LOG OF BORING C-11

Avalon Hotel, Conference Center, and Parking Deck
Alpharetta, Fulton County, Georgia
PROJECT NO.: G14NAP02

LOGGED BY: Blake Summers	ELEVATION: 1065.0 ft
DATE DRILLED: April 22, 2014	BORING DEPTH: 76 ft
DRILLING METHOD: Hollow Stem Auger	24 HR WATER LEVEL: ft / TOB WATER LEVEL: 56.0 ft

DEPTH (feet)	ELEVATION (feet)	GRAPHIC LOG	SAMPLE DESCRIPTION	LAB RESULTS: NATURAL MOISTURE CONTENT (%)	LAB RESULTS: LIQUID LIMIT (%)	LAB RESULTS: PLASTIC INDEX (%)	FIELD DATA: BLOW COUNTS	FIELD DATA: N Value, blows/ft. (1, 5, 10, 50, 100)
			RESIDUUM: Stiff, brown-red, sandy SILT (ML), trace clay *(Continued)*					
40.0	1025.0		Loose, brown-red, silty fine SAND (SM)				4 5 5	
45.0	1020.0		Loose, brown-white, silty medium to fine SAND (SM), **wet**				5 5 4	
50.0	1015.0		Stiff, tan, sandy SILT (ML), **wet**				4 3 4	
55.0							5 5 7	
60.0	1005.0		Medium dense, tan, silty fine SAND (SM), trace mica, **moist**				5 8 7	
65.0							4 8 16	
70.0	995.0		**PARTIALLY WEATHERED ROCK** Dark gray, silty medium to fine SAND (SM), trace rock fragments				4 7 11	

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CONTOUR ENGINEERING, LLC

LEGEND

▽ = TIME OF BORING (TOB) ▼ = 24 HOUR READING

REMARKS

AUTO HAMMER

GEOTECH BORING LOG AVALON PHASE II LOGS.GPJ CONTOUR.GDT 4/29/14

LOG OF BORING C-11

Avalon Hotel, Conference Center, and Parking Deck
Alpharetta, Fulton County, Georgia
PROJECT NO.: G14NAP02

LOGGED BY: Blake Summers	ELEVATION: 1065.0 ft
DATE DRILLED: April 22, 2014	BORING DEPTH: 76 ft
DRILLING METHOD: Hollow Stem Auger	24 HR WATER LEVEL: ft / TOB WATER LEVEL: 56.0 ft

DEPTH (feet)	ELEVATION (feet)	GRAPHIC LOG	SAMPLE DESCRIPTION	LAB RESULTS: NATURAL MOISTURE CONTENT (%)	LAB RESULTS: LIQUID LIMIT (%)	LAB RESULTS: PLASTIC INDEX (%)	FIELD DATA: BLOW COUNTS	FIELD DATA: N Value, blows/ft. (1, 5, 10, 50, 100)
75.0	989.0		**PARTIALLY WEATHERED ROCK** Dark gray, silty medium to fine SAND (SM), trace rock fragments *(Continued)*				50/1"	
			Auger Refusal at 76 feet.					
80.0								
85.0								
90.0								
95.0								
100.0								
105.0								

CONTOUR ENGINEERING, LLC

LEGEND
▽ = TIME OF BORING (TOB) ▼ = 24 HOUR READING

REMARKS
AUTO HAMMER

GEOTECH BORING LOG AVALON PHASE II LOGS.GPJ CONTOUR.GDT 4/29/14

LOG OF BORING C-12

Avalon Hotel, Conference Center, and Parking Deck
Alpharetta, Fulton County, Georgia
PROJECT NO.: G14NAP02

LOGGED BY: Blake Summers	ELEVATION: 1065.0 ft
DATE DRILLED: April 12, 2014	BORING DEPTH: 70 ft
DRILLING METHOD: Hollow Stem Auger	24 HR WATER LEVEL: ft / TOB WATER LEVEL: ft

DEPTH (feet)	ELEVATION (feet)	SAMPLE DESCRIPTION	NATURAL MOISTURE CONTENT (%)	LIQUID LIMIT (%)	PLASTIC INDEX (%)	BLOW COUNTS
	1062.0	**FILL:** Red-brown, sandy SILT (ML), trace rock fragments				6 5 6
5.0	1059.0	Red-brown, silty medium to fine SAND (SM), trace rock fragments				6 11 12
		Red-brown, clayey fine SAND (SC), trace rock fragments				7 10 17
10.0	1055.0	Red-brown, sandy SILT (ML)				10 15 15
15.0	1050.0	**RESIDUUM:** Stiff, purple-brown-black, sandy SILT (ML)				4 6 9
20.0	1045.0	Firm, orange-brown-black, sandy SILT (ML), **moist**				4 7 8
25.0	1040.0	Medium dense, pink-red, silty fine SAND (SM)				3 3 4
30.0	1035.0	Stiff, purple-brown, sandy SILT (ML), **moist**				4 6 8
35.0						4 5 10

LAB RESULTS / FIELD DATA

N Value, blows/ft. (1, 5, 10, 50, 100)

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CONTOUR ENGINEERING, LLC

LEGEND

▽ = TIME OF BORING (TOB) ▼ = 24 HOUR READING

REMARKS

AUTO HAMMER

LOG OF BORING C-12

Avalon Hotel, Conference Center, and Parking Deck
Alpharetta, Fulton County, Georgia
PROJECT NO.: G14NAP02

LOGGED BY: Blake Summers	ELEVATION: 1065.0 ft
DATE DRILLED: April 12, 2014	BORING DEPTH: 70 ft
DRILLING METHOD: Hollow Stem Auger	24 HR WATER LEVEL: ft / TOB WATER LEVEL: ft

DEPTH (feet)	ELEVATION (feet)	GRAPHIC LOG	SAMPLE DESCRIPTION	LAB RESULTS: NATURAL MOISTURE CONTENT (%)	LAB RESULTS: LIQUID LIMIT (%)	LAB RESULTS: PLASTIC INDEX (%)	FIELD DATA: BLOW COUNTS
40.0			Stiff, purple-brown, sandy SILT (ML), **moist** *(Continued)*				4 5 6
45.0	1020.0						3 5 6
			Stiff to very stiff, orange-brown-black, sandy SILT (ML), **moist**				3 4 5
50.0							
55.0							4 6 6
60.0	1005.0						7 8 13
			Very stiff, white-pink-brown, sandy SILT (ML)				
65.0	1000.0						8 10 15
			Very stiff, orange-brown-black, sandy SILT (ML)				
70.0	995.0						7 7 9
			Boring Terminated at 70 feet.				

N Value, blows/ft. (1, 5, 10, 50, 100)

CONTOUR ENGINEERING, LLC

LEGEND
▽ = TIME OF BORING (TOB) ▼ = 24 HOUR READING

REMARKS
AUTO HAMMER

GEOTECH BORING LOG AVALON PHASE II LOGS.GPJ CONTOUR.GDT 4/29/14

LOG OF BORING C-13

Avalon Hotel, Conference Center, and Parking Deck
Alpharetta, Fulton County, Georgia
PROJECT NO.: G14NAP02

LOGGED BY: Blake Summers	ELEVATION: 1066.0 ft
DATE DRILLED: April 22, 2014	BORING DEPTH: 127 ft
DRILLING METHOD: Hollow Stem Auger	24 HR WATER LEVEL: ft / TOB WATER LEVEL: 50.0 ft

DEPTH (feet)	ELEVATION (feet)	GRAPHIC LOG	SAMPLE DESCRIPTION	LAB RESULTS: NATURAL MOISTURE CONTENT (%)	LAB RESULTS: LIQUID LIMIT (%)	LAB RESULTS: PLASTIC INDEX (%)	FIELD DATA: BLOW COUNTS
0.0	1063.0		**FILL:** Red-brown, silty coarse to medium SAND (SM), with rock fragments				3 5 5
			Red-brown, sandy SILT (ML), trace rock fragments				5 5 6
5.0							3 6 7
							4 6 7
10.0							
							3 3 6
15.0	1051.0		**RESIDUUM:** Stiff to very stiff, brown-red, sandy SILT (ML), trace clay				
							4 6 9
20.0							
							5 10 10
25.0	1041.0		Firm, brown, sandy SILT (ML), trace mica				
							3 4 4
30.0	1036.0		Medium dense, tan-red, silty fine SAND (SM)				
							4 5 6
35.0	1031.0						

N Value, blows/ft. (1, 5, 10, 50, 100)

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CONTOUR ENGINEERING, LLC

LEGEND
▽ = TIME OF BORING (TOB) ▼ = 24 HOUR READING

REMARKS
AUTO HAMMER

GEOTECH BORING LOG AVALON PHASE II LOGS.GPJ CONTOUR.GDT 4/29/14

LOG OF BORING C-13

Avalon Hotel, Conference Center, and Parking Deck
Alpharetta, Fulton County, Georgia
PROJECT NO.: G14NAP02

LOGGED BY: Blake Summers	ELEVATION: 1066.0 ft
DATE DRILLED: April 22, 2014	BORING DEPTH: 127 ft
DRILLING METHOD: Hollow Stem Auger	24 HR WATER LEVEL: ft / TOB WATER LEVEL: 50.0 ft

DEPTH (feet)	ELEVATION (feet)	GRAPHIC LOG	SAMPLE DESCRIPTION	LAB RESULTS: NATURAL MOISTURE CONTENT (%)	LAB RESULTS: LIQUID LIMIT (%)	LAB RESULTS: PLASTIC INDEX (%)	FIELD DATA: BLOW COUNTS	FIELD DATA: N Value, blows/ft.
40.0	1026.0		Loose, brown, silty coarse to medium SAND (SM), trace rock fragments *(Continued)*				3 4 4	
			Firm, brown-red, sandy SILT (ML), **moist**					
45.0	1021.0		Firm, brown-purple-white, sandy SILT (ML), **moist**				2 3 5	
50.0	▽1016.0		Loose to medium dense, brown, silty medium to fine SAND (SM), **wet**				2 3 4	
55.0							3 4 6	
60.0	1006.0		Very stiff, brown-white, sandy SILT (ML), **moist**				3 4 8	
65.0	1001.0		Very stiff to stiff, brown, sandy SILT (ML), trace mica, **moist**				4 8 12	
70.0							4 6 12	

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CONTOUR ENGINEERING, LLC

LEGEND
▽ = TIME OF BORING (TOB) ▼ = 24 HOUR READING

REMARKS
AUTO HAMMER

LOG OF BORING C-13

Avalon Hotel, Conference Center, and Parking Deck
Alpharetta, Fulton County, Georgia
PROJECT NO.: G14NAP02

LOGGED BY: Blake Summers	ELEVATION: 1066.0 ft
DATE DRILLED: April 22, 2014	BORING DEPTH: 127 ft
DRILLING METHOD: Hollow Stem Auger	24 HR WATER LEVEL: ft / TOB WATER LEVEL: 50.0 ft

DEPTH (feet)	ELEVATION (feet)	GRAPHIC LOG	SAMPLE DESCRIPTION	LAB RESULTS: NATURAL MOISTURE CONTENT (%)	LAB RESULTS: LIQUID LIMIT (%)	LAB RESULTS: PLASTIC INDEX (%)	FIELD DATA: BLOW COUNTS	FIELD DATA: N Value, blows/ft. (1 5 10 50 100)
75.0			Very stiff to stiff, brown, sandy SILT (ML), trace mica, **moist** *(Continued)*				4 5 8	
80.0							3 5 10	
85.0	981.0		Stiff, tan-white-red, sandy SILT (ML), trace mica, **moist**				4 5 8	
90.0	976.0		Very stiff, brown, sandy SILT (ML), trace mica, **moist**				4 5 6	
95.0							3 7 10	
100.0							4 6 9	
105.0							4 6 10	

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CONTOUR ENGINEERING, LLC

LEGEND
▽ = TIME OF BORING (TOB) ▼ = 24 HOUR READING

REMARKS
AUTO HAMMER

LOG OF BORING C-13

Avalon Hotel, Conference Center, and Parking Deck
Alpharetta, Fulton County, Georgia
PROJECT NO.: G14NAP02

LOGGED BY: Blake Summers	ELEVATION: 1066.0 ft
DATE DRILLED: April 22, 2014	BORING DEPTH: 127 ft
DRILLING METHOD: Hollow Stem Auger	24 HR WATER LEVEL: ft / TOB WATER LEVEL: 50.0 ft

DEPTH (feet)	ELEVATION (feet)	GRAPHIC LOG	SAMPLE DESCRIPTION	LAB RESULTS: NATURAL MOISTURE CONTENT (%)	LAB RESULTS: LIQUID LIMIT (%)	LAB RESULTS: PLASTIC INDEX (%)	FIELD DATA: BLOW COUNTS	FIELD DATA: N Value, blows/ft.
110.0	956.0		Very stiff, brown, sandy SILT (ML), trace mica, **moist** *(Continued)*				6 10 12	
			Hard, brown, sandy SILT (ML), trace rock fragments, **moist**					
115.0	951.0		Very stiff, brown-black, sandy SILT (ML), **moist**				10 15 20	
120.0							4 7 11	
125.0	939.0						8 11 17	
			Auger Refusal at 127 feet.					
130.0								
135.0								
140.0								

N Value, blows/ft. scale: 1 5 10 50 100

CONTOUR ENGINEERING, LLC

LEGEND
▽ = TIME OF BORING (TOB) ▼ = 24 HOUR READING

REMARKS
AUTO HAMMER

GEOTECH BORING LOG AVALON PHASE II LOGS.GPJ CONTOUR.GDT 4/29/14

LOG OF BORING C-14

Avalon Hotel, Conference Center, and Parking Deck
Alpharetta, Fulton County, Georgia
PROJECT NO.: G14NAP02

LOGGED BY: Blake Summers	ELEVATION: 1064.0 ft
DATE DRILLED: April 12, 2014	BORING DEPTH: 70 ft
DRILLING METHOD: Hollow Stem Auger	24 HR WATER LEVEL: 47.0 ft / TOB WATER LEVEL: 47.0 ft

DEPTH (feet)	ELEVATION (feet)	GRAPHIC LOG	SAMPLE DESCRIPTION	LAB RESULTS: NATURAL MOISTURE CONTENT (%)	LAB RESULTS: LIQUID LIMIT (%)	LAB RESULTS: PLASTIC INDEX (%)	FIELD DATA: BLOW COUNTS
0.0	1064.0		**FILL:** Red-brown, silty medium to fine SAND (SM), some rock fragments				9 9 9
	1061.0		Tan-brown, silty medium to fine SAND (SM), trace rock fragments				5 6 9
5.0	1058.0		Red-brown, silty medium to fine SAND (SM), trace rock fragments				4 4 4
							2 3 6
10.0							
							5 7 8
15.0							
							4 5 9
20.0							
							5 6 9
25.0	1039.0		White-tan-brown, silty coarse to fine SAND (SM), and rock fragments				
							6 4 35
30.0	1034.0		Red-brown, silty medium to fine SAND (SM), some rock fragments				
							3 4 6
35.0	1029.0						

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FIELD DATA: N Value, blows/ft. (1, 5, 10, 50, 100)

CONTOUR ENGINEERING, LLC

LEGEND
▽ = TIME OF BORING (TOB) ▼ = 24 HOUR READING

REMARKS
AUTO HAMMER

GEOTECH BORING LOG AVALON PHASE II LOGS.GPJ CONTOUR.GDT 4/29/14

LOG OF BORING C-14

Avalon Hotel, Conference Center, and Parking Deck
Alpharetta, Fulton County, Georgia
PROJECT NO.: G14NAP02

LOGGED BY: Blake Summers	ELEVATION: 1064.0 ft
DATE DRILLED: April 12, 2014	BORING DEPTH: 70 ft
DRILLING METHOD: Hollow Stem Auger	24 HR WATER LEVEL: 47.0 ft / TOB WATER LEVEL: 47.0 ft

DEPTH (feet)	ELEVATION (feet)	GRAPHIC LOG	SAMPLE DESCRIPTION	LAB RESULTS: NATURAL MOISTURE CONTENT (%)	LAB RESULTS: LIQUID LIMIT (%)	LAB RESULTS: PLASTIC INDEX (%)	FIELD DATA: BLOW COUNTS	FIELD DATA: N Value, blows/ft. (1, 5, 10, 50, 100)
			RESIDUUM: Firm to stiff, tan-orange-brown, sandy SILT (ML) *(Continued)*					
40.0	1024.0		Firm, tan-orange-brown, sandy SILT (ML), **moist**				4 7 7	
45.0	1019.0		Firm, orange-purple-brown, sandy SILT (ML), some rock fragments, **wet**				3 4 4	
50.0	1014.0		Firm to stiff, red-brown-black, sandy SILT (ML), trace mica, **moist**				2 3 3	
55.0							2 3 3	
60.0							4 4 4	
65.0	999.0		Stiff, orange-purple-brown, sandy SILT (ML), trace rock fragments, trace mica, **moist**				4 5 6	
70.0	994.0		Boring Terminated at 70 feet.				3 3 6	

CONTOUR ENGINEERING, LLC

LEGEND
▽ = TIME OF BORING (TOB) ▼ = 24 HOUR READING

REMARKS
AUTO HAMMER

GEOTECH BORING LOG AVALON PHASE II LOGS.GPJ CONTOUR.GDT 4/29/14

LOG OF BORING C-15

Avalon Hotel, Conference Center, and Parking Deck
Alpharetta, Fulton County, Georgia
PROJECT NO.: G14NAP02

LOGGED BY: Blake Summers	ELEVATION: 1058.0 ft
DATE DRILLED: April 11, 2014	BORING DEPTH: 70 ft
DRILLING METHOD: Hollow Stem Auger	24 HR WATER LEVEL: ft / TOB WATER LEVEL: ft

DEPTH (feet)	ELEVATION (feet)	SAMPLE DESCRIPTION	LAB RESULTS: NATURAL MOISTURE CONTENT (%)	LAB RESULTS: LIQUID LIMIT (%)	LAB RESULTS: PLASTIC INDEX (%)	FIELD DATA: BLOW COUNTS
0.0	1058.0	**FILL:** Red-brown, sandy SILT (ML), **trace organic material**				8 10 8
	1055.0	Red-brown, silty medium to fine SAND (SM), **trace organic material**				8 7 6
5.0	1052.0	Brown, sandy SILT (ML), trace mica				6 5 6
	1050.0	Brown-red, sandy SILT (ML)				6 5 5
10.0	1048.0	Brown-red, silty coarse to medium SAND (SM), trace rock fragments				8 9 6
15.0	1043.0	Brown, sandy SILT (ML)				4 5 5
20.0	1038.0	Brown-red, silty coarse to medium SAND (SM), trace rock fragments				18 12 10
25.0	1033.0	Red, sandy SILT (ML), **moist**				2 2 3
30.0						2 3 2
35.0						

FIELD DATA: N Value, blows/ft. (1, 5, 10, 50, 100)

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CONTOUR ENGINEERING, LLC

LEGEND
▽ = TIME OF BORING (TOB) ▼ = 24 HOUR READING

REMARKS
AUTO HAMMER

GEOTECH BORING LOG AVALON PHASE II LOGS.GPJ CONTOUR.GDT 4/29/14

LOG OF BORING C-15

Avalon Hotel, Conference Center, and Parking Deck
Alpharetta, Fulton County, Georgia
PROJECT NO.: G14NAP02

LOGGED BY: Blake Summers	ELEVATION: 1058.0 ft
DATE DRILLED: April 11, 2014	BORING DEPTH: 70 ft
DRILLING METHOD: Hollow Stem Auger	24 HR WATER LEVEL: ft / TOB WATER LEVEL: ft

DEPTH (feet)	ELEVATION (feet)	GRAPHIC LOG	SAMPLE DESCRIPTION	LAB RESULTS: NATURAL MOISTURE CONTENT (%)	LAB RESULTS: LIQUID LIMIT (%)	LAB RESULTS: PLASTIC INDEX (%)	FIELD DATA: BLOW COUNTS	FIELD DATA: N Value, blows/ft.
			Red, sandy SILT (ML), **moist** *(Continued)*				5 5	
40.0	1018.0		**RESIDUUM:** Stiff, tan-brown, sandy SILT (ML), **moist**				6 8 5	
45.0	1013.0		Firm, brown-orange, sandy SILT (ML), **moist**				2 3 3	
50.0	1008.0		Firm to stiff, brown-purple, sandy SILT (ML), trace mica, **moist**				2 3 3	
55.0							3 3 4	
60.0							3 4 5	
65.0							4 6 7	
70.0	988.0		Boring Terminated at 70 feet.					

N Value, blows/ft. scale: 1, 5, 10, 50, 100

CONTOUR ENGINEERING, LLC

LEGEND
▽ = TIME OF BORING (TOB) ▼ = 24 HOUR READING

REMARKS
AUTO HAMMER

GEOTECH BORING LOG AVALON PHASE II LOGS.GPJ CONTOUR.GDT 4/29/14

LOG OF BORING C-16

Avalon Hotel, Conference Center, and Parking Deck
Alpharetta, Fulton County, Georgia
PROJECT NO.: G14NAP02

LOGGED BY: Blake Summers	ELEVATION: 1060.0 ft
DATE DRILLED: April 22, 2014	BORING DEPTH: 92 ft
DRILLING METHOD: Hollow Stem Auger	24 HR WATER LEVEL: ft / TOB WATER LEVEL: 55.0 ft

DEPTH (feet)	ELEVATION (feet)	SAMPLE DESCRIPTION	NATURAL MOISTURE CONTENT (%)	LIQUID LIMIT (%)	PLASTIC INDEX (%)	BLOW COUNTS
		FILL: Red-brown, sandy SILT (ML), trace rock fragments				3 4 4
5.0						3 4 6
	1054.0	Brown-black, sandy SILT (ML), **and organic material**				3 3 4
	1052.0	Red-black, sandy SILT (ML), **some organic material**				3 5 10
10.0	1050.0	Red-brown, silty coarse SAND (SM), with rock fragments				7 14 13
15.0	1045.0	Brown-white, silty coarse SAND (SM), with rock fragments				4 23 17
20.0	1040.0	Brown, sandy SILT (ML), some rock fragments				2 3 5
25.0	1035.0	Red-brown, sandy SILT (ML)				4 3 3
30.0	1030.0	Red-brown, sandy SILT (ML), **moist**				3 4 4
35.0	1025.0					

N Value, blows/ft. (1, 5, 10, 50, 100)

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CONTOUR ENGINEERING, LLC

LEGEND
▽ = TIME OF BORING (TOB) ▼ = 24 HOUR READING

REMARKS
AUTO HAMMER

GEOTECH BORING LOG AVALON PHASE II LOGS.GPJ CONTOUR.GDT 4/29/14

LOG OF BORING C-16

Avalon Hotel, Conference Center, and Parking Deck
Alpharetta, Fulton County, Georgia
PROJECT NO.: G14NAP02

LOGGED BY: Blake Summers	ELEVATION: 1060.0 ft
DATE DRILLED: April 22, 2014	BORING DEPTH: 92 ft
DRILLING METHOD: Hollow Stem Auger	24 HR WATER LEVEL: ft / TOB WATER LEVEL: 55.0 ft

DEPTH (feet)	ELEVATION (feet)	GRAPHIC LOG	SAMPLE DESCRIPTION	LAB RESULTS: NATURAL MOISTURE CONTENT (%)	LAB RESULTS: LIQUID LIMIT (%)	LAB RESULTS: PLASTIC INDEX (%)	FIELD DATA: BLOW COUNTS	FIELD DATA: N Value, blows/ft. (1, 5, 10, 50, 100)
			RESIDUUM: Stiff, red-brown, sandy SILT (ML), **moist** *(Continued)*					
40.0	1020.0		Stiff, tan-black, sandy SILT (ML)				8 6 6	
45.0							4 6 6	
50.0	1010.0		Loose, tan-white, silty fine SAND (SM), **moist**				7 5 8	
55.0	▽1005.0		Medium dense, tan-black, silty fine SAND (SM), **moist**				4 4 6	
60.0	1000.0		Loose, tan-white, silty fine SAND (SM), **wet**				4 6 9	
65.0	995.0		Medium dense, tan-black, silty fine SAND (SM), **wet**				3 4 6	
70.0	990.0		Very stiff to hard, gray-brown, sandy SILT (ML), trace mica, **moist**				7 8 12	

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CONTOUR ENGINEERING, LLC

LEGEND
▽ = TIME OF BORING (TOB) ▼ = 24 HOUR READING

REMARKS
AUTO HAMMER

GEOTECH BORING LOG AVALON PHASE II LOGS.GPJ CONTOUR.GDT 4/29/14

LOG OF BORING C-16

Avalon Hotel, Conference Center, and Parking Deck
Alpharetta, Fulton County, Georgia
PROJECT NO.: G14NAP02

LOGGED BY: Blake Summers	ELEVATION: 1060.0 ft
DATE DRILLED: April 22, 2014	BORING DEPTH: 92 ft
DRILLING METHOD: Hollow Stem Auger	24 HR WATER LEVEL: ft / TOB WATER LEVEL: 55.0 ft

DEPTH (feet)	ELEVATION (feet)	GRAPHIC LOG	SAMPLE DESCRIPTION	LAB RESULTS: NATURAL MOISTURE CONTENT (%)	LAB RESULTS: LIQUID LIMIT (%)	LAB RESULTS: PLASTIC INDEX (%)	FIELD DATA: BLOW COUNTS	FIELD DATA: N Value, blows/ft.
75.0			Very stiff to hard, gray-brown, sandy SILT (ML), trace mica, **moist** *(Continued)*				7 8 15	
80.0							12 15 22	
85.0	975.0						13 17 20	
90.0	968.0		**PARTIALLY WEATHERED ROCK** Sampled as gray, silty fine SAND (SM), trace mica				50/2"	
			Auger Refusal at 92 feet.					
95.0								
100.0								
105.0								

N Value, blows/ft. scale: 1, 5, 10, 50, 100

CONTOUR ENGINEERING, LLC

LEGEND
▽ = TIME OF BORING (TOB) ▼ = 24 HOUR READING

REMARKS
AUTO HAMMER

GEOTECH BORING LOG AVALON PHASE II LOGS.GPJ CONTOUR.GDT 4/29/14

LOG OF BORING C-17

Avalon Hotel, Conference Center, and Parking Deck
Alpharetta, Fulton County, Georgia
PROJECT NO.: G14NAP02

LOGGED BY: Blake Summers	ELEVATION: 1062.0 ft
DATE DRILLED: April 9, 2014	BORING DEPTH: 70 ft
DRILLING METHOD: Hollow Stem Auger	24 HR WATER LEVEL: 48.0 ft / TOB WATER LEVEL: 48.0 ft

DEPTH (feet)	ELEVATION (feet)	GRAPHIC LOG	SAMPLE DESCRIPTION	LAB RESULTS: NATURAL MOISTURE CONTENT (%)	LAB RESULTS: LIQUID LIMIT (%)	LAB RESULTS: PLASTIC INDEX (%)	FIELD DATA: BLOW COUNTS
0.0	1062.0		**FILL:** Red-brown, sandy SILT (ML), trace rock fragments				4 5 7
	1059.0		Red-brown, silty medium to fine SAND (SM), trace rock fragments				7 13 13
5.0	1056.0		Red-brown, silty medium to fine SAND (SM), and rock fragments				10 21 6
	1054.0		Red-brown, silty medium to fine SAND (SM), some rock fragments				5 5 5
10.0	1052.0		Red-brown, sandy SILT (ML), trace rock fragments				3 5 6
15.0							
							4 7 5
20.0	1042.0		Red-brown, sandy SILT (ML), trace rock fragments, **trace organic material**				5 7 7
25.0	1037.0		Red-brown, sandy SILT (ML), some rock fragments				4 6 7
30.0	1032.0		**RESIDUUM:** Medium dense, tan-brown, silty fine SAND (SM)				6 9 8
35.0	1027.0		Firm, tan-red-brown, sandy SILT (ML)				

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FIELD DATA: N Value, blows/ft. (1, 5, 10, 50, 100)

CONTOUR ENGINEERING, LLC

LEGEND
▽ = TIME OF BORING (TOB) ▼ = 24 HOUR READING

REMARKS
AUTO HAMMER

GEOTECH BORING LOG AVALON PHASE II LOGS.GPJ CONTOUR.GDT 4/29/14

LOG OF BORING C-17

Avalon Hotel, Conference Center, and Parking Deck
Alpharetta, Fulton County, Georgia
PROJECT NO.: G14NAP02

LOGGED BY: Blake Summers	ELEVATION: 1062.0 ft
DATE DRILLED: April 9, 2014	BORING DEPTH: 70 ft
DRILLING METHOD: Hollow Stem Auger	24 HR WATER LEVEL: 48.0 ft / TOB WATER LEVEL: 48.0 ft

DEPTH (feet)	ELEVATION (feet)	GRAPHIC LOG	SAMPLE DESCRIPTION	LAB RESULTS: NATURAL MOISTURE CONTENT (%)	LAB RESULTS: LIQUID LIMIT (%)	LAB RESULTS: PLASTIC INDEX (%)	FIELD DATA: BLOW COUNTS	FIELD DATA: N Value, blows/ft. (1, 5, 10, 50, 100)
			Firm, tan-red-brown, sandy SILT (ML) *(Continued)*					
40.0	1022.0		Loose, tan-brown-black, silty medium to fine SAND (SM), **moist**				4 4 4	
45.0	1017.0		Loose, gray-tan, silty fine SAND (SM), **wet**				4 5 5	
50.0	1012.0		Medium dense, gray-tan, silty fine SAND (SM), **moist**				3 4 5	
55.0	1007.0		Dense, gray-tan, silty coarse to fine SAND (SM), **moist**				4 6 10	
60.0							17 20 16	
65.0	997.0		Very dense, tan-gray-green, silty fine SAND (SM)				15 18 20	
70.0	992.0		Boring Terminated at 70 feet.				27 27 27	

CONTOUR ENGINEERING, LLC

LEGEND
▽ = TIME OF BORING (TOB) ▼ = 24 HOUR READING

REMARKS
AUTO HAMMER

GEOTECH BORING LOG AVALON PHASE II LOGS.GPJ CONTOUR.GDT 4/29/14

LOG OF BORING H-01

Avalon Hotel, Conference Center, and Parking Deck
Alpharetta, Fulton County, Georgia
PROJECT NO.: G14NAP02

LOGGED BY: Andrew Rebeiz	ELEVATION: 1063.3 ft
DATE DRILLED: February 10, 2012	BORING DEPTH: 20 ft
DRILLING METHOD: Hollow Stem Auger	24 HR WATER LEVEL: ft / TOB WATER LEVEL: ft

DEPTH (feet)	ELEVATION (feet)	GRAPHIC LOG	SAMPLE DESCRIPTION	LAB RESULTS: NATURAL MOISTURE CONTENT (%)	LAB RESULTS: LIQUID LIMIT (%)	LAB RESULTS: PLASTIC INDEX (%)	FIELD DATA: BLOW COUNTS	FIELD DATA: N Value, blows/ft. (1 5 10 50 100)
0.0	1060.3		**FILL:** Orange-tan silty SAND (SM), with rock fragments,				5 6 8	
			Red-brown sandy SILT (ML), with rock fragments				5 7 14	
5.0							4 5 5	
10.0							5 7 8	
15.0							5 6 8	
	1046.3		**RESIDUUM:** Medium dense, tan-brown silty SAND (SM)				5 7 10	
20.0	1043.3		Boring Terminated at 20 feet.					
25.0								
30.0								
35.0								

CONTOUR ENGINEERING, LLC

LEGEND

▽ = TIME OF BORING (TOB) ▼ = 24 HOUR READING

REMARKS

AUTOMATIC HAMMER

GEOTECH BORING LOG AVALON PHASE II LOGS.GPJ CONTOUR.GDT 4/29/14

LOG OF BORING H-02

Avalon Hotel, Conference Center, and Parking Deck
Alpharetta, Fulton County, Georgia
PROJECT NO.: G14NAP02

LOGGED BY: Andrew Rebeiz	ELEVATION: 1064.5 ft
DATE DRILLED: February 10, 2012	BORING DEPTH: 20 ft
DRILLING METHOD: Hollow Stem Auger	24 HR WATER LEVEL: ft / TOB WATER LEVEL: ft

DEPTH (feet)	ELEVATION (feet)	GRAPHIC LOG	SAMPLE DESCRIPTION	LAB RESULTS: NATURAL MOISTURE CONTENT (%)	LAB RESULTS: LIQUID LIMIT (%)	LAB RESULTS: PLASTIC INDEX (%)	FIELD DATA: BLOW COUNTS	FIELD DATA: N Value, blows/ft.
0.0	1064.5		**FILL:** Red-brown sandy SILT (ML), with rock fragments, **with organic material consisting of topsoil with wood fragments and rock fragments**				3 3 5	
	1061.5		Red-brown sandy SILT (ML), with rock fragments				4 5 8	
5.0							6 8 12	
							5 7 7	
10.0								
							5 4 5	
15.0	1047.5		Red-brown sandy SILT (ML), **with organic material consisting of topsoil with wood fragments and rock fragments**					
	1044.5						4 6 8	
20.0			Boring Terminated at 20 feet.					
25.0								
30.0								
35.0								

N Value, blows/ft. scale: 1, 5, 10, 50, 100

CONTOUR ENGINEERING, LLC

LEGEND

▽ = TIME OF BORING (TOB) ▼ = 24 HOUR READING

REMARKS

AUTOMATIC HAMMER

GEOTECH BORING LOG AVALON PHASE II LOGS.GPJ CONTOUR.GDT 4/29/14

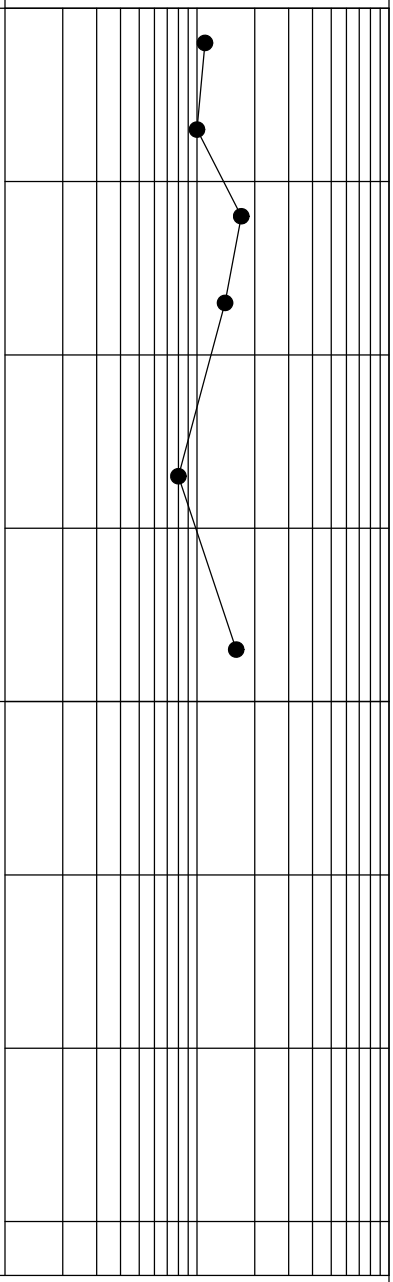
LOG OF BORING H-03

Avalon Hotel, Conference Center, and Parking Deck
Alpharetta, Fulton County, Georgia
PROJECT NO.: G14NAP02

LOGGED BY: Andrew Rebeiz	ELEVATION: 1066.6 ft
DATE DRILLED: February 10, 2012	BORING DEPTH: 20 ft
DRILLING METHOD: Hollow Stem Auger	24 HR WATER LEVEL: ft / TOB WATER LEVEL: ft

DEPTH (feet)	ELEVATION (feet)	GRAPHIC LOG	SAMPLE DESCRIPTION	LAB RESULTS: NATURAL MOISTURE CONTENT (%)	LAB RESULTS: LIQUID LIMIT (%)	LAB RESULTS: PLASTIC INDEX (%)	FIELD DATA: BLOW COUNTS
0.0	1063.6		**FILL:** Red-brown sandy SILT (ML), with rock fragments, **with organic material consisting of topsoil with wood fragments and rock fragments**				4 5 6
			Red-brown sandy SILT (ML), with rock fragments				4 5 5
5.0							5 7 10
							5 6 8
10.0							
							4 4 4
15.0							
							4 6 10
20.0	1046.6		Boring Terminated at 20 feet.				
25.0							
30.0							
35.0							

FIELD DATA: N Value, blows/ft. (1, 5, 10, 50, 100)



CONTOUR ENGINEERING, LLC

LEGEND

▽ = TIME OF BORING (TOB) ▼ = 24 HOUR READING

REMARKS

AUTOMATIC HAMMER

LOG OF BORING H-04

Avalon Hotel, Conference Center, and Parking Deck
Alpharetta, Fulton County, Georgia
PROJECT NO.: G14NAP02

LOGGED BY: Andrew Rebeiz	ELEVATION: 1064.1 ft
DATE DRILLED: February 10, 2012	BORING DEPTH: 40 ft
DRILLING METHOD: Hollow Stem Auger	24 HR WATER LEVEL: ft / TOB WATER LEVEL: ft

DEPTH (feet)	ELEVATION (feet)	GRAPHIC LOG	SAMPLE DESCRIPTION	LAB RESULTS: NATURAL MOISTURE CONTENT (%)	LAB RESULTS: LIQUID LIMIT (%)	LAB RESULTS: PLASTIC INDEX (%)	FIELD DATA: BLOW COUNTS	FIELD DATA: N Value, blows/ft.
0	1064.1							
5.0	1058.1		**FILL:** Red-brown sandy SILT (ML), with rock fragments				3 4 5	
	1056.1		Red-brown sandy SILT (ML), with rock fragments, **with organic material consisting of topsoil with wood fragments and rock fragments**				4 5 5	
10.0			Red-brown sandy SILT (ML), with rock fragments				4 6 8	
							5 7 9	
15.0	1047.1						5 7 7	
20.0	1042.1		Red-brown-tan sandy SILT (ML), with rock fragments				4 5 5	
25.0	1037.1		Tan-brown silty SAND (SM), with rock fragments, **moist**				3 4 5	
30.0	1032.1		Red-brown sandy SILT (ML), with rock fragments, **moist**				4 5 7	
35.0			Red-brown sandy SILT (ML), **organic material consisting of topsoil with wood fragments and rock fragments, moist**				5 6 6	

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CONTOUR ENGINEERING, LLC

LEGEND
▽ = TIME OF BORING (TOB) ▼ = 24 HOUR READING

REMARKS
AUTOMATIC HAMMER

GEOTECH BORING LOG AVALON PHASE II LOGS.GPJ CONTOUR.GDT 4/29/14

LOG OF BORING H-04

Avalon Hotel, Conference Center, and Parking Deck
Alpharetta, Fulton County, Georgia
PROJECT NO.: G14NAP02

LOGGED BY: Andrew Rebeiz	ELEVATION: 1064.1 ft
DATE DRILLED: February 10, 2012	BORING DEPTH: 40 ft
DRILLING METHOD: Hollow Stem Auger	24 HR WATER LEVEL: ft / TOB WATER LEVEL: ft

DEPTH (feet)	ELEVATION (feet)	GRAPHIC LOG	SAMPLE DESCRIPTION	LAB RESULTS: NATURAL MOISTURE CONTENT (%)	LAB RESULTS: LIQUID LIMIT (%)	LAB RESULTS: PLASTIC INDEX (%)	FIELD DATA: BLOW COUNTS	FIELD DATA: N Value, blows/ft. (1, 5, 10, 50, 100)
	1027.1							
			RESIDUUM: Very stiff, red-brown-black sandy SILT (ML)				5 8 10	
40.0	1024.1		Boring Terminated at 40 feet.					
45.0								
50.0								
55.0								
60.0								
65.0								
70.0								

CONTOUR ENGINEERING, LLC

LEGEND

▽ = TIME OF BORING (TOB) ▼ = 24 HOUR READING

REMARKS

AUTOMATIC HAMMER

GEOTECH BORING LOG AVALON PHASE II LOGS.GPJ CONTOUR.GDT 4/29/14

LOG OF BORING P-37

Avalon Hotel, Conference Center, and Parking Deck
Alpharetta, Fulton County, Georgia
PROJECT NO.: G14NAP02

LOGGED BY: Andrew Rebeiz	ELEVATION: 1063.4 ft
DATE DRILLED: February 10, 2012	BORING DEPTH: 20 ft
DRILLING METHOD: Hollow Stem Auger	24 HR WATER LEVEL: ft / TOB WATER LEVEL: ft

DEPTH (feet)	ELEVATION (feet)	GRAPHIC LOG	SAMPLE DESCRIPTION	LAB RESULTS: NATURAL MOISTURE CONTENT (%)	LAB RESULTS: LIQUID LIMIT (%)	LAB RESULTS: PLASTIC INDEX (%)	FIELD DATA: BLOW COUNTS
0.0	1060.4		**FILL:** Red-brown sandy SILT (ML), with rock fragments, **some organic material consisting of topsoil with wood fragments and rock fragments**				5 8 6
			Red-brown sandy SILT (ML), with rock fragments				6 9 12
5.0							5 5 5
							3 3 3
10.0							
							4 5 5
15.0							
							2 3 3
20.0	1043.4		Boring Terminated at 20 feet.				
25.0							
30.0							
35.0							

FIELD DATA: N Value, blows/ft. (1, 5, 10, 50, 100)

CONTOUR ENGINEERING, LLC

LEGEND
▽ = TIME OF BORING (TOB) ▼ = 24 HOUR READING

REMARKS
AUTOMATIC HAMMER

GEOTECH BORING LOG AVALON PHASE II LOGS.GPJ CONTOUR.GDT 4/29/14

LOG OF BORING P-38

Avalon Hotel, Conference Center, and Parking Deck
Alpharetta, Fulton County, Georgia
PROJECT NO.: G14NAP02

LOGGED BY: Andrew Rebeiz	ELEVATION: 1060.2 ft
DATE DRILLED: February 9, 2012	BORING DEPTH: 20 ft
DRILLING METHOD: Hollow Stem Auger	24 HR WATER LEVEL: ft / TOB WATER LEVEL: ft

DEPTH (feet)	ELEVATION (feet)	GRAPHIC LOG	SAMPLE DESCRIPTION	LAB RESULTS: NATURAL MOISTURE CONTENT (%)	LAB RESULTS: LIQUID LIMIT (%)	LAB RESULTS: PLASTIC INDEX (%)	FIELD DATA: BLOW COUNTS	FIELD DATA: N Value, blows/ft.
0.0	1060.2							
	1057.2		**FILL:** Brown-tan silty SAND (SM), with rock fragments				4 4 5	
5.0			Red-orange silty SAND (SM), with rock fragments				3 2 4	
							4 4 4	
10.0							6 3 4	
	1048.2							
			Red-brown sandy SILT (ML)				6 11 12	
15.0								
	1043.2							
			RESIDUUM: Medium dense, brown-tan silty SAND (SM)				4 6 8	
20.0	1040.2							
			Boring Terminated at 20 feet.					
25.0								
30.0								
35.0								

N Value, blows/ft. scale: 1, 5, 10, 50, 100

CONTOUR ENGINEERING, LLC

LEGEND

▽ = TIME OF BORING (TOB) ▼ = 24 HOUR READING

REMARKS

AUTOMATIC HAMMER

GEOTECH BORING LOG AVALON PHASE II LOGS.GPJ CONTOUR.GDT 4/29/14

LOG OF BORING P-39

Avalon Hotel, Conference Center, and Parking Deck
Alpharetta, Fulton County, Georgia
PROJECT NO.: G14NAP02

LOGGED BY: Andrew Rebeiz	ELEVATION: 1058.0 ft
DATE DRILLED: February 9, 2012	BORING DEPTH: 35 ft
DRILLING METHOD: Hollow Stem Auger	24 HR WATER LEVEL: ft / TOB WATER LEVEL: ft

DEPTH (feet)	ELEVATION (feet)	GRAPHIC LOG	SAMPLE DESCRIPTION	LAB RESULTS: NATURAL MOISTURE CONTENT (%)	LAB RESULTS: LIQUID LIMIT (%)	LAB RESULTS: PLASTIC INDEX (%)	FIELD DATA: BLOW COUNTS
0.0	1058.0						
	1055.0		**FILL:** Brown-red silty SAND (SM), with rock fragments				2 1 3
5.0			Red-brown sandy SILT (ML), with rock fragments				4 5 5
	1050.0						5 5 6
			Brown-red silty SAND (SM), with rock fragments				2 3 3
10.0							
							3 3 6
15.0							
							4 5 5
20.0							
	1036.0		**Sampled as organic fill consisting of topsoil with wood fragments and rock fragments**				1 2 1
25.0	1031.0		Red-brown sandy SILT (ML)				
							7 9 10
30.0	1026.0		**RESIDUUM:** Very dense, red-brown-tan sandy SILT (ML)				9 11 12
35.0	1023.0		Boring Terminated at 35 feet.				

FIELD DATA: N Value, blows/ft. (1, 5, 10, 50, 100)

CONTOUR ENGINEERING, LLC

LEGEND
▽ = TIME OF BORING (TOB) ▼ = 24 HOUR READING

REMARKS
AUTOMATIC HAMMER

GEOTECH BORING LOG AVALON PHASE II LOGS.GPJ CONTOUR.GDT 4/29/14

LOG OF BORING P-45

Avalon Hotel, Conference Center, and Parking Deck
Alpharetta, Fulton County, Georgia
PROJECT NO.: G14NAP02

LOGGED BY: Andrew Rebeiz	ELEVATION: 1056.3 ft
DATE DRILLED: February 9, 2012	BORING DEPTH: 20 ft
DRILLING METHOD: Hollow Stem Auger	24 HR WATER LEVEL: ft / TOB WATER LEVEL: ft

DEPTH (feet)	ELEVATION (feet)	GRAPHIC LOG	SAMPLE DESCRIPTION	LAB RESULTS: NATURAL MOISTURE CONTENT (%)	LAB RESULTS: LIQUID LIMIT (%)	LAB RESULTS: PLASTIC INDEX (%)	FIELD DATA: BLOW COUNTS	FIELD DATA: N Value, blows/ft.
0.0	1053.3		**FILL:** Medium dense, red-orange silty SAND (SM), with rock fragments				3 7 6	
	1050.3		Very stiff, red-brown sandy SILT (ML), with rock fragments				5 8 12	
5.0	1048.3		Medium dense, orange-brown silty SAND (SM), with rock fragments				4 8 10	
			Stiff to firm, red-brown sandy SILT (ML), with rock fragments, **some organic material consisting of topsoil with wood fragments and rock fragments**				3 4 6	
10.0								
							3 4 4	
15.0	1039.3		Stiff, red-brown sandy SILT (ML), with rock fragments					
	1036.3						4 5 7	
20.0			Boring Terminated at 20 feet.					
25.0								
30.0								
35.0								

N Value, blows/ft. scale: 1, 5, 10, 50, 100

CONTOUR ENGINEERING, LLC

LEGEND

▽ = TIME OF BORING (TOB) ▼ = 24 HOUR READING

REMARKS

AUTOMATIC HAMMER

GEOTECH BORING LOG AVALON PHASE II LOGS.GPJ CONTOUR.GDT 4/29/14

LOG OF BORING P-47

Avalon Hotel, Conference Center, and Parking Deck
Alpharetta, Fulton County, Georgia
PROJECT NO.: G14NAP02

LOGGED BY: Andrew Rebeiz	ELEVATION: 1050.5 ft
DATE DRILLED: February 9, 2012	BORING DEPTH: 20 ft
DRILLING METHOD: Hollow Stem Auger	24 HR WATER LEVEL: ft / TOB WATER LEVEL: ft

DEPTH (feet)	ELEVATION (feet)	GRAPHIC LOG	SAMPLE DESCRIPTION	LAB RESULTS: NATURAL MOISTURE CONTENT (%)	LAB RESULTS: LIQUID LIMIT (%)	LAB RESULTS: PLASTIC INDEX (%)	FIELD DATA: BLOW COUNTS	FIELD DATA: N Value, blows/ft. (1, 5, 10, 50, 100)
0			**FILL:** Red-brown silty SAND (SM), with rock fragments				6 6 8	
5.0							2 8 6	
	1042.5		Red-brown sandy SILT (ML), with rock fragments, **with organic material consisting of topsoil with wood fragments and rock fragments**				4 4 5	
10.0							3 3 9	
15.0							2 1 3	
	1033.5		**Sampled as organic fill consisting of topsoil with wood fragments and rock fragments**					
20.0	1030.5		Boring Terminated at 20 feet.				5 9 9	
25.0								
30.0								
35.0								

CONTOUR ENGINEERING, LLC

LEGEND

▽ = TIME OF BORING (TOB) ▼ = 24 HOUR READING

REMARKS

AUTOMATIC HAMMER

LOG OF BORING Q-01

Avalon Hotel, Conference Center, and Parking Deck
Alpharetta, Fulton County, Georgia
PROJECT NO.: G14NAP02

LOGGED BY: Andrew Rebeiz	ELEVATION: 1061.2 ft
DATE DRILLED: February 9, 2012	BORING DEPTH: 20 ft
DRILLING METHOD: Hollow Stem Auger	24 HR WATER LEVEL: ft / TOB WATER LEVEL: ft

DEPTH (feet)	ELEVATION (feet)	GRAPHIC LOG	SAMPLE DESCRIPTION	LAB RESULTS: NATURAL MOISTURE CONTENT (%)	LAB RESULTS: LIQUID LIMIT (%)	LAB RESULTS: PLASTIC INDEX (%)	FIELD DATA: BLOW COUNTS
0.0	1061.2		**FILL:** Red-brown sandy SILT (ML), with rock fragments				5, 9, 11
5.0							16, 16, 12
	1053.2		**RESIDUUM:** Very stiff to stiff, red-brown-purple sandy SILT (ML)				7, 9, 12
10.0							4, 7, 9
15.0							4, 6, 5
	1041.2						5, 6, 8
20.0			Boring Terminated at 20 feet.				
25.0							
30.0							
35.0							

N Value, blows/ft. (1, 5, 10, 50, 100)

CONTOUR ENGINEERING, LLC

LEGEND
▽ = TIME OF BORING (TOB) ▼ = 24 HOUR READING

REMARKS
AUTOMATIC HAMMER

GEOTECH BORING LOG AVALON PHASE II LOGS.GPJ CONTOUR.GDT 4/29/14

LOG OF BORING Q-02

Avalon Hotel, Conference Center, and Parking Deck
Alpharetta, Fulton County, Georgia
PROJECT NO.: G14NAP02

LOGGED BY: Andrew Rebeiz	ELEVATION: 1061.8 ft
DATE DRILLED: February 9, 2012	BORING DEPTH: 20 ft
DRILLING METHOD: Hollow Stem Auger	24 HR WATER LEVEL: ft / TOB WATER LEVEL: ft

DEPTH (feet)	ELEVATION (feet)	GRAPHIC LOG	SAMPLE DESCRIPTION	LAB RESULTS: NATURAL MOISTURE CONTENT (%)	LAB RESULTS: LIQUID LIMIT (%)	LAB RESULTS: PLASTIC INDEX (%)	FIELD DATA: BLOW COUNTS
0.0	1061.8		**FILL:** Tan-brown silty SAND (SM), with rock fragments				4 5 5
	1058.8		Red-brown silty SAND (SM), with rock fragments				7 8 8
5.0							6 7 8
							5 7 9
10.0	1049.8		**RESIDUUM:** Very stiff to stiff, red-brown-purple sandy SILT (ML)				6 8 11
15.0							
							5 5 5
20.0	1041.8		Boring Terminated at 20 feet.				
25.0							
30.0							
35.0							

FIELD DATA: N Value, blows/ft. (1, 5, 10, 50, 100)

CONTOUR ENGINEERING, LLC

LEGEND
▽ = TIME OF BORING (TOB) ▼ = 24 HOUR READING

REMARKS
AUTOMATIC HAMMER

GEOTECH BORING LOG AVALON PHASE II LOGS.GPJ CONTOUR.GDT 4/29/14

LOG OF BORING Q-03

Avalon Hotel, Conference Center, and Parking Deck
Alpharetta, Fulton County, Georgia
PROJECT NO.: G14NAP02

LOGGED BY: Andrew Rebeiz	ELEVATION: 1060.8 ft
DATE DRILLED: February 9, 2012	BORING DEPTH: 20 ft
DRILLING METHOD: Hollow Stem Auger	24 HR WATER LEVEL: ft / TOB WATER LEVEL: ft

DEPTH (feet)	ELEVATION (feet)	GRAPHIC LOG	SAMPLE DESCRIPTION	LAB RESULTS: NATURAL MOISTURE CONTENT (%)	LAB RESULTS: LIQUID LIMIT (%)	LAB RESULTS: PLASTIC INDEX (%)	FIELD DATA: BLOW COUNTS	FIELD DATA: N Value, blows/ft.
0			**FILL:** Red-brown sandy SILT (ML), with rock fragments				3 3 4	
5.0							3 3 2	
							7 14 22	
10.0							8 14 10	
15.0							7 9 9	
	1043.8		**RESIDUUM:** Very stiff, red-brown sandy SILT (ML)				7 10 10	
20.0	1040.8		Boring Terminated at 20 feet.					
25.0								
30.0								
35.0								

N Value, blows/ft. scale: 1, 5, 10, 50, 100

CONTOUR ENGINEERING, LLC

LEGEND

▽ = TIME OF BORING (TOB) ▼ = 24 HOUR READING

REMARKS

AUTOMATIC HAMMER

GEOTECH BORING LOG AVALON PHASE II LOGS.GPJ CONTOUR.GDT 4/29/14

LOG OF BORING Q-04

Avalon Hotel, Conference Center, and Parking Deck
Alpharetta, Fulton County, Georgia
PROJECT NO.: G14NAP02

LOGGED BY: Andrew Rebeiz	ELEVATION: 1063.6 ft
DATE DRILLED: February 9, 2012	BORING DEPTH: 20 ft
DRILLING METHOD: Hollow Stem Auger	24 HR WATER LEVEL: ft / TOB WATER LEVEL: ft

DEPTH (feet)	ELEVATION (feet)	GRAPHIC LOG	SAMPLE DESCRIPTION	LAB RESULTS: NATURAL MOISTURE CONTENT (%)	LAB RESULTS: LIQUID LIMIT (%)	LAB RESULTS: PLASTIC INDEX (%)	FIELD DATA: BLOW COUNTS	FIELD DATA: N Value, blows/ft.
0.0	1060.6		**FILL:** Red-brown silty SAND (SM), with rock fragments				3 3 5	
			Red-brown sandy SILT (ML), with rock fragments				5 8 7	
5.0	1055.6		Tan-brown silty SAND (SM), with rock fragments				8 11 12	
							3 7 6	
10.0	1051.6		Red-brown sandy SILT (ML), with rock fragments				3 7 8	
15.0	1046.6		Red-brown sandy SILT (ML), with rock fragments, **organic material consisting of topsoil with wood fragments and rock fragments**				3 7 9	
20.0	1043.6		Boring Terminated at 20 feet.					
25.0								
30.0								
35.0								

N Value, blows/ft. scale: 1, 5, 10, 50, 100

CONTOUR ENGINEERING, LLC

LEGEND

▽ = TIME OF BORING (TOB) ▼ = 24 HOUR READING

REMARKS

AUTOMATIC HAMMER

LOG OF BORING TP-10

Avalon Hotel, Conference Center, and Parking Deck
Alpharetta, Fulton County, Georgia
PROJECT NO.: G14NAP02

LOGGED BY: Shelley Zimmerman	ELEVATION: 1044.0 ft
DATE DRILLED: February 1, 2012	BORING DEPTH: 15 ft
DRILLING METHOD: Komatsu PC130 Excavator	24 HR WATER LEVEL: ft / TOB WATER LEVEL: ft

DEPTH (feet)	ELEVATION (feet)	GRAPHIC LOG	SAMPLE DESCRIPTION	LAB RESULTS: NATURAL MOISTURE CONTENT (%)	LAB RESULTS: LIQUID LIMIT (%)	LAB RESULTS: PLASTIC INDEX (%)	FIELD DATA: BLOW COUNTS	FIELD DATA: N Value, blows/ft. (1, 5, 10, 50, 100)
0.0	1042.0		**FILL:** Red tan sandy SILT (ML)					
			UNSUITABLE FILL: Fill with **organic topsoil, boulders and debris**					
5.0								
10.0								
15.0	1029.0		Test Pit Terminated at 15 feet.					
20.0								
25.0								
30.0								
35.0								

CONTOUR ENGINEERING, LLC

LEGEND

▽ = TIME OF BORING (TOB) ▼ = 24 HOUR READING

REMARKS

GEOTECH BORING LOG AVALON PHASE II LOGS.GPJ CONTOUR.GDT 4/29/14

LOG OF BORING TP-11

Avalon Hotel, Conference Center, and Parking Deck
Alpharetta, Fulton County, Georgia
PROJECT NO.: G14NAP02

LOGGED BY: Shelley Zimmerman	ELEVATION: 1041.0 ft
DATE DRILLED: February 1, 2012	BORING DEPTH: 15 ft
DRILLING METHOD: Komatsu PC130 Excavator	24 HR WATER LEVEL: ft / TOB WATER LEVEL: ft

DEPTH (feet)	ELEVATION (feet)	GRAPHIC LOG	SAMPLE DESCRIPTION	LAB RESULTS: NATURAL MOISTURE CONTENT (%)	LAB RESULTS: LIQUID LIMIT (%)	LAB RESULTS: PLASTIC INDEX (%)	FIELD DATA: BLOW COUNTS	FIELD DATA: N Value, blows/ft. (1, 5, 10, 50, 100)
0	1039.0		**FILL:** Tan red sandy SILT (ML)					
			UNSUITABLE ORGANIC FILL: Fill material with **organic topsoil, boulders and debris**					
5.0								
10.0								
15.0	1026.0		Test Pit Terminated at 15 feet.					
20.0								
25.0								
30.0								
35.0								

CONTOUR ENGINEERING, LLC

LEGEND

▽ = TIME OF BORING (TOB) ▼ = 24 HOUR READING

REMARKS

GEOTECH BORING LOG AVALON PHASE II LOGS.GPJ CONTOUR.GDT 4/29/14

LOG OF BORING TP-12

Avalon Hotel, Conference Center, and Parking Deck
Alpharetta, Fulton County, Georgia
PROJECT NO.: G14NAP02

LOGGED BY: Shelley Zimmerman	ELEVATION: 1049.0 ft
DATE DRILLED: February 1, 2012	BORING DEPTH: 15 ft
DRILLING METHOD: Komatsu PC130 Excavator	24 HR WATER LEVEL: ft / TOB WATER LEVEL: ft

DEPTH (feet)	ELEVATION (feet)	GRAPHIC LOG	SAMPLE DESCRIPTION	LAB RESULTS: NATURAL MOISTURE CONTENT (%)	LAB RESULTS: LIQUID LIMIT (%)	LAB RESULTS: PLASTIC INDEX (%)	FIELD DATA: BLOW COUNTS	FIELD DATA: N Value, blows/ft. (1, 5, 10, 50, 100)
0.0	1049.0							
	1047.0		**FILL:** Red tan sandy SILT (ML)					
5.0			**UNSUITABLE FILL:** Fill containing **organic topsoil, boulders and debris**					
10.0								
15.0	1034.0		Test Pit Terminated at 15 feet.					
20.0								
25.0								
30.0								
35.0								

CONTOUR ENGINEERING, LLC

LEGEND

▽ = TIME OF BORING (TOB) ▼ = 24 HOUR READING

REMARKS

GEOTECH BORING LOG AVALON PHASE II LOGS.GPJ CONTOUR.GDT 4/29/14

LOG OF BORING TP-17

Avalon Hotel, Conference Center, and Parking Deck
Alpharetta, Fulton County, Georgia
PROJECT NO.: G14NAP02

LOGGED BY: Shelley Zimmerman	ELEVATION: 1059.0 ft
DATE DRILLED: February 1, 2012	BORING DEPTH: 15 ft
DRILLING METHOD: Komatsu PC130 Excavator	24 HR WATER LEVEL: ft / TOB WATER LEVEL: ft

DEPTH (feet)	ELEVATION (feet)	GRAPHIC LOG	SAMPLE DESCRIPTION	LAB RESULTS: NATURAL MOISTURE CONTENT (%)	LAB RESULTS: LIQUID LIMIT (%)	LAB RESULTS: PLASTIC INDEX (%)	FIELD DATA: BLOW COUNTS	FIELD DATA: N Value, blows/ft. (1, 5, 10, 50, 100)
0.0	1058.5		**FILL:** Red sandy SILT (ML)					
			BOULDER FILL: Red brown silty SAND (SM), with 50 percent rock fragments ranging in size from 8-inches to 30- inches in diameter.					
5.0								
10.0								
15.0	1044.0		Test Pit Terminated at 15 feet.					
20.0								
25.0								
30.0								
35.0								

CONTOUR ENGINEERING, LLC

LEGEND

▽ = TIME OF BORING (TOB) ▼ = 24 HOUR READING

REMARKS

GEOTECH BORING LOG AVALON PHASE II LOGS.GPJ CONTOUR.GDT 4/29/14

LOG OF BORING TP-18

Avalon Hotel, Conference Center, and Parking Deck
Alpharetta, Fulton County, Georgia
PROJECT NO.: G14NAP02

LOGGED BY: Shelley Zimmerman	ELEVATION: 1053.0 ft
DATE DRILLED: February 1, 2012	BORING DEPTH: 15 ft
DRILLING METHOD: Komatsu PC130 Excavator	24 HR WATER LEVEL: ft / TOB WATER LEVEL: ft

DEPTH (feet)	ELEVATION (feet)	GRAPHIC LOG	SAMPLE DESCRIPTION	LAB RESULTS: NATURAL MOISTURE CONTENT (%)	LAB RESULTS: LIQUID LIMIT (%)	LAB RESULTS: PLASTIC INDEX (%)	FIELD DATA: BLOW COUNTS	FIELD DATA: N Value, blows/ft. (1, 5, 10, 50, 100)
0	1052.5		**FILL:** Red sandy SILT (ML)					
			FILL CONTAINING ROCK/BOULDERS: Red brown silty SAND (SM), with **50 percent rock/boulders ranging in size from 8" to 30" in diameter**					
5.0								
10.0								
15.0	1038.0		Test Pit Terminated at 15 feet.					
20.0								
25.0								
30.0								
35.0								

CONTOUR ENGINEERING, LLC

LEGEND

▽ = TIME OF BORING (TOB) ▼ = 24 HOUR READING

REMARKS

GEOTECH BORING LOG AVALON PHASE II LOGS.GPJ CONTOUR.GDT 4/29/14

LOG OF BORING TP-19

Avalon Hotel, Conference Center, and Parking Deck
Alpharetta, Fulton County, Georgia
PROJECT NO.: G14NAP02

LOGGED BY:	ELEVATION: 1061.0 ft
DATE DRILLED:	BORING DEPTH: 15 ft
DRILLING METHOD:	24 HR WATER LEVEL: ft / TOB WATER LEVEL: ft

DEPTH (feet)	ELEVATION (feet)	GRAPHIC LOG	SAMPLE DESCRIPTION	LAB RESULTS: NATURAL MOISTURE CONTENT (%)	LAB RESULTS: LIQUID LIMIT (%)	LAB RESULTS: PLASTIC INDEX (%)	FIELD DATA: BLOW COUNTS	FIELD DATA: N Value, blows/ft. (1, 5, 10, 50, 100)
0.0			**FILL:** Tan-red, sandy SILT (ML)					
5.0								
10.0								
15.0	1046.0		Test Pit Terminated at 15 feet.					
20.0								
25.0								
30.0								
35.0								

CONTOUR ENGINEERING, LLC

LEGEND

▽ = TIME OF BORING (TOB) ▼ = 24 HOUR READING

REMARKS

GEOTECH BORING LOG AVALON PHASE II LOGS.GPJ CONTOUR.GDT 4/29/14

LOG OF BORING TP-20

Avalon Hotel, Conference Center, and Parking Deck
Alpharetta, Fulton County, Georgia
PROJECT NO.: G14NAP02

LOGGED BY: Blake Summers	ELEVATION: 1061.0 ft
DATE DRILLED: April 16, 2014	BORING DEPTH: 15 ft
DRILLING METHOD: CAT 325 Excavator	24 HR WATER LEVEL: ft / TOB WATER LEVEL: ft

DEPTH (feet)	ELEVATION (feet)	GRAPHIC LOG	SAMPLE DESCRIPTION	LAB RESULTS: NATURAL MOISTURE CONTENT (%)	LAB RESULTS: LIQUID LIMIT (%)	LAB RESULTS: PLASTIC INDEX (%)	FIELD DATA: BLOW COUNTS	FIELD DATA: N Value, blows/ft. (1, 5, 10, 50, 100)
0.0			**FILL:** Red-brown, sandy SILT (ML), with rock fragments					
5.0	1056.0							
	1055.0		Fill material **with topsoil and organics**					
			Tan-red-brown, silty SAND (SM)					
10.0								
15.0	1046.0		Test Pit Terminated at 15 feet.					
20.0								
25.0								
30.0								
35.0								

CONTOUR ENGINEERING, LLC

LEGEND

▽ = TIME OF BORING (TOB) ▼ = 24 HOUR READING

REMARKS

GEOTECH BORING LOG AVALON PHASE II LOGS.GPJ CONTOUR.GDT 4/29/14

LOG OF BORING TP-21

Avalon Hotel, Conference Center, and Parking Deck
Alpharetta, Fulton County, Georgia
PROJECT NO.: G14NAP02

LOGGED BY: Blake Summers	ELEVATION: 1065.0 ft
DATE DRILLED: April 16, 2014	BORING DEPTH: 15 ft
DRILLING METHOD: CAT 325 Excavator	24 HR WATER LEVEL: ft / TOB WATER LEVEL: ft

DEPTH (feet)	ELEVATION (feet)	GRAPHIC LOG	SAMPLE DESCRIPTION	LAB RESULTS: NATURAL MOISTURE CONTENT (%)	LAB RESULTS: LIQUID LIMIT (%)	LAB RESULTS: PLASTIC INDEX (%)	FIELD DATA: BLOW COUNTS	FIELD DATA: N Value, blows/ft. (1, 5, 10, 50, 100)
	1063.0		**FILL:** Red-brown, sandy SILT (ML)					
	1062.0		Tan-red, sandy silty SAND (SM)					
5.0			Red-brown, sandy SILT (ML), with rock fragments					
10.0								
15.0	1050.0		Test Pit Terminated at 15 feet.					
20.0								
25.0								
30.0								
35.0								

CONTOUR ENGINEERING, LLC

LEGEND

▽ = TIME OF BORING (TOB) ▼ = 24 HOUR READING

REMARKS

GEOTECH BORING LOG AVALON PHASE II LOGS.GPJ CONTOUR.GDT 4/29/14

LOG OF BORING TP-22

Avalon Hotel, Conference Center, and Parking Deck
Alpharetta, Fulton County, Georgia
PROJECT NO.: G14NAP02

LOGGED BY: Blake Summers	ELEVATION: 1065.0 ft
DATE DRILLED: April 16, 2014	BORING DEPTH: 15 ft
DRILLING METHOD: CAT 325 Excavator	24 HR WATER LEVEL: ft / TOB WATER LEVEL: ft

DEPTH (feet)	ELEVATION (feet)	GRAPHIC LOG	SAMPLE DESCRIPTION	LAB RESULTS: NATURAL MOISTURE CONTENT (%)	LAB RESULTS: LIQUID LIMIT (%)	LAB RESULTS: PLASTIC INDEX (%)	FIELD DATA: BLOW COUNTS	FIELD DATA: N Value, blows/ft. (1, 5, 10, 50, 100)
0.0	1062.0		**FILL:** Tan-brown, silty SAND (SM), with rock fragments					
5.0			Red-brown, silty SAND (SM), with rock fragments					
10.0								
15.0	1050.0		Test Pit Terminated at 15 feet.					
20.0								
25.0								
30.0								
35.0								

CONTOUR ENGINEERING, LLC

LEGEND

▽ = TIME OF BORING (TOB) ▼ = 24 HOUR READING

REMARKS

GEOTECH BORING LOG AVALON PHASE II LOGS.GPJ CONTOUR.GDT 4/29/14

LOG OF BORING TP-23

Avalon Hotel, Conference Center, and Parking Deck
Alpharetta, Fulton County, Georgia
PROJECT NO.: G14NAP02

LOGGED BY: Blake Summers	ELEVATION: 1065.0 ft
DATE DRILLED: April 16, 2014	BORING DEPTH: 15 ft
DRILLING METHOD: CAT 325 Excavator	24 HR WATER LEVEL: ft / TOB WATER LEVEL: ft

DEPTH (feet)	ELEVATION (feet)	GRAPHIC LOG	SAMPLE DESCRIPTION	LAB RESULTS: NATURAL MOISTURE CONTENT (%)	LAB RESULTS: LIQUID LIMIT (%)	LAB RESULTS: PLASTIC INDEX (%)	FIELD DATA: BLOW COUNTS	FIELD DATA: N Value, blows/ft. (1, 5, 10, 50, 100)
0.0	1065.0		**FILL:** Red-brown, sandy SILT (ML)					
	1058.0		Fill material **with topsoil** and rock fragments					
	1057.0		Red-brown, sandy SILT (ML)					
	1056.0		Fill material **with topsoil**					
10.0	1055.0		Red-brown, sandy SILT (ML)					
15.0	1050.0		Test Pit Terminated at 15 feet.					
20.0								
25.0								
30.0								
35.0								

CONTOUR ENGINEERING, LLC

LEGEND

▽ = TIME OF BORING (TOB) ▼ = 24 HOUR READING

REMARKS

GEOTECH BORING LOG AVALON PHASE II LOGS.GPJ CONTOUR.GDT 4/29/14

LOG OF BORING TP-24

Avalon Hotel, Conference Center, and Parking Deck
Alpharetta, Fulton County, Georgia
PROJECT NO.: G14NAP02

LOGGED BY: Blake Summers	ELEVATION: 1065.0 ft
DATE DRILLED: April 16, 2014	BORING DEPTH: 15 ft
DRILLING METHOD: CAT 325 Excavator	24 HR WATER LEVEL: ft / TOB WATER LEVEL: ft

DEPTH (feet)	ELEVATION (feet)	GRAPHIC LOG	SAMPLE DESCRIPTION	LAB RESULTS: NATURAL MOISTURE CONTENT (%)	LAB RESULTS: LIQUID LIMIT (%)	LAB RESULTS: PLASTIC INDEX (%)	FIELD DATA: BLOW COUNTS	FIELD DATA: N Value, blows/ft. (1, 5, 10, 50, 100)
	1064.0		**FILL:** Red-tan, silty SAND (SM)					
			Red-brown, sandy SILT (ML)					
5.0	1060.0		Fill material **with topsoil**					
10.0								
15.0	1050.0		Test Pit Terminated at 15 feet.					
20.0								
25.0								
30.0								
35.0								

CONTOUR ENGINEERING, LLC

LEGEND

▽ = TIME OF BORING (TOB) ▼ = 24 HOUR READING

REMARKS

GEOTECH BORING LOG AVALON PHASE II LOGS.GPJ CONTOUR.GDT 4/29/14

LOG OF BORING TP-25

Avalon Hotel, Conference Center, and Parking Deck
Alpharetta, Fulton County, Georgia
PROJECT NO.: G14NAP02

LOGGED BY: Blake Summers	ELEVATION: 1065.0 ft
DATE DRILLED: April 16, 2014	BORING DEPTH: 15 ft
DRILLING METHOD: CAT 325 Excavator	24 HR WATER LEVEL: ft / TOB WATER LEVEL: ft

DEPTH (feet)	ELEVATION (feet)	GRAPHIC LOG	SAMPLE DESCRIPTION	LAB RESULTS: NATURAL MOISTURE CONTENT (%)	LAB RESULTS: LIQUID LIMIT (%)	LAB RESULTS: PLASTIC INDEX (%)	FIELD DATA: BLOW COUNTS	FIELD DATA: N Value, blows/ft. (1, 5, 10, 50, 100)
0.0	1065.0		**FILL:** Red-brown, sandy SILT (ML)					
5.0	1059.0		Fill material **with topsoil**					
10.0								
15.0	1050.0		Test Pit Terminated at 15 feet.					
20.0								
25.0								
30.0								
35.0								

CONTOUR ENGINEERING, LLC

LEGEND
▽ = TIME OF BORING (TOB) ▼ = 24 HOUR READING

REMARKS

GEOTECH BORING LOG AVALON PHASE II LOGS.GPJ CONTOUR.GDT 4/29/14

LOG OF BORING TP-26

Avalon Hotel, Conference Center, and Parking Deck
Alpharetta, Fulton County, Georgia
PROJECT NO.: G14NAP02

LOGGED BY: Blake Summers	ELEVATION: 1065.0 ft
DATE DRILLED: April 16, 2014	BORING DEPTH: 15 ft
DRILLING METHOD: CAT 325 Excavator	24 HR WATER LEVEL: ft / TOB WATER LEVEL: ft

DEPTH (feet)	ELEVATION (feet)	GRAPHIC LOG	SAMPLE DESCRIPTION	LAB RESULTS: NATURAL MOISTURE CONTENT (%)	LAB RESULTS: LIQUID LIMIT (%)	LAB RESULTS: PLASTIC INDEX (%)	FIELD DATA: BLOW COUNTS	FIELD DATA: N Value, blows/ft. (1, 5, 10, 50, 100)
	1064.0		**FILL:** Red-brown, sandy SILT (ML)					
	1063.0		Tan-red, silty SAND (SM)					
			Red-brown, sandy SILT (ML)					
5.0								
	1057.0		Fill material **with topsoil**					
10.0								
15.0	1050.0		Test Pit Terminated at 15 feet.					
20.0								
25.0								
30.0								
35.0								

CONTOUR ENGINEERING, LLC

LEGEND

▽ = TIME OF BORING (TOB) ▼ = 24 HOUR READING

REMARKS

GEOTECH BORING LOG AVALON PHASE II LOGS.GPJ CONTOUR.GDT 4/29/14

LOG OF BORING TP-27

Avalon Hotel, Conference Center, and Parking Deck
Alpharetta, Fulton County, Georgia
PROJECT NO.: G14NAP02

LOGGED BY: Blake Summers	ELEVATION: 1064.0 ft
DATE DRILLED: April 16, 2014	BORING DEPTH: 15 ft
DRILLING METHOD: CAT 325 Excavator	24 HR WATER LEVEL: ft / TOB WATER LEVEL: ft

DEPTH (feet)	ELEVATION (feet)	GRAPHIC LOG	SAMPLE DESCRIPTION	LAB RESULTS: NATURAL MOISTURE CONTENT (%)	LAB RESULTS: LIQUID LIMIT (%)	LAB RESULTS: PLASTIC INDEX (%)	FIELD DATA: BLOW COUNTS	FIELD DATA: N Value, blows/ft. (1, 5, 10, 50, 100)
0.0	1064.0		**FILL:** Red-brown, sandy SILT (ML)					
5.0	1059.0		Tan-red, silty SAND (SM)					
	1058.0		Fill material **with topsoil**					
10.0								
15.0	1049.0		Test Pit Terminated at 15 feet.					
20.0								
25.0								
30.0								
35.0								

CONTOUR ENGINEERING, LLC

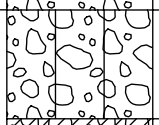
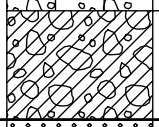
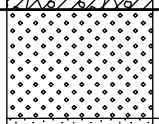
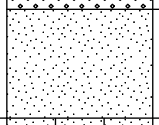
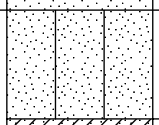
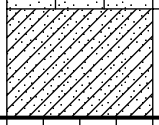
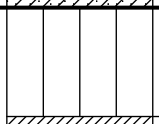
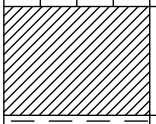
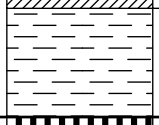
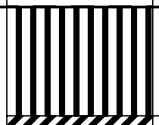
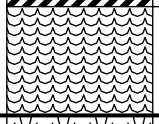
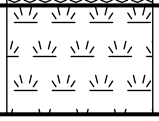
LEGEND

▽ = TIME OF BORING (TOB) ▼ = 24 HOUR READING

REMARKS

GEOTECH BORING LOG AVALON PHASE II LOGS.GPJ CONTOUR.GDT 4/29/14

SOIL CLASSIFICATION CHART

MAJOR DIVISIONS			SYMBOLS		TYPICAL DESCRIPTIONS
			GRAPH	LETTER	
COARSE GRAINED SOILS MORE THAN 50% OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	GRAVEL AND GRAVELLY SOILS MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	CLEAN GRAVELS (LITTLE OR NO FINES)		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
				GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
		GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
				GC	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES
	SAND AND SANDY SOILS MORE THAN 50% OF COARSE FRACTION PASSING ON NO. 4 SIEVE	CLEAN SANDS (LITTLE OR NO FINES)		SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
				SP	POORLY-GRADED SANDS, GRAVELLY SAND, LITTLE OR NO FINES
		SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)		SM	SILTY SANDS, SAND - SILT MIXTURES
				SC	CLAYEY SANDS, SAND - CLAY MIXTURES
FINE GRAINED SOILS MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50		ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
				CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
				OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
	SILTS AND CLAYS	LIQUID LIMIT GREATER THAN 50		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS
				CH	INORGANIC CLAYS OF HIGH PLASTICITY
				OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOILS				PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

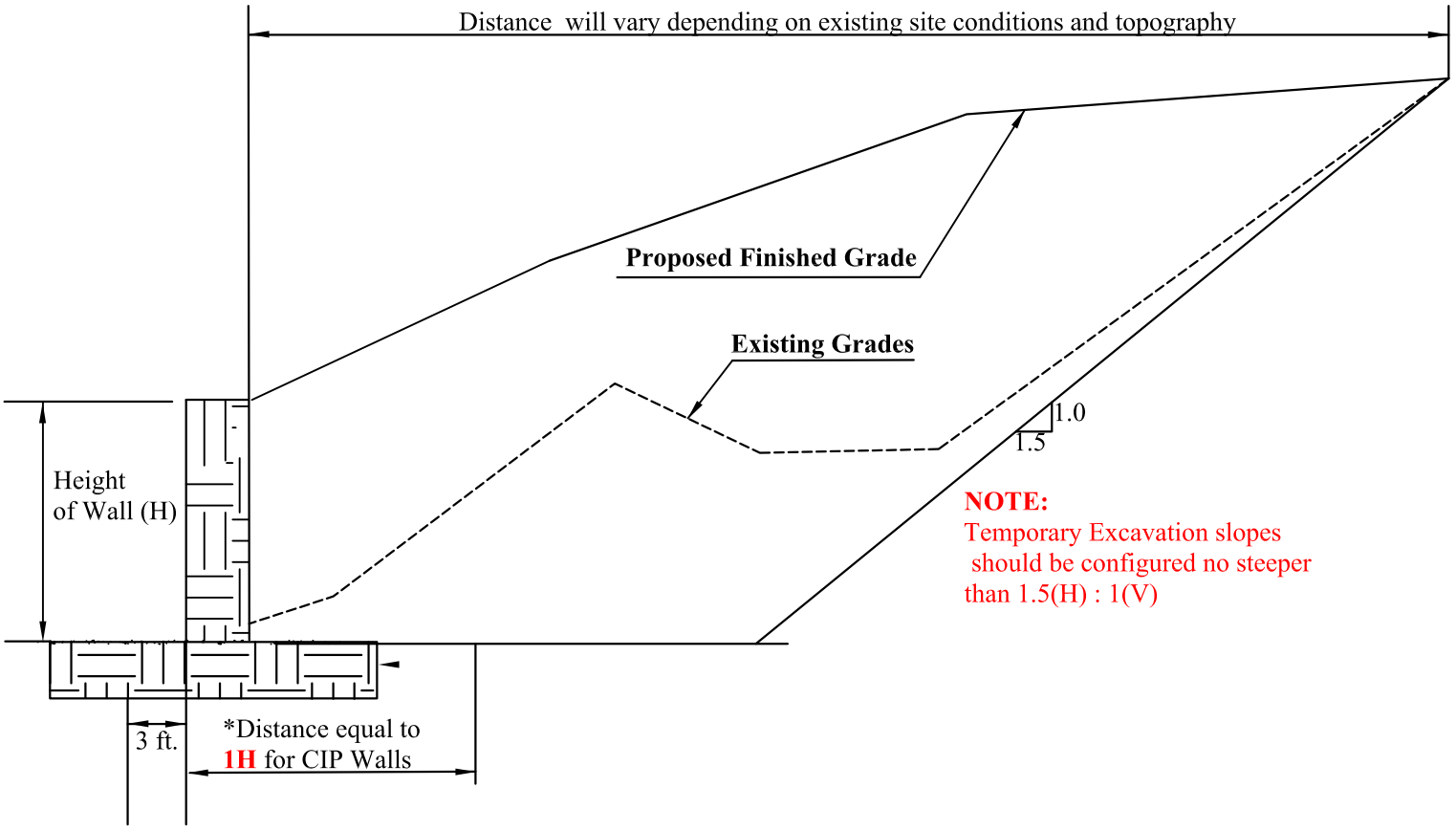
NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

EARTHWORK RECOMMNEDATIONS FOR CAST-IN-PLACE (CIP) LOCATED ON THE EASTERN PORTION OF THE SITE

NOTES:

1. To allow for construction of the proposed retaining wall on the eastern portion of the site ***as a cast-in-place (CIP) retaining wall***, unsuitable materials within the existing slope should be removed from the face of the wall to a distance behind the wall equal to the height of the wall **(H, i.e. distance will vary depending on wall height throughout the length of the wall).** Also, all unsuitable soils, if any, should be undercut beneath the retaining wall footing plus 3 feet in front and back of the concrete footing.

2. Temporary excavations slopes should be configured no steeper than 1.5 (Horizontally) to 1.0 (Vertically). Temporary slopes may require flattening depending on the materials exposed during temporary excavations.



CONTOUR ENGINEERING, LLC

1955 Vaughn Road, Sulte 101, Kennesaw, GA 30144
Phone: (770) 794-0266 Fax: (770) 794-9483

LEGEND:

Retaining Wall Detail

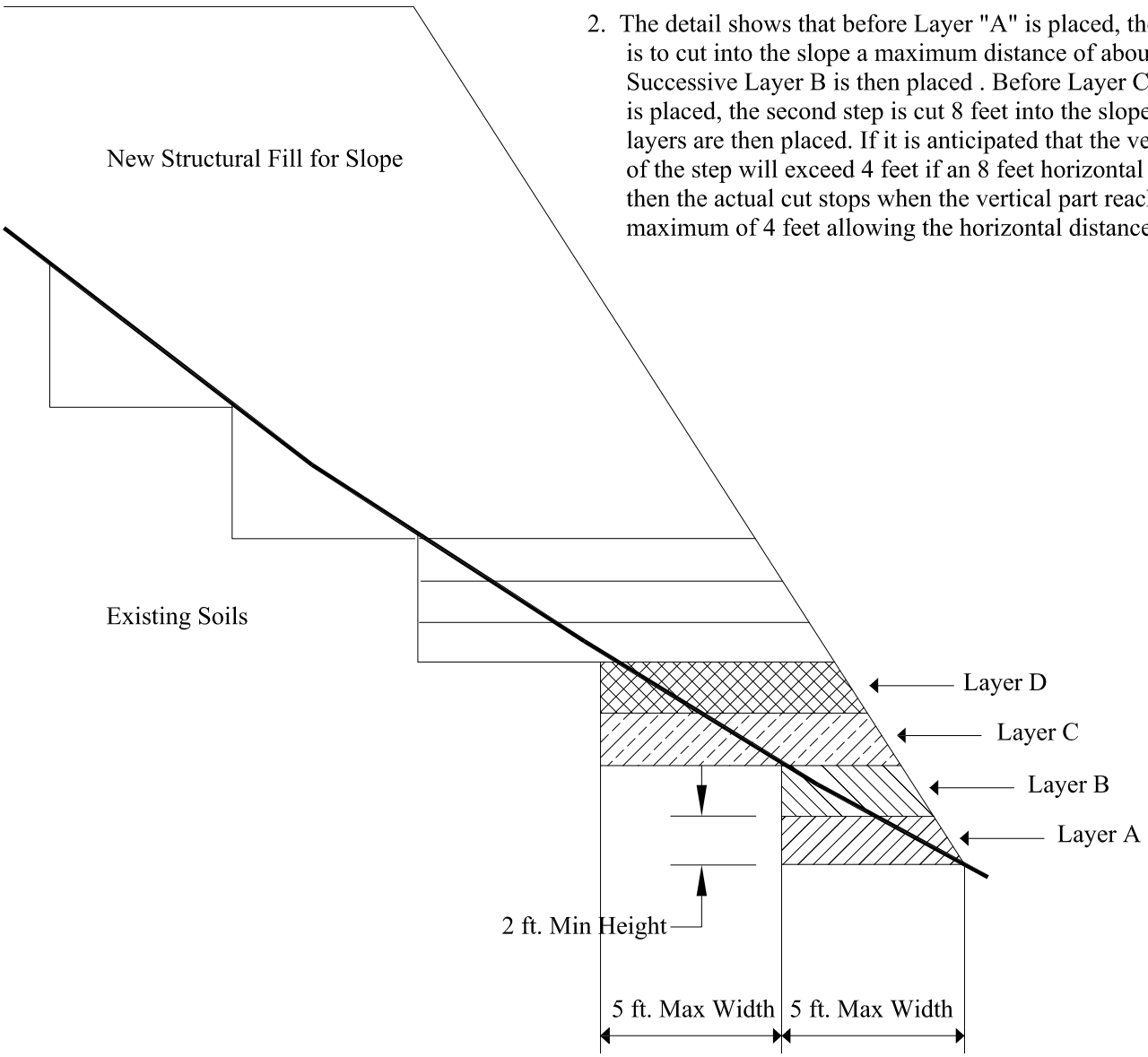
Scale: Not to Scale

PROJECT:
Earthwork Recommendations for Retaining Walls
Avalon Development
Alpharetta, Fulton County, Georgia
Project No: G12NAP01

NOTES:

1. Where the new slope is to placed on an existing hillside, the new slope must be benched into the existing slope.

2. The detail shows that before Layer "A" is placed, the first step is to cut into the slope a maximum distance of about 8 feet. Successive Layer B is then placed . Before Layer C is placed, the second step is cut 8 feet into the slope and successive layers are then placed. If it is anticipated that the vertical part of the step will exceed 4 feet if an 8 feet horizontal cut is made, then the actual cut stops when the vertical part reaches a maximum of 4 feet allowing the horizontal distance to vary.



CONTOUR ENGINEERING, LLC

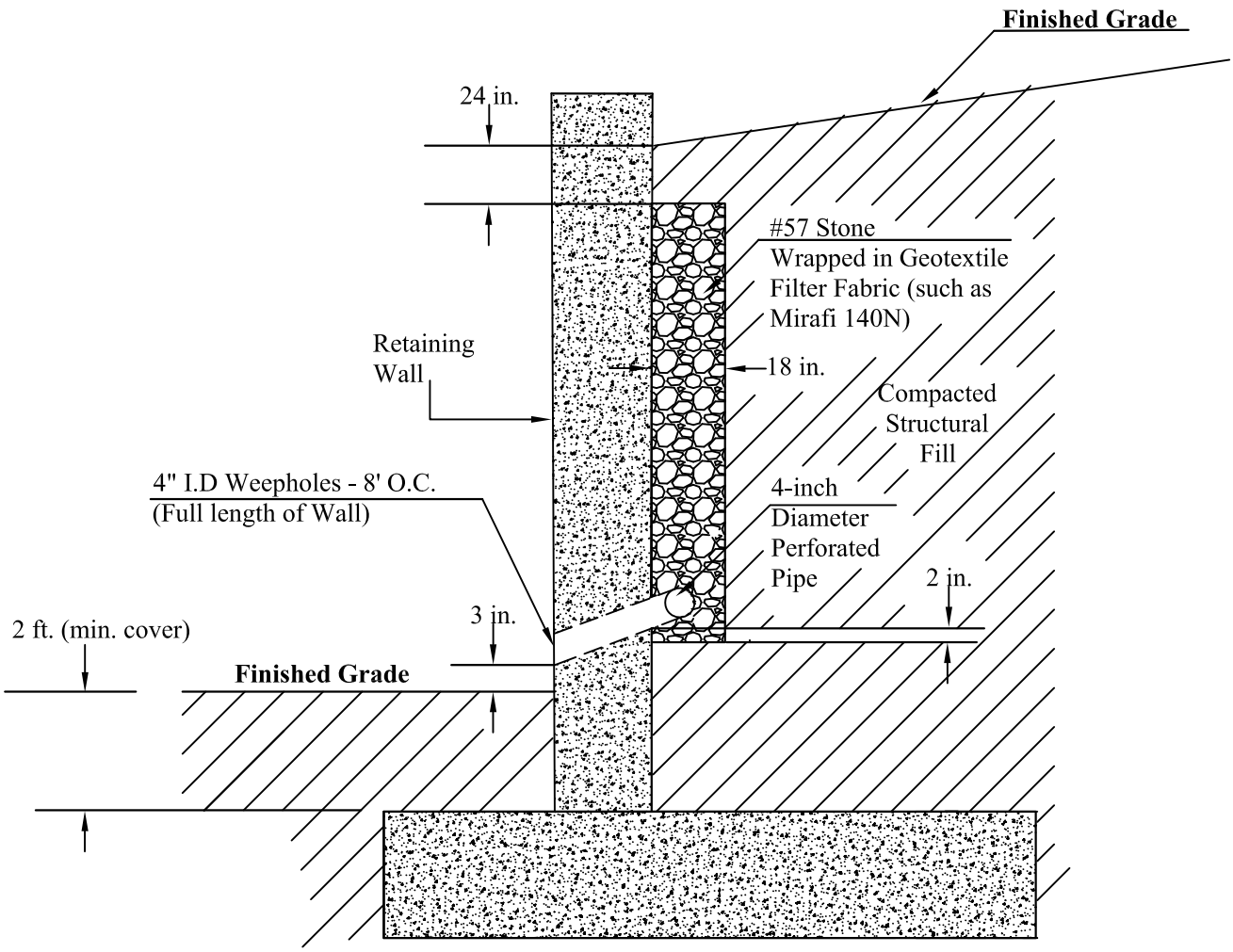
1955 Vaughn Road, Suite 101, Kennesaw, GA 30144
Phone: (770) 794-0266 Fax: (770) 794-9483

LEGEND

Typical Benching Detail

Scale: Not To Scale

PROJECT
Geotechnical Exploration
Hotel and Conference Center
Avalon
Alpharetta, Fulton County, Georgia
Project No: G14NAP02



FOUNDATION

CONTOUR ENGINEERING, LLC

1955 Vaughn Road, Sulte 101, Kennesaw, GA 30144
Phone: (770) 794-0266 Fax: (770) 794-9483

LEGEND
Typical Detail for Concrete Retaining Wall Drainage System

Scale: Not to Scale

PROJECT
Geotechnical Exploration
Hotel and Conference Center
Avalon
Alpharetta, Fulton County, Georgia
Project No: G14NAP02