only general guidance that should be supplemented by the Standby Remedial Contractor's Corporate Health and Safety Plan.

General Health and Safety Guidelines

All work should be conducted in accordance with standard health and safety procedures for hazardous waste site work. All Personnel must have the 40-hour HAZWOPER training certification as required by 29 CFR 1910.120, and maintain this training by taking the annual 8-hour Refresher Course. The Standby Remedial Contractor will provide, as necessary, appropriate personal protective equipment (PPE) suitable for working in and around contaminated liquids, wastes and soils. The Standby Remedial Contractor will supply a photoionization detector (PID) for monitoring organic vapors, when necessary, which will be utilized to determine the necessity to upgrade PPE requirements.

It is anticipated that all field work can be performed in Level D personal protective equipment: steel toe shoes/boots, hard hat and latex gloves. The Standby Remedial Contractor will ensure that sufficient personal protective equipment is available for all personnel prior to entering the exclusion zone. All appropriate PPE will be donned, used and removed as described in the 40-hour training course. Air monitoring will be conducted with a PID. An air-purifying respirator must be worn whenever there are sustained organic vapor concentrations of 5 ppm or above in the breathing zone.

Emergency Telephone Numbers

Following is a list of emergency telephone numbers for use by all personnel involved in the investigation:

Emergency Services	911
Kenmore Mercy Hospital	(716) 447-6100
National Poison Control Center	(800) 222-1222
NYSDEC Region 9: Glenn May	(716) 851-7220
NYSDOH Central Office: Sara Bogardus	(518) 402-7860

Dig Safely New York (800) 962-7962 or 811

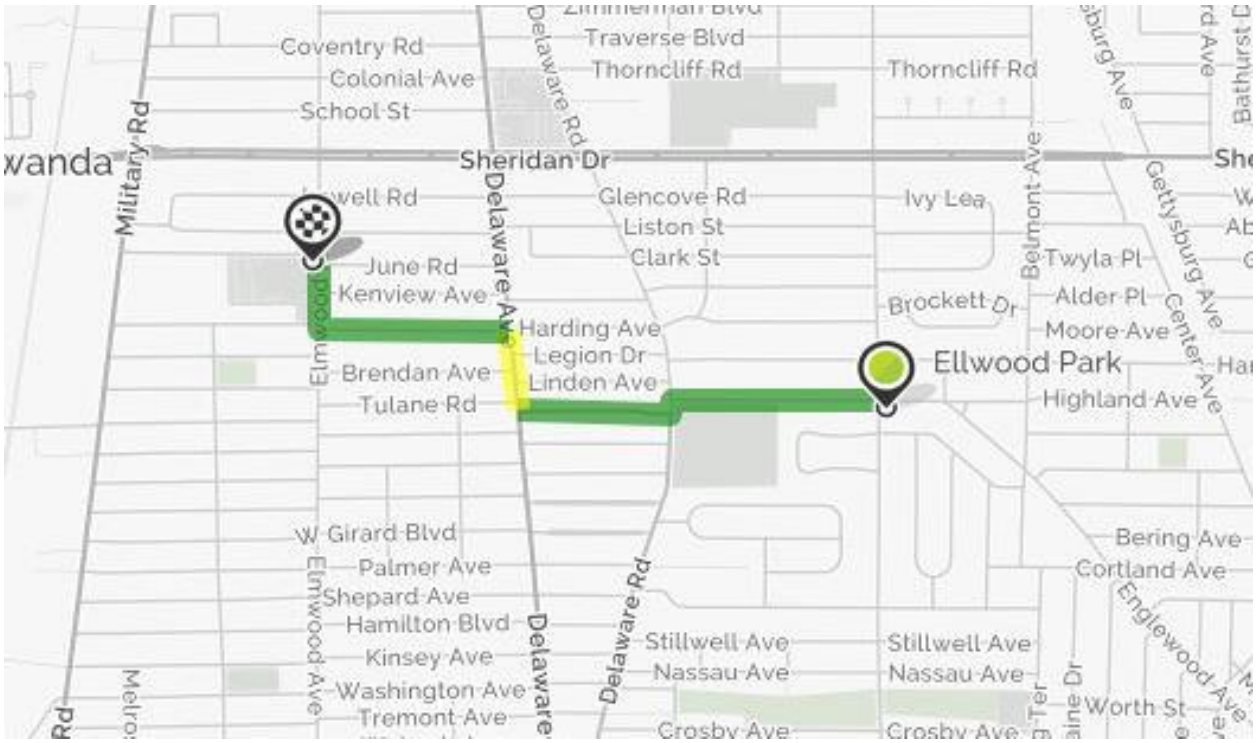
Medical Assistance

The primary source of medical assistance during the investigation of the Highland Plaza BCP Off-Site Area is the following:

Kenmore Mercy Hospital
2950 Elmwood Avenue
Kenmore, New York 14217
Phone: (716) 447-6100

This hospital is located approximately 1.3 miles northwest of the Site. All personnel should be familiar with the location of this hospital and know how to get there from the Site. Directions to the hospital are given on the following pages.

Driving Directions to Hospital



1. Start out going west on Highland Parkway toward Colvin Blvd.
2. Continue going straight to Delaware Road. Turn left on Delaware Road and travel for 0.03 miles.
3. Take the 1st right onto Princeton Blvd and travel for 0.28 miles.
4. Turn right onto Delaware Ave (NY-384) and travel for 0.15 miles.
5. Take the 3rd left onto Westchester Blvd, which is just past Legion Dive, and travel for 0.35 miles.
6. Turn right onto Elmwood Avenue and travel for 0.12 miles.
7. Kenmore Mercy Hospital, 2950 Elmwood Avenue, is on the left.

APPENDIX B

NEW YORK STATE DEPARTMENT OF HEALTH

COMMUNITY AIR MONITORING PLAN

Overview

A Community Air Monitoring Plan (CAMP) requires real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

The generic CAMP presented below will be sufficient to cover many, if not most, sites. Specific requirements should be reviewed for each situation in consultation with NYSDOH to ensure proper applicability. In some cases, a separate site-specific CAMP or supplement may be required. Depending upon the nature of contamination, chemical-specific monitoring with appropriately-sensitive methods may be required. Depending upon the proximity of potentially exposed individuals, more stringent monitoring or response levels than those presented below may be required. Special requirements will be necessary for work within 20 feet of potentially exposed individuals or structures and for indoor work with co-located residences or facilities. These requirements should be determined in consultation with NYSDOH.

Reliance on the CAMP should not preclude simple, common-sense measures to keep VOCs, dust, and odors at a minimum around the work areas.

Community Air Monitoring Plan

Depending upon the nature of known or potential contaminants at each site, real-time air monitoring for VOCs and/or particulate levels at the perimeter of the exclusion zone or work area will be necessary. Most sites will involve VOC and particulate monitoring; sites known to be contaminated with heavy metals alone may only require particulate monitoring. If radiological contamination is a concern, additional monitoring requirements may be necessary per consultation with appropriate NYSDEC and NYSDOH staff.

- **Continuous monitoring** will be required for all ground intrusive activities and during the demolition of contaminated or potentially contaminated structures. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells;

- **Periodic monitoring** for VOCs will be required during non-intrusive activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. "Periodic" monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or overturning soil, monitoring during well bailing/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence.

VOC Monitoring, Response Levels, and Actions

Volatile organic compounds (VOCs) must be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis or as otherwise specified. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions, particularly if wind direction changes. The monitoring work should be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment should be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment should be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

- If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring;

- If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average;

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

- All 15-minute readings must be recorded and available for NYSDEC and NYSDOH review. Instantaneous readings, if any, used for decision purposes should also be recorded.

Particulate Monitoring, Response Levels, and Actions

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

- If the downwind PM-10 particulate level is 100 micrograms per cubic meter ($\Phi g/m^3$) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 $\Phi g/m^3$ above the upwind level and provided that no visible dust is migrating from the work area;

- If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 Φg/m^3 above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 Φg/m^3 of the upwind level and in preventing visible dust migration; and

- All readings must be recorded and available for NYSDEC and NYSDOH review.

Special Requirements for Work within 20 Feet of Potentially Exposed Individuals or Structures

When work areas are within 20 feet of potentially exposed populations or occupied structures, the continuous monitoring locations for VOCs and particulates must reflect the nearest potentially exposed individuals and the location of ventilation system intakes for nearby structures. The use of engineering controls such as vapor/dust barriers, temporary negative-pressure enclosures, or special ventilation devices should be considered to prevent exposures related to the work activities and to control dust and odors. Consideration should be given to implementing the planned activities when potentially exposed populations are at a minimum, such as during weekends or evening hours in non-residential settings.

If total VOC concentrations opposite the walls of occupied structures or next to intake vents exceed 1 ppm, monitoring should occur within the occupied structure(s). Depending upon the nature of contamination. Background readings in the occupied spaces must be taken prior to commencement of the planned work. Any unusual background readings should be discussed with NYSDOH prior to commencement of the work.

If total particulate concentrations opposite the walls of occupied structures or next to intake vents exceed 150 Φg/m^3, work activities should be suspended until controls are implemented and are successful in reducing the total particulate concentration to 150 Φg/m^3 or less at the monitoring point.

Depending upon the nature of contamination and remedial activities, other parameters (e.g., explosivity, oxygen, hydrogen sulfide, carbon monoxide) may also need to be monitored. Response levels and actions should be pre-determined, as necessary, for each site.

APPENDIX C

SOIL BORING LOGS & WELL CONSTRUCTION DIAGRAMS

2014 LIMITED PHASE II INVESTIGATION AND VAPOR INTRUSION STUDY

EGMS	EGMS 15 Briar Hill Road Orchard Park, NY 14127 Phone: 716-445-2105	BORING LOG	Boring No.	SB-1
			Sheet 1 of:	1
			Project No.:	

Project Name:	High Park Plaza							Surface Elev.:	
Location:	Colvin & Highland Parkway, Tonawanda, NY							Datum:	
Client:	Buffalo Business Park							Start Date:	5/13/14
Drilling Firm:	SJB, Inc							Finish Date:	5/13/14
Groundwater	Depth	Date & Time	Drill Rig:	Geoprobe 6620 DT				Inspector:	N. Wohlabaugh
While Drilling:			Casing:	Macrocore	Rock Core:		Undist:		
Before Casing Removal:			Sampler:	Macrocore	Notes:				
After Casing Removal:			Hammer:	Direct Push					

(N -- No. of blows to drive sampler 12" w/140 lb. hammer falling 30" ASTM D-1586, Standard Penetration Test)

Depth (ft)	Sample No.	Symbol	Blows on Sampler per 6"	MATERIAL DESCRIPTION c - coarse, m - medium, f - fine; a - and - 35-50%, s - some - 20-35%, l - little - 10-20%, t - trace - 0-10% S - Sand, $ - Silt, G - Gravel, C - Clay, cly - clayey	COMMENTS (e.g., N-value, recovery, relative moisture, core run, RQD, % recovered)
				0 - 1 ft Asphalt (0 - 6") and crushed stone (6 - 12")	
1					
2	S-1				
				1 - 4 ft Red-brown CLAY, some silt, little sand, trace gravel	PID = 0.1 ppm
3				***Moist***	
4					
5					
6	S-2			**4 - 8 ft Red-brown CLAY, some silt, little sand, trace gravel**	PID = 0.0 ppm
				Moist to wet	
7					
8					
				End of boring at 8.0 ft	

EGMS	EGMS 15 Briar Hill Road Orchard Park, NY 14127 Phone: 716-445-2105	**BORING LOG**	Boring No.	SB-2
			Sheet 1 of:	1
			Project No.:	

Project Name:	High Park Plaza							Surface Elev.:	
Location:	Colvin & Highland Parkway, Tonawanda, NY							Datum:	
Client:	Buffalo Business Park							Start Date:	5/13/14
Drilling Firm:	SJB, Inc							Finish Date:	5/13/14
Groundwater	Depth	Date & Time	Drill Rig:	Geoprobe 6620 DT				Inspector:	N. Wohlabaugh
While Drilling:			Casing:	Macrocore	Rock Core:		Undist:		
Before Casing Removal:			Sampler:	Macrocore	Notes:				
After Casing Removal:			Hammer:	Direct Push					

(N -- No. of blows to drive sampler 12" w/140 lb. hammer falling 30" ASTM D-1586, Standard Penetration Test)

Depth (ft)	Sample No.	Symbol	Blows on Sampler per 6"	c - coarse m - medium f - fine **MATERIAL DESCRIPTION** S - Sand, $ - Silt, G - Gravel, C - Clay, cly - clayey a - and - 35-50% s - some - 20-35% l - little - 10-20% t - trace - 0-10%	**COMMENTS** (e.g., N-value, recovery, relative moisture, core run, RQD, % recovered)
1	S-1			**0 - 1 ft Asphalt (0 - 6") and crushed stone (6 - 12")**	
2					
3				**1 - 4 ft Red-brown CLAY, some silt, little sand, trace gravel** ***Moist***	PID = 0.1 ppm
4					
5	S-2				
6				**4 - 8 ft Red-brown CLAY, some silt, little sand, trace gravel**	PID = 0.0 ppm
7				***Moist to wet*** *Soil sample from 4 - 8 feet for lab analysis*	
8				*Fitted with temporary 1 inch PVC screen and riser to 8 ft to collect water sample for laboratory analysis*	
				End of boring at 8.0 ft	

EGMS	EGMS 15 Briar Hill Road Orchard Park, NY 14127 Phone: 716-445-2105	BORING LOG	Boring No.	SB-3
			Sheet 1 of:	1
			Project No.:	

Project Name:	High Park Plaza							Surface Elev.:	
Location:	Colvin & Highland Parkway, Tonawanda, NY							Datum:	
Client:	Buffalo Business Park							Start Date:	5/13/14
Drilling Firm:	SJB, Inc							Finish Date:	5/13/14
Groundwater	Depth	Date & Time	Drill Rig:	Geoprobe 6620 DT				Inspector:	N. Wohlabaugh
While Drilling:			Casing:	Macrocore	Rock Core:		Undist:		
Before Casing Removal:			Sampler:	Macrocore	Notes:				
After Casing Removal:			Hammer:	Direct Push					

(N -- No. of blows to drive sampler 12" w/140 lb. hammer falling 30" ASTM D-1586, Standard Penetration Test)

Depth (ft)	Sample No.	Symbol	Blows on Sampler per 6"	MATERIAL DESCRIPTION c - coarse, m - medium, f - fine a - and - 35-50%, s - some - 20-35%, l - little - 10-20%, t - trace - 0-10% S - Sand, $ - Silt, G - Gravel, C - Clay, cly - clayey	COMMENTS (e.g., N-value, recovery, relative moisture, core run, RQD, % recovered)
1	S-1			**0 - 1 ft Asphalt (0 - 6") and crushed stone (6 - 12")**	
2					
3				**1 - 4 ft Red-brown CLAY, some silt, little sand, trace gravel** ***Moist*** ***Soil sample from 1 - 4 ' for lab analysis***	PID = 0.0 ppm
4					
5	S-2				
6				**4 - 8 ft Red-brown CLAY, some silt, little sand, little gravel** ***Moist to wet***	PID = 0.0 ppm
7					
8					
				End of boring at 8.0 ft	

EGMS	EGMS 15 Briar Hill Road Orchard Park, NY 14127 Phone: 716-445-2105	**BORING LOG**	Boring No.	SB-4
			Sheet 1 of:	1
			Project No.:	

Project Name:	High Park Plaza							Surface Elev.:	
Location:	Colvin & Highland Parkway, Tonawanda, NY							Datum:	
Client:	Buffalo Business Park							Start Date:	5/13/14
Drilling Firm:	SJB, Inc							Finish Date:	5/13/14
Groundwater	Depth	Date & Time	Drill Rig:	Geoprobe 6620 DT				Inspector:	N. Wohlabaugh
While Drilling:			Casing:	Macrocore	Rock Core:		Undist:		
Before Casing Removal:			Sampler:	Macrocore	Notes:				
After Casing Removal:			Hammer:	Direct Push					

(N -- No. of blows to drive sampler 12" w/140 lb. hammer falling 30" ASTM D-1586, Standard Penetration Test)

Depth (ft)	Sample No.	Symbol	Blows on Sampler per 6"	c - coarse m - medium f - fine **MATERIAL DESCRIPTION** S - Sand, $ - Silt, G - Gravel, C - Clay, cly - clayey a - and - 35-50% s - some - 20-35% l - little - 10-20% t - trace - 0-10%	**COMMENTS** (e.g., N-value, recovery, relative moisture, core run, RQD, % recovered)
1	S-1			**0 - 1 ft** **Asphalt (0 - 6") and crushed stone (6 - 12")**	
2					
3				**1 - 4 ft** **Red-brown CLAY, some silt, some sand, little gravel** ***Dry***	PID = 0.0 ppm
4					
5	S-2				
6				**4 - 8 ft** **Red-brown CLAY, some silt, little sand, little gravel** ***Moist***	PID = 0.2 ppm
7					
8					
9	S-3				
10				**8-12 ft** **Red-brown CLAY, some silt, little sand, little gravel** ***Moist*** ***Soil sample from 8 - 12 ' for lab analysis***	PID = 0.8 ppm
11					
12				***Fitted with temporary 1 inch PVC screen and riser to 12 ft to collect water sample. No water after 4 hours***	
				End of boring at 12.0 ft	

EGMS
15 Briar Hill Road
Orchard Park, NY 14127
Phone: 716-445-2105

BORING LOG

Boring No.	**SB-5**
Sheet 1 of:	1
Project No.:	

Project Name:	High Park Plaza	**Surface Elev.:**	
Location:	Colvin & Highland Parkway, Tonawanda, NY	**Datum:**	
Client:	Buffalo Business Park	**Start Date:**	5/13/14
Drilling Firm:	SJB, Inc	**Finish Date:**	5/13/14

Groundwater	Depth	Date & Time				
			Drill Rig:	Geoprobe 6620 DT	**Inspector:**	N. Wohlabaugh
While Drilling:			**Casing:**	Macrocore	**Rock Core:**	**Undist:**
Before Casing Removal:			**Sampler:**	Macrocore	**Notes:**	
After Casing Removal:			**Hammer:**	Direct Push		

(N -- No. of blows to drive sampler 12" w/140 lb. hammer falling 30" ASTM D-1586, Standard Penetration Test)

c - coarse, m - medium, f - fine; a - and - 35-50%, s - some - 20-35%, l - little - 10-20%, t - trace - 0-10%
S - Sand, $ - Silt, G - Gravel, C - Clay, cly - clayey

Depth (ft)	Sample No.	Symbol	Blows on Sampler per 6"	MATERIAL DESCRIPTION	COMMENTS (e.g., N-value, recovery, relative moisture, core run, RQD, % recovered)
				0 - .25 ft **Concrete**	
1				**.25-1.0 ft** **Crushed stone**	
				1-1.5 ft **Brown CLAY**	
2	S-1				
				1.5 - 4 ft **Red-brown CLAY, some silt, little sand, trace gravel**	PID = 4.7 ppm
3				***Damp*** ***Soil sample from 1 - 4 ' for lab analysis***	
4					
5					
6	S-2			**4 - 8 ft** **Red-brown CLAY, some silt, little sand, little gravel**	PID = 10.9 ppm
				Damp	
7				***Soil sample from 4 - 8 ' for lab analysis***	
8					
9					
10	S-3			**8-12 ft** **Red-brown CLAY, some silt, little sand, little gravel**	PID = 8.7 ppm
				Moist	
11					
				Fitted with temporary 1 inch PVC screen and riser to 12 ft to collect	
12				***water sample. No water after 3 hours***	
				End of boring at 12.0 ft	

EGMS
15 Briar Hill Road
Orchard Park, NY 14127
Phone: 716-445-2105

BORING LOG

Boring No.	SB-6
Sheet 1 of:	1
Project No.:	

Project Name:	High Park Plaza	Surface Elev.:	
Location:	Colvin & Highland Parkway, Tonawanda, NY	Datum:	
Client:	Buffalo Business Park	Start Date:	5/13/14
Drilling Firm:	SJB, Inc	Finish Date:	5/13/14

Groundwater	Depth	Date & Time	Drill Rig:	Geoprobe 6620 DT			Inspector:	N. Wohlabaugh
While Drilling:			Casing:	Macrocore	Rock Core:		Undist:	
Before Casing Removal:			Sampler:	Macrocore	Notes:			
After Casing Removal:			Hammer:	Direct Push				

(N -- No. of blows to drive sampler 12" w/140 lb. hammer falling 30" ASTM D-1586, Standard Penetration Test)

Depth (ft)	Sample No.	Symbol	Blows on Sampler per 6"	MATERIAL DESCRIPTION (c - coarse, m - medium, f - fine; a - and - 35-50%, s - some - 20-35%, l - little - 10-20%, t - trace - 0-10%; S - Sand, $ - Silt, G - Gravel, C - Clay, cly - clayey)	COMMENTS (e.g., N-value, recovery, relative moisture, core run, RQD, % recovered)
1	S-1			**0-0.5 ft** **Concrete**	
2				**0.5-2 ft** **Dark Brown stained CLAY**	PID = 0.0 ppm
3				**2 - 4 ft** **Red-brown CLAY, some silt, little sand, trace gravel** ***Damp*** ***Soil sample from 1 - 4 ' for lab analysis***	PID = 0.0 ppm
4					
5	S-2				
6				**4 - 8 ft** **Red-brown CLAY, some silt, little sand, little gravel**	PID = 6.7 ppm
7				***Damp***	
8					
				End of boring at 8.0 ft	

EGMS	EGMS 15 Briar Hill Road Orchard Park, NY 14127 Phone: 716-445-2105	**BORING LOG**	Boring No.	SB-7
			Sheet 1 of:	1
			Project No.:	

Project Name:	High Park Plaza							Surface Elev.:	
Location:	Colvin & Highland Parkway, Tonawanda, NY							Datum:	
Client:	Buffalo Business Park							Start Date:	5/13/14
Drilling Firm:	SJB, Inc							Finish Date:	5/13/14
Groundwater	Depth	Date & Time	Drill Rig:	Geoprobe 6620 DT				Inspector:	N. Wohlabaugh
While Drilling:			Casing:	Macrocore	Rock Core:		Undist:		
Before Casing Removal:			Sampler:	Macrocore	Notes:				
After Casing Removal:			Hammer:	Direct Push					

(N -- No. of blows to drive sampler 12" w/140 lb. hammer falling 30" ASTM D-1586, Standard Penetration Test)

Depth (ft)	Sample No.	Symbol	Blows on Sampler per 6"	c - coarse m - medium f - fine **MATERIAL DESCRIPTION** S - Sand, $ - Silt, G - Gravel, C - Clay, cly - clayey a - and - 35-50% s - some - 20-35% l - little - 10-20% t - trace - 0-10%	**COMMENTS** (e.g., N-value, recovery, relative moisture, core run, RQD, % recovered)
				0 -.5 ft **Concrete**	
1				**.5-.75ft** **Dark black SAND**	PID = 0,8 ppm
				.75-1.5ft ***Brown Clay*** *Soil sample from .5 - 1.5 ' for lab analysis*	PID = 1.6 ppm
2	S-1				
				1.5 - 4 ft **Red-brown CLAY, some silt, little sand, trace gravel**	PID = 1.1 ppm
3				***Damp***	
4					
5					
6	S-2			**4 - 8 ft** **Red-brown CLAY, some silt, little sand, little gravel**	PID = 0.0 ppm
				Damp	
7					
8					
				End of boring at 8.0 ft	

EGMS	EGMS 15 Briar Hill Road Orchard Park, NY 14127 Phone: 716-445-2105	**BORING LOG**	*Boring No.*	**SB-8**
			Sheet 1 of:	1
			Project No.:	

Project Name:	High Park Plaza							*Surface Elev.:*	
Location:	Colvin & Highland Parkway, Tonawanda, NY							*Datum:*	
Client:	Buffalo Business Park							*Start Date:*	5/13/14
Drilling Firm:	SJB, Inc							*Finish Date:*	5/13/14
Groundwater	*Depth*	*Date & Time*	*Drill Rig:*	Geoprobe 6620 DT				*Inspector:*	N. Wohlabaugh
While Drilling:			*Casing:*	Macrocore	*Rock Core:*		*Undist:*		
Before Casing Removal:			*Sampler:*	Macrocore	*Notes:*				
After Casing Removal:			*Hammer:*	Direct Push					

(N -- No. of blows to drive sampler 12" w/140 lb. hammer falling 30" ASTM D-1586, Standard Penetration Test)

Depth (ft)	Sample No.	Symbol	Blows on Sampler per 6"	c - coarse m - medium f - fine **MATERIAL DESCRIPTION** S - Sand, $ - Silt, G - Gravel, C - Clay, cly - clayey a - and - 35-50% s - some - 20-35% l - little - 10-20% t - trace - 0-10%	**COMMENTS** (e.g., N-value, recovery, relative moisture, core run, RQD, % recovered)
				0 -.5 ft Concrete	
1				**.5-2.0 ft Medium gray CLAY**	PID =2.1 ppm
				Soil sample from .5 - 2.0 ' for lab analysis	
2	S-1				
				2 - 4 ft Red-brown CLAY, some silt, little sand, trace gravel	PID = 0.3 ppm
3				***Damp***	
4					
5					
6	S-2			**4 - 8 ft Red-brown CLAY, some silt, little sand, little gravel**	PID = 1.7 ppm
				Damp	
7					
8					
				End of boring at 8.0 ft	

EGMS	EGMS 15 Briar Hill Road Orchard Park, NY 14127 Phone: 716-445-2105	BORING LOG	Boring No.	SB-9
			Sheet 1 of:	1
			Project No.:	

Project Name:	High Park Plaza							Surface Elev.:	
Location:	Colvin & Highland Parkway, Tonawanda, NY							Datum:	
Client:	Buffalo Business Park							Start Date:	5/13/14
Drilling Firm:	SJB, Inc							Finish Date:	5/13/14
Groundwater	Depth	Date & Time	Drill Rig:	Geoprobe 6620 DT				Inspector:	N. Wohlabaugh
While Drilling:			Casing:	Macrocore	Rock Core:		Undist:		
Before Casing Removal:			Sampler:	Macrocore	Notes:				
After Casing Removal:			Hammer:	Direct Push					

(N -- No. of blows to drive sampler 12" w/140 lb. hammer falling 30" ASTM D-1586, Standard Penetration Test)

Depth (ft)	Sample No.	Symbol	Blows on Sampler per 6"	c - coarse m - medium f - fine MATERIAL DESCRIPTION S - Sand, $ - Silt, G - Gravel, C - Clay, cly - clayey a - and - 35-50% s - some - 20-35% l - little - 10-20% t - trace - 0-10%	COMMENTS (e.g., N-value, recovery, relative moisture, core run, RQD, % recovered)
				0 -.5 ft Concrete	
1				**.5-2.0 ft Dark brown CLAY**	PID =0.0 ppm
				Soil sample from .5 - 2.0 ' for lab analysis	
2	S-1				
				2 - 4 ft Red-brown CLAY, some silt, little sand, trace gravel	PID =0.0 ppm
3				***Damp***	
4					
5					
6	S-2			**4 - 8 ft Red-brown CLAY, some silt, little sand, little gravel**	PID =0.0 ppm
				Damp	
7					
8					
				End of boring at 8.0 ft	

EGMS	EGMS 15 Briar Hill Road Orchard Park, NY 14127 Phone: 716-445-2105	**BORING LOG**	Boring No.	SB-10
			Sheet 1 of:	1
			Project No.:	

Project Name:	High Park Plaza							Surface Elev.:	
Location:	Colvin & Highland Parkway, Tonawanda, NY							Datum:	
Client:	Buffalo Business Park							Start Date:	5/13/14
Drilling Firm:	SJB, Inc							Finish Date:	5/13/14
Groundwater	Depth	Date & Time	Drill Rig:	Geoprobe 6620 DT				Inspector:	N. Wohlabaugh
While Drilling:			Casing:	Macrocore	Rock Core:		Undist:		
Before Casing Removal:			Sampler:	Macrocore	Notes:				
After Casing Removal:			Hammer:	Direct Push					

(N -- No. of blows to drive sampler 12" w/140 lb. hammer falling 30" ASTM D-1586, Standard Penetration Test)

Depth (ft)	Sample No.	Symbol	Blows on Sampler per 6"	c - coarse m - medium f - fine **MATERIAL DESCRIPTION** S - Sand, $ - Silt, G - Gravel, C - Clay, cly - clayey a - and - 35-50% s - some - 20-35% l - little - 10-20% t - trace - 0-10%	**COMMENTS** (e.g., N-value, recovery, relative moisture, core run, RQD, % recovered)
				0 -.25 ft Concrete	
1				**.25-.5 ft Medium gray SAND**	PID =0.0 ppm
2	S-1				
				.5 - 4 ft Red-brown CLAY, some silt, little sand, trace gravel	PID =0.5 ppm
3				***Damp***	
4				***Soil sample from .5 - 4.0 ' for lab analysis***	
5					
6	S-2			**4 - 8 ft Red-brown CLAY, some silt, little sand, little gravel**	PID =0.2 ppm
7				***Damp***	
8					
				End of boring at 8.0 ft	

EGMS	EGMS 15 Briar Hill Road Orchard Park, NY 14127 Phone: 716-445-2105	**BORING LOG**	Boring No.	SB-11
			Sheet 1 of:	1
			Project No.:	

Project Name:	High Park Plaza							Surface Elev.:	
Location:	Colvin & Highland Parkway, Tonawanda, NY							Datum:	
Client:	Buffalo Business Park							Start Date:	5/13/14
Drilling Firm:	SJB, Inc							Finish Date:	5/13/14
Groundwater	Depth	Date & Time	Drill Rig:	Geoprobe 6620 DT				Inspector:	N. Wohlabaugh
While Drilling:			Casing:	Macrocore	Rock Core:		Undist:		
Before Casing Removal:			Sampler:	Macrocore	Notes:				
After Casing Removal:			Hammer:	Direct Push					

(N -- No. of blows to drive sampler 12" w/140 lb. hammer falling 30" ASTM D-1586, Standard Penetration Test)

Depth (ft)	Sample No.	Symbol	Blows on Sampler per 6"	MATERIAL DESCRIPTION c - coarse, m - medium, f - fine a - and - 35-50%, s - some - 20-35%, l - little - 10-20%, t - trace - 0-10% S - Sand, $ - Silt, G - Gravel, C - Clay, cly - clayey	COMMENTS (e.g., N-value, recovery, relative moisture, core run, RQD, % recovered)
				0 -.5 ft Concrete & wood	
1				**.5-2.0 ft Dark brown SILT, some clay**	PID =0.8 ppm
				Soil sample from .5 - 2.0 ' for lab analysis	
2	S-1				
				2 - 4 ft Red-brown CLAY, some silt, little sand, trace gravel	PID =0.90 ppm
3				***Damp***	
4					
5					
6	S-2			**4 - 8 ft Red-brown CLAY, some silt, little sand, little gravel**	PID =0.0 ppm
				Gravel zone at 5 - 5.5ft.	
7				***Damp***	
8					
				End of boring at 8.0 ft	

EGMS	EGMS 15 Briar Hill Road Orchard Park, NY 14127 Phone: 716-445-2105	**BORING LOG**	Boring No.	SB-15
			Sheet 1 of:	1
			Project No.:	

Project Name:	High Park Plaza							Surface Elev.:	
Location:	Colvin & Highland Parkway, Tonawanda, NY							Datum:	
Client:	Buffalo Business Park							Start Date:	5/13/14
Drilling Firm:	SJB, Inc							Finish Date:	5/13/14
Groundwater	Depth	Date & Time	Drill Rig:	Geoprobe 6620 DT				Inspector:	N. Wohlabaugh
While Drilling:			Casing:	Macrocore	Rock Core:		Undist:		
Before Casing Removal:			Sampler:	Macrocore	Notes:				
After Casing Removal:			Hammer:	Direct Push					

(N -- No. of blows to drive sampler 12" w/140 lb. hammer falling 30" ASTM D-1586, Standard Penetration Test)

Depth (ft)	Sample No.	Symbol	Blows on Sampler per 6"	c - coarse m - medium f - fine **MATERIAL DESCRIPTION** S - Sand, $ - Silt, G - Gravel, C - Clay, cly - clayey a - and - 35-50% s - some - 20-35% l - little - 10-20% t - trace - 0-10%	**COMMENTS** (e.g., N-value, recovery, relative moisture, core run, RQD, % recovered)
				0 - 1 ft **Asphalt (0 - 6") and crushed stone (6 - 12")**	
1				**1-1.5 ft** **Brown CLAY**	PID + 0.8 ppm
2	S-1				
				1.5-4 ft **Red-brown CLAY, some silt, little sand, trace gravel**	PID = 0.8 ppm
3				***Moist***	
4					
5					
6	S-2			**4 - 8 ft** **Red-brown CLAY, some silt, little sand, little gravel**	PID = 0.9 ppm
				Moist ***Soil sample from 4 - 8 ' for lab analysis***	
7					
8					
				End of boring at 12.0 ft	

2015 REMEDIAL INVESTIGATION
HIGHLAND PLAZA BCP SITE
SITE NO. C915293

EGMS	SUBSURFACE BORING LOG	Start Date: 10/14 End Date: 10/14	Boring No. SB-16/MW-1

Project Number:	Geologist: N. Wohlabaugh	Weather: ~50°F, Overcast	
Client: HIGHLAND PLAZA	Project Manager: N. Wohlabaugh	Northing:	Datum:
Location (City, State): Tonawanda, New York	Driller: R. Steiner	Easting:	
Drill Rig Type: GeoProbe 6620 (Track Mounted)		Borehole Diameter (ft.): 0.25	
Type of Sampling Device: GeoProbe Macro-Core Sampler		Type of Casing:	

Depth *(feet)*	Sample ID	Recovery	SOIL DESCRIPTION	USCS Symbol	PID Screening (ppm)
0			0 to 4" Asphalt		
			4" to 12" Crushed Stone		1.5
1			*6" to 12" - Soil sample collected for lab analysis*		1.1
2	1	44"	Red Brown **CLAY**, some Silt, little fine Sand, very little Gravel		1.1
			Moist and compact		
3					1.1
4					1.1
5					1.1
6	2	42"	Red Brown **CLAY**, some Silt, little fine Sand, very little Gravel		1.1
			Damp and compact		
7					1.1
8					1.1
9					1.0
10	3	46"	Red Brown **CLAY**, some Silt, little fine Sand, very little Gravel		1.0
			Damp and compact		
11					1.0
12					1.0
13					1.0
14	4	48"	Red Brown **CLAY**, some Silt, little fine Sand, very little Gravel		1.2
			Damp to slightly moist; compact		
15					1.1
16					1.0
17					1.1
18	5	47"	Red Brown **CLAY**, some Silt, little fine Sand, very little Gravel		1.0
			Slightly moist; less compact		
19					1.1
20					1.0
21					1.0
22	6	46"	Red Brown **CLAY**, some Silt, little fine Sand, very little Gravel		0.9
			Slightly moist; less compact to pliable		
23			Drill rods are dry		0.9
			23' to 24' - Soil sample collectd for lab analysis		
24			**END OF BORING**		1.0

Depth to Water: Not encountered	Comments: **Converted to MW-1**	Boring No. **SB-16**

EGMS	SUBSURFACE BORING LOG	Start Date: 10/14 End Date: 10/14	Boring No. SB-17/MW-2
Project Number:	Geologist: N. Wohlabaugh	Weather: ~50°F, Overcast	
Client: HIGHLAND PLAZA	Project Manager: N. Wohlabaugh	Northing:	Datum:
Location (City, State): Tonawanda, New York	Driller: R. Steiner	Easting:	
Drill Rig Type: GeoProbe 6620 (Track Mounted)		Borehole Diameter (ft.): 0.25	
Type of Sampling Device: GeoProbe Macro-Core Sampler		Type of Casing:	

Depth *(feet)*	Sample ID	Recovery	SOIL DESCRIPTION	USCS Symbol	PID Screening (ppm)
0			0 to 6" Asphalt		
			6" to 12" Crushed Stone		0.8
1			***6" to 12" - Soil sample collected for lab analysis***		0.7
2	1	45"	Red Brown **CLAY**, some Silt, little fine Sand, very little Gravel		0.7
			Damp and compact		
3					0.7
4					0.7
5					0.7
6	2	46"	Red Brown **CLAY**, some Silt, little fine Sand, very little Gravel		0.7
			Dry to damp; very compact		
7					0.7
8					0.7
9					0.5
10	3	45.5"	Red Brown **CLAY**, some Silt, little fine Sand, very little Gravel		0.5
			Damp and compact		
11					0.5
12					0.5
13					0.5
14	4	45"	Red Brown **CLAY**, some Silt, little fine Sand, very little Gravel		0.4
			Damp and compact		
15					0.4
16					0.5
17					0.4
18	5	47"	Red Brown **CLAY**, some Silt, little fine Sand, very little Gravel		0.4
			Slightly moist; less compact at 19' to 20'		
19					0.4
20					0.4
21					0.4
22	6	46"	Red Brown **CLAY**, some Silt, little fine Sand, very little Gravel		0.4
			Moist; pliable to soft		
23			***23' to 24' - Soil sample collectd for lab analysis***		0.4
			23.5 to 24' Red brown **SILT**, some Clay, minor fine Sand, little Gravel		
24			**END OF BORING**		0.4

Depth to Water: Not encountered	Comments: **Converted to MW-2**	Boring No. **SB-17**

EGMS	SUBSURFACE BORING LOG	Start Date: 10/14 End Date: 10/14	Boring No. SB-18

Project Number:	Geologist: N. Wohlabaugh	Weather: ~50°F, Sunny	
Client: HIGHLAND PLAZA	Project Manager: N. Wohlabaugh	Northing:	Datum:
Location (City, State): Tonawanda, New York	Driller: R. Steiner	Easting:	
Drill Rig Type: GeoProbe 6620 (Track Mounted)		Borehole Diameter (ft.): 0.25	
Type of Sampling Device: GeoProbe Macro-Core Sampler		Type of Casing:	

Depth *(feet)*	Sample ID	Recovery	SOIL DESCRIPTION	USCS Symbol	PID Screening (ppm)
0			0 to 6" Asphalt		
			6" to 12" Crushed Stone		0
1			12" to 16" Black stained Sand		0
			12" to 18" - Soil sample collected for lab analysis		
2	1	46"	Red Brown **CLAY**, some Silt, little fine Sand, very little Gravel		0
			Damp and compact		
3					0
4					0
5					0
6	2	45"	Red Brown **CLAY**, some Silt, little fine Sand, very little Gravel		0
			Dry to damp; very compact		
7					0
			7' to 8' - Soil sample collected for lab analysis		
8			**END OF BORING**		0

Depth to Water: Not encountered	Comments: Groundwater not encountered in completed geoprobe boring.	Boring No. SB-18

EGMS	SUBSURFACE BORING LOG	Start Date: 10/14 End Date: 10/14	Boring No. SB-19/MW-3

Project Number:	Geologist: N. Wohlabaugh	Weather: ~50°F, Overcast	
Client: HIGHLAND PLAZA	Project Manager: N. Wohlabaugh	Northing:	Datum:
Location (City, State): Tonawanda, New York	Driller: R. Steiner	Easting:	
Drill Rig Type: GeoProbe 6620 (Track Mounted)		Borehole Diameter (ft.): 0.25	
Type of Sampling Device: GeoProbe Macro-Core Sampler		Type of Casing:	

Depth *(feet)*	Sample ID	Recovery	SOIL DESCRIPTION	USCS Symbol	PID Screening (ppm)
0			0 to 6" Asphalt		
			6" to 12" Crushed Stone		0.4
1			***6" to 18" - Soil sample collected for lab analysis***		0.3
2	1	42"	Red Brown **CLAY**, some Silt, little fine Sand, very little Gravel		0.3
			Damp and compact		
3					0.3
4					0.3
5					0.2
6	2	43.5"	Red Brown **CLAY**, some Silt, little fine Sand, very little Gravel		0.2
			Damp; very compact		
7					0.2
8					0.2
9					0.2
10	3	45.5"	Red Brown **CLAY**, some Silt, little fine Sand, very little Gravel		0.2
			Damp; very compact		
11					0.2
12					0.2
13					0.1
14	4	46"	Red Brown **CLAY**, some Silt, very little fine Sand, very little Gravel		0.2
			Damp to moist; less compact		
15					0
16					0.1
17					0.1
18	5	46"	Red Brown **CLAY**, some Silt, little fine Sand, very little Gravel		0.1
			Slightly moist; less compact at 19' to 20'		
19					0.1
20					0.1
21					0
22	6	46"	Red Brown **CLAY**, some Silt, little fine Sand, very little Gravel		0.1
			Moist; pliable to soft		
23					0
			23' to 24' - Soil sample collected for lab analysis		
24			**END OF BORING**		0.1

Depth to Water: Not encountered	Comments: **Converted to MW-3**	Boring No. **SB-19**

EGMS	SUBSURFACE BORING LOG	Start Date: 10/15 End Date: 10/15	Boring No. SB-20

Project Number:	Geologist: N. Wohlabaugh	Weather: ~48°F, Sunny	
Client: HIGHLAND PLAZA	Project Manager: N. Wohlabaugh	Northing:	Datum:
Location (City, State): Tonawanda, New York	Driller: R. Steiner	Easting:	
Drill Rig Type: GeoProbe 6620 (Track Mounted)		Borehole Diameter (ft.): 0.25	
Type of Sampling Device: GeoProbe Macro-Core Sampler		Type of Casing:	

Depth *(feet)*	Sample ID	Recovery	SOIL DESCRIPTION	USCS Symbol	PID Screening (ppm)
0			0 to 6" Asphalt & crushed stone		
					0.2
1			6" to 18" Dark Brown stained **CLAY**		2.3
			6" to 18" - Soil sample collected for lab analysis		
2	1	45"	Red Brown **CLAY**, some Silt, little fine Sand, very little Gravel		0.1
			Damp and compact		
3					0.1
4					1.4
5					0.2
6	2	46"	Red Brown **CLAY**, some Silt, little fine Sand, very little Gravel		0.8
			Dry to damp; compact		
7					0
			7' to 8' - Soil sample collected for lab analysis		
8			**END OF BORING**		0

Depth to Water: Not encountered_____	Comments: Groundwater not encountered in completed geoprobe boring.	Boring No. SB-20

EGMS	SUBSURFACE BORING LOG	Start Date: 10/15 End Date: 10/15	Boring No. SB-21

Project Number:	Geologist: N. Wohlabaugh	Weather: ~48°F, Sunny	
Client: HIGHLAND PLAZA	Project Manager: N. Wohlabaugh	Northing:	Datum:
Location (City, State): Tonawanda, New York	Driller: R. Steiner	Easting:	
Drill Rig Type: GeoProbe 6620 (Track Mounted)		Borehole Diameter (ft.): 0.25	
Type of Sampling Device: GeoProbe Macro-Core Sampler		Type of Casing:	

Depth *(feet)*	Sample ID	Recovery	SOIL DESCRIPTION	USCS Symbol	PID Screening (ppm)
0			0 to 8" Asphalt & crushed stone		
					0
1			8" to 20" Dark Brown stained **CLAY**		0
			12" to 20" - Soil sample collected for lab analysis		
2	1	45"	Red Brown **CLAY**, some Silt, little fine Sand, very little Gravel		0
			Damp and compact		
3					0
4					0
5					0
6	2	44"	Red Brown **CLAY**, some Silt, little fine Sand, very little Gravel		0
			Damp and compact		
7					0
			7' to 8' - Soil sample collected for lab analysis		
8			**END OF BORING**		0

Depth to Water: Not encountered_____	Comments: Groundwater not encountered in completed geoprobe boring.	Boring No. SB-21

EGMS	SUBSURFACE BORING LOG	Start Date: 10/15 End Date: 10/15	Boring No. SB-22

Project Number:	Geologist: N. Wohlabaugh	Weather: ~48°F, Sunny	
Client: HIGHLAND PLAZA	Project Manager: N. Wohlabaugh	Northing:	Datum:
Location (City, State): Tonawanda, New York	Driller: R. Steiner	Easting:	
Drill Rig Type: GeoProbe 6620 (Track Mounted)		Borehole Diameter (ft.): 0.25	
Type of Sampling Device: GeoProbe Macro-Core Sampler		Type of Casing:	

Depth *(feet)*	Sample ID	Recovery	SOIL DESCRIPTION	USCS Symbol	PID Screening (ppm)
0			0 to 10" Asphalt & crushed stone		
					0
1			10" to 19" Dark Brown stained **CLAY**		0
			6" to 18" - Soil sample collected for lab analysis		
2	1	45"	Red Brown **CLAY**, some Silt, little fine Sand, very little Gravel		0
			Damp and compact		
3					0
4					0
5					0
6	2	45.5"	Red Brown **CLAY**, some Silt, little fine Sand, very little Gravel		0
			Damp and compact		
7					0
			7' to 8' - Soil sample collected for lab analysis		
8			**END OF BORING**		0

Depth to Water: Not encountered_____	Comments: Groundwater not encountered in completed geoprobe boring.	Boring No. SB-22

EGMS	SUBSURFACE BORING LOG	Start Date:	Boring No. SB-23
		End Date:	

Project Number:	Geologist: N. Wohlabaugh	Weather: ~50°F, Overcast	
Client: HIGHLAND PLAZA	Project Manager: N. Wohlabaugh	Northing:	Datum:
Location (City, State): Tonawanda, New York	Driller: R. Steiner	Easting:	
Drill Rig Type: GeoProbe 6620 (Track Mounted)		Borehole Diameter (ft.): 0.25	
Type of Sampling Device: GeoProbe Macro-Core Sampler		Type of Casing:	

Depth *(feet)*	Sample ID	Recovery	SOIL DESCRIPTION	USCS Symbol	PID Screening (ppm)
0			0 to 8" Dark grey coarse SAND		0.3
			8" to 10" Medium grey Coarse SAND		1.3
1			10" to 17" Light grey andgular GRAVEL (crushed stone)		0
			17" to 24" Dark grey stained CLAY ***Soil sample collected for lab analysis***		
2	1	40"	Red Brown **CLAY**, some Silt, little fine Sand, very little Gravel		0
			Damp and compact		
3					0
4					0
5					1.7
6	2	45.5"	Red Brown **CLAY**, some Silt, little fine Sand, very little Gravel		1.7
			Damp and compact		
7			***6' to 7' - Soil sample collected for lab analysis***		1.6
8			**END OF BORING**		0.4

Depth to Water: Not encountered_____	Comments: Groundwater not encountered in completed geoprobe boring.	Boring No. SB-23

EGMS	SUBSURFACE BORING LOG	Start Date: 10/15 15-Oct	Boring No. SB-24/MW-4
Project Number:	Geologist: N. Wohlabaugh	Weather: ~50°F, Sunny	
Client: HIGHLAND PLAZA	Project Manager: N. Wohlabaugh	Northing:	Datum:
Location (City, State): Tonawanda, New York	Driller: R. Steiner	Easting:	
Drill Rig Type: GeoProbe 6620 (Track Mounted)		Borehole Diameter (ft.): 0.25	
Type of Sampling Device: GeoProbe Macro-Core Sampler		Type of Casing:	

Depth *(feet)*	Sample ID	Recovery	SOIL DESCRIPTION	USCS Symbol	PID Screening (ppm)
0			0 to 6" Dark grey angular GRAVEL (crushed stone)t		5.4
			6" to 12" Medium grey angular GRAVEL (crushed stone)		
1			12" to 14" Black coarse SAND (stained) ***Sample collected for analysis***		92.6
			14" to 24" Black CLAY (stained) some Silt, little fine Sand, very little		13.1
2	1	41"	Gravel; Damp and compact		
			24" to 48" Red brown **CLAY,** some Silt, little fine Sand, very little Gravel		
3			Damp and compact		0.3
4					0.3
5					9.3
6	2	43"	Red Brown **CLAY**, some Silt, little fine Sand, very little Gravel		49.6
			Damp; very compact		
7					64.2
8					39.4
9					48.3
10	3	46"	Red Brown **CLAY**, some Silt, little fine Sand, very little Gravel		66.1
			Damp; very compact		
11					132.1
12					Not recorded
13					25.8
14	4	43"	Red Brown **CLAY**, some Silt, very little fine Sand, very little Gravel		66
			Damp to moist; less compact		
15			***14' to 15' - Soil sample collected for lab analysis***		203
16					44.2
17					36.5
18	5	44"	Red Brown **CLAY**, some Silt, little fine Sand, very little Gravel		22.8
			Slightly moist; less compact at 17.5' to 20'		
19					8.3
20					43.5
21					50.8
22	6	45.5"	Red Brown **CLAY**, some Silt, little fine Sand, very little Gravel		22.7
			Moist; pliable to soft		
23					8.3
			23' to 24' - Soil sample collected for lab analysis		
24			**END OF BORING**		4.4

Depth to Water: Not encountered	Comments: **Converted to MW-4**	Boring No. **SB-24**

EGMS	SUBSURFACE BORING LOG	Start Date: 10/16 16-Oct	Boring No. SB-25
Project Number:	Geologist: N. Wohlabaugh	Weather: ~50°F, Sunny	
Client: HIGHLAND PLAZA	Project Manager: N. Wohlabaugh	Northing:	Datum:
Location (City, State): Tonawanda, New York	Driller: R. Steiner	Easting:	
Drill Rig Type: GeoProbe 6620 (Track Mounted)		Borehole Diameter (ft.): 0.25	
Type of Sampling Device: GeoProbe Macro-Core Sampler		Type of Casing:	

Depth *(feet)*	Sample ID	Recovery	SOIL DESCRIPTION	USCS Symbol	PID Screening (ppm)
0			0 to 3" Dark greyTopsoil		7.4
			3" to 16" Medium grey angular GRAVEL (crushed stone)		1.3
1			16" to 18" Dark black GRAVEL (crushed stone) ***Soil sample***		30.0
			18" to 22" Dark grey stained CLAY ***collected for analysis (16" to 20")***		885
2	1	39.5"	22" to 48' Red Brown **CLAY**, some Silt, little fine Sand, very little Gravel		
			Damp and compact		
3					69.2
4					0
5					188.8
6	2	40.0"	Red Brown **CLAY**, some Silt, little fine Sand, very little Gravel		122.4
			Damp and compact		
7			***6' to 7' - Soil sample collected for lab analysis***		393.4
8			**END OF BORING**		365.2

Depth to Water: Not encountered	Comments: Groundwater not encountered in completed geoprobe boring.	Boring No. SB-25

EGMS	SUBSURFACE BORING LOG	Start Date: 10/16 End Date: 10/16	Boring No. SB-26
Project Number:	Geologist: N. Wohlabaugh	Weather: ~50°F, Overcast	
Client: HIGHLAND PLAZA	Project Manager: N. Wohlabaugh	Northing:	Datum:
Location (City, State): Tonawanda, New York	Driller: R. Steiner	Easting:	
Drill Rig Type: GeoProbe 6620 (Track Mounted)		Borehole Diameter (ft.): 0.25	
Type of Sampling Device: GeoProbe Macro-Core Sampler		Type of Casing:	

Depth *(feet)*	Sample ID	Recovery	SOIL DESCRIPTION	USCS Symbol	PID Screening (ppm)
0			0 to 3" Dark grey Topsoil		0.5
			3" to 16.5" Medium grey angular GRAVEL (crushed stone)		1.0
1					
			17" to 22" - Soil sample collected for lab analysis		
2	1	41.0"	16.5" to 48" Red Brown **CLAY**, some Silt, little fine Sand, very little Gravel		2
			Damp and compact		
3					1.9
4					0.7
5					188.8
6	2	46.0"	Red Brown **CLAY**, some Silt, little fine Sand, very little Gravel		122.4
			Damp and compact		
7					393.4
			7' to 8' - Soil sample collected for lab analysis		
8			**END OF BORING**		365.2

Depth to Water: Not encountered	Comments: Groundwater not encountered in completed geoprobe boring.	Boring No. SB-26

EGMS	SUBSURFACE BORING LOG	Start Date: 10/15 End Date: 10/15	Boring No. SB-27/MW-5

Project Number:	Geologist: N. Wohlabaugh	Weather: ~50°F, Sunny	
Client: HIGHLAND PLAZA	Project Manager: N. Wohlabaugh	Northing:	Datum:
Location (City, State): Tonawanda, New York	Driller: R. Steiner	Easting:	
Drill Rig Type: GeoProbe 6620 (Track Mounted)		Borehole Diameter (ft.): 0.25	
Type of Sampling Device: GeoProbe Macro-Core Sampler		Type of Casing:	

Depth *(feet)*	Sample ID	Recovery	SOIL DESCRIPTION	USCS Symbol	PID Screening (ppm)
0			0 to 6" Dark grey Topsoil		0
			6" to 12" Medium grey angular GRAVEL (crushed stone)		0
1			***17" to 22" - Soil sample collected for lab analysis***		
			14" to 19" Dark grey CLAY (stained) some Silt, little fine Sand, very little		0
2	1	40"	Gravel; Damp and compact		
			19" to 48" Red brown **CLAY,** some Silt, little fine Sand, very little Gravel		0
3			Damp and compact		
4					0
5					0
6	2	46"	Red Brown **CLAY**, some Silt, little fine Sand, very little Gravel		0
			Damp; very compact		
7					0
8					0
9					0
10	3	45.5"	Red Brown **CLAY**, some Silt, little fine Sand, very little Gravel		0
			Damp; very compact		
11					0.5
12					0.2
13					0
14	4	39.5"	Red Brown **CLAY**, some Silt, very little fine Sand, very little Gravel		2.7
			Damp to moist; less compact		
15			***14' to 15' - Soil sample collected for lab analysis***		9.6
16					3.8
17					0
18	5	43"	Red Brown **CLAY**, some Silt, little fine Sand, very little Gravel		0
			Moist to wet; less compact at 17.5' to 20'		
19					0
20					0
21					0
22	6	40.5"	Red Brown **CLAY**, some Silt, little fine Sand, very little Gravel		0
			Mois to wet; pliable to soft		
23					0
			23' to 24' - Soil sample collected for lab analysis		
24			**END OF BORING**		0

Depth to Water: Not encountered	Comments: **Converted to MW-5**	Boring No. **SB-27**

EGMS	SUBSURFACE BORING LOG	Start Date: 10/16 End Date:	Boring No. SB-28
Project Number:	Geologist: N. Wohlabaugh	Weather: ~50°F, Overcast	
Client: HIGHLAND PLAZA	Project Manager: N. Wohlabaugh	Northing:	Datum:
Location (City, State): Tonawanda, New York	Driller: R. Steiner	Easting:	
Drill Rig Type: GeoProbe 6620 (Track Mounted)		Borehole Diameter (ft.): 0.25	
Type of Sampling Device: GeoProbe Macro-Core Sampler		Type of Casing:	

Depth *(feet)*	Sample ID	Recovery	SOIL DESCRIPTION	USCS Symbol	PID Screening (ppm)
0			0 to 2.5" Dark grey Topsoil		0.1
			2.5" to 17" Medium grey angular GRAVEL (crushed stone)		1.0
1					
			10" to 22" - Soil sample collected for lab analysis		
2	1	42.0"	17" to 48" Red Brown **CLAY**, some Silt, little fine Sand, very little Gravel		2.7
			Damp and compact		
3					0
4					0
5					0
6	2	45.5"	Red Brown **CLAY**, some Silt, little fine Sand, very little Gravel		0
			Damp and compact		
7					0
			7' to 8' - Soil sample collected for lab analysis		
8			**END OF BORING**		0

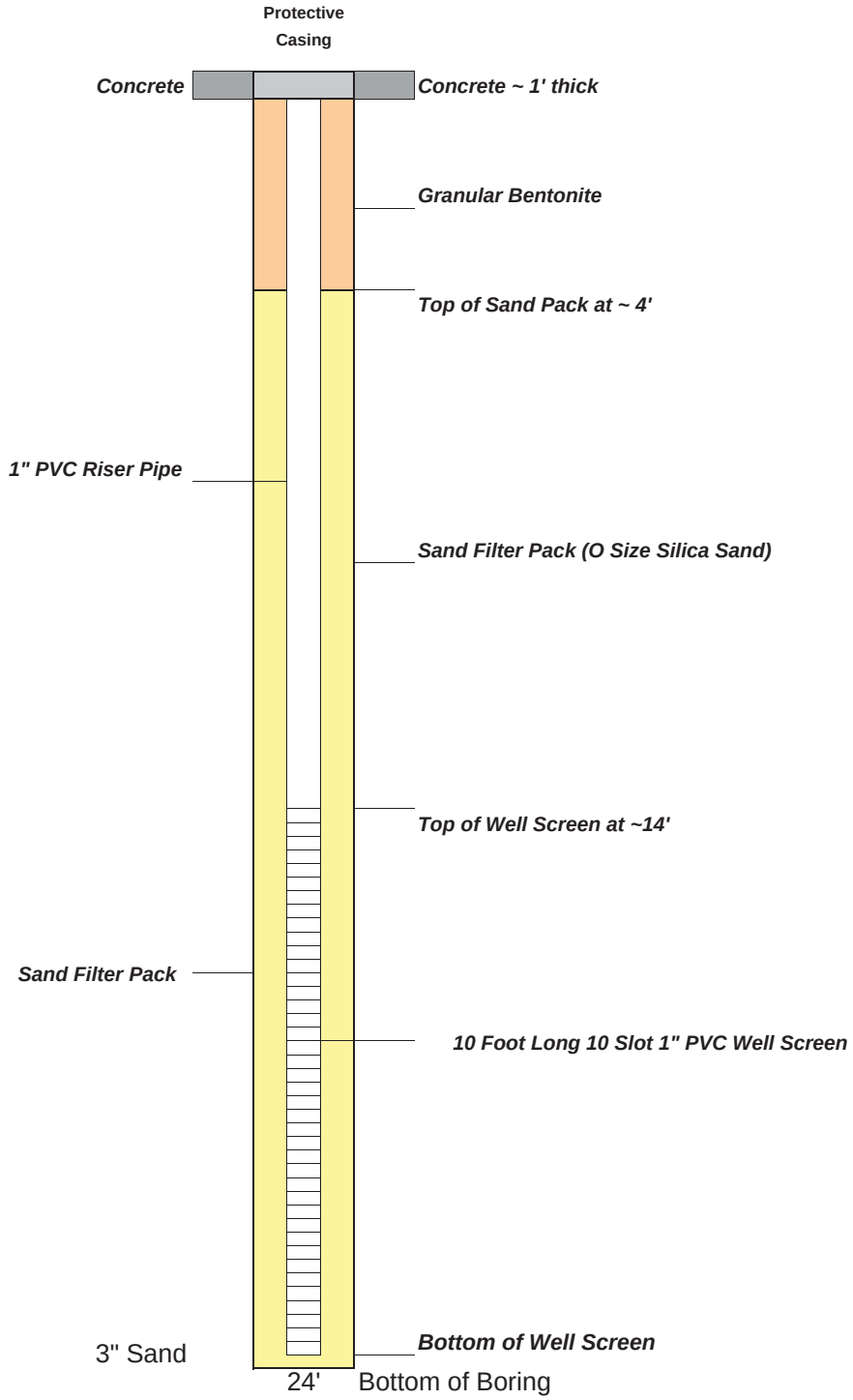
Depth to Water: Not encountered	Comments: Groundwater not encountered in completed geoprobe boring.	Boring No. SB-28

EGMS	SUBSURFACE BORING LOG	Start Date:	Boring No. SB-29
		End Date:	
Project Number:	Geologist: N. Wohlabaugh	Weather: ~50°F, Overcast	
Client: HIGHLAND PLAZA	Project Manager: N. Wohlabaugh	Northing:	Datum:
Location (City, State): Tonawanda, New York	Driller: R. Steiner	Easting:	
Drill Rig Type: GeoProbe 6620 (Track Mounted)		Borehole Diameter (ft.): 0.25	

Depth *(feet)*	Sample ID	Recovery	SOIL DESCRIPTION	USCS Symbol	PID Screening (ppm)
0			0 to 10" Medium grey angular GRAVEL (crushed stone)		1.1
			10" to 16" Light grey angular GRAVEL (crushed stone)		1.0
1			***17" to 22" - Soil sample collected for lab analysis***		
			16' to 26" Dark brown CLAY (stained) some Silt, little fine Sand, very		0.8
2	1	45.5"	Gravel; damp and compact		
			26" to 48" Red Brown **CLAY**, some Silt, little fine Sand, very little Gravel		
3			Damp and compact		3.0
4					5.7
5					2.2
6	2	44'	Red Brown **CLAY**, some Silt, little fine Sand, very little Gravel		32.9
			Damp and compact		
7					21.5
			7' to 8' - Soil sample collected for lab analysis		
8			**END OF BORING**		51.1

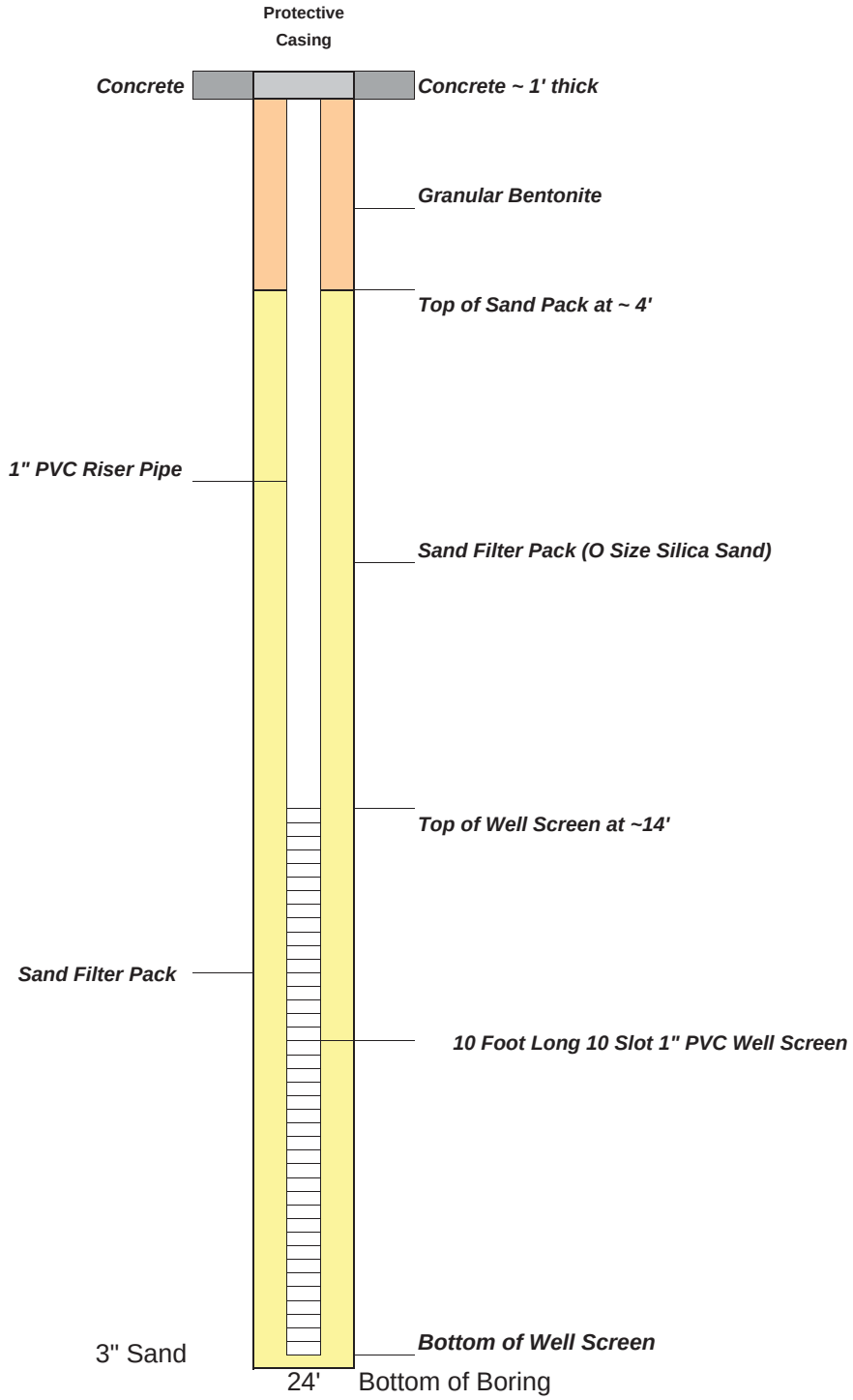
Depth to Water: Not encountered	Comments: Groundwater not encountered in completed geoprobe boring.	Boring No. SB-29

EGMS	MONITORING WELL CONSTRUCTION DIAGRAM	Start Date: 10/14 End Date: 10/14	Boring No. MW-1
Project Number:	Geologist: N. Wohlabaugh	Weather: ~50°F, Overcast	
Client: HIGHLAND PLAZA	Project Manager: N. Wohlabaugh	Northing: 23.36' S	Top Riser:
Location (City, State): Tonawanda, New York	Driller: R. Steiner	Easting: 104.45' E	100.51'
Drill Rig Type: GeoProbe 6620 (Track Mounted)		Borehole Diameter (ft.): 0.25	



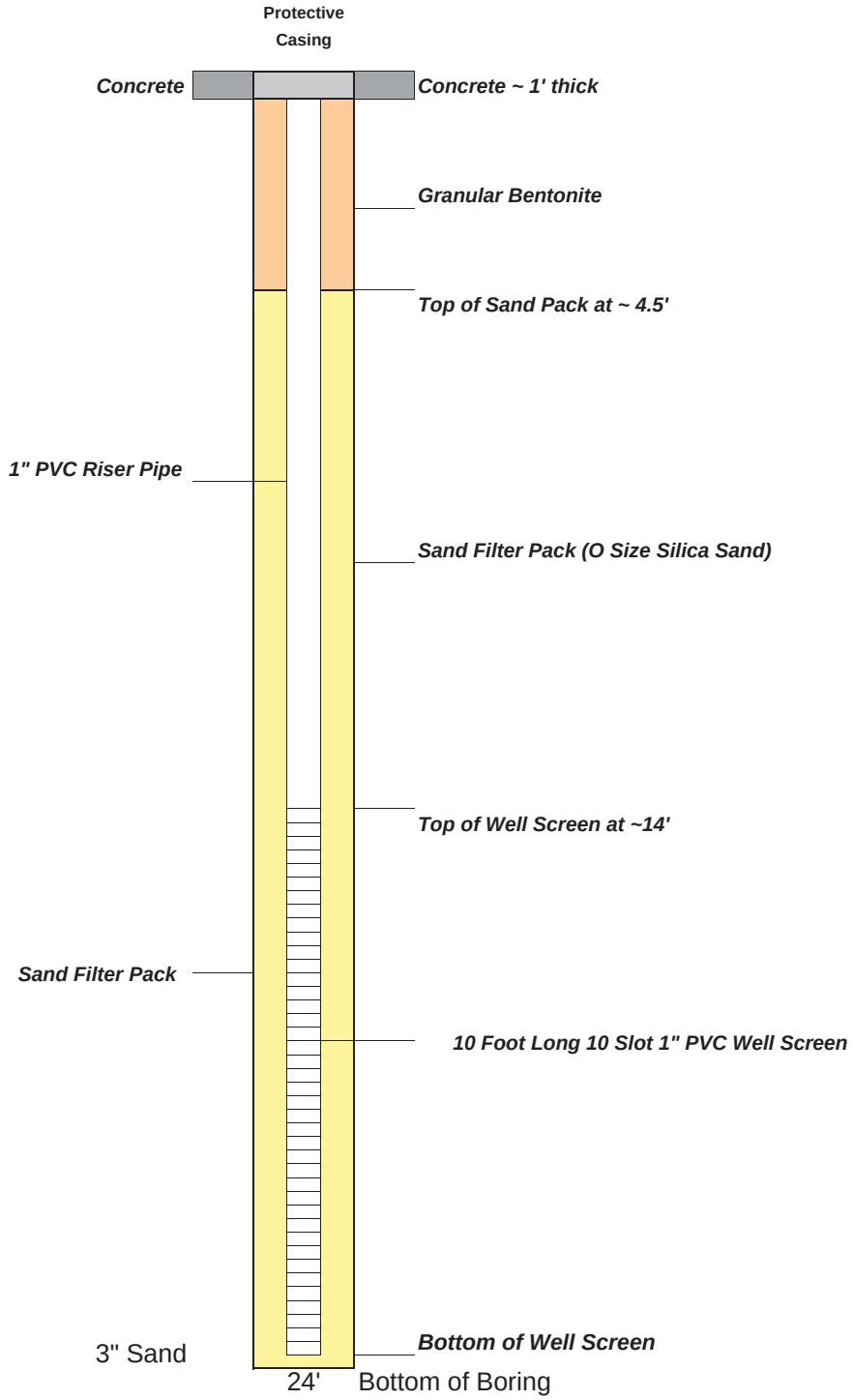
Depth to Water: Not encountered during drilling or well construction.	Comments:	MW-1

EGMS	MONITORING WELL CONSTRUCTION DIAGRAM	Start Date: 10/14 End Date: 10/14	Boring No. MW-2
Project Number:	Geologist: N. Wohlabaugh	Weather: ~50°F, Overcast	
Client: HIGHLAND PLAZA	Project Manager: N. Wohlabaugh	Northing: 23.43' S	Top Riser
Location (City, State): Tonawanda, New York	Driller: R. Steiner	Easting: 216.22' E	100.18'
Drill Rig Type: GeoProbe 6620 (Track Mounted)		Borehole Diameter (ft.): 0.25	



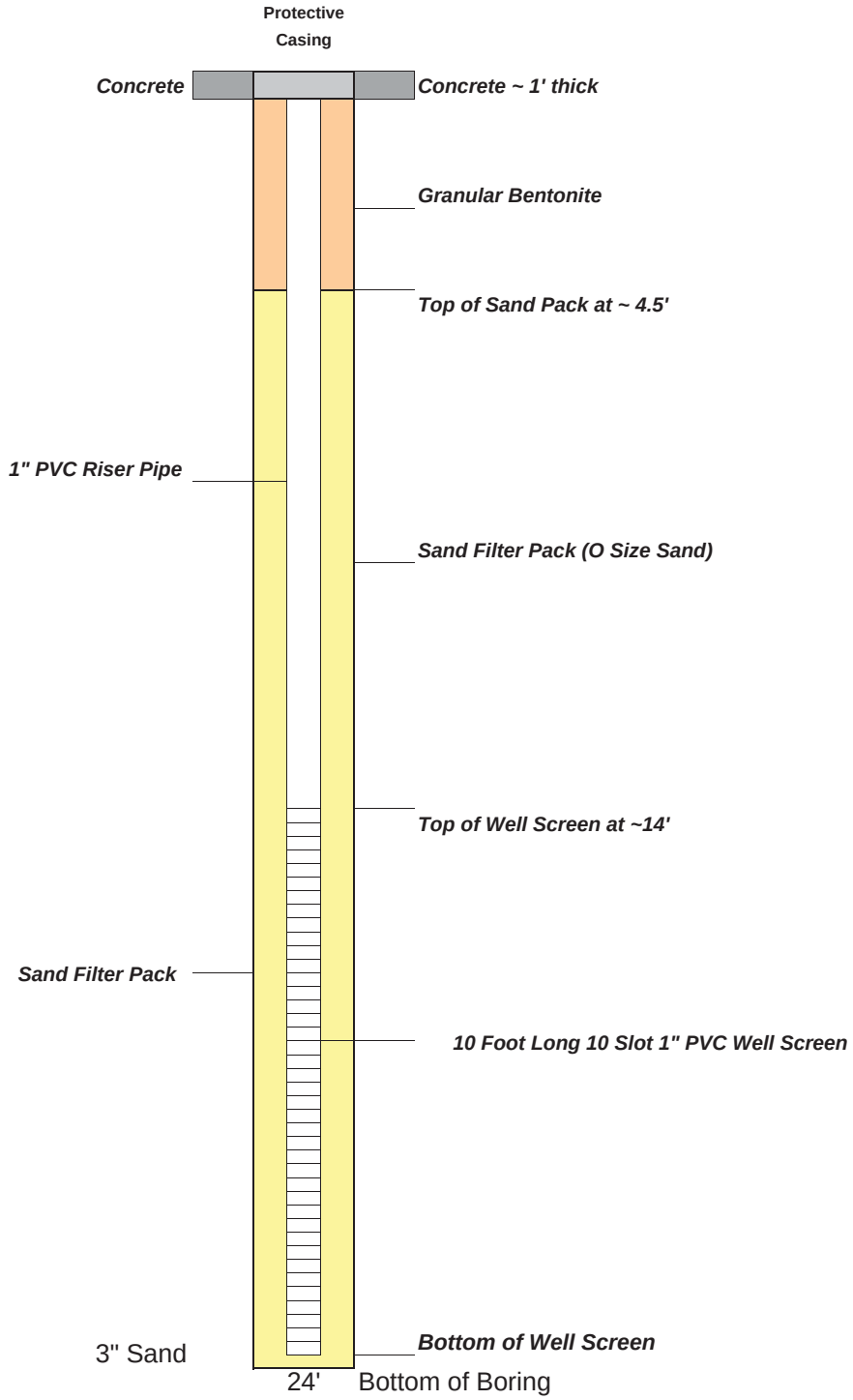
Depth to Water: Not encountered during drilling or well construction.	Comments:	MW-2

EGMS	MONITORING WELL CONSTRUCTION DIAGRAM	Start Date: 10/14 End Date: 10/14	Boring No. MW-3
Project Number:	Geologist: N. Wohlabaugh	Weather: ~50°F, Overcast	
Client: HIGHLAND PLAZA	Project Manager: N. Wohlabaugh	Northing: 24.29' S	Top Riser
Location (City, State): Tonawanda, New York	Driller: R. Steiner	Easting: 282.43' E	100.08'
Drill Rig Type: GeoProbe 6620 (Track Mounted)		Borehole Diameter (ft.): 0.25	



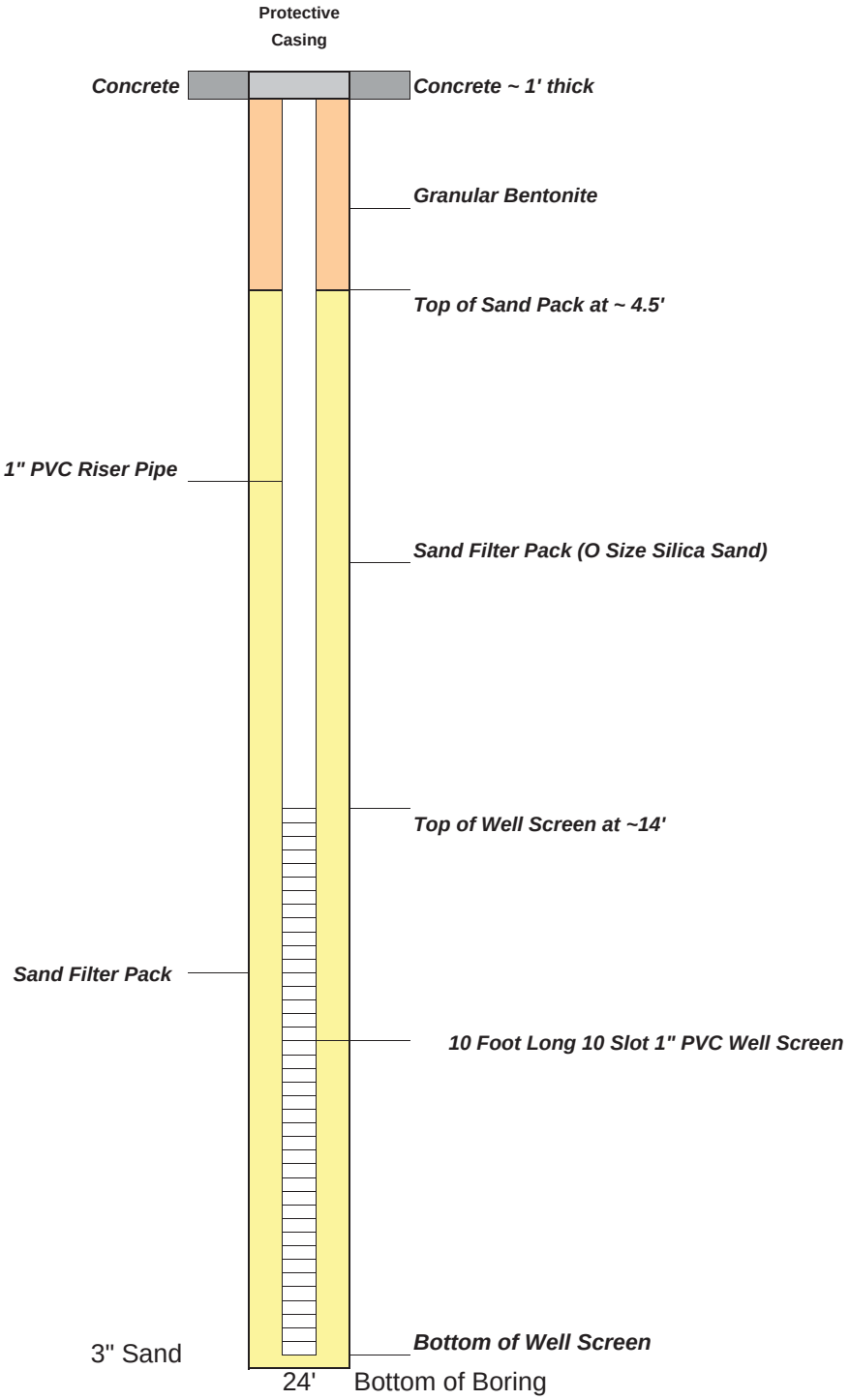
Depth to Water: Not encountered during drilling or well construction.	Comments:	MW-3

EGMS	MONITORING WELL CONSTRUCTION DIAGRAM	Start Date: 10/16 End Date: 10/16	Boring No. MW-4
Project Number:	Geologist: N. Wohlabaugh	Weather: ~50°F, Overcast	
Client: HIGHLAND PLAZA	Project Manager: N. Wohlabaugh	Northing: 119.19' S	Top Riser
Location (City, State): Tonawanda, New York	Driller: R. Steiner	Easting: 274.59' E	101.45'
Drill Rig Type: GeoProbe 6620 (Track Mounted)		Borehole Diameter (ft.): 0.25	



Depth to Water: Not encountered during drilling or well construction.	Comments:	MW-4

EGMS	MONITORING WELL CONSTRUCTION DIAGRAM	Start Date: 10/16 End Date: 10/16	Boring No. MW-5
Project Number:	Geologist: N. Wohlabaugh	Weather: ~50°F, Overcast	
Client: HIGHLAND PLAZA	Project Manager: N. Wohlabaugh	Northing: 120.15' S	Top Riser
Location (City, State): Tonawanda, New York	Driller: R. Steiner	Easting: 176.13' E	102.06'
Drill Rig Type: GeoProbe 6620 (Track Mounted)		Borehole Diameter (ft.): 0.25	



Depth to Water: Not encountered during drilling or well construction.	Comments:	MW-5

2017 REMEDIAL INVESTIGATION
HIGHLAND PLAZA OFF-SITE AREA
SITE NO. C915293A

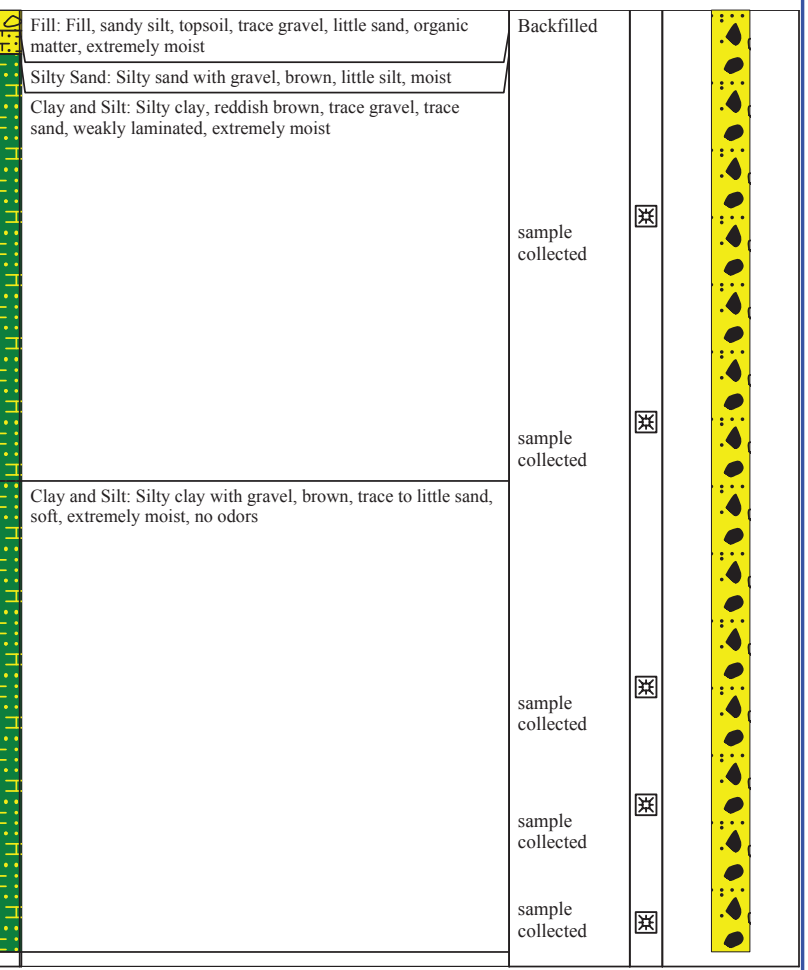
Soil Boring

Groundwater & Environmental Services, Inc.

ID NO. **SB-30**

Project: **NYSDEC Highland Plaza**	Client: **NYSDEC**	
Address: **Tonawanda, NY**	GES Job #: **0901703**	
County: **Erie County**	GES Project Mgr: **Eric Popken**	NYSDEC Site No: **C915293A**
Logged By: **Brandon Mikolin**	Date Drilled: **6/19/2017**	Split Spoon/Acetate Sleeve Dia: **1.75"**
Drilling Company: **Empire Geo Services, Inc.**	Completion Date: **6/19/2017**	Split Spoon/Acetate Sleeve Length:
Drill Operator: **Art Koske**	Drilling Method: **Direct Push/Auger**	Soil Classification System: **Mod. Burnmeister**
Drill Rig Type: **Geoprobe 6620 DT**	Sampling Method: **MacroCore**	Field Screening: **PID, 10.2 eV Lamp (ppmv)**
Borehole Diameter: **3"**	Surface Elevation: **Not Surveyed**	Abandonment Method: **Backfilled**
Total Depth: **32'**	Depth to Water: **Not Encountered**	Backfill Material: **Soil Cuttings**
Refusal Depth: **Not Applicable**	Well Diameter: **Not Applicable**	Abandonment Completion Date: **6/19/2017**

Depth (feet)	Sample Interval	Recovery (inches)	Field Screen (ppm)	Geologic Description	Comments
0	0-4'	90%	0	Fill: Fill, sandy silt, topsoil, trace gravel, little sand, organic matter, extremely moist	Backfilled
				Silty Sand: Silty sand with gravel, brown, little silt, moist	
	4-8'	95%	0.3	Clay and Silt: Silty clay, reddish brown, trace gravel, trace sand, weakly laminated, extremely moist	
5					
	8-12'	85%	0.3		sample collected
10					
	12-16'	95%	1.8		
15					sample collected
	16-20'	97.5%	1.8	Clay and Silt: Silty clay with gravel, brown, trace to little sand, soft, extremely moist, no odors	
20					
	20-24'	95%	1.5		
	24-28'	100%	1.0		sample collected
25					
	28-32'	97.5%	0.9		sample collected
30					sample collected



Proportions Used:
Trace =
Few =
Little =
Some =
Adjective =
And =

Notes:
ft bg = feet below grade
Field Screening measured in ppmv

Blow Count Penetration Resistance:

Consistency (M&C)	Density (G&S)
<2 = Very Soft	0-4 = Very Loose
2-4 = Soft	4-10 = Loose
4-8 = Medium	10-30 = Medium
8-15 = Stiff	30-50 = Dense
15-30 = Very Stiff	50> = Very Dense
>30 = Hard	

Symbols:
Apparent Water Level
Lab Sample Location

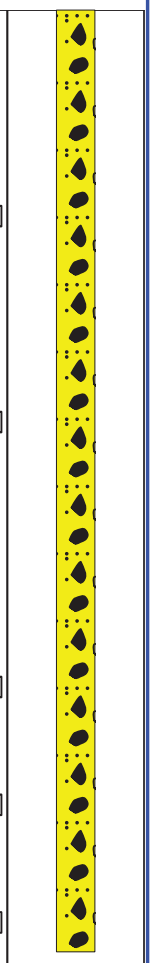
Soil Boring

Groundwater & Environmental Services, Inc.

ID NO. **SB-31**

Project: **NYSDEC Highland Plaza**	Client: **NYSDEC**	
Address: **Tonawanda, NY**	GES Job #: **0901703**	
County: **Erie County**	GES Project Mgr: **Eric Popken**	NYSDEC Site No: **C915293A**
Logged By: **Brandon Mikolin**	Date Drilled: **6/19/2017**	Split Spoon/Acetate Sleeve Dia: **1.75"**
Drilling Company: **Empire Geo Services, Inc.**	Completion Date: **6/19/2017**	Split Spoon/Acetate Sleeve Length:
Drill Operator: **Art Koske**	Drilling Method: **Direct Push/Auger**	Soil Classification System: **Mod. Burnmeister**
Drill Rig Type: **Geoprobe 6620 DT**	Sampling Method: **MacroCore**	Field Screening: **PID, 10.2 eV Lamp (ppmv)**
Borehole Diameter: **3"**	Surface Elevation: **Not Surveyed**	Abandonment Method: **Backfilled**
Total Depth: **32'**	Depth to Water: **Not Encountered**	Backfill Material: **Soil Cuttings**
Refusal Depth: **Not Applicable**	Well Diameter: **Not Applicable**	Abandonment Completion Date: **6/19/2017**

Depth (feet)	Sample Interval	Recovery (inches)	Field Screen (ppm)	Geologic Description	Comments
0	0-4'	97.5%	0.9	Fill: Fill, Sandy silt, topsoil, little sand, organic matter, moist	Backfilled
				Fill: Silty sand with gravel, little sand	
				Clay and Silt: Silty clay, reddish brown, trace gravel, trace sand, weakly laminated, hard	
5	4-8'	95%	1.1		sample collected
	8-12'	92.5	0.0	Clay and Silt: Clayey silt with gravel, massive, trace sand, moist	
10	12-16'	95%	2.1	Clay and Silt: Silty clay, trace sand, trace gravel, soft, weakly laiminated to massive, extremely moist	sample collected
15	16-20'	97.5%	1.9		
20	20-24'	97.5%	2.1		sample collected
25	24-28'	95%	2.3		sample collected
30	28-32'	97.5%	1.6		sample collected



Proportions Used:
Trace =
Few =
Little =
Some =
Adjective =
And =

Notes:
ft bg = feet below grade
Field Screening measured in ppmv

Blow Count Penetration Resistance:

Consistency (M&C)	Density (G&S)
<2 = Very Soft	0-4 = Very Loose
2-4 = Soft	4-10 = Loose
4-8 = Medium	10-30 = Medium
8-15 = Stiff	30-50 = Dense
15-30 = Very Stiff	50> = Very Dense
>30 = Hard	

Symbols:
Apparent Water Level
Lab Sample Location

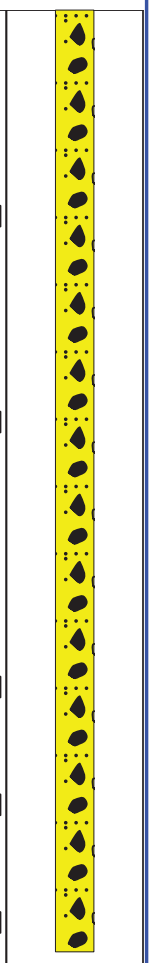
Soil Boring

Groundwater & Environmental Services, Inc.

ID NO. **SB-32**

Project: **NYSDEC Highland Plaza**	Client: **NYSDEC**	
Address: **Tonawanda, NY**	GES Job #: **0901703**	
County: **Erie County**	GES Project Mgr: **Eric Popken**	NYSDEC Site No: **C915293A**
Logged By: **Brandon Mikolin**	Date Drilled: **6/19/2017**	Split Spoon/Acetate Sleeve Dia: **1.75"**
Drilling Company: **Empire Geo Services, Inc.**	Completion Date: **6/19/2017**	Split Spoon/Acetate Sleeve Length:
Drill Operator: **Art Koske**	Drilling Method: **Direct Push/Auger**	Soil Classification System: **Mod. Burnmeister**
Drill Rig Type: **Geoprobe 6620 DT**	Sampling Method: **MacroCore**	Field Screening: **PID, 10.2 eV Lamp (ppmv)**
Borehole Diameter: **3"**	Surface Elevation: **Not Surveyed**	Abandonment Method: **Backfilled**
Total Depth: **32'**	Depth to Water: **Not Encountered**	Backfill Material: **Soil Cuttings**
Refusal Depth: **Not Applicable**	Well Diameter: **Not Applicable**	Abandonment Completion Date: **6/19/2017**

Depth (feet)	Sample Interval	Recovery (inches)	Field Screen (ppm)	Geologic Description	Comments
0	0-4'	87.5%	2.9	Fill: Fill, dark brown to brown, sandy silt, topsoil, gravel, course sand, trace organic matter, medium stiffness, moist	Backfilled
				Clay and Silt: Silty clay, reddish brown to brown, trace gravel, trace sand, weakly laminated to massive, moist	
5	4-8'	92.5%	1.9		sample collected
	8-12'	87.5%	1.6	Clay and Silt: Silty clay, reddish brown, trace gravel, trace sand, laminated, stiff, moist	
10	12-16'	97.5%	2.1	Clay and Silt: Silty clay, reddish brown, trace gravel, trace sand, laminated, stiff, softer with depth after 15 feet, moist	sample collected, Duplicate
15	16-20'	100%	0.4	Clay and Silt: Silty clay, brown, trace sand, trace gravel, soft, massive, extremely moist	
20	20-24'	97.5%	2.0		sample collected, MS/MSD
25	24-28'	100%	1.6		sample collected
30	28-32'	100%	3.1		sample collected



Proportions Used:
Trace =
Few =
Little =
Some =
Adjective =
And =

Notes:
ft bg = feet below grade
Field Screening measured in ppmv

Blow Count Penetration Resistance:

Consistency (M&C)	Density (G&S)
<2 = Very Soft	0-4 = Very Loose
2-4 = Soft	4-10 = Loose
4-8 = Medium	10-30 = Medium
8-15 = Stiff	30-50 = Dense
15-30 = Very Stiff	50> = Very Dense
>30 = Hard	

Symbols:
Apparent Water Level
Lab Sample Location

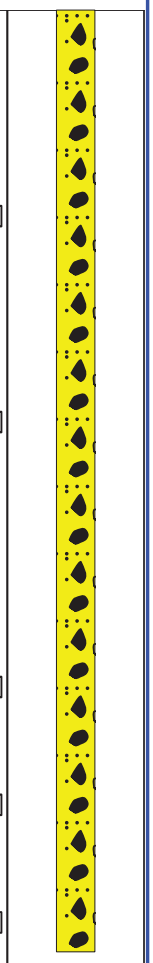
Soil Boring

Groundwater & Environmental Services, Inc.

ID NO. **SB-33**

Project: **NYSDEC Highland Plaza**	Client: **NYSDEC**	
Address: **Tonawanda, NY**	GES Job #: **0901703**	
County: **Erie County**	GES Project Mgr: **Eric Popken**	NYSDEC Site No: **C915293A**
Logged By: **Brandon Mikolin**	Date Drilled: **6/19/2017**	Split Spoon/Acetate Sleeve Dia: **1.75"**
Drilling Company: **Empire Geo Services, Inc.**	Completion Date: **6/19/2017**	Split Spoon/Acetate Sleeve Length:
Drill Operator: **Art Koske**	Drilling Method: **Direct Push/Auger**	Soil Classification System: **Mod. Burnmeister**
Drill Rig Type: **Geoprobe 6620 DT**	Sampling Method: **MacroCore**	Field Screening: **PID, 10.2 eV Lamp (ppmv)**
Borehole Diameter: **3"**	Surface Elevation: **Not Surveyed**	Abandonment Method: **Backfilled**
Total Depth: **32'**	Depth to Water: **Not Encountered**	Backfill Material: **Soil Cuttings**
Refusal Depth: **Not Applicable**	Well Diameter: **Not Applicable**	Abandonment Completion Date: **6/19/2017**

Depth (feet)	Sample Interval	Recovery (inches)	Field Screen (ppm)	Geologic Description	Comments
0	0-4'	92.5%	3.5	Fill: Fill, gravely with some sand	sample collected
				Clay and Silt: Silty clay with gravel, brown, trace sand, weakly laminated to blockey, moist	
5	4-8'	97.5%	2.8		
	8-12'	90%	2.8	Clay and Silt: Silty clay, brown, trace gravel, trace sand, laminated, moist	sample collected
10	12-16'	100%	2.1	Clay and Silt: Silty clay, brown, trace gravel, trace sand, weakly laminated, soft, moist	
15	16-20'	100%	1.8		sample collected
20	20-24'	97.5%	1.6		
25	24-28'	100%	1.4		sample collected
	28-32'	100%	2.0		sample collected
30					sample collected



Proportions Used:
Trace =
Few =
Little =
Some =
Adjective =
And =

Notes:
ft bg = feet below grade
Field Screening measured in ppmv

Blow Count Penetration Resistance:

Consistency (M&C)	Density (G&S)
<2 = Very Soft	0-4 = Very Loose
2-4 = Soft	4-10 = Loose
4-8 = Medium	10-30 = Medium
8-15 = Stiff	30-50 = Dense
15-30 = Very Stiff	50> = Very Dense
>30 = Hard	

Symbols:
Apparent Water Level
Lab Sample Location

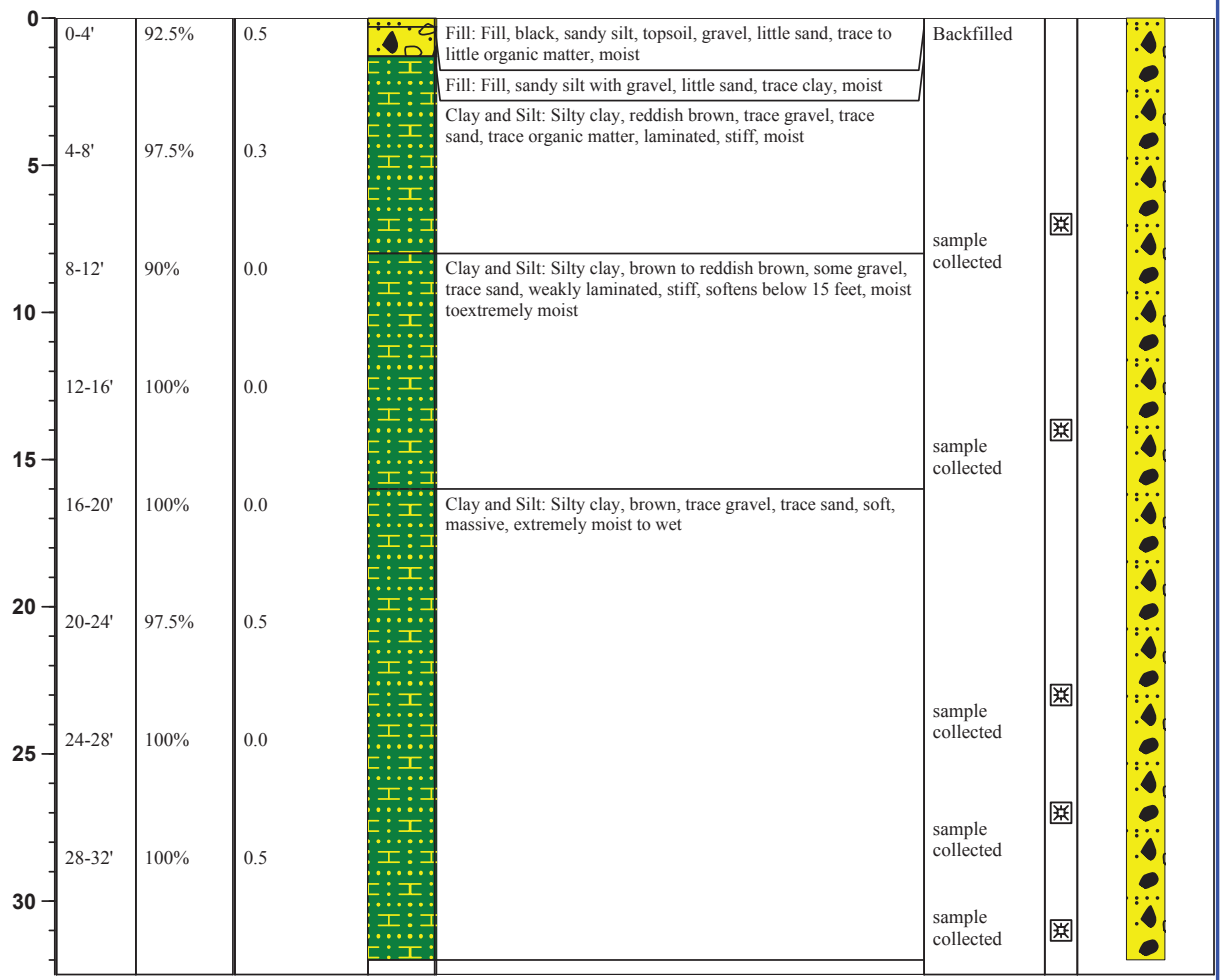
Soil Boring

Groundwater & Environmental Services, Inc.

ID NO. **SB-34**

Project: **NYSDEC Highland Plaza**	Client: **NYSDEC**	
Address: **Tonawanda, NY**	GES Job #: **0901703**	
County: **Erie County**	GES Project Mgr: **Eric Popken**	NYSDEC Site No: **C915293A**
Logged By: **Brandon Mikolin**	Date Drilled: **6/20/2017**	Split Spoon/Acetate Sleeve Dia: **1.75"**
Drilling Company: **Empire Geo Services, Inc.**	Completion Date: **6/20/2017**	Split Spoon/Acetate Sleeve Length:
Drill Operator: **Art Koske**	Drilling Method: **Direct Push/Auger**	Soil Classification System: **Mod. Burnmeister**
Drill Rig Type: **Geoprobe 6620 DT**	Sampling Method: **MacroCore**	Field Screening: **PID, 10.2 eV Lamp (ppmv)**
Borehole Diameter: **3"**	Surface Elevation: **Not Surveyed**	Abandonment Method: **Backfilled**
Total Depth: **32'**	Depth to Water: **Not Encountered**	Backfill Material: **Soil Cuttings**
Refusal Depth: **Not Applicable**	Well Diameter: **Not Applicable**	Abandonment Completion Date: **6/20/2017**

Depth (feet)	Sample Interval	Recovery (inches)	Field Screen (ppm)	Geologic Description	Comments
0	0-4'	92.5%	0.5	Fill: Fill, black, sandy silt, topsoil, gravel, little sand, trace to little organic matter, moist	Backfilled
				Fill: Fill, sandy silt with gravel, little sand, trace clay, moist	
5	4-8'	97.5%	0.3	Clay and Silt: Silty clay, reddish brown, trace gravel, trace sand, trace organic matter, laminated, stiff, moist	sample collected
10	8-12'	90%	0.0	Clay and Silt: Silty clay, brown to reddish brown, some gravel, trace sand, weakly laminated, stiff, softens below 15 feet, moist toextremely moist	
	12-16'	100%	0.0		sample collected
15	16-20'	100%	0.0	Clay and Silt: Silty clay, brown, trace gravel, trace sand, soft, massive, extremely moist to wet	
20	20-24'	97.5%	0.5		sample collected
25	24-28'	100%	0.0		sample collected
30	28-32'	100%	0.5		sample collected



Proportions Used:
Trace =
Few =
Little =
Some =
Adjective =
And =

Notes:
ft bg = feet below grade
Field Screening measured in ppmv

Blow Count Penetration Resistance:

Consistency (M&C)	Density (G&S)
<2 = Very Soft	0-4 = Very Loose
2-4 = Soft	4-10 = Loose
4-8 = Medium	10-30 = Medium
8-15 = Stiff	30-50 = Dense
15-30 = Very Stiff	50> = Very Dense
>30 = Hard	

Symbols:
Apparent Water Level
Lab Sample Location

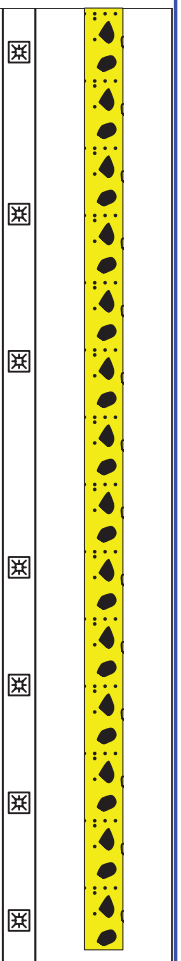
Soil Boring

Groundwater & Environmental Services, Inc.

ID NO. **SB-35**

Project: **NYSDEC Highland Plaza**	Client: **NYSDEC**	
Address: **Tonawanda, NY**	GES Job #: **0901703**	
County: **Erie County**	GES Project Mgr: **Eric Popken**	NYSDEC Site No: **C915293A**
Logged By: **Brandon Mikolin**	Date Drilled: **5/4/2017**	Split Spoon/Acetate Sleeve Dia: **1.75"**
Drilling Company: **Empire Geo Services, Inc.**	Completion Date: **5/4/2017**	Split Spoon/Acetate Sleeve Length:
Drill Operator: **Art Koske**	Drilling Method: **Direct Push/Auger**	Soil Classification System: **Mod. Burnmeister**
Drill Rig Type: **Geoprobe 6620 DT**	Sampling Method: **MacroCore**	Field Screening: **PID, 10.2 eV Lamp (ppmv)**
Borehole Diameter: **3"**	Surface Elevation: **Not Surveyed**	Abandonment Method: **Backfilled**
Total Depth: **32'**	Depth to Water: **Not Encountered**	Backfill Material: **Soil Cuttings**
Refusal Depth: **Not Applicable**	Well Diameter: **Not Applicable**	Abandonment Completion Date: **5/4/2017**

Depth (feet)	Sample Interval	Recovery (inches)	Field Screen (ppm)	Geologic Description	Comments	Abandonment Detail
0	0-4'	100%	0.4	Gravel: Gravel	Backfilled	
				Fill: Fill, clay and gravel, dark brown to black		
			12.3	Clay and Silt: Silty clay, brown, hard, dry	sample collected	
5	4-8'	100%	19.0	Clay and Silt: Silty clay, brown, hard, dry, no odors		
			21.2		sample collected	
	8-12'	100%	13.6			
10			5.2			
	12-16'	100%	0.5		sample collected	
15			0.0			
	16-20'	100%	0.0	Clay and Silt: Silty clay, brown, medium stiffness, dry, no odors		
			0.0		sample collected	
20	20-24'	100%	0.3			
			0.0		sample collected	
25	24-28'	100%	0.0			
			0.2		sample collected	
	28-32'	100%	0.0			
30			0.0		sample collected	



Proportions Used:
Trace =
Few =
Little =
Some =
Adjective =
And =

Notes:
ft bg = feet below grade
Field Screening measured in ppmv

Blow Count Penetration Resistance:

Consistency (M&C)	Density (G&S)
<2 = Very Soft	0-4 = Very Loose
2-4 = Soft	4-10 = Loose
4-8 = Medium	10-30 = Medium
8-15 = Stiff	30-50 = Dense
15-30 = Very Stiff	50> = Very Dense
>30 = Hard	

Symbols:
Apparent Water Level
Lab Sample Location

Soil Boring

Groundwater & Environmental Services, Inc.

ID NO. **SB-36**

Project: **NYSDEC Highland Plaza**	Client: **NYSDEC**	
Address: **Tonawanda, NY**	GES Job #: **0901703**	
County: **Erie County**	GES Project Mgr: **Eric Popken**	NYSDEC Site No: **C915293A**
Logged By: **Eric Popken**	Date Drilled: **5/4/2017**	Split Spoon/Acetate Sleeve Dia: **1.75"**
Drilling Company: **Empire Geo Services, Inc.**	Completion Date: **5/4/2017**	Split Spoon/Acetate Sleeve Length:
Drill Operator: **Art Koske**	Drilling Method: **Direct Push/Auger**	Soil Classification System: **Mod. Burnmeister**
Drill Rig Type: **Geoprobe 6620 DT**	Sampling Method: **MacroCore**	Field Screening: **PID, 10.2 eV Lamp (ppmv)**
Borehole Diameter: **3"**	Surface Elevation: **Not Surveyed**	Abandonment Method: **Backfilled**
Total Depth: **32'**	Depth to Water: **Not Encountered**	Backfill Material: **Soil Cuttings**
Refusal Depth: **Not Applicable**	Well Diameter: **Not Applicable**	Abandonment Completion Date: **5/4/2017**

Depth (feet)	Sample Interval	Recovery (inches)	Field Screen (ppm)	Geologic Description	Comments
0	0-4'	25%	4.2	Clay and Silt: Silty clay, brown, hard, trace gravel, no odors	Backfilled sample collected
5	4-8'	100%	26.7	Clay and Silt: Silty clay, brown, hard, trace gravel, dry to moist, no odors	sample collected
			30.3		
	8-12'	100%	27.1	Clay and Silt: Silty clay, brown, hard, trace gravel, moist to dry, no odors	sample collected
10			25.2		
	12-16'	75%	20.7	Clay and Silt: Silty clay, brown, hard, trace gravel, moist, no odors	
15			7.8		sample collected
	16-20'	0%	1.8	Clay and Silt: Silty clay, brown, medium stiffness, trace gravel, moist, no odors	
			1.7		
20	20-24'	100%	2.5	Clay and Silt: Silty clay, brown, soft, trace gravel, wet, no odors	
			1.6	Clay and Silt: Silty clay, brown, medium stiffness, trace gravel, wet, no odors	sample collected
25	24-28'	100%	2.4	Clay and Silt: Silty clay, brown, medium stiffness, trace gravel, moist, no odors	
			1.0		sample collected
	28-32'	100%	1.5	Clay and Silt: Silty clay, brown, medium stiffness, trace gravel, moist, no odors	
30			0.8		sample collected

Proportions Used:
Trace =
Few =
Little =
Some =
Adjective =
And =

Notes:
ft bg = feet below grade
Field Screening measured in ppmv

Blow Count Penetration Resistance:

Consistency (M&C)	Density (G&S)
<2 = Very Soft	0-4 = Very Loose
2-4 = Soft	4-10 = Loose
4-8 = Medium	10-30 = Medium
8-15 = Stiff	30-50 = Dense
15-30 = Very Stiff	50> = Very Dense
>30 = Hard	

Symbols:
Apparent Water Level
Lab Sample Location

Soil Boring

Groundwater & Environmental Services, Inc.

ID NO. **SB-37**

Project: **NYSDEC Highland Plaza**	Client: **NYSDEC**	
Address: **Tonawanda, NY**	GES Job #: **0901703**	
County: **Erie County**	GES Project Mgr: **Eric Popken**	NYSDEC Site No: **C915293A**
Logged By: **Eric Popken**	Date Drilled: **5/4/2017**	Split Spoon/Acetate Sleeve Dia: **1.75"**
Drilling Company: **Empire Geo Services, Inc.**	Completion Date: **5/4/2017**	Split Spoon/Acetate Sleeve Length:
Drill Operator: **Art Koske**	Drilling Method: **Direct Push/Auger**	Soil Classification System: **Mod. Burnmeister**
Drill Rig Type: **Geoprobe 6620 DT**	Sampling Method: **MacroCore**	Field Screening: **PID, 10.2 eV Lamp (ppmv)**
Borehole Diameter: **3"**	Surface Elevation: **Not Surveyed**	Abandonment Method: **Backfilled**
Total Depth: **32'**	Depth to Water: **Not Encountered**	Backfill Material: **Soil Cuttings**
Refusal Depth: **Not Applicable**	Well Diameter: **Not Applicable**	Abandonment Completion Date: **5/4/2017**

Depth (feet)	Sample Interval	Recovery (inches)	Field Screen (ppm)	Geologic Description	Comments	Abandonment Detail
0	0-4'	100%	1.9	Gravel: Silty clay, brown, hard, moist, no odors	Backfilled	
			8.2	Fill: Fill, silty clay, brown, hard, trace gravel, trace organics, slight odor	sample collected	
				Clay and Silt: Silty clay, brown, soft to medium stiffness, trace gravel, dry, no odors		
5	4-8'	95%	46.2	Clay and Silt: Silty clay, brown, hard, trace gravel, dry to moist, no odors		
			44.6		sample collected	
	8-12'	75%	32.2			
10			43.2			
	12-16'	100%	1195	Clay and Silt: Silty clay, brown, hard, trace gravel, dry to moist, odors between 14-15 feet		
15			>2,000		sample collected	
	16-20'	100%	>2,000	Clay and Silt: Silty clay, brown, hard, trace gravel, dry to moist, odors	sample collected	
			43.2	Clay and Silt: Silty clay, brown, medium stiffness, trace gravel, dry to moist, no odors		
20	20-24'	100%	20.0	Clay: Clay, brown, soft to medium stiffness, dry to moist	sample collected	
			5.1			
	24-28'	100%	14.8		sample collected	
25			2.9			
	28-32'	100%	2.5		sample collected	
30			1.8			
					sample collected	

Proportions Used:
Trace =
Few =
Little =
Some =
Adjective =
And =

Notes:
ft bg = feet below grade
Field Screening measured in ppmv

Blow Count Penetration Resistance:

Consistency (M&C)	Density (G&S)
<2 = Very Soft	0-4 = Very Loose
2-4 = Soft	4-10 = Loose
4-8 = Medium	10-30 = Medium
8-15 = Stiff	30-50 = Dense
15-30 = Very Stiff	50> = Very Dense
>30 = Hard	

Symbols:
Apparent Water Level
Lab Sample Location

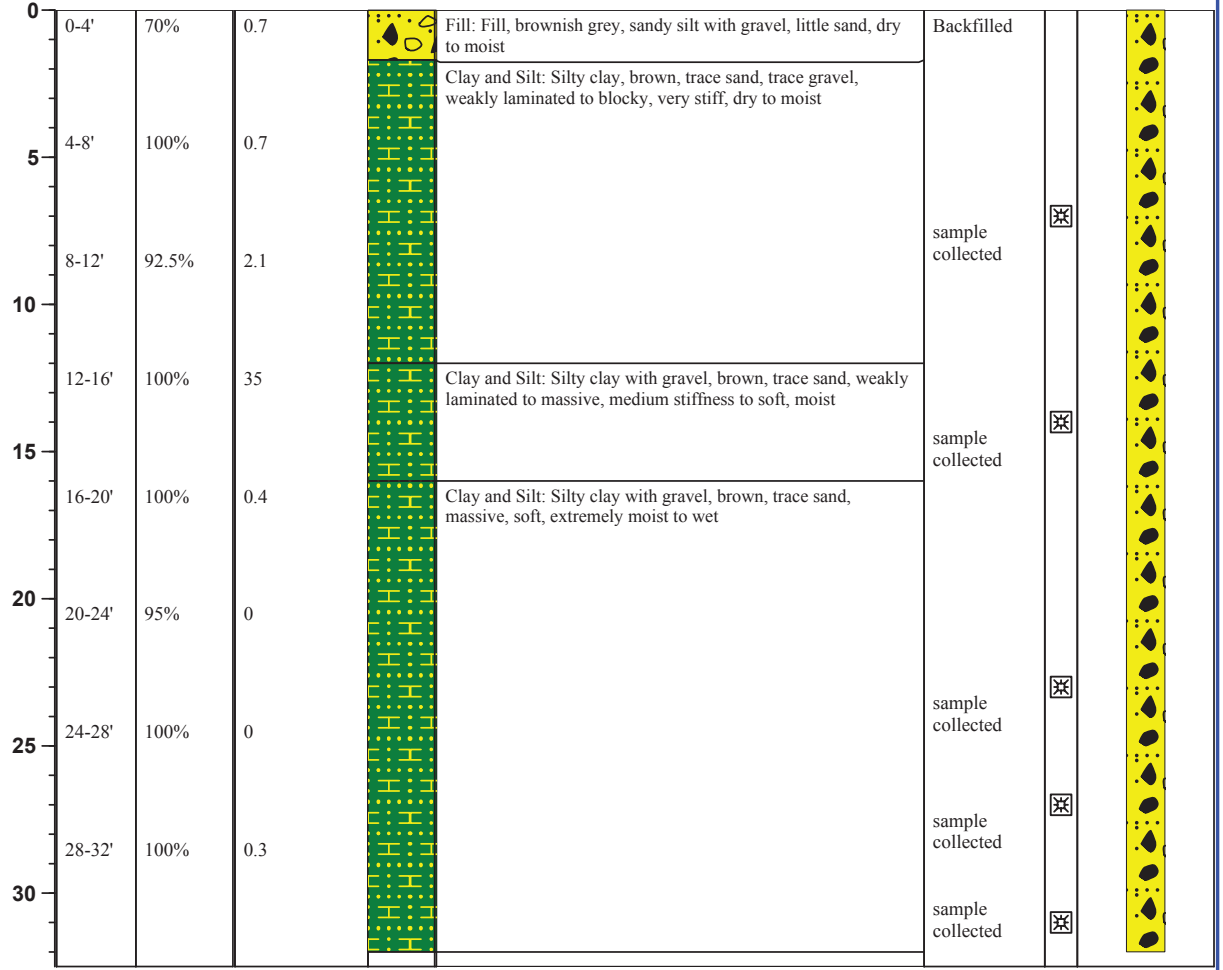
Soil Boring

Groundwater & Environmental Services, Inc.

ID NO. **SB-38**

Project: **NYSDEC Highland Plaza**	Client: **NYSDEC**	
Address: **Tonawanda, NY**	GES Job #: **0901703**	
County: **Erie County**	GES Project Mgr: **Eric Popken**	NYSDEC Site No: **C915293A**
Logged By: **Brandon Mikolin**	Date Drilled: **6/21/2017**	Split Spoon/Acetate Sleeve Dia: **1.75"**
Drilling Company: **Empire Geo Services, Inc.**	Completion Date: **6/21/2017**	Split Spoon/Acetate Sleeve Length:
Drill Operator: **Art Koske**	Drilling Method: **Direct Push/Auger**	Soil Classification System: **Mod. Burnmeister**
Drill Rig Type: **Geoprobe 6620 DT**	Sampling Method: **MacroCore**	Field Screening: **PID, 10.2 eV Lamp (ppmv)**
Borehole Diameter: **3"**	Surface Elevation: **Not Surveyed**	Abandonment Method: **Backfilled**
Total Depth: **32'**	Depth to Water: **Not Encountered**	Backfill Material: **Soil Cuttings**
Refusal Depth: **Not Applicable**	Well Diameter: **Not Applicable**	Abandonment Completion Date: **6/21/2017**

Depth (feet)	Sample Interval	Recovery (inches)	Field Screen (ppm)	Geologic Description	Comments
0	0-4'	70%	0.7	Fill: Fill, brownish grey, sandy silt with gravel, little sand, dry to moist	Backfilled
	4-8'	100%	0.7	Clay and Silt: Silty clay, brown, trace sand, trace gravel, weakly laminated to blocky, very stiff, dry to moist	
5	8-12'	92.5%	2.1		sample collected
10	12-16'	100%	35	Clay and Silt: Silty clay with gravel, brown, trace sand, weakly laminated to massive, medium stiffness to soft, moist	sample collected
15	16-20'	100%	0.4	Clay and Silt: Silty clay with gravel, brown, trace sand, massive, soft, extremely moist to wet	
20	20-24'	95%	0		sample collected
25	24-28'	100%	0		sample collected
30	28-32'	100%	0.3		sample collected



Proportions Used:
Trace =
Few =
Little =
Some =
Adjective =
And =

Notes:
ft bg = feet below grade
Field Screening measured in ppmv

Blow Count Penetration Resistance:

Consistency (M&C)	Density (G&S)
<2 = Very Soft	0-4 = Very Loose
2-4 = Soft	4-10 = Loose
4-8 = Medium	10-30 = Medium
8-15 = Stiff	30-50 = Dense
15-30 = Very Stiff	50> = Very Dense
>30 = Hard	

Symbols:
Apparent Water Level
Lab Sample Location

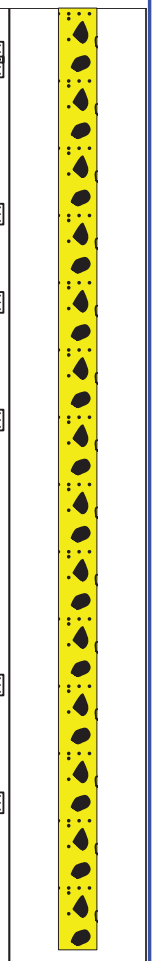
Soil Boring

Groundwater & Environmental Services, Inc.

ID NO. **SB-39**

Project: NYSDEC Highland Plaza	Client: NYSDEC	
Address: Tonawanda, NY	GES Job #: 0901703	
County: Erie County	GES Project Mgr: Eric Popken	NYSDEC Site No: C915293A
Logged By: Eric Popken	Date Drilled: 5/4/2017	Split Spoon/Acetate Sleeve Dia: 1.75"
Drilling Company: Empire Geo Services, Inc.	Completion Date: 5/4/2017	Split Spoon/Acetate Sleeve Length:
Drill Operator: Art Koske	Drilling Method: Direct Push/Auger	Soil Classification System: Mod. Burnmeister
Drill Rig Type: Geoprobe 6620 DT	Sampling Method: MacroCore	Field Screening: PID, 10.2 eV Lamp (ppmv)
Borehole Diameter: 3"	Surface Elevation: Not Surveyed	Abandonment Method: Backfilled
Total Depth: 32'	Depth to Water: Not Encountered	Backfill Material: Soil Cuttings
Refusal Depth: Not Applicable	Well Diameter: Not Applicable	Abandonment Completion Date: 5/4/2017

Depth (feet)	Sample Interval	Recovery (inches)	Field Screen (ppm)	Geologic Description	Comments
0	0-4'	87.5%	244	Gravel: Gravel	Backfilled
				Fill: Fill, gravel, sand, clay, stained black, moist, solvent odor	sample collected
			756	Clay and Silt: Silty clay, brown, hard, dry, solvent odor	sample collected
5	4-8'	100%	>2000		
			>2000		sample collected
	8-12'	100%	201		
10			>2000		sample collected
	12-16'	100%	418	Clay and Silt: Silty clay, brown, hard, dry, slight odors	
			170		sample collected
15	16-20'	100%	88.8	Clay and Silt: Silty clay, brown, medium stiffness, dry, slight odors	
			10.9		
20	20-24'	75%	3.4	Clay and Silt: Silty clay, brown, medium stiffness, dry, no odor	
			41.4		sample collected
	24-28'	0%	20.1		
25			13.8		sample collected
	28-32'	0%	NA	No recovery	
30					



Proportions Used:
Trace =
Few =
Little =
Some =
Adjective =
And =

Notes:
ft bg = feet below grade
Field Screening measured in ppmv

Blow Count Penetration Resistance:

Consistency (M&C)	Density (G&S)
<2 = Very Soft	0-4 = Very Loose
2-4 = Soft	4-10 = Loose
4-8 = Medium	10-30 = Medium
8-15 = Stiff	30-50 = Dense
15-30 = Very Stiff	50> = Very Dense
>30 = Hard	

Symbols:
Apparent Water Level
Lab Sample Location

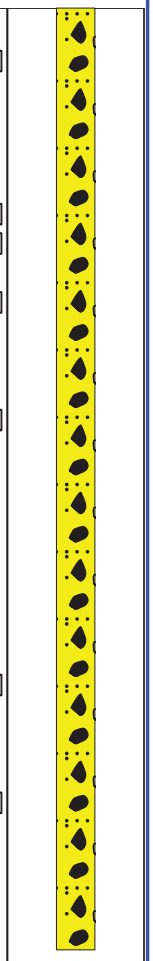
Soil Boring

Groundwater & Environmental Services, Inc.

ID NO. **SB-40**

Project: **NYSDEC Highland Plaza**	Client: **NYSDEC**	
Address: **Tonawanda, NY**	GES Job #: **0901703**	
County: **Erie County**	GES Project Mgr: **Eric Popken**	NYSDEC Site No: **C915293A**
Logged By: **Eric Popken**	Date Drilled: **5/3/2017**	Split Spoon/Acetate Sleeve Dia: **1.75"**
Drilling Company: **Empire Geo Services, Inc.**	Completion Date: **5/3/2017**	Split Spoon/Acetate Sleeve Length:
Drill Operator: **Art Koske**	Drilling Method: **Direct Push/Auger**	Soil Classification System: **Mod. Burnmeister**
Drill Rig Type: **Geoprobe 6620 DT**	Sampling Method: **MacroCore**	Field Screening: **PID, 10.2 eV Lamp (ppmv)**
Borehole Diameter: **3"**	Surface Elevation: **Not Surveyed**	Abandonment Method: **Backfilled**
Total Depth: **32'**	Depth to Water: **10'**	Backfill Material: **Soil Cuttings**
Refusal Depth: **Not Applicable**	Well Diameter: **Not Applicable**	Abandonment Completion Date: **5/3/2017**

Depth (feet)	Sample Interval	Recovery (inches)	Field Screen (ppm)	Geologic Description	Comments
0	0-4'	50%	0.0	Clay: Clay, brown, hard, moist, no odors	Backfilled
					sample collected
5	4-8'	75%	0.1		
			0.0		sample collected
	8-12'	100%	1.3		sample collected
10			0.4		sample collected, water encountered
	12-16'	15%	0.6		
		25%			sample collected
15	16-20'	0%	0.8		
20	20-24'	12.5	NA		
					sample collected
25	24-28'	50%	0.6		
			0.0		sample collected
	28-32'	15%	0.0		
30					



Proportions Used:
Trace =
Few =
Little =
Some =
Adjective =
And =

Notes:
ft bg = feet below grade
Field Screening measured in ppmv

Blow Count Penetration Resistance:

Consistency (M&C)	Density (G&S)
<2 = Very Soft	0-4 = Very Loose
2-4 = Soft	4-10 = Loose
4-8 = Medium	10-30 = Medium
8-15 = Stiff	30-50 = Dense
15-30 = Very Stiff	50> = Very Dense
>30 = Hard	

Symbols:
Apparent Water Level
Lab Sample Location

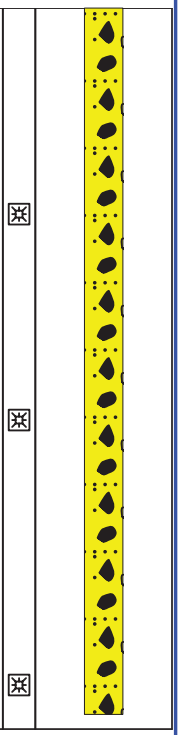
Soil Boring

Groundwater & Environmental Services, Inc.

ID NO. **SB-41**

Project: **NYSDEC Highland Plaza**	Client: **NYSDEC**	
Address: **Tonawanda, NY**	GES Job #: **0901703**	
County: **Erie County**	GES Project Mgr: **Eric Popken**	NYSDEC Site No: **C915293A**
Logged By: **Brandon Mikolin**	Date Drilled: **6/22/2017**	Split Spoon/Acetate Sleeve Dia: **1.75"**
Drilling Company: **Empire Geo Services, Inc.**	Completion Date: **6/22/2017**	Split Spoon/Acetate Sleeve Length:
Drill Operator: **Art Koske**	Drilling Method: **Direct Push/Auger**	Soil Classification System: **Mod. Burnmeister**
Drill Rig Type: **Geoprobe 6620 DT**	Sampling Method: **MacroCore**	Field Screening: **PID, 10.2 eV Lamp (ppmv)**
Borehole Diameter: **3"**	Surface Elevation: **Not Surveyed**	Abandonment Method: **Backfilled**
Total Depth: **24'**	Depth to Water: **10'**	Backfill Material: **Soil Cuttings**
Refusal Depth: **Not Applicable**	Well Diameter: **Not Applicable**	Abandonment Completion Date: **6/22/2017**

Depth (feet)	Sample Interval	Recovery (inches)	Field Screen (ppm)	Geologic Description	Comments
0	0-4'	85%	0.7	Fill: Fill, brownish grey, sandy silt with gravel, little sand, trace concrete, trace slag, dry to moist	Backfilled
				Clay and Silt: Silty clay with gravel, brown, mottled, trace sand, weakly laminated, medium stiffness, moist	
5	4-8'	100%	0.5	Clay and Silt: Silty clay with gravel, brown, trace sand, weakly laminated, very stiff, softer after 14 feet, dry to moist	
	8-12'	100%	0.8		sample collected
10	12-16'	100%	1.6		
15	16-20'	100%	3.0	Clay and Silt: Silty clay with gravel, brown, trace sand, massive, soft, extremely moist	sample collected
20	20-24'	100%	0.6		sample collected



Proportions Used:
Trace =
Few =
Little =
Some =
Adjective =
And =

Notes:
ft bg = feet below grade
Field Screening measured in ppmv

Blow Count Penetration Resistance:

Consistency (M&C)	Density (G&S)
<2 = Very Soft	0-4 = Very Loose
2-4 = Soft	4-10 = Loose
4-8 = Medium	10-30 = Medium
8-15 = Stiff	30-50 = Dense
15-30 = Very Stiff	50> = Very Dense
>30 = Hard	

Symbols:
Apparent Water Level
Lab Sample Location

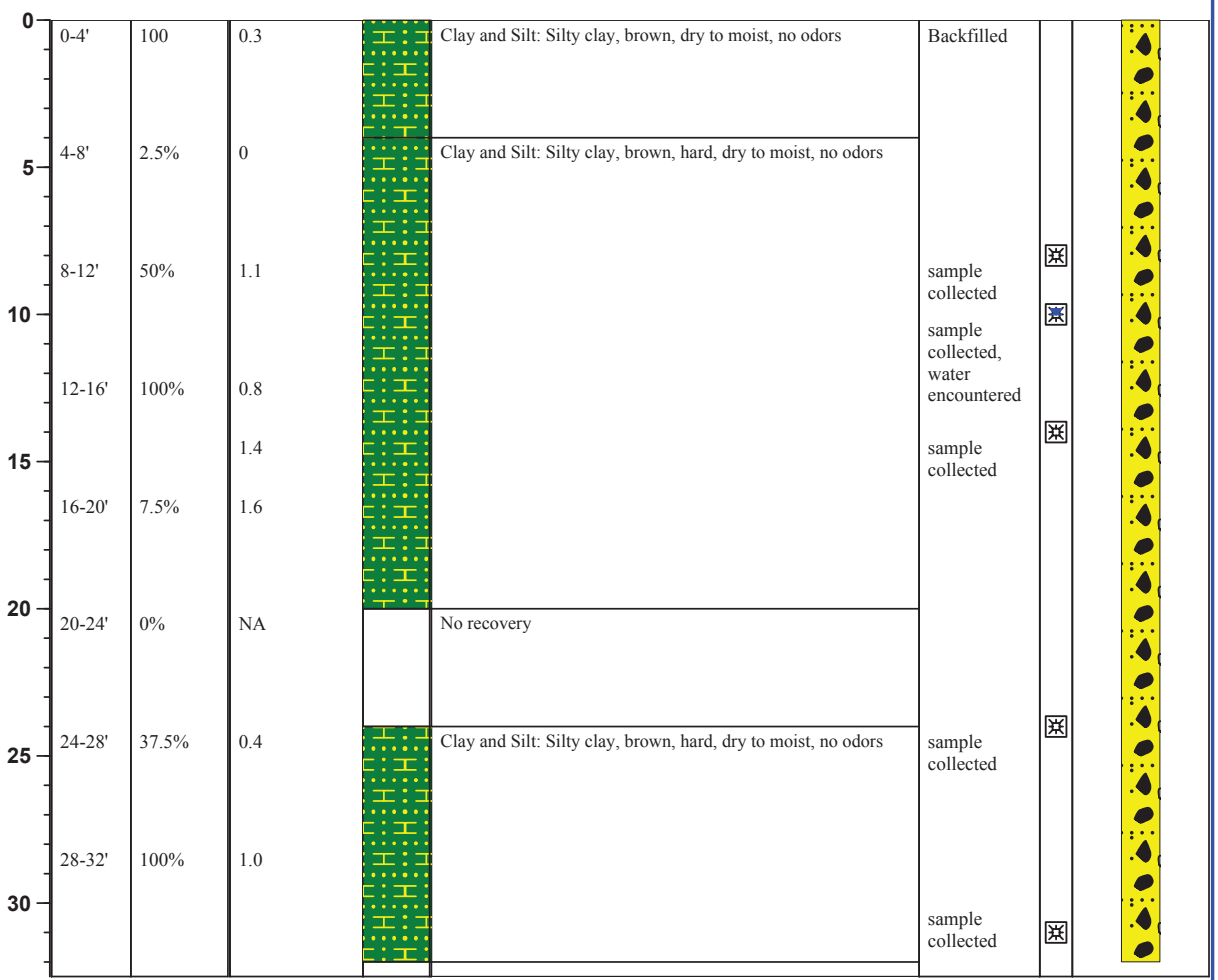
Soil Boring

Groundwater & Environmental Services, Inc.

ID NO. **SB-43**

Project: **NYSDEC Highland Plaza**	Client: **NYSDEC**	
Address: **Tonawanda, NY**	GES Job #: **0901703**	
County: **Erie County**	GES Project Mgr: **Eric Popken**	NYSDEC Site No: **C915293A**
Logged By: **Eric Popken**	Date Drilled: **5/3/2017**	Split Spoon/Acetate Sleeve Dia: **1.75"**
Drilling Company: **Empire Geo Services, Inc.**	Completion Date: **5/3/2017**	Split Spoon/Acetate Sleeve Length:
Drill Operator: **Art Koske**	Drilling Method: **Direct Push/Auger**	Soil Classification System: **Mod. Burnmeister**
Drill Rig Type: **Geoprobe 6620 DT**	Sampling Method: **MacroCore**	Field Screening: **PID, 10.2 eV Lamp (ppmv)**
Borehole Diameter: **3"**	Surface Elevation: **Not Surveyed**	Abandonment Method: **Backfilled**
Total Depth: **32'**	Depth to Water: **10'**	Backfill Material: **Soil Cuttings**
Refusal Depth: **Not Applicable**	Well Diameter: **Not Applicable**	Abandonment Completion Date: **5/3/2017**

Depth (feet)	Sample Interval	Recovery (inches)	Field Screen (ppm)	Geologic Description	Comments
0	0-4'	100	0.3	Clay and Silt: Silty clay, brown, dry to moist, no odors	Backfilled
5	4-8'	2.5%	0	Clay and Silt: Silty clay, brown, hard, dry to moist, no odors	
10	8-12'	50%	1.1		sample collected
	12-16'	100%	0.8		sample collected, water encountered
15			1.4		sample collected
	16-20'	7.5%	1.6		
20	20-24'	0%	NA	No recovery	
25	24-28'	37.5%	0.4	Clay and Silt: Silty clay, brown, hard, dry to moist, no odors	sample collected
30	28-32'	100%	1.0		sample collected



Proportions Used:
Trace =
Few =
Little =
Some =
Adjective =
And =

Notes:
ft bg = feet below grade
Field Screening measured in ppmv

Blow Count Penetration Resistance:

Consistency (M&C)	Density (G&S)
<2 = Very Soft	0-4 = Very Loose
2-4 = Soft	4-10 = Loose
4-8 = Medium	10-30 = Medium
8-15 = Stiff	30-50 = Dense
15-30 = Very Stiff	50> = Very Dense
>30 = Hard	

Symbols:
Apparent Water Level
Lab Sample Location

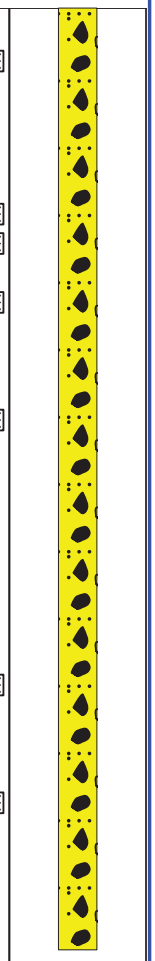
Soil Boring

Groundwater & Environmental Services, Inc.

ID NO. **SB-44**

Project: **NYSDEC Highland Plaza**	Client: **NYSDEC**	
Address: **Tonawanda, NY**	GES Job #: **0901703**	
County: **Erie County**	GES Project Mgr: **Eric Popken**	NYSDEC Site No: **C915293A**
Logged By: **Eric Popken**	Date Drilled: **5/3/2017**	Split Spoon/Acetate Sleeve Dia: **1.75"**
Drilling Company: **Empire Geo Services, Inc.**	Completion Date: **5/3/2017**	Split Spoon/Acetate Sleeve Length:
Drill Operator: **Art Koske**	Drilling Method: **Direct Push/Auger**	Soil Classification System: **Mod. Burnmeister**
Drill Rig Type: **Geoprobe 6620 DT**	Sampling Method: **MacroCore**	Field Screening: **PID, 10.2 eV Lamp (ppmv)**
Borehole Diameter: **3"**	Surface Elevation: **Not Surveyed**	Abandonment Method: **Backfilled**
Total Depth: **32'**	Depth to Water: **10'**	Backfill Material: **Soil Cuttings**
Refusal Depth: **Not Applicable**	Well Diameter: **Not Applicable**	Abandonment Completion Date: **5/3/2017**

Depth (feet)	Sample Interval	Recovery (inches)	Field Screen (ppm)	Geologic Description	Comments
0	0-4'	62.5%	2.0	Clay and Silt: Silty clay, brown, hard, moist, no odors	Backfilled sample collected
5	4-8'	75%	1.8	Clay and Silt: Silty clay, brown, hard, dry to moist, no odors	sample collected
	8-12'	75%	1.0	Clay and Silt: Silty clay, brown, hard, moist, no odors	sample collected
10			2.3		sample collected, water encountered
	12-16'	37.5%	2.0		sample collected
15	16-20'	20%	0.0	Clay and Silt: Silty clay, brown, medium stiffness, moist, no odors	
20	20-24'	37.5%	2.0		
	24-28'	100%	0.8		sample collected
25			0.9		
	28-32'	12.5%	0.0		sample collected
30					



Proportions Used:
Trace =
Few =
Little =
Some =
Adjective =
And =

Notes:
ft bg = feet below grade
Field Screening measured in ppmv

Blow Count Penetration Resistance:

Consistency (M&C)	Density (G&S)
<2 = Very Soft	0-4 = Very Loose
2-4 = Soft	4-10 = Loose
4-8 = Medium	10-30 = Medium
8-15 = Stiff	30-50 = Dense
15-30 = Very Stiff	50> = Very Dense
>30 = Hard	

Symbols:
Apparent Water Level
Lab Sample Location

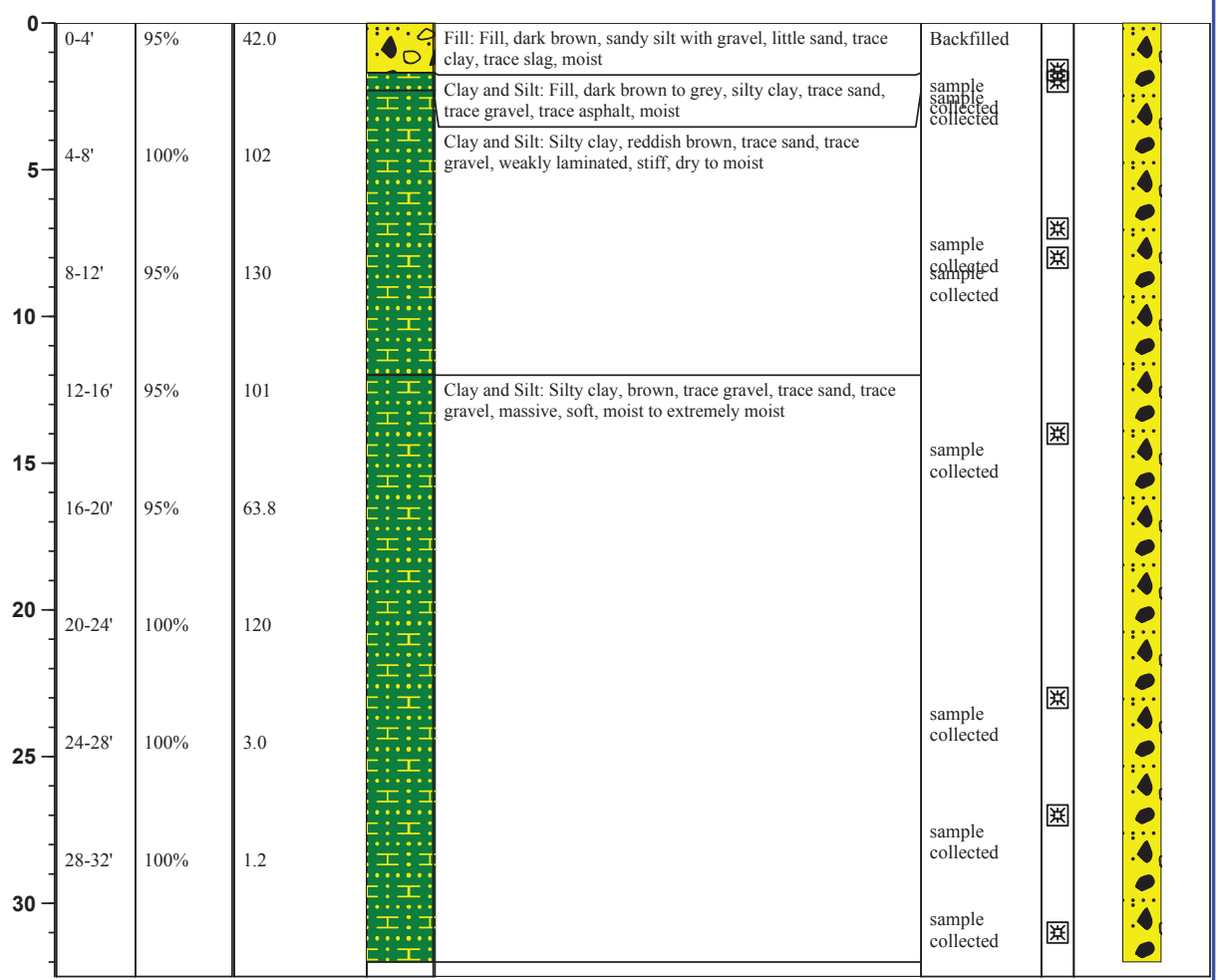
Soil Boring

Groundwater & Environmental Services, Inc.

ID NO. **SB-45**

Project: **NYSDEC Highland Plaza**	Client: **NYSDEC**	
Address: **Tonawanda, NY**	GES Job #: **0901703**	
County: **Erie County**	GES Project Mgr: **Eric Popken**	NYSDEC Site No: **C915293A**
Logged By: **Brandon Mikolin**	Date Drilled: **6/20/2017**	Split Spoon/Acetate Sleeve Dia: **1.75"**
Drilling Company: **Empire Geo Services, Inc.**	Completion Date: **6/20/2017**	Split Spoon/Acetate Sleeve Length:
Drill Operator: **Art Koske**	Drilling Method: **Direct Push/Auger**	Soil Classification System: **Mod. Burnmeister**
Drill Rig Type: **Geoprobe 6620 DT**	Sampling Method: **MacroCore**	Field Screening: **PID, 10.2 eV Lamp (ppmv)**
Borehole Diameter: **3"**	Surface Elevation: **Not Surveyed**	Abandonment Method: **Backfilled**
Total Depth: **32'**	Depth to Water: **Not Encountered**	Backfill Material: **Soil Cuttings**
Refusal Depth: **Not Applicable**	Well Diameter: **Not Applicable**	Abandonment Completion Date: **6/20/2017**

Depth (feet)	Sample Interval	Recovery (inches)	Field Screen (ppm)	Geologic Description	Comments
0	0-4'	95%	42.0	Fill: Fill, dark brown, sandy silt with gravel, little sand, trace clay, trace slag, moist	Backfilled
				Clay and Silt: Fill, dark brown to grey, silty clay, trace sand, trace gravel, trace asphalt, moist	sample collected
5	4-8'	100%	102	Clay and Silt: Silty clay, reddish brown, trace sand, trace gravel, weakly laminated, stiff, dry to moist	sample collected
	8-12'	95%	130		sample collected
10	12-16'	95%	101	Clay and Silt: Silty clay, brown, trace gravel, trace sand, trace gravel, massive, soft, moist to extremely moist	sample collected
15	16-20'	95%	63.8		
20	20-24'	100%	120		sample collected
25	24-28'	100%	3.0		sample collected
30	28-32'	100%	1.2		sample collected



Proportions Used:
Trace =
Few =
Little =
Some =
Adjective =
And =

Notes:
ft bg = feet below grade
Field Screening measured in ppmv

Blow Count Penetration Resistance:

Consistency (M&C)	Density (G&S)
<2 = Very Soft	0-4 = Very Loose
2-4 = Soft	4-10 = Loose
4-8 = Medium	10-30 = Medium
8-15 = Stiff	30-50 = Dense
15-30 = Very Stiff	50> = Very Dense
>30 = Hard	

Symbols:
Apparent Water Level
Lab Sample Location

Soil Boring

Groundwater & Environmental Services, Inc.

ID NO. **SB-46**

Project: **NYSDEC Highland Plaza**	Client: **NYSDEC**	
Address: **Tonawanda, NY**	GES Job #: **0901703**	
County: **Erie County**	GES Project Mgr: **Eric Popken**	NYSDEC Site No: **C915293A**
Logged By: **Brandon Mikolin**	Date Drilled: **6/20/2017**	Split Spoon/Acetate Sleeve Dia: **1.75"**
Drilling Company: **Empire Geo Services, Inc.**	Completion Date: **6/20/2017**	Split Spoon/Acetate Sleeve Length:
Drill Operator: **Art Koske**	Drilling Method: **Direct Push/Auger**	Soil Classification System: **Mod. Burnmeister**
Drill Rig Type: **Geoprobe 6620 DT**	Sampling Method: **MacroCore**	Field Screening: **PID, 10.2 eV Lamp (ppmv)**
Borehole Diameter: **3"**	Surface Elevation: **Not Surveyed**	Abandonment Method: **Backfilled**
Total Depth: **32'**	Depth to Water: **10'**	Backfill Material: **Soil Cuttings**
Refusal Depth: **Not Applicable**	Well Diameter: **Not Applicable**	Abandonment Completion Date: **6/20/2017**

Depth (feet)	Sample Interval	Recovery (inches)	Field Screen (ppm)	Geologic Description	Comments	Abandonment Detail
0	0-4'	95%	7.2	Fill: Fill, dark grey, sandy silt, some gravel, little sand, massive, dry to moist	Backfilled	
				Clay and Silt: Silty clay, trace sand and gravel, weakly laminated, stiff, dry to moist	sample collected	
5	4-8'	100%	148			
	8-12'	100%	100		sample collected	
10	12-16'	100%	27			
					sample collected	
15	16-20'	100%	1.4	Clay and Silt: Silty clay with gravel, brown, trace sand, massive, soft, moist to extremely moist		
					sample collected	
20	20-24'	100%	1.1			
					sample collected	
25	24-28'	100%	1.6			
					sample collected	
30	28-32'	100%	1.0			
					sample collected	

Proportions Used:
Trace =
Few =
Little =
Some =
Adjective =
And =

Notes:
ft bg = feet below grade
Field Screening measured in ppmv

Blow Count Penetration Resistance:

Consistency (M&C)	Density (G&S)
<2 = Very Soft	0-4 = Very Loose
2-4 = Soft	4-10 = Loose
4-8 = Medium	10-30 = Medium
8-15 = Stiff	30-50 = Dense
15-30 = Very Stiff	50> = Very Dense
>30 = Hard	

Symbols:
Apparent Water Level
Lab Sample Location

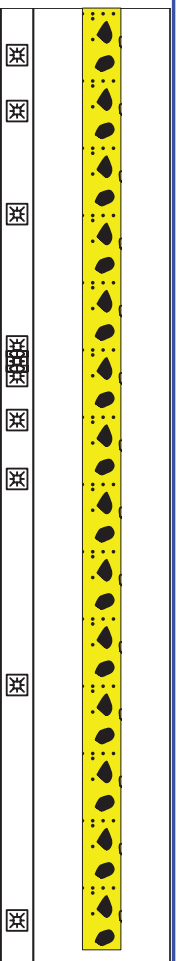
Soil Boring

Groundwater & Environmental Services, Inc.

ID NO. **SB-47**

Project: **NYSDEC Highland Plaza**	Client: **NYSDEC**	
Address: **Tonawanda, NY**	GES Job #: **0901703**	
County: **Erie County**	GES Project Mgr: **Eric Popken**	NYSDEC Site No: **C915293A**
Logged By: **Brandon Mikolin**	Date Drilled: **6/21/2017**	Split Spoon/Acetate Sleeve Dia: **1.75"**
Drilling Company: **Empire Geo Services, Inc.**	Completion Date: **6/21/2017**	Split Spoon/Acetate Sleeve Length:
Drill Operator: **Art Koske**	Drilling Method: **Direct Push/Auger**	Soil Classification System: **Mod. Burnmeister**
Drill Rig Type: **Geoprobe 6620 DT**	Sampling Method: **MacroCore**	Field Screening: **PID, 10.2 eV Lamp (ppmv)**
Borehole Diameter: **3"**	Surface Elevation: **Not Surveyed**	Abandonment Method: **Backfilled**
Total Depth: **32'**	Depth to Water: **Not Encountered**	Backfill Material: **Soil Cuttings**
Refusal Depth: **Not Applicable**	Well Diameter: **Not Applicable**	Abandonment Completion Date: **6/21/2017**

Depth (feet)	Sample Interval	Recovery (inches)	Field Screen (ppm)	Geologic Description	Comments
0	0-4'	92.5%	206	Fill: Fill, black to grey, sandy silt with gravel, little sand, trace asphalt, trace glass debris, massive, dry to moist	Backfilled
				Clay and Silt: Silty clay with gravel, reddish brown, trace sand, weakly laminated, stiff, softer below 15 feet, moist, strongchemical odor at 11-12 feet	sample collected
5	4-8'	97.5%	203		sample collected
	8-12'	87.5%	>2000		sample collected
10	12-16'	100%	1824		sample collected
			229		sample collected
15	16-20'	100%	465	Clay and Silt: Silty clay, brown, trace gravel, trace sand, massive, soft, moist to extremely moist	sample collected
			77		
20	20-24'	100%	30		
	24-28'	0%	NA	No recovery	sample collected
25	28-32'	100%	2.1	Clay and Silt: Silty clay, brown, trace gravel, trace sand, massive, soft, moist to extremely moist	sample collected, Duplicate MS/MSD
30					



Proportions Used:
Trace =
Few =
Little =
Some =
Adjective =
And =

Notes:
ft bg = feet below grade
Field Screening measured in ppmv

Blow Count Penetration Resistance:

Consistency (M&C)	Density (G&S)
<2 = Very Soft	0-4 = Very Loose
2-4 = Soft	4-10 = Loose
4-8 = Medium	10-30 = Medium
8-15 = Stiff	30-50 = Dense
15-30 = Very Stiff	50> = Very Dense
>30 = Hard	

Symbols:
Apparent Water Level
Lab Sample Location

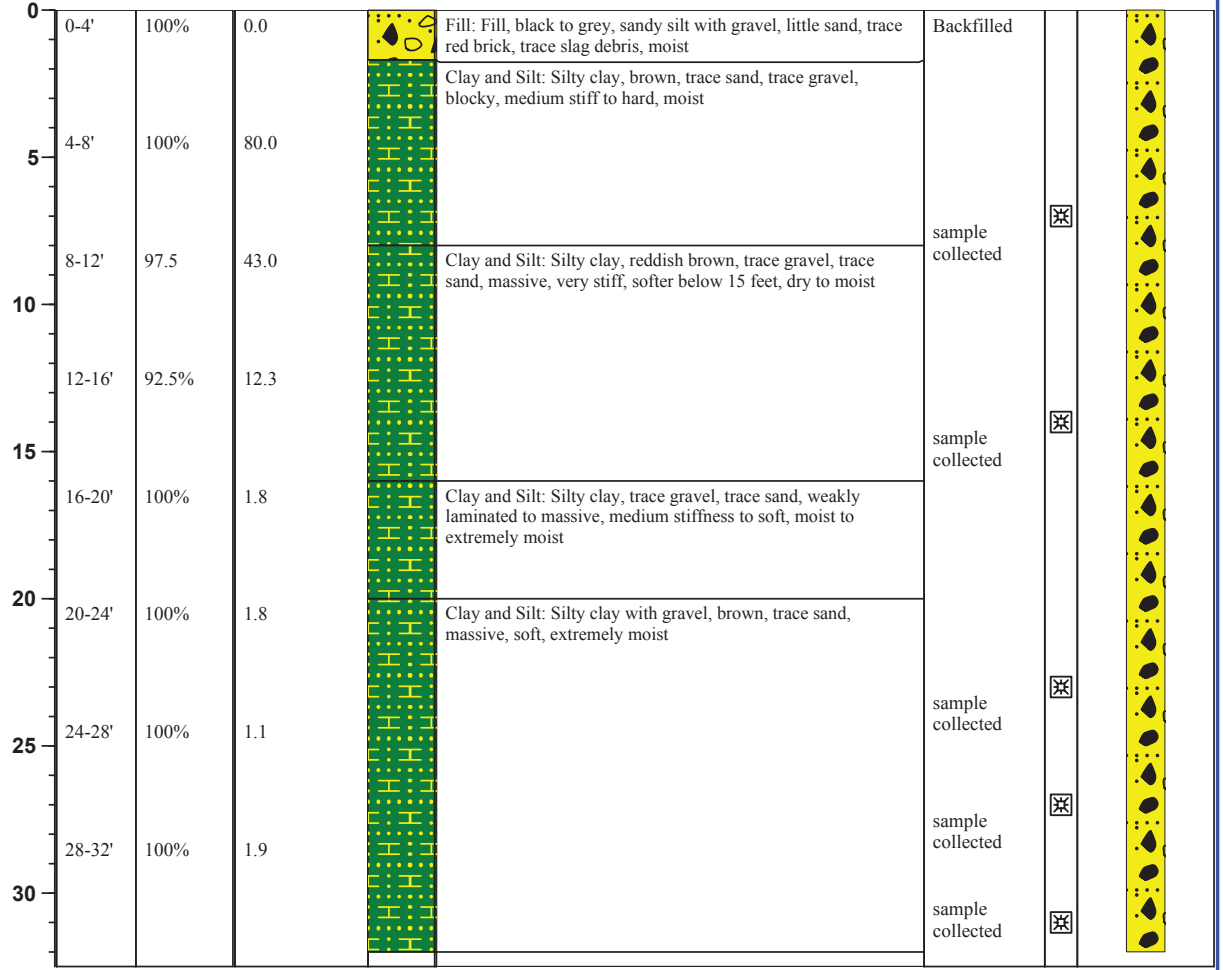
Soil Boring

Groundwater & Environmental Services, Inc.

ID NO. **SB-48**

Project: **NYSDEC Highland Plaza**	Client: **NYSDEC**	
Address: **Tonawanda, NY**	GES Job #: **0901703**	
County: **Erie County**	GES Project Mgr: **Eric Popken**	NYSDEC Site No: **C915293A**
Logged By: **Brandon Mikolin**	Date Drilled: **6/21/2017**	Split Spoon/Acetate Sleeve Dia: **1.75"**
Drilling Company: **Empire Geo Services, Inc.**	Completion Date: **6/21/2017**	Split Spoon/Acetate Sleeve Length:
Drill Operator: **Art Koske**	Drilling Method: **Direct Push/Auger**	Soil Classification System: **Mod. Burnmeister**
Drill Rig Type: **Geoprobe 6620 DT**	Sampling Method: **MacroCore**	Field Screening: **PID, 10.2 eV Lamp (ppmv)**
Borehole Diameter: **3"**	Surface Elevation: **Not Surveyed**	Abandonment Method: **Backfilled**
Total Depth: **32'**	Depth to Water: **Not Encountered**	Backfill Material: **Soil Cuttings**
Refusal Depth: **Not Applicable**	Well Diameter: **Not Applicable**	Abandonment Completion Date: **6/21/2017**

Depth (feet)	Sample Interval	Recovery (inches)	Field Screen (ppm)	Geologic Description	Comments
0	0-4'	100%	0.0	Fill: Fill, black to grey, sandy silt with gravel, little sand, trace red brick, trace slag debris, moist	Backfilled
				Clay and Silt: Silty clay, brown, trace sand, trace gravel, blocky, medium stiff to hard, moist	
5	4-8'	100%	80.0		sample collected
	8-12'	97.5	43.0	Clay and Silt: Silty clay, reddish brown, trace gravel, trace sand, massive, very stiff, softer below 15 feet, dry to moist	
10	12-16'	92.5%	12.3		sample collected
15	16-20'	100%	1.8	Clay and Silt: Silty clay, trace gravel, trace sand, weakly laminated to massive, medium stiffness to soft, moist to extremely moist	
20	20-24'	100%	1.8	Clay and Silt: Silty clay with gravel, brown, trace sand, massive, soft, extremely moist	sample collected
25	24-28'	100%	1.1		sample collected
30	28-32'	100%	1.9		sample collected



Proportions Used:
Trace =
Few =
Little =
Some =
Adjective =
And =

Notes:
ft bg = feet below grade
Field Screening measured in ppmv

Blow Count Penetration Resistance:

Consistency (M&C)	Density (G&S)
<2 = Very Soft	0-4 = Very Loose
2-4 = Soft	4-10 = Loose
4-8 = Medium	10-30 = Medium
8-15 = Stiff	30-50 = Dense
15-30 = Very Stiff	50> = Very Dense
>30 = Hard	

Symbols:
Apparent Water Level
Lab Sample Location

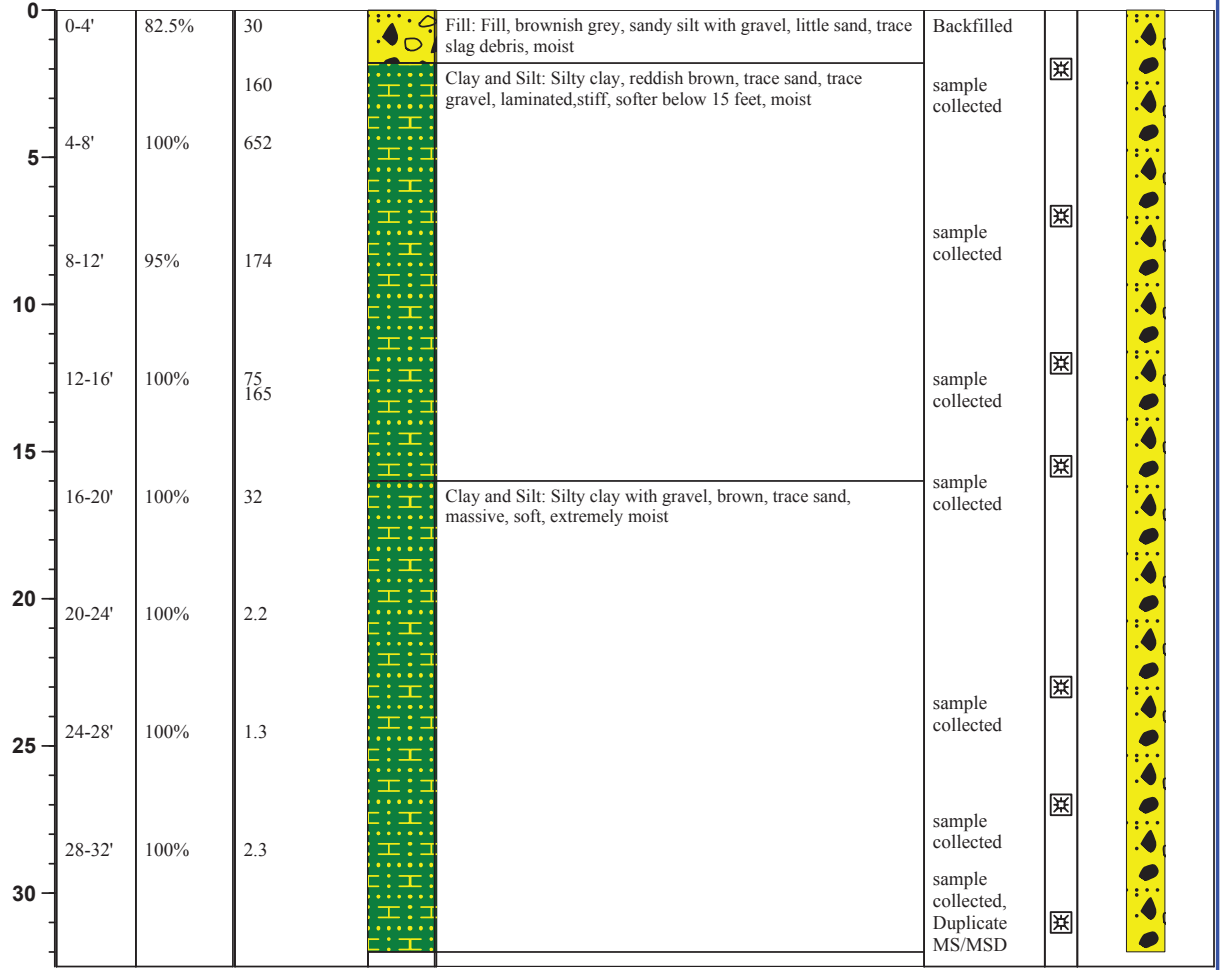
Soil Boring

Groundwater & Environmental Services, Inc.

ID NO. **SB-49**

Project: **NYSDEC Highland Plaza**	Client: **NYSDEC**	
Address: **Tonawanda, NY**	GES Job #: **0901703**	
County: **Erie County**	GES Project Mgr: **Eric Popken**	NYSDEC Site No: **C915293A**
Logged By: **Brandon Mikolin**	Date Drilled: **6/21/2017**	Split Spoon/Acetate Sleeve Dia: **1.75"**
Drilling Company: **Empire Geo Services, Inc.**	Completion Date: **6/21/2017**	Split Spoon/Acetate Sleeve Length:
Drill Operator: **Art Koske**	Drilling Method: **Direct Push/Auger**	Soil Classification System: **Mod. Burnmeister**
Drill Rig Type: **Geoprobe 6620 DT**	Sampling Method: **MacroCore**	Field Screening: **PID, 10.2 eV Lamp (ppmv)**
Borehole Diameter: **3"**	Surface Elevation: **Not Surveyed**	Abandonment Method: **Backfilled**
Total Depth: **32'**	Depth to Water: **Not Encountered**	Backfill Material: **Soil Cuttings**
Refusal Depth: **Not Applicable**	Well Diameter: **Not Applicable**	Abandonment Completion Date: **6/21/2017**

Depth (feet)	Sample Interval	Recovery (inches)	Field Screen (ppm)	Geologic Description	Comments
0	0-4'	82.5%	30	Fill: Fill, brownish grey, sandy silt with gravel, little sand, trace slag debris, moist	Backfilled
			160	Clay and Silt: Silty clay, reddish brown, trace sand, trace gravel, laminated,stiff, softer below 15 feet, moist	sample collected
5	4-8'	100%	652		
	8-12'	95%	174		sample collected
10	12-16'	100%	75 165		sample collected
15	16-20'	100%	32	Clay and Silt: Silty clay with gravel, brown, trace sand, massive, soft, extremely moist	sample collected
20	20-24'	100%	2.2		
25	24-28'	100%	1.3		sample collected
	28-32'	100%	2.3		sample collected
30					sample collected, Duplicate MS/MSD



Proportions Used:
Trace =
Few =
Little =
Some =
Adjective =
And =

Notes:
ft bg = feet below grade
Field Screening measured in ppmv

Blow Count Penetration Resistance:

Consistency (M&C)	Density (G&S)
<2 = Very Soft	0-4 = Very Loose
2-4 = Soft	4-10 = Loose
4-8 = Medium	10-30 = Medium
8-15 = Stiff	30-50 = Dense
15-30 = Very Stiff	50> = Very Dense
>30 = Hard	

Symbols:
Apparent Water Level
Lab Sample Location

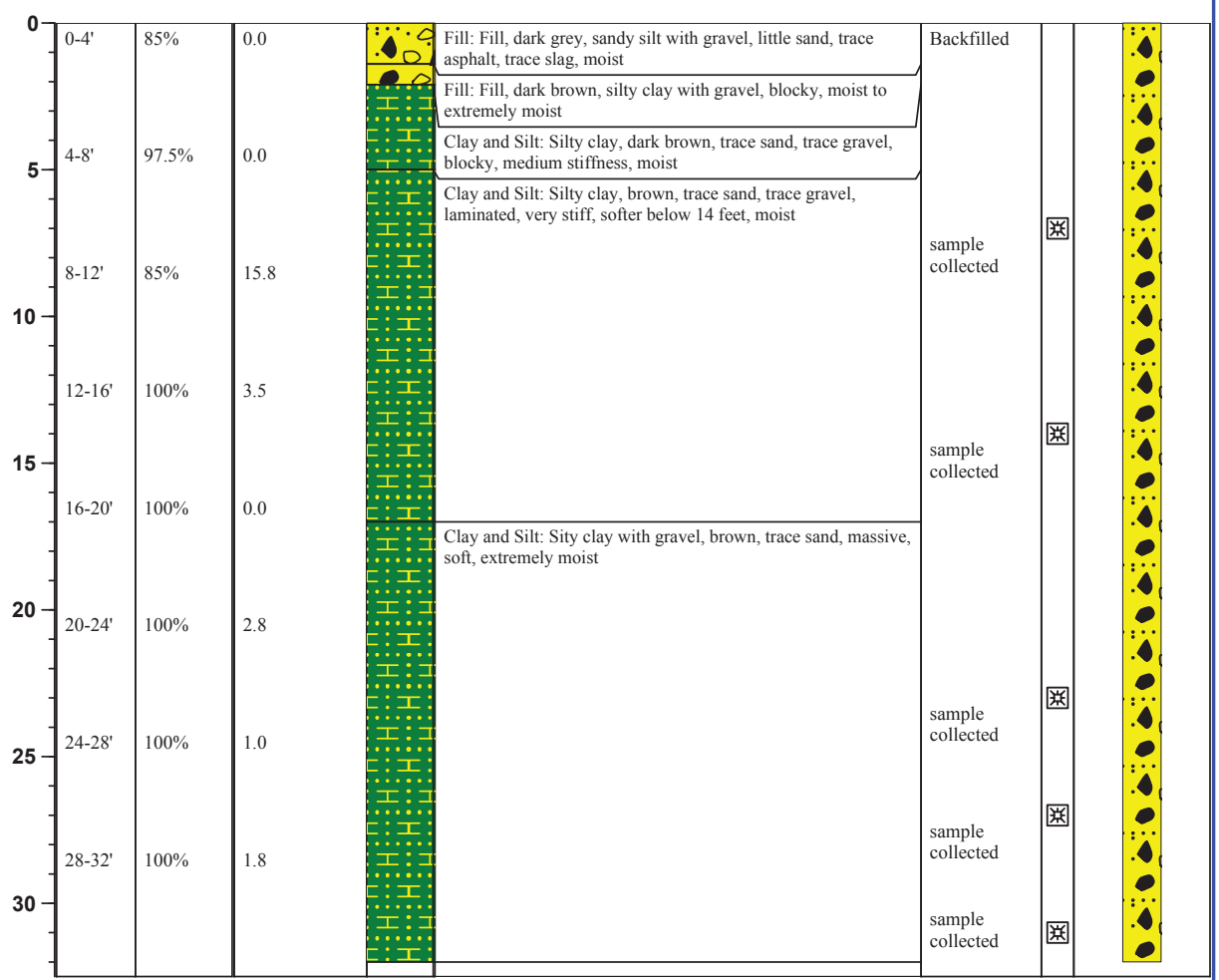
Soil Boring

Groundwater & Environmental Services, Inc.

ID NO. **SB-50**

Project: **NYSDEC Highland Plaza**	Client: **NYSDEC**	
Address: **Tonawanda, NY**	GES Job #: **0901703**	
County: **Erie County**	GES Project Mgr: **Eric Popken**	NYSDEC Site No: **C915293A**
Logged By: **Brandon Mikolin**	Date Drilled: **6/22/2017**	Split Spoon/Acetate Sleeve Dia: **1.75"**
Drilling Company: **Empire Geo Services, Inc.**	Completion Date: **6/22/2017**	Split Spoon/Acetate Sleeve Length:
Drill Operator: **Art Koske**	Drilling Method: **Direct Push/Auger**	Soil Classification System: **Mod. Burnmeister**
Drill Rig Type: **Geoprobe 6620 DT**	Sampling Method: **MacroCore**	Field Screening: **PID, 10.2 eV Lamp (ppmv)**
Borehole Diameter: **3"**	Surface Elevation: **Not Surveyed**	Abandonment Method: **Backfilled**
Total Depth: **32'**	Depth to Water: **Not Encountered**	Backfill Material: **Soil Cuttings**
Refusal Depth: **Not Applicable**	Well Diameter: **Not Applicable**	Abandonment Completion Date: **6/22/2017**

Depth (feet)	Sample Interval	Recovery (inches)	Field Screen (ppm)	Geologic Description	Comments
0	0-4'	85%	0.0	Fill: Fill, dark grey, sandy silt with gravel, little sand, trace asphalt, trace slag, moist	Backfilled
				Fill: Fill, dark brown, silty clay with gravel, blocky, moist to extremely moist	
5	4-8'	97.5%	0.0	Clay and Silt: Silty clay, dark brown, trace sand, trace gravel, blocky, medium stiffness, moist	
				Clay and Silt: Silty clay, brown, trace sand, trace gravel, laminated, very stiff, softer below 14 feet, moist	
10	8-12'	85%	15.8		sample collected
	12-16'	100%	3.5		
15					sample collected
	16-20'	100%	0.0		
				Clay and Silt: Sity clay with gravel, brown, trace sand, massive, soft, extremely moist	
20	20-24'	100%	2.8		
					sample collected
25	24-28'	100%	1.0		
					sample collected
30	28-32'	100%	1.8		
					sample collected



Proportions Used:
Trace =
Few =
Little =
Some =
Adjective =
And =

Notes:
ft bg = feet below grade
Field Screening measured in ppmv

Blow Count Penetration Resistance:

Consistency (M&C)	Density (G&S)
<2 = Very Soft	0-4 = Very Loose
2-4 = Soft	4-10 = Loose
4-8 = Medium	10-30 = Medium
8-15 = Stiff	30-50 = Dense
15-30 = Very Stiff	50> = Very Dense
>30 = Hard	

Symbols:
Apparent Water Level
Lab Sample Location

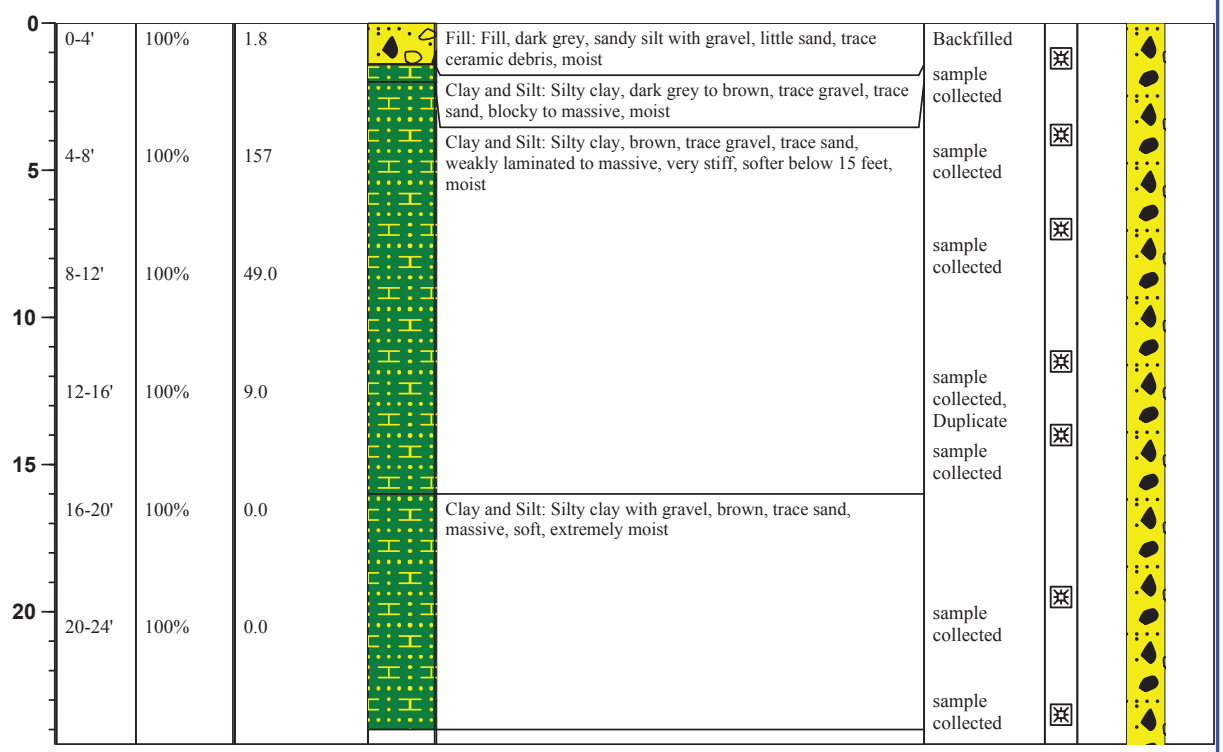
Soil Boring

Groundwater & Environmental Services, Inc.

ID NO. **SB-51**

Project: **NYSDEC Highland Plaza**	Client: **NYSDEC**	
Address: **Tonawanda, NY**	GES Job #: **0901703**	
County: **Erie County**	GES Project Mgr: **Eric Popken**	NYSDEC Site No: **C915293A**
Logged By: **Brandon Mikolin**	Date Drilled: **6/22/2017**	Split Spoon/Acetate Sleeve Dia: **1.75"**
Drilling Company: **Empire Geo Services, Inc.**	Completion Date: **6/22/2017**	Split Spoon/Acetate Sleeve Length:
Drill Operator: **Art Koske**	Drilling Method: **Direct Push/Auger**	Soil Classification System: **Mod. Burnmeister**
Drill Rig Type: **Geoprobe 6620 DT**	Sampling Method: **MacroCore**	Field Screening: **PID, 10.2 eV Lamp (ppmv)**
Borehole Diameter: **3"**	Surface Elevation: **Not Surveyed**	Abandonment Method: **Backfilled**
Total Depth: **24'**	Depth to Water: **Not Encountered**	Backfill Material: **Soil Cuttings**
Refusal Depth: **Not Applicable**	Well Diameter: **Not Applicable**	Abandonment Completion Date: **6/22/2017**

Depth (feet)	Sample Interval	Recovery (inches)	Field Screen (ppm)	Geologic Description	Comments
0	0-4'	100%	1.8	Fill: Fill, dark grey, sandy silt with gravel, little sand, trace ceramic debris, moist	Backfilled sample collected
				Clay and Silt: Silty clay, dark grey to brown, trace gravel, trace sand, blocky to massive, moist	
5	4-8'	100%	157	Clay and Silt: Silty clay, brown, trace gravel, trace sand, weakly laminated to massive, very stiff, softer below 15 feet, moist	sample collected
	8-12'	100%	49.0		sample collected
10	12-16'	100%	9.0		sample collected, Duplicate
15	16-20'	100%	0.0	Clay and Silt: Silty clay with gravel, brown, trace sand, massive, soft, extremely moist	sample collected
20	20-24'	100%	0.0		sample collected



Proportions Used:
Trace =
Few =
Little =
Some =
Adjective =
And =

Notes:
ft bg = feet below grade
Field Screening measured in ppmv

Blow Count Penetration Resistance:

Consistency (M&C)	Density (G&S)
<2 = Very Soft	0-4 = Very Loose
2-4 = Soft	4-10 = Loose
4-8 = Medium	10-30 = Medium
8-15 = Stiff	30-50 = Dense
15-30 = Very Stiff	50> = Very Dense
>30 = Hard	

Symbols:
Apparent Water Level
Lab Sample Location

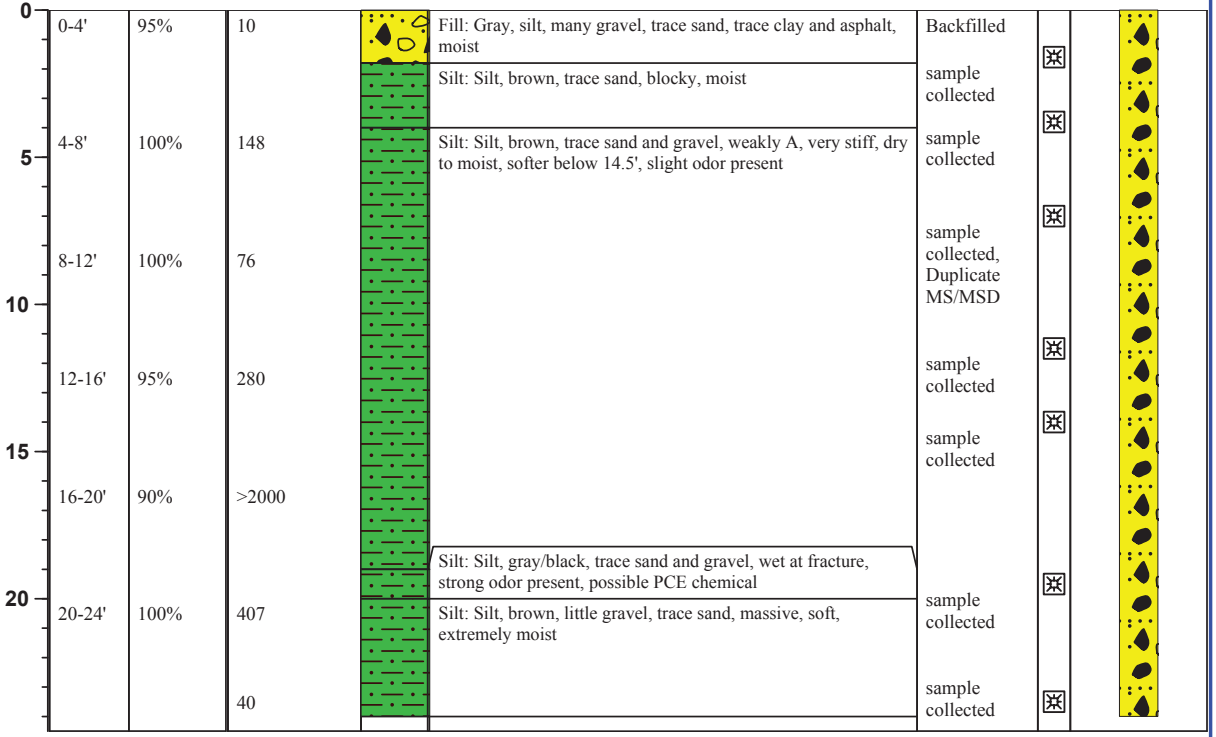
Soil Boring

Groundwater & Environmental Services, Inc.

ID NO. **SB-52**

Project: **NYSDEC Highland Plaza**	Client: **NYSDEC**	
Address: **Tonawanda, NY**	GES Job #: **0901703**	
County: **Erie County**	GES Project Mgr: **Eric Popken**	NYSDEC Site No: **C915293A**
Logged By: **Brandon Mikolin**	Date Drilled: **6/22/2017**	Split Spoon/Acetate Sleeve Dia: **1.75"**
Drilling Company: **Empire Geo Services, Inc.**	Completion Date: **6/22/2017**	Split Spoon/Acetate Sleeve Length:
Drill Operator: **Art Koske**	Drilling Method: **Direct Push/Auger**	Soil Classification System: **Mod. Burnmeister**
Drill Rig Type: **Geoprobe 6620 DT**	Sampling Method: **MacroCore**	Field Screening: **PID, 10.2 eV Lamp (ppmv)**
Borehole Diameter: **3"**	Surface Elevation: **Not Surveyed**	Abandonment Method: **Backfilled**
Total Depth: **24'**	Depth to Water: **Not Encountered**	Backfill Material: **Soil Cuttings**
Refusal Depth: **Not Applicable**	Well Diameter: **Not Applicable**	Abandonment Completion Date: **6/22/2017**

Depth (feet)	Sample Interval	Recovery (inches)	Field Screen (ppm)	Geologic Description	Comments
0	0-4'	95%	10	Fill: Gray, silt, many gravel, trace sand, trace clay and asphalt, moist	Backfilled
				Silt: Silt, brown, trace sand, blocky, moist	sample collected
5	4-8'	100%	148	Silt: Silt, brown, trace sand and gravel, weakly A, very stiff, dry to moist, softer below 14.5', slight odor present	sample collected
	8-12'	100%	76		sample collected, Duplicate MS/MSD
10	12-16'	95%	280		sample collected
15	16-20'	90%	>2000		sample collected
				Silt: Silt, gray/black, trace sand and gravel, wet at fracture, strong odor present, possible PCE chemical	
20	20-24'	100%	407	Silt: Silt, brown, little gravel, trace sand, massive, soft, extremely moist	sample collected
			40		sample collected



Proportions Used:
Trace =
Few =
Little =
Some =
Adjective =
And =

Notes:
ft bg = feet below grade
Field Screening measured in ppmv

Blow Count Penetration Resistance:

Consistency (M&C)	Density (G&S)
<2 = Very Soft	0-4 = Very Loose
2-4 = Soft	4-10 = Loose
4-8 = Medium	10-30 = Medium
8-15 = Stiff	30-50 = Dense
15-30 = Very Stiff	50> = Very Dense
>30 = Hard	

Symbols:
Apparent Water Level
Lab Sample Location

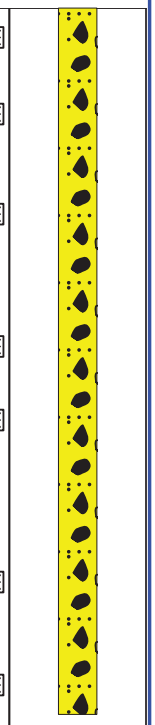
Soil Boring

Groundwater & Environmental Services, Inc.

ID NO. **SB-53**

Project: **NYSDEC Highland Plaza**	Client: **NYSDEC**	
Address: **Tonawanda, NY**	GES Job #: **0901703**	
County: **Erie County**	GES Project Mgr: **Eric Popken**	NYSDEC Site No: **C915293A**
Logged By: **Brandon Mikolin**	Date Drilled: **6/22/2017**	Split Spoon/Acetate Sleeve Dia: **1.75"**
Drilling Company: **Empire Geo Services, Inc.**	Completion Date: **6/22/2017**	Split Spoon/Acetate Sleeve Length:
Drill Operator: **Art Koske**	Drilling Method: **Direct Push/Auger**	Soil Classification System: **Mod. Burnmeister**
Drill Rig Type: **Geoprobe 6620 DT**	Sampling Method: **MacroCore**	Field Screening: **PID, 10.2 eV Lamp (ppmv)**
Borehole Diameter: **3"**	Surface Elevation: **Not Surveyed**	Abandonment Method: **Backfilled**
Total Depth: **24'**	Depth to Water: **Not Encountered**	Backfill Material: **Soil Cuttings**
Refusal Depth: **Not Applicable**	Well Diameter: **Not Applicable**	Abandonment Completion Date: **6/22/2017**

Depth (feet)	Sample Interval	Recovery (inches)	Field Screen (ppm)	Geologic Description	Comments
0	0-4'	92.5%	107	Topsoil: Topsoil, dark brown, sandy silty, little sand, trace gravel, trace organic matter, moist	Backfilled sample collected
			>2000	Clay and Silt: Silty clay, brown, trace gravel, trace sand, blocky to weakly laminated, medium stiffness, moist	
5	4-8'	100%		Clay and Silt: Silty clay, brown, trace gravel, trace sand, weakly laminated, very stiff, softer after 15 feet, dry to moist	sample collected
			>2000		sample collected, Duplicate
10	8-12'	100%	766		
	12-16'	100%	163		sample collected
15					sample collected
	16-20'	100%	90.0	Clay and Silt: Silty clay with gravel, brown, trace sand, massive, soft, moist to extremely moist	
20	20-24'	100%	3.0		sample collected
					sample collected



Proportions Used:
Trace =
Few =
Little =
Some =
Adjective =
And =

Notes:
ft bg = feet below grade
Field Screening measured in ppmv

Blow Count Penetration Resistance:

Consistency (M&C)	Density (G&S)
<2 = Very Soft	0-4 = Very Loose
2-4 = Soft	4-10 = Loose
4-8 = Medium	10-30 = Medium
8-15 = Stiff	30-50 = Dense
15-30 = Very Stiff	50> = Very Dense
>30 = Hard	

Symbols:
Apparent Water Level
Lab Sample Location

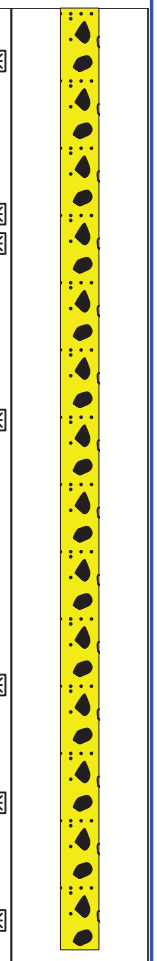
Soil Boring

Groundwater & Environmental Services, Inc.

ID NO. **SB-54**

Project: **NYSDEC Highland Plaza**	Client: **NYSDEC**	
Address: **Tonawanda, NY**	GES Job #: **0901703**	
County: **Erie County**	GES Project Mgr: **Eric Popken**	NYSDEC Site No: **C915293A**
Logged By: **Brandon Mikolin**	Date Drilled: **6/20/2017**	Split Spoon/Acetate Sleeve Dia: **1.75"**
Drilling Company: **Empire Geo Services, Inc.**	Completion Date: **6/20/2017**	Split Spoon/Acetate Sleeve Length:
Drill Operator: **Art Koske**	Drilling Method: **Direct Push/Auger**	Soil Classification System: **Mod. Burnmeister**
Drill Rig Type: **Geoprobe 6620 DT**	Sampling Method: **MacroCore**	Field Screening: **PID, 10.2 eV Lamp (ppmv)**
Borehole Diameter: **3"**	Surface Elevation: **Not Surveyed**	Abandonment Method: **Backfilled**
Total Depth: **32'**	Depth to Water: **Not Encountered**	Backfill Material: **Soil Cuttings**
Refusal Depth: **Not Applicable**	Well Diameter: **Not Applicable**	Abandonment Completion Date: **6/20/2017**

Depth (feet)	Sample Interval	Recovery (inches)	Field Screen (ppm)	Geologic Description	Comments
0	0-4'	100%	0.0	Fill: Fill, light brown, sandy silt with gravel, little sand, trace brick and concrete debris, dry to moist	Backfilled
				Clay and Silt: Silty clay, reddish brown, trace sand and gravel, stiff, dry to moist, slight odor at 10 feet	sample collected
5	4-8'	97.5%	40.6		sample collected
	8-12'	100%	62.0		sample collected
10	12-16'	100%	5.0	Clay and Silt: Silty clay, reddish brown, trace sand and gravel, stiff, dry to moist, slight odor at 15 feet	sample collected
15	16-20'	100%	59.0	Clay and Silt: Silty clay, brown, trace gravel, trace sand, massive, soft, extremely moist	
20	20-24'	100%	0.5		sample collected
25	24-28'	100%	0.9		sample collected
	28-32'	100%	0.0		sample collected
30					



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Lab Sample Location