

Appendix C

Miscellaneous Exhibits

Exhibit C-1 Generalized Soil Profiles
Exhibit C-2 ASCE7 Hazards Report

LEGEND

ATTACHMENT TO CEG REPORT NUMBER: 172E-01-0124

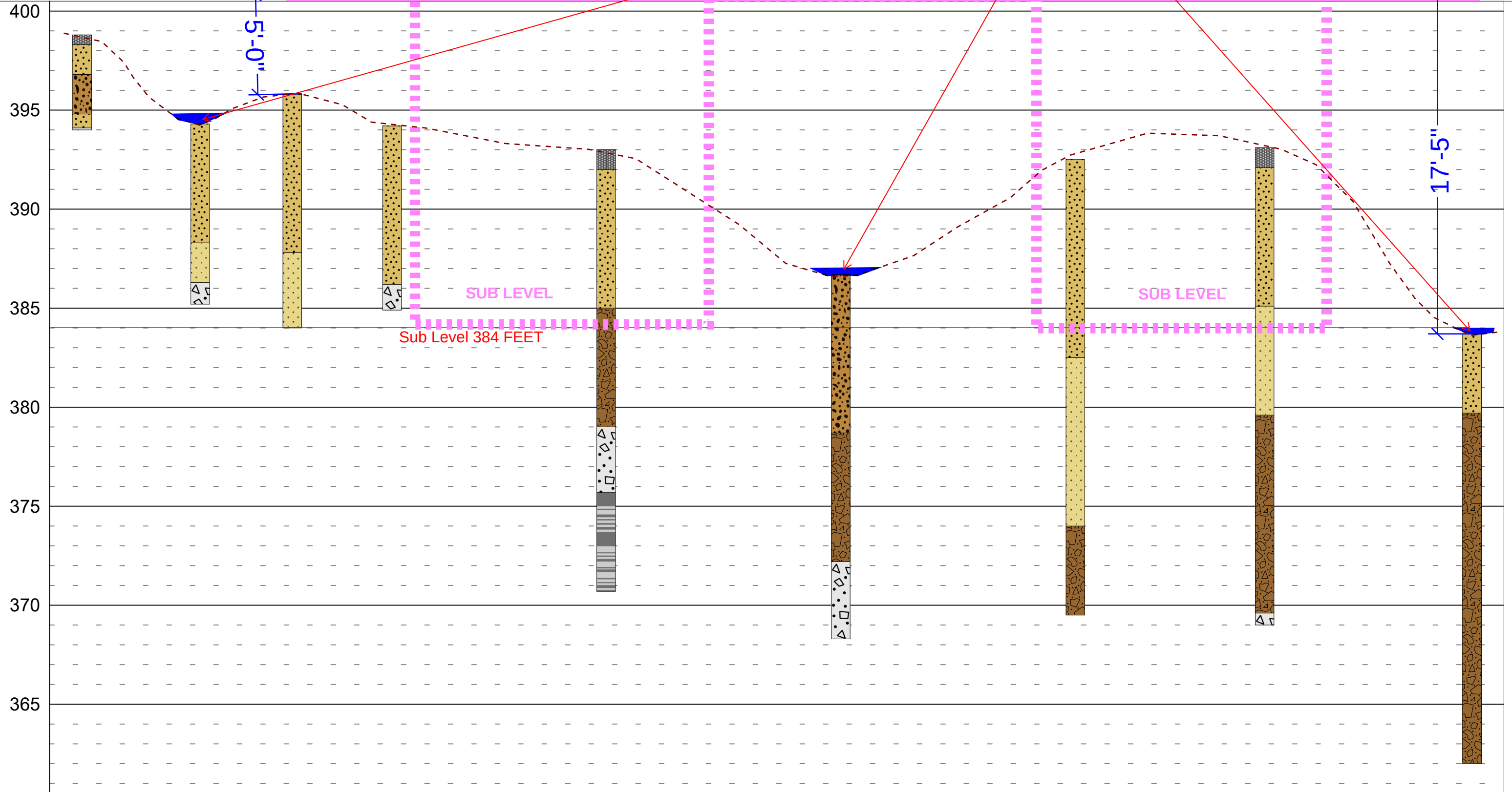
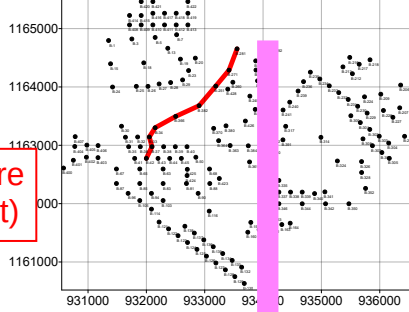
EXHIBIT C-1: GENERALIZED SUBSURFACE PROFILES

Page 1 of 2

- | | | | |
|---|-----------|---|---------------|
|  | TOPSOIL |  | LOOSE SAND |
|  | FILL |  | SILT AND SAND |
|  | CLAY |  | GLACIAL TILL |
|  | SOFT SILT |  | ROCK |
|  | SILT |  | BEDROCK |

GENERALIZED SUBSURFACE PROFILE
FAB 1

Headwater Natural Drainage Feature
(See Figure 5 of Referenced Report)

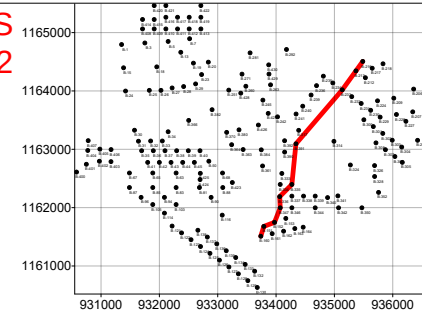


LEGEND

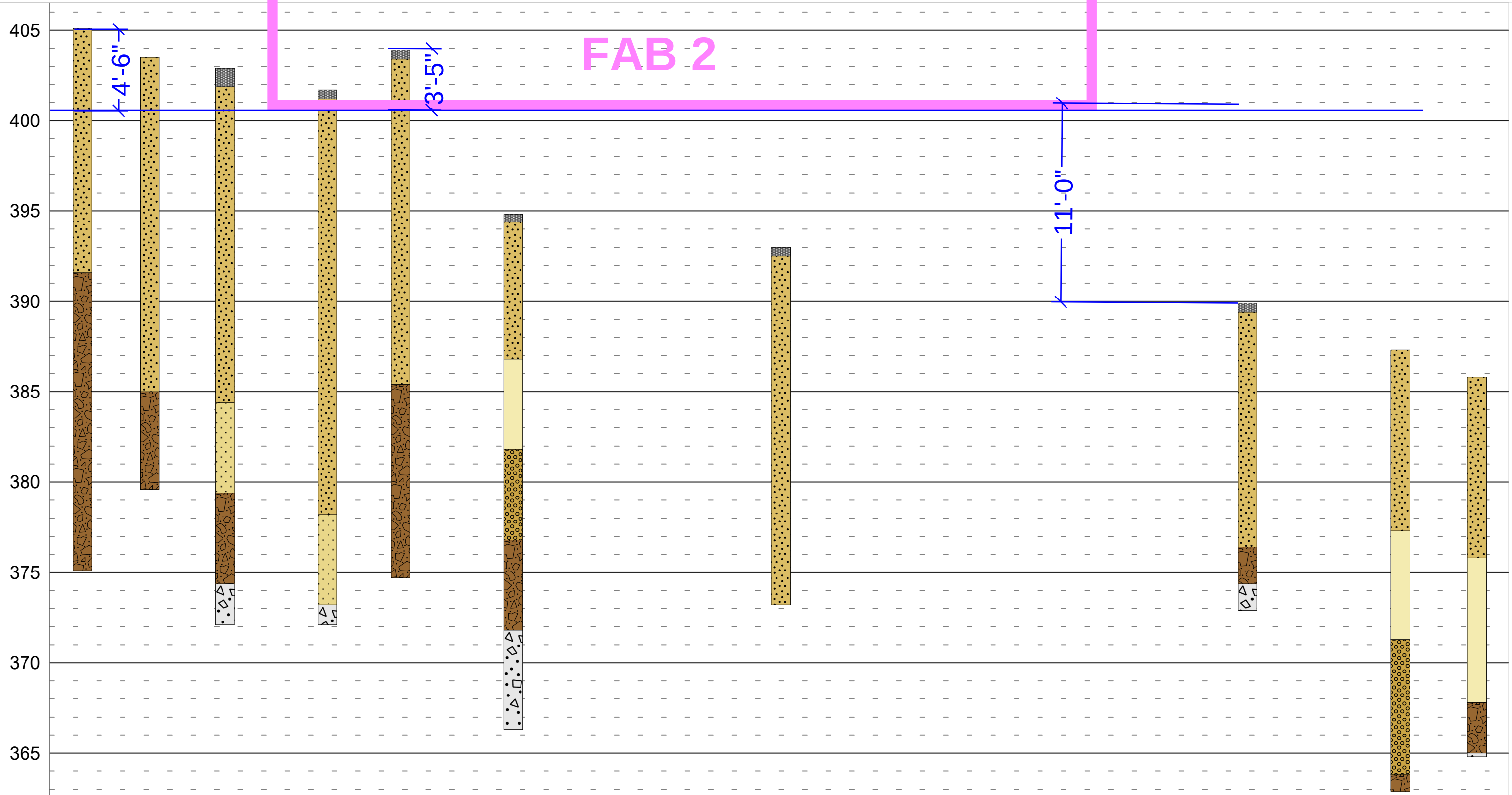
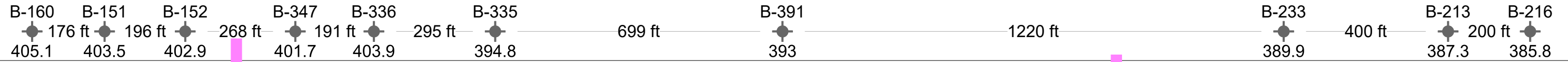
ATTACHMENT TO CEG REPORT NUMBER: 172E-01-0124

EXHIBIT C-1: GENERALIZED SUBSURFACE PROFILES

Page 2 of 2



GENERALIZED SUBSURFACE PROFILE



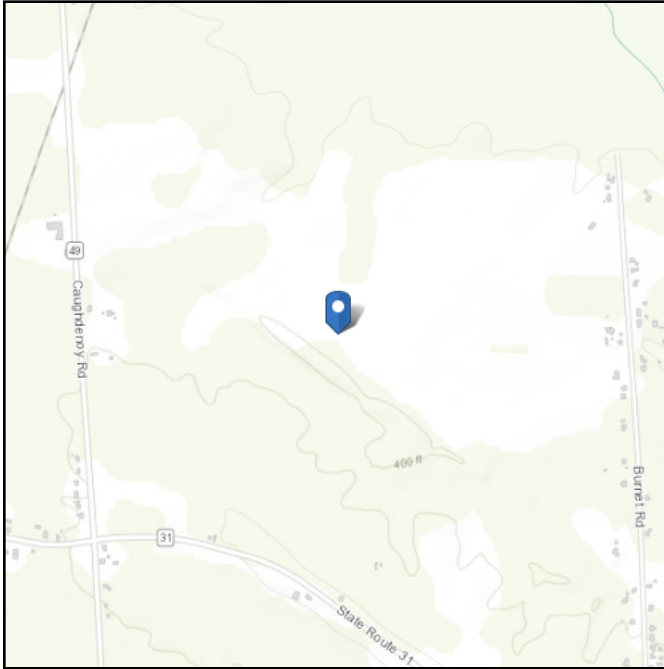


ASCE Hazards Report

Address:
No Address at This Location

Standard: ASCE/SEI 7-16
Risk Category: III
Soil Class: D - Stiff Soil

Latitude: 43.190766
Longitude: -76.157611
Elevation: 392.9035682946986 ft
(NAVD 88)

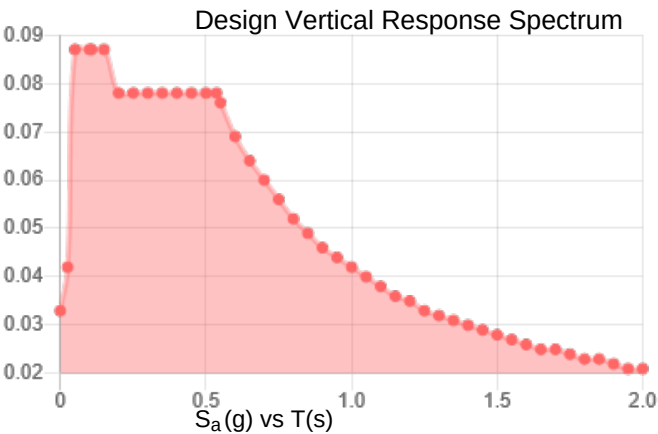
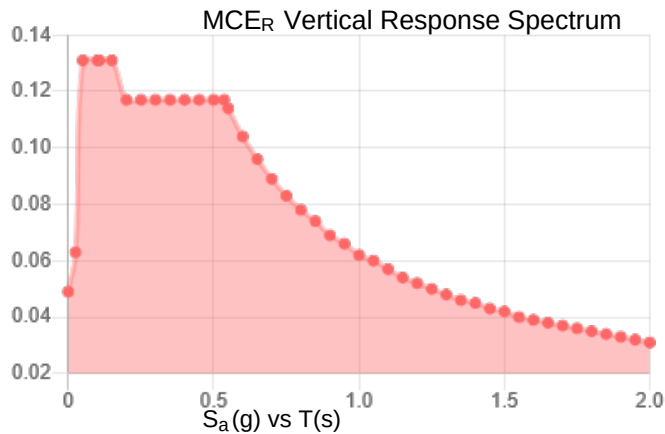
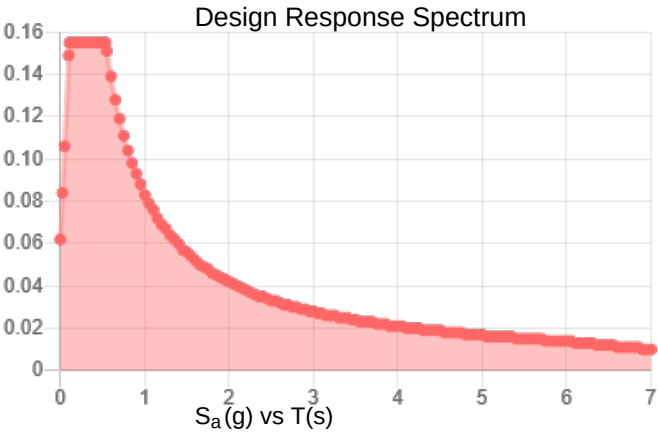
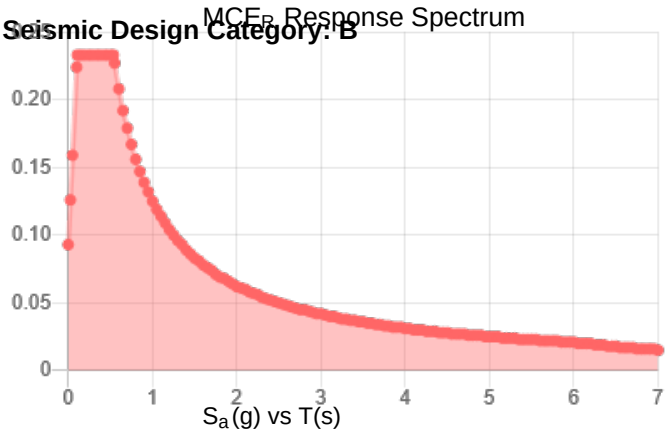




Site Soil Class: D - Stiff Soil

Results:

S_S :	0.146	S_{D1} :	0.083
S_1 :	0.052	T_L :	6
F_a :	1.6	PGA :	0.073
F_v :	2.4	PGA _M :	0.117
S_{MS} :	0.233	F_{PGA} :	1.6
S_{M1} :	0.125	I_e :	1.25
S_{DS} :	0.155	C_v :	0.7



Data Accessed: Thu Feb 01 2024

Date Source:

USGS Seismic Design Maps based on ASCE/SEI 7-16 and ASCE/SEI 7-16 Table 1.5-2. Additional data for site-specific ground motion procedures in accordance with ASCE/SEI 7-16 Ch. 21 are available from USGS.



The ASCE Hazard Tool is provided for your convenience, for informational purposes only, and is provided "as is" and without warranties of any kind. The location data included herein has been obtained from information developed, produced, and maintained by third party providers; or has been extrapolated from maps incorporated in the ASCE standard. While ASCE has made every effort to use data obtained from reliable sources or methodologies, ASCE does not make any representations or warranties as to the accuracy, completeness, reliability, currency, or quality of any data provided herein. Any third-party links provided by this Tool should not be construed as an endorsement, affiliation, relationship, or sponsorship of such third-party content by or from ASCE.

ASCE does not intend, nor should anyone interpret, the results provided by this Tool to replace the sound judgment of a competent professional, having knowledge and experience in the appropriate field(s) of practice, nor to substitute for the standard of care required of such professionals in interpreting and applying the contents of this Tool or the ASCE standard.

In using this Tool, you expressly assume all risks associated with your use. Under no circumstances shall ASCE or its officers, directors, employees, members, affiliates, or agents be liable to you or any other person for any direct, indirect, special, incidental, or consequential damages arising from or related to your use of, or reliance on, the Tool or any information obtained therein. To the fullest extent permitted by law, you agree to release and hold harmless ASCE from any and all liability of any nature arising out of or resulting from any use of data provided by the ASCE Hazard Tool.

CME Report No. 28062B-04-0724



6035 Corporate Drive
East Syracuse, New York 13057
(315) 701-0522
(315) 701-0526 (Fax)
www.cmeassociates.com

Transmittal

July 16, 2024

Ramboll (Client)
94 New Karner Road
Albany, New York
Phone: 315.420.8439

Attn: Andy Philips, Sr. Project Manager
Andy.Philips@Ramboll.com

Re: Micron Campus
Clay, New York
CME Project No.: 28062-05

Gentlepeople:

Enclosed you will find....

<u>Number of Copies</u>	<u>Report Number</u>	<u>Description</u>
1	28062B-04-0724	Geotechnical Data Report – Third Phase

The above report was emailed to Andy Philips at Andy.Philips@Ramboll.com on 07/16/2024.

Respectfully submitted,
CME Associates, Inc.

A handwritten signature in black ink, appearing to read "Anas N. Anasthas".

Anas N. Anasthas, P.E.
Senior Geotechnical Engineer

AA.js



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July 16, 2024

Ramboll
94 New Karner Road
Albany, New York
Phone: 315.420.8439

Attn: Andy Philips, Sr. Project Manager
Andy.Philips@Ramboll.com

Re: Geotechnical Data Report – Third Phase
Micron Campus
Clay, New York
CME Report No. 28062B-04-0724
Page 1 of 4

1.0 INTRODUCTION

CME Associates, Inc. (CME) was retained by Ramboll (Client) to provide subsurface exploration and geotechnical services for the subject project. In Spring 2024, CME conducted a limited subsurface exploration at the subject project site as part of the third phase exploration program.

The Scope of Basic Services and this report have been provided pursuant to CME Proposal/Agreement No.: 05.7126, Addendum 3, dated 04/07/2023, authorized by Client via Ramboll PO# 1950006347, dated 04/14/2023, and subsequent CME Change Order No. 2, authorized via Ramboll PO# 1950007864, dated 03/25/2024. This report provides a summary of the third phase exploration activities conducted at the subject project site.

Please note, the first phase exploration at this site was conducted by CME in May/June 2023 and CME's deliverables consisted of the previously issued *Geotechnical Data Report - Revision 1*, labeled CME Report Number: 28062B-01-0523R1, dated 06/20/2023. The second phase exploration at this site was conducted by CME in September/October 2023 and CME's deliverables consisted of the previously issued *Geotechnical Data Report - Second Phase*, labeled CME Report Number: 28062B-03-1223, dated 12/08/2023.

2.0 EXPLORATION METHODOLOGY

2.1 Exploration Layout and Utility Clearance

The exploration locations were selected by the Client and staked by Thew Associates (Thew). Following the field stakeout, CME contacted UDig NY to clear public utilities at the exploration locations. Private utilities at the exploration locations were cleared by Thew. No utility conflicts were noted at the exploration locations.

The attached *Exploration Location Plans* depict the approximate locations of the third phase explorations. Elevation at grade at the exploration locations, along with Northing and Easting coordinates, was provided by Thew. Please see the attached *Elevation and Coordinates Tables* prepared using the survey data provided by Thew.

A New York State Certified Woman-Owned Business Enterprise (WBE)

2.2 Test Borings

A total of 134 Test Borings were completed by CME and a Subcontractor to CME. The Test Borings were advanced using either a Central Mine Equipment Model 550X, Model 55, or Model 45, ATV-mounted, rotary exploration drill rig, equipped with 3-1/4" I.D. hollow stem augers. Soil sampling was conducted using a 140-pound hammer dropping through 30 inches to drive a 2" O.D. split barrel sampler in general conformance with ASTM Standard Practice D1586. Rock coring was performed in general conformance with ASTM Standard Practice D2113. Undisturbed Shelby Tube sampling was conducted in general conformance with ASTM Standard Practice D1587. All Borings were backfilled with auger cuttings to nearly match existing grades.

Soil samples were logged and visually classified in the field by the Driller or an on-site Geologist, and a portion of each soil sample was placed and sealed in a glass jar. Bedrock cores were placed and secured in a wooden box. The soil and rock classifications were later reviewed by a CME Engineer in CME's East Syracuse AASHTO re:source¹ Accredited Laboratory. The visual soil classifications were made using a modified Burmister Classification System, as practiced by CME, and as generally described in the attached document entitled *General Information & Key to the Test Boring Logs*. The *Test Boring Logs* and *Bedrock Core Photographs* are also attached to this report.

2.3 Auger Probes

A total of 5 Auger Probes were completed by CME at explorations locations labeled B-522, B-524, B-525, B-527, and B-528. The Auger Probes were advanced to depths where auger refusal was encountered on probable bedrock. The Auger Probes were advanced using a Central Mine Equipment Model 550X, ATV-mounted, rotary exploration drill rig, equipped with 3-1/4" I.D. hollow stem augers. The *Auger Probe Logs* are attached to this report.

2.4 Groundwater Monitoring Wells

A total of 9 Groundwater Monitoring Wells, labeled W-10, W-11, W-12, W-13, W-14, W-16, W-17, W-18, and W-19, were installed in or near Test Borings B-505, B-522, B-546, B-557, B-564, B-604, B-618, B-676, and B-683, respectively. Please refer to the attached *Groundwater Monitoring Well Logs* for details of the well installation.

As part of the first phase exploration, 3 Groundwater Monitoring Wells, labeled W-1, W-2 and W-3, were installed in or near Test Borings B-129, B-24, and B-227, respectively. As part of the second phase exploration, 6 Groundwater Monitoring Wells, labeled W-4, W-5, W-6, W-7, W-8 and W-9, were installed in or near Test Borings B-337, B-391, B-370, B-400, B-420, and B-422, respectively.

Periodic monitoring of the groundwater level in the wells was performed by CME. Please refer to the attached *Groundwater Observation Summary Table* for groundwater levels observed, thus far.

2.5 Infiltration Testing

A total of 5 Infiltration Tests, labeled IT-TP301, IT-TP302, IT-TP305, IT-B565, and IT-B611, were performed. The tests were performed in general conformance with the requirements of the New York State Stormwater Management Design Manual, Appendix D: Infiltration Testing. The test details and results are given in the attached *Infiltration Test Reports*.

¹ AASHTO re:source – American Association of State Highway & Transportation Officials (AASHTO) Materials Reference Laboratory, a Federal Agency having jurisdiction to assess laboratory competency according to the Standards of the United States of America. CME East Syracuse accreditation includes testing of Portland Cement Concrete, Aggregate and Soil Materials. www.AASHTOresource.org.

2.6 Test Pits

A total of 17 Test Pits were excavated using a Link Belt Model LNK 27 excavator, equipped with a 24-inch-wide general-purpose bucket. The Test Pits were excavated and backfilled by a Subcontractor to CME. The backfill consisted of excavated materials placed in 2 to 3 feet thick lifts, with each lift compacted using the excavator bucket. CME Engineer Astitwa Sharma, E.I.T. was on-site to observe the Test Pit excavation, take photographs, and prepare Test Pit Logs. The *Test Pit Logs* and *Test Pit Photographs* are attached to this report.

Soil samples were logged and visually classified in the field by Astitwa Sharma. The visual soil classifications were made using the modified Burmister Classification System.

In-situ Vane Shear Tests were performed at various depths in the Test Pits utilizing a Humbolt H-60 field testing apparatus. Pocket Penetrometer Testing was also performed in the Test Pits. Please refer to the attached *Vane Shear Test and Pocket Penetrometer Test Summary Tables* for test results.

2.7 Field Soil Resistivity Testing

Field soil resistivity testing at a total of 24 survey points identified on the attached *Exploration Location Plans* were completed by CME. CME utilized a Miller 400D Digital Soil Resistivity Meter to conduct soil resistivity testing. At each point the line of probes were oriented to avoid trees and to minimize grade elevation change. All lines were surveyed in areas free of standing water or mud. The soil resistivity tests were performed in general conformance with ASTM G57 Standard Test Method for Measurement of Soil Resistivity using the Wenner Four – Electrode Method. Probe spacings of 4 feet to 20 feet were used along all survey lines. Probe depths were approximately 2.5 inches.

Field soil resistivity data and calculated Resistivity ($\Omega \cdot \text{cm}$) are provided in the attached *Field Soil Resistivity Observations Summary Table*. Please see attached *Field Soil Resistivity Photographs* for groundcover conditions at the time of survey.

2.8 Laboratory Testing

Laboratory testing was performed on selected soil samples, consisting of Natural Moisture Content, Atterberg Limits, Particle Size Analysis, One-Dimensional Consolidation, Unconfined Compressive Strength of Cohesive Soil, Moisture-Density Relationship (Proctor Compaction), Rock Core Compression, and California Bearing Ratio (CBR), in CME's East Syracuse Laboratory. Please refer to the attached *Laboratory Test Summary Report* for test methods and results.

3.0 STANDARD OF CARE

CME endeavored to conduct services identified herein in a manner consistent with that level of care and skill ordinarily exercised by members of the industry currently practicing in the same locality and under similar conditions as this project. No warranty, either expressed or implied, is made or intended by CME's proposal, contract, and written or oral reports, all of which warranties are hereby expressly disclaimed. CME shall not be responsible for the acts or omissions of the Client, its contractors, agents, and consultants. CME may rely upon information supplied by Client, its contractors, agents, and consultants or information available from generally accepted reputable sources, without independent verification, and CME assumes no responsibility for the accuracy thereof.

4.0 CLOSING

CME's services have been provided according to the requirements of the referenced CME Proposal/Agreement. No other representations, expressed or implied, are intended or made with respect to the information provided herein, including but not limited to, its suitability for use by others.

Respectfully Submitted,

CME Associates, Inc.

A handwritten signature in black ink, appearing to read "Anas N. Anasthas", written over a horizontal line.

Anas N. Anasthas, P.E.
Senior Geotechnical Engineer

Reviewed by:

CME Associates, Inc.

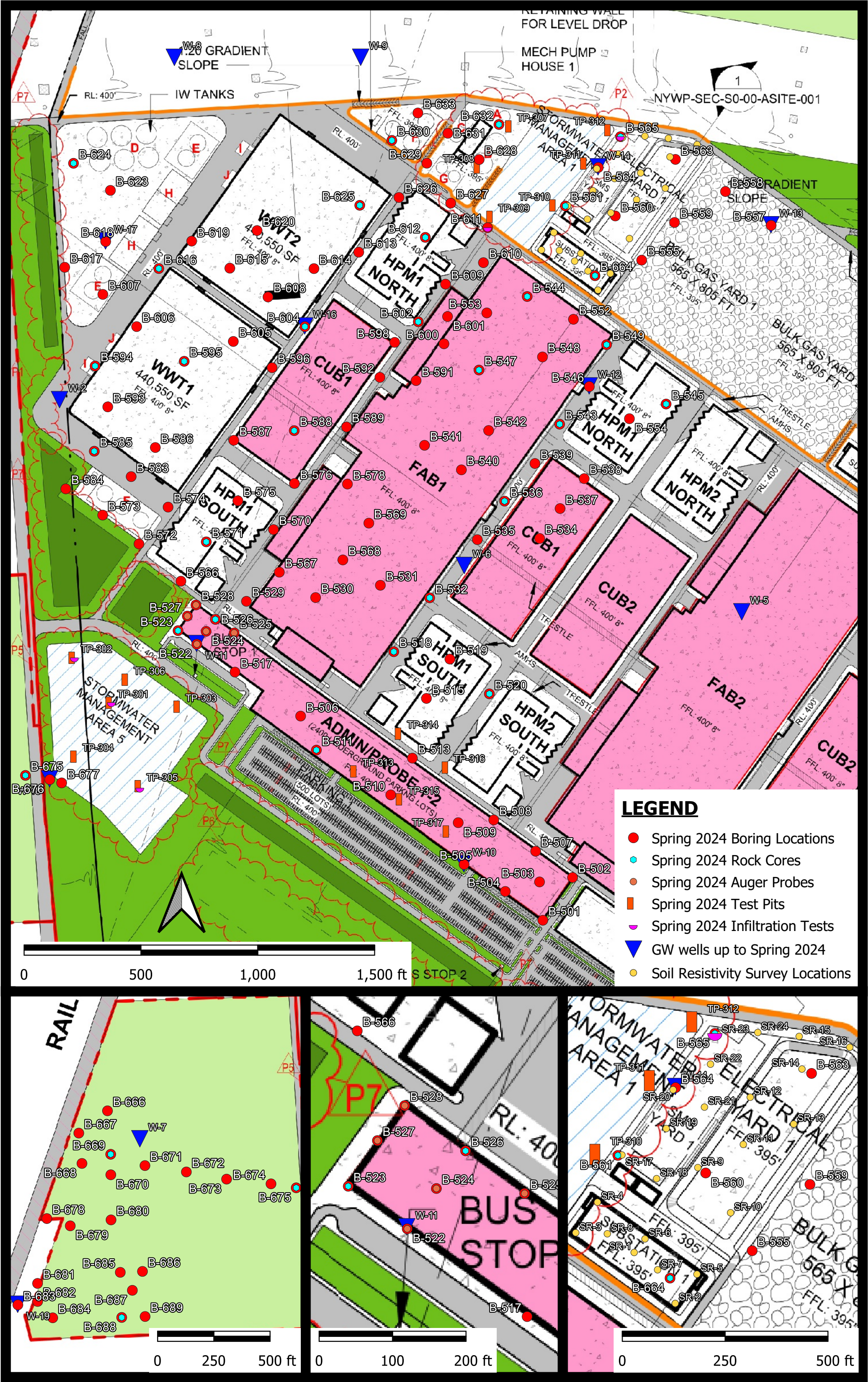
A handwritten signature in black ink, appearing to read "Marcus A. Rotundo", written over a horizontal line.

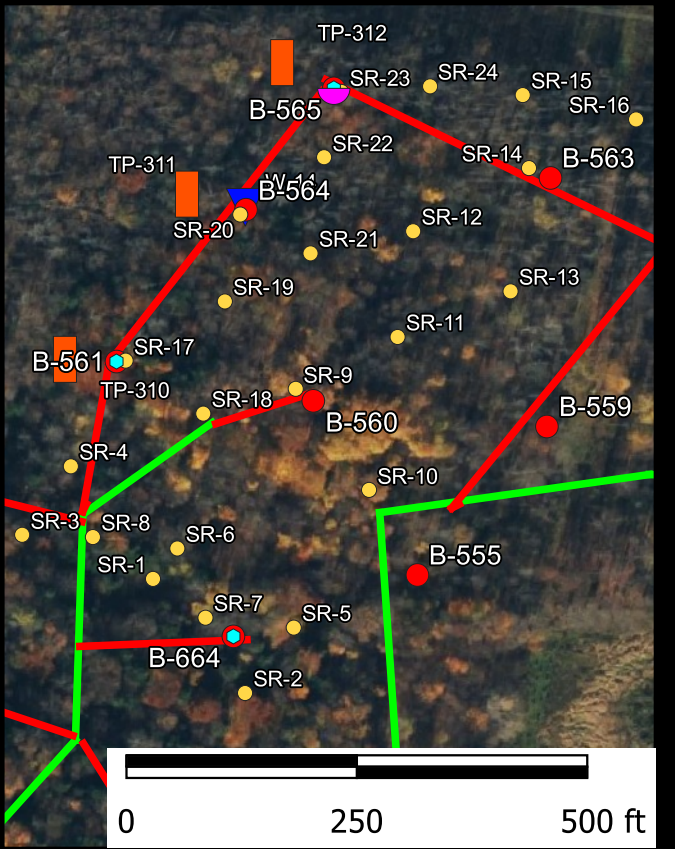
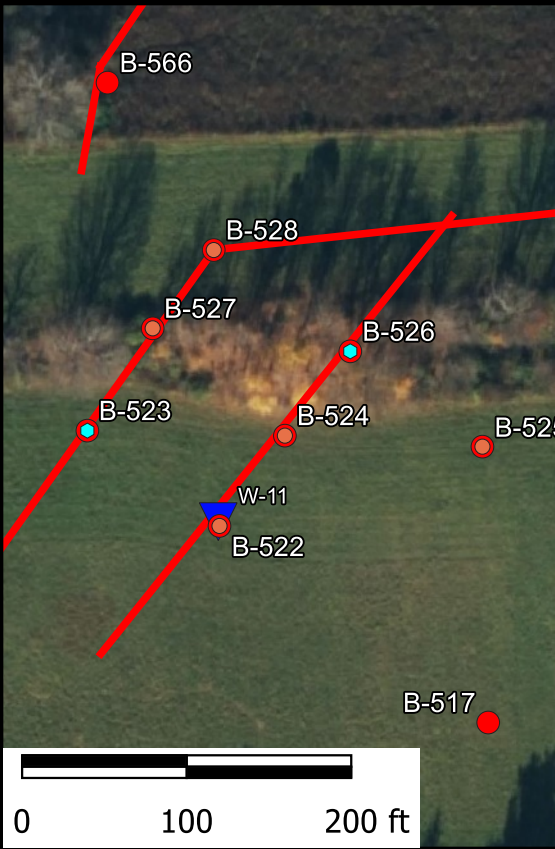
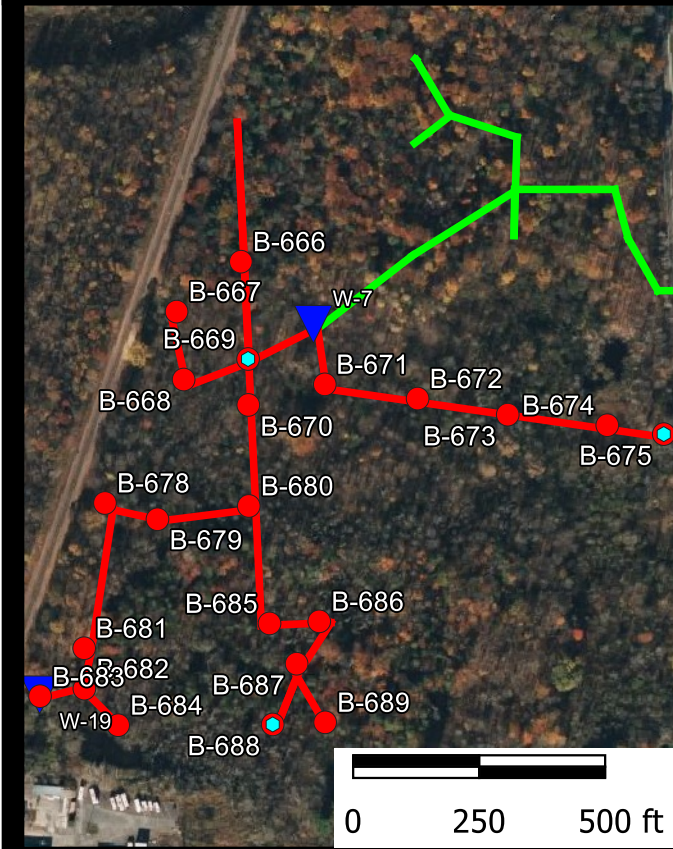
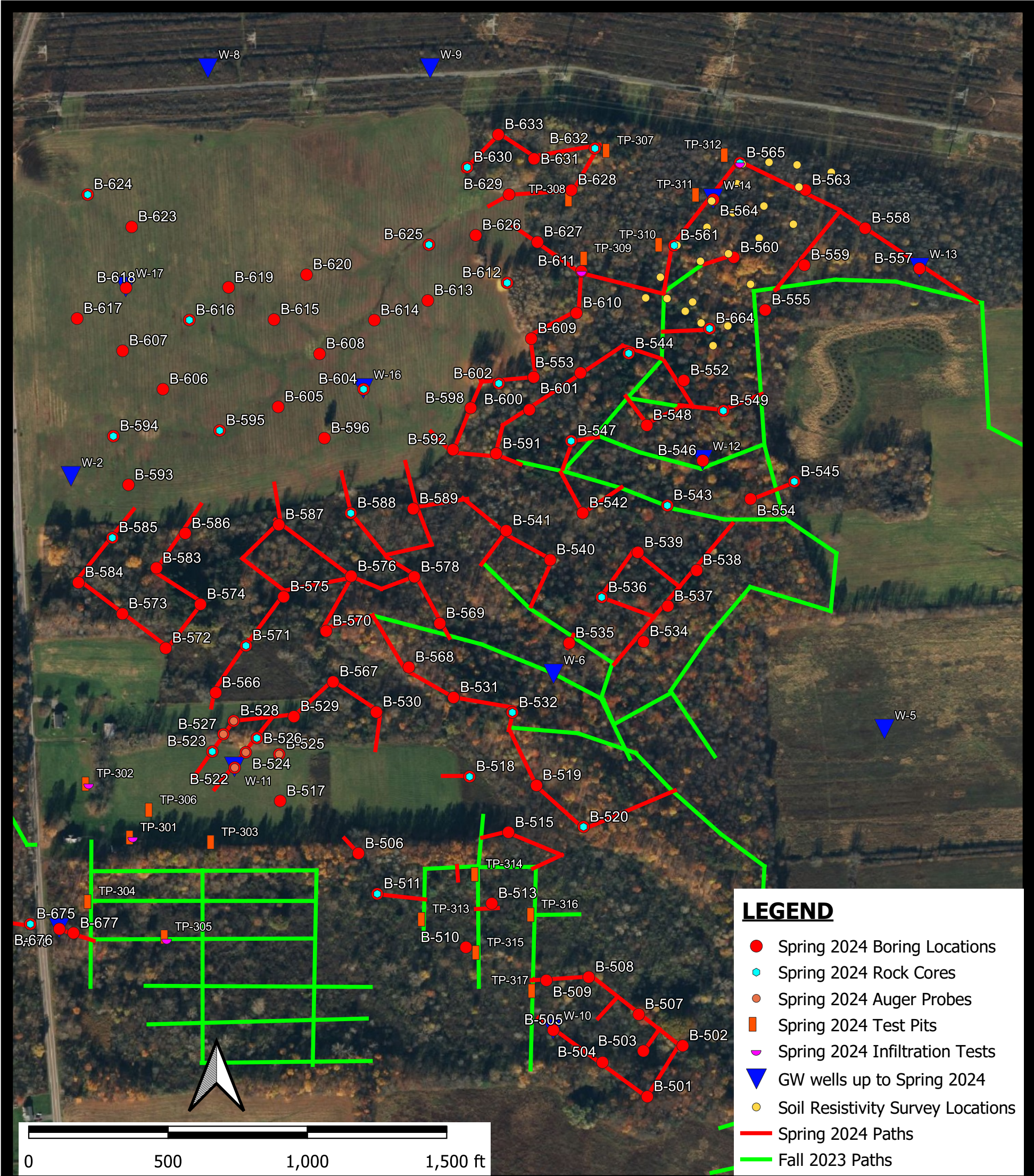
Marcus A. Rotundo, P.E.
Senior Principal Engineer

Attachment Listing:

- Exploration Location Plans (3 of 3)
- Coordinates and Elevations Tables (4 of 4)
- Laboratory Test Summary Report (33 of 33)
- Infiltration Test Reports (5 of 5)
- Test Pit Logs (17 of 17)
- Test Pit Photographs (17 of 17)
- Vane Shear Test and Pocket Penetrometer Test Summary Tables (2 of 2)
- Field Soil Resistivity Observations Summary Table (1 of 1)
- Field Soil Resistivity Photographs (12 of 12)
- Groundwater Observation Summary Table (1 of 1)
- Groundwater Monitoring Well Logs (9 of 9)
- Bedrock Core Photographs (62 of 62)
- Auger Probe Logs (5 of 5)
- Test Boring Logs (201 of 201)
- General Information & Key to Test Boring Logs (4 of 4)





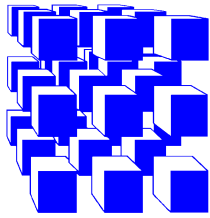


COORDINATES AND ELEVATION TABLE					PAGE 1 of 4	
Exploration ID	Latitude	Longitude	Northing (ft)	Easting (ft)	Elevation (ft)	Exploration Phase and Type
B-501	43.18771	-76.15857	1161775.3	933487.8	405.5	Test Boring - Third Phase
B-502	43.18821	-76.15809	1161958.1	933616.8	400.4	Test Boring - Third Phase
B-503	43.18816	-76.15862	1161938.5	933473.1	400.8	Test Boring - Third Phase
B-504	43.18805	-76.15917	1161896.9	933326.7	404.4	Test Boring - Third Phase
B-505	43.18837	-76.15983	1162015.7	933151.5	406.1	Test Boring - Third Phase
B-506	43.19012	-76.16244	1162648.3	932451.8	399.6	Test Boring - Third Phase
B-507	43.18852	-76.15868	1162069.8	933458.7	403.8	Test Boring - Third Phase
B-508	43.18889	-76.15935	1162206.0	933279.3	404.7	Test Boring - Third Phase
B-509	43.18886	-76.15992	1162194.4	933126.8	404.7	Test Boring - Third Phase
B-510	43.18919	-76.16100	1162313.0	932838.6	405.2	Test Boring - Third Phase
B-511	43.18972	-76.16219	1162503.9	932519.2	400.6	Test Boring - Third Phase
B-513	43.18962	-76.16065	1162467.2	932929.6	402.3	Test Boring - Third Phase
B-515	43.19032	-76.16042	1162726.0	932989.4	395.4	Test Boring - Third Phase
B-517	43.19064	-76.16349	1162838.3	932170.9	395.2	Test Boring - Third Phase
B-518	43.19087	-76.16094	1162925.1	932849.7	393.4	Test Boring - Third Phase
B-519	43.19078	-76.16004	1162890.7	933091.6	394.9	Test Boring - Third Phase
B-520	43.19037	-76.15941	1162744.3	933259.3	395.7	Test Boring - Third Phase
B-522	43.19097	-76.16410	1162955.1	932008.4	393.7	Auger Probe - Third Phase
B-522A	43.19097	-76.16410	1162955.1	932008.4	393.7	Test Boring - Third Phase
B-523	43.19113	-76.16440	1163013.4	931927.2	393.5	Test Boring - Third Phase
B-524	43.19112	-76.16395	1163009.4	932047.5	394.5	Auger Probe - Third Phase
B-525	43.19110	-76.16350	1163005.4	932167.8	396.4	Auger Probe - Third Phase
B-526	43.19126	-76.16380	1163064.0	932086.7	396.9	Test Boring - Third Phase
B-527	43.19130	-76.16425	1163074.8	931968.2	394.4	Auger Probe - Third Phase
B-528	43.19143	-76.16411	1163122.2	932005.3	395.8	Auger Probe - Third Phase
B-529	43.19147	-76.16330	1163140.7	932221.4	395.6	Test Boring - Third Phase
B-530	43.19151	-76.16219	1163155.0	932516.5	391.4	Test Boring - Third Phase
B-531	43.19165	-76.16115	1163209.8	932792.7	401.7	Test Boring - Third Phase
B-532	43.19150	-76.16036	1163155.6	933004.0	396.5	Test Boring - Third Phase
B-534	43.19219	-76.15859	1163409.5	933474.5	390.4	Test Boring - Third Phase
B-535	43.19218	-76.15959	1163403.2	933207.0	390.3	Test Boring - Third Phase
B-536	43.19263	-76.15915	1163568.5	933325.1	387.2	Test Boring - Third Phase
B-537	43.19254	-76.15826	1163537.6	933563.3	392.5	Test Boring - Third Phase
B-538	43.19289	-76.15787	1163664.1	933665.6	388.1	Test Boring - Third Phase
B-539	43.19307	-76.15866	1163729.4	933455.8	387.5	Test Boring - Third Phase
B-540	43.19300	-76.15984	1163700.5	933140.5	389.7	Test Boring - Third Phase
B-541	43.19329	-76.16043	1163805.2	932983.2	385.3	Test Boring - Third Phase
B-542	43.19346	-76.15940	1163871.4	933256.4	384.7	Test Boring - Third Phase
B-543	43.19353	-76.15826	1163898.7	933559.3	392.1	Test Boring - Third Phase
B-544	43.19503	-76.15877	1164442.3	933421.2	381.6	Test Boring - Third Phase
B-545	43.19376	-76.15655	1163982.3	934014.8	392.6	Test Boring - Third Phase
B-546	43.19397	-76.15778	1164057.2	933686.8	394.5	Test Boring - Third Phase
B-547	43.19417	-76.15955	1164126.9	933214.9	389.0	Test Boring - Third Phase
B-548	43.19432	-76.15853	1164183.7	933487.2	393.4	Test Boring - Third Phase

COORDINATES AND ELEVATION TABLE					PAGE 2 of 4	
Exploration ID	Latitude	Longitude	Northing (ft)	Easting (ft)	Elevation (ft)	Exploration Phase and Type
B-549	43.19446	-76.15750	1164237.3	933761.9	391.3	Test Boring - Third Phase
B-552	43.19476	-76.15803	1164345.9	933620.5	390.3	Test Boring - Third Phase
B-553	43.19484	-76.15942	1164372.0	933247.7	383.2	Test Boring - Third Phase
B-554	43.19359	-76.15714	1163918.8	933858.4	393.8	Test Boring - Third Phase
B-555	43.19545	-76.15693	1164597.7	933911.6	386.4	Test Boring - Third Phase
B-557	43.19585	-76.15485	1164746.0	934464.4	382.0	Test Boring - Third Phase
B-558	43.19625	-76.15558	1164893.2	934270.2	382.0	Test Boring - Third Phase
B-559	43.19589	-76.15640	1164761.2	934051.7	385.4	Test Boring - Third Phase
B-560	43.19597	-76.15735	1164787.4	933797.2	388.0	Test Boring - Third Phase
B-561	43.19609	-76.15815	1164828.6	933584.7	383.5	Test Boring - Third Phase
B-563	43.19663	-76.15638	1165028.5	934056.6	381.1	Test Boring - Third Phase
B-564	43.19654	-76.15762	1164993.5	933725.9	380.8	Test Boring - Third Phase
B-565	43.19690	-76.15726	1165127.2	933822.0	381.2	Test Boring - Third Phase
B-566	43.19171	-76.16435	1163224.1	931938.8	392.2	Test Boring - Third Phase
B-567	43.19181	-76.16277	1163265.9	932362.0	389.1	Test Boring - Third Phase
B-568	43.19195	-76.16175	1163317.7	932633.2	395.8	Test Boring - Third Phase
B-569	43.19238	-76.16133	1163474.0	932744.3	389.6	Test Boring - Third Phase
B-570	43.19231	-76.16286	1163446.3	932336.4	387.4	Test Boring - Third Phase
B-571	43.19217	-76.16394	1163393.0	932048.7	391.3	Test Boring - Third Phase
B-572	43.19215	-76.16502	1163386.7	931760.4	390.3	Test Boring - Third Phase
B-573	43.19249	-76.16560	1163507.0	931604.3	393.5	Test Boring - Third Phase
B-574	43.19258	-76.16455	1163542.6	931885.6	389.1	Test Boring - Third Phase
B-575	43.19265	-76.16343	1163568.2	932182.2	385.8	Test Boring - Third Phase
B-576	43.19285	-76.16252	1163642.4	932425.9	385.4	Test Boring - Third Phase
B-578	43.19284	-76.16167	1163639.3	932652.2	383.4	Test Boring - Third Phase
B-583	43.19294	-76.16514	1163673.5	931726.6	388.7	Test Boring - Third Phase
B-584	43.19280	-76.16619	1163618.7	931446.3	393.5	Test Boring - Third Phase
B-585	43.19324	-76.16573	1163782.7	931569.0	394.1	Test Boring - Third Phase
B-586	43.19328	-76.16475	1163797.8	931830.8	388.7	Test Boring - Third Phase
B-587	43.19336	-76.16349	1163828.5	932167.0	385.0	Test Boring - Third Phase
B-588	43.19347	-76.16252	1163869.3	932424.4	384.4	Test Boring - Third Phase
B-589	43.19351	-76.16168	1163885.2	932649.7	383.8	Test Boring - Third Phase
B-591	43.19405	-76.16056	1164083.0	932946.8	384.1	Test Boring - Third Phase
B-592	43.19409	-76.16114	1164098.0	932790.2	383.0	Test Boring - Third Phase
B-593	43.19376	-76.16551	1163971.4	931626.7	392.4	Test Boring - Third Phase
B-594	43.19424	-76.16571	1164147.1	931572.9	392.9	Test Boring - Third Phase
B-595	43.19429	-76.16428	1164167.8	931952.6	390.4	Test Boring - Third Phase
B-596	43.19421	-76.16287	1164137.2	932329.8	391.7	Test Boring - Third Phase
B-598	43.19450	-76.16090	1164246.1	932855.7	383.5	Test Boring - Third Phase
B-600	43.19448	-76.16011	1164242.5	933066.4	383.4	Test Boring - Third Phase
B-601	43.19480	-76.16005	1164357.5	933081.6	383.1	Test Boring - Third Phase
B-602	43.19474	-76.16052	1164335.8	932955.8	384.9	Test Boring - Third Phase
B-604	43.19469	-76.16234	1164315.1	932470.9	391.4	Test Boring - Third Phase
B-605	43.19452	-76.16349	1164252.1	932163.4	390.2	Test Boring - Third Phase

COORDINATES AND ELEVATION TABLE					PAGE 3 of 4	
Exploration ID	Latitude	Longitude	Northing (ft)	Easting (ft)	Elevation (ft)	Exploration Phase and Type
B-606	43.19470	-76.16504	1164315.8	931751.1	393.2	Test Boring - Third Phase
B-607	43.19508	-76.16558	1164451.2	931604.9	393.9	Test Boring - Third Phase
B-608	43.19504	-76.16293	1164439.5	932311.9	387.7	Test Boring - Third Phase
B-609	43.19518	-76.16008	1164497.5	933071.8	391.7	Test Boring - Third Phase
B-610	43.19543	-76.15947	1164587.0	933235.5	382.7	Test Boring - Third Phase
B-611	43.19584	-76.15940	1164737.5	933253.3	380.6	Test Boring - Third Phase
B-612	43.19573	-76.16040	1164696.8	932986.3	391.6	Test Boring - Third Phase
B-613	43.19556	-76.16147	1164632.9	932700.0	390.0	Test Boring - Third Phase
B-614	43.19537	-76.16219	1164563.4	932508.9	386.2	Test Boring - Third Phase
B-615	43.19538	-76.16354	1164564.3	932148.3	391.8	Test Boring - Third Phase
B-616	43.19538	-76.16468	1164561.8	931845.2	392.5	Test Boring - Third Phase
B-617	43.19540	-76.16619	1164566.8	931441.5	393.0	Test Boring - Third Phase
B-618	43.19570	-76.16553	1164679.1	931617.1	392.7	Test Boring - Third Phase
B-619	43.19570	-76.16415	1164679.8	931985.0	392.3	Test Boring - Third Phase
B-620	43.19582	-76.16310	1164725.5	932265.3	391.3	Test Boring - Third Phase
B-623	43.19630	-76.16545	1164897.8	931638.4	392.1	Test Boring - Third Phase
B-624	43.19662	-76.16604	1165013.5	931480.7	389.8	Test Boring - Third Phase
B-625	43.19611	-76.16145	1164832.5	932705.8	385.8	Test Boring - Third Phase
B-626	43.19620	-76.16082	1164866.3	932873.8	385.4	Test Boring - Third Phase
B-627	43.19613	-76.15999	1164844.0	933093.2	383.0	Test Boring - Third Phase
B-628	43.19664	-76.15953	1165029.4	933217.0	381.4	Test Boring - Third Phase
B-629	43.19660	-76.16037	1165011.9	932991.2	383.3	Test Boring - Third Phase
B-630	43.19687	-76.16093	1165109.7	932843.2	381.7	Test Boring - Third Phase
B-631	43.19695	-76.16003	1165140.0	933080.9	384.5	Test Boring - Third Phase
B-632	43.19705	-76.15921	1165179.3	933300.1	383.8	Test Boring - Third Phase
B-633	43.19719	-76.16051	1165229.6	932953.9	380.9	Test Boring - Third Phase
B-664	43.19527	-76.15768	1164533.4	933711.1	389.8	Test Boring - Third Phase
B-666	43.19039	-76.17000	1162738.1	930435.9	399.1	Test Boring - Third Phase
B-667	43.19012	-76.17048	1162638.2	930307.9	399.4	Test Boring - Third Phase
B-668	43.18975	-76.17043	1162504.6	930320.9	399.5	Test Boring - Third Phase
B-669	43.18986	-76.16995	1162543.3	930449.2	399.9	Test Boring - Third Phase
B-670	43.18961	-76.16995	1162452.2	930450.4	400.0	Test Boring - Third Phase
B-671	43.18972	-76.16938	1162493.4	930601.6	400.3	Test Boring - Third Phase
B-672	43.18964	-76.16869	1162465.2	930787.1	400.4	Test Boring - Third Phase
B-673	43.18955	-76.16802	1162433.3	930964.3	400.7	Test Boring - Third Phase
B-674	43.18949	-76.16728	1162411.8	931161.5	401.4	Test Boring - Third Phase
B-675	43.18944	-76.16686	1162396.2	931275.0	403.9	Test Boring - Third Phase
B-676	43.18939	-76.16647	1162377.2	931378.8	404.3	Test Boring - Third Phase
B-677	43.18935	-76.16628	1162362.7	931429.5	403.8	Test Boring - Third Phase
B-678	43.18908	-76.17102	1162257.1	930166.7	398.4	Test Boring - Third Phase
B-679	43.18899	-76.17063	1162224.9	930270.0	395.9	Test Boring - Third Phase
B-680	43.18906	-76.16995	1162253.8	930451.2	399.5	Test Boring - Third Phase
B-681	43.18829	-76.17118	1161971.8	930123.6	395.6	Test Boring - Third Phase
B-682	43.18807	-76.17118	1161890.8	930126.1	393.3	Test Boring - Third Phase

COORDINATES AND ELEVATION TABLE					PAGE 4 of 4	
Exploration ID	Latitude	Longitude	Northing (ft)	Easting (ft)	Elevation (ft)	Exploration Phase and Type
B-683	43.18803	-76.17151	1161873.3	930035.9	394.8	Test Boring - Third Phase
B-684	43.18787	-76.17093	1161817.9	930193.0	394.0	Test Boring - Third Phase
B-685	43.18842	-76.16980	1162019.1	930492.6	397.0	Test Boring - Third Phase
B-686	43.18843	-76.16943	1162021.8	930592.2	397.5	Test Boring - Third Phase
B-687	43.18820	-76.16960	1161940.2	930546.1	398.1	Test Boring - Third Phase
B-688	43.18787	-76.16978	1161819.9	930498.5	394.8	Test Boring - Third Phase
B-689	43.18788	-76.16939	1161822.8	930601.6	395.2	Test Boring - Third Phase
TP-301	43.19028	-76.16547	1162703.8	931642.8	403.1	Test Pit - Third Phase
TP-302	43.19081	-76.16606	1162895.3	931484.6	398.9	Test Pit - Third Phase
TP-303	43.19023	-76.16438	1162685.4	931933.3	400.2	Test Pit - Third Phase
TP-304	43.18965	-76.16604	1162471.8	931492.7	404.4	Test Pit - Third Phase
TP-305	43.18930	-76.16501	1162346.0	931768.3	404.0	Test Pit - Third Phase
TP-306	43.19055	-76.16521	1162800.3	931713.5	399.0	Test Pit - Third Phase
TP-307	43.19702	-76.15901	1165167.7	933354.1	382.4	Test Pit - Third Phase
TP-308	43.19654	-76.15952	1164991.0	933217.9	381.0	Test Pit - Third Phase
TP-309	43.19596	-76.15932	1164782.3	933274.4	380.6	Test Pit - Third Phase
TP-310	43.19609	-76.15831	1164828.8	933543.0	383.1	Test Pit - Third Phase
TP-311	43.19658	-76.15781	1165009.8	933676.1	380.5	Test Pit - Third Phase
TP-312	43.19697	-76.15742	1165151.1	933776.8	380.5	Test Pit - Third Phase
TP-313	43.18946	-76.16155	1162410.5	932690.4	403.6	Test Pit - Third Phase
TP-314	43.18990	-76.16083	1162571.2	932880.5	401.6	Test Pit - Third Phase
TP-315	43.18913	-76.16082	1162288.5	932885.0	405.1	Test Pit - Third Phase
TP-316	43.18950	-76.16008	1162426.2	933083.3	403.3	Test Pit - Third Phase
TP-317	43.18875	-76.16007	1162152.5	933085.3	405.4	Test Pit - Third Phase



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LABORATORY TEST SUMMARY

Micron Campus

CME Report No.: 28062L-04-0724

July 9, 2024

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CME Representatives obtained soil and rock samples from Test Borings and Test Pits advanced as part of the Subsurface Exploration Program conducted for the subject project. Selected samples were delivered to CME's East Syracuse facility, an AASHTO re:source¹ accredited laboratory for various laboratory testing. The results are presented below:

Sample ID Notations: B - Test Boring, S – Sample, TP – Test Pit, R – Run

I. Natural Moisture Content (ASTM D2216)

Sample ID	Natural Moisture (%)	Sample ID	Natural Moisture (%)
B-517; S-2	17.9	B-560; S-4	25.3
B-531; S-2	14.9	B-560; S-5	13.4
B-532; S-4	24.0	B-560; S-6	9.7
B-534; S-1B	41.0	B-560; S-7	6.9
B-534; S-2	27.1	B-561; S-3	28.1
B-534; S-3	22.5	B-561; S-5	23.6
B-534; S-4	20.0	B-563; S-2	25.3
B-534; S-5	24.7	B-563; S-6	24.4
B-534; S-6	18.5	B-565; S-3	22.7
B-534; S-7	13.3	B-565; S-5	25.1
B-534; S-8	10.5	B-569; S-1B	20.9
B-538; S-6	23.2	B-569; S-2	23.7
B-538; S-7	19.1	B-569; S-3	21.8
B-542; S-4	20.9	B-569; S-4	11.1
B-545; S-5	26.5	B-569; S-5	9.2
B-548; S-4	25.2	B-569; S-6	8.7
B-548; S-5	23.6	B-583; S-1B	22.5
B-557; S-4	26.7	B-583; S-2	8.7
B-557; S-5	25.7	B-583; S-3	15.7
B-558; S-3	24.5	B-583; S-4	17.5
B-560; S-1B	41.7	B-587; S-4	23.0
B-560; S-2	22.2	B-592; S-5	20.5
B-560; S-3	24.0	B-602; S-4	22.5

¹AASHTO re:source – American Association of State Highway & Transportation Officials (AASHTO) Materials Reference Laboratory, a Federal Agency having jurisdiction to assess laboratory competency according to the Standards of the United States of America. CME East Syracuse accreditation includes testing of Portland Cement Concrete, Aggregate and Soil Materials. www.AASHTOresource.org.

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Sample ID	Natural Moisture (%)	Sample ID	Natural Moisture (%)
B-602; S-6	20.9	B-624; S-3	21.9
B-609; S-5	21.6	B-624; S-4	21.8
B-613; S-1	22.9	B-624; S-5	19.6
B-613; S-2	22.6	B-624; S-6	24.2
B-613; S-3	22.8	B-624; S-7	25.2
B-613; S-4	24.5	B-624; S-8A	18.3
B-613; S-5	21.8	B-624; S-8B	17.3
B-613; S-6	23.8	B-626; S-5	23.8
B-613; S-7	11.0	B-632; S-1B	25.0
B-613; S-8A	28.0	B-632; S-2	23.9
B-613; S-8B	21.2	B-632; S-3	20.3
B-618; S-1B	31.8	B-632; S-4	11.2
B-618; S-2	25.9	B-632; S-5	22.6
B-618; S-3	28.6	B-632; S-6	24.7
B-618; S-4	22.6	B-671; S-2	25.9
B-618; S-5	21.0	B-680; S-1B	22.7
B-618; S-6	24.5	B-680; S-2	23.5
B-618; S-7A	22.3	B-680; S-3	22.4
B-618; S-7B	18.9	B-680; S-4	20.9
B-618; S-8	21.3	B-680; S-5	20.4
B-618; S-9	8.0	B-680; S-6	8.3
B-620; S-6	22.2	B-683; S-7	8.8
B-624; S-2	25.9		

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II. Atterberg Limits Testing (ASTM D4318)

Sample ID	Liquid Limit	Plastic Limit	Plasticity Index	Natural Moisture (%)
B-534; S-2	25	20	5	27.1
B-545; S-5	20	17	3	26.5
B-561; S-3	30	18	12	28.1
B-563; S-2	29	17	12	25.3
B-618; S-7B	20	14	6	18.9
B-624; S-7	22	13	9	25.2
B-624; S-8A	17	12	5	18.3
B-517; S-2	Non-Plastic			17.9
B-532; S-4	Non-Plastic			24
B-534; S-4	Non-Plastic			20
B-534; S-6	Non-Plastic			18.5
B-538; S-6	Non-Plastic			23.2
B-538; S-7	Non-Plastic			19.1
B-542; S-4	Non-Plastic			20.9
B-548; S-4	Non-Plastic			25.2
B-548; S-5	Non-Plastic			23.6
B-557; S-4	Non-Plastic			26.7
B-557; S-5	Non-Plastic			25.7
B-561; S-5	Non-Plastic			23.6
B-563; S-6	Non-Plastic			24.4
B-565; S-5	Non-Plastic			25.1
B-569; S-2	Non-Plastic			23.7
B-587; S-4	Non-Plastic			23
B-592; S-5	Non-Plastic			20.5
B-602; S-4	Non-Plastic			22.5
B-602; S-6	Non-Plastic			20.9
B-613; S-4	Non-Plastic			24.5
B-613; S-5	Non-Plastic			21.8
B-613; S-6	Non-Plastic			23.8
B-618; S-2	Non-Plastic			25.9
B-618; S-5	Non-Plastic			21
B-618; S-8	Non-Plastic			21.3
B-620; S-6	Non-Plastic			22.2
B-624; S-5	Non-Plastic			19.6
B-624; S-6	Non-Plastic			24.2
B-626; S-5	Non-Plastic			23.8
B-632; S-4	Non-Plastic			11.2
B-632; S-5	Non-Plastic			22.6
B-632; S-6	Non-Plastic			24.7
B-671; S-2	Non-Plastic			25.9

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III. Particle Size Analysis (ASTM D422)

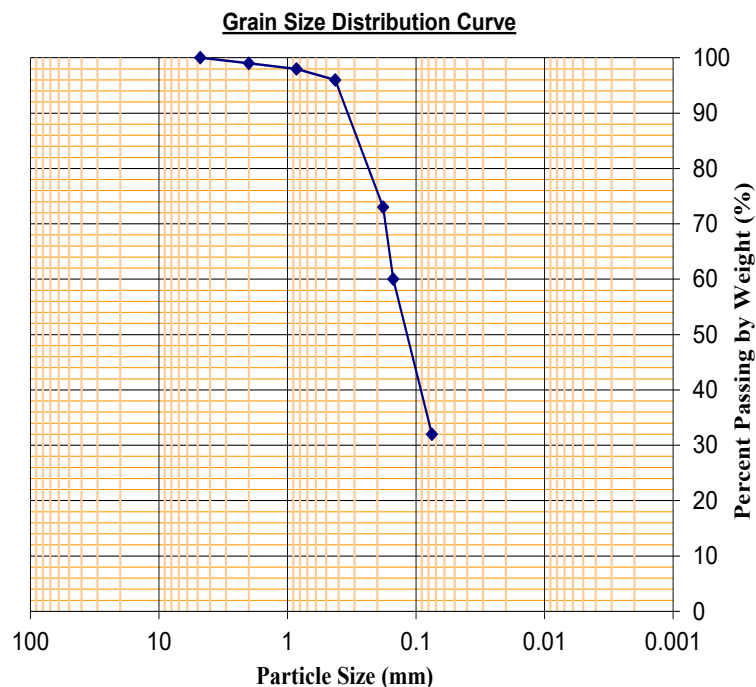
Sample #

B-531; S-2

Classification

Brown/Orange cmf SAND, some SILT

<u>Sieve Designation</u>	<u>Size (mm)</u>	<u>Percent Passing by Weight (%)</u>
No.4	4.750	100
No.10	2.00	99
No.20	0.850	98
No.40	0.425	96
No.80	0.180	73
No.100	0.150	60
No.200	0.075	32



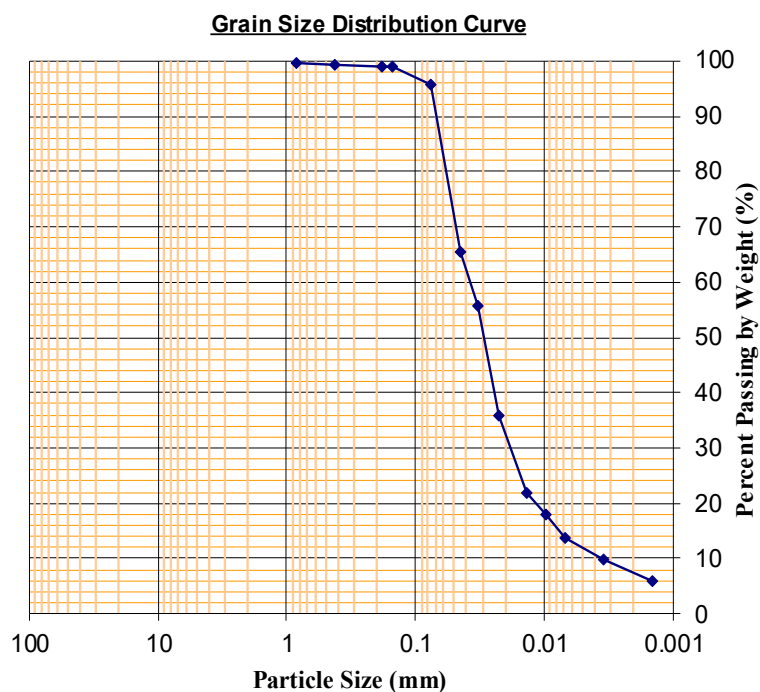
Sample #

B-538; S-7

Classification

Grey SILT, little CLAY, trace fine SAND

<u>Sieve Designation</u>	<u>Size (mm)</u>	<u>Percent Passing by Weight (%)</u>
No.20	0.850	100
No.40	0.425	99
No.80	0.180	99
No.100	0.150	99
No.200	0.075	96
Hydrometer	0.045	65
	0.033	56
	0.022	36
	0.013	22
	0.010	18
	0.007	14
	0.003	10
	0.001	6.0



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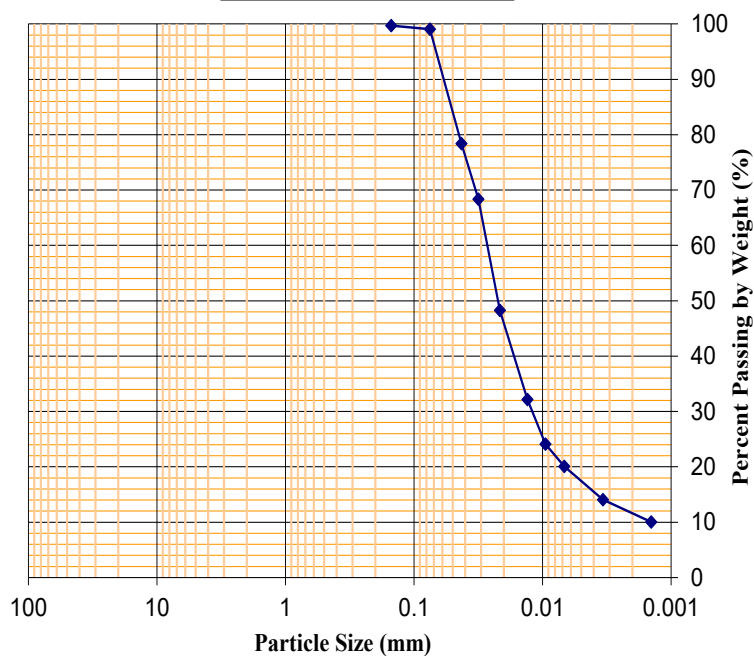
**Sample #**

B-558; S-3

Classification

Brown SILT, little CLAY, trace fine SAND

<u>Sieve</u>	<u>Size</u>	<u>Percent</u>
<u>Designation</u>	<u>(mm)</u>	<u>Passing by</u>
		<u>Weight (%)</u>
No.100	0.150	100
No.200	0.075	99
Hydrometer	0.043	78
	0.031	68
	0.021	48
	0.013	32
	0.009	24
	0.007	20
	0.003	14
	0.001	10

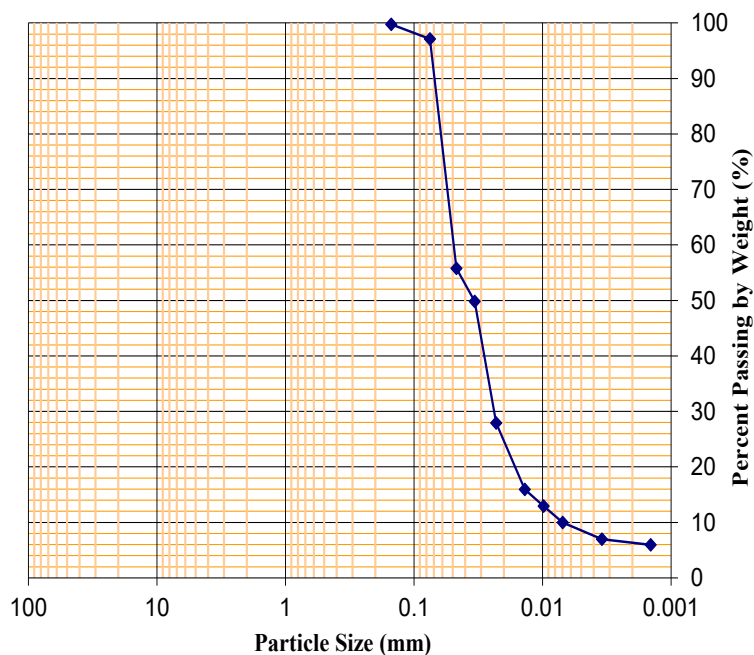
Grain Size Distribution Curve**Sample #**

B-565; S-5

Classification

Brown/Grey SILT, trace CLAY, trace fine SAND

<u>Sieve</u>	<u>Size</u>	<u>Percent</u>
<u>Designation</u>	<u>(mm)</u>	<u>Passing by</u>
		<u>Weight (%)</u>
No.100	0.150	100
No.200	0.075	97
Hydrometer	0.047	56
	0.034	50
	0.023	28
	0.014	16
	0.010	13
	0.007	10
	0.003	7.0
	0.001	6.0

Grain Size Distribution Curve

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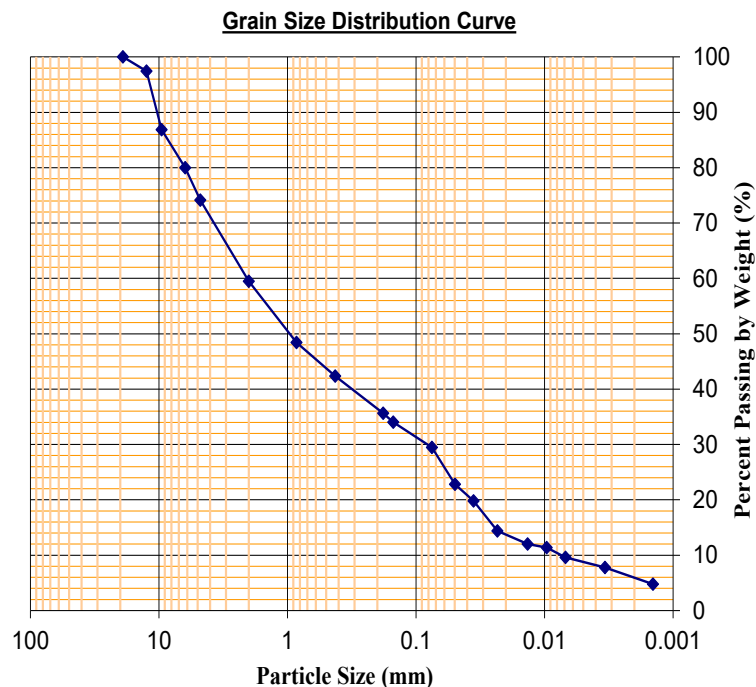
**Sample #**

B-569; S-5

Classification

Grey/Black cmf SAND, some mf GRAVEL, some SILT, trace CLAY

<u>Sieve</u>	<u>Size</u>	<u>Percent</u>
<u>Designation</u>	<u>(mm)</u>	<u>Passing by</u>
		<u>Weight (%)</u>
3/4"	19.0	100
1/2"	12.5	97
3/8"	9.5	87
1/4"	6.25	80
No.4	4.75	74
No.10	2.00	60
No.20	0.850	48
No.40	0.425	42
No.80	0.180	36
No.100	0.150	34
No.200	0.075	29
Hydrometer	0.050	23
	0.036	20
	0.023	14
	0.014	12
	0.010	11
	0.007	10
	0.003	7.8
	0.001	4.8

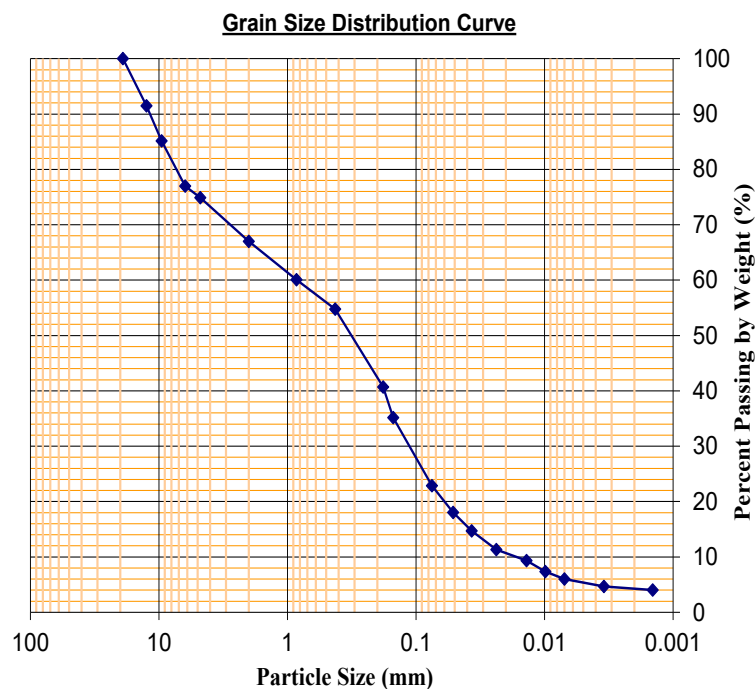
**Sample #**

B-609; S-5

Classification

Brown cmf SAND, some mf GRAVEL, little SILT, trace CLAY

<u>Sieve</u>	<u>Size</u>	<u>Percent</u>
<u>Designation</u>	<u>(mm)</u>	<u>Passing by</u>
		<u>Weight (%)</u>
3/4"	19.0	100
1/2"	12.5	92
3/8"	9.5	85
1/4"	6.25	77
No.4	4.75	75
No.10	2.00	67
No.20	0.850	60
No.40	0.425	55
No.80	0.180	41
No.100	0.150	35
No.200	0.075	23
Hydrometer	0.051	18
	0.037	15
	0.024	11
	0.014	9.3
	0.010	7.3
	0.007	6.0
	0.003	4.7
	0.001	4.0



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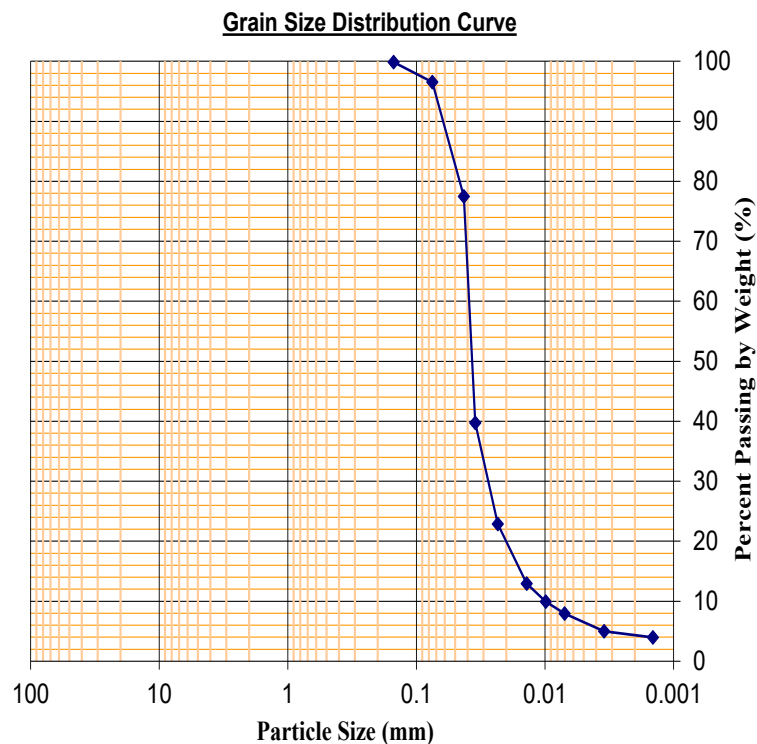
**Sample #**

B-624; S-6

Classification

Grey SILT, trace CLAY, trace fine SAND

<u>Sieve</u>	<u>Size</u>	<u>Percent</u>
<u>Designation</u>	<u>(mm)</u>	<u>Passing by</u>
		<u>Weight (%)</u>
No.100	0.150	100
No.200	0.075	97
Hydrometer	0.043	78
	0.035	40
	0.023	23
	0.014	13
	0.010	10
	0.007	7.9
	0.003	5.0
	0.001	4.0

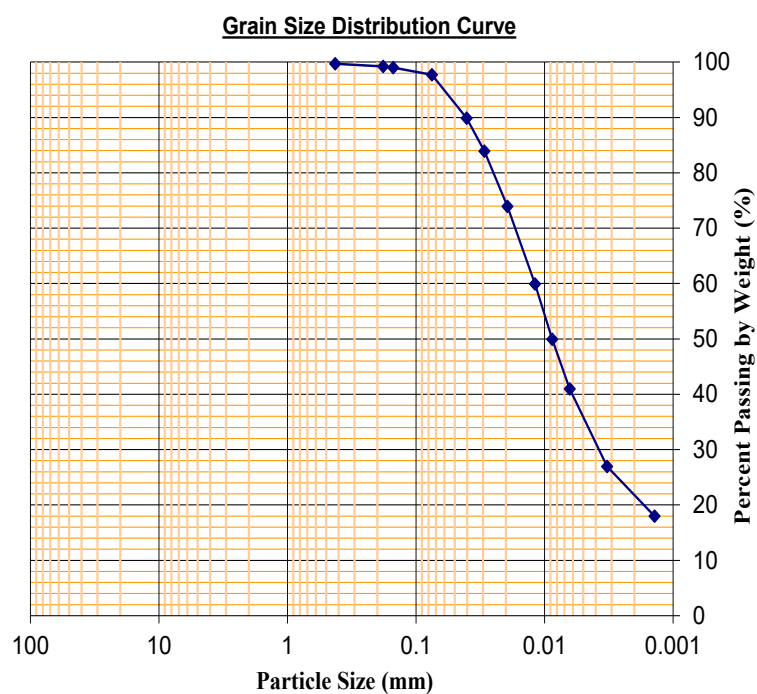
**Sample #**

B-624; S-7

Classification

Grey SILT and CLAY, trace fine SAND

<u>Sieve</u>	<u>Size</u>	<u>Percent</u>
<u>Designation</u>	<u>(mm)</u>	<u>Passing by</u>
		<u>Weight (%)</u>
No.40	0.425	100
No.80	0.180	99
No.100	0.150	99
No.200	0.075	98
Hydrometer	0.040	90
	0.029	84
	0.019	74
	0.012	60
	0.009	50
	0.006	41
	0.003	27
	0.001	18



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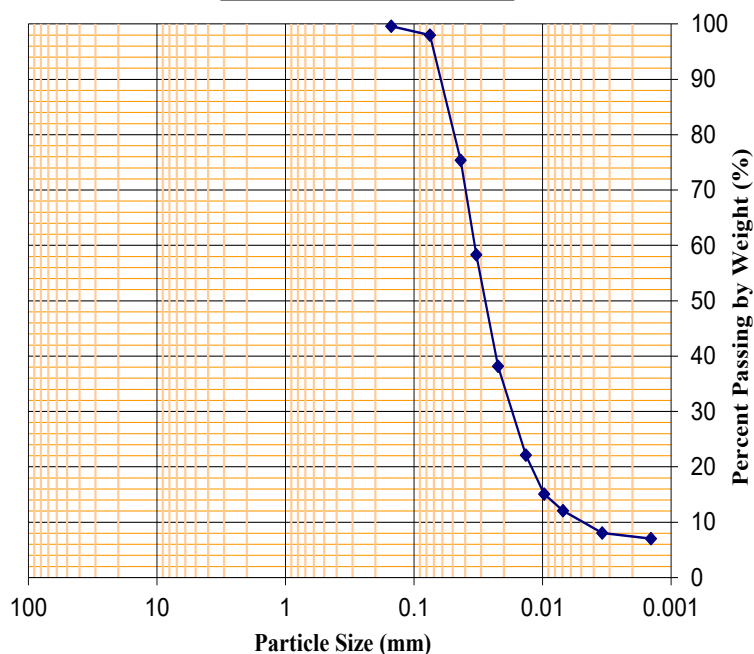
**Sample #**

B-632; S-6

Classification

Brown/Grey SILT, little CLAY, trace fine SAND

<u>Sieve Designation</u>	<u>Size (mm)</u>	<u>Percent Passing by Weight (%)</u>
No.100	0.150	100
No.200	0.075	98
Hydrometer	0.043	75
	0.033	58
	0.022	38
	0.013	22
	0.010	15
	0.007	12
	0.003	8.0
	0.001	7.0

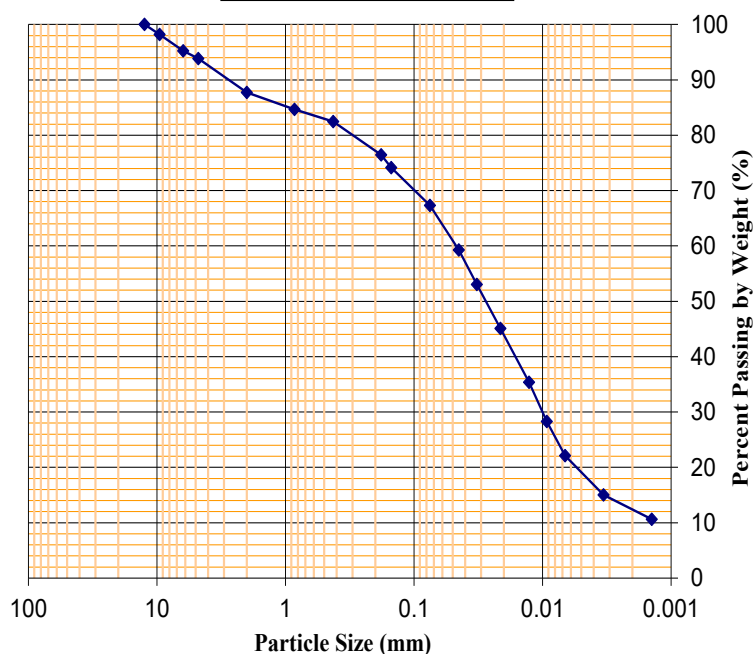
Grain Size Distribution Curve**Sample #**

B-683; S-7

Classification

Grey SILT, some cmf SAND, little CLAY, trace fine GRAVEL

<u>Sieve Designation</u>	<u>Size (mm)</u>	<u>Percent Passing by Weight (%)</u>
1/2"	12.5	100
3/8"	9.5	98
1/4"	6.25	95
No.4	4.75	94
No.10	2.00	88
No.20	0.850	85
No.40	0.425	82
No.80	0.180	76
No.100	0.150	74
No.200	0.075	67
Hydrometer	0.045	59
	0.032	53
	0.021	45
	0.013	35
	0.009	28
	0.007	22
	0.003	15
	0.001	11

Grain Size Distribution Curve

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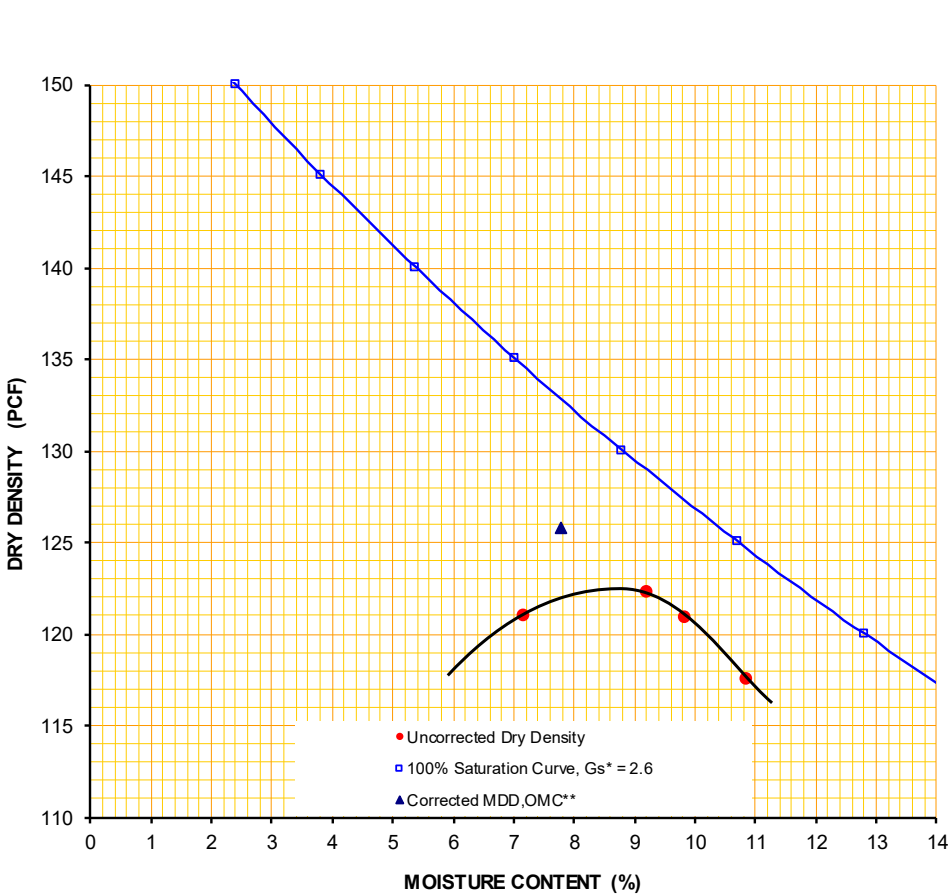


IV. Moisture-Density Relationship (ASTM D-1557: Modified Proctor)

SAMPLE LOCATION:	TP-303; S-1	DATE SAMPLED:	5/1/24
SOIL CLASSIFICATION:	Brown cmf SAND, some SILT, some cmf GRAVEL, little CLAY	SAMPLE NO.:	TP-303

Moisture - Density Relationship Curve

Particle Size Analysis ASTMD422



Sieve Size	% Passing
6"	100
5"	100
4"	100
3"	100
2"	97
1-1/2"	96
1"	90
3/4"	89
1/2"	85
3/8"	82
1/4"	78
No.4	77
No.10	73
No.20	69
No.40	66
No.80	55
No.100	50
No.200	37

Test Procedure Information

Test Method

Procedure Used

Preparation Method

Description of Rammer

☒ ASTM D-1557 (Modified) ☐ ASTM D-698 (Standard)

☐ A ☐ B ☒ C

☐ Dry ☒ Moist

☐ Manual ☒ Mechanical

Test Results

Corrected MDD (PCF) = **125.8**
Corrected OMC (%) = **7.8**

Oversize Fraction by Dry Weight

11 % Retained on ☐ No.4 Sieve ☐ 3/8" Sieve ☒ 3/4" Sieve

* Specific Gravity, estimated
** MDD = Maximum Dry Density, OMC = Optimum Moisture Content

Laboratory Test Summary

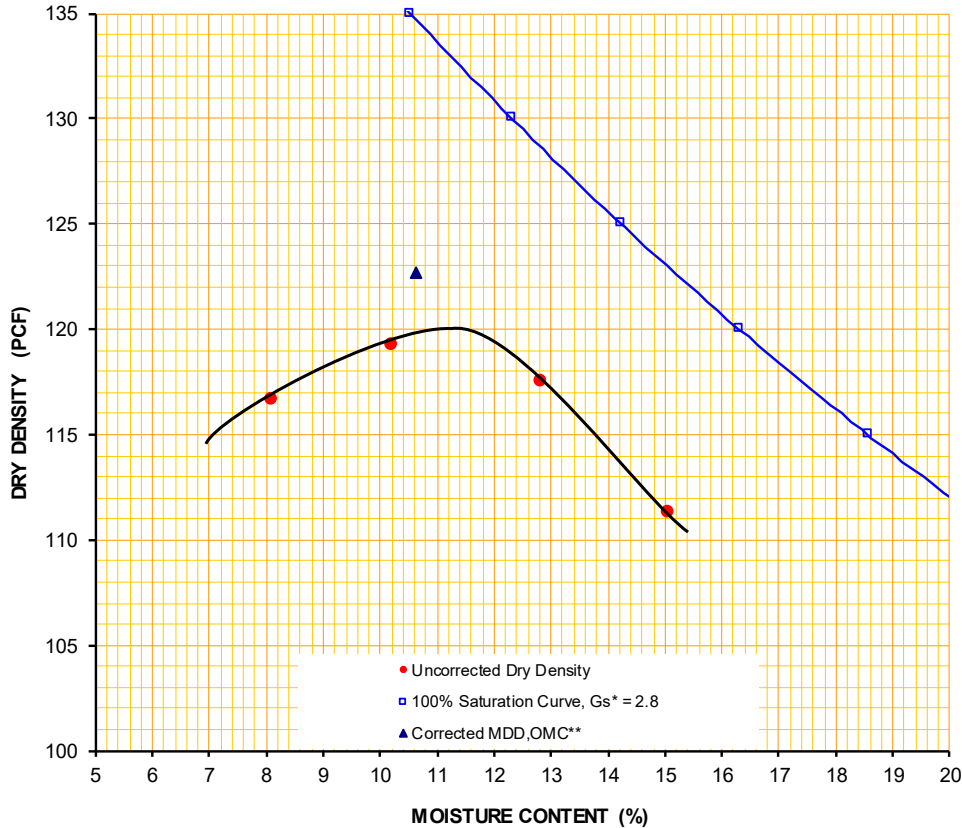
CME Report No.: 28062L-04-0724

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SAMPLE LOCATION:	TP-304; S-1	DATE SAMPLED:	5/1/24
SOIL CLASSIFICATION:	Brown cmf SAND, some SILT, some cmf GRAVEL, trace CLAY	SAMPLE NO.:	TP-304

Moisture - Density Relationship Curve



Particle Size Analysis ASTMD422

Sieve Size	% Passing
2"	100
1-1/2"	98
1"	96
3/4"	93
1/2"	89
3/8"	86
1/4"	81
No.4	79
No.10	75
No.20	71
No.40	67
No.80	54
No.100	49
No.200	33

Test Procedure Information

Test Method

☒ ASTM D-1557 (Modified)☐ ASTM D-698 (Standard)

Procedure Used

☐ A☐ B☒ C

Preparation Method

☐ Dry☒ Moist

Description of Rammer

☐ Manual☒ Mechanical

Test Results

Corrected MDD (PCF) = 122.7

Corrected OMC (%) = 10.6

Oversize Fraction by Dry Weight

7 % Retained on

☐ No.4 Sieve☐ 3/8" Sieve☒ 3/4" Sieve

* Specific Gravity, estimated

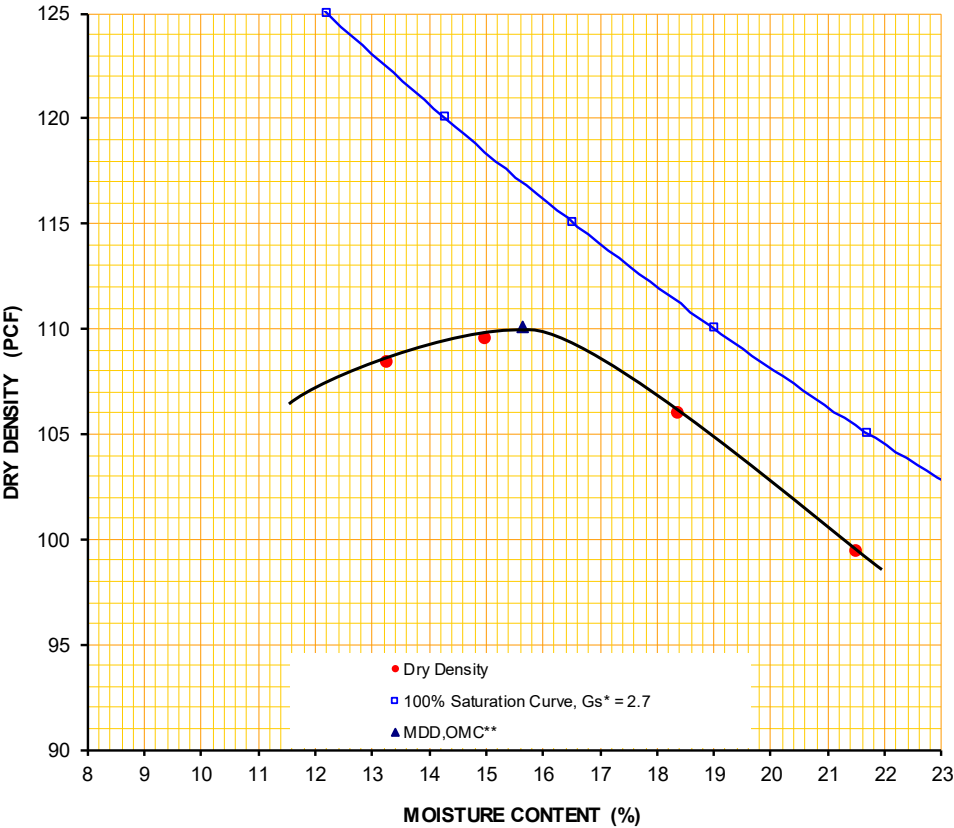
** MDD = Maximum Dry Density, OMC = Optimum Moisture Content

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SAMPLE LOCATION:	TP-307; S-1	DATE SAMPLED:	5/2/24
SOIL CLASSIFICATION:	Brown SILT, little CLAY, trace mf SAND	SAMPLE NO.:	TP-307

Moisture - Density Relationship Curve



Particle Size Analysis ASTMD422

Sieve Size	% Passing
2"	100
1-1/2"	100
1"	100
3/4"	100
1/2"	100
3/8"	100
1/4"	100
No.4	100
No.10	100
No.20	100
No.40	99
No.80	98
No.100	98
No.200	97

Test Procedure Information

Test Method

☒ ASTM D-1557 (Modified)☐ ASTM D-698 (Standard)

Procedure Used

☐ A☐ B☒ C

Preparation Method

☐ Dry☒ Moist

Description of Rammer

☐ Manual☒ Mechanical

Test Results

MDD (PCF) = 110.1
OMC (%) = 15.6

Oversize Fraction by Dry Weight

0 % Retained on

☐ No.4 Sieve☐ 3/8" Sieve☒ 3/4" Sieve

* Specific Gravity, estimated
** MDD = Maximum Dry Density, OMC = Optimum Moisture Content

Laboratory Test Summary

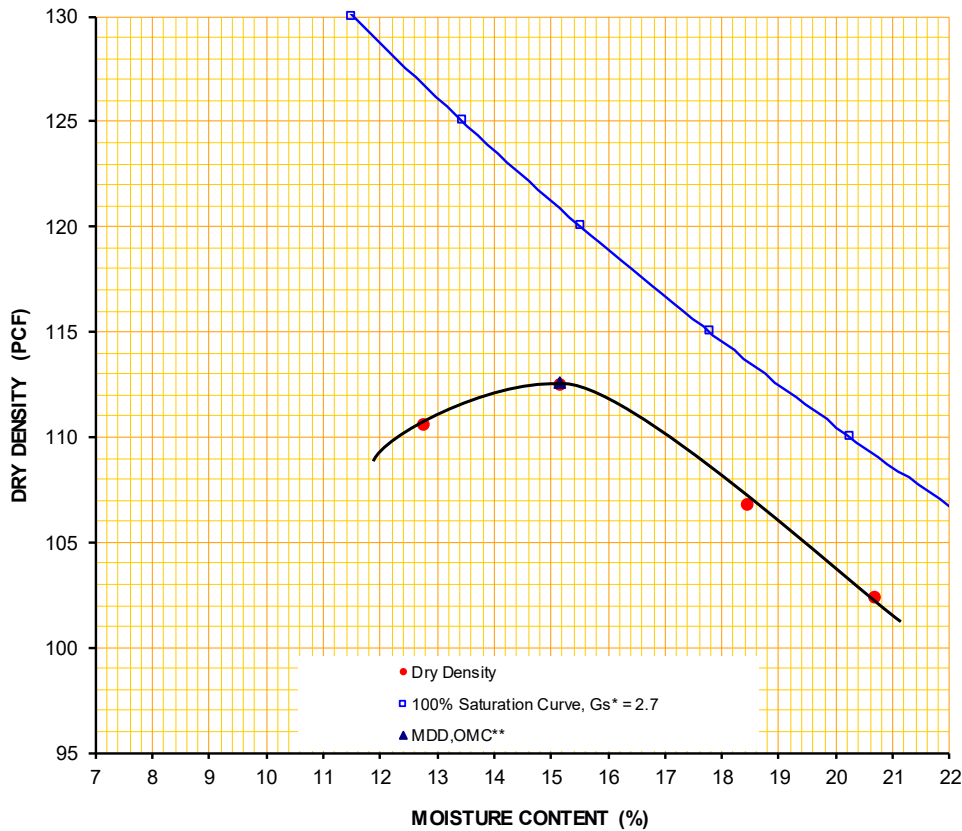
CME Report No.: 28062L-04-0724

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SAMPLE LOCATION:	TP-312; S-1	DATE SAMPLED:	5/2/24
SOIL CLASSIFICATION:	Brown SILT, little CLAY, trace fine SAND	SAMPLE NO.:	TP-312

Moisture - Density Relationship Curve



Particle Size Analysis ASTMD422

Sieve Size	% Passing
2"	100
1-1/2"	100
1"	100
3/4"	100
1/2"	100
3/8"	100
1/4"	100
No.4	100
No.10	100
No.20	100
No.40	100
No.80	99
No.100	99
No.200	98

Test Procedure Information

Test Method

Procedure Used

Preparation Method

Description of Rammer

☒ ASTM D-1557 (Modified) ☐ ASTM D-698 (Standard)

☐ A ☐ B ☒ C

☐ Dry ☒ Moist

☐ Manual ☒ Mechanical

Test Results

MDD (pcf) = 112.6
OMC (%) = 15.2

Oversize Fraction by Dry Weight

☒ 0 % Retained on ☐ No.4 Sieve ☐ 3/8" Sieve ☒ 3/4" Sieve

* Specific Gravity, estimated
** MDD = Maximum Dry Density, OMC = Optimum Moisture Content

Laboratory Test Summary

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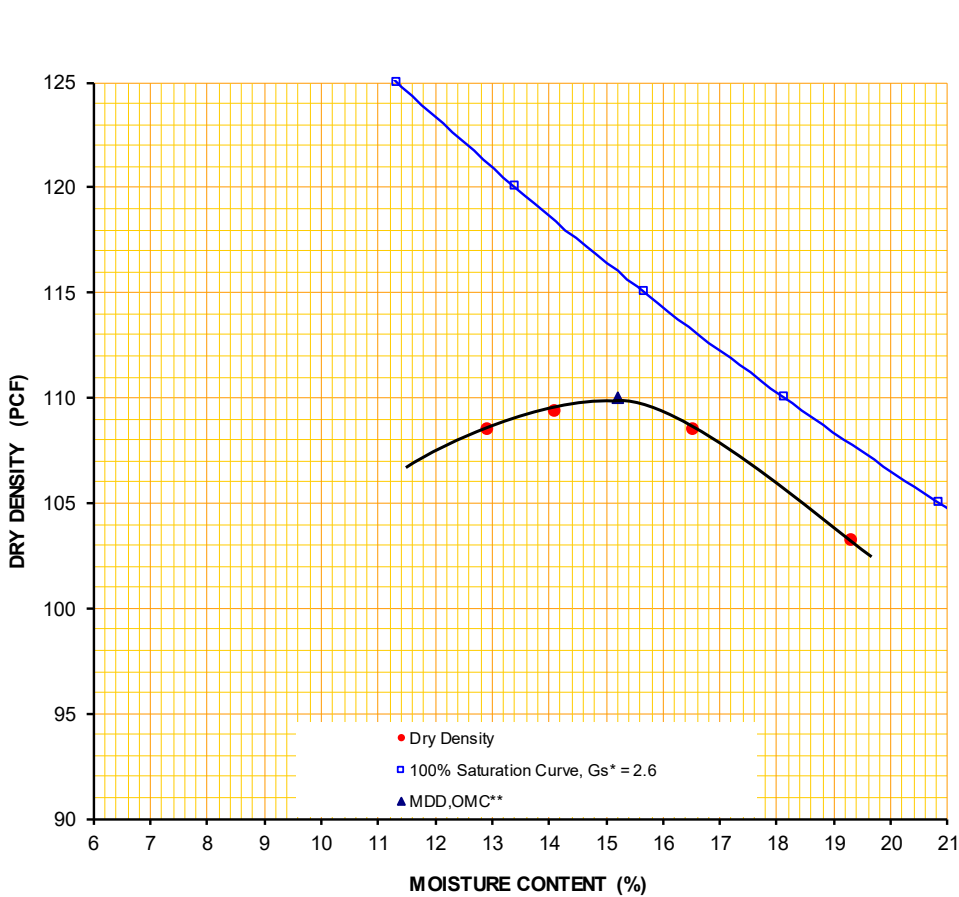
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SAMPLE LOCATION:	TP-315; S-1	DATE SAMPLED:	5/2/24
SOIL CLASSIFICATION:	Brown SILT, little CLAY, trace mf SAND	SAMPLE NO.:	TP-315

Moisture - Density Relationship Curve

Particle Size Analysis ASTMD422



Sieve Size	% Passing
2"	100
1-1/2"	100
1"	100
3/4"	100
1/2"	100
3/8"	100
1/4"	100
No.4	100
No.10	100
No.20	100
No.40	99
No.80	98
No.100	98
No.200	96

Test Procedure Information

Test Method

Procedure Used

Preparation Method

Description of Rammer

☒ ASTM D-1557 (Modified) ☐ ASTM D-698 (Standard)

☐ A ☐ B ☒ C

☐ Dry ☒ Moist

☐ Manual ☒ Mechanical

Test Results

MDD (pcf) = 110.0
OMC (%) = 15.2

Oversize Fraction by Dry Weight

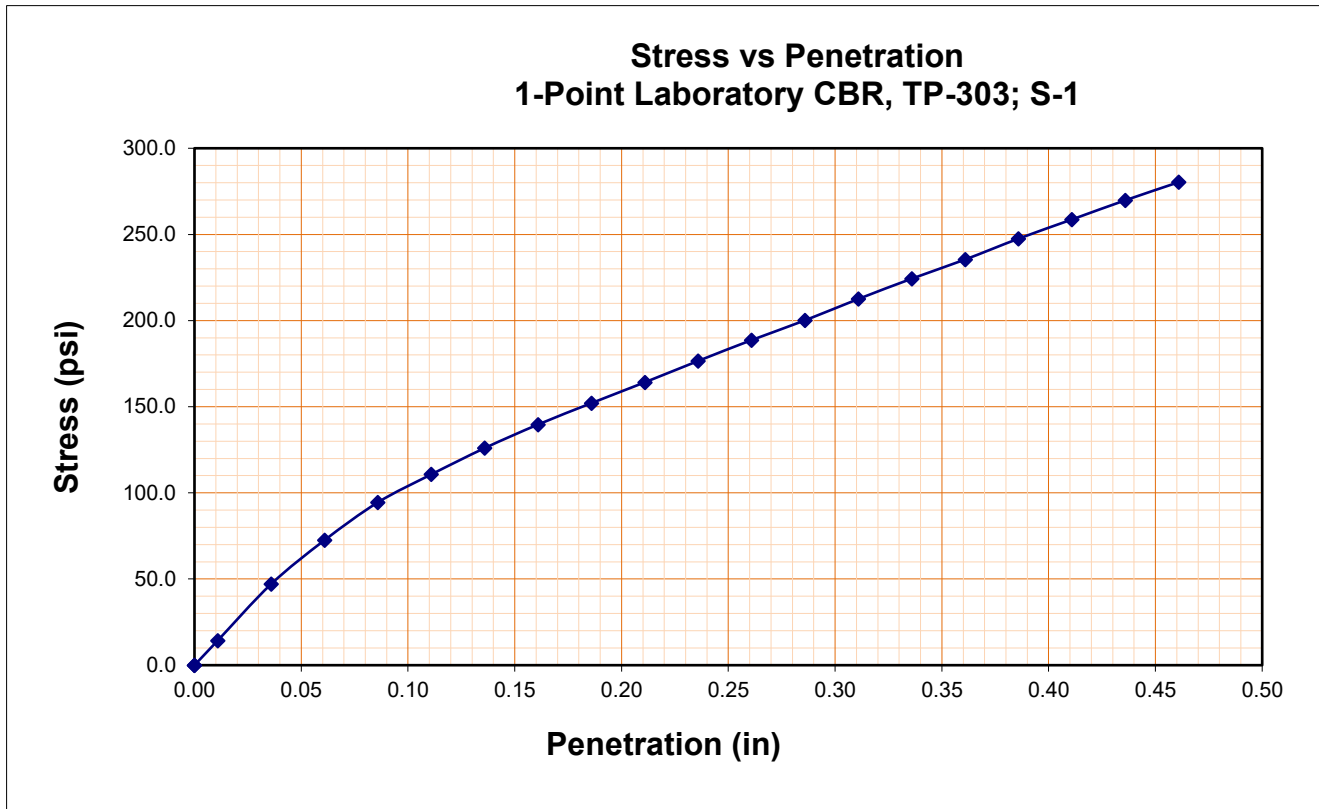
☒ 0 % Retained on ☐ No.4 Sieve ☐ 3/8" Sieve ☒ 3/4" Sieve

* Specific Gravity, estimated
** MDD = Maximum Dry Density, OMC = Optimum Moisture Content

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V. **CBR (California Bearing Ratio) of Laboratory-Compacted Soils (ASTM D1883)**

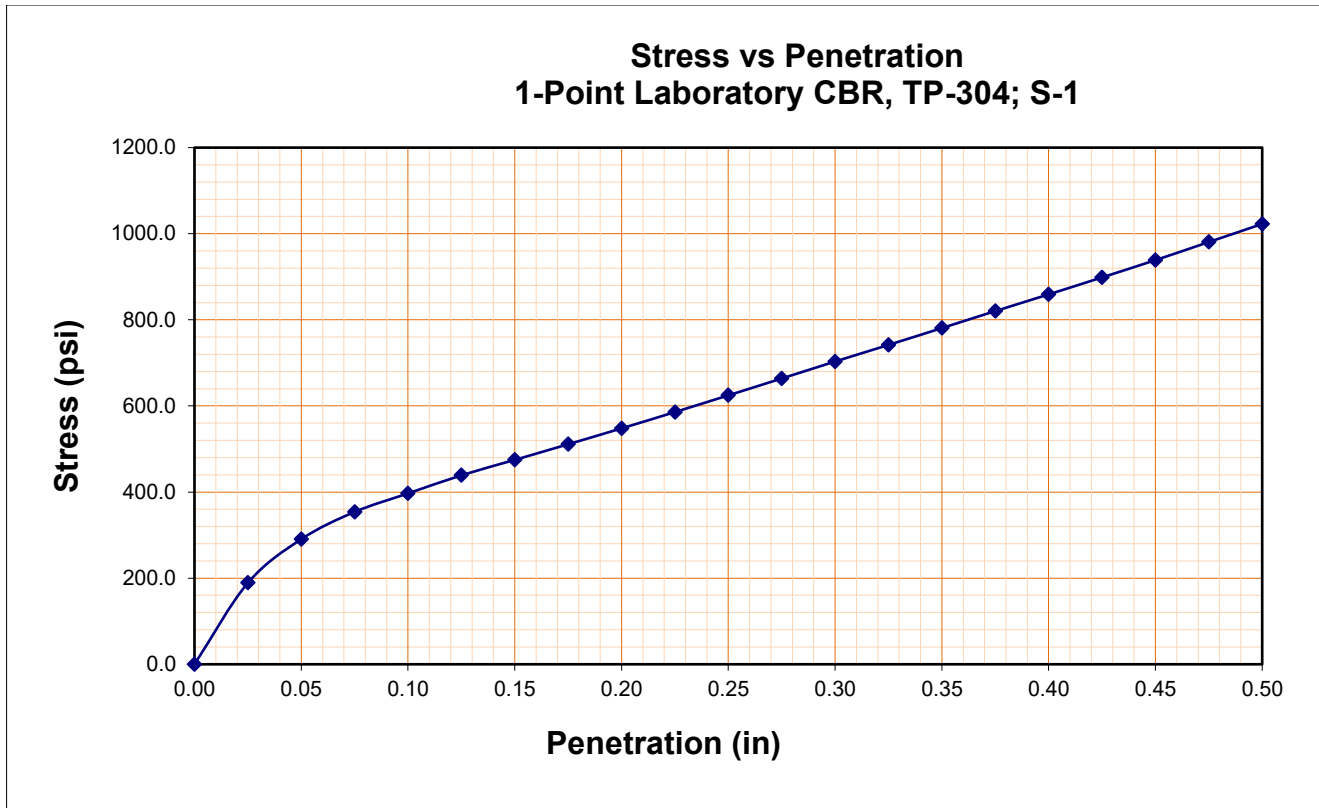


Burmister Classification:

Brown cmf SAND, some SILT, some cmf GRAVEL, little CLAY

As-Molded Moisture Content (%)	6.0
As-Molded Dry Density (pcf)	117.5
No. of Blows	37
Percent Compaction, ASTM D1557	93.4
Time Soaked (hrs)	96
Swell (%)	2.5
Moisture Content After Soaking (%)	
Top 1"	17.4
Center	14.7
Ring Capacity (lbs.)	6000
Soaked CBR @ 0.1	10.4
Soaked CBR @ 0.2	10.2
Surcharge Weight (lbs.)	10

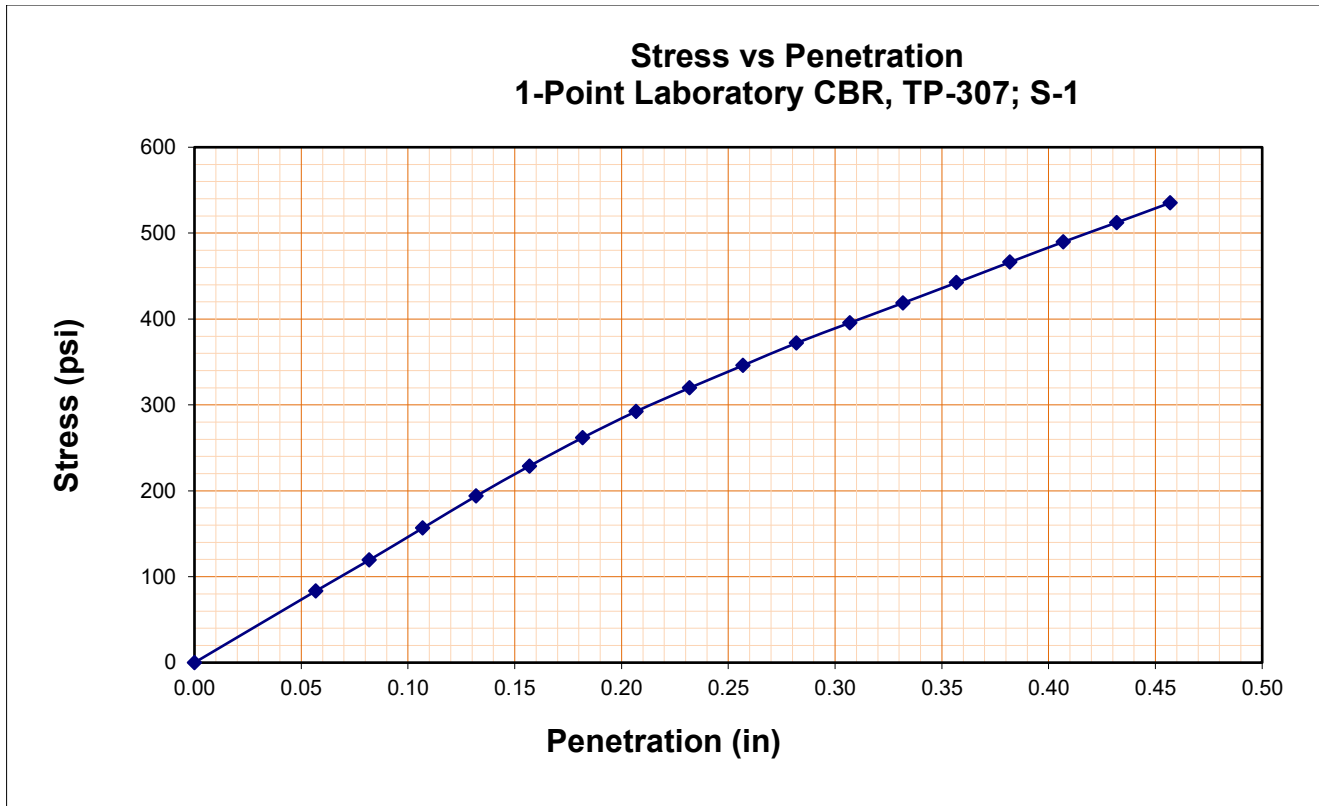
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**Burmister Classification:**

Brown cmf SAND, some SILT, some cmf GRAVEL, trace CLAY

As-Molded Moisture Content (%)	9.7
As-Molded Dry Density (pcf)	118.6
No. of Blows	42
Percent Compaction, ASTM D1557	96.7
Time Soaked (hrs)	96
Swell (%)	0.2
Moisture Content After Soaking (%)	
Top 1"	12.6
Center	12.8
Ring Capacity (lbs.)	6000
Soaked CBR @ 0.1	39.7
Soaked CBR @ 0.2	36.5
Surcharge Weight (lbs.)	10

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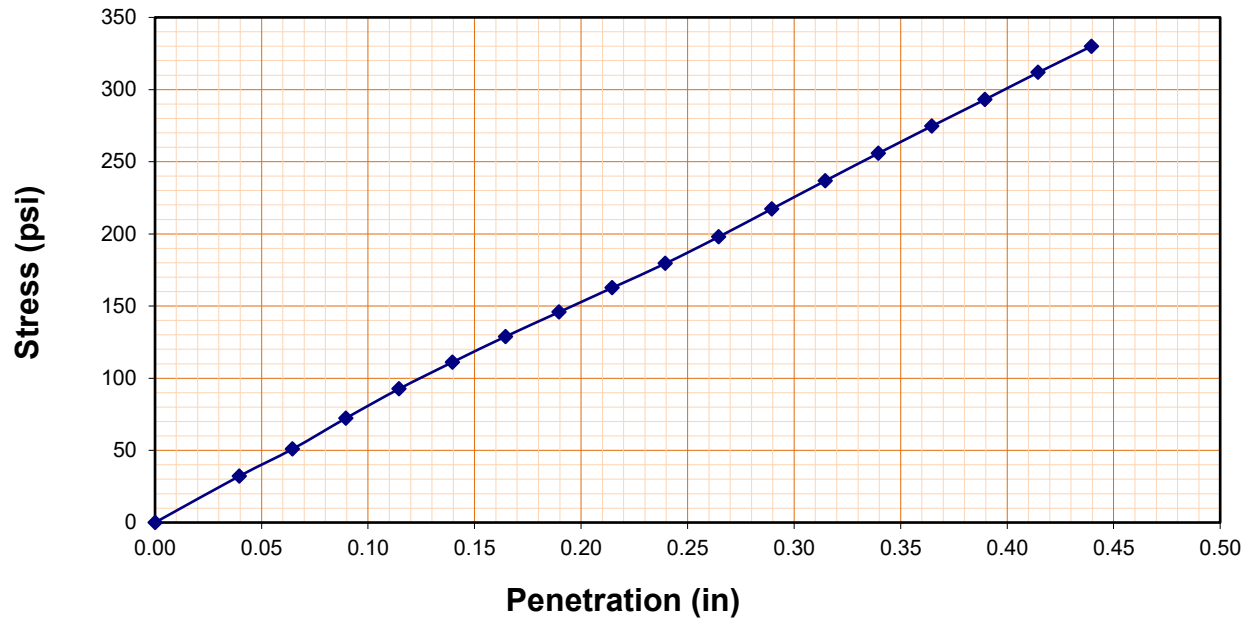
Burmister Classification: Brown SILT, little CLAY, trace mf SAND

As-Molded Moisture Content (%)	17.8
As-Molded Dry Density (pcf)	106.1
No. of Blows	40
Percent Compaction, ASTM D1557	96.3
Time Soaked (hrs)	96
Swell (%)	1.5
Moisture Content After Soaking (%)	
Top 1"	20.2
Center	18.7
Ring Capacity (lbs.)	6000
Soaked CBR @ 0.1	14.5
Soaked CBR @ 0.2	19.0
Surcharge Weight (lbs.)	10

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Stress vs Penetration
1-Point Laboratory CBR, TP-312; S-1



Burmister Classification:

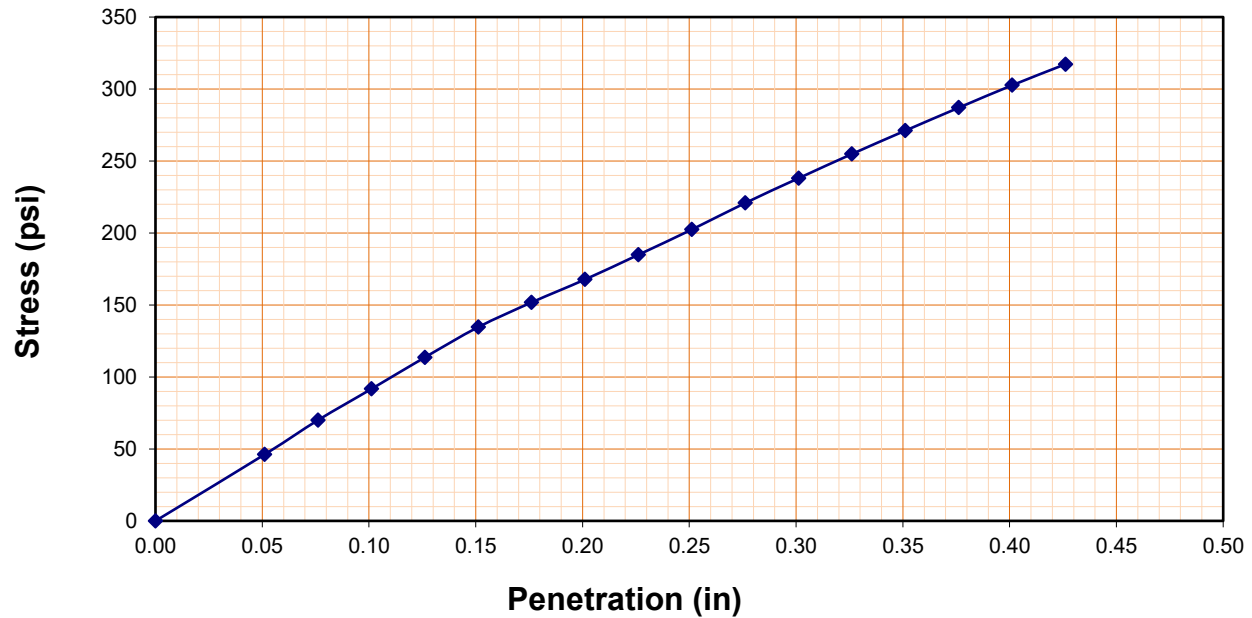
Brown SILT, little CLAY, trace fine SAND

As-Molded Moisture Content (%)	16.8
As-Molded Dry Density (pcf)	109.1
No. of Blows	37
Percent Compaction, ASTM D1557	96.9
Time Soaked (hrs)	96
Swell (%)	2.0
Moisture Content After Soaking (%)	
Top 1"	19.2
Center	18.3
Ring Capacity (lbs.)	6000
Soaked CBR @ 0.1	8.0
Soaked CBR @ 0.2	10.5
Surcharge Weight (lbs.)	10

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Stress vs Penetration
1-Point Laboratory CBR, TP-315; S-1



Burmister Classification:

Brown SILT, little CLAY, trace mf SAND

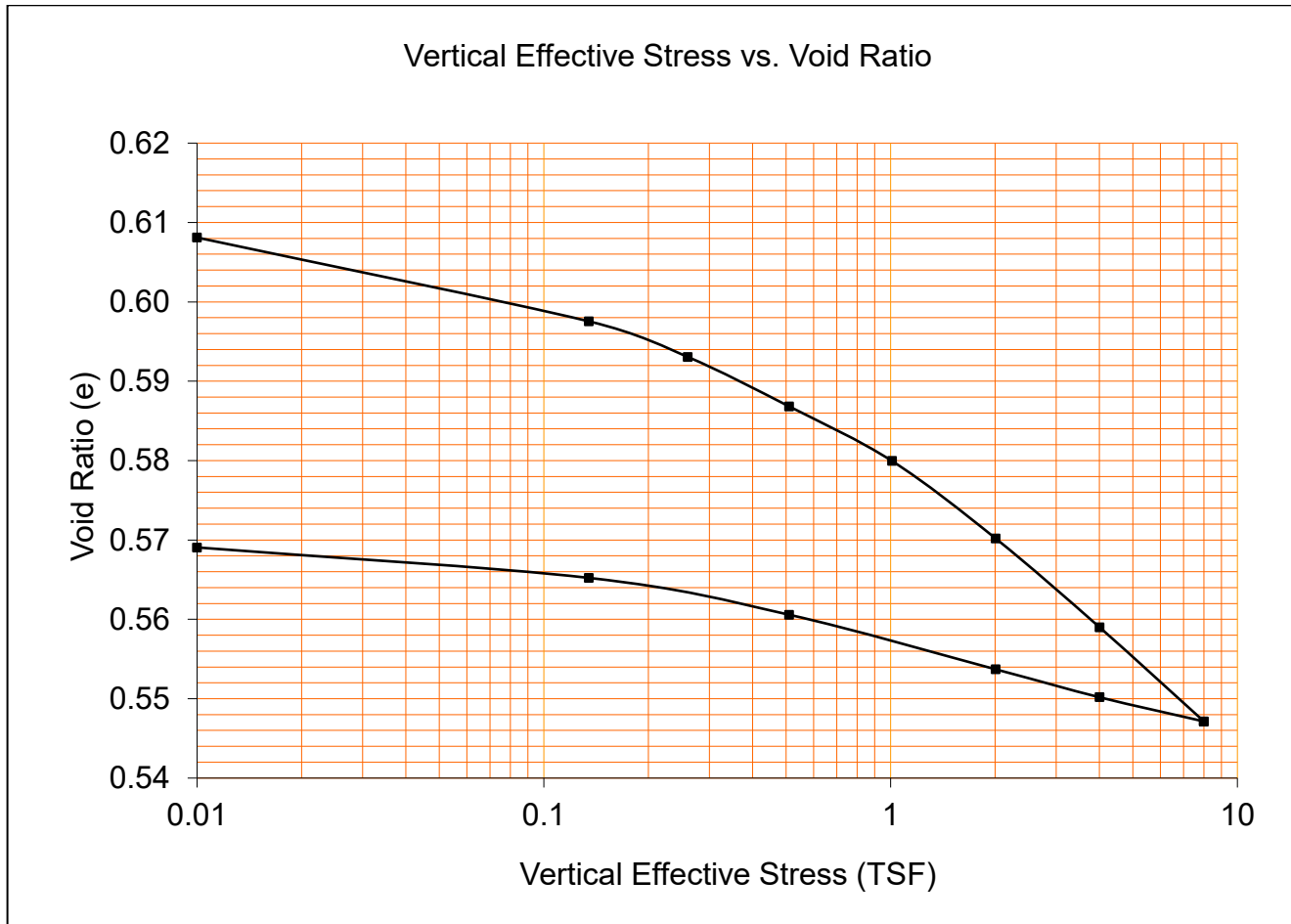
As-Molded Moisture Content (%)	16.3
As-Molded Dry Density (pcf)	105.5
No. of Blows	33
Percent Compaction, ASTM D1557	95.9
Time Soaked (hrs)	96
Swell (%)	1.9
Moisture Content After Soaking (%)	
Top 1"	20.0
Center	19.0
Ring Capacity (lbs.)	6000
Soaked CBR @ 0.1	9.2
Soaked CBR @ 0.2	11.2
Surcharge Weight (lbs.)	10

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VI. One-Dimensional Consolidation Test (ASTM D2435)

1) Boring: B-617 Sample: ST-1 (Depth = 15.5')



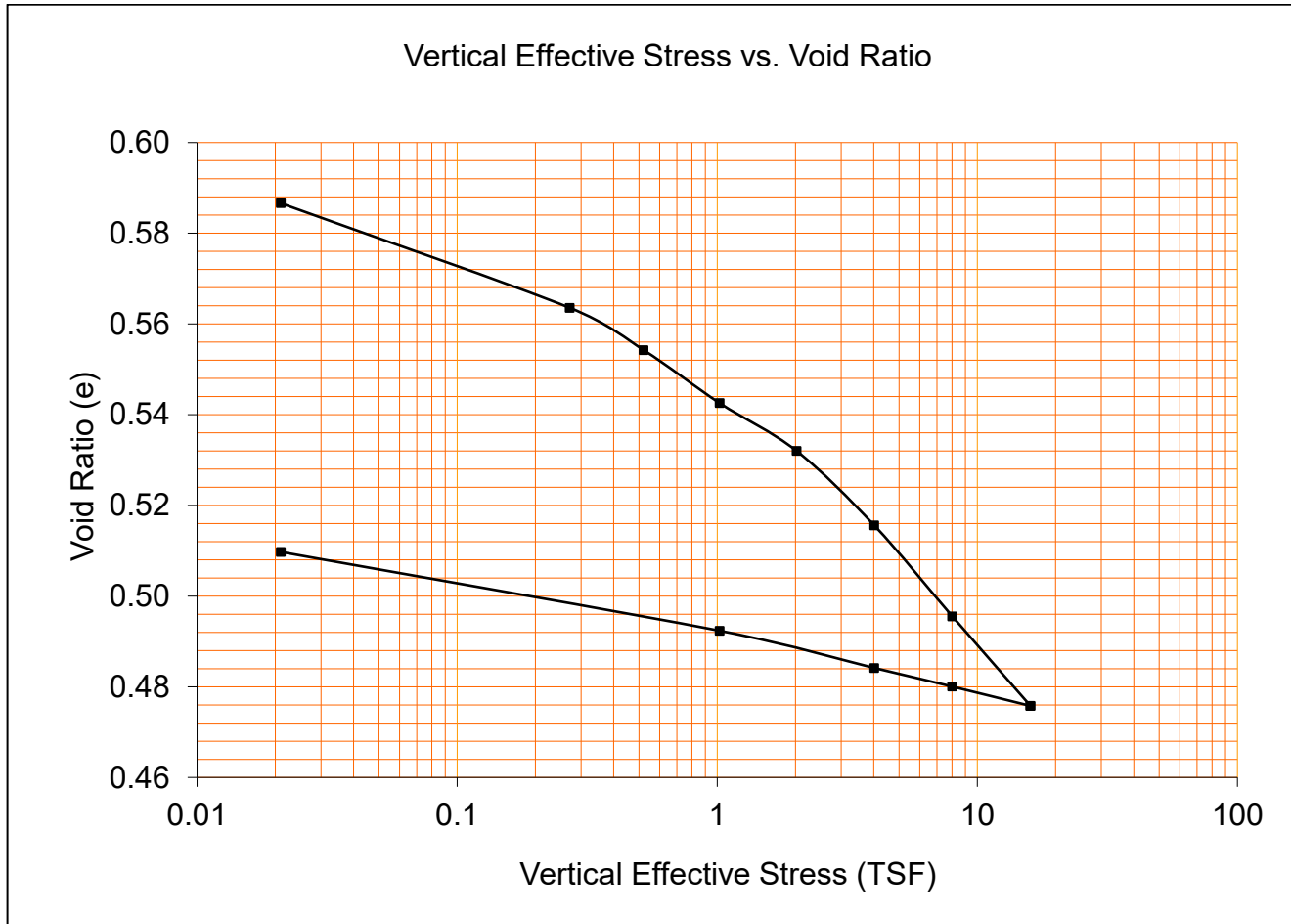
Pre-consolidation Pressure (P') = N.A. (Normally Consolidated)
Compression Index (Cc) = 0.05
Re-compression Index (Cr) = 0.01
Initial Void Ratio (e₀) = 0.58
Initial Water Content (W_n) = 22.17%
Dry Unit Weight Before Testing (γ_d) = 108.8 pcf
Specific Gravity = 2.76
Classification: = Brown/Grey SILT, little CLAY, trace cmf SAND
Coefficient of Consolidation (C_v):

Vertical Effective Stress (tsf)	Coefficient of Consolidation (C _v , ft ² /month)		
	Log of Time Method	Square Root of Time Method	Average
0.135	Not Obtainable	>100	>100
0.260	Not Obtainable	>100	>100
0.510	Not Obtainable	>100	>100
1.010	Not Obtainable	>100	>100
2.010	Not Obtainable	>100	>100
4.010	Not Obtainable	>100	>100
8.010	Not Obtainable	>100	>100

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2) Boring: B-623 Sample: ST-1 (Depth = 16.8')



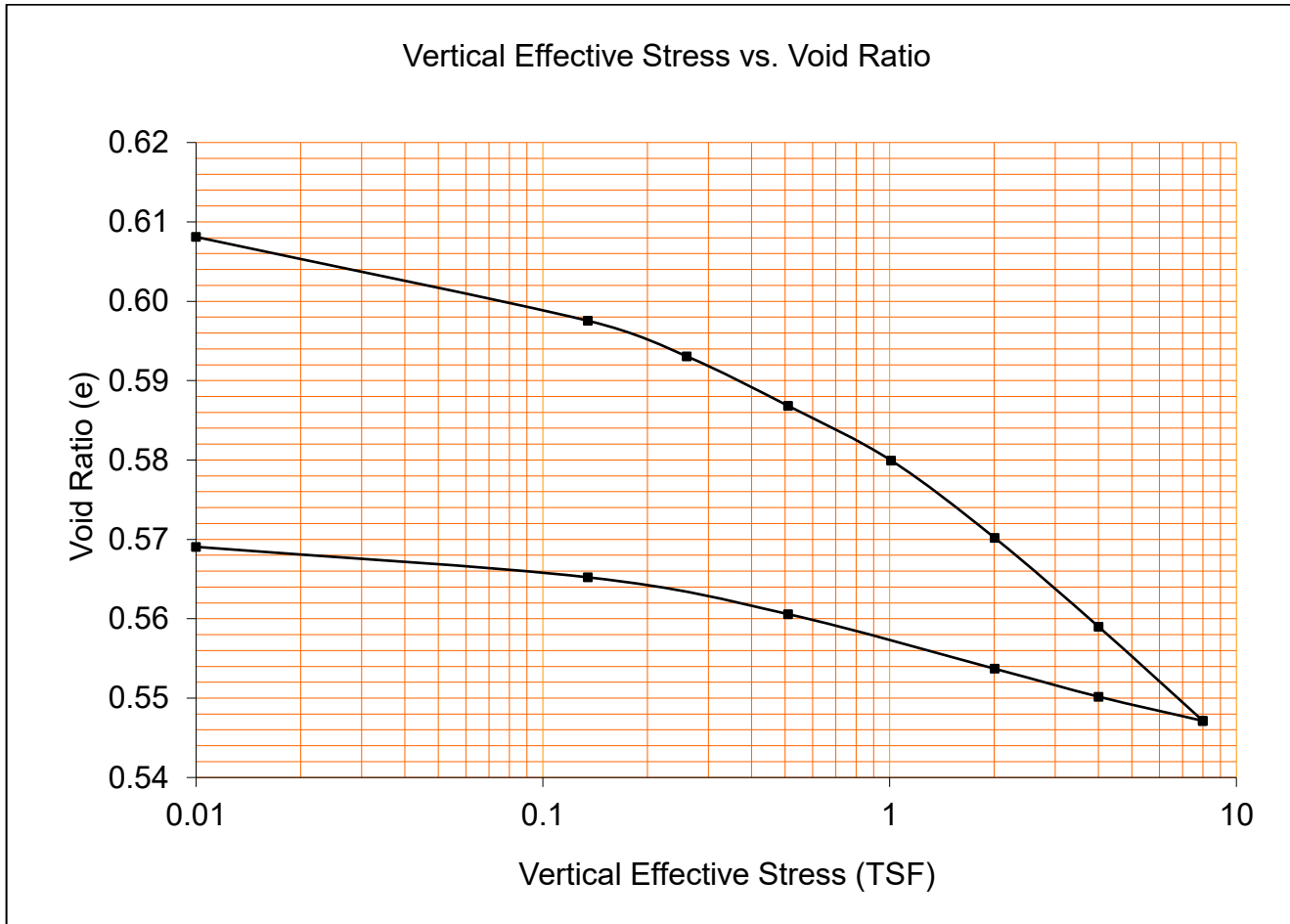
Pre-consolidation Pressure (P') = N.A. (Normally Consolidated)
 Compression Index (C_c) = 0.06
 Re-compression Index (C_r) = 0.01
 Initial Void Ratio (e_0) = 0.59
 Initial Water Content (W_n) = 23.2%
 Dry Unit Weight Before Testing (γ_d) = 108.5 pcf
 Specific Gravity = 2.76
 Classification: = Grey SILT, little CLAY, trace fine SAND
 Coefficient of Consolidation (C_v):

Vertical Effective Stress (tsf)	Coefficient of Consolidation (C_v , ft ² /month)		
	Log of Time Method	Square Root of Time Method	Average
0.271	Not Obtainable	65.13	65.13
0.521	Not Obtainable	12.31	12.31
1.021	Not Obtainable	16.28	16.28
2.021	Not Obtainable	65.13	65.13
4.021	Not Obtainable	>100	>100
8.021	Not Obtainable	90.15	90.15
16.021	Not Obtainable	95.85	95.85

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3) Boring: B-623 Sample: ST-2 (Depth = 16.5')



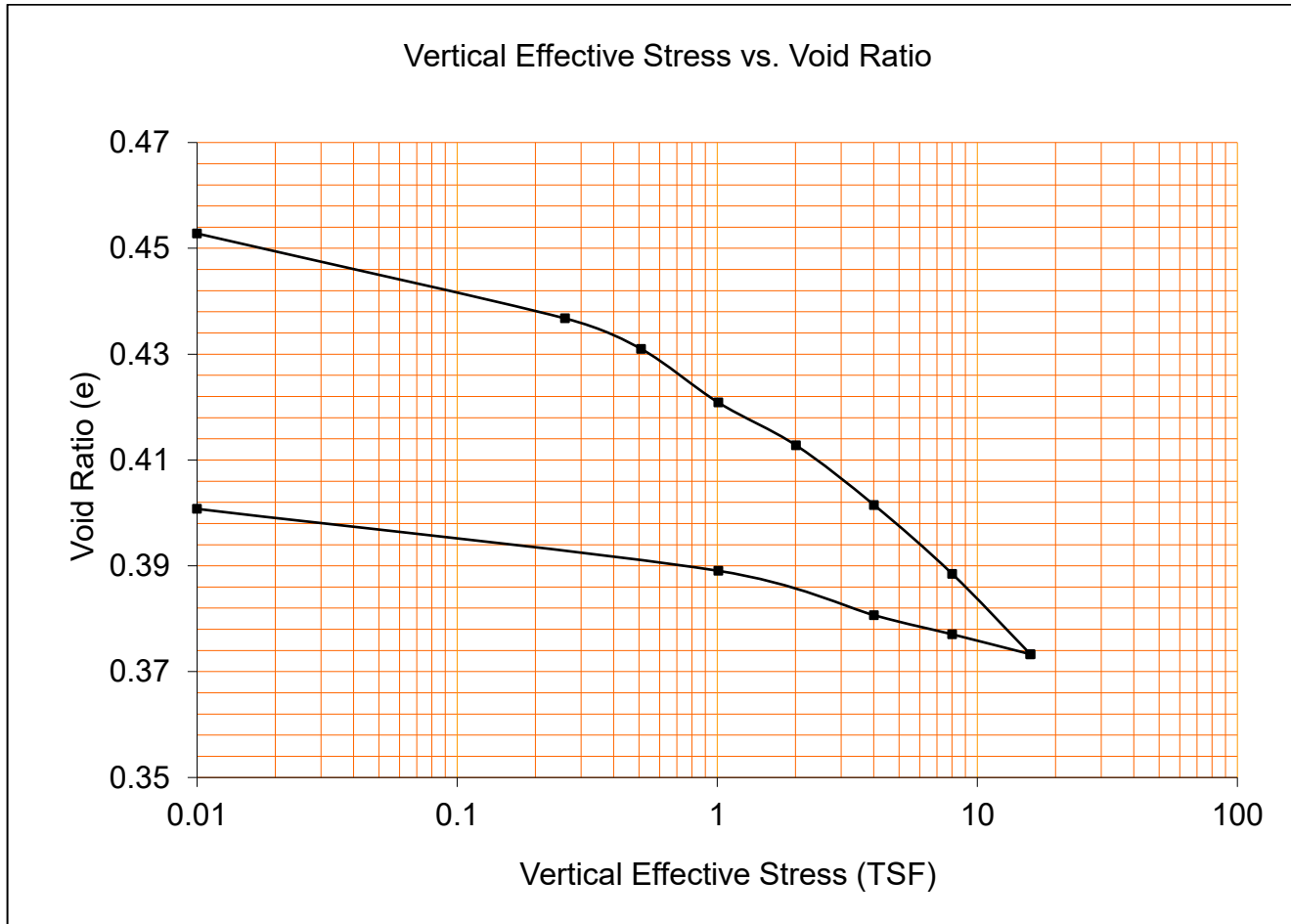
Pre-consolidation Pressure (P') = N.A. (Normally Consolidated)
Compression Index (Cc) = 0.04
Re-compression Index (Cr) = 0.01
Initial Void Ratio (eo) = 0.61
Initial Water Content (Wn) = 18.84%
Dry Unit Weight Before Testing (γ_d) = 107.1 pcf
Specific Gravity = 2.76
Classification: = Grey SILT, little CLAY, trace fine SAND
Coefficient of Consolidation (Cv):

Vertical Effective Stress (tsf)	Coefficient of Consolidation (Cv, ft ² /month)		
	Log of Time Method	Square Root of Time Method	Average
0.135	Not Obtainable	>100	>100
0.260	Not Obtainable	>100	>100
0.510	Not Obtainable	>100	>100
1.010	Not Obtainable	>100	>100
2.010	Not Obtainable	>100	>100
4.010	Not Obtainable	>100	>100
8.010	Not Obtainable	>100	>100

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4) Boring: B-624 Sample: ST-1 (Depth = 19.4')



Pre-consolidation Pressure (P') = N.A. (Normally Consolidated)
Compression Index (C_c) = 0.05
Re-compression Index (C_r) = 0.01
Initial Void Ratio (e_0) = 0.45
Initial Water Content (W_n) = 20.7%
Dry Unit Weight Before Testing (γ_d) = 112.4 pcf
Specific Gravity = 2.62
Classification: = Grey SILT, little CLAY, trace fine SAND
Coefficient of Consolidation (C_v):

Vertical Effective Stress (tsf)	Coefficient of Consolidation (C_v , ft ² /month)		
	Log of Time Method	Square Root of Time Method	Average
0.26	Not Obtainable	90.15	90.15
0.51	Not Obtainable	45.23	45.23
1.01	Not Obtainable	80.41	80.41
2.01	Not Obtainable	>100	>100
4.01	Not Obtainable	72.17	72.17
8.01	Not Obtainable	53.83	53.83
16.01	Not Obtainable	95.85	95.85

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VII. Rock Core Compression (ASTM D7012 Method C)

A) Testing Conditions:

Tested by: G.C.	Moisture Condition: Laboratory air-dry	Equipment: Forney QC-400-DR
Date of Test: 6/24/2024	Load Direction: Generally perpendicular to laminations	

B) Core Identification and Location:

Core ID	Location	Description
B-511; R-1	15.0'-15.5'	Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 1/4" thick), slightly to moderately weathered, thinly laminated to thinly bedded, hard.
B-518; R-1	18.2'-18.7'	Dark Grey SHALE with DOLOSTONE layers (<1/8" - 1.0" thick), slightly to moderately weathered, thinly laminated to medium hard.
B-518; R-2	22.3'-23.1'	Dark Grey SHALE with DOLOSTONE layers (<1/8" - 2.0" thick), slightly to moderately weathered, thinly laminated to medium bedded, medium hard to hard.
B-523; R-1	15.5'-16.0'	Grey DOLOSTONE with interbedded SHALE (<1/8" - 4.0" thick), slightly weathered, thinly laminated to thinly bedded, medium to hard.
B-544; R-1	18.7'-19.3'	Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 2.0" thick), slightly weathered, thinly laminated to thinly bedded, hard.
B-547; R-1	22.1'-22.6'	Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 1" thick), slightly weathered, thinly laminated to thinly bedded, medium hard to hard.
B-547; R-2	28.8'-29.4'	Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 2" thick), slightly weathered, thinly laminated to thinly bedded, medium hard to hard.
B-549; R-1	29.1'-29.6'	Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 2" thick), slightly weathered, thinly laminated to thinly bedded, medium hard to hard.
B-561; R-1	20.8'-21.3'	Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 2" thick), thinly laminated to thinly bedded, hard.
B-565; R-1	22.5'-23.0'	Grey DOLOSTONE with interbedded SHALE layers (<1/8" to 1" thick), thinly laminated to medium bedded, hard.
B-595; R-2	24.1'-24.6'	Grey DOLOSTONE with SHALE layers (<1/8" - 3.0" thick), slightly weathered, thinly laminated to medium bedded, medium hard to hard.
B-604; R-1	26.7'-27.2'	Gray SHALE, weathered, bedded, hard.
B-688; R-1	17.8'-18.3'	Grey DOLOSTONE with interbedded SHALE (1/8" - 1.0" thick), slightly weathered, thinly laminated to medium bedded, medium hard to hard.

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C) Core Measurements:

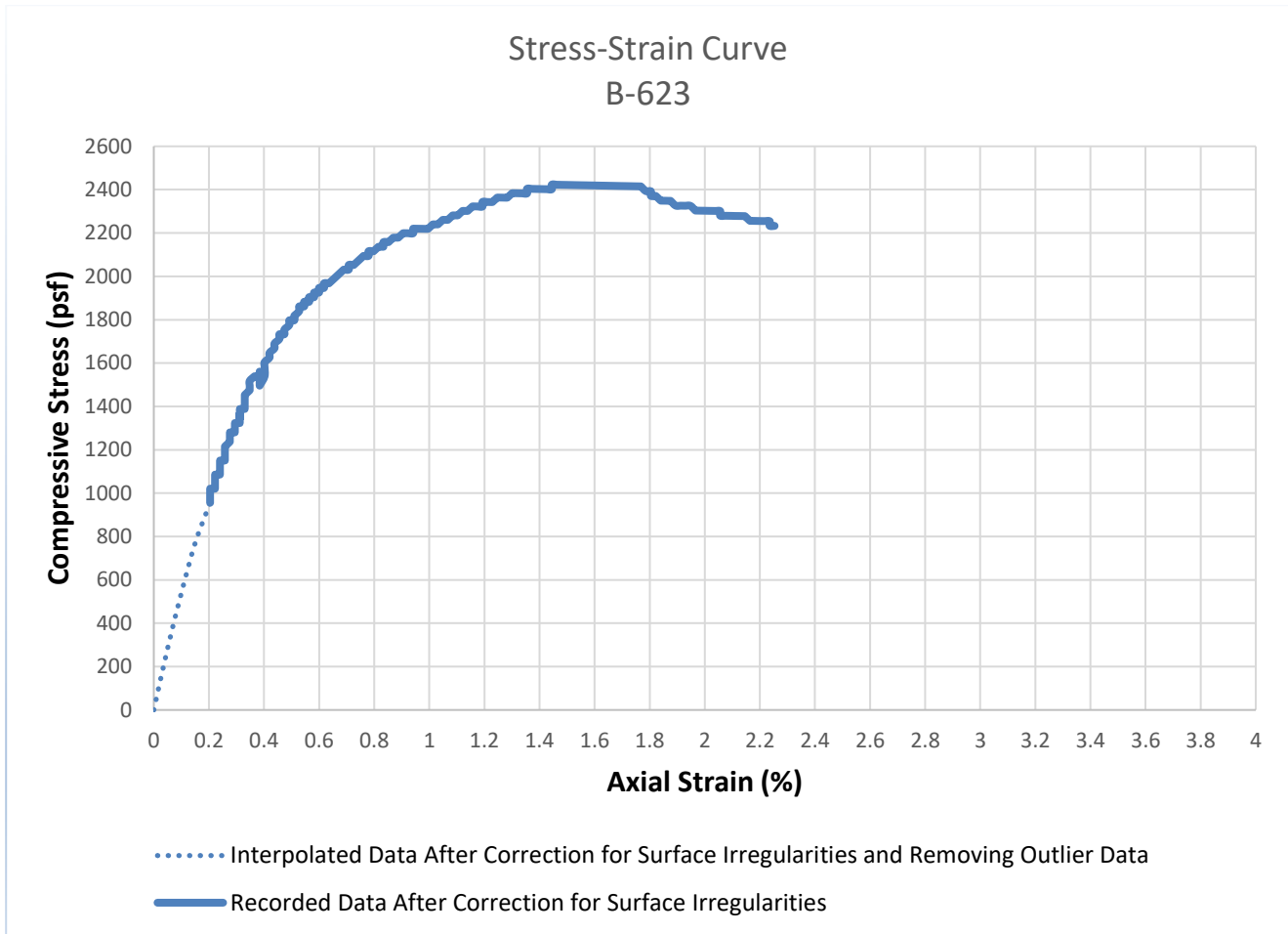
Core ID	Core Diameter (inch)	Length (in.)	Length to Diameter	Mass (g)	Density (lb./ft ³)
B-511; R-1	1.97	4.00	2.03	566.54	176
B-518; R-1	1.97	3.23	1.64	425.57	165
B-518; R-2	1.97	3.96	2.01	532.24	168
B-523; R-2	1.97	4.01	2.03	557.14	174
B-544; R-1	1.97	3.08	1.56	421.61	171
B-547; R-1	1.97	4.04	2.05	573.46	165
B-547; R-2	1.97	4.03	2.04	555.44	172
B-549; R-1	1.97	3.97	2.01	535.69	169
B-561; R-1	1.97	3.98	2.02	549.35	172
B-565; R-1	1.97	4.01	2.05	560.26	175
B-595; R-2	1.97	3.91	1.98	538.38	171
B-604; R-1	1.97	3.92	1.98	545.93	174
B-688; R-1	1.97	3.92	1.98	550.22	175

D) Compression Test Results:

Core ID	Specimen Area (inch ²)	Total Load (lbs.)	Compressive Strength (psi)	Temperature (°C)	Time to Failure (seconds)	Rate of Loading (psi/sec)
B-511; R-1	3.05	62,000	20,330	22	66	307
B-518; R-1	3.05	9,200	3,020	22	48	63
B-518; R-2	3.05	14,800	4,850	22	49	99
B-523; R-2	3.05	19,800	6,490	22	55	118
B-544; R-1	3.05	17,000	5,570	22	30	186
B-547; R-1	3.05	25,200	8,260	22	39	212
B-547; R-2	3.05	22,000	7,210	22	34	214
B-549; R-1	3.05	11,000	3,610	22	47	77
B-561; R-1	3.05	15,600	5,110	22	44	115
B-565; R-1	3.05	31,000	10,160	22	40	252
B-595; R-2	3.05	29,000	9,510	22	37	257
B-604; R-1	3.05	25,800	8,460	22	45	188
B-688; R-1	3.05	40,000	13,110	22	63	210

VIII. Unconfined Compressive Strength of Cohesive Soil (ASTM 2166)

1) Boring: B-623 Sample depth = 16.0'-16.5' below grade



Initial Dry Density = 112.7 pcf
Water Content = 23.2 %
Unconfined Compressive Strength = 2420 psf

Average Height	= 5.56 in
Average Diameter	= 2.88 in
Height-to-Diameter Ratio	= 1.9
Strain Rate	= 0.26 %/min
Strain at Failure	= 1.44 %

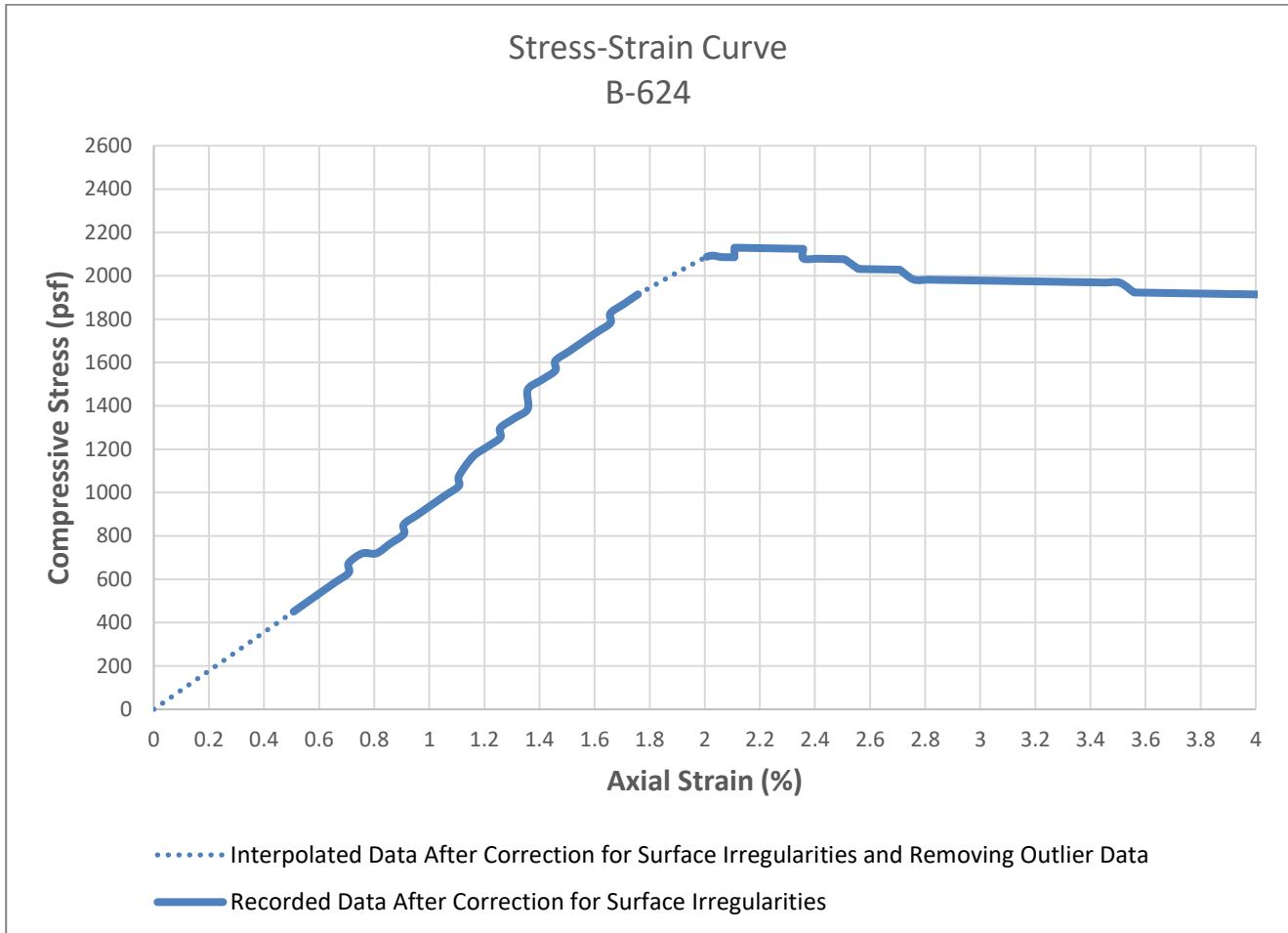
Note: Sample experienced slumping during sample preparation.



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2) Boring: B-624 Sample depth = 19.0'-19.5' below grade



Initial Dry Density = 121.0 pcf
Water Content = 20.7 %
Unconfined Compressive Strength = 2130 psf

Average Height = 2.00 in
Average Length = 1.78 in
Height-to-Length Ratio = 1.1
Strain Rate = 1.30 %/min
Strain at Failure = 2.11 %

Note: Sample experienced significant slumping during sample preparation. A cube sample was prepared after the cylindrical sample could not support its own weight.



If you have any questions regarding this report please contact our office.

Hannah Kloiber
 Hannah Kloiber
 Laboratory Supervisor

Attachment: Rock Core Photographs (7 of 7)

Attachment to Laboratory Test Summary
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B-511; R-1 Before Compression



B-511; R-1 After Compression



B-518; R-1 Before Compression



B-518; R-1 After Compression

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B-518; R-2 Before Compression



B-518; R-2 After Compression



B-523; R-1 Before Compression



B-523; R-1 After Compression

Attachment to Laboratory Test Summary
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B-544; R-1 Before Compression



B-544; R-1 After Compression



B-547; R-1 Before Compression



B-547; R-1 After Compression

Attachment to Laboratory Test Summary
CME Report No.: 28062L-04-0724
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B-547; R-2 Before Compression



B-547; R-2 After Compression



B-549; R-1 Before Compression



B-549; R-1 After Compression

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B-561; R-1 Before Compression



B-561; R-1 After Compression



B-565; R-1 Before Compression



B-565; R-1 After Compression

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CME Report No.: 28062L-04-0724
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B-595; R-1 Before Compression



B-595; R-1 After Compression



B-604; R-1 Before Compression



B-604; R-1 After Compression

Attachment to Laboratory Test Summary

CME Report No.: 28062L-04-0724

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B-688; R-1 Before Compression



B-688; R-1 After Compression

INFILTRATION TEST REPORTS



Test ID: IT-TP301			
Project:	Micron Campus Clay, NY	CME Project No.:	28062
		Test Date:	05/02/24
Client:	Ramboll	Test Location:	Near Test Pit TP-301
		Technician:	Astitwa Sharma, EIT

Test Preparation and Dimensions

Casing Installed in: ☒ Test Pit ☐ Borehole

Casing Diameter and Type: 3 inch I.D. HDPE

A Existing Grade Elevation (ft): 403.1 ±

B Casing Stickup Length Above Grade (ft): 4.00

C Top of Casing Elevation (ft): (A+B)= 407.1 ±

D Depth to Bottom of Test Hole, Below Top of Casing (ft): 7.90

E Bottom of Test Hole Elevation: (C-D)= 399.2 ±

Burmister Classification of Soil at Bottom of Hole: Brown mottled SILT, some cmf SAND, some cmf GRAVEL, trace COBBLES

Thickness&Type of Scour/Sediment Protection Layer Installed: 3"

Date and Time Pre-Soaked:..... 05/01/24 Time: 13:18

Depth to Water Level, Below Top of Casing

Just After Pre-Soak Filling (ft): 5.85

Just Prior to First Test Filling (ft): 6.40 Date: 05/02/24 Time: 13:10

Test Observations

Run 1			Run 2			Run 3			Run 4		
Real Time (hh:mm)	Elapsed Time (h:mm)	Depth to Water Level, Below Top of Casing (feet)	Real Time (hh:mm)	Elapsed Time (h:mm)	Depth to Water Level, Below Top of Casing (feet)	Real Time (hh:mm)	Elapsed Time (h:mm)	Depth to Water Level, Below Top of Casing (feet)	Real Time (hh:mm)	Elapsed Time (h:mm)	Depth to Water Level, Below Top of Casing (feet)
13:14	0:00	5.85		0:00			0:00			0:00	
13:15	0:01	5.85		0:01			0:01			0:01	
13:16	0:02	5.85		0:02			0:02			0:02	
13:17	0:03	5.85		0:03			0:03			0:03	
13:19	0:05	5.85		0:05			0:05			0:05	
13:24	0:10	5.85		0:10			0:10			0:10	
13:29	0:15	5.85		0:15			0:15			0:15	
13:44	0:30	5.85		0:30			0:30			0:30	
13:59	0:45	5.85		0:45			0:45			0:45	
14:14	1:00	5.85		1:00			1:00			1:00	

Test Results

Run:	Run 1	Run 2	Run 3	Run 4
Infiltration Rate (feet/hour):	0.00			
Infiltration Rate (inches/hour):	0.00			

Final Infiltration Rate (inches/hour): 0.00
☐ Based on average of all four runs

☒ Based on result of last run

- Note(s)**
- Test performed in general conformance with NYS Stormwater Management Design Manual, Appendix D: Infiltration Testing Requirements.
 - No infiltration noted after Run 1, infiltration testing was suspended at this location.

INFILTRATION TEST REPORTS



Test ID: IT-TP302			
Project:	Micron Campus Clay, NY	CME Project No.:	28062
		Test Date:	05/02/24
Client:	Ramboll	Test Location:	Near Test Pit TP-302
		Technician:	Astitwa Sharma, EIT

Test Preparation and Dimensions

Casing Installed in: ☒ Test Pit ☐ Borehole

Casing Diameter and Type: 3 inch I.D. HDPE

A Existing Grade Elevation (ft): 398.9 ±

B Casing Stickup Length Above Grade (ft): 3.60

C Top of Casing Elevation (ft): (A+B)= 402.5 ±

D Depth to Bottom of Test Hole, Below Top of Casing (ft): 7.80

E Bottom of Test Hole Elevation: (C-D)= 394.7 ±

Burmister Classification of Soil at Bottom of Hole: Grey/Brown cmf SAND, some SILT, some COBBLES, little cmf GRAVEL

Thickness&Type of Scour/Sediment Protection Layer Installed: 4"

Date and Time Pre-Soaked:..... 05/01/24 Time: 13:30

Depth to Water Level, Below Top of Casing

Just After Pre-Soak Filling (ft): 5.65

Just Prior to First Test Filling (ft): 5.65 Date: 5/2/2024 Time: 13:45

Test Observations

Run 1			Run 2			Run 3			Run 4		
Real Time (hh:mm)	Elapsed Time (h:mm)	Depth to Water Level, Below Top of Casing (feet)	Real Time (hh:mm)	Elapsed Time (h:mm)	Depth to Water Level, Below Top of Casing (feet)	Real Time (hh:mm)	Elapsed Time (h:mm)	Depth to Water Level, Below Top of Casing (feet)	Real Time (hh:mm)	Elapsed Time (h:mm)	Depth to Water Level, Below Top of Casing (feet)
	0:00			0:00			0:00			0:00	
	0:01			0:01			0:01			0:01	
	0:02			0:02			0:02			0:02	
	0:03			0:03			0:03			0:03	
	0:05			0:05			0:05			0:05	
	0:10			0:10			0:10			0:10	
	0:15			0:15			0:15			0:15	
	0:30			0:30			0:30			0:30	
	0:45			0:45			0:45			0:45	
	1:00			1:00			1:00			1:00	

Test Results

Run:	Run 1	Run 2	Run 3	Run 4
Infiltration Rate (feet/hour):				
Infiltration Rate (inches/hour):				

Final Infiltration Rate (inches/hour): 0.00
☐ Based on average of all four runs

☒ Based on result of last run
Note(s)

- Test performed in general conformance with NYS Stormwater Management Design Manual, Appendix D: Infiltration Testing Requirements.
- No infiltration noted 24 hours after presoak on 05/01/24, infiltration testing was suspended at this location.

INFILTRATION TEST REPORTS**Test ID: IT-TP305**

Project:	Micron Campus Clay, NY	CME Project No.:	28062
		Test Date:	05/02/24
Client:	Ramboll	Test Location:	Near Test Pit TP-305
		Technician:	Astitwa Sharma, EIT

Test Preparation and DimensionsCasing Installed in: ☒ Test Pit ☐ BoreholeCasing Diameter and Type: 3 inch I.D. HDPEA Existing Grade Elevation (ft): 404.0 ±B Casing Stickup Length Above Grade (ft): 3.90C Top of Casing Elevation (ft): (A+B)= 407.9 ±D Depth to Bottom of Test Hole, Below Top of Casing (ft): 7.80E Bottom of Test Hole Elevation: (C-D)= 400.1 ±Burmister Classification of Soil at Bottom of Hole: Dark Brown mottled cmf SAND, some SILT,
some cmf GRAVEL, little COBBLESThickness&Type of Scour/Sediment Protection Layer Installed: 4"Date and Time Pre-Soaked:..... 05/01/24 Time: 13:45

Depth to Water Level, Below Top of Casing

Just After Pre-Soak Filling (ft): 5.90Just Prior to First Test Filling (ft): 0.00 Date: 5/2/2024 Time: 14:02**Test Observations**

Run 1			Run 2			Run 3			Run 4		
Real Time (hh:mm)	Elapsed Time (h:mm)	Depth to Water Level, Below Top of Casing (feet)	Real Time (hh:mm)	Elapsed Time (h:mm)	Depth to Water Level, Below Top of Casing (feet)	Real Time (hh:mm)	Elapsed Time (h:mm)	Depth to Water Level, Below Top of Casing (feet)	Real Time (hh:mm)	Elapsed Time (h:mm)	Depth to Water Level, Below Top of Casing (feet)
14:08	0:00	5.70		0:00			0:00			0:00	
14:09	0:01	5.70		0:01			0:01			0:01	
14:10	0:02	5.70		0:02			0:02			0:02	
14:11	0:03	5.70		0:03			0:03			0:03	
14:13	0:05	5.70		0:05			0:05			0:05	
14:18	0:10	5.70		0:10			0:10			0:10	
14:23	0:15	5.70		0:15			0:15			0:15	
14:38	0:30	5.70		0:30			0:30			0:30	
14:53	0:45	5.70		0:45			0:45			0:45	
15:08	1:00	5.70		1:00			1:00			1:00	

Test Results

Run:	Run 1	Run 2	Run 3	Run 4
Infiltration Rate (feet/hour):	0.00			
Infiltration Rate (inches/hour):	0.00			

Final Infiltration Rate (inches/hour): 0.00 ☐ Based on average of all four runs☒ Based on result of last run**Note(s)** 1. Test performed in general conformance with NYS Stormwater Management Design Manual, Appendix D: Infiltration Testing Requirements.

2. No infiltration noted after Run 1, infiltration testing was suspended at this location.

INFILTRATION TEST REPORTS



Test ID: IT-B565			
Project:	Micron Campus Clay, NY	CME Project No.:	28062
		Test Date:	04/30/24
Client:	Ramboll	Test Location:	Near Test Boring B-565
		Technician:	Astitwa Sharma, EIT

Test Preparation and Dimensions

Casing Installed in: ☐ Test Pit ☒ Borehole

Casing Diameter and Type: 3 inch I.D. HDPE

A Existing Grade Elevation (ft): 381.2 ±

B Casing Stickup Length Above Grade (ft): 1.75

C Top of Casing Elevation (ft): (A+B)= 383.0 ±

D Depth to Bottom of Test Hole, Below Top of Casing (ft): 7.00

E Bottom of Test Hole Elevation: (C-D)= 376.0 ±

Burmister Classification of Soil at Bottom of Hole: Light Brown/Grey SILT, trace fine SAND

Thickness&Type of Scour/Sediment Protection Layer Installed: 3"

Date and Time Pre-Soaked: 04/30/24 Time: 11:30

Depth to Water Level, Below Top of Casing

Just After Pre-Soak Filling (ft): 4.80

Just Prior to First Test Filling (ft): 2.60 Date: 5/3/2024 Time: 13:56

Test Observations

Run 1			Run 2			Run 3			Run 4		
Real Time (hh:mm)	Elapsed Time (h:mm)	Depth to Water Level, Below Top of Casing (feet)	Real Time (hh:mm)	Elapsed Time (h:mm)	Depth to Water Level, Below Top of Casing (feet)	Real Time (hh:mm)	Elapsed Time (h:mm)	Depth to Water Level, Below Top of Casing (feet)	Real Time (hh:mm)	Elapsed Time (h:mm)	Depth to Water Level, Below Top of Casing (feet)
	0:00			0:00			0:00			0:00	
	0:01			0:01			0:01			0:01	
	0:02			0:02			0:02			0:02	
	0:03			0:03			0:03			0:03	
	0:05			0:05			0:05			0:05	
	0:10			0:10			0:10			0:10	
	0:15			0:15			0:15			0:15	
	0:30			0:30			0:30			0:30	
	0:45			0:45			0:45			0:45	
	1:00			1:00			1:00			1:00	

Test Results

Run:	Run 1	Run 2	Run 3	Run 4
Infiltration Rate (feet/hour):				
Infiltration Rate (inches/hour):				

Final Infiltration Rate (inches/hour): 0.00
☐ Based on average of all four runs

☒ Based on result of last run
Note(s)

- Test performed in general conformance with NYS Stormwater Management Design Manual, Appendix D: Infiltration Testing Requirements.
- Water level rose 72 hours after presoak on 04/30/24, presoak water did not infiltrate, infiltration testing was suspended at this location.

INFILTRATION TEST REPORTS



Test ID: IT-B611			
Project:	Micron Campus Clay, NY	CME Project No.:	28062
		Test Date:	05/03/24
Client:	Ramboll	Test Location:	Near Test Boring B-611
		Technician:	Astitwa Sharma, EIT

Test Preparation and Dimensions

Casing Installed in: ☐ Test Pit ☒ Borehole

Casing Diameter and Type: 3 inch I.D. HDPE

A Existing Grade Elevation (ft): 380.6 ±

B Casing Stickup Length Above Grade (ft): 1.70

C Top of Casing Elevation (ft): (A+B)= 382.3 ±

D Depth to Bottom of Test Hole, Below Top of Casing (ft): 6.17

E Bottom of Test Hole Elevation: (C-D)= 376.1 ±

Burmister Classification of Soil at Bottom of Hole: Light Brown SILT, trace fine SAND

Thickness&Type of Scour/Sediment Protection Layer Installed: 3"

Date and Time Pre-Soaked:..... 04/30/24 Time: 10:30

Depth to Water Level, Below Top of Casing

Just After Pre-Soak Filling (ft): 2.20

Just Prior to First Test Filling (ft): 2.20 Date: 5/3/2024 Time: 14:10

Test Observations

Run 1			Run 2			Run 3			Run 4		
Real Time (hh:mm)	Elapsed Time (h:mm)	Depth to Water Level, Below Top of Casing (feet)	Real Time (hh:mm)	Elapsed Time (h:mm)	Depth to Water Level, Below Top of Casing (feet)	Real Time (hh:mm)	Elapsed Time (h:mm)	Depth to Water Level, Below Top of Casing (feet)	Real Time (hh:mm)	Elapsed Time (h:mm)	Depth to Water Level, Below Top of Casing (feet)
	0:00			0:00			0:00			0:00	
	0:01			0:01			0:01			0:01	
	0:02			0:02			0:02			0:02	
	0:03			0:03			0:03			0:03	
	0:05			0:05			0:05			0:05	
	0:10			0:10			0:10			0:10	
	0:15			0:15			0:15			0:15	
	0:30			0:30			0:30			0:30	
	0:45			0:45			0:45			0:45	
	1:00			1:00			1:00			1:00	

Test Results

Run:	Run 1	Run 2	Run 3	Run 4
Infiltration Rate (feet/hour):				
Infiltration Rate (inches/hour):				

Final Infiltration Rate (inches/hour): 0.00
☐ Based on average of all four runs

☒ Based on result of last run
Note(s)

- Test performed in general conformance with NYS Stormwater Management Design Manual, Appendix D: Infiltration Testing Requirements.
- No infiltration noted 72 hours after presoak on 04/30/24, infiltration testing was suspended at this location.

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST PIT LOG		Test Pit ID	TP-301	
				Page No.	1 of 1	
				Project No.	28062	
Project Name:		Micron Campus, Clay, New York		Date Started	05/01/24	
Client:		Ramboll		Date Finished	05/01/24	
Location:		See Exploration Location Plan		Surface Elev.	403.0'	
METHOD OF INVESTIGATION				GROUNDWATER OBSERVATIONS		
Operator:		Daryl Sherman	Date	Time	Depth (Ft.)	Comment
Inspector:		Astitwa Sharma, EIT	05/01/24	9:44	6	Water seeping through side walls
Equipment:		Link Belt Model LNK 27 Excavator				
Bucket Type:		Toothed				
Bucket Width:		24"				
VISUAL CLASSIFICATION OF MATERIAL						
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%
0				1	Topsoil and Organic Material (moist, easy digging)	
1					Brown mottled SILT, some cmf SAND, some cmf GRAVEL, trace COBBLES (moist, easy to moderate digging)	
2						
3						
4						
5						
6					Bottom of Test Pit @ 6'. Remark 3	
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
Remarks: 1. See Test Pit Photographs, attached. 2. Test Pit excavated and backfilled by a subcontractor to CME, utilizing a Link Belt Model LNK 27 excavator, equipped with a 24" wide bucket with teeth. 3. Grey possible bedrock surface observed at 6 feet below grade. Test Pit Terminated after difficulty noted in digging through possible bedrock.						

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST PIT LOG		Test Pit ID	TP-302	
				Page No.	1 of 1	
				Project No.	28062	
Project Name:		Micron Campus, Clay, New York		Date Started	05/01/24	
Client:		Ramboll		Date Finished	05/01/24	
Location:		See Exploration Location Plan		Surface Elev.	398.9'	
METHOD OF INVESTIGATION				GROUNDWATER OBSERVATIONS		
Operator:		Daryl Sherman	Date	Time	Depth (Ft.)	Comment
Inspector:		Astitwa Sharma, EIT	05/01/24	10:40	3.5	Water seeping through side walls
Equipment:		Link Belt Model LNK 27 Excavator	05/01/24	10:45	4.2	About 0.8' of water accumulated at bottom of Test Pit
Bucket Type:		Toothed				
Bucket Width:		24"				
VISUAL CLASSIFICATION OF MATERIAL						
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%
0				0.5	Topsoil and Organic Material (moist, easy digging)	
1					Brown mottled cmf SAND, some SILT, some cmf GRAVEL, little COBBLES (moist, easy to moderate digging)	
2					Boulder noted at about 1' below grade	
3				3.5	Grey/Brown cmf SAND, some SILT, some COBBLES, little cmf GRAVEL (saturated, hard digging)	
4					Weathered Flat + Elongated Ledge Rock Boulders noted	
5					Bottom of Test Pit @ 5'. Remark 3	
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
Remarks:						
1. See Test Pit Photographs, attached.						
2. Test Pit excavated and backfilled by a subcontractor to CME, utilizing a Link Belt Model LNK 27 excavator, equipped with a 24" wide bucket with teeth.						
3. Dark grey weathered rock observed at about 5 feet below grade. Test Pit terminated after difficulty noted in digging through weathered rock.						

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST PIT LOG		Test Pit ID	TP-303		
				Page No.	1 of 1		
				Project No.	28062		
Project Name:	Micron Campus, Clay, New York			Date Started	05/01/24		
Client:	Ramboll			Date Finished	05/01/24		
Location:	See Exploration Location Plan			Surface Elev.	400.2'		
METHOD OF INVESTIGATION				GROUNDWATER OBSERVATIONS			
Operator: Daryl Sherman Inspector: Astitwa Sharma, EIT Equipment: Link Belt Model LNK 27 Excavator Bucket Type: Toothed Bucket Width: 24"				Date	Time	Depth (Ft.)	Comment
				05/01/24	9:13	4	Water seeping through side walls
VISUAL CLASSIFICATION OF MATERIAL							
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	
0	S-1	2.0	4.0	1	Topsoil and Organic Material (moist, easy digging)		
1					Brown mottled SILT, some cmf SAND, some cmf GRAVEL, trace COBBLES (moist, easy to moderate digging)		
2							
3							
4							
5					Bottom of Test Pit @ 5'. Remark 3		
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
Remarks: 1. See Test Pit Photographs, attached. 2. Test Pit excavated and backfilled by a subcontractor to CME, utilizing a Link Belt Model LNK 27 excavator, equipped with a 24" wide bucket with teeth. 3. Grey possible bedrock surface observed at 5 feet below. Test Pit terminated after difficulty noted in digging through possible bedrock.							

 CME Associates, Inc. 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST PIT LOG		Test Pit ID	TP-304
				Page No.	1 of 1
				Project No.	28062
Project Name:	Micron Campus, Clay, New York			Date Started	05/01/24
Client:	Ramboll			Date Finished	05/01/24
Location:	See Exploration Location Plan			Surface Elev.	404.4'
METHOD OF INVESTIGATION				GROUNDWATER OBSERVATIONS	
Operator:	Daryl Sherman			Date	Time
Inspector:	Astitwa Sharma, EIT			05/01/24	11:34
Equipment:	Link Belt Model LNK 27 Excavator			05/01/24	11:40
Bucket Type:	Toothed				
Bucket Width:	24"				
VISUAL CLASSIFICATION OF MATERIAL					
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Depth of Change (Ft.)	c - coarse m - medium f - fine and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%
0	S-1	2.0	4.0	0.5	Topsoil and Organic Material (moist, easy digging)
1				1	Dark Brown cmf SAND and SILT, some cmf GRAVEL (moist, easy to moderate digging)
2				2	Reddish Brown cmf SAND, some SILT, some cmf GRAVEL (moist, moderate digging)
3					Brown cmf SAND, some SILT, some cmf GRAVEL, some COBBLES (moist, moderate digging)
4					
5				5	Grey SILT, some cmf SAND, some cmf GRAVEL (wet, hard digging)
6				6	Same as above (saturated, hard digging)
7					Weathered Flat + Elongated Ledge Rock Boulders noted
8					Bottom of Test Pit @ 7.5'
9					
10					
11					
12					
13					
14					
15					
16					
Remarks:					
1. See Test Pit Photographs, attached. 2. Test Pit excavated and backfilled by a subcontractor to CME, utilizing a Link Belt Model LNK 27 excavator, equipped with a 24" wide bucket with teeth. 3. Test Pit terminated after difficulty noted in digging at 7.5 feet. 4.					

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST PIT LOG		Test Pit ID	TP-305		
				Page No.	1 of 1		
				Project No.	28062		
Project Name:	Micron Campus, Clay, New York			Date Started	05/01/24		
Client:	Ramboll			Date Finished	05/01/24		
Location:	See Exploration Location Plan			Surface Elev.	404.0'		
METHOD OF INVESTIGATION				GROUNDWATER OBSERVATIONS			
Operator:	Daryl Sherman			Date	Time	Depth (Ft.)	Comment
Inspector:	Astitwa Sharma, EIT			05/01/24	12:00	4.5	Water seeping through side walls
Equipment:	Link Belt Model LNK 27 Excavator			05/01/24	12:06	5	About 2' of water accumulated at bottom of Test Pit
Bucket Type:	Toothed						
Bucket Width:	24"						
VISUAL CLASSIFICATION OF MATERIAL							
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	
0				1	Topsoil and Organic Material (moist, easy digging)		
1					Dark Brown mottled cmf SAND, some SILT, some cmf GRAVEL, little COBBLES (moist, easy to moderate digging)		
2							
3							
4				4.5	Grey cmf SAND and SILT, some cmf GRAVEL with BOULDERS (saturated, hard digging)		
5					Weathered Flat + Elongated Ledge Rock Boulders noted		
6							
7					Bottom of Test Pit @ 7'. Remark 3		
8							
9							
10							
11							
12							
13							
14							
15							
16							
Remarks: 1. See Test Pit Photographs, attached. 2. Test Pit excavated and backfilled by a subcontractor to CME, utilizing a Link Belt Model LNK 27 excavator, equipped with a 24" wide bucket with teeth. 3. Test Pit terminated after difficulty noted in digging at 7 feet on possible bedrock surface. Test Pit bottom could not be observed due to accumulated water.							

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST PIT LOG		Test Pit ID	TP-306	
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				Project No.	28062	
Project Name:		Micron Campus, Clay, New York		Date Started	05/01/24	
Client:		Ramboll		Date Finished	05/01/24	
Location:		See Exploration Location Plan		Surface Elev.	399.0'	
METHOD OF INVESTIGATION				GROUNDWATER OBSERVATIONS		
Operator:		Daryl Sherman	Date	Time	Depth (Ft.)	Comment
Inspector:		Astitwa Sharma, EIT	05/01/24	10:17	2.5	Water seeping from bottom
Equipment:		Link Belt Model LNK 27 Excavator	05/01/24	10:25	3.5	About 1' of water accumulated at bottom of Test Pit
Bucket Type:		Toothed				
Bucket Width:		24"				
VISUAL CLASSIFICATION OF MATERIAL						
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%
0				1	Topsoil and Organic Material (moist, easy digging)	
1					Dark Brown mottled SILT, some cmf SAND, some cmf GRAVEL, little COBBLES (moist, easy to moderate digging)	
2						
3				3.5	Same as above (saturated, moderate to hard digging)	
4				4.5	Bottom of Test Pit @ 4.5'. Remark 3	
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
Remarks:						
1. See Test Pit Photographs, attached.						
2. Test Pit excavated and backfilled by a subcontractor to CME, utilizing a Link Belt Model LNK 27 excavator, equipped with a 24" wide bucket with teeth.						
3. Grey possible bedrock surface observed at 4.5 feet below. Test Pit terminated after difficulty noted in digging through possible bedrock.						

 CME Associates, Inc. 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST PIT LOG		Test Pit ID	TP-307	
				Page No.	1 of 1	
				Project No.	28062	
Project Name:	Micron Campus, Clay, New York			Date Started	05/03/24	
Client:	Ramboll			Date Finished	05/03/24	
Location:	See Exploration Location Plan			Surface Elev.	382.4'	
METHOD OF INVESTIGATION				GROUNDWATER OBSERVATIONS		
Operator:	Daryl Sherman			Date	Time	
Inspector:	Astitwa Sharma, EIT			05/03/24	10:07	
Equipment:	Link Belt Model LNK 27 Excavator			8	Depth (Ft.)	
Bucket Type:	Toothed				Comment	
Bucket Width:	24"				About 3.5' of water accumulated at Test Pit bottom	
VISUAL CLASSIFICATION OF MATERIAL						
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Depth of Change (Ft.)	c - coarse m - medium f - fine and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	
0	S-1	2.0	4.0	0.5	Topsoil and Organic Material (moist, easy digging)	
1				Brown mottled SILT, little fine SAND, little CLAY (moist, easy digging)		
2						
3						
4						
5					5	Brown/Grey SILT, little CLAY, little cmf SAND, trace mf GRAVEL, trace COBBLES (wet, easy to moderate digging)
6						
7						
8					(Saturated below about 8')	
9						
10					10.5	Pinkish Grey cmf SAND, some cmf GRAVEL, little SILT, trace COBBLES (saturated, moderate digging)
11					Bottom of Test Pit @ 11.5'	
12						
13						
14						
15						
16						
Remarks: 1. See Test Pit Photographs, attached. 2. Test Pit excavated and backfilled by a subcontractor to CME, utilizing a Link Belt Model LNK 27 excavator, equipped with a 24" wide bucket with teeth. 3. Nearly horizontal clay seams observed between 5 to 8 feet below grade. 4. Nearly horizontal Clay seams noted between 6 to 8 feet.						

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST PIT LOG		Test Pit ID	TP-308
				Page No.	1 of 1
				Project No.	28062
Project Name:		Micron Campus, Clay, New York		Date Started	05/03/24
Client:		Ramboll		Date Finished	05/03/24
Location:		See Exploration Location Plan		Surface Elev.	381.0'
METHOD OF INVESTIGATION				GROUNDWATER OBSERVATIONS	
Operator:		Daryl Sherman		Date	05/03/24
Inspector:		Astitwa Sharma, EIT		Time	10:43
Equipment:		Link Belt Model LNK 27 Excavator		Depth (Ft.)	10
Bucket Type:		Toothed			Water seeping through side walls
Bucket Width:		24"			About 2.5' of water accumulated at Test Pit bottom
VISUAL CLASSIFICATION OF MATERIAL					
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Depth of Change (Ft.)	c - coarse m - medium f - fine and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%
0				1	Topsoil and Organic Material (moist, easy digging)
1					Brown mottled SILT, little fine SAND, little CLAY (moist, easy digging)
2					
3					
4				5	
5					Same as above (wet, easy digging)
6					
7					
8					
9					
10				10	Grey SILT, some CLAY, some cmf SAND, little cmf GRAVEL, trace COBBLES, trace BOULDER (saturated, easy to moderate digging)
11					Bottom of Test Pit @ 11.5'
12					
13					
14					
15					
16					
Remarks: 1. See Test Pit Photographs, attached. 2. Test Pit excavated and backfilled by a subcontractor to CME, utilizing a Link Belt Model LNK 27 excavator, equipped with a 24" wide bucket with teeth. 4.					

		6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST PIT LOG		Test Pit ID	TP-309
						Page No.	1 of 1
						Project No.	28062
Project Name:		Micron Campus, Clay, New York				Date Started	05/03/24
Client:		Ramboll				Date Finished	05/03/24
Location:		See Exploration Location Plan				Surface Elev.	380.6'
METHOD OF INVESTIGATION					GROUNDWATER OBSERVATIONS		
Operator:		Daryl Sherman		Date	Time	Depth (Ft.)	Comment
Inspector:		Astitwa Sharma, EIT		05/03/24	9:20	4	Water seeping through side walls
Equipment:		Link Belt Model LNK 27 Excavator		05/03/24	9:30	11	About 1' of water accumulated at bottom of Test Pit
Bucket Type:		Toothed					
Bucket Width:		24"					
VISUAL CLASSIFICATION OF MATERIAL							
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	
0				0.5	Topsoil and Organic Material (moist, easy digging)		
1					Light Brown mottled SILT, little cmf SAND, little CLAY, trace fine GRAVEL (moist, easy digging)		
2							
3							
4				4			
5				5	Reddish Brown cmf SAND, some SILT, little CLAY (wet, easy to moderate digging)		
6					Brown SILT, little cmf SAND, little CLAY (wet, moderate digging)		
7							
8							
9				9	Grey SILT, some CLAY, little cmf SAND, little cmf GRAVEL, trace COBBLES, trace BOULDER (wet to saturated, moderate to hard digging)		
10							
11							
12					Bottom of Test Pit @ 12'		
13							
14							
15							
16							
Remarks:							
1. See Test Pit Photographs, attached.							
2. Test Pit excavated and backfilled by a subcontractor to CME, utilizing a Link Belt Model LNK 27 excavator, equipped with a 24" wide bucket with teeth.							
4.							

		6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST PIT LOG		Test Pit ID	TP-310
						Page No.	1 of 1
						Project No.	28062
Project Name: Micron Campus, Clay, New York						Date Started	05/03/24
Client: Ramboll						Date Finished	05/03/24
Location: See Exploration Location Plan						Surface Elev.	383.1'
METHOD OF INVESTIGATION				GROUNDWATER OBSERVATIONS			
Operator: Daryl Sherman				Date	Time	Depth (Ft.)	Comment
Inspector: Astitwa Sharma, EIT				05/03/24	11:48	4	Water seeping from sides of Test Pit
Equipment: Link Belt Model LNK 27 Excavator				05/03/24	12:00	12	Water rising from bottom of Test Pit
Bucket Type: Toothed							
Bucket Width: 24"							
VISUAL CLASSIFICATION OF MATERIAL							
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	
0				0.5	Topsoil and Organic Material (moist, easy digging)		
1					Dark Brown SILT, some CLAY, trace fine SAND (wet, easy digging)		
2							
3							
4				4			
5					Brown mottled SILT and CLAY, trace fine SAND (wet, easy to moderate digging)		
6							
7							
8							
9							
10				10	Grey SILT, some CLAY, trace fine SAND (saturated, moderate digging)		
11							
12					Bottom of Test Pit @ 12'		
13							
14							
15							
16							
Remarks: 1. See Test Pit Photographs, attached. 2. Test Pit excavated and backfilled by a subcontractor to CME, utilizing a Link Belt Model LNK 27 excavator, equipped with a 24" wide bucket with teeth. 4.							

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST PIT LOG		Test Pit ID		TP-311			
				Page No.		1 of 1			
				Project No.		28062			
Project Name:		Micron Campus, Clay, New York				Date Started		05/03/24	
Client:		Ramboll				Date Finished		05/03/24	
Location:		See Exploration Location Plan				Surface Elev.		380.5'	
METHOD OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Operator:		Daryl Sherman			Date	Time	Depth (Ft.)	Comment	
Inspector:		Astitwa Sharma, EIT			05/03/24	12:16	2.5	Water seeping from bottom	
Equipment:		Link Belt Model LNK 27 Excavator			05/03/24	12:30	10.5	About 0.5' of water accumulated at bottom of Test Pit	
Bucket Type:		Toothed							
Bucket Width:		24"							
VISUAL CLASSIFICATION OF MATERIAL									
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%			
0				0.5	Topsoil and Organic Material (moist, easy digging)				
1					Brown mottled SILT, little CLAY, trace fine SAND (moist, easy digging)				
2									
3				3	Same as above (wet, easy digging)				
4									
5									
6									
7									
8									
9				9	Grey mottled SILT, some CLAY, trace fine SAND (saturated, easy to medium digging)				
10									
11					Bottom of Test Pit @ 11'				
12									
13									
14									
15									
16									
Remarks:									
1. See Test Pit Photographs, attached.									
2. Test Pit excavated and backfilled by a subcontractor to CME, utilizing a Link Belt Model LNK 27 excavator, equipped with a 24" wide bucket with teeth.									
4.									

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST PIT LOG		Test Pit ID		TP-312			
				Page No.		1 of 1			
				Project No.		28062			
Project Name:		Micron Campus, Clay, New York				Date Started		05/03/24	
Client:		Ramboll				Date Finished		05/03/24	
Location:		See Exploration Location Plan				Surface Elev.		380.5'	
METHOD OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Operator:		Daryl Sherman			Date	Time	Depth (Ft.)	Comment	
Inspector:		Astitwa Sharma, EIT			05/03/24	12:58	None Noted		
Equipment:		Link Belt Model LNK 27 Excavator							
Bucket Type:		Toothed							
Bucket Width:		24"							
VISUAL CLASSIFICATION OF MATERIAL									
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%			
0	S-1	2.0	4.0	0.5	Topsoil and Organic Material (wet, easy digging)				
1				Brown mottled SILT, little CLAY, trace fine SAND (wet, easy digging)					
2									
3									
4									
5									
6									
7				7	Grey SILT and CLAY, trace fine SAND (wet to saturated, easy to moderate digging)				
8									
9									
10				Bottom of Test Pit @ 10'					
11									
12									
13									
14									
15									
16									
Remarks:									
1. See Test Pit Photographs, attached.									
2. Test Pit excavated and backfilled by a subcontractor to CME, utilizing a Link Belt Model LNK 27 excavator, equipped with a 24" wide bucket with teeth.									
3. Side walls caved in before taking Test Pit photographs.									
4. Nearly horizontal Clay seams noted between 6 to 8 feet.									

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST PIT LOG		Test Pit ID	TP-313	
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				Project No.	28062	
Project Name:	Micron Campus, Clay, New York			Date Started	05/02/24	
Client:	Ramboll			Date Finished	05/02/24	
Location:	See Exploration Location Plan			Surface Elev.	403.6'	
METHOD OF INVESTIGATION				GROUNDWATER OBSERVATIONS		
Operator:	Daryl Sherman			Date	Time	
Inspector:	Astitwa Sharma, EIT			05/02/24	12:21	
Equipment:	Link Belt Model LNK 27 Excavator			Depth (Ft.)	Comment	
Bucket Type:	Toothed			10	Water seeping through side walls	
Bucket Width:	24"					
VISUAL CLASSIFICATION OF MATERIAL						
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%
		From	To			
0				0.5	Topsoil and Organic Material (moist, easy digging)	
1					Brown SILT, some fine SAND, trace CLAY (moist, easy digging)	
2				2		
3					Same as above (wet, easy)	
4				4		
5				5	Reddish Brown cmf SAND, some SILT, trace CLAY, trace GRAVEL (moist, easy digging)	
6					Brown cmf SAND, some SILT, some cmf GRAVEL, little COBBLES, trace CLAY (wet to saturated, moderate digging)	
7					See Remark 3	
8						
9				9.5	See Remark 4	
10					Bottom of Test Pit @ 10'	
11						
12						
13						
14						
15						
16						
Remarks: 1. See Test Pit Photographs, attached. 2. Test Pit excavated and backfilled by a subcontractor to CME, utilizing a Link Belt Model LNK 27 excavator, equipped with a 24" wide bucket with teeth. 3. Large weathered rock of about 16"x16"x8" in dimension noted at about 9.5' below grade. 4. Nearly horizontal Clay seams noted between 6 to 8 feet.						

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST PIT LOG		Test Pit ID		TP-314			
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				Project No.		28062			
Project Name:		Micron Campus, Clay, New York				Date Started		05/02/24	
Client:		Ramboll				Date Finished		05/02/24	
Location:		See Exploration Location Plan				Surface Elev.		401.6'	
METHOD OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Operator:		Daryl Sherman			Date	Time	Depth (Ft.)	Comment	
Inspector:		Astitwa Sharma, EIT			05/02/24	9:55	None Noted		
Equipment:		Link Belt Model LNK 27 Excavator							
Bucket Type:		Toothed							
Bucket Width:		24"							
VISUAL CLASSIFICATION OF MATERIAL									
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%			
0				0.5	Topsoil and Organic Material (moist, easy digging)				
1					Light Brown SILT, some cmf SAND, trace CLAY (moist, easy digging)				
2									
3									
4				4	Grey/Brown, Same as above (wet, easy to medium digging)				
5									
6									
7									
8				8	Grey, Same as above (wet, moderate to hard digging)				
9					Rock fragments noted.				
10					Bottom of Test Pit @ 9'. Remark 3				
11									
12									
13									
14									
15									
16									
Remarks:									
1. See Test Pit Photographs, attached.									
2. Test Pit excavated and backfilled by a subcontractor to CME, utilizing a Link Belt Model LNK 27 excavator, equipped with a 24" wide bucket with teeth.									
3. Test Pit terminated after difficulty noted in digging through possible weathered rock.									
4.									

 CME Associates, Inc. 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST PIT LOG		Test Pit ID TP-315	
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				Project No. 28062	
Project Name: Micron Campus, Clay, New York		Date Started 05/02/24		Date Finished 05/02/24	
Client: Ramboll		Date Finished 05/02/24		Surface Elev. 405.1'	
Location: See Exploration Location Plan					
METHOD OF INVESTIGATION				GROUNDWATER OBSERVATIONS	
Operator: Daryl Sherman Inspector: Astitwa Sharma, EIT Equipment: Link Belt Model LNK 27 Excavator Bucket Type: Toothed Bucket Width: 24"		Date 05/02/24	Time 10:27	Depth (Ft.) 3	Comment Water seeping through side walls
VISUAL CLASSIFICATION OF MATERIAL					
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Depth of Change (Ft.)	c - coarse m - medium f - fine and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%
0	S-1	2.0	3.5	1	Topsoil and Organic Material (moist, easy digging)
1					Light Brown mottled SILT, some mf SAND, trace CLAY (wet, easy to moderate digging)
2					
3				3.5	Grey/Brown mottled SILT, some mf SAND, little CLAY (wet, easy to moderate digging)
4					
5					
6					
7				7	See Remark 4
8					Grey/Brown mottled SILT, some mf SAND, little CLAY, trace GRAVEL (wet, easy to moderate digging)
9					Bottom of Test Pit @ 9'. Remark 5
10					
11					
12					
13					
14					
15					
16					
Remarks: 1. See Test Pit Photographs, attached. 2. Test Pit excavated and backfilled by a subcontractor to CME, utilizing a Link Belt Model LNK 27 excavator, equipped with a 24" wide bucket with teeth. 3. Side walls caved in before taking Test Pit photographs. 4. Nearly horizontal Clay seams noted between 6 to 8 feet. 5. Test Pit terminated after difficulty noted in digging through dense COBBLES/BOULDER.					

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST PIT LOG		Test Pit ID		TP-316			
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				Project No.		28062			
Project Name:				Micron Campus, Clay, New York		Date Started		05/02/24	
Client:				Ramboll		Date Finished		05/02/24	
Location:				See Exploration Location Plan		Surface Elev.		403.3'	
METHOD OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Operator: Daryl Sherman					Date	Time	Depth (Ft.)	Comment	
Inspector: Astitwa Sharma, EIT					05/02/24	11:45	10	Water seeping through bottom	
Equipment: Link Belt Model LNK 27 Excavator									
Bucket Type: Toothed									
Bucket Width: 24"									
VISUAL CLASSIFICATION OF MATERIAL									
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%			
0				0.5	Topsoil and Organic Material (moist, easy digging)				
1					Brown mottled SILT, some fine SAND, trace CLAY (moist, easy digging)				
2									
3									
4									
5				5	Brown mottled SILT, some fine SAND, little CLAY, trace ROOTS (wet, easy to moderate digging)				
6									
7									
8				8.5	Brown SILT, some fine SAND, trace GRAVEL, trace CLAY (wet, moderate digging)				
9				9.5	Brown mf SAND, some SILT, little cmf GRAVEL (wet, moderate to hard digging)				
10					Bottom of Test Pit @ 10'				
11									
12									
13									
14									
15									
16									
Remarks:									
1. See Test Pit Photographs, attached.									
2. Test Pit excavated and backfilled by a subcontractor to CME, utilizing a Link Belt Model LNK 27 excavator, equipped with a 24" wide bucket with teeth.									
3. Test Pit terminated after difficulty noted in digging through dense COBBLES/BOULDER.									

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST PIT LOG		Test Pit ID	TP-317	
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				Project No.	28062	
Project Name:		Micron Campus, Clay, New York		Date Started	05/02/24	
Client:		Ramboll		Date Finished	05/02/24	
Location:		See Exploration Location Plan		Surface Elev.	405.4'	
METHOD OF INVESTIGATION				GROUNDWATER OBSERVATIONS		
Operator:		Daryl Sherman	Date	Time	Depth (Ft.)	Comment
Inspector:		Astitwa Sharma, EIT	05/02/24	11:09	2.5	Water seeping through side walls
Equipment:		Link Belt Model LNK 27 Excavator				
Bucket Type:		Toothed				
Bucket Width:		24"				
VISUAL CLASSIFICATION OF MATERIAL						
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%
0				1	Topsoil and Organic Material (moist, easy digging)	
1					Brown SILT, some fine SAND, little CLAY (wet, easy to moderate digging)	
2						
3				4		
4					Same as above (wet, easy digging)	
5				6		
6					Brown SILT, some fine SAND, little CLAY, trace cmf GRAVEL (wet, easy to moderate digging)	
7				7.5		
8					Brown cmf GRAVEL, some cmf SAND, some SILT, little COBBLES, trace BOULDER (wet, hard digging)	
9						
10						
11					Test Pit bottom @ 10.5'	
12						
13						
14						
15						
16						
Remarks: 1. See Test Pit Photographs, attached. 2. Test Pit excavated and backfilled by a subcontractor to CME, utilizing a Link Belt Model LNK 27 excavator, equipped with a 24" wide bucket with teeth. 3. Test Pit terminated after difficulty noted in digging through dense COBBLES/BOULDER.						

Test Pit Photographs
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Figure 1: Test Pit TP-301



Figure 2: Materials excavated from TP-301

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Figure 3: Test Pit TP-302



Figure 4: Materials excavated from TP-302

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Figure 5: Test Pit TP-303



Figure 6: Materials excavated from TP-303

Test Pit Photographs
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Figure 7: Test Pit TP-304



Figure 8: Materials excavated from TP-304

Test Pit Photographs
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Figure 9: Test Pit TP-305



Figure 10: Materials excavated from TP-305

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Figure 11: Test Pit TP-306



Figure 12: Materials excavated from TP-306

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Figure 13: Test Pit TP-307



Figure 14: Materials excavated from TP-307

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Figure 15: Test Pit TP-308



Figure 16: Materials excavated from TP-308

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Figure 17: Test Pit TP-309



Figure 18: Materials excavated from TP-309

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Figure 19: Test Pit TP-310



Figure 20: Materials excavated from TP-310

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Figure 21: Test Pit TP-311



Figure 22: Materials excavated from TP-311

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Figure 23: Test Pit TP-312



Figure 24: Materials excavated from TP-312

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Figure 25: Test Pit TP-313



Figure 26: Materials excavated from TP-313

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Figure 27: Test Pit TP-314



Figure 28: Materials excavated from TP-314

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Figure 29: Test Pit TP-315



Figure 30: Materials excavated from TP-315

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Figure 31: Test Pit TP-316



Figure 32: Materials excavated from TP-316

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Figure 33: Test Pit TP-317



Figure 34: Materials excavated from TP-317

Vane Shear Test and Pocket Penetrometer Test Summary Tables

In-situ Vane Shear Test Readings

TESP PIT ID	Depth (ft)	TEST 1		TEST 2		TEST 3	
		Peak (psf)	Residual (psf)	Peak (psf)	Residual (psf)	Peak (psf)	Residual (psf)
TP-301	3.5	1,044	543	1,003	501	1,420	794
TP-303	2.5	1,337	961	1,295	794	1,880	794
	3.5	1,337	877	1,253	835	877	522
TP-307	2.5	2,444	794	2,611	773	2,151	773
TP-308	2.5	1,880	919	2,799	1,128	1,838	835
	4	794	209	626	334	710	209
TP-309	2	1,880	731	1,775	794	1,546	606
TP-310	2.5	3,258	1,671	5,013	1,921	4,261	2,214
	4	1,838	919	2,130	1,337	2,556	835
TP-311	2.5	2,005	835	1,786	668	1,963	752
	3.5	1,546	585	1,504	459	1,796	626
TP-312	2	3,342	1,336	2,924	1,587	2,506	1,253
TP-313	2	439	292	585	292	710	376
TP-314	2.5	752	209	877	209	835	209
	3.5	606	251	877	292	501	251
TP-315	3	647	251	272	125	459	209
TP-316	2.5	522	251	835	376	794	313
	5	1,190	Note 1	1,525	Note 1	627	Note 1
TP-317	2.5	689	376	794	355	1,211	418
	3.5	835	459	710	397	982	459

Note 1: Test pit was too deep to enter and perform the traditional vane shear test. The test was performed from grade using extension rods. The Residual reading could not be obtained with this method.

Vane Shear Test and Pocket Penetrometer Test Summary Tables

In-situ Pocket Penetrometer Readings

TEST PIT ID	Depth (ft)	TEST 1 (tsf)	TEST 2 (tsf)	TEST 3 (tsf)
TP-301	3.5	0.50	0.50	0.75
TP-303	2.5	0.50	0.25	1.00
	3.5	0.25	0.25	0.50
TP-307	2.5	1.25	2.50	1.75
TP-308	2.5	1.38	0.88	2.00
	4.0	1.50	0.75	1.25
TP-309	2.0	0.75	0.75	1.50
	3.0	3.00	1.00	1.25
TP-310	2.5	4.25	1.75	1.75
	4.0	0.75	1.00	0.50
TP-311	2.5	3.00	3.00	3.50
	3.5	1.00	0.25	1.88
TP-312	2.0	3.00	1.75	2.38
TP-313	2.0	2.75	1.25	1.13
TP-314	2.5	0.67	1.00	0.50
	3.5	0.67	1.00	1.00
TP-316	2.5	1.25	1.00	3.75
TP-317	2.5	1.50	1.25	1.87
	3.5	0.38	1.00	0.38

FIELD SOIL RESISTIVITY OBSERVATIONS SUMMARY TABLE

		Probe Spacing									
		20 ft (610 cm)		16 ft (488 cm)		12 ft (366 cm)		8 ft (244 cm)		4 ft (122 cm)	
Date:	Survey Point ID	R (Ω)	ρ (Ω•cm)	R (Ω)	ρ (Ω•cm)	R (Ω)	ρ (Ω•cm)	R (Ω)	ρ (Ω•cm)	R (Ω)	ρ (Ω•cm)
5/31/2024	SR-1	10.10	38,700	11.70	35,900	18.30	42,100	40.10	61,500	175.00	134,000
5/31/2024	SR-2	3.66	14,000	4.73	14,500	4.96	11,400	12.00	18,400	76.90	58,900
5/31/2024	SR-3	3.72	14,300	4.04	12,400	4.36	10,000	5.16	7,910	8.82	6,760
5/31/2024	SR-4	3.48	13,300	3.19	9,780	3.74	8,600	5.71	8,750	27.10	20,800
5/31/2024	SR-5	3.67	14,100	4.01	12,300	5.33	12,300	7.11	10,900	34.80	26,700
5/31/2024	SR-6	9.77	37,400	9.24	28,300	15.30	35,200	39.20	60,100	144.00	110,000
5/31/2024	SR-7	4.64	17,800	5.28	16,200	6.61	15,200	9.84	15,100	26.90	20,600
5/31/2024	SR-8	5.86	22,500	6.26	19,200	7.09	16,300	10.70	16,400	36.00	27,600
6/3/2024	SR-9	12.80	49,100	19.50	59,800	32.80	75,400	64.50	98,900	187.00	143,000
6/3/2024	SR-10	8.69	33,300	12.00	36,800	18.50	42,500	37.50	57,500	96.20	73,700
6/3/2024	SR-11	6.11	23,400	7.12	21,800	9.23	21,200	19.30	29,600	95.20	73,000
6/3/2024	SR-12	3.93	15,100	4.12	12,600	4.87	11,200	6.69	10,300	15.60	12,000
6/3/2024	SR-13	4.51	17,300	4.78	14,700	5.52	12,700	8.09	12,400	20.00	15,300
6/3/2024	SR-14	2.09	8,010	2.26	6,930	2.50	5,750	3.43	5,260	7.51	5,760
6/3/2024	SR-15	2.36	9,050	2.51	7,700	2.91	6,690	3.61	5,530	6.41	4,910
6/3/2024	SR-16	2.04	7,820	2.32	7,110	2.64	6,070	3.62	5,550	8.46	6,490
6/4/2024	SR-17	5.81	22,300	4.17	12,800	5.91	13,600	19.70	30,200	145.00	111,000
6/4/2024	SR-18	5.40	20,700	5.89	18,100	5.19	11,900	15.40	23,600	88.20	67,600
6/4/2024	SR-19	5.91	22,700	7.19	22,000	9.28	21,300	14.40	22,100	23.60	18,100
6/4/2024	SR-20	3.08	11,800	3.13	9,600	3.29	7,570	3.98	6,100	6.80	5,210
6/4/2024	SR-21	3.30	12,600	3.53	10,800	3.73	8,580	4.68	7,170	8.45	6,480
6/4/2024	SR-22	3.09	11,800	3.09	9,470	3.37	7,750	3.97	6,090	7.45	5,710
6/4/2024	SR-23	3.14	12,000	3.24	9,930	3.57	8,210	4.10	6,290	6.34	4,860
6/4/2024	SR-24	2.89	11,100	3.04	9,320	3.41	7,840	4.23	6,490	11.90	9,120

Notes:

See Field Soil Resistivity Photographs for Surface Cover Conditions

R = Resistance (Ω) from field test data

A = Probe spacing in centimeters (cm)

ρ = Resistivity (Ω•cm) calculated by formula: $\rho = 2 \cdot \pi \cdot A \cdot R$, rounded to 3 significant figures

Survey Conditions	Weather	Temperature	Date of Last Rainfall
5/31/2024	Sunny	50-65 °F	5/27/2024
6/3/2024	Sunny	65-70 °F	5/27/2024
6/4/2024	Sunny	65-75 °F	5/27/2024

Field Soil Resistivity Photographs
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Figure 1: Survey Line SR-1

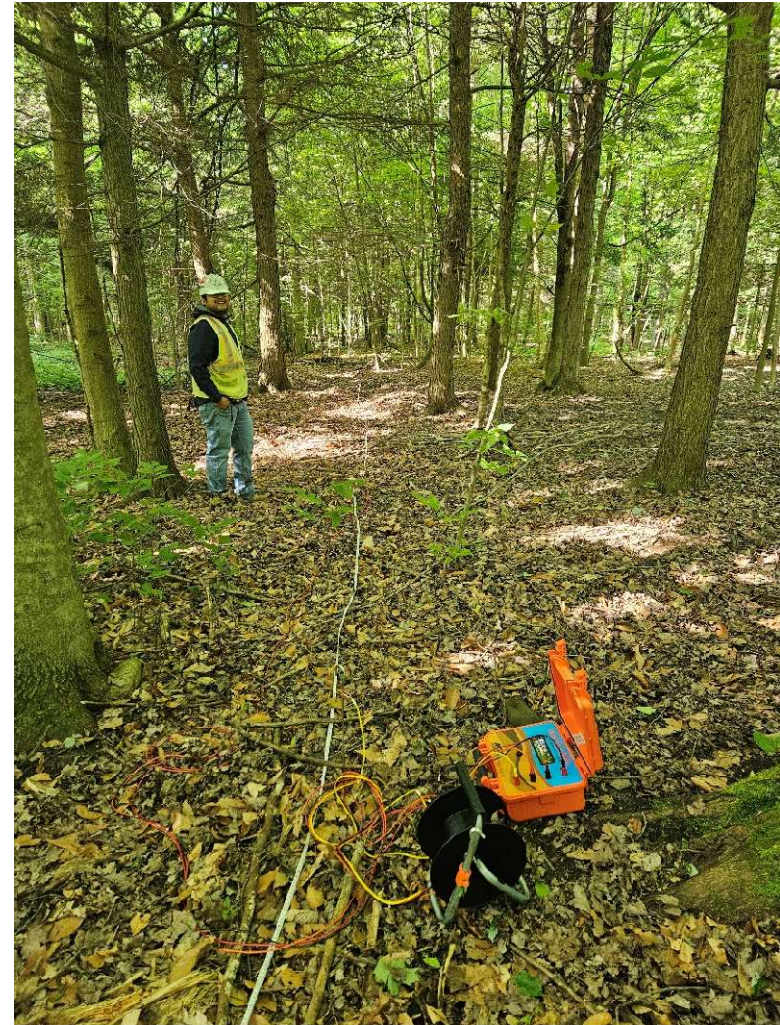


Figure 2: Survey Line SR-2

Field Soil Resistivity Photographs
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Figure 3: Survey Line SR-3



Figure 4: Survey Line SR-4

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Figure 5: Survey Line SR-5



Figure 6: Survey Line SR-6

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Figure 7: Survey Line SR-7



Figure 8: Survey Line SR-8

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Figure 9: Survey Line SR-9

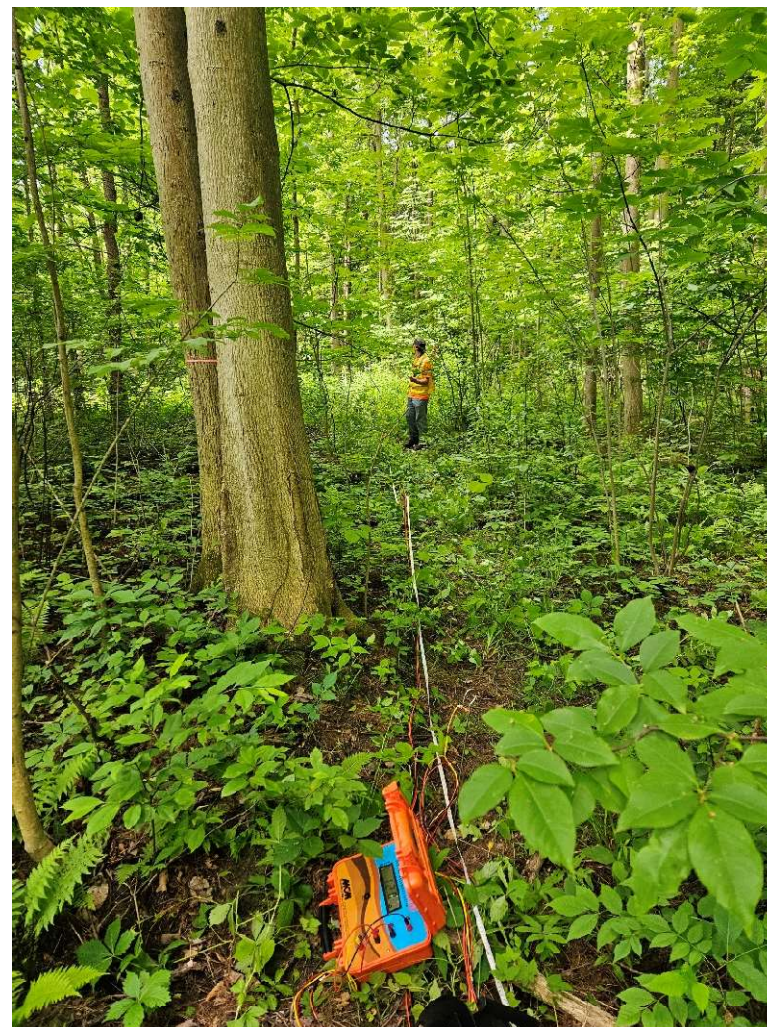


Figure 10: Survey Line SR-10

Field Soil Resistivity Photographs
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Figure 11: Survey Line SR-11

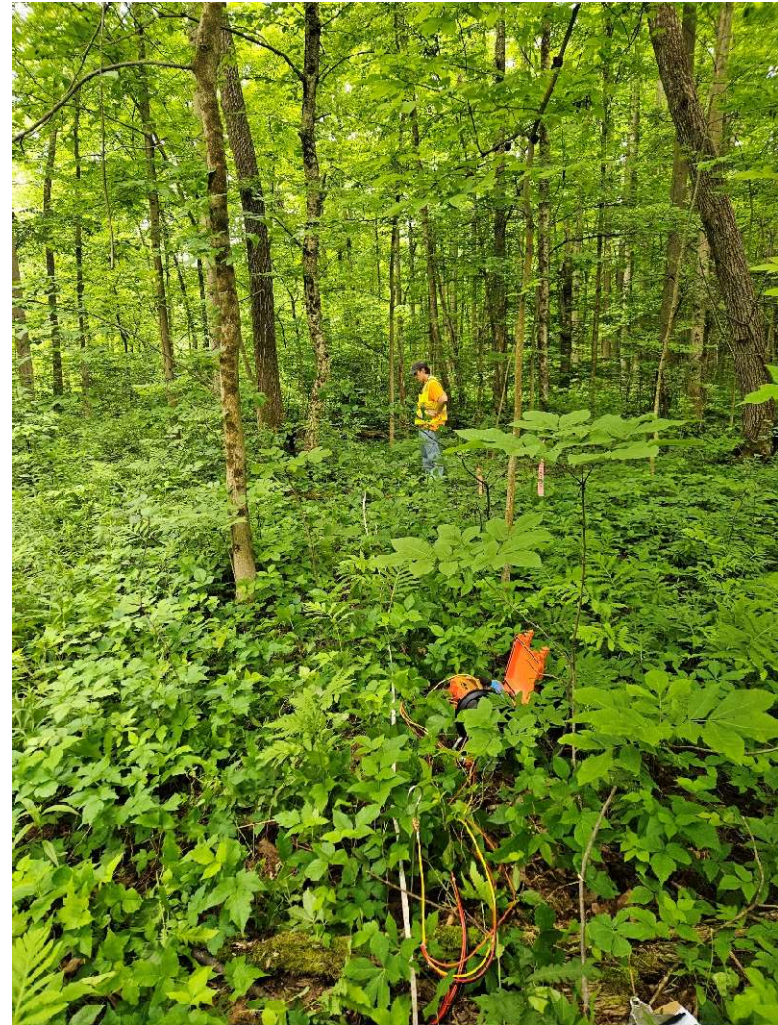


Figure 12: Survey Line SR-12

Field Soil Resistivity Photographs
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Figure 13: Survey Line SR-13



Figure 14: Survey Line SR-14

Field Soil Resistivity Photographs
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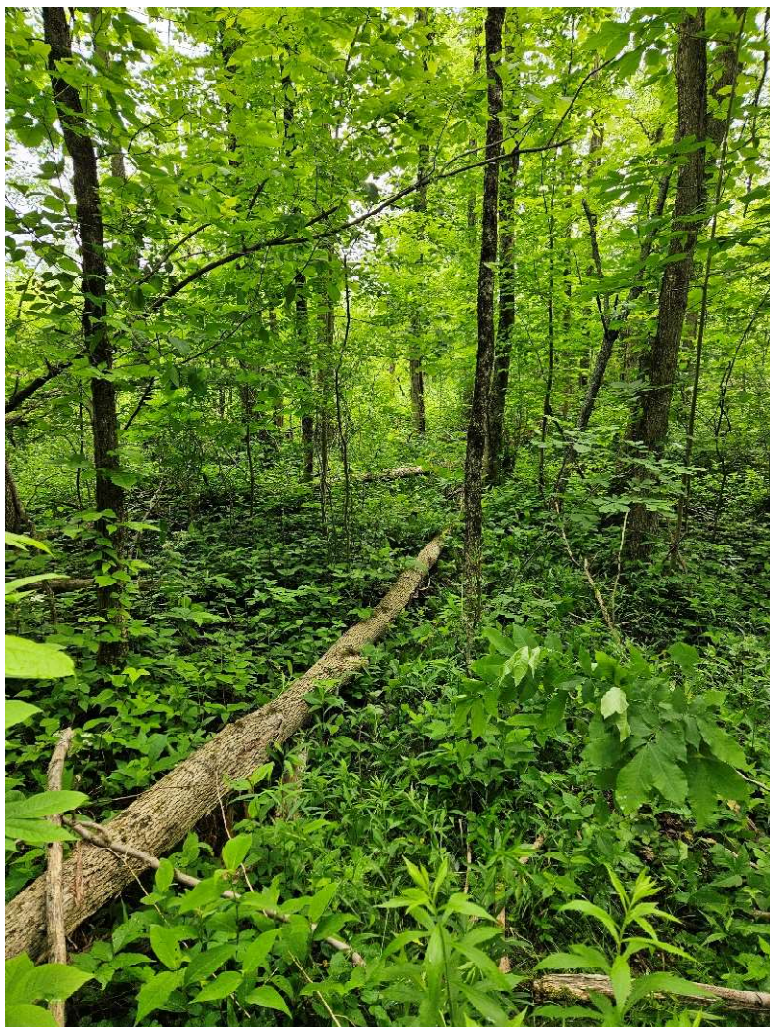


Figure 15: Survey Line SR-15 (picture taken after probes were packed up)



Figure 16: Survey Line SR-16

Field Soil Resistivity Photographs
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Figure 17: Survey Line SR-17



Figure 18: Survey Line SR-18

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Figure 19: Survey Line SR-19

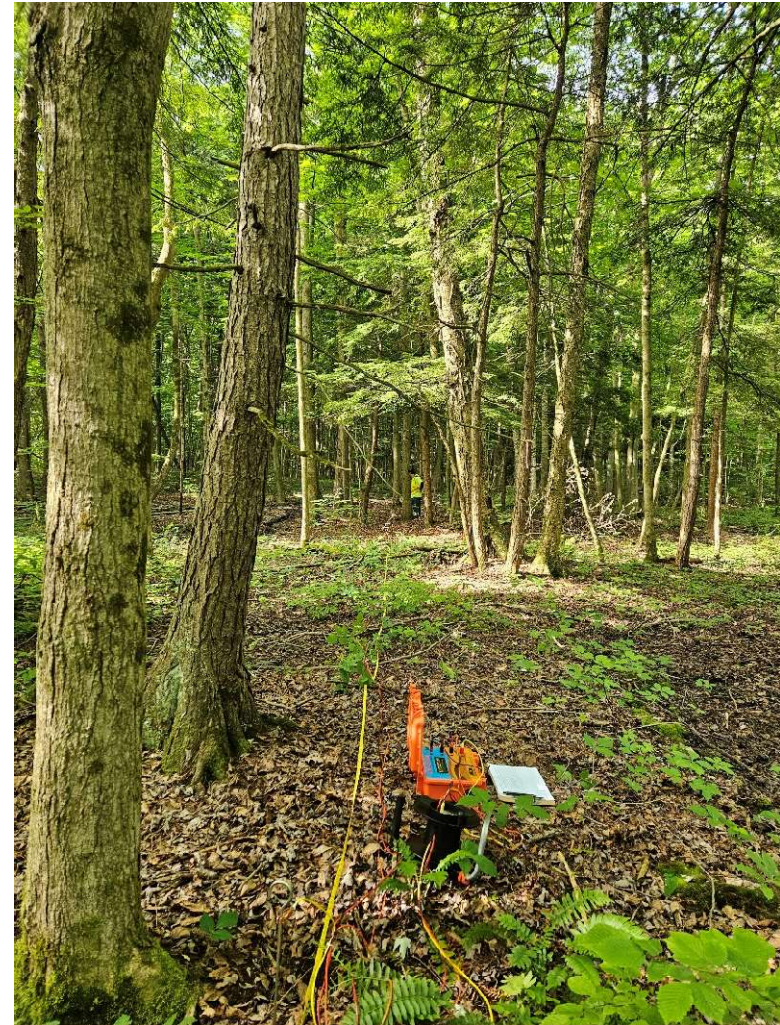


Figure 20: Survey Line SR-20

Field Soil Resistivity Photographs
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Figure 21: Survey Line SR-21

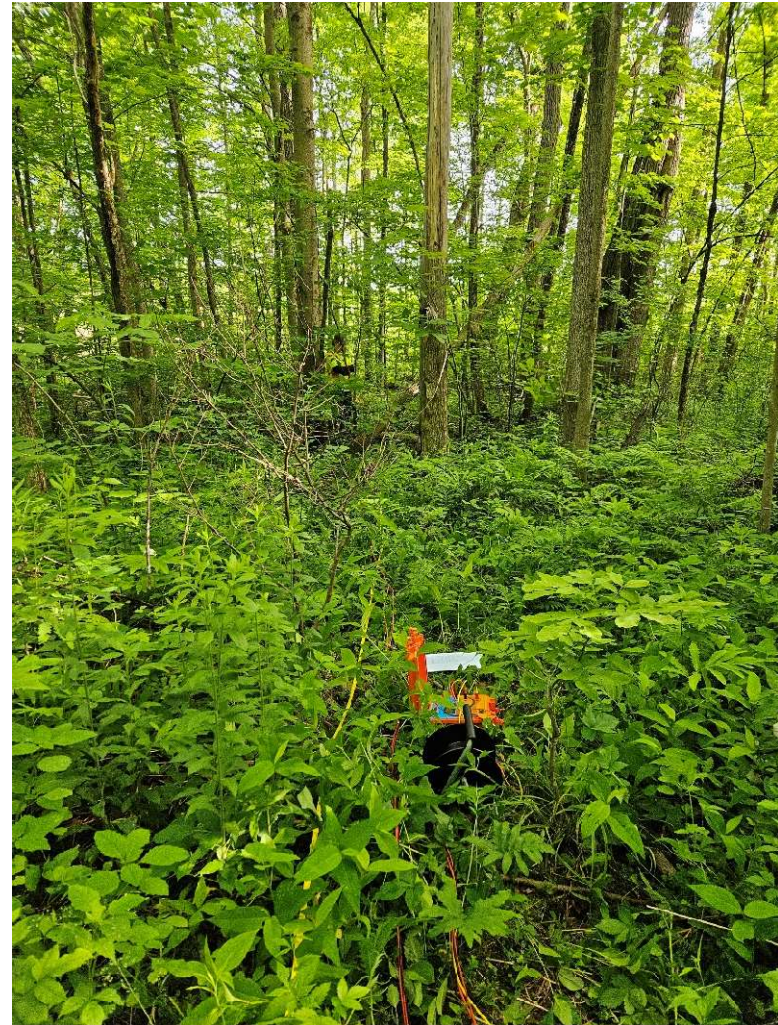


Figure 22: Survey Line SR-22

Field Soil Resistivity Photographs
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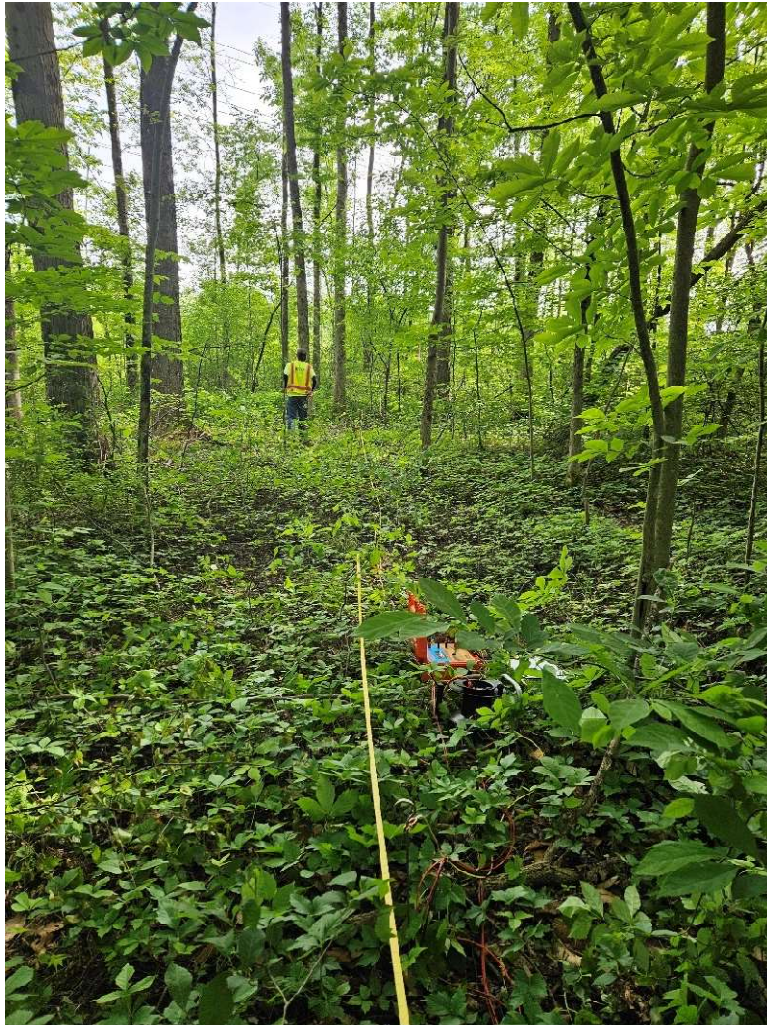


Figure 23: Survey Line SR-23



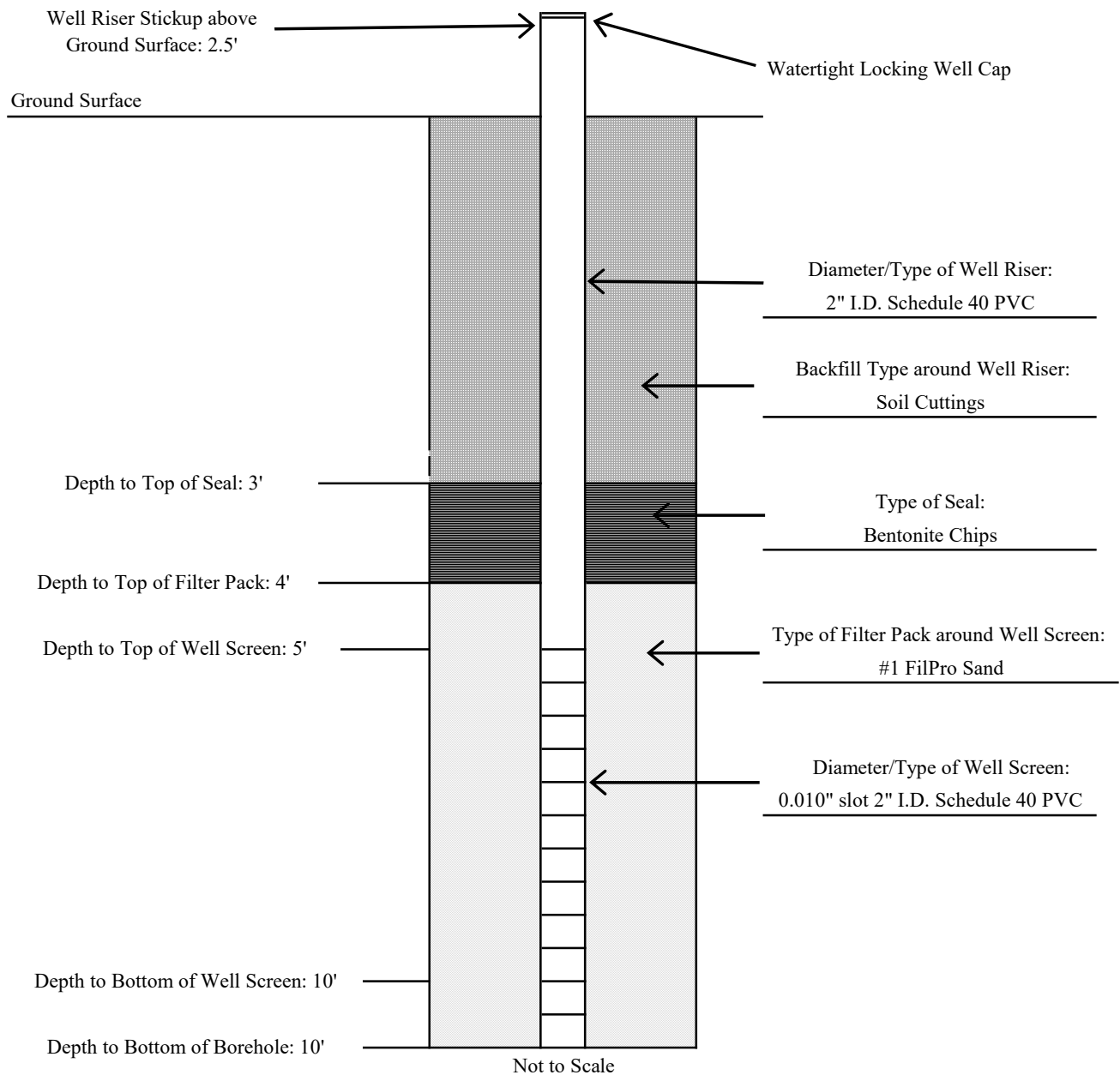
Figure 24: Survey Line SR-24

Observed Groundwater Elevation and Depth Below Grade (Feet)																		
Boring ID	B-129		B-24		B-227		B-337		B-391		B-370		B-400		B-420		B-422	
Elev. at Grade (ft)	418.8		394.6		389.3		403.5		393		393.7		399.6		390.9		382	
WELL ID	W-1		W-2		W-3		W-4		W-5		W-6		W-7		W-8		W-9	
DATE	Elev.	Depth	Elev.	Depth	Elev.	Depth	Elev.	Depth	Elev.	Depth	Elev.	Depth	Elev.	Depth	Elev.	Depth	Elev.	Depth
4/19/2023	418.7	0.1			385.5	3.8												
4/21/2023			393.8	0.8														
5/16/2023	416.1	2.7	392.5	2.1	385.7	3.6												
5/17/2023	416.0	2.8	391.8	2.8	386.4	2.9												
6/12/2023	414.6	4.2	386.8	7.8	385.3	4.0												
10/5/2023	415.2	3.6	389.2	5.4	386.4	2.9												
11/9/2023	416.4	2.4	394.2	0.4	386.2	3.1	398.4	5.1	392.3	0.7	388.7	5	398.5	1.1	388.7	2.2	379.4	2.6
11/17/2023	417.8	1.0	394.4	0.2	387.1	2.2	398.9	4.6	392.1	0.9	389.8	3.9	398.5	1.1	386.7	4.2	377.0	5.00
1/16/2024	418.0	0.8	394.0	0.6	388.8	0.5	401.8	1.7	392.6	0.4	391.1	2.6	398.8	0.8	389.3	1.6	377.9	4.1
5/14/2024	417.9	0.9	394.4	0.3	388.7	0.6	400.5	3.1	392.5	0.5	390.4	3.3	398.8	0.8	389.6	1.4	380.9	1.1
5/28/2024	415.9	2.9	391.5	3.1	387.1	2.2	400.0	3.6	391.3	1.7	389.1	4.6	397.2	2.4	385.3	5.6	379.4	2.6
7/11/2024	418.5	0.3	394.3	0.3	388.3	1.0	398.7	4.8	392.3	0.7	388.1	5.6	398.9	0.7	388.5	2.4	381.0	1.0

Boring ID	B-505		B-522		B-546		B-557		B-564		B-604		B-618		B-676		B-683	
Elev. at Grade (ft)	406.1		393.7		394.5		382		380.8		391.4		392.7		404.3		394.8	
WELL ID	W-10		W-11		W-12		W-13		W-14		W-16		W-17		W-18		W-19	
DATE	Elev.	Depth	Elev.	Depth	Elev.	Depth	Elev.	Depth	Elev.	Depth	Elev.	Depth	Elev.	Depth	Elev.	Depth	Elev.	Depth
5/14/2024	405.9	0.3	390.2	3.5	391.2	3.3	381.6	0.4	380.6	0.2	391.0	0.4	392.1	0.6	400.3	4.0	392.7	2.1
5/28/2024	405.0	1.1	389.5	4.2	388.4	6.1	380.3	1.7	379.8	1.1	389.1	2.3	391.1	1.6	398.6	5.7	392.0	2.8
7/11/2024	405.4	0.7	390.9	2.8	385.3	9.2	381.1	0.9	380.4	0.4	390.0	1.4	391.9	0.8	397.2	7.1	393.1	1.7

Note: Groundwater Observation Well W-15 was not installed due to access restrictions.

 CME Associates, Inc. 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		GROUNDWATER MONITORING WELL LOG		Well No. W-10
				Boring No. B-505
Project Name:	Micron Campus, Clay, New York			Project No. 28062
Client:	Ramboll			Installation Date 5/10/2024
Location:	See Exploration Location Plan	Surface Elevation	406.1	Riser Elevation 408.6
Driller:	Beau Fletcher	Driller:	Ryan Casatelli	Inspector: N/A



Well Riser Stickup above Ground Surface: 2.5'

Ground Surface

Watertight Locking Well Cap

Diameter/Type of Well Riser:
2" I.D. Schedule 40 PVC

Backfill Type around Well Riser:
Soil Cuttings

Depth to Top of Seal: 3'

Type of Seal:
Bentonite Chips

Depth to Top of Filter Pack: 4'

Type of Filter Pack around Well Screen:
#1 FilPro Sand

Depth to Top of Well Screen: 5'

Diameter/Type of Well Screen:
0.010" slot 2" I.D. Schedule 40 PVC

Depth to Bottom of Well Screen: 10'

Depth to Bottom of Borehole: 10'

Not to Scale

Remarks:

1. See Test Boring Log B-505 for soil information.

 CME Associates, Inc. 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		GROUNDWATER MONITORING WELL LOG		Well No.	W-11
				Boring No.	B-522
Project Name:	Micron Campus, Clay, New York			Project No.	28062
Client:	Ramboll			Installation Date	4/16/2024
Location:	See Exploration Location Plan	Surface Elevation	393.7	Riser Elevation	397.0
Driller:	Al Linstruth	Driller:	John Winks	Inspector:	N/A

Well Riser Stickup above Ground Surface: 3.33'

Ground Surface

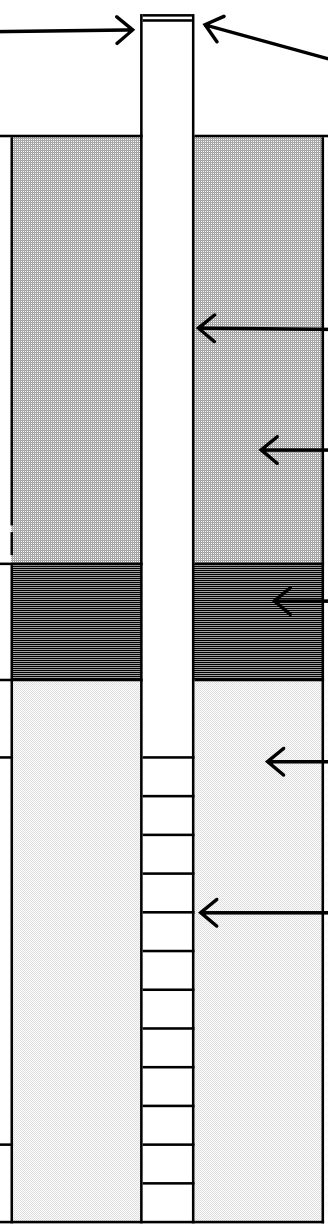
Depth to Top of Seal: 0.5'

Depth to Top of Filter Pack: 1.5'

Depth to Top of Well Screen: 2'

Depth to Bottom of Well Screen: 7'

Depth to Bottom of Borehole: 7'



Watertight Locking Well Cap

Diameter/Type of Well Riser:
2" I.D. Schedule 40 PVC

Backfill Type around Well Riser:
Soil Cuttings

Type of Seal:
Bentonite Chips

Type of Filter Pack around Well Screen:
#1 FilPro Sand

Diameter/Type of Well Screen:
0.010" slot 2" I.D. Schedule 40 PVC

Not to Scale

Remarks:

1. See Test Boring Log B-522 for soil information.

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		GROUNDWATER MONITORING WELL LOG		Well No.	W-12
				Boring No.	B-546
Project Name:	Micron Campus, Clay, New York			Project No.	28062
Client:	Ramboll			Installation Date	4/22/2024
Location:	See Exploration Location Plan	Surface Elevation	394.5	Riser Elevation	397.2
Driller:	Beau Fletcher	Driller:	Ryan Casatelli	Inspector:	N/A

Well Riser Stickup above Ground Surface: 2.67'

Ground Surface

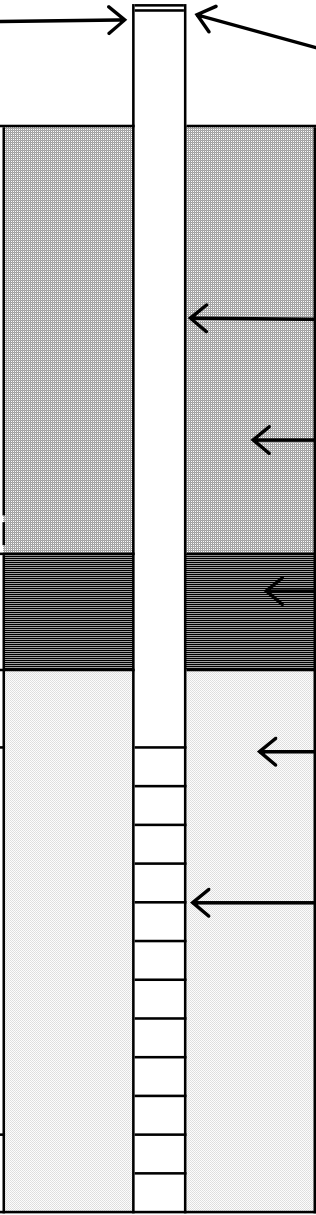
Depth to Top of Seal: 3'

Depth to Top of Filter Pack: 4'

Depth to Top of Well Screen: 5'

Depth to Bottom of Well Screen: 10'

Depth to Bottom of Borehole: 10'



← Watertight Locking Well Cap

← Diameter/Type of Well Riser:
2" I.D. Schedule 40 PVC

← Backfill Type around Well Riser:
Soil Cuttings

← Type of Seal:
Bentonite Chips

← Type of Filter Pack around Well Screen:
#1 FilPro Sand

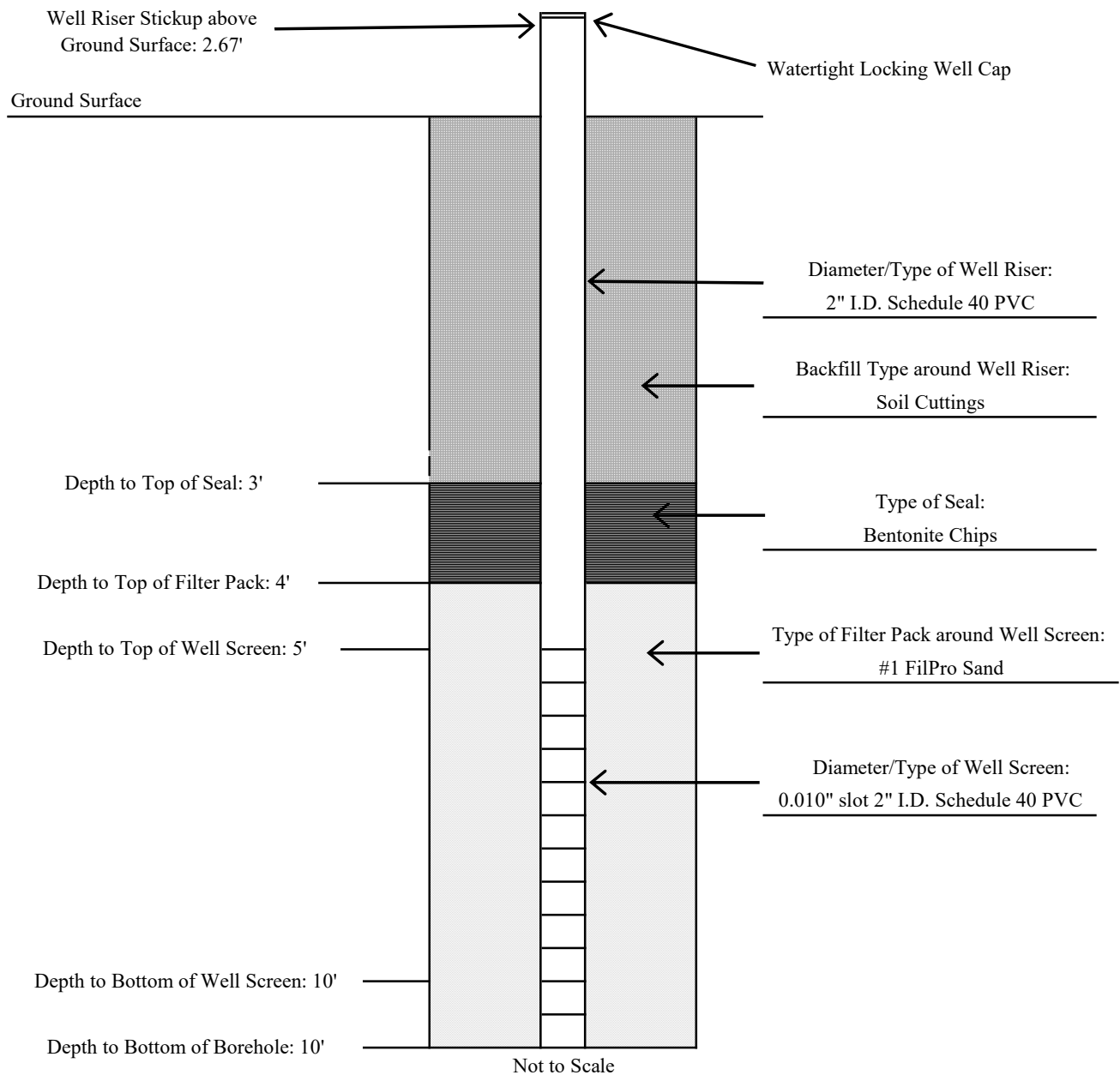
← Diameter/Type of Well Screen:
0.010" slot 2" I.D. Schedule 40 PVC

Not to Scale

Remarks:

1. See Test Boring Log B-546 for soil information.

 CME Associates, Inc. 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		GROUNDWATER MONITORING WELL LOG		Well No. W-13
				Boring No. B-557
Project Name:	Micron Campus, Clay, New York			Project No. 28062
Client:	Ramboll			Installation Date 4/22/2024
Location:	See Exploration Location Plan	Surface Elevation	382.0	Riser Elevation 384.7
Driller:	Beau Fletcher	Driller:	Ryan Casatelli	Inspector: N/A



Well Riser Stickup above Ground Surface: 2.67'

Ground Surface

Watertight Locking Well Cap

Diameter/Type of Well Riser:
2" I.D. Schedule 40 PVC

Backfill Type around Well Riser:
Soil Cuttings

Depth to Top of Seal: 3'

Type of Seal:
Bentonite Chips

Depth to Top of Filter Pack: 4'

Depth to Top of Well Screen: 5'

Type of Filter Pack around Well Screen:
#1 FilPro Sand

Diameter/Type of Well Screen:
0.010" slot 2" I.D. Schedule 40 PVC

Depth to Bottom of Well Screen: 10'

Depth to Bottom of Borehole: 10'

Not to Scale

Remarks:

1. See Test Boring Log B-557 for soil information.

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		GROUNDWATER MONITORING WELL LOG		Well No.	W-14
				Boring No.	B-564
Project Name:	Micron Campus, Clay, New York			Project No.	28062
Client:	Ramboll			Installation Date	4/23/2024
Location:	See Exploration Location Plan	Surface Elevation	380.8	Riser Elevation	383.6
Driller:	Beau Fletcher	Driller:	Ryan Casatelli	Inspector:	N/A

Well Riser Stickup above Ground Surface: 2.75'

Ground Surface

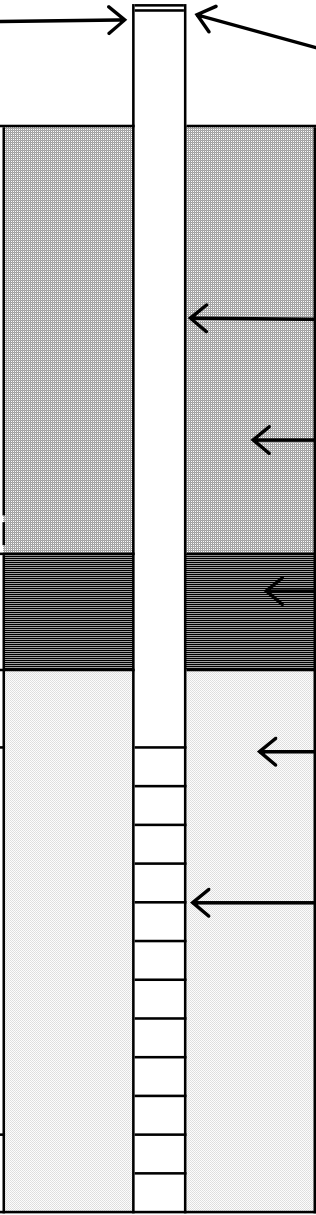
Depth to Top of Seal: 3'

Depth to Top of Filter Pack: 4'

Depth to Top of Well Screen: 5'

Depth to Bottom of Well Screen: 10'

Depth to Bottom of Borehole: 10'



Not to Scale

Watertight Locking Well Cap

Diameter/Type of Well Riser:
2" I.D. Schedule 40 PVC

Backfill Type around Well Riser:
Soil Cuttings

Type of Seal:
Bentonite Chips

Type of Filter Pack around Well Screen:
#1 FilPro Sand

Diameter/Type of Well Screen:
0.010" slot 2" I.D. Schedule 40 PVC

Remarks:

1. See Test Boring Log B-564 for soil information.

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		GROUNDWATER MONITORING WELL LOG		Well No.	W-16
				Boring No.	B-604
Project Name:	Micron Campus, Clay, New York			Project No.	28062
Client:	Ramboll			Installation Date	4/19/2024
Location:	See Exploration Location Plan	Surface Elevation	391.4	Riser Elevation	393.9
Driller:	Beau Fletcher	Driller:	Ryan Casatelli	Inspector:	N/A

Well Riser Stickup above Ground Surface: 2.5'

Ground Surface

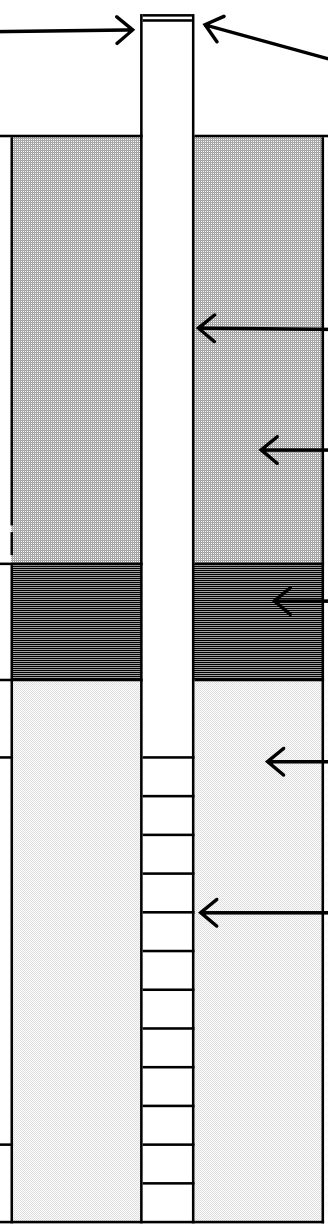
Depth to Top of Seal: 3'

Depth to Top of Filter Pack: 4'

Depth to Top of Well Screen: 5'

Depth to Bottom of Well Screen: 10'

Depth to Bottom of Borehole: 10'



Watertight Locking Well Cap

Diameter/Type of Well Riser:
2" I.D. Schedule 40 PVC

Backfill Type around Well Riser:
Soil Cuttings

Type of Seal:
Bentonite Chips

Type of Filter Pack around Well Screen:
#1 FilPro Sand

Diameter/Type of Well Screen:
0.010" slot 2" I.D. Schedule 40 PVC

Not to Scale

Remarks:

1. See Test Boring Log B-604 for soil information.

 CME Associates, Inc.		6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		GROUNDWATER MONITORING WELL LOG		Well No. W-17
						Boring No. B-618
Project Name: Micron Campus, Clay, New York				Project No. 28062		
Client: Ramboll				Installation Date 4/19/2024		
Location: See Exploration Location Plan		Surface Elevation 392.7	Riser Elevation 395.5			
Driller: Beau Fletcher		Driller: Ryan Casatelli		Inspector: N/A		

Well Riser Stickup above Ground Surface: 2.75'

Ground Surface

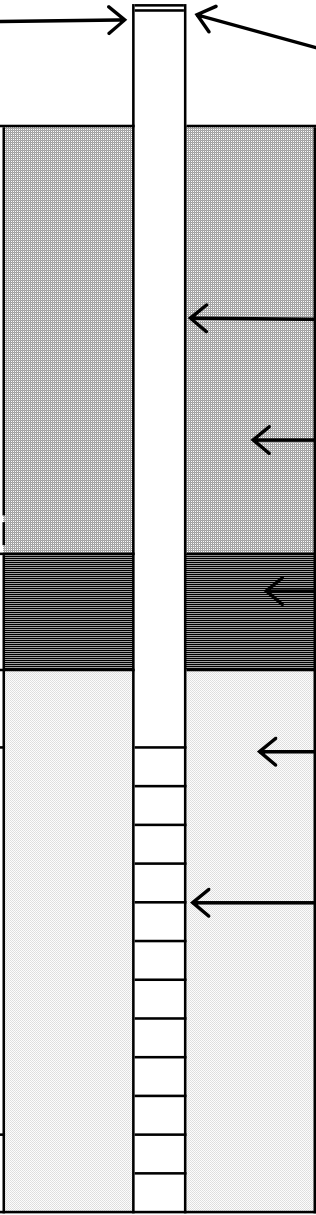
Depth to Top of Seal: 3'

Depth to Top of Filter Pack: 4'

Depth to Top of Well Screen: 5'

Depth to Bottom of Well Screen: 10'

Depth to Bottom of Borehole: 10'



Watertight Locking Well Cap

Diameter/Type of Well Riser:
2" I.D. Schedule 40 PVC

Backfill Type around Well Riser:
Soil Cuttings

Type of Seal:
Bentonite Chips

Type of Filter Pack around Well Screen:
#1 FilPro Sand

Diameter/Type of Well Screen:
0.010" slot 2" I.D. Schedule 40 PVC

Not to Scale

Remarks:

1. See Test Boring Log B-618 for soil information.

 CME Associates, Inc. 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		GROUNDWATER MONITORING WELL LOG		Well No.	W-18
				Boring No.	B-676
Project Name:	Micron Campus, Clay, New York			Project No.	28062
Client:	Ramboll			Installation Date	5/6/2024
Location:	See Exploration Location Plan	Surface Elevation	404.3	Riser Elevation	405.8
Driller:	Beau Fletcher	Driller:	Ryan Casatelli	Inspector:	N/A

Well Riser Stickup above Ground Surface: 1.5'

Ground Surface

Depth to Top of Seal: 4.3'

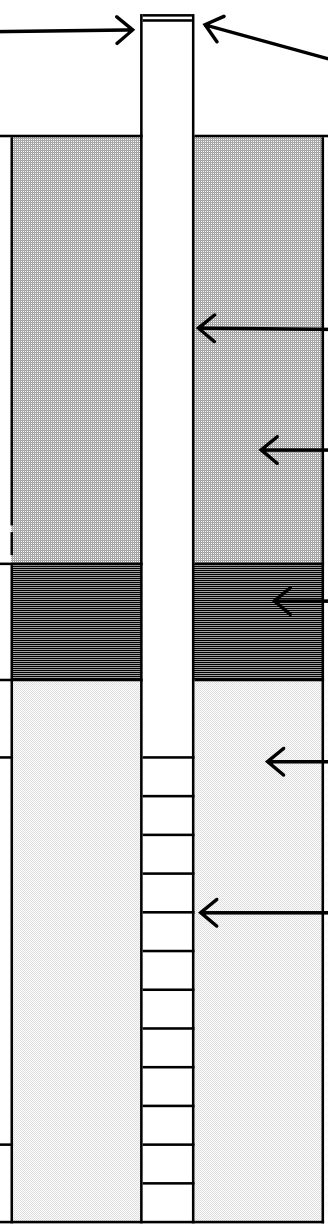
Depth to Top of Filter Pack: 5.3'

Depth to Top of Well Screen: 6.3'

Depth to Bottom of Well Screen: 11.3'

Depth to Bottom of Borehole: 11.3'

Not to Scale



Watertight Locking Well Cap

Diameter/Type of Well Riser:
2" I.D. Schedule 40 PVC

Backfill Type around Well Riser:
Soil Cuttings

Type of Seal:
Bentonite Chips

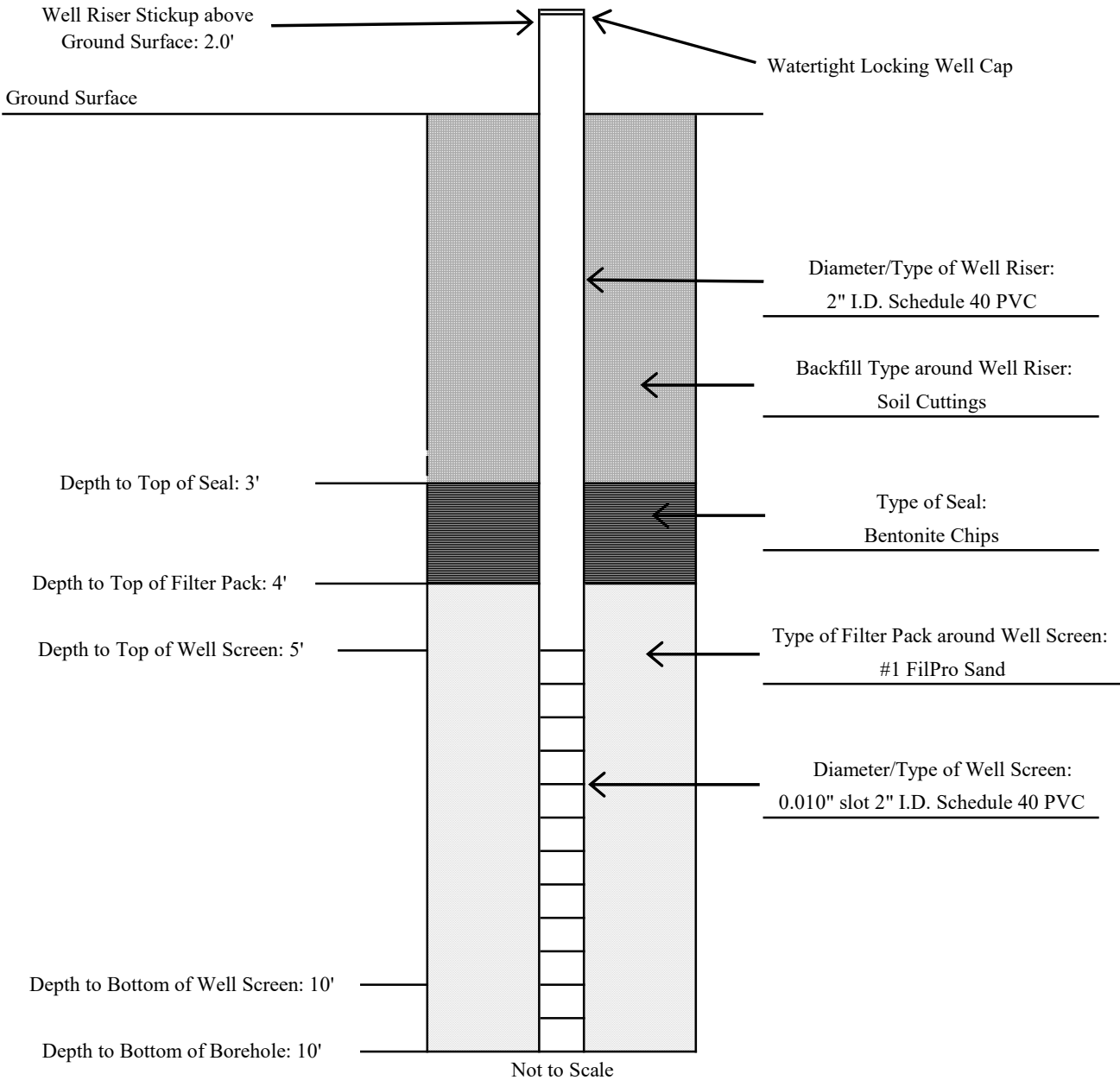
Type of Filter Pack around Well Screen:
#1 FilPro Sand

Diameter/Type of Well Screen:
0.010" slot 2" I.D. Schedule 40 PVC

Remarks:

1. See Test Boring Log B-676 for soil information.

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		GROUNDWATER MONITORING WELL LOG		Well No. W-19
				Boring No. B-683
Project Name:	Micron Campus, Clay, New York			Project No. 28062
Client:	Ramboll			Installation Date 5/8/2024
Location:	See Exploration Location Plan	Surface Elevation	394.8	Riser Elevation 396.8
Driller:	Beau Fletcher	Driller:	Ryan Casatelli	Inspector: N/A



Not to Scale

Remarks:

1. See Test Boring Log B-683 for soil information.

Bedrock Core Photographs

CME Project No: 28062



Photograph 1 Boring: B-511 Run 1 Depth 15.0' - 20.0' See Photographs Nos. 2 and 3 for detailed views.



Photograph 2 B-511 Run 1 Top Depth 15.0' - 17.5'



Photograph 3 B-511 Run 1 Bottom Depth 17.5' - 20.0'

Bedrock Core Photographs

CME Project No: 28062

**Photograph 4**

Boring: B-511 Run 2 Depth 20.0' - 25.0'

See Photographs Nos. 5 and 6 for detailed views.

**Photograph 5**

B-511 Run 2 Top Depth 20.0' - 22.5'

**Photograph 6**

B-511 Run 2 Bottom Depth 22.5' - 25.0'

Bedrock Core Photographs

CME Project No: 28062



Photograph 7 Boring: B-518 Run 1 Depth 14.4' - 19.4' See Photographs Nos. 8 and 9 for detailed views.



Photograph 8 B-518 Run 1 Top Depth 14.4' - 16.9'



Photograph 9 B-518 Run 1 Bottom Depth 16.9' - 19.4'

Bedrock Core Photographs

CME Project No: 28062



Photograph 10 Boring: B-518 Run 2 Depth 19.4' - 24.4' See Photographs Nos. 11 and 12 for detailed views.



Photograph 11 B-518 Run 2 Top Depth 19.4' - 21.9'



Photograph 12 B-518 Run 2 Bottom Depth 21.9' - 24.4'

Bedrock Core Photographs

CME Project No: 28062



Photograph 13 Boring: B-520 Run 1 Depth 29.1' - 34.1' See Photographs Nos. 14 and 15 for detailed views.



Photograph 14 B-520 Run 1 Top Depth 29.1' - 31.6'



Photograph 15 B-520 Run 1 Bottom Depth 31.6' - 34.1'

Bedrock Core Photographs

CME Project No: 28062



Photograph 16 Boring B-520 Run 2 Depth 34.1' -39.1' See Photographs Nos. 17 and 18 for detailed views.



Photograph 17 B-520 Run 2 Top Depth 34.0' - 36.6'



Photograph 18 B-520 Run 2 Bottom Depth 36.6' - 39.1'

Bedrock Core Photographs

CME Project No: 28062



Photograph 19 Boring B-523 Run 1 Depth 7.2' - 12.2' See Photographs Nos. 20 and 21 for detailed views.



Photograph 20 B-523 Run 1 Top Depth 7.2' - 9.7'



Photograph 21 B-523 Run 1 Bottom Depth 9.7' - 12.2'

Bedrock Core Photographs

CME Project No: 28062



Photograph 22 Boring B-523 Run 2 Depth 12.2' - 17.2' See Photographs Nos. 23 and 24 for detailed views.



Photograph 23 B-523 Run 2 Top Depth 12.2' - 14.7'



Photograph 24 B-523 Run 2 Bottom Depth 14.7' - 17.2'

Bedrock Core Photographs

CME Project No: 28062



Photograph 25 Boring B-526 Run 1 Depth 13.5' - 18.5' See Photographs Nos. 26 and 27 for detailed views.



Photograph 26 B-526 Run 1 Top Depth 13.5' - 16.0'



Photograph 27 B-526 Run 1 Bottom Depth 16.0' - 18.5'

Bedrock Core Photographs
CME Project No: 28062



Photograph 28 Boring B-526 Run 2 Depth 18.5' - 23.5' See Photographs Nos. 29 and 30 for detailed views.



Photograph 29 B-526 Run 2 Top Depth 18.5' - 21.0'



Photograph 30 B-526 Run 2 Bottom Depth 21.0' - 23.5'

Bedrock Core Photographs

CME Project No: 28062



Photograph 31 Boring B-532 Run 1 Depth 24.0' - 29.0' See Photographs Nos. 32 and 33 for detailed views.



Photograph 32 B-532 Run 1 Top Depth 24.0' - 26.5'



Photograph 33 B-532 Run 1 Bottom Depth 26.5' - 29.0'

Bedrock Core Photographs

CME Project No: 28062



Photograph 34 Boring: B-532 Run 2 Depth 29.0' - 34.0' See Photographs Nos. 35 and 36 for detailed views.



Photograph 35 B-532 Run 2 Top Depth 29.0 - 31.5'



Photograph 36 B-532 Run 2 Bottom Depth 31.5' - 34.0'

Bedrock Core Photographs

CME Project No: 28062



Photograph 37 Boring: B-536 Run 1 Depth 16.0' - 21.0' See Photographs Nos. 38 and 39 for detailed views.



Photograph 38 B-536 Run 1 Top Depth 16.0' - 18.5'



Photograph 39 B-536 Run 1 Bottom Depth 18.5' - 21'

Bedrock Core Photographs

CME Project No: 28062

**Photograph 40**

Boring: B-536 Run 2 Depth 21.0'- 26.0'

See Photographs Nos. 41 and 42 for detailed views.

**Photograph 41**

B-536 Run 2 Top Depth 21.0' - 23.5'

**Photograph 42**

B-536 Run 2 Bottom Depth 23.5' - 26.0'

Bedrock Core Photographs

CME Project No: 28062



Photograph 43 Boring B-543 Run 1 Depth 20.2' -25.2' See Photographs Nos. 44 and 45 for detailed views.



Photograph 44 B-543 Run 1 Top Depth 20.2' - 22.7'



Photograph 45 B-543 Run 1 Bottom Depth 22.7' - 25.2'

Bedrock Core Photographs
CME Project No: 28062



Photograph 46 Boring B-543 Run 2 Depth 25.2' - 30.2' See Photographs Nos. 47 and 48 for detailed views.



Photograph 47 B-543 Run 2 Top Depth 25.2' - 27.9'



Photograph 48 B-543 Run 2 Bottom Depth 27.9' - 30.2'

Bedrock Core Photographs

CME Project No: 28062



Photograph 49 Boring B-544 Run 1 Depth 15.5' - 20.5' See Photographs Nos. 50 and 51 for detailed views.



Photograph 50 B-544 Run 1 Top Depth 15.5' - 18.0'



Photograph 51 B-544 Run 1 Bottom Depth 18.0' -20.5'

Bedrock Core Photographs

CME Project No: 28062

**Photograph 52**

Boring

B-544

Run 2

Depth

20.5' - 25.5'

See Photographs Nos. 53 and 54 for detailed views.

**Photograph 53**

B-544

Run 2

Top

Depth

20.5' - 23.0'

**Photograph 54**

B-544

Run 2

Bottom

Depth

23.0' - 25.5'

Bedrock Core Photographs

CME Project No: 28062

**Photograph 55**

Boring

B-545

Run 1

Depth

25.7' - 30.7'

See Photographs Nos. 56 and 57 for detailed views.

**Photograph 56**

B-545

Run 1

Top

Depth

25.7' - 28.2'

**Photograph 57**

B-545

Run 1

Bottom

Depth

28.2' - 30.7'

Bedrock Core Photographs

CME Project No: 28062



Photograph 58 Boring B-545 Run 2 Depth 30.7' - 35.7' See Photographs Nos. 59 and 60 for detailed views.



Photograph 59 B-545 Run 2 Top Depth 30.7' - 33.2'



Photograph 60 B-545 Run 2 Bottom Depth 33.2' - 35.7'

Bedrock Core Photographs

Attachment to CME Report No: 28062B-01-0624



Photograph 61 Boring: B-547 Run 1 Depth 21.0' - 26.0' See Photographs Nos. 62 and 63 for detailed views.



Photograph 62 B-547 Run 1 Top Depth 21.0' - 23.5'



Photograph 63 B-547 Run 1 Bottom Depth 23.5' - 26.0'

Bedrock Core Photographs

Attachment to CME Report No: 28062B-01-0624



Photograph 64 Boring: B-547 Run 2 Depth 26.0' - 31.0' See Photographs Nos. 65 and 66 for detailed views.



Photograph 65 B-547 Run 2 Top Depth 26.0' - 28.5'



Photograph 66 B-547 Run 2 Bottom Depth 28.5' - 31.0'

Bedrock Core Photographs

Attachment to CME Report No: 28062B-01-0624

**Photograph 67**

Boring: B-549 Run 1 Depth 25.1' - 30.1'

See Photographs Nos. 68 and 69 for detailed views.

**Photograph 68**

B-549 Run 1 Top Depth 25.1' - 27.6'

**Photograph 69**

B-549 Run 1 Bottom Depth 27.6' - 30.1'

Bedrock Core Photographs

Attachment to CME Report No: 28062B-01-0624



Photograph 70 Boring: B-549 Run 2 Depth 30.1' - 35.1' See Photographs Nos. 71 and 72 for detailed views.



Photograph 71 B-549 Run 2 Top Depth 30.1' - 32.6'



Photograph 72 B-549 Run 2 Bottom Depth 32.6' - 35.1'

Bedrock Core Photographs

Attachment to CME Report No: 28062B-01-0624

**Photograph 73**

Boring: B-561 Run 1 Depth 20.4' - 25.4'

See Photographs Nos. 74 and 75 for detailed views.

**Photograph 74**

B-561 Run 1 Top Depth 20.4' - 22.9'

**Photograph 75**

B-561 Run 1 Bottom Depth 22.9' - 25.4'

Bedrock Core Photographs

Attachment to CME Report No: 28062B-01-0624



Photograph 76 Boring B-561 Run 2 Depth 25.4' -30.4' See Photographs Nos. 77 and 78 for detailed views.



Photograph 77 B-561 Run 2 Top Depth 25.4' - 27.9'



Photograph 78 B-561 Run 2 Bottom Depth 27.9' - 30.4'

Bedrock Core Photographs

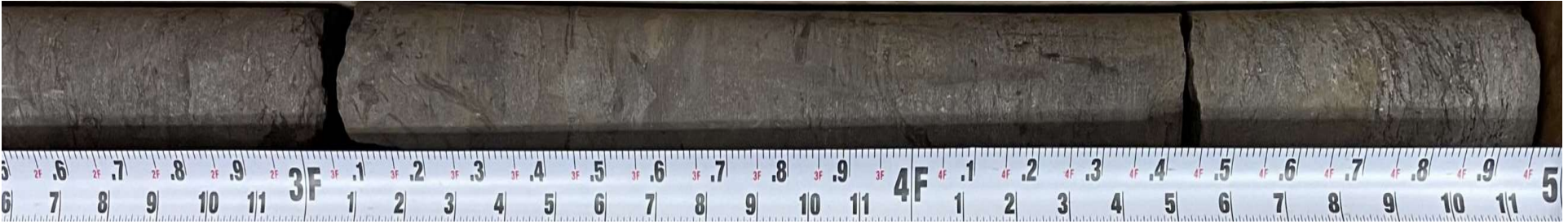
Attachment to CME Report No: 28062B-01-0624



Photograph 79 Boring B-565 Run 1 Depth 18.0' - 23.0' See Photographs Nos. 80 and 81 for detailed views.



Photograph 80 B-565 Run 1 Top Depth 18.0' - 20.5'



Photograph 81 B-565 Run 1 Bottom Depth 20.5' - 23.0'

Bedrock Core Photographs

Attachment to CME Report No: 28062B-01-0624



Photograph 82 Boring B-565 Run 2 Depth 23.0' - 28.0' See Photographs Nos. 83 and 84 for detailed views.



Photograph 83 B-565 Run 2 Top Depth 23.0' - 25.5'



Photograph 84 B-565 Run 2 Bottom Depth 25.5' -28.0'

Bedrock Core Photographs

Attachment to CME Report No: 28062B-01-0624



Photograph 85 Boring B-571 Run 1 Depth 9.5' - 14.5' See Photographs Nos. 86 and 87 for detailed views.



Photograph 86 B-571 Run 1 Top Depth 9.5' - 12.0'



Photograph 87 B-571 Run 1 Bottom Depth 12.0' - 14.5'

Bedrock Core Photographs

Attachment to CME Report No: 28062B-01-0624



Photograph 88 Boring B-571 Run 2 Depth 14.5' - 19.5' See Photographs Nos. 89 and 90 for detailed views.



Photograph 89 B-571 Run 2 Top Depth 14.5' - 17.0'



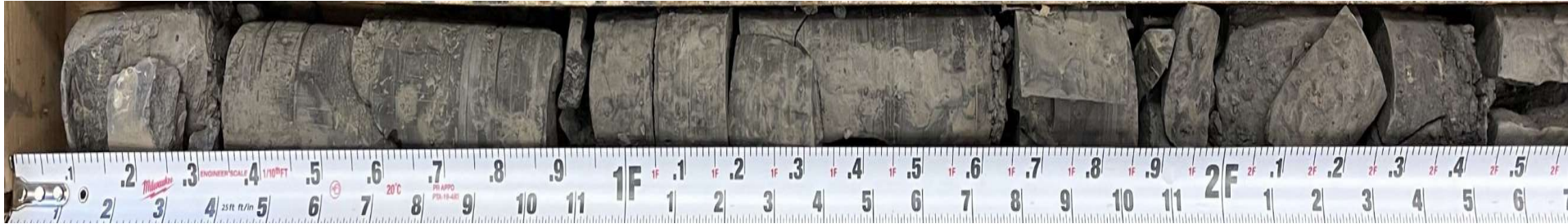
Photograph 90 B-571 Run 2 Bottom Depth 17.0' - 19.5'

Bedrock Core Photographs

Attachment to CME Report No: 28062B-01-0624



Photograph 91 Boring B-585 Run 1 Depth 11.0' - 16.0' See Photographs Nos. 92 and 93 for detailed views.



Photograph 92 B-585 Run 1 Top Depth 11.0' - 13.5'



Photograph 93 B-585 Run 1 Bottom Depth 13.5' - 16.0'

Bedrock Core Photographs

Attachment to CME Report No: 28062B-01-0624

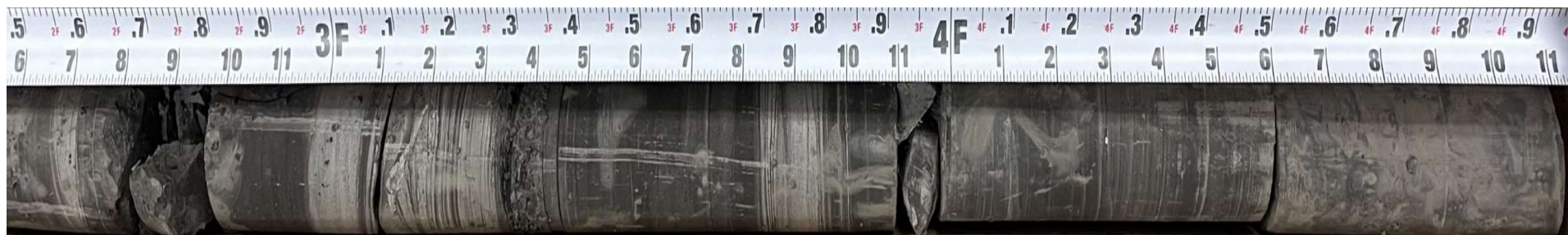
**Photograph 94**

Boring: B-585 Run 2 Depth 16.0' - 21.0'

See Photographs Nos. 95 and 96 for detailed views.

**Photograph 95**

B-585 Run 2 Top Depth 16.0 - 18.5'

**Photograph 96**

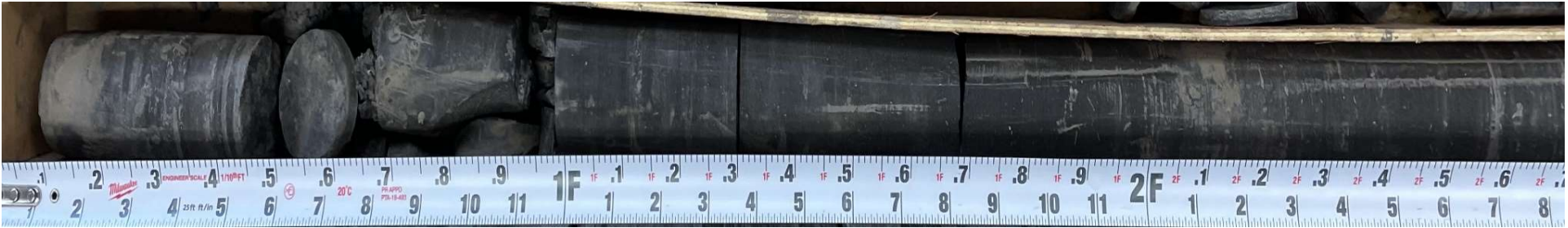
B-585 Run 2 Bottom Depth 18.5' - 21.0'

Bedrock Core Photographs

Attachment to CME Report No: 28062B-01-0624



Photograph 97 Boring: B-588 Run 1 Depth 11.0' - 16.0' See Photographs Nos. 98 and 99 for detailed views.



Photograph 98 B-588 Run 1 Top Depth 11.0' - 13.5'



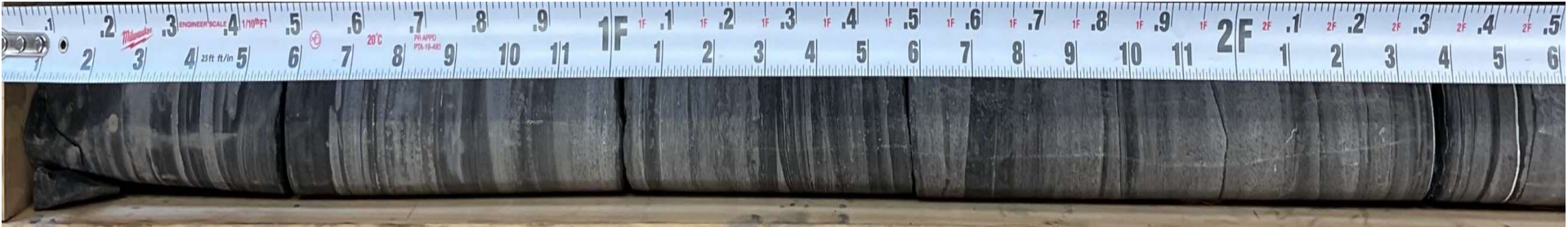
Photograph 99 B-588 Run 1 Bottom Depth 13.5' - 16.0'

Bedrock Core Photographs

Attachment to CME Report No: 28062B-01-0624



Photograph 100 Boring: B-588 Run 2 Depth 16.0'- 21.0' See Photographs Nos. 101 and 102 for detailed views.



Photograph 101 B-588 Run 2 Top Depth 16.0' - 18.5'



Photograph 102 B-588 Run 2 Bottom Depth 18.5' - 21.0'

Bedrock Core Photographs

Attachment to CME Report No: 28062B-01-0624



Photograph 103 Boring B-594 Run 1 Depth 19.5' -24.5' See Photographs Nos. 104 and 105 for detailed views.



Photograph 104 B-594 Run 1 Top Depth 19.5' - 22.0'



Photograph 105 B-594 Run 1 Bottom Depth 22.0' - 24.5'

Bedrock Core Photographs

Attachment to CME Report No: 28062B-01-0624



Photograph 106 Boring B-594 Run 2 Depth 24.5' - 29.5' See Photographs Nos. 107 and 108 for detailed views.



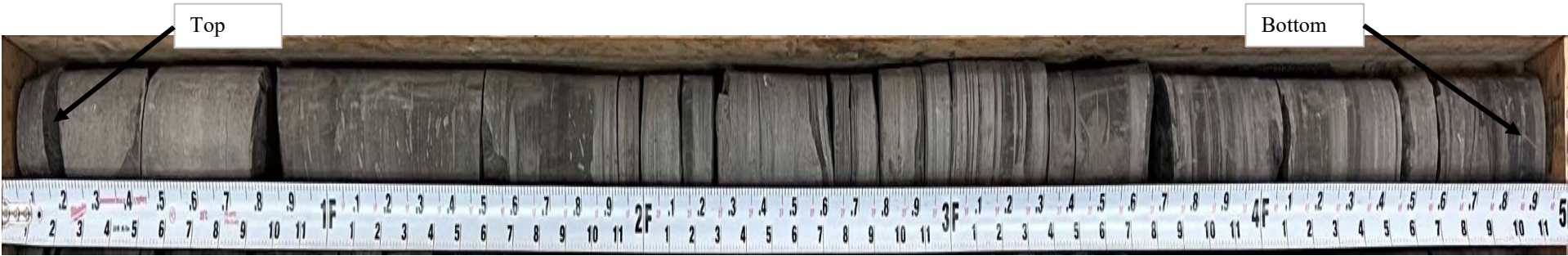
Photograph 107 B-594 Run 2 Top Depth 24.5' - 27.0'



Photograph 108 B-594 Run 2 Bottom Depth 27.0' - 29.5'

Bedrock Core Photographs

Attachment to CME Report No: 28062B-01-0624



Photograph 109 Boring B-595 Run 1 Depth 18.6' - 23.6' See Photographs Nos. 110 and 111 for detailed views.



Photograph 110 B-595 Run 1 Top Depth 18.6' - 21.1'



Photograph 111 B-595 Run 1 Bottom Depth 21.1' -23.6'

Bedrock Core Photographs

Attachment to CME Report No: 28062B-01-0624



Photograph 112 Boring B-595 Run 2 Depth 23.6' - 28.6' See Photographs Nos. 113 and 114 for detailed views.



Photograph 113 B-595 Run 2 Top Depth 23.6 - 26.1



Photograph 114 B-595 Run 2 Bottom Depth 26.1' - 28.6'

Bedrock Core Photographs

Attachment to CME Report No: 28062B-01-0624



Photograph 115 Boring B-602 Run 1 Depth 21.8' - 26.8' See Photographs Nos. 116 and 117 for detailed views.



Photograph 116 B-602 Run 1 Top Depth 21.8' - 24.3'



Photograph 117 B-602 Run 1 Bottom Depth 24.3' - 26.8'

Bedrock Core Photographs

Attachment to CME Report No: 28062B-01-0624



Photograph 118 Boring B-602 Run 2 Depth 26.8' - 31.8' See Photographs Nos. 119 and 120 for detailed views.



Photograph 119 B-602 Run 2 Top Depth 26.8' - 29.3'



Photograph 120 B-602 Run 2 Bottom Depth 28.3' - 31.8'

Bedrock Core Photographs

Attachment to CME Report No: 28062B-01-0624

**Photograph 121**

Boring: B-604 Run 1 Depth 25.0' - 30.0'

See Photographs Nos. 122 and 123 for detailed views.

**Photograph 122**

B-604 Run 1 Top Depth 25.0' - 27.5'

**Photograph 123**

B-604 Run 1 Bottom Depth 27.5' - 30.0'

Bedrock Core Photographs

Attachment to CME Report No: 28062B-01-0624

**Photograph 124**

Boring: B-604 Run 2 Depth 30.0' - 35.0'

See Photographs Nos. 125 and 126 for detailed views.

**Photograph 125**

B-604 Run 2 Top Depth 30.0' - 32.5'

**Photograph 126**

B-604 Run 2 Bottom Depth 32.5' - 35.0'

Bedrock Core Photographs

Attachment to CME Report No: 28062B-01-0624



Photograph 127 Boring: B-612 Run 1 Depth 23.6' - 28.6' See Photographs Nos. 128 and 129 for detailed views.



Photograph 128 B-612 Run 1 Top Depth 23.6' - 26.1'



Photograph 129 B-612 Run 1 Bottom Depth 26.1' - 28.6'

Bedrock Core Photographs

Attachment to CME Report No: 28062B-01-0624

**Photograph 130**

Boring: B-612 Run 2 Depth 28.6' - 33.6'

See Photographs Nos. 131 and 132 for detailed views.

**Photograph 131**

B-612 Run 2 Top Depth 28.6' - 31.1'

**Photograph 132**

B-612 Run 2 Bottom Depth 31.1' - 33.6'

Bedrock Core Photographs

Attachment to CME Report No: 28062B-01-0624



Photograph 133 Boring: B-616 Run 1 Depth 24.2' - 29.2' See Photographs Nos. 134 and 135 for detailed views.



Photograph 134 B-616 Run 1 Top Depth 24.2' - 26.7'



Photograph 135 B-616 Run 1 Bottom Depth 26.7' - 29.2'

Bedrock Core Photographs

Attachment to CME Report No: 28062B-01-0624

**Photograph 136**

Boring

B-616

Run 2

Depth

29.2' -34.2'

See Photographs Nos. 137 and 138 for detailed views.

**Photograph 137**

B-616

Run 2

Top

Depth

29.2' - 31.7'

**Photograph 138**

B-616

Run 2

Bottom

Depth

31.7' - 34.2'

Bedrock Core Photographs

Attachment to CME Report No: 28062B-01-0624

**Photograph 139**

Boring

B-624

Run 1

Depth

24.1' - 29.1'

See Photographs Nos. 140 and 141 for detailed views.

**Photograph 140**

B-624

Run 1

Top

Depth

24.1' - 26.6'

**Photograph 141**

B-624

Run 1

Bottom

Depth

26.6' - 29.1'

Bedrock Core Photographs

Attachment to CME Report No: 28062B-01-0624



Photograph 142 Boring B-624 Run 2 Depth 29.1' - 34.1' See Photographs Nos. 143 and 144 for detailed views.



Photograph 143 B-624 Run 2 Top Depth 29.1' - 31.6'



Photograph 144 B-624 Run 2 Bottom Depth 31.6' - 34.1'

Bedrock Core Photographs

Attachment to CME Report No: 28062B-01-0624



Photograph 145 Boring B-625 Run 1 Depth 16.0' - 21.0' See Photographs Nos. 146 and 147 for detailed views.



Photograph 146 B-625 Run 1 Top Depth 16.0' - 18.5'



Photograph 147 B-625 Run 1 Bottom Depth 18.5' - 21.0'

Bedrock Core Photographs

Attachment to CME Report No: 28062B-01-0624



Photograph 148 Boring B-625 Run 2 Depth 21.0' - 26.0' See Photographs Nos. 149 and 150 for detailed views.



Photograph 149 B-625 Run 2 Top Depth 21.0' - 23.5'



Photograph 150 B-625 Run 2 Bottom Depth 23.5' - 26.0'

Bedrock Core Photographs

Attachment to CME Report No: 28062B-01-0624



Photograph 151 Boring B-630 Run 1 Depth 22.0' - 27.0' See Photographs Nos. 152 and 153 for detailed views.



Photograph 152 B-630 Run 1 Top Depth 22.0' - 24.5'



Photograph 153 B-630 Run 1 Bottom Depth 24.5' - 27.0'

Bedrock Core Photographs

Attachment to CME Report No: 28062B-01-0624

**Photograph 154**

Boring: B-630 Run 2 Depth 27.0' - 32.0'

See Photographs Nos. 155 and 156 for detailed views.

**Photograph 155**

B-630 Run 2 Top Depth 27.0 - 29.5'

**Photograph 156**

B-630 Run 2 Bottom Depth 29.5' - 32.0'

Bedrock Core Photographs

Attachment to CME Report No: 28062B-01-0624



Photograph 157 Boring: B-632 Run 1 Depth 22.0' - 27.0' See Photographs Nos. 158 and 159 for detailed views.



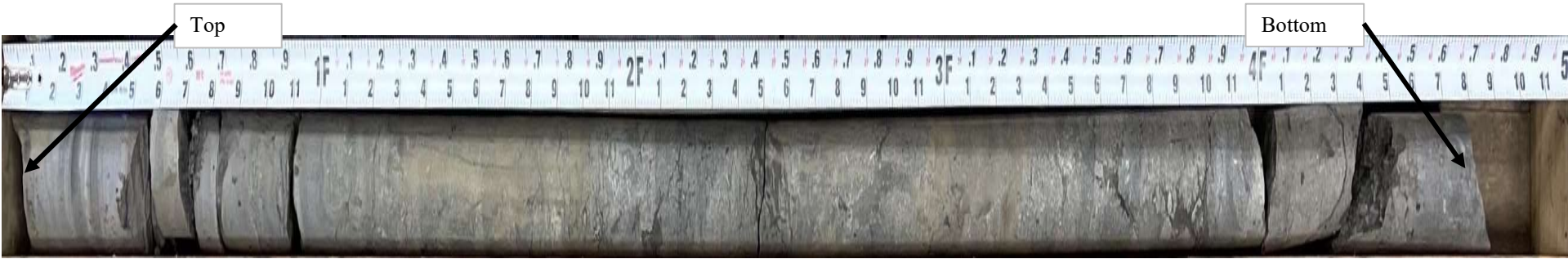
Photograph 158 B-632 Run 1 Top Depth 22.0' - 24.5'



Photograph 159 B-632 Run 1 Bottom Depth 24.5' - 27.0'

Bedrock Core Photographs

Attachment to CME Report No: 28062B-01-0624



Photograph 160 Boring: B-632 Run 2 Depth 27.0' - 32.0' See Photographs Nos. 161 and 162 for detailed views.



Photograph 161 B-632 Run 2 Top Depth 27.0' - 29.5'



Photograph 162 B-632 Run 2 Bottom Depth 29.5' - 32.0'

Bedrock Core Photographs

Attachment to CME Report No: 28062B-01-0624



Photograph 163 Boring B-664 Run 1 Depth 25.1' - 30.1' See Photographs Nos. 164 and 165 for detailed views.



Photograph 164 B-664 Run 1 Top Depth 25.1' - 27.6'



Photograph 165 B-664 Run 1 Bottom Depth 27.6' - 30.1'

Bedrock Core Photographs

Attachment to CME Report No: 28062B-01-0624



Photograph 166 Boring B-664 Run 2 Depth 30.1' - 35.1' See Photographs Nos. 167 and 168 for detailed views.



Photograph 167 B-664 Run 2 Top Depth 30.1' - 32.6'



Photograph 168 B-664 Run 2 Bottom Depth 32.6' - 35.1'

Bedrock Core Photographs

Attachment to CME Report No: 28062B-01-0624



Photograph 169 Boring B-669 Run 1 Depth 13.2' - 18.2' See Photographs Nos. 170 and 171 for detailed views.



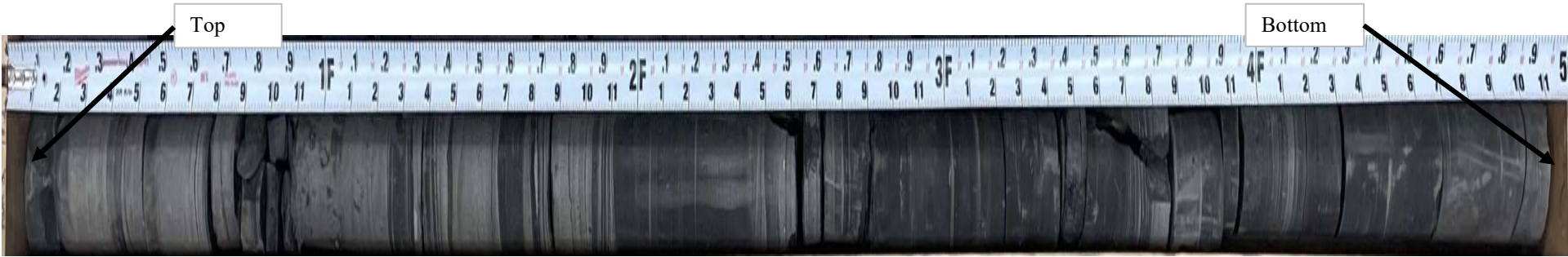
Photograph 170 B-669 Run 1 Top Depth 13.2' - 15.7'



Photograph 171 B-669 Run 1 Bottom Depth 15.7' - 18.2'

Bedrock Core Photographs

Attachment to CME Report No: 28062B-01-0624



Photograph 172 Boring B-669 Run 2 Depth 18.2' - 23.2' See Photographs Nos. 173 and 174 for detailed views.



Photograph 173 B-669 Run 2 Top Depth 18.2' - 20.7'



Photograph 174 B-669 Run 2 Bottom Depth 20.7' - 23.2'

Bedrock Core Photographs

Attachment to CME Report No: 28062B-01-0624



Photograph 175 Boring B-675 Run 1 Depth 10.5' - 15.5' See Photographs Nos. 176 and 177 for detailed views.



Photograph 176 B-675 Run 1 Top Depth 10.5' - 13.0'



Photograph 177 B-675 Run 1 Bottom Depth 13.0' - 15.5'

Bedrock Core Photographs

Attachment to CME Report No: 28062B-01-0624



Photograph 178 Boring B-675 Run 2 Depth 15.5' - 20.5' See Photographs Nos. 179 and 180 for detailed views.



Photograph 179 B-675 Run 2 Top Depth 15.5' - 18.0'



Photograph 180 B-675 Run 2 Bottom Depth 18.0' - 20.5'

Bedrock Core Photographs

Attachment to CME Report No: 28062B-01-0624



Photograph 181 Boring B-688 Run 1 Depth 16.0' - 21.0' See Photographs Nos. 182 and 183 for detailed views.



Photograph 182 B-688 Run 1 Top Depth 16.0' - 18.5'



Photograph 183 B-688 Run 1 Bottom Depth 18.5' - 21.0'

Bedrock Core Photographs

Attachment to CME Report No: 28062B-01-0624



Photograph 184 Boring B-688 Run 2 Depth 21.0' - 26.0' See Photographs Nos. 185 and 186 for detailed views.



Photograph 185 B-688 Run 2 Top Depth 21.0' - 23.5'



Photograph 186 B-688 Run 2 Bottom Depth 23.5' - 26.0'

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION AUGER PROBE LOG				Probe No.		B-522											
						Page No.		1 of 1											
						Report No.		28062B-04-0624											
Project Name:		Micron Campus, Clay, New York				Date Started		04/16/24											
Client:		Ramboll				Date Finished		04/16/24											
Location:		See Exploration Location Plan, ELP-1				Surface Elev.		393.7'											
METHODS OF INVESTIGATION						GROUNDWATER OBSERVATIONS													
Driller:		Al Linstruth		Casing:		3 ¼" ID H.S.A.		Date		Time		Depth (Ft.)		Casing At (Ft.)					
Driller:		John Winks		Casing Hammer:				04/16/24		While Drilling		N/A		N/A					
Inspector:				Other:				04/16/24		Before Casing Removed		N/A		N/A					
Drill Rig:		CME 550X		Soil Sampler:				04/16/24		After Casing Removed		3.3		out					
Type:		ATV		Hammer Wt:				04/16/24		After Casing Removed		caved @ 4.3		out					
Rod Size:		AWJ		Hammer Fall:															
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL													
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine		and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%			SPT "N" or RQD %							
0							AUGER PROBE - No Sampling												
1							2	3	4	5	6			7	8	9			
10							11	12	13	14	15			16	17	18	19	20	
							Auger Refusal @ 7.6'												
							Bottom of Boring @ 7.6'												

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION AUGER PROBE LOG				Probe No.		B-524			
						Page No.		1 of 1			
						Report No.		28062B-04-0624			
Project Name:		Micron Campus, Clay, New York				Date Started		04/16/24			
Client:		Ramboll				Date Finished		04/16/24			
Location:		See Exploration Location Plan, ELP-1				Surface Elev.		394.5'			
METHODS OF INVESTIGATION						GROUNDWATER OBSERVATIONS					
Driller:		Al Linstruth		Casing:		3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)
Driller:		John Winks		Casing Hammer:				04/16/24	While Drilling	N/A	N/A
Inspector:				Other:				04/16/24	Before Casing Removed	N/A	N/A
Drill Rig:		CME 550X		Soil Sampler:				04/16/24	After Casing Removed	4.7	out
Type:		ATV		Hammer Wt:				04/16/24	After Casing Removed	caved @ 5.0	out
Rod Size:		AWJ		Hammer Fall:							
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL					
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%		SPT "N" or RQD %	
0							AUGER PROBE - No Sampling				
1											
2											
3											
4											
5											
6											
7											
8											
9											
10							Auger Refusal @ 9.0' Bottom of Boring @ 9.0'				
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION AUGER PROBE LOG				Probe No.		B-525			
						Page No.		1 of 1			
						Report No.		28062B-04-0624			
Project Name:		Micron Campus, Clay, New York				Date Started		04/16/24			
Client:		Ramboll				Date Finished		04/16/24			
Location:		See Exploration Location Plan, ELP-1				Surface Elev.		396.4'			
METHODS OF INVESTIGATION						GROUNDWATER OBSERVATIONS					
Driller:		Al Linstruth		Casing:		3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)
Driller:		John Winks		Casing Hammer:							
Inspector:				Other:				04/16/24	While Drilling	N/A	N/A
Drill Rig:		CME 550X		Soil Sampler:				04/16/24	Before Casing Removed	N/A	N/A
Type:		ATV		Hammer Wt:				04/16/24	After Casing Removed	6.5	out
Rod Size:		AWJ		Hammer Fall:				04/16/24	After Casing Removed	caved @ 6.9	out
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL					
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%		SPT "N" or RQD %	
		From	To								
0							AUGER PROBE - No Sampling				
1											
2											
3											
4											
5							<i>Augers gravelly from 7.7' to 10.0'</i>				
6											
7											
8											
9											
10							<i>Auger Refusal @ 12.2'</i> Bottom of Boring @ 12.2'				
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION AUGER PROBE LOG				Probe No.		B-527							
						Page No.		1 of 1							
						Report No.		28062B-04-0624							
Project Name:		Micron Campus, Clay, New York				Date Started		04/16/24							
Client:		Ramboll				Date Finished		04/16/24							
Location:		See Exploration Location Plan, ELP-1				Surface Elev.		394.4'							
METHODS OF INVESTIGATION						GROUNDWATER OBSERVATIONS									
Driller:		Al Linstruth		Casing:		3 ¼" ID H.S.A.		Date		Time		Depth (Ft.)		Casing At (Ft.)	
Driller:		John Winks		Casing Hammer:				04/16/24		While Drilling		N/A		N/A	
Inspector:				Other:				04/16/24		Before Casing Removed		N/A		N/A	
Drill Rig:		CME 550X		Soil Sampler:				04/16/24		After Casing Removed		4.0		out	
Type:		ATV		Hammer Wt:				04/16/24		After Casing Removed		caved @ 4.6		out	
Rod Size:		AWJ		Hammer Fall:											
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL									
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine		and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%			SPT "N" or RQD %			
0							AUGER PROBE - No Sampling								
1															
2															
3															
4															
5							Auger Refusal @ 7.5'								
6															
7															
8															
9															
10							Bottom of Boring @ 7.5'								
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION AUGER PROBE LOG				Probe No.		B-528			
						Page No.		1 of 1			
						Report No.		28062B-04-0624			
Project Name:		Micron Campus, Clay, New York				Date Started		04/16/24			
Client:		Ramboll				Date Finished		04/16/24			
Location:		See Exploration Location Plan, ELP-1				Surface Elev.		395.8'			
METHODS OF INVESTIGATION						GROUNDWATER OBSERVATIONS					
Driller:		Al Linstruth		Casing:		3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)
Driller:		John Winks		Casing Hammer:				04/16/24	While Drilling	N/A	N/A
Inspector:				Other:				04/16/24	Before Casing Removed	N/A	N/A
Drill Rig:		CME 550X		Soil Sampler:				04/16/24	After Casing Removed	5.4	out
Type:		ATV		Hammer Wt:				04/16/24	After Casing Removed	caved @ 7.5	out
Rod Size:		AWJ		Hammer Fall:							
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL					
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%		SPT "N" or RQD %	
		From	To								
0							AUGER PROBE - No Sampling				
1											
2											
3											
4											
5											
6											
7											
8											
9											
10							Auger Refusal @ 9.8' Bottom of Boring @ 9.8'				
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-501			
				Page No.		1 of 2			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		05/09/24			
Client: Ramboll				Date Finished		05/09/24			
Location: See Exploration Location Plan				Surface Elev.		405.5'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: Beau Fletcher		Casing: 3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller: Ryan Casatelli		Casing Hammer:							
Inspector:		Other:							
Drill Rig: CME 55		Soil Sampler: 2" OD Split Barrel							
Type: ATV		Hammer Wt: 140 lbs.							
Rod Size: AWJ		Hammer Fall: 30 in.		05/09/24	While Drilling	None Noted	23.7		
				05/09/24	Before Casing Removed	None Noted	23.7		
				05/09/24	After Casing Removed	4.5	out		
				05/09/24	After Casing Removed	caved @ 4.7	out		
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1A	0.0	1.0	SS/16	1-2-3-4		Topsoil and Organic Material (moist)		5
1	1B	1.0	2.0				-----		
2	2	2.0	4.0	SS/17	4-5-6-7		Brown SILT, little CLAY (moist, medium stiff)		
3									
4	3	4.0	6.0	SS/11	4-2-5-7		Brown/Grey mottled SILT, trace CLAY, trace fine SAND (wet, stiff)		11
5									
6	4	6.0	8.0	SS/17	8-8-8-10		Brown SILT, trace CLAY (moist, very stiff)		7
7									
8	5	8.0	10.0	SS/20	6-7-10-10		Similar as above (moist, very stiff)		16
9									
10									
11									
12							-----		
13									
14	6	13.5	15.0	SS/14	3-5-7		Grey/Brown/Red mf GRAVEL, little cmf SAND, little SILT (wet, medium compact)		12
15									
16									
17									
18									
19	7	18.5	18.5	SS/0	50@0"		No Recovery - Split Spoon Refusal		50+
20							Continued on Page 2		

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG			Boring No.	B-501
									Page No.	2 of 2
									Project No.	28062
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%		SPT "N" or RQD %
20	8	23.5	23.7	SS/2	50@2"		Continued from Page 1			50+
21										
22										
23										
24							Grey cmf GRAVEL, little cmf SAND, trace SILT (moist, very compact)			
25							Bottom of Boring @ 23.7'			
26										
27										
28										
29										
30										
31										
32										
33										
34										
35										
36										
37										
38										
39										
40										
41										
42										
43										
44										
45										

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG				Boring No. B-503				
						Page No. 1 of 1				
						Project No. 28062				
Project Name: Micron Campus, Clay, New York						Date Started 05/13/24				
Client: Ramboll						Date Finished 05/13/24				
Location: See Exploration Location Plan						Surface Elev. 400.8'				
METHODS OF INVESTIGATION						GROUNDWATER OBSERVATIONS				
Driller: Gary Richards		Casing: 3 ¼" ID H.S.A.				Date	Time	Depth (Ft.)	Casing At (Ft.)	
Driller: Ryan Casatelli		Casing Hammer:				05/13/24	While Drilling	17.8	18.5	
Inspector:		Other:				05/13/24	Before Casing Removed	17.8	18.5	
Drill Rig: CME 55		Soil Sampler: 2" OD Split Barrel				05/13/24	After Casing Removed	2.6	out	
Type: ATV		Hammer Wt: 140 lbs.				05/13/24	After Casing Removed	caved @ 3.2	out	
Rod Size: AWJ		Hammer Fall: 30 in.								
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %	
0	1A	0.0	1.5	SS/11	WH-1-1-5		Topsoil and Organic Material (moist)		2	
1	1B 2	1.5	2.0	SS/18	7-9-9-9		Brown SILT, trace fine SAND, trace CLAY (wet, soft)		18	
2		2.0	4.0				Brown SILT, trace CLAY (wet, very stiff)			
3										
4	3	4.0	6.0	SS/16	5-9-9-11		Similar as above (wet, very stiff)		18	
5	4	6.0	8.0	SS/20	7-9-8-9		Similar as above (wet, very stiff)		17	
6										
7										
8	5	8.0	10.0	SS/17	8-18-29-23		Light Grey/Brown SILT, trace CLAY (moist, hard)		47	
9	6	13.5	14.2	SS/7	47-50@2"				50+	
10										
11										
12							Augers harder beginning @ 11.8'			
13										
14							Grey SILT, little mf GRAVEL, little cmf SAND (moist, hard)			
15	7	18.5	18.5	SS/0	50@0"				50+	
16										
17										
18							No Recovery - Split Spoon Refusal			
19							Bottom of Boring @ 18.5'			
20										

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 CME Associates, Inc.		6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG			Boring No.	B-504	
							Page No.	1 of 2	
							Project No.	28062	
Project Name:	Micron Campus, Clay, New York					Date Started	05/10/24		
Client:	Ramboll					Date Finished	05/10/24		
Location:	See Exploration Location Plan					Surface Elev.	404.4'		
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller:	Beau Fletcher	Casing:	3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)	
Driller:	Ryan Casatelli	Casing Hammer:			05/10/24	While Drilling	None Noted	23.5	
Inspector:		Other:			05/10/24	Before Casing Removed	None Noted	23.5	
Drill Rig:	CME 55	Soil Sampler:	2" OD Split Barrel		05/10/24	After Casing Removed	10.6	out	
Type:	ATV	Hammer Wt:	140 lbs.		05/10/24	After Casing Removed	caved @ 13.0	out	
Rod Size:	AWJ	Hammer Fall:	30 in.						
LOG OF BORING SAMPLES				VISUAL CLASSIFICATION OF MATERIAL					
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
0	1A	0.0	1.0	SS/16	1-1-3-3		Topsoil and Organic Material (moist)		4
1	1B	1.0	2.0				Brown/Grey mottled SILT, little CLAY, trace ROOTS (moist, medium stiff)		
2	2	2.0	4.0	SS/22	4-5-9-4		Brown SILT, trace CLAY (wet, stiff)		14
3									
4	3	4.0	6.0	SS/16	4-5-6-7		Brown SILT, trace CLAY (wet, stiff)		11
5									
6	4	6.0	8.0	SS/20	4-7-7-7		Similar as above (wet, stiff)		14
7									
8	5	8.0	10.0	SS/23	4-10-10-15		Brown SILT, trace CLAY, trace cmf SAND (wet, very stiff)		20
9									
10									
11									
12									
13									
14	6	13.5	15.0	SS/12	2-4-10		Grey SILT, some cmf SAND, trace fine GRAVEL (wet, stiff)		14
15									
16									
17									
18									
19	7	18.5	19.3	SS/12	44-50@4"		Grey SILT, some cmf SAND, little cmf GRAVEL (moist, hard)		50+
20									
Continued on Page 2									

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG		Boring No. B-504	Page No. 2 of 2
								Project No. 28062	
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL			
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
20	8	23.5	23.8	SS/4	50@4"		Continued from Page 1		50+
21									
22									
23									
24							Grey SILT, some cmf SAND, trace fine GRAVEL (moist, hard)		
25							Bottom of Boring @ 23.8'		
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									
36									
37									
38									
39									
40									
41									
42									
43									
44									
45									

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-505			
				Page No.		1 of 1			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		05/10/24			
Client: Ramboll				Date Finished		05/10/24			
Location: See Exploration Location Plan				Surface Elev.		406.1'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: Beau Fletcher		Casing: 3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller: Ryan Casatelli		Casing Hammer:							
Inspector:		Other:							
Drill Rig: CME 55		Soil Sampler: 2" OD Split Barrel							
Type: ATV		Hammer Wt: 140 lbs.							
Rod Size: AWJ		Hammer Fall: 30 in.		05/10/24	While Drilling	None Noted	18.5		
					05/10/24	Before Casing Removed	None Noted	18.5	
					05/10/24	After Casing Removed	None Noted	out	
					05/10/24	After Casing Removed	caved @ 3.0	out	
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1A	0.0	1.0	SS/16	1-1-2-3		Topsoil and Organic Material (moist)		3
1	1B	1.0	2.0				Brown/Grey mottled SILT, little CLAY (moist, soft)		
2	2	2.0	4.0	SS/22	5-8-5-6		Brown SILT, trace CLAY (wet, stiff)		13
3									
4	3	4.0	6.0	SS/15	5-6-10-10		Brown SILT, trace CLAY, trace fine SAND (wet, very stiff)		16
5									
6	4	6.0	8.0	SS/22	5-7-7-7		Brown SILT, trace CLAY (wet, stiff)		14
7									
8	5	8.0	10.0	SS/20	6-16-20-16		Brown SILT, trace mf GRAVEL, trace cmf SAND (moist, hard)		36
9									
10									
11									
12									
13									
14	6	13.5	14.3	SS/8	30-50@3"		Grey SILT, some cmf SAND, trace mf GRAVEL (moist, hard)		50+
15									
16									
17									
18									
19	7	18.5	18.7	SS/3	50@3"		Grey cmf GRAVEL, some cmf SAND, some SILT (moist, very compact)		50+
20							Bottom of Boring @ 18.7'		

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-507									
				Page No.		1 of 1									
				Project No.		28062									
Project Name:		Micron Campus, Clay, New York				Date Started		05/13/24							
Client:		Ramboll				Date Finished		05/13/24							
Location:		See Exploration Location Plan				Surface Elev.		403.8'							
METHODS OF INVESTIGATION						GROUNDWATER OBSERVATIONS									
Driller:		Gary Richards		Casing:		3 ¼" ID H.S.A.		Date		Time		Depth (Ft.)		Casing At (Ft.)	
Driller:		Ryan Casatelli		Casing Hammer:				05/13/24		While Drilling		None Noted		19.4	
Inspector:				Other:				05/13/24		Before Casing Removed		None Noted		19.4	
Drill Rig:		CME 55		Soil Sampler:		2" OD Split Barrel		05/13/24		After Casing Removed		2.3		out	
Type:		ATV		Hammer Wt:		140 lbs.		05/13/24		After Casing Removed		caved @ 3.3		out	
Rod Size:		AWJ		Hammer Fall:		30 in.									
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL									
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%		SPT "N" or RQD %					
0	1A	0.0	1.0	SS/16	WH-1-3-6		Topsoil and Organic Material (moist)		4						
1	1B	1.0	2.0				Brown SILT, trace CLAY (moist, medium stiff)								
2	2	2.0	4.0	SS/17	3-4-5-4		Brown SILT, trace CLAY (moist, stiff)		9						
3															
4	3	4.0	6.0	SS/16	2-6-7-7		Similar as above (wet, stiff)		13						
5															
6	4	6.0	8.0	SS/18	8-8-9-10		Similar as above (wet, very stiff)		17						
7															
8	5	8.0	10.0	SS/20	6-8-11-10		Similar as above (moist, very stiff)		19						
9															
10															
11															
12															
13	6	13.5	15.0	SS/7	7-12-46		Dark Grey/Black weathered ROCK Fragments (Shale) and ROCK Flour (moist)		58						
14															
15															
16															
17															
18															
19	7	18.5	19.4	SS/9	33-50@5"		Grey SILT, some cmf SAND, little mf GRAVEL (moist, hard)		50+						
20							Bottom of Boring @ 19.4'								

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-508			
				Page No.		1 of 1			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		05/09/24			
Client: Ramboll				Date Finished		05/09/24			
Location: See Exploration Location Plan				Surface Elev.		404.7'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: Beau Fletcher		Casing: 3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller: Ryan Casatelli		Casing Hammer:							
Inspector:		Other:							
Drill Rig: CME 55		Soil Sampler: 2" OD Split Barrel							
Type: ATV		Hammer Wt: 140 lbs.							
Rod Size: AWJ		Hammer Fall: 30 in.		05/09/24	While Drilling	None Noted	18.5		
				05/09/24	Before Casing Removed	None Noted	18.5		
				05/09/24	After Casing Removed	6.0	out		
				05/09/24	After Casing Removed	caved @ 11.0	out		
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1	0.0	2.0	SS/19	1-1-2-4		Brown SILT, trace CLAY, trace ORGANIC MATERIAL, trace fine SAND (moist, soft)		3
1									
2	2	2.0	4.0	SS/20	3-3-3-4		Brown/Grey mottled SILT, little CLAY (moist, medium stiff)		6
3									
4	3	4.0	6.0	SS/14	5-4-5-6		Brown SILT, trace cmf SAND, trace fine GRAVEL (wet, stiff)		9
5									
6	4	6.0	8.0	SS/20	3-4-5-8		Brown SILT, trace CLAY (wet, stiff)		9
7									
8	5	8.0	10.0	SS/15	3-4-8-13		Similar as above (moist, stiff)		12
9									
10									
11									
12									
13									
14	6	13.5	15.0	SS/12	20-26-30		Grey SILT, some mf GRAVEL, trace cmf SAND (moist, hard)		56
15									
16									
17									
18									
19	7	18.5	18.8	SS/4	50@4"		Grey SILT, little fine GRAVEL, trace cmf SAND (moist, hard)		50+
20							Bottom of Boring @ 18.8'		

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG				Boring No. B-509			
						Page No. 1 of 2			
						Project No. 28062			
Project Name:		Micron Campus, Clay, New York				Date Started		05/10/24	
Client:		Ramboll				Date Finished		05/10/24	
Location:		See Exploration Location Plan				Surface Elev.		404.7'	
METHODS OF INVESTIGATION						GROUNDWATER OBSERVATIONS			
Driller:	Beau Fletcher	Casing:	3 ¼" ID H.S.A.			Date	Time	Depth (Ft.)	Casing At (Ft.)
Driller:	Ryan Casatelli	Casing Hammer:				05/10/24	While Drilling	20.7	23.5
Inspector:		Other:				05/10/24	Before Casing Removed	20.7	23.5
Drill Rig:	CME 55	Soil Sampler:	2" OD Split Barrel			05/10/24	After Casing Removed	None Noted	out
Type:	ATV	Hammer Wt:	140 lbs.			05/10/24	After Casing Removed	caved @ 2.6	out
Rod Size:	AWJ	Hammer Fall:	30 in.						
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine		SPT "N" or RQD %
		From	To				and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%		
0	1A	0.0	1.0	SS/16	1-WH-2-3		Topsoil and Organic Material (moist)		2
1	1B	1.0	2.0				Brown/Grey SILT, little CLAY, trace fine SAND, trace ROOTS (moist, soft)		
2	2	2.0	4.0	SS/18	6-7-7-7		Brown SILT, trace fine SAND (wet, stiff)		14
3									
4	3	4.0	6.0	SS/20	4-5-5-6		Brown SILT, trace mf SAND (wet, stiff)		10
5									
6	4	6.0	8.0	SS/23	3-8-13-17		Brown SILT, trace fine SAND (moist, very stiff)		21
7									
8	5	8.0	10.0	SS/20	5-7-25-11		Brown SILT, little mf GRAVEL, little cmf SAND (wet, hard)		32
9									
10									
11									
12									
13									
14	6	13.5	15.0	SS/18	14-11-27		Brown SILT, little cmf GRAVEL, trace cmf SAND (moist, hard)		38
15									
16									
17									
18									
19	7	18.5	20.0	SS/4	50@4"		Grey cmf GRAVEL and SILT, little cmf SAND (moist, very compact)		50+
20							Continued on Page 2		

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG			Boring No.	B-509
									Page No.	2 of 2
									Project No.	28062
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%		SPT "N" or RQD %
20	8	23.5	23.8	SS/3	50@3"		Continued from Page 1			50+
21										
22										
23										
24						Grey SILT, some cmf SAND, little cmf GRAVEL (moist, hard)				
25						Bottom of Boring @ 23.8'				
26										
27										
28										
29										
30										
31										
32										
33										
34										
35										
36										
37										
38										
39										
40										
41										
42										
43										
44										
45										

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG				Boring No. B-510			
						Page No. 1 of 2			
						Project No. 28062			
Project Name:		Micron Campus, Clay, New York				Date Started		05/09/24	
Client:		Ramboll				Date Finished		05/09/24	
Location:		See Exploration Location Plan				Surface Elev.		405.2'	
METHODS OF INVESTIGATION						GROUNDWATER OBSERVATIONS			
Driller:	Beau Fletcher	Casing:	3 ¼" ID H.S.A.			Date	Time	Depth (Ft.)	Casing At (Ft.)
Driller:	Ryan Casatelli	Casing Hammer:				05/09/24	While Drilling	24.8	28.5
Inspector:		Other:				05/09/24	Before Casing Removed	24.8	28.5
Drill Rig:	CME 55	Soil Sampler:	2" OD Split Barrel			05/09/24	After Casing Removed	None Noted	out
Type:	ATV	Hammer Wt:	140 lbs.			05/09/24	After Casing Removed	caved @ 3.0	out
Rod Size:	AWJ	Hammer Fall:	30 in.						
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1	0.0	2.0	SS/12	1-1-2-3		Brown/Grey SILT, trace ORGANIC MATERIAL, trace CLAY, trace fine SAND (moist, soft)		3
1									
2	2	2.0	4.0	SS/23	3-5-4-6		Brown SILT, little CLAY, trace ROOTS (moist, stiff)		9
3									
4	3	4.0	6.0	SS/14	4-5-6-6		Brown SILT, trace CLAY (wet, stiff)		11
5									
6	4	6.0	8.0	SS/22	6-8-10-12		Similar as above (wet, very stiff)		18
7									
8	5	8.0	10.0	SS/20	9-16-15-11		Brown SILT, little fine SAND (moist, hard)		31
9									
10									
11									
12									
13	6	13.5	13.9	SS/5	50@5"		Grey cmf GRAVEL (moist, very compact)		50+
14									
15									
16									
17									
18	7	18.5	18.9	SS/5	50@5"		Grey SILT, little cmf GRAVEL, trace cmf SAND (moist, hard)		50+
19									
20							Continued on Page 2		

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG			Boring No.	B-510
									Page No.	2 of 2
									Project No.	28062
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%		SPT "N" or RQD %
20	8	23.5	23.8	SS/4	50@4"		Continued from Page 1			50+
21										
22										
23										
24							Grey SILT, little mf GRAVEL, trace cmf SAND (moist, hard)			
25	9	28.5	29.3	SS/*	41-50@4"		Grey SILT, little CLAY, trace mf GRAVEL, trace cmf SAND (moist, hard)			50+
26										
27										
28										
29							Bottom of Boring @ 29.3'			
30										
31										
32										
33										
34										
35										
36										
37										
38										
39										
40										
41										
42										
43										
44										
45										

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks: * recovery length not measured

 CME Associates, Inc. 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG			Boring No.	B-511		
					Page No.	1 of 2		
					Project No.	28062		
Project Name:	Micron Campus, Clay, New York			Date Started	05/08/24			
Client:	Ramboll			Date Finished	05/09/24			
Location:	See Exploration Location Plan			Surface Elev.	400.6'			
METHODS OF INVESTIGATION				GROUNDWATER OBSERVATIONS				
Driller:	Beau Fletcher	Casing:	3 ¼" ID H.S.A.	Date	Time	Depth (Ft.)	Casing At (Ft.)	
Driller:	Ryan Casatelli	Casing Hammer:						
Inspector:		Other:	NQ-Core	05/09/24	While Drilling	None Noted	15.0	
Drill Rig:	CME 55	Soil Sampler:	2" OD Split Barrel	05/09/24	Before Casing Removed	None Noted	15.0	
Type:	ATV	Hammer Wt:	140 lbs.	05/09/24	After Casing Removed	1.0 *	out	
Rod Size:	AWJ	Hammer Fall:	30 in.	05/09/24	After Casing Removed	caved @ 5.0	out	
LOG OF BORING SAMPLES				VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
0	1A	0.0	1.5	SS/16	WH-1-2-0		Topsoil and Organic Material (moist)	3
1	1B	1.5	2.0				Brown/Red SILT, some cmf GRAVEL, little CLAY, little cmf SAND (moist, soft)	
2								
3	2	2.0	4.0	SS/17	8-7-5-6		Brown SILT, little cmf GRAVEL, trace cmf SAND (wet, stiff)	12
4	3	4.0	6.0	SS/6	5-12-10-11		Brown SILT, some cmf GRAVEL, trace woody ORGANIC MATERIAL, trace cmf SAND (wet, very stiff)	22
5	4	6.0	8.0	SS/12	9-11-10-11		Brown SILT, some mf GRAVEL, little cmf SAND (moist, very stiff)	21
6								
7								
8	5	8.0	10.0	SS/5	10-13-12-21		Brown SILT, some cmf SAND, little cmf GRAVEL (wet, very stiff)	25
9	6	13.5	14.5	SS/12	29-50@6"		Dark Grey/Black SILT, some highly weathered ROCK Fragments (Shale) (wet, hard)	50+
10								
11								
12								
13								
14								
15	R-1	15.0	20.0	C/42	NQ-Core		Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 1/4" thick), slightly to moderately weathered, thinly laminated to thinly bedded, hard. SILT seam with weathered ROCK Fragments @ 15.5' - 15.6' and 18.4' - 18.2'. Broken and fractured zones @ 15.6'-16.0', 16.5'-16.6', 17.3"-17.8' and 18.1'-18.2'. Recovery: 42"/60" = 70% RQD: 13"/60" = 22% 4 Pieces, 11" Chips and Fragments 30 sec - 1:00 min/ft, no water loss	22%
16								
17								
18								
19								
20								

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks: * Water added to boring for coring.

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.	B-511
								Page No.	2 of 2
								Project No.	28062
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL			
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
20	R-2	20.0	25.0	C/57	NQ-Core		Continued from Page 1 Coring conducted in 4th gear, 1500 rpm, 600 psi down pressure. Dark Grey SHALE with interbedded DOLOSTONE (<1/8" - 2.0" thick), slightly weathered, thinly laminated to thinly bedded, medium hard to hard. Broken and fractured zones @ 20.1' - 20.2', 20.6' - 20.8' and 21.1' - 21.2'. VOID with CALCITE crystals @ 21.6' - 21.7'. Recovery: 57"/60" = 95% RQD: 34"/60" = 57% 29 Pieces, 5" Chips and Fragments 40 sec - 1:30 min/ft, no water loss Coring conducted in 4th gear, 1500 rpm, 600 psi down pressure.		57%
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									
36									
37									
38									
39									
40									
41									
42									
43									
44									
45									

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG				Boring No.		B-513							
						Page No.		1 of 1							
						Project No.		28062							
Project Name:		Micron Campus, Clay, New York				Date Started		05/13/24							
Client:		Ramboll				Date Finished		05/13/24							
Location:		See Exploration Location Plan				Surface Elev.		402.3'							
METHODS OF INVESTIGATION						GROUNDWATER OBSERVATIONS									
Driller:		Gary Richards		Casing:		3 ¼" ID H.S.A.		Date		Time		Depth (Ft.)		Casing At (Ft.)	
Driller:		Ryan Casatelli		Casing Hammer:				05/13/24		While Drilling		None Noted		9.3	
Inspector:				Other:				05/13/24		Before Casing Removed		None Noted		9.3	
Drill Rig:		CME 55		Soil Sampler:		2" OD Split Barrel		05/13/24		After Casing Removed		None Noted		out	
Type:		ATV		Hammer Wt:		140 lbs.		05/13/24		After Casing Removed		caved @ 7.2		out	
Rod Size:		AWJ		Hammer Fall:		30 in.									
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL									
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%		SPT "N" or RQD %					
0	1A	0.0	1.0	SS/18	WH-2-2-3		Topsoil and Organic Material (moist)		4						
1	1B	1.0	2.0				Brown SILT, trace fine SAND, trace CLAY (moist, medium stiff)								
2	2	2.0	4.0	SS/19	6-6-7-9		Brown SILT, trace CLAY (wet, stiff)		13						
3															
4	3	4.0	6.0	SS/18	5-14-11-12		Brown SILT, some mf GRAVEL, little cmf SAND (moist, very stiff)		25						
5															
6	4	6.0	8.0	SS/19	6-14-9-12		Grey/Brown cmf GRAVEL, some SILT, trace cmf SAND (wet, medium compact)		23						
7															
8	5	8.0	8.9	SS/9	5-50@5"		Brown/Dark Grey/Black SILT, some highly weathered ROCK Fragments (Shale) (moist, hard)		50+						
9	6	9.3	9.3	SS/0	50@0"		SHALE Fragments in tip of spoon - Split Spoon and Auger Refusal @ 9.3'		50+						
10							Bottom of Boring @ 9.3'								
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG			Boring No.	B-515
									Page No.	2 of 2
									Project No.	28062
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) FromTo		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %	
20	8	23.5	23.9	SS/4	50@5"		Continued from Page 1		50+	
21										
22										
23										
24							Similar as above (moist)			
25							Bottom of Boring @ 23.9'			
26										
27										
28										
29										
30										
31										
32										
33										
34										
35										
36										
37										
38										
39										
40										
41										
42										
43										
44										
45										

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG				Boring No.		B-517	
						Page No.		1 of 1	
						Project No.		28062	
Project Name:		Micron Campus, Clay, New York				Date Started		04/16/24	
Client:		Ramboll				Date Finished		04/16/24	
Location:		See Exploration Location Plan				Surface Elev.		395.2'	
METHODS OF INVESTIGATION						GROUNDWATER OBSERVATIONS			
Driller:		Al Linstruth		Casing:		3 ¼" ID H.S.A.		Date	
Driller:		John Winks		Casing Hammer:				Time	
Inspector:				Other:				Depth (Ft.)	
Drill Rig:		CME 550X		Soil Sampler:		2" OD Split Barrel		Casing At (Ft.)	
Type:		ATV		Hammer Wt:		140 lbs.		04/16/24 While Drilling	
Rod Size:		AWJ		Hammer Fall:		30 in.		04/16/24 Before Casing Removed	
								04/16/24 After Casing Removed	
								04/16/24 After Casing Removed	
								caved @ 5.5	
								out	
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL			
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
0	1A	0.0	0.3	SS/15	1-1-2-3		Topsoil and Organic Material (moist, medium stiff)		3
1	1B	0.3	2.0				Brown SILT, little cmf GRAVEL, trace cmf SAND, trace ROOTS (moist, soft)		
2	2	2.0	4.0	SS/7	1-1-3-2		Brown SILT, little mf GRAVEL, trace cmf SAND (wet, medium stiff)		4
3									
4	3	4.0	6.0	SS/13	1-4-7-7		Brown SILT, little mf GRAVEL, trace CLAY, trace cmf SAND (wet, stiff)		11
5									
6	4	6.0	8.0	SS/16	3-5-7-8		Brown SILT and cmf GRAVEL, trace cmf SAND, trace CLAY (wet, stiff)		12
7									
8	5	8.0	8.9	SS/7	7-50@5"		Grey/Brown ROCK Fragments (Limestone) and SILT, trace cmf SAND (wet)		50+
9							Auger Refusal @ 9.2'		
10							Bottom of Boring @ 9.2'		
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG				Boring No.		B-518			
						Page No.		1 of 2			
						Project No.		28062			
Project Name:		Micron Campus, Clay, New York				Date Started		05/04/24			
Client:		Ramboll				Date Finished		05/04/24			
Location:		See Exploration Location Plan				Surface Elev.		393.4'			
METHODS OF INVESTIGATION						GROUNDWATER OBSERVATIONS					
Driller:		John Winks		Casing:		3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)
Driller:		Bryan Reles		Casing Hammer:							
Inspector:				Other:		NQ-Core		05/04/24	While Drilling	4.0	4.0
Drill Rig:		CME 55		Soil Sampler:		2" OD Split Barrel		05/04/24	Before Casing Removed	0.9 *	14.4
Type:		ATV		Hammer Wt:		140 lbs.		05/04/24	After Casing Removed	1.5 *	out
Rod Size:		AWJ		Hammer Fall:		30 in.		05/04/24	After Casing Removed	caved @ 10.0	out
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL					
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%		SPT "N" or RQD %	
		From	To								
0	1A	0.0	0.8	SS/13	WH-1-2-2		Topsoil and Organic Material (moist)				3
1	1B	0.8	2.0				Brown SILT, some cmf SAND, little mf GRAVEL, trace CLAY (wet, soft)				
2	2	2.0	4.0	SS/15	3-3-4-4		Brown/Grey CLAY and cmf SAND, little mf GRAVEL, little SILT (wet, medium stiff)				7
3											
4	3	4.0	6.0	SS/19	8-14-10-7		Brown/Grey cmf SAND and mf GRAVEL, some SILT, trace CLAY (wet, medium compact)				24
5											
6	4	6.0	8.0	SS/13	7-11-12-12		Similar as above (wet, medium compact)				23
7											
8	5	8.0	10.0	SS/11	6-7-8-12		Dark Grey cmf SAND and weathered ROCK Fragements, some SILT (moist, medium compact)				15
9											
10											
11											
12											
13											
14	6	13.5	14.3	SS/9	42-50@4"		Dark Grey weathered ROCK Fragments, some SILT (moist)				50+
15	R-1	14.4	19.4	C/56	NQ-Core		Auger Refusal @ 14.4'. Set up to core.				
16							Dark Grey SHALE with interbedded DOLOSTONE layers (<1/8" - 1.0" thick), slightly to moderately weathered, thinly laminated, medium hard.				38%
17							Broken and fractured zone @ 14.6' - 15.6'. Weathered horizontal fractures @ 16.5', 18.0', 18.2' and 18.8'. Recovery: 56"/60" = 93% RQD: 23"/60" = 38%				
18							20 Pieces, 2" Chips and Fragments 1:00 - 2:00 min/ft, no water loss				
19	R-2	19.4	24.4	C/58	NQ-Core		Coring conducted in 4th gear, 1500 rpm, 650 psi down pressure. Dark Grey SHALE with interbedded DOLOSTONE layers (<1/8" - 2.0" thick), slightly to moderately weathered, thinly laminated to				53%
20							Continued on Page 2				

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks: * Water added to boring for coring.

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG		Boring No. B-518	Page No. 2 of 2
								Project No. 28062	
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL			
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
20							Continued from Page 1 medium bedded, medium hard to hard. <i>Broken and fractured zone @ 19.7'-19.8' and 21.9'-22.2'.</i> <i>Weathered horizontal fracture @ 20.2'.</i> Recovery: 58"/60" = 97% RQD: 32"/60" = 53% 16 Pieces, 4" Chips and Fragments 40 seconds - 1:00 min/ft, no water loss <i>Coring conducted in 4th gear, 1500 rpm, 650 psi down pressure.</i> Bottom of Boring @ 24.4'		
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									
36									
37									
38									
39									
40									
41									
42									
43									
44									
45									

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

		6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG			Boring No.	B-519	
							Page No.	1 of 1	
							Project No.	28062	
Project Name:	Micron Campus, Clay, New York						Date Started	05/10/24	
Client:	Ramboll						Date Finished	05/10/24	
Location:	See Exploration Location Plan						Surface Elev.	394.9'	
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller:	H. Lyon	Casing:	3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)	
Driller:	K. Crandall	Casing Hammer:			05/10/24	While Drilling	None Noted	8.0	
Inspector:	C. O'Hara	Other:			05/10/24	Before Casing Removed	None Noted	18.0	
Drill Rig:	CME 45	Soil Sampler:	2" OD Split Barrel		05/10/24	After Casing Removed	None Noted	out	
Type:	ATV	Hammer Wt:	140 lbs.		05/10/24	After Casing Removed	caved @	out	
Rod Size:	AWJ	Hammer Fall:	30 in.		05/10/24	After Casing Removed			
LOG OF BORING SAMPLES				VISUAL CLASSIFICATION OF MATERIAL					
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1A	0.0	0.7	SS/17	1-WH-1-7		Topsoil and Organic Material (moist)		1
1	1B	0.7	2.0				Brown SILT, trace CLAY, trace fine SAND, trace ORGANIC MATERIAL (moist, soft)		
2	2	2.0	4.0	SS/18	4-6-5-3		Brown/Grey SILT, trace CLAY, trace fine SAND (wet, stiff)		11
3									
4	3	4.0	6.0	SS/16	5-6-11-11		Brown SILT, trace CLAY (wet, very stiff)		17
5									
6	4	6.0	8.0	SS/15	5-6-6-9		Brown SILT, trace fine GRAVEL, trace cmf SAND, trace CLAY (wet, stiff)		12
7									
8	5	8.0	10.0	SS/14	3-17-17-17		Red/Brown SILT, some cmf GRAVEL, little cmf SAND, trace CLAY (moist, hard) <i>Augers like Cobble beginning @ 8.7'</i>		34
9									
10									
11									
12									
13	6	13.0	15.0	SS/16	18-10-22-25		Grey SILT, little mf GRAVEL, trace cmf SAND (moist, hard)		32
14									
15									
16	7	16.5	17.4	SS/11	38-50@5"		<i>Augers very hard beginning @ 16.2'</i> Grey SILT and cmf GRAVEL, little cmf SAND (moist, hard)		50+
17									
18	8	18.0	18.9	SS/11	50-50@5"		Grey SILT, little mf GRAVEL, trace cmf SAND (moist, hard)		50+
19									
20							Bottom of Boring @ 18.9'		

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG				Boring No.		B-520	
						Page No.		1 of 2	
						Project No.		28062	
Project Name:		Micron Campus, Clay, New York				Date Started		05/08/24	
Client:		Ramboll				Date Finished		05/08/24	
Location:		See Exploration Location Plan				Surface Elev.		395.7'	
METHODS OF INVESTIGATION						GROUNDWATER OBSERVATIONS			
Driller:		Beau Fletcher		Casing:		3 ¼" ID H.S.A.		Date	
Driller:		Ryan Casatelli		Casing Hammer:				Time	
Inspector:				Other:		NQ-Core		Depth (Ft.)	
Drill Rig:		CME 55		Soil Sampler:		2" OD Split Barrel		Casing At (Ft.)	
Type:		ATV		Hammer Wt:		140 lbs.		05/08/24 While Drilling	
Rod Size:		AWJ		Hammer Fall:		30 in.		05/08/24 Before Casing Removed	
								05/08/24 After Casing Removed	
								05/08/24 After Casing Removed	
								caved @ 3.5	
								out	
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL			
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine		SPT "N" or RQD %
		From	To				and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%		
0	1A	0.0	1.0	SS/18	1-WH-4-6		Topsoil and Organic Material (moist)		4
1	1B	1.0	2.0				Brown SILT, trace fine SAND, trace ROOTS (wet, medium stiff)		
2	2	2.0	4.0	SS/17	6-8-8-6		Brown SILT, trace fine SAND, trace CLAY (wet, very stiff)		16
3									
4	3	4.0	6.0	SS/10	4-4-6-7		Brown/Grey CLAY, little SILT, trace mf GRAVEL, trace cmf SAND (wet, stiff)		10
5									
6	4	6.0	8.0	SS/19	7-9-11-12		Grey/Brown SILT, some cmf GRAVEL, trace cmf SAND (wet, very stiff)		20
7									
8	5	8.0	10.0	SS/19	6-8-11-11		Grey/Brown SILT, trace CLAY (wet, very stiff)		19
9									
10									
11									
12									
13									
14	6	13.5	15.0	SS/20	8-8-9		Brown/Orange/Grey SILT, little CLAY, trace cmf SAND (moist, very stiff)		17
15									
16									
17									
18									
19	7	18.5	20.0	SS/16	6-11-15		Grey SILT, little cmf SAND, trace fine GRAVEL (moist, very stiff)		26
20							Continued on Page 2		

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks: * Water added to boring for coring.

 CME Associates, Inc.		6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522				SUBSURFACE EXPLORATION TEST BORING LOG			Boring No.	B-520
									Page No.	2 of 2
									Project No.	28062
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%		SPT "N" or RQD %
20	8	23.5	24.7	SS/14	23-28-50@3"		Continued from Page 1 ----- Augers harder beginning @ 20.0'			50+
21										
22										
23										
24							Grey highly weathered ROCK Fragments (Shale), little SILT (moist)			
25	9	28.5	29.1	SS/6	30-50@1"					50+
26										
27										
28							Similar as above (moist)			
29							Split Spoon and Auger Refusal @ 29.1'. Set up to core.			
30	R-1	29.1	34.1	C/60	NQ-Core		Dark Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 1" thick), slightly weathered, thinly laminated to thinly bedded, medium hard to hard.			40%
31							SILT seam (1/4" thick) @ 29.3'.			
32							Recovery: 60"/60" = 100% RQD: 24"/60" = 40%			
33							25 Pieces, 0" Chips and Fragments 1:30 min/ft, no water loss			
34							Coring conducted in 4th gear, 1500 rpm, 500 psi down pressure.			
35	R-2	34.1	39.1	C/58	NQ-Core		Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 2.0" thick), slightly weathered, thinly laminated to thinly bedded, medium hard to hard.			53%
36							Broken and fractured zone @ 25.7' - 26.4'.			
37							SILT seam with weathered ROCK Fragments @ 36.5' - 36.7'.			
38							Weathered zones @ 37.3' and 37.8'.			
39							Recovery: 58"/60" = 97% RQD: 32"/60" = 53%			
40							17 Pieces, 8" Chips and Fragments 1:30 min/ft, no water loss			
41							Coring conducted in 4th gear, 1500 rpm, 500 psi down pressure.			
42							Bottom of Boring @ 39.1'			
43										
44										
45										

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG				Boring No.		B-522A																					
						Page No.		1 of 1																					
						Project No.		28062																					
Project Name: Micron Campus, Clay, New York						Date Started		04/17/24																					
Client: Ramboll						Date Finished		04/17/24																					
Location: See Exploration Location Plan						Surface Elev.		393.7'																					
METHODS OF INVESTIGATION						GROUNDWATER OBSERVATIONS																							
Driller: Al Linstruth		Casing: 3 ¼" ID H.S.A.		<table border="1"> <thead> <tr> <th>Date</th> <th>Time</th> <th>Depth (Ft.)</th> <th>Casing At (Ft.)</th> </tr> </thead> <tbody> <tr> <td>04/17/24</td> <td>While Drilling</td> <td>4.2</td> <td>6.0</td> </tr> <tr> <td>04/17/24</td> <td>Before Casing Removed</td> <td>4.2</td> <td>6.0</td> </tr> <tr> <td>04/17/24</td> <td>After Casing Removed</td> <td>4.2</td> <td>out</td> </tr> <tr> <td>04/17/24</td> <td>After Casing Removed</td> <td>caved @ 5.7</td> <td>out</td> </tr> </tbody> </table>		Date	Time	Depth (Ft.)	Casing At (Ft.)	04/17/24	While Drilling	4.2	6.0	04/17/24	Before Casing Removed	4.2	6.0	04/17/24	After Casing Removed	4.2	out	04/17/24	After Casing Removed	caved @ 5.7	out				
Date	Time	Depth (Ft.)	Casing At (Ft.)																										
04/17/24	While Drilling	4.2	6.0																										
04/17/24	Before Casing Removed	4.2	6.0																										
04/17/24	After Casing Removed	4.2	out																										
04/17/24	After Casing Removed	caved @ 5.7	out																										
Driller: John Winks		Casing Hammer:																											
Inspector:		Other:																											
Drill Rig: CME 550X		Soil Sampler: 2" OD Split Barrel																											
Type: ATV		Hammer Wt: 140 lbs.																											
Rod Size: AWJ		Hammer Fall: 30 in.																											
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL																							
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine		SPT "N" or RQD %																				
		From	To				and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%																						
0	1A	0.0	0.3	SS/14	1-2-5-7		Topsoil and Organic Material (moist)		7																				
1	1B	0.3	2.0				Brown SILT, some cmf GRAVEL, trace cmf SAND, trace ROOTS (moist, medium stiff)																						
2	2	2.0	4.0	SS/19	3-3-9-3		Brown SILT, some cmf GRAVEL, trace cmf SAND (wet, stiff)		12																				
3																													
4	3	4.0	6.0	SS/17	5-5-5-5		Brown cmf GRAVEL and SILT, some cmf SAND (wet, medium compact)		10																				
5																													
6	4	6.0	7.0	SS/9	3-6-50@0"		Grey/Brown SILT, little mf GRAVEL, little cmf SAND, trace CLAY (wet, hard)		50+																				
7							Split Spoon and Auger Refusal @ 7.0'																						
8							Bottom of Boring @ 7.0'																						
9																													
10																													
11																													
12																													
13																													
14																													
15																													
16																													
17																													
18																													
19																													
20																													

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522					SUBSURFACE EXPLORATION TEST BORING LOG			Boring No.	B-523
								Page No.	1 of 1
								Project No.	28062
Project Name:					Micron Campus, Clay, New York			Date Started	04/16/24
Client:					Ramboll			Date Finished	04/16/24
Location:					See Exploration Location Plan			Surface Elev.	393.5'
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller:	Al Linstruth	Casing:	3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)	
Driller:	John Winks	Casing Hammer:			04/16/24	While Drilling	7.0	7.2	
Inspector:		Other:	NQ-Core		04/16/24	Before Casing Removed	3.0 *	7.2	
Drill Rig:	CME 550X	Soil Sampler:	2" OD Split Barrel		04/16/24	After Casing Removed	2.0 *	out	
Type:	ATV	Hammer Wt:	140 lbs.		04/16/24	After Casing Removed	caved @ 4.2	out	
Rod Size:	AWJ	Hammer Fall:	30 in.						
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
0	1A	0.0	0.3	SS/9	2-3-4-7		Topsoil and Organic Material (moist)		7
1	1B	0.3	2.0				Dark Brown SILT, little mf GRAVEL, trace cmf SAND, trace ROOTS (moist, medium stiff)		
2	2	2.0	4.0	SS/5	4-3-3-2		Brown SILT, trace mf GRAVEL, trace cmf SAND (moist, medium stiff)		6
3									
4	3	4.0	6.0	SS/3	2-2-6-5		Black/Grey cmf GRAVEL (moist, loose)		8
5									
6	4	6.0	6.9	SS/5	7-50@5"		Black/Grey ROCK Fragments (Limestone), trace SILT (wet)		50+
7						7.2	Auger Refusal @ 7.2' - Set up to core		
8	R-1	7.2	12.2	C/59	NQ-Core		Grey DOLOSTONE with interbedded SHALE (<1/8" -4.0" thick), slightly weathered, thinly laminated to thinly bedded, medium hard to hard. Weathered horizontal fractures @ 9.0', 9.5' and 10.8'. Recovery: 59"/60" = 98% RQD: 58"/60" = 97% 32 Pieces, 0" Chips and Fragments 55 sec/ft, no water loss		97%
9									
10									
11									
12	R-2	12.2	17.2	C/56	NQ-Core		Coring conducted in 5th gear, 2000 rpm, 700 psi down pressure. Dark Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 4.0" thick), slightly weathered, thinly laminated to medium bedded, medium hard to hard. Weathered zone (1/2" thick) @ 13.9'. Recovery: 56"/60" = 93% RQD: 50"/60" = 83% 22 Pieces, 1" Chips and Fragments 55 sec/ft, no water loss Coring conducted in 5th gear, 2000 rpm, 700 psi down pressure.		83%
13									
14									
15									
16									
17							Bottom of Boring @ 17.2'		
18									
19									
20									

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks: *Water added to boring for coring.

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG				Boring No.		B-526			
						Page No.		1 of 2			
						Project No.		28062			
Project Name:		Micron Campus, Clay, New York				Date Started		04/17/24			
Client:		Ramboll				Date Finished		04/17/24			
Location:		See Exploration Location Plan				Surface Elev.		396.9'			
METHODS OF INVESTIGATION						GROUNDWATER OBSERVATIONS					
Driller: Al Linstruth Driller: John Winks Inspector: Drill Rig: CME 550X Type: ATV Rod Size: AWJ		Casing: 3 ¼" ID H.S.A. Casing Hammer: Other: NQ-Core Soil Sampler: 2" OD Split Barrel Hammer Wt: 140 lbs. Hammer Fall: 30 in.		Date		Time		Depth (Ft.)		Casing At (Ft.)	
				04/17/24		While Drilling		12.7		13.5	
				04/17/24		Before Casing Removed		7.2 *		13.5	
				04/17/24		After Casing Removed		6.8 *		out	
				04/17/24		After Casing Removed		caved @ 10.0		out	
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL					
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%		SPT "N" or RQD %	
0	1A	0.0	0.2	SS/15	2-2-2-2		Topsoil and Organic Material (moist)				4
1	1B	0.2	2.0				Brown SILT, trace fine SAND, trace ROOTS (moist, medium stiff)				
2	2	2.0	4.0	SS/17	2-8-8-8		Brown SILT, trace CLAY, trace fine SAND (wet, very stiff)				16
3											
4	3	4.0	6.0	SS/10	7-6-7-6		Brown SILT, trace CLAY (wet, stiff)				13
5											
6	4	6.0	8.0	SS/15	3-2-1-2		Brown SILT, trace CLAY (wet, soft)				3
7											
8	5	8.0	10.0	SS/14	4-20-9-16		Brown/Black SILT and ROCK Fragments (Shale), little cmf SAND, trace fine GRAVEL (wet, very stiff)				29
9											
10											
11											
12											
13											
14	6 R-1	13.5 13.5	13.5 18.5	SS/0 C/57	50@0" NQ-Core		No Recovery. Spoon Refusal - Set up to core				73%
15							Dark Grey SHALE with interbedded DOLOSTONE layers (<1/8" - 2.0" thick), slightly weathered, thinly laminated to thinly bedded, medium hard to hard. Broken and fractured zone @ 13.7' - 14.0'. Weathered horizontal fractures @ 14.4', 15.3' and 15.7'. Recovery: 57"/60" = 95% RQD: 44"/60" = 73% 27 Pieces, 4" Chips and Fragments 50 sec/ft, no water loss				
16											
17											
18											
19	R-2	18.5	23.5	C/59	NQ-Core		Coring conducted in 5th gear, 2100 rpm, 700 psi down pressure. Dark Grey SHALE with interbedded DOLOSTONE layers (<1/8" - 1/4" thick), slightly weathered, thinly laminated, medium bedded, medium hard. Broken and fractured zones @ 19.8', 20.7' - 20.8', Continued on Page 2				85%
20											

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks: * Water added to boring for coring.

6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.	B-526
								Page No.	2 of 2
								Project No.	28062
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL			
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) FromTo		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
20							Continued from Page 1 and 22.4' - 22.5'. Recovery: 59"/60" = 98% RQD: 51"/60" = 85% 21 Pieces, 5" Chips and Fragments 50 sec/ft, no water loss Coring conducted in 5th gear, 2100 rpm, 700 psi down pressure.		
21									
22									
23									
24									
25									
26									
27									
28									
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36									
37									
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39									
40									
41									
42									
43									
44									
45									

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG				Boring No.	B-529		
						Page No.	1 of 1		
						Project No.	28062		
Project Name:		Micron Campus, Clay, New York				Date Started	04/16/24		
Client:		Ramboll				Date Finished	04/16/24		
Location:		See Exploration Location Plan				Surface Elev.	395.6'		
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller:	Al Linstruth	Casing:	3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)	
Driller:	John Winks	Casing Hammer:							
Inspector:		Other:			04/16/24	While Drilling	7.4	6.0	
Drill Rig:	CME 550X	Soil Sampler:	2" OD Split Barrel		04/16/24	Before Casing Removed	11.8	14.8	
Type:	ATV	Hammer Wt:	140 lbs.		04/16/24	After Casing Removed	5.9	out	
Rod Size:	AWJ	Hammer Fall:	30 in.		04/16/24	After Casing Removed	caved @ 7.2	out	
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1A	0.0	0.3	SS/13	1-1-1-2		Topsoil and Organic Material (moist)		2
1	1B	0.3	2.0				Brown SILT, trace fine SAND, trace ROOTS (moist, soft)		
2	2	2.0	4.0	SS/11	1-3-2-1		Brown SILT, trace fine SAND (wet, medium stiff)		5
3									
4	3A	4.0	5.5	SS/12	4-3-2-11		Dark Grey/Brown cmf GRAVEL, some SILT, little cmf SAND (wet, loose)		5
5									
6	3B	5.5	6.0				Grey cmf GRAVEL, little cmf SAND, trace SILT (moist)		
7	4	6.0	8.0	SS/13	8-11-7-5		Grey/Brown SILT, some cmf GRAVEL, little cmf SAND (wet, very stiff)		18
8	5	8.0	10.0	SS/8	11-7-10-4		Grey SILT and cmf GRAVEL, some cmf SAND (wet, medium compact)		17
9							Augers gravelly beginning @ 8.0'		
10									
11									
12									
13	6	12.5	12.7	SS/3	50@3"		Grey ROCK Fragments (Dolostone) and ROCK Flour (moist)		50+
14									
15	7	14.8	14.8	SS/0	50@0"		Spoon and Auger Refusal @ 14.8'		50+
16							Bottom of Boring @ 14.8'		
17									
18									
19									
20									

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks: * recovery length not measured

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-531			
				Page No.		1 of 1			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		05/10/24			
Client: Ramboll				Date Finished		05/10/24			
Location: See Exploration Location Plan				Surface Elev.		401.7'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: H. Lyon		Casing: 3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller: K. Crandall		Casing Hammer:							
Inspector: C. O'Hara		Other:							
Drill Rig: CME 45		Soil Sampler: 2" OD Split Barrel							
Type: ATV		Hammer Wt: 140 lbs.							
Rod Size: AWJ		Hammer Fall: 30 in.		05/10/24	While Drilling	None Noted	6.0		
				05/10/24	Before Casing Removed	None Noted	13.8		
				05/10/24	After Casing Removed	None Noted	out		
				05/10/24	After Casing Removed	caved @ 9.2	out		
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1	0.0	2.0	SS/13	1-1-1-1		Topsoil and Organic Material (moist)		2
1									
2	2	2.0	4.0	SS/10	1-WH-1-1		Brown/Orange fine SAND, some SILT (moist, very loose)		1
3									
4	3	4.0	6.0	SS/15	6-8-9-11		Brown, Similar as above (moist, medium compact)		17
5									
6	4	6.0	7.9	SS/12	8-26-28-50@5"		Brown cmf SAND and SILT, trace fine GRAVEL (moist, very compact) <i>Augers gravelly beginning @ 6.2'</i>		54
7									
8	5	8.0	8.9	SS/10	25-50@5"		Grey SILT, some cmf GRAVEL, little cmf SAND (moist, hard)		50+
9									
10									
11									
12									
13	6	13.0	13.8	SS/10	36-50@4"		Dark Grey SILT, trace cmf SAND, trace ROCK Fragments (Shale) (moist, hard)		50+
14							Bottom of Boring @ 13.8'		
15									
16									
17									
18									
19									
20									

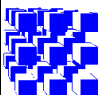
SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-532			
				Page No.		1 of 2			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		05/04/24			
Client: Ramboll				Date Finished		05/04/24			
Location: See Exploration Location Plan				Surface Elev.		396.5'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: John Winks		Casing: 3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller: Bryan Reles		Casing Hammer:							
Inspector:		Other: NQ-Core							
Drill Rig: CME 55		Soil Sampler: 2" OD Split Barrel							
Type: ATV		Hammer Wt: 140 lbs.							
Rod Size: AWJ		Hammer Fall: 30 in.		05/04/24	While Drilling	11.5	13.5		
				05/04/24	Before Casing Removed	5.8 *	24.0		
				05/04/24	After Casing Removed	5	out		
				05/04/24	After Casing Removed	caved @ 5.5	out		
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1A	0.0	0.8	SS/22	WH-2-2-5		Topsoil and Organic Material (moist)		4
1	1B	0.8	2.0				Brown SILT, trace fine SAND, trace ROOTS (moist, medium stiff)		
2	2	2.0	4.0	SS/18	4-5-7-6		Brown SILT, little fine SAND, trace ROOTS (wet, stiff)		12
3									
4	3	4.0	6.0	SS/19	3-4-5-7		Brown SILT, trace CLAY, trace fine SAND (wet, stiff)		9
5									
6	4	6.0	8.0	SS/17	4-3-3-5		Brown SILT, some cmf SAND, little CLAY (wet, medium stiff)		6
7									
8	5	8.0	10.0	SS/15	7-7-6-7		Brown cmf SAND, some mf GRAVEL, little SILT (wet, medium compact)		13
9									
10									
11									
12									
13	6	13.5	15.0	SS/13	18-27-18		Dark Grey weathered ROCK Fragments, some SILT (wet)		45
14									
15									
16									
17									
18	7	18.5	20.0	SS/14	13-22-26		Dark Grey weathered ROCK Fragments, little SILT (moist)		48
19									
20							Continued on Page 2		

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 CME Associates, Inc. 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG			Boring No. Page No. Project No.	B-532 2 of 2 28062
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) FromTo		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %	
20	8	23.5	23.8	SS/4	50@4"		Continued from Page 1		50+	
21										
22										
23										
24							Dark Grey ROCK Fragments (Shale), trace ROCK Flour (moist) <i>Auger Refusal @ 24.0'. Set up to core.</i>			
25	R-1	24.0	29.0	C/55	NQ-Core		Dark Grey SHALE with interbedded DOLOSTONE layers (<1/8" - 2.0" thick), moderately weathered, thinly laminated to medium bedded, medium hard. <i>Broken and fractured zone @ 24.0'-24.9'.</i> <i>Weathered horizontal fracture @ 26.9'.</i> <i>SILT seam (~1/4" thick) @ 27.4'.</i> Recovery: 55"/60" = 92% RQD: 41"/60" = 68% 14 Pieces, 4" Chips and Fragments <i>1:00 - 2:00 min/ft, no water loss</i> <i>Coring conducted in 4th gear, 1500 rpm, 650 psi down pressure.</i>		68%	
26										
27										
28										
29										
30	R-2	29.0	34.0	C/59	NQ-Core		Dark Grey SHALE with interbedded DOLOSTONE layers (<1/8" - 4.0" thick), slightly weathered, laminated to medium bedded, medium hard to hard. <i>Weathered horizontal fractures @ 31.4', 33.3' and 33.4'.</i> Recovery: 59"/60" = 98% RQD: 54"/60" = 90% 20 Pieces, 1" Chips and Fragments <i>1:25 - 1:50 min/ft, no water loss</i> <i>Coring conducted in 4th gear, 1500 rpm, 650 psi down pressure.</i>		90%	
31										
32										
33										
34										
35							Bottom of Boring @ 34.0'			
36										
37										
38										
39										
40										
41										
42										
43										
44										
45										

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks: * Water added to boring for coring.

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-534			
				Page No.		1 of 2			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		04/25/24			
Client: Ramboll				Date Finished		04/25/24			
Location: See Exploration Location Plan				Surface Elev.		390.4'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: H. Lyon		Casing: 3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller: K. Crandall		Casing Hammer:							
Inspector: C. O'Hara		Other:							
Drill Rig: CME 45		Soil Sampler: 2" OD Split Barrel							
Type: ATV		Hammer Wt: 140 lbs.							
Rod Size: AWJ		Hammer Fall: 30 in.		04/25/24	While Drilling	2.5	15.0		
				04/25/24	Before Casing Removed	5.5	20.8		
				04/25/24	After Casing Removed	5.7	out		
				04/25/24	After Casing Removed	caved @ 10.2	out		
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1A	0.0	0.3	SS/12	1-2-1-1		Topsoil and Organic Material (moist)		3
1	1B	0.3	2.0				Brown SILT, trace CLAY, trace fine SAND, trace ORGANIC MATERIAL (moist, soft)		
2	2	2.0	4.0	SS/13	2-3-3-3		Brown/Grey mottled SILT, little CLAY (wet, medium stiff)		6
3									
4	3	4.0	6.0	SS/15	3-3-4-4		Brown SILT, trace CLAY (wet, medium stiff)		7
5									
6	4	6.0	8.0	SS/20	3-5-7-6		Similar as above (wet, stiff)		12
7									
8	5	8.0	10.0	SS/21	4-5-5-7		Similar as above (wet, stiff)		10
9									
10									
11									
12									
13	6	13.0	15.0	SS/16	1-2-1-1		Grey/Brown SILT, some CLAY, trace cmf SAND, trace fine GRAVEL (wet, soft)		3
14									
15	7	15.0	17.0	SS/8	WR-6-11-4		Grey/Brown SILT, little cmf SAND, little mf GRAVEL, trace CLAY (wet, very stiff) <i>Augers gravelly beginning @ 15.7'</i>		17
16									
17									
18	8	18.0	18.3	SS/3	50@3"		Dark Grey/Black cmf GRAVEL, little cmf SAND, little SILT, trace CLAY (wet, very compact)		50+
19									
20							Continued on Page 2		

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG			Boring No.	B-534
									Page No.	2 of 2
									Project No.	28062
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %	
20	9	20.8	21.6	SS/6	8-50@4"		Continued from Page 1		50+	
21							Auger Refusal @ 20.8'			
22							Black weathered ROCK Fragments (Shale), some SILT (wet)			
23							Bottom of Boring @ 21.6'			
24										
25										
26										
27										
28										
29										
30										
31										
32										
33										
34										
35										
36										
37										
38										
39										
40										
41										
42										
43										
44										
45										

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-536			
				Page No.		1 of 2			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		04/26/24			
Client: Ramboll				Date Finished		04/26/24			
Location: See Exploration Location Plan				Surface Elev.		387.2'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: Beau Fletcher		Casing: 3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller: Ryan Casatelli		Casing Hammer:							
Inspector:		Other: NQ-Core							
Drill Rig: CME 55		Soil Sampler: 2" OD Split Barrel							
Type: ATV		Hammer Wt: 140 lbs.							
Rod Size: AWJ		Hammer Fall: 30 in.		04/26/24	While Drilling	7.5	13.5		
				04/26/24	Before Casing Removed	None Noted	26.0		
				04/26/24	After Casing Removed	2.5 *	out		
				04/26/24	After Casing Removed	caved @ 7.6	out		
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1A	0.0	0.5	SS/18	WH-1-2-4		Topsoil and Organic Material (moist)		3
1	1B	0.5	2.0				Brown/Grey mottled SILT, trace CLAY (moist, soft)		
2	2	2.0	4.0	SS/16	8-8-7-11		Brown SILT, trace fine SAND, trace CLAY (wet, very stiff)		15
3									
4	3	4.0	6.0	SS/22	2-4-3-3		Brown/Grey SILT, trace CLAY (wet, medium stiff)		7
5									
6	4	6.0	8.0	SS/16	2-2-3-2		Brown SILT, little CLAY (wet, medium stiff)		5
7									
8	5A	8.0	9.0	SS/16	2-4-11-6		Grey/Brown CLAY, some mf GRAVEL, little SILT, trace cmf SAND (wet, very stiff)		15
9	5B	9.0	10.0				Black highly weathered ROCK Fragments (Shale) (wet)		
10									50+
11									
12									
13	6	13.5	13.6	SS/1	50@1"		Similar as above (wet)		
14									
15							Auger Refusal @ 16.0'. Set up to core.		70%
16	R-1	16.0	21.0	C/55	NQ-Core		Grey DOLOSTONE with interbedded SHALE layers (<1/8' - 2" thick), slightly weathered, thinly laminated to thinly bedded, medium hard to hard.		
17							Broken and fractured zone @ 16.0' - 17.2'.		
18							Recovery: 55"/60" = 92% RQD: 42"/60" = 70%		
19							15 Pieces, 14" Chips and Fragments		
20							1:00 - 2:00 min/ft, no water loss		
							Coring conducted in 4th gear, 1500 rpm, 700 psi down pressure.		
							Continued on Page 2		

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks: * Water added to boring for coring.

6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG			Boring No.	B-536
									Page No.	2 of 2
									Project No.	28062
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%		SPT "N" or RQD %
20	R-2	21.0 26.0		C/57	NQ-Core		Continued from Page 1			53%
21							Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 1" thick), slightly weathered, thinly laminated to thinly bedded, medium hard to hard. <i>Weathered zone @ 24.4' - 24.6'.</i> Recovery: 57"/60" = 95% RQD: 32"/60" = 53% 21 Pieces, 2" Chips and Fragments 1:00 min/ft, no water loss Coring conducted in 4th gear, 1500 rpm, 700 psi down pressure.			
22										
23										
24										
25										
26							Bottom of Boring @ 26.0'			
27										
28										
29										
30										
31										
32										
33										
34										
35										
36										
37										
38										
39										
40										
41										
42										
43										
44										
45										

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG				Boring No.		B-537																					
						Page No.		1 of 2																					
						Project No.		28062																					
Project Name: Micron Campus, Clay, New York						Date Started		04/25/24																					
Client: Ramboll						Date Finished		04/25/24																					
Location: See Exploration Location Plan						Surface Elev.		392.5'																					
METHODS OF INVESTIGATION						GROUNDWATER OBSERVATIONS																							
Driller: H. Lyon		Casing: 3 ¼" ID H.S.A.		<table border="1"> <thead> <tr> <th>Date</th> <th>Time</th> <th>Depth (Ft.)</th> <th>Casing At (Ft.)</th> </tr> </thead> <tbody> <tr> <td>04/25/24</td> <td>While Drilling</td> <td>9.0</td> <td>13.0</td> </tr> <tr> <td>04/25/24</td> <td>Before Casing Removed</td> <td>7.8</td> <td>22.0</td> </tr> <tr> <td>04/25/24</td> <td>After Casing Removed</td> <td>3.5</td> <td>out</td> </tr> <tr> <td>04/25/24</td> <td>After Casing Removed</td> <td>caved @ 8.6</td> <td>out</td> </tr> </tbody> </table>		Date	Time	Depth (Ft.)	Casing At (Ft.)	04/25/24	While Drilling	9.0	13.0	04/25/24	Before Casing Removed	7.8	22.0	04/25/24	After Casing Removed	3.5	out	04/25/24	After Casing Removed	caved @ 8.6	out				
Date	Time	Depth (Ft.)	Casing At (Ft.)																										
04/25/24	While Drilling	9.0	13.0																										
04/25/24	Before Casing Removed	7.8	22.0																										
04/25/24	After Casing Removed	3.5	out																										
04/25/24	After Casing Removed	caved @ 8.6	out																										
Driller: K. Crandall		Casing Hammer:																											
Inspector: C. O'Hara		Other:																											
Drill Rig: CME 45		Soil Sampler: 2" OD Split Barrel																											
Type: ATV		Hammer Wt: 140 lbs.																											
Rod Size: AWJ		Hammer Fall: 30 in.																											
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL																							
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %																				
		From	To																										
0	1A	0.0	0.5	SS/17	1-WH-2-2		Topsoil and Organic Material (moist)		2																				
1	1B	0.5	2.0				Brown SILT, little CLAY, trace ROOTS (moist, soft)																						
2	2	2.0	4.0	SS/16	2-4-4-5		Brown/Grey mottled SILT, little CLAY (moist, stiff)		8																				
3																													
4	3	4.0	6.0	SS/14	2-2-2-3		Brown SILT, trace CLAY (moist, medium stiff)		4																				
5																													
6	4	6.0	8.0	SS/13	4-4-5-5		Similar as above (wet, stiff)		9																				
7																													
8	5	8.0	10.0	SS/15	4-5-6-6		Similar as above (wet, stiff)		11																				
9																													
10																													
11																													
12																													
13	6	13.0	15.0	SS/14	1-2-1-4		Grey/Brown SILT, little CLAY (wet, soft)		3																				
14																													
15	7	15.0	17.0	SS/15	1-2-1-WH		Grey SILT, some CLAY, little cmf SAND, little mf GRAVEL (wet, soft)		3																				
16																													
17	8	17.0	19.0	SS/14	WR-4-7-10		Grey SILT, some CLAY, trace cmf SAND, trace fine GRAVEL (wet, stiff)		11																				
18																													
19	9	19.0	21.0	SS/7	6-9-9-26		Augered like Cobble @ 18.5' Black highly weathered ROCK Fragments (Shale), some SILT (wet)		18																				
20							Continued on Page 2																						

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG			Boring No.	B-537
									Page No.	2 of 2
									Project No.	28062
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %	
20	10	22.0	22.0	SS/0	50@0"		Continued from Page 1		50+	
21										
22						Black ROCK Fragments (Dolostone) in tip of Split Spoon. Auger Refusal @ 22.0'				
23						Bottom of Boring @ 22.0'				
24										
25										
26										
27										
28										
29										
30										
31										
32										
33										
34										
35										
36										
37										
38										
39										
40										
41										
42										
43										
44										
45										

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 CME Associates, Inc.		6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522				SUBSURFACE EXPLORATION TEST BORING LOG				Boring No.	B-538
										Page No.	1 of 1
										Project No.	28062
Project Name:	Micron Campus, Clay, New York								Date Started	04/24/24	
Client:	Ramboll								Date Finished	04/24/24	
Location:	See Exploration Location Plan								Surface Elev.	388.1'	
METHODS OF INVESTIGATION						GROUNDWATER OBSERVATIONS					
Driller:	H. Lyon	Casing:	3 ¼" ID H.S.A.			Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller:	K. Crandall	Casing Hammer:				04/24/24	While Drilling	3.0	10.0		
Inspector:	C. O'Hara	Other:				04/24/24	Before Casing Removed	8.5	17.3		
Drill Rig:	CME 45	Soil Sampler:	2" OD Split Barrel			04/24/24	After Casing Removed	3.5	out		
Type:	ATV	Hammer Wt:	140 lbs.			04/24/24	After Casing Removed	caved @ 9.5	out		
Rod Size:	AWJ	Hammer Fall:	30 in.								
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL						
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %		
		From	To								
0	1A	0.0	0.7	SS/12	WH-1-2-5		Topsoil and Organic Material (moist)			3	
1	1B	0.7	2.0				Brown/Grey mottled SILT, little CLAY, trace ROOTS (moist, soft)				
2	2	2.0	4.0	SS/14	3-5-7-8		Brown/Grey mottled SILT, trace CLAY (moist, stiff)			12	
3											
4	3	4.0	6.0	SS/15	4-5-5-5		Brown SILT, trace CLAY, trace fine SAND (moist, stiff)			10	
5											
6	4	6.0	8.0	SS/16	4-5-9-9		Brown SILT, trace CLAY (moist, stiff)			14	
7											
8	5	8.0	10.0	SS/13	2-2-2-3		Grey SILT, little CLAY (wet, medium stiff)			4	
9											
10	6	10.0	12.0	SS/14	2-2-2-2		Grey SILT, trace CLAY (wet, medium stiff)			4	
11											
12	7	12.0	14.0	SS/*	WH-1-WR-1		Grey SILT, little CLAY, trace fine SAND (wet, very soft)			1	
13											
14	8	14.0	16.0		3-6-8-40		Dark Grey/Black highly weathered ROCK Fragments (Shale) and SILT (wet)			14	
15											
16							Augers harder @ 16.3' Augers very hard @ 16.6'				
17	9	17.3	17.5	SS/0	50@3"		Black ROCK Fragments in tip of Split Spoon. Split Spoon and Auger Refusal @ 17.3'			50+	
18											
19							Bottom of Boring @ 17.3'				
20											

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks: * recovery length not measured

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-539			
				Page No.		1 of 1			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		04/25/24			
Client: Ramboll				Date Finished		04/25/24			
Location: See Exploration Location Plan				Surface Elev.		387.5'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: H. Lyon		Casing: 3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller: K. Crandall		Casing Hammer:							
Inspector: C. O'Hara		Other:							
Drill Rig: CME 45		Soil Sampler: 2" OD Split Barrel							
Type: ATV		Hammer Wt: 140 lbs.							
Rod Size: AWJ		Hammer Fall: 30 in.		04/25/24	While Drilling	1.0	8.0		
				04/25/24	Before Casing Removed	8.2	15.7		
				04/25/24	After Casing Removed	2.2	out		
				04/25/24	After Casing Removed	caved @ 7.3	out		
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1A	0.0	0.4	SS/16	WH-1-3-4		Topsoil and Organic Material (moist)		4
1	1B	0.4	2.0				Brown SILT, trace CLAY, trace ROOTS (moist, medium stiff)		
2	2	2.0	4.0	SS/15	3-5-5-4		Brown/Grey mottled SILT, trace CLAY (moist, stiff)		10
3									
4	3	4.0	6.0	SS/11	4-5-5-4		Similar as above (moist, stiff)		10
5									
6	4	6.0	8.0	SS/13	3-3-3-2		Grey/Brown SILT, trace CLAY (wet, medium stiff)		6
7									
8	5	8.0	10.0	SS/17	2-2-3-2		Grey SILT, little CLAY (moist, medium stiff)		5
9									
10									
11							Augers gravelly beginning @ 11.0'		
12							Augers harder beginning @ 11.5'		
13	6	13.0	15.0	SS/11	11-16-13-9		Dark Grey/Black ROCK Fragments (Dolostone) (wet)		29
14									
15	7	15.7	15.7	SS/0	50@0"		Augers harder beginning @ 15.3'		
16							Split Spoon and Auger Refusal @ 15.7'		50+
17							Bottom of Boring @ 15.7'		
18									
19									
20									

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG			Boring No.	B-540			
					Page No.	1 of 1			
					Project No.	28062			
Project Name:		Micron Campus, Clay, New York			Date Started	04/26/24			
Client:		Ramboll			Date Finished	04/26/24			
Location:		See Exploration Location Plan			Surface Elev.	389.7'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller:	H. Lyon	Casing:	3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)	
Driller:	K. Crandall	Casing Hammer:							
Inspector:	C. O'Hara	Other:			04/26/24	While Drilling	5.0	15.0	
Drill Rig:	CME 55	Soil Sampler:	2" OD Split Barrel		04/26/24	Before Casing Removed	6.9	19.1	
Type:	ATV	Hammer Wt:	140 lbs.		04/26/24	After Casing Removed	7.0	out	
Rod Size:	AWJ	Hammer Fall:	30 in.		04/26/24	After Casing Removed	caved @ 7.8	out	
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
0	1A	0.0	0.3	SS/14	1-1-1-5		Topsoil and Organic Material (moist)		2
1	1B	0.3	2.0				Brown SILT, trace CLAY (moist, soft)		
2	2	2.0	4.0	SS/17	3-5-5-5		Similar as above (moist, stiff)		10
3									
4	3	4.0	6.0	SS/13	4-6-4-3		Similar as above (moist, stiff)		10
5									
6	4	6.0	8.0	SS/15	4-6-7-6		Brown SILT, trace CLAY, trace fine SAND (moist, stiff)		13
7									
8	5	8.0	10.0	SS/18	4-4-5-6		Brown SILT, trace CLAY, trace cmf SAND (wet, stiff)		9
9									
10									
11									
12									
13	6	13.0	15.0	SS/17	WR-WH-3-5		Grey/Brown CLAY, some SILT, trace cmf SAND, trace fine GRAVEL (wet, soft)		3
14									
15	7	15.0	17.0		5-7-5-4		Grey CLAY, some SILT, little mf GRAVEL, trace cmf SAND (wet, stiff)		12
16									
17									
18	8	18.0	9.0	SS/3	20-50@5"		Black highly weathered ROCK Fragments (Shale), some SILT (wet)		50+
19	9	19.1	19.1	SS/0	50@0"		Split Spoon and Auger Refusal @ 19.1'		50+
20							Bottom of Boring @ 19.1'		

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-541			
				Page No.		1 of 1			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		04/26/24			
Client: Ramboll				Date Finished		04/26/24			
Location: See Exploration Location Plan				Surface Elev.		385.3'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: H. Lyon		Casing: 3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller: K. Crandall		Casing Hammer:							
Inspector: C. O'Hara		Other:							
Drill Rig: CME 55		Soil Sampler: 2" OD Split Barrel							
Type: ATV		Hammer Wt: 140 lbs.							
Rod Size: AWJ		Hammer Fall: 30 in.		04/26/24	While Drilling	11.7	13.0		
				04/26/24	Before Casing Removed	5.0	19.1		
				04/26/24	After Casing Removed	4.5	8.0		
				04/26/24	After Casing Removed	caved @ 11.1	out		
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1A	0.0	0.3	SS/14	1-1-1-5		Topsoil and Organic Material (moist)		2
1	1B	0.3	2.0				Brown SILT, little CLAY (moist, soft)		
2	2	2.0	4.0	SS/17	5-9-9-9		Brown/Grey mottled SILT, trace CLAY (moist, very stiff)		18
3									
4	3	4.0	6.0	SS/13	8-7-7-7		Brown SILT, trace fine SAND, trace CLAY (moist, stiff)		14
5									
6	4	6.0	8.0	SS/14	9-7-5-5		Brown SILT, trace CLAY (wet, stiff)		12
7									
8	5	8.0	10.0	SS/15	4-4-4-4		Brown/Grey SILT, little CLAY (wet, stiff)		8
9									
10									
11									
12									
13	6	13.0	15.0	SS/10	1-3-5-6		Brown/Grey SILT, little mf GRAVEL, trace cmf SAND, trace CLAY (wet, stiff)		8
14									
15							Augers gravelly beginning @ 15.5'		
16									
17							Augers harder beginning @ 17.3'		
18									
19	7	18.7	19.6	SS/11	31-50@5"		Black highly weathered ROCK Fragments (Dolostone), some SILT (wet)		50+
	8	19.6	19.7	SS/0	50@0"		Split Spoon and Auger Refusal @ 19.1'		
20							Bottom of Boring @ 19.1'		

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG				Boring No. B-543																					
						Page No. 1 of 2																					
						Project No. 28062																					
Project Name: Micron Campus, Clay, New York						Date Started 04/25/24																					
Client: Ramboll						Date Finished 04/25/24																					
Location: See Exploration Location Plan						Surface Elev. 392.1'																					
METHODS OF INVESTIGATION						GROUNDWATER OBSERVATIONS																					
Driller: Beau Fletcher		Casing: 3 ¼" ID H.S.A.		<table border="1"> <thead> <tr> <th>Date</th> <th>Time</th> <th>Depth (Ft.)</th> <th>Casing At (Ft.)</th> </tr> </thead> <tbody> <tr> <td>04/25/24</td> <td>While Drilling</td> <td>5.3</td> <td>13.5</td> </tr> <tr> <td>04/25/24</td> <td>Before Casing Removed</td> <td>None Noted</td> <td>30.1</td> </tr> <tr> <td>04/25/24</td> <td>After Casing Removed</td> <td>4.2 *</td> <td>out</td> </tr> <tr> <td>04/25/24</td> <td>After Casing Removed</td> <td>8.6</td> <td>out</td> </tr> </tbody> </table>		Date	Time	Depth (Ft.)	Casing At (Ft.)	04/25/24	While Drilling	5.3	13.5	04/25/24	Before Casing Removed	None Noted	30.1	04/25/24	After Casing Removed	4.2 *	out	04/25/24	After Casing Removed	8.6	out		
Date	Time	Depth (Ft.)	Casing At (Ft.)																								
04/25/24	While Drilling	5.3	13.5																								
04/25/24	Before Casing Removed	None Noted	30.1																								
04/25/24	After Casing Removed	4.2 *	out																								
04/25/24	After Casing Removed	8.6	out																								
Driller: Ryan Casatelli		Casing Hammer:																									
Inspector:		Other: NQ-Core																									
Drill Rig: CME 55		Soil Sampler: 2" OD Split Barrel																									
Type: ATV		Hammer Wt: 140 lbs.																									
Rod Size: AWJ		Hammer Fall: 30 in.																									
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL																					
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %																		
		From	To																								
0	1	0.0	2.0	SS/15	WH-1-1-1		Brown SILT, little CLAY, trace fine GRAVEL, trace cmf SAND, trace ORGANIC MATERIAL (wet, soft)		2																		
1																											
2	2	2.0	4.0	SS/19	2-4-5-7		Brown/Grey mottled SILT, trace CLAY, trace ORGANIC MATERIAL (moist, stiff)		9																		
3																											
4	3	4.0	6.0	SS/23	4-4-4-5		Brown SILT, trace CLAY (wet, stiff)		8																		
5																											
6	4	6.0	8.0	SS/18	6-5-5-5		Brown SILT, trace CLAY (wet, stiff)		10																		
7																											
8	5	8.0	10.0	SS/17	3-6-7-6		Brown SILT, trace CLAY, trace fine SAND (wet, stiff)		13																		
9																											
10																											
11																											
12																											
13	6	13.5	15.0	SS/12	6-6-5		Grey SILT, some mf GRAVEL, trace cmf SAND, trace CLAY (wet, stiff)		11																		
14																											
15																											
16																											
17																											
18	7	18.5	18.9	SS/5	50@5"		Grey highly weathered ROCK Fragments (Shale) (wet)		50+																		
19																											
20							Continued on Page 2																				

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks: *Water added to boring for coring.

6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG			Boring No.		B-543	
									Page No.		2 of 2	
									Project No.		28062	
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL						
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) FromTo		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%		SPT "N" or RQD %		
20	R-1	20.2	25.2	C/58	NQ-Core		Continued from Page 1 Auger Refusal @ 20.2'. Set up to core.				67%	
21						Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 2.0" thick), slightly weathered, thinly laminated to medium bedded, medium hard to hard. Weathered horizontal fractures @ 22.2' and 24.2'. Broken and fractured zone @ 24.7' - 25.0'. Recovery: 58"/60" = 97% RQD: 40"/60" = 67% 18 Pieces, 3" Chips and Fragments 1:00 min/ft, no water loss Coring conducted in 4th gear, 1500 rpm, 700 psi down pressure.						
22												
23												
24												
25	R-2	25.2	30.2	C/57	NQ-Core		Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 2.0" thick), slightly weathered, thinly laminated to thinly bedded, medium hard to hard. Weathered horizontal fractures @ 25.7', 25.9', 27.3 - 27.4 and 29.1'. Broken fractured zone @ 25.2' - 25.4', and 28.8' - 28.9'. Recovery: 57"/60" - 95% RQD: 35"/60" = 58% 24 Pieces, 4" Chips and Fragments 1:00 min/ft, no water loss Coring conducted in 4th gear, 1500 rpm, 700 psi down pressure.				58%	
26												
27												
28												
29												
30						Bottom of Boring @ 30.2'						
31												
32												
33												
34												
35												
36												
37												
38												
39												
40												
41												
42												
43												
44												
45												

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG				Boring No. B-544																					
						Page No. 1 of 2																					
						Project No. 28062																					
Project Name: Micron Campus, Clay, New York						Date Started 04/24/24																					
Client: Ramboll						Date Finished 04/24/24																					
Location: See Exploration Location Plan						Surface Elev. 381.6'																					
METHODS OF INVESTIGATION						GROUNDWATER OBSERVATIONS																					
Driller: Beau Fletcher		Casing: 3 ¼" ID H.S.A.		<table border="1"> <thead> <tr> <th>Date</th> <th>Time</th> <th>Depth (Ft.)</th> <th>Casing At (Ft.)</th> </tr> </thead> <tbody> <tr> <td>04/24/24</td> <td>While Drilling</td> <td>5.0</td> <td>13.5</td> </tr> <tr> <td>04/24/24</td> <td>Before Casing Removed</td> <td>None Noted</td> <td>30.5</td> </tr> <tr> <td>04/24/24</td> <td>After Casing Removed</td> <td>2.4 *</td> <td>out</td> </tr> <tr> <td>04/24/24</td> <td>After Casing Removed</td> <td>caved @ 11.5</td> <td>out</td> </tr> </tbody> </table>		Date	Time	Depth (Ft.)	Casing At (Ft.)	04/24/24	While Drilling	5.0	13.5	04/24/24	Before Casing Removed	None Noted	30.5	04/24/24	After Casing Removed	2.4 *	out	04/24/24	After Casing Removed	caved @ 11.5	out		
Date	Time	Depth (Ft.)	Casing At (Ft.)																								
04/24/24	While Drilling	5.0	13.5																								
04/24/24	Before Casing Removed	None Noted	30.5																								
04/24/24	After Casing Removed	2.4 *	out																								
04/24/24	After Casing Removed	caved @ 11.5	out																								
Driller: Ryan Casatelli		Casing Hammer:																									
Inspector:		Other: NQ-Core																									
Drill Rig: CME 55		Soil Sampler: 2" OD Split Barrel																									
Type: ATV		Hammer Wt: 140 lbs.																									
Rod Size: AWJ		Hammer Fall: 30 in.																									
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL																					
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %																		
		From	To																								
0	1	0.0	2.0	SS/14	WH-1-3-4		Brown SILT, trace CLAY, trace fine SAND, trace ORGANIC MATERIAL (moist, medium stiff)		4																		
1																											
2	2	2.0	4.0	SS/20	3-3-5-5		Brown SILT, trace CLAY (moist, stiff)		8																		
3																											
4	3	4.0	6.0	SS/22	2-4-5-4		Brown SILT, trace CLAY (wet, stiff)		9																		
5																											
6	4	6.0	8.0	SS/19	4-5-8-6		Brown SILT, trace CLAY, trace fine SAND (wet, stiff)		13																		
7																											
8	5	8.0	10.0	SS/12	4-3-11-13		Brown cmf GRAVEL, some SILT, trace cmf SAND (wet, medium compact)		14																		
9																											
10																											
11																											
12																											
13	6	12.5	15.0	SS/13	12-12-12		Grey/Brown cmf GRAVEL, some cmf SAND, trace SILT (wet, medium compact)		24																		
14																											
15																											
16	R-1	15.5	20.5	C/60	NQ-Core		<i>Auger Refusal @ 15.5'. Set up to core.</i> Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 2.0" thick), slightly weathered, thinly laminated to thinly bedded, hard. Broken and fractured zones @ 16.4' - 16.6' and 17.5' - 18.5'. Weathered zones (1/2" - 3 1/4" thick) @ 16.7' and 18.3'. Recovery: 60"/60" = 100% RQD: 24"/60" = 40% 17 Pieces, 9" Chips and Fragments 1:00 min/ft, no water loss Coring conducted in 4th gear, 1500 rpm, 700 psi down pressure.	40%																			
17																											
18																											
19																											
20							Continued on Page 2																				

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks: *Water added to boring for coring.

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG		Boring No. B-544	Page No. 2 of 2
								Project No. 28062	
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL			
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
20	R-2	20.5	25.5	C/60	NQ-Core		Continued from Page 1 Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 2.0" thick), slightly weathered, thinly laminated to thinly bedded, hard. <i>Broken and weathered zones @ 21.5' - 21.6' and 22.0' - 22.2'.</i> Recovery: 60"/60" = 100% RQD: 50"/60" = 83% 17 Pieces, 2" Chips and Fragments 1:00 min/ft, no water loss Coring conducted in 4th gear, 1500 rpm, 700 psi down pressure.		83%
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									
36									
37									
38									
39									
40									
41									
42									
43									
44									
45									

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-545			
				Page No.		1 of 2			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		04/26/24			
Client: Ramboll				Date Finished		04/26/24			
Location: See Exploration Location Plan				Surface Elev.		392.6'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: Beau Fletcher		Casing: 3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller: Ryan Casatelli		Casing Hammer:							
Inspector:		Other: NQ-Core							
Drill Rig: CME 55		Soil Sampler: 2" OD Split Barrel							
Type: ATV		Hammer Wt: 140 lbs.							
Rod Size: AWJ		Hammer Fall: 30 in.		04/26/24	While Drilling	4.2	23.5		
				04/26/24	Before Casing Removed	None Noted	35.2		
				04/26/24	After Casing Removed	4.2 *	out		
				04/26/24	After Casing Removed	caved @ 9.1	out		
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1	0.0	2.0	SS/16	1-2-4-5		Brown/Grey mottled SILT, trace CLAY (moist, medium stiff)		6
1									
2	2	2.0	4.0	SS/18	6-6-5-6		Brown SILT, trace CLAY (wet, stiff)		11
3									
4	3	4.0	6.0	SS/20	4-4-4-4		Brown SILT, little CLAY (wet, stiff)		8
5									
6	4	6.0	8.0	SS/16	2-4-4-5		Brown SILT, trace CLAY (wet, stiff)		8
7									
8	5	8.0	10.0	SS/21	3-3-3-4		Similar as above (wet, medium stiff)		6
9									
10									
11									
12									
13	6	13.5	15.0	SS/14	3-3-5		Brown/Grey SILT, little cmf SAND, little CLAY, trace fine GRAVEL (wet, stiff)		8
14									
15									
16									
17									
18	7	18.5	20.0	SS/6	2-3-4		Grey cmf GRAVEL, little SILT, trace cmf SAND (wet, loose)		7
19									
20							Continued on Page 2		

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks: * Water added to boring for coring.

6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-545	
Page No.		2 of 2									
Project No.		28062									
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL					
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) FromTo		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%		SPT "N" or RQD %	
20	8	23.5	25.0	SS/16	13-35-35		Continued from Page 1				70
21											
22											
23											
24							Dark Grey weathered ROCK Fragments (Dolostone) (wet)				
25	R-1	25.7	30.7	C/60	NQ-Core		Auger Refusal @ 25.7'. Set up to core.				77%
26							Grey DOLOSTONE with interbedded SHALE layers (1/8" - 3" thick), slightly weathered, laminated to thinly bedded, medium hard to hard.				
27							Weathered and broken zones @ 26.0' - 26.1' and 29.5' - 29.9'.				
28							SILT seam @ 26.8' - 27.1'.				
29							Recovery: 60"/60" = 100% RQD: 46"/60" = 77%				
30	R-2	30.7	35.7	C/59	NQ-Core		16 Pieces, 5" Chips and Fragments				83%
31							1:00 - 2:30 min/ft, no water loss				
32							Coring conducted in 4th gear, 1500 rpm, 700 psi down pressure.				
33							Grey DOLOSTONE with interbedded SHALE layers (1/8" - 2" thick), slightly weathered, laminated to medium bedded, medium hard to hard.				
34							Weathered and broken zone @ 31.8' - 32.0'.				
35							CALCITE deposit (~ 1" thick) @ 34.2'.				
36							Recovery: 59"/60" = 98% RQD: 50"/60" = 83%				
37							9 Pieces, 2" Chips and Fragments				
38							1:00 min/ft, no water loss				
39							Coring conducted in 4th gear, 1500 rpm, 700 psi down pressure.				
40							Bottom of Boring @ 35.7'				
41											
42											
43											
44											
45											

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-546			
				Page No.		1 of 2			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		04/22/24			
Client: Ramboll				Date Finished		04/22/24			
Location: See Exploration Location Plan				Surface Elev.		394.5'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: Beau Fletcher		Casing: 3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller: Ryan Casatelli		Casing Hammer:							
Inspector:		Other:							
Drill Rig: CME 550X		Soil Sampler: 2" OD Split Barrel							
Type: ATV		Hammer Wt: 140 lbs.							
Rod Size: AWJ		Hammer Fall: 30 in.		04/22/24	While Drilling	14.0	18.5		
				04/22/24	Before Casing Removed	11.5	22.5		
				04/22/24	After Casing Removed	None Noted	out		
				04/22/24	After Casing Removed	caved @ 5.0	out		
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1A	0.0	1.0	SS/16	1-WH-4-7		Topsoil and Organic Material (moist)		4
1	1B	1.0	2.0				Brown SILT, trace CLAY, trace ORGANIC MATERIAL (moist, medium stiff)		
2	2	2.0	4.0	SS/22	6-8-7-7		Brown/Grey mottled SILT, trace CLAY, trace fine SAND (wet, very stiff)		15
3									
4	3	4.0	6.0	SS/18	2-3-3-4		Brown SILT, trace CLAY (wet, medium stiff)		6
5									
6	4	6.0	8.0	SS/20	1-2-2-3		Brown SILT, little CLAY (wet, medium stiff)		4
7									
8	5	8.0	10.0	SS/17	8-7-2-4		Brown/Red SILT, little CLAY, little cmf SAND, trace fine GRAVEL (wet, stiff)		9
9									
10									
11									
12									
13									
14	6	13.5	15.0	SS/8	10-11-16		Brown SILT and cmf GRAVEL, little cmf SAND, trace CLAY (wet, very stiff)		27
15									
16									
17									
18									
19	7	18.5	20.0	SS/11	7-7-12		Grey mf GRAVEL, little cmf SAND, little SILT (wet, medium compact)		19
20							Continued on Page 2		

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG			Boring No.	B-546
									Page No.	2 of 2
									Project No.	28062
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) FromTo		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %	
20	8	22.5	22.5	SS/0	50@0"		Continued from Page 1		50+	
21										
22										
23						Split Spoon and Auger Refusal @ 22.5'				
24						Bottom of Boring @ 22.5'				
25										
26										
27										
28										
29										
30										
31										
32										
33										
34										
35										
36										
37										
38										
39										
40										
41										
42										
43										
44										
45										

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG				Boring No.		B-547	
						Page No.		1 of 2	
						Project No.		28062	
Project Name:		Micron Campus, Clay, New York				Date Started		04/24/24	
Client:		Ramboll				Date Finished		04/25/24	
Location:		See Exploration Location Plan				Surface Elev.		389.0'	
METHODS OF INVESTIGATION						GROUNDWATER OBSERVATIONS			
Driller:		Beau Fletcher		Casing:		3 ¼" ID H.S.A.		Date	
Driller:		Ryan Casatelli		Casing Hammer:				Time	
Inspector:				Other:		NQ-Core		Depth (Ft.)	
Drill Rig:		CME 55		Soil Sampler:		2" OD Split Barrel		Casing At (Ft.)	
Type:		ATV		Hammer Wt:		140 lbs.		04/25/24 While Drilling	
Rod Size:		AWJ		Hammer Fall:		30 in.		04/25/24 Before Casing Removed	
								04/25/24 After Casing Removed	
								04/25/24 After Casing Removed	
								caved @ 8.1	
								out	
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL			
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1	0.0	2.0	SS/17	1-1-4-5		Brown SILT, trace CLAY, trace ORGANIC MATERIAL (wet, medium stiff)		5
1									
2	2	2.0	4.0	SS/18	5-5-5-6		Brown SILT, trace CLAY (wet, stiff)		10
3									
4	3	4.0	6.0	SS/24	4-4-4-5		Brown/Grey SILT, trace CLAY (wet, stiff)		8
5									
6	4	6.0	8.0	SS/16	4-5-6-9		Similar as above (wet, stiff)		11
7									
8	5	8.0	10.0	SS/19	7-5-5-5		Brown SILT, little CLAY (wet, stiff)		10
9									
10									
11									
12									
13	6	13.5	15.0	SS/4	3-2-3		Brown/Grey SILT, little mf GRAVEL, trace cmf SAND, trace CLAY (wet, medium stiff)		5
14									
15									
16							Augered gravelly beginning @ 16.0'		
17									
18	7	18.5	18.8	SS/3	50@3"		Grey/Black cmf GRAVEL, little cmf SAND, trace SILT (wet, very compact)		50+
19									
20							Continued on Page 2		

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks: *Water added to boring for coring.

6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG			Boring No. B-547		
								Page No. 2 of 2			
								Project No. 28062			
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL					
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%		SPT "N" or RQD %	
20	R-1	21.0	26.0	C/56	NQ-Core		Continued from Page 1			28%	
21						Auger Refusal @ 21.0'. Set up to core.					
22						Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 1" thick), slightly weathered, thinly laminated to thinly bedded, medium hard to hard.					
23						Broken and fractured zones @ 21.0' - 21.2' and 24.0' - 24.3'. Weathered horizontal fractures @ 21.4', 21.7', 22.6' and 23.2'. Recovery: 56"/60" = 93% RQD: 17"/60" = 28%					
24						22 Pieces, 8" Chips and Fragments 1:00 min/ft, no water loss					
25	R-2	26.0	31.0	C/59			Coring conducted in 4th gear, 1500 rpm, 700 psi down pressure. Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 2" thick), slightly weathered, thinly laminated to thinly bedded, medium hard to hard. Weathered horizontal fracture @ 27.9'. Recovery: 59"/60" = 98% RQD: 54"/60" = 90%			90%	
26						10 Pieces, 4" Chips and Fragments 1:00 min/ft, no water loss Coring conducted in 4th gear, 1500 rpm, 700 psi down pressure.					
27											
28											
29											
30							Bottom of Boring @ 31.0'				
31											
32											
33											
34											
35											
36											
37											
38											
39											
40											
41											
42											
43											
44											
45											

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-548			
				Page No.		1 of 2			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		04/22/24			
Client: Ramboll				Date Finished		04/22/24			
Location: See Exploration Location Plan				Surface Elev.		393.4'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: H. Lyon		Casing: 3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller: K. Crandall		Casing Hammer:							
Inspector: C. O'Hara		Other:							
Drill Rig: CME 45		Soil Sampler: 2" OD Split Barrel							
Type: ATV		Hammer Wt: 140 lbs.							
Rod Size: AWJ		Hammer Fall: 30 in.		04/22/24	While Drilling	6.8	13.0		
				04/22/24	Before Casing Removed	5.3	20.8		
				04/22/24	After Casing Removed	None Noted	out		
				04/22/24	After Casing Removed	caved @	out		
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1A	0.0	0.5	SS/11	1-1-3-5		Topsoil and Organic Material (moist)		4
1	1B	0.5	2.0				Brown SILT, trace CLAY (moist, medium stiff)		
2	2	2.0	4.0	SS/14	3-4-5-5		Brown/Grey mottled SILT, trace CLAY (moist, stiff)		9
3									
4	3	4.0	6.0	SS/13	3-4-5-5		Brown SILT, little CLAY (moist, stiff)		9
5									
6	4	6.0	8.0	SS/12	2-1-4-5		Brown SILT, trace CLAY (wet, medium stiff)		5
7									
8	5	8.0	10.0	SS/14	4-5-6-5		Similar as above (wet, stiff)		11
9									
10									
11									
12							Augers harder like Cobble @ 12.0'		
13	6	13.0	15.0	SS/9	7-25-23-30		Grey/Brown cmf GRAVEL and SILT, trace cmf SAND (wet, compact)		48
14									
15									
16									
17									
18	7A	18.0	18.5	SS/12	17-23-18-30		Grey/Brown cmf GRAVEL, some SILT, trace cmf SAND (wet, compact)		41
19	7B	18.5	20.0				Black highly weathered ROCK Fragments (Shale) and SILT, trace cmf SAND (moist)		
20							Continued on Page 2		

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG			Boring No.	B-548
									Page No.	2 of 2
									Project No.	28062
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) FromTo		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %	
20	8	20.8	20.8	SS/0	50@0"		Continued from Page 1 Augers harder beginning @ 20.8' Split Spoon Refusal - No Recovery		50+	
21							Bottom of Boring @ 20.8'			
22										
23										
24										
25										
26										
27										
28										
29										
30										
31										
32										
33										
34										
35										
36										
37										
38										
39										
40										
41										
42										
43										
44										
45										

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-549			
				Page No.		1 of 2			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		04/22/24			
Client: Ramboll				Date Finished		04/22/24			
Location: See Exploration Location Plan				Surface Elev.		391.3'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: Beau Fletcher		Casing: 3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller: Ryan Casatelli		Casing Hammer:							
Inspector:		Other: NQ-Core							
Drill Rig: CME 550X		Soil Sampler: 2" OD Split Barrel							
Type: ATV		Hammer Wt: 140 lbs.							
Rod Size: AWJ		Hammer Fall: 30 in.		04/22/24	While Drilling	9.5	25.1		
				04/22/24	Before Casing Removed	None Noted	35.1		
				04/22/24	After Casing Removed	3.8 *	out		
				04/22/24	After Casing Removed	caved @ 5.4	out		
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1A	0.0	0.5	SS/17	WH-2-3-5		Topsoil and Organic Material (moist)		5
1	1B	0.5	2.0				Brown/Grey mottled SILT, little CLAY, trace fine SAND (moist, medium stiff)		
2	2	2.0	4.0	SS/20	6-5-6-6		Brown/Grey mottled SILT, little CLAY (moist, stiff)		11
3									
4	3	4.0	6.0	SS/24	3-4-3-3		Brown SILT, trace CLAY (wet, medium stiff)		7
5									
6	4	6.0	8.0	SS/19	3-3-4-4		Similar as above (wet, medium stiff)		7
7									
8	5	8.0	10.0	SS/20	2-3-4-6		Similar as above (wet, medium stiff)		7
9									
10									
11									
12									
13	6	13.5	15.0	SS/16	2-4-4		Brown/Red SILT and mf SAND, trace CLAY (wet, stiff)		8
14									
15									
16									
17									
18	7	18.5	20.0	SS/12	8-14-12		Dark Grey cmf GRAVEL, some SILT, little cmf SAND (wet, very stiff)		26
19									
20							Continued on Page 2		

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks: *Water added to boring for coring.

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522					SUBSURFACE EXPLORATION TEST BORING LOG			Boring No.	B-549
								Page No.	2 of 2
								Project No.	28062
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
20	8	23.5	25.0	SS/12	27-26-31		Continued from Page 1		57
21									
22									
23									
24							Dark Grey cmf GRAVEL and weathered ROCK Fragments, trace cmf SAND, trace SILT (wet, very compact)		
25	R-1	25.1	30.1	C/57	NQ-Core		Auger Refusal @ 25.1. Set up to core.		65%
26							Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 2" thick), slightly weathered, thinly laminated to thinly bedded, medium hard to hard.		
27							Broken and fractured zone @ 25.6' - 25.8'. Weathered and broken zone (1/2" thick) @ 25.9'. SILT seam (1/8" thick) @ 27.8'.		
28							Recovery: 57"/60" = 95% RQD: 39"/60" = 65%		
29							16 Pieces, 3" Chips and Fragments 1:15 min/ft, no water loss		
30	R-2	30.1	35.1	C/60	NQ-Core		Coring conducted in 4th gear, 1700 rpm, 700 psi down pressure. Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 1" thick), slightly weathered, thinly laminated to medium bedded, medium hard to hard.		100%
31							Recovery: 60"/60" = 100%		
32							RQD: 60"/60" = 100%		
33							11 Pieces, 0" Chips and Fragments 1:00 min/ft, no water loss		
34							Coring conducted in 4th gear, 1700 rpm, 700 psi down pressure.		
35							Bottom of Boring @ 35.1'		
36									
37									
38									
39									
40									
41									
42									
43									
44									
45									

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-552			
				Page No.		1 of 2			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		04/22/24			
Client: Ramboll				Date Finished		04/22/24			
Location: See Exploration Location Plan				Surface Elev.		390.3'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: H. Lyon		Casing: 3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller: K. Crandall		Casing Hammer:							
Inspector: C. O'Hara		Other:							
Drill Rig: CME 45		Soil Sampler: 2" OD Split Barrel							
Type: ATV		Hammer Wt: 140 lbs.							
Rod Size: AWJ		Hammer Fall: 30 in.		04/22/24	While Drilling	5.4	6.0		
				04/22/24	Before Casing Removed	7.0	22.8		
				04/22/24	After Casing Removed	3.7	out		
				04/22/24	After Casing Removed	caved @ 8.5	out		
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1A	0.0	0.5	SS/12	1-2-3-2		Topsoil and Organic Material (moist)		5
1	1B	0.5	2.0				Brown SILT, trace CLAY, trace cmf SAND, trace ORGANIC MATERIAL (moist, medium stiff)		
2	2	2.0	4.0	SS/13	2-4-3-3		Brown SILT, some CLAY (moist, medium stiff)		7
3									
4	3	4.0	6.0	SS/18	2-1-1-2		Brown CLAY and SILT (moist, soft)		2
5									
6	4	6.0	8.0	SS/15	1-1-1-1		Brown SILT, some CLAY (wet, soft)		2
7									
8	5	8.0	10.0	SS/13	1-4-5-5		Brown SILT, trace CLAY (wet, stiff)		9
9									
10									
11									
12									
13	6	13.0	15.0	SS/11	2-1-3-2		Similar as above (wet, medium stiff)		4
14									
15	7	15.0	17.0	SS/16	3-5-4-4		Similar as above (wet, stiff)		9
16									
17									
18	8	17.0	19.0	SS/14	2-3-4-3		Brown/Grey SILT, some mf GRAVEL, little CLAY, trace cmf SAND (wet, medium stiff)		7
19									
20							Continued on Page 2		

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG			Boring No. B-552
						Page No. 2 of 2			
						Project No. 28062			
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL			
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) FromTo		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
20	9	23.0	23.7		19-50@2"		Continued from Page 1		50+
21									
22									
23							Augers harder beginning @ 22.8' Grey cmf GRAVEL, some SILT, some cmf SAND (wet, very compact)		
24							Auger Refusal @ 23.7'		
25							Bottom of Boring @ 23.7'		
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									
36									
37									
38									
39									
40									
41									
42									
43									
44									
45									

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG				Boring No.		B-553																					
						Page No.		1 of 1																					
						Project No.		28062																					
Project Name: Micron Campus, Clay, New York						Date Started		04/25/24																					
Client: Ramboll						Date Finished		04/25/24																					
Location: See Exploration Location Plan						Surface Elev.		383.2'																					
METHODS OF INVESTIGATION						GROUNDWATER OBSERVATIONS																							
Driller: H. Lyon		Casing: 3 ¼" ID H.S.A.		<table border="1"> <thead> <tr> <th>Date</th> <th>Time</th> <th>Depth (Ft.)</th> <th>Casing At (Ft.)</th> </tr> </thead> <tbody> <tr> <td>04/25/24</td> <td>While Drilling</td> <td>3.0</td> <td>6.0</td> </tr> <tr> <td>04/25/24</td> <td>Before Casing Removed</td> <td>3.4</td> <td>12.8</td> </tr> <tr> <td>04/25/24</td> <td>After Casing Removed</td> <td>2.1</td> <td>out</td> </tr> <tr> <td>04/25/24</td> <td>After Casing Removed</td> <td>caved @ 3.8</td> <td>out</td> </tr> </tbody> </table>		Date	Time	Depth (Ft.)	Casing At (Ft.)	04/25/24	While Drilling	3.0	6.0	04/25/24	Before Casing Removed	3.4	12.8	04/25/24	After Casing Removed	2.1	out	04/25/24	After Casing Removed	caved @ 3.8	out				
Date	Time	Depth (Ft.)	Casing At (Ft.)																										
04/25/24	While Drilling	3.0	6.0																										
04/25/24	Before Casing Removed	3.4	12.8																										
04/25/24	After Casing Removed	2.1	out																										
04/25/24	After Casing Removed	caved @ 3.8	out																										
Driller: K. Crandall		Casing Hammer:																											
Inspector: C. O'Hara		Other:																											
Drill Rig: CME 45		Soil Sampler: 2" OD Split Barrel																											
Type: ATV		Hammer Wt: 140 lbs.																											
Rod Size: AWJ		Hammer Fall: 30 in.																											
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL																							
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine		SPT "N" or RQD %																				
		From	To				and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%																						
0	1A	0.0	0.5	SS/13	1-WH-5-5		Topsoil and Organic Material (moist)		5																				
1	1B	0.5	2.0				Brown/Grey/Orange mottled SILT, trace CLAY (moist, medium stiff)																						
2	2	2.0	4.0	SS/14	5-5-5-4		Brown SILT, little mf GRAVEL, trace cmf SAND, trace CLAY (moist, stiff)		10																				
3																													
4	3	4.0	6.0	SS/16	5-16-33-22		Dark Grey/Brown ROCK Fragments (Shale), little cmf SAND, trace fine GRAVEL, trace SILT (moist)		49																				
5							Augers like Cobble beginning @ 3.5'																						
6	4	6.0	8.0	SS/14	4-11-12-19		Brown mf GRAVEL and SILT, some cmf SAND (wet, medium compact)		23																				
7																													
8	5	8.0	10.0	SS/15	7-14-17-14		Brown cmf GRAVEL and cmf SAND, trace SILT (wet, compact)		31																				
9																													
10																													
11																													
12	6	12.2	12.4	SS/2	50@2"		Grey ROCK Fragments (Shale) (wet)		50+																				
13	7	12.9	12.9	SS/0	50@0"		Auger Refusal @ 12.8'		50+																				
14							No Recovery, Split Spoon and Auger Refusal @ 12.9'																						
15							Bottom of Boring @ 12.9'																						
16																													
17																													
18																													
19																													
20																													

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-554			
				Page No.		1 of 2			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		04/24/24			
Client: Ramboll				Date Finished		04/24/24			
Location: See Exploration Location Plan				Surface Elev.		393.8'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: H. Lyon		Casing: 3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller: K. Crandall		Casing Hammer:							
Inspector: C. O'Hara		Other:							
Drill Rig: CME 45		Soil Sampler: 2" OD Split Barrel							
Type: ATV		Hammer Wt: 140 lbs.							
Rod Size: AWJ		Hammer Fall: 30 in.		04/24/24	While Drilling	2.0	8.0		
				04/24/24	Before Casing Removed	11.0	22.4		
				04/24/24	After Casing Removed	4.0	out		
				04/24/24	After Casing Removed	caved @ 8.3	out		
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1A	0.0	0.5	SS/12	1-WH-1-1		Topsoil and Organic Material (moist)		1
1	1B	0.5	2.0				Brown SILT, trace CLAY, trace ORGANIC MATERIAL (moist, soft)		
2	2	2.0	4.0	SS/16	2-4-4-5		Brown SILT, trace CLAY (moist, medium stiff)		8
3									
4	3	4.0	6.0	SS/13	3-2-2-4		Similar as above (moist, medium stiff)		4
5									
6	4	6.0	8.0	SS/15	3-4-3-4		Similar as above (moist, medium stiff)		7
7									
8	5	8.0	10.0	SS/17	3-3-4-5		Similar as above (moist, medium stiff)		7
9									
10									
11							Augers harder like Cobble @ 11.0'		
12									
13	6	13.0	15.0	SS/14	5-20-18-16		Brown cmf SAND, some SILT, trace fine GRAVEL (moist, compact)		38
14									
15									
16									
17									
18	7	18.0	20.0	SS/16	WH-3-8-16		Brown/Grey cmf SAND and SILT, little fine GRAVEL (wet, medium compact)		11
19									
20							Continued on Page 2		

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG			Boring No.		B-554	
									Page No.		2 of 2	
									Project No.		28062	
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL						
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) FromTo		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%		SPT "N" or RQD %		
20	8	21.0	22.4	SS/10	31-30-50@5"		Continued from Page 1				50+	
21						----- <i>Augers like Rock beginning @ 21.0'</i>						
22						Grey highly weathered ROCK Fragments (Shale), some SILT (moist, hard)						
23	9	22.4	23.7		38-42-27-50@2"		<i>Auger Refusal @ 22.4'</i> Similar as above (wet)				69	
24							Bottom of Boring @ 23.7'					
25												
26												
27												
28												
29												
30												
31												
32												
33												
34												
35												
36												
37												
38												
39												
40												
41												
42												
43												
44												
45												

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-555					
				Page No.		1 of 2					
				Project No.		28062					
Project Name: Micron Campus, Clay, New York				Date Started		05/03/24					
Client: Ramboll				Date Finished		05/03/24					
Location: See Exploration Location Plan				Surface Elev.		386.4'					
METHODS OF INVESTIGATION						GROUNDWATER OBSERVATIONS					
Driller: H. Lyon		Casing: 3 ¼" ID H.S.A.		Date		Time		Depth (Ft.)		Casing At (Ft.)	
Driller: K. Crandall		Casing Hammer:		05/03/24		While Drilling		5.7		8.0	
Inspector: C. O'Hara		Other:		05/03/24		Before Casing Removed		7.3		20.7	
Drill Rig: CME 45		Soil Sampler: 2" OD Split Barrel		05/03/24		After Casing Removed		6.7		out	
Type: ATV		Hammer Wt: 140 lbs.		05/03/24		After Casing Removed		caved @ 13.5		out	
Rod Size: AWJ		Hammer Fall: 30 in.									
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL					
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%		SPT "N" or RQD %	
0	1A	0.0	0.6	SS/13	WH-1-1-2		Topsoil and Organic Material (moist)				2
1	1B	0.6	2.0				Brown SILT, some CLAY, trace fine SAND (moist, soft)				
2	2	2.0	4.0	SS/14	1-2-4-3		Brown/Grey mottled CLAY, little SILT (moist, medium stiff)				6
3											
4	3	4.0	6.0	SS/12	1-2-3-3		Brown/Grey mottled CLAY, some SILT (moist, medium stiff)				5
5											
6	4	6.0	8.0	SS/11	3-4-4-5		Brown SILT, trace CLAY (wet, stiff)				8
7											
8	5	8.0	10.0	SS/24	4-4-5-7		Similar as above (wet, stiff)				9
9											
10											
11											
12											
13	6	13.0	15.0	SS/18	2-3-3-3		Brown SILT, little CLAY (wet, medium stiff)				6
14											
15											
16											
17											
18	7	18.0	20.0	SS/11	8-9-10-9		Dark Grey/Black SILT and cmf GRAVEL, little CLAY, trace cmf SAND (moist, very stiff)				19
19											
20							Continued on Page 2				

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.	B-555
								Page No.	2 of 2
								Project No.	28062
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL			
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
20	8	20.7	20.7	SS/0	50@0"		Continued from Page 1 <i>Augers like Rock beginning @ 20.5'</i> <i>Split Spoon and Auger Refusal @ 20.7'</i>		50+
21							Bottom of Boring @ 20.7		
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									
36									
37									
38									
39									
40									
41									
42									
43									
44									
45									

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG				Boring No.		B-557							
						Page No.		1 of 2							
						Project No.		28062							
Project Name:		Micron Campus, Clay, New York				Date Started		04/22/24							
Client:		Ramboll				Date Finished		04/22/24							
Location:		See Exploration Location Plan				Surface Elev.		382.0'							
METHODS OF INVESTIGATION						GROUNDWATER OBSERVATIONS									
Driller:		Beau Fletcher		Casing:		3 ¼" ID H.S.A.		Date		Time		Depth (Ft.)		Casing At (Ft.)	
Driller:		Ryan Casatelli		Casing Hammer:				04/22/24		While Drilling		11.0		13.5	
Inspector:				Other:				04/22/24		Before Casing Removed		3.0		23.8	
Drill Rig:		CME 55		Soil Sampler:		2" OD Split Barrel		04/22/24		After Casing Removed		4.6		out	
Type:		ATV		Hammer Wt:		140 lbs.		04/22/24		After Casing Removed		caved @ 8.4		out	
Rod Size:		AWJ		Hammer Fall:		30 in.									
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL									
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine		and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%		SPT "N" or RQD %				
0	1A	0.0	1.0	SS/14	WH-1-3-3		Topsoil and Organic Material (moist)				4				
1	1B	1.0	2.0				Brown SILT, trace CLAY, trace fine SAND, trace ORGANIC MATERIAL (moist, medium stiff)								
2	2	2.0	4.0	SS/17	4-4-4-5		Brown/Grey mottled SILT, trace CLAY (moist, stiff)				8				
3															
4	3	4.0	6.0	SS/23	3-4-4-5		Brown SILT, trace CLAY (wet, stiff)				8				
5															
6	4	6.0	8.0	SS/24	4-4-4-5		Brown SILT, trace CLAY (wet, stiff)				8				
7															
8	5	8.0	10.0	SS/19	1-2-3-5		Brown SILT, little CLAY (wet, medium stiff)				5				
9															
10															
11															
12															
13	6	13.5	15.0	SS/12	1-6-9		Grey/Brown cmf GRAVEL, little SILT, trace cmf SAND, trace CLAY (wet, medium compact)				15				
14															
15															
16															
17															
18	7	18.5	20.0	SS/20	6-8-8		Grey mf GRAVEL, some cmf SAND, trace SILT (wet, medium compact)				16				
19															
20							Continued on Page 2								

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG			Boring No.	B-557
									Page No.	2 of 2
									Project No.	28062
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) FromTo		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %	
20	8	23.5	23.8	SS/4	50@4"		Continued from Page 1		50+	
21										
22										
23										
24							Grey/Black highly weathered ROCK Fragments (Shale) (moist)			
25							Bottom of Boring @ 23.8'			
26										
27										
28										
29										
30										
31										
32										
33										
34										
35										
36										
37										
38										
39										
40										
41										
42										
43										
44										
45										

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-558			
				Page No.		1 of 1			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		04/22/24			
Client: Ramboll				Date Finished		04/22/24			
Location: See Exploration Location Plan				Surface Elev.		382.0'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: H. Lyon		Casing: 3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller: K. Crandall		Casing Hammer:							
Inspector: C. O'Hara		Other:							
Drill Rig: CME 45		Soil Sampler: 2" OD Split Barrel							
Type: ATV		Hammer Wt: 140 lbs.							
Rod Size: AWJ		Hammer Fall: 30 in.		04/22/24	While Drilling	4.0	8.0		
				04/22/24	Before Casing Removed	11.0	14.0		
				04/22/24	After Casing Removed	5.0	out		
				04/22/24	After Casing Removed	caved @ 7.5	out		
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1A	0.0	0.5	SS/17	WH-1-1-3		Topsoil and Organic Material (moist)		2
1	1B	0.5	2.0				Brown SILT, little CLAY, trace ORGANIC MATERIAL (moist, soft)		
2	2	2.0	4.0	SS/15	2-4-3-2		Brown/Grey mottled SILT, trace CLAY (moist, medium stiff)		7
3							Augered easier beginning @ 3.3'		
4	3	4.0	6.0	SS/14	3-3-4-3		Brown SILT, little CLAY, trace fine SAND (wet, medium stiff)		7
5									
6	4	6.0	8.0	SS/15	3-3-4-4		Similar as above (wet, medium stiff)		7
7									
8	5	8.0	10.0	SS/13	4-4-5-3		Brown SILT, trace CLAY (wet, stiff)		9
9									
10									
11									
12									
13	6	13.0	13.9	SS/8	WH-50@5"		Grey/Brown SILT and CLAY, little mf GRAVEL, trace cmf SAND (moist, hard)		50+
14							Split Spoon and Auger Refusal @ 13.9'		
15							Bottom of Boring @ 13.9'		
16									
17									
18									
19									
20									

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 CME Associates, Inc.		6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG			Boring No.	B-559	
							Page No.	1 of 1	
							Project No.	28062	
Project Name:	Micron Campus, Clay, New York						Date Started	04/22/24	
Client:	Ramboll						Date Finished	04/22/24	
Location:	See Exploration Location Plan						Surface Elev.	385.4'	
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller:	H. Lyon	Casing:	3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)	
Driller:	K. Crandall	Casing Hammer:							
Inspector:	C. O'Hara	Other:			04/22/24	While Drilling	3.5	4.0	
Drill Rig:	CME 45	Soil Sampler:	2" OD Split Barrel		04/22/24	Before Casing Removed	9.0	18.9	
Type:	ATV	Hammer Wt:	140 lbs.		04/22/24	After Casing Removed	4.0	out	
Rod Size:	AWJ	Hammer Fall:	30 in.		04/22/24	After Casing Removed	caved @ 11.0	out	
LOG OF BORING SAMPLES				VISUAL CLASSIFICATION OF MATERIAL					
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
0	1A	0.0	0.5	SS/14	1-1-2-5		Topsoil and Organic Material (moist)		3
1	1B	0.5	2.0				Brown SILT, trace CLAY, trace ORGANIC MATERIAL (moist, soft)		
2	2	2.0	4.0	SS/15	3-3-3-4		Brown/Grey mottled SILT, trace CLAY, trace ROOTS (moist, medium stiff)		6
3									
4	3	4.0	6.0	SS/13	WH-2-2-3		Brown SILT, trace CLAY (wet, medium stiff)		4
5									
6	4	6.0	8.0	SS/15	2-4-4-3		Similar as above (wet, stiff)		8
7									
8	5	8.0	10.0	SS/13	3-5-3-4		Similar as above (wet, stiff)		8
9									
10									
11							Augers gravelly beginning @ 11.3'		
12									
13	6	13.0	15.0	SS/11	6-24-47-17		Grey cmf GRAVEL, some SILT, little cmf SAND, trace CLAY (wet, very compact)		71
14									
15									
16									
17							Augers like COBBLE @ 17.7'		
18	7	18.0	18.9	SS/10	8-50@5"		Dark Grey highly weathered ROCK Fragments (Shale), some mf GRAVEL, little cmf SAND, little SILT (wet)		50+
19							Bottom of Boring @ 18.9'		
20									

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG			Boring No.	B-560
									Page No.	2 of 2
									Project No.	28062
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%		SPT "N" or RQD %
20	8	20.0	20.2	SS/2	50@2"		Continued from Page 1 Dark Grey ROCK Fragments (wet) <i>Split Spoon and Auger Refusal @ 20.2'</i>			
						Bottom of Boring @ 20.2'				
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										
31										
32										
33										
34										
35										
36										
37										
38										
39										
40										
41										
42										
43										
44										
45										

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-561			
				Page No.		1 of 2			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		04/24/24			
Client: Ramboll				Date Finished		04/24/24			
Location: See Exploration Location Plan				Surface Elev.		383.5'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: H. Lyon		Casing: 3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller: K. Crandall		Casing Hammer:							
Inspector: C. O'Hara		Other: NQ-Core							
Drill Rig: CME 45		Soil Sampler: 2" OD Split Barrel							
Type: ATV		Hammer Wt: 140 lbs.							
Rod Size: AWJ		Hammer Fall: 30 in.		04/24/24	While Drilling	None Noted	10.0		
				04/24/24	Before Casing Removed	5.4 *	20.4		
				04/24/24	After Casing Removed	12 *	out		
				04/24/24	After Casing Removed	caved @ 20.0	out		
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1A	0.0	0.5	SS/13	1-1-2-5		Topsoil and Organic Material (moist)		3
1	1B	0.5	2.0				Brown SILT, trace CLAY, trace fine SAND, trace ORGANIC MATERIAL (moist, soft)		
2	2	2.0	4.0	SS/18	3-4-5-4		Brown/Grey CLAY, little SILT (moist, stiff)		9
3									
4	3	4.0	6.0	SS/12	3-2-2-3		Brown/Grey CLAY, little SILT, trace ORGANIC MATERIAL (moist, medium stiff)		4
5									
6	4	6.0	8.0	SS/14	2-2-3-5		Brown SILT, little CLAY (moist, medium stiff)		5
7									
8	5	8.0	10.0	SS/13	3-5-5-6		Brown/Grey SILT, trace CLAY (moist, stiff)		10
9									
10									
11									
12									
13									
14	6	13.5	15.0	SS/16	2-2-3		Brown/Grey SILT, little CLAY (wet, medium stiff)		5
15									
16									
17									
18									
19	7A	18.5	19.3	SS/12	2-4-50@4"		Similar as above (moist)		50+
	7B	19.3	19.8				Grey cmf GRAVEL, some cmf SAND, little SILT (wet, very compact)		
	7B	19.3	19.8						
20							Continued on Page 2		

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks: *Water added to boring for coring.

6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG			Boring No. B-561		
						Page No. 2 of 2					
						Project No. 28062					
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL					
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%		SPT "N" or RQD %	
20	R-1	20.4	25.4	C/60	NQ-Core		Continued from Page 1 compact) <i>Auger Refusal @ 20.4'. Set up to core.</i>			92%	
21						Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 2" thick), thinly laminated to thinly bedded, hard. Recovery: 60"/60" = 100% RQD: 55"/60" = 92% 16 Pieces, 1" Chips and Fragments 1:00 min/ft, no water loss Coring conducted in 4th gear, 1700 rpm, 700 psi down pressure.					
22											
23											
24											
25	R-2	25.4	30.4	C/60	NQ-Core		Grey DOLOSTONE, fresh, thickly bedded, hard. Recovery: 60"/60" = 100% RQD: 60"/60" = 100% 4 Pieces, 0" Chips and Fragments 1:00 min/ft, no water loss Coring conducted in 4th gear, 1700 rpm, 700 psi down pressure.			100%	
26											
27											
28											
29											
30						Bottom of Boring @ 30.4'					
31											
32											
33											
34											
35											
36											
37											
38											
39											
40											
41											
42											
43											
44											
45											

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-563			
				Page No.		1 of 2			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		04/22/24			
Client: Ramboll				Date Finished		04/22/24			
Location: See Exploration Location Plan				Surface Elev.		381.1'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: Beau Fletcher		Casing: 3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller: Ryan Casatelli		Casing Hammer:							
Inspector:		Other:							
Drill Rig: CME 55		Soil Sampler: 2" OD Split Barrel							
Type: ATV		Hammer Wt: 140 lbs.							
Rod Size: AWJ		Hammer Fall: 30 in.		04/22/24	While Drilling	7.0	13.0		
				04/22/24	Before Casing Removed	6.0 *	23.3		
				04/22/24	After Casing Removed	1.0 *	out		
				04/22/24	After Casing Removed	caved @ 7.0	out		
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1A	0.0	0.5	SS/11	1-2-4-4		Topsoil and Organic Material (moist)		6
1	1B	0.5	2.0				Brown/Grey mottled SILT, trace CLAY, trace cmf SAND (moist, medium stiff)		
2	2	2.0	4.0	SS/24	3-2-3-4		Brown SILT, trace CLAY, trace fine GRAVEL, trace cmf SAND (moist, medium stiff)		5
3									
4	3	4.0	6.0	SS/24	2-3-4-4		Brown/Grey/Orange mottled CLAY, some SILT (moist, medium stiff)		7
5									
6	4	6.0	8.0	SS/18	3-3-4-3		Brown/Grey/Orange SILT, some CLAY (wet, medium stiff)		7
7									
8	5	8.0	10.0	SS/24	3-4-4-4		Brown/Grey/Orange SILT, trace CLAY (wet, medium stiff)		8
9									
10									
11									
12									
13									
14	6	13.5	15.0	SS/17	1-2-2-2		Grey SILT, little CLAY (wet, medium stiff)		4
15	7	15.0	17.0	SS/18	2-2-2-2		Grey SILT, trace fine SAND, trace CLAY (moist, medium stiff)		4
16									
17	8	17.0	19.0	SS/15	1-2-4-4		Grey SILT, trace CLAY (wet, medium stiff)		6
18									
19									
20							Continued on Page 2		

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks: *Water added to boring for coring.

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG			Boring No.	B-563
									Page No.	2 of 2
									Project No.	28062
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %	
20	9	23.0	23.0	SS/1	50@1"		Continued from Page 1		50+	
21										
22										
23							Augers harder beginning @ 22.5' Grey weathered ROCK Fragments (Shale) (wet) Split Spoon and Auger Refusal @ 23.3'			
24							Bottom of Boring @ 23.3'			
25										
26										
27										
28										
29										
30										
31										
32										
33										
34										
35										
36										
37										
38										
39										
40										
41										
42										
43										
44										
45										

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 CME Associates, Inc.		6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG			Boring No.	B-564	
							Page No.	1 of 1	
							Project No.	28062	
Project Name:	Micron Campus, Clay, New York						Date Started	04/23/24	
Client:	Ramboll						Date Finished	04/23/24	
Location:	See Exploration Location Plan						Surface Elev.	380.8'	
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller:	Beau Fletcher	Casing:	3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)	
Driller:	Ryan Casatelli	Casing Hammer:							
Inspector:	Chris O'Hara	Other:							
Drill Rig:	CME 55	Soil Sampler:	2" OD Split Barrel						
Type:	ATV	Hammer Wt:	140 lbs.						
Rod Size:	AWJ	Hammer Fall:	30 in.		04/23/24	While Drilling	11.0	13.0	
					04/23/24	Before Casing Removed	12.0	18.5	
					04/23/24	After Casing Removed	5.6	out	
					04/23/24	After Casing Removed	caved @ 6.8	out	
LOG OF BORING SAMPLES				VISUAL CLASSIFICATION OF MATERIAL					
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1A	0.0	0.6	SS/15	1-1-2-4		Topsoil and Organic Material (moist)		3
1	1B	0.6	2.0				Brown SILT, trace CLAY, trace fine SAND (moist, soft)		
2	2	2.0	4.0	SS/19	3-4-5-4		Brown/Grey mottled CLAY, some SILT (moist, stiff)		9
3									
4	3	4.0	6.0	SS/16	4-6-6-8		Brown/Grey mottled SILT, trace CLAY (moist, stiff)		12
5									
6	4	6.0	8.0	SS/17	5-3-4-4		Brown/Grey SILT, little CLAY (wet, medium stiff)		7
7									
8	5	8.0	10.0	SS/*	4-3-3-3		Similar as above (wet, medium stiff)		6
9									
10									
11									
12									
13									
14	6	13.5	15.0	SS/13	1-1-2		Grey SILT, trace CLAY, trace fine SAND (wet, soft)		3
15	7A	15.0	16.3	SS/16	5-6-10-33		Similar as above (wet, very stiff)		16
16	7B	16.3	17.0				Grey cmf GRAVEL, little cmf SAND, little SILT (wet, medium compact)		
17									
18									
19	8	18.5	18.6	SS/1	50@1"		Black ROCK Fragments (Shale) <i>Split Spoon and Auger Refusal at 18.5'</i>		50+
20							Bottom of Boring @ 18.5'		

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks: * recovery length not measured

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG				Boring No.		B-565							
						Page No.		1 of 2							
						Project No.		28062							
Project Name:		Micron Campus, Clay, New York				Date Started		04/23/24							
Client:		Ramboll				Date Finished		04/23/24							
Location:		See Exploration Location Plan				Surface Elev.		381.2'							
METHODS OF INVESTIGATION						GROUNDWATER OBSERVATIONS									
Driller:		Beau Fletcher		Casing:		3 ¼" ID H.S.A.		Date		Time		Depth (Ft.)		Casing At (Ft.)	
Driller:		Ryan Casatelli		Casing Hammer:				04/23/24		While Drilling		4.0		14.0	
Inspector:				Other:		NQ-Core		04/23/24		Before Casing Removed		None Noted		31.0	
Drill Rig:		CME 55		Soil Sampler:		2" OD Split Barrel		04/23/24		After Casing Removed		3.0 *		out	
Type:		ATV		Hammer Wt:		140 lbs.		04/23/24		After Casing Removed		caved @ 8.0		out	
Rod Size:		AWJ		Hammer Fall:		30 in.									
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL									
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%		SPT "N" or RQD %					
0	1A	0.0	0.5	SS/14	WH-2-3-5		Topsoil and Organic Material (moist)		5						
1	1B	0.5	2.0				Brown SILT, trace CLAY, trace fine SAND (moist, medium stiff)								
2	2	2.0	4.0	SS/20	6-5-6-6		Brown/Grey SILT, trace CLAY (wet, stiff)		11						
3															
4	3	4.0	6.0	SS/18	5-5-6-6		Similar as above (wet, stiff)		11						
5															
6	4	6.0	8.0	SS/16	4-4-5-4		Brown/Grey SILT, trace CLAY, trace fine SAND (wet, stiff)		9						
7															
8	5	8.0	10.0	SS/20	WH-1-1-1		Similar as above (wet, soft)		2						
9															
10	6	10.0	12.0	SS/20	1-1-2-2		Similar as above (wet, soft)		3						
11															
12	7	12.0	14.0	SS/20	1-2-3-9		Brown/Grey SILT, trace cmf SAND, trace weathered ROCK Fragments (wet, medium stiff)		5						
13															
14	8	14.0	16.0	SS/14	6-5-7-21		Grey cmf GRAVEL and weathered ROCK Fragments (Shale), trace SILT, trace cmf SAND (wet, stiff)		12						
15															
16															
17															
18	7	18.0	18.0	SS/0	50@0"		Split Spoon and Auger Refusal @ 18.0. Set up to core.		50+						
19	R-1	18.0	23.0	C/60	NQ-Core		Grey DOLOSTONE with interbedded SHALE layers (<1/8" to 1" thick), thinly laminated to medium bedded, hard. Recovery: 60"/60" = 100%		100%						
20							Continued on Page 2								

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks: *Water added to boring for coring.

6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.	B-565
								Page No.	2 of 2
								Project No.	28062
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL			
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
20	R-2	23.0	28.0	C/60	NQ-Core		Continued from Page 1 RQD: 60"/60" = 100% 6 Pieces, 0" Chips and Fragments 1:00 min/ft, no water loss Coring conducted in 4th gear, 1700 rpm, 700 psi down pressure.		85%
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									
36									
37									
38									
39									
40									
41									
42									
43									
44									
45									
							Bottom of Boring @ 28.0'		

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-566			
				Page No.		1 of 1			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		04/17/24			
Client: Ramboll				Date Finished		04/17/24			
Location: See Exploration Location Plan				Surface Elev.		392.2'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: Al Linstruth		Casing: 3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller: John Winks		Casing Hammer:							
Inspector:		Other:							
Drill Rig: CME 550X		Soil Sampler: 2" OD Split Barrel							
Type: ATV		Hammer Wt: 140 lbs.							
Rod Size: AWJ		Hammer Fall: 30 in.		04/17/24	While Drilling	2.8	4.0		
				04/17/24	Before Casing Removed	7.0	8.0		
				04/17/24	After Casing Removed	2.1	out		
				04/17/24	After Casing Removed	caved @ 4.0	out		
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1A	0.0	0.3	SS/15	1-2-3-4		Topsoil and Organic Material (moist, medium stiff)		5
1	1B	0.3	2.0				Brown SILT, trace ROOTS (moist, medium stiff)		
2	2	2.0	4.0	SS/11	2-3-4-2		Brown SILT, little mf GRAVEL, trace cmf SAND (wet, medium stiff)		7
3									
4	3	4.0	6.0	SS/7	2-3-3-2		Dark Brown SILT and cmf GRAVEL, trace cmf SAND (wet, medium stiff)		6
5									
6	4	6.0	6.7	SS/5	8-50@3"		Dark Grey highly weathered ROCK Fragments (Shale) and SILT (wet)		50+
7									
8	5	8.0	8.3	SS/3	50@3"		Dark Grey ROCK Fragments (Shale) and ROCK Flour		50+
9							Bottom of Boring @ 8.3'		
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG				Boring No. B-567																					
						Page No. 1 of 1																					
						Project No. 28062																					
Project Name: Micron Campus, Clay, New York						Date Started 05/10/24																					
Client: Ramboll						Date Finished 05/10/24																					
Location: See Exploration Location Plan						Surface Elev. 389.1'																					
METHODS OF INVESTIGATION						GROUNDWATER OBSERVATIONS																					
Driller: H. Lyon		Casing: 3 ¼" ID H.S.A.		<table border="1"> <thead> <tr> <th>Date</th> <th>Time</th> <th>Depth (Ft.)</th> <th>Casing At (Ft.)</th> </tr> </thead> <tbody> <tr> <td>05/10/24</td> <td>While Drilling</td> <td>0.6</td> <td>4.0</td> </tr> <tr> <td>05/10/24</td> <td>Before Casing Removed</td> <td>1.0</td> <td>6.5</td> </tr> <tr> <td>05/10/24</td> <td>After Casing Removed</td> <td>1.8</td> <td>out</td> </tr> <tr> <td>05/10/24</td> <td>After Casing Removed</td> <td>caved @ 5.2</td> <td>out</td> </tr> </tbody> </table>		Date	Time	Depth (Ft.)	Casing At (Ft.)	05/10/24	While Drilling	0.6	4.0	05/10/24	Before Casing Removed	1.0	6.5	05/10/24	After Casing Removed	1.8	out	05/10/24	After Casing Removed	caved @ 5.2	out		
Date	Time	Depth (Ft.)	Casing At (Ft.)																								
05/10/24	While Drilling	0.6	4.0																								
05/10/24	Before Casing Removed	1.0	6.5																								
05/10/24	After Casing Removed	1.8	out																								
05/10/24	After Casing Removed	caved @ 5.2	out																								
Driller: K. Crandall		Casing Hammer:																									
Inspector: C. O'Hara		Other:																									
Drill Rig: CME 45		Soil Sampler: 2" OD Split Barrel																									
Type: ATV		Hammer Wt: 140 lbs.																									
Rod Size: AWJ		Hammer Fall: 30 in.																									
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL																					
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine		SPT "N" or RQD %																		
		From	To				and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%																				
0	1A	0.0	0.3	SS/13	1-1-2-5		Topsoil and Organic Material (moist)		3																		
1	1B	0.3	2.0				Brown SILT, trace CLAY, trace fine SAND, trace ORGANIC MATERIAL (moist, soft)																				
2	2	2.0	4.0	SS/10	8-7-4-5		Brown/Grey cmf GRAVEL, little cmf SAND, little SILT (moist, medium compact)		11																		
3																											
4	3	4.0	6.0	SS/17	6-4-5-9		Grey cmf GRAVEL, some SILT, little cmf SAND, trace CLAY (moist, stiff)		9																		
5																											
6	4	6.0	6.3	SS/2	50@4"		Dark Grey/Black highly weathered ROCK Fragments (Shale) (moist)		50+																		
7																											
8	5	6.5	6.5	SS/0	50@0"		<i>Augers very hard beginning @ 6.2'. Shale fragments in tip of Split Spoon. Auger Refusal @ 6.5'</i>		50+																		
9							Bottom of Boring @ 6.5'																				
10																											
11																											
12																											
13																											
14																											
15																											
16																											
17																											
18																											
19																											
20																											

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG				Boring No.		B-568																					
						Page No.		1 of 1																					
						Project No.		28062																					
Project Name:		Micron Campus, Clay, New York				Date Started		05/13/24																					
Client:		Ramboll				Date Finished		05/13/24																					
Location:		See Exploration Location Plan				Surface Elev.		395.8'																					
METHODS OF INVESTIGATION						GROUNDWATER OBSERVATIONS																							
Driller: H. Lyon		Casing: 3 ¼" ID H.S.A.		<table border="1"> <thead> <tr> <th>Date</th> <th>Time</th> <th>Depth (Ft.)</th> <th>Casing At (Ft.)</th> </tr> </thead> <tbody> <tr> <td>05/13/24</td> <td>While Drilling</td> <td>13.9</td> <td>1.0</td> </tr> <tr> <td>05/13/24</td> <td>Before Casing Removed</td> <td>14.9</td> <td>16.0</td> </tr> <tr> <td>05/13/24</td> <td>After Casing Removed</td> <td>7.8</td> <td>out</td> </tr> <tr> <td>05/13/24</td> <td>After Casing Removed</td> <td>caved @ 8.1</td> <td>out</td> </tr> </tbody> </table>		Date	Time	Depth (Ft.)	Casing At (Ft.)	05/13/24	While Drilling	13.9	1.0	05/13/24	Before Casing Removed	14.9	16.0	05/13/24	After Casing Removed	7.8	out	05/13/24	After Casing Removed	caved @ 8.1	out				
Date	Time	Depth (Ft.)	Casing At (Ft.)																										
05/13/24	While Drilling	13.9	1.0																										
05/13/24	Before Casing Removed	14.9	16.0																										
05/13/24	After Casing Removed	7.8	out																										
05/13/24	After Casing Removed	caved @ 8.1	out																										
Driller: K. Crandall		Casing Hammer:																											
Inspector: C. O'Hara		Other:																											
Drill Rig: CME 45		Soil Sampler: 2" OD Split Barrel																											
Type: ATV		Hammer Wt: 140 lbs.																											
Rod Size: AWJ		Hammer Fall: 30 in.																											
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL																							
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %																				
		From	To																										
0	1	0.0	2.0	SS/5	1-1-1-1		Topsoil and Organic Material (moist)		2																				
1																													
2	2	2.0	4.0	SS/14	3-5-5-5		Brown SILT, trace fine SAND, trace CLAY (moist, stiff)		10																				
3																													
4	3	4.0	6.0	SS/12	3-2-2-3		Red/Brown SILT, little mf GRAVEL, trace cmf SAND, trace CLAY (moist, medium stiff)		4																				
5																													
6	4	6.0	8.0	SS/17	4-6-7-8		Brown cmf SAND, some mf GRAVEL, trace SILT (moist, medium compact) <i>Augers like Cobble beginning @ 6.0'.</i>		13																				
7																													
8	5	8.0	10.0	SS/13	6-7-8-9		Brown cmf SAND, some cmf GRAVEL, trace SILT (moist, medium compact)		15																				
9																													
10																													
11							<i>Augers hard beginning @ 11.4'</i>																						
12																													
13	6	13.0	14.3	SS/12	18-36-50@3"		Grey SILT, trace cmf SAND, trace CLAY (moist, hard)		50+																				
14																													
15	7	15.0	15.4	SS/4	50@5"		Grey SILT, some mf GRAVEL, trace cmf SAND, trace CLAY (moist, hard)		50+																				
16	8	16.0	16.9	SS/10	38-50@5"		Dark Grey SILT, little mf GRAVEL, little CLAY, trace cmf SAND (moist, hard)		50+																				
17							Bottom of Boring @ 16.9'																						
18																													
19																													
20																													

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG				Boring No.		B-569							
						Page No.		1 of 1							
						Project No.		28062							
Project Name:		Micron Campus, Clay, New York				Date Started		04/26/24							
Client:		Ramboll				Date Finished		04/26/24							
Location:		See Exploration Location Plan				Surface Elev.		389.6'							
METHODS OF INVESTIGATION						GROUNDWATER OBSERVATIONS									
Driller:		H. Lyon		Casing:		3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)				
Driller:		K. Crandall		Casing Hammer:											
Inspector:		C. O'Hara		Other:		04/26/24		While Drilling		7.5		13.0			
Drill Rig:		CME 45		Soil Sampler:		2" OD Split Barrel		04/26/24		Before Casing Removed		6.4		13.8	
Type:		ATV		Hammer Wt:		140 lbs.		04/26/24		After Casing Removed		2.8		out	
Rod Size:		AWJ		Hammer Fall:		30 in.		04/26/24		After Casing Removed		caved @ 6.2		out	
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL									
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine		and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%		SPT "N" or RQD %				
		From	To												
0	1A	0.0	0.7	SS/15	WH-1-6-7		Topsoil and Organic Material (moist)					7			
1	1B	0.7	2.0				Brown SILT, trace CLAY, trace fine SAND (moist, medium stiff)								
2	2	2.0	4.0	SS/16	6-6-5-4		Brown SILT, trace CLAY (moist, stiff)					11			
3															
4	3	4.0	6.0	SS/17	3-4-5-7		Grey/Brown, Similar as above (moist, stiff)					9			
5															
6	4	6.0	8.0	SS/16	7-5-9-5		Brown SILT, some mf GRAVEL, trace cmf SAND, trace CLAY (wet, stiff)					14			
7															
8	5	8.0	10.0	SS/13	2-4-3-5		Augers gravelly beginning @ 7.5' Grey/Black cmf SAND, some mf GRAVEL, some SILT, trace CLAY (moist, loose)					7			
9															
10							Augers harder beginning @ 10.8'								
11															
12															
13	6	13.0	13.7	SS/5	14-50@1"		Dark Grey/Black highly weathered ROCK Fragments (Shale) and SILT, little cmf SAND (moist)					50+			
14	7	13.8	13.9	SS/1	50@1"		Black ROCK Fragments (Shale) Split Spoon and Auger Refusal @ 13.8'					50+			
15							Bottom of Boring @ 13.8'								
16															
17															
18															
19															
20															

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG				Boring No. B-570																			
						Page No. 1 of 1																			
						Project No. 28062																			
Project Name: Micron Campus, Clay, New York						Date Started 05/13/24																			
Client: Ramboll						Date Finished 05/13/24																			
Location: See Exploration Location Plan						Surface Elev. 387.4'																			
METHODS OF INVESTIGATION						GROUNDWATER OBSERVATIONS																			
Driller: H. Lyon		Casing: 3 ¼" ID H.S.A.		<table border="1"> <thead> <tr> <th>Date</th> <th>Time</th> <th>Depth (Ft.)</th> <th>Casing At (Ft.)</th> </tr> </thead> <tbody> <tr> <td>05/13/24</td> <td>While Drilling</td> <td>None Noted</td> <td>8.0</td> </tr> <tr> <td>05/13/24</td> <td>Before Casing Removed</td> <td>10.8</td> <td>12.8</td> </tr> <tr> <td>05/13/24</td> <td>After Casing Removed</td> <td>5.7</td> <td>out</td> </tr> <tr> <td>05/13/24</td> <td>After Casing Removed</td> <td>caved @ 6.0</td> <td>out</td> </tr> </tbody> </table>		Date	Time	Depth (Ft.)	Casing At (Ft.)	05/13/24	While Drilling	None Noted	8.0	05/13/24	Before Casing Removed	10.8	12.8	05/13/24	After Casing Removed	5.7	out	05/13/24	After Casing Removed	caved @ 6.0	out
Date	Time	Depth (Ft.)	Casing At (Ft.)																						
05/13/24	While Drilling	None Noted	8.0																						
05/13/24	Before Casing Removed	10.8	12.8																						
05/13/24	After Casing Removed	5.7	out																						
05/13/24	After Casing Removed	caved @ 6.0	out																						
Driller: K. Crandall		Casing Hammer:																							
Inspector: C. O'Hara		Other:																							
Drill Rig: CME 45		Soil Sampler: 2" OD Split Barrel																							
Type: ATV		Hammer Wt: 140 lbs.																							
Rod Size: AWJ		Hammer Fall: 30 in.																							
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL																				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %																
		From	To																						
0	1A	0.0	0.9	SS/18	1-1-2-16		Topsoil and Organic Material (moist)		3																
1	1B	0.9	2.0				Brown SILT, some fine SAND (moist, soft)																		
2	2	2.0	4.0	SS/16	5-7-7-7		Brown SILT, trace fine SAND, trace CLAY (moist, stiff)		14																
3																									
4	3	4.0	6.0	SS/15	3-2-7-10		Brown/Red SILT, some cmf SAND, little cmf GRAVEL (wet, stiff)		9																
5																									
6	4A	6.0	6.7	SS/14	12-11-10-7		Brown cmf GRAVEL and cmf SAND, trace SILT (wet, medium compact)		21																
7	4B	6.7	8.0				Grey cmf SAND and cmf GRAVEL, trace SILT (wet, medium compact)																		
8	5	8.0	10.0	SS/13	5-5-6-7		Grey cmf GRAVEL and SILT, little cmf SAND (moist, medium compact)		11																
9																									
10							<i>Augers hard beginning @ 10.5</i>																		
11																									
12																									
13	6	12.8	13.0	SS/1	50@2"		Black SHALE Fragments in tip of spoon <i>Split Spoon and Auger Refusal @ 12.8'</i>		50+																
14							Bottom of Boring @ 13.0'																		
15																									
16																									
17																									
18																									
19																									
20																									

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 CME Associates, Inc. 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG				Boring No.		B-571							
						Page No.		1 of 1							
						Project No.		28062							
Project Name:		Micron Campus, Clay, New York				Date Started		04/18/24							
Client:		Ramboll				Date Finished		04/18/24							
Location:		See Exploration Location Plan				Surface Elev.		391.3'							
METHODS OF INVESTIGATION						GROUNDWATER OBSERVATIONS									
Driller:		Al Linstruth		Casing:		3 ¼" ID H.S.A.		Date		Time		Depth (Ft.)		Casing At (Ft.)	
Driller:		John Winks		Casing Hammer:				04/18/24		While Drilling		7.5		8.0	
Inspector:				Other:		NQ-Core		04/18/24		Before Casing Removed		9.0		9.5	
Drill Rig:		CME 550X		Soil Sampler:		2" OD Split Barrel		04/18/24		After Casing Removed		3.2		out	
Type:		ATV		Hammer Wt:		140 lbs.		04/18/24		After Casing Removed		caved @ 7.8		out	
Rod Size:		AWJ		Hammer Fall:		30 in.									
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL									
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine		and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%				SPT "N" or RQD %		
		From	To												
0	1	0.0	2.0	SS/17	1-1-3-3		Brown SILT, trace CLAY (moist, medium stiff)						4		
1															
2	2	2.0	4.0	SS/15	2-3-4-2		Brown/Grey SILT, trace cmf SAND (wet, medium stiff)						7		
3															
4	3	4.0	6.0	SS/11	1-1-1-1		Brown SILT, trace CLAY (moist, soft)						2		
5															
6	4A	6.0	7.9	SS/8	WH-1-1-37		Grey/Brown SILT and cmf GRAVEL, trace cmf SAND, trace CLAY (wet, soft)						2		
7															
8	4B	7.9	8.0				Grey ROCK Fragments (Shale) and ROCK Flour)								
9	5	8.0	8.3	SS/2	50@3"		Similar as above (moist)						50+		
							<i>Auger Refusal @ 9.5'. Set up to core.</i>								
10	R-1	9.5	14.5	C/56	NQ-Core		Dark Grey SHALE with interbedded DOLOSTONE layers (<1/8" - 1/4" thick), slightly weathered, laminated to medium bedded, medium hard to hard. SILT seams (1/8" - 2.0" thick) @ 10.5' - 10.7', 11.9', 12.8', 12.9' and 13.0'. Recovery: 56"/60" = 93% RQD: 42"/60" - 70% 15 Pieces, 0" Chips and Fragments 50 sec/ft, no water loss						70%		
11															
12															
13															
14															
15	R-2	14.5	19.5	C/60	NQ-Core		Coring conducted in 5th gear, 2100 rpm, 700 psi down pressure. Dark Grey SHALE with interbedded DOLOSTONE layers (<1/8" - 4.0' thick), slightly weathered, thinly laminated to medium bedded, medium hard to hard. Weathered horizontal fractures (1/8' - 1" thick) @ 16.5', 16.7', 16.9', 17.0', 17.2', 17.4' - 17.5'. CALCITE veins (1/4" - 1" thick) @ 18.8' and 19.3' - 19.4'. Recovery: 60"/60" = 100% RQD: 37"/60" = 62% 15 Pieces, 4" Chips and Fragments 50 sec/ft, no water loss						62%		
16															
17															
18															
19															
20															

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG				Boring No.		B-572	
						Page No.		1 of 1	
						Project No.		28062	
Project Name:		Micron Campus, Clay, New York				Date Started		04/18/24	
Client:		Ramboll				Date Finished		04/18/24	
Location:		See Exploration Location Plan				Surface Elev.		390.3'	
METHODS OF INVESTIGATION						GROUNDWATER OBSERVATIONS			
Driller:		Al Linstruth		Casing:		3 ¼" ID H.S.A.		Date	
Driller:		John Winks		Casing Hammer:				Time	
Inspector:				Other:				Depth (Ft.)	
Drill Rig:		CME 550X		Soil Sampler:		2" OD Split Barrel		Casing At (Ft.)	
Type:		ATV		Hammer Wt:		140 lbs.		04/18/24	
Rod Size:		AWJ		Hammer Fall:		30 in.		04/18/24	
								While Drilling	
								Before Casing Removed	
								After Casing Removed	
								After Casing Removed	
								caved @	
								out	
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL			
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
0	1	0.0	2.0	SS/15	1-1-4-3		Brown SILT, little cmf SAND (moist, medium stiff)		5
1							-----		
2	2	2.0	4.0	SS/14	4-3-2-1		Grey/Brown cmf GRAVEL, some SILT, little cmf SAND (wet, loose)		5
3									
4	3A	4.0	5.0	SS/11	1-1-31-51		Grey cmf GRAVEL and SILT, little cmf SAND (wet, compact)		32
5	3B	5.0	6.0				Grey highly weathered ROCK Fragments, some SILT (wet)		
6	4	6.0	6.2	SS/2	50@2"		Grey highly weathered ROCK Fragments (moist)		50+
7									
8	5	8.0	8.2	SS/2	50@2"		Similar as above (moist)		50+
9							Bottom of Boring @ 8.2'		
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG				Boring No.		B-573																					
						Page No.		1 of 1																					
						Project No.		28062																					
Project Name:		Micron Campus, Clay, New York				Date Started		04/29/24																					
Client:		Ramboll				Date Finished		04/29/24																					
Location:		See Exploration Location Plan				Surface Elev.		393.5'																					
METHODS OF INVESTIGATION						GROUNDWATER OBSERVATIONS																							
Driller: H. Lyon		Casing: 3 ¼" ID H.S.A.		<table border="1"> <thead> <tr> <th>Date</th> <th>Time</th> <th>Depth (Ft.)</th> <th>Casing At (Ft.)</th> </tr> </thead> <tbody> <tr> <td>04/29/24</td> <td>While Drilling</td> <td>3.8</td> <td>6.0</td> </tr> <tr> <td>04/29/24</td> <td>Before Casing Removed</td> <td>4.0</td> <td>8.7</td> </tr> <tr> <td>04/29/24</td> <td>After Casing Removed</td> <td>3.5</td> <td>out</td> </tr> <tr> <td>04/29/24</td> <td>After Casing Removed</td> <td>caved @ 5.5</td> <td>out</td> </tr> </tbody> </table>		Date	Time	Depth (Ft.)	Casing At (Ft.)	04/29/24	While Drilling	3.8	6.0	04/29/24	Before Casing Removed	4.0	8.7	04/29/24	After Casing Removed	3.5	out	04/29/24	After Casing Removed	caved @ 5.5	out				
Date	Time	Depth (Ft.)	Casing At (Ft.)																										
04/29/24	While Drilling	3.8	6.0																										
04/29/24	Before Casing Removed	4.0	8.7																										
04/29/24	After Casing Removed	3.5	out																										
04/29/24	After Casing Removed	caved @ 5.5	out																										
Driller: K. Crandall		Casing Hammer:																											
Inspector: C. O'Hara		Other:																											
Drill Rig: CME 45		Soil Sampler: 2" OD Split Barrel																											
Type: ATV		Hammer Wt: 140 lbs.																											
Rod Size: AWJ		Hammer Fall: 30 in.																											
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL																							
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine		SPT "N" or RQD %																				
		From	To				and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%																						
0	1A	0.0	0.4	SS/16	1-1-2-6		Topsoil and Organic Material (moist)		3																				
1	1B	0.4	2.0				Brown SILT, trace CLAY, trace fine SAND (moist, soft)																						
2	2	2.0	4.0	SS/15	7-8-6-4		Brown SILT, trace CLAY (moist, stiff)		14																				
3																													
4	3	4.0	6.0	SS/16	4-3-3-5		Similar as above (wet, medium stiff)		6																				
5																													
6	4A	6.0	6.5	SS/12	6-9-12-18		Brown cmf GRAVEL, some cmf SAND, little SILT (moist, medium compact)		21																				
7	4B	6.5	8.0				Black/Grey weathered ROCK Fragments (Shale), little SILT, little cmf SAND (moist)																						
8	5	8.0	8.4	SS/5	50@5"		Similar as above (moist)		50+																				
	6A	8.7	9.3	SS/11	22-25-50@4"		Black weathered ROCK Fragments (Shale)		50+																				
9	6B	9.3	10.1				Black ROCK Fragments (Shale)																						
10							Split Spoon and Auger Refusal @ 10.1'																						
11							Bottom of Boring @10.1'																						
12																													
13																													
14																													
15																													
16																													
17																													
18																													
19																													
20																													

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG				Boring No.		B-574	
						Page No.		1 of 1	
						Project No.		28062	
Project Name:		Micron Campus, Clay, New York				Date Started		04/29/24	
Client:		Ramboll				Date Finished		04/29/24	
Location:		See Exploration Location Plan				Surface Elev.		389.1'	
METHODS OF INVESTIGATION						GROUNDWATER OBSERVATIONS			
Driller:		H. Lyon		Casing:		3 ¼" ID H.S.A.		Date	
Driller:		K. Crandall		Casing Hammer:				Time	
Inspector:		C. O'Hara		Other:				Depth (Ft.)	
Drill Rig:		CME 45		Soil Sampler:		2" OD Split Barrel		Casing At (Ft.)	
Type:		ATV		Hammer Wt:		140 lbs.		04/29/24 While Drilling	
Rod Size:		AWJ		Hammer Fall:		30 in.		04/29/24 Before Casing Removed	
								04/29/24 After Casing Removed	
								04/29/24 After Casing Removed	
								caved @ 4.7	
								out	
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL			
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
0	1A	0.0	0.6	SS/13	1-WH-2-2		Topsoil and Organic Material (moist)		2
1	1B	0.6	2.0				Dark Brown CLAY, some SILT, trace cmf SAND, trace fine GRAVEL (moist, soft)		
2	2	2.0	4.0	SS/	1-1-2-4		Dark Brown SILT, little CLAY, little cmf SAND, trace fine GRAVEL (moist, soft)		3
3									
4	3	4.0	4.6	SS/9	17-50@3"		Dark Grey highly weathered ROCK Fragments (Shale) and SILT (wet)		50+
5	4	5.2	5.3	SS/1	50@1"		Dark Grey ROCK Fragments (Shale) - Auger Refusal @ 5.2' (Boring B-574, See Remark 1)		50+
6	5	5.1	5.3	SS/1	50@3"		Dark Grey ROCK Fragments (Shale) - Auger Refusal @ 5.1' (Boring B-574A, See Remark 1)		50+
7							Bottom of Boring @ 5.3'		
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks: 1. Offset 7.0' west to B-574A and sampled at 5.1' auger refusal.

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-575			
				Page No.		1 of 1			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		05/10/24			
Client: Ramboll				Date Finished		05/10/24			
Location: See Exploration Location Plan				Surface Elev.		385.8'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: H. Lyon		Casing: 3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller: K. Crandall		Casing Hammer:							
Inspector: C. O'Hara		Other:							
Drill Rig: CME 45		Soil Sampler: 2" OD Split Barrel							
Type: ATV		Hammer Wt: 140 lbs.							
Rod Size: AWJ		Hammer Fall: 30 in.		05/10/24	While Drilling	None Noted	6.0		
				05/10/24	Before Casing Removed	None Noted	8.2		
				05/10/24	After Casing Removed	None Noted	out		
				05/10/24	After Casing Removed	caved @	out		
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1A	0.0	0.7	SS/16	1-WH-2-4		Topsoil and Organic Material (moist)		2
1	1B	0.7	2.0				Brown CLAY, some SILT, trace fine SAND (moist, soft)		
2	2	2.0	4.0	SS/12	3-4-7-16		Brown/Grey SILT and highly weathered ROCK Fragments (Shale) (moist, stiff)		11
3									
4	3	4.0	6.0	SS/21	6-8-8-10		Dark Grey, Similar as above (moist, very stiff)		16
5									
6	4A	6.0	7.0	SS/15	12-12-50@3"		Similar as above (moist, hard)		50+
7	4B	7.0	7.3				Grey ROCK Fragments (Shale)		
8	5	8.0	8.2	SS/1	50@2"		Augers like Rock @ 7.9'		
9							Similar as above - Split Spoon and Auger Refusal @ 8.2'		
10							Bottom of Boring @ 8.2'		
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 CME Associates, Inc.		6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522				SUBSURFACE EXPLORATION TEST BORING LOG				Boring No.		B-576	
		Page No.		1 of 1									
		Project No.		28062									
Project Name: Micron Campus, Clay, New York						Date Started				05/13/24			
Client: Ramboll						Date Finished				05/13/24			
Location: See Exploration Location Plan						Surface Elev.				385.4'			
METHODS OF INVESTIGATION						GROUNDWATER OBSERVATIONS							
Driller: H. Lyon		Casing: 3 ¼" ID H.S.A.				Date	Time	Depth (Ft.)	Casing At (Ft.)				
Driller: K. Crandall		Casing Hammer:				05/13/24	While Drilling	None Noted	12.5				
Inspector: C. O'Hara		Other:				05/13/24	Before Casing Removed	None Noted	12.5				
Drill Rig: CME 45		Soil Sampler: 2" OD Split Barrel				05/13/24	After Casing Removed	2.4	out				
Type: ATV		Hammer Wt: 140 lbs.				05/13/24	After Casing Removed	caved @ 2.8	out				
Rod Size: AWJ		Hammer Fall: 30 in.											
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL							
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine		and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%		SPT "N" or RQD %		
		From	To										
0	1A	0.0	0.8	SS/16	1-1-2-2		Topsoil and Organic Material (moist)				3		
1	1B	0.8	2.0				Brown SILT, some cmf SAND, trace fine GRAVEL (wet, soft)						
2	2	2.0	4.0	SS/14	2-4-2-6		Brown SILT, little cmf SAND, trace fine GRAVEL (wet, medium stiff)				6		
3													
4	3	4.0	6.0	SS/17	10-8-9-10		Brown cmf SAND and SILT, trace fine GRAVEL (wet, medium compact)				17		
5													
6	4	6.0	8.0	SS/13	10-16-20-22		Grey SILT and cmf SAND, trace mf GRAVEL (moist, hard)				36		
7							Augers hard beginning @ 7.0'						
8	5	8.0	8.3	SS/2	50@3"		Brown/Grey SILT, little mf GRAVEL, little cmf SAND (wet, hard)				50+		
9							Augers very hard beginning @ 8.0'						
10													
11							Augers like weathered Rock beginning @ 10.5						
12													
13	6	12.5	12.7	SS/1	50@2"		Black SHALE Fragments				50+		
14							Bottom of Boring @ 12.7'						
15													
16													
17													
18													
19													
20													

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG				Boring No.		B-578																					
						Page No.		1 of 1																					
						Project No.		28062																					
Project Name: Micron Campus, Clay, New York						Date Started		04/26/24																					
Client: Ramboll						Date Finished		04/26/24																					
Location: See Exploration Location Plan						Surface Elev.		383.4'																					
METHODS OF INVESTIGATION						GROUNDWATER OBSERVATIONS																							
Driller: H. Lyon		Casing: 3 ¼" ID H.S.A.		<table border="1"> <thead> <tr> <th>Date</th> <th>Time</th> <th>Depth (Ft.)</th> <th>Casing At (Ft.)</th> </tr> </thead> <tbody> <tr> <td>04/26/24</td> <td>While Drilling</td> <td>2.8</td> <td>4.0</td> </tr> <tr> <td>04/26/24</td> <td>Before Casing Removed</td> <td>3.0</td> <td>9.8</td> </tr> <tr> <td>04/26/24</td> <td>After Casing Removed</td> <td>1.2</td> <td>out</td> </tr> <tr> <td>04/26/24</td> <td>After Casing Removed</td> <td>caved @ 2.3</td> <td>out</td> </tr> </tbody> </table>		Date	Time	Depth (Ft.)	Casing At (Ft.)	04/26/24	While Drilling	2.8	4.0	04/26/24	Before Casing Removed	3.0	9.8	04/26/24	After Casing Removed	1.2	out	04/26/24	After Casing Removed	caved @ 2.3	out				
Date	Time	Depth (Ft.)	Casing At (Ft.)																										
04/26/24	While Drilling	2.8	4.0																										
04/26/24	Before Casing Removed	3.0	9.8																										
04/26/24	After Casing Removed	1.2	out																										
04/26/24	After Casing Removed	caved @ 2.3	out																										
Driller: K. Crandall		Casing Hammer:																											
Inspector: C. O'Hara		Other:																											
Drill Rig: CME 45		Soil Sampler: 2" OD Split Barrel																											
Type: ATV		Hammer Wt: 140 lbs.																											
Rod Size: AWJ		Hammer Fall: 30 in.																											
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL																							
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine		SPT "N" or RQD %																				
		From	To				and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%																						
0	1A	0.0	0.7	SS/12	WH-1-1-5		Topsoil and Organic Material (moist)		2																				
1	1B	0.7	2.0				Brown/Grey cmf GRAVEL, some SILT, little cmf SAND (moist, very loose)																						
2	2	2.0	4.0	SS/14	6-8-8-8		Brown cmf GRAVEL, some cmf SAND, little SILT (moist, medium compact)		16																				
3																													
4	3	4.0	6.0	SS/11	12-13-14-15		Brown/Grey cmf GRAVEL, some ROCK Fragments (Shale), little SILT, trace cmf SAND (wet, medium compact)		27																				
5																													
6	4	6.0	8.0	SS/16	9-8-12-12		Grey cmf GRAVEL, little ROCK Fragments (Shale), little SILT, trace cmf SAND (wet, medium compact) <i>Augered harder beginning @ 7.4'</i>		20																				
7																													
8	5A	8.0	9.1	SS/21	18-22-27-50@3"		Brown/Grey cmf GRAVEL and SILT, little cmf SAND (moist, compact)		49																				
9	5B	9.1	9.8				Grey/Black highly weathered ROCK Fragments (Shale) (moist)																						
10	6	9.8	9.8	SS/0	50@0"		Split Spoon and Auger Refusal @ 9.8'		50+																				
11							Bottom of Boring @ 9.8'																						
12																													
13																													
14																													
15																													
16																													
17																													
18																													
19																													
20																													

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522					SUBSURFACE EXPLORATION TEST BORING LOG			Boring No. B-585	
								Page No. 1 of 2	
								Project No. 28062	
Project Name: Micron Campus, Clay, New York					Date Started 05/01/24		Date Finished 05/01/24		
Client: Ramboll					Surface Elev. 394.1'				
Location: See Exploration Location Plan									
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: Beau Fletcher Driller: Ryan Casatelli Inspector: Drill Rig: CME 55 Type: ATV Rod Size: AWJ		Casing: 3 ¼" ID H.S.A. Casing Hammer: Other: NQ-Core Soil Sampler: 2" OD Split Barrel Hammer Wt: 140 lbs. Hammer Fall: 30 in.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
				05/01/24	While Drilling	None Noted	11.0		
				05/01/24	Before Casing Removed	None Noted	21.0		
				05/01/24	After Casing Removed	3.6 *	out		
				05/01/24	After Casing Removed	caved @ 11.4	out		
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
0	1A	0.0	1.0	SS/19	1-1-3-5		Topsoil and Organic Material (moist)		4
1	1B	1.0	2.0				Brown/Grey SILT, little CLAY, trace ROOTS (moist, medium stiff)		
2	2	2.0	4.0	SS/20	5-6-7-6		Brown/Grey SILT, trace CLAY (moist, stiff)		13
3									
4	3	4.0	6.0	SS/23	6-6-5-6		Brown SILT, trace CLAY (wet, stiff)		11
5									
6	4	6.0	8.0	SS/20	2-3-5-11		Similar as above (wet, stiff)		8
7									
8	5	8.0	10.0	SS/14	9-11-10-5		Brown/Grey weathered ROCK Fragments (Shale), little SILT, trace cmf SAND (moist)		21
9									
10									
11									
12	R-1	11.0	16.0	C/58	NQ-Core		Dark Grey SHALE with interbedded DOLOSTONE layers (<1/8" - 1/2" thick), slightly to moderately weathered, thinly laminated to thinly bedded, medium hard. Broken and fractured zones @ 11.8'-12.3', 12.9'-13.3', 13.8'-14.2', and 15.0'-15.2'. Weathered zones @ 12.6', 13.4'-13.5' and 14.2'-14.4'. Recovery: 58"/60" = 97% RQD: 20"/60" = 33%		33%
13									
14									
15									
16	R-2	16.0	21.0	C/60	NQ-Core		11 Pieces, 13" Chips and Fragments 1:00 min/ft, no water loss Coring conducted in 4th gear, 1700 rpm, 700 psi down pressure. Dark Grey SHALE with interbedded DOLOSTONE layers (<1/8" - 2.0" thick), slightly to moderately weathered, thinly laminated to thinly bedded, medium hard to hard. Broken and fractured zones @ 16.7'-16.8', 17.2'-17.9', 18.7'-18.8', and 19.9'-20.0'. Weathered zone (3/4" thick) @ 19.3'. Recovery: 60"/60" = 100% RQD: 36"/60" = 60%		60%
17									
18									
19									
20							Continued on Page 2		

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks: * Water added to boring during coring.

6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG			Boring No.	B-585
									Page No.	2 of 2
									Project No.	28062
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%		SPT "N" or RQD %
20							Continued from Page 1			
21							13 Pieces, 10" Chips and Fragments			
22							1:00 min/ft, no water loss			
23							Coring conducted in 4th gear, 1700 rpm, 700 psi down pressure.			
24							Bottom of Boring @ 21.0'			
25										
26										
27										
28										
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30										
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35										
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41										
42										
43										
44										
45										

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG				Boring No. B-587																			
						Page No. 1 of 1																			
						Project No. 28062																			
Project Name: Micron Campus, Clay, New York						Date Started 05/02/24																			
Client: Ramboll						Date Finished 05/02/24																			
Location: See Exploration Location Plan						Surface Elev. 385.0'																			
METHODS OF INVESTIGATION						GROUNDWATER OBSERVATIONS																			
Driller: H. Lyon		Casing: 3 ¼" ID H.S.A.		<table border="1"> <thead> <tr> <th>Date</th> <th>Time</th> <th>Depth (Ft.)</th> <th>Casing At (Ft.)</th> </tr> </thead> <tbody> <tr> <td>05/02/24</td> <td>While Drilling</td> <td>1.8</td> <td>6.0</td> </tr> <tr> <td>05/02/24</td> <td>Before Casing Removed</td> <td>2.8</td> <td>11.5</td> </tr> <tr> <td>05/02/24</td> <td>After Casing Removed</td> <td>2.8</td> <td>out</td> </tr> <tr> <td>05/02/24</td> <td>After Casing Removed</td> <td>caved @ 5.5</td> <td>out</td> </tr> </tbody> </table>		Date	Time	Depth (Ft.)	Casing At (Ft.)	05/02/24	While Drilling	1.8	6.0	05/02/24	Before Casing Removed	2.8	11.5	05/02/24	After Casing Removed	2.8	out	05/02/24	After Casing Removed	caved @ 5.5	out
Date	Time	Depth (Ft.)	Casing At (Ft.)																						
05/02/24	While Drilling	1.8	6.0																						
05/02/24	Before Casing Removed	2.8	11.5																						
05/02/24	After Casing Removed	2.8	out																						
05/02/24	After Casing Removed	caved @ 5.5	out																						
Driller: K. Crandall		Casing Hammer:																							
Inspector: C. O'Hara		Other:																							
Drill Rig: CME 45		Soil Sampler: 2" OD Split Barrel																							
Type: ATV		Hammer Wt: 140 lbs.																							
Rod Size: AWJ		Hammer Fall: 30 in.																							
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL																			
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %																
		From	To																						
0	1A	0.0	0.3	SS/14	WH-WH-4-9		Topsoil and Organic Material (moist)		4																
1	1B	0.3	2.0				Brown/Grey SILT, trace CLAY, trace fine SAND (moist, medium stiff)																		
2	2	2.0	4.0	SS/16	8-8-9-7		Brown/Grey mottled SILT, trace CLAY (moist, very stiff)		17																
3																									
4	3	4.0	6.0	SS/15	7-8-7-7		Brown SILT, little fine SAND, trace CLAY (wet, stiff)		15																
5																									
6	4	6.0	8.0	SS/24	4-5-4-4		Brown SILT, trace fine SAND, trace CLAY (wet, stiff)		9																
7																									
8	5A	8.0	8.6	SS/14	6-14-16-10		Similar as above (wet, hard)		30																
9	5B	8.6	10.0				Black/Brown weathered ROCK Fragments (Shale), little cmf SAND, trace SILT (moist) Augered gravelly beginning @ 8.3'																		
10																									
11							Augered harder beginning @ 11.4'																		
12	6	11.5	11.5	SS/0	50@0"		Split Spoon and Auger Refusal @ 11.5'		50+																
13							Bottom of Boring @ 11.5'																		
14																									
15																									
16																									
17																									
18																									
19																									
20																									

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522					SUBSURFACE EXPLORATION TEST BORING LOG				Boring No. B-588	
							Page No. 1 of 2			
							Project No. 28062			
Project Name: Micron Campus, Clay, New York							Date Started 05/02/24			
Client: Ramboll							Date Finished 05/02/24			
Location: See Exploration Location Plan							Surface Elev. 384.4'			
METHODS OF INVESTIGATION						GROUNDWATER OBSERVATIONS				
Driller: Beau Fletcher		Casing: 3 ¼" ID H.S.A.				Date	Time	Depth (Ft.)	Casing At (Ft.)	
Driller: Ryan Casatelli		Casing Hammer:				05/02/24	While Drilling	4.6	8.0	
Inspector:		Other: NQ-Core				05/02/24	Before Casing Removed	None Noted	21.0	
Drill Rig: CME 55		Soil Sampler: 2" OD Split Barrel				05/02/24	After Casing Removed	2.8 *	out	
Type: ATV		Hammer Wt: 140 lbs.				05/02/24	After Casing Removed	caved @ 12.0	out	
Rod Size: AWJ		Hammer Fall: 30 in.								
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL					
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %	
0	1	0.0	2.0	SS/12	WH-1-3-4		Brown SILT, little ROOTS (wet, medium stiff)		4	
1										
2	2	2.0	4.0	SS/16	5-5-6-7		Brown/Grey SILT, trace CLAY (wet, stiff)		11	
3										
4	3	4.0	6.0	SS/16	6-4-6-5		Brown/Grey SILT, trace CLAY (wet, stiff)		10	
5										
6	4	6.0	8.0	SS/15	3-3-4-5		Brown/Grey SILT, trace fine SAND, trace CLAY (wet, medium stiff)		7	
7										
8	5	8.0	10.0	SS/12	9-10-8-5		Dark Grey highly weathered ROCK Fragments (Shale)		18	
9										
10										
11										
12	R-1	11.0	16.0	C/60	NQ-Core		11.0' - 14.2': Dark Grey SHALE, slightly weathered, laminated to thickly bedded, medium hard. 14.2' - 16.0': Dark Grey DOLOSTONE, slightly weathered, thinly laminated to thinly bedded, hard. Weathered fractures @ 14.7' and 15.2'. Broken and horizontal fractured zone @ 11.4' - 11.7' and 11.9'. Recovery: 60"/60" = 100% RQD: 50"/60" = 83% 16 Pieces, 4" Chips and Fragments 1:00 min/ft, no water loss Coring conducted in 4th gear, 1500 rpm, 700 psi down pressure.		83%	
13										
14										
15										
16	R-2	16.0	21.0	C/60	NQ-Core		Dark Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 3.0" thick), slightly weathered, thinly laminated to thinly bedded, medium hard to hard. Recovery: 60"/60" = 100% RQD: 60"/60" = 100% 10 Pieces, 0" Chips and Fragments 1:00 min/ft, no water loss Coring conducted in 4th gear, 1500 rpm, 700 psi down pressure.		100%	
17										
18										
19										
20							Continued on Page 2			

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks: *Water added to boring for coring

6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG			Boring No.	B-588
									Page No.	2 of 2
									Project No.	28062
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%		SPT "N" or RQD %
20							Continued from Page 1			
Bottom of Boring @ 21.0'										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										
31										
32										
33										
34										
35										
36										
37										
38										
39										
40										
41										
42										
43										
44										
45										

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-589					
				Page No.		1 of 1					
				Project No.		28062					
Project Name: Micron Campus, Clay, New York				Date Started		05/02/24					
Client: Ramboll				Date Finished		05/02/24					
Location: See Exploration Location Plan				Surface Elev.		383.8'					
METHODS OF INVESTIGATION						GROUNDWATER OBSERVATIONS					
Driller: H. Lyon		Casing: 3 ¼" ID H.S.A.		Date		Time		Depth (Ft.)		Casing At (Ft.)	
Driller: K. Crandall		Casing Hammer:		05/02/24		While Drilling		1.0		2.0	
Inspector: C. O'Hara		Other:		05/02/24		Before Casing Removed		3.8		14.1	
Drill Rig: CME 45		Soil Sampler: 2" OD Split Barrel		05/02/24		After Casing Removed		2.6		out	
Type: ATV		Hammer Wt: 140 lbs.		05/02/24		After Casing Removed		caved @ 3.2		out	
Rod Size: AWJ		Hammer Fall: 30 in.									
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL					
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%		SPT "N" or RQD %	
0	1A	0.0	0.8	SS/16	1-WH-1-2		Topsoil and Organic Material (moist)				1
1	1B	0.8	2.0				Brown SILT, trace CLAY (moist, soft)				
2	2	2.0	4.0	SS/14	4-5-5-12		Brown/Grey mottled SILT, trace mf SAND, trace CLAY (moist, stiff)				10
3											
4	3	4.0	6.0	SS/15	7-12-10-10		Brown/Grey mottled SILT, trace CLAY (moist, stiff)				22
5											
6	4	6.0	8.0	SS/18	7-9-10-10		Brown SILT, trace CLAY (moist, very stiff)				19
7											
8	5	8.0	10.0	SS/12	6-11-14-14		Augered gravelly beginning @ 7.5' Grey cmf GRAVEL and cmf SAND, trace SILT (wet, medium compact)				25
9											
10											
11											
12											
13	6	13.0	13.3	SS/2	50@3"		Black highly weathered ROCK Fragments (Shale) (wet)				50+
14							Bottom of Boring @ 13.3'				
15											
16											
17											
18											
19											
20											

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-591			
				Page No.		1 of 2			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		04/24/24			
Client: Ramboll				Date Finished		04/24/24			
Location: See Exploration Location Plan				Surface Elev.		384.1'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: H. Lyon		Casing: 3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller: K. Crandall		Casing Hammer:							
Inspector: C. O'Hara		Other:							
Drill Rig: CME 45		Soil Sampler: 2" OD Split Barrel							
Type: ATV		Hammer Wt: 140 lbs.							
Rod Size: AWJ		Hammer Fall: 30 in.		04/24/24	While Drilling	2.0	13.0		
				04/24/24	Before Casing Removed	7.5	21.1		
				04/24/24	After Casing Removed	3.5	out		
				04/24/24	After Casing Removed	caved @ 8.0	out		
LOG OF BORING SAMPLES				VISUAL CLASSIFICATION OF MATERIAL					
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1A	0.0	0.7	SS/12	1-1-1-2		Topsoil and Organic Material (moist)		2
1	1B	0.7	2.0				Brown SILT, trace CLAY (moist, soft)		
2	2	2.0	4.0	SS/16	3-3-3-3		Similar as above (moist, medium stiff)		6
3									
4	3	4.0	6.0	SS/11	1-2-4-5		Brown SILT, trace fine SAND, trace CLAY (wet, medium stiff)		6
5									
6	4	6.0	8.0	SS/16	8-8-7-7		Brown SILT, trace CLAY (wet, stiff)		15
7									
8	5	8.0	10.0	SS/19	3-4-5-3		Grey/Brown, Similar as above (wet, stiff)		9
9									
10									
11									
12									
13	6A	13.0	13.5	SS/12	1-3-4-3		Grey/Brown SILT, little CLAY (wet, medium stiff)		7
14	6B	13.5	15.0				Brown/Red CLAY, some SILT, little cmf SAND, trace mf GRAVEL (wet, medium stiff)		
15									
16									
17									
18	7A	18.0	18.5	SS/8	3-9-7-1		Brown/Grey SILT, little CLAY, trace cmf SAND (moist)		16
19	7B	18.5	20.0				Highly weathered ROCK Fragments (Shale), little SILT, trace cmf SAND (wet)		
20							Continued on Page 2		

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG			Boring No.	B-591
									Page No.	2 of 2
									Project No.	28062
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %	
20	8	21.1	21.2	SS/1	50@1"		Continued from Page 1 Augers harder beginning @ 20.6' Black Rock Fragments (Shale) Split Spoon and Auger Refusal @ 21.1'		50+	
21							Bottom of Boring @ 21.1'			
22										
23										
24										
25										
26										
27										
28										
29										
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31										
32										
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42										
43										
44										
45										

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG				Boring No.		B-592																					
						Page No.		1 of 1																					
						Project No.		28062																					
Project Name: Micron Campus, Clay, New York						Date Started		05/02/24																					
Client: Ramboll						Date Finished		05/02/24																					
Location: See Exploration Location Plan						Surface Elev.		383.0'																					
METHODS OF INVESTIGATION						GROUNDWATER OBSERVATIONS																							
Driller: H. Lyon		Casing: 3 ¼" ID H.S.A.		<table border="1"> <thead> <tr> <th>Date</th> <th>Time</th> <th>Depth (Ft.)</th> <th>Casing At (Ft.)</th> </tr> </thead> <tbody> <tr> <td>05/02/24</td> <td>While Drilling</td> <td>2.8</td> <td>6.0</td> </tr> <tr> <td>05/02/24</td> <td>Before Casing Removed</td> <td>6.7</td> <td>16.5</td> </tr> <tr> <td>05/02/24</td> <td>After Casing Removed</td> <td>4.3</td> <td>out</td> </tr> <tr> <td>05/02/24</td> <td>After Casing Removed</td> <td>caved @ 6.0</td> <td>out</td> </tr> </tbody> </table>		Date	Time	Depth (Ft.)	Casing At (Ft.)	05/02/24	While Drilling	2.8	6.0	05/02/24	Before Casing Removed	6.7	16.5	05/02/24	After Casing Removed	4.3	out	05/02/24	After Casing Removed	caved @ 6.0	out				
Date	Time	Depth (Ft.)	Casing At (Ft.)																										
05/02/24	While Drilling	2.8	6.0																										
05/02/24	Before Casing Removed	6.7	16.5																										
05/02/24	After Casing Removed	4.3	out																										
05/02/24	After Casing Removed	caved @ 6.0	out																										
Driller: K. Crandall		Casing Hammer:																											
Inspector: C. O'Hara		Other:																											
Drill Rig: CME 45		Soil Sampler: 2" OD Split Barrel																											
Type: ATV		Hammer Wt: 140 lbs.																											
Rod Size: AWJ		Hammer Fall: 30 in.																											
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL																							
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine		SPT "N" or RQD %																				
		From	To				and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%																						
0	1A	0.0	0.6	SS/17	WH-1-1-4		Topsoil and Organic Material (moist)		2																				
1	1B	0.6	2.0				Brown SILT, trace CLAY, trace fine SAND, trace ORGANIC MATERIAL (moist, soft)																						
2	2	2.0	4.0	SS/15	4-4-4-6		Brown SILT and cmf SAND, trace fine GRAVEL (wet, stiff)		8																				
3																													
4	3	4.0	6.0	SS/13	6-7-7-6		Brown/Grey mottled SILT, trace CLAY, trace fine SAND (wet, stiff)		14																				
5																													
6	4	6.0	8.0	SS/11	8-8-10-7		Similar as above (wet, very stiff)		18																				
7																													
8	5	8.0	10.0	SS/14	3-3-3-4		Grey, Similar as above (wet, medium stiff)		6																				
9																													
10																													
11																													
12																													
13	6	13.0	15.0	SS/8	7-4-4-3		Grey cmf GRAVEL, little SILT, little cmf SAND (wet, loose)		8																				
14																													
15																													
16	7	16.5	16.5	SS/0	50@0"		<i>Augers harder beginning @ 16.2'</i> <i>Split Spoon and Auger Refusal @ 16.5'</i>		50+																				
17							Bottom of Boring @ 16.5'																						
18																													
19																													
20																													

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-593			
				Page No.		1 of 1			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		04/29/24			
Client: Ramboll				Date Finished		04/30/24			
Location: See Exploration Location Plan				Surface Elev.		392.4'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: H. Lyon		Casing: 3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller: K. Crandall		Casing Hammer:							
Inspector: C. O'Hara		Other:							
Drill Rig: CME 45		Soil Sampler: 2" OD Split Barrel							
Type: ATV		Hammer Wt: 140 lbs.							
Rod Size: AWJ		Hammer Fall: 30 in.		04/29/24	While Drilling	2.1	6.0		
				04/30/24	Before Casing Removed	6.0	13.0		
				04/30/24	After Casing Removed	4.5	out		
				04/30/24	After Casing Removed	caved @ 6.3	out		
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1A	0.0	0.7	SS/14	WR-2-3-4		Topsoil and Organic Material (moist)		5
1	1B	0.7	2.0				Brown SILT, trace CLAY, trace fine SAND (moist, medium stiff)		
2	2	2.0	4.0	SS/12	5-6-7-6		Brown/Grey mottled SILT, trace CLAY (moist, stiff)		13
3									
4	3	4.0	6.0	SS/13	4-4-2-2		Brown SILT, trace CLAY (moist, medium stiff)		6
5									
6	4	6.0	8.0	SS/16	4-5-6-7		Similar as above (wet, stiff)		11
7									
8	5	8.0	10.0	SS/15	12-14-16-11		Brown SILT, trace CLAY, trace cmf SAND (moist, hard)		30
9									
10									
11							Augers harder beginning @ 11.0'		
12									
13	6A	13.0	14.8	SS/11	14-12-8-11		Brown CLAY, some SILT, trace cmf SAND (wet, very stiff)		20
14	6B	14.8	15.0	SS/11			Black cmf SAND, some SILT (wet)		
15									
16	7	16.0	16.1	SS/1	50@2"		Black ROCK Fragments (Shale) - Auger Refusal @ 16.0'		50+
17							Bottom of Boring @ 16.2'		
18									
19									
20									

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG				Boring No.		B-594	
						Page No.		1 of 2	
						Project No.		28062	
Project Name:		Micron Campus, Clay, New York				Date Started		05/01/24	
Client:		Ramboll				Date Finished		05/02/24	
Location:		See Exploration Location Plan				Surface Elev.		392.9'	
METHODS OF INVESTIGATION						GROUNDWATER OBSERVATIONS			
Driller:		Beau Fletcher		Casing:		3 ¼" ID H.S.A.		Date	
Driller:		Ryan Casatelli		Casing Hammer:				Time	
Inspector:				Other:		NQ-Core		Depth (Ft.)	
Drill Rig:		CME 55		Soil Sampler:		2" OD Split Barrel		Casing At (Ft.)	
Type:		ATV		Hammer Wt:		140 lbs.		05/02/24 While Drilling 9.3 13.5	
Rod Size:		AWJ		Hammer Fall:		30 in.		05/02/24 Before Casing Removed None Noted 26.5	
								05/02/24 After Casing Removed 3.4 * out	
								05/02/24 After Casing Removed caved @ 7.9 out	
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
0	1A	0.0	1.0	SS/17	WH-WH-2-3		Topsoil and Organic Material (moist)		2
1	1B	1.0	2.0				Brown/Grey SILT, little CLAY (moist, soft)		
2	2	2.0	4.0	SS/16	3-4-3-4		Brown SILT, little CLAY (moist, medium stiff)		7
3									
4	3	4.0	6.0	SS/23	4-5-6-9		Brown SILT, trace CLAY (wet, stiff)		11
5									
6	4	6.0	8.0	SS/20	6-8-8-10		Brown SILT, trace CLAY (wet, very stiff)		16
7									
8	5	8.0	10.0	SS/19	5-8-8-8		Similar as above (wet, very stiff)		16
9									
10									
11									
12									
13	6	13.5	15.0	SS/18	2-2-16		Grey cmf SAND, some SILT, trace fine GRAVEL (wet, medium compact)		18
14									
15									
16									
17									
18	7	18.5	19.1	SS/6	26-50@1"		Dark Grey highly weathered ROCK Fragments (Shale) (wet)		50+
19									
20							Split Spoon and Auger Refusal @ 19.5. Set up to core.		
							Continued on Page 2		

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks: *Water added to boring for coring.

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.	B-594
								Page No.	2 of 2
								Project No.	28062
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL			
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
20	R-1	19.5	24.5	C/60	NQ-Core		Continued from Page 1 19.5' - 22.0': Dark Grey SHALE, slightly weathered, laminated to medium bedded, medium hard. 22.0' - 24.5': DOLOSTONE with interbedded Shale layers (1/8" - 2" thick), slightly weathered, thinly laminated to thinly bedded, medium hard to hard. SILT seam (1/4" thick) @ 19.8'. Broken and fractured zones @ 25.7' - 25.8' and 26.5' - 26.7'. Recovery: 60"/60" = 100% RQD: 29"/60" = 48% 27 Pieces, 0" Chips and Fragments 1:00 min/ft, no water loss		48%
21									
22									
23									
24									
25	R-2	24.5	29.5	C/60	NQ-Core		Coring conducted in 4th gear, 1500 rpm, 700 psi down pressure. Dark Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 3.0" thick), slightly weathered, thinly laminated to medium bedded, medium hard to hard. Recovery: 60"/60" = 100% RQD: 43"/60" = 72% 7 Pieces, 5" Chips and Fragments 1:00 min/ft, no water loss Coring conducted in 4th gear, 1500 rpm, 700 psi down pressure. Bottom of Boring @ 29.5'		72%
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									
36									
37									
38									
39									
40									
41									
42									
43									
44									
45									

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 CME Associates, Inc.		6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG				Boring No.	B-595
								Page No.	1 of 2
								Project No.	28062
Project Name:	Micron Campus, Clay, New York							Date Started	05/02/24
Client:	Ramboll							Date Finished	05/03/24
Location:	See Exploration Location Plan							Surface Elev.	390.4'
METHODS OF INVESTIGATION						GROUNDWATER OBSERVATIONS			
Driller:	Beau Fletcher	Casing:	3 ¼" ID H.S.A.			Date	Time	Depth (Ft.)	Casing At (Ft.)
Driller:	Ryan Casatelli	Casing Hammer:							
Inspector:		Other:	NQ-Core			05/02/24	While Drilling	0.0	18.5
Drill Rig:	CME 55	Soil Sampler:	2" OD Split Barrel			05/03/24	Before Casing Removed	None Noted	28.6
Type:	ATV	Hammer Wt:	140 lbs.			05/03/24	After Casing Removed	2.7	out
Rod Size:	AWJ	Hammer Fall:	30 in.			05/03/24	After Casing Removed	caved @ 13.0	out
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1A	0.0	0.5	SS/15	WH-2-3-4		Topsoil and Organic Material (moist) ----- Light Brown SILT, trace CLAY, trace fine SAND (moist, medium stiff)		
1	1B	0.5	2.0						
2	2	2.0	4.0	SS/17	6-6-7-7		Brown SILT, trace fine SAND, trace CLAY (wet, stiff) 13		
3									
4	3	4.0	6.0	SS/16	5-6-6-8		Brown SILT, trace fine SAND, trace CLAY (wet, stiff) 12		
5									
6	4	6.0	8.0	SS/16	6-6-8-8		Similar as above (wet, stiff) 14		
7									
8	5	8.0	10.0	SS/20	5-7-8-7		Brown/Grey, similar as above (wet, very stiff) 15		
9									
10									
11									
12									
13									
14	6	13.5	15.0	SS/12	8-6-7		Grey SILT, trace CLAY (wet, stiff) 13		
15									
16									
17									
18									
18							Augers harder beginning @ 18.0'		
19	7	18.5	18.6	SS/1	50@1"		Grey highly weathered ROCK Fragments (Shale) (wet) 50+		
							Split Spoon and Auger Refusal @ 18.6. Set up to core.		
	R-1	18.6	23.6	C/59	NQ-Core		Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 3.0" 93%		
20							Continued on Page 2		

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks: *Water added to boring for coring.

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.	B-595
								Page No.	2 of 2
								Project No.	28062
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL			
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
20	R-2	23.6	28.6	C/58	NQ-Core		Continued from Page 1 thick), slightly weathered, thinly laminated to medium bedded, medium hard to hard. <i>SILT seam (<1/8" thick) @ 23.0'.</i> Recovery: 59"/60" = 98% RQD: 56"/60" = 93% 21 Pieces, 0" Chips and Fragments 1:00 min/ft, no water loss Coring conducted in 4th gear, 1700 rpm, 700 psi down pressure. Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 5.0" thick), slightly weathered, thinly laminated to medium bedded, medium hard to hard. Broken and fractured zones @ 24.9', 25.1' and 27.0' - 27.2'. Recovery: 58"/60" = 97% RQD: 49"/60" = 82% 12 Pieces, 4" Chips and Fragments 1:00 min/ft, no water loss Coring conducted in 4th gear, 1700 rpm, 700 psi down pressure.		82%
21									
22									
23									
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41									
42									
43									
44									
45									

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-596			
				Page No.		1 of 2			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		04/19/24			
Client: Ramboll				Date Finished		04/19/24			
Location: See Exploration Location Plan				Surface Elev.		391.7'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: Beau Fletcher		Casing: 3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller: Ryan Casatelli		Casing Hammer:							
Inspector: Chris O'Hara		Other:							
Drill Rig: CME 55		Soil Sampler: 2" OD Split Barrel							
Type: ATV		Hammer Wt: 140 lbs.							
Rod Size: AWJ		Hammer Fall: 30 in.		04/19/24	While Drilling	11.3	13.5		
				04/19/24	Before Casing Removed	14.4	22.2		
				04/19/24	After Casing Removed	4.8	out		
				04/19/24	After Casing Removed	caved @ 8.6	out		
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1A	0.0	0.5	SS/15	1-1-4-3		Topsoil and Organic Material (moist)		5
1	1B	0.5	2.0				Brown/Grey mottled SILT, little CLAY, trace ORGANIC MATERIAL (moist, medium stiff)		
2	2	2.0	4.0	SS/19	3-6-5-6		Similar as above (moist, stiff)		11
3									
4	3	4.0	6.0	SS/14	4-4-4-2		Grey/Brown CLAY, some SILT, trace cmf SAND (moist, medium stiff)		8
5									
6	4	6.0	8.0	SS/13	3-5-5-4		Brown SILT, trace CLAY (moist, stiff)		10
7									
8	5	8.0	10.0	SS/12	4-7-6-7		Similar as above (wet, stiff)		13
9									
10									
11									
12									
13									
14	6	13.5	15.0	SS/11	3-4-7		Brown SILT, trace CLAY, trace mf GRAVEL, trace cmf SAND (wet, stiff)		11
15									
16									
17									
18									
19	7	18.5	20.0	SS/10	5-15-17		Dark Grey cmf GRAVEL, some cmf SAND, little SILT (wet, compact)		32
20							Continued on Page 2		

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG			Boring No.	B-596
									Page No.	2 of 2
									Project No.	28062
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%		SPT "N" or RQD %
20	8	22.2	22.2	SS/0	50@0"		Continued from Page 1			
21										
22										
23										
24										
25										
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38										
39										
40										
41										
42										
43										
44										
45										

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-598					
				Page No.		1 of 2					
				Project No.		28062					
Project Name: Micron Campus, Clay, New York				Date Started		05/01/24					
Client: Ramboll				Date Finished		05/01/24					
Location: See Exploration Location Plan				Surface Elev.		383.5'					
METHODS OF INVESTIGATION						GROUNDWATER OBSERVATIONS					
Driller: H. Lyon		Casing: 3 ¼" ID H.S.A.		Date		Time		Depth (Ft.)		Casing At (Ft.)	
Driller: K. Crandall		Casing Hammer:		05/01/24		While Drilling					
Inspector: C. O'Hara		Other:		05/01/24		Before Casing Removed					
Drill Rig: CME 45		Soil Sampler: 2" OD Split Barrel		05/01/24		After Casing Removed				out	
Type: ATV		Hammer Wt: 140 lbs.		05/01/24		After Casing Removed		caved @ 8.0		out	
Rod Size: AWJ		Hammer Fall: 30 in.									
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL					
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%		SPT "N" or RQD %	
0	1A	0.0	0.6	SS/14	WH-WH-3-2		Topsoil and Organic Material (moist)				3
1	1B	0.6	2.0				Brown/Grey SILT, trace CLAY, trace mf SAND (moist, soft)				
2	2	2.0	4.0	SS/15	1-2-1-2		Brown SILT, little CLAY, trace cmf SAND (wet, soft)				3
3											
4	3	4.0	6.0	SS/14	9-11-11-7		Brown SILT, trace CLAY (moist, very stiff)				22
5											
6	4	6.0	8.0	SS/17	5-5-6-5		Brown/Grey/Orange, Similar as above (moist, stiff)				11
7											
8	5	8.0	10.0	SS/12	3-4-5-4		Grey SILT, trace CLAY (wet, stiff)				9
9											
10											
11											
12											
13	6	13.0	15.0	SS/14	2-7-5-5		Similar as above (wet, stiff)				12
14											
15											
16											
17											
18	7	18.0	20.0	SS/17	1-2-2-4		Grey CLAY, some SILT, little mf GRAVEL, trace cmf SAND (wet, medium stiff)				4
19											
20							Continued on Page 2				

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522					SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.	B-598	
Page No.	2 of 2								
Project No.	28062								
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
20	8A 8B 9	20.0	20.6	SS/14	8-15-50@2"		Continued from Page 1 Similar as above (wet, hard)		50+
21		20.6	21.7	SS/0	50@0"		Black highly weathered ROCK Fragments (Shale)		
22		21.1	21.1				Split Spoon and Auger Refusal @ 21.1'		
23		Bottom of Boring @ 21.1'							
24									
25									
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									
36									
37									
38									
39									
40									
41									
42									
43									
44									
45									

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-600			
				Page No.		1 of 1			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		04/24/24			
Client: Ramboll				Date Finished		04/24/24			
Location: See Exploration Location Plan				Surface Elev.		383.4'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: H. Lyon		Casing: 3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller: K. Crandall		Casing Hammer:							
Inspector: C. O'Hara		Other:							
Drill Rig: CME 45		Soil Sampler: 2" OD Split Barrel							
Type: ATV		Hammer Wt: 140 lbs.							
Rod Size: AWJ		Hammer Fall: 30 in.		04/24/24	While Drilling	7.8	8.0		
				04/24/24	Before Casing Removed	7.0	17.4		
				04/24/24	After Casing Removed	4.7	out		
				04/24/24	After Casing Removed	caved @ 7.6	out		
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1A	0.0	0.6	SS/14	1-1-4-4		Topsoil and Organic Material (moist)		5
1	1B	0.6	2.0				Brown/Grey mottled SILT, trace CLAY (moist, medium stiff)		
2	2	2.0	4.0	SS/10	2-2-4-3		Similar as above (moist, medium stiff)		6
3									
4	3	4.0	6.0	SS/13	3-5-5-3		Brown/Red SILT, little cmf SAND, trace fine GRAVEL, trace CLAY (moist, stiff)		10
5									
6	4A	6.0	6.9	SS/15	4-15-23-23		Similar as above (wet, hard)		38
7	4B	6.9	8.0				Grey cmf GRAVEL, some cmf SAND, little SILT (moist, compact)		
8	5	8.0	10.0	SS/8	4-5-13-19		Augers like Cobble @ 7.3'		
9							Augers harder beginning @ 7.8'		
10							Brown/Grey cmf GRAVEL, some cmf SAND, little SILT (wet, medium compact)		18
11									
12									
13	6	13.0	15.0	SS/11	1-2-4-11		Grey cmf SAND and mf GRAVEL, little SILT (moist, loose)		6
14									
15							Augers harder beginning @ 15.5'		
16									
17	7	17.4	17.5	SS/1	50@1"		Black ROCK Fragments (Shale) (wet)		50+
18							Split Spoon and Auger Refusal @ 17.4'		
19							Bottom of Boring @ 17.4'		
20									

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-601					
				Page No.		1 of 1					
				Project No.		28062					
Project Name: Micron Campus, Clay, New York				Date Started		05/01/24					
Client: Ramboll				Date Finished		05/01/24					
Location: See Exploration Location Plan				Surface Elev.		383.1'					
METHODS OF INVESTIGATION						GROUNDWATER OBSERVATIONS					
Driller: H. Lyon		Casing: 3 ¼" ID H.S.A.		Date		Time		Depth (Ft.)		Casing At (Ft.)	
Driller: K. Crandall		Casing Hammer:		05/01/24		While Drilling		0.6		13.0	
Inspector: C. O'Hara		Other:		05/01/24		Before Casing Removed		7.1		15.0	
Drill Rig: CME 45		Soil Sampler: 2" OD Split Barrel		05/01/24		After Casing Removed		4.6		out	
Type: ATV		Hammer Wt: 140 lbs.		05/01/24		After Casing Removed		caved @ 7.3		out	
Rod Size: AWJ		Hammer Fall: 30 in.									
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL					
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%		SPT "N" or RQD %	
0	1A	0.0	0.7	SS/13	1-WH-WH-4		Topsoil and Organic Material (moist)				0
1	1B	0.7	2.0				Brown SILT, little CLAY, trace fine SAND, trace ORGANIC MATERIAL (moist, very soft)				
2	2	2.0	4.0	SS/17	3-8-7-6		Brown SILT, trace CLAY (moist, very stiff)				15
3											
4	3	4.0	6.0	SS/13	5-7-5-7		Brown/Grey, Similar as above (moist, stiff)				12
5											
6	4	6.0	8.0	SS/18	7-6-5-8		Brown SILT, little CLAY (moist, stiff)				11
7											
8	5	8.0	10.0	SS/12	5-8-8-5		Grey SILT, trace CLAY (moist, very stiff)				16
9											
10											
11											
12											
13	6	13.0	15.0	SS/7	WH-2-6-3		Grey SILT and cmf SAND, trace mf GRAVEL, trace CLAY (wet, stiff)				8
14											
15	7	15.9	15.9	SS/0	50@0"		Augers hard beginning @ 15.2' Auger Refusal @ 15.9'				50+
16							Bottom of Boring @ 15.9'				
17											
18											
19											
20											

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-602			
				Page No.		1 of 2			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		05/01/24			
Client: Ramboll				Date Finished		05/01/24			
Location: See Exploration Location Plan				Surface Elev.		384.9'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: Beau Fletcher		Casing: 3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller: Ryan Casatelli		Casing Hammer:							
Inspector:		Other: NQ-Core							
Drill Rig: CME 55		Soil Sampler: 2" OD Split Barrel							
Type: ATV		Hammer Wt: 140 lbs.							
Rod Size: AWJ		Hammer Fall: 30 in.		05/01/24	While Drilling	4.9	18.5		
				05/01/24	Before Casing Removed	None Noted	31.8		
				05/01/24	After Casing Removed	3.2 *	out		
				05/01/24	After Casing Removed	caved @ 17.0	out		
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1A	0.0	1.0	SS/17	1-1-8-9	1.0	Topsoil and Organic Material (moist)		9
1	1B	1.0	2.0				Brown SILT, trace cmf SAND, trace fine GRAVEL (moist, stiff)		
2	2	2.0	4.0	SS/18	10-12-13-16		Brown/Grey SILT, trace fine SAND, trace CLAY (wet, very stiff)		25
3									
4	3	4.0	6.0	SS/19	8-9-6-7		Brown SILT, trace CLAY (wet, very stiff)		15
5									
6	4	6.0	8.0	SS/19	7-8-6-6		Brown SILT, little fine SAND, trace CLAY (wet, stiff)		14
7									
8	5	8.0	10.0	SS/14	3-4-4-4		Grey SILT, trace fine SAND, trace CLAY (wet, stiff)		8
9									
10									
11									
12									
13									
14	6	13.5	15.0	SS/15	2-4-4		Grey SILT, trace CLAY (wet, stiff)		8
15									
16									
17									
18									
19	7	18.5	20.0	SS/15	14-13-10		Grey highly weathered ROCK Fragments (Shale), little SILT, little cmf SAND (wet)		23
20							Continued on Page 2		

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks: *Water added to boring for coring.

		6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522				SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.	B-602
								Page No.	2 of 2
								Project No.	28062
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL			
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
20	R-1	21.8	26.8	C/60	NQ-Core		Continued from Page 1		22%
21						<i>Split Spoon and Auger Refusal @ 21.8'. Set up to core.</i>			
22						Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 3.0" thick), moderately weathered, thinly laminated to thinly bedded, medium hard to hard.			
23						<i>Weathered, broken and fractured zones @ 22.2'-23.0', 23.5'-24.0', 24.3'-24.6' and 26.4'-26.8'.</i>			
24						SILT seam with weathered ROCK Fragments @ 25.8'-26.0'. <i>Weathered zones @ 22.0'-22.2', 23.2', and 26.5'-26.6'.</i>			
25	R-2	26.8	31.8	C/57	NQ-Core		Recovery: 60"/60" = 100% RQD: 13"/60" = 22%		28%
26						22 Pieces, 16" Chips and Fragments <i>1:00 min/ft, no water loss</i>			
27						<i>Coring conducted in 4th gear, 1700 rpm, 700 psi down pressure.</i>			
28						Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 2.0" thick), slightly to moderately weathered, thinly laminated to thinly bedded, medium hard to hard.			
29						<i>Broken and fractured zones @ 27.0'-27.1', 27.5'-27.6', 27.8'-28.3', 28.4'-28.5', 28.8'-29.0', and 29.6'-30.0'.</i>			
30						SILT seam with weathered ROCK Fragments @ 28.6'-28.8'. Recovery: 57"/60" = 95% RQD: 17"/60" = 28%			
31						11 Pieces, 15" Chips and Fragments <i>1:15 min/ft, no water loss</i>			
32						<i>Coring conducted in 4th gear, 1700 rpm, 700 psi down pressure.</i>			
33						Bottom of Boring @ 31.8'			
34									
35									
36									
37									
38									
39									
40									
41									
42									
43									
44									
45									

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-604			
				Page No.		1 of 2			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		04/19/24			
Client: Ramboll				Date Finished		04/19/24			
Location: See Exploration Location Plan				Surface Elev.		391.4'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller:	Beau Fletcher	Casing:	3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)	
Driller:	Ryan Casatelli	Casing Hammer:			04/19/24	While Drilling	None Noted	15.0	
Inspector:	Chris O'Hara	Other:	NQ-Core		04/19/24	Before Casing Removed	None Noted	25.0	
Drill Rig:	CME 55	Soil Sampler:	2" OD Split Barrel		04/19/24	After Casing Removed	4.0 *	out	
Type:	ATV	Hammer Wt:	140 lbs.		04/19/24	After Casing Removed	caved @ 20.6	out	
Rod Size:	AWJ	Hammer Fall:	30 in.						
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
0	1A	0.0	0.5	SS/12	1-1-2-4		Topsoil and Organic Material (moist)		3
1	1B	0.5	2.0				Brown SILT, trace CLAY, trace ORGANIC MATERIAL (moist, soft)		
2	2	2.0	4.0	SS/15	4-6-5-6		Brown SILT, trace CLAY (moist, stiff)		11
3									
4	3	4.0	6.0	SS/24	3-4-3-6		Brown SILT, little CLAY, trace fine SAND (moist, medium stiff)		7
5									
6	4	6.0	8.0	SS/14	4-5-6-8		Brown SILT, trace CLAY (moist, stiff)		11
7									
8	5	8.0	10.0	SS/13	5-6-6-7		Similar as above (wet, stiff)		12
9									
10									
11									
12									
13									
14	6	13.5	15.0	SS/11	4-4-4		Similar as above (wet, stiff)		8
15									
16									
17									
18	7A	18.5	19.6	SS/16	1-2-5		Grey CLAY, little mf GRAVEL, little SILT, trace cmf SAND (wet, medium stiff)		7
19	7B	19.6	20.0				Grey SILT and CLAY, trace cmf SAND (wet, medium stiff)		
20							Continued on Page 2		

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks: *Water added to boring for coring.

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG			Boring No. B-604	
									Page No. 2 of 2	
									Project No. 28062	
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %	
20	8	23.5	24.3	SS/9	5-50@3"		Continued from Page 1		50+	
21										
22										
23										
24							Grey/Black cmf GRAVEL, some CLAY, little SILT, trace cmf SAND (wet, very compact)			
25	R-1	25.0	30.0	C/60	NQ-Core		Split Spoon and Auger Refusal @ 25.0'		98%	
26							Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 3.0" thick), slightly weathered, thinly laminated to thinly bedded, medium hard to hard.			
27							Recovery: 60"/60" = 100%			
28							RQD: 59"/60" = 98%			
29							17 Pieces, 0" Chips and Fragments 1.0 - 1.25 min/ft, no water loss			
30	R-2	30.0	35.0	C/60	NQ-Core		Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 1.0" thick), slightly weathered, thinly laminated to thinly bedded, medium hard to hard. Broken and fractured zone with SILT @ 25.2' - 25.3'. Horizontal fractures with weathering @ 30.7', 30.8', 31.0', 31.3', 34.5' and 34.7'.		63%	
31							Recovery: 60"/60" = 100%			
32							RQD: 38"/60" = 63%			
33							23 Pieces, 1" Chips and Fragments			
34							1.0 - 1.5 min/ft, no water loss			
35							Bottom of Boring @ 35.0'			
36										
37										
38										
39										
40										
41										
42										
43										
44										
45										

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-605			
				Page No.		1 of 2			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		05/03/24			
Client: Ramboll				Date Finished		05/03/24			
Location: See Exploration Location Plan				Surface Elev.		390.2'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: H. Lyon		Casing: 3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller: K. Crandall		Casing Hammer:							
Inspector: C. O'Hara		Other:							
Drill Rig: CME 45		Soil Sampler: 2" OD Split Barrel							
Type: ATV		Hammer Wt: 140 lbs.							
Rod Size: AWJ		Hammer Fall: 30 in.		05/03/24	While Drilling	2.8	8.0		
				05/03/24	Before Casing Removed	9.6	20.2		
				05/03/24	After Casing Removed	7.3	out		
				05/03/24	After Casing Removed	caved @ 4.0	out		
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1A	0.0	0.5	SS/14	WH-WH-1-2				1
1	1B	0.5	2.0						
2	2	2.0	4.0	SS/18	2-4-3-3				7
3									
4	3	4.0	6.0	SS/18	5-7-7-8				14
5									
6	4	6.0	8.0	SS/16	7-8-8-8				16
7									
8	5	8.0	10.0	SS/17	6-8-7-10				15
9									
10									
11									
12									
13	6A	13.0	13.6	SS/11	5-7-8-7				15
14	6B	13.6	15.0						
15									
16									
17									
18	7	18.0	19.2	SS/12	11-28-50@2"				50+
19									
20									

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.	B-605
								Page No.	2 of 2
								Project No.	28062
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL			
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
20	8	20.2	20.2	SS/2	50@2"		Continued from Page 1		
21							Black SHALE Fragments		
22							<i>Split Spoon and Auger Refusal @ 20.2'</i>		
23							Bottom of Boring @ 20.2'		
24									
25									
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									
36									
37									
38									
39									
40									
41									
42									
43									
44									
45									

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-606			
				Page No.		1 of 2			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		05/02/24			
Client: Ramboll				Date Finished		05/02/24			
Location: See Exploration Location Plan				Surface Elev.		393.2'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller:	H. Lyon	Casing:	3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)	
Driller:	K. Crandall	Casing Hammer:			05/02/24	While Drilling	10.8	13.0	
Inspector:	C. O'Hara	Other:			05/02/24	Before Casing Removed	7.2	21.5	
Drill Rig:	CME 45	Soil Sampler:	2" OD Split Barrel		05/02/24	After Casing Removed	3.8	out	
Type:	ATV	Hammer Wt:	140 lbs.		05/02/24	After Casing Removed	caved @ 5.1	out	
Rod Size:	AWJ	Hammer Fall:	30 in.						
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1A	0.0	0.4	SS/12	1-WH-3-4		Topsoil and Organic Material (moist)		3
1	1B	0.4	2.0				Brown/Grey mottled SILT, little CLAY (moist, soft)		
2	2	2.0	4.0	SS/14	3-3-3-2		Brown/Grey mottled SILT, trace CLAY (wet, medium stiff)		6
3									
4	3	4.0	6.0	SS/13	3-3-4-8		Brown SILT, trace CLAY (wet, medium stiff)		7
5									
6	4	6.0	8.0	SS/20	8-9-9-11		Similar as above (wet, very stiff)		18
7									
8	5	8.0	10.0	SS/24	10-12-16-16		Similar as above (wet, very stiff)		28
9									
10									
11							Augers easier beginning @ 11.0'		
12							Augers gravelly beginning @ 11.5'		
13	6	13.0	15.0	SS/14	1-3-4-4		Similar as above (wet, medium stiff)		7
14									
15									
16									
17									
18	7	18.0	20.0	SS/11	11-7-12-16		Grey cmf GRAVEL and cmf SAND, trace SILT (wet, medium compact)		19
19									
20							Continued on Page 2		

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG			Boring No.	B-606			
									Page No.	2 of 2			
									Project No.	28062			
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL							
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%		SPT "N" or RQD %			
20	8	21.5	21.5	SS/0	50@0"	Continued from Page 1 Augers harder beginning @ 20.5'	Split Spoon and Auger Refusal @ 21.5'						
21													
22													
23													
24													
25													
26													
27													
28													
29													
30													
31													
32													
33													
34													
35													
36													
37													
38													
39													
40													
41													
42													
43													
44													
45													

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-607			
				Page No.		1 of 2			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		04/18/24			
Client: Ramboll				Date Finished		04/18/24			
Location: See Exploration Location Plan				Surface Elev.		393.9'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: Gary Richards		Casing: 3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller: Chris O'Hara		Casing Hammer:							
Inspector:		Other:							
Drill Rig: CME 55		Soil Sampler: 2" OD Split Barrel							
Type: ATV		Hammer Wt: 140 lbs.							
Rod Size: AWJ		Hammer Fall: 30 in.		04/18/24	While Drilling	None Noted	15.0		
				04/18/24	Before Casing Removed	None Noted	22.0		
				04/18/24	After Casing Removed	None Noted	out		
				04/18/24	After Casing Removed	caved @ 5.0	out		
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1A	0.0	0.5	SS/16	1-1-2-3		Topsoil and Organic Material (moist)		3
1	1B	0.5	2.0				Brown SILT, trace CLAY, trace ORGANIC MATERIAL (moist, soft)		
2	2	2.0	4.0	SS/20	4-4-4-4		Brown SILT, little CLAY (moist, stiff)		8
3									
4	3	4.0	6.0	SS/21	4-5-7-6		Brown SILT, trace CLAY (moist, stiff)		12
5									
6	4	6.0	8.0	SS/11	6-5-12-11		Brown SILT, trace CLAY (moist, very stiff)		17
7									
8	5	8.0	10.0	SS/23	9-5-5-5		Similar as above (moist, stiff)		10
9									
10									
11									
12									
13									
14	6	13.5	15.0	SS/17	3-3-4		Similar as above (wet, medium stiff)		7
15									
16									
17									
18									
19	7A	18.5	18.7	SS/13	7-7-13		Brown SILT, some CLAY (wet, very stiff)		20
	7B	18.7	20.0				Grey/Black cmf SAND and cmf GRAVEL, trace SILT (wet)		
20							Continued on Page 2		

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG			Boring No.	B-607
									Page No.	2 of 2
									Project No.	28062
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%		SPT "N" or RQD %
20	8	22.0	22.0	SS/0	50@0"		Continued from Page 1			
21										
22							Black ROCK Fragments (Shale) in tip of Split Spoon			50+
23							Bottom of Boring @ 22.0'			
24										
25										
26										
27										
28										
29										
30										
31										
32										
33										
34										
35										
36										
37										
38										
39										
40										
41										
42										
43										
44										
45										

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-608			
				Page No.		1 of 2			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		05/03/24			
Client: Ramboll				Date Finished		05/03/24			
Location: See Exploration Location Plan				Surface Elev.		387.7'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: H. Lyon		Casing: 3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller: K. Crandall		Casing Hammer:							
Inspector: C. O'Hara		Other:							
Drill Rig: CME 45		Soil Sampler: 2" OD Split Barrel							
Type: ATV		Hammer Wt: 140 lbs.							
Rod Size: AWJ		Hammer Fall: 30 in.		05/03/24	While Drilling	3.5	8.0		
				05/03/24	Before Casing Removed	5.3	22.4		
				05/03/24	After Casing Removed	8.0	out		
				05/03/24	After Casing Removed	caved @ 12.0	out		
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1A	0.0	0.5	SS/12	WR-1-1-3		Topsoil and Organic Material (moist)		2
1	1B	0.5	2.0				Brown SILT, trace fine SAND, trace CLAY (moist, soft)		
2	2	2.0	4.0	SS/14	4-3-4-5		Brown/Grey mottled SILT, trace CLAY (moist, medium stiff)		7
3									
4	3	4.0	6.0	SS/17	3-7-7-8		Similar as above (moist, stiff)		14
5									
6	4	6.0	8.0	SS/24	6-6-8-11		Brown SILT, trace CLAY (moist, stiff)		14
7									
8	5	8.0	10.0	SS/19	11-9-6-7		Similar as above (moist, very stiff)		15
9									
10									
11									
12									
13	6	13.0	15.0	SS/15	1-3-3-4		Grey, Similar as above (wet, medium stiff)		6
14									
15									
16									
17									
18	7	18.0	20.0	SS/11	2-2-8-8		Grey cmf SAND and mf GRAVEL, little SILT (wet, medium compact)		10
19									
20							Continued on Page 2		

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG			Boring No.		B-608	
									Page No.		2 of 2	
									Project No.		28062	
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL						
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) FromTo		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%		SPT "N" or RQD %		
20	8	22.4	22.4	SS/0	50@0"		Continued from Page 1 Augers gravelly beginning @ 20.2'					
21						Augers possibly on top of Rock beginning @ 21.9'						
22						Split Spoon and Auger Refusal @ 22.4'				50+		
23						Bottom of Boring @ 22.4'						
24												
25												
26												
27												
28												
29												
30												
31												
32												
33												
34												
35												
36												
37												
38												
39												
40												
41												
42												
43												
44												
45												

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

		6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522				SUBSURFACE EXPLORATION TEST BORING LOG				Boring No.		B-609			
										Page No.		1 of 1			
										Project No.		28062			
Project Name:						Micron Campus, Clay, New York						Date Started		05/01/24	
Client:						Ramboll						Date Finished		05/01/24	
Location:						See Exploration Location Plan						Surface Elev.		391.7'	
METHODS OF INVESTIGATION								GROUNDWATER OBSERVATIONS							
Driller:		H. Lyon		Casing:		3 ¼" ID H.S.A.		Date		Time		Depth (Ft.)		Casing At (Ft.)	
Driller:		K. Crandall		Casing Hammer:				05/01/24		While Drilling		7.8		10.0	
Inspector:		C. O'Hara		Other:				05/01/24		Before Casing Removed		9.5		17.6	
Drill Rig:		CME 45		Soil Sampler:		2" OD Split Barrel		05/01/24		After Casing Removed		6.4		out	
Type:		ATV		Hammer Wt:		140 lbs.		05/01/24		After Casing Removed		caved @ 11.4		out	
Rod Size:		AWJ		Hammer Fall:		30 in.		05/01/24		After Casing Removed		caved @ 11.4		out	
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL									
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine		and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%				SPT "N" or RQD %		
		From	To												
0	1A	0.0	0.5	SS/15	1-1-2-5		Topsoil and Organic Material (moist)						3		
1	1B	0.5	2.0				Brown SILT, trace CLAY, trace fine SAND, trace ORGANIC MATERIAL (moist, soft)								
2	2	2.0	4.0	SS/13	7-6-7-6		Brown SILT, trace CLAY, trace fine SAND (moist, stiff)						13		
3															
4	3	4.0	6.0	SS/11	4-4-5-5		Brown SILT, trace CLAY (moist, stiff)						9		
5															
6	4	6.0	8.0	SS/13	4-2-2-7		Brown SILT, trace cmf SAND, trace fine GRAVEL (wet, medium stiff)						4		
7															
8	5	8.0	10.0	SS/14	2-2-1-1		Brown cmf SAND, some mf GRAVEL, little SILT, trace CLAY (wet, very loose)						3		
9															
10	6	10.0	12.0	SS/14	15-28-38-42		Brown cmf GRAVEL and cmf SAND, trace SILT (moist, very compact)						66		
11															
12															
13															
14	7	14.0	15.2	SS/11	12-15-50@2"		Brown cmf SAND, some mf GRAVEL, little SILT (moist, very compact)						50+		
15															
16							Augers harder beginning @ 15.7'								
17															
18	8	17.6	18.5	SS/4	20-50@3"		Black ROCK Fragments (Shale)						50+		
19							Bottom of Boring @ 18.5'								
20															

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-610			
				Page No.		1 of 1			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		05/01/24			
Client: Ramboll				Date Finished		05/01/24			
Location: See Exploration Location Plan				Surface Elev.		382.7'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: H. Lyon		Casing: 3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller: K. Crandall		Casing Hammer:							
Inspector: C. O'Hara		Other:							
Drill Rig: CME 45		Soil Sampler: 2" OD Split Barrel							
Type: ATV		Hammer Wt: 140 lbs.							
Rod Size: AWJ		Hammer Fall: 30 in.		05/01/24	While Drilling	8.8	13.0		
				05/01/24	Before Casing Removed	10.0	18.5		
				05/01/24	After Casing Removed	4.3	out		
				05/01/24	After Casing Removed	caved @ 6.7	out		
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1A	0.0	0.4	SS/16	1-WH-4-5		Topsoil and Organic Material (moist)		4
1	1B	0.4	2.0				Brown SILT, trace CLAY, trace fine SAND (moist, medium stiff)		
2	2	2.0	4.0	SS/12	4-6-7-7		Brown SILT, trace CLAY, trace mf SAND (moist, stiff)		13
3									
4	3	4.0	5.9	SS/13	3-4-3-50@5"		Brown SILT, trace cmf GRAVEL, trace cmf GRAVEL, trace CLAY (wet, medium stiff)		7
5									
6	4	6.0	8.0	SS/11	4-8-8-8		Brown SILT, little fine GRAVEL, trace cmf SAND (wet, very stiff)		16
7									
8	5	8.0	10.0	SS/14	8-6-6-7		Brown SILT, some cmf SAND, trace fine GRAVEL (wet, stiff)		12
9							Augers like Cobble beginning @ 9.0'		
10									
11									
12									
13	6	13.0	15.0	SS/12	WR-5-6-6		Grey cmf GRAVEL, some cmf SAND, little SILT (wet, medium compact)		11
14									
15									
16									
17							Augers like Cobble beginning @ 17.2'		
18	7	18.0	18.2	SS/4	41-50@2"		Black highly weathered ROCK Fragments (Shale), little SILT (moist)		50+
19	8	18.5	18.5		50@0"		Split Spoon and Auger Refusal @ 18.5'		50+
20							Bottom of Boring @ 18.5'		

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-611			
				Page No.		1 of 1			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		04/30/24			
Client: Ramboll				Date Finished		04/30/24			
Location: See Exploration Location Plan				Surface Elev.		380.6'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: Beau Fletcher		Casing: 3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller: Ryan Casatelli		Casing Hammer:							
Inspector:		Other:							
Drill Rig: CME 55		Soil Sampler: 2" OD Split Barrel							
Type: ATV		Hammer Wt: 140 lbs.							
Rod Size: AWJ		Hammer Fall: 30 in.		04/30/24	While Drilling	6.7	8.0		
				04/30/24	Before Casing Removed	6.7	18.8		
				04/30/24	After Casing Removed	3.5	out		
				04/30/24	After Casing Removed	caved @ 6.8	out		
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1A	0.0	1.0	SS/13	WH-1-3-4		Topsoil and Organic Material (moist, medium stiff)		4
1	1B	1.0	2.0				Brown/Grey SILT, little CLAY, trace ORGANIC MATERIAL (wet, medium stiff)		
2	2	2.0	4.0	SS/16	6-5-5-4		Brown/Grey mottled SILT, trace CLAY (moist, stiff)		10
3									
4	3	4.0	6.0	SS/22	3-4-5-5		Brown/Grey SILT, little cmf SAND, trace CLAY (wet, stiff)		9
5									
6	4	6.0	8.0	SS/24	4-4-5-5		Brown SILT, trace CLAY (wet, stiff)		9
7									
8	5	8.0	10.0	SS/18	3-5-6-7		Brown SILT, trace CLAY (wet, stiff)		11
9									
10									
11									
12									
13	6	13.5	15.0	SS/6	8-16-8		Grey highly weathered ROCK Fragments (Shale) and SILT, trace cmf SAND (wet)		24
14									
15									
16									
17									
18	7	18.5	18.8	SS/3	50@3"		Grey weathered ROCK Fragments (Shale) and ROCK Flour		50+
19							Split Spoon and Auger Refusal @ 18.8'		
20							Bottom of Boring @ 18.8'		

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-612			
				Page No.		1 of 2			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		04/18/24			
Client: Ramboll				Date Finished		04/19/24			
Location: See Exploration Location Plan				Surface Elev.		391.6'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: Al Linstruth		Casing: 3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller: John Winks		Casing Hammer:							
Inspector:		Other: NQ-Core							
Drill Rig: CME 550X		Soil Sampler: 2" OD Split Barrel							
Type: ATV		Hammer Wt: 140 lbs.							
Rod Size: AWJ		Hammer Fall: 30 in.		04/18/24	While Drilling	13.0	13.5		
				04/19/24	Before Casing Removed	13.5 *	13.6		
				04/19/24	After Casing Removed	6.3 *	out		
				04/19/24	After Casing Removed	caved @ 15.5	out		
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1	0.0	2.0	SS/11	1-2-2-3			Brown SILT, trace cmf SAND, trace ORGANIC MATERIAL (moist, medium stiff)	4
1									
2	2	2.0	4.0	SS/16	3-3-4-5			Brown/Grey mottled SILT, trace CLAY (wet, medium stiff)	7
3									
4	3	4.0	6.0	SS/19	3-3-4-4			Brown SILT, trace fine SAND (wet, medium stiff)	7
5									
6	4	6.0	8.0	SS/17	3-3-3-3			Similar as above (wet, medium stiff)	6
7									
8	5	8.0	10.0	SS/15	1-2-3-3			Brown SILT, some cmf GRAVEL, little cmf SAND (wet, medium stiff)	5
9									
10									
11									
12									
13	6	13.5	15.0	SS/10	13-21-27			Brown/Grey cmf SAND, some cmf GRAVEL, little SILT (moist, compact)	48
14									
15									
16									
17									
18	7A	18.5	19.0		40-50@4"			Similar as above (moist, very compact)	50+
19	7B	19.0	19.4					Grey cmf GRAVEL and cmf SAND, trace SILT (moist, very compact)	
20								Continued on Page 2	

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks: *Water added to boring for coring.

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.	B-612
								Page No.	2 of 2
								Project No.	28062
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL			
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
20							Continued from Page 1		
21									
22									
23									
24	8	23.5	23.6	SS/1	50@1"		Grey ROCK Fragments (Dolostone) (wet) <i>Auger Refusal @ 23.6' - Set up to Core</i>		50+
25	R-1	23.6	28.6	C/54	NQ-Core		Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 1" thick), moderately weathered, medium hard to hard, thinly laminated to thinly bedded. <i>Broken and fractured zone @ 24.1' - 27.4'.</i> Recovery: 54"/60" = 90% RQD: 7"/60" = 12%		12%
26							5 Pieces, 31" Chips and Fragments		
27							55 sec/ft, no water loss		
28							Coring conducted in 5th gear, 2100 rpm, 700 psi down pressure.		
29	R-2	28.6	33.6	C/60	NQ-Core		Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 2" thick), slightly to moderately weathered, medium hard to hard. <i>Weathered fracture zones (1/4" - 2" thick) @ 30.4' - 30.5', 31.2' - 31.3', 31.4', 31.9', 32.3' - 32.4', and 33.2' - 33.3'.</i> Recovery: 60"/60" = 100% RQD: 33"/60" = 55%		55%
30							28 Pieces, 1" Chips and Fragments		
31							50 sec/ft, no water loss		
32							Coring conducted in 5th gear, 2100 rpm, 700 psi down pressure.		
33									
34							Bottom of Boring @ 33.6'		
35									
36									
37									
38									
39									
40									
41									
42									
43									
44									
45									

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-613			
				Page No.		1 of 2			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		04/19/24			
Client: Ramboll				Date Finished		04/19/24			
Location: See Exploration Location Plan				Surface Elev.		390.0'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: Al Linstruth		Casing: 3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller: John Winks		Casing Hammer:							
Inspector:		Other:							
Drill Rig: CME 550X		Soil Sampler: 2" OD Split Barrel							
Type: ATV		Hammer Wt: 140 lbs.							
Rod Size: AWJ		Hammer Fall: 30 in.		04/19/24	While Drilling	12.5	18.5		
				04/19/24	Before Casing Removed	6.5	21.6		
				04/19/24	After Casing Removed	4.5	out		
				04/19/24	After Casing Removed	caved @ 12.5	out		
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1	0.0	2.0	SS/17	WH-1-3-5		Brown/Grey mottled SILT, trace CLAY, trace ORGANIC MATERIAL (moist, medium stiff)		4
1									
2	2	2.0	4.0	SS/15	3-3-5-3		Brown/Grey mottled SILT, trace CLAY (moist, stiff)		8
3									
4	3	4.0	6.0	SS/17	2-2-3-4		Brown/Grey SILT, trace CLAY (wet, medium stiff)		5
5									
6	4	6.0	8.0	SS/19	3-3-3-5		Brown SILT, trace CLAY (wet, medium stiff)		6
7									
8	5	8.0	10.0	SS/16	3-5-7-8		Similar as above (wet, stiff)		12
9									
10									
11									
12									
13									
14	6	13.5	15.0	SS/11	3-3-2		Similar as above (wet, medium stiff)		5
15									
16									
17	7	16.5	16.8	SS/3	50@4"		Grey mf GRAVEL, little SILT, little cmf SAND (wet, very compact) <i>Augers like Boulder from 16.5' to 18.0'</i>		50+
18									
19	8A	18.5	19.5	SS/7	3-6-6		Brown/Grey CLAY, some SILT, trace cmf SAND (wet, stiff)		12
20	8B	19.5	20.0				Grey mf GRAVEL, trace cmf SAND, trace SILT (wet, medium compact)		

Continued on Page 2

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG			Boring No.	B-613
							Page No.	2 of 2		
							Project No.	28062		
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %	
20	9	21.0	21.4	SS/3	50@3"		Continued from Page 1		50+	
21						----- Grey ROCK Fragments (Dolostone) (wet) <i>Auger Refusal @ 21.6'</i>				
22						Bottom of Boring @ 21.6'				
23										
24										
25										
26										
27										
28										
29										
30										
31										
32										
33										
34										
35										
36										
37										
38										
39										
40										
41										
42										
43										
44										
45										

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

		6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522				SUBSURFACE EXPLORATION TEST BORING LOG				Boring No.		B-614	
		Page No.		1 of 1									
		Project No.		28062									
Project Name:		Micron Campus, Clay, New York								Date Started		05/02/24	
Client:		Ramboll								Date Finished		05/02/24	
Location:		See Exploration Location Plan								Surface Elev.		386.2'	
METHODS OF INVESTIGATION						GROUNDWATER OBSERVATIONS							
Driller:		H. Lyon		Casing:		3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller:		K. Crandall		Casing Hammer:									
Inspector:		C. O'Hara		Other:				05/02/24	While Drilling	1.5	8.0		
Drill Rig:		CME 45		Soil Sampler:		2" OD Split Barrel		05/02/24	Before Casing Removed	3.0	19.7		
Type:		ATV		Hammer Wt:		140 lbs.		05/02/24	After Casing Removed	2.5	out		
Rod Size:		AWJ		Hammer Fall:		30 in.		05/02/24	After Casing Removed	caved @ 6.0	out		
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL							
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine		and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%		SPT "N" or RQD %		
		From	To										
0	1A	0.0	0.5	SS/14	WR-1-1-3		Topsoil and Organic Material (moist)					2	
1	1B	0.5	2.0				Brown SILT, trace CLAY, trace fine SAND (moist, soft)						
2	2	2.0	4.0	SS/15	3-4-4-4		Brown SILT, trace CLAY (moist, stiff)					8	
3													
4	3	4.0	6.0	SS/16	1-1-WH-4		Brown/Grey CLAY and SILT, trace cmf SAND (moist, very soft)					1	
5													
6	4	6.0	8.0	SS/13	7-8-8-8		Brown/Grey SILT, trace CLAY (wet, very stiff)					16	
7													
8	5	8.0	10.0	SS/12	8-10-11-12		Similar as above (wet, very stiff)					21	
9													
10													
11													
12													
13	6	13.0	15.0	SS/14	1-4-5-6		Grey, Similar as above (wet, stiff)					9	
14													
15													
16													
17							Augers gravelly beginning @ 17.0'						
18	7	18.0	19.6	SS/7	5-6-8-50@1"		Dark Grey/Black highly weathered ROCK Fragments (Shale) and SILT, little cmf SAND (wet)					14	
19													
20	8	19.7	19.8	SS/1	50@1"		Black SHALE Fragments in tip of spoon. Auger Refusal @ 19.8'					50+	
							Bottom of Boring @ 19.8'						

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-615									
				Page No.		1 of 2									
				Project No.		28062									
Project Name:		Micron Campus, Clay, New York				Date Started		04/18/24							
Client:		Ramboll				Date Finished		04/18/24							
Location:		See Exploration Location Plan				Surface Elev.		391.8'							
METHODS OF INVESTIGATION						GROUNDWATER OBSERVATIONS									
Driller:		Beau Fletcher		Casing:		3 ¼" ID H.S.A.		Date		Time		Depth (Ft.)		Casing At (Ft.)	
Driller:		Ryan Casatelli		Casing Hammer:				04/18/24		While Drilling		None Noted		15.0	
Inspector:		Chris O'Hara		Other:				04/18/24		Before Casing Removed		8.8		26.4	
Drill Rig:		CME 55		Soil Sampler:		2" OD Split Barrel		04/18/24		After Casing Removed		None Noted		out	
Type:		ATV		Hammer Wt:		140 lbs.		04/18/24		After Casing Removed		caved @ 6.3		out	
Rod Size:		AWJ		Hammer Fall:		30 in.									
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL									
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%		SPT "N" or RQD %					
0	1A	0.0	0.5	SS/13	WH-1-2-3		Topsoil and Organic Material (moist, medium stiff)		3						
1	1B	0.5	2.0				Brown/Grey mottled SILT, little CLAY, trace ORGANIC MATERIAL (moist, soft)								
2	2	2.0	4.0	SS/18	4-4-4-4		Brown/Grey mottled SILT, trace CLAY (wet, stiff)		8						
3															
4	3	4.0	6.0	SS/17	3-3-5-7		Brown SILT, trace CLAY (moist, stiff)		8						
5															
6	4	6.0	8.0	SS/16	4-6-7-8		Similar as above (moist, stiff)		13						
7															
8	5	8.0	10.0	SS/24	6-7-6-7		Similar as above (wet, stiff)		13						
9															
10															
11															
12															
13															
14	6	13.5	15.0	SS/14	3-6-7		Grey/Brown, Similar as above (wet, stiff)		13						
15															
16															
17															
18															
19	7	18.5	20.0	SS/13	2-3-6		Grey, Similar as above (wet, stiff)		9						
20							Continued on Page 2								

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG			Boring No.	B-615
									Page No.	2 of 2
									Project No.	28062
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) FromTo		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %	
20	8	23.5	25.0	SS/12	6-8-13		Continued from Page 1		21	
21										
22										
23										
24						Grey cmf GRAVEL and cmf SAND, trace SILT (wet, medium compact)				
25										
26						Auger Refusal @ 26.4'				
27						Bottom of Boring @ 26.4'				
28										
29										
30										
31										
32										
33										
34										
35										
36										
37										
38										
39										
40										
41										
42										
43										
44										
45										

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-616			
				Page No.		1 of 2			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		04/18/24			
Client: Ramboll				Date Finished		04/18/24			
Location: See Exploration Location Plan				Surface Elev.		392.5'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller:	Beau Fletcher	Casing:	3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)	
Driller:	Ryan Casatelli	Casing Hammer:			04/18/24	While Drilling	None Noted	15.0	
Inspector:	Chris O'Hara	Other:			04/18/24	Before Casing Removed	7.0 *	24.2	
Drill Rig:	CME 55	Soil Sampler:	2" OD Split Barrel		04/18/24	After Casing Removed	5.0 *	out	
Type:	ATV	Hammer Wt:	140 lbs.		04/18/24	After Casing Removed	caved @ 9.7	out	
Rod Size:	AWJ	Hammer Fall:	30 in.						
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1A	0.0	0.5	SS/13	1-1-3-4		Topsoil and Organic Material (moist)		4
1	1B	0.5	2.0				Brown/Grey mottled SILT, little CLAY, trace cmf SAND, trace ORGANIC MATERIAL (moist, medium stiff)		
2	2	2.0	4.0	SS/12	4-5-5-5		Brown/Grey mottled SILT, trace CLAY (moist, stiff)		10
3									
4	3	4.0	6.0	SS/17	4-4-6-8		Brown SILT, trace CLAY, trace fine SAND (moist, stiff)		10
5									
6	4	6.0	8.0	SS/15	6-8-7-10		Brown SILT, trace CLAY (wet, very stiff)		15
7									
8	5	8.0	10.0	SS/20	6-8-5-5		Brown SILT, little cmf GRAVEL, trace CLAY, trace cmf SAND (wet, stiff)		13
9									
10									
11									
12									
13									
14	6	13.5	15.0	SS/12	3-4-8		Brown/Grey SILT, trace CLAY (wet, stiff)		12
15									
16									
17									
18									
19	7	18.5	20.0	SS/7	WH-1-2		Grey cmf SAND, little mf GRAVEL, trace SILT (wet, very loose)		3
20							Continued on Page 2		

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks: *Water added to boring for coring.

 CME Associates, Inc. 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-616
Page No.		2 of 2								
Project No.		28062								
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %	
20	8	20.0	22.0	SS/11	7-8-21-22		Continued from Page 1 Grey cmf SAND and mf GRAVEL, trace SILT (wet, medium compact)		29	
21										
22										
23										
24	9 R-1	23.5 24.2	24.2 29.2	SS/8 C/60	19-50@2" NQ-Core		Grey cmf SAND and mf GRAVEL, little SILT (wet, very compact)		50+ 97%	
25										
26										
27										
28	R-2	29.2	34.2	C/60	NQ-Core		Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 2.0" thick), slightly weathered, thinly laminated to thinly bedded, medium hard to hard. SILT seam (1/8" thick) @ 24.4'. Recovery: 60"/60" = 100% RQD: 58"/60" = 97% 21 Pieces, 0" Chips and Fragments 0.5 - 1.50 min/ft, no water loss Coring conducted in 4th gear, 1500 rpm, 600 psi down pressure.		97%	
29										
30										
31										
32							Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 2.0" thick), slightly weathered, thinly laminated to thinly bedded, medium hard to hard. Weathered zones (1/2" - 3/4" thick) @ 31.3' and 31.8'. Recovery: 60"/60" = 100% RQD: 58"/60" = 97% 22 Pieces, 1" Chips and Fragments 1.5 - 1.75 min/ft, no water loss Coring conducted in 4th gear, 1500 rpm, 600 psi down pressure.			
33										
34										
35										
36							Bottom of Boring @ 34.2'			
37										
38										
39										
40										
41										
42										
43										
44										
45										

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-617			
				Page No.		1 of 2			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		04/17/24			
Client: Ramboll				Date Finished		04/17/24			
Location: See Exploration Location Plan				Surface Elev.		393.0'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: Gary Richards		Casing: 3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller: Chris O'Hara		Casing Hammer:							
Inspector:		Other:							
Drill Rig: CME 55		Soil Sampler: 2" OD Split Barrel							
Type: ATV		Hammer Wt: 140 lbs.							
Rod Size: AWJ		Hammer Fall: 30 in.		04/17/24	While Drilling	None Noted	15.0		
				04/17/24	Before Casing Removed	12.6	24.3		
				04/17/24	After Casing Removed	4.3	out		
				04/17/24	After Casing Removed	caved @ 7.7	out		
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1A	0.0	0.5	SS/14	WH-1-3-4		Topsoil and Organic Material (moist)		4
1	1B	0.5	2.0				Brown/Grey mottled SILT, little CLAY, trace ORGANIC MATERIAL (moist, medium stiff)		
2	2	2.0	4.0	SS/15	4-5-7-8		Brown/Grey SILT, little CLAY (wet, stiff)		12
3									
4	3	4.0	6.0	SS/13	5-5-6-6		Brown SILT, trace CLAY (wet, stiff)		11
5									
6	4	6.0	8.0	SS/12	7-7-7-7		Brown SILT, trace CLAY (wet, stiff)		14
7									
8	5	8.0	10.0	SS/11	4-5-7-8		Brown SILT, trace CLAY, trace cmf SAND (wet, stiff)		12
9									
10									
11									
12									
13									
14	6	14.0	16.0	SS/12	WH-1-WH-2		Brown/Grey SILT, little CLAY, trace cmf SAND (wet, very soft)		1
15									
16	7	16.0	18.0	SS/10	1-2-2-2		Similar as above (wet, medium stiff)		4
17									
18	8	18.0	20.0	SS/15	2-3-3-2		Grey SILT, trace CLAY (wet, medium stiff)		6
19									
20							Continued on Page 2		

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.	B-617
								Page No.	2 of 2
								Project No.	28062
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL			
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
20	9	20.0	22.0	SS/18	WH-1-2-4		Continued from Page 1 Grey CLAY, little SILT, trace cmf SAND (wet, very soft)		1
21									
22	10	22.0	23.9	SS/13	5-10-16-50@5"		Dark Grey/Black ROCK Fragments (Shale) and CLAY (wet)		26
23									
24	11	24.3	24.3	SS/0	50@0"		Augered harder beginning @ 24.3' No Recovery - Auger Refusal @ 24.3'		50+
25							Bottom of Boring @ 24.3'		
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									
36									
37									
38									
39									
40									
41									
42									
43									
44									
45									

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-618					
				Page No.		1 of 2					
				Project No.		28062					
Project Name: Micron Campus, Clay, New York				Date Started		04/19/24					
Client: Ramboll				Date Finished		04/19/24					
Location: See Exploration Location Plan				Surface Elev.		392.7'					
METHODS OF INVESTIGATION						GROUNDWATER OBSERVATIONS					
Driller: Beau Fletcher		Casing: 3 ¼" ID H.S.A.		Date		Time		Depth (Ft.)		Casing At (Ft.)	
Driller: Ryan Casatelli		Casing Hammer:		04/19/24		While Drilling		15.0		18.5	
Inspector: Chris O'Hara		Other:		04/19/24		Before Casing Removed		14.3		24.3	
Drill Rig: CME 55		Soil Sampler: 2" OD Split Barrel		04/19/24		After Casing Removed		6.0		out	
Type: ATV		Hammer Wt: 140 lbs.		04/19/24		After Casing Removed		caved @ 6.1		out	
Rod Size: AWJ		Hammer Fall: 30 in.									
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL					
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%		SPT "N" or RQD %	
0	1A	0.0	0.4	SS/14	WH-2-2-3		Topsoil and Organic Material (moist)				4
1	1B	0.4	2.0				Brown/Grey mottled CLAY, little SILT, trace ORGANIC MATERIAL (moist, medium stiff)				
2	2	2.0	4.0	SS/15	1-2-2-2		Brown/Grey mottled SILT and CLAY (moist, medium stiff)				4
3											
4	3	4.0	6.0	SS/13	3-4-5-6		Similar as above (moist, stiff)				9
5											
6	4	6.0	8.0	SS/14	4-7-6-7		Brown SILT, trace CLAY (moist, stiff)				13
7											
8	5	8.0	10.0	SS/7	6-10-10-8		Similar as above (moist, very stiff)				20
9											
10											
11											
12											
13											
14	6	13.5	15.0	SS/14	3-2-2		Grey/Brown SILT, little CLAY (wet, medium stiff)				4
15	7A	15.0	16.0	SS/15	2-2-1-1		Grey SILT, some CLAY (wet, soft)				3
16	7B	16.0	17.0				Grey CLAY, little SILT, little fine GRAVEL, trace cmf SAND (wet, soft)				
17	8	17.0	18.5		4-5-4		Grey SILT, some CLAY, trace fine GRAVEL, trace cmf SAND (wet, stiff)				9
18											
19	9	18.5	20.0	SS/11	3-5-4		Grey cmf SAND, some cmf GRAVEL, some SILT (wet, loose)				9
20							Continued on Page 2				

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG			Boring No.	B-618
									Page No.	2 of 2
									Project No.	28062
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%		SPT "N" or RQD %
20	10	23.5	23.9	SS/5	50@5"		Continued from Page 1			50+
21										
22										
23										
24						Grey/Black highly weathered ROCK Fragments (Dolostone), little SILT (wet) <i>Split Spoon and Auger Refusal @ 24.3'</i>				
25						Bottom of Boring @ 24.3'				
26										
27										
28										
29										
30										
31										
32										
33										
34										
35										
36										
37										
38										
39										
40										
41										
42										
43										
44										
45										

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-619			
				Page No.		1 of 2			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		04/17/24			
Client: Ramboll				Date Finished		04/17/24			
Location: See Exploration Location Plan				Surface Elev.		392.3'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: Gary Richards		Casing: 3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller: Chris O'Hara		Casing Hammer:							
Inspector:		Other:							
Drill Rig: CME 55		Soil Sampler: 2" OD Split Barrel							
Type: ATV		Hammer Wt: 140 lbs.							
Rod Size: AWJ		Hammer Fall: 30 in.		04/17/24	While Drilling	None Noted	15.0		
				04/17/24	Before Casing Removed	3.0	24.0		
				04/17/24	After Casing Removed	4.7	out		
				04/17/24	After Casing Removed	caved @ 12.1	out		
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1A	0.0	0.3	SS/13	WH-1-3-4		Topsoil and Organic Material (moist)		4
1	1B	0.3	2.0				Brown/Grey mottled SILT, some CLAY, trace ORGANIC MATERIAL (moist, medium stiff)		
2	2	2.0	4.0	SS/11	5-4-3-5		Brown/Grey mottled SILT, little CLAY (moist, medium stiff)		7
3									
4	3	4.0	6.0	SS/12	3-4-5-7		Brown SILT, trace CLAY (wet, stiff)		9
5									
6	4	6.0	8.0	SS/15	5-7-7-7		Brown SILT, trace CLAY, trace fine SAND (wet, stiff)		14
7									
8	5	8.0	10.0	SS/14	5-6-7-8		Brown SILT, trace CLAY (wet, stiff)		13
9									
10									
11									
12									
13									
14	6	14.0	16.0	SS/12	3-3-3-5		Grey, Similar as above (wet, medium stiff)		6
15									
16									
17									
18									
19	7	19.0	21.0	SS/10	1-3-5-7		Similar as above (moist, stiff)		8
20							Continued on Page 2		

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG			Boring No.	B-619
									Page No.	2 of 2
									Project No.	28062
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %	
20	8A 8B	24.0	24.2	SS/9	3-22-50@1"		Continued from Page 1		50+	
21										
22										
23										
24						Augered harder beginning @ 23.7' Grey CLAY, little SILT, trace fine GRAVEL, trace cmf SAND (wet, hard)				
25						Black/Grey ROCK Fragments (Dolostone) (wet) Split Spoon and Auger Refusal @ 25.3'				
26						Bottom of Boring @ 25.3'				
27										
28										
29										
30										
31										
32										
33										
34										
35										
36										
37										
38										
39										
40										
41										
42										
43										
44										
45										

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-620			
				Page No.		1 of 2			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		04/18/24			
Client: Ramboll				Date Finished		04/18/24			
Location: See Exploration Location Plan				Surface Elev.		391.3'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: Beau Fletcher		Casing: 3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller: Ryan Casatelli		Casing Hammer:							
Inspector: Chris O'Hara		Other:							
Drill Rig: CME 55		Soil Sampler: 2" OD Split Barrel							
Type: ATV		Hammer Wt: 140 lbs.							
Rod Size: AWJ		Hammer Fall: 30 in.		04/18/24	While Drilling	None Noted	15.0		
				04/18/24	Before Casing Removed	14.0	24.5		
				04/18/24	After Casing Removed	8.0	out		
				04/18/24	After Casing Removed	caved @ 21.0	out		
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1A	0.0	0.5	SS/14	1-1-4-4		Topsoil and Organic Material (moist)		5
1	1B	0.5	2.0				Brown SILT, trace CLAY, trace cmf SAND, trace GRAVEL (moist, medium stiff)		
2	2	2.0	4.0	SS/11	3-4-4-7		Brown/Grey mottled SILT, trace CLAY (wet, stiff)		8
3									
4	3	4.0	6.0	SS/15	5-8-7-9		Brown SILT, trace CLAY (wet, very stiff)		15
5									
6	4	6.0	8.0	SS/10	6-7-8-7		Similar as above (wet, very stiff)		15
7									
8	5	8.0	10.0	SS/18	5-7-8-9		Similar as above (moist, very stiff)		15
9									
10									
11									
12									
13									
14	6	13.5	15.0	SS/14	2-3-3		Grey, Similar as above (moist, medium stiff)		6
15									
16									
17									
18									
19	7	18.5	20.0	SS/11	4-7-3		Grey SILT, some CLAY (wet, stiff)		10
20							Continued on Page 2		

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG			Boring No.		B-620	
									Page No.		2 of 2	
									Project No.		28062	
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL						
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) FromTo		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%		SPT "N" or RQD %		
20	8	23.5	24.4	SS/9	5-50@5"		Continued from Page 1				50+	
21						Augers gravelly beginning @ 21.4'						
22												
23												
24						Dark Grey/Black ROCK Fragments (Shale) and CLAY, little cmf SAND (wet) Auger Refusal @ 24.5'						
25						Bottom of Boring @ 24.5'						
26												
27												
28												
29												
30												
31												
32												
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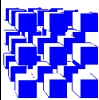
SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-623			
				Page No.		1 of 2			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		04/16/24			
Client: Ramboll				Date Finished		04/16/24			
Location: See Exploration Location Plan				Surface Elev.		392.1'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: Gary Richards		Casing: 3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller: Chris O'Hara		Casing Hammer:							
Inspector: Mark Schumacher, P.G		Other:							
Drill Rig: CME 55		Soil Sampler: 2" OD Split Barrel							
Type: ATV		Hammer Wt: 140 lbs.							
Rod Size: AWJ		Hammer Fall: 30 in.		04/16/24	While Drilling	None Noted	19.0		
				04/16/24	Before Casing Removed	8.1	25.7		
				04/16/24	After Casing Removed	4.8	out		
				04/16/24	After Casing Removed	caved @ 7.7	out		
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1A	0.0	0.3	SS/18	1-1-3-4		Topsoil and Organic Material (moist)		4
1	1B	0.3	2.0				Brown/Grey mottled SILT, trace CLAY, trace ORGANIC MATERIAL (moist, medium stiff)		
2	2	2.0	4.0	SS/18	3-5-5-5		Brown/Grey mottled SILT, trace CLAY (moist, stiff)		10
3									
4	3	4.0	6.0	SS/24	3-6-6-7		Brown/Grey SILT, trace CLAY, trace cmf SAND (moist, stiff)		12
5									
6	4	6.0	8.0	SS/24	7-8-8-9		Brown SILT, trace CLAY (moist, very stiff)		16
7									
8	5	8.0	10.0	SS/20	5-7-7-7		Brown SILT, trace fine GRAVEL, trace cmf SAND (moist, stiff)		14
9									
10									
11									
12									
13									
14	6	14.0	16.0	SS/18	2-3-4-7		Grey SILT, trace CLAY (wet, medium stiff)		7
15									
16									
17									
18									
19	7A	19.0	20.5	SS/22	1-2-2-1		Grey CLAY, trace SILT, trace fine GRAVEL, trace cmf SAND (wet, medium stiff)		4
20							Continued on Page 2		

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 CME Associates, Inc. 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG			Boring No.	B-623
							Page No.	2 of 2		
							Project No.	28062		
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %	
20	7B 8	20.5	21.0	SS/17	2-4-9-6		Continued from Page 1		13	
21		21.0	23.0				Grey SILT, some cmf SAND, little cmf GRAVEL, trace CLAY (wet)			
22							Grey cmf SAND and cmf GRAVEL, some SILT (wet, medium compact)			
23										
24	9A	24.0	24.6	SS/13	4-23-50@1"		Augers gravelly beginning @ 23.5' Grey cmf SAND, little SILT, trace fine GRAVEL (wet, very compact)		50+	
25	9B	24.6	25.1				Dark Grey weathered ROCK Fragments (Shale)			
26							Auger Refusal @ 25.7'			
27							Bottom of Boring @ 25.7'			
28										
29										
30										
31										
32										
33										
34										
35										
36										
37										
38										
39										
40										
41										
42										
43										
44										
45										

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-624			
				Page No.		1 of 2			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		04/16/24			
Client: Ramboll				Date Finished		04/17/24			
Location: See Exploration Location Plan				Surface Elev.		389.8'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: Al Linstruth		Casing: 3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller: John Winks		Casing Hammer:							
Inspector: Mark Schumacher, P.G		Other: NQ-Core							
Drill Rig: CME 55		Soil Sampler: 2" OD Split Barrel							
Type: ATV		Hammer Wt: 140 lbs.							
Rod Size: AWJ		Hammer Fall: 30 in.		04/16/24	While Drilling	None Noted	10.0		
				04/17/24	Before Casing Removed	4.3*	24.1		
				04/17/24	After Casing Removed	5.5	out		
				04/17/24	After Casing Removed	caved @ 16.7	out		
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1A	0.0	0.5	SS/18	1-1-1-3		Topsoil and Organic Material (wet)		2
1	1B	0.5	2.0				Brown/Grey mottled SILT, trace CLAY (moist, soft)		
2	2	2.0	4.0	SS/16	4-6-6-8		Brown/Grey mottled SILT, little CLAY (moist, stiff)		12
3									
4	3	4.0	6.0	SS/24	4-6-6-6		Brown SILT, trace CLAY (moist, stiff)		12
5									
6	4	6.0	8.0	SS/19	5-6-6-6		Brown SILT, trace CLAY (moist, stiff)		12
7									
8	5	8.0	10.0	SS/13	4-6-7-10		Brown SILT, trace CLAY (moist, stiff)		13
9									
10									
11									
12									
13									
14	6	14.0	16.0	SS/20	4-3-3-3		Grey SILT, trace CLAY, trace fine SAND (wet, medium stiff)		6
15									
16									
17									
18									
19	7	19.0	21.0	SS/9	WH-1-WH-1		Grey SILT and CLAY, trace fine SAND (wet, very soft)		1
20							Continued on Page 2		

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks: *Water added to borehole during coring process.

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.	B-624
								Page No.	2 of 2
								Project No.	28062
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL			
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
20							Continued from Page 1		
21	8A	21.0	22.5		WH-3-2-4		Grey CLAY, little SILT, trace cmf SAND (wet, medium stiff)		5
22	8B	22.5	23.0				Grey cmf SAND and SILT (wet)		
23							<i>Augers gravelly beginning @ 23.0'</i>		
24	9	24.0	24.1		50@1"		Grey ROCK Fragments (Shale) and ROCK Flour		50+
24.1'							<i>Split Spoon and Auger Refusal @ 24.1'. Set up to core.</i>		
25	R-1	24.1	29.1	C/59	NQ-Core		Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 1" thick), slightly weathered, thinly laminated to medium bedded, hard. CLAY seam (3/4" thick) @ 25.0'. Broken and fractured zone @ 25.4' - 25.6'. Core blocked @ ~ 25.4'. Recovery: 59"/60" = 98% RQD: 22"/60" = 37%		37%
26							28 Pieces, 2" Chips and Fragments		
27							2 - 2.25 min/ft, no water loss		
28							<i>Coring conducted in 4th gear, 1800-2000 rpm, 450 psi down pressure.</i>		
29	R-2	29.1	34.1	C60	NQ-Core		Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 2" thick), slightly weathered, thinly laminated to medium bedded. CLAY seam (1/4" thick) @ 29.1'. <i>Weathered horizontal fractures @ 32.1' and 32.2'.</i> Recovery: 60"/60" = 100% RQD: 47"/60" = 78%		78%
30							13 Pieces, 0" Chips and Fragments		
31							2 - 2.75 min/ft, no water loss		
32							<i>Coring conducted in 4th gear, 1800-2000 rpm, 450 psi down pressure.</i>		
33									
34							Bottom of Boring @ 34.1'		
35									
36									
37									
38									
39									
40									
41									
42									
43									
44									
45									

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 CME Associates, Inc.		6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG			Boring No.	B-625	
							Page No.	1 of 2	
							Project No.	28062	
Project Name:	Micron Campus, Clay, New York					Date Started	04/30/24		
Client:	Ramboll					Date Finished	04/30/24		
Location:	See Exploration Location Plan					Surface Elev.	385.8'		
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller:	Beau Fletcher	Casing:	3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)	
Driller:	Ryan Casatelli	Casing Hammer:							
Inspector:		Other:	NQ-Core		04/30/24	While Drilling	8.4	13.5	
Drill Rig:	CME 55	Soil Sampler:	2" OD Split Barrel		04/30/24	Before Casing Removed	None Noted	26.0	
Type:	ATV	Hammer Wt:	140 lbs.		04/30/24	After Casing Removed	4.0 *	out	
Rod Size:	AWJ	Hammer Fall:	30 in.		04/30/24	After Casing Removed	caved @ 6.0	out	
LOG OF BORING SAMPLES				VISUAL CLASSIFICATION OF MATERIAL					
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1	0.0	2.0	SS/16	WH-1-1-3		Brown SILT, little ORGANIC MATERIAL, trace fine SAND (moist, soft)		2
1									
2	2	2.0	4.0	SS/23	8-9-7-7		Brown SILT, some cmf SAND, little mf GRAVEL (wet, very stiff)		16
3									
4	3	4.0	5.4	SS/14	5-32-50@5"		Brown cmf SAND, some mf GRAVEL, trace SILT (moist, very compact) <i>Auger Refusal @ 5.5' possibly due to boulder Augered to 8.0'</i>		50+
5									
6									
7									
8	4	8.0	10.0	SS/24	40-35-40-29		Brown cmf SAND, some cmf GRAVEL, trace SILT (moist, very compact)		75
9									
10									
11									
12									
13									
14	5A	13.5	14.5	SS/12	34-39-50@2"		Grey cmf SAND, some mf GRAVEL, little SILT (moist, very compact)		50+
15	5B	14.5	14.7				Grey highly weathered ROCK Fragments (Shale) and ROCK Flour (moist)		
16									
17	R-1	16.0	21.0	C/60	NQ-Core		Auger Refusal @ 16.0' - set up to core		
18							Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 2.0" thick), slightly to moderately weathered, medium hard to hard. <i>Weathered horizontal fractures @ 16.7', 17.7', 17.8', 18.2', 18.3', 18.6', 18.7', 19.1', 19.2' and 19.4'.</i> <i>Broken and fractured zone @ 19.5' - 20.3'.</i> Recovery: 60"/60" = 100% RQD: 10"/60" = 17%		17%
19									
20							23 Pieces, 6" Chips and Fragments Continued on Page 2		

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks: *Water added to boring for coring.

6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.	B-625
								Page No.	2 of 2
								Project No.	28062
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL			
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
20	R-2	21.0	26.0	C/60	NQ-Core		Continued from Page 1 1:00 min/ft, no water loss Coring conducted in 4th gear, 1500 rpm, 700 psi down pressure. Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 1.0" thick), slightly to moderately weathered, thinly laminated to thinly bedded, hard. Horizontal fractures with weathering @ 21.3', 21.5', 22.3', 24.9', 25.3', 25.5', 25.6' and 25.8'. Recovery: 60"/60" = 100% RQD: 25"/60" = 42% 28 Pieces, 2" Chips and Fragments 1:00 min/ft, no water loss Coring conducted in 4th gear, 1500 rpm, 700 psi down pressure.		42%
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									
36									
37									
38									
39									
40									
41									
42									
43									
44									
45									

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-626			
				Page No.		1 of 2			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		04/19/24			
Client: Ramboll				Date Finished		04/19/24			
Location: See Exploration Location Plan				Surface Elev.		385.4'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: Al Linstruth		Casing: 3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller: John Winks		Casing Hammer:							
Inspector:		Other:							
Drill Rig: CME 55		Soil Sampler: 2" OD Split Barrel							
Type: ATV		Hammer Wt: 140 lbs.							
Rod Size: AWJ		Hammer Fall: 30 in.		04/19/24	While Drilling	15.0	18.5		
				04/19/24	Before Casing Removed	14.7	20.8		
				04/19/24	After Casing Removed	None Noted	out		
				04/19/24	After Casing Removed	caved @	out		
LOG OF BORING SAMPLES				VISUAL CLASSIFICATION OF MATERIAL					
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1	0.0	2.0	SS/16	4-1-1-3			Brown/Grey mottled SILT, trace CLAY, trace ORGANIC MATERIAL (moist, soft)	2
1									
2	2	2.0	4.0	SS/18	3-4-4-4			Similar as above (wet, stiff)	8
3									
4	3	4.0	6.0	SS/19	3-4-3-3			Brown SILT, trace CLAY (wet, medium stiff)	7
5									
6	4	6.0	8.0	SS/17	3-4-3-4			Brown SILT, little CLAY (wet, medium stiff)	7
7									
8	5	8.0	10.0	SS/18	2-3-3-3			Brown SILT, trace CLAY (wet, medium stiff)	6
9									
10									
11									
12									
13	6A	13.5	14.0	SS/18	3-6-6			Grey SILT, some cmf GRAVEL, little cmf SAND, trace CLAY (wet, stiff)	12
14	6B	14.0	15.0					Brown SILT, trace CLAY (wet)	
15									
16									
17									
18	7	18.5	20.0	SS/0	6-5-6			Dark Grey/Black ROCK Fragments (Shale), some SILT, little cmf SAND, trace fine GRAVEL (wet)	11
19								See Remark 1	
20								Continued on Page 2	

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks: 1. No recovery with a 2" spoon; therefore a 3" spoon was utilized.

6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG			Boring No.	B-626
									Page No.	2 of 2
									Project No.	28062
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%		SPT "N" or RQD %
20	8	20.7	20.8		50@1"		Continued from Page 1 Grey ROCK Fragments (Shale) (wet) <i>Split Spoon and Auger Refusal @ 20.8'</i>			50+
						Bottom of Boring @ 20.8'				
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										
31										
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36										
37										
38										
39										
40										
41										
42										
43										
44										
45										

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-627			
				Page No.		1 of 2			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		04/30/24			
Client: Ramboll				Date Finished		04/30/24			
Location: See Exploration Location Plan				Surface Elev.		383.0'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: H. Lyon		Casing: 3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller: K. Crandall		Casing Hammer:							
Inspector: C. O'Hara		Other:							
Drill Rig: CME 45		Soil Sampler: 2" OD Split Barrel							
Type: ATV		Hammer Wt: 140 lbs.							
Rod Size: AWJ		Hammer Fall: 30 in.		04/30/24	While Drilling	2.5	8.0		
				04/30/24	Before Casing Removed	7.8	21.0		
				04/30/24	After Casing Removed	3.5	out		
				04/30/24	After Casing Removed	caved @ 5.5	out		
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1A	0.0	0.5	SS/12	WH-1-1-3		Topsoil and Organic Material (moist)		2
1	1B	0.5	2.0				Brown SILT, trace CLAY, trace fine SAND (moist, soft)		
2	2	2.0	4.0	SS/14	4-5-6-4		Brown/Grey mottled SILT, trace CLAY (wet, stiff)		11
3									
4	3	4.0	6.0	SS/17	1-2-4-4		Brown SILT, trace CLAY (wet, medium stiff)		6
5									
6	4	6.0	8.0	SS/24	3-4-4-4		Similar as above (wet, stiff)		8
7									
8	5	8.0	10.0	SS/23	4-4-4-5		Similar as above (wet, stiff)		8
9									
10									
11									
12							Augered gravelly beginning @ 11.8'		
13	6	13.0	15.0	SS/10	2-9-8-8		Grey cmf GRAVEL, little SILT, little cmf SAND (wet, medium compact)		17
14									
15									
16									
17									
18	7	18.0	20.0	SS/10	12-5-6-6		Grey cmf GRAVEL and cmf SAND, little SILT (wet, medium compact)		11
19									
20							Continued on Page 2		

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG			Boring No.	B-627
									Page No.	2 of 2
									Project No.	28062
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) FromTo		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %	
20	8	21.0	21.1	SS/1	50@1"		Continued from Page 1 Augers harder beginning @ 20.5' Black ROCK Fragments (Shale) (wet) Split Spoon and Auger Refusal @ 21.1'.		50+	
21							Bottom of Boring @ 21.1'			
22										
23										
24										
25										
26										
27										
28										
29										
30										
31										
32										
33										
34										
35										
36										
37										
38										
39										
40										
41										
42										
43										
44										
45										

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-628			
				Page No.		1 of 1			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		04/30/24			
Client: Ramboll				Date Finished		04/30/24			
Location: See Exploration Location Plan				Surface Elev.		381.4'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller:	H. Lyon	Casing:	3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)	
Driller:	K. Crandall	Casing Hammer:			04/30/24	While Drilling	None Noted	6.0	
Inspector:	C. O'Hara	Other:			04/30/24	Before Casing Removed	None Noted	11.0	
Drill Rig:	CME 45	Soil Sampler:	2" OD Split Barrel		04/30/24	After Casing Removed	None Noted	out	
Type:	ATV	Hammer Wt:	140 lbs.		04/30/24	After Casing Removed	caved @ 6.9	out	
Rod Size:	AWJ	Hammer Fall:	30 in.						
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1A	0.0	0.6	SS/16	4-WH-2-1		Topsoil and Organic Material (moist)		2
1	1B	0.6	2.0				Brown SILT, little CLAY, trace fine SAND (moist, soft)		
2	2	2.0	4.0	SS/15	1-4-3-4		Brown SILT, trace CLAY (wet, medium stiff)		7
3									
4	3	4.0	6.0	SS/11	7-7-6-5		Similar as above (wet, stiff)		13
5									
6	4	6.0	8.0	SS/14	4-5-4-4		Similar as above (wet, stiff)		9
7									
8	5	8.0	8.6	SS/7	5-50@1"		Brown SILT, little cmf SAND, trace CLAY (wet, hard) <i>Augers like Cobble beginning @ 8.5'</i>		50+
9									
10									
11	6	11.0	11.0	SS/0	50@0"		Split Spoon and Auger Refusal @ 11.0'		50+
12							Bottom of Boring @ 11.0'		
13									
14									
15									
16									
17									
18									
19									
20									

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.	B-629
								Page No.	2 of 2
								Project No.	28062
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL			
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
20	8A	20.0	20.3	SS/8	3-9-7-10		Continued from Page 1 Similar as above (moist, very stiff) Grey CLAY, some cmf GRAVEL, little SILT, trace cmf SAND (wet, very stiff)		16
21	8B	20.3	22.0						
22									
23	9	23.7	23.9	SS/1	50@2"		-----		
24							Augers like Rock starting @ 23.1' Black SHALE Fragments Split Spoon and Auger Refusal @ 23.9'		50+
25							Bottom of Boring @ 23.9'		
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									
36									
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39									
40									
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43									
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45									

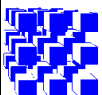
SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-630			
				Page No.		1 of 2			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		04/29/24			
Client: Ramboll				Date Finished		04/29/24			
Location: See Exploration Location Plan				Surface Elev.		381.7'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: Gary Richards		Casing: 3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller: John Winks		Casing Hammer:							
Inspector:		Other: NQ-Core							
Drill Rig: CME 55		Soil Sampler: 2" OD Split Barrel							
Type: ATV		Hammer Wt: 140 lbs.							
Rod Size: AWJ		Hammer Fall: 30 in.		04/29/24	While Drilling	4.1	14.0		
				04/29/24	Before Casing Removed	2.2	22.0		
				04/29/24	After Casing Removed	2.2	out		
				04/29/24	After Casing Removed	caved @ 14.0	out		
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1	0.0	2.0	SS/5	WH-WH-2-4		Brown SILT, little cmf SAND, trace woody ORGANIC MATERIAL (moist, soft)		2
1									
2	2	2.0	4.0	SS/15	7-6-6-6		Brown/Grey SILT, trace CLAY, trace fine SAND (wet, stiff)		12
3									
4	3	4.0	6.0	SS/17	6-5-7-6		Similar as above (wet, stiff)		12
5									
6	4	6.0	8.0	SS/17	5-6-7-11		Similar as above (wet, stiff)		13
7									
8	5	8.0	10.0	SS/14	6-8-8-7		Brown SILT, trace fine SAND (wet, very stiff)		16
9									
10									
11									
12									
13									
14	6	14.0	15.5	SS/14	WH-1-4		Brown SILT, little fine SAND, trace CLAY (wet, very soft)		1
15									
16	7	15.5	17.5	SS/15	WH-WH-2-2		Brown CLAY, some SILT, trace cmf SAND, trace mf GRAVEL (wet, soft)		2
17									
18	8	17.5	19.5	SS/15	16-6-9-15		Brown cmf GRAVEL, some SILT, little CLAY, little cmf SAND (wet, medium compact)		15
19									
20							Continued on Page 2		

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 CME Associates, Inc.						6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.	B-630
								Page No.	2 of 2		
								Project No.	28062		
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL					
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%		SPT "N" or RQD %	
20	9 R-1	22.0 22.0	22.0 27.0	SS/0 C/57	50@0" NQ-Core		Continued from Page 1				50+ 72%
21											
22							<i>Spoon Refusal @ 22.0' - set up to core</i>				
23							Grey DOLOSTONE with interbedded SHALE (<1/8" - 2.0" thick), slightly weathered, thinly laminated to medium bedded, medium hard to hard.				
24							<i>Weathered broken and fractured zone (1/2" thick) @ 22.8'.</i>				
25	R-2	27.0	32.0	C/57	NQ-Core		Recovery: 57"/60" = 95% RQD: 43"/60" = 72% 11 Pieces, 1" Chips and Fragments <i>1:20 min/ft, no water loss</i> <i>Coring conducted in 4th gear, 1700 rpm, 700 psi down pressure.</i>				95%
26											
27							Grey DOLOSTONE with interbedded SHALE (<1/8" - 1/4" thick), slightly weathered, thinly laminated to medium bedded, hard.				
28							SILT seam (1/8" thick) @ 29.3'.				
29							Recovery: 57"/60" = 95% RQD: 57"/60" = 95% 10 Pieces, 0" Chips and Fragments <i>57 sec/ft, no water loss</i> <i>Coring conducted in 4th gear, 1700 rpm, 700 psi down pressure.</i>				
30											
31											
32											
33											
34											
35							Bottom of Boring @ 32.0'				
36											
37											
38											
39											
40											
41											
42											
43											
44											
45											

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-631			
				Page No.		1 of 2			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		04/30/24			
Client: Ramboll				Date Finished		04/30/24			
Location: See Exploration Location Plan				Surface Elev.		384.5'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: H. Lyon		Casing: 3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller: K. Crandall		Casing Hammer:							
Inspector: C. O'Hara		Other:							
Drill Rig: CME 45		Soil Sampler: 2" OD Split Barrel							
Type: ATV		Hammer Wt: 140 lbs.							
Rod Size: AWJ		Hammer Fall: 30 in.		04/30/24	While Drilling	5.7	13.0		
				04/30/24	Before Casing Removed	6.0	25.7		
				04/30/24	After Casing Removed	8.8	out		
				04/30/24	After Casing Removed	caved @ 12.5	out		
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1A	0.0	0.6	SS/17	1-1-1-3		Topsoil and Organic Material (moist)		2
1	1B	0.6	2.0				Brown SILT, trace CLAY, trace mf SAND (moist, soft)		
2	2	2.0	4.0	SS/14	3-4-4-5		Brown/Grey SILT, little CLAY (moist, stiff)		8
3									
4	3	4.0	6.0	SS/16	6-3-2-4		Similar as above (wet, medium stiff)		5
5									
6	4	6.0	8.0	SS/17	5-6-7-8		Brown SILT, trace CLAY (moist, stiff)		13
7									
8	5	8.0	10.0	SS/20	6-7-7-8		Similar as above (wet, stiff)		14
9									
10									
11									
12									
13	6	13.0	15.0	SS/13	3-4-4-2		Brown SILT, trace fine SAND, trace SILT (wet, stiff)		8
14									
15									
16									
17									
18	7	18.0	20.0	SS/16	WH-1-2-1		Grey CLAY, little SILT, trace fine GRAVEL, trace cmf SAND (wet, soft)		3
19									
20							Continued on Page 2		

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG			Boring No. B-631 Page No. 2 of 2 Project No. 28062	
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %	
20	8	20.0	22.0	S/24	WH-1-5-8		Continued from Page 1 Brown/Red CLAY, little SILT, trace mf GRAVEL, trace cmf SAND (wet, medium stiff)		6	
21							----- Augers gravelly beginning @ 21.1'			
22										
23	9	23.0	25.0	SS/5	5-7-10-12		Grey cmf GRAVEL, some cmf SAND, trace SILT (wet, medium compact)		17	
24										
25										
26	10	25.7	25.7	SS/0	50@0"		Black SHALE Fragments in tip of spoon. Split Spoon and Auger Refusal @ 25.7'		50+	
27							Bottom of Boring @ 25.7'			
28										
29										
30										
31										
32										
33										
34										
35										
36										
37										
38										
39										
40										
41										
42										
43										
44										
45										

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-632			
				Page No.		1 of 2			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		04/30/24			
Client: Ramboll				Date Finished		04/30/24			
Location: See Exploration Location Plan				Surface Elev.		383.8'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: Beau Fletcher		Casing: 3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller: Ryan Casatelli		Casing Hammer:							
Inspector:		Other: NQ-Core							
Drill Rig: CME 55		Soil Sampler: 2" OD Split Barrel							
Type: ATV		Hammer Wt: 140 lbs.							
Rod Size: AWJ		Hammer Fall: 30 in.		04/30/24	While Drilling	7.7	13.5		
				04/30/24	Before Casing Removed	None Noted	32.0		
				04/30/24	After Casing Removed	5.3	out		
				04/30/24	After Casing Removed	caved @ 17.6	out		
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1A	0.0	0.5	SS/16	1-1-1-4		Topsoil and Organic Material (moist)		2
1	1B	0.5	2.0				Brown/Grey SILT, little CLAY, trace ROOTS, trace fine SAND (moist, stiff)		
2	2	2.0	4.0	SS/22	4-5-7-6		Brown/Grey mottled SILT, trace CLAY (moist, stiff)		12
3									
4	3	4.0	6.0	SS/5	4-5-6-4		Brown SILT, little CLAY, trace mf GRAVEL, trace cmf SAND (wet, stiff)		11
5									
6	4	6.0	8.0	SS/14	6-7-8-7		Brown SILT, some cmf GRAVEL, trace cmf SAND (wet, very stiff)		15
7									
8	5	8.0	10.0	SS/19	3-3-5-5		Brown SILT, trace CLAY, trace fine SAND (wet, stiff)		8
9									
10									
11									
12									
13									
14	6	13.5	15.0	SS/17	3-2-2		Brown/Grey SILT, little CLAY, trace fine SAND (wet, medium stiff)		4
15									
16									
17									
18									
19	7	18.5	20.0	SS/12	6-5-7		Grey cmf SAND and SILT, some mf GRAVEL (wet, medium compact)		12
20							Continued on Page 2		

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG			Boring No. B-632		
						Page No. 2 of 2					
						Project No. 28062					
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL					
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%		SPT "N" or RQD %	
20	R-1	22.0	27.0	C/60	NQ-Core		Continued from Page 1			95%	
21											
22							Auger Refusal @ 22.0' - Set up to core.				
23							Grey DOLOSTONE with interbedded SHALE layers (1/8" - 1.0" thick), slightly weathered, laminated to thinly bedded, medium hard to hard.				
24							Weathered and broken zone (1/2" thick) @ 23.1'. Recovery: 60"/60" = 100% RQD: 57"/60" = 95% 11 Pieces, 0" Chips and Fragments 1:15 min/ft, no water loss Coring conducted in 4th gear, 1700 rpm, 700 psi down pressure.				
25	R-1	27.0	32.0	C/56	NQ-Core		Grey DOLOSTONE with interbedded SHALE layers (~1/4" thick), slightly weathered, laminated to thickly bedded, hard. Weathered fractures @ 27.4' and 27.6'. Recovery: 56"/60" = 93% RQD: 52"/60" = 87% 8 Pieces, 3" Chips and Fragments 1:00 min/ft, no water loss Coring conducted in 4th gear, 1700 rpm, 700 psi down pressure.			87%	
26											
27											
28											
29											
30											
31											
32											
33											
34											
35							Bottom of Boring @ 32.0'				
36											
37											
38											
39											
40											
41											
42											
43											
44											
45											

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-633			
				Page No.		1 of 2			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		04/30/24			
Client: Ramboll				Date Finished		04/30/24			
Location: See Exploration Location Plan				Surface Elev.		380.9'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: H. Lyon		Casing: 3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller: K. Crandall		Casing Hammer:							
Inspector: C. O'Hara		Other:							
Drill Rig: CME 45		Soil Sampler: 2" OD Split Barrel							
Type: ATV		Hammer Wt: 140 lbs.							
Rod Size: AWJ		Hammer Fall: 30 in.		04/30/24	While Drilling	4.9	13.0		
				04/30/24	Before Casing Removed	4.5	21.5		
				04/30/24	After Casing Removed	3.7	out		
				04/30/24	After Casing Removed	caved @ 9.0	out		
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1A	0.0	0.5	SS/14	WH-1-2-5		Topsoil and Organic Material (moist)		3
1	1B	0.6	2.0				Brown SILT, trace CLAY, trace fine SAND (moist, soft)		
2	2	2.0	4.0	SS/16	5-4-5-5		Brown SILT, trace CLAY (moist, stiff)		9
3									
4	3	4.0	6.0	SS/15	4-5-6-6		Similar as above (wet, stiff)		11
5									
6	4	6.0	8.0	SS/21	4-5-6-5		Similar as above (wet, stiff)		11
7									
8	5	8.0	10.0	SS/20	4-4-5-5		Similar as above (wet, stiff)		9
9									
10									
11									
12							Augers gravelly beginning @ 11.5'		
13	6	13.0	15.0	SS/9	5-3-14-13		Red/Brown SILT, little mf GRAVEL, little CLAY, trace cmf SAND (wet, very stiff)		17
14									
15									
16									
17									
18	7	18.0	20.0	SS/16	7-11-10-30		Grey cmf GRAVEL, some cmf SAND, some SILT (wet, medium compact)		21
19									
20							Continued on Page 2		

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG			Boring No.	B-633
									Page No.	2 of 2
									Project No.	28062
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%		SPT "N" or RQD %
20	8	21.5	21.7	SS/1	50@2"		Continued from Page 1			
21						Grey SHALE Fragments			50+	
22						Split Spoon and Auger Refusal @ 21.7'				
23						Bottom of Boring @ 21.7'				
24										
25										
26										
27										
28										
29										
30										
31										
32										
33										
34										
35										
36										
37										
38										
39										
40										
41										
42										
43										
44										
45										

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-664			
				Page No.		1 of 2			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		04/24/24			
Client: Ramboll				Date Finished		04/24/24			
Location: See Exploration Location Plan				Surface Elev.		389.8'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: Beau Fletcher		Casing: 3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller: Ryan Casatelli		Casing Hammer:							
Inspector:		Other: NQ-Core							
Drill Rig: CME 55		Soil Sampler: 2" OD Split Barrel							
Type: ATV		Hammer Wt: 140 lbs.							
Rod Size: AWJ		Hammer Fall: 30 in.		04/24/24	While Drilling	13.2	18.5		
				04/24/24	Before Casing Removed	None Noted	30.1		
				04/24/24	After Casing Removed	6.0 *	out		
				04/24/24	After Casing Removed	caved @ 17.0	out		
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1A	0.0	0.5	SS/18	WH-1-1-2		Topsoil and Organic Material (moist)		2
1	1B	0.5	2.0				Brown SILT, trace CLAY, trace fine SAND, trace ORGANIC MATERIAL (moist, soft)		
2	2	2.0	4.0	SS/22	6-5-4-4		Brown/Grey mottled SILT, trace CLAY (moist, stiff)		9
3									
4	3	4.0	6.0	SS/16	2-3-3-4		Brown CLAY, some SILT (moist, medium stiff)		6
5									
6	4	6.0	8.0	SS/18	4-4-4-3		Brown/Grey SILT, little CLAY (wet, stiff)		8
7									
8	5	8.0	10.0	SS/20	2-2-2-2		Brown SILT, trace CLAY (wet, medium stiff)		4
9									
10									
11									
12									
13	6	13.5	15.0	SS/18	3-3-4		Brown SILT, trace CLAY (wet, medium stiff)		7
14									
15									
16									
17									
18	7	18.5	20.0	SS/18	2-4-8		Grey SILT and cmf GRAVEL, little CLAY, trace cmf SAND (wet, stiff)		12
19									
20							Continued on Page 2		

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks: * Water added to boring for coring.

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG			Boring No. B-664	
									Page No. 2 of 2	
									Project No. 28062	
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %	
20	8	23.5	25.0	SS/15	23-13-50		Continued from Page 1		63	
21										
22										
23										
24							Dark Grey SILT, some cmf GRAVEL, little highly weathered ROCK Fragments (Shale), trace cmf SAND, trace CLAY (wet, hard)			
25	R-1	25.1	30.1	C/59	NQ-Core		Auger Refusal @ 25.1'. Set up to Core.		80%	
26							Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 1.0" thick), slightly weathered, thinly laminated to medium bedded, hard. Weathered horizontal fracture @ 25.5'.			
27							Recovery: 59"/60" = 98%			
28							RQD: 48"/60" = 80%			
29							14 Pieces, 0" Chips and Fragments 1:00 min/ft, no water loss Coring conducted in 4th gear, 1500 rpm, 700 psi down pressure.			
30	R-2	30.1	35.1	C/59	NQ-Core		Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 1.0" thick), slightly weathered, thinly laminated to thickly bedded, hard. Weathered and broken zone (1/2" thick) @ 30.3'.		93%	
31							Recovery: 59"/60" = 98%			
32							RQD: 56"/60" = 93%			
33							9 Pieces, 0" Chips and Fragments 1:00 min/ft, no water loss			
34							Coring conducted in 4th gear, 1500 rpm, 700 psi down pressure.			
35							Bottom of Boring @ 35.1'			
36										
37										
38										
39										
40										
41										
42										
43										
44										
45										

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-666			
				Page No.		1 of 1			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		05/06/24			
Client: Ramboll				Date Finished		05/06/24			
Location: See Exploration Location Plan				Surface Elev.		399.1'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: H. Lyon		Casing: 3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller: K. Crandall		Casing Hammer:							
Inspector: C. O'Hara		Other:							
Drill Rig: CME 45		Soil Sampler: 2" OD Split Barrel							
Type: ATV		Hammer Wt: 140 lbs.							
Rod Size: AWJ		Hammer Fall: 30 in.		05/06/24	While Drilling	4.0	6.0		
				05/06/24	Before Casing Removed	2.8	10.2		
				05/06/24	After Casing Removed	2.5	out		
				05/06/24	After Casing Removed	caved @ 5.2	out		
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1A	0.0	0.3	SS/10	1-WH-2-3		Topsoil and Organic Material (moist)		2
1	1B	0.3	2.0				Brown SILT, trace CLAY, trace fine SAND (moist, soft)		
2	2	2.0	4.0	SS/11	3-3-3-2		Brown SILT, trace CLAY, trace mf GRAVEL, trace cmf SAND (moist, medium stiff)		6
3									
4	3	4.0	6.0	SS/7	7-7-21-24		Augers like Cobble beginning @ 3.5' Brown/Grey SILT and cmf GRAVEL, trace cmf SAND, trace CLAY (moist, very stiff)		28
5									
6	4	6.0	8.0	SS/4	22-18-20-30		Brown/Grey cmf GRAVEL and SILT, trace cmf SAND (moist, compact) Augers harder beginning @ 6.8'		38
7									
8	5	8.0	9.8	SS/15	18-20-30-50@4"		Brown SILT, little cmf GRAVEL, trace cmf SAND (moist, hard) Augers like Rock beginning @ 9.2'		50
9									
10	6	10.1	10.2	SS/0	50@1"		Black SHALE Fragments in tip of spoon Split Spoon and Auger Refusal @ 10.2'		50+
11							Bottom of Boring @ 10.2'		
12									
13									
14									
15									
16									
17									
18									
19									
20									

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-667			
				Page No.		1 of 1			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		05/06/24			
Client: Ramboll				Date Finished		05/06/24			
Location: See Exploration Location Plan				Surface Elev.		399.4'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: H. Lyon		Casing: 3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller: K. Crandall		Casing Hammer:							
Inspector: C. O'Hara		Other:							
Drill Rig: CME 45		Soil Sampler: 2" OD Split Barrel							
Type: ATV		Hammer Wt: 140 lbs.							
Rod Size: AWJ		Hammer Fall: 30 in.		05/06/24	While Drilling	8.0	2.0		
				05/06/24	Before Casing Removed	10.2	10.8		
				05/06/24	After Casing Removed	6.5	out		
				05/06/24	After Casing Removed	caved @ 6.0	out		
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1A	0.0	0.4	SS/13	WR-WH-1-2		Topsoil and Organic Material (moist)		1
1	1B	0.4	2.0				Brown/Grey mottled SILT, little CLAY, trace fine SAND, trace ROOTS (moist, soft)		
2	2	2.0	4.0	SS/14	2-2-3-4		Brown SILT, trace CLAY (moist, medium stiff)		5
3									
4	3	4.0	6.0	SS/15	7-8-8-6		Brown SILT, trace CLAY, trace cmf SAND, trace fine GRAVEL (moist, very stiff)		16
5									
6	4	6.0	8.0	SS/17	20-14-16-20		Brown/Grey SILT, some cmf GRAVEL, trace cmf SAND, trace CLAY (moist, hard)		30
7							Augers like Cobble beginning @ 6.3'		
8	5	8.0	10.0	SS/18	19-36-41-50		Brown/Grey mf GRAVEL and SILT, little cmf SAND (moist, very compact)		77
9									
10							Augers hard @ 10.1'.		
11	6	10.8	11.8	SS/13	19-39-30-38		Grey cmf GRAVEL, little cmf SAND, little SILT (moist, very compact)		69
12									
13							Bottom of Boring @ 12.8'		
14									
15									
16									
17									
18									
19									
20									

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-668			
				Page No.		1 of 2			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		05/07/24			
Client: Ramboll				Date Finished		05/07/24			
Location: See Exploration Location Plan				Surface Elev.		399.5'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: H. Lyon		Casing: 3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller: K. Crandall		Casing Hammer:							
Inspector: C. O'Hara		Other:							
Drill Rig: CME 45		Soil Sampler: 2" OD Split Barrel							
Type: ATV		Hammer Wt: 140 lbs.							
Rod Size: AWJ		Hammer Fall: 30 in.		05/07/24	While Drilling	3.8	8.0		
				05/07/24	Before Casing Removed	6.5	20.5		
				05/07/24	After Casing Removed	None Noted	out		
				05/07/24	After Casing Removed	caved @ 5.1	out		
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1A	0.0	0.4	SS/12	WH-1-3-5		Topsoil and Organic Material (moist)		4
1	1B	0.4	2.0				Brown SILT, trace CLAY (moist, medium stiff)		
2	2	2.0	4.0	SS/13	3-4-6-5		Brown SILT, little CLAY (moist, stiff)		10
3									
4	3	4.0	6.0	SS/18	3-5-5-8		Brown SILT, trace CLAY (moist, stiff)		10
5									
6	4	6.0	8.0	SS/17	9-14-16-20		Similar as above (moist, hard)		30
7									
8	5	8.0	9.8	SS/16	17-14-11-50@4"		Brown SILT, little mf GRAVEL, trace cmf SAND (moist, very stiff)		25
9							Augered like Cobble beginning @ 8.8'		
10									
11							Augers gravelly beginning @ 11.5'		
12									
13	6	13.0	15.0	SS/10	10-12-7-12		Grey SILT, some mf GRAVEL, little cmf SAND, trace CLAY (wet, very stiff)		19
14									
15									
16									
17									
18	7	18.0	18.8	SS/9	38-50@4"		Grey SILT, some mf GRAVEL, little cmf SAND (wet, hard)		50+
19									
20							Continued on Page 2		

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG			Boring No.	B-668
									Page No.	2 of 2
									Project No.	28062
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%		SPT "N" or RQD %
20	8	20.5	20.5	SS/0	50@0"		Continued from Page 1 Black SHALE Fragments in tip of spoon <i>Split Spoon and Auger Refusal @ 20.5'</i>			50+
						Bottom of Boring @ 20.5'				
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										
31										
32										
33										
34										
35										
36										
37										
38										
39										
40										
41										
42										
43										
44										
45										

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 CME Associates, Inc. 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG				Boring No.		B-669							
						Page No.		1 of 2							
						Project No.		28062							
Project Name:		Micron Campus, Clay, New York				Date Started		05/07/24							
Client:		Ramboll				Date Finished		05/07/24							
Location:		See Exploration Location Plan				Surface Elev.		399.9'							
METHODS OF INVESTIGATION						GROUNDWATER OBSERVATIONS									
Driller:		Beau Fletcher		Casing:		3 ¼" ID H.S.A.		Date		Time		Depth (Ft.)		Casing At (Ft.)	
Driller:		Ryan Casatelli		Casing Hammer:				05/07/24		While Drilling		None Noted		23.2	
Inspector:				Other:		NQ-Core		05/07/24		Before Casing Removed		None Noted		23.2	
Drill Rig:		CME 55		Soil Sampler:		2" OD Split Barrel		05/07/24		After Casing Removed		2.0 *		out	
Type:		ATV		Hammer Wt:		140 lbs.		05/07/24		After Casing Removed		caved @ 9.6		out	
Rod Size:		AWJ		Hammer Fall:		30 in.									
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL									
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine		and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%				SPT "N" or RQD %		
		From	To												
0	1A	0.0	1.0	SS/16	1-WH-3-4		Topsoil and Organic Material (moist)						3		
1	1B	1.0	2.0				Brown SILT, trace CLAY (moist, stiff)								
2	2	2.0	4.0	SS/20	4-4-5-4		Brown SILT, trace CLAY (wet, stiff)						9		
3															
4	3	4.0	6.0	SS/22	5-5-5-5		Brown SILT, trace CLAY (wet, stiff)						10		
5															
6	4	6.0	8.0	SS/15	4-4-5-7		Brown/Grey SILT, little cmf GRAVEL, trace cmf SAND (moist, stiff)						9		
7															
8	5	8.0	10.0	SS/19	7-9-12-20		Brown/Grey SILT, little cmf GRAVEL, trace cmf SAND (moist, very stiff)						21		
9															
10															
11															
12															
13							Auger Refusal @ 13.2'. Set up to core.								
14	R-1	13.2	18.2	C/59	NQ-Core		Grey DOLOSTONE with interbedded SHALE layers (<1/8"-2.0" thick), slightly weathered, thinly laminated to thinly bedded, medium hard to hard. Weathered zones (<1/8"-1/2" thick) @ 13.9', 14.1' and 14.8'. Recovery: 59"/60" = 98% RQD: 48"/60" = 80% 29 Pieces, 1" Chips and Fragments 1:00 min/ft, no water loss						80%		
15															
16															
17															
18	R-2	18.2	23.2	C/59	NQ-Core		Coring conducted in 4th gear, 1700 rpm, 700 psi down pressure. 18.2'-20.1': Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 1.0" thick), slightly weathered, thinly laminated to thinly bedded, medium hard to hard.						80%		
19							20.1'-23.2': Dark Grey SHALE with interbedded DOLOSTONE								
20							Continued on Page 2								

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks: * Water added to boring for coring.

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-671			
				Page No.		1 of 1			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		05/06/24			
Client: Ramboll				Date Finished		05/06/24			
Location: See Exploration Location Plan				Surface Elev.		400.3'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: H. Lyon		Casing: 3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller: K. Crandall		Casing Hammer:							
Inspector: C. O'Hara		Other:							
Drill Rig: CME 45		Soil Sampler: 2" OD Split Barrel							
Type: ATV		Hammer Wt: 140 lbs.							
Rod Size: AWJ		Hammer Fall: 30 in.		05/06/24	While Drilling	None Noted	6.0		
				05/06/24	Before Casing Removed	None Noted	10.2		
				05/06/24	After Casing Removed	2.8	out		
				05/06/24	After Casing Removed	caved @ 4.5	out		
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1A	0.0	0.5	SS/13	1-WH-4-6	-----	Topsoil and Organic Material (moist)		4
1	1B	0.5	2.0				Brown/Grey SILT, trace CLAY (moist, medium stiff)		
2	2	2.0	4.0	SS/16	2-3-3-2		Brown/Grey mottled SILT, trace CLAY (wet, medium stiff)		6
3									
4	3	4.0	6.0	SS/18	1-6-11-14		Brown SILT, trace CLAY (moist, very stiff)		17
5									
6	4	6.0	8.0	SS/	12-10-11-14	-----	Brown SILT, little mf GRAVEL, trace cmf SAND (wet, very stiff)		21
7									
8	5	8.0	10.0	SS/15	10-11-16-32		Brown/Grey SILT, little mf GRAVEL, trace cmf SAND (moist, very stiff)		27
9									
10	6	10.2	10.2	SS/0	50@0"		Split Spoon and Auger Refusal @ 10.2'.		
11							Bottom of Boring @ 10.2'		
12									
13									
14									
15									
16									
17									
18									
19									
20									

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG			Boring No.		B-673		
					Page No.		1 of 1		
					Project No.		28062		
Project Name: Micron Campus, Clay, New York					Date Started		05/06/24		
Client: Ramboll					Date Finished		05/06/24		
Location: See Exploration Location Plan					Surface Elev.		400.7'		
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: H. Lyon		Casing: 3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller: K. Crandall		Casing Hammer:							
Inspector: C. O'Hara		Other:							
Drill Rig: CME 45		Soil Sampler: 2" OD Split Barrel							
Type: ATV		Hammer Wt: 140 lbs.							
Rod Size: AWJ		Hammer Fall: 30 in.		05/06/24	While Drilling	None Noted	8.0		
				05/06/24	Before Casing Removed	None Noted	9.2		
				05/06/24	After Casing Removed	None Noted	out		
				05/06/24	After Casing Removed	caved @ 8.8	out		
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1A	0.0	0.3	SS/13	1-WH-1-3		Topsoil and Organic Material (moist)		1
1	1B	0.3	2.0				Brown SILT, little cmf SAND (wet, very soft)		
2	2	2.0	4.0	SS/15	3-8-5-5		Brown SILT, trace CLAY, trace fine SAND (moist, stiff)		13
3									
4	3	4.0	6.0	SS/14	2-5-5-5		Brown SILT, some cmf SAND, trace CLAY, trace fine GRAVEL (wet, stiff)		10
5									
6	4	6.0	8.0	SS/11	2-5-10-10		Augers gravelly beginning @ 5.5' Brown SILT, little mf GRAVEL, trace cmf SAND (wet, very stiff)		15
7							Augers like Cobble beginning @ 7.4'		
8	5	8.0	9.2	SS/10	11-25-50@2"		Brown/Grey SILT, little cmf SAND, trace fine GRAVEL (moist, hard)		50+
9	6	9.2	9.2	SS/0	50@0"		Split Spoon and Auger Refusal @ 9.2'		50+
10							Bottom of Boring @ 9.2'		
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG				Boring No. B-674																			
						Page No. 1 of 1																			
						Project No. 28062																			
Project Name: Micron Campus, Clay, New York						Date Started 05/06/24																			
Client: Ramboll						Date Finished 05/06/24																			
Location: See Exploration Location Plan						Surface Elev. 401.4'																			
METHODS OF INVESTIGATION						GROUNDWATER OBSERVATIONS																			
Driller: H. Lyon		Casing: 3 ¼" ID H.S.A.		<table border="1"> <thead> <tr> <th>Date</th> <th>Time</th> <th>Depth (Ft.)</th> <th>Casing At (Ft.)</th> </tr> </thead> <tbody> <tr> <td>05/06/24</td> <td>While Drilling</td> <td>None Noted</td> <td>6.0</td> </tr> <tr> <td>05/06/24</td> <td>Before Casing Removed</td> <td>None Noted</td> <td>7.7</td> </tr> <tr> <td>05/06/24</td> <td>After Casing Removed</td> <td>None Noted</td> <td>out</td> </tr> <tr> <td>05/06/24</td> <td>After Casing Removed</td> <td>caved @ 6.4</td> <td>out</td> </tr> </tbody> </table>		Date	Time	Depth (Ft.)	Casing At (Ft.)	05/06/24	While Drilling	None Noted	6.0	05/06/24	Before Casing Removed	None Noted	7.7	05/06/24	After Casing Removed	None Noted	out	05/06/24	After Casing Removed	caved @ 6.4	out
Date	Time	Depth (Ft.)	Casing At (Ft.)																						
05/06/24	While Drilling	None Noted	6.0																						
05/06/24	Before Casing Removed	None Noted	7.7																						
05/06/24	After Casing Removed	None Noted	out																						
05/06/24	After Casing Removed	caved @ 6.4	out																						
Driller: K. Crandall		Casing Hammer:																							
Inspector: C. O'Hara		Other:																							
Drill Rig: CME 45		Soil Sampler: 2" OD Split Barrel																							
Type: ATV		Hammer Wt: 140 lbs.																							
Rod Size: AWJ		Hammer Fall: 30 in.																							
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL																			
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %																
		From	To																						
0	1A	0.0	0.5	SS/12	1-4-6-8		Topsoil and Organic Material (moist)		10																
1	1B	0.5	2.0				Brown cmf GRAVEL, little cmf SAND, little SILT (moist, medium compact)																		
2	2	2.0	4.0	SS/14	9-9-10-10		Brown/Grey cmf GRAVEL and SILT, little cmf SAND (moist, medium compact)		19																
3																									
4	3	4.0	6.0	SS/6	11-10-16-18		Brown SILT, little cmf GRAVEL, trace cmf SAND (moist, very stiff)		26																
5																									
6	4	6.0	7.3	SS/16	14-15-50@4"		Similar as above (moist, hard)		50+																
7							Augers like Rock beginning @ 7.4'																		
8	5	7.7	7.7	SS/0	50@0"		Split Spoon and Auger Refusal @ 7.7'		50+																
9							Bottom of Boring @ 7.7'																		
10																									
11																									
12																									
13																									
14																									
15																									
16																									
17																									
18																									
19																									
20																									

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG				Boring No.		B-675	
						Page No.		1 of 2	
						Project No.		28062	
Project Name:		Micron Campus, Clay, New York				Date Started		05/06/24	
Client:		Ramboll				Date Finished		05/06/24	
Location:		See Exploration Location Plan				Surface Elev.		403.9'	
METHODS OF INVESTIGATION						GROUNDWATER OBSERVATIONS			
Driller: Al Linstruth Driller: John Winks Inspector: Drill Rig: CME 55 Type: ATV Rod Size: AWJ		Casing: 3 ¼" ID H.S.A. Casing Hammer: Other: NQ-Core Soil Sampler: 2" OD Split Barrel Hammer Wt: 140 lbs. Hammer Fall: 30 in.		Date		Time		Depth (Ft.)	
				05/06/24		While Drilling		4.2	
				05/06/24		Before Casing Removed		4.5 *	
				05/06/24		After Casing Removed		out	
				05/06/24		After Casing Removed		caved @	
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL			
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
0	1	0.0	2.0	SS/16	2-2-2-2		Brown SILT, little cmf SAND, trace fine GRAVEL, trace ROOTS (moist, loose)		4
1									
2	2	2.0	4.0	SS/19	2-2-2-2		Brown SILT, little cmf SAND, trace fine GRAVEL (wet, medium stiff)		4
3									
4	3	4.0	6.0	SS/17	1-1-1-1		Brown SILT, little mf GRAVEL, little cmf SAND (wet, very loose)		2
5									
6	4	6.0	8.0	SS/15	3-4-7-7		Brown SILT, some cmf SAND, some mf GRAVEL (wet, stiff)		11
7									
8	5	8.0	10.0	SS/16	6-3-6-11		Similar as above (wet, stiff)		9
9									
10							<i>Auger Refusal @ 10.5'. Set up to core.</i>		
11	R-1	10.5	15.5	C/54	NQ-Core		Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 2.0" thick), slightly weathered, thinly laminated to thinly bedded, medium hard to hard. <i>Weathered zones (< 1/8" thick) @ 11.0' and 11.6'.</i> Recovery: 54"/60" = 90% RQD: 54"/60" = 90% 12 Pieces, 0" Chips and Fragments 1:25 min/ft, no water loss Coring conducted in 4th gear, 1700 rpm, 550 psi down pressure.		90%
12									
13									
14									
15	R-2	15.5	20.5	C/60	NQ-Core		Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 3.0" thick), slightly weathered, thinly laminated to thinly bedded, medium hard to hard. <i>Weathered zones (~1/2" thick) @ 19.4'.</i> Recovery: 60"/60" = 100% RQD: 58"/60" = 97% 19 Pieces, 0" Chips and Fragments 1:10 min/ft, no water loss Coring conducted in 4th gear, 1700 rpm, 550 psi down pressure.		97%
16									
17									
18									
19									
20							Continued on Page 2		

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks: *Water added to boring for coring.

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG			Boring No.		B-675	
									Page No.		2 of 2	
									Project No.		28062	
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL						
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine		and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%		SPT "N" or RQD %	
20							Continued from Page 1					
Bottom of Boring @ 20.5'												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
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41												
42												
43												
44												
45												

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG				Boring No.		B-676	
						Page No.		1 of 1	
						Project No.		28062	
Project Name:		Micron Campus, Clay, New York				Date Started		05/06/24	
Client:		Ramboll				Date Finished		05/06/24	
Location:		See Exploration Location Plan				Surface Elev.		404.3'	
METHODS OF INVESTIGATION						GROUNDWATER OBSERVATIONS			
Driller:		Al Linstruth		Casing:		3 ¼" ID H.S.A.		Date	
Driller:		John Winks		Casing Hammer:				Time	
Inspector:				Other:				Depth (Ft.)	
Drill Rig:		CME 55		Soil Sampler:		2" OD Split Barrel		Casing At (Ft.)	
Type:		ATV		Hammer Wt:		140 lbs.		05/06/24 While Drilling	
Rod Size:		AWJ		Hammer Fall:		30 in.		05/06/24 Before Casing Removed	
								05/06/24 After Casing Removed	
								05/06/24 After Casing Removed	
								caved @	
								out	
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL			
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
0	1	0.0	2.0	SS/15	1-2-2-4		Brown SILT, little cmf SAND, little mf GRAVEL, trace ORGANIC MATERIAL (moist, medium stiff)		4
1									
2	2	2.0	4.0	SS/16	4-4-3-4		Brown SILT, some cmf SAND, trace fine GRAVEL, trace ORGANIC MATERIAL (moist, medium stiff)		7
3									
4	3	4.0	6.0	SS/18	2-2-3-2		Brown SILT and cmf GRAVEL, some cmf SAND (wet, medium stiff)		5
5									
6	4	6.0	8.0	SS/15	2-12-10-10		Brown SILT, some cmf GRAVEL, little cmf SAND, trace CLAY (wet, very stiff)		22
7									
8	5	8.0	10.0	SS/16	5-10-13-7		Brown SILT and mf GRAVEL, little CLAY, little cmf SAND (wet, very stiff)		23
9									
10									
11							Auger Refusal @ 11.3'		
12							Bottom of Boring @ 11.3'		
13									
14									
15									
16									
17									
18									
19									
20									

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG				Boring No. B-677			
						Page No. 1 of 1			
						Project No. 28062			
Project Name:		Micron Campus, Clay, New York				Date Started		05/06/24	
Client:		Ramboll				Date Finished		05/06/24	
Location:		See Exploration Location Plan				Surface Elev.		403.8'	
METHODS OF INVESTIGATION						GROUNDWATER OBSERVATIONS			
Driller:	Al Linstruth	Casing:	3 ¼" ID H.S.A.			Date	Time	Depth (Ft.)	Casing At (Ft.)
Driller:	John Winks	Casing Hammer:				05/06/24	While Drilling	4.2	8.0
Inspector:		Other:				05/06/24	Before Casing Removed	4.7	10.5
Drill Rig:	CME 55	Soil Sampler:	2" OD Split Barrel			05/06/24	After Casing Removed	5.4	out
Type:	ATV	Hammer Wt:	140 lbs.			05/06/24	After Casing Removed	caved @ 6.0	out
Rod Size:	AWJ	Hammer Fall:	30 in.						
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine		SPT "N" or RQD %
		From	To				and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%		
0	1	0.0	2.0	SS/15	1-2-1-6		Brown SILT, little cmf SAND, trace ORGANIC MATERIAL (moist, soft)		3
1									
2	2	2.0	4.0	SS/14	4-2-2-4		Brown cmf SAND and cmf GRAVEL, some SILT, trace CLAY (moist, loose)		4
3									
4	3	4.0	6.0	SS/17	4-2-4-7		Brown SILT, some mf GRAVEL, little cmf SAND, trace CLAY (moist, medium stiff)		6
5									
6	4	6.0	8.0	SS/15	6-7-14-17		Brown SILT, little cmf SAND, trace CLAY (moist, very stiff)		21
7									
8	5A	8.0	9.0	SS/16	14-17-27-54		Brown cmf SAND, some cmf GRAVEL, little SILT (wet, compact)		44
9	5B	9.0	10.0				Grey/Black weathered ROCK Fragments (Shale) (wet)		
10							Auger Refusal @ 10.5'		
11							Bottom of Boring @ 10.5'		
12									
13									
14									
15									
16									
17									
18									
19									
20									

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-678			
				Page No.		1 of 2			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		05/07/24			
Client: Ramboll				Date Finished		05/07/24			
Location: See Exploration Location Plan				Surface Elev.		398.4'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: H. Lyon		Casing: 3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller: K. Crandall		Casing Hammer:							
Inspector: C. O'Hara		Other:							
Drill Rig: CME 45		Soil Sampler: 2" OD Split Barrel							
Type: ATV		Hammer Wt: 140 lbs.							
Rod Size: AWJ		Hammer Fall: 30 in.		05/07/24	While Drilling	None Noted	8.0		
				05/07/24	Before Casing Removed	20.4	24.4		
				05/07/24	After Casing Removed	None Noted	out		
				05/07/24	After Casing Removed	caved @ 3.8	out		
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1A	0.0	0.4	SS/14	1-1-2-2		Topsoil and Organic Material (moist)		3
1	1B	0.4	2.0				Brown/Black SILT, trace CLAY, trace woody ORGANIC MATERIAL (moist, soft)		
2	2	2.0	4.0	SS/13	4-6-6-4		Brown SILT, trace CLAY (moist, stiff)		12
3									
4	3	4.0	6.0	SS/14	3-3-4-2		Brown SILT, little CLAY (moist, medium stiff)		7
5									
6	4	6.0	8.0	SS/17	2-4-5-8		Brown SILT, trace CLAY (wet, stiff)		9
7									
8	5	8.0	10.0	SS/16	8-10-10-8		Brown/Grey, Similar as above (moist, very stiff)		20
9									
10									
11									
12									
13	6	13.0	15.0	SS/14	1-3-4-5		Brown/Grey SILT, trace CLAY (wet, medium stiff)		7
14									
15									
16									
17							Augers easier beginning @ 17.0'		
18	7	18.0	20.0	SS/14	WH-2-13-35		Grey SILT, some cmf SAND, trace mf GRAVEL (moist, very stiff)		15
19									
20							Continued on Page 2		

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG			Boring No.		B-678	
									Page No.		2 of 2	
									Project No.		28062	
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL						
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) FromTo		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%		SPT "N" or RQD %		
20	8	23.0	23.4	SS/5	50@5"		Continued from Page 1				50+	
21							Augers hard @ 21.4'					
22												
23	9	24.4	24.7	SS/4	50@4"		Grey cmf SAND and fine GRAVEL, little SILT (moist, very compact)				50+	
24							Auger Refusal @ 24.4'					
25							Grey cmf SAND and SILT, little fine GRAVEL (moist, very compact)					
26							Bottom of Boring @ 24.7'					
27												
28												
29												
30												
31												
32												
33												
34												
35												
36												
37												
38												
39												
40												
41												
42												
43												
44												
45												

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG			Boring No.	B-679
									Page No.	2 of 2
									Project No.	28062
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%		SPT "N" or RQD %
20	9	22.2	22.5	SS/4	50@4"		Continued from Page 1			50+
21						-----				
22						Augers very hard beginning @ 22.2'				
23						Dark Grey weathered ROCK Fragments (Shale), little cmf SAND, little SILT (moist, very compact)				
24						Bottom of Boring @ 22.5'				
25										
26										
27										
28										
29										
30										
31										
32										
33										
34										
35										
36										
37										
38										
39										
40										
41										
42										
43										
44										
45										

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG				Boring No.		B-681	
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						Project No.		28062	
Project Name:		Micron Campus, Clay, New York				Date Started		05/08/24	
Client:		Ramboll				Date Finished		05/08/24	
Location:		See Exploration Location Plan				Surface Elev.		395.6'	
METHODS OF INVESTIGATION						GROUNDWATER OBSERVATIONS			
Driller:		H. Lyon		Casing:		3 ¼" ID H.S.A.			
Driller:		K. Crandall		Casing Hammer:					
Inspector:		C. O'Hara		Other:					
Drill Rig:		CME 45		Soil Sampler:		2" OD Split Barrel			
Type:		ATV		Hammer Wt:		140 lbs.			
Rod Size:		AWJ		Hammer Fall:		30 in.			
Date		05/08/24		Time		While Drilling		Depth (Ft.)	
Before Casing Removed		None Noted		Casing At (Ft.)		13.0			
After Casing Removed		None Noted		out					
After Casing Removed		caved @ 6.7		out					
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
0	1A	0.0	0.3	SS/12	WH-1-1-2		Topsoil and Organic Material (moist)		2
1	1B	0.3	2.0				Miscellaneous FILL; Black cinders, fine gravel, cmf sand, silt (wet)		
2	2	2.0	4.0	SS/18	9-8-7-7		Brown SILT, trace CLAY, trace fine SAND (moist, stiff)		15
3									
4	3	4.0	6.0	SS/17	2-6-8-12		Similar as above (moist, stiff)		14
5									
6	4	6.0	8.0	SS/15	11-7-6-7		Brown SILT, little cmf SAND, trace mf GRAVEL, trace CLAY (wet, stiff)		13
7									
8	5	8.0	9.4	SS/14	11-28-50@5"		Brown SILT, some cmf SAND, trace fine GRAVEL (moist, hard) <i>Augers like Cobble beginning @ 8.5'</i>		50+
9									
10									
11							<i>Augers harder beginning @ 11.7'</i>		
12									
13	6	13.0	13.9	SS/10	83-50@5"		Grey SILT, trace fine SAND, trace CLAY (moist, hard)		50+
14							Bottom of Boring @ 13.9'		
15									
16									
17									
18									
19									
20									

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-683			
				Page No.		1 of 2			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		05/07/24			
Client: Ramboll				Date Finished		05/08/24			
Location: See Exploration Location Plan				Surface Elev.		394.8'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: Beau Fletcher		Casing: 3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller: Ryan Casatelli		Casing Hammer:							
Inspector:		Other:							
Drill Rig: CME 55		Soil Sampler: 2" OD Split Barrel							
Type: ATV		Hammer Wt: 140 lbs.							
Rod Size: AWJ		Hammer Fall: 30 in.		05/08/24	While Drilling	3.3	13.5		
				05/08/24	Before Casing Removed	27.4	28.5		
				05/08/24	After Casing Removed	6.0	out		
				05/08/24	After Casing Removed	caved @ 8.3	out		
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1A	0.0	0.5	SS/17	1-7-4-12		Topsoil and Organic Material (moist)		11
1	1B	0.5	2.0				Grey/Brown cmf GRAVEL and cmf SAND, trace SILT (moist, medium compact)		
2	2	2.0	4.0	SS/16	5-6-11-13		Brown/Dark Grey SILT, trace fine SAND (moist, very stiff)		17
3									
4	3	4.0	6.0	SS/219	8-10-11-12		Brown/Grey SILT, trace fine SAND, trace CLAY (moist, very stiff)		21
5									
6	4	6.0	8.0	SS/24	7-5-7-7		Brown SILT, little cmf SAND, trace mf GRAVEL (wet, stiff)		12
7									
8	5	8.0	9.7	SS/15	3-9-11-50@2"		Grey SILT, some cmf SAND, little cmf GRAVEL (wet, very stiff)		20
9									
10									
11									
12									
13									
14	6	13.5	14.4	SS/7	19-50@5"		Grey SILT, trace mf GRAVEL, trace cmf SAND, trace CLAY (moist, hard)		50+
15									
16									
17									
18									
19	7	18.5	19.8	SS/13	17-45-50@4"		Grey SILT, some cmf SAND, little CLAY, trace fine GRAVEL (moist, hard)		50+
20							Continued on Page 2		

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks: * Water added to boring for coring.

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG			Boring No.	B-683
									Page No.	2 of 2
									Project No.	28062
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %	
20	8	23.5	23.9	SS/5	50@5"		Continued from Page 1		50+	
21										
22										
23										
24							Grey SILT, trace mf GRAVEL, trace cmf SAND (moist, hard)			
25	9	28.5	29.3	SS/8	30-50@4"		Grey SILT, little CLAY, trace fine SAND (moist, hard)		50+	
26										
27										
28										
29										
30							Bottom of Boring @ 30.0'			
31										
32										
33										
34										
35										
36										
37										
38										
39										
40										
41										
42										
43										
44										
45										

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-684			
				Page No.		1 of 1			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		05/08/24			
Client: Ramboll				Date Finished		05/08/24			
Location: See Exploration Location Plan				Surface Elev.		394.0'			
METHODS OF INVESTIGATION						GROUNDWATER OBSERVATIONS			
Driller: H. Lyon		Casing: 3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller: K. Crandall		Casing Hammer:							
Inspector: C. O'Hara		Other:							
Drill Rig: CME 45		Soil Sampler: 2" OD Split Barrel							
Type: ATV		Hammer Wt: 140 lbs.							
Rod Size: AWJ		Hammer Fall: 30 in.		05/08/24	While Drilling	4.5	8.0		
				05/08/24	Before Casing Removed	3.2	13.0		
				05/08/24	After Casing Removed	3.7	out		
				05/08/24	After Casing Removed	caved @ 6.7	out		
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1A	0.0	0.5	SS/13	1-WH-1-2		Topsoil and Organic Material (moist)		1
1	1B	0.5	2.0				Brown SILT, trace CLAY, trace ORGANIC MATERIAL (moist, very soft)		
2	2	2.0	4.0	SS/14	2-6-5-6		Brown SILT, trace CLAY, trace fine SAND (moist, stiff)		11
3									
4	3	4.0	6.0	SS/15	2-2-8-10		Brown SILT, little cmf GRAVEL, trace cmf SAND (wet, stiff)		10
5									
6	4	6.0	8.0	SS/12	8-17-21-29		<i>Augers harder beginning @ 5.5'</i> Brown SILT, little mf GRAVEL, trace cmf SAND (moist, hard)		38
7									
8	5	8.0	9.4	SS/10	19-28-50@5"		Grey SILT, little fine GRAVEL, trace cmf SAND (moist, hard)		50+
9									
10									
11									
12									
13	6	13.0	14.3	SS/11	27-34-50@4"		Grey SILT, little mf GRAVEL, trace CLAY, trace cmf SAND (moist, hard)		50+
14									
15							Bottom of Boring @ 14.3'		
16									
17									
18									
19									
20									

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-685			
				Page No.		1 of 1			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		05/09/24			
Client: Ramboll				Date Finished		05/09/24			
Location: See Exploration Location Plan				Surface Elev.		397.0'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: H. Lyon		Casing: 3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller: K. Crandall		Casing Hammer:							
Inspector: C. O'Hara		Other:							
Drill Rig: CME 45		Soil Sampler: 2" OD Split Barrel							
Type: ATV		Hammer Wt: 140 lbs.							
Rod Size: AWJ		Hammer Fall: 30 in.		05/09/24	While Drilling	7.4	10.0		
				05/09/24	Before Casing Removed	5.8	17.7		
				05/09/24	After Casing Removed	4.8	out		
				05/09/24	After Casing Removed	caved @ 14.8	out		
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1A	0.0	0.6	SS/16	WH-1-2-2		Topsoil and Organic Material (moist)		3
1	1B	0.6	2.0				Brown SILT, little CLAY, trace cmf SAND, trace ORGANIC MATERIAL (moist, soft)		
2	2	2.0	4.0	SS/15	5-6-6-6		Brown SILT, trace CLAY (moist, stiff)		12
3									
4	3	4.0	6.0	SS/16	6-9-11-12		Similar as above (wet, very stiff)		20
5									
6	4	6.0	8.0	SS/18	7-8-8-8		Similar as above (moist, very stiff)		16
7									
8	5	8.0	10.0	SS/20	6-8-8-7		Brown/Grey/Orange, Similar as above (moist, very stiff)		16
9									
10									
11									
12									
13	6	13.0	15.0	SS/11	7-5-11-6		Grey, Similar as above (moist, very stiff)		16
14							Augers like Cobble beginning @ 14.0'		
15									
16									
17							Augers very hard beginning @ 17.2'		
18	7	17.7	17.8	SS/1	50@1"		Black SHALE Fragments Auger Refusal @ 17.7'		
19							Bottom of Boring @ 17.8'		
20									

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-686			
				Page No.		1 of 1			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		05/09/24			
Client: Ramboll				Date Finished		05/09/24			
Location: See Exploration Location Plan				Surface Elev.		397.5'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: H. Lyon		Casing: 3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller: K. Crandall		Casing Hammer:							
Inspector: C. O'Hara		Other:							
Drill Rig: CME 45		Soil Sampler: 2" OD Split Barrel							
Type: ATV		Hammer Wt: 140 lbs.							
Rod Size: AWJ		Hammer Fall: 30 in.		05/09/24	While Drilling	5.8	10.0		
				05/09/24	Before Casing Removed	6.5	17.0		
				05/09/24	After Casing Removed	5.0	out		
				05/09/24	After Casing Removed	caved @ 15.0	out		
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1A	0.0	0.8	SS/18	WR-WH-1-4		Topsoil and Organic Material (moist)		1
1	1B	0.8	2.0				Brown SILT, trace CLAY, trace fine SAND, trace ORGANIC MATERIAL (moist, soft)		
2	2	2.0	4.0	SS/16	5-6-6-7		Brown SILT, trace CLAY (moist, stiff)		12
3									
4	3	4.0	6.0	SS/15	4-7-7-8		Brown SILT, trace CLAY (wet, stiff)		14
5									
6	4	6.0	8.0	SS/11	4-8-11-5		Similar as above (wet, very stiff)		19
7									
8	5	8.0	10.0	SS/20	5-6-8-13		Similar as above (moist, stiff)		14
9									
10									
11									
12									
13	6	13.0	15.0	SS/13	5-6-8-13		Grey, Similar as above (moist, stiff)		14
14									
15									
16									
17	7	16.9	17.0	SS/1	50@1"		Augers like Cobble beginning @ 16.7'. Augers harder beginning @ 16.9'. Black SHALE Fragments Auger Refusal @ 17.0'		50+
18							Bottom of Boring @ 17.0'		
19									
20									

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522					SUBSURFACE EXPLORATION TEST BORING LOG			Boring No. B-688	
								Page No. 1 of 2	
								Project No. 28062	
Project Name: Micron Campus, Clay, New York					Date Started 05/07/24		Date Finished 05/07/24		
Client: Ramboll					Surface Elev. 394.8'				
Location: See Exploration Location Plan									
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: Beau Fletcher Driller: Ryan Casatelli Inspector: Drill Rig: CME 55 Type: ATV Rod Size: AWJ		Casing: 3 ¼" ID H.S.A. Casing Hammer: Other: NQ-Core Soil Sampler: 2" OD Split Barrel Hammer Wt: 140 lbs. Hammer Fall: 30 in.		Date 05/07/24 05/07/24 05/07/24 05/07/24		Time While Drilling Before Casing Removed After Casing Removed After Casing Removed		Depth (Ft.) 5.5 None Noted 3.0 * caved @ 8.0	
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
0	1A	0.0	1.0	SS/19	WH-1-2-5		Topsoil and Organic Material (moist)		3
1	1B	1.0	2.0				Brown SILT, trace CLAY (moist, soft)		
2	2	2.0	4.0	SS/20	5-6-8-10		Brown/Grey SILT, trace CLAY (moist, stiff)		14
3									
4	3	4.0	6.0	SS/17	6-7-7-8		Brown, Similar as above (wet, stiff)		14
5									
6	4	6.0	8.0	SS/19	7-8-9-13		Similar as above (moist, very stiff)		17
7									
8	5	8.0	10.0	SS/12	8-6-4-4		Grey SILT, little mf GRAVEL, trace cmf SAND (wet, stiff)		10
9									
10									
11									
12									
13	6	13.5	15.0	SS/6	11-50-9		Grey/Black cmf GRAVEL, little SILT, little cmf SAND (wet, very compact)		59
14									
15									
16	R-1	16.0	21.0	C/58	NQ-Core		Auger Refusal @ 16.0'. Set up to core.		60%
17							Grey DOLOSTONE with interbedded SHALE layers (1/8" - 1.0" thick), slightly weathered, thinly laminated to medium bedded, medium hard to hard.		
18							Broken and fractured zone @ 17.6' - 17.8'.		
19							Weathered zone (1/4" - 3/4" thick) @ 18.6' and 19.8'.		
20							Recovery: 58"/60" = 97% RQD: 36"/60" = 60%		
							21 Pieces, 2" Chips and Fragments		
							Continued on Page 2		

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks: *Water added to boring for coring.

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522						SUBSURFACE EXPLORATION TEST BORING LOG		Boring No. B-688	Page No. 2 of 2
								Project No. 28062	
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL			
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
20	R-2	21.0	26.0	C/56	NQ-Core		Continued from Page 1 1:00 min/ft, no water loss Coring conducted in 4th gear, 1700 rpm, 700 psi down pressure. Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 6.0' thick), slightly weathered, thinly laminated to medium bedded, medium hard to hard. Weathered zone (<1/8" thick) @ 20.2'. Recovery: 56"/60" = 93% RQD: 47"/60" = 78% 22 Pieces, 0" Chips and Fragments 1:00 min/ft, no water loss Coring conducted in 4th gear, 1700 rpm, 700 psi down pressure.		78%
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									
36									
37									
38									
39									
40									
41									
42									
43									
44									
45									

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

 6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No.		B-689			
				Page No.		1 of 1			
				Project No.		28062			
Project Name: Micron Campus, Clay, New York				Date Started		05/09/24			
Client: Ramboll				Date Finished		05/09/24			
Location: See Exploration Location Plan				Surface Elev.		395.2'			
METHODS OF INVESTIGATION					GROUNDWATER OBSERVATIONS				
Driller: H. Lyon		Casing: 3 ¼" ID H.S.A.		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller: K. Crandall		Casing Hammer:							
Inspector: C. O'Hara		Other:							
Drill Rig: CME 45		Soil Sampler: 2" OD Split Barrel							
Type: ATV		Hammer Wt: 140 lbs.							
Rod Size: AWJ		Hammer Fall: 30 in.		05/09/24	While Drilling	1.5	13.0		
				05/09/24	Before Casing Removed	2.9	14.5		
				05/09/24	After Casing Removed	3.9	out		
				05/09/24	After Casing Removed	caved @ 7.6	out		
LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.)		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%	SPT "N" or RQD %
		From	To						
0	1A	0.0	1.0	SS/18	WH-WH-1-2		Topsoil and Organic Material (moist)		1
1	1B	1.0	2.0				-----		
2	2	2.0	4.0	SS/15	8-9-7-7		Brown SILT, trace CLAY (moist, very stiff)		16
3									
4	3	4.0	6.0	SS/17	7-8-7-7		Brown SILT, trace CLAY (moist, very stiff)		15
5									
6	4	6.0	8.0	SS/19	5-8-8-10		Brown/Grey, Similar as above (moist, very stiff)		16
7							-----		
8	5	8.0	10.0	SS/17	8-7-9-4		Brown/Grey SILT, little mf GRAVEL, trace cmf SAND (moist, very stiff)		16
9									
10									
11							Augers gravelly beginning @ 10.5'		
12							Augers like Cobble beginning @ 11.2'		
13	6	13.0	14.3	SS/5	2-6-50@4"		Grey/Brown SILT, some cmf SAND, trace fine GRAVEL (moist, hard)		50+
14							-----		
15	7	14.5	14.5	SS/0	50@0"		Black SHALE Fragments in tip of spoon. Auger Refusal @ 14.5'		50+
16							Bottom of Boring @ 14.5'		
17									
18									
19									
20									

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:



GENERAL INFORMATION & KEY TO TEST BORING LOGS

The **Subsurface Exploration – Test Boring Logs** produced by **CME Associates, Inc.** (CME) present observations and mechanical data collected by the CME Drill Crew while at the site, supplemented, at times, by classification of the materials removed from the borings determined through visual identification by technicians in the laboratory. It is cautioned that the materials removed from the borings represent only a fraction of the total volume of the deposits at the site and may not necessarily be representative of the subsurface conditions between adjacent borings or between the sampled intervals. The data presented on the Exploration Logs together with the recovered samples will provide a basis for evaluating the character of the subsurface conditions relative to the proposed construction. The evaluation must consider all the recorded details and their significance relative to each other. Often, analyses of standard boring data indicate the need for additional testing and sampling procedures to more accurately evaluate the subsurface conditions. Any evaluations of the contents of CME's report and the recovered samples must be performed by Licensed Professionals having experience in Soil Mechanics, Geological Sciences and Geotechnical Engineering. The information presented in this Key defines some of the methods, procedures and terms used on the CME Exploration Logs to describe the conditions encountered. Refer to the Log on page 4 for key number.

Key No.

Description

1. The figures in the **DEPTH SCALE** column define the vertical scale of the Boring Log.
2. The **SAMPLE NO.** is used for identification on the sample containers and in the Laboratory Test Report or Summary.
3. The **SAMPLE DEPTH** column gives the depth range from which a sample was recovered.
4. The **TYPE / SAMPLE RECOVERY** column is used to signify the various types of samples. "SS is Split Spoon, "U" is Undisturbed Tube, and "C" is Rock Core. For soil and rock samples, the recovered length of the sample is recorded in inches.
5. **BLOWS ON SAMPLER** – This column shows the results of the "Standard Penetration Test (SPT) ASTM D1586", recording the number of blows required to drive a 2-inch outside diameter (O.D.) split spoon sampler into the ground beneath the casing. The number of blows required for each six inches of penetration is recorded. The total number of blows required for the 6-inch to 18-inch interval is summarized in the **SPT "N"** column and represents the "Standard Penetration Number". The outside diameter of the sampler, the hammer weight and the length of drop are noted in the **Methods of Investigation** portion of the log. A "WH" or "WR" in this column indicates that the sample spoon advanced a 6-inch interval under the **Weight of Hammer + Rod** or **Weight of Rod**, respectively. If a rock core sample is taken, the core bit size designation is given here.
6. The **DEPTH OF CHANGE** column designates the depth (in feet) that the driller noted a compactness or stratum change. In soft materials or soil strata exhibiting a consistent relative density, it is difficult for the driller to determine the exact change from one stratum to the next. In addition, a grading or gradual change may exist. In such cases the depth noted is approximate or estimated only and may be represented by a dashed line. When continuous split spoon sampling is not employed, or an interval of several feet exists between samplings, the Depth of Change may not be indicated at all.
7. **VISUAL CLASSIFICATION OF MATERIAL** – Soil materials sampled and recovered are described by the Driller or Geotechnical Representative on the original field log. Notes of the Drillers observations are also placed in this column. Recovered samples may also be visually classified by a Geologist, Engineer, or Soil Technician. Visual soil classifications are made using a modified Burmister System as practiced by CME and as generally described in this Key and abbreviated on the Test Boring Log. This modified Burmister System is a type of visual-manual textural classification estimated by the Driller, Geologist, Engineer, or Technician on the basis of weight-fraction of the recovered material and estimated plasticity, among other characteristics. See Table 1 "**Classification of Materials**". The description of the relative compactness or consistency is based upon the standard penetration number as defined in Table 2. The description of the recovered sample moisture condition is described as dry, moist, wet, or saturated. Water used to advance the boring may affect the moisture content of the recovered sample. Special terms may be used to describe recovered materials in greater detail, such terms are listed in ASTM D653. When sampling gravelly soils with a standard two-inch O.D. Split Spoon, the true percentage of gravel is often not recovered due to the relatively small sampler diameter. The presence of boulders, cobbles, and large gravel is sometimes, but not necessarily, detected by observation of the casing advancement and sampler blows and/or through the "action" of the drill rig, sampler and/or casing as reported by the Driller.

The description of **Rock** is based upon the recovered rock core. Terms frequently used in the description are included in Tables 3, 4 and 5. The length of core run is defined as length of penetration between retrievals of the core barrel from the bore hole, expressed in inches. The core recovery expresses the length of core recovered from the core barrel per core run, in percent. The size core barrel used is noted in Column 5. An "N" size core, being larger in diameter than "A" size core, often produces better recovery, and is frequently utilized where accurate information regarding the geologic conditions and engineering properties is needed. An estimate of in-situ rock quality is provided by a modified core recovery ratio known as the "**Rock Quality Designation**" (**RQD**). This ratio is determined by considering only pieces of core that are at least 4 inches long and are hard and sound. Breaks obviously caused by drilling are ignored. The percentage ratio between the total length of such core recovered and the length of core drilled on a given run is the RQD. Table 4 indicates in-situ rock quality as related to the **RQD**.



8. The **SPT “N”** or **RQD** is given in this column as applicable to the specific sample taken. In Very Compact coarse-grained soils and in Hard fine-grained soils the N-value may be indicated as 50+ or 100+. This typically means that the blow count was achieved prior to driving the sampler the entire 6-inch interval or the sampler refused further penetration. For an “N” size rock core, the RQD is reported here, expressed in percent (%).
9. **GROUNDWATER OBSERVATIONS** and timing noted by the Drill Crew are shown in this section. It is important to realize that the reliability of the water level observations depend upon the soil type (e.g. water does not readily stabilize in a hole through fine grained soils), and that drill water used to advance the boring may have influenced the observations. Groundwater levels typically fluctuate seasonally so those noted on the log are only representative of that exhibited during the period of time noted on the log. One or more perched or trapped water levels may exist in the ground seasonally. All the available resources and data should be evaluated. If definite conclusions cannot be made, it is often prudent to examine the conditions more thoroughly through test pit excavations or through groundwater observation well installations.
10. **METHODS of INVESTIGATION** provides pertinent information regarding the identity of the Drill Crew members, inspector (if any), drill rig make and model, drill rig mount vehicle, casing and type of advancement, soil and rock sampling tools and appurtenances used in the installation of the Test Boring.

TABLE 1 - CLASSIFICATION OF MATERIALS	
GROUP	COARSE GRAINED SOILS TEXTURAL SIZES
BOULDERS	larger than 12" diameter
COBBLES	12" diameter to 3" sieve
GRAVEL	3" - coarse - 1" - medium - 1/2" - fine - #4 sieve
SAND	#4 - coarse - #10 - medium - #40 - fine - #200 sieve
GROUP	FINE GRAINED SOILS SIZE (PLASTICITY*)
SILT	#200 sieve (0.074mm) to 0.005mm size (see below *)
CLAY	0.005mm size to 0.001 mm size (see below *)
GROUP	ORGANIC SOILS, PEAT, MUCK, MARL
ORGANIC	Based on smell, visual-manual and laboratory testing

ABBREVIATIONS	TERM	ESTIMATED PERCENT OF TOTAL SAMPLE BY WEIGHT
f - fine	and	35 to 50%
m - medium	some	20 to 35%
c - coarse	little	10 to 20%
	trace	0 to 10%

*PLASTICITY DESCRIPTIONS and INDICATOR FIELD TESTS			
TERM	PLASTICITY INDEX	DRY STRENGTH TEST	
		INDICATION	FIELD TEST RESULT
non-plastic	0 - 3	Very low	falls apart easily
slightly plastic	4 - 15	Slight	easily crushed by fingers
plastic	15 - 30	Medium	difficult to crush
highly plastic	31 or more	High	impossible to crush with fingers
Other Field Tests include: Dilatancy, Thread and Shine Testing			

**TABLE 2 - DESCRIPTION OF SOIL COMPACTNESS OR CONSISTENCY based on SPT "N"***

Primary Soil Type	Descriptive Term of Compactness	Range of Standard Penetration Resistance (N)
COARSE GRAINED SOILS	Very Loose	less than 4 blows per foot
(More than half of Material is larger than No. 200 sieve size)	Loose	4 to 10
	Medium Compact	10 to 30
	Compact	30 to 50
	Very Compact	Greater than 50
FINE GRAINED SOILS	Descriptive Term of Consistency	Range of Standard Penetration Resistance (N)
(More than half of material is smaller than No. 200 sieve size)	Very Soft	less than 2 blows per foot
	Soft	2 to 4
	Medium Stiff	4 to 8
	Stiff	8 to 15
	Very Stiff	15 to 30
	Hard	Greater than 30
*The number of blows of 140-pound weight falling 30 inches to drive a 2-inch O.D., 1-3/8 inch I.D. sampler 12 inches is defined as the Standard Penetration Resistance, designated "N".		

TABLE 3 - ROCK CLASSIFICATION TERMS

Rock Classification Terms		Field Test or Meaning of Term
Hardness	Soft	Scratched by fingernail. Crumbles under firm blows with a geologic pick.
	Medium Soft	Shallow indentations (1 to 3 mm) can be made by firm blows of a geologic pick. Can be peeled with a pocketknife with difficulty.
	Medium Hard	Scratched distinctly by penknife or steel nail. Can't be peeled or scraped with knife.
	Hard	Scratched with difficulty by penknife or steel nail. Requires more than one blow with a geologic hammer to break it
	Very Hard	Cannot be scratched by penknife or steel nail. Breaks only by repeated heavy blows with a geologic hammer.
Bedding (Divisional planes and/or surfaces separating it from layers above and below)	Thinly Laminated Laminated Thinly Bedded Medium Bedded Thickly Bedded Massive	less than 1/8 th inch 1/8 th to 1 inch 1 inch to 4 inches 4 inches to 12 inches 12 inches to 48 inches greater than 48 inches

**TABLE 4
Relation of Rock Quality Designation (RQD) and in-situ Rock Quality**

RQD %	Rock Quality Term Used
90 to 100	Excellent
75 to 90	Good
50 to 75	Fair
25 to 50	Poor
0 to 25	Very Poor

**TABLE 5 – BEDROCK WEATHERING CLASSIFICATION**

Classification	Diagnostic Features
Fresh	No visible sign of decomposition or discoloration. Rings under hammer impact.
Slightly Weathered	Slight discoloration inwards from open fractures, otherwise similar to Fresh.
Moderately Weathered	Discoloration throughout. Strength somewhat less than fresh rock but cores cannot be broken by hand or scraped with knife. Texture observed.
Highly Weathered	Most minerals somewhat decomposed. Specimens can be broken by hand with effort or shaved with knife. Core stones present in rock mass. Texture becoming indistinct but fabric preserved.
Completely Weathered	Minerals decomposed to soil, but fabric and structure preserved (e.g. Saprolite). Specimens easily crumbled or penetrated.
Residual Soil	Advanced state of decomposition resulting in plastic soils. Rock fabric and structure completely destroyed. Large volume change.

6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522		SUBSURFACE EXPLORATION TEST BORING LOG		Boring No. B-2
				Page No. 1 of 1
				Report No.
Project Name:				Date Started
Client:				Date Finished
Location:				Surface Elev.
METHODS OF INVESTIGATION			GROUNDWATER OBSERVATIONS	
Driller: 10 Driller: Inspector: Drill Rig: Type: Rod Size:	Casing: 10 Casing Hammer: Other: Soil Sampler: Hammer Wt: Hammer Fall:	Date	Time	Depth (Ft.)
			While Drilling	9
			Before Casing Removed	
			After Casing Removed	
			After Casing Removed	
LOG OF BORING SAMPLES		VISUAL CLASSIFICATION OF MATERIAL		
Depth Scale (Feet)	Sample No.	Sample Depth (Ft.) From To	Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches
1	2	3 3	4	5
				6
				7
				8

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

CEG Report No.: 172E-02-0824



6035 Corporate Drive
East Syracuse, New York 13057
(315) 701-0522
(315) 701-0526 (Fax)
www.cmeassociates.com

Transmittal

August 08, 2024

Ramboll (Client)
94 New Karner Road
Albany, New York
Phone: 315.420.8439

Attn: Andy Philips, Sr. Project Manager
Andy.Philips@Ramboll.com

Re: Micron Campus
Clay, New York
CME Project No.: 28062-05

Gentlepeople:

Enclosed you will find....

<u>Number of Copies</u>	<u>Report Number</u>	<u>Description</u>
1	CEG Report No.: 172E-02-0824	Geotechnical Engineering and 30% Civil Design Q&A Twelve Questions from CK Tang on 08/05/2024

The above report was emailed to Andy Philips at Andy.Philips@Ramboll.com on 08/08/2024.

Respectfully submitted,
CME Associates, Inc.

A handwritten signature in black ink, appearing to read "J. Seamans", is written over a light blue circular stamp.

Jerry Seamans
Administrative Assistant
AA.js

August 08, 2024

Ramboll Americas Integrated Solutions
94 New Karner Road
Albany, New York 12203
Email: Andy.Philips@Ramboll.com

Attn: Andy Philips, Senior Project Manager

Re: Geotechnical Engineering and 30% Civil Design Q&A
Twelve Questions from CK Tang on 08/05/2024
Micro Campus, Clay, New York
CEG Report No.: 172E-02-0824
Page 1 of 4

Gentlepeople:

At your request, CME Engineering Group, D.P.C. (CEG) is responding to the twelve questions posed by CK Tang of Micron on 08/05/2024, as given in the attached email. The Soils Investigation and Conceptual Foundation Recommendation Report, CEG Report No. 172E-01-0224, dated 02/06/2024, (CFR Report) is referenced.

Q1: What else would the geotechnical engineers propose to do and how do they anticipate that would help the project?

A1: CEG currently has a proposal (CME Change Order No. 3 R1, dated 06/27/2024) submitted to Ramboll for Phase 1A, which answers this question.

Q2: Can you show, graphically, the intent the 2.5' height of fill requirement and where there are concerns in Figure 2 of the Feb 2024 report? What are the risks and how can they be mitigated? (SMP Risk)

A2: The setback recommendation is applicable to conventional shallow foundation systems for Level 400 structures located less than about 12.5 feet from the Level 400/Level 395 line and anywhere proposed structural fills grade down to native, pre-existing grade. The concern is retaining wall rotation and/or soil grade creep causing subsidence of on-grade improvements and building elements within this approximate influence area.

Alternatively, these concerns may be mitigated by stepping foundations down to below the influence area, and, in the case of on-grade improvements, other mitigating techniques may be applied.

Q3: What are lateral load capacities of pile options to be used in evaluating deep foundations?

- Are there any concerns with the soils resisting lateral (wind/seismic) loads from the buildings if piles are not used?

A3: Pile lateral load capacity will vary significantly depending on, but not limited to, depth of structural fill, allowable deflection under service load, etc. In general, though, you can achieve higher lateral load capacity with drilled concrete piers, vs. driven steel and/or timber piles. Driven batter piles may be considered for higher lateral capacity. It is too early to answer the second part of the question.

Q4: Drilled pier foundations are specifically not recommended, could you elaborate on why they are not recommended? Drilled piers are a preferred option for the heaviest areas if they are feasible.

A4: Drilled Piers could be utilized in some areas, however, there are technical concerns, constructability concerns, and time concerns. Some of these issues/concerns include: the in-situ bedrock quality varies from RQD 12% to RQD 100% in the upper 5 feet and the unconfined compressive strength varies from less than 4 ksi to 24 ksi, as well as the presence of inundated, collapsing non-plastic soils below structural fills, intervening layers of geotextiles, and variable downdrag loadings.

Q5: Could you add recommendations for driven concrete piles, push piles, and micropiles?

A5: In CEG's professional opinion, precast concrete piles are not a viable alternative due to highly variable pile length, and risk of pile damage when driving to reach the end-bearing stratum (bedrock/till). For the loads presented, the time of installation, and other factors; push piles and micropiles are not recommended.

Q6: What are the risks to underground utility installations, regardless of foundation types, and how are they recommended to be addressed?

A6: Underground utilities situated in, or below structural fill are subject to differential settlement risk. Large diameter storm sewers and underground utility tunnels may interfere with and/or create large linear abnormalities in areas where ground improvement techniques are elected. More risks may come to light once CEG is provided with underground utility plans and profiles.

Q7: Stormwater facilities will need to be specialty designed via sheet piling, weirs, liners, in lieu of native soils due to existing water table and proximity to existing swamp areas. What else can the Geotechnical Engineer recommend for these topics?

A7: CEG has insufficient information to evaluate and/or render recommendations at this time. Input from Ramboll may be beneficial

Q8: What are geotechnical recommendations for building dewatering systems and anticipated design flowrates?

A8: CEG has insufficient information to evaluate and/or render recommendations at this time.

Q9: Can the geotechnical engineers provide a contour map or similar of what depths the expansive clays are found so that we can better understand their extents and depths?

A9: Please refer to the CFR Report, Section 4.5, 3rd Paragraph and note that expensive soils were also noted in the Test Pits (see CBR test results), within 6 feet of existing grade.

Q10: We do not believe the building column demands stated in the geotechnical recommendations are adequate for the FAB. Column reactions we have derived based on the reference project design and loading (both values are service level loads):

- Typical truss support column: 2500 kips
- Typical cleanroom column: 1200 kips

A10: Thank you for this new information.

Q11: At those values, we are finding that the pile recommendations provided are probably not adequate in strength to support the columns and so we would like to request options for a higher strength pile. Our first thought is a larger diameter drilled pier is needed.

- For drilled piers, we also need recommendations for minimum pile spacing and/or group effect modifications to aid in selecting a foundations option.

A11: CEG has insufficient information to evaluate and/or render recommendations at this time.

Q12: We are anticipating construction possibly into/below bedrock levels for some portions of the project. What are requirements for bedrock preparation for foundations and what methods of bedrock removal other than blasting can be recommended?

A12: CEG has insufficient information to evaluate and/or render recommendations at this time.

Thank you for the opportunity to prepare this response report. Please contact our office with any questions that you may have.

Respectfully Submitted,
CME ENGINEERING GROUP, D.P.C.



Anas N. Anasthas, PE
President

Reviewed By,
CME ENGINEERING GROUP, D.P.C.



Christopher R. Paolini, PE, MPS, EXWSM
Vice President

Attachments:

Email from CK Tang of Micron through Andy Philips (3 of 3)

Anas Anasthas

From: Andy Philips <Andy.Philips@ramboll.com>
Sent: Monday, August 5, 2024 10:48 AM
To: Chris Paolini; Anas Anasthas; Marcus Rotundo
Cc: Zach Henderson; Derrick Cheney
Subject: FW: [EXT] Micron NY WP - Geotech and 30% Civil Design Q&A

Importance: High

Caution! This message was sent from outside CME.

[Allow sender](#) | [Block sender](#)

Updated list of questions, see below:

Kind regards

Andy Philips

Sr. Project Manager
Advanced Manufacturing

M +1 315 420 8439
andy.philips@ramboll.com

Ramboll
333 West Washington Street
Syracuse, NY 13202
USA
<https://ramboll.com>

Classification: Confidential

From: Ck Tang 湯 珠淦 <cktang@micron.com>
Sent: Monday, August 5, 2024 10:44 AM
To: Zach Henderson <Zachary.Henderson@ramboll.com>; Chris Paolini <cpaolini@cmeassociates.com>; Andy Philips <Andy.Philips@ramboll.com>; Jeffrey Maidment <jmaidment@micron.com>; Mike Nguyen <minhnguyen@micron.com>; Kar Hau Chai <kchai@micron.com>; Jane Hsu 徐 尉珍 <hsujane@micron.com>; Kayla Case <kcase@micron.com>; Manuel Paner <mpaner@micron.com>
Subject: RE: [EXT] Micron NY WP - Geotech and 30% Civil Design Q&A
Importance: High

Micron Confidential

Hi Andy:

I summary the Geotech Q&A as below, please provide as possible as your teams recommendation (high level idea) during the meeting discussion.

- What else would the geotechnical engineers propose to do and how do they anticipate that would help the project?

- Can you show, graphically, the intent the 2.5* height of fill requirement and where there are concerns in Figure 2 of the Feb 2024 report? What are the risks and how can they be mitigated? (SMP Risk)
- What are lateral load capacities of pile options to be used in evaluating deep foundations?
 - Are there any concerns with the soils resisting lateral (wind/seismic) loads from the buildings if piles are not used?
- Drilled pier foundations are specifically not recommended, could you elaborate on why they are not recommended? Drilled piers are a preferred option for the heaviest areas if they are feasible.
- Could you add recommendations for driven concrete piles, push piles, and micropiles?
- What are the risks to underground utility installations, regardless of foundation types, and how are they recommended to be addressed?
- Stormwater facilities will need to be specialty designed via sheet piling, weirs, liners, in lieu of native soils due to existing water table and proximity to existing swamp areas. What else can the Geotechnical Engineer recommend for these topics?
- What are geotechnical recommendations for building dewatering systems and anticipated design flowrates?
- Can the geotechnical engineers provide a contour map or similar of what depths the expansive clays are found so that we can better understand their extents and depths?
- We do not believe the building column demands stated in the geotechnical recommendations are adequate for the FAB. Column reactions we have derived based on the reference project design and loading (both values are service level loads):
 - Typical truss support column: 2500 kips
 - Typical cleanroom column: 1200 kips
- At those values, we are finding that the pile recommendations provided are probably not adequate in strength to support the columns and so we would like to request options for a higher strength pile. Our first thought is a larger diameter drilled pier is needed.
 - For drilled piers, we also need recommendations for minimum pile spacing and/or group effect modifications to aid in selecting a foundations option.
- We are anticipating construction possibly into/below bedrock levels for some portions of the project. What are requirements for bedrock preparation for foundations and what methods of bedrock removal other than blasting can be recommended?

BR

CK

Micron Confidential

-----Original Appointment-----

From: Zach Henderson <Zachary.Henderson@ramboll.com>**Sent:** Friday, August 2, 2024 9:18 AM**To:** Zach Henderson; Chris Paolini; Andy Philips; Ck Tang 湯珠淦; Jeffrey Maidment; Mike Nguyen; Kar Hau Chai; Jane Hsu 徐尉珍; Kayla Case**Subject:** [EXT] Micron NY WP – Geotech and 30% Civil Design Q&A**When:** Monday, August 5, 2024 9:00 AM–10:00 AM (UTC–05:00) Eastern Time (US & Canada).**Where:** Microsoft Teams Meeting

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Agenda:

1. Geotech Q&A
2. Civil 30% drawing request
3. TBD

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CEG Report No.: 172E-03-0924

September 30, 2024

Ramboll Americas Integrated Solutions
333 West Washington Street
Syracuse, New York 13202
Email: Andy.Philips@Ramboll.com

Attn: Andy Philips, P.E., Senior Project Manager

Re: Driller Pier vs. Driven Pile Geotechnical Memorandum
Micron Campus, Clay, New York
CEG Report No.: 172E-03-0924
Page 1 of 8

Gentlepeople:

1.0 INTRODUCTION

This memorandum is prepared by CME Engineering Group, D.P.C. (CEG), a subconsultant to CME Associates, Inc. (CME). This memorandum is issued pursuant to authorization of CME's continuing geotechnical services by Client (Ramboll), described in CME Proposal Number 28062A-06-0924, by Ramboll Purchase Order Number: 1950006347 and subsequent oral modification by Andy Philips on 09/27/2024.

This memorandum presents preliminary design parameters for drilled piers and driven steel H-piles for use within the FAB 1 construction area at the Micron Campus in Clay, New York. These recommendations are provided presuming that a satisfactory platform level design and installation will be completed prior to final selection and design of foundation type(s) for each structure planned for this FAB 1 construction. All other foundation options listed in the CFR¹ will be evaluated in concert with the platform level designs, construction, and in-situ performance.

The modified scope of services for this memorandum includes presenting the following recommendations:

- Service capacity and sizing.
- Standard Specification for Design and Construction.
- Summary of construction issues and methods to overcome them.

¹ Soils Investigation and Conceptual Foundation Report, CEG Report Number: 172E-01-0124, dated 02/06/2024

- Spreadsheet of Boring ID, coordinates, grade elevation, and presumptive bedrock contact elevation in Excel spreadsheet format and a contour map of presumptive bedrock contact elevation, overlain with the current Jacobs Site Master Plan in pdf format.
- Ancillary relevant information such as frost depth, load testing, and minimum spacing between foundation elements.
- Geotechnical design basis including provision for Down Drag (also called Negative Skin Friction).

The geotechnical design basis for the drilled pier foundations presented under this service scope is understood to be called out in the Jacobs SOW² Item 14 excerpt given below:

“The structures listed are anticipated to be supported by mat slabs supported by deep foundations bearing on bedrock, so the soils need only support the construction up to the point where the mat slab concrete has hardened.”

Thus, estimates of down drag are incorporated into the foundation element capacity calculations, reducing the drilled pier and driven pile service capacities. There are other inherent risks associated with this design basis directive, such as long-term post-construction settlement of the near-surface and surface improvements, which need to be evaluated by Jacobs. Also, depending on other factors such as platform construction, installation timing, and ground improvement technologies implemented, the foundation sizes may be reduced or increased.

This report is made in reliance on the existing CME Geotechnical Data Reports (GDR) and CEG Geotechnical Engineering Reports (listed below) and the Jacobs SOW Design Basis and Design Criteria given in Items 14 and 15.

Geotechnical Data Reports:

<u>CME Report Number</u>	<u>Date Issued</u>	<u>Title</u>	<u>Total Pages</u>
28062B-01-0523R1	06/19/2023	Ph. 1 GDR	154
28062B-02-0623R1	06/12/2023	Ph. 2 GDR	172
28062B-03-1223	12/08/2023	Combined Ph. 1 & Ph. 2 GDR	693
28062B-04-0724	07/16/2024	Ph. 3 GDR	381

Geotechnical Engineering Reports:

<u>CEG Report Number</u>	<u>Date Issued</u>	<u>Title</u>	<u>Total Pages</u>
172E-01-0124	02/06/2024	Soils Investigation and Conceptual Foundation (CFR) Report	915
172E-02-0824	08/08/2024	Geotechnical Engineering and 30% Civil Design Q & A	8

² Geotechnical Investigation Scope of Services, dated 08/30/2024

2.0 SPECIFICATION FOR DESIGN AND CONSTRUCTION

Specifications, materials, and methods of construction are presented herein.

2.1 Drilled Piers

Reference Document: Report on Design and Construction of Drilled Piers, ACI 336.3R-14. Drilled Piers designed and installed in full conformance with the specifications and this report are predicted to settle less than about one inch.

Construction Specification: Specification for the Construction of Drilled Piers, ACI 336.1-01.

End Bearing Stratum: Competent bedrock defined as rock exhibiting a nominal Rock Quality Designation (RQD) greater than or equal to 25% with minimum 95% recovery, as evidenced by a 60-inch core sample run taken with an N-size double-tube core barrel equipped with a diamond impregnated core bit.

Portland Cement Concrete: ACI 301-Specifications for Structural Concrete.

Concrete Mixture: 3000 psi compressive strength (at 28 days), Type I or I/II Portland Cement Concrete, with $\frac{3}{4}$ -inch maximum size aggregate, 6 ± 2 inches of slump at point of discharge, and high range water reducer and retarding admixture as appropriate.

Anticipated Concrete Placement Method: Tremie method using a pig (aka: rabbit or go-devil).

Anticipated Shaft Excavation: By Dry Method using temporary steel casing (due to loss of ground, unstable strata, flow of saturated silts and sands into hole, and/or uncontrollable groundwater, etc.) or permanent steel casing sealed into bedrock, where warranted.

Permanent Steel Casing: ASTM A36 or equivalent, with a wall thickness of $\frac{1}{8}$ inch or 0.0075 times the diameter of shaft, whichever is larger. Length equals cut-off elevation minus bedrock contact elevation. Current estimate is that 10% of drilled piers will require permanent casing, sealed into bedrock.

Excavation into Bedrock: Excavation into bedrock shall be achieved by drilling, coring, chipping, and chopping. No blasting is allowed.

Bedrock Socket: A full-diameter bedrock socket is required for all drilled piers. See the notes in Table 2 of the attached *Preliminary H-Pile and Drilled Pier Capacity Tables* for length of socket.

Drilled Pier Length: Drilled Pier (DP) Length may be estimated using the following formula.

DP Length = Cutoff Elevation – Presumptive Bedrock Contact Elevation + Length of Rock Socket

See attached *Presumptive Bedrock Contact Elevation Table*. The bedrock contact elevation has been confirmed only at the Test Boring locations by extraction of bedrock core samples.

Steel Reinforcement: Full-depth steel reinforcement to top of rock is undesirable and only required to accommodate full uplift capacity. It is recommended that the Structural Engineer of Record minimize the steel reinforcement to that necessary to satisfy the applicable structural code requirements.

Preconstruction Load Testing: A comprehensive preconstruction load testing program including not less than six (6) static load tests in accordance with ASTM D-8169 *Standard Test Methods for Deep Foundations Under Bi-Directional Static Axial Compressive Load* is required. The details of this prequalification load testing program will be determined by CEG. Evaluation of test results could result in redesign. Therefore, it is recommended that this load test program occur prior to Bid of the Drilled Pier Work Scope.

Drilled Pier Service Capacity: See Table 2 of the attached *Preliminary H-Pile and Drilled Pier Capacity Tables*.

Drilled Piers in Groups: There is no reduction in service capacity for drilled piers in groups when the clear distance (i.e., shortest plan dimension between perimeters of adjacent piers) is greater than or equal to 3 feet.

Quality Assurance: Full time inspection of shaft excavation, bedrock socket drilling, bottom cleanliness, and concrete and reinforcement cage placement is required. One inspector per drill rig will be required. The minimum level and scope of inspection and materials testing shall conform to the New York State Building Code section titled: *Special Inspections and Tests*, the New York State Department of Transportation (NYSDOT) publication *GEM-18 – Drilled Shaft Inspector's Guidelines*, Aug. 2015, and ACI 336.3R-14.

2.2 Driven Steel H-Piles

Steel H-Piles shall be designed and installed consistent with this report and the applicable NYSDOT Standard Specifications for Construction and Materials. All the design and construction criteria given below shall apply. Steel H-Piles, designed and installed in full conformance with the specifications and this report, are predicted to settle less than about one inch.

Pile Type: Rolled HP sections of standard dimensions. Steel for piles shall be new and unused and shall conform to the requirements of ASTM A572, Grade 50.

Pile Shoes (Driving Points): A pile shoe shall be factory installed on all piles. Pile shoes shall be cast steel conforming to ASTM A27-65/35, such as H-Pile Point by Skyline Steel or

equivalent. The driving point is to be specifically selected based on its robust performance for hard driving into weathered bedrock.

Pile Service Capacity: See Table 1 of the attached *Preliminary H-Pile and Drilled Pier Capacity Tables*.

Pile Length: All piles shall be driven to practical refusal in bedrock, so lengths will vary. Pile Pay Length may be estimated using the following formula:

$$\text{Pile Pay Length} = \text{Cutoff Elevation} - \text{Presumptive Bedrock Contact Elevation} + 2 \text{ feet}$$

See attached *Presumptive Bedrock Contact Elevation Table*.

Piles in Groups: There is no reduction in service capacity for piles in groups, if piles are not closer than 3 feet center-to-center spacing.

Driving Criteria: Piles shall be driven to Practical Refusal in bedrock using an approved pile driving hammer. Practical Refusal is defined as the condition reached when a pile being driven by the approved hammer produces a pile penetration of less than 1/4 inch after 20 blows of the hammer.

Installation Criteria: The WEAP analysis shall be used by the contractor to estimate pile drivability of both driving stresses and net displacement per blow at ultimate load for the Contractor's proposed hammer. The WEAP analysis shall be submitted to CEG for review and comment, and the cost of said analysis shall be included in the Contractor's Base Bid.

Axial Load Testing: Axial capacity shall be confirmed via a dynamic load testing program paid for by the Contractor. The Dynamic Method of Load Testing (ASTM D4945 *Standard Test Method for High-Strain Dynamic Testing of Piles*) shall be performed at a minimum frequency of six (6) tests per structure or two (2) tests per one hundred (100) piles, whichever is greater. Five (5) piles tested within each structure shall be selected for a CAPWAP analysis. The Licensed Professional Engineer that performs the load testing for the contractor, shall be currently registered in New York State, and shall sign and seal the report of load testing in accordance with New York State Education Law.

Quality Assurance: Full-time inspection of all pile driving installation is required, with one inspector per drill rig. The minimum level and scope of inspection and materials testing shall conform to the New York State Building Code section titled: *Special Inspections and Tests*, and the NYSDOT publication *GEM-26 – Pile Driving Inspection Manual*, August 2015.

3.0 PRESUMPTIVE BEDROCK CONTACT INFORMATION

A *Presumptive Bedrock Contact Elevation Table* is attached. This table presents the CME Test Boring ID, location coordinates, elevation at grade, and presumptive bedrock contact elevation. The bedrock contact elevation has been confirmed only at the test boring locations by extraction of bedrock core samples. See the Geotechnical Data Reports (GDRs) for Test Boring Logs, classification of rock samples recovered, photographs of core samples, and “General Information and Key to the Test Boring Log” for the terms and definitions used in soil and rock classification. A map of presumptive bedrock contact elevation overlaid with the current Jacobs Site Master Plan, titled *Presumptive Bedrock Contact Elevation Contour Map* is attached.

4.0 SUMMARY OF CONSTRUCTION ISSUES

A *Drilled Pier vs. Driven Steel H-Pile Comparison Table* is attached. This table presents several practical geotechnical design and construction, as well as cost and schedule related issues and risks. Based upon CEG’s experience and considering the complexity and magnitude of this project, it is CEG’s professional opinion that “simpler is better”. Also, when it is within our purview and ability to minimize and manage known risks, it is prudent to do so.

In CEG’s professional opinion, deep foundations consisting of driven H-Piles, a non-displacement pile, is recommended. Installation fugitive vibration (which is understood to adversely affect Micron’s fabrication and production) may be controlled by implementing one or several relatively inexpensive and time efficient traditional methods and should be evaluated and accepted by the Project Vibration Consultant. An H-Pile deep foundation is a much less risky alternative to drilled piers, from a geotechnical design, installation, and performance standpoint. It is also understood that fugitive vibration from any of the various construction operations prior to the commissioning of FAB 1 for microchip fabrication would not or should not be an issue.

From a geotechnical engineering standpoint, there are several risks which are unquantifiable with respect to the satisfactory performance of drilled pier foundations. One of the primary concern is as-built drilled pier settlement risk.

The quality of the in-situ bedrock, as measured by Rock Quality Designation (RQD) in the upper 5 feet, varies in classification from “very poor” (RQD less than 25%) to “excellent” (RQD greater than 90%). Empirical data and universally recognized literature relate drilled pier foundation settlement to RQD. A single drilled pier foundation over bedrock that exhibits an RQD of less than 25% may settle more than the one-inch design tolerance. Approximately 11% of the core samples taken exhibit an RQD less than 25%. It is not possible to define the arial extents where the rock quality is very poor, because the Test Boring bedrock samplings are spaced out several hundred feet apart and the site area is about 1,400 acres.

To help reduce the settlement risk, the pier is socketed into bedrock, which will add significant increased cost and much longer time of installation impacts, along with several adverse installation and quality assurance consequences. These are some but not all the reasons that CEG did not recommend drilled piers in the Concept Geotechnical Report (CFR) and still does not recommend drilled piers as the single foundation solution for the FAB 1 construction at the Micron Clay, New York Site.

In-situ bedrock quality is not an issue with H-Piles, because each pile is driven through very poor-quality rock to competent end bearing sufficient to mobilize the element's full ultimate capacity, and the quality is consistently assured at the end of driving every pile. Further, there is redundancy (i.e., multiple piles under one pile cap) built into the foundation system. CEG recommends the selection of driven H-Piles in-lieu of drilled piers for the FAB 1 construction. H-Piles will also be more compatible with the geotechnical and earthwork solutions (platform design) yet to be developed and as described in the CFR.

5.0 ANCILLARY INFORMATION

Frost Depth: For heated space, a minimum of four feet (4') frost cover is recommended for all foundation elements (footings, pile caps, grade beams, mats, foundation slabs, etc.) exposed to freezing temperatures. The bottom of interior foundation elements in heated space may be set as high as practical. For unheated space, a minimum frost cover of four feet six inches (4'-6") is recommended for all foundation elements. Frost cover is measured from final adjacent exterior grade to bottom of foundation element.

Mass Fill Material: It is understood that locally sourced imported granular fill will be used as Controlled Engineered Fill for FAB 1 construction. Imported material shall be a well-graded natural sand and gravel, meeting the quality and gradation requirements of the NYSDOT Standard Specifications for Construction and Materials, Item No. 304.14 Subbase Course Type 4.

6.0 CLOSING

CEG has endeavored to conduct the services identified herein in a manner consistent with that level of care and skill ordinarily exercised by members of the geotechnical engineering profession currently practicing in the same locality and under similar conditions as this project.

Please do not hesitate to contact the undersigned engineers if you have any questions regarding this report, its conclusions, its recommendations, or its application to planning, design, and/or actual field conditions revealed in the future. CEG looks forward to working with the Design & Construction Teams and future interaction necessary to the success of this project.

Thank you for the opportunity to prepare this Geotechnical Memorandum. Please contact our office with any questions that you may have.

CME ENGINEERING GROUP, D.P.C.



Anas N. Anasthas, P.E.
President / Senior Geotechnical Engineer



Christopher R. Paolini, P.E.
Senior Vice President



Marcus A. Rotundo, P.E.
Senior Principal Engineer

Attachments:

- Preliminary H-Pile and Drilled Pier Capacity Tables (1 of 1)
- Drilled Pier vs. Steel H-Pile Comparison Table (1 of 1)
- Presumptive Bedrock Contact Elevation Table (1 of 1)
- Presumptive Bedrock Contact Elevation Contour Map (1 of 1)

Table 1: Preliminary H-Pile Capacity				
Steel H-Pile Size	Axial Service Capacity (kips) <i>Note A</i>	Uplift Service Capacity (kips) <i>Note B</i>	Lateral Service Capacity (Kips) - <i>Note B</i>	
			Strong Axis	Weak Axis
HP12x53	100	15	7	5
HP14x89	300	20	10	7
HP14x102	400	20	10	7
HP14x117	500	20	11	8
Notes A. Axial capacity shall be confirmed via a dynamic load testing program. Dynamic load testing per ASTM D4945 shall be performed at a minimum frequency of 6 tests per structure or 2 tests per 100 piles, whichever is greater. B. Uplift and lateral capacities can be increased by design and installation of batter piles. C. Full time inspection of pile driving/installation and the Contractor's dynamic load testing is required. One inspector per drill rig is required. D. See report text for other requirements.				

Table 2: Preliminary Drilled Pier Capacity			
Shaft Diameter (ft)	Axial Service Capacity (kips)	Uplift Service Capacity (kips)	Lateral Service Capacity (kips)
2.5	550 (See Note 1)	95	17
3.0	950 (See Note 1)	115	23
3.5	1,450 (See Note 2)	140	30
4.0	2,000 (See Note 2)	160	37
4.5	2,750 (See Note 2)	185	49
5.0	3,500 (See Note 2)	210	52
5.5	4,400 (See Note 2)	240	61
6.0	5,400 (See Note 2)	265	70
Notes 1. A full-diameter bedrock socket of 3-ft length is required. 2. A full-diameter bedrock socket is required. Socket length shall be equal to the shaft diameter (For example: 6-ft diameter drilled pier shall have a 6-ft diameter and 6-ft deep rock socket). 3. Full-time inspection of shaft excavation, bedrock socket drilling, bottom cleanliness, and concrete and reinforcement cage placement is required. One inspector per drill rig during drilling and concreting. 4. Axial service capacity shall be verified by a preconstruction static load testing program. A minimum of 6 static load tests per ASTM D8169 shall be performed for each FAB building. Evaluation of load test results could result in redesign. 5. Include an allowance for 10% of the total number of drilled piers to be installed with a permanent casing. 6. See report text for other requirements.			

	Drilled Pier	Driven Steel H-Pile
1. Diameter	Large (2.5 to 6-foot diameter)	Essentially non-displacement
2. Volume of Spoil Removal	Large volumes of saturated mud spoils requiring continuous removal from work zone	No spoil
3. Ease of Material Delivery and Storage	Large volumes of fresh concrete must be delivered continuously & without interruption during pier installation. Large area required to store prefab Rebar Cages	Steel piles can be pre-ordered, delivered and efficiently stacked & stored on or off-site, so they are readily available for installation.
4. Bedrock Quality Issue	Unknown extents of very poor bedrock require rock sockets to help reduce settlement risk.	Every pile is driven to a quality assured capacity through very poor-quality rock.
5. Effects from natural groundwater conditions & drainage improvements	Large diameter shaft will penetrate in-use buried geotextile, French, trench and blanket drainage, PVDs and other improvements, destroying said. Aquifers and Artesian groundwater conditions pose great risk of unexpected “changed site condition” claims by the construction team.	Piles can be driven through drainage improvements without issues to overcome and inflicting minor damage. Also, piles will not bind up with geotextile and destroy the integrity of the drain the way drilled shaft augers will.
6. Dewatering	Temporary and permanent casing, dewatering and turbid discharge accommodation required. Potential artesian conditions and caving soils must be dealt with.	No casing, no dewatering required. Also, no sedimentation basins required to lower turbidity to environmental permit discharge limit.
7. Installation and As-built Quality Issues	Underwater placement of concrete required (i.e. tremie method) and withdrawal of temporary casing results in neck-down or cave-in of soil difficulties and effective diameter and service capacity reduction; and requires Integrity Testing to assure quality.	Piles will be driven with a prequalified hammer and driving resistance carefully monitored to assure end-bearing integrity for every pile. Simple and quick restrrike procedure when questionable. Also, no integrity testing required.
8. Speed of Installation	Slow to very slow (about 1/3 to 1 per shift per crew) depending on subsurface conditions.	Fast (about 30 to 50 per shift per crew)
9. End Bearing Quality Assurance	Impossible to visually inspect bedrock bearing surface to assure quality and intimate contact concrete-to-bedrock	Every pile is driven to practical refusal in bedrock and is easily monitored to assure end bearing.
10. Load Testing	Static load testing is required before Bid, which is expensive, time consuming, and requires reaction piles and loading frame. Only a limited number of piers can be tested from a monetary, time and schedule standpoint. Load test set up and testing will take 2 to 4 weeks/test and could result in redesign.	Dynamic load testing is expedient and inexpensive. Many piles (10 to 20 per shift per testing crew) can be tested quickly & contemporaneously while pile driving without production delay. No need for reaction piles, loading frame, tell-tails and electronic monitors.
11. Pile Cap Size	Significantly larger and more massive when group piers are required	Smaller pile caps
12. Downdrag and reduced service capacity	Significantly greater due to larger diameter & rough surface correspond to greater concrete-to-soil bond and downdrag, greatly reducing effective service capacity.	Significantly smaller due to smaller diameter & smooth surface correspond to less pile-to-soil skin friction, less downdrag & more efficient capacity.

Boring ID	Latitude	Longitude	Northing (ft)	Easting (ft)	Grade Elevation (ft)	Depth to Bedrock (ft)	Bedrock Surface Elevation (ft)
B-13	43.195649	-76.162720	1164662.6	932366.8	391.1	23.8	367.3
B-15	43.194933	-76.166403	1164397.0	931386.1	394.0	23.8	370.2
B-30	43.191994	-76.165719	1163326.8	931573.7	392.3	7.0	385.3
B-35	43.191028	-76.165267	1162975.3	931696.1	397.4	4.0	393.4
B-39	43.191017	-76.162268	1162975.3	932496.0	397.0	19.0	378.0
B-41	43.190479	-76.164883	1162775.4	931799.5	398.8	4.3	394.5
B-217	43.194852	-76.150421	1164388.9	935648.1	387.8	21.9	365.9
B-227	43.192349	-76.148274	1163479.6	936225.2	389.3	24.0	365.3
B-292	43.195755	-76.155925	1164710.7	934178.5	385.5	18.5	367.0
B-300	43.192432	-76.150976	1163506.1	935504.5	393.6	28.0	365.6
B-366	43.192444	-76.162234	1163495.2	932502.4	393.0	17.3	375.7
B-400	43.190039	-76.169458	1162609.1	930580.2	399.6	8.8	390.8
B-426	43.192209	-76.157757	1163415.5	933696.8	390.5	22.5	368.0
B-511	43.189724	-76.162190	1162503.9	932519.2	400.6	15.0	385.6
B-518	43.190875	-76.160942	1162925.1	932849.7	393.4	14.4	379.0
B-520	43.190373	-76.159410	1162744.3	933259.3	395.7	29.1	366.6
B-523	43.191130	-76.164400	1163013.4	931927.2	393.5	7.2	386.3
B-526	43.191266	-76.163801	1163064.0	932086.7	396.9	13.5	383.4
B-532	43.191500	-76.160360	1163155.6	933004.0	396.5	24.0	372.5
B-536	43.192634	-76.159148	1163568.5	933325.1	387.2	16.0	371.2
B-543	43.193536	-76.158263	1163898.7	933559.3	392.1	20.2	371.9
B-544	43.195030	-76.158771	1164442.3	933421.2	381.6	15.5	366.1
B-545	43.193759	-76.156553	1163982.3	934014.8	392.6	25.7	366.9
B-547	43.194167	-76.159550	1164126.9	933214.9	389.0	21.0	368.0
B-549	43.194462	-76.157497	1164237.3	933761.9	391.3	25.1	366.2
B-561	43.196087	-76.158150	1164828.6	933584.7	383.5	20.4	363.1
B-565	43.196903	-76.157255	1165127.2	933822.0	381.2	18.0	363.2
B-571	43.192169	-76.163937	1163393.0	932048.7	391.3	9.5	381.8
B-585	43.193245	-76.165729	1163782.7	931569.0	394.1	11.0	383.1
B-588	43.193471	-76.162519	1163869.3	932424.4	384.4	11.0	373.4
B-594	43.194245	-76.165707	1164147.1	931572.9	392.9	19.5	373.4
B-595	43.194297	-76.164283	1164167.8	931952.6	390.4	18.6	371.8
B-602	43.194744	-76.160518	1164335.8	932955.8	384.9	21.8	363.1
B-604	43.194694	-76.162336	1164315.1	932470.9	391.4	25.0	366.4
B-612	43.195734	-76.160396	1164696.8	932986.3	391.6	23.6	368.0
B-616	43.195379	-76.164678	1164561.8	931845.2	392.5	24.2	368.3
B-624	43.196623	-76.166037	1165013.5	931480.7	389.8	24.1	365.7
B-625	43.196110	-76.161446	1164832.5	932705.8	385.8	16.0	369.8
B-630	43.196869	-76.160925	1165109.7	932843.2	381.7	22.0	359.7
B-632	43.197053	-76.159210	1165179.3	933300.1	383.8	22.0	361.8
B-664	43.195276	-76.157682	1164533.4	933711.1	389.8	25.1	364.7
B-669	43.189860	-76.169951	1162543.3	930449.2	399.9	13.2	386.7
B-675	43.189445	-76.166857	1162396.2	931275.0	403.9	10.5	393.4
B-688	43.187875	-76.169779	1161819.9	930498.5	394.8	16.0	378.8

LEGEND

- Borings With Bedrock Confirmed By Coring
- Presumptive Bedrock Surface Elevation Contours
- Current SMP Overlay from C-01, dated 08/06/2024

Presumptive Bedrock Contact Elevation Contour Map



**PRELIMINARY EARTHWORK CRITERIA
MEMORANDUM
(LANGAN)**

Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C.
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To: Jeffrey Maidment, Kayla Case, CK Tang, Terry Nasapara - Micron

From: Saul Shapiro, Arthur Alzamora, Anthony Cennamo - Langan

CC: Langan Micron Team
Jacobs Yankee Team
File

Date: 12 February 2025

Re: **Preliminary Earthwork Criteria**
Micron New York Manufacturing Facility
Clay, New York
Langan Project No.: 170883801

We have prepared this memorandum in response to the request for information pertaining to earthwork operations at the proposed Micron New York Campus located within the White Pine Commerce Park in Clay, New York. The list of requested items was identified in Item 21 of the Geotechnical RFP Bid Clarifications Log of 4 December 2024 (copy attached).

DESCRIPTION AND CLASSIFICATION OF EXISTING SITE SOILS

The existing site soils are generally comprised of topsoil underlain by low plasticity clayey silt soils with small concentrations of sand and gravel which are in turn underlain by heterogeneous glacial till soils comprised of sand, silt, clay, and gravel and finally dolostone or shale bedrock. We note that soils on the south side of the site, where drumlins are present, are reported to have higher concentrations of sand and gravel as would be expected based on the depositional environment. These areas also represent zones the depth of soil overburden is least, with the rock topography typically trending downward towards the northeast.

USCS Classification

The majority of the site soils generally classify as low plasticity silt (ML) or clayey silt (ML-CL) in accordance with the Unified Soil Classification System (USCS). Areas containing drumlins on the south side of the site tend to show higher concentrations of sand and gravel within the soil matrix, but these soils are still predominantly silt typically classify as ML.

USDA Hydrologic Soil Group

The United States Department of Agriculture (USDA) Hydrologic Soil Group (HSG) varies within the property from A to D, but over 93 percent of the property includes areas containing HSG = D. As such, for the purposes of site-wide design of stormwater management systems, we recommend assuming HSG = D. An overlay property limits on the USDA Soil Survey mapping is attached for reference.

For reference, the USDA definition for each soil group is as follows:

- Hydrologic Soil Group A - Soils having high infiltration rates even when thoroughly wetted, consisting chiefly of deep, well to excessively drained sand and/or gravel. These soils have a high rate of water transmission and would result in a low runoff potential.
- Hydrologic Soil Group B - Soils having moderate infiltration rates when thoroughly wetted, consisting chiefly of moderately deep or deep, moderately well or well drained soils with moderately fine to moderately coarse textures. These soils have a moderate rate of water transmission.
- Hydrologic Soil Group C - Soils having slow infiltration rates when thoroughly wetted, consisting chiefly of (1) soils with a layer that impedes the downward movement of water, or (2) soils with moderately fine or fine textures and slow infiltration rate. These soils have a slow rate of water transmission.
- Hydrologic Soil Group D - Soils having very slow infiltration rates when thoroughly wetted, consisting chiefly of (1) clayey soils with high swelling capacity or potential, (2) soils with a high permanent water table, (3) soils with claypan or clay layer at or near the surface, and (4) shallow soils over nearly impervious materials. These soils have a very slow rate of water transmission.

CLEARING, GRUBBING, AND STRIPPING

Prior to commencing fill operations, the site will need to be cleared and grubbed of trees, brush and other surficial cover, including all root matter. We anticipate that clearing operations will likely be completed in a single season to avoid protracted schedule impacts resulting from protected endangered species that may seasonally inhabit some areas of the property. Following clearing and grubbing, or coincident with such operations, the site will need to be stripped of surficial topsoil and organic matter, and very soft surficial soils. For the purposes of preliminary design, we recommend assuming removals to a minimum depth of 18-inches. Following such removals, we anticipate that much of the site will require placement of a layer of clean crushed stone aggregate to stabilize the subgrade and facilitate placement and compaction of new fill in the dry. The use of crushed stone materials is considered necessary because of the to the poor draining nature of the near-surface silt soils and the reported presence of high groundwater.

REUSE OF EXISTING SITE SOILS

Topsoil

Topsoil can be stripped and reclaimed for reuse where desired. Based on review of the available data compiled by CME Associates and our general experience, we would expect that screening or the addition of amendments may be required to improve the soil. This may include blending the reclaimed topsoil with sand meeting the gradation requirements of ASTM C33 to ensure particle size distributions consistent with those recommended in ASTM D5268.

Site Soils - General

In general, the native site soils are not considered suitable for re-use as structural fill due to the presence of high fines content (percent by weight passing a No. 200 sieve). The results of the subsurface investigation completed by CME Associates indicate that most of the soil within the site classifies as silt with varying concentrations of clay, sand, and gravel. The in-situ natural moisture contents of these soils tend to be well outside the reported optimum range necessary to achieve proper compaction and would require drying procedures such as discing to aid drying. Silt-rich soils are generally a poor construction material. Such soils are frost susceptible and are prone to degradation and softening when subjected to freeze-thaw cycles. Further, silts are prone to degradation and softening when subjected to construction traffic or vibratory loading while outside of their optimum moisture content. Use of such soils should be precluded within the limits of proposed structures, especially those to be founded on shallow foundations. Their use without significant amendment may lead to construction delays or the need to employ stabilization methods, particularly if they are not dried or become wetted following placement. While not suitable for structural purposes (without significant amendment), the existing site soils are likely suitable for reuse as detention pond embankments or in landscaped areas. The native clayey silts are likely also suitable for use as detention pond liners and are expected to comply with the requirements outlined in the NYSDEC Stormwater Management Design Manual for liner materials.

IMPORTED SOILS

All fill materials should be free of trash, debris, roots, vegetation, peat, or other deleterious materials and should be approved by the Geotechnical Engineer prior to placement. Imported fills shall be free of contaminants in excess of the permissible concentrations dictated by all applicable state and federal agencies having jurisdiction. Additionally, imported fills should meet the requirements identified below for the specific applications as identified herein.

Subgrade Stabilization and Drainage Materials

The following coarse aggregate materials shall be used as subgrade stabilization and drainage materials. All such materials shall be comprised of crushed bedrock crushed gravel, or natural gravel meeting the physical and gradation requirements outlined herein. Coarse aggregate materials shall be free of organics and other deleterious materials and shall be sound, durable, and non-reactive. Coarse aggregate shall be tested for soundness in accordance with NYSDOT Method No.: 703-07P,G and shall demonstrate Magnesium Sulfate Soundness losses less than or equal to 10 percent by weight after 10 cycles.

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AASHTO Size No. 1

US Sieve Size	% Passing by Weight
4"	100
3 ½"	90 – 100
2 ½"	25 – 60
1 ½"	0 – 15
¾"	0 – 5

AASHTO Size No. 357

US Sieve Size	% Passing by Weight
2 ½"	100
2"	95 – 100
1"	35 – 70
½"	10 – 30
No. 4	0 – 5

AASHTO Size No. 57

US Sieve Size	% Passing by Weight
1 ½"	100
1"	95 – 100
½"	25 – 60
No. 4	0 – 10
No. 8	0 – 5

Granular Fill

Granular fill shall be used for general site filling operations, and for backfill beneath and behind structures (i.e., Structural Fill). Granular fill be comprised sand, gravel, crushed stone, or other approved recycled materials. Granular fill shall be sound, durable, and non-plastic and except as modified herein shall comply with the requirements of NYSDOT Standard Specification 733-04. Granular fill shall only be placed during the periods of freezing weather subject to the approval of the Geotechnical Engineer. Where not otherwise permitted due to inclement conditions, granular fill shall be replaced with AASHTO No. 57 materials, except that the AASHTO No. 57 gradation shall be modified to permit up to 2 percent by weight passing the No. 200 sieve.

US Sieve Size	% Passing by Weight
4"	100
2"	90 – 100
¾"	30 – 65
No. 40	5 – 40
No. 200	0 – 15

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Paving Subbase

Paving subbase materials shall be comprised of sand, stone, gravel, or other approved recycled materials meeting the requirements for NYSDOT Standard Specification 733-04, Type 1.

US Sieve Size	% Passing by Weight
3"	100
2"	90 – 100
¾"	30 – 65
No. 40	5 – 40
No. 200	0 – 10

Utility Bedding Sand

Bedding for utilities shall be comprised of natural sand having the gradation presented herein and a pH value between 5 and 10.

US Sieve Size	% Passing by Weight
½"	100
¼"	90 – 100
No. 200	0 – 5

Thermal Sand

Thermal sand is recommended for use as backfill for utilities requiring improved heat dissipation. Such materials shall be comprised of clean quartz-rich sand, free of cinders, ash, organic matter, and other deleterious matter, meeting the gradation requirements presented herein. Thermal sand shall have a minimum pH of 5.5, a dry unit weight equal to 115 pcf, and a maximum thermal resistivity equal to 120 °C·cm/Watt at dry-out conditions at 95 percent of the maximum dry density determined in accordance with ASTM D1557.

US Sieve Size	% Passing by Weight
⅜"	100
No. 4	70 – 90
No. 8	60 – 75
No. 30	35 – 50
No. 50	15 – 30
No. 200	3 – 8

Soil Detention Pond Lining

Per the NYSDEC Stormwater Management Design Manual, detention ponds liners shall be comprised of clay and/or silt rich soils having at least 50 percent by weight passing a standard US No. 200 sieve and shall have a maximum permeability of 1x10⁻⁵ cm/s.

SLOPES

Based on a review of the available subsurface data, we believe that unreinforced earthen slopes up inclinations of up to 2H:1V are possible; however, we recommend that slopes not exceed a maximum inclination of 3H:1V. While steeper slopes are permissible from a stability standpoint, our experience is that increasing the slope inclination can lead to issues with establishment of vegetation and reduced access for maintenance such as mowing. Also, we note that the New York State Department of Environmental Conservation (NYSDEC) Stormwater Management Design Manual limits permissible slope inclination for detention ponds to 3H:1V. Slope heights exceeding 25 feet should be broken up with horizontal benches or by terracing with retaining walls. Drainage measures such as swales should be implemented at the tops of slopes to divert surface water runoff away from the slope face. Upon completion of final grading, slopes should be vegetated with a deep-rooted grasses or other appropriate plantings as soon as possible to avoid potential erosion and/or raveling. Grasses such as red or hard fescue are considered viable for general use, but alternative species are considered warranted for detention pond or drainage ditch areas where wet soils may be expected for extended periods. Use of stabilization measures such as mulch, jute mesh, erosion control blankets, or geosynthetics may be necessary to help establish vegetation, especially for slopes inclined at greater than 3H:1V.

Fill Slopes

Fill slopes should be constructed from the bottom up by creating a level key within firm stable subgrade materials. The key should be cut below any existing topsoil or loose/soft surficial soils to improve basal stability. The existing surface should be benched into competent materials to allow fill to be placed in horizontal lifts. Loose lift thickness should not exceed 12 inches and each lift should be compacted to at least 92 percent of the maximum dry density determined in accordance with ASTM D1557.

Cut Slopes

Cut slopes should be formed with uniform linear inclinations. The inclination of cut slopes may need to be reduced from the maximum value indicated above where excavations extend below the groundwater table or where seepage is observed through the slope face. Where such conditions occur, stabilization and/or permanent erosion controls measure of the slope face may also be required.

RETAINING WALL DESIGN CRITERIA

For the purposes of preliminary design, we recommend that retaining walls assume the following geotechnical parameters. Walls which are free to rotate should be designed assuming active earth pressure conditions whereas walls which are restrained should be design for at-rest conditions. We recommend that passive resistance be ignored above the frost line. The passive earth pressure coefficient provided herein assumes an applied factor of safety (FS) equal to 2.0 to reduce the translation necessary to mobilize resistance. All walls should be designed assuming a minimum factor of safety of 1.5 for sliding and overturning resistance and all walls shall bear at least 4 feet below adjacent grade.

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Soil Class	Description	Parameter	Estimated Range	Preliminary Recommended Value	Unit
Granular or Aggregate Fill	Moist Unit Weight	γ_d	120 to 130	120	lb/ft ³
	Friction Angle	ϕ	34 to 40	36	degrees
	Cohesion	c	0	0	lb/ft ²
	Active Earth Pressure	K_a	0.28 to 0.22	0.26	-
	Passive Earth Pressure Coefficient	K_p	3.5 to 4.6	190 (FS = 2)	-
	At-Rest Earth Pressure Coefficient	K_o	0.45 to 0.35	0.42	-
	Interface Friction Coefficient	μ	0.4 to 0.5	0.45	-
	Allowable Bearing Pressure	q_a	4 to 8	6 ⁽¹⁾	kip/ft ²
Native Site Soils	Moist Unit weight	γ_d	100 to 125	115	lb/ft ³
	Friction angle	ϕ	28 to 32	30	degrees
	Cohesion	c	0 to 200	0	lb/ft ²
	Active Earth Pressure	K_a	0.36 to 0.31	0.33	-
	Passive Earth Pressure Coefficient	K_p	3.0	1.5 (FS = 2)	-
	At-Rest Earth Pressure Coefficient	K_o	0.55 to 0.47	0.50	-
	Interface friction coefficient	μ	0.3 to 0.4	0.3	-
	Allowable Bearing Pressure	q_a	2 to 4	3	kip/ft ²

(1) The allowable bearing pressure indicated does not consider potential reductions necessary to account for underlying soft or compressible soils of lower strength. The allowable bearing pressure for final design shall be evaluated on a case-by-case basis based on local in-situ soil conditions and proposed wall geometry.

FILL PLACEMENT AND COMPACTION CRITERIA

Fill should be placed in uniform loose lifts not exceeding 12 inches in thickness in open areas and 6 inches in thickness in confined areas. Fill shall not be placed on frozen ground or on subgrades that contain topsoil, organics, snow, ice, rubbish or other deleterious materials. Fill placement in standing water shall only be performed where directed by the Geotechnical Engineer and material selection for such use shall be subject to the review and approval of the Geotechnical Engineer.

All subgrades should be proof-rolled prior to placement of fill and any moisture-sensitive soils that exhibit pumping and heaving during proof-rolling should be excavated to a depth of 12-inches and replaced with free draining crushed stone or gravel meeting the requirements for stabilization materials as described herein.

With the exception of landscaped areas, all fill placed should be compacted to at least 95% of its maximum dry density as determined by ASTM D1557. In landscaped areas, compaction may be reduced to 92% of the maximum dry density as determined by ASTM D1557. Compaction within 5 feet of retaining walls and foundation walls should be performed using hand operated equipment, unless otherwise approved by the Geotechnical Engineer. The water content at the

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time of compaction should be within 2 percent of the optimum value determined by ASTM D1557.

STORMWATER POND DESIGN CRITERIA

We understand that 17 permanent detention ponds are proposed for stormwater management within the site and that the ponds will not be relied upon for infiltration. The design of detention ponds should comply with the NYSDEC Stormwater Management Design Manual. Per Chapter 6 of the manual, ponds not serving as treatment for the stormwater are not required to maintain any separation from the seasonal high groundwater table. Based on a review of groundwater conditions reported by CME Associates, we believe that several of the ponds extend below the groundwater table. As the groundwater level is unlikely to decrease as a result of the proposed development, we do not recommend extending pond bottoms below estimated groundwater table. Ponds formed in cut zones should be constructed in accordance with the criteria for cut slopes outlined herein. Where ponds are formed by filling, the resulting embankments should be constructed in accordance with the criteria for fill slopes outlined herein. We expect that the native site soils can be reused to form the embankments; however, as noted prior these soils may prove difficult if not within 2 percent of their optimum moisture content at the time of placement. The native soils are generally expected to suffice for pond liner material; however, a liner will likely be needed in areas where the ponds are constructed via new fill.

A summary of the local conditions at the proposed stormwater management practice (SMP) areas.

SMP	Parameter	Value	Notes
1	Pond Bottom Elev.	374 to 378	Current pond bottom indicated on grading plan is expected to reside below the groundwater table.
	Est. GW Elev.	376 to 378	No data available in this area. Groundwater assumed to reside near-surface in this area of the site
	Est. Top of Rock Elev.	N/A	No data available in this area. Rock expected to reside well below pond based on general trend of bedrock topography and is not expected to impact pond construction.
2	Pond Bottom Elev.	391	Current pond bottom indicated on grading plan is expected to reside near the groundwater table.
	Est. GW Elev.	390 to 392	No data available in this area. Groundwater assumed to reside near-surface in this area of the site.
	Est. Top of Rock Elev.	368 to 374	Rock is not expected to impact pond construction
3/4	Pond Bottom Elev.	397 to 401	Current pond bottom indicated on grading plan is expected to reside below the groundwater table.
	Est. GW Elev.	390 to 392	No data available in this area. Groundwater assumed to reside near-surface in this area of the site
	Est. Top of Rock Elev.	386 to 394	Estimated top of rock is near the bottom of the proposed pond.
5	Pond Bottom Elev.	397 to 401	Current pond bottom indicated on grading plan is expected to reside below the groundwater table.

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SMP	Parameter	Value	Notes
	Est. GW Elev.	401 to 412	Groundwater is believed to be perched atop rock in this area and varies from about el 401 at the NW to about el 412 at the SE corner of the pond.
	Est. Top of Rock Elev.	395 to 400	Estimated top of rock is near the bottom of the proposed pond.
7-10	Pond Bottom Elev.	-	Varies
	Est. GW Elev.	-	No subsurface data in this area.
	Est. Top of Rock Elev.	-	No subsurface data in this area.
11	Pond Bottom Elev.	377.5 to 382	Current pond bottom indicated on grading plan is expected to reside below the groundwater table.
	Est. GW Elev.	380 to 384	-
	Est. Top of Rock Elev.	-	Rock is not expected to impact pond construction in this area.
12	Pond Bottom Elev.	379 to 382	Current pond bottom indicated on grading plan is expected to reside below the groundwater table.
	Est. GW Elev.	385 to 388	-
	Est. Top of Rock Elev.	-	Rock is not expected to impact pond construction in this area.
13	Pond Bottom Elev.	379 to 382	Current pond bottom indicated on grading plan is expected to reside below the groundwater table.
	Est. GW Elev.	385 to 388	-
	Est. Top of Rock Elev.	-	Rock is not expected to impact pond construction in this area.
14	Pond Bottom Elev.	380 to 384	-
	Est. GW Elev.	385 to 388	No subsurface data in this area.
	Est. Top of Rock Elev.	-	No subsurface data in this area, but rock is not expected to impact pond construction in this area.
15	Pond Bottom Elev.	389 to 392	
	Est. GW Elev.	385 to 388	Groundwater is expected to be perched atop rock by about 1 to 2 feet in this area and would reside above the bottom of the pond.
	Est. Top of Rock Elev.	393 to 400	Estimated top of rock is above the bottom of the pond and would require rock excavation.
16-17	Pond Bottom Elev.	-	Varies
	Est. GW Elev.	-	No subsurface data in this area.
	Est. Top of Rock Elev.	-	No subsurface data in this area.

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REFERENCES

American Association of State and Highway Transportation Officials, Guide Specifications for Highway Construction, 2020.

American Society for Testing and Materials, Annual Book of Standards.

New York State Department of Environmental Protection, Stormwater Management Design Manual, 2024.

New York State Department of Transportation, Standard Specifications, Volumes 1-4, 2025.

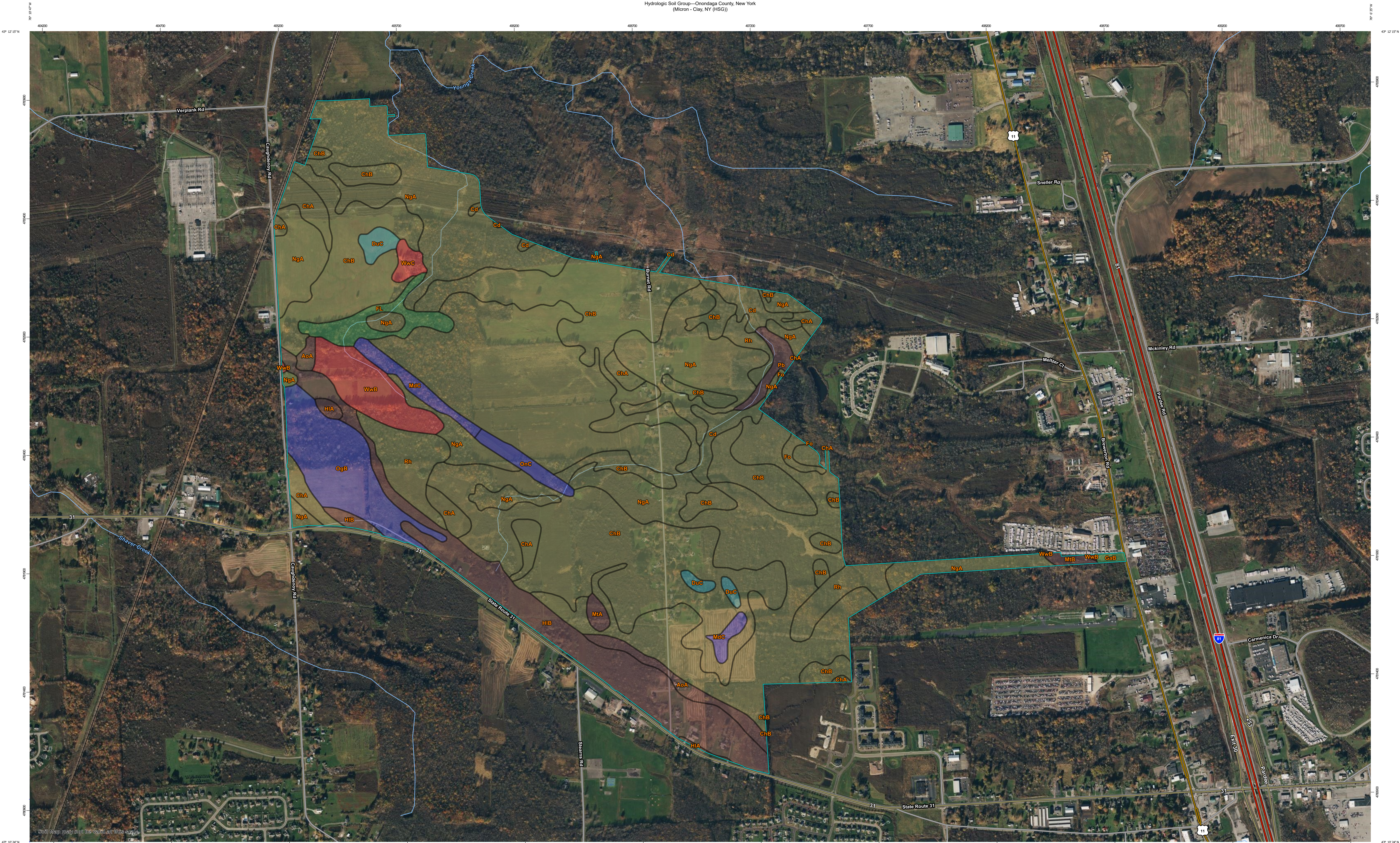
ATTACHMENTS

USDA Web Soil Survey Report

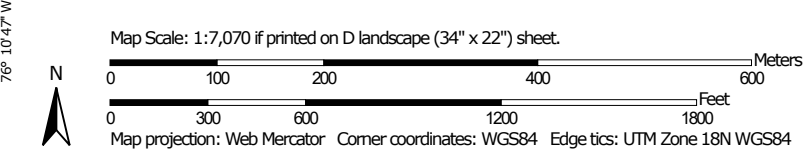
Bid Clarification Questions, Item 21.

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ATTACHMENTS



Small map may not be valid at this scale.



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

 A
 A/D
 B
 B/D
 C
 C/D
 D
 Not rated or not available

Soil Rating Lines

 A
 A/D
 B
 B/D
 C
 C/D
 D
 Not rated or not available

Soil Rating Points

 A
 A/D
 B
 B/D

 C
 C/D
 D
 Not rated or not available

Water Features

 Streams and Canals

Transportation

 Rails
 Interstate Highways
 US Routes
 Major Roads
 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Onondaga County, New York
Survey Area Data: Version 19, Aug 29, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 3, 2021—Nov 7, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
AoA	Appleton loam, 0 to 3 percent slopes	B/D	11.5	1.1%
Cd	Canandaigua mucky silt loam	C/D	16.9	1.7%
ChA	Collamer silt loam, 0 to 2 percent slopes	C/D	28.4	2.8%
ChB	Collamer silt loam, 2 to 6 percent slopes	C/D	291.6	28.6%
DuC	Dunkirk silt loam, rolling	C	7.4	0.7%
FL	Fluvaquents, frequently flooded	A/D	14.3	1.4%
Fo	Fonda mucky silty clay loam	C/D	2.8	0.3%
GaB	Galen very fine sandy loam, 2 to 6 percent slopes	A/D	1.1	0.1%
HIA	Hilton loam, 0 to 3 percent slopes	B/D	2.2	0.2%
HIB	Hilton loam, 3 to 8 percent slopes	B/D	71.8	7.0%
MdC	Madrid fine sandy loam, 8 to 15 percent slopes	B	11.5	1.1%
MtA	Minoa fine sandy loam, 0 to 2 percent slopes	B/D	2.6	0.3%
MtB	Minoa fine sandy loam, 2 to 6 percent slopes	B/D	1.9	0.2%
NgA	Niagara silt loam, 0 to 4 percent slopes	C/D	436.9	42.8%
OgB	Ontario loam, 3 to 8 percent slopes	B	40.2	3.9%
OnC	Ontario gravelly loam, 8 to 15 percent slopes	B	6.7	0.7%
Pb	Palms muck	B/D	5.8	0.6%
Rh	Rhinebeck silt loam	C/D	38.4	3.8%
WwB	Williamson silt loam, 2 to 6 percent slopes	D	23.9	2.3%
WwC	Williamson silt loam, rolling	D	3.9	0.4%
Totals for Area of Interest			1,019.7	100.0%

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Bid Clarification Questions – Item 21, dated 4 December 2024

Number	Reference	Question
21	Proposal for Geotech investigation	Micron would like to understand if the bidder will be able to provide the following information without waiting the full geotechnical evaluation. In particular, Micron would like to understand if this information could be provided within the 6-week Information Memo delivery and if not when is the earliest that the bidder expects to have this information available: • Description and classification of existing site soils • Existing soils removal criteria (topsoil stripping, demucking, and over-excavation) • Suitability of reuse of existing soils as Structural fill • Import Structural fill requirements • Maximum earthen cut and fill slopes • Retaining wall design criteria. These will need to be installed as part of initial site filling. • Fill compaction requirements • Design criteria and/or considerations for stormwater ponds in a cut condition due to high ground water elevations. Likely an impermeable liner or clay layer will be required. • Design criteria for constructed stormwater pond earthen embankments. Fill side of stormwater ponds typically require an impermeable liner or clay layer

Appendix E-5

Micron Blasting Plan



NY EHS – Blasting

CONTROL INFORMATION

Control Items	Details
Document Number	NYEHS - 002
Revision	0
Revision Date	16 May 2025
ECN Number	
Translated Documents	

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1 Purpose

This document specifies the requirements for blasting operations as part of Micron operations within the state of New York, including construction.

2 Scope

Items	Details
Site(s) Impacted	This document applies to the Fab 20 Micron-NY site in Clay, NY and associated construction activities
Target Audience	Construction Team, Site Leadership Team, Site EHS and All Micron Team members
Applicability	Micron-NY and all associated contractors

3 Terms and Definitions

Terms	Definitions
Authorized Blasting Assistant	An individual who has been authorized by the certified blaster-in-charge to work on a blasting operation after such blaster-in-charge has confirmed that the individual is either a certified blaster, or otherwise meets the following qualifications: (1) is at least 18 years old; (2) has been properly trained in the performance of the tasks to be assigned; and (3) has been made aware of and understands the blasting hazards and risks.
Blast area	An area near any blasting operation in which concussion, flying material or debris, or gases resulting from a detonation of explosives can reasonably be expected to cause injury or property damage.
Blaster	An individual who performs any task on a blasting operation.
Blaster-in-Charge	The individual who has overall responsibility for the conduct and safety of a detonation of explosives within a blast area.
Blasting operation	The planning, preparation, detonation, and post detonation inspection of a blast. Where explosives are being used for purposes such as, but not limited to, rock and earth excavation, steel and concrete demolition, bonding metals, testing, ice breaking, industrial boiler cleaning, and seismic prospecting.
Blasting site	The specific place defined by the blaster-in-charge where explosives are used in blasting operations and where only the blaster-in-charge and authorized blasting assistants are permitted to work. A blast site is part of the blast area.
Certified blaster	An individual who holds a valid certificate of competence to act as a blaster in accordance with the NYSDOL
Explosives	See New York State Labor Law Article 16 Section 451

Terms	Definitions
Fly rock	Any material propelled from the blast area by the force of the blast.

4 References

Internal References	Link
NY Construction EHS Program	Link to be added

External References	Link
12 NYCRR 61-4 Special Provisions for Blasters	Subpart 61-4 Special Provisions for Blasters
12 NYCRR 39 Possession, Handling, Storage, and Transportation of Explosives	Subpart 39 Possession, Handling, Storage, and Transportation of Explosives
NY Labor Law Article 16; 450 – 465: Explosives	Article 16 Explosives

5 Document Control

Items	Details
ECN Facility	Fab 20 MNY
ECN Area	EHS SAFETY
Approval	This document is approved by: GLOBAL_EHS_SEAL_LT
Notification	Notification of changes to this document is managed through Micron’s Engineering Change Notification (ECN) process to the following: <u>Constructions Team</u> • MNY <u>Leadership Team</u> • MNY <u>EHS</u> • MNY_EHS <u>Facilities</u> • MNY MANAGERS • MNY_CONSTRUCTION_MGRS • MNY_ALL EMPLOYEES
Review	This document will be reviewed at least biennially (once per two years) by MNY EHS through the Periodic Document Review (PDR) process.

6 Revision History

Rev	Revision Date	Description	Requestor	Conformance Date
0	16 May 16, 2025	ECN Number: 101175924 First published version	DZELEZNOCK	

7 Standard

All blasting work must conform to the provisions of this standard.

All blasting work shall be managed and directed by a blaster-in-charge. All contractors and personnel that are part of the blasting operation shall be a certified blaster or authorized blasting assistant.

7.1 License, Certification, Permits, and Training

All personnel associated with blasting operations shall be certified by the New York State Department of Labor (NYSDOL) in accordance with Subpart 61-4.3 and have a valid federal explosives user license from the Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF). The certification of the blaster shall be in accordance with the appropriate certification class A through F, and aligned with the scope of blasting work being performed.

Certification Classes are listed below (see Subpart ;61-4.3 for more information):

- Class A – Above/Below Ground
- Class B – Aboveground
- Class C – Belowground
- Class D – Demolition
- Class E – Seismic
- Class F – Special Uses with total explosive material less than 50 pounds

All training and certification of blasters associated with a project must be verified and copies of the appropriate certification and training records will be documented at the project site and in the project files.

All blasting work shall be performed under the applicable operating permit issued by the local codes enforcement, along with appropriate notification procedures to the Town, local Fire Department and/or other necessary public entity.

7.2 Standards of Conduct

While blasting all workers present will adhere to the following standards:

All blasts must be supervised by the Blaster-in Charge. Before any blasting can begin the blasting area must be cleared of all non-authorized personnel. To ensure that no worker who is not permitted to be in the blast site does not accidentally or unknowingly enter the blast area blasting signs will be posted on all accesses to the blasting site. In addition, a blasting signal sign will be posted so the public is aware of blasting signals. Only authorized personnel may handle or work with the explosives.

Access to the blast site must be restricted prior to any loading of explosives. No smoking, open flames, or hot work permits are permitted within the blast area.

All blasting shall comply with the specific standards listed below:

- In charging holes for blasting, only non-sparking material shall be used for tamping and loading.
- Any fuse which varies more than 10 percent from an average speed when burned unconfined in the open at sea level in three-foot lengths shall not be used. Any fuse that burns faster than 90 seconds per three-foot length with more than an allowable variation of 10 percent, when burned unconfined in the open at sea level, shall not be used. Any 40 second/foot fuse length less than 36 inches shall not be used. This shall not apply to log-splitting wedges, the fuses for which may be not less than 12 inches in length. Fuses shall be cut and capped in safe, dry locations posted with "NO SMOKING" signs.
- The A.C. voltage used to detonate any blast shall not exceed 440 volts.
- All blasting operations and any handling of explosives shall be stopped immediately upon the approach of an electrical storm, and all persons shall immediately retire to a place of safety.
- All blasting operations conducted in areas that could be affected by radio frequency radiation hazards from either permanent or mobile sources shall be conducted in compliance with IME No. 20.
- Blasting caps shall be crimped to fuses only with implements designed for that specific purpose.
- Permanent electric blasting lines shall be properly supported, insulated and kept in good repair.
- If branch circuits are used when blasts are fired from power circuits, safety switches located at safe distances from the blast areas shall be provided in addition to the main blasting switch.
- Blasting switches shall be locked in the open position except when closed to fire and blast. Lead wires shall not be connected to the blasting switch until the shot is ready to be fired, except for permanent electric blasting lines.
- Electric circuits from blasting switches to the blast area shall not be grounded.
- All detonating-cord knots shall be tight and all connections shall be kept at right angles to the trunk lines.
- Blasts shall be monitored for ground vibration and airblast as required by article 8 of IME no. 3. When seismographs are used they shall be properly calibrated as recommended by the manufacturer and monitored by a qualified operator trained by the manufacturer of the device or individuals certified by the manufacturer.

- Wherever any person may be endangered from the material being blasted, such material shall be covered on all exposed sides with a strong woven matting of wire rope not less than one-half inch in diameter, or other equivalent covering which will be effective in preventing particles from being projected into the air by the blast.

7.3 Blasting Safety Plan and Blast Design

The blasting contractor will create a blasting safety plan for each blast that includes the specific details of blasting signage, signals, traffic and personnel control, and emergency procedure. The blasting safety plan will be communicated to all personnel onsite and relevant details of the plan will be communicated to the nearby public as necessary for public safety.

At a minimum the safety plan must include specific details on:

- Details on how the blasting will comply with section 7.2 Standards of Conduct portion of this document
- Personal safety of all workers on the project team, including all required Personal Protective Equipment (PPE)
- Blasting safety procedures, including plan for misfires
- Drilling safety procedures
- Plan to prevent flyrock including details on stemming height, blasting mats, and delay sequence
- Detail on any hazardous materials, including necessary Safety Data Sheets (SDS)
- Hearing protection required and community noise and vibration exposure reduction efforts
- Airborne dust control plan
- Certifications and licenses of blasting company and associated personnel

Blast designs will be documented. The blast designs will be created in a manner to minimize ground vibration, air blast, flyrock, and overall risk. Included in the blast design will be an overall map of the blast, that indicates the location and depth of explosives as well as details that will be needed for recordkeeping, as indicated in section 7.6 of this document “Reporting and Recordkeeping.”

No blasting materials may be stored onsite. All storage, handling, and transportation of blasting materials must be done in accordance with federal, state, and local requirements.

7.4 Signs, Signals, and Traffic Control

To ensure that no personnel is accidentally or unknowingly within the designated radius of the blast site, blasting signs will be posted on all access points to the blasting site and appropriately barricaded. The blast area will also be swept by the blast team to ensure no personnel is present. There will be signage to inform the nearby public of the time and duration of blasting, as well as the indicating blasting signals.

Five minutes prior to the blast, the Blaster-in-Charge will give a series of air horn signals. These signals will be repeated again one minute prior to the blast. The Blaster-in-Charge will initiate the blast once all is clear. After a successful blast the all clear signal is given and blast area can be reoccupied.

7.5 Emergency Plan

In case of an emergency, Micron's onsite Emergency Response Team (ERT) will be notified. Micron's ERT will contact outside medical, or fire department support as needed.

Prior to any blasting, the contractor will confirm that appropriate Micron ERT support is available and on standby.

7.6 Reporting and Recordkeeping

Within 24-hours of a blast the Blaster-in-Charge will complete a shot/blast report. This report shall be available for review by Micron and the NYSDOL and needs to be maintained for a minimum of 5 years after the blast. The report will include exactly where the blast was, including the ground material, distance to another structure not owned by Micron along with even the local time of the blast and the weather conditions at the time of the blast. The report will also include a detailed breakdown of exactly what was used before and during the explosion. This includes the exact number and type of detonators and explosives, the method for firing and circuit used, if any timing delays were used and the maximum number of explosives per delay period of eight milliseconds or greater. Lastly all reports will note any unusual or suspicious activity

If seismographs are used then the report will need to include additional information such as location of the seismograph and how far from the blast it was placed, the air blast readings, and the ground vibrations readings.

If the blast used drilled holes, then in the report the number, diameter, spacing and burden of the holes must be included as well as the height of stemming, drill logs and a description of the shop patterns including the number of holes with a delay of 8 seconds or more.