

#### November 13, 2025

# City of Granbury Water and Sewer Relocation Improvements for the US 377 Breakout Project Contract D: SH 144 Water and Sewer

#### Addendum No. 2

Attention is called to the following modifications to the Plans, Specifications and Contract Documents for the above referenced project. The City of Granbury will receive sealed Proposals for Contract D: SH 144 Water and Sewer Project until 11:00 a.m. local time on Thursday, November 20, 2025, at the City Service Center located at 401 N. Park Street, Granbury, Texas 76048. We hereby modify the documents as follows:

#### **CONTRACT DOCUMENTS:**

The attached Appendix A: Geotechnical Data shall be added as an appendix to the Project Manual. This geotechnical data includes completed bore logs from the *Preliminary* Geotechnical Data Report for the US 377 Improvements Project, Hood County, CSJ: 0080-03-049

This addendum consists of eighty-nine (89) pages. This addendum becomes a part of the Proposal Documents and **SHALL BE ACKNOWLEDGED** by the bidder on the Proposal Form submitted.

By: Christopher S. Hay, P.E

Project Engineer

CHRISTOPHER S. HAY
11/13/2025

PE Firm Registration No. 1151 PG Firm Registration No. 50103 RPLS Firm Registration No. 10011900

# **APPENDIX A**

**Geotechnical Data** 





Version 3.3

County Hood Highway US 377 CSJ 0080-03-049

Structure Station Offset

Hole

HA-4 **Retaining Wall**  District Date Grnd. Elev. 744.00 ft

Dallas 8/24/23

GW Elev. N/A

		Texas Cone			al Test		Prop	ertie	s	
Elev. (ft)	L O G	Penetrometer	Strata Description	Lateral Press. (psi)	Deviator Stress (psi)	МС	LL	PI	Wet Den. (pcf)	Additional Remarks
			CLAY, brown, sandy, lean (CL)	T.,						
						6	46	29		-200=57%
								23		-200-31 /0
2.			WEATHERED LIMESTONE, hard, tan	+						
			WEATHERED EINED FORE, Hard, tall							
	-									
-	-									
). 5 -				_						
-										
_	]									
-	7									
-										
-	+ $+$									
10 -	-									
-	4									
-	4									
	_									
4-										
15 -	7									
-										
-	+ $ $									
-	-									
=	4									
20 -										

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434211, Longitude: -97.797350. Hand Auger: 0'-5'. Groundwater was not encountered during drilling. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

#### Teris Department of Transportation

Version 3.3

### **DRILLING LOG**

County Hood Highway US 377 CSJ 0080-03-049 Hole Structure Station

Offset

RW-01 Retaining Wall District Dallas
Date 7/25/23
Grnd. Elev. 769.00 ft

GW Elev. N/A

	<u>                                    </u>			Triaxi	al Test		Prop	ertie	s	
Elev. (ft)	L O G	Texas Cone Penetrometer	Strata Description	1	Deviator Stress (psi)				Wet Den. (pcf)	Additional Remarks
			CLAY, soft, gray to reddish brown, with sand, lean (CL)		(P = -/	6	36	23		-200=70%; SS = 9-9-15
-			man cana, roan (C2)							
_						6				SS = 6-6-5
-										
_										
_		8 (6) 8 (6)								
5 -										
=						40	64	45		200-00% DD - 4.5: 4-5
762.5			CLAY, stiff, brown to light brown, sandy, fat (CH)			18	-61	45		-200=66%; PP = 4.5+ tsf Sulfate Content = 36.8 ppm
			Salluy, lat (On)							Chloride Content = 80 ppm
-						15				PP = 3.75 tsf Organic Content = 1.6%
-										
40		10 (6) 12 (6)								
10 -										
-										
757.5 -			CLAY, hard, tan, sandy, lean (CL)							
-										
-										
45		34 (6) 50 (5)								
15 -										
-						8	26	12		-200=63%; SS = 28-33-31
-							20	14		-200-0070, 00 - 20-00-01
-										
_										
20 -		50 (0.25) 50 (0.25)				1				Run:20'-25'; Rec=93%; RQD=56

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434933, Longitude: -97.803714. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). PP= Pocket Penetrometer (tsf). SFA:0'-20'; Wet Rotary: 20'-40'. Groundwater was not encountered during drilling. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

Tenis
Department
of Transportation

WinCore Version 3.3 County Hood Highway US 377 CSJ 0080-03-049

Structure Station Offset

Hole

RW-01 Retaining Wall District Dallas
Date 7/25/23
Grnd. Elev. 769.00 ft

GW Elev. N/A

	L	Tayor Cana			al Test		Prop			
Elev. (ft)	O G	Texas Cone Penetrometer	Strata Description	Lateral Press.	Deviator Stress (psi)	МС	LL	PI	Wet Den.	Additional Remarks
(-9)	1 1		LIMESTONE, very hard, tan to gray,	(psi)	(psi)				(pcf)	
	-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\		slightly weathered							
-	T'T									
	++									
_	垚									
_										
_										
	井									
25 -	+	50 (0.25) 50 (0)				1				Run:25'-30'; Rec=93%; RQD=7
	+									
=	菜									
	芸									
_	1									
_	<del>-</del>									
_										
	至	() (- (-								
30 -	菜	50 (0.25) 50 (0.12	5)			1				Run:30'-35'; Rec=93%; RQD=6
_										
_	111									
	1									
_	丑									
	尭									
-	芸									
	<del></del>	50 (0.25) 50 (0.25)				1				Run:35'-40'; Rec=78%; RQD=9'
35 –	+++					•				100 40, 100 7070, 100 0
_	++									
	귶									
_	苹									
	芉									
-	弄									
_	11									
9. 40 –		50 (0.25) 50 (0.25	•							

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434933, Longitude: -97.803714. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). PP= Pocket Penetrometer (tsf). SFA:0'-20'; Wet Rotary: 20'-40'. Groundwater was not encountered during drilling. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

WinCore Version 3.3 County Hood Highway US 377 CSJ 0080-03-049

Structure Station

Hole

RW-02 Retaining Wall District Dallas
Date 7/26/23
Grnd. Elev. 767.00 ft

Offset GW Elev. N/A

		L	Tawas Octob		Triaxi	al Test		Prop	pertie	es	
Ele (ft	ev. :)	O G	Texas Cone Penetrometer	Strata Description	Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)	Additional Remarks
				CLAY, brown, sandy, lean (CL)			12	34	21		-200=65%; SS = 8-6-5
	-										
-05							15				PP = 4.5+ tsf
765.	_			CLAY, stiff, brown to reddish brown, with sand, fat (CH)							Sulfate Content = 160 ppm
	_			brown, with sand, fat (On)							
	_										
	5 -		10 (6) 12 (6)								
	_						16	57	40		-200=88%; PP = 4.5+ tsf
	-										
759.	_			CLAY, stiff to hard, light brown,			13				SS = 10-11-13
	_			with calcareous deposits and sand, lean (CL)							
			10 (6) 17 (6)								
	10 –		10 (0) 11 (0)								
	_										
	_										
	_										
	-										
	15 –		16 (6) 16 (6)								
	_						14	38	25		-200=78%; SS = 5-7-10
	_										, 5
	_										
	_										
			EO (E) EO (O)								
	20 -	1	50 (5) 50 (2)								

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434869, Longitude: -97.803192. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). PP= Pocket Penetrometer (tsf). SFA:0'-20'; Wet Rotary: 20'-40'. Groundwater was not encountered during drilling. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

County Hood **US 377** Highway CSJ

Version 3.3

0080-03-049

Hole Structure Station

Offset

RW-02 **Retaining Wall**  District **Dallas** 7/26/23 Date Grnd. Elev. 767.00 ft

GW Elev. N/A

	L	Toyor Cons			al Test		Prop	ertie	s	
Elev. (ft)	O G	Texas Cone Penetrometer	Strata Description	Lateral Press. (psi)	Deviator Stress (psi)				Wet Den. (pcf)	Additional Remarks
_			CLAY, stiff to hard, light brown, with calcareous deposits and sand, lean (CL)		. ,				.,	SS = 50/3.5"
<b>45</b> . –			LIMEGRANE			11				Run:22'-25'; Rec=67%; RQD=59
_	++++++		LIMESTONE, very hard, light gray, slightly weathered							DD = 148 pcf; UC = 190 tsf
25 –	<u> </u>	50 (1) 50 (0.25)				1				Run:25'-30'; Rec=96%; RQD=84
- - -										
		50 (1) 50 (0.25)				1				Run:30'-35'; Rec=92%; RQD=95
30 -		30 (1) 30 (0.25)				1				DD = 154 pcf; UC = 425 tsf
35 -	<u></u>	50 (1) 50 (0.25)				1				Run:35'-40'; Rec=28%; RQD=0%
										DD = 148 pcf; UC = 161 tsf
_	# # # # # # # # # # # # # # # # # # # #									
27. 40 -	1,1	36 (6) 50 (3)								

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434869, Longitude: -97.803192. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). PP= Pocket Penetrometer (tsf). SFA:0'-20'; Wet Rotary: 20'-40'. Groundwater was not encountered during drilling. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

Te is Department of Transportation

WinCore Version 3.3 County Hood Highway US 377 CSJ 0080-03-049

Structure Station Offset

Hole

RW-03 Retaining Wall District
Date
Grnd. Elev.

Dallas 7/26/23 768.00 ft

et GW Elev. N/A

			L	Texas Cone			al Test		Prop	ertie	es	
Ele (ft	ev. t)		L O G	Penetrometer	Strata Description	Lateral Press. (psi)	Deviator Stress (psi)	МС	LL	ΡI	Wet Den. (pcf)	Additional Remarks
					CLAY, very stiff, dark brown to		, , , , , , , , , , , , , , , , , , ,	10	36	21	,	-200=84%; PP = 4.5+ tsf
					reddish brown, with calcareous deposits and sand, lean (CL)							Sulfate Content = 71 ppm
												Chloride Content = 60 ppm
		-						11				PP = 4.5+ tsf
	5			52 (6) 23 (6)								
	3	-										
								13	46	31		-200=82%; PP = 4.5+ tsf
		-										
760.					CLAY, very hard, tan, sandy, lean			44				00 4500
					(CL)			_11				SS = 4-5-22
		-										
	10			50 (1.5) 50 (0.5)								
	10											
		-										
		-										
	15			50 (0.5) 50 (0.25)								
	13											
								4	28	16		-200=65%; SS = 50/2"
		-										
		-										
748.	20			50 (1.5) 50 (0.5)				1				Run:20'-25'; Rec=85%; RQD=0

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434817, Longitude: -97.802831. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). PP= Pocket Penetrometer (tsf). SFA:0'-20'; Wet Rotary: 20'-30'. Groundwater was not encountered during drilling. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

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WinCore Version 3.3 County Hood Highway US 377 CSJ 0080-03-049

Structure Station Offset

Hole

RW-03 Retaining Wall District
Date
Grad Flow

Dallas 7/26/23 . 768.00 ft

Station	Grnd. Elev.	768.0
Offset	GW Elev.	N/A

	L			Triaxi	al Test		Prop	ertie	es	
Elev. (ft)	O G	Texas Cone Penetrometer	Strata Description	Lateral Press. (psi)	Deviator Stress (psi)	МС	LL	PI	Wet Den. (pcf)	Additional Remarks
-			LIMESTONE, very hard, gray, with clay seams, moderatly to highly weathered	(psi)	(psi)	1			(pcf)	DD = 150 pcf; UC = 87 tsf  Run:25'-30'; Rec=83%; RQD=25%
40 -	4									

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434817, Longitude: -97.802831. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). PP= Pocket Penetrometer (tsf). SFA:0'-20'; Wet Rotary: 20'-30'. Groundwater was not encountered during drilling. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.



Version 3.3

County Hood Highway **US 377** CSJ 0080-03-049

Structure Station

Hole

RW-04 **Retaining Wall**  District **Dallas** 7/18/23 Date Grnd. Elev.

773.00 ft Offset GW Elev. N/A

	L	Tayaa Cana		Triaxi	al Test		Prop	ertie	es	
Elev. (ft)	O G	Texas Cone Penetrometer	Strata Description	Lateral Press. (psi)	Deviator Stress (psi)	МС	LL	PI	Wet Den. (pcf)	Additional Remarks
-	.0000000		GRAVEL, tan, clayey, with sand and limestone fragments (GC)	(100.7)	(60.)	3	21	9	(150.7	-200=24%; SS = 21-24-7
770.5	0		CLAY, tan, with sand and limestone fragments, lean (CL)			12	47	29		-200=82%; SS = 5-15-50/5"  Sulfate Content = 165 ppm
769.5			WEATHERED LIMESTONE, very hard, tan							Chloride Content = 120 ppm
5 -		50 (0.25) 50 (0.25)								Run:5'-10'; Rec=97%; RQD=88%
						1				DD = 142 pcf; UC = 92 tsf
765.			LIMESTONE, very hard, gray, with clay seams, slightly weathered			9				DD = 141 pcf; UC = 437 tsf
10 -		50 (0.25) 50 (0)								Run:10'-15'; Rec=98%, RQD=93%
15 -		50 (0.25) 50 (0) 50 (0.125) 50 (0)				7				Run:15'-20'; Rec=95%; RQD=95%

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434479, Longitude: -97.801314. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). Air Rotary:0'-5'; Wet Rotary: 5'-30'. Groundwater was not encountered during drilling. Caved in during drilling at 30'. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

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WinCore Version 3.3 County Hood Highway US 377 CSJ 0080-03-049 Hole Structure Station Offset RW-04 Retaining Wall District Dallas
Date 7/18/23
Grnd. Elev. 773.00 ft

GW Elev. N/A

	L	Texas Cone		Triaxial Test			perti		
Elev. (ft)	O G	Penetrometer	Strata Description	Lateral Deviator Press. Stress (psi) (psi)	МС	LL	PI	Wet Den. (pcf)	Additional Remarks
			LIMESTONE, very hard, gray, with	(psi) (psi)				(pci)	
_	辛		clay seams, slightly weathered						
	辛								
-	茊								
	垚								
_									
_	芸								
25 –	芸	50 (0) 50 (0)							Run:25'-30'; Rec=100%; RQD=1
	苹	50 (0) 50 (0)							
_	苹	50 (0.25) 50 (0.12							
	茊								
_	茊								
	艼								
_	茔								
_	+								
	艼								
3. 30 –	++	50 (0.25) 50 (0.12	5)	_					
_									
_									
_									
_									
35 —									
_									
_									
_									
=									

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434479, Longitude: -97.801314. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). Air Rotary:0'-5'; Wet Rotary: 5'-30'. Groundwater was not encountered during drilling. Caved in during drilling at 30'. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

# Tans Topografia Ottomoria

Version 3.3

### **DRILLING LOG**

County Hood Highway US 377 CSJ 0080-03-049 Hole Structure Station RW-05 Retaining Wall District Dallas
Date 7/19/23
Grad Fley 769 00

Station Grnd. Elev. 769.00 ft
Offset GW Elev. N/A

	L	T 0		Triaxial Test	Properties	
Elev. (ft)	O G	Texas Cone Penetrometer	Strata Description	Lateral Deviator Press. Stress (psi) (psi)	MC LL PI Den. (pcf)	Additional Remarks
	. 0 . 0 . 0 . 0 . 0 . 0 . 0 . 0 . 0 . 0		GRAVEL, tan, clayey, with sand and limestone fragments (GC)		3 27 15	-200=16%; SS = 32-17-9
767.	9 .		WEATHERED LIMESTONE, very hard, gray, with seams of shale		4	SS = 50/6"
			<b>3.3,</b>			DD = 137 pcf; UC = 570 tsf
5		50 (0.5) 50 (0.25)				Run:5'-10'; Rec=80%; RQD=90%
					9	DD = 132 pcf; UC = 164 tsf
61.			LIMESTONE, very hard, gray, with		4	DD = 146 pcf; UC = 114 tsf
10 -		50 (0.25) 50 (0)	seams of shale, slightly weathered			Run:10'-15'; Rec=98%; RQD=93%
		50 (0) 50 (0)				
15		50 (0) 50 (0)			1	Run:15'-20'; Rec=100%; RQD=10
20		50 (0) 50 (0)			3	Run:20'-25'; Rec=100%: RQD=10

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434395, Longitude: -97.800678. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). Air Rotary:0'-5'; Wet Rotary: 5'-30'. Groundwater was not encountered during drilling. Caved in during drilling at 30'. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

In as Department of Transportation

WinCore Version 3.3 County Hood Highway US 377 CSJ 0080-03-049

Structure Station Offset

Hole

RW-05 Retaining Wall District Dallas
Date 7/19/23

Grnd. Elev. 769.00 ft GW Elev. N/A

Elev. (ft) G Penetrometer Strata Description Lateral Deviator Press. Stress (psi) (psi) Additional Remarks  LIMESTONE, very hard, gray, with seams of shale, slightly weathered seams of shale, slightly weathered 50 (0.125) 50 (0) Fig. (psi) Stress (psi) (psi) Run:25'-30'; Rec=98%; RQD=100 Fig. (psi) Run:25'-30';		L	Tawas Octob		Triaxia		Prop		
LIMESTONE, very hard, gray, with seams of shale, slightly weathered  50 (0.125) 50 (0)  5 Run:25'-30'; Rec=98%; RQD=100	Elev. (ft)	O G	Penetrometer	Strata Description					Additional Remarks
40 -	739. 30 -		50 (0.125) 50 (0)	LIMESTONE, very hard, gray, with seams of shale, slightly weathered	(psi)	(psi)		(pcf)	Run:25'-30'; Rec=98%; RQD=100

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434395, Longitude: -97.800678. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). Air Rotary:0'-5'; Wet Rotary: 5'-30'. Groundwater was not encountered during drilling. Caved in during drilling at 30'. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

# Tals Department of transportation

Version 3.3

### **DRILLING LOG**

County Hood Highway US 377 CSJ 0080-03

Hood Hole
y US 377 Structure
0080-03-049 Station
Offset

RW-06 Retaining Wall

Date 7/18/23 Grnd. Elev. 763.00 ft GW Elev. N/A

**Dallas** 

Run:20'-25'; Rec=100%; RQD=100%

District

				Triaxi	al Test		Pro	perti	es	
Elev. (ft)	O G	Texas Cone Penetrometer	Strata Description		Deviator Stress (psi)	МС			Wet Den. (pcf)	Additional Remarks
	_		SAND, light brown, clayey, with gravel (SC)		<b>"</b> /	5	23	11		-200=38%; SS = 11-8-6
760.5			CLAY, dark gray, sandy, with limestone			10	38	25		-200=67%; SS = 36-50/4"
			gravel, lean (CL)							
759. 5	44444	50 (0.125) 50 (0)	LIMESTONE, very hard, gray to tan, with bands of shale, slightly weathered							Run:5'-10'; Rec=88%; RQD=83%
						1				DD = 148 pcf; UC = 314 tsf
	井	50 (0.125) 50 (0) 50 (0) 50 (0)								Run:10'-15'; Rec=83%; RQD=100%
15						1				Run:15'-20'; Rec=100%; RQD=100' DD = 148 pcf; UC = 566 tsf

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434313, Longitude: -97.800057. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). Air Rotary:0'-5'; Wet Rotary: 5'-30'. Groundwater was not encountered during drilling. Caved in during drilling at 30'. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

50 (0) 50 (0.25)

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Version 3.3

County Hood Highway US 377 CSJ 0080-03-049

Structure Station

Hole

RW-06 Retaining Wall

Date 7/18/23 Grnd. Elev. 763.00 ft

**Dallas** 

District

Offset GW Elev. N/A

				Triaxial Test		Prop	pertic	es	
Elev. (ft)	L O G	Texas Cone Penetrometer	Strata Description	Lateral Deviator Press. Stress (psi) (psi)	МС			Wet Den. (pcf)	Additional Remarks
-			LIMESTONE, very hard, gray to tan, with bands of shale, slightly weathered	(psi) (psi)	1			(pct)	Run:25'-30'; Rec=100%; RQD=100 DD = 148 pcf; UC = 366 tsf

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434313, Longitude: -97.800057. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). Air Rotary:0'-5'; Wet Rotary: 5'-30'. Groundwater was not encountered during drilling. Caved in during drilling at 30'. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

CSJ

Version 3.3

County Hood Highway US 377

0080-03-049

Hole RW-08 Structure Retaining Wall Station District Date Dallas 7/17/23 . 750.00 ft

N/A

Station Grnd. Elev.
Offset GW Elev.

		L	Texas Cone			al Test		Prop	ertie		
Elev. (ft)	.	O G	Penetrometer	Strata Description	Lateral Press. (psi)	Deviator Stress (psi)	МС	LL	PI	Wet Den. (pcf)	Additional Remarks
749.				PAVEMENT, 4.5" Asphalt over 8" Base	(PS-7)	(Ir = -)	10			- (p = -)	SS = 21-22-10
				SAND, dense to very dense, reddish brown to tan, poorly graded, with limestone gravel (SP)							
							4				-200=35%; SS = 13-34-50/3"
	-										
5	-		50 (6) 45 (6)								
							2				SS = 18-16-14
	_						3				-200=7%; SS = 14-13-32
10	0 -		50 (2) 50 (0.25)								
											SS = 50/1"
737.		Ţ		LIMESTONE, very hard, tan to gray,							DD = 150 pcf; UC = 482 tsf
	_	<u> </u>		slightly weathered							
1	į.	$\dot{\Box}$	50 (0.25) 50 (0)				1				Run:15'-20'; Rec=100%; RQD=100'
2		<u>-</u>	50 (0.25) 50 (0)				1				Run:20'-25'; Rec=100%; RQD=100

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434153, Longitude: -97.798372. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). Air Rotary:0'-15'; Wet Rotary: 15'-30'. Groundwater was not encountered during drilling. Caved in during drilling at 30'. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

In as Department of Transportation

WinCore Version 3.3 County Hood Highway US 377 CSJ 0080-03-049

Structure Station Offset

Hole

RW-08 Retaining Wall Date 7/17/23
Grnd. Elev. 750.00

Grnd. Elev. 750.00 ft GW Elev. N/A

		Toyor Cons			al Test		Prop	ertie	s	
Elev. (ft)	L O G	Texas Cone Penetrometer	Strata Description	Lateral Press. (psi)	Deviator Stress (psi)	МС	LL	PI	Wet Den. (pcf)	Additional Remarks
_			LIMESTONE, very hard, tan to gray, slightly weathered		•				``	DD = 153 pcf; UC = 543 tsf
-	<del>-</del>									
-	#									
-	<u>+++</u>									
25 -	<del></del>	50 (0.5) 50 (0)								Run:25'-30'; Rec=97%; RQD=90
-	Ħ									
-										
-	<del>-</del>									
20. 30 -	芸	50 (0.125) 50 (0)								
-										
-										
-										
35 -										
_										
-	-									
-	-									
-	-									
40 -										

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434153, Longitude: -97.798372. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). Air Rotary:0'-15'; Wet Rotary: 15'-30'. Groundwater was not encountered during drilling. Caved in during drilling at 30'. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

#### In is Department of Transportation

Version 3.3

### **DRILLING LOG**

County Hood Highway US 377 CSJ 0080-03-049 Hole Structure Station RW-12 Retaining Wall District Dallas
Date 7/28/23
Grnd. Elev. 752.00 ft

Offset GW Elev. N/A

	L	Texas Cone		Triaxial Test		Prop	erti		]
Elev. (ft)	O G	Penetrometer	Strata Description	Lateral Deviator Press. Stress (psi) (psi)	МС	LL	PI	Wet Den. (pcf)	Additional Remarks
			SAND, loose, reddish brown to	, , ,	3	19	5		-200=38%; SS = 22-18-19
			brown, clayey, silty (SC-SM)						Sulfate Content = 160 ppm
	_								
					2				SS = 13-10-22
	-								
	-								
_		9 (6) 9 (6)							
5	_		-						
745.5					1				200=6%; SS = 2-3-6
743.3			SAND, loose, tan, poorly-graded,						,
			with silt (SP-SM)						
	_								
					3	20	3		-200=6%; SS = 3-4-8
	-								
		2 (6) 9 (6)							
10 -	-	2 (6) 9 (6)	-						
					1				Run:11'-15'; Rec=73%; RQD=57%
741.			WEATHERED LIMESTONE, very hard,		•				
			tan						
	-								
		50 (4) 50 (4)							
737. 15 ·	#	50 (1) 50 (1)	LIMESTONE, very hard, tan, slightly		1				Run:15'-20'; Rec=100%; RQD=100
	4+		to moderatly weathered						
	- <del> </del>								
	芸								
	+								
	1								
	某								
	7								
20 -		50 (1.5) 50 (0.5)	-		1				Run:20'-25'; Rec=100%; RQD=93%

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434298, Longitude: -97.798789. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). Air Rotary:0'-10'; Wet Rotary: 10'-30'. Groundwater was not encountered during drilling. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

WinCore
Version 3.3

County Hood Highway US 377 CSJ 0080-03-049 Hole Structure Station RW-12 Retaining Wall District Dallas
Date 7/28/23
Grnd. Elev. 752.00 ft

Offset GW Elev. N/A

	L	Texas Cone			al Test		Prop			
Elev. (ft)	L O G	renetionietei	Strata Description	Lateral Press. (psi)	Deviator Stress (psi)	МС	LL	ΡI	Wet Den. (pcf)	Additional Remarks
_	HHH		LIMESTONE, very hard, tan, slightly to moderatly weathered	(Ir say	(Is a s)				(Pos)	
_										
_										
25 –		50 (0.5) 50 (0.5)				1				Run:25'-30'; Rec=100%; RQD=7
_	$\ddot{\Box}$									
_										
_										
2. 30 -		50 (0.25) 50 (0.25								
_										
-	-									
35 –										
_										
-										
-										
40 -										

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434298, Longitude: -97.798789. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). Air Rotary:0'-10'; Wet Rotary: 10'-30'. Groundwater was not encountered during drilling. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.



WinCore Version 3.3 County Hood Highway US 377 CSJ 0080-03-049

Structure Station Offset

Hole

RW-15 Retaining Wall District Dallas
Date 7/17/23
Grnd. Elev. 735.00 ft

GW Elev. N/A

		L	Texas Cone			al Test		Prop	CI LIC		
Ele (ft	ev. )	O G	Penetrometer	Strata Description	Lateral Press. (psi)	Deviator Stress (psi)	МС	LL	ΡI	Wet Den. (pcf)	Additional Remarks
				PAVEMENT, 2" Asphalt over 3" Base	,	,	9			. ,	-200=27%; SS = 33-17-16
34.	-			SAND, tan, clayey, with gravel, crushed base (SC)			<u> </u>				-200-2176, 00 - 00-11-10
33.	-			WEATHERED LIMESTONE, very hard, tan, clayey, with sand			5				SS = 24-50/1"
	_										
30.	5 -		50 (1.5) 50 (0)	LIMESTONE, very hard, gray, moderatel	у						Run:5'-10'; Rec=75%; RQD=27%
	-	芸芸		weathered							
	=										
	-										
	-										
	10 -	茎					1				Run:10'-15'; Rec=93%; RQD=4
	-	+									DD = 155 pcf; UC = 319 tsf
	-										
	-										
	-										
	15 -	#	50 (0.5) 50 (0)				1				Run:15'-20'; Rec=92%; RQD=6'
	_										DD = 157 pcf; UC = 440 tsf
	-	井									
	-										
	-										
		<u> </u>	50 (0.25) 50 (0)								

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.43426556, Longitude: -97.79610635. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). Air Rotary:0'-5'; Wet Rotary: 5'-20'. Groundwater was not encountered during drilling. Caved in during drilling at 20'. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

# Te is Department of Transportation

WinCore Version 3.3 County Hood Highway US 377 CSJ 0080-03-049 Hole Structure Station

**DRILLING LOG** 

RW-18 Retaining Wall District Dallas
Date 7/24/23
Grnd. Elev. 733.00 ft

Offset GW Elev. N/A

	L	- 0		Triaxi	al Test		Prop	ertie	es	
Elev. (ft)	O G	Texas Cone Penetrometer	Strata Description	Lateral Press. (psi)	Deviator Stress (psi)	МС	LL	PI	Wet Den. (pcf)	Additional Remarks
-	0.0.0.0		GRAVEL, slightly compact, reddish brown to tan, clayey, with sand and limestone gravel (GC)			2	21	10		-200=22%; SS = 15-18-15
-	0.0.0.0					1	23	12		-200=14%; SS = 17-20-16
-	0.000000									
5 -		11 (6) 10 (6)								
-	0.0.0.0					1				SS = 5-6-7
-	0 . 0 . 0					3	23	_11		-200=33%; SS = 11-23-24
723. 10 <b>-</b>	. 0	50 (2) 50 (0.5)				1				Run:10'-15'; Rec=87%; RQD=16%
			LIMESTONE, very hard, gray, with clay seams, slightly to moderatly weathered							DD = 151 pcf; UC = 245 tsf
15 -		50 (0.5) 50 (0)								Run:15'-20'; Rec=77%; RQD=10%
	Ŧ	50 (0.5) 50 (0)				1				Run:20'-25'; Rec=60%; RQD=0%

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434290, Longitude: -97.794647. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). SFA:0'-10'; Wet Rotary: 10'-30'. Groundwater was not encountered during drilling. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

Version 3.3

County Hood **US 377** Highway CSJ 0080-03-049

Structure Station Offset

Hole

**RW-18 Retaining Wall**  District **Dallas** 7/24/23 Date

Grnd. Elev. 733.00 ft GW Elev. N/A

	L	Texas Cone			al Test		Prop			
Elev. (ft)	L O G	Penetrometer	Strata Description	Lateral Press. (psi)	Deviator Stress (psi)	МС	LL	PI	Wet Den. (pcf)	Additional Remarks
-			LIMESTONE, very hard, gray, with clay seams, slightly to moderatly weathered							DD = 148 pcf; UC = 340 tsf
<b>25</b> -		50 (4) 50 (0.5)								Run:25'-30'; Rec=55%; RQD=7'
3. <b>30</b> -	-	50 (0.5) 50 (0)								
35 - -	_									
- - <b>40</b> -										

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434290, Longitude: -97.794647. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). SFA:0'-10'; Wet Rotary: 10'-30'. Groundwater was not encountered during drilling. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

#### **DRILLING LOG** County Hood

Version 3.3

Hole Structure

**RW-19** 

**Retaining Wall** 

District Date

**Dallas** 7/19/23 722.00 ft

Highway **US 377** CSJ 0080-03-049

Station Offset

Grnd. Elev. GW Elev. N/A

		L	Toyon Come			al Test		Prop	ertie	s	
Elev (ft)	<i>'</i>	0 G	Texas Cone Penetrometer	Strata Description	Lateral Press. (psi)	Deviator Stress (psi)	МС	LL	PI	Wet Den. (pcf)	Additional Remarks
	_			CLAY, very stiff, reddish-brown to tan, sandy, with limestone gravel pieces, lean (CL)	, qrs-y	(For)	4	45	29	(P = -)	-200=55%; SS = 17-50/5"
	_						1				SS = 17-18-11
	5 –		25 (6) 25 (6)				6	30	16		200=37%; SS = 11-42-33
715.5	_			SAND, compact, tan, clayey, with limestone gravel (SC)				30	10		Organic Content = 0.1%
714.	_			CLAY, very stiff to very hard, gray, with sand, lean (CL)			17				SS = 8-11-22
1	10 — —		50 (4) 24 (6)								
	_						10	29	18_		-200=75%; PP = 2.0 tsf Sulfate Content = 352 ppm Chloride Content = 100 ppm
1	15 —		50 (4) 50 (2.5)				12				Run:15'-20'; Rec=82%; RQD=80%
705.5	_			CLAY, very hard to hard, gray, with seams of limestone and gravel, lean (CL)							
	-		50 (1.5) 50 (1)				2				Run:20'-25'; Rec=80%; RQD=17%

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434315, Longitude: -97.794359. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). PP= Pocket Penetrometer (tsf). SFA:0'-15'; Wet Rotary: 15'-30'; Mud Rotary: 30'-40'. Groundwater was not encountered during drilling. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

**Driller: TX Geo Bore Organization: Arias** Logger: L. Arizola

Version 3.3

County Hood Highway US 377 CSJ 0080-03-049

Structure

Hole

**RW-19** Retaining Wall District Date

**Dallas** 7/19/23 ft

Otractare	rectaining wan	Duto	1710720
Station		Grnd. Elev.	722.00
Offset		GW Elev.	N/A

	L	Towar Come			al Test		Prop	ertie	es	
Elev. (ft)	O G	Texas Cone Penetrometer	Strata Description	Lateral Press. (psi)	Deviator Stress (psi)	МС	LL	PI	Wet Den. (pcf)	Additional Remarks
25		50 (2.5) 50 (1)	CLAY, very hard to hard, gray, with seams of limestone and gravel, lean (CL)	(psi)	(pai)	18	27	13	(рсі)	Run:25'-30'; Rec=27%, RQD=25% -200=97%
30 690.5		50 (4) 50 (2.5)	GRAVEL, very dense, gray, clayey, silty, with sand and limestone gravel (GC-GM)			21				SS = 50/2"
35		50 (2) 50 (1) 50 (1.5) 50 (0.5)				11	19	4		-200=15%; SS = 50/6"

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434315, Longitude: -97.794359. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). PP= Pocket Penetrometer (tsf). SFA:0'-15'; Wet Rotary: 15'-30'; Mud Rotary: 30'-40'. Groundwater was not encountered during drilling. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

**Driller: TX Geo Bore** Organization: Arias Logger: L. Arizola

#### Talis Department of Transportation

Version 3.3

### **DRILLING LOG**

County Hood Highway US 377 CSJ 0080-03-049 Hole Structure Station RW-20 Retaining Wall District Dallas
Date 7/19/23
Grnd. Elev. 712.00 ft

Offset GW Elev. N/A

		L Texas Cone			al Test		Prop	ertie	s	
Elev. (ft)	- 1	L Texas Cone O Penetrometer	Strata Description	Lateral Press. (psi)	Deviator Stress (psi)	МС	LL	PI	Wet Den. (pcf)	Additional Remarks
			CLAY, stiff to hard, tan and gray, with gravel pieces, limestone fragments, and ferrous stains, lean (CL)	(60.7)	(βυ.)	2			(60.7	-200=40%; SS = 27-19-17
						12	26	11		-200=89%; SS = 6-11-12
5		15 (6) 20 (6)								
						9	24	11		-200=82%; SS = 9-23-23 Organic Content = 0.1%
						6				SS = 50/0.5"
10	) -	50 (0.5) 50 (0.25)				16	35	21		-200=90% SS = 13-15-13
										Sulfate Content = 220 ppm
15	5 -	28 (6) 27 (6)								
						14				SS = 27-28-50/3.5"
2. 20		50 (3) 50 (2)								Run:20'-25'; Rec=48%; RQD=3

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434312, Longitude: -97.793052. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). SFA:0'-20'; Wet Rotary: 20'-30'. Groundwater was not encountered during drilling. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

WinCore Version 3.3 County Hood Highway US 377 CSJ 0080-03-049

Structure Station RW-20 Retaining Wall District Dallas
Date 7/19/23
Grnd. Elev. 712.00 ft

Offset GW Elev. N/A

			T 0		Triaxial			Prop	ertie	s	
Eld (fi	ev. t)	L O G	Texas Cone Penetrometer	Strata Description	Lateral De Press. S (psi) (	eviator tress psi)	MC	LL	ΡI	Wet Den. (pcf)	Additional Remarks
	-			CLAYSTONE, very hard, gray, partially cemented	(85.)	poly				(89.)	
687.	25 -		50 (3) 50 (2)	LIMESTONE, very hard, tan, with ferrous stains, slightly weathered	_						Run:25'-30'; Rec=75%; RQD=78%
	-										
682.	30 -		50 (0.25) 50 (0.25	)	_						
	-										
	35 -										
	-										
	40 -										

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434312, Longitude: -97.793052. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). SFA:0'-20'; Wet Rotary: 20'-30'. Groundwater was not encountered during drilling. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

Version 3.3

County Hood Highway **US 377 CSJ** 0080-03-049

Hole Structure Station Offset

**RW-22 Retaining Wall**  District **Dallas** Date

7/27/23 Grnd. Elev. 709.00 ft GW Elev. 684.00 ft

	L	Texas Cone			al Test		Prop	ertie		
Elev. (ft)	O G	Penetrometer	Strata Description	Lateral Press. (psi)	Deviator Stress (psi)	МС	LL	ΡI	Wet Den. (pcf)	Additional Remarks
			SAND, reddish brown, clayey, silty,	(50.)	(60.)				(60.)	
_			with gravel and limestone fragments (SC-SM)			7	20	7		-200=37%; SS = 14-10-14
			(SS Sill)							Organic Content = 0.1%
	_									
06.5	1		OLAY stiff and dish harmon and he			8	17	4		-200=54%; SS = 8-14-12
			CLAY, stiff, reddish brown, sandy, silty, lean (CL-ML)							
-										
		23 (6) 27 (6)								
5 -		23 (0) 27 (0)								
02.5						10				SS = 9-10-8
			CLAY, very stiff to very soft,							
			reddish brown, with sand, lean (CL)							
-			,							
						14				SS = 8-9-18
-										Sulfate Content = 141 ppm
		40 (0) 40 (0)								Chloride Content = 80 ppm
10 -		12 (6) 18 (6)								
-						11	27	12		-200=81%; SS = 6-6-12
								12		-200-0170, 00 - 0-0-12
-										
_										
15 -		3 (6) 2 (6)								
-						04				00 - 4 4 4
						21				SS = 1-1-1
-										
_										
<del>-</del>										
-										
20 -		1 (6) 2 (6)								

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434375, Longitude: -97.788050. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). Air Rotary:0'-30'; Wet Rotary: 30'-40'. Groundwater was encountered during drilling at 25'. Surface elevation estimated by Google Earth.

In is
Department
Of Transportation

WinCore Version 3.3 County Hood Highway US 377 CSJ 0080-03-049

Structure Station Offset

Hole

RW-22 Retaining Wall District Dallas
Date 7/27/23
Grnd. Elev. 709.00 ft

GW Elev. 684.00 ft

			Texas Cone			al Test		Prop	ertie		
Ele (ft)	v. )	L O G	Penetrometer	Strata Description	Lateral Press. (psi)	Deviator Stress (psi)	МС	LL	PI	Wet Den. (pcf)	Additional Remarks
	-			CLAY, very stiff to very soft, reddish brown, with sand, lean (CL)	(ро:/	(50.)	22	24	8	(ps./	-200=79%; SS = 3-3-4
			1 (6) 1 (6)								
	- -										SS = 1-1-1
677.5	30 -		3 (6) 4 (6)				10				-200=46%; SS = 14-17-15
	-	00000000000		GRAVEL, slightly compact to compact, reddish brown, clayey (GC)							
	35 -	0.	14 (6) 20 (6)				7				SS = 17-17-15
669.	- 40 -	0.00.0000000	28 (6) 34 (6)								

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434375, Longitude: -97.788050. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). Air Rotary:0'-30'; Wet Rotary: 30'-40'. Groundwater was encountered during drilling at 25'. Surface elevation estimated by Google Earth.

WinCore Version 3.3 County Hood Highway US 377 CSJ 0080-03-049 Hole Structure Station

Offset

RW-23 Retaining Wall District Dallas
Date 7/18/23
Grnd. Elev. 703.00 ft
GW Elev. 699.00 ft

	L	Tawas Ories		Triaxial Test		Properti		
Elev. (ft)	O G	Texas Cone Penetrometer	Strata Description	Lateral Deviator Press. Stress (psi) (psi)			Wet	Additional Remarks
-			CLAY, very soft, reddish brown with gray to reddish brown, with sand, lean (CL)	(FS) (FSS)	8	28 14		-200=75%; PP = 4.5+ tsf
-					7			SS = 9-9-8
-								Organic Content = 0.6%
5 -		2 (6) 2 (6)						
-					19	26 12		200=73%; SS = 4-4-4
-					22	24 10		-200= 73%; Sulfate Content = 140
10 -		3 (6) 3 (6)						
-					22	25 9		
-								
15 -		2 (6) 3 (6)						
-					20			-200=69%; SS = 4-4-4
-								sandy at 16'
-								
20 -		3 (6) 3 (6)						

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434442, Longitude: -97.787412. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). PP= Pocket Penetrometer (tsf). SFA:0'-30'. Groundwater was encountered during drilling at 4'. Surface elevation estimated by Google Earth.

Te is Department of Transportation

WinCore Version 3.3 County Hood Highway US 377 CSJ 0080-03-049

Structure Station Offset

Hole

RW-23 Retaining Wall District
Date
Grnd. Elev.

Grnd. Elev. 703.00 ft GW Elev. 699.00 ft

Dallas 7/18/23

	L	Towns Coms		Triaxial Test	Properties	
Elev. (ft)	O G	Texas Cone Penetrometer	Strata Description	Lateral Deviator Press. Stress (psi) (psi)		Additional Remarks
-			CLAY, very soft, reddish brown with gray to reddish brown, with sand, lean (CL)	(poi)	18	-200=49%; SS = 3-3-3
-			SAND, loose to slightly compact, reddish brown, clayey (SC)			
25 –		5 (6) 7 (6)				
_					19	SS = 4-4-4
30 -		7 (6) 16 (6)				
30 - - .5			SAND, slightly compact, reddish		4	-200=9%; SS = 9-7-8
- )			brown, well graded, with gravel (SW)			
-						
35 -						
_	-					
_						

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434442, Longitude: -97.787412. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). PP= Pocket Penetrometer (tsf). SFA:0'-30'. Groundwater was encountered during drilling at 4'. Surface elevation estimated by Google Earth.

Version 3.3

County Hood Highway **US 377 CSJ** 0080-03-049

Structure Station

Hole

**RW-27 Retaining Wall**  District **Dallas** 8/1/23 Date Grnd. Elev.

776.00 ft Offset GW Elev. 762.00 ft

		L	T C		Triaxi	al Test		Prop	ertie	s	
Elev (ft)	<b>v</b> .	O G	Texas Cone Penetrometer	Strata Description	Lateral Press. (psi)	Deviator Stress (psi)	МС	LL	PI	Wet Den. (pcf)	Additional Remarks
				WEATHERED LIMESTONE, tan			1				SS = 50/3"
772.	5 —		50 (1.5) 50 (0.5)	CLAY, very hard, tan, sandy, with weathered limestone nodules, lean (CL)			9	25	12		SS = 19-50/50.5" -200=64%; SS = 12-34-50/3"
	10 -		50 (1.5) 50 (0.5)				9				SS = 42-50/2"
	15		50 (4) 39 (6)				14	45	30		-200=62%; SS = 10-18-38
	20 —		22 (6) 50 (3)				14				SS = 18-24-48

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.433993, Longitude: -97.800522. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). Air Rotary:0'-25'; Wet Rotary: 25'-40'. Groundwater was encountered during drilling at 14'. Surface elevation estimated by Google Earth.

Version 3.3

County Hood Highway US 377 CSJ 0080-03-049

Hole

**RW-27** 

District **Dallas** 

Structure	Retaining Wall	Date	8/1/23
Station		Grnd. Elev.	776.00 ft
Offset		GW Elev.	762.00 ft

	L	T		Triaxi	al Test		Prop	pertie	es	
Elev. (ft)	O G	Texas Cone Penetrometer	Strata Description	Lateral Press. (psi)	Deviator Stress (psi)				Wet Den. (pcf)	Additional Remarks
			CLAY, very hard, tan, sandy, with weathered limestone nodules, lean (CL)	(PSI)	(FG:)				(60.7	
						8	38	26		-200=51%; SS = 50/5.5"
751. 25	HHH	50 (1) 50 (0)	LIMESTONE, very hard, gray, moderatly weathered							
										Run:27'-30'; Rec=47%; RQD=24%
30		50 (1) 50 (0)				_1				Run:30'-35'; Rec=100%; RQD=58%
										DD = 148 pcf; UC = 309 tsf
35		50 (0.25) 50 (0)				1				Run:35'-40'; Rec=95%; RQD=88% DD = 142 pcf; UC = 153 tsf
736. 40		50 (0) 50 (0.25)								

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.433993, Longitude: -97.800522. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). Air Rotary:0'-25'; Wet Rotary: 25'-40'. Groundwater was encountered during drilling at 14'. Surface elevation estimated by Google Earth.

Terus Department Di Transportation

WinCore Version 3.3 County Hood Highway US 377 CSJ 0080-03-049

Structure Station Offset

Hole

RW-28 Retaining Wall District Dallas
Date 8/3/23
Grnd. Elev. 777.00 ft

GW Elev. N/A

	[	Texas Cone			al Test		Prop	ertie		
Elev. (ft)	L O G	Penetrometer	Strata Description	Lateral Press. (psi)	Deviator Stress (psi)	МС	LL	PI	Wet Den. (pcf)	Additional Remarks
			CLAY, gray, with sand and limestone	(60.7	(рс./	1	26	14	(100.7	-200=39%; SS = 20-50/3"
			fragments, lean (CL)							Organic Content = 1.0%
										<b>3</b>
_										
74.5						5	30	18		-200=82%; SS = 50/4"
	_		WEATHERED LIMESTONE, very hard, gray							
			giuy							
-	-									
		50 (0) 50 (4)								
5 -	-	50 (2) 50 (1)								
ē						16	59	35		-200=90%; SS = 14-50/3"
							- 55			Sulfate Content = 580 ppm
-										
69						1				Run:8'-10'; Rec=100%; RQD=7
	1,1		LIMESTONE, very hard, gray, moderatly weathered	1						DD = 145 pcf; UC = 205 tsf
-			weathered							
	7									
10 -	_ <u> </u>	50 (0.25) 50 (0)				2				Run:10'-15'; Rec=98%; RQD=
-										
	7,1									
	+									
-	-									
	芋									
15 -		50 (0) 50 (0)				1				Run:15'-20'; Rec=97%; RQD=9
	+++									DD = 148 pcf; UC = 398 tsf
-	茔									
	++									
-	-#									
=	茁									
	<u> </u>									
-	1,1	50 (0.25) 50 (0)								
	+	50 (0 25) 50 (0)								

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434083, Longitude: -97.801180. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). SFA:0'-8'; Wet Rotary: 8'-20'. Groundwater was not encountered during drilling. Surface elevation estimated by Google Farth

The ground water elevation was not determined during the course of this boring.

WinCore Version 3.3 County Hood Highway US 377 CSJ 0080-03-049

Structure Station

Offset

RW-29 Retaining Wall District Dallas
Date 8/3/23
Grnd. Elev. 778.00 ft

GW Elev. N/A

		L	Texas Cone			al Test		Prop	ertie		
Elev (ft)	<i>.</i> .	O G	Penetrometer	Strata Description	Lateral Press. (psi)	Deviator Stress (psi)	МС	LL	PI	Wet Den. (pcf)	Additional Remarks
	_			CLAY, very hard, gray, gravelly, with sand and limestone fragments, lean (CL)	(10.7)	(20.)	5	37	25	(PS-)	-200=60%; SS = 18-18-19
	_						_11	40	26		-200=76%; PP = 4.5+ tsf
	_										
Ę	5 -		50 (3) 50 (1)								
771.5							6				SS = 50/2"
	_			WEATHERED LIMESTONE, very hard, gray							Organic Content = 0.5%
	_						14	41	27		-200=80%; SS = 50/3"
<b>768.</b> 1			38 (1) 50 (1)	LIMESTONE, very hard, gray, slightly weathered							
	_										SS = 50/3.5"
	_										
1		1,1	50 (0.5) 50 (0.25)				1				Run:15'-20'; Rec=100%; RQD=80
	-										
	_										
	20 –		50 (0.25) 50 (0)				2				Run:20'-25'; Rec=87%; RQD=88%

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434203, Longitude: -97.801819. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). PP= Pocket Penetrometer (tsf). SFA:0'-15'; Wet Rotary: 15'-30'. Groundwater was not encountered during drilling. Caved in during drilling at 30'. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

Tenses
Department
Of Transportation

WinCore Version 3.3 County Hood Highway US 377 CSJ 0080-03-049

Structure Station Offset

Hole

RW-29 Retaining Wall District Dallas
Date 8/3/23
Grnd. Elev. 778.00 ft

GW Elev. N/A

	Ι.			Triaxial Test		Prop	pertie	es	
Elev. (ft)	L O G	Texas Cone Penetrometer	Strata Description	Lateral Deviator Press. Stress (psi) (psi)	МС		PI	Wot	Additional Remarks
-		50 (0.5) 50 (0.125)	LIMESTONE, very hard, gray, slightly weathered	(psi) (psi)	1			(рст)	DD = 151 pcf; UC = 711 tsf  Run:25'-30'; Rec=100%; RQD=45  DD = 144 pcf; UC = 201 tsf

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434203, Longitude: -97.801819. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). PP= Pocket Penetrometer (tsf). SFA:0'-15'; Wet Rotary: 15'-30'. Groundwater was not encountered during drilling. Caved in during drilling at 30'. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

Hole

Ten is Department of Transportation

WinCore Version 3.3 County Hood Highway US 377 CSJ 0080-03-

US 377 Structure 0080-03-049 Station Offset RW-30 Retaining Wall District Dallas
Date 8/1/23
Grnd. Elev. 775.00 ft
GW Elev. N/A

	L	T 0		Triaxi	al Test		Prop	ertie	es	
Elev. (ft)	O G	Texas Cone Penetrometer	Strata Description	Lateral Press. (psi)	Deviator Stress (psi)				Wet Den. (pcf)	Additional Remarks
-			CLAY, very hard, gray to dark brown, with sand, lean (CL)		(POI)	8	41	25	<b></b>	-200=73%; SS = 4-6-11 -200=77%; SS = 14-20-20
5 -		50 (5) 50 (4)								
768.5			CLAY, dark reddish brown, lean			7	33	19		-200=89%; SS = 50/2"
766.5			(CL)			5	64	46		-200=79%; SS = 50/5.5"
10 -		50 (1) 50 (2)	CLAY, very hard, tan, with sand, fat (CH)							Sulfate Content = 30.4 ppm Chloride Content = 120 ppm
-						5				SS = 50/5"
-										
15 -		50 (2) 50 (1)								
_						4				SS = 50/2"
-		50 (1.5) 50 (0.5)								

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.433337, Longitude: -97.800021. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). SFA:0'-30'. Groundwater was not encountered during drilling. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

Hole

Version 3.3

County Hood Highway **CSJ** 

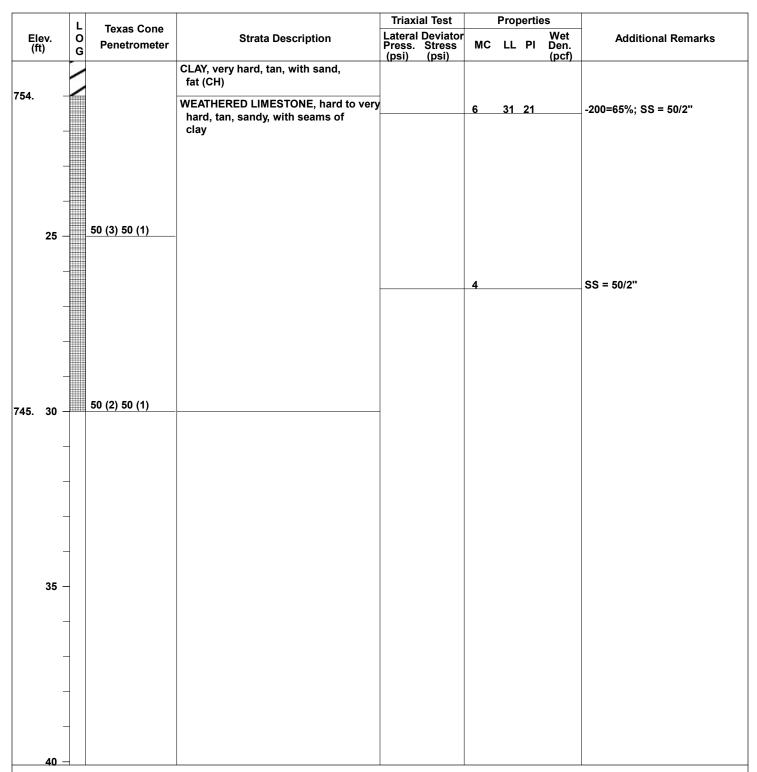
RW-30

Date 8/1/23 Grnd. Elev.

**Dallas** 

District

**US 377** Structure **Retaining Wall** 0080-03-049 Station 775.00 ft Offset GW Elev. N/A



Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.433337, Longitude: -97.800021. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). SFA:0'-30'. Groundwater was not encountered during drilling. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

Terus Department Di Transportation

WinCore Version 3.3 County Hood Highway US 377 CSJ 0080-03-049 Hole Structure Station RW-31 Retaining Wall District Dallas
Date 7/27/23
Grnd. Elev. 766.00 ft

Offset GW Elev. N/A

		Tayor Carr			al Test		Prop	ertie	s	
Elev. (ft)	L O G	Texas Cone Penetrometer	Strata Description	Lateral Press. (psi)	Deviator Stress (psi)	МС	LL	PI	Wet Den. (pcf)	Additional Remarks
			CLAY, brown, with sand, fat (CH)			9	42	26		-200=82%; SS = 5-7-7
_										
763.5	/					9	54	37		-200=41%; SS = 8-10-13
-			SAND, dense, reddish brown, clayey (SC)							Sulfate Content = 140 ppm
5 -		20 (6) 19 (6)								
-	_					8				SS = 9-13-18
757.5	_		SAND, slightly compact to compact,			3	18	2		-200=42%; SS = 5-5-6
-		11 (6) 12 (6)	reddish brown to tan, silty (SM)							Organic Content = 0.5%
10 -		(e) (e)								
-	_									
-										
15 -		19 (6) 22 (6)								
-	-					2				SS = 9-11-17
- - -										
20 -		40 (6) 35 (6)								

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.433156, Longitude: -97.799680. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). SFA:0'-30'. Groundwater was not encountered during drilling. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

Version 3.3

County Hood **US 377** Highway CSJ 0080-03-049

Structure Station Offset

Hole

RW-31 **Retaining Wall**  District Date

**Dallas** 7/27/23 Grnd. Elev. 766.00 ft

GW Elev. N/A

		Tawas Cama			ial Test		Prop			
Elev. (ft)	L O G	Texas Cone Penetrometer	Strata Description	Lateral Press. (psi)	Deviator Stress (psi)	МС	LL	PI	Wet Den. (pcf)	Additional Remarks
_			SAND, slightly compact to compact, reddish brown to tan, silty (SM)		- U /					
_						1	16	1_		-200=21%; SS = 10-13-11
744 05		50 (5.5) 50 (3.5)								
741. 25 -			MARL, very hard, light brown, highly weathered							
-						3				SS = 50/3"
-										
-										SS = 50/3"
-		50 (1) 50 (0.25)								
736. 30 -		00 (1) 00 (0.20)								
-										
-										
-										
-										
35 -										
-										
-										
-										
-										
40 -										

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.433156, Longitude: -97.799680. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). SFA:0'-30'. Groundwater was not encountered during drilling. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

# Tents Explainment of Transportation

Version 3.3

#### **DRILLING LOG**

County Hood Highway US 377 CSJ 0080-03-049 Hole Structure Station Offset RW-32 Retaining Wall District Dallas
Date 8/2/23
Grnd. Elev. 753.00 ft
GW Elev. N/A

	1			Triaxial Test		Prop	ertie	es	
Elev. (ft)	L O G	Texas Cone Penetrometer	Strata Description	Lateral Deviator Press. Stress (psi) (psi)	МС	LL		Wet	Additional Remarks
			SAND, dense, brownish red, clayey (SC)	(pai) (pai)	5	26	14	(рсі)	-200=51%; SS = 10-13-14 Organic Content = 1.0%
	_				8				SS = 10-14-16
5		34 (6) 40 (6)							
	_				5	34	21		-200=39%; SS = 20-19-15
	_				6				SS = 8-14-11
10	_	30 (6) 50 (1.5)							
741.			LIMESTONE, very hard, tan to gray,		1				SS = 50/0.25" Run:12'-15'; Rec=100%; RQD=97
			slightly to moderatly weathered						
15	1	50 (0.25) 50 (0)			1				Run:15'-20'; Rec=97%; RQD=98%
		50 (0) 50 (0.125)							
20	- <del></del>	50 (0) 50 (0.125)			1_				Run:20'-25'; Rec=90%; RQD=84%

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.433449, Longitude: -97.797547. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). SFA:0'-12'; Water Rotary: 12'-30'. Groundwater was not encountered during drilling. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

WinCore Version 3.3 County Hood Highway US 377 CSJ 0080-03-049

Structure Station Offset

Hole

RW-32 Retaining Wall District Date

Date 8/2/23
Grnd. Elev. 753.00 ft
GW Elev. N/A

**Dallas** 

	L	T 0			al Test		Prop			
Elev. (ft)	O G	Texas Cone Penetrometer	Strata Description	Lateral Press. (psi)	Deviator Stress (psi)	МС	LL	PI	Wet Den. (pcf)	Additional Remarks
723. 30 -		50 (0.25) 50 (0.12	LIMESTONE, very hard, tan to gray, slightly to moderatly weathered  5)	(psi)	(psi)	1			(pcf)	Run:25'-30'; Rec=95%; RQD=39%

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.433449, Longitude: -97.797547. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). SFA:0'-12'; Water Rotary: 12'-30'. Groundwater was not encountered during drilling. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

# Texts Department of Transportation

Version 3.3

#### **DRILLING LOG**

County Hood Highway US 377 CSJ 0080-03-049 Hole Structure Station RW-33 Retaining Wall District Dallas
Date 7/27/23
Grnd. Elev. 756.00 ft

Offset GW Elev. N/A

	Τ,	Towar Commi		Triaxi	al Test		Prop	ertie	es	
Elev. (ft)	. O G	Texas Cone Penetrometer	Strata Description	Lateral Press. (psi)	Deviator Stress (psi)	МС	LL	PI	Wet Den. (pcf)	Additional Remarks
			SAND, slightly compact, dark reddish		,	3	32	19	,	-200=50%; SS = 11-16-16
			brown, clayey, with gravel (SC)							Organic Content = 1.8%
	_					2	35	22		-200=22%; PP = 4.5+ tsf
	_	14 (0) 14 (0)								
5	=	14 (6) 14 (6)				4				SS = 0.5.2
	_					1				SS = 9-5-3
747.5			SAND, compact to slightly compact,			2	21	9		-200=9%; SS = 15-20-25
1	0 -	11 (6) 50 (4)	light brown, well graded, with clay and gravel (SW-SC)							
1	5 —	12 (6) 19 (6)				111				Run:15'-20'; Rec=88%; RQD=49%
739.5	_									
733.3			LIMESTONE, very hard, tan to gray, with sandy clay seams, slightly weathered							
	11	50 (0.5) 50 (0.25)				1				_Run:20'-25'; Rec=97%; RQD=69%

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.433349, Longitude: -97.798171. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). PP= Pocket Penetrometer (tsf). SFA:0'-15'; Water Rotary: 15'-30'. Groundwater was not encountered during drilling. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

Tess Department of Transportation

WinCore Version 3.3 County Hood Highway US 377 CSJ 0080-03-049

Structure Station Offset

Hole

RW-33 Retaining Wall District Date

Dallas 7/27/23 756.00 ft

tation	Grnd. Elev.	756.00
effset	GW Elev.	N/A

				Triaxi	al Test		Prop	ertie	es	
Elev. (ft)	L O G	Texas Cone Penetrometer	Strata Description	Lateral Press. (psi)	Deviator Stress (psi)				Wet Den. (pcf)	Additional Remarks
-			LIMESTONE, very hard, tan to gray, with sandy clay seams, slightly weathered	(psi)	(psi)	1			(pcf)	DD = 152 pcf; UC = 431 tsf  Run:25'-30'; Rec=88%; RQD=819  DD = 159 pcf; UC = 1135 tsf
40 -	4									

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.433349, Longitude: -97.798171. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). PP= Pocket Penetrometer (tsf). SFA:0'-15'; Water Rotary: 15'-30'. Groundwater was not encountered during drilling. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

## County Hood

Version 3.3

**US 377** 

0080-03-049

Highway

CSJ

RW-38

Hole Structure

**DRILLING LOG** 

**Retaining Wall** 

District **Dallas** 7/25/23 Date Grnd. Elev. 738.00 ft

Station Offset GW Elev. N/A

	L			Triaxi	al Test		Prop	ertie	es	
Elev. (ft)	O G	Texas Cone Penetrometer	Strata Description	Lateral Press. (psi)	Deviator Stress (psi)	МС	LL	PI	Wet Den. (pcf)	Additional Remarks
			PAVEMENT, 9.5" Asphalt over 4"	(1000)	(IP 9-7				(12-2-7	
7000			Base			9	25	11		-200=29%; SS = 7-5-5
736.9			SAND, dense, dark brown, clayey, with limestone gravel (SC)							Sulfate Content = 140 ppm
735.5						3	24	10		-200=20%; SS = 5-24-27
	00000		GRAVEL, dense, gray, clayey, with with sand and limestone fragments (GC)							Organic Content = 0.4%
	. 0.0.	45 (6) 50 (6)								
5 -	0.0.0	45 (6) 55 (6)								
731.5	٠,٠					5	23	11		-200=19%; SS = 24-19-30
	_		SAND, very dense, reddish brown, well graded, gravelly (SW)							
	_					3				-200=11%; SS = 32-50/4.5"
700 40		50 (0.5) 50 (0.25)								Run:10'-15'; Rec=100%; RQD=95%
728. 10 ·	1		LIMESTONE, very hard to hard,							, , , , , , , , , , , , , , , , , , , ,
			gray, moderatly weathered							
	臣									
	莊									
	4									
15 -	<u> </u>	50 (0.25) 50 (0.25)				1				Run:15'-20'; Rec=100%; RQD=92%
13	11									DD = 150 pcf; UC = 377 tsf
	井									
	7									
	- <u>F</u>									
	+++									
	-#									
	苹	50 (0.25) 50 (0)								Bun:20' 25': Boo-4000': BOD-070
20		00 (0.20) 00 (0)								Run:20'-25'; Rec=100%; RQD=87%

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.433655, Longitude: -97.794665. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). SFA:0'-10'; Water Rotary: 10'-30'. Groundwater was not encountered during drilling. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

Driller: TX Geo Bore Logger: L. Arizola **Organization: Arias** 

WinCore Version 3.3 County Hood Highway US 377 CSJ 0080-03-049

Structure Station Offset

Hole

RW-38 Retaining Wall District Dallas
Date 7/25/23
Grnd. Elev. 738.00 ft

GW Elev. N/A

	Ι			Triaxial Tes	t		Prop	ertie	es	
Elev. (ft)	L O G	Texas Cone Penetrometer	Strata Description	Lateral Devia Press. Stres (psi) (psi)		МС	LL	PI	Wet Den. (pcf)	Additional Remarks
- - -	G		LIMESTONE, very hard to hard, gray, moderatly weathered	(psi) (psi)		1			pen. (pcf)	Run:25'-30'; Rec=77%; RQD=50% DD = 153 pcf; UC = 171 tsf
40 -	1									

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.433655, Longitude: -97.794665. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). SFA:0'-10'; Water Rotary: 10'-30'. Groundwater was not encountered during drilling. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

Driller: TX Geo Bore Logger: L. Arizola Organization: Arias

Version 3.3

County Hood **US 377** Highway CSJ 0080-03-049

Structure Station

Hole

RW-39 **Retaining Wall**  District **Dallas** 7/20/23 Date 729.00 ft Grnd. Elev.

Offset GW Elev. N/A

	L	Texas Cone			al Test		Prop	ertie	es	
Elev. (ft)	O G	Donotromotor	Strata Description	Lateral Press. (psi)	Deviator Stress (psi)	МС	LL	PI	Wet Den. (pcf)	Additional Remarks
			CLAY, reddish brown, sandy, with limestone fragments, lean (CL)			2				SS = 13-25-24 Sulfate Content = 46 ppm Chloride Content = 80 ppm
727.			LIMESTONE, very hard, gray, slightly to moderatly weathered							SS = 50/3.5"
5		50 (2) 50 (1.5)				1				_Run:5'-10'; Rec=40%; RQD=0% DD = 157 pcf; UC = 280 tsf
										DD TOT pot, or Zeo tot
10		50 (1) 50 (0.5)								Run:10'-15'; Rec=98%; RQD=46%
15		50 (0.5) 50 (0.25)								Run:15'-20'; Rec=45%; RQD=59%
709. 20	井	32 (6) 40 (6)								

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.433674, Longitude: -97.793729. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). SFA:0'-5'; Wet Rotary: 5'-30'. Groundwater was not encountered during drilling. Surface elevation estimated by

The ground water elevation was not determined during the course of this boring.

**Driller: TX Geo Bore** Logger: L. Arizola **Organization: Arias** 

Version 3.3

County Hood Highway US 377 CSJ 0080-03-049

Hole Structure Station

Offset

RW-39 Retaining Wall District Dallas
Date 7/20/23
Grnd. Elev. 729.00 ft

N/A

GW Elev.

	1	T 2		Triaxi	al Test		Prop	ertie	s	
Elev. (ft)	L O G	Texas Cone Penetrometer	Strata Description		Deviator Stress (psi)				Wet Den. (pcf)	Additional Remarks
			CLAY, very stiff, gray, with sand,	(60.7	(10.7				(100.7	
			lean (CL)							
						12	29	14		-200=84%; SS = 7-23-22
04. 25		50 (2.5) 50 (1.5)	LIMESTONE, very hard, gray, moderatly			4				Run:25'-30'; Rec=53%; RQD=5
			weathered							DD = 135 pcf; UC = 208 tsf
	<del>-</del>									
	_ #									
	+									
	- #									
	+++									
i 99. 30	1	50 (1.5) 50 (0.5)								
33. 30										
	4									
	+									
35	-									
	-									
	+									

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.433674, Longitude: -97.793729. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). SFA:0'-5'; Wet Rotary: 5'-30'. Groundwater was not encountered during drilling. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

Driller: TX Geo Bore Logger: L. Arizola Organization: Arias

WinCore Version 3.3 County Hood Highway US 377 CSJ 0080-03-049

Structure Station Offset

Hole

RW-40 Retaining Wall District Dallas
Date 7/24/23

Grnd. Elev. 718.00 ft GW Elev. N/A

	L	Texas Cone			al Test		Prop	ertie	s	
Elev. (ft)	O G	Penetrometer	Strata Description	Lateral Press. (psi)	Deviator Stress (psi)	МС	LL	PI	Wet Den. (pcf)	Additional Remarks
-			SAND, reddish brown, clayey, with ferrous stains and limestone gravel (SC)		<b></b>	1	23	10		-200=28%; SS = 50/5.75"
715.5	_		GRAVEL, dense to loose, tan, clayey,			1	22	10		-200=16%; SS = 15-3-4
-	0000000		with sand and limestone fragments (GC)							Organic Content = 0.1%
5 -	0.0.0.	23 (6) 50 (5)								
-	. 0 . 0 .					4				SS = 13-18-50/5"
-	0.000									Sulfate Content = 30.5 ppm Chloride Content = 80 ppm
-						12				-200=42%; SS = 5-4-2
10 -	00000	4 (6) 8 (6)								
-	0.00000									
<b>705.</b> -			CLAY, very hard, gray, with sand and ferrous stains, lean (CL)			15	32	18		-200=85%; PP = 4.5 tsf
15 -		50 (4) 50 (2)								
-						12	25	12		-200=74%; SS = 21-31-41
700			LIMESTONE, very hard, gray to dark gray, moderatly to highly weathered							Run:18'-20'; Rec=58%; RQD=93%
20 -	<u></u>	50 (3) 50 (1)				11				Run:20'-25'; Rec=22%; RQD=0%

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.433786, Longitude: -97.793206. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). PP= Pocket Penetrometer (tsf). SFA:0'-18'; Wet Rotary: 18'-30'. Groundwater was not encountered during drilling. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

Version 3.3

County Hood Highway US 377 CSJ 0080-03-049

Structure

Hole

RW-40 **Retaining Wall**  District Date

**Dallas** 7/24/23 ft

Station	Grnd. Elev.	718.00
Offset	GW Elev.	N/A

	Τ,			Triaxial Test	Properties	
Elev. (ft)	L O G	Penetrometer	Strata Description	Lateral Deviator Press. Stress (psi) (psi)	MC LL PI Den. (pcf)	Additional Remarks
25		50 (3.5) 50 (1)	LIMESTONE, very hard, gray to dark gray, moderatly to highly weathered	(psi) (psi)	(рст)	DD = 160 pcf; UC = 623 tsf  Run:25'-30'; Rec=63%; RQD=139
30 683. 35		50 (4.5) 50 (3)				SS = 50/3.5"
40	_					

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.433786, Longitude: -97.793206. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). PP= Pocket Penetrometer (tsf). SFA:0'-18'; Wet Rotary: 18'-30'. Groundwater was not encountered during drilling. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

# Trais Expenses of Trappetion

Version 3.3

**DRILLING LOG** 

County Hood Highway US 377 CSJ 0080-03-049 Hole Structure Station RW-45 Retaining Wall District
Date
Grad Fley

Dallas 8/17/23 . 706.00 ft

Station Grnd. Elev. 706.0
Offset GW Elev. N/A

	L	Texas Cone			al Test		Prop	ertie		
Elev. (ft)	O G	Penetrometer	Strata Description	Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)	Additional Remarks
			PAVEMENT, 6" Asphalt over 6" Base							
5.						8				SS = 4-6-5
			CLAY, stiff to very soft, brown, silty, with sand, lean (CL-ML)							
-			,							
						9	20	4		-200=55%; SS = 5-7-3
-										
-										
_		13 (6) 24 (6)								
5 -										
_										
						12				SS = 7-8-9
-										
-						13	21	7		-200=72%; SS = 13-13-19
-										
		13 (6) 19 (6)								
10 -	/	10 (0) 10 (0)								
						14				SS = 6-6-8
	/									
-										
		1 (6) 1 (6)								
15 -		1 (0) 1 (0)								
-						23	23	6		Sulfate Content = 184 ppm
-										Chloride Content = 100 ppm
-										
-										
		4 (0) 4 (0)								
20 -	۲.	1 (6) 1 (6)								

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434002, Longitude: -97.788177. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). PP= Pocket Penetrometer (tsf). Air Rotary:0'-40'. Groundwater was not encountered during drilling. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

Version 3.3

County Hood Highway **US 377** CSJ 0080-03-049

Structure Station

Hole

RW-45 **Retaining Wall**  District Date

**Dallas** 8/17/23 706.00 ft

Grnd. Elev. Offset GW Elev. N/A

	L	Texas Cone		Triaxial Test		Prop	ertie		
Elev. (ft)	. C	Penetrometer	Strata Description	Lateral Deviator Press. Stress (psi) (psi)	МС	LL	PI	Wet Den. (pcf)	Additional Remarks
			CLAY, stiff to very soft, brown, silty, with sand, lean (CL-ML)	Way Way					
					22				SS = 0-1-1
2	25 –	0 (6) 0 (6)							
679.5					20	22	9		-200=63%; SS = 0-1-1
079.5			CLAY, very soft, brown, sandy, lean (CL)						,
			, ,						
3	30 -	8 (6) 9 (6)							
J									
674.5					12				-200=14%; SS = 6-11-9
6/4.5	_		SAND, slightly compact, brown, with gravel (SW)						
			January (2007)						
	-								
	-								
671. 3	15	18 (6) 21 (6)							
07 1. 0			CLAY, stiff, brown, sandy, lean (CL)						
	-				15	21	8		-200=65%; SS = 4-4-8
							•		
		10 (6) 10 (6)							

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434002, Longitude: -97.788177. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). PP= Pocket Penetrometer (tsf). Air Rotary:0'-40'. Groundwater was not encountered during drilling. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

Tet is Department of Transportation

WinCore Version 3.3 County Hood Highway US 377 CSJ 0080-03-049

Structure Station Offset

Hole

RW-46 Retaining Wall District Dallas
Date 8/17/23
Grnd. Elev. 705.00 ft

GW Elev. N/A

	L	Texas Cone			al Test		Prop	ertie		
Elev. (ft)	O G	Penetrometer	Strata Description	Lateral Press. (psi)	Deviator Stress (psi)	МС	LL	PI	Wet Den. (pcf)	Additional Remarks
04.1			PAVEMENT, 6" Asphalt over 5" Base		,	10	24	14	.,	-200=21%; SS = 8-6-7
V-7.1 -			SAND, FILL, brown, clayey, with limestone gravel (SC)							200 2178, 00 00 1
02.5			CLAY, very stiff to stiff, brown,			9				-200=52%; SS = 5-15-17
-			sandy, silty, lean (CL-ML)							
-		00 (0) 00 (0)								
5 -		23 (6) 23 (6)								
-						12	22	7		-200=66%; SS = 8-11-12
-										
-						13				SS = 10-11-19
-										Sulfate Content = 120 ppm
10 -		18 (6) 15 (6)								
10										
93.5						14	24	9		-200=76%; SS = 5-8-12
-			CLAY, very soft, brown, with sand, lean (CL)							
-										
-										
15 -		0 (6) 1 (6)								
-										
-						25				_
_										
-		2 (6) 2 (6)								
20 -	//	2 (6) 3 (6)								

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434119, Longitude: -97.787609. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). PP= Pocket Penetrometer (tsf). Air Rotary:0'-11.5', Wet Rotary: 15.5'-30'. Groundwater was not encountered during drilling. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

Version 3.3

County Hood Highway **US 377** CSJ 0080-03-049

Structure Station Offset

Hole

RW-46 **Retaining Wall**  District Date

8/17/23 Grnd. Elev. 705.00 ft GW Elev. N/A

**Dallas** 

	L Texas Cone		Triaxial Test		Prop			
Elev. (ft)	L Texas Cone O Penetromete	Strata Decariation	Lateral Deviator Press. Stress (psi) (psi)	МС	LL	PI	Wet Den. (pcf)	Additional Remarks
_		CLAY, very soft, brown, with sand, lean (CL)	(801) (801)		22	7	(рог)	-200=71%;SS = 0-1-1
3.5		CLAY, very soft, brown, silty, with sand, lean (CL-ML)		20	22			-200-7176,33 - 0-1-1
_								
25 –	2 (6) 2 (6)							
-				18				SS = 1-2-3
_								
-	5 (6) 3 (6)							
5. 30 -								
-	_							
_								
35 -	-							
_								
_								
=	_							
40								

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434119, Longitude: -97.787609. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). PP= Pocket Penetrometer (tsf). Air Rotary:0'-11.5', Wet Rotary: 15.5'-30'. Groundwater was not encountered during drilling. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

Tents
Department
of Transportation

WinCore Version 3.3 County Hood Highway US 377 CSJ 0080-03-049

Structure Station Offset

Hole

P-01 Pavement District Dallas
Date 7/19/23
Grnd. Elev. 789.00 ft

N/A

GW Elev.

	L	Texas Cone			al Test		Prop	ertie		
Elev. (ft)	O G	Penetrometer	Strata Description	Lateral Press. (psi)	Deviator Stress (psi)	МС	LL	PI	Wet Den. (pcf)	Additional Remarks
38.3			PAVEMENT, 6" Asphalt over 3" Base		(100.)				(100.7	
0.5			CLAY, FILL: light brown, crushed base material, with sand and gravel, lean (CL)							SS = 29-19-11
										SS = 30-33-50/5"
5.										
5	.00.00	9 (6) 10 (6)	GRAVEL, loose, light brown, clayey (GC)							
	. 0.0.					9	25	10		-200=27%; SS = 8-5-3
	0.0.0.					J	20			Organic Content = 0.6%
31.			CLAY, stiff to very soft, light brown, sandy, with gravel, lean (CL)			9				-200=50%; SS = 2-4-8
10		14 (6) 13 (6)								
						13	26	11		-200=50%; SS = 5-5-3
15		1 (6) 2 (6)								
						7				-200=35%; SS = 5-9-15
69. <b>2</b> 0		8 (6) 9 (6)								

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434950, Longitude: -97.805113. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). Air Meter: 0'-20'. Groundwater was not encountered during drilling. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.



WinCore Version 3.3

740.

County Hood Highway US 377 CSJ 0080-03-049 Hole Structure Station

Offset

P-03 Pavement District Dallas
Date 7/18/23
Grnd. Elev. 754.00 ft
GW Elev. N/A

Run:15'-20'; Rec=100%; RQD=100%

	L	Towas Come		Triaxi	al Test		Prop	ertie	es	
Elev. (ft)	O G	Texas Cone Penetrometer	Strata Description	Lateral Press. (psi)	Deviator Stress (psi)	МС	LL	ΡI	Wet Den. (pcf)	Additional Remarks
'53.			PAVEMENT, 7" Asphalt over 6" Base			8	26	11	.,	-200=32%; SS = 5-9-10
JJ.			SAND, brown, clayey, with limestone gravel (SC)							Organic Content = 0.9% Sulfate Content = 1020 ppm
51.5			CLAY, stiff, brown, with limestone			18	50	29		-200=86%; SS = 6-7-12
			fragments, fat (CH)							
5 -		10 (6) 16 (6)								
-						20				SS = 8-15-12
46.			WEATHERED LIMESTONE, stiff, tan, with sand and gravel nodules							SS = 4-6-10
10 -		16 (6) 21 (6)								
										SS = 8-14-23

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434161, Longitude: -97.798982. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). Air Meter: 0'-15'; Wet Rotary: 15'-20'. Groundwater was not encountered during drilling. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

Driller: TX Geo Bore Logger: J. Flores Organization: Arias

LIMESTONE, very hard, tan to gray,

moderatly weathered

50 (0.125) 50 (0)

50 (0) 50 (0)



WinCore Version 3.3 County Hood Highway US 377 CSJ 0080-03-049 Hole P-04 Structure Pavement Station

Offset

District Dallas
Date 7/20/23
Grnd. Elev. 717.00 ft
GW Elev. 701.00 ft

		L	Texas Cone			al Test		Prop	ertie	es	
Ele <sup>,</sup> (ft)	<b>v</b> .	O G	Penetrometer	Strata Description	Lateral Press. (psi)	Deviator Stress (psi)	МС	LL	PI	Wet Den. (pcf)	Additional Remarks
				PAVEMENT, 7" Asphalt over 3" Base		-,-				,	
716.2	_	-		SAND, FILL: dark brown, crushed			4				SS = 10-8-12
				base material, clayey, with limestone gravel (SC)							Sulfate Content = 140 ppm
							2				-200=42%; SS = 50/6"
740	_										
713.	_		50 (1) 50 (0.5)	LIMESTONE, very hard, gray, with seams of shale, moderatly weathered							Run:5'-10'; Rec=100%; RQD=100
	5 –	<del></del>									Kuii.5-10 , Net-100 %, NqD-100
	-	菩									
	_										
	_	芸									
	_	芸									
707.	10 –	++	50 (2) 50 (0)								Run:10'-15'; Rec=0%; RQD=0%
	-	00000		GRAVEL, very hard, gray, poorly graded, with sand (GP)			4				-200=5%; SS = 50/0.25"
	_										
	_	0.0									
		0.0.0									
700	45	0.0.0	50 (0.25) 50 (0.25)								Run:15'-20'; Rec=0%; RQD=0%
702.	15 -			CLAY, very hard, gray, gravelly, with sand, lean (CL)							7,000 0,00, 1,000 0,00
	_										
	-										
	_						17	28	13		-200=68%; SS = 50/0"
	_										
697.	20 –		50 (2) 50 (1)								

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.433923, Longitude: -97.794807. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). Air Meter: 0'-5'; Water Meter: 5'-20'. Groundwater was encountered during drilling at 16'. Caved in during drilling at 18.5'. Surface elevation estimated by Google Earth.

Any ground water elevation information provided on this boring log is representative of conditions existing on the day and for the specific location where this information was collected. The actual groundwater elevation may fluctuate due to time, climatic conditions, and/or construction activity.

Offset



WinCore Version 3.3 County Hood Highway US 377 CSJ 0080-03-049 Hole P-05 Structure Pavement Station District Dallas
Date 7/16/23
Grnd. Elev. 711.00 ft
GW Elev. 698.00 ft

	L	- Texas Cone			al Test		Prop	ertie		
Elev. (ft)		Penetrometer	Strata Description	Lateral Press. (psi)	Deviator Stress (psi)	МС	LL	ΡI	Wet Den. (pcf)	Additional Remarks
10.2			PAVEMENT, 4" Asphalt over 6" Base	(PS-7	(рс.)	_			(100.7	
10.2			CLAY, FILL: tan, crushed base material, lean (CL)			6				SS = 8-41-34 Organic Content = 1.3%
09.			CLAY, very stiff, brown, sandy,							Sulfate Content = 1480 ppm
			silty, lean (CL-ML)			_10	20	7		-200=65%; SS = 15-16-16
5		31 (6) 39 (6)								
						10				200-729/ . SS - 840 44 42
4.5			CLAY, stiff, brown, silty, with sand (CL-ML)			12				-200=73%; SS = 810-11-13
			(Sama (S2 iii)							
						14	22	7		-200=84%; SS = 8-12-12
10	-	22 (6) 10 (6)								
						0.4	05	•		000-050/
98.			CLAY, very soft, dark brown to brown, with sand, lean (CL)			21	25	9		-200=85%; PP = 1.0 tsf DD = 112 pcf, UC = 0.83 tsf
			Slown, with Sand, Idan (GE)							
15	5 -	1 (6) 2 (3)								
						19				
		1 (6) 1 (6)								

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434286, Longitude: -97.787637. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). PP= Pocket Penetrometer (tsf). Air Meter: 0'-20'. Groundwater was encountered during drilling at 13'. Caved during drilling at 20'. Surface elevation estimated by Google Earth.

Any ground water elevation information provided on this boring log is representative of conditions existing on the day and for the specific location where this information was collected. The actual groundwater elevation may fluctuate due to time, climatic conditions, and/or construction activity.

Tinus Enguined Corre

WinCore Version 3.3 County Hood Highway US 377 CSJ 0080-03-049 Hole P-06 Structure Pavement Station Offset District Dallas
Date 7/24/23
Grnd. Elev. 708.00 ft
GW Elev. N/A

	L	Texas Cone			al Test		Prop	ertie		
Elev. (ft)	O G	Penetrometer	Strata Description	Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)	Additional Remarks
<b></b> 4			PAVEMENT, 6" Asphalt over 5" Base			•				55 - 44 0 40
07.1			CLAY, stiff, brown, with sand and limestone fragments, lean			6				SS = 11-9-10
			(CL)			8	23	8		-200=79%; SS = 8-10-18
5		14 (6) 19 (6)								
						8				SS = 6-9-13
						•				
						_				
9.5			CLAY, very soft, dark brown to brown, sandy, lean (CL)			7	22	9		-200=52%; SS = 7-11-13
10 -		2 (6) 1 (6)								
										SS = 1-1-1
		2 (6) 1 (6)								
15		_ (0) : (0)								
										SS = 1-2-1
8. <b>20</b> -		3 (6) 3 (6)								

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434168, Longitude: -97.785644. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). Mud Rotary: 0'-20'. Groundwater was not encountered during drilling. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

Driller: TX Geo Bore Logger: L. Arizola Organization: Arias

Offset

Te is Department of Transportation

WinCore Version 3.3 County Hood Highway US 377 CSJ 0080-03-049 Hole P-13 Structure Pavement Station District Dallas
Date 8/7/23
Grnd. Elev. 782.00 ft
GW Elev. N/A

	L	Texas Cone		Triaxial Test		Prope	ertie		
Elev. (ft)	L O G	Penetrometer	Strata Description	Lateral Deviator Press. Stress (psi) (psi)	МС	LL	ΡI	Wet Den. (pcf)	Additional Remarks
			PAVEMENT, 7" Asphalt over 6" Base						
'81			CLAY, very soft, dark brown, sandy, with limestone fragments, lean		7	31_	18		-200=53%; SS = 12-6-6 Organic Content = 1.7%
-			(CL)		17				PP = 3.25 tsf
-									
5 -		4 (6) 3 (6)							
-					20	55	20		-200=84%; PP = 3.0 tsf
75.5			CLAY, stiff, dark brown, with sand, fat (CH)		20	33	30		-200-04/6, FF - 3.0 tSi
-					18				SS = 3-6-9
-		12 (6) 12 (6)							
10 -		(*)							
70.5			CLAY, very stiff to hard, light		10	30	17		-200=73%; SS = 8-12-15 with calcareous deposits from 11.
-			brown to brown, with sand and limestone fragments, lean (CL)						
-									
15 -		28 (6) 25 (6)							
-					9				SS = 8-13-20
-									
-									
62. <u>20</u> -		50 (5) 50 (4)							

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.433339, Longitude: -97.800731. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). PP= Pocket Penetrometer (tsf). SFA: 0'-20'. Groundwater was not encountered during drilling. Caveed in during drilling at 20'. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.



WinCore Version 3.3 County Hood Highway US 377 CSJ 0080-03-049

Structure Station Offset

Hole

P-14 Pavement District Dallas
Date 8/6/23
Grnd. Elev. 767.00 ft
GW Elev. N/A

		L	Texas Cone	ne .		al Test		Prop	ertie		
Ele (ft)	v. )	Ō G	Penetrometer	Strata Description	Lateral Press. (psi)	Deviator Stress (psi)	MC	LL	PI	Wet Den. (pcf)	Additional Remarks
				PAVEMENT, 6" Asphalt over 7" Base			15				SS = 8-6-6
66.				CLAY, soft, light brown, sandy, with limestone fragments and calcared	ous		13				Sulfate Content = 100 ppm
				deposits, lean (CL)			9	30	16		-200=68%; SS = 7-15-16
	5		9 (6) 8 (6)								
	J										
							8				SS = 4-5-4
58.5				CLAY, very stiff, brown, sandy,			4	23	5		-200=61%; SS = 3-5-3
	10		24 (6) 25 (6)	silty, lean (CL-ML)							
55.5				CLAY, hard, light brown, sandy, with calcarreous deposits, lean			10				SS = 10-16-18
				(CL)							
	15		50 (2) 50 (2)								
50.5				WEATHERED LIMESTONE, very hard, tan			7				SS = 50/4"
47.	20		50 (1) 50 (0.5)								

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434784, Longitude: -97.798786. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). SFA: 0'-20'. Groundwater was not encountered during drilling. Caved in during drilling at 20'. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.



WinCore Version 3.3 County Hood Highway US 377 CSJ 0080-03-049 Hole P-15 Structure Pavement Station

Offset

District Dallas
Date 7/27/23
Grnd. Elev. 739.00 ft
GW Elev. N/A

	L	Texas Cone		Triaxial Test	Properties	
Elev. (ft)	L O G	Penetrometer	Strata Description	Lateral Deviator Press. Stress (psi) (psi)	MC LL PI Den. (pcf)	Additional Remarks
			PAVEMENT, 4" Asphalt over 4"	(ре:/	(βοι/	
38.3			Base CLAY, soft, dark brown, sandy, with limestone fragments, fat (CH)		9	SS = 5-6-7
	1		. ,		12 50 36	-200=59%; SS = 3-6-12
5		7 (6) 4 (6)				
					3	Run:6'-10'; Rec=70%; RQD=60%
32.5	¥		LIMESTONE, very hard, gray, with clay seams, moderatly weathered			DD = 147 pcf; UC = 503 tsf
	芸					
10 -	幕	50 (1.5) 50 (1)			13	Run:10'-15'; Rec=100%; RQD=8
	111					
	辛					
	7					
	_ <u></u>					
	立	50 (1) 50 (0.5)			1	Run:15'-20'; Rec=100%; RQD=
15 ·	+1+					DD = 151 pcf; UC = 350 tsf
						. ,
	中					
	++					
	11					
:	#	50 (0.5) 50 (0.5)				
9. 20		50 (0.5) 50 (0.5)				

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.431685, Longitude: -97.794029. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). Air Meter: 0'-5'; Wet Rotary: 5'-20'. Groundwater was not encountered during drilling. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

Driller: TX Geo Bore Logger: L. Arizola Organization: Arias



WinCore Version 3.3 County Hood Highway US 377 CSJ 0080-03-049 Hole P-16 Structure Pavement Station

Offset

District Dallas
Date 7/16/23
Grnd. Elev. 733.00 ft
GW Elev. N/A

		L	Tawaa Cana		Triaxi	al Test		Prop	ertie	s	
Ele (ft	ev. )	O G	Texas Cone Penetrometer	Strata Description	Lateral Press. (psi)	Deviator Stress (psi)	МС	LL	PI	Wet Den. (pcf)	Additional Remarks
732.2				PAVEMENT, 6" Asphalt over 4" Base						, , , , , , , , , , , , , , , , , , ,	
132.2		0.0.00		GRAVEL, FILL: very hard, light brown and tan, clayey, with sand and crushed limestone gravel (GC)			2				_ SS = 50/5"
		. 0 . 0 . 0					8	48	34		200=13%; SS = 18-10-17
		.0.0.	TO (0) TO (4)								
	5	0.0.0.0	50 (2) 50 (1)								
726.5		0.0		WEATHERED LIMESTONE, very hard, brown			1				SS = 50/2"
725.				LIMESTONE, very hard, brown to gray, moderatly weathered			2				SS = 50/1"
				gray, moderally weathered							DD = 149 pcf; UC = 307 tsf
	10						_1				_Run:10'-15';Rec=100%;RQD=27%
	15 -	辛	50 (0.5) 50 (0.5)				1				_Run:15'-20';Rec=67%;RQD=45%
	10										
713.	20 -	++	50 (6) 50 (6)								

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.435171, Longitude: -97.794300. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). Air Meter: 0'-10'; Wet Rotary: 10'-20'. Groundwater was not encountered during drilling. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

Tents
Experiment
of Transportation

WinCore Version 3.3 County Hood Highway US 377 CSJ 0080-03-049

Structure Station Offset

Hole

O-1 Overhead Sign District Dallas
Date 7/20/23
Grnd. Elev. 777.00 ft

GW Elev. N/A

	L	Texas Cone			al Test		Prop	ertie		
Elev. (ft)	O G	Penetrometer	Strata Description	Lateral Press. (psi)	Deviator Stress (psi)	МС	LL	ΡI	Wet Den. (pcf)	Additional Remarks
770 0			PAVEMENT, 6" Asphalt over 4" Base		,	_			- (I /	
776.2			SAND, slightly compact, dark brown, clayey, with limestone gravel			6	30	16		-200=42%; SS = 12-9-5 Sulfate Content = 1160 ppm
-	_		(SC)			9	38	23		-200=49%; SS = 6-19-23
-	-									
-										
5 -	-	18 (6) 17 (6)								
-	-									
770.5			CLAY, stiff, light gray, sandy, with seams of weathered limestone,			88				-200=57%SS = 8-13-18
			lean (CL)							
						10	43	30		-200=62%; SS = 5-13-15
_		22 (6) 14 (6)								
10 -		22 (6) 14 (6)								
-						33				SS = 5-5-10
-										
-										
-										
<b>762.</b> 15 –		50 (1) 50 (0.25)	WEATHERED LIMESTONE, very hard,							
_			light gray to gray							Run:16'-20'; Rec=100%; RQD=7
_										
_										
_		50 (0.25) 50 (0.25								Run:20'-25'; Rec=98%; RQD=93

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.43445129, Longitude: -97.80271097. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). Air Meter: 0'-16'; Water Rotary: 16'-30'. Groundwater was not encountered during drilling. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

WinCore
Version 3.3

County Hood Highway US 377 CSJ 0080-03-049 Hole Structure Station

Offset

O-1 Overhead Sign District Dallas
Date 7/20/23
Grnd. Elev. 777.00 ft
GW Elev. N/A

	L	Texas Cone		Triaxial Test			perti		
Elev. (ft)	L O G	Penetrometer	Strata Description	Lateral Deviat Press. Stress (psi) (psi)	or s N	MC LI	. PI	Wet Den. (pcf)	Additional Remarks
			WEATHERED LIMESTONE, very hard,	(psi) (psi)				(pci)	
_			light gray to gray						
-	-								
-									
_									
25 -		50 (0.25) 50 (0)							Run:25'-30'; Rec=100%; RQD=1
=									
=									
_									
_									
'. 30 -		50 (0.25) 50 (0.25	)	-					
_									
_									
-									
-									
35 -									
35 -									
_									
-									
=									
_									
40 -									

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.43445129, Longitude: -97.80271097. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). Air Meter: 0'-16'; Water Rotary: 16'-30'. Groundwater was not encountered during drilling. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.



Version

County Hood

0-2

District Dallas

ore	Highwa	y US 377	Structure	Overhe	ad Sign	Date	7/19/23
on 3.3	CSJ	0080-03-049	Station Offset			Grnd. Elev. GW Elev.	798.00 ft N/A
L	Texas Cone		Tria	xial Test	Properties		

Hole

	L	Texas Cone		Triaxi	al Test		Prop	pertie	es	
Elev. (ft)	O G	Penetrometer	Strata Description	Lateral Press. (psi)	Deviator Stress (psi)	МС	LL	PI	Wet Den. (pcf)	Additional Remarks
797.3			PAVEMENT, 6" Asphalt over 3" Base						-11-7	
191.5	.0.		GRAVEL, dark brown and gray, clayey, with sand and limestone fragments			12	35	22		-200=41%; SS = 6-6-6
	. 0		(GC)							Sulfate Content = 1160 ppm
										Organic Content = 1.4% SS = 16-22-32
795.5			WEATHERED LIMESTONE, very hard, light gray							33 - 10-22-32
-										
5 -		50 (0.25) 50 (0)								
J										
_										SS = 50/5"
791			LIMESTONE, very hard, light gray,							Run:7'-10'; Rec=33%; RQD=83%
-	芸		moderatly weathered, with silty clayey seams							DD = 154 pcf; UC = 336 tsf
	芸									
	<del>-</del>	50 (1) 50 (0.5)								Run:10'-15'; Rec=15%; RQD=0%
788. 10 -		00 (1) 00 (0.0)	WEATHERED LIMESTONE, very hard, light gray to gray, clayey, with sand							Run: 10 -15 ; Rec=15%; RQD=0%
-			sand							
-										
-										
-										
15 -		24 (6) 35 (6)								
_										
-										
-										SS = 50/2"
-										
20 -		50 (0.25) 50 (0.25)								

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.43500001, Longitude: -97.80724874. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). Air Meter: 0'-8'; Water Rotary: 8'-30'. Groundwater was not encountered during drilling. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

Version 3.3

County Hood Highway **US 377** CSJ 0080-03-049

Structure Station

Hole

0-2 **Overhead Sign**  District **Dallas** 7/19/23 Date Grnd. Elev.

798.00 ft Offset GW Elev. N/A

		T 2			al Test		Prop	ertie	s	
Elev. (ft)	L O G	Texas Cone Penetrometer	Strata Description		Deviator Stress (psi)				Wet Den. (pcf)	Additional Remarks
_			WEATHERED LIMESTONE, very hard, light gray to gray, clayey, with sand	(PS)	(1991)	12			(PS-)	-200=76%; SS = 50/3"
_										·
_										
25 –		39 (6) 50 (5)								
_										SS = 50/5"
_										
768. 30 <b>–</b>		50 (0.25) 50 (0.25)								
_	-									
_	-									
_										
35 –										
-   -										
_	-									
40 -	-									

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.43500001, Longitude: -97.80724874. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). Air Meter: 0'-8'; Water Rotary: 8'-30'. Groundwater was not encountered during drilling. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

## DRILLING LOG Hood

Version 3.3

Hole **BR-05** 

**Bridge** 

District **Dallas** 8/8/23 712.00 ft

County Highway **US 377** Structure Date CSJ 0080-03-049 Station Grnd. Elev. Offset GW Elev. N/A

		L	Tayas Care		Triaxi	al Test		Prop	ertie	es	
Ele (ft)	v. )	O G	Texas Cone Penetrometer	Strata Description	Lateral Press. (psi)	Deviator Stress (psi)	МС	LL	PI	Wet Den. (pcf)	Additional Remarks
711.1				PAVEMENT, 7" Asphalt over 4" Base		- (I )				_u-,	SS = 50/6"
711.1				SAND, FILL: loose, dark brown, clayey (SC)							33 - 30/6
											SS = 12-15-18
	-	_	9 (6) 8 (6)								
	5 -		3 (0) 0 (0)								
	•						13	35	24		-200=50%; SS = 3-5-4 Oganic Content = 1.5%
	-										
704.	-			CLAY, FILL: soft, brown, sandy, lean (CL)			13	46	32		-200=56%; SS = 4-8-11 Sulfate Content = 226 ppm
	-		7 (6) 10 (6)								Chloride Content = 160 ppm
	10 -		. (6) 10 (6)								
700.5		100		GRAVEL, FILL: compact, dark brown,			36	47	34		-200=16%; SS = 5-10-6
		0.0.0		clayey, with sand (GC)							
		0.0									
	15 -	00.00	26 (6) 18 (6)								
695.5		. 0.0					11	55	37		-200=56%; SS = 5-6-9
	-			CLAY, FILL: stiff, dark brown, sandy, fat (CH)							
	=	/									
ı	ē	/									
	20		15 (6) 13 (6)								

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434194, Longitude: -97.792291. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). Air Meter: 0'-45'; Water Meter: 45'-120. Groundwater was not encountered during drilling. Caved in during drilling at 118.58'. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

**Dallas** 

# DRILLING LOG

WinCore Version 3.3 County Hood
Highway US 377
CSJ 0080-03-049

Hole BR-05 Structure Bridge Station

Offset

Date 8/8/23

Grnd. Elev. 712.00 ft

GW Elev. N/A

District

	L	Texas Cone			al Test		Prop	ertie		
Elev. (ft)	O G	Penetrometer	Strata Description	Lateral Press. (psi)	Deviator Stress (psi)	МС	LL	PI	Wet Den. (pcf)	Additional Remarks
			CLAY, FILL: stiff, dark brown, sandy, fat (CH)	(poi)	(рс.)				(po.)	
90.5	/					27	38	25		-200=34%; SS = 4-6-8
-	_		SAND, compact to loose, dark brown to brown, clayey, with gravel							Organic Content = 1.6%
			(SC)							Sulfate Content = 320 ppm
-		20 (6) 22 (6)								Chloride Content = 100 ppm
<b>25</b> - -		29 (6) 23 (6)				_14	38	26		-200=25%; SS = 10-11-13
- 30 -		11 (6) 6 (6)								
-						23	25	12		-200=73%
8 <b>0.5</b> - -			CLAY, soft to very soft, brown to gray, with sand, lean (CL)					12		7200-7070
35 -		4 (6) 5 (6)								
-						20	27	_13_		-200=88%; SS = 4-3-2
40 -		23 (6) 18 (6)								very stiff at 40'

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434194, Longitude: -97.792291. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). Air Meter: 0'-45'; Water Meter: 45'-120. Groundwater was not encountered during drilling. Caved in during drilling at 118.58'. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

#### In is Department of Transportation

WinCore
Version 3.3

County Hood Highway US 377 CSJ 0080-03-049 Hole BR-05 Structure Bridge

**DRILLING LOG** 

District Dallas
Date 8/8/23
Grnd. Elev. 712.00 ft

Station Grnd. Elev. 712.00 t Offset GW Elev. N/A

		L	Texas Cone			al Test		Prop	ertie		
Ele (ft)	<b>v</b> .	L O G	Penetrometer	Strata Description	Lateral Press. (psi)	Deviator Stress (psi)	МС	LL	PI	Wet Den. (pcf)	Additional Remarks
				CLAY, soft to very soft, brown to gray, with sand, lean (CL)						<b>,</b>	
	-						15	44	29		-200=83%; SS = 4-10-13
	_						10				-200-0370, 00 - 4-10-13
	-										
	-										
667.	45 -		4 (6) 3 (6)				19	66	46		Run:45'-50';Rec=90%;RQD=74%
		$\equiv$		SHALE, very hard, dark gray to gray, sandy							
	-										
	_										
	_										
		$\equiv$									
	-	$\equiv$									
	50 -		34 (6) 36 (6)								Run:50'-55';Rec=77%;RQD=0%
	_	$\equiv$									
		$\equiv$									
	-										
	-										
			40 (0) 40 (0)								
	55 -	$\equiv$	12 (6) 19 (6)								Run:55'-60';Rec=33%:RQD=20%
	_	░									
	_	Ē									
	-										
	-										
652.	60 -		50 (0.5) 50 (0.25)								Run:60'-65';Rec=88%;RQD=25%

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434194, Longitude: -97.792291. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). Air Meter: 0'-45'; Water Meter: 45'-120. Groundwater was not encountered during drilling. Caved in during drilling at 118.58'. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

# Tels Deputies of Tresposition

Version 3.3

## **DRILLING LOG**

Offset

County Hood Highway US 377 CSJ 0080-03-049 Hole BR-05 Structure Bridge Station District Dallas
Date 8/8/23
Grnd. Elev. 712.00 ft
GW Elev. N/A

					Triavi	al Test	Pron	ertie	<u> </u>	
Elev (ft)	<i>i</i> .	L O G	Texas Cone Penetrometer	Strata Description		Deviator Stress (psi)			Wet Den. (pcf)	Additional Remarks
				LIMESTONE, very hard, gray, moderatly weathered		(F = 7)			Ne/	DD = 150 pcf; UC = 585 tsf
(	-		50 (0.5) 50 (0.25)							Run:65'-70';Rec=60%;RQD=31%
642. 7	70 — — —		50 (0.25) 50 (0.25	SHALE, very hard, dark gray to light gray, moderatly weathered						Run:70'-75';Rec=7%;RQD=0%
	75 — — — —		50 (1) 50 (0.25) 50 (3) 50 (2)							Run:75'-80';Rec=23%;RQD=0%  Run:80'-85';Rec=32%;RQD=21%

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434194, Longitude: -97.792291. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). Air Meter: 0'-45'; Water Meter: 45'-120. Groundwater was not encountered during drilling. Caved in during drilling at 118.58'. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

#### Tals Deputines di Transpostation

Version 3.3

## **DRILLING LOG**

Offset

County Hood Highway US 377 CSJ 0080-03-049 Hole BR-05 Structure Bridge Station District Dallas
Date 8/8/23
Grnd. Elev. 712.00 ft
GW Elev. N/A

Elev. (ft)	L O G	Texas Cone Penetrometer	Strata Description	Triaxial Test		Pro	opert		
				Lateral Deviato Press. Stress (psi) (psi)	r M	IC L	L PI	Wet Den. (pcf)	Additional Remarks
_			SHALE, very hard, dark gray to light gray, moderatly weathered	W. J. W. J.				W ,	
-									
_									
85 -		50 (3) 50 (3)							Run:85'-90';Rec=88%;RQD=51%
_									
_									
90 –		50 (4) 50 (4)							Run:90'-95';Rec=47%;RQD=61%
-									
_									
95 –		50 (4) 50 (2)							Run:95'-100';Rec=75%;RQD=62
_									
_									
_									
100	=	50 (3) 50 (2)							Run:100'-105';Rec=100%;RQD=

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434194, Longitude: -97.792291. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). Air Meter: 0'-45'; Water Meter: 45'-120. Groundwater was not encountered during drilling. Caved in during drilling at 118.58'. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

#### Te is Department of Transportation

Version 3.3

## **DRILLING LOG**

Offset

County Hood Highway US 377 CSJ 0080-03-049 Hole BR-05 Structure Bridge Station District Dallas
Date 8/8/23
Grnd. Elev. 712.00 ft
GW Elev. N/A

		L	Texas Cone			al Test		Prop	ertie		
Ele (ft	ev. i)	L O G	Penetrometer	Strata Description	Lateral Press. (psi)	Deviator Stress (psi)	МС	LL	PI	Wet Den. (pcf)	Additional Remarks
607.	110-	<b>6</b>	50 (0.25) 50 (0) 50 (2) 50 (2)	SHALE, very hard, dark gray to light gray, moderatly weathered  LIMESTONE, very hard, gray, moderatly weathered	(psi)	Stress (psi)	MC		PI	Den. (pcf)	Run:105'-110';Rec=75%;RQD=0%

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434194, Longitude: -97.792291. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). Air Meter: 0'-45'; Water Meter: 45'-120. Groundwater was not encountered during drilling. Caved in during drilling at 118.58'. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

50 (2) 50 (2)

Tents
Department
of Transportation

WinCore Version 3.3 County Hood Highway US 377 CSJ 0080-03-049 Hole BR-09 Structure Bridge Station

Offset

Date 8/3/23
Grnd. Elev. 711.00 ft
GW Elev. N/A

**Dallas** 

District

		L	Texas Cone			ial Test		Prop	ertie		
Ele (ft		G	Ponetrometer	Strata Description	Lateral Press. (psi)	Deviator Stress (psi)	МС	LL	PI	Wet Den. (pcf)	Additional Remarks
10.2				PAVEMENT, 4" Asphalt over 1.5" Base						(PS:/	
				WEATHERED LIMESTONE, FILL: crusho limestone	ed						SS = 17-19-14
08.				CLAV atiff to your stiff busying							
				CLAY, stiff to very stiff, brown, sandy, silty, lean (CL-ML)			8	21	7		-200=57%; SS = 8-16-14
	5		13 (6) 14 (6)								Organic Content = 0.3%
							11	21	6		-200=55%; SS = 12-14-15
							6	20	5		-200=66%; SS = 12-13-17
	10		25 (6) 19 (6)								
99.5		/		OLAY attiff horses to deal horses			12	23	15		-200=84%; SS = 9-9-7
				CLAY, stiff, brown to dark brown, with sand, lean (CL)							
	15		14 (6) 8 (6)								
							14	25	15		-200=71%; SS = 7-13-18 Sulfate Content = 362 ppm
00											Chloride Content = 80 ppm
93.				CLAY, very soft, brown, sandy, silty, lean (CL-ML)							
	20	/	4 (6) 3 (6)								

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434280, Longitude: -97.789250. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). Air Meter: 0'-23'; Mud Rotary: 25'-100'. Groundwater was not encountered during drilling. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

WinCore Version 3.3 County Hood Highway US 377 CSJ 0080-03-049 Hole BR-09 Structure Bridge Station

Offset

idge

District Dallas
Date 8/3/23
Grnd. Elev. 711.00 ft
GW Elev. N/A

	L	Texas Cone			al Test		Prop	ertie	s	
Elev. (ft)	O G	Penetrometer	Strata Description	Lateral Press. (psi)	Deviator Stress (psi)	МС	LL	PI	Wet Den. (pcf)	Additional Remarks
	7		CLAY, very soft, brown, sandy, silty, lean (CL-ML)	(poi)	(poi)				(poi)	
-						19	21	7		-200=56%; SS = 1-1-1
-										
-										
-										
25 -		3 (6) 2 (6)								
84.5						21	25	10		-200=46%; SS = 4-3-2
-			SAND, very loose, brown, clayey (SC)							
_										
-										
30 -		4 (6) 3 (6)								
79.5			CAND ware large to large house			24				SS = 1-1-1
-			SAND, very loose to loose, brown, poorly graded (SP)							Sulfate Content = 236 ppm Chloride Content = 140 ppm
-										Cilionae Content - 140 ppin
-										
35 -		5 (6) 5 (6)								
_										
74.5			SAND, very loose to loose, brown,			16	28	16		-200=3%; SS = 1-1-1
-			clayey (SC)							
-										
-										
40 -		3 (6) 2 (6)								

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434280, Longitude: -97.789250. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). Air Meter: 0'-23'; Mud Rotary: 25'-100'. Groundwater was not encountered during drilling. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

WinCore Version 3.3 County Hood Highway US 377 CSJ 0080-03-049 Hole BR-09 Structure Bridge Station

Offset

District Dallas
Date 8/3/23
Grnd. Elev. 711.00 ft
GW Elev. N/A

	L	Texas Cone		Triaxi	al Test		Prop	ertie		
Elev. (ft)	O G	Donotromotor	Strata Description	Lateral Press. (nsi)	Deviator Stress (psi)	МС	LL	ΡI	Wet Den. (pcf)	Additional Remarks
	_		SAND, very loose to loose, brown, clayey (SC)	(psi)	(рэі)	17			(рсі)	SS = 1-1-2
45	_	8 (6) 7 (6)								
						20	23	8		-200=25%; SS = 3-8-6
3.	000000		GRAVEL, compact, brown, poorly graded (GP)							
50	0.	33 (6) 17 (6)				16				SS = 18-23-14
	000000000									
55	0.0.0.0.0	26 (6) 50 (4)								
	0.00.00.0					7				-200=8%; SS = 14-18-27
3.	.0000		GRAVEL, compact, brown, well graded, with sand (GW)							

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434280, Longitude: -97.789250. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). Air Meter: 0'-23'; Mud Rotary: 25'-100'. Groundwater was not encountered during drilling. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

WinCore Version 3.3 County Hood Highway US 377 CSJ 0080-03-049 Hole BR-09 Structure Bridge Station

Offset

idge

Date 8/3/23 Grnd. Elev. 711.00 ft GW Elev. N/A

**Dallas** 

District

		L	Towas Come			al Test		Prop	ertie	s	
Ele (ft	ev. :)	O G	Texas Cone Penetrometer	Strata Description	Lateral Press. (psi)	Deviator Stress (psi)	МС	LL	PI	Wet Den. (pcf)	Additional Remarks
	-	.00000000		GRAVEL, compact, brown, well graded, with sand (GW)	(PS-)	(60.)	14			(βυ.)	SS = 50/5"
	-	0 . 0 . 0 . 0 . 0									
	65 -	0.0.00.0.0	34 (6) 18 (6)								
	-	. 0 . 0 . 0 . 0 . 0 . 0 . 0 . 0 . 0 . 0					5				-200=3%; SS = 5-6-6
641.	70 -	0.0.0	50 (4) 50 (4)	LIMESTONE, very hard, dark gray, slightly weathered							Run:70'-75';Rec=55%;RQD=97%
	-						1				_DD = 156 pcf; UC = 585 tsf
	75 - -	辛	50 (0.25) 50 (0.25)								Run:75'-80';Rec=93%;RQD=48%
	-										
631.	80 -		50 (5) 35 (6)				10				Run:80'-85';Rec=80%;RQD=64%

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434280, Longitude: -97.789250. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). Air Meter: 0'-23'; Mud Rotary: 25'-100'. Groundwater was not encountered during drilling. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

#### Te is Department of Transportation

Version 3.3

# **DRILLING LOG**

Offset

County Hood Highway US 377 CSJ 0080-03-049

Hole BR-09 Structure Bridge Station District Dallas
Date 8/3/23
Grnd. Elev. 711.00 ft
GW Elev. N/A

**Triaxial Test Properties Texas Cone** Lateral Deviator Press. Stress Wet Den. Elev. (ft) 0 **Strata Description Additional Remarks** Penetrometer MC LL PI G (psi) (psi) (pcf) SANDSTONE, very dense, dark gray DD = 116 pcf; UC = 45 tsf to gray, slightly fragmented 43 (6) 45 (6) Run=85'-90';Rec=37%;RQD=0% 16 85 50 (2) 50 (1) Run:90'-95';Rec=40%;RQD=0% 621. 90 SHALE, very hard, light gray

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434280, Longitude: -97.789250. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). Air Meter: 0'-23'; Mud Rotary: 25'-100'. Groundwater was not encountered during drilling. Surface elevation estimated by Google Earth.

The ground water elevation was not determined during the course of this boring.

50 (3) 50 (3)

50 (2) 50 (2)

611. 100

WinCore Version 3.3 County Hood Highway US 377 CSJ 0080-03-049 Hole BR-10 Structure Bridge Station

Date Grnd.

District

Date 7/31/23 Grnd. Elev. 710.00 ft

**Dallas** 

Offset GW Elev. 685.00 ft

	L	Tawas Orie		Triaxial Test		Prop	ertie	s	
Elev. (ft)	O G	Texas Cone Penetrometer	Strata Description	Lateral Deviator Press. Stress (psi) (psi)	МС			Wet Den. (pcf)	Additional Remarks
			PAVEMENT, 8" Asphalt over 8"	(80.) (80.)				(50.)	
09			Base		6	21	8		-200=32%; SS = 6-5-7
			SAND, FILL: dark brown, clayey, with limestone gravel (SC)						Oganic Content = 0.8%
7.5					7	21	9		-200=55%; SS = 7-8-12
			CLAY, soft, brown, sandy, lean (CL)						·
-									
		7 (6) 11 (6)							
5 -		7 (0) 11 (0)							
-					44	•	•		000-000/
·-					11	20	8		-200=69%; SS = 7-7-11
01.5					12	20	6		-200=61%; SS = 10-12-17
-			CLAY, very stiff, brown, sandy, silty, lean (CL-ML)						Organic Content = 0.5%
10 -		22 (6) 26 (6)							
10									
98.5					12	22	8		-200=76%; SS = 8-9-11
-			CLAY, stiff to very stiff, brown to dark brown, with sand, lean						Sulfate Content = 308 ppm
			(CL)						Chloride Content = 120 ppm
-									
15 -		8 (6) 12 (6)							
-					12	22	9		-200=73%; SS = 8-8-10
-									
-									
-									
20 -		22 (6) 22 (6)							

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434012, Longitude: -97.789379. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). Air Meter: 0'-70'; Wet Rotary: 70'-120'. Groundwater was encountered during drilling at 25'. Surface elevation estimated by Google Earth.

Offset

Tenses
Department
Of Transportation

WinCore Version 3.3 County Hood Highway US 377 CSJ 0080-03-049 Hole BR-10 Structure Bridge Station District Dallas
Date 7/31/23
Grnd. Elev. 710.00 ft
GW Elev. 685.00 ft

		T 0		Triaxi	al Test		Prop	ertie	s	
Elev. (ft)	L O G	Texas Cone Penetrometer	Strata Description		Deviator Stress (psi)				Wet Den. (pcf)	Additional Remarks
			CLAY, stiff to very stiff, brown to dark brown, with sand, lean (CL)		<b>V</b> = 7	12	23	10		-200=74%; SS = 6-6-5
687.		1 (6) 2 (6)	CLAY, very soft, brown, sandy, silty, lean (CL-ML)							
25		(0) 2 (0)				21	20	6		-200=68%; SS = 1-1-2
30		3 (6) 4 (6)								
677.			CLAY, very soft to soft, brown, sandy, lean (CL)			23				SS = 2-2-3
35		3 (6) 4 (6)				_17	24	12		-200=70%; SS = 2-3-4
40		6 (6) 6 (6)								

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434012, Longitude: -97.789379. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). Air Meter: 0'-70'; Wet Rotary: 70'-120'. Groundwater was encountered during drilling at 25'. Surface elevation estimated by Google Earth.

County Highway Version 3.3 CSJ

Hood Hole **BR-10 US 377** Structure **Bridge** 0080-03-049

Station Offset

District **Dallas** 7/31/23 Date Grnd. Elev. 710.00 ft GW Elev. 685.00 ft

		Texas Cone			al Test		Prop	ertie	s	
Elev. (ft)	L O G	Penetrometer	Strata Description	Lateral Press. (psi)	Deviator Stress (psi)	МС	LL	PI	Wet Den. (pcf)	Additional Remarks
-			CLAY, very soft to soft, brown, sandy, lean (CL)	(ре.)	(60.)	14	19	5	(ре./	-200=41%; SS = 5-7-8
- - -			SAND, loose, brown to light brown, silty, clayey (SC-SM)							
<b>45</b> -		8 (6) 8 (6)				_18				-200=25%; SS = 4-3-4
<b>662.</b> –			SAND, compact to very dense, dark brown to brown, clayey, with gravel (SC)	_						
<b>50</b> -		20 (6) 30 (6)				4				SS = 5-19-21
- 55 -		30 (6) 43 (6)								
-						12	22	9		-200=20%; SS = 8-22-22
60 -		50 (3) 50 (2)								

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434012, Longitude: -97.789379. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). Air Meter: 0'-70'; Wet Rotary: 70'-120'. Groundwater was encountered during drilling at 25'. Surface elevation estimated by Google Earth.

**Dallas** 

# **DRILLING LOG**

Offset



WinCore Version 3.3 County Hood Highway US 377 CSJ 0080-03-049 Hole BR-10 Structure Bridge Station

Date 7/31/23 Grnd. Elev. 710.00 ft GW Elev. 685.00 ft

District

	L	Texas Cone			al Test		Prop	ertie		
Elev. (ft)	O G	Penetrometer	Strata Description	Lateral Press. (psi)	Deviator Stress (psi)	МС	LL	ΡI	Wet Den. (pcf)	Additional Remarks
	_		SAND, compact to very dense, dark brown to brown, clayey, with gravel (SC)	(50.)	(50.)	8			(ро.)	SS = 50/3
647.5			CLAY, very stiff, gray, with sand, lean (CL)							
65 -		42 (6) 34 (6)								
-						18	41	25		-200=84%; SS = 12-15-25
-										
<del>-</del> .		50 (3) 50 (1)				1				Run:70'-75'; Rec=63%; RQD=61%
640. 70 -			LIMESTONE, very hard, gray, slightly weathered							DD = 153 pcf; UC = 564 tsf
<b>75</b> -		50 (0.25) 50 (0) 32 (3) 50 (5)								Run:75'-80'; Rec=37%; RQD=68%
80 -		32 (3) 50 (5)				14				_Run:80'-85'; Rec=40%; RQD=23 <sup>°</sup>

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434012, Longitude: -97.789379. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). Air Meter: 0'-70'; Wet Rotary: 70'-120'. Groundwater was encountered during drilling at 25'. Surface elevation estimated by Google Earth.

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Version 3.3

#### **DRILLING LOG**

County Hood Highway US 377 CSJ 0080-03-049 Hole BR-10 Structure Bridge

Date 7/31/23
Grnd. Elev. 710.00 ft
GW Elev. 685.00 ft

**Dallas** 

District

Station Offset

	L	Texas Cone			al Test		Prop	ertie	s	
Elev. (ft)		Ponotromotor	Strata Description	Lateral Press. (psi)	Deviator Stress (psi)	МС	LL	ΡI	Wet Den. (pcf)	Additional Remarks
85 620. 90		50 (0.25) 50 (0.25	LIMESTONE, very hard, gray, slightly weathered  SHALE, very hard, dark gray to	(psi)	(psi)				(pcf)	DD = 109 pcf; UC = 24 tsf  Run:85'-90'; Rec=0%; RQD=0%  Run:90'-95'; Rec=15%; RQD=0%
95		50 (0.25) 50 (0.25) 50 (0.5) 50 (0.25)	gray, moderatly weathered			17				Run:95'-100'; Rec=13%; RQD=0% DD = 122 pcf; UC = 138 tsf Run:100'-105'; Rec=74%; RQD=55%

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434012, Longitude: -97.789379. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). Air Meter: 0'-70'; Wet Rotary: 70'-120'. Groundwater was encountered during drilling at 25'. Surface elevation estimated by Google Earth.

Any ground water elevation information provided on this boring log is representative of conditions existing on the day and for the specific location where this information was collected. The actual groundwater elevation may fluctuate due to time, climatic conditions, and/or construction activity.

Driller: TX Geo Bore Logger: L. Arizola Organization: Arias

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Version 3.3

## DRILLING LOG

Offset

County Hood Highway US 377 CSJ 0080-03-049 Hole BR-10 Structure Bridge Station District Dallas
Date 7/31/23
Grnd. Elev. 710.00 ft
GW Elev. 685.00 ft

**Triaxial Test Properties Texas Cone** Lateral Deviator Press. Stress Wet Den. Elev. (ft) **Additional Remarks** 0 **Strata Description** Penetrometer MC LL PI G (psi) (psi) (pcf) SANDSTONE, very hard, gray, moderatly weathered 50 (3.5) 50 (4) Run:105'-110'; Rec=84%; RQD=85% 605. 105 SHALE, very hard, reddish brown, moderatly weathered 50 (5) 50 (3.5) Run:110'-115'; Rec=100%; RQD=57% 50 (3.5) 50 (3.5) Run:115'-120'; Rec=64%; RQD=42% 592. LIMESTONE, very hard, reddish brown, highly weathered 50 (3) 50 (3)

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.434012, Longitude: -97.789379. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). Air Meter: 0'-70'; Wet Rotary: 70'-120'. Groundwater was encountered during drilling at 25'. Surface elevation estimated by Google Earth.

Any ground water elevation information provided on this boring log is representative of conditions existing on the day and for the specific location where this information was collected. The actual groundwater elevation may fluctuate due to time, climatic conditions, and/or construction activity.

Driller: TX Geo Bore Logger: L. Arizola Organization: Arias

Dallas 8/19/23

711.00 ft

689.00 ft

District

Grnd. Elev.

GW Elev.

Date

# **DRILLING LOG**



WinCore Version 3.3 County Hood Highway US 377 CSJ 0080-03-049 Hole BR-13 Structure Bridge Station

Station Offset

		L Texas Cone		Triaxia	al Test		Prop	ertie	es	
Elev. (ft)	-	O Penetrometer	Strata Description	Lateral Press. (psi)	Deviator Stress (psi)	МС	LL	PI	Wet Den. (pcf)	Additional Remarks
			PAVEMENT, 7" Asphalt over 8" Base		,	4	46	•	<b>W</b>	200-400/ . CC = 0.40.0
09.8		000	GRAVEL, FILL: dark brown, silty, clayey, with sand (GC-GM)			_1	16			-200=18%; SS = 8-12-9 Organic Content = 1.0%
708.8			SAND, FILL: slightly compact to loose, brown, clayey, with limestone gravel (SC)			_11	28	18		Sulfate Content = 140 ppm -200=33%; SS = 11-12-13
5	_	15 (6) 15 (6)								
	-					10	40	28		200=41%; SS = 7-8-9
	_									Sulfate Content = 234 ppm Chloride Content = 100 ppm
						14	43	30		-200=40%; SS = 5-11-13
1	0 -	7 (6) 7 (6)								
						6	45	34		-200=37%; SS = 3-3-15 Sulfate Content = 120 ppm
98.		0 · · · · · · · · · · · · · · · · · · ·	GRAVEL, slightly compact, brown, clayey, with sand and limestone fragments (GC)							
1	5 -	16 (6) 14 (6)								
	0.0					10	41	29		-200=23%; SS = 10-11-8
	4.6.0.0	0.00.00								
2	20 -	13 (6) 13 (6)								

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.433943, Longitude: -97.792306. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). Air Meter: 0'-25'; Water Meter: 25'-100'. Groundwater was encountered at 22' during drilling. Surface elevation estimated by Google Earth.

Tense Department of Transportation

WinCore Version 3.3 County Hood Highway US 377 CSJ 0080-03-049 Hole BR-13 Structure Bridge Station

Offset

Date 8/19/23
Grnd. Elev. 711.00 ft
GW Elev. 689.00 ft

**Dallas** 

District

		Tayor Cana		Triaxi	al Test		Prop	ertie	s	
Elev. (ft)	L O G	Texas Cone Penetrometer	Strata Description	Lateral Press. (psi)	Deviator Stress (psi)				Wet Den. (pcf)	Additional Remarks
	.0.0.0.0		GRAVEL, slightly compact, brown, clayey, with sand and limestone fragments (GC)	(ро.)	(poi)	19	31	21	(po./	-200=68%; SS = 7-8-10
89.5			CLAY, brown, sandy, with limestone fragments, lean (CL)			-10		<u></u> ,		200 00%, 00 7 0 10
87.			WEATHERED LIMESTONE, stiff, gray,							
DC DE		50 (4) 50 (3)	silty			1				Run:25'-30';Rec=42%;RQD=52
86. 25			LIMESTONE, very hard, tan, finely to moderatly weathered			•				DD = 145 pcf; UC = 350 tsf
30 -		12 (6) 22 (6)								Run:30'-35';Rec=60%;RQD=33'
35 -		50 (0.25) 50 (0.25								Run:35'-40';Rec=22%;RQD=38
71. 40 :		50 (0.5) 50 (0.25)								Run:40'-45';Rec=55%;RQD=42

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.433943, Longitude: -97.792306. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). Air Meter: 0'-25'; Water Meter: 25'-100'. Groundwater was encountered at 22' during drilling. Surface elevation estimated by Google Earth.

Offset

Tense Deportment of Transportation

WinCore Version 3.3 County Hood Highway US 377 CSJ 0080-03-049 Hole BR-13 Structure Bridge Station District Dallas
Date 8/19/23
Grnd. Elev. 711.00 ft
GW Elev. 689.00 ft

					Triaxi	al Test		Prop	ertie	s	
Ele <sup>*</sup>	<b>v</b> .	L O G	Texas Cone Penetrometer	Strata Description		Deviator Stress (psi)	МС	LL		Wet	Additional Remarks
	_			SHALE, very hard to hard, gray, sandy	" ,	· ·				* ,	
	_										
	- 45 –		50 (5) 50 (3)				7				Run:45'-50';Rec=70%;RQD=90% DD = 121 pcf; UC = 25 tsf
	_										120 120 120 120 120 120 120 120 120 120
	_										
	50 –		36 (6) 34 (6)								Run:50'-55';Rec=60%;RQD=0%
	_										
	-										
	55 —	=	40 (6) 50 (5)								Run:55'-60';Rec=40%;RQD=0%
	-										
	-										
651.	60 —		50 (1) 50 (2)								Run:60'-65';Rec=92%;RQD=7%

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.433943, Longitude: -97.792306. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). Air Meter: 0'-25'; Water Meter: 25'-100'. Groundwater was encountered at 22' during drilling. Surface elevation estimated by Google Earth.

Any ground water elevation information provided on this boring log is representative of conditions existing on the day and for the specific location where this information was collected. The actual groundwater elevation may fluctuate due to time, climatic conditions, and/or construction activity.

Offset

In as Supportment of Transportation

WinCore Version 3.3 County Hood Highway US 377 CSJ 0080-03-049 Hole BR-13 Structure Bridge Station District Dallas
Date 8/19/23
Grnd. Elev. 711.00 ft
GW Elev. 689.00 ft

		L	Tawas Octob			Triaxial Test Properties				
Ele (ft	ev. )	O G	Texas Cone Penetrometer	Strata Description	Lateral Press. (psi)	Deviator Stress (psi)			Wet Den. (pcf)	Additional Remarks
	65 -			LIMESTONE, very hard, gray to dark gray, finely weathered	(1901)	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\			(601)	Run:65'-70';Rec=90%;RQD=56%
636.	- - 75 - - - -		50 (0.5) 50 (0.25) 50 (1) 50 (0.5)	SHALE, very hard, dark gray, moderatly weathered, sandy						Run:75'-80';Rec=58%;RQD=0% Run:80'-85';Rec=73%;RQD=16%

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.433943, Longitude: -97.792306. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). Air Meter: 0'-25'; Water Meter: 25'-100'. Groundwater was encountered at 22' during drilling. Surface elevation estimated by Google Earth.

# **DRILLING LOG** Hood

Version 3.3

**BR-13** 

**Dallas** 

8/19/23 711.00 ft

County Hole District Highway **US 377** Structure **Bridge** Date CSJ 0080-03-049 Station Grnd. Elev. Offset GW Elev. 689.00 ft

		Ι.			Triaxi	al Test	Test Properties		s		
Eld (fi	ev. t)	L O G	Texas Cone Penetrometer	Strata Description	Lateral Press. (psi)	Deviator Stress (psi)				Wet	Additional Remarks
	85 -		50 (4) 50 (4)	SHALE, very hard, dark gray, moderatly weathered, sandy	(psi)	(psi)				(pci)	Run:85'-90';Rec=60%;RQD=28%
	90 -		50 (5) 50 (6)				27	52	36		Run:90'-95';Rec=5%;RQD=0% -200=99%
616.	95 -		50 (1) 50 (0.5)	SHALE, very hard, gray, moderatly weathered, sandy, with seams of silt							Run:90'-100';Rec=58%;RQD=80%
611.	100-		50 (1) 50 (0.25)								

Remarks: Drilled at US HWY 377 Brazos River. Latitude: 32.433943, Longitude: -97.792306. Automatic TCP Hammer. SS = Split Spoon (with 170-lb hammer). Air Meter: 0'-25'; Water Meter: 25'-100'. Groundwater was encountered at 22' during drilling. Surface elevation estimated by Google Earth.