

Melick-Tully & Associates

A Division of GZA



STORMWATER INVESTIGATION Proposed Quick Chek Food Store and Restaurant West Windsor, Mercer County, New Jersey ER/UDC West Windsor, LLC

August 30, 2021 File No. 26.0092434.00

PREPARED FOR: ER/UDC West Windsor, LLC P. O. Box 391 Williston, Vermont 05493

Melick-Tully & Associates, A Division of GZA

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Melick-Tully & Associates

A Division of GZA

GEOTECHNICAL ENVIRONMENTAL ECOLOGICAL WATER CONSTRUCTION MANAGEMENT

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ER/UDC West Windsor, LLC P. O. Box 391 Williston, Vermont 05493

Attention: Mr. Larry Harder

Report Stormwater Investigation Proposed Quick Chek Food Store and Restaurant West Windsor, Mercer County, New Jersey ER/UDC West Windsor, LLC

Introduction

This report presents the results of a stormwater investigation completed by Melick-Tully & Associates, a Division of GZA GeoEnvironmental, Inc. (MTA) at the site of a proposed Quick Chek food store and a proposed restaurant which may be constructed in West Windsor, Mercer County, New Jersey. The site is located adjacent to and west of Southfield Road between Princeton-Hightstown Road and McGetrick Lane, as shown on the attached Site Location Map, Plate 1. Our work was performed in general conformance with our proposal dated June 30, 2021.

Proposed Construction

A site layout plan provided to us indicates that the development would consist of two facilities and associated site improvements. The eastern half of the property would be developed by a Quick Chek food store approximately 5,869 square feet in plan area with a finish floor elevation of +97.00 feet. A canopy with eight fuel dispensers would be located to the north of the food store area and four underground storage tanks would be



located north of the canopy. On-site paved parking and roadway areas would be constructed to service the proposed facility.

Adjacent to and west of the Quick Chek development, a restaurant approximately 4,541 square feet in plan area with a drive-thru would be constructed with a finish floor elevation of +96.50 feet. The building would be located on the west parcel with a drive-thru lane south and east of the building. On-site paved parking and roadway areas would be constructed north and west of the proposed restaurant.

On-site stormwater management facilities are currently planned. These currently include seven aboveground stormwater management basins, seven areas of porous asphalt pavement below proposed car parking areas on both developments, and porous concrete pavements adjacent to the two structures.

Purpose and Scope of Work

The purpose of our services was to:

- 1) explore the subsurface soil and groundwater conditions via test pits and borings in accessible portions of the proposed development;
- 2) collect tube samples of the soil layers encountered from all proposed test pit locations for laboratory tube permeameter permeability testing;
- 3) perform cased borehole permeability testing at selected locations; and
- 4) prepare a brief summary report of our findings for use by the basin designer in their evaluation of the stormwater improvements.

To accomplish these purposes, a subsurface exploration program consisting of 28 supervised test pit excavations and two test borings were performed at the site in the locations of proposed stormwater management facilities shown on Bohler's preliminary site plan dated April 27, 2021. The test pits were advanced using a track-mounted excavator (CAT 308) and extended to depths of 12 to 13 feet below existing



surface grades. The test borings were advanced using a geoprobe with continuous core sampling and extended to depths of 10 feet below grade. A cased borehole permeability test was performed adjacent to each boring following completion at depths of 2 and 8.5 feet below grade. The locations of the explorations are shown in relation to proposed site features on the Plot Plan, Plate 2.

All field work was performed under the direct technical supervision of a geotechnical engineer from MTA. Our representative located the explorations in the field, supervised the soil sampling operations, maintained continuous logs of the explorations as the work proceeded, and obtained samples of the materials encountered in the explorations for identification purposes. We also obtained relatively undisturbed tube samples from the test pits for laboratory tube permeameter permeability testing and performed cased borehole permeability testing adjacent to each boring.

Detailed descriptions of the encountered subsurface conditions are described on the Test Pit Logs, Plates 3-1 through 3-28, and Test Boring Logs, Plates 4-1 and 4-2. The soils were visually classified in general accordance with the procedures of the United States Department of Agriculture Soil Classification System (USDA) described on Plate 5.

All soil samples were brought to our office, and selected samples were subjected to laboratory grain-size and tube permeameter permeability testing. The results of the gradation testing are presented on Plates 6-1 and 6-2, while the permeability test results are presented on Plate 7.

The following discussion of our findings are subject to the Limitations attached as an Appendix to this report.



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Site Conditions

<u>Surface Features</u>: The site contains five separate lots (Lots 2 through 6). Lot 2 consists of a one-story masonry building with a basement and a paved parking lot to the west. Lot 3 consists of a two-story frame building and a detached frame garage. Lot 4 consists of a two-story frame building and a detached one-story garage structure. Lot 5 consists of a one-story frame building with a detached frame garage. And Lot 6 consists of a one-story frame building to the west and previously consisted of a one-story frame building to the southeast, which had already been demolished at the time of our investigation. Grass lawns with trees, bushes, and driveways cover the surface between the buildings. Princeton-Hightstown Road borders the property to the north, Southfield Road to the east, and McGetrick Lane to the south.

Topographic information shown on the plans provided to us indicates that the ground surface elevations slope downward from approximately Elevation +96 feet in the northeast to approximately Elevation +93 in the western and southern portions of the site.

<u>Subsurface Conditions</u>: Approximately 2 inches of asphalt pavement was encountered at the surface in Test Pits 16 and 19. Fill was encountered at the surface in Test Pits 10 and 11. The remaining test pits were performed in grass lawn areas where approximately 3 to 26 inches of topsoil was encountered. Fill was also encountered below the surface materials in Test Pits 16, 17, 21, and 22. Fill thicknesses varied from about 1.3 feet to 5.8 feet and typically consisted of sandy loam, sandy clay loam, and clay soils. The surface and fill materials were underlain by interlayered sand, loamy sand, sandy loam, sandy clay loam, clay loam, and clay soils. Generally, clayey soils were encountered near the surface while sandier soils were encountered at deeper depths.



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Groundwater seepage was observed in 17 of the test pits (Test Pits 1 through 16, and 20) at depths of approximate 9.5 to 13 feet below grade, corresponding approximately to elevations ranging from +81 feet to +84.5 feet. In addition, groundwater levels were obtained in five wells installed on August 12, 2021 for an environmental baseline on the proposed Quick Chek property. Depths to groundwater varied from approximately 7.7 to 10.8 feet in the wells, corresponding approximately to elevations ranging from +84.2 feet and +85.6 feet. Mottling, which is indicative of seasonally saturated conditions, was observed in the test pits at depths ranging from 7 to 108 inches below grade. In addition, the sidewalls in some of the test pits collapsed during excavation within a few feet of the observed groundwater seepage levels, suggesting groundwater levels in those test pits are likely near sidewall caving depths.

Permeability Test Results

Laboratory tube permeameter permeability tests were performed on tube samples of the subsoils collected below the proposed stormwater management facilities in each test pit. The permeability tests indicate that the deeper sandy subsoils (sand, loamy sand, and sandy loam) generally exhibited permeabilities of 1 inch per hour to greater than 20 inches per hour, while the surficial silty and clayey soils (sandy clay loam, loam, clay loam, and clay) generally exhibited permeability of less than 1 inch per hour, and often less than 0.06 inches per hour. The laboratory tube permeability tests are summarized on Plate 7.

Cased borehole permeability testing was performed below proposed porous concrete pavement areas around the proposed Quick Chek building. Field permeability tests were performed in Boring 1 at a depth of 3.3 feet below grade and in Boring 2 at a depth of 8.5 feet below grade. The field permeability tests indicate that the silty clay soils in Boring 1 and loamy sand soils in Boring 2 exhibited permeabilities of less than 0.06



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inches per hour. It is possible that the bottom of the cased borehole test for Boring 2 was at or near the

groundwater level which may explain the slow rate observed even though the soils were sandy.

Please contact us if you have any questions regarding this information.

The following Plates and Appendix are attached and complete this report:

Plate 1 – Site Location Map Plate 2 – Plot Plan Plates 3-1 through 3-28 – Test Pit Logs Plates 4-1 and 4-2 – Test Boring Logs Plate 5 – USDA Soil Textural Triangle Plates 6-1 and 6-2 – Gradation Curves Plate 7 – Summary of Laboratory Tube Permeameter Permeability Test Results Appendix – Limitations

Respectfully submitted,

MELICK-TULLY and ASSOCIATES, a Division of GZA GeoEnvironmental, Inc.

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Cory S. Karinja, P.E. Project Manager

(Maile ZZ

Mark R. Denno, P.E. Consultant/Reviewer

CSK:EMG/mh (1 copy submitted via e-mail)

Zhm Jangy

Eugene M. Gallagher, Jr., P.E. Principal





KEY:

- B-1 NUMBER AND APPROXIMATE LOCATION OF BORINGS PERFORMED FOR THIS STUDY
- NUMBER AND APPROXIMATE LOCATION OF TEST PITS PERFORMED FOR THIS STUDY
- (1.0) APPROXIMATE DEPTH IN FEET TO SOIL MOTTLING BELOW THE EXISTING GROUND SURFACE
- [10] APPROXIMATE DEPTH IN FEET TO GROUNDWATER BELOW THE GROUND SURFACE
- NE NOT ENCOUNTERED

NOTES:

- This drawing is part of Melick—Tully and Associates, a Division of GZA, Report No. 26.0092434.00 and should be read together with the report for complete evaluation.
- General layout was obtained from a drawing prepared by Bohler Eng., entitled "Grading Plan" dated 4/28/20 (revised 4/27/21), scale 1"= 30'.

PLOT PLAN

PROPOSED QUICK CHEK FOOD STORE WEST WINDSOR, NEW JERSEY ER/UDC WEST WINDSOR, LLC

₩ M	Geot	LICK- echnical South	-TULL A Div Enginee 11 [°] Bound (73	Y AND AS vision of GZA rs & Environmen 7 Canal Road Brook, New Jers 52) 356–3400	SOCIATES 4 tal Consultants ey 08880
JOB NO.	26.0092434	1.00	FIL	E NO.	-
DR. BY VJD	CHK. BY CSK	DA 8/5	TE 5/21	SCALE 1"= 60'	PLATE 2

				TEST P	PIT LOG							
GZN	MTA, a I GeoEnvin Engineers an	Division of conmental nd Scientists	GZA , Inc	East Ridge I Prop. Quick Chek Foo West Win	Development d Store and Resta ndsor, NJ	urant	EXPLOR/ SHEET: PROJECT REVIEWE	ATION NO.: TF 1 of 1 F NO: 26.00924 ED BY: Cory Ka	P-1 34.00 rinja			
Logged	By: Nick Pyt	lowany		Test Pit Location: Se	ee Plan	Fina	I Test Pit I	Depth (ft.): 12.5	i			
Operator	: Chris			Ground Surface Elev	/. (ft.): 93	Date	e Start - Fir	nish: 7/26/2021	- 7/26/	2021		
Type of I	Excavator:	Track Excava	ator		Dete	-	Groundwa	ter Depth (ft.)		04-1-7		
Excavato	or Model: (CAT 308			7/26/21		Ime	11	<u>tn</u>	Stab. 11	me	
Depth (ft)	Sample No.	Sample Depth (ft.)	Stratum Depth (in.)	Samp	ble Description and	l Identifi	ication		Depth (ft)	Water Content (%)	Remark	
- - 1			0-12	Topsoil - Brown (10YR medium granular, sligh common medium roots	R, 5/3) sandy loai htly moist, friable s	m, 10% , abrup	6 gravel, i ot smooth	moderate boundary,	1_			
2 _	S1, T1	1.5	12-27	Light yellowish brown moderate medium sub smooth boundary	(10YR, 6/4) sanc angular blocky,	dy clay slightly	loam, 5% moist, fri	o gravel, able, clear	2			
3 _	3 S2, T2 3 27-42 Dark yellowish brown (10YR, 4/6) sandy loam, 30% gravel, 10% cobbles, moderate medium granular, slightly moist, friable, clear smooth boundary 4 Strong brown (7.5YR, 5/8) sandy loam, moderate medium granular, slightly moist, friable, clear smooth boundary											
4 _	4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5											
5 _	S3, T3	5.5	42-94			5_						
0 - 7									0 - - 7			
8 _				Yellowish brown (10YF	R, 5/6) sandy cla	y loam	, 5% grav	vel, moderate	8_			
9	S4, T4	9		medium crumb, wet, fr (10YR, 7/1) mottles en	iable, common r icountered from	nediun 94 incł	n promine nes to 150	nt light gray) inches	9			
10 _			94-150						10 _			
11 _									11 _			
12 _				End of exploration at 1	2.5 feet.				12 _			
	13 13 14 Moderate groundwater seepage encountered @ 11' Soil mottling observed @ 94"											
15												
ST PIT USDA; 8/30/202 REMARKS												
See Log approxim been may than thos	Key for ex ate boundarie de at the tim e present at t	ploration of es between s es and unde the times the	sample de soil and bedr r the condition measureme	scription and identification of the scription and identification of the scription of the sc	on procedures. S ns may be gradua f groundwater may	tratificat I. Water y occur	tion lines r level reac due to oth	represent lings have her factors	Plate	No.: 3-1		

	TEST PIT LOG											
GZN	MTA, a I GeoEnvin Engineers an	Division o f ronmenta ad Scientists	f GZA I, Inc	East Ridge I Prop. Quick Chek Foo West Wi	Development d Store and Resta ndsor, NJ	aurant	EXPLOR/ SHEET: PROJECT REVIEWE	ATION NO.: 1 of 1 NO: 26.0092 D BY: Cory I	TP-2 2434.00 Karinja			
Logge	d By: Nick Pyt	lowany		Test Pit Location: Se	ee Plan	Fin	al Test Pit I	Depth (ft.): 12	2.5			
Operat	ctor: Heritage tor: Chris			Ground Surface Elev	/. (ft.) : 93	Dat	e Start - Fir	nish: 7/26/202	21 - 7/26/	2021		
Туре с	f Excavator:	Track Excav	ator				Groundwa	ter Depth (ft.)				
Excava	ator Model: (CAT 308			Date 7/26/21		Time	Water D	epth	Stab.Ti	me	
Exourt					1120121							
Depth (ft)	Sample No.	Sample Depth (ft.)	Stratum Depth (in.)	Samp	ble Description an	d Identi	fication		Depth (ft)	Water Content (%)	Remark	
1		1	0-10	Topsoil - Brown (10YR granular, slightly moist medium roots	8, 5/3) sandy loa t, friable, abrupt	am, mo smoot	derate me h boundar	dium y, common	1_			
2			10-23	Light yellowish brown of moderate medium cruit boundary fow medium	(10YR, 6/4) san mb, slightly mois	dy clay st, frial	/ loam, 25 ble, clear s	% gravel, mooth	2			
3 S2, T2 3 4 23-55												
4												
5 Light yellowish brown (10YR, 6/4) sandy loam, 10% gravel, 5 moderate medium granular, moist, friable, clear smooth boundary 5												
6	S3, T3	6	55-98						6_			
7									7_			
8	-			Yellowish brown (10YF	R, 5/6) sandy cla	ay loar	n, 15% gra	ivel,	8			
9				light gray (10YR, 7/1) i inches	mottled encount	tered f	rom 98 inc	hes to 150	9_			
10	S4, T4	10	98-150						10			
12									12			
13	- - - - -			End of exploration at 1	2.5 feet.							
14	-			Soil mottling observed	@ 98"	untere						
15												
REMARKS	REMARKS											
See Lo approxi been m than the	og Key for ex mate boundarie ade at the time ose present at t	ploration of es between es and unde the times the	sample des soil and bedro r the condition measureme	scription and identification ock types. Actual transition ons stated. Fluctuations on ts were made.	on procedures. S ns may be gradua f groundwater ma	Stratifica al. Wate ay occu	ation lines er level read r due to oth	represent ings have er factors	Plate	No.: 3-2		

				TEST P	PIT LOG						
GZN	MTA, a I GeoEnvin Engineers an	Division of conmental and Scientists	f GZA I, Inc	East Ridge Prop. Quick Chek Foo West Wi	Development d Store and Resta ndsor, NJ	urant	EXPLOR/ SHEET: PROJEC ⁻ REVIEWE	ATION NO.: 1 1 of 1 T NO: 26.0092 ED BY: Cory K	'P-3 434.00 arinja		
Logged	By: Nick Pytl	owany		Test Pit Location: Se	ee Plan	Final	Test Pit I	Depth (ft.): 13			
Contract Operator	or: Heritage : Chris			Ground Surface Elev	/. (ft.): 91	Date	Start - Fii	nish: 7/26/202	1 - 7/26/	2021	
Type of I	Excavator:	Frack Excava	ator			G	iroundwa	ter Depth (ft.)			
E	w Madalı (Date	Ti	me	Water De	pth	Stab.Ti	me
Excavato	or wodel:	JAT 308			7/26/21			10			
Depth (ft)	Sample No.	Sample Depth (ft.)	Stratum Depth (in.)	Samp	ble Description and	d Identific	ation	•	Depth (ft)	Water Content (%)	Remark
- - - 1 -			0-7	Topsoil - Brown (10YF granular, slightly moist medium roots	R, 6/3) sandy loai t, loose, abrupt s	m, mode smooth l	erate me poundary	edium y, common			
				Yellowish brown (10YF	R, 5/4) clay loam	n, moder	ate med	ium	-1 -		
2	S1, T1	2	7-38	subangular blocky, slig	ghtly moist, friabl	le, clear	smooth	boundary	2_		
3 _	3 Yellowish brown (10YR, 5/6) loamy sand, 25% gravel, moderate										
	4 S2 T2 4 Yellowish brown (10YR, 5/6) loamy sand, 25% gravel, moderate medium granular, slightly moist, friable, clear smooth boundary										
4	4 _ S2, T2 4 _ Medium granular, slightly moist, mable, clear smooth boundary										
5 _	5_										
6_				Light brownish gray (1 granular, slightly moist	0YR, 6/2) loamy t, loose, clear sm	r sand, s nooth bo	trong moundary	edium	6_		
7 -	S3. T3	7							7 -		
	- , -		64-106								
°									°		
9_				Yellowish brown (10YF	R, 5/6) sandy cla	y loam,	30% gra	avel,	9_		
10 _	S4, T4	10		prominent light gray (1 inches to 156 inches	0YR, 7/1) mottle	e, comn es encou	untered f	from 106	10 _		
11 _			106-156						11 _		
12 _									12 _		
13 -				End of exploration at 1	3 feet.				13 -		
	14 Moderate groundwater seepage encountered @ 10' Soil mottling observed @ 106"										
15											
S0/2021; 2		1		1					1		L
USDA; 8/											
L See Log approxim been ma ma than thos	Key for ex ate boundarie de at the time e present at t	ploration of es between s es and unde he times the	sample de soil and bedr the conditi measureme	escription and identification ock types. Actual transition ons stated. Fluctuations of ents were made.	on procedures. S ns may be gradua f groundwater mag	tratificati I. Water y occur o	on lines level read due to oth	represent lings have her factors	Plate	No.: 3-3	

				TEST P	PIT LOG										
GZN	MTA, a I GeoEnvin Engineers ar	Division of conmental and Scientists	f GZA I, Inc	East Ridge I Prop. Quick Chek Foo West Wi	Development d Store and Resta ndsor, NJ	urant	EXPLOR SHEET: PROJEC REVIEWE	ATION NO.: TF 1 of 1 T NO: 26.00924 ED BY: Cory Ka	P-4 34.00 rinja						
Logged	By: Nick Pytl	owany		Test Pit Location: Se	ee Plan	Fina	al Test Pit I	Depth (ft.): 13							
Contract Operator	:or: Heritage r: Chris			Ground Surface Elev	/. (ft.): 92	Date	e Start - Fi	nish: 7/26/2021	- 7/26/	2021					
Type of	Excavator:	Frack Excava	ator				Groundwa	ter Depth (ft.)							
					Date		Time	Water Dep	th	Stab.Ti	ime				
Excavate	or Model: (CAT 308			7/26/21			10.5							
Depth (ft)	Sample No.	Sample Depth (ft.)	Stratum Depth (in.)	Samp	ble Description and	d Identif	ication	1	Depth (ft)	Water Content (%)	Remark				
			0-7	Topsoil - Brown (10YR granular, slightly moist	R, 5/3) sandy loa t, loose, abrupt s	m, mo smooth	derate me boundar	edium y, common							
23	S1, T1	2	7-42	Yellowish brown (10YF subangular blocky, mo fine faint light gray (10 mottles encountered fr	lowish brown (10YR, 5/4) clay loam, moderate medium angular blocky, moist, friable, clear smooth boundary, common e faint light gray (10YR, 7/1) and strong brown (7.5YR, 4/6) ttles encountered from 27 inches to 42 inches angular blocky, slightly moist, firm, clear smooth boundary										
4 5 6	S2, T2	4	42-82	Light brownish gray (1 subangular blocky, slig many coarse prominer encountered from 42 in	ght brownish gray (10YR, 6/2) sandy clay loam, moderate medium bangular blocky, slightly moist, firm, clear smooth boundary, any coarse prominent strong brown (7.5YR, 4/6) mottles countered from 42 inches to 82 inches 5 6										
7_			82-94	Light yellowish brown granular, moist, friable	(10YR, 6/4) sand , clear smooth b	dy loar oounda	n, modera ry	ate medium	7_						
8_	S3, T3	8		Light gray (10YR, 7/2) moist, friable, many co	fine sandy loam barse prominent	n, mode strong	erate coar brown (7	se granular, .5YR, 4/6)	8_						
9_	S4, T4	9		mottles encountered fr	rom 94 inches to	o 140 ir	nches		9	16.6					
10 _			04 156						10 _						
11 _			94-130						11_						
12 _	St	12							12 _						
13									13						
14 _				End of exploration at 1 Moderate groundwater Soil mottling observed	13 feet. r seepage encou @ 42"	unterec	l @ 10.5'								
15															
REMARKS															
See Log approxim been ma than thos	Key for ex ate boundarie de at the time e present at t	ploration of es between s es and unde he times the	sample de soil and bedr the conditi measureme	escription and identification rock types. Actual transition ons stated. Fluctuations o ents were made.	on procedures. S ns may be gradua f groundwater ma	itratifica I. Wate y occur	tion lines r level read due to oth	represent dings have her factors	Plate	No.: 3-4					

				TEST P	IT LOG								
GZN	MTA, a Division of GZA GeoEnvironmental, Inc Engineers and Scientists East Ridge Development Prop. Quick Chek Food Store and Restaurant West Windsor, NJ EXPLORATION NO. SHEET: 1 of PROJECT NO: 26.0 REVIEWED BY: Col Logged By: Nick Pytlowany Contractor: Heritage Test Pit Location: See Plan Final Test Pit Depth (ft.): Date Start - Finish: 7/26/												
Logge	d By: Nick F	Pytlowany		Test Pit Location: Se	ee Plan	Fina	I Test Pit	Depth (ft.): 12					
Opera	tor: Herita	ige		Ground Surface Elev	/. (ft.): 92	Date	e Start - Fi	nish: 7/26/2021	- 7/26/2	2021			
Туре	of Excavator:	Track Excav	ator				Groundwa	ter Depth (ft.)					
Frcav	ator Model	CAT 308			Date 7/26/21	1	Time	Water Dep	oth	Stab.Ti	me		
LXCav		041 000			1120/21			3.5					
Depth (ft)	Sample No.	Sample Depth (ft.)	Stratum Depth (in.)	Samp	ble Description and	d Identifi	cation	1	Depth (ft)	Water Content (%)	Remark		
1	- - - - S1 T1	1	0-7	Topsoil - Brown (10YR granular, slightly moist	R, 5/3) sandy loa , loose, abrupt s	im, moo smooth	lerate me boundar	edium y, common					
2	01,11		7-27	Yellowish brown (10YF blocky, slightly moist, f	R, 5/4) clay, moo riable, clear sm	derate r ooth bo	nedium s oundary	ubangular	 				
			27.32	Yellowish brown (10YF	R, 5/8) loamy sa	nd, 10%	% gravel,	moderate					
3	3 - coarse granular, slightly moist, loose, abrupt smooth boundary Pale brown (10YR, 6/3) sandy loam, moderate medium granular												
4	4 5 5 5 4 Pale brown (10YR, 6/3) sandy loam, moderate medium granular moist, friable, clear smooth boundary, common medium promine light gray (10YR, 7/1) and strong brown (7.5YR, 4/6) mottles encountered from 32 inches to 105 inches												
5		5_											
6			32-105						6_				
7									7 _				
8									8_				
9				Strong brown (7.5YR, loose	4/6) sandy loam	n, stronę	g coarse	granular, wet,	9_				
10	S3, T3	10	105-144						10 _				
11	- - -								11 _				
12	- - - - -			End of exploration at 1 Moderate groundwater Soil mottling observed	2 feet. seepage encou @ 32"	untered	@ 9.5'		12				
14													
15													
ST PIT USDA; 8/30/2021; : REMARKS													
See L approx been r than th	og Key for imate bound nade at the t ose present	exploration of aries between s imes and unde at the times the	sample de soil and bedr the conditi measureme	escription and identification of the secription and identification of the secret secret and the secret secret and the secret a	on procedures. S ns may be gradua f groundwater ma	Stratificat al. Water ay occur	tion lines level read due to oth	represent dings have her factors	Plate	No.: 3-5			

				TEST P	PIT LOG							
GZN	MTA, a GeoEn Engineers	a Division of vironmenta s and Scientists	f GZA I, Inc	East Ridge I Prop. Quick Chek Foo West Win	Development d Store and Resta ndsor, NJ	aurant	EXPLOR SHEET: PROJEC REVIEW	ATION NO.: TH 1 of 1 T NO: 26.00924 ED BY: Cory Ka	2-6 34.00 rinja			
Logg	ed By: Nick F	Pytlowany		Test Pit Location: Se	ee Plan	Fina	al Test Pit	Depth (ft.): 13				
Opera	ator: Chris	ige		Ground Surface Elev	/. (ft.): 94	Date	e Start - Fi	nish: 7/26/2021	- 7/26/	2021		
Туре	of Excavator	: Track Excav	ator				Groundwa	ter Depth (ft.)	-		-	
Exca	vator Model:	CAT 308			7/26/21		Ime	11	oth	Stab. I	me	
				1								
Depth (ft)	n Sample No.	Sample Depth (ft.)	Stratum Depth (in.)	Samp	ble Description and	d Identif	ication		Depth (ft)	Water Content (%)	Remark	
1			0-3	Topsoil - Brown (10YR granular, slightly moist medium roots	R, 6/3) sandy loa t, loose, abrupt s	im, moo smooth	derate me boundar	edium y, common	- - 1			
2	S1, T1	2	3-34	Yellowish brown (10YF blocky, slightly moist, f	R, 5/6) clay, moo firm, clear smoo	derate i th bour	medium s ndary	ubangular	2			
	3 _ Strong brown (7.5YR, 4/6) loam, 10% gravel, moderate medium											
3	3											
4	S2, T2		4 _									
5	ium granular	5										
6	5 S3, T3	6		slightly moist, friable, o 7/1) mottles encounter	common medium red from 93 inch	n prom es to 1	inent ligh 56 inches	t gray (10YR, S	6 _			
7									7_			
8									8_			
9			64-156						9_			
10									10 _			
11	S4, T4	11							11			
12									12 _			
13	-			End of exploration at 1	3 feet				13 -			
14				Moderate groundwater Soil mottling observed	r seepage encou @ 93"	unterec	l @ 11'					
2:41:55 15												
T PIT USDA; 8/30/2021; REMARKS												
See L approx been than th	_og Key for ximate bound made at the t hose present	exploration of aries between imes and unde at the times the	sample de soil and bedi er the conditi e measureme	escription and identification ock types. Actual transition ons stated. Fluctuations of ents were made.	on procedures. S ns may be gradua f groundwater ma	Stratifica al. Wate ay occur	tion lines r level read due to otl	represent dings have her factors	Plate	No.: 3-6		

				TEST P	IT LOG								
GZN	MTA, a I GeoEnvin Engineers an	ATION NO.: TF 1 of 1 T NO: 26.00924: ED BY: Cory Ka	9-7 34.00 rinja										
Logged I	By: Nick Pyt	owany		Test Pit Location: Se	ee Plan	Fina	l Test Pit	Depth (ft.): 13					
Operator	Chris			Ground Surface Elev	/. (ft.): 94	Date	e Start - Fi	nish: 7/26/2021	- 7/26/	2021			
Type of I	Excavator:	Frack Excava	ator				Groundwa	ter Depth (ft.)					
Excavato	or Model: (CAT 308			Date 7/26/21	1	ime	13	th	Stab.Ti	ime		
Depth (ft)	Sample No.	Sample Depth (ft.)	Stratum Depth (in.)	Samp	ble Description and	d Identifi	cation	1	Depth (ft)	Water Content (%)	Remark		
- - 1			0-13	Topsoil - Brown (10YR blocky, slightly moist, f medium roots	k, 5/3) silt loam, friable, clear smo	modera ooth bo	ate mediu oundary, o	ım subangular common	 1				
2	S1, T1	2	13-35	Yellowish brown (10YF coarse granular, friable	(ellowish brown (10YR, 5/6) sandy loam, 40% gravel, mo coarse granular, friable, clear smooth boundary (ellowish brown (10YR, 5/6) sandy loam, 40% gravel, mo								
3	S2, T2	moderate ooundary, ttles	3	8.8									
5_			35-80	encountered from 35 in		5 -							
6				Light brownish grav (1	NVR 6/2) sandy	loam	moderate	medium	6 -				
8 -	S3, T3	8		granular, moist, friable	, 0,2) Janay	iouni,	modoruk	moann	8				
9 -									9				
10 _			80-156						10 _ - - 11 -				
12 _									12				
13	S4	13							13 -				
14 _				End of exploration at 1 Moderate groundwater Soil mottling observed	3 feet. seepage encou @ 35"	untered	@ 13'						
15													
T PIT USDA; 8/30/2021; REMARKS													
See Log approxima been mad than thos	Key for ex ate boundarie de at the time e present at t	ploration of es between s es and unde he times the	sample de soil and bedr the conditi measureme	escription and identification ock types. Actual transition ons stated. Fluctuations of ents were made.	on procedures. S ns may be gradua f groundwater ma	stratificat I. Water y occur	tion lines level read due to ot	represent dings have her factors	Plate	No.: 3-7			

				TEST P	PIT LOG								
GZN	MTA, a E GeoEnvir Engineers an	Division of conmental of Scientists	EXPLOR/ SHEET: PROJEC ⁻ REVIEWE	ATION NO.: TH 1 of 1 F NO: 26.00924 ED BY: Cory Ka	⊃_8 34.00 rinja								
Logged I	By: Nick Pytl	owany		Test Pit Location: Se	ee Plan	Fina	al Test Pit I	Depth (ft.): 13					
Operator	Chris			Ground Surface Elev	/. (ft.): 94	Dat	e Start - Fii	nish: 7/27/2021	- 7/27/	2021			
Type of I	Excavator:	rack Excava	ator		Data		Groundwa	ter Depth (ft.)	41.	Stab Ti	Ima		
Excavato	or Model: (CAT 308			7/27/21		TITLE	10.5		Stab. II	me		
Depth (ft)	Sample No.	Sample Depth (ft.)	Stratum Depth (in.)	Samp	ble Description and	d Identii	fication		Depth (ft)	Water Content (%)	Remark		
- - 1			0-12	Topsoil - Brown (10YF moderate medium gra boundary, common fin	₨, 5/3) sandy loa nular, slightly mo e roots	m, 20% pist, lo	% gravel, ose, abru∣	10% cobbles, ot smooth	1_				
2	S1, T1	2.5	12-54	Light yellowish brown subangular blocky, slig common medium disti (10YR, 7/1) mottles er	medium boundary, id light gray inches	2							
5	S2, T2	5.5	53-75	Yellowish brown (10YF blocky, slightly moist, f medium distinct light g inches to 75 inches	subangular common ered from 53	5							
7	S3, T3	6.5	75-156	Yellowish brown (10YF medium granular, sligh gray (10YR, 7/1) motth - (wet) End of exploration at 1 Moderate groundwate	medium distinct light gray (10YR, 7/1) mottles encountered from 8 inches to 75 inches Yellowish brown (10YR, 6/8) loamy sand, 15% gravel, moderate medium granular, slightly moist, loose, common fine distinct light gray (10YR, 7/1) mottles encountered from 75 inches to 156 inch - (wet) End of exploration at 13 feet.								
				Soil mottling observed Note: Sidewalls collap	@ 12"								
See Log approxim been mat than thos	Key for ex ate boundarie de at the time e present at t	ploration of s between s es and unde he times the	sample de soil and bedr r the conditi	escription and identificatio ock types. Actual transitio ons stated. Fluctuations o ents were made.	on procedures. S ns may be gradua f groundwater ma	tratifica I. Wate y occur	tion lines r level reac due to oth	represent lings have ler factors	Plate	No.: 3-8			

					TEST P	PIT LOG									
G	MTA, a Division of GZA GeoEnvironmental, Inc Engineers and Scientists East Ridge Development Prop. Quick Chek Food Store and Restaurant West Windsor, NJ EXPLORATION NO.: The SHEET: 1 of 1 PROJECT NO: 26.00924 REVIEWED BY: Cory Kate Logged By: Nick Pytlowany Contractor: Heritage Test Pit Location: See Plan Final Test Pit Depth (ft.): 13 Ground Surface Eley. (ft.): 94 Date Start - Finish: 7/27/2021														
Log	gged E	By: Nick Pytl	owany		Test Pit Location: Se	ee Plan	Fina	al Test Pit	Depth (ft.): 13						
Op	erator	br: Heritage : Chris			Ground Surface Elev	/. (ft.): 94	Dat	e Start - Fi	nish: 7/27/2021	- 7/27/	2021				
Тур	be of E	Excavator:	Frack Excava	ator				Groundwa	ter Depth (ft.)						
Ev		Model: (00¢ TAT			Date		Time	Water Dep	th	Stab.Ti	ime			
	avalu	i wouer.	JAT 300			//2//21			10.5						
Dej (f	pth t)	Sample No.	Sample Depth (ft.)	Stratum Depth (in.)	Samp	ble Description and	l Identii	fication		Depth (ft)	Water Content (%)	Remark			
	- - 1			0-12	Topsoil - Brown (10YR granular, slightly moist fine roots	R, 5/3) sandy loai t, loose, abrupt s	m, 15% mooth	% gravel, boundar	moderate fine y, common	1					
2 Brown (10YR, 5/3) silty clay loam, moderate medium subangular blocky, slightly moist, friable, diffuse smooth boundary, common medium distinct light gray (10YR, 7/1) and yellowish brown (10YR, 5/8) mottles encountered from 12 inches to 65 inches 3 S1, T1 3 4 12-65															
	3 S1, T1 3 4 5 12-65 5 Yellowish brown (10YR, 5/6) sandy loam, 20% gravel, strong coarse														
	6 7 8	S2, T2	6		Yellowish brown (10YF granular, slightly moist gray (10YR, 7/1) and s encountered from 65 in	ellowish brown (10YR, 5/6) sandy loam, 20% gravel, strong coarse ranular, slightly moist, loose, common medium prominent light ray (10YR, 7/1) and strong brown (7.5YR, 4/6) mottles ncountered from 65 inches to 156 inches									
	9			65-156	- (wet)					9 10 11					
	12 -									12					
Σ	13 <u>-</u> 14 <u>-</u>				End of exploration at 1 Moderate groundwater Soil mottling observed	3 feet. r seepage encou @ 12"	Intered	d @ 10.5'		15_					
2:47:56	15				Note: Sidewalls collap	osing below 8'									
3B - MTA TEST PIT USDA; 8/30/2021; ethage S add as REMARKS	e Log roxima n mac n those	Key for ex ate boundarie le at the time e present at t	ploration of es between s es and unde he times the	sample de soil and bedr r the conditi measureme	escription and identificatio ock types. Actual transitio ons stated. Fluctuations o ents were made.	on procedures. S ns may be gradua f groundwater ma	tratifica I. Wate y occur	tion lines r level reac due to oth	represent lings have her factors	Plate	No.: 3-9)			

				TEST P	PIT LOG						
GZN	MTA, a I GeoEnvin Engineers an	Division of conmental and Scientists	f GZA I, Inc	East Ridge Prop. Quick Chek Foo West Wi	Development d Store and Resta ndsor, NJ	aurant	EXPLOR SHEET: PROJEC REVIEWE	ATION NO.: T 1 of 1 T NO: 26.00924 ED BY: Cory K	P-10 134.00 arinja		
Logged	By: Nick Pytl	owany		Test Pit Location: Se	ee Plan	Fina	I Test Pit	Depth (ft.): 13			
Contrac Operato	tor: Heritage r: Chris			Ground Surface Elev	/. (ft.): 94	Date	e Start - Fi	nish: 7/27/202 ⁻	- 7/27/2	2021	
Type of	Excavator:	Frack Excava	ator				Groundwa	ter Depth (ft.)			
Execut	or Model: (00¢ TAC			Date	1	Fime	Water De	oth	Stab.Ti	ime
Excaval	or model.	JAT 300			1/2//21			9.5			
Depth (ft)	Sample No.	Sample Depth (ft.)	Stratum Depth (in.)	Samp	ble Description and	d Identif	ication	1	Depth (ft)	Water Content (%)	Remark
1				Fill - Light yellowish br weak fine granular, slig common medium roots	own (10YR, 6/4) ghtly moist, friab s) sandy lle, abr	loam, 10 upt smoo	% gravel, th boundary,	1		
3 _		3 -									
5 - - - - - - - - - -	S2, T2	6		Strong brown (7.5YR, granular, moist, loose, prominent light gray (1	4/6) loam, 20% clear smooth bo 0YR, 7/1) mottle	gravel, oundar	moderate y, commo	e coarse on coarse from 64	5		
7 7 8			64-105	inches to 105 inches					7 _ 7 _ 8 _ 8 _		
9	S3, T3	10		Light brownish gray (1 coarse granular, wet, I 7/1) and strong brown inches to 156 inches	0YR, 6/2) loamy oose, many coa (7.5YR, 4/6) mo	v sand, rse dis ottles ei	20% grav tinct light ncountere	vel, strong gray (10YR, ed from 105	9		
11			105-156						11 _		
End of exploration at 13 feet. 14 14 15 15 15 15 16 17 16 17 18 19 19 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10											
REMARKS	Key for a	nloration of	sample de	scription and identification	n proceduras S	Stratifico	tion lines	renresent	Dist		
approxim been ma g than those	de at the time se present at t	es between s es and unde he times the	soil and bedr the condition measurement	ock types. Actual transitio ons stated. Fluctuations o ents were made.	ns may be gradua f groundwater ma	l. Water y occur	r level read due to oth	lings have her factors	riate l	NO.: 3-10	J

					TEST P	PIT LOG							
	GZN	MTA, a E GeoEnvin Engineers ar	Division of conmental ad Scientists	GZA , Inc	East Ridge Prop. Quick Chek Foo West Wi	Development d Store and Resta ndsor, NJ	urant	EXPLOR/ SHEET: PROJECT REVIEWE	ATION NO.: TF 1 of 1 T NO: 26.00924 ED BY: Cory Ka	P-11 34.00 rinja			
	Logged I	By: Nick Pytl	owany		Test Pit Location: Se	ee Plan	Fina	I Test Pit I	Depth (ft.): 13				
	Contract Operator	or: Heritage : Chris			Ground Surface Elev	/. (ft.): 94.5	Date	Start - Fir	n ish: 7/27/2021	- 7/27/	2021		
	Type of E	Excavator:	Frack Excava	ator			(Groundwa	ter Depth (ft.)				
						Date	Т	ïme	Water Dep	th	Stab.T	ime	
	Excavato	or woder:	JAT 308			//2//21							
	Depth (ft)	Sample No.	Sample Depth (ft.)	Stratum Depth (in.)	Samp	ble Description and	d Identifi	cation		Depth (ft)	Water Content (%)	Remark	
	- - 1 - -				Fill - Brown (10YR, 5/3 moderate medium sub smooth boundary, con	B) sandy clay loa sangular blocky, smon medium ro	m, 20% slightly oots	ő gravel, moist, fri	10% cobbles, iable, clear	1			
	2									2			
	3 _		3										
	4 _		4										
	5 -		5_										
	6 7	S2, T2	6.5	70-98	Brown (10YR, 5/3) loa slightly moist, friable, o distinct light gray (10Y encountered from 70 i	m, 10% gravel, ı clear smooth bou R, 7/1) and stror nches to 98 inch	modera undary, ng brow ues	ite mediu common /n (7.5YR	m granular, 1 medium 8, 4/6) mottles	6 7			
	8 _									8_			
	9	S3, T3	9		Yellowish brown (10YF medium granular, wet, (10YR, 7/1) mottled er	R, 5/6) sandy loa loose, common ncountered 98 in	am, 10% mediu ches to	6 gravel, m distinc 156 inch	moderate t light gray nes	9			
	10 _			00.450						10 _			
	11 _			98-156						11			
	12 -									12 _			
W	13												
::47:57 P	Note: Sidewalls caving below 10'												
1TA TEST PIT USDA; 8/30/2021; 2	See Log Key for exploration of sample description and identification procedures. Stratification lines represent approximate boundaries between soil and bedrock types. Actual transitions may be gradual. Water level readings have Plate No.: 3-11												
3B - N	been mad than thos	te at the time e present at t	es and unde he times the	r the condition measurements	ons stated. Fluctuations o ents were made.	f groundwater mag	y occur	due to oth	ner factors				

				TEST P	IT LOG						
GZN	MTA, a l GeoEnvi Engineers a	Division of ronmental nd Scientists	f GZA I, Inc	East Ridge I Prop. Quick Chek Foo West Wi	Development d Store and Resta ndsor, NJ	aurant	EXPLOR SHEET: PROJEC REVIEW	ATION NO.: 1 of 1 T NO: 26.0092 ED BY: Cory k	TP-12 2434.00 Karinja		
Logged	By: Nick Pyt	lowany		Test Pit Location: Se	ee Plan	Fina	al Test Pit	Depth (ft.): 13			
Contrac Operato	tor: Heritage r: Chris	•		Ground Surface Elev	/. (ft.): 94	Dat	e Start - Fi	nish: 7/27/202	1 - 7/27/	2021	
Type of	Excavator:	Track Excava	ator				Groundwa	iter Depth (ft.)			
		•• • • • • • • • • •			Date		Time	Water De	epth	Stab.T	ime
Excavat	or Model:	CAT 308			//2//21			11			
Depth (ft)	Sample No.	Sample Depth (ft.)	Stratum Depth (in.)	Samp	ble Description and	d Identii	fication	1	Depth (ft)	Water Content (%)	Remark
- - - 1			0-12	Topsoil - Brown (10YR moist, loose, clear smo	R, 5/3) sandy loa both boundary, c	im, wea commo	ak mediur on mediun	n granular, n roots	1		
2				Yellowish brown (10YF blocky, slightly moist, f medium distinct light g	R, 5/6) clay, moo friable, clear sm ray (10YR, 7/1)	derate ooth bo mottle	medium s oundary, o s encount	ubangular common ered from 21	2_		
3 -	S1, T1	3		inches to 78 inches		3_					
4 _			12-78					4			
5_						5_					
6				Brown (10YR 5/3) sar	udy loam 15% o	ravel	moderate	medium	6		
7 _ - 8 _ -	S2, T2	7.5		subangular blocky, mc medium distinct light g 4/6) mottles encounter	nist, friable, clear ray (10YR, 7/1) red from 78 inch	r smoo and st les to 1	th bounda rong brow 30 inches	ary, common n (7.5YR,	7 _ 8	9.3	
9 -			78-130						9		
10 _									10		
	S3, T3	11	100 150	Yellowish brown (10YF granular, wet, friable	R, 5/8) sandy loa	am, mo	oderate m	edium			
13			130-156						13		
				End of exploration at 1 Moderate groundwater Soil mottling observed	3 feet. seepage encou @ 21"	unterec	1@11'				
15											
REMARKS											
See Log approxim been ma than thos	g Key for ex nate boundari ide at the tim se present at	xploration of es between s es and unde the times the	sample des soil and bedro r the condition measureme	scription and identification ock types. Actual transition ons stated. Fluctuations on ts were made.	on procedures. S ns may be gradua f groundwater ma	Stratifica al. Wate ay occur	tion lines r level read due to otl	represent lings have her factors	Plate I	No.: 3-12	2

				TEST P	PIT LOG						
GZN	MTA, a I GeoEnvin Engineers an	Division of conmental ad Scientists	f GZA I, Inc	East Ridge I Prop. Quick Chek Foo West Win	Development d Store and Resta ndsor, NJ	aurant	EXPLOR/ SHEET: PROJEC ¹ REVIEWE	ATION NO.: TH 1 of 1 F NO: 26.00924 ED BY: Cory Ka	P-13 34.00 Irinja		
Logged	By: Nick Pyt	owany		Test Pit Location: Se	ee Plan	Final	Test Pit I	Depth (ft.): 13			
Operato	r: Chris			Ground Surface Elev	/. (ft.): 94	Date	Start - Fir	nish: 7/27/2021	- 7/27/	2021	
Type of	Excavator:	Frack Excava	ator			G	Groundwa	ter Depth (ft.)			
Executet	or Model: (00¢ TAT			Date	Ti	ime	Water Dep	oth	Stab.Ti	ime
Excaval		JAT 300			//2//21						
Depth (ft)	Sample No.	Sample Depth (ft.)	Stratum Depth (in.)	Samp	ble Description and	d Identific	cation		Depth (ft)	Water Content (%)	Remark
			0-26	Topsoil - Brown (10YR medium crumb, moist, medium roots	R, 5/3) sandy loai friable, abrupt s	m, 10% smooth t	gravel, i boundary	moderate /, common	1		
	S1, T1	3	26.68	Yellowish brown (10YF blocky, slightly moist, 1 medium prominent ligh 26 inches to 68 inches	R, 5/4) clay, mod firm, clear smoot nt gray (10YR, 7/ ;	ubangular nmon untered from	2				
5 -			20-00	Light brownish grav (1	vel moderate	5_					
7	S2, T2	6.5	68-105	medium granular, mois	st, loose, clear s	mooth b	boundary	, ,	7 _		
9 _ - 10 _ -	S3, T3	9.5		Yellowish red (5YR, 4/ granular, moist, loose, (10YR, 6/2) mottles fro	6) sandy loam, 3 common mediu om 132 inches to	35% gra ım distin o 156 ind	ivel, moc ict light b ches	lerate coarse prownish gray	9 -		
11			105-156						11		
Md 89:24				End of exploration at 1 Moderate groundwater Soil mottling observed	3 feet. r seepage encou @ 26"	untered	@ 11'		10		
		· 							•		
See Log approxim been ma than thos	Key for ex ate boundarie de at the time e present at t	ploration of es between s es and unde he times the	sample de soil and bedr r the condition measureme	scription and identificatic ock types. Actual transitio ons stated. Fluctuations o ents were made.	on procedures. S ns may be gradua f groundwater ma	Stratificati II. Water IV occur o	on lines level reac due to oth	represent lings have her factors	Plate I	No.: 3-13	3

						TEST P	IT LOG									
	GZ	MTA, GeoEn Enginee	a Di nvirc	vision of onmental Scientists	GZA , Inc	East Ridge I Prop. Quick Chek Foo West Win	Development d Store and Resta ndsor, NJ	iurant	EXPLORA SHEET: PROJEC REVIEWE	ATION NO.: TF 1 of 1 T NO: 26.00924: ED BY: Cory Ka	P-14 34.00 rinja					
	Logge	d By: Nick	Pytlo	wany		Test Pit Location: Se	ee Plan	Fina	al Test Pit	Depth (ft.): 13						
	Contra Operat	t or: Herri	tage s			Ground Surface Elev	v. (ft.) : 94	Dat	e Start - Fi	n ish: 7/27/2021	- 7/27/	2021				
	Туре с	of Excavato	or: Tr	ack Excava	ator				Groundwa	ter Depth (ft.)						
	Execut	ator Model		AT 200			Date		Time	Water Dep	th	Stab.Ti	ime			
	Excave		. 0/	41 300			1121121			11.5						
	Depth (ft)	Samp No.	le	Sample Depth (ft.)	Stratum Depth (in.)	Samp	ble Description and	d Identii	fication	1	Depth (ft)	Water Content (%)	Remark			
	1	-			0-12	Topsoil - Brown (10YR granular, moist, loose, roots	l, 5/3) sandy loa clear smooth bo	m, mo oundar	derate me y, commo	edium on medium	1					
	2		1	3	12-58	Yellowish brown (10YF subangular blocky, slig common medium distii from 17 inches to 58 ir	Yellowish brown (10YR, 5/4) silty clay loam, strong coarse subangular blocky, slightly moist, firm, clear smooth boundary, common medium distinct light gray (10YR, 7/1) mottles encountered rom 17 inches to 58 inches 3 4									
	4							4								
	6	S2, T	2	6	58-92	Strong brown (7.5YR, moist, loose, clear smo	4/6) loamy sand both boundary	, mode	erate coar	se granular,	6					
	7					Brownish vellow (10)	C/C) condu loo	motr		o gropulor	7 -					
	9		3	9		moist, loose, common strong brown (7.5YR, 4 156 inches	medium distinct 4/6) mottles enco	in, sud ight g ounter	gray (10YF ed from 9	e granular, R, 7/1) and 2 inches to	0 9 9					
	10				92-156						10 _					
	11	-									11 _					
	12	-									12 _					
	13	-				Find of overlage tion of 1	2 fact				13 -					
PM	14	-				Moderate groundwater Soil mottling observed	s reel. seepage encol @ 12"	Intered	d @ 11.5'							
2:47:58	15					Note: Sidewalls collap	osing below 10.5									
5T PIT USDA; 8/30/2021; . 1	REMARKS					·										
3B - MTA TES	See Lo approxi been m than the	og Key fo mate boun nade at the ose presen	r exp daries times t at th	loration of between s and unde e times the	sample de oil and bedr r the conditi measureme	escription and identification of the secription and identification of the secret secret and the secret secret and the secret a	on procedures. S ns may be gradua f groundwater ma	tratifica I. Wate y occur	ition lines r level read due to oth	represent dings have her factors	Plate I	No.: 3-14	1			

				TEST F	PIT LOG						
GZN	MTA, a l GeoEnvi Engineers a	Division of ronmenta nd Scientists	f GZA I, Inc	East Ridge Prop. Quick Chek Foo West Wi	Development d Store and Resta ndsor, NJ	urant	EXPLOR/ SHEET: PROJEC ⁻ REVIEWE	ATION NO.: TH 1 of 1 T NO: 26.00924 ED BY: Cory Ka	P-15 34.00 rinja		
Logged	By: Nick Pyt	llowany		Test Pit Location: S	ee Plan	Fina	al Test Pit I	Depth (ft.): 13			
Contract Operato	tor: Heritage r: Chris	9		Ground Surface Elev	/. (ft.): 94	Dat	e Start - Fii	nish: 7/27/2021	- 7/27/	2021	
Type of	Excavator:	Track Excava	ator				Groundwa	ter Depth (ft.)			
.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					Date		Time	Water Dep	th	Stab.T	ïme
Excavat	or Model:	CAT 308			7/27/21			11			
Depth (ft)	Sample No.	Sample Depth (ft.)	Stratum Depth (in.)	Sam	ble Description and	d Identi	fication		Depth (ft)	Water Content (%)	Remark
			0-7	Topsoil - Brown (10YF	R, 5/3) sandy loa	m, mo	derate fine	e crumb, um roots	-		
1 _				Yellowish brown (10Yf	R, 5/4) clay loam	, mod	erate coar	se	1_		
-				subangular blocky, slig	ghtly moist, firm,	clear	smooth bo	oundary,	-		
2 _	s encountered	2 _									
-											
3 -	S1, T1	3	7-65						3_		
- - -											
· · ·											
5_									5		
-				Vollowish brown (10V	$P_{\rm b}$ (6) condu los	m m	dorato m	odium			
6 _				granular, moist, loose,	clear smooth bo	oundai	y Y	culuiti	6 _		
-	S2, T2	6.5							-		
7 -			65-98						7_		
-											
° -				Light brownish gray (1	OVP 6/2) sandy	loam	moderate	medium	- ° -		
9 -	S3 T3	9		granular, moist, loose,	many coarse pr	omine	nt strong	brown	9 -		
-	00, 10			(7.5YR, 4/6) mottles e	ncountered from	98 ind	ches to 15	6 inches	-		
10 _									10 _		
-			00.450						-		
11 _			98-156						11 _		
-									-		
12 _									12 _		
13 -									13 -		
				End of exploration at 1	3 feet.						
14 _				Moderate groundwate Soil mottling observed	r seepage encou @ 7"	untered	d@11'				
-				5	0						
15 -											
S											
IAR											
REN											
See Log approxim	y Key for ex nate boundari	xploration of es between s	sample de	scription and identification of the scription and identification of the scription of the sc	on procedures. S ns may be gradua	tratifica I. Wate	ation lines er level read	represent lings have	Plate I	No.: 3-1	5
been ma than thos	se present at	the times the	r the condition measureme	ons stated. Fluctuations o ents were made.	i groundwater ma	y occu	r aue to oth	ier factors			

				TEST P	IT LOG						
GZN	MTA, a GeoEnvi Engineers d	Division of ronmenta and Scientists	f GZA I, Inc	East Ridge I Prop. Quick Chek Foo West Wi	Development d Store and Resta ndsor, NJ	aurant	EXPLOR SHEET: PROJEC REVIEWI	ATION NO.: 1 of 1 T NO: 26.009 ED BY: Cory	TP-16 2434.00 Karinja		
Logged	By: Nick Py	tlowany		Test Pit Location: Se	ee Plan	Fin	al Test Pit	Depth (ft.): 12	2		
Operato	or: Chris	9		Ground Surface Elev	r. (ft.): 91.5	Dat	e Start - Fi	nish: 7/27/202	21 - 7/27/	2021	
Type of	Excavator:	Track Excave	ator				Groundwa	ater Depth (ft.)			
Excavat	tor Model:	CVT 308			Date		Time	Water D	epth	Stab.T	ime
LACAVA	tor would .	CAT 300			1121121			5			
Depth (ft)	Sample No.	Sample Depth (ft.)	Stratum Depth (in.)	Samp	ble Description and	d Identi	fication	1	Depth (ft)	Water Content (%)	Remark
-			0-2	2" Asphalt							
1_			2-15						1_		
2	S1, T1	1.5	15-27	Yellowish brown (10YF subangular blocky, mc Fill - Dark gray (10YR,	R, 5/6) sandy cla pist, friable, clear 4/1) clay, 45%	ay loan r smoo gravel	n, modera oth bounda , moderate	te medium ary e coarse	2		
3	S2, T2	3		Yellowish brown (10YF loose, clear smooth bo	R, 5/6) sand, sin oundary	ain, slighti	y moist,	3	4.1		
4	-		4 _								
5 6 7	S3, T3	6	62-104	Brownish yellow (10YF subangular blocky, slig common medium faint (7.5YR, 4/6) mottles en	te medium boundary, ig brown 94 inches	5 - 6 - 7 -					
8 9 10 11 12	S4, T4	10	104-144	Strong brown (7.5YR, medium granular, wet,	4/6) sandy loam friable	ı, 20%	gravel, m	oderate	8 - 9 - 10 - 11 - 12 -		
13 13 14 15											
See Log approxim been ma than those	g Key for e nate boundar ade at the tin se present at	xploration of ies between the times the	sample de soil and bedr r the conditi measureme	escription and identification rock types. Actual transition ons stated. Fluctuations o ents were made.	on procedures. S ns may be gradua f groundwater ma	Stratifica I. Wate y occu	ation lines er level read r due to ot	represent dings have her factors	Plate	No.: 3-10	6

				TEST P	PIT LOG						
GZN	MTA, a GeoEnvi Engineers d	Division of ironmental	f GZA I, Inc	East Ridge Prop. Quick Chek Foo West Wi	Development d Store and Resta ndsor, NJ	urant	EXPLOR SHEET: PROJEC REVIEWI	ATION NO.: 1 1 of 1 T NO: 26.0092 ED BY: Cory K	'P-17 434.00 arinja		
Logged	By: Nick Py	tlowany		Test Pit Location: So	ee Plan	Fin	al Test Pit	Depth (ft.): 12			
Operato	tor: Heritage r: Chris	e		Ground Surface Elev	/. (ft.): 94.5	Dat	e Start - Fi	nish: 7/28/202	1 - 7/28/	2021	
Type of	Excavator:	Track Excava	ator				Groundwa	ter Depth (ft.)			
Excavat	or Model:	CAT 308			Date		Time	Water De	pth	Stab.T	ime
Exouvat	or model.	0,11,000			1120121						
Depth (ft)	Sample No.	Sample Depth (ft.)	Stratum Depth (in.)	Samp	ble Description and	d Identi	fication		Depth (ft)	Water Content (%)	Remark
			0-16	Topsoil - Grayish brow medium crumb, slightl common medium roots	/n (10YR, 5/2) lo y moist, firm, ab s	am, 10 rupt sr	0% gravel nooth bou	, moderate Indary,	1_		
2	S1, T1	2	16-31	Fill - Yellowish brown (moderate medium gra boundary	(10YR, 5/8) sand nular, slightly mo	dy loar oist, fri	n, 10% gr able, abru	avel, ıpt smooth	2 -		
3	S2, T2	erate coarse oundary, rong brown	3_								
	S3, T3	5	46-90	Yellowish brown (10Yf medium granular, sligh common medium faint from 46 inches to 90 ir	R, 5/6) sandy loa ntly moist, firm, c light gray (10YF nches	moderate undary, ncountered	5 5 6				
7			90-144	Yellowish brown (10YF subangular blocky	R, 5/6) loam, 20 ⁰	% grav	rel, moder	ate medium	9 - 10 - 11 -		
12 <u>-</u> 13 <u>-</u> 14 <u>-</u> 15 -				End of exploration at 1 Groundwater seepage Soil mottling observed	2 feet. not encountere @ 31"	d			12 -		
See Log approvim	, Key for e	exploration of	sample de	escription and identificatio	on procedures. S	tratifica	ation lines	represent	Plate I	No.: 3-17	7
been ma than thos	de at the tin se present at	the times the	er the conditi e measureme	ons stated. Fluctuations o ents were made.	f groundwater ma	y occu	r due to otl	ner factors			

				TEST P	PIT LOG	,					
GZN	MTA, a I GeoEnvin Engineers an	Division of conmental ad Scientists	GZA , Inc	East Ridge I Prop. Quick Chek Foo West Wi	Development d Store and Resta ndsor, NJ	urant	EXPLOR SHEET: PROJEC REVIEWI	ATION NO.: T 1 of 1 T NO: 26.0092 ED BY: Cory K	'P-18 434.00 arinja		
Logged	By: Nick Pyt	owany		Test Pit Location: Se	ee Plan	Fina	al Test Pit	Depth (ft.): 12			
Operato	or: Chris			Ground Surface Elev	/. (ft.): 96	Date	e Start - Fi	nish: 7/28/202 ⁻	1 - 7/28/	2021	
Type of	Excavator:	Frack Excava	ator				Groundwa	ater Depth (ft.)			
Execute	tor Model: (00¢ TAT			Date	-	Time	Water De	pth	Stab.Ti	ime
Excava		JAT 300			1120/21			INC			
Depth (ft)	Sample No.	Sample Depth (ft.)	Stratum Depth (in.)	Samp	ble Description and	l Identif	ication		Depth (ft)	Water Content (%)	Remark
1	-		0-16	Topsoil - Dark gray (10 granular, slightly moist medium roots	DYR, 4/1) sandy t, friable, clear sr	loam, nooth	moderate boundary	e medium v, common	1		
2 _				Yellowish brown (10YF granular, slightly moist	R, 5/6) loam, 209 t, friable, clear sr	% grav nooth	el, moder boundary	ate coarse	2_		
3 _		3									
4 _							4				
5 _ 6 _	S2, T2	6		Yellowish brown (10YF medium granular, sligh	R, 5/6) sandy loa ntly moist, friable	moderate um faint light	- 5_ - 6				
7				gray (10YR, 7/1) and s encountered from 64 in	strong brown (7.5 nches to 144 inc	/6) mottle	s	7_			
8									8_		
9_			64-144						9_		
10	-								10		
12	-								11		
13 _				End of exploration at 1 Groundwater seepage Soil mottling observed	2 feet. not encountered @ 64"	d					
	-										
15	1										
ST PIT USDA; 8/30/20 REMARKS											
See Lo approxir been ma than tho	g Key for ex nate boundarie ade at the time se present at t	ploration of es between s es and unde he times the	sample de soil and bedr r the conditio measureme	scription and identification ock types. Actual transition ons stated. Fluctuations or ents were made.	on procedures. S ns may be gradua f groundwater ma	tratifica I. Wate y occur	tion lines r level read due to otl	represent dings have her factors	Plate I	No.: 3-18	3

				TEST P	PIT LOG								
GZN	MTA, a l GeoEnvi Engineers a	Division of ronmental	GZA , Inc	East Ridge Prop. Quick Chek Foo West Wi	Development d Store and Resta ndsor, NJ	iurant	EXPLORA SHEET: PROJEC REVIEWE	ATION NO.: T 1 of 1 T NO: 26.00924 ED BY: Cory K	'P-19 434.00 arinja				
Logged	By: Nick Pyt	lowany		Test Pit Location: Se	ee Plan	Fina	al Test Pit	Depth (ft.): 12					
Operate	or: Chris			Ground Surface Elev	/. (ft.) : 95	Date	e Start - Fi	nish: 7/28/202	1 - 7/28/:	2021			
Type of	Excavator:	Track Excava	ator				Groundwa	ter Depth (ft.)			-		
Excava	tor Model:	CAT 308			7/28/21		IIme	NE	pth	Stab. I	ime		
Depth (ft)	Sample No.	Sample Depth (ft.)	Stratum Depth (in.)	Samp	ble Description and	d Identif	ication	1	Depth (ft)	Water Content (%)	Remark		
			0-2	2" Asphalt Dark grav (10YR, 4/1)	sandy loam, 45°	% grav	el moder	ate medium					
1_	S1, T1	1.5	2-18	granular, slightly moist	t, firm, abrupt sm	nooth b	oundary		1_	12.3			
2 _	- - - - - -		18-34	Yellowish brown (10YF moderate coarse suba smooth boundary	R, 5/8) sandy cla Ingular blocky, s	iy loam lightly	n, 10% gra moist, firn	avel, n, clear	2 _				
3	-	moderate undary	3 -										
4 _		4 _											
5 _	- - - - -					5_							
6 _	-			Light yellowish brown moderate coarse gran	Light yellowish brown (10YR, 6/4) sandy loam, 10% gravel, moderate coarse granular, moist, friable, common medium of								
7	S3, T3	7		light gray (10YR, 7/1) i inches	mottles encounte	ered fro	om 70 inc	hes to 144	7 -				
8_	-								8_				
9 _	-		70-144						9_				
10 _	-								10 _				
11 _	-								11 _				
12	-								12 -				
13 _	-			End of exploration at 1 Groundwater seepage Soil mottling observed	2 feet. not encountered @ 70"	d							
≥ 14													
d 00.35:48:00 d	-												
ST PIT USDA; 8/30/2021; REMARKS													
See Lo approxir been m than tho	g Key for ex nate boundari ade at the tim se present at	xploration of es between s es and unde the times the	sample de soil and bedr r the conditi measureme	escription and identification of types. Actual transition ons stated. Fluctuations of ents were made.	on procedures. S ns may be gradua f groundwater ma	tratifica I. Wate y occur	tion lines r level read due to oth	represent lings have her factors	Plate I	No.: 3-19	Ð		

			TEST PIT LOG East Ridge Development Trail, Inc. EXPLORATION NO: TP-20 SHEET: 1 of 1 Prop. Quick Check Food Store and Restaurant West Windsor, N EXPLORATION NO: TP-20 SHEET: 1 of 1 Prop. Quick Check Food Store and Restaurant Reviewed Data (Check Food Store and Restaurant) Reviewed Data (Check Food Store and Reviewed Check (Check Food Store (Ch								
GZN	MTA, a I GeoEnvin Engineers ar	Division of conmenta and Scientists	f GZA I, Inc	East Ridge I Prop. Quick Chek Foo West Win	Development d Store and Resta ndsor, NJ	urant	EXPLOR SHEET: PROJEC REVIEW	ATION NO.: T 1 of 1 T NO: 26.00924 ED BY: Cory Ka	P-20 134.00 arinja		
Logged	By: Nick Pytl	owany		Test Pit Location: Se	ee Plan	Fina	al Test Pit	Depth (ft.): 12			
Operato	r: Chris			Ground Surface Elev	/. (ft.): 95.5	Date	e Start - Fi	inish: 7/28/2021	- 7/28/	2021	
Type of	Excavator:	Frack Excav	ator				Groundwa	ater Depth (ft.)			
Excavat	or Model: (CAT 308			Date		Time	Water De	oth	Stab.T	ime
Excavat		5A1 500			1120/21			12			
Depth (ft)	Sample No.	Sample Depth (ft.)	Stratum Depth (in.)	Samp	ble Description and	d Identif	fication		Depth (ft)	Water Content (%)	Remark
- - 1			0-12	Topsoil - Brown (10YR medium crumb, slightly common coarse roots	R, 5/3) sandy loa y moist, loose, c	m, 5% lear sn	gravel, n nooth boi	noderate undary,	1_		
-				Yellowish brown (10YF	R, 5/6) clay, mod	lerate	coarse su	ubangular	1 =		
2 _	S1, T1	2		DIOCKY, Slightly moist, f	irm, clear smoo	tn doui	ndary		2 _		
			12-44	GZA Inc Prop. Quick Chek Food Store and Restaurant West Windsor, NJ EXPLORATION NO. PROJECT NO: 26.0 REVIEWED BY: Co. Test Pit Location: See Plan Final Test Pit Depth (ft.): Ground Surface Elev. (ft.): 95.5 Date Start - Finish: 7/28/ and the start - Finish: 7/28/ Date Start - Finish: 7/28/ Time or Groundwater Depth / Date Time Wate 0-12 Topsoil - Brown (10YR, 5/3) sandy loam, 5% gravel, moderate medium crumb, slightly moist, loose, clear smooth boundary, common coarse roots Yellowish brown (10YR, 5/6) clay, moderate coarse subangular blocky, slightly moist, loose, clear smooth boundary, common medium faint light gray (10YR, 7/1) mottles encountere from 96 inches to 130 inches 44-130 End of exploration at 12 feet. Slight groundwater seepage encountered @ 12' Soil mottling observed @ 96'' sample description and identification procedures. Stratification lines represent the conditions stated. Fluctuations of groundwater may occur due to other factors heasurements were made.		3 -					
4	S2. T2	4.5	GZA Inc Prop. Quick Check Food Store and Restaurant West Windsor, NJ EXPLORATION NO.: PROJECT NO: 26:092333.00 REVEWED BY: Corp Karniga Test Pit Location: See Plan Final Test Pit Dopth (ft.): 12 Ground Surface Elev. (ft.): 95.5 Date Start - Finish: 7/28/2021 - 7/28/2021 or Ground Surface Elev. (ft.): 95.5 Date Start - Finish: 7/28/2021 - 7/28/2021 or Ground Surface Elev. (ft.): 95.5 Date Start - Finish: 7/28/2021 - 7/28/2021 Statum (nt.) Sample Description and Identification Depth (ft.) Water Depth (ft.) 0-12 Topsoil - Brown (10YR, 5/3) sandy loam, 5% gravel, moderate medium crumb, slightly moist, loose, clear smooth boundary, common coarse roots 1 Vellowish brown (10YR, 5/6) clay, moderate coarse subangular blocky, slightly moist, firm, clear smooth boundary, common medium faint light gray (10YR, 7/1) mottles encountered from 96 inches to 130 inches 6 44-130 Brownish yellow (10YR, 6/6) sandy loam, moderate medium granular, wet, fiable 11 130-144 Brownish yellow (10YR, 6/6) sandy loam, moderate medium granular, wet, fiable 12 Sight groundwater seepage encountered @ 12' Soil mottling observed @ 96' 12 Sight groundwater seepage encountered @ 12' Soil mottling observed @ 96' 12								
5_	,			common medium faint from 96 inches to 130	Ridge Development ex Food Store and Restaurant est Windsor, NJ EXPLORATION NO.: TP-20 SHEET: 1 of 1 PROJECT NO: 26:0092434.00 REVIEWED BY: Cory Karinja ion: See Plan Final Test Pit Depth (ft.): 12 ce Elev. (ft.): 95.5 Date Start - Finish: 7/28/2021 - 7/28/2021 Image: Correct Start (ft.): 95.5 Date Start - Finish: 7/28/2021 - 7/28/2021 Image: Correct Start (ft.): 95.5 Date Start - Finish: 7/28/2021 - 7/28/2021 Image: Correct Start (ft.): 95.5 Date Start - Finish: 7/28/2021 - 7/28/2021 Image: Correct Start (ft.): 95.5 Date Start - Finish: 7/28/2021 - 7/28/2021 Image: Correct Start (ft.): 95.5 Date Start - Finish: 7/28/2021 - 7/28/2021 Sample Description and Identification Depth (ft.): 96.00 Image: Correct Start (ft.): 005.80, clear smooth boundary, roots 1 (10YR, 5/6) sandy loam, 10% gravel, moderate for start (ft.): 005.80, clear smooth boundary, in faint light gray (10YR, 7/1) mottles encountered on 130 inches 5 Image: Correct Stratification lines represent ansitions of groundwater May be gradual. Water level readings have light in the sepage encountered @ 12' enved @ 96'' 11 Image: Correct Rest Stratification lines represent correct Rest Read Rest Read Rest Read Rest Read Read Read Read Read Read Read Read						
6_							6_				
7 _			44-130			7_					
8 _									8		
9									9_		
10 _									10 _		
11 _	S3, T3	11	130-144	Brownish yellow (10YF granular, wet, friable	R, 6/6) sandy loa	am, mo	derate m	edium	11		
12 _				End of exploration at 1 Slight groundwater see	2 feet. epage encounte	red @	12'		12 -		
13 _				Soil mottling observed	@ 96"						
		<u> </u>	<u> </u>							<u> </u>	1
PIT USDA; 8/30/ REMARKS											
See Log approxim been ma than thos	Key for ex ate boundarie de at the time e present at t	ploration of es between es and unde he times the	sample de soil and bedre the condition measureme	scription and identification ock types. Actual transition ons stated. Fluctuations of onts were made.	on procedures. S ns may be gradua f groundwater ma	itratifica I. Wate y occur	tion lines r level rea due to ot	represent dings have her factors	Plate I	No.: 3-20)

					TEST P	PIT LOG						
C	GZN	MTA, a E GeoEnvir Engineers an	Division of conmental ad Scientists	f GZA I, Inc	East Ridge I Prop. Quick Chek Foo West Wi	Development d Store and Resta ndsor, NJ	urant	EXPLOR SHEET: PROJEC REVIEWI	ATION NO.: TF 1 of 1 T NO: 26.00924: ED BY: Cory Ka	2-21 34.00 rinja		
	Logged I	By: Nick Pytl	owany		Test Pit Location: Se	ee Plan	Fina	l Test Pit	Depth (ft.): 13			
	Contract Operator	or: Heritage : Chris			Ground Surface Elev	/. (ft.): 95	Date	Start - Fi	nish: 7/29/2021	- 7/29/	2021	
	Type of E	Excavator: 7	rack Excava	ator			(Groundwa	ter Depth (ft.)			
	-					Date	Т	ïme	Water Dep	th	Stab.T	ime
	Excavato	or woder:	JAT 308			7729/21			NE			
	Depth (ft)	Sample No.	Sample Depth (ft.)	Stratum Depth (in.)	Samp	ble Description and	d Identifi	cation		Depth (ft)	Water Content (%)	Remark
	- - 1			0-8	Topsoil - Very dark bro crumb, slightly moist, l medium roots	own (7.5YR, 2.5/ oose, clear smo	2) loan oth boι	n, modera Indary, c	ate fine ommon	- - - 1 _		
	-				Fill - Brown (10YR, 5/	3) sandy clay loa	am, 109	% gravel,	moderate	/ _ _		
	2	S1, T1	2		medium subangular bl	ocky, slightly mo	oist, firn	n, clear v	vavy boundary	2_		
	3 _			8-60						3_		
	4							4 _				
	5_				Yellowish brown (10YF	R, 5/6) sandy cla	avel,	5_				
	6	S2, T2	6		moderate medium sub boundary	lual smooth	6_					
	7 -			60-96						7_		
	8 -				Strong brown (7.5YR,	5/8) sandy loam	. 10% (gravel, st	rong fine	8_		
	9 -				crumb, moist, firm, few encountered from 96 in	r fine faint light g nches to 156 inc	ray (7. hes	5YR, 7/1) mottles	9		
	10	S3, T3	10							10 _		
	11 _			96-156						11 _		
	12 _									12 _		
	13 _				-					13		
5	- 14 _				End of exploration at 1 Groundwater seepage Soil mottling observed	3 feet. not encountered @ 96"	d					
2:48:01 PI	15											
TEST PIT USDA; 8/30/2021;	KEMAKKS							P				
3B - MTA	See Log approxima been mad than those	Key for ex ate boundarie de at the time e present at t	pioration of es between s es and unde he times the	sample de soil and bedr r the conditi measureme	escription and identification ock types. Actual transition ons stated. Fluctuations o ents were made.	on procedures. S ns may be gradua f groundwater ma	tratificat I. Water y occur	level read due to ot	represent dings have her factors	Plate I	No.: 3-2'	I

					TEST P	PIT LOG						
	GZN	MTA, a I GeoEnvin Engineers an	Division of ronmental nd Scientists	f GZA I, Inc	East Ridge I Prop. Quick Chek Foo West Win	Development d Store and Resta ndsor, NJ	iurant	EXPLOR SHEET: PROJEC REVIEW	ATION NO.: T 1 of 1 T NO: 26.00924 ED BY: Cory Ka	P-22 134.00 arinja		
	Logged	By: Nick Pyt	lowany		Test Pit Location: Se	ee Plan	Fina	al Test Pit	Depth (ft.): 13			
	Operat	or: Chris			Ground Surface Elev	/. (ft.): 95	Dat	e Start - Fi	i nish: 7/29/2021	- 7/29/	2021	
Ī	Type of	f Excavator:	Track Excava	ator				Groundwa	ater Depth (ft.)			
	Frcava	tor Model: (CAT 308			Date		Time	Water Dep	oth	Stab.T	ime
	LACUVO		5A1 500			1123121						
	Depth (ft)	Sample No.	Sample Depth (ft.)	Stratum Depth (in.)	Samp	ble Description and	d Identii	fication		Depth (ft)	Water Content (%)	Remark
		-		0-8	Topsoil - Very dark bro	own (7.5YR, 2.5/	2) loar	n, weak f	ine crumb,	-		
	1 _	-			Fill - Brown (10YR, 5/3	B) sandy clay loa	m, 10 ⁹	% gravel,	moderate	1_		
		-			medium subangular bl	ocky						
	2_	_ T1	2							2_		
	3	-		8-54						3 -		
	-	-								-		
	4 _									4 _		
	-	-			Yellowish brown (10YF	R, 5/6) loam, 109	% grav	el, weak	medium			
	5_	-			subangular blocky, slig	htly moist, firm,	clear	smooth b	oundary, few)		
	6 _	т2	6	54.00	90 inches		6_					
		-		54-90						-		
	7 _	-								7 _		
	8	-			Strong brown (7.5YR,	5/8) loamy sand	, 10%	gravel, m	noderate	8 -		
		-			medium crumb, moist, mottles encountered fr	firm, few fine fa om 90 inches to	int ligh 156 ir	it gray (7. nches	5YR, 7/1)			
	9 _	-								9 _		
		-										
	10 _	Т3	10	90-156						10 _		
	11	-								11 -		
	-	-								-		
	12 _	-								12 _		
	10	-								10 -		
	13 _				End of exploration at 1	3 feet.				13		
M	14 _	-			Groundwater seepage Soil mottling observed	0 not encountere	d					
48:01 P		-										
021; 2:4	15]										
8/30/2(KKS											
JSDA;	EMAF											
T PIT L	5											
3B - MTA TES	See Lo approxin been m than tho	ng Key for ex mate boundarie ade at the time ase present at t	ploration of es between s es and unde the times the	sample de soil and bed the conditi measureme	escription and identification rock types. Actual transition ons stated. Fluctuations of ents were made.	on procedures. S ns may be gradua f groundwater ma	tratifica I. Wate y occur	ition lines r level rea due to ot	represent dings have her factors	Plate I	No.: 3-22	2

				TEST F	PIT LOG								
GZN	MTA, a E GeoEnvin Engineers ar	Division of conmental and Scientists	f GZA I, Inc	East Ridge Prop. Quick Chek Foo West Wi	Development d Store and Resta ndsor, NJ	aurant	EXPLOR SHEET: PROJEC REVIEWI	ATION NO.: TF 1 of 1 T NO: 26.00924 ED BY: Cory Ka	P-23 34.00 rinja				
Logged I	By: Nick Pytl	owany		Test Pit Location: S	ee Plan	Fina	al Test Pit	Depth (ft.): 12					
Operator	Chris			Ground Surface Elev	/. (ft.): 95	Date	e Start - Fi	nish: 7/28/2021	- 7/28/	2021			
Type of I	Excavator:	rack Excava	ator				Groundwa	ater Depth (ft.)					
Excavato	or Model: (CAT 308			7/28/21		IIme	Water Dep NE	th	Stab. I	me		
Depth (ft)	Sample No.	Sample Depth (ft.)	Stratum Depth (in.)	Samı	le Description and	d Identif	ication		Depth (ft)	Water Content (%)	Remark		
- - 1			0-7	Topsoil - Brown (10YF medium granular, sligh common medium root	R, 5/3) sandy loa htly moist, loose s	m, 10% , clear	6 gravel, smooth b	moderate oundary,	1				
2	S1, T1	2	7-50	Brown (10YR, 5/3) cla slightly moist, friable, o	y loam, moderat clear smooth boi	te medi undary	ium suba , few fine	ngular blocky, roots	2_				
4				Yellowish brown (10Yf	ellowish brown (10YR, 5/6) loam, 30% gravel, moderate medium umb, slightly moist, firm, common medium distinct light gray 0YR_7/1) mottles encountered from 64 inches to 144 inches								
5	S2, T2	5		crumb, slightly moist, f (10YR, 7/1) mottles er	ght gray 4 inches	5_							
7									7				
8 9			50-144						8 9 -				
10									10				
11 _									11 				
13 _				End of exploration at 1 Groundwater seepage Soil mottling observed	2 feet. not encountere @ 64"	d							
14													
REMARKS	Key for a	nloration of	sample do	scription and identification	n procedures S	Stratifico	tion lines	represent					
approxim been mad than thos	ate boundarie de at the time e present at t	he times the	sample de soil and bedr r the conditi measureme	ock types. Actual transitio ons stated. Fluctuations o ents were made.	ns may be gradua f groundwater ma	al. Wate	r level read due to ot	dings have her factors	riate l	NO.: 3-23	5		

MTA, a Division of GZA GeoEnvironmental, Inc Engineers and Scientiss Prop. Quick Chek Food Store and Restaurant West Windsor, NJ EXPLORATION NO. : TP-24 SHET: 1 of 1 PROJECT NO. 26.0092434.00 ReviewED SY: Cory Karinja Logged By: Nick Pytlowany Contractor: Heritage Operator: Chris Test Pit Location: See Plan Final Test Pit Depth (ft.): 12 Type of Excavator: Track Excavator Ground Surface Elev. (ft.): 95 Date Start - Finish: 7/28/2021 - 7/28/2021 - 7/28/21 Type of Excavator: Track Excavator Groundwater Depth (ft.) Excavator Model: CAT 308 Topsoil - Brown (10YR, 5/3) sandy loam, moderate medium granular, slightly moist, lose, abrupt smooth boundary, common medium roots Vellowish brown (10YR, 5/6) clay, 5% gravel, moderate medium granular, slightly moist, friable, clear smooth boundary 4 -7 Yellowish brown (10YR, 5/8) loam, 10% gravel, moderate medium granular, moist, friable, clear smooth boundary, common medium g							T LOG	TEST P					
Logged By: Nick Pytlowany Contractor: Heritage Operator: Chris Test Pit Location: See Plan Final Test Pit Depth (ft.): 12 Type of Excavator: Track Excavator Ground Surface Elev. (ft.): 95 Date Start - Finish: 7/28/2021 - 7/28/2021 - 7/28/2021 Excavator Model: CAT 308 Ground Surface Elev. (ft.): 95 Date Start - Enish: 7/28/2021 - 7/28/2021 - 7/28/2021 Depth Sample Sample Depth (ft.) Stratum Depth (ft.) Sample Description and Identification Depth (ft.) Water Depth (ft.) Water Common (ft.) 1 0-7 Topsoil - Brown (10YR, 5/3) sandy loam, moderate medium granular, slightly moist, loose, abrupt smooth boundary, common medium roots 1 1 2 - - - Topsoil - Brown (10YR, 5/6) clay, 5% gravel, moderate medium subangular blocky, slightly moist, friable, clear smooth boundary 1 3 S1, T1 3 - - - 4 - - - - - 5 - - - - - - 1 - - - - - - 4 - - - - - - 5 - - <			'-24 34.00 rinja	ATION NO.: TP 1 of 1 T NO: 26.009243 ED BY: Cory Kar	EXPLOR/ SHEET: PROJECT REVIEWE	urant	evelopment Store and Rest dsor, NJ	st Ridge E Chek Food West Wir	Prop. Quic	f GZA I, Inc	ivision of onmental d Scientists	MTA, a E GeoEnvir Engineers an	GZN
Operator: Chris Ground Surface Elev. (ft.): 95 Date Start - Finish: 7/28/2021 - 7/28/2021 Type of Excavator: Track Excavator Groundwater Depth (ft.) Date Time Water Depth Start Excavator Model: CAT 308 Sample Depth Date Time Water Depth Start Depth Sample Sample Depth Depth Cart Topsoil - Brown (10YR, 5/3) sandy loam, moderate medium Met 1 0-7 Topsoil - Brown (10YR, 5/6) clay, 5% gravel, moderate medium 1 1 1 1 2				Depth (ft.): 12	al Test Pit I	Fina	e Plan	ation: Se	Test Pit I		owany	y: Nick Pytl	Logged E
Groundwater Depth (ft.) Date Time Water Depth Size Depth Sample Depth Depth Depth Sample Depth Size Depth Sample Depth Sample Depth Stratum Depth Sample Depth Control (10/R, 5/3) sandy loam, moderate medium granular, slightly moist, loose, abrupt smooth boundary, common medium roots 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 - 7/28/2021			nish: 7/28/2021	Ground Surface Elev. (ft.): 95 Date Start - Finish: 7/28/202						Chris	Operator	
Date Time Water Depth State Depth Sample Sample Stratum NE NE Depth Sample Depth Stratum Depth Sample Description and Identification Depth Water Depth				ter Depth (ft.)	Groundwa			-		ator	rack Excava	xcavator: 7	Type of E
Depth (ft) Sample No. Sample Depth (ft.) Stratum Depth (ft.) Sample Description and Identification Depth (ft.) Wat Cont (ft.) 1 0-7 Topsoil - Brown (10YR, 5/3) sandy loam, moderate medium granular, slightly moist, loose, abrupt smooth boundary, common medium roots 1 1 2	Time	Stab.T	<u>th</u>	Water Dept	Time	ר <u>ו</u>	Date 7/28/21	-			AT 308	Model: (Excavato
Depth (ft) Sample No. Sample Depth (ft.) Stratum Depth (ft.) Sample Description and Identification Depth (ft.) Wat Cont (ft.) 1													
1 0-7 Topsoil - Brown (10YR, 5/3) sandy loam, moderate medium granular, slightly moist, loose, abrupt smooth boundary, common medium roots 1 2	Remark	Water Content (%)	Depth (ft)		ication	d Identifi	e Description an	Samp		Stratum Depth (in.)	Sample Depth (ft.)	Sample No.	Depth (ft)
2 3 S1, T1 3 Yellowish brown (10YR, 5/6) clay, 5% gravel, moderate medium subangular blocky, slightly moist, friable, clear smooth boundary 2 3 S1, T1 3 7-75 4 5 6 4 5 6 6 7 5 6 6 7 S2, T2 7.5 Yellowish brown (10YR, 5/8) loam, 10% gravel, moderate medium granular, moist, friable, clear smooth boundary, common medium distinct light gray (10YR, 7/1) and strong brown (7.5YR, 4/6) mottles encountered from 75 inches to 137 inches 7			- - - 1	edium y, common	derate me boundary	m, moo smooth	5/3) sandy loa loose, abrupt	n (10YR tly moist	Topsoil - Br granular, sli medium roo	0-7			- - 1
3 S1, T1 3 4 7-75 4 7-75 5 6 6 6 7 S2, T2 7.5 Yellowish brown (10YR, 5/8) loam, 10% gravel, moderate medium granular, moist, friable, clear smooth boundary, common medium distinct light gray (10YR, 7/1) and strong brown (7.5YR, 4/6) mottles encountered from 75 inches to 137 inches			2	e medium boundary	moderate ar smooth	gravel, le, clea	, 5/6) clay, 5% htly moist, friat	/n (10YF ocky, slig	Yellowish bi subangular	L L L			2
4 4 5 6 6 6 7 5 S2, T2 7.5 Yellowish brown (10YR, 5/8) loam, 10% gravel, moderate medium granular, moist, friable, clear smooth boundary, common medium distinct light gray (10YR, 7/1) and strong brown (7.5YR, 4/6) mottles encountered from 75 inches to 137 inches			3_							7-75	3	S1, T1	3_
5 5 5 6 6 6 7 7 6 S2, T2 7.5 7.5			4							110			4_
6 6 6 6 7 - S2, T2 7.5 Yellowish brown (10YR, 5/8) loam, 10% gravel, moderate medium granular, moist, friable, clear smooth boundary, common medium 7 7 S2, T2 7.5 encountered from 75 inches to 137 inches 137 inches			5										5_
S2, T2 7.5				ate medium	el, modera	% grave	, 5/8) loam, 10 clear smooth l	/n (10YR t_friable	Yellowish bi granular me				6_
			8	R, 4/6) mottles	wn (7.5YR	ng brov hes	ches to 137 in	ay (10YI om 75 ir	distinct light encountered		7.5	S2, T2	8_
9			9_							75-137			9
			10 _										10 _
			11 _	odium	darata m		E(4) condulo	m (10)/E	Vallawiah h				11
$12 \xrightarrow{1}{33, T3} 12 \xrightarrow{1}{37-144} $			12 -	euluin		ani, mo	, 5/4) Sanuy 10	t, friable	granular, m	137-144	12	S3, T3	12
13 End of exploration at 12 feet. Groundwater seepage not encountered Soil mottling observed @ 75"						d	2 feet. not encountere @ 75"	tion at 1 seepage bserved	End of explo Groundwate Soil mottling				13 _
													14 _
													15 -
													REM/
See Log Key for exploration of sample description and identification procedures. Stratification lines represent approximate boundaries between soil and bedrock types. Actual transitions may be gradual. Water level readings have been made at the times and under the conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the times the measurements were made.	24	No.: 3-24	'late N	represent dings have her factors	tion lines r level read due to oth	itratificat I. Water y occur	n procedures. S s may be gradua groundwater ma	entificatio transitior uations of	scription and ock types. Act ins stated. Flu nts were mad	sample descoil and bedro r the condition measureme	ploration of s between s s and unde ne times the	Key for ex te boundarie e at the time present at t	See Log approxima been mad than those

				TEST P	IT LOG							
GZN	MTA, a I GeoEnvin Engineers an	Division of ronmental nd Scientists	GZA , Inc	East Ridge I Prop. Quick Chek Foo West Wir	Development d Store and Resta ndsor, NJ	urant	EXPLOR SHEET: PROJEC REVIEW	ATION NO.: TI 1 of 1 T NO: 26.00924 ED BY: Cory Ka	P-25 34.00 Irinja			
Logged	By: Nick Pyt	lowany		Test Pit Location: Se	ee Plan	Fina	al Test Pit	Depth (ft.): 12				
Contract Operato	tor: Heritage r: Chris			Ground Surface Elev	. (ft.): 95.5	Dat	e Start - Fi	nish: 7/29/2021	- 7/29/2	2021		
Type of	Excavator:	Track Excava	ator				Groundwa	ater Depth (ft.)				
Evenuet	or Model	CAT 200			Date		Time	Water Dep	oth	Stab.Ti	ime	
EXCaval		CAT 306			1/29/21							
Depth (ft)	Sample No.	Sample Depth (ft.)	Stratum Depth (in.)	Samp	le Description and	l Identi	fication		Depth (ft)	Water Content (%)	Remark	
			0-6	Topsoil - Very dark bro	wn (7.5YR, 2.5/ oose_abrunt.sm	2) san ooth h	dy loam, oundary	weak fine	-			
1_				Yellowish brown (10YF	R, 5/6) sandy loa	m, 10	% gravel,	weak	1_1_			
				medium subangular bl	ocky, slightly mo	oist, fir	m, gradua	al smooth				
2_	T1	2		,					2_			
3 -									3			
-												
4 _									4			
5 _												
6									6			
									-			
7 _	S1, T2	7							7 _	8.4		
°												
9 _									9_			
				Brownish yellow (10YF medium crumb, moist,	R, 6/8) sandy loa firm, common fi	m, 10' ne dis	% gravel, tinct light	moderate gray (7.5YR,	-			
10 _	S2, T3	10		7/1) mottles encounter	ed from 108 incl	hes to	144 inche	es	10 _			
11 -			108-144						11 -			
									''-			
12 _				Fuel of combined in a 4	0.6				12 -			
-				Groundwater seepage	not encountered	b						
13 _				Soil mottling observed	@ 108"							
14												
15 -	5											
REMARKS												
See Log approxim been ma than thos	Plate No.: 3-25 Plate No.: 3-25 Plate No.: 3-25											

				TEST P	IT LOG						
GZN	MTA, a E GeoEnvir Engineers ar	Division of conmental and Scientists	f GZA I, Inc	East Ridge I Prop. Quick Chek Foo West Win	Development d Store and Resta ndsor, NJ	aurant	EXPLOR SHEET: PROJEC REVIEWI	ATION NO.: T 1 of 1 T NO: 26.00924 ED BY: Cory Ka	P-26 134.00 arinja		
Logged I	By: Nick Pytl	owany		Test Pit Location: See PlanFinal Test Pit Depth (ft.): 12							
Operator	Chris			Ground Surface Elev. (ft.): 96 Date Start - Finish: 7/29				nish: 7/29/2021	- 7/29/	2021	
Type of I	Excavator:	Frack Excava	ator				Groundwa	ater Depth (ft.))		
Excavato	or Model (CAT 308			Date		Time	Water De	oth	Stab.Ti	ime
Excavat					1123121						
Depth (ft)	Sample No.	Sample Depth (ft.)	Stratum Depth (in.)	Samp	ble Description and	d Identii	ication		Depth (ft)	Water Content (%)	Remark
1_			0-6	Topsoil - Very dark bro slightly moist, loose, a roots	own (7.5YR, 2.5/ brupt smooth bo	/2) loar oundar	n, weak f y, commo	ine crumb, n medium	1		
2 _	S1, T1	2		Yellowish brown (10YF medium angular block	R, 5/6) clay loam y, slightly moist,	1, 5% g firm, c	ravel, mo lear wavy	oderate / boundary	2		
3 _			6-54								
4 _									4		
5_				Strong brown (7.5YR, moist, firm, gradual sm (7.5YR, 7/1) mottles en	5/8) loam, 10% nooth boundary, ncountered from	gravel few fir 54 inc	, weak me ne faint lig ches to 96	edium crumb, ht gray inches	5 -		
6 _	S2, T2	6	54-96						6	11.1	
9				Brownish yellow (10YF medium crumb, moist, (7.5YR, 7/1) mottles el	R, 6/8) sandy loa friable, commor ncountered from	am, 5% n fine o n 96 ino	gravel, r distinct lig	noderate ht gray I4 inches	9		
- - 10	S3, T3	10	96-144						10		
11 _									11 _		
12									12		
13 _				End of exploration at 1 Groundwater seepage Soil mottling observed	2 feet. not encountere @ 54"	d					
14 _											
2:48:0: 											
T PIT USDA; 8/30/2021; REMARKS											
See Log approxim been mad than thos	See Log Key for exploration of sample description and identification procedures. Stratification lines represent approximate boundaries between soil and bedrock types. Actual transitions may be gradual. Water level readings have been made at the times and under the conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the times the measurements were made.										

				TEST F	PIT LOG						
GZ	MTA, a GeoEnvi Engineers a	Division of ronmenta and Scientists	f GZA I, Inc	East Ridge Prop. Quick Chek Foo West Wi	Development d Store and Resta ndsor, NJ	aurant	EXPLOR SHEET: PROJEC REVIEWE	ATION NO.: TF 1 of 1 T NO: 26.00924 ED BY: Cory Ka	P-27 34.00 rinja		
Logge	d By: Nick Py	tlowany		Test Pit Location: S	ee Plan	Fin	al Test Pit	Depth (ft.): 12			
Operat	tor: Heritage	9		Ground Surface Elev	/. (ft.): 96	Dat	e Start - Fi	nish: 7/29/2021	- 7/29/	2021	
Туре с	of Excavator:	Track Excava	ator	- I			Groundwa	ter Depth (ft.)			
Excav	ator Model:	CAT 308			Date		Time	Water Dep	th	Stab.Ti	me
LACAV		CAT 500			1129/21						
Depth (ft)	Sample No. Sample Depth (ft.) Stratum Depth (in.) Sample Description and Identification Depth (ft) Water Content (%) Water © 0 - 0-4 Topsoil - Very dark brown (7.5YR 2.5/2) sandy loam 5-10% gravel -										
	-		0-4	Topsoil - Very dark bro	own (7.5YR, 2.5/	/2) san	dy loam, s	5-10% gravel,	-		
1	-			fine roots	itty moist, ioose,	abrup	t shiooth i	Joundary, lew	1_		
2	2 S1, T1 2 Yellowish brown (10YR, 5/6) sandy clay loam, 10% gravel, moderate fine subangular blocky, slightly moist, firm, gradual smooth boundary, few fine faint light gray (7.5YR, 7/1) mottles encountered from 54 inches to 60 inches 2 3 4-60 3										
5											
4											
5	-								5_		
6	6 S2, T2 6 Brownish yellow (10YR, 6/8) sandy loam, 5% gravel, weak medium subangular blocky, moist, firm, clear smooth boundary, common fine distinct light gray (7.5YR, 7/1) mottles encountered from 60 6 inches to 102 inches 102 inches 102 inches										
7			60-102						7_		
8	-								8_		
9				Strong brown (7.5YR, subangular blocky, mo (7.5YR, 7/1) mottles e	5/8) loam, 15% pist, firm, commo ncountered from	gravel on meo 102 ii	, moderate lium distir nches to 1	e medium act light gray 44 inches	9 -		
10	S3, T3	10	100 111						10 _		
11			102-144						- - 11 _ -		
12	-			First of combined in the	10.6				12		
13	-			Groundwater seepage Soil mottling observed	not encountered @ 54"	d					
14											
15											
REMARKS	Log Kov for exploration of sample description and identification precedures. Stratification lines concerned.										
approxi been m than th	Plate No.: 3-27 Plate No.: 3-2										

					TEST P	PIT LOG							
	GZ	MTA, a l GeoEnvi Engineers a	Division o ronmenta nd Scientists	f GZA l, Inc	East Ridge I Prop. Quick Chek Foo West Win	Development d Store and Resta ndsor, NJ	aurant	EXPLOR SHEET: PROJEC REVIEWI	ATION NO.: TF 1 of 1 T NO: 26.009243 ED BY: Cory Ka	2-28 34.00 rinja			
	Logge	ed By: Nick Pyt	lowany		Test Pit Location: Se	Test Pit Location: See PlanFinal Test Pit Depth (ft.): 12							
	Opera	tor: Chris	;		Ground Surface Elev	/. (ft.): 96	Dat	e Start - Fi	nish: 7/29/2021	- 7/29/	2021		
	Туре	of Excavator:	Track Excav	ator	·		1	Groundwa	ater Depth (ft.)				
	Excav	ator Model:	CAT 308			Date 7/29/21		Time	Water Dep	th	Stab.Ti	me	
	Depth (ft)	Sample No.	Sample Depth (ft.)	Stratum Depth (in.)	Samp	ble Description and	d Identi	fication	1	Depth (ft)	Water Content (%)	Remark	
	1	-		0-4	Topsoil - Very dark bro slightly moist, loose, a roots	own (7.5YR, 2.5/ brupt smooth bc	/2) loai oundar	m, weak f y, commo	ine crumb, n medium	1_			
	2	T1	2		Yellowish brown (10YF medium subangular bl	R, 5/6) sandy cla ocky, slightly mo	ay loan oist, fir	n, 5-10% g m, clear v	gravel, weak vavy boundary	2_			
	3			4-60						3 -			
	4												
	5	5 Brownish yellow (10YR, 6/8) clay loam, 5% gravel, weak fine											
	6	S2	6	60-90	fine distinct light gray (inches to 90 inches	(7.5YR, 7/1) mot	ttles er	countere	d from 60	6 _			
	7				Brownish yellow (10YF	R, 6/8) sandy loa	am, 5%	gravel, r	noderate				
	9				medium crumb, moist, 7/1) mottles encounter	firm, common f ed from 90 inch	ine dis les to 1	tinct light 44 inches	gray (7.5YR, s	9 -			
	10		10	90-144						10 _			
	11									11_			
	12	-								12 -			
	13				End of exploration at 1 Groundwater seepage Soil mottling observed	2 feet. not encountere @ 60"	d			12			
PM	14												
1; 2:48:04	15												
T PIT USDA; 8/30/2021	REMARKS												
3B - MTA TES	See L approx been r than th	og Key for ex imate boundari nade at the tim lose present at	xploration of es between es and unde the times the	f sample de soil and bedr er the conditi e measureme	escription and identification of the secription and identification of the secret secret and the secret secret and the secret a	on procedures. S ns may be gradua f groundwater ma	Stratifica al. Wate ay occur	ation lines r level read r due to ot	represent dings have her factors	Plate I	No.: 3-28	3	

				TEST BO	RING LOG							
GZN	MTA, a l GeoEnvir Engineers at	Division of ronmenta nd Scientists	f GZA I, Inc	Quicl Prop. Quick Chek Foo West Wi	k Chek d Store and Resta ndsor, NJ	aurant	EXPLOR/ SHEET: PROJECT REVIEWE	ATION NO.: 1 of 1 7 NO: 26.0092 D BY: Cory P	B-1 2434.00 Karinja			
Logge	d By: Ohm Pa	tel		Test Pit Location: S	ee Plan	Fin	al Test Pit I	Depth (ft.): 10)			
Operator: Darren/Brian Ground Surface Elev. (ft.): 94 Date Start - Finish: 8/13/2021									21 - 8/13/	2021		
Туре с	Type of Excavator: Geoprobe Groundwater Depth (ft.)											
Excave	ator Model:				Date		Time	Water De	epth	Stab.T	ime	
Excave	ator woder.				0/13/21							
Depth (ft)	Sample No.	Sample Depth (ft.)	Stratum Depth (in.)	Sam	ble Description and	d Identi	fication	1	Depth (ft)	Water Content (%)	Remark	
	-		0-9	9" Topsoil - Brown (10	YR, 4/3) silt loar	n, moo	lerate me	dium crumb,	-			
1	-			Yellowish brown (10YF	R, 5/4) silty clay,	mode	rate medii	um	1_			
	S1	1.5		subangular blocky, slig	ghtly moist, firm,	comm	ion mediu	m distinct		26.0		
2	-			light gray (1011(, 7/2))		ereu a			2_			
3												
4	4											
	Light gray (10YR, 7/1) silt loam, moderate medium subangular blocky, slightly moist, friable, many coarse prominent dark reddish											
5	5 brown (5YR, 3/4) mottles encountered at 48 inches to 90 inches 5											
	-		18.00									
0		6.5	40-90						0_			
7	- 32	0.5							7 -			
	-											
8	-			Brownish yellow (10Y) medium granular, sligh	R, 6/8) loamy sai htly moist, friable	nd, 25 e, com	% gravel, mon medi	weak um distinct	8_			
	S3	8.5	00.120	light brownish gray (10	YR, 6/2) mottles	s enco	untered at	90 inches to				
9	-		90-120	120 mones					9_			
10	-								10 -			
	-			End of exploration at 1 Groundwater seepage	10 feet.	d						
11				Soil mottling observed	@ 16"	G						
10	-											
12	-											
13												
	-											
14												
15												
RKS												
EMA												
R												
See Lo	og Key for ex	ploration of	sample des	scription and identification	on procedures. S	Stratifica	ition lines	represent	Plate	No.: 4-1		
been m than th	ade at the tim ose present at	es and unde the times the	er the condition measureme	ons stated. Fluctuations onts were made.	f groundwater ma	y occui	due to oth	ner factors				

				TEST BOI	RING LOG						
GZN	MTA, a I GeoEnvin Engineers an	Division of conmental and Scientists	f GZA I, Inc	Quick Prop. Quick Chek Foo West Wi	< Chek d Store and Resta ndsor, NJ	urant	EXPLOR SHEET: PROJEC REVIEWI	ATION NO.: B 1 of 1 T NO: 26.00924 ED BY: Cory Ka	-2 34.00 Irinja		
Logged	By: Ohm Pat	el		Test Pit Location: See PlanFinal Test Pit Depth (ft.): 10							
Contrac Operato	tor: Gold Sta r: Darren/B	r Frian		Ground Surface Elev	Ground Surface Elev. (ft.): 94 Date Start - Finish: 8/13/202				- 8/13/	2021	
Type of	Excavator:	Geoprobe					Groundwa	ter Depth (ft.)			
-	B4				Date	٦	Time	Water Dep	oth	Stab.T	ime
Excaval	or wodel:				8/13/21			NE			
Depth (ft)	Sample No.	Sample Depth (ft.)	Stratum Depth (in.)	Samp	ble Description and	d Identif	ication	1	Depth (ft)	Water Content (%)	Remark
-			0-6	6" Topsoil - Brown (10	YR, 4/3) silt loar	n, wea	k mediun	n crumb, dry,	-		
1_				Yellowish brown (10YF	R, 5/4) silty clay,	moder	ate medi	um	1_		
-				subangular blocky, dry	/, friable, commo	on med	ium distir	nct light gray	-		
2	S1	2	6-45		icountered at 12	inches	5 10 45 110	lies	2_		
			0-40						2		
									3_		
4 _									4		
-		dry, friable, common medium distinct dark reddish brown (5YR, 3/4)									
5 _			mottles encountered at 45 inches to 90 inches								
-			45.00								
6			45-90	45-90 6 _							
	S2	6.5							7		
·									' -		
8_	S3	8		Brownish yellow (10YF	R, 6/8) loamy sai	nd, wea	ak mediu	m granular,	8_	12.5	
-				(10YR, 8/4) mottles er	countered at 90	inches	s to 120 ii	nches	-		
9 _			90-120						9_		
10 _				End of exploration at 1	0 feet.				10		
11 _				Groundwater seepage Soil mottling observed	not encountere @ 12"	d					
12 _											
 13											
- 14 <u>-</u> 14 -											
15											
se log usda; 8% REMARKS	EMARKS										
D2400 000 000 000 000 000 000 000 000 000	See Log Key for exploration of sample description and identification procedures. Stratification lines represent approximate boundaries between soil and bedrock types. Actual transitions may be gradual. Water level readings have been made at the times and under the conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the times the measurements were made.										



USDA SOIL CLASSIFICATION SYSTEM





Melick-Tully & Associates	Client: ER/UDC West Windsor				
a Division of GZA GeoEnvironmental, Inc.	Project: Proposed Quick Chek Food Store and Restaurant				
South Bound Brook, NJ	Project No.: 26.0092434.00	Plate	6-2		

Summary of Laboratory Tube Permeameter Permeability Test Results ER/UDC West Windsor LLC - West Windsor, NJ 26.0092434.00

Test Pit No.	Depth (ft)	Permeability Rate (in/hr)	USDA Visual Soil Classification
TP-1	5.5	>20	Loamy Sand
TP-1	9	0.91	Sandy Clay Loam
TP-2	3	3.5	Sandy Loam
TP-2	6	11.1	Sandy Loam
TP-2	10	0.44	Sandy Clay Loam
TP-3	4	>20	Loamy Sand
TP-3	7	17.5	Loamy Sand
TP-4	4	<0.06	Sandy Clay Loam
TP-4	9	<0.06	Fine Sandy Loam
TP-5	1	<0.06	Clay
TP-5	4	1.0	Sandy Loam
TP-6	4	4.0	Sandy Loam
TP-6	6	>20	Loamy Sand
TP-7	4	2.8	Sandy Loam
TP-7	8	4.0	Sandy Loam
TP-8	2.5	<0.06	Clay Loam
TP-8	6.5	16.6	Loamy Sand
TP-9	3	<0.06	Silty Clay Loam
TP-9	6	14.9	Sandy Loam
TP-10	6	1.9	Loam
TP-10	10	>20	Loamy Sand
TP-11	6.5	0.30	Loam
TP-11	9	2.2	Sandy Loam
TP-12	3	<0.06	Clay
TP-12	7.5	1.4	Sandy Loam
TP-13	3	<0.06	Clay
TP-13	6.5	1.5	Sandy Loam
TP-14	3	<0.06	Silty Clay Loam
TP-14	6	>20	Loamy Sand
TP-15	3	<0.06	Clay Loam
TP-15	6.5	16.3	Sandy Loam
TP-16	1.5	<0.06	Sandy Clay Loam
TP-16	3	>20	Sand
TP-17	3.5	<0.06	Sandy Clay Loam
TP-17	5	2.0	Sandy Loam
TP-18	3	<0.06	Loam
TP-18	6	6.4	Sandy Loam
TP-19	1.5	0.52	Sandy Clay Loam
TP-19	4	17.5	Sandy Loam

Summary of Laboratory Tube Permeameter Permeability Test Results ER/UDC West Windsor LLC - West Windsor, NJ 26.0092434.00

Test Pit No.	Depth (ft)	Permeability Rate (in/hr)	USDA Visual Soil Classification
TP-20	2	<0.06	Clay
TP-20	4.5	>20	Sandy Loam
TP-21	6	2.6	Sandy Loam
TP-21	10	>20	Loamy Sand
TP-22	6	1.9	Loam
TP-22	10	>20	Loamy Sand
TP-23	2	<0.06	Clay Loam
TP-23	5	3.6	Sandy Loam
TP-24	3	<0.06	Clay
TP-24	7.5	7.7	Sandy Loam
TP-25	2	1.0	Sandy Loam
TP-25	7	1.5	Sandy Loam
TP-25	10	2.2	Sandy Loam
TP-26	2	<0.06	Clay Loam
TP-26	6	1.0	Sandy Loam
TP-27	6	5.5	Sandy Loam
TP-27	10	10.2	Loamy Sand
TP-28	2	0.74	Sandy Clay Loam
TP-28	10	7.1	Sandy Loam

APPENDIX

APPENDIX

Limitations

A. Subsurface Information

<u>Locations</u>: The locations of the explorations were approximately determined by tape measurement from existing site features. Elevations of the explorations were approximately determined by interpolation between contours shown on topographic plans provided to us. The locations and elevations of the explorations should be considered accurate only to the degree implied by the method used.

<u>Interface of Strata</u>: The stratification lines shown on the individual logs of the subsurface explorations represent the approximate boundaries between soil types, and the transitions may be gradual.

<u>Field Logs/Final Logs:</u> A field log was prepared for each exploration by a member of our staff. The field log contains factual information and interpretation of the soil conditions between samples. Our recommendations are based on the final logs as shown in this report and the information contained therein, and not on the field logs. The final logs represent our interpretation of the contents of the field logs, and the results of the laboratory observations and/or tests of the field samples.

<u>Water Levels</u>: Water level readings have been made in the explorations at times and under conditions stated on the individual logs. These data have been reviewed and interpretations made in the text of this report. However, it must be noted that fluctuations in the level of the groundwater will occur due to variations in rainfall, temperature, and other factors.

<u>Pollution/Contamination</u>: Unless specifically indicated to the contrary in this report, the scope of our services was limited only to investigation and evaluation of the geotechnical engineering aspects of the site conditions, and did not include any consideration of potential site pollution or contamination resulting from the presence of chemicals, metals, radioactive elements, etc. This report offers no facts or opinions related to potential pollution/contamination of the site.

<u>Environmental Considerations</u>: Unless specifically indicated to the contrary in this report, this report does not address environmental considerations which may affect the site development, e.g., wetlands determinations, flora and fauna, wildlife, etc. The findings and recommendations of this report are not intended to supersede any environmental conditions which should be reflected in the site planning.

B. Applicability of Report

This report has been prepared in accordance with generally accepted soils engineering practices for the exclusive use of ER/UDC West Windsor, LLC for specific application to the design of the proposed stormwater management facilities. No other warranty, expressed or implied, is made.

This report may be referred to in the project specifications for general information purposes only, but should not be used as the technical specifications for the work, as it was prepared for design purposes exclusively.

C. Reinterpretation of Recommendations

<u>Change in Location or Nature of Facilities:</u> In the event that any changes in the nature, design or location of the facilities are planned, the findings and recommendations contained in this report shall not be considered valid unless the changes are reviewed and the findings of this report modified or verified in writing.

<u>Changed Conditions During Construction</u>: The analyses and recommendations submitted in this report are based in part upon the data obtained from 2 widely-spaced test borings and 28 test pit excavations performed for this study. The nature and extent of variations between the explorations may not become evident until construction. If variations then appear evident, it will be necessary to reevaluate the recommendations of this report.

<u>Changes in State-of-the-Art:</u> The findings and recommendations contained in this report are based upon the applicable standards of our profession at the time this report was prepared.

D. Use of Report by Prospective Bidders

This soil engineering report was prepared for the project by Melick-Tully and Associates, a Division of GZA GeoEnvironmental Inc. (MTA) for design purposes and may not be sufficient to prepare an accurate bid. Contractors utilizing the information in the report should do so with the express understanding that its scope was developed to address design considerations. Prospective bidders should obtain the owner's permission to perform whatever additional explorations or data gathering they deem necessary to prepare their bid accurately.

E. Construction Observation

We recommend that MTA be retained to provide on-site soils engineering services during the earthwork construction phase of the work. This is to observe compliance with the design concepts and to allow changes in the event that subsurface conditions differ from those anticipated prior to the start of construction.