



MASER
CONSULTING P.A.

Geotechnical Data Report

FOR
Bayside Mixed-Use Development
Tax Lot 109.1-4-29
Marlboro, NY

July 3, 2018

Prepared For
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MC Project No. 05000787A



GEOTECHNICAL DATA REPORT
BAYSIDE MIXED USE DEVELOPMENT
TOWN OF MARLBORO, ULSTER COUNTY, NY
MC PROJECT NO. 05000787A

TABLE OF CONTENTS

	<u>Page No.</u>
1. INTRODUCTION	1
2. SITE AND PROJECT DESCRIPTION.....	1
3. SUBSURFACE EXPLORATION	1
4. SUBSURFACE CONDITIONS	3
5. SOIL LABORATORY TESTING	4
6. LIMITATIONS.....	4

FIGURES

Figure 1	Exploration Location Plan
Figure 2	Bedrock Geology Map
Figure 3	Surficial Geology Map

APPENDICES

APPENDIX A	Test Boring Logs
APPENDIX B	Rock Core Photos
APPENDIX C	Soil Laboratory Test Results



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BAYSIDE MIXED USE DEVELOPMENT
TOWN OF MARLBORO, ULSTER COUNTY, NY
MC PROJECT NO. 05000787A

Page 1

1. INTRODUCTION

In accordance with our proposal dated June 4, 2018, Maser Consulting has performed a geotechnical exploration program for the proposed development on Tax Lot 109.1-4-29, Town of Marlboro, Ulster County, New York. The exploration program was undertaken at the request of Bayside Construction, LLC to explore the subsurface conditions at four specified locations within the site.

This Data Report presents results of the subsurface exploration program and our findings.

2. SITE AND PROJECT DESCRIPTION

The project site is located at Tax Lot 109.1-4-29, Town of Marlboro, New York as shown on the Exploration Location Plan, Figure 1. The site is bounded by NYS Route 9W towards east, Purdy Avenue towards North, landscaped areas towards west, and Marlboro Middle School towards south. The ground surface varies from El. 250 towards its northwest corner to El. 190 at its southeast corner (see Figure 1).

The site is currently undeveloped and is generally densely wooded. Multiple existing structures are located within the site, including an abandoned two-story building located within a landscaped area, along with several other residential structures. We understand these structures will be demolished prior to construction. Information pertaining to underground utilities within the proposed footprint was not available at the time of this report.

The project comprises the construction of five new residential buildings and one commercial building with related roadways and parking lots. The commercial building will be constructed adjacent to Route 9W. The remaining buildings will be constructed inward of the site. A new roadway will be constructed to connect these buildings to NYS Route 9W. The available information indicates the site will be regraded, primarily through cuts, as part of the proposed development.

3. SUBSURFACE EXPLORATION

Maser Consulting performed a geotechnical exploration program consisting of four test borings, TB-01 through TB-04, to explore the subsurface conditions below the site. The general locations of the test borings were specified by Bayside Construction, LLC. The corresponding locations were staked by Maser Consulting survey team on June 11, 2018. One additional offset test boring, TB-04A, was performed in an effort to bypass the



GEOTECHNICAL DATA REPORT
BAYSIDE MIXED USE DEVELOPMENT
TOWN OF MARLBORO, ULSTER COUNTY, NY
MC PROJECT NO. 05000787A

Page 2

subsurface conditions encountered within the corresponding original location. Figure 1 illustrates the test borings locations.

The test borings were performed within the period from June 25, 2018 through June 26, 2018 by SoilTesting, Inc. of Oxford, CT, using ATV-mounted drilling equipment, under the continuous observation of Maser Consulting field representative, Mr. Nicholas Ohrynowicz. The test borings were advanced to depths varying between 5 ft and 25 ft below corresponding surface grades.

The test borings were advanced using standard hollow stem auger drilling techniques. Split spoon sampling was performed in accordance with ASTM D1586 (Standard Method for Penetration Test and Split-Barrel Sampling of Soils) by means of a 2-inch OD split barrel sampler. The number of blows required to drive the split spoon every 6 inches into the soil were recorded and are shown on the logs. The sum of blows for the 6- to 18-inch interval is the SPT N-value expressed in terms of blows per foot (bpf). The SPT N-value indicates the soil resistance encountered at that respective layer. Sampling was performed continuously from the ground surface to a depth of 12 ft, then at 5-ft intervals to the termination depth of the test boring.

Rock coring was performed within Test Borings TB-B01, TB-B02, TB-B03, in accordance with ASTM D2113 (Standard Practice for Rock Core Drilling and Sampling of Rock for Site Exploration). Rock Quality Designation (RQD) values were determined in accordance with U.S. Army Corps of Engineers recommendations presented in EM-1110-1-2908 where RQD is defined as the ratio (in percent) of the total length of sound core pieces 4 inches in length or longer to the length of the core run. Recovery Ratio (RR) defines the degree of sample disturbance and is the ratio (in percent) of length of recovered sample to the length of the core run.

Soils encountered were classified in the field in accordance with the Burmister Soil Classification System. Rock cores were classified in accordance with our rock classification standard. Details pertaining to the subsurface conditions encountered are presented on the Test Boring Logs in Appendix A along with a summary of our soil and rock classification standards..

Recovered soil and rock samples were transported to our regional geotechnical office in Montvale, NJ. The samples were re-classified and select samples were identified for further laboratory soil testing..



4. SUBSURFACE CONDITIONS

Geologic Setting

The project site is underlain by granular soils overlying bedrock. A review of the geologic information for the area indicates that bedrock underlying the site (Figure 2) is part of the Ordovician Formation consisting mainly of limestones, shales, sandstones, and dolostones. The surficial geology of the area (Figure 3) consists of granular soils with various quantities of fine-grained soils.

Subsurface Description

The site is mostly covered with a vegetative cover consisting of topsoil. At the explored locations, the thickness of topsoil ranged from 1 inch to 3 inches. The subsurface conditions encountered below the topsoil are presented in the corresponding test boring logs included in Appendix A.

Stratum S – Sand

Stratum S was encountered below the topsoil in each of the test borings. The thickness of this stratum varied from 5 ft to 20 ft. This stratum consists of brown to grey-brown, loose coarse to fine sand, little to some medium to fine gravel, trace to some silts and clays. The SPT-N values for this stratum ranged from 1 bpf to refusal (defined as more than 50 blows per 6 inches).

Stratum R – Bedrock

Bedrock was cored within Test Borings TB-01, TB-02, and TB-03. Based on the extracted cores, bedrock below the site consists of weathered grey shale, non-foliated, with broken, weathered joints. The recovery ratio (RR) and Rock Quality Designation (RQD) range from 70% to 2%, and from 53% to 0%, respectively. The depth to bedrock at other locations (TB-04 and 04A) was assessed through drilling refusal as indicated on the corresponding test boring logs.

Groundwater

Groundwater was not encountered in any of the test borings at the time of our on-site presence. However, it should be noted that groundwater levels can fluctuate with locations, seasonal changes, precipitation, nearby construction activities, foreign influences such as leakage into and out of utilities, and other factors.



GEOTECHNICAL DATA REPORT
BAYSIDE MIXED USE DEVELOPMENT
TOWN OF MARLBORO, ULSTER COUNTY, NY
MC PROJECT NO. 05000787A

Page 4

5. SOIL LABORATORY TESTING

Soil laboratory testing was performed on select soil samples at TerraSense Soil Laboratory in Totowa, NJ. Appendix C presents the results of the conducted soil tests which consisted of:

Grain Size Analyses

Two grain size analysis tests were performed in accordance with ASTM D-6913. Samples were prepared using dry preparation methods. The corresponding grain size plots are presented in Appendix C. Table 1 presents a summary of the results.

Table 1. Summary of Grain Size Analysis Tests

Exploration ID	Sample Depth (ft)	Stratum	Sample Description	Moisture Content (%)	Fines (%)
TB-01	15-17	S	Brown cmf SAND, some Clayey Silt, some mf Gravel.	11.6	34.2
TB-03	4-6	S	Brown cmf SAND, some mf Gravel, some Clayey Silt.	11.7	25.5

6. LIMITATIONS

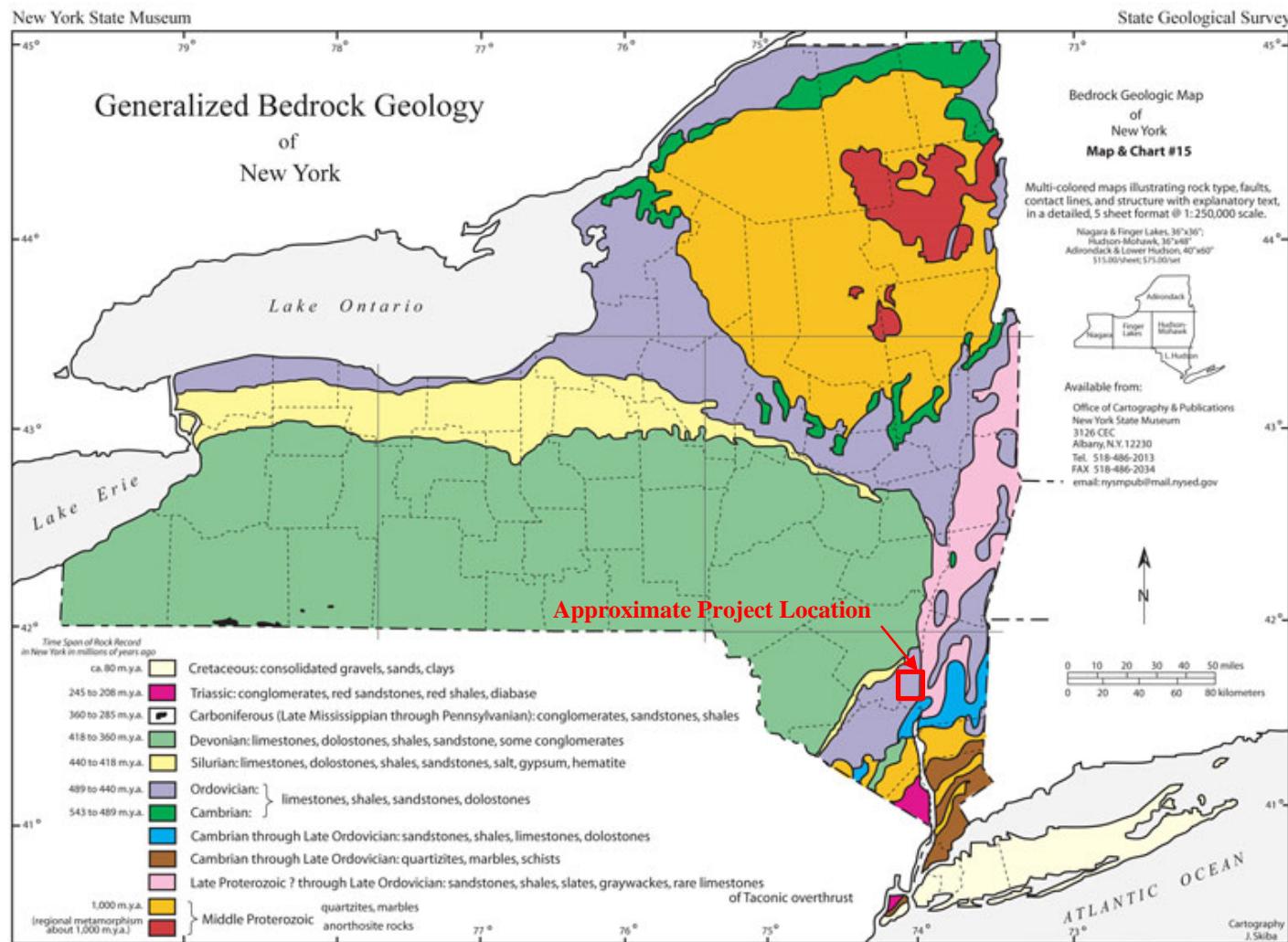
This data report and its supporting documentation have been prepared exclusively for the use of **Bayside Construction, LLC** pursuant to the Agreement between Maser Consulting P.A. (Maser) and **Bayside Construction, LLC**. All provisions set forth in the Agreement and the General Terms and Conditions attached thereto are incorporated herein by reference. No warranty, express or implied, is made herein.

The field observations and data contained in this report are based on limited exploration and testing of the subsurface at the referenced project site, at the locations and depths specified by the Client. The explorations indicate subsurface conditions at the specific locations, depths, and times explored and may not reflect the conditions at other locations. Additional explorations within the footprint of the proposed buildings will be required to comply with requirements of the 2015 NYS Building Code and develop foundation design recommendations and construction considerations.

This report is intended to serve as a data report. Maser Consulting is not responsible for any claims, damages, or liability associated with interpretation of subsurface data or reuse of the subsurface data or engineering analysis without the expressed written authorization of Maser Consulting.



Figures



NOTES:

1- BASE MAP BASED ON BEDROCK GEOLOGIC MAP OF NEW YORK.

FIGURE 2

BEDROCK GEOLOGY

PROJECT:
Bayside Mixed Use
Development
Marlboro, Ulster County, NY

MC File No.: 05000787A

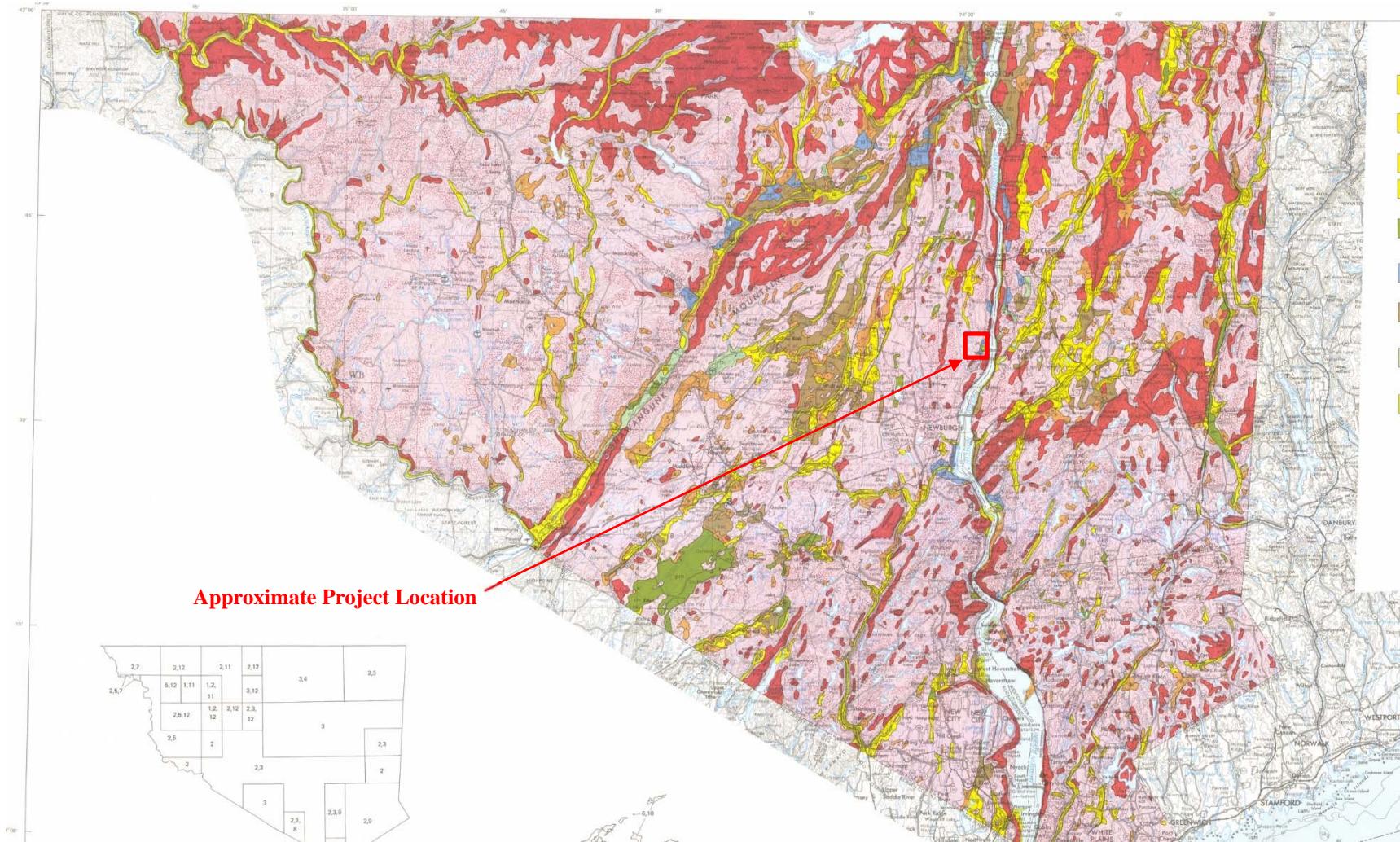


FIGURE 3

SURFICIAL GEOLOGY

PROJECT:
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Marlboro, Ulster County, NY

MC File No.: 05000787A



Appendix A

Test Boring Logs

Burmister Soil Classification System

I. Definition of Soil Components and Fractions

<u>Material</u>	<u>Symbol</u>	<u>Fraction</u>	<u>Sieve Size</u>	<u>Definition</u>
Boulders	Bldr	-----	9" +	Material retained on 9" sieve.
Cobbles	Cbl	-----	3" to 9"	Material passing the 9" sieve and retained on the 3" sieve.
Gravel	G	coarse (c) medium (m) fine (f)	1" to 3" 3/8" to 1" No. 10 to 3/8"	Material passing the 3" sieve and retained on the No. 10 sieve.
Sand	S	coarse (c) medium (m) fine (f)	No. 30 to No. 10 No. 60 to No. 30 No. 200 to No. 60	Material passing the No. 10 sieve and retained on the No. 200 sieve.
Silt	\$	---	Passing No. 200 (0.075 mm)	Material passing the No. 200 sieve that is non-plastic in character and exhibits little or no strength when air dried.
Clayey SILT	Cy\$	Slight (SL)	1 to 5	Clay - Soil
SILT & CLAY	\$ & C	Low (L)	5 to 10	Material passing the No. 200 which can be made to exhibit plasticity and clay qualities within a certain range of moisture content, and which exhibits considerable strength when air-dried.
CLAY & SILT	C & \$	Medium (M)	10 to 20	
Silty CLAY	\$yC	High (H)	20 to 40	
CLAY	C	Very High (VH)	40 Plus	
Organic Silt	(O\$)			Material passing the No. 200 sieve which exhibits plastic properties within a certain range of moisture content, and exhibits fine granular and organic characteristics.

II. Definition of Component Proportions

<u>Component</u>	<u>Written</u>	<u>Proportions</u>	<u>Symbol</u>	<u>Percentage Range by Weight*</u>
Principal	CAPITALS	---		50 or more
Minor	Lower Case	and	a.	35 to 50
		some	s.	20 to 35
		little	l.	10 to 20
		trace	t.	1 to 10

* Minus sign (-) lower limit, plus sign (+) upper limit, no sign middle range.

Rock Classification Standard

[Soundness] [Color] [Type] [Jointing] [Joint Weathering]

I. Rock Mass

<u>Soundness Classification</u>	<u>RQD</u>	<u>REC</u>	<u>Characteristics</u>
Hard	85-100%	85-100%	<ul style="list-style-type: none">• Rings when struck with pick/bar.• Does not disintegrate after exposure to air or water.• Breaks with sharp fresh fracture.• Cracks are unweathered.
Medium	50-85%	50-85%	<ul style="list-style-type: none">• Rings when struck with pick/bar.• Does not disintegrate after exposure to air or water.• Breaks with sharp fresh fracture.• Cracks between 1/8-in and 1/4-in wide.
Intermediate	35-50%	35-50%	<ul style="list-style-type: none">• Gives dull sound when struck with pick/bar.• Does not disintegrate after exposure to air or water.• Broken pieces may show moderately weathered zones between 1/4 in to 1-in.• Weathered zones spaced ~1-ft apart.
Weathered (Soft)	0-35%	0-35%	<ul style="list-style-type: none">• May soften after exposure to air or water.• May contain highly weathered zones up to 3-in.

Notes:

- Recovery (REC): the total length of recovered rock as a percentage of total length of core run.
- Rock Quality Designation (RQD): the total length of rock pieces greater than or equal to 4-in as a percentage of total length of core run.
- Decomposed Rock (Residual Soils) follows soil classification standards.

II. Joints

<u>Degree of Jointing</u>	<u>Frequency</u>	<u>Joint Classification</u>	<u>Appearance</u>
Massive	<1 Joint in 4-ft	Weathered	Clean
Blocky	1 Joint every 2 – 4-ft	Iron-stained	Brown/Yellow
Moderate	1 Joint every 1 – 2-ft		
Jointed	1 – 2 Joints every 1-ft		
Closely Jointed	2 – 4 Joints every 1-ft		
Broken	>4 Joints every 1-ft		



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PROJECT Bayside
Marlboro, NY
PROJECT NO. 05000787A

BORING NO. TB-01
PAGE 1 OF 1
LOCATION SEE PLAN
OFFSET _____

CONTRACTOR: SoilTesting, Inc.
DRILLER: Brock Deninger
DRILLING EQUIPMENT: CME-550X
METHOD: HSA Mud Rotary Other _____
HAMMER: CH Safety Automatic
RODS: AW NW Other _____
INSPECTOR: Nicholas C. Ohrynowicz

GROUNDWATER: DEPTH (ft.) DATE
First Encountered N/A _____
End of Drilling (0 hrs.) _____
After Drilling (>24 hrs.) _____

DATE STARTED 06/26/18
DATE FINISHED 06/26/18
GROUND ELEV. 210' +/-
GROUND WATER ELEV. N/A

DEPTH BELOW SURFACE (ft)	SAMPLE NUMBER	BLOWS PER 6 INCHES				RECOVERY (in)	PP (tst) /WC (%)	PROFILE CHANGE DEPTH ELEV.	IDENTIFICATION OF SOILS / REMARKS	
		DEPTH (ft)	0-6"	6-12"	12-18"	18-24"				
0	S-1	2	4	6	15	15	S	S	**:	Topsoil: 1"
	0'-2'					18			S-1:	Brown cmf SAND, some mf Gravel, little Clayey Silt. (Dry)
	S-2	16	26	42	33	19			S-2:	Top 8": Brown cmf SAND, some mf Gravel, little Clayey Silt. (Dry) Bottom 10": Grey cmf GRAVEL, some cmf Sand, trace Silt. (Dry)
	2'-4'					9			S-3:	Grey-brown cmf SAND, some cmf Gravel, trace Silt. (Dry) (Decomposed Rock)
	S-3	28	25	20	20	12			S-4:	Grey-brown cmf SAND, some cmf Gravel, trace Silt. (Dry) (Decomposed Rock)
	4'-6'					14			S-5:	Grey-brown cmf SAND, some cmf Gravel, trace Silt. (Dry) (Decomposed Rock)
	S-4	46	33	50/4"		15			S-6:	Grey-brown cmf SAND, some cmf Gravel, trace Silt. (Dry) (Decomposed Rock)
	6'-7.3'								S-7:	Brown cmf SAND, some Clayey Silt, some mf Gravel. (Dry) (Decomposed Rock)
	S-5	10	12	12	8					
	8'-10'									
10	S-6	17	22	18	16					
	10'-12'									
	S-7	27	48	50/4"						
	15'-16.3									
20	C-1					1:46	R	R	C-1:	Weathered Grey Shale, broken, weathered joints.
	20'-25'					1:23				
						1:42				
						2:08				
						3:54				
30										
40										

NOTES: Test Boring backfilled with cuttings.

VISUAL IDENTIFICATION OF SOILS (BURMISTER CLASSIFICATION SYSTEM)				TERMINOLOGY for STRATIFIED SOILS	
Component	Proportions	% Range (by weight)	Clayey Soils	Term	Definition
PRINCIPAL	---	50 or more	Clayey SILT	slight Pl.	0 to 1/16" thickness
Minor	and	35 to 50	SILT & CLAY	low Pl.	1/16" to 1/2" thickness
	some	20 to 35	CLAY & SILT	medium Pl.	1/2" to 12" thickness
	little	10 to 20	Silty CLAY	high Pl.	one or less per foot of thickness
	trace	1 to 10	CLAY	very high Pl.	more than one per foot of thickness
				occasional	
				frequent	



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BORING NO. TB-02
PAGE 1 OF 1
LOCATION SEE PLAN
OFFSET _____

CONTRACTOR: SoilTesting, Inc.
DRILLER: Brock Deninger
DRILLING EQUIPMENT: CME-550X
METHOD: HSA Mud Rotary Other _____
HAMMER: CH Safety Automatic
RODS: AW NW Other _____
INSPECTOR: Nicholas C. Ohrynowicz

GROUNDWATER: DEPTH (ft.) DATE
First Encountered N/A _____
End of Drilling (0 hrs.) _____
After Drilling (>24 hrs.) _____

DATE STARTED 06/26/18
DATE FINISHED 06/26/18
GROUND ELEV. 222' +/-
GROUND WATER ELEV. N/A

DEPTH BELOW SURFACE (ft)	SAMPLE NUMBER	BLOWS PER 6 INCHES				RECOVERY (in)	PP (tst) /WC (%)	PROFILE CHANGE DEPTH ELEV.	IDENTIFICATION OF SOILS / REMARKS		
		DEPTH (ft)	0-6"	6-12"	12-18"	18-24"					
0	S-1	2	3	2	3	5	12	S	**: Topsoil: 2"		
	0'-2'								S-1: Brown cmf SAND, some Silt & Clay, trace f Gravel. (Dry)		
	S-2	7	15	50/5"					S-2: Top 4": Brown cmf SAND, some Silt & Clay, trace f Gravel. (Dry)		
	2'-3.4'								Bottom 8": Grey cmf GRAVEL, some cmf Sand, little Clayey Silt. (Dry)		
	C-1								C-1: Weathered Grey Shale, broken, weathered joints.		
	5'-10'					1:15 1:38 1:33 3:45 1:17	R		REC: $\frac{42}{60} = > 70\%$ RQD: $\frac{32}{60} = > 53\%$		
10									END OF TEST BORING AT 10.0 FEET.		
20											
30											
40											

NOTES: Test Boring backfilled with cuttings.

VISUAL IDENTIFICATION OF SOILS (BURMISTER CLASSIFICATION SYSTEM)				TERMINOLOGY for STRATIFIED SOILS	
Component	Proportions	% Range (by weight)	Clayey Soils	Term	Definition
PRINCIPAL	---	50 or more	Clayey SILT	parting	0 to 1/16" thickness
Minor	and	35 to 50	SILT & CLAY	seam	1/16" to 1/2" thickness
	some	20 to 35	CLAY & SILT	layer	1/2" to 12" thickness
	little	10 to 20	Silty CLAY	occasional	one or less per foot of thickness
	trace	1 to 10	CLAY	frequent	more than one per foot of thickness



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PROJECT Bayside
Marlboro, NY
PROJECT NO. 05000787A

BORING NO. TB-03
PAGE 1 OF 1
LOCATION SEE PLAN
OFFSET _____

CONTRACTOR: SoilTesting, Inc.
DRILLER: Brock Deninger
DRILLING EQUIPMENT: CME-550X
METHOD: HSA Mud Rotary Other _____
HAMMER: CH Safety Automatic
RODS: AW NW Other _____
INSPECTOR: Nicholas C. Ohrynowicz

GROUNDWATER: DEPTH (ft.) DATE
First Encountered N/A _____
End of Drilling (0 hrs.) _____
After Drilling (>24 hrs.) _____

DATE STARTED 06/25/18
DATE FINISHED 06/25/18
GROUND ELEV. 234' +/-
GROUND WATER ELEV. N/A

DEPTH BELOW SURFACE (ft)	SAMPLE NUMBER	BLOWS PER 6 INCHES				RECOVERY (in)	PP (tst) /WC (%)	PROFILE CHANGE DEPTH ELEV.	IDENTIFICATION OF SOILS / REMARKS			
		DEPTH (ft)	0-6"	6-12"	12-18"	18-24"						
0	S-1	2	3	2	6	6	S	C-1	**: Topsoil: 1"			
	0'-2'								S-1: Brown cmf SAND, little Clayey Silt. (Dry)			
	S-2	7	6	10	13	19			S-2: Brown cmf SAND, little Clayey Silt. (Dry)			
	2'-4'								S-3: Brown cmf SAND, some mf Gravel, some Clayey Silt. (Dry)			
	S-3	17	20	17	26	15			S-4: Brown cmf SAND, little Silt. (Dry)			
	4'-6'								S-5: Dk. Brown cmf SAND, some Clayey Silt. (Dry)			
	S-4	36	50/5.5"			5			REC: $\frac{4}{60} = 7\%$ RQD: $\frac{0}{60} = 0\%$			
	6'-6.9'								C-2: Weathered Grey Shale, brokwn, weathered joints.			
	S-5	50/5"				3			REC: $\frac{1}{60} = 2\%$ RQD: $\frac{0}{60} = 0\%$			
	8'-8.4'					1:45			C-1: Weathered Grey Shale, broken, weathered joints.			
10	C-1					0:21			REC: $\frac{4}{60} = 7\%$ RQD: $\frac{0}{60} = 0\%$			
	9'-14'					0:23	R		C-2: Weathered Grey Shale, brokwn, weathered joints.			
						0:20			REC: $\frac{1}{60} = 2\%$ RQD: $\frac{0}{60} = 0\%$			
						0:39			C-1: Weathered Grey Shale, broken, weathered joints.			
	C-1					0:41			REC: $\frac{4}{60} = 7\%$ RQD: $\frac{0}{60} = 0\%$			
	9'-14'					0:42			C-2: Weathered Grey Shale, brokwn, weathered joints.			
						0:40			REC: $\frac{1}{60} = 2\%$ RQD: $\frac{0}{60} = 0\%$			
						0:49			C-1: Weathered Grey Shale, broken, weathered joints.			
						0:47			REC: $\frac{4}{60} = 7\%$ RQD: $\frac{0}{60} = 0\%$			
									C-2: Weathered Grey Shale, brokwn, weathered joints.			
20									REC: $\frac{1}{60} = 2\%$ RQD: $\frac{0}{60} = 0\%$			
									C-1: Weathered Grey Shale, broken, weathered joints.			
									REC: $\frac{4}{60} = 7\%$ RQD: $\frac{0}{60} = 0\%$			
									C-2: Weathered Grey Shale, brokwn, weathered joints.			
									REC: $\frac{1}{60} = 2\%$ RQD: $\frac{0}{60} = 0\%$			
									C-1: Weathered Grey Shale, broken, weathered joints.			
									REC: $\frac{4}{60} = 7\%$ RQD: $\frac{0}{60} = 0\%$			
									C-2: Weathered Grey Shale, brokwn, weathered joints.			
									REC: $\frac{1}{60} = 2\%$ RQD: $\frac{0}{60} = 0\%$			
									C-1: Weathered Grey Shale, broken, weathered joints.			
30									REC: $\frac{4}{60} = 7\%$ RQD: $\frac{0}{60} = 0\%$			
									C-2: Weathered Grey Shale, brokwn, weathered joints.			
									REC: $\frac{1}{60} = 2\%$ RQD: $\frac{0}{60} = 0\%$			
									C-1: Weathered Grey Shale, broken, weathered joints.			
									REC: $\frac{4}{60} = 7\%$ RQD: $\frac{0}{60} = 0\%$			
									C-2: Weathered Grey Shale, brokwn, weathered joints.			
									REC: $\frac{1}{60} = 2\%$ RQD: $\frac{0}{60} = 0\%$			
									C-1: Weathered Grey Shale, broken, weathered joints.			
									REC: $\frac{4}{60} = 7\%$ RQD: $\frac{0}{60} = 0\%$			
									C-2: Weathered Grey Shale, brokwn, weathered joints.			
40									REC: $\frac{1}{60} = 2\%$ RQD: $\frac{0}{60} = 0\%$			
									C-1: Weathered Grey Shale, broken, weathered joints.			
									REC: $\frac{4}{60} = 7\%$ RQD: $\frac{0}{60} = 0\%$			
									C-2: Weathered Grey Shale, brokwn, weathered joints.			
									REC: $\frac{1}{60} = 2\%$ RQD: $\frac{0}{60} = 0\%$			
									C-1: Weathered Grey Shale, broken, weathered joints.			
									REC: $\frac{4}{60} = 7\%$ RQD: $\frac{0}{60} = 0\%$			
									C-2: Weathered Grey Shale, brokwn, weathered joints.			
									REC: $\frac{1}{60} = 2\%$ RQD: $\frac{0}{60} = 0\%$			
									C-1: Weathered Grey Shale, broken, weathered joints.			

NOTES: Test Boring backfilled with cuttings.

VISUAL IDENTIFICATION OF SOILS (BURMISTER CLASSIFICATION SYSTEM)				TERMINOLOGY for STRATIFIED SOILS	
Component	Proportions	% Range (by weight)	Clayey Soils	Term	Definition
PRINCIPAL	---	50 or more	Clayey SILT	parting	0 to 1/16" thickness
Minor	and	35 to 50	SILT & CLAY	seam	1/16" to 1/2" thickness
	some	20 to 35	CLAY & SILT	layer	1/2" to 12" thickness
	little	10 to 20	Silty CLAY	occasional	one or less per foot of thickness
	trace	1 to 10	CLAY	frequent	more than one per foot of thickness



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PROJECT NO. 05000787A

BORING NO. TB-04
PAGE 1 OF 1
LOCATION SEE PLAN
OFFSET _____

CONTRACTOR: SoilTesting, Inc.
DRILLER: Brock Deninger
DRILLING EQUIPMENT: CME-550X
METHOD: HSA Mud Rotary Other _____
HAMMER: CH Safety Automatic
RODS: AW NW Other _____
INSPECTOR: Nicholas C. Ohrynowicz

GROUNDWATER: DEPTH (ft.) DATE
First Encountered N/A _____
End of Drilling (0 hrs.) _____
After Drilling (>24 hrs.) _____

DATE STARTED 06/25/18
DATE FINISHED 06/25/18
GROUND ELEV. 238' +/-
GROUND WATER ELEV. N/A

DEPTH BELOW SURFACE (ft)	SAMPLE NUMBER	BLOWS PER 6 INCHES				RECOVERY (in)	PP (tsf) /WC (%)	PROFILE CHANGE DEPTH ELEV.	IDENTIFICATION OF SOILS / REMARKS	
		DEPTH (ft)	0-6"	6-12"	12-18"	18-24"				
0	S-1	2	1	2	3	9	S	S	**: Topsoil: 3"	S-1: Brown cmf SAND, some mf Gravel, little Clayey Silt. (Moist) S-2: Top 3": Brown cmf SAND, some mf Gravel, little Clayey Silt. (Moist) Bottom 2": Grey cmf GRAVEL, some cmf Sand, trace Silt. (Dry) S-3: Grey-brown cmf SAND, little Silt & Clay, some organic matter. (Splintered wood) (Dry)
	0'-2'					5				
	S-2	50/5"				4				
	2'-2.4'									
	S-3	17	50/1"							
	4'-4.6'									
10									AUGER REFUSAL AT 6.5 FEET.	
20										
30										
40										

NOTES: Test Boring backfilled with cuttings.

VISUAL IDENTIFICATION OF SOILS (BURMISTER CLASSIFICATION SYSTEM)				TERMINOLOGY for STRATIFIED SOILS	
Component	Proportions	% Range (by weight)	Clayey Soils	Term	Definition
PRINCIPAL	---	50 or more	Clayey SILT	parting	0 to 1/16" thickness
Minor	and	35 to 50	SILT & CLAY	seam	1/16" to 1/2" thickness
	some	20 to 35	CLAY & SILT	layer	1/2" to 12" thickness
	little	10 to 20	Silty CLAY	occasional	one or less per foot of thickness
	trace	1 to 10	CLAY	frequent	more than one per foot of thickness



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PROJECT Bayside
Marlboro, NY
PROJECT NO. 05000787A

BORING NO. TB-04A
PAGE 1 OF 1
LOCATION SEE PLAN
OFFSET 5' OFFSET SOUTH

CONTRACTOR: SoilTesting, Inc.
DRILLER: Brock Deninger
DRILLING EQUIPMENT: CME-550X
METHOD: HSA Mud Rotary Other
HAMMER: CH Safety Automatic
RODS: AW NW Other
INSPECTOR: Nicholas C. Ohrynowicz

GROUNDWATER: DEPTH (ft.) DATE
First Encountered N/A
End of Drilling (0 hrs.)
After Drilling (>24 hrs.)

DATE STARTED 06/25/18
DATE FINISHED 06/25/18
GROUND ELEV. 237' +/-
GROUND WATER ELEV. N/A

DEPTH BELOW SURFACE (ft)	SAMPLE NUMBER	BLOWS PER 6 INCHES				RECOVERY (in)	PP (tsf) / WC (%)	PROFILE CHANGE DEPTH ELEV.	IDENTIFICATION OF SOILS / REMARKS
		DEPTH (ft)	0-6"	6-12"	12-18"	18-24"			
0								S	AUGERED DOWN 5.0 FEET
10									
20									
30									
40									

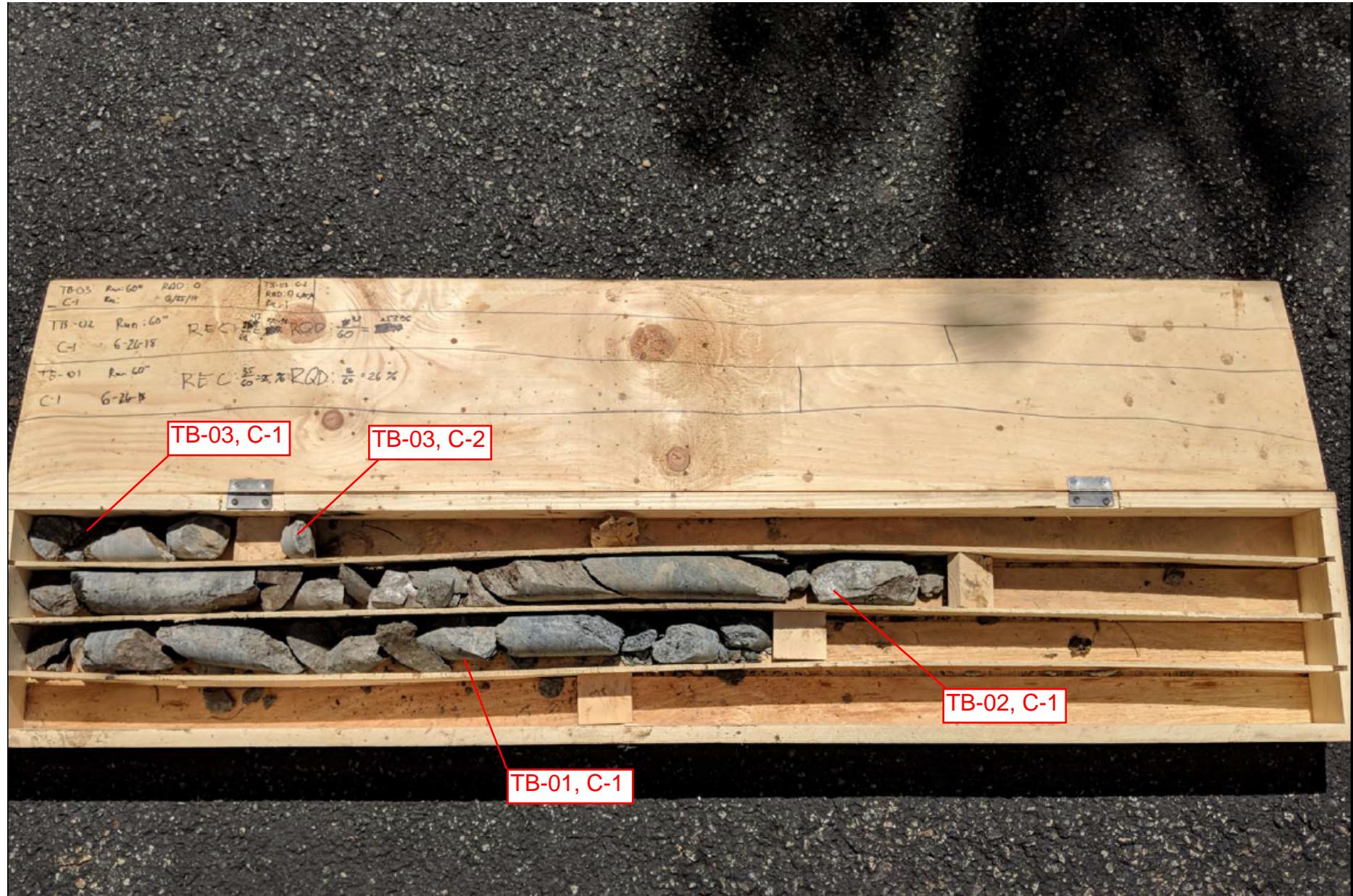
NOTES: Test Boring backfilled with cuttings.

VISUAL IDENTIFICATION OF SOILS (BURMISTER CLASSIFICATION SYSTEM)				TERMINOLOGY for STRATIFIED SOILS	
Component	Proportions	% Range (by weight)	Clayey Soils	Term	Definition
PRINCIPAL	---	50 or more	Clayey SILT	parting	0 to 1/16" thickness
Minor	and	35 to 50	SILT & CLAY	seam	1/16" to 1/2" thickness
	some	20 to 35	CLAY & SILT	layer	1/2" to 12" thickness
	little	10 to 20	Silty CLAY	occasional	one or less per foot of thickness
	trace	1 to 10	CLAY	frequent	more than one per foot of thickness



Appendix B

Rock Core Photos



TITLE:

**PLATE B – ROCK CORE C-1 AND C-2
TEST BORINGS TB-01, TB-02 AND TB-03**

PROJECT:
Bayside Mixed Use
Development
Marlboro, Ulster County, NY

MC File No.: 05000787A



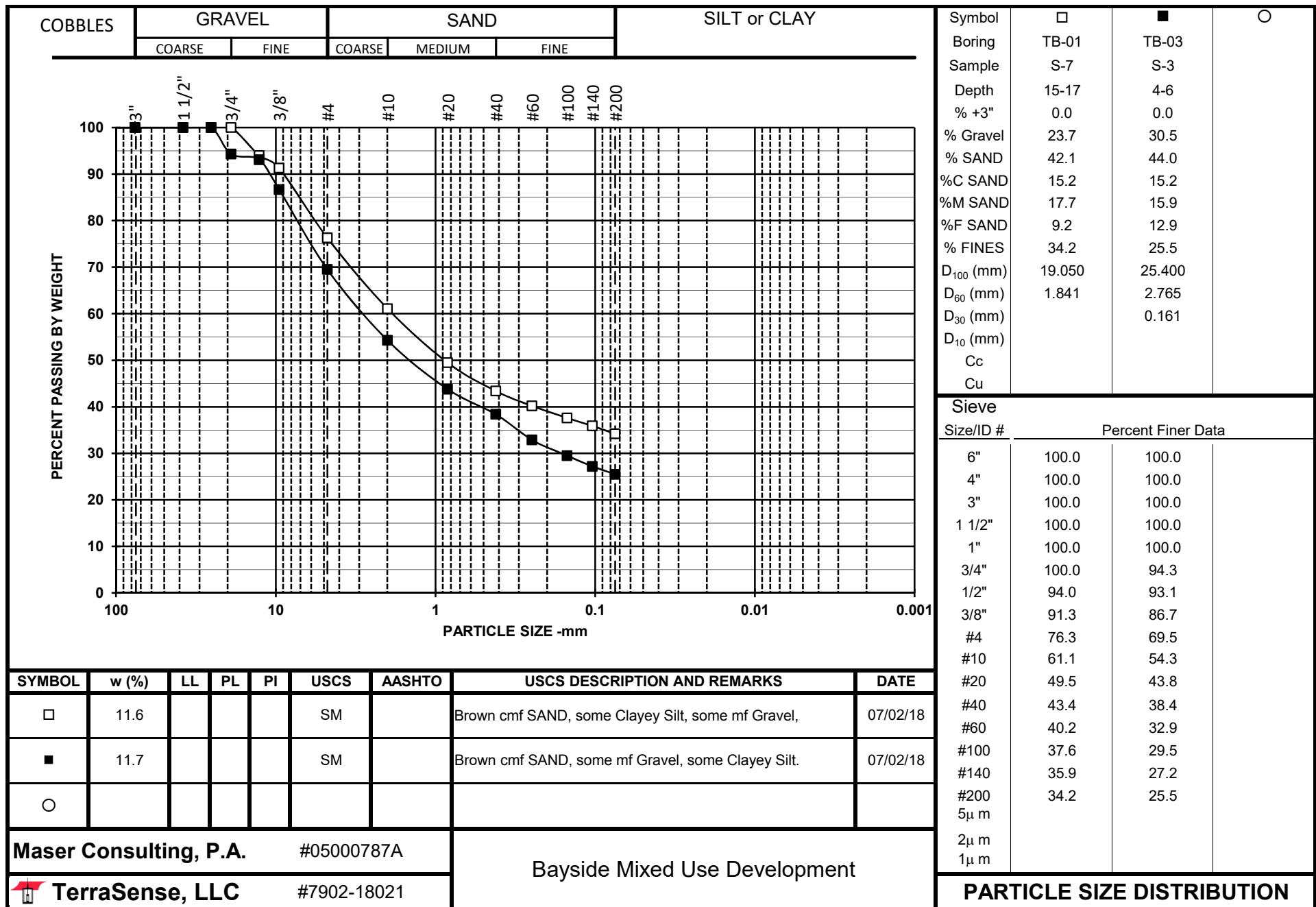
Appendix C

Soil Laboratory Test Results

Maser Consulting, P.A. #05000787A
Bayside Mixed Use Development
LABORATORY TESTING DATA SUMMARY

BORING NO.	SAMPLE NO.	DEPTH (ft)	IDENTIFICATION TESTS			REMARKS
			WATER CONTENT (%)	USCS SYMB. (1)	SIEVE MINUS NO. 200 (%)	
TB-01	S-7	15-17	11.6	SM	34.2	
TB-03	S-3	4-6	11.7	SM	25.5	

Note: (1) USCS symbol based on visual observation and Sieve reported.





GEOTECHNICAL DATA REPORT
BAYSIDE MIXED USE DEVELOPMENT
TOWN OF MARLBORO, ULSTER COUNTY, NY
MC PROJECT NO. 05000787A

Page 5

This Data Report and related documentation are instruments of service. The subject matter of this Data Report is limited to the facts and matters stated herein.

The scope of this subsurface exploration did not include geotechnical interpretation or evaluation of the findings, or investigation or evaluation of any environmental issues, such as wetlands, or hazardous or toxic materials on, below, or in the vicinity of the subject site. Any statements in this report or supporting documentation regarding odors or unusual or suspicious items or conditions observed are strictly for information only.

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