## **APPENDIX B**

TEST PIT LOGS

THIELS	SCH Thielsch	Engineering, Inc.		TE	ST PIT NU	PAGE 1 OF 1				
ENGINEE	Cranstor	n RI 02910								
CLIENT Beta G	CLIENT Beta Group, Inc. PROJECT NAME Infiltration Testing									
PROJECT NUMB	ER TEI 74230025	LOCATION Paw	tucket & Ailanthus Ave,	East Providence, RI CC	ORDINATES					
DATE & TIME ST	<b>ARTED</b> <u>2/24/23</u>	DATE &	TIME COMPLETED _2/2	24/23 WEATHER _	<u>Overcast 30</u> ° F <b>EL</b>	EVATION (FT)				
EXCAVATION CO	<b>DNTRACTOR</b> East F	Providence DPW		MENT Cat 307E2 REAC	C/					
FORMAN		LOC	GED BY <u>A. Davis</u>	CHECKE	DBY A Dewhirs	t				
o DEPTH (ft) EXCAVATION EFFORT	GRAPHIC LOG	MATERIAL DESCI	RIPTION	STRATUM DESCRIPTION	BOULDER COUNT (qty./class)	SUBMITTED GEOTECHNICAL LABORATORY TESTING				
E  1	(ML) C organi 1.0	Dark brown SILT, s cs present	ome fine Sand, moist,	Top Soil	N/A					
M	(SM) E	Brown, fine SAND,	some Silt, moist	Glacial Outwash	2/A 0/B 0/C	Sieve				
25	Botton	n of test pit at 6.0	feet.							
5   TEI 7423005		1								
TEST PIT PLAN:       6 ft.       0       VOLUME (±) = 8 YD	AZIMUTH: NORTH ft.	EXCAVATION EFFORT: E EASY M MODERATE D DIFFICULT	BOULDER SIZE RANGE DESIGNATION: DIAMETER (IN) SYMBOL 6 TO 16 A 16 TO 36 B > 36 C	COHESIVE SOIL PLASTICITY CLASSIFICATION THI NON-PLASTIC SILT SLIGHT CLAYEY SILT LOW SILT & CLAY MEDIUM CLAY & SILT HIGH Silty CLAY VERY HIGH CLAY	S: READ'S DIAMETER 1/4" 1/8" 1/16" 1/32" 1/64"	BURMISTER CLASSIFICATION: TRACE 0-10% LITTLE 10-20% SOME 20-35% AND 35-50% PERCENT BY WEIGHT				
	TER LEVELS: DF EXCAVATION OF EXCAVATION (CAVATION		REMARKS: 1. Groundwater not encount	ered during testing or observation						

THIELSCH	Thielsch Engineering, Ind	<b>D</b> .	TE	ST PIT NU	MBER TP-2 PAGE 1 OF 1					
ENGINEERING	Cranston RI 02910									
CLIENT Beta Group, Inc	CLIENT Beta Group, Inc. PROJECT NAME Infiltration Testing									
PROJECT NUMBER TE	174230025 LOCATION Pa	wtucket & Ailanthus Ave,	East Providence, RI CO	ORDINATES						
DATE & TIME STARTED	_2/24/23 DATE	& TIME COMPLETED _2/2	24/23 WEATHER (	<u>Overcast 30</u> ° F <b>EL</b>	EVATION (FT)					
EXCAVATION CONTRAC	TOR East Providence DPW	EQUIP	MENT Cat 307E2 REACH	H (FT) CA						
FORMAN	LC	OGGED BY <u>A. Davis</u>	CHECKEI	<b>DBY</b> <u>A Dewhirst</u>	t					
o DEPTH (ft) EXCAVATION EFFORT GRAPHIC LOG	MATERIAL DES(	CRIPTION	STRATUM DESCRIPTION	BOULDER COUNT (qty./class)	SUBMITTED GEOTECHNICAL LABORATORY TESTING					
E  1 1.	(ML) Dark brown SILT, organics present 0	some fine Sand, moist,	Top Soil	N/A						
$- \frac{1}{M}$	(SM) Brown fine SANE trace fine Gravel	), some Silt, Moist,	Glacial Outwash	3/A 0/B 0/C	Sieve					
25	Bottom of test pit at 6.0	) feet.								
8   TEI 7423000		1			1					
TEST PIT PLAN:     A       6 ft.     6 ft.       0 ft.     6 ft.       0 ft.     6 ft.       0 VOLUME (±) = 8 YD <sup>3</sup>	XZIMUTH: NORTH EFFORT: E EASY M MODERATE D DIFFICULT	BOULDER SIZE RANGE DESIGNATION:DIAMETER (IN)SYMBOL6 TO 16A16 TO 36B> 36C	COHESIVE SOILS PLASTICITY CLASSIFICATION THR NON-PLASTIC SILT SLIGHT CLAYEY SILT LOW SILT & CLAY MEDIUM CLAY & SILT HIGH Silty CLAY VERY HIGH CLAY	5: EAD'S DIAMETER NONE 1/4" 1/8" 1/16" 1/16" 1/32" 1/64"	BURMISTER CLASSIFICATION: TRACE 0-10% LITTLE 10-20% SOME 20-35% AND 35-50% PERCENT BY WEIGHT					
	/ELS: Avation Vation Ion	<b>REMARKS:</b> 1. Groundwater not encount	tered during testing or observation							

THIELSCH 195 Frances Ave	ing, Inc.	TES	ST PIT NU	PAGE 1 OF 1
ENGINEERING	0			
CLIENT Beta Group, Inc.	PRO	JECT NAME Infiltration Testing		
PROJECT NUMBER TEI 74230025 LOCATIO	<b>DN</b> <u>Pawtucket &amp; Ailanthus Ave,</u>	East Providence, RI CO		
DATE & TIME STARTED _2/24/23	DATE & TIME COMPLETED 2/	24/23 WEATHER (	<u>Overcast 30</u> ° F <b>El</b>	EVATION (FT)
EXCAVATION CONTRACTOR _East Providenc	e DPW EQUIP	MENT Cat 307E2 REAC	H (FT) C/	
FORMAN	LOGGED BY A. Davis	CHECKE	DBY A Dewhirs	t
0 DEPTH EXCAVATION EFFORT LOG LOG LOG	L DESCRIPTION	STRATUM DESCRIPTION	BOULDER COUNT (qty./class)	SUBMITTED GEOTECHNICAL LABORATORY TESTING
E (ML) Dark brow organics preser	n SILT, some fine Sand, moist, t	Top Soil	N/A	
1 1 1.0 M (SM) Brown fine trace to little fine oxidation at app 2       -	e SAND, some Silt, Moist, e Gravel, moist, observed roximately 7- to 8-feet	Glacial Outwash	8/A 1/B 0/C	Sieve
8 8.0 Bottom of test p	it at 8.0 feet.			
EI 74230				
Light TEST PIT PLAN: AZIMUTH:   8 ft. NORTH   8 ft. NORTH   VOLUME ( $\pm$ ) = 19 YD <sup>3</sup>	ATION RT: Y DERATE CICULT BOULDER SIZE RANGE DESIGNATION: DIAMETER (IN) SYMBOL 6 TO 16 A 16 TO 36 B > 36 C	COHESIVE SOILS PLASTICITY CLASSIFICATION THR NON-PLASTIC SLIGHT LOW SILT & CLAYEY SILT LOW SILT & CLAY MEDIUM HIGH Silty CLAY VERY HIGH CLAY	5: EAD'S DIAMETER NONE 1/4" 1/8" 1/6" 1/64"	BURMISTER CLASSIFICATION: TRACE 0-10% LITTLE 10-20% SOME 20-35% AND 35-50% PERCENT BY WEIGHT
GROUND WATER LEVELS:     ✓   AT TIME OF EXCAVATION     ✓   AT END OF EXCAVATION     ✓   AFTER EXCAVATION		tered during testing or observation		



195 Frances Avenue Cranston, Rhode Island 02910 Phone: 401-467-6454 Fax: 401-467-2398 http://www.Thielsch.com Client Information: Beta Group, Inc. 701 George Washington Hwy, Lincoln, RI 02865 jcobleigh@BETA-Inc.com

## **Double Ring Infiltrometer Test Report**

Project:	Pawtucket Ave & Ailanthus Ave	TEI Project No.:	74-23-0025
Project Address:	Pawtucket Ave & Ailanthus Ave, East Providence, RI	Date of Service:	2/24/2023

Test Information						
Test Location:	Test Pit #1	Tested by:	Alex Dewhirst			
Start Time:	10:00 AM	Temp of Water (°F):	63			
pH:	8	Depth Below Ground Surface:	~4-ft			
Soil Description:	Brown fine SAND, some Silt, Silty Sand with gravel (SM)					

Test Setup					
Information	Inner Ring	Annular Space			
Area (sq cm):	729	2189			
Depth Driven (in):	5	5			
Water Depth (in):	4	4			
Mariotte Tube (cc/div):	100	250			

	Infiltrometer Test Data (ASTM D3385)									
Test	Elapsed Time	Time Increment		Inner Ring			Annular Space			
No.	(min)	(min)	Reading (in)	Volume (cm)	Rate (cm/hr)	Reading (in)	Volume (cc)	Rate (cm/hr)		
0	0	0	0	-	-	0	-	-		
1	15	15	0	0.0	0.00	0	0.0	0.00		
2	30	15	0	0.0	0.00	0	0.0	0.00		
3	45	15	0	0.0	0.00	0	0.0	0.00		
4	60	15	0	0.0	0.00	0	0.0	0.00		
5	75	15	0	0.0	0.00	0	0.0	0.00		
6	90	15	0.5	925.8	5.08	0.5	2780.0	5.08		
7	120	15	0	0.0	0.00	0	0.0	0.00		
8	135	15	0	0.0	0.00	0	0.0	0.00		
9	150	15	0.5	925.8	5.08	0.5	2780.0	5.08		
10	165	15	1	925.8	5.08	1	2780.0	5.08		
11	180	15	1	0.0	0.00	1	0.0	0.00		
Δνα	Infiltration va	lues based on inr	or ring readir	as 1 to 11	Avg. Infiltration (cm/hr): 1.4		.4			
Avy.			er mig reduit	iys 1 (0 11.	Avg. Infiltra	tion (in/hr):	0	.5		

Comments: After an initial pre-soak of approximately two hours, measured water level drop was approximately 0.5inches. The testing at this location was completed as falling head test. Reported readings for this test are measured head drop, not mariotte tube divisions.

Tested By:	Arianna Davis			Reviewed By:	Matthew Colman, P.E.		
Title:	Field Engineer	Date:	2/24/2023	Title:	Senior Engineer	Date:	3/1/2023



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## **Double Ring Infiltrometer Test Report**

Project:	Pawtucket Ave & Ailanthus Ave	TEI Project No.:	74-23-0025
Project Address:	Pawtucket Ave & Ailanthus Ave, East Providence, RI	Date of Service:	2/24/2023

Test Information						
Test Location:	Test Pit #2	Tested by:	Alex Dewhirst			
Start Time:	10:35 AM	Temp of Water (°F):	63			
pH:	8	Depth Below Ground Surface:	~4 ft			
Soil Description:	Brown fine SA	ND, some Silt, trace fine Grave	l, moist			

Test Setup					
Information	Inner Ring	Annular Space			
Area (sq cm):	729	2189			
Depth Driven (in):	5	5			
Water Depth (in):	6	6			
Mariotte Tube (cc/div):	100	250			

	Infiltrometer Test Data (ASTM D3385)								
Test	Elapsed Time	Time Increment		Inner Ring		Annular Space			
No.	(min)	(min)	Reading (div)	Volume (cc)	Rate (cm/hr)	Reading (div)	Volume (cc)	Rate (cm/hr)	
0	0	0	0	-	-	0	-	-	
1	5	5	1	100	1.65	2.5	625	3.43	
2	10	5	3	200	3.29	8.5	1500	8.22	
3	15	5	5	200	3.29	14.5	1500	8.22	
4	20	5	7	200	3.29	18.5	1000	5.48	
5	25	5	9	200	3.29	21.5	750	4.11	
6	30	5	11	200	3.29	24.5	750	4.11	
7	35	5	13	200	3.29	28	875	4.80	
8	40	5	15	200	3.29	31.5	875	4.80	
9	45	5	18	300	4.94	35	875	4.80	
Δυα	Aver Infiltration values based on inner rise resultings 2 to 0					ion (cm/hr):	3	.3	
Avy.		innes pasen oli ill	nei ning redui	$1y_5 \ge 100$ .	Avg. Infiltra	tion (in/hr):	1	3	

Comments:

Tested By:	Ari Davis			Reviewed By:	Matthew Colman, P.E.		
Title:	Field Engineer	Date:	2/24/2023	Title:	Senior Engineer	Date:	3/1/2023



## **Double Ring Infiltrometer Test Report**

Project:	Infiltration Testing - Pawtucket Ave & Ailanthus Ave	TEI Project No.:	74-23-0025
Project Address:	Pawtucket Ave & Ailanthus Ave, East Providence, RI 02915	Date of Service:	2/24/2023

Test Information						
Test Location:	Test Pit - 3	Tested by:	Alex Dewhirst & Ari Davis			
Start Time:	12:20 PM	Temp of Water (°F):	63			
pH:	8.00	Depth Below Ground Surface:	~6-feet			
Soil Description:	il Description: Brown fine SAND, some SILT, trace to little fine Gravel, moist (SM)					

Test Setup					
Information	Inner Ring	Annular Space			
Area (sq cm):	729	2189			
Depth Driven (in):	5	5			
Water Depth (in):	4.5	4			
Mariotte Tube (cc/div):	100	250			

Infiltrometer Test Data (ASTM D3385)									
Test	Flancod	Time		Inner Ring			Annular Space		
Ne	Time (min)	Increment	Reading	Volume	Rate	Reading		Rate	
INO.		(min)	(div)	(cm)	(cm/hr)	(div)	volume (cc)	(cm/hr)	
0	0	0	0	-	-	0	-	-	
1	5	5	3.5	350	5.76	2.5	625	3.43	
2	10	5	5.5	200	3.29	4	375	2.06	
3	15	5	6.5	100	1.65	6	500	2.74	
4	20	5	8	150	2.47	7.5	375	2.06	
5	25	5	8.5	50	0.82	9	375	2.06	
6	30	5	9	50	0.82	10.5	375	2.06	
7	35	5	9.5	50	0.82	12	375	2.06	
8	40	5	10	50	0.82	13.5	375	2.06	
9	50	10	11	100	0.82	16.5	750	2.06	
10	60	10	12	100	0.82	19	625	1.71	
Ava	Aug Infiltration values hand an inner reading 5 to 10					Avg. Infiltration (cm/hr):		8	
Avg	Avg. Influtration values based on inner ring readings $5$ to $10$ .				Avg. Infiltration (in/hr): 0.3			3	

Comments:

Tested By:	Ari Davis			Reviewed By:	Matthew Colman, P.E.		
Title:	Field Engineer	Date:	2/24/2023	Title:	Senior Engineer	Date:	3/1/2023