

## Form A - Seasonal High Groundwater Determination Report

Project/Plat Name: SEH Inc. Date: 9/11/2019  
 Project Location (PLS/CSM#): Lot 1-15 of Proposed Subdivision: Stone Ridge

The following table summarizes my interpretation of the soil profile evaluations conducted on the above noted site. The purpose of this report is to demonstrate compliance with a Waukesha County ordinance requirement to maintain basement floor elevations at least 1 foot above the seasonal high water table. I understand that the definition for seasonal high water table means the upper limit of the zone of soil saturation caused by underlying groundwater at its highest level. I certify that the information presented in this report represents my best professional judgment in estimating seasonal high water table based on soil and site evaluations in accordance with the procedures contained in Chapter SPS 385 Wisconsin Administrative Code.

Interpreters Signature: Morgan Butler IV  
 Interpreters Printed Name/Credentials/Lic. #: Morgan Butler IV / CST / 1357852  
 Interpreters Company Name/Address: Butler Engineering Inc / N679 Tamarack Rd. Palmyra, WI 53156  
 Site Benchmark/Elevation (Co. Stds.): PLSS Section Corner on Ainsworth Rd. / 1058.7'  
 References: 1) Soil Report – SBD-8330 (R.04/15) 2) Waukesha County Soils Map

Lot #	Soil Observ. (#)	Surface Elev. (NGVD 29)	Bottom Elev. of Soil Profile	Soil Map Unit Symbol (NRCS)	Elevation of Seasonal High Water Table	Depth to Seasonal High Water Table (Feet)	Proposed Basement Floor Elevation	Notes: List information used to determine seasonal high water table, including any soil color pattern exemptions under SPS 385.30(3) for a basement floor proposed less than 1-foot above redoximorphic features shown in the referenced soil evaluation reports.
1	SB114	1021.2	1013.2	HmB	≤1013.2	≥8.0	≥1014.2	Regarding Lot 6: a lower basement elevation may be possible with the installation of a gravity drain to daylight.  Few fine faint high chroma mottles in native Hochheim and Theresa soils can be disregarded as a sign of seasonal high groundwater.
2	SB113	1028.6	1020.6	HmC2	≤1020.6	≥8.0	≥1021.6	
3	SB112	1036.6	1028.27	HmC2	≤1028.27	≥8.33	≥1029.27	
4	SB41	1026.4	1018.4	HmC2	≤1018.4	≥8.0	≥1019.4	
5	SB110	1015.6	1007.6	HmC2	≤1007.6	≥8.0	≥1008.6	
6	SB111	1010.8	1002.8	HmB	1009.05	1.75	1010.05	

Lot #	Soil Observ. (a)	Surface Elev. (NGVD 29)	Bottom Elev. of Soil Profile	Soil Map Unit Symbol (SRCS)	Elevation of Seasonal High Water Table	Depth to Seasonal High Water Table (Feet)	Proposed Basement Floor Elevation	Notes: List information used to determine seasonal high water table, including any soil color pattern exemptions under SPS 385.30(3) for a basement floor proposed less than 1-foot above redoximorphic features shown in the referenced soil evaluation reports.
7	SB37	1031.4	1023.4	HmC2	≤1023.4	≥8.0	≥1024.4	Few fine faint high chroma mottles in native Hochheim and Theresa soils can be disregarded as a sign of seasonal high groundwater.
8	B8A	1038.1	1033.6	HmC2	≤1033.6	≥4.5	≥1034.6	
9	SB-36	1044.4	1036.4	HmC2	≤1036.4	≥8.0	≥1037.4	
10	B10A	1051.0	1046.83	HmC2	≤1046.83	≥4.17	≥1047.83	
11	SB-35	1057.4	1049.07	ThB	≤1049.07	≥8.33	≥1050.07	
12	B12A	1056.5	1051.83	ThB	≤1051.83	≥4.67	≥1052.83	
13	SB-34	1065.1	1056.93	ThB	≤1056.93	≥8.17	≥1057.93	
14	B14A	1061.9	1057.07	ThB	≤1057.07	≥4.83	≥1058.07	
15	B15A	1055.4	1049.9	HoD3	≤1049.9	≥5.5	≥1050.9	

### SOIL EVALUATION REPORT

In accordance with SPS 385, Wis. Adm. Code

Attach complete site plan on paper not less than 8 1/2 x 11 inches in size. Plan must include, but not limited to: vertical and horizontal reference point (BM), direction and percent slope, scale or dimensions, north arrow, and location and distance to nearest road.

**Please print all information**

Personal information you provide may be used for secondary purposes (Privacy Law, s. 15.04(1)(m)).

County:	Waukesha
Parcel ID:	MV0385995002
Reviewed by:	Date:

Property Owner SEH Inc				Property Location SE¼, NE¼, S25, T8N, R18E & NW¼, S30, T8N, R19E			
Property Owner's Mailing Address 501 Maple Avenue				Lot # 1-15	Block# Phase I	Subd. Name or CSM# Proposed Subd.: Stone Ridge	
City Delafield	State WI	Zip Code 53018	Phone Number 414.949.8962	Municipality: Village of Merton		Nearest Road: Ainsworth Road	
<input checked="" type="checkbox"/> New Construction		Use: <input checked="" type="checkbox"/> Residential/Number of Bedrooms: _____		Code derived design flow rate: _____ GPD			
<input type="checkbox"/> Replacement		<input type="checkbox"/> Public or Commercial - Describe: _____					
Parent Material: _____							
General Comments & Recommendations:							

SB114	Boring #	Lot 1	<input type="checkbox"/> Boring <input checked="" type="checkbox"/> Pit	Ground Surface Elev.: 1021.2 ft.	Depth to Limiting Factor: 30 in.
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Horizon	Depth (In.)	Dominant Color	Redox Description (Qu.Az.Cont.Color)	Texture	Structure (Gr. Sz. Sh.)	Consistence	Boundary	Roots	GPD/Ft. <sup>2</sup>	
									*Eff#1	*Eff#2
1	0 - 9	7.5YR 3/2	-	l	2fsbk	mfr	cw	1vf	0.6	0.8
2	9 - 18	7.5YR 4/4	-	grscl	2fsbk	mfr	gw	1vf	0.4	0.6
3	18 - 30	7.5YR 5/4	-	grsl	2fsbk	mfr	gw	1vf	0.6	1.0
4	30 - 96	7.5YR 6/4	f1f 10YR 5/8	grsl	1fsbk	mfr	-	-	0.4	0.7
			Roots to 32"							

SB113	Boring #	Lot 2	<input type="checkbox"/> Boring <input checked="" type="checkbox"/> Pit	Ground Surface Elev.: 1028.6 ft.	Depth to Limiting Factor: 48 in.
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Horizon	Depth (In.)	Dominant Color	Redox Description (Qu.Az.Cont.Color)	Texture	Structure (Gr. Sz. Sh.)	Consistence	Boundary	Roots	GPD/Ft. <sup>2</sup>	
									*Eff#1	*Eff#2
1	0 - 17	7.5YR 3/2	-	l	2fsbk	mfr	cw	1vf	0.6	0.8
2	17 - 38	7.5YR 4/4	-	cl	2fsbk	mfr	cw	1vf	0.4	0.6
3	38 - 48	7.5YR 3/4	-	grcl	1fsbk	mfr	gw	-	0.2	0.3
4	48 - 96	7.5YR 6/4	f1f 10YR 5/8	grsl	1fsbk	mfr	-	-	0.4	0.7

\*Effluent #1 = BOD, > 30 ≤ 220 mg/L and TSS > 30 ≤ 150 mg/L

\*Effluent #2 = BOD, > 30 ≤ 220 mg/L and TSS > 30 ≤ 150 mg/L

CST Name (Please Print) Morgan Butler IV	Signature <i>Morgan Butler IV</i>	CST Number 1357852
Address N679 Tamarack Rd. Palmyra, WI 53156	Date Evaluation Conducted 9/11/2019	Telephone Number (262) 650 - 2000

County: Waukesha  
Parcel ID: MV0385995002

<b>SB112</b>	Boring #	Lot 3	<input type="checkbox"/>	Boring	Ground Surface Elev.:	1036.6 ft.	Depth to Limiting Factor:	40 in.		
			<input checked="" type="checkbox"/>	Pit						

Horizon	Depth (In.)	Dominant Color	Redox Description (Qu.Az.Cont.Color)	Texture	Structure (Gr. Sz. Sh.)	Consistence	Boundary	Roots	GPD/Ft. <sup>2</sup>	
									*Eff#1	*Eff#2
1	0 - 11	7.5YR 3/2	-	sil	2fsbk	mfr	cw	1vf	0.6	0.8
2	11 - 28	7.5YR 4/4	-	sicl	2fsbk	mfr	cw	1vf	0.4	0.6
3	28 - 40	7.5YR 3/4	-	grsicl	1fsbk	mfr	gw	-	0.2	0.3
4	40 - 100	7.5YR 6/4	f1f 10YR 5/8	grsl	1fsbk	mfr	-	-	0.4	0.7
			Roots to 40"							

<b>SB41</b>	Boring #	Lot 4	<input type="checkbox"/>	Boring	Ground Surface Elev.:	1026.4 ft.	Depth to Limiting Factor:	48 in.		
			<input checked="" type="checkbox"/>	Pit						

Horizon	Depth (In.)	Dominant Color	Redox Description (Qu.Az.Cont.Color)	Texture	Structure (Gr. Sz. Sh.)	Consistence	Boundary	Roots	GPD/Ft. <sup>2</sup>	
									*Eff#1	*Eff#2
1	0 - 16	7.5YR 3/2	-	sil	2fsbk	mfr	cw	1vf	0.6	0.8
2	16 - 24	7.5YR 5/2	-	sicl	2fsbk	mfr	gw	-	0.4	0.6
3	24 - 38	7.5YR 4/4	-	cl	2fsbk	mfr	cw	-	0.4	0.6
4	38 - 48	7.5YR 3/4	-	grcl	1fsbk	mfr	gw	-	0.2	0.3
5	48 - 96	7.5YR 6/4	f1f 10YR 5/8	grsl	1fsbk	mfr	-	-	0.4	0.7

<b>SB110</b>	Boring #	Lot 5	<input type="checkbox"/>	Boring	Ground Surface Elev.:	1015.6 ft.	Depth to Limiting Factor:	42 in.		
			<input checked="" type="checkbox"/>	Pit						

Horizon	Depth (In.)	Dominant Color	Redox Description (Qu.Az.Cont.Color)	Texture	Structure (Gr. Sz. Sh.)	Consistence	Boundary	Roots	GPD/Ft. <sup>2</sup>	
									*Eff#1	*Eff#2
1	0 - 16	7.5YR 3/2	-	l	2fsbk	mfr	cw	1vf	0.6	0.8
2	16 - 30	7.5YR 4/4	-	cl	2fsbk	mfr	cw	1vf	0.4	0.6
3	30 - 42	7.5YR 3/4	-	grscl	1fsbk	mfr	gw	-	0.2	0.3
4	42 - 96	7.5YR 6/4	f1f 10YR 5/8	grsl	1fsbk	mfr	-	-	0.4	0.7

\*Effluent #1 = BOD, > 30 ≤ 220 mg/L and TSS > 30 ≤ 150 mg/L

\*Effluent #2 = BOD, > 30 ≤ 220 mg/L and TSS > 30 ≤ 150 mg/L

County: Waukesha  
 Parcel ID: MV0385995002

**SB111** Boring # Lot 6

Boring  
 Pit

Ground Surface Elev.:  
1010.8 ft.

Depth to Limiting Factor:  
21 in.

Horizon	Depth (In.)	Dominant Color	Redox Description (Qu.Az.Cont.Color)	Texture	Structure (Gr. Sz. Sh.)	Consistence	Boundary	Roots	GPD/Ft. <sup>2</sup>	
									*Eff#1	*Eff#2
1	0 - 12	7.5YR 3/2	-	sil	2fsbk	mfr	cw	1vf	0.6	0.8
2	12 - 21	7.5YR 4/4	-	sicl	2fsbk	mfr	cw	1vf	0.4	0.6
3	21 - 36	7.5YR 3/4	c1f 10YR 5/8, 6/2	sicl	1fsbk	mfr	gw	-	0.2	0.3
4	36 - 96	7.5YR 6/4	f1f 10YR 5/8	grsl	1fsbk	mfr	-	-	0.4	0.7

**SB37** Boring # Lot 7

Boring  
 Pit

Ground Surface Elev.:  
1031.4 ft.

Depth to Limiting Factor:  
32 in.

Horizon	Depth (In.)	Dominant Color	Redox Description (Qu.Az.Cont.Color)	Texture	Structure (Gr. Sz. Sh.)	Consistence	Boundary	Roots	GPD/Ft. <sup>2</sup>	
									*Eff#1	*Eff#2
1	0 - 9	7.5YR 3/2	-	l	2fsbk	mfr	cw	1vf	0.6	0.8
2	9 - 20	7.5YR 4/4	-	grcl	2fsbk	mfr	cw	1vf	0.4	0.6
3	20 - 32	7.5YR 5/4	-	grsl	1fsbk	mfr	gw	-	0.4	0.7
4	32 - 96	7.5YR 6/3	f1f 10YR 5/8	grsl	1fsbk	mfr	-	-	0.4	0.7

**B8A** Boring # Lot 8

Boring  
 Pit

Ground Surface Elev.:  
1038.1 ft.

Depth to Limiting Factor:  
26 in.

Horizon	Depth (In.)	Dominant Color	Redox Description (Qu.Az.Cont.Color)	Texture	Structure (Gr. Sz. Sh.)	Consistence	Boundary	Roots	GPD/Ft. <sup>2</sup>	
									*Eff#1	*Eff#2
1	0 - 5	7.5YR 3/2	-	sl	2fsbk	mfr	cw	1vf	0.6	1.0
2	5 - 12	7.5YR 4/4	-	scl	2msbk	mfr	cw	1vf	0.4	0.6
3	12 - 26	7.5YR 5/4	-	grsl cob	2fsbk	mfr	gw	1vf	0.4	0.7
4	26 - 54	7.5YR 5/4	f1f 10YR 5/8	grsl cob	1fsbk	mfr	-	-	0.4	0.7

\*Effluent #1 = BOD, > 30 ≤ 220 mg/L and TSS > 30 ≤ 150 mg/L

\*Effluent #2 = BOD, > 30 ≤ 220 mg/L and TSS > 30 ≤ 150 mg/L

County: Waukesha  
 Parcel ID: MV0385995002

**SB36** Boring # Lot 9  Boring  Pit Ground Surface Elev.: 1044.4 ft. Depth to Limiting Factor: 18 in.

Horizon	Depth (In.)	Dominant Color	Redox Description (Qu.Az.Cont.Color)	Texture	Structure (Gr. Sz. Sh.)	Consistence	Boundary	Roots	GPD/Ft. <sup>2</sup>	
									*Eff#1	*Eff#2
1	0 - 6	7.5YR 3/2	-	l	2fsbk	mfr	cw	1vf	0.6	0.8
2	6 - 18	7.5YR 4/4	-	cl	2fsbk	mfr	cw	1vf	0.4	0.6
3	18 - 96	7.5YR 6/3	f1f 10YR 5/8	grsl	1fsbk	mfr	-	-	0.4	0.7

**B10A** Boring # Lot 10  Boring  Pit Ground Surface Elev.: 1051.0 ft. Depth to Limiting Factor: 30 in.

Horizon	Depth (In.)	Dominant Color	Redox Description (Qu.Az.Cont.Color)	Texture	Structure (Gr. Sz. Sh.)	Consistence	Boundary	Roots	GPD/Ft. <sup>2</sup>	
									*Eff#1	*Eff#2
1	0 - 4	7.5YR 3/2	-	sl	2fsbk	mfr	cw	1vf	0.6	1.0
2	4 - 13	7.5YR 4/4	-	scl	2msbk	mfr	cw	1vf	0.4	0.6
3	13 - 30	7.5YR 5/4	-	grsl cob	2fsbk	mfr	gw	1vf	0.4	0.7
4	30 - 50	7.5YR 5/4	f1f 10YR 5/8	grsl cob	1fpl	mfr	-	-	0.4	0.7

**SB35** Boring # Lot 11  Boring  Pit Ground Surface Elev.: 1057.4 ft. Depth to Limiting Factor: 19 in.

Horizon	Depth (In.)	Dominant Color	Redox Description (Qu.Az.Cont.Color)	Texture	Structure (Gr. Sz. Sh.)	Consistence	Boundary	Roots	GPD/Ft. <sup>2</sup>	
									*Eff#1	*Eff#2
1	0 - 8	7.5YR 3/2	-	l	2fsbk	mfr	cw	1vf	0.6	0.8
2	8 - 19	7.5YR 4/4	-	grcl	2fsbk	mfr	cw	1vf	0.4	0.6
3	19 - 100	7.5YR 6/3	f1f 10YR 5/8	grsl	1fsbk	mfr	-	-	0.4	0.7

\*Effluent #1 = BOD, > 30 ≤ 220 mg/L and TSS > 30 ≤ 150 mg/L

\*Effluent #2 = BOD, > 30 ≤ 220 mg/L and TSS > 30 ≤ 150 mg/L

County: Waukesha  
 Parcel ID: MV0385995002

**B12A** Boring # Lot 12  Boring  
 Pit Ground Surface Elev.: 1056.5 ft. Depth to Limiting Factor: 22 in.

Horizon	Depth (In.)	Dominant Color	Redox Description (Qu.Az.Cont.Color)	Texture	Structure (Gr. Sz. Sh.)	Consistence	Boundary	Roots	GPD/Ft. <sup>2</sup>	
									*Eff#1	*Eff#2
1	0 - 8	7.5YR 3/2	-	sl	2fsbk	mfr	cw	1vf	0.6	1.0
2	8 - 22	7.5YR 4/4	-	scl	2msbk	mfr	cw	1vf	0.4	0.6
3	22 - 56	7.5YR 5/4	f1f 10YR 5/8	grsl cob	1fsbk	mfr	gw	1vf	-	0.7

**SB34** Boring # Lot 13  Boring  
 Pit Ground Surface Elev.: 1065.1 ft. Depth to Limiting Factor: 15 in.

Horizon	Depth (In.)	Dominant Color	Redox Description (Qu.Az.Cont.Color)	Texture	Structure (Gr. Sz. Sh.)	Consistence	Boundary	Roots	GPD/Ft. <sup>2</sup>	
									*Eff#1	*Eff#2
1	0 - 9	7.5YR 3/2	-	l	2fsbk	mfr	cw	1vf	0.6	0.8
2	9 - 15	7.5YR 4/4	-	grcl	2fsbk	mfr	gw	1vf	0.4	0.6
3	15 - 98	7.5YR 6/3	f1f 10YR 5/8	grsl	1fsbk	mfr	-	-	0.4	0.7
			No water observed							

**B14A** Boring # Lot 14  Boring  
 Pit Ground Surface Elev.: 1061.9 ft. Depth to Limiting Factor: 36 in.

Horizon	Depth (In.)	Dominant Color	Redox Description (Qu.Az.Cont.Color)	Texture	Structure (Gr. Sz. Sh.)	Consistence	Boundary	Roots	GPD/Ft. <sup>2</sup>	
									*Eff#1	*Eff#2
1	0 - 8	7.5YR 3/2	-	sl	2fsbk	mfr	cw	1vf	0.6	1.0
2	8 - 20	7.5YR 4/4	-	scl	2msbk	mfr	cw	1vf	0.4	0.6
3	20 - 36	7.5YR 4/4	-	grsl cob	2fsbk	mfr	gw	1vf	0.4	0.7
4	36 - 58	7.5YR 5/4	f1f 10YR 5/8	grsl cob	1fpl	mfr	-	-	0.4	0.7

\*Effluent #1 = BOD, > 30 ≤ 220 mg/L and TSS > 30 ≤ 150 mg/L

\*Effluent #2 = BOD, > 30 ≤ 220 mg/L and TSS > 30 ≤ 150 mg/L

County: Waukesha  
 Parcel ID: MV0385995002

**B15A** Boring # Lot 15  Boring  
 Pit Ground Surface Elev.: 1055.4 ft. Depth to Limiting Factor: 36 in.

Horizon	Depth (In.)	Dominant Color	Redox Description (Qu.Az.Cont.Color)	Texture	Structure (Gr. Sz. Sh.)	Consistence	Boundary	Roots	GPD/Ft. <sup>2</sup>	
									*Eff#1	*Eff#2
1	0 - 8	7.5YR 3/2	-	sl	2fsbk	mfr	cw	1vf	0.6	1.0
2	8 - 26	7.5YR 4/4	-	scl	2msbk	mfr	cw	1vf	0.4	0.6
3	26 - 36	7.5YR 4/4	-	grsl cob	2fsbk	mfr	gw	1vf	0.4	0.7
4	36 - 66	7.5YR 5/4	f1f 10YR 5/8	grsl cob	1fpl	mfr	-	-	0.4	0.7

Boring #  Boring  
 Pit Ground Surface Elev.: \_\_\_\_\_ ft. Depth to Limiting Factor: \_\_\_\_\_ in.

Horizon	Depth (In.)	Dominant Color	Redox Description (Qu.Az.Cont.Color)	Texture	Structure (Gr. Sz. Sh.)	Consistence	Boundary	Roots	GPD/Ft. <sup>2</sup>	
									*Eff#1	*Eff#2

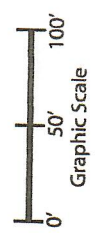
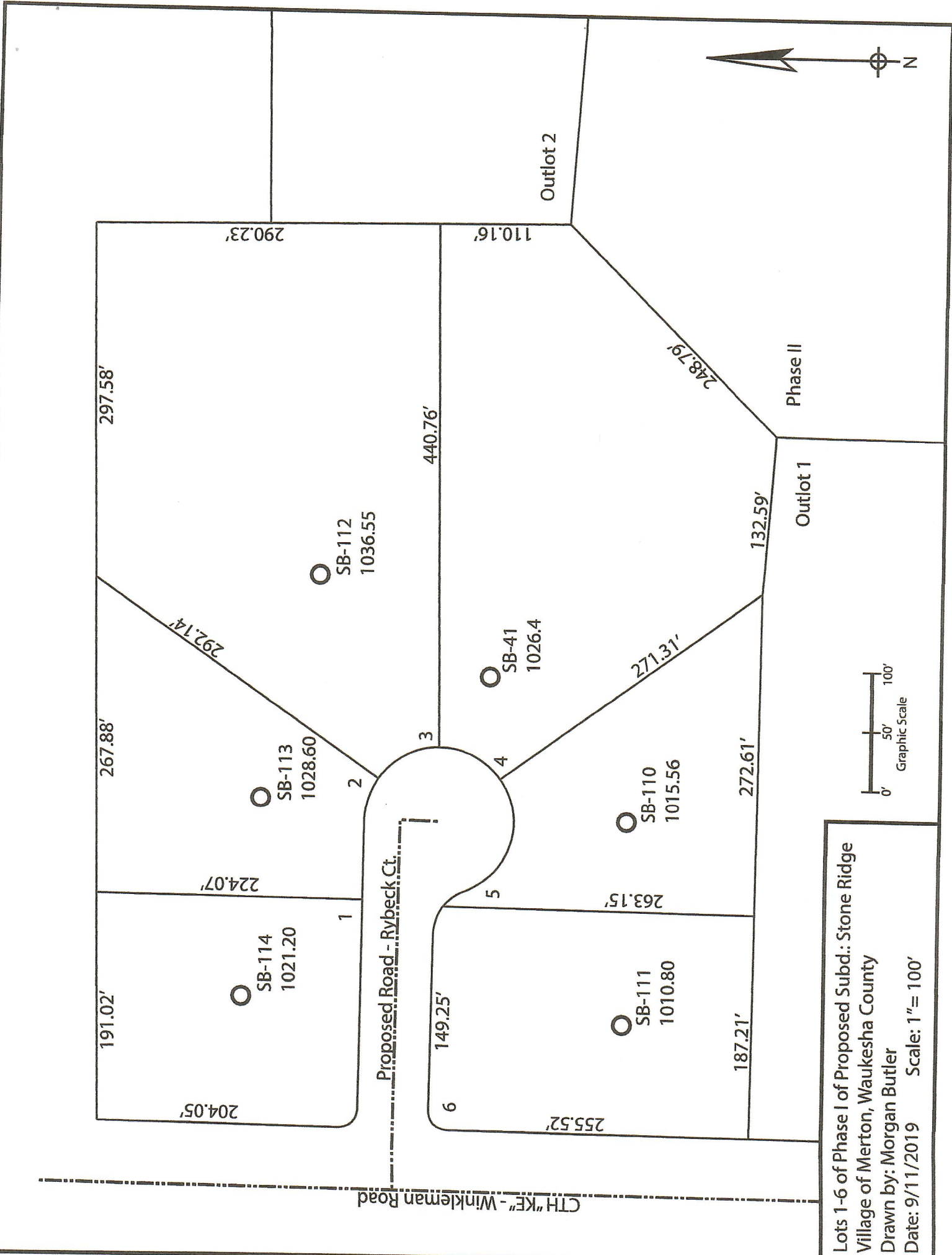
Boring #  Boring  
 Pit Ground Surface Elev.: \_\_\_\_\_ ft. Depth to Limiting Factor: \_\_\_\_\_ in.

Horizon	Depth (In.)	Dominant Color	Redox Description (Qu.Az.Cont.Color)	Texture	Structure (Gr. Sz. Sh.)	Consistence	Boundary	Roots	GPD/Ft. <sup>2</sup>	
									*Eff#1	*Eff#2

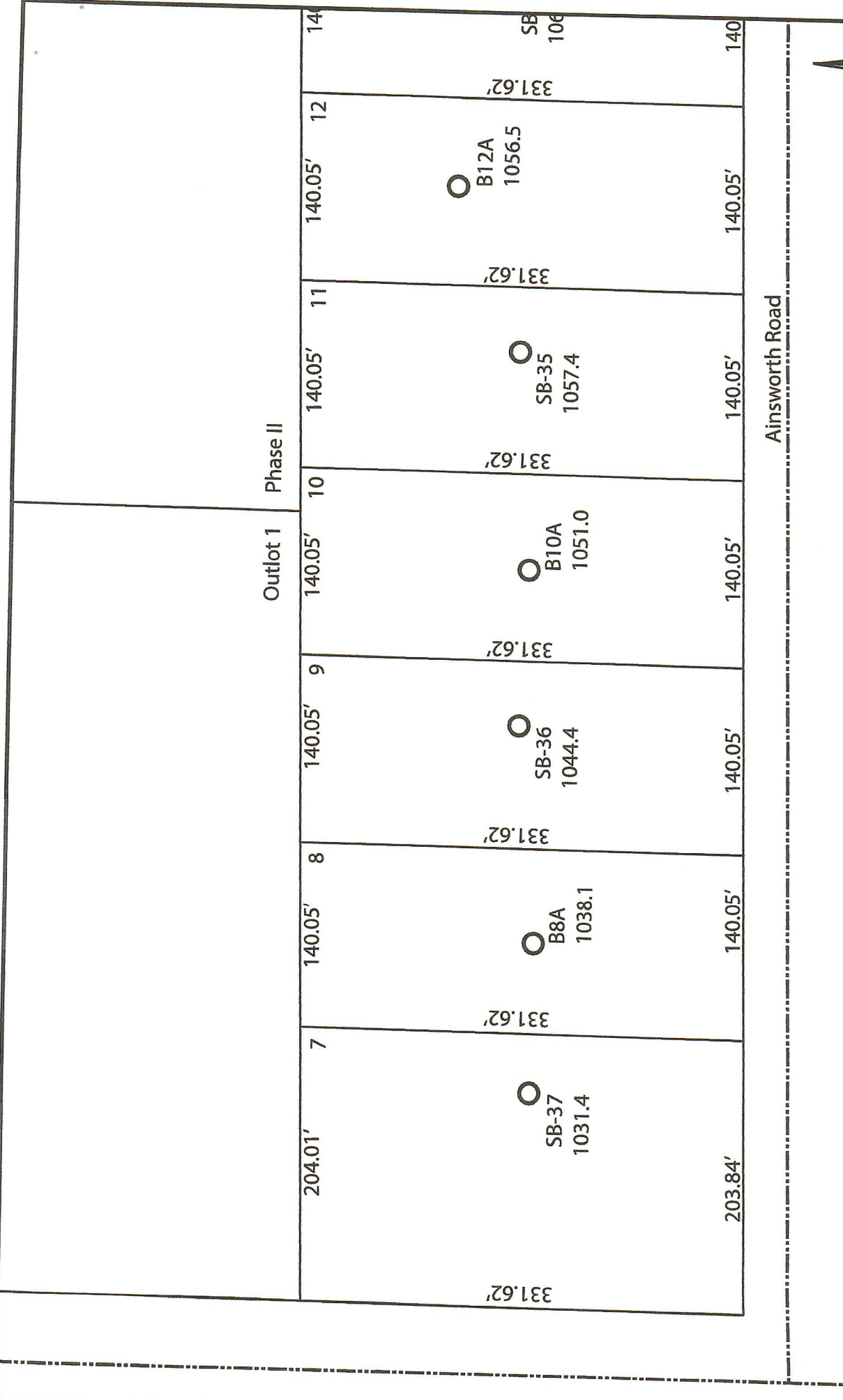
\*Effluent #1 = BOD, > 30 ≤ 220 mg/L and TSS > 30 ≤ 150 mg/L

\*Effluent #2 = BOD, > 30 ≤ 220 mg/L and TSS > 30 ≤ 150 mg/L





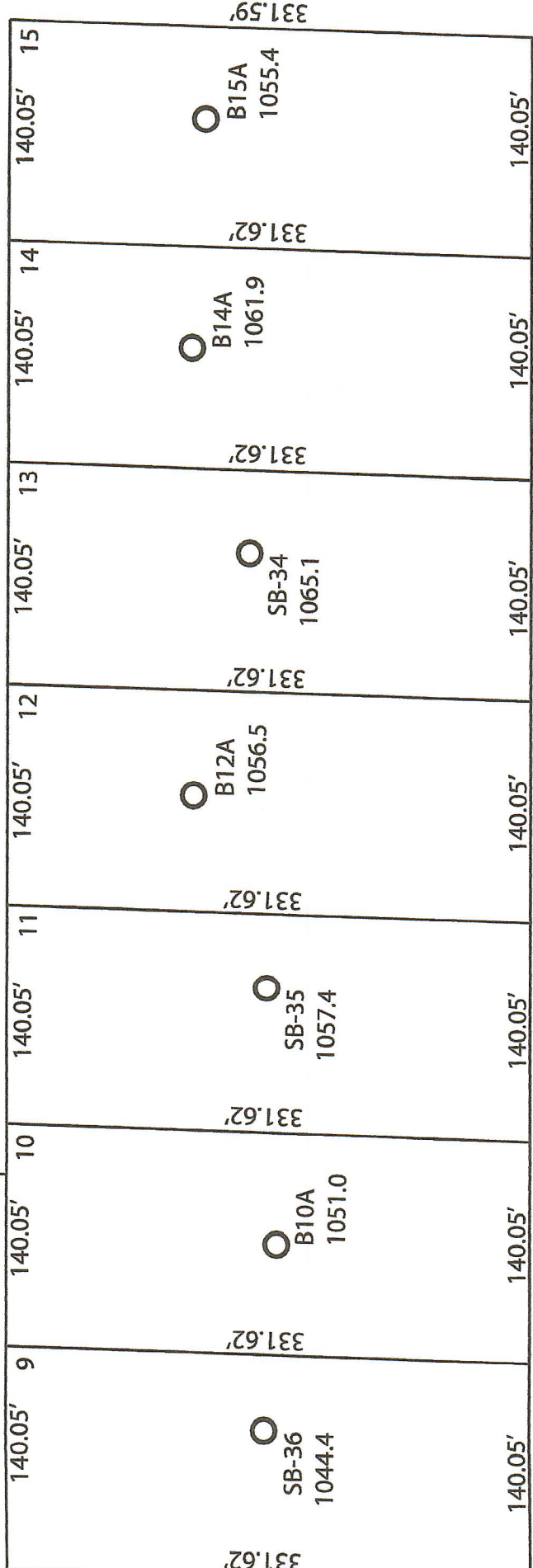
Lots 1-6 of Phase I of Proposed Subd.: Stone Ridge  
 Village of Merton, Waukesha County  
 Drawn by: Morgan Butler  
 Date: 9/11/2019 Scale: 1" = 100'



Ainsworth Road

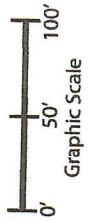


Lots 7-12 of Phase I of Proposed Subd.: Stone Ridge Village of Merton, Waukesha County  
 Drawn by: Morgan Butler  
 Date: 9/11/2019 Scale: 1" = 100'



Ainsworth Road

PLSS Sec. Corner  
 Conc. Monument w/ Brass Cap  
 1058.7'



lots 9-15 of Phase I of Proposed Subd.: Stone Ridge  
 Village of Merton, Waukesha County  
 Drawn by: Morgan Butler  
 Date: 9/11/2019 Scale: 1" = 100'



LAND INFORMATION SYSTEMS DIVISION

# Waukesha County Soils Map



### Legend

Parcels (Click for details)

Plats (Click for details)

Retired Parcels (Click for details)

Retired Plats (Click for details)

Soils

Municipal Boundary\_2K

FacilitySites\_2K\_Labels

Lots\_2K

Lot

Outlot

SimultaneousConveyance

Assessor Plat

CSM

Condominium

Subdivision

Cartoline\_2K

<all other values>

EA-Easement\_Line

PL-DA

PL-Extended\_Tie\_Line

PL-Meander\_Line

PL-Note

PL-Tie

PL-Tie\_Line

Road Centerlines\_2K

Railroad\_2K

TaxParcel\_2K

Waterbodies\_2K\_Labels

Waterlines\_2K\_Labels

0 362.42 Feet

The information and depictions herein are for informational purposes and Waukesha County specifically disclaims accuracy in this reproduction and specifically administers and advises that if specific and precise accuracy is required, the same should be determined by procurement of certified maps, surveys, plats, Flood Insurance Studies, or other official means. Waukesha County will not be responsible for any damages which result from third party use of the information and depictions herein, or for use which ignores this warning.

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