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REFERENCE: B-5362

PROJECT: 46077

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
GEOTECHNICAL ENGINEERING UNIT

**STRUCTURE**  
**SUBSURFACE INVESTIGATION**

COUNTY MONTGOMERY  
PROJECT DESCRIPTION REPLACE BRIDGE NO. 53 ON  
NC 73 OVER DROWNING CREEK

**CONTENTS**

<u>SHEET NO.</u>	<u>DESCRIPTION</u>
1	TITLE SHEET
2	LEGEND
3	SITE PLAN
4	PROFILE
5-6	CROSS SECTIONS
7-II	BORE LOGS, CORE REPORTS & CORE PHOTOGRAPHS
12	SITE PHOTOGRAPHS

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-5362	1	12

**CAUTION NOTICE**

THE SUBSURFACE INFORMATION AND THE SUBSURFACE INVESTIGATION ON WHICH IT IS BASED WERE MADE FOR THE PURPOSE OF STUDY, PLANNING AND DESIGN, AND NOT FOR CONSTRUCTION OR PAY PURPOSES. THE VARIOUS FIELD BORING LOGS, ROCK CORES AND SOIL TEST DATA AVAILABLE MAY BE REVIEWED OR INSPECTED IN RALEIGH BY CONTACTING THE N. C. DEPARTMENT OF TRANSPORTATION, GEOTECHNICAL ENGINEERING UNIT AT (919) 707-6850. THE SUBSURFACE PLANS AND REPORTS, FIELD BORING LOGS, ROCK CORES AND SOIL TEST DATA ARE NOT PART OF THE CONTRACT.

GENERAL SOIL AND ROCK STRATA DESCRIPTIONS AND INDICATED BOUNDARIES ARE BASED ON A GEOTECHNICAL INTERPRETATION OF ALL AVAILABLE SUBSURFACE DATA AND MAY NOT NECESSARILY REFLECT THE ACTUAL SUBSURFACE CONDITIONS BETWEEN BORINGS OR BETWEEN SAMPLED STRATA WITHIN THE BOREHOLE. THE LABORATORY SAMPLE DATA AND THE IN SITU (IN-PLACE) TEST DATA CAN BE RELIED ON ONLY TO THE DEGREE OF RELIABILITY INHERENT IN THE STANDARD TEST METHOD. THE OBSERVED WATER LEVELS OR SOIL MOISTURE CONDITIONS INDICATED IN THE SUBSURFACE INVESTIGATIONS ARE AS RECORDED AT THE TIME OF THE INVESTIGATION. THESE WATER LEVELS OR SOIL MOISTURE CONDITIONS MAY VARY CONSIDERABLY WITH TIME ACCORDING TO CLIMATIC CONDITIONS INCLUDING TEMPERATURES, PRECIPITATION AND WIND, AS WELL AS OTHER NON-CLIMATIC FACTORS.

THE BIDDER OR CONTRACTOR IS CAUTIONED THAT DETAILS SHOWN ON THE SUBSURFACE PLANS ARE PRELIMINARY ONLY AND IN MANY CASES THE FINAL DESIGN DETAILS ARE DIFFERENT. FOR BIDDING AND CONSTRUCTION PURPOSES, REFER TO THE CONSTRUCTION PLANS AND DOCUMENTS FOR FINAL DESIGN INFORMATION ON THIS PROJECT. THE DEPARTMENT DOES NOT WARRANT OR GUARANTEE THE SUFFICIENCY OR ACCURACY OF THE INVESTIGATION MADE, NOR THE INTERPRETATIONS MADE, OR OPINION OF THE DEPARTMENT AS TO THE TYPE OF MATERIALS AND CONDITIONS TO BE ENCOUNTERED. THE BIDDER OR CONTRACTOR IS CAUTIONED TO MAKE SUCH INDEPENDENT SUBSURFACE INVESTIGATIONS AS HE DEEMS NECESSARY TO SATISFY HIMSELF AS TO CONDITIONS TO BE ENCOUNTERED ON THE PROJECT. THE CONTRACTOR SHALL HAVE NO CLAIM FOR ADDITIONAL COMPENSATION OR FOR AN EXTENSION OF TIME FOR ANY REASON RESULTING FROM THE ACTUAL CONDITIONS ENCOUNTERED AT THE SITE DIFFERING FROM THOSE INDICATED IN THE SUBSURFACE INFORMATION.

- NOTES:
- THE INFORMATION CONTAINED HEREIN IS NOT IMPLIED OR GUARANTEED BY THE N. C. DEPARTMENT OF TRANSPORTATION AS ACCURATE NOR IS IT CONSIDERED PART OF THE PLANS, SPECIFICATIONS OR CONTRACT FOR THE PROJECT.
  - BY HAVING REQUESTED THIS INFORMATION, THE CONTRACTOR SPECIFICALLY WAIVES ANY CLAIMS FOR INCREASED COMPENSATION OR EXTENSION OF TIME BASED ON DIFFERENCES BETWEEN THE CONDITIONS INDICATED HEREIN AND THE ACTUAL CONDITIONS AT THE PROJECT SITE.

PERSONNEL

T. WELLS

R. TOOTHMAN

W. ALLEN

M. BAHIRADHAN

INVESTIGATED BY A. PRUITT

DRAWN BY T. WELLS /C. BUTLER

CHECKED BY R. RIVENBARK

SUBMITTED BY SCHNABEL

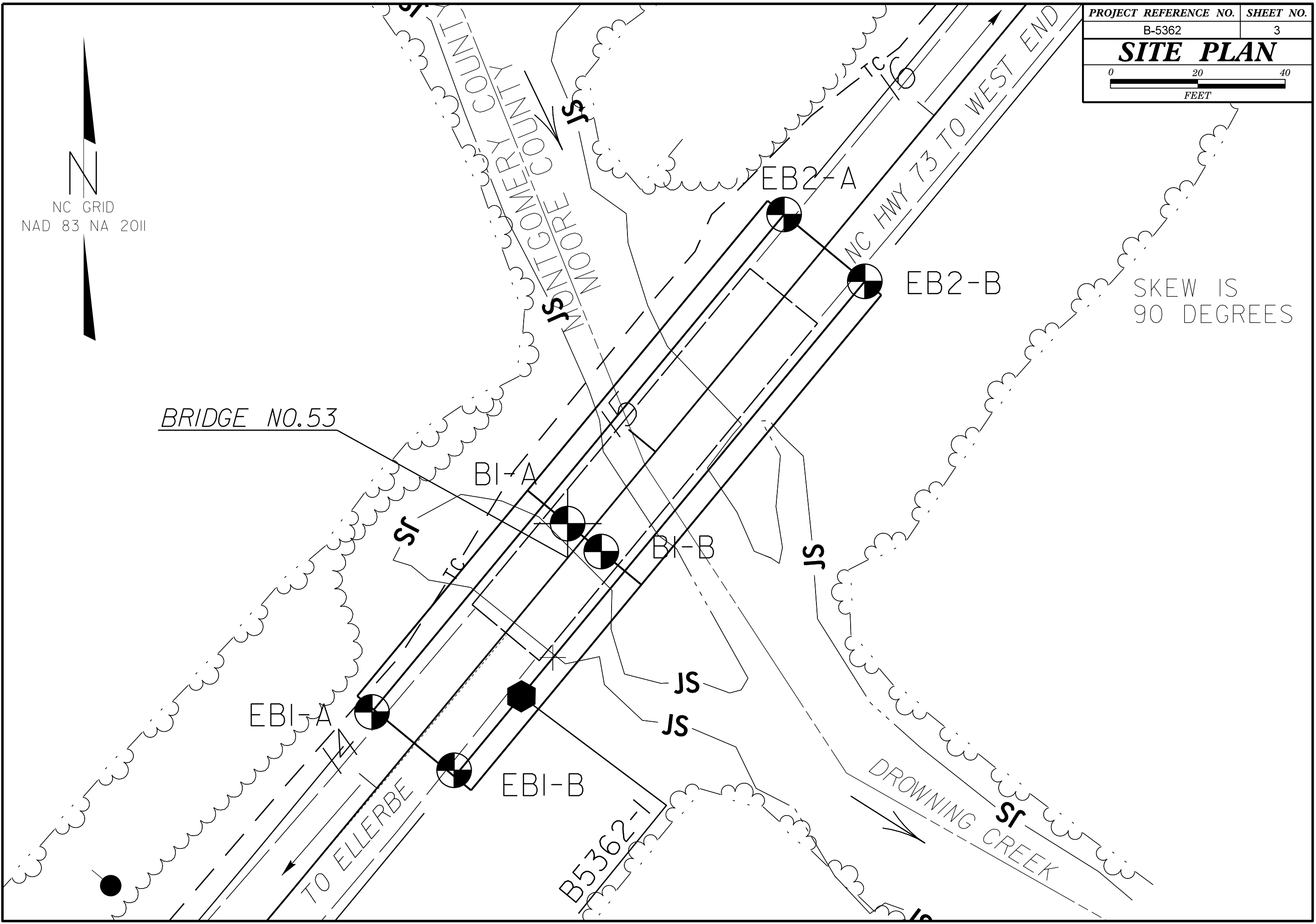
DATE MAY 2016



DocuSigned by:  
Mahalingam Bahiradhan 6/2016  
4DEAD345C3274ZURE DATE

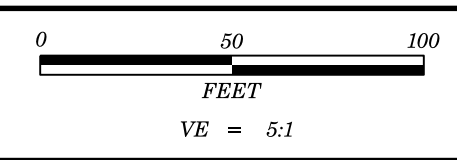
**DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED**





430

- (A) ROADWAY EMBANKMENT: WET, LOOSE, GRAY AND BROWN, SILTY, COARSE TO FINE SAND
- (B) ROADWAY EMBANKMENT: WET, VERY SOFT, BROWN, CLAYEY, FINE TO COARSE SANDY SILT
- (C) ALLUVIAL: WET, VERY LOOSE, GRAY, SILTY, FINE TO COARSE SAND
- (D) ALLUVIAL: WET, MEDIUM STIFF, GRAY, FINE SANDY CLAY WITH TRACE WOOD FRAGMENTS
- (E) WEATHERED ROCK: BROWN TRIASSIC MUDSTONE



PROJECT REFERENCE NO.	SHEET NO.
B-5362	4
BRIDGE NO. 53 CENTERLINE PROFILE ON -L-	

420

END BENT NO.1      BENT NO.1      END BENT NO.2

410

EB1-A  
14+13  
12' LT

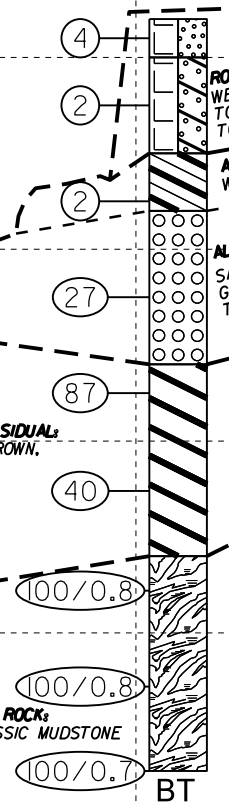
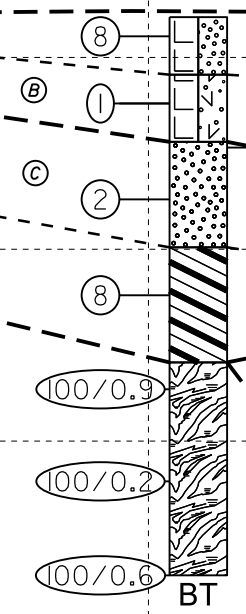
EB2-A  
15+61  
12' LT

WSE ON  
9-9-2015 = 391.2'

B1-A  
14+75  
5' LT

EXISTING GROUND

400



390

TRIASSIC RESIDUAL:  
WET, HARD, BROWN,  
FINE SANDY,  
SILTY CLAY

ROADWAY EMBANKMENT:  
WET, VERY LOOSE TO LOOSE, GRAY AND BROWN  
TO LIGHT BROWN AND GRAY, SILTY, COARSE  
TO FINE SAND TO CLAYEY, COARSE TO FINE SAND  
WET, SOFT, FINE SANDY CLAY  
ALLUVIAL:  
WET, VERY LOOSE TO MEDIUM DENSE,  
GRAY AND DARK GRAY, SILTY, COARSE TO FINE SAND  
TO FINE TO COARSE SAND WITH TRACE CLAY LAYERS  
AND WOOD FRAGMENTS AND LITTLE GRAVEL

380

WEATHERED ROCK:  
BROWN TRIASSIC MUDSTONE

370

NON-CRYSTALLINE ROCK:  
SLIGHT WEATHERING, HARD TO MODERATELY HARD,  
MODERATELY INDURATED, BROWN, TRIASSIC  
MUDSTONE WITH CLOSE TO MODERATELY CLOSE  
FRACTURE SPACING

360

REC: 98  
ROD: 94

350

NOTES:  
GROUNDLINE TAKEN FROM ROADWAY FILES  
RECEIVED ON JANUARY 15, 2016

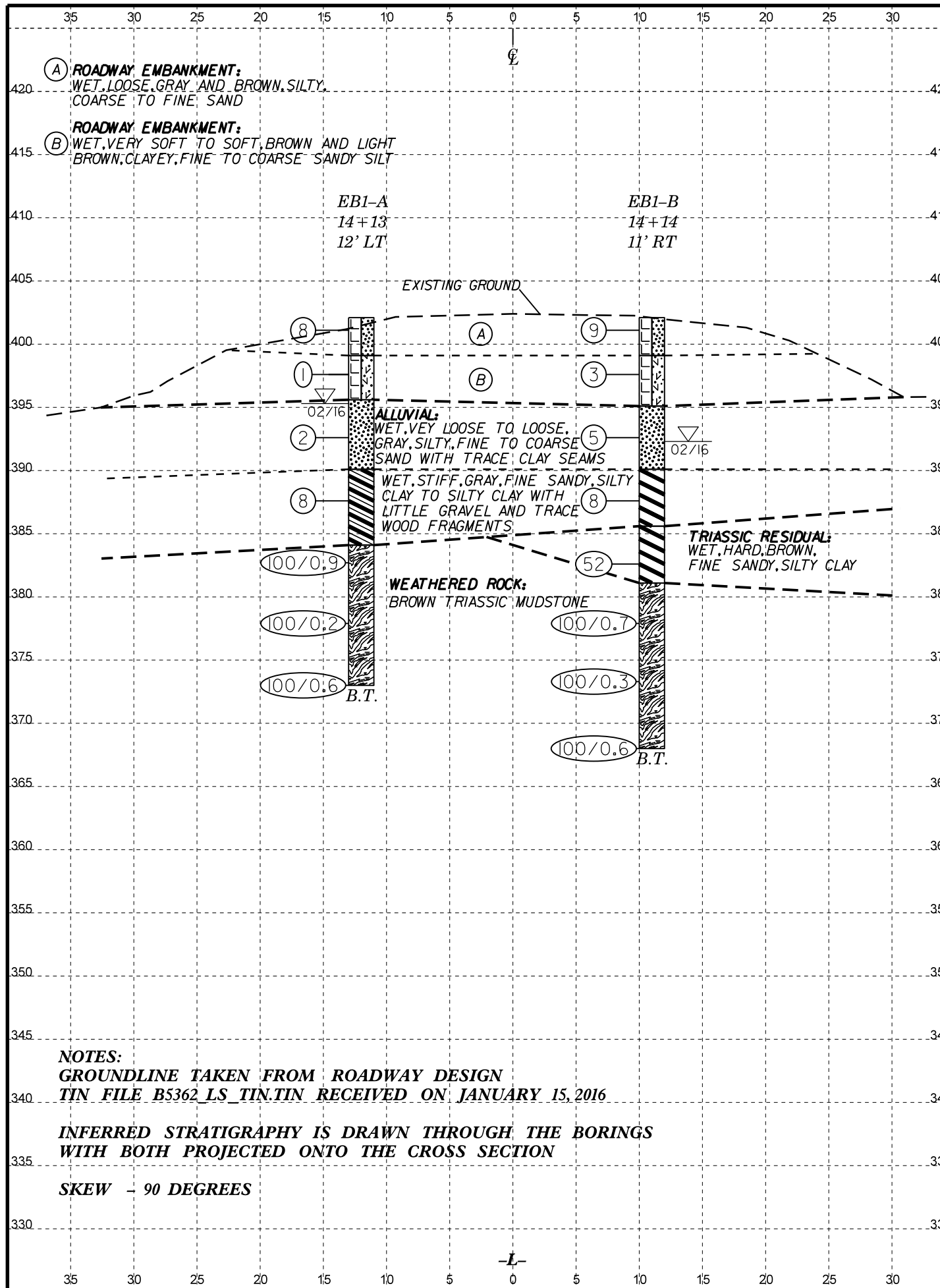
INFERRED STRATIGRAPHY IS DRAWN THROUGH  
THE BORINGS WITH BOTH PROJECTED ONTO  
THE PROFILE

SKEW - 90 DEGREES

340

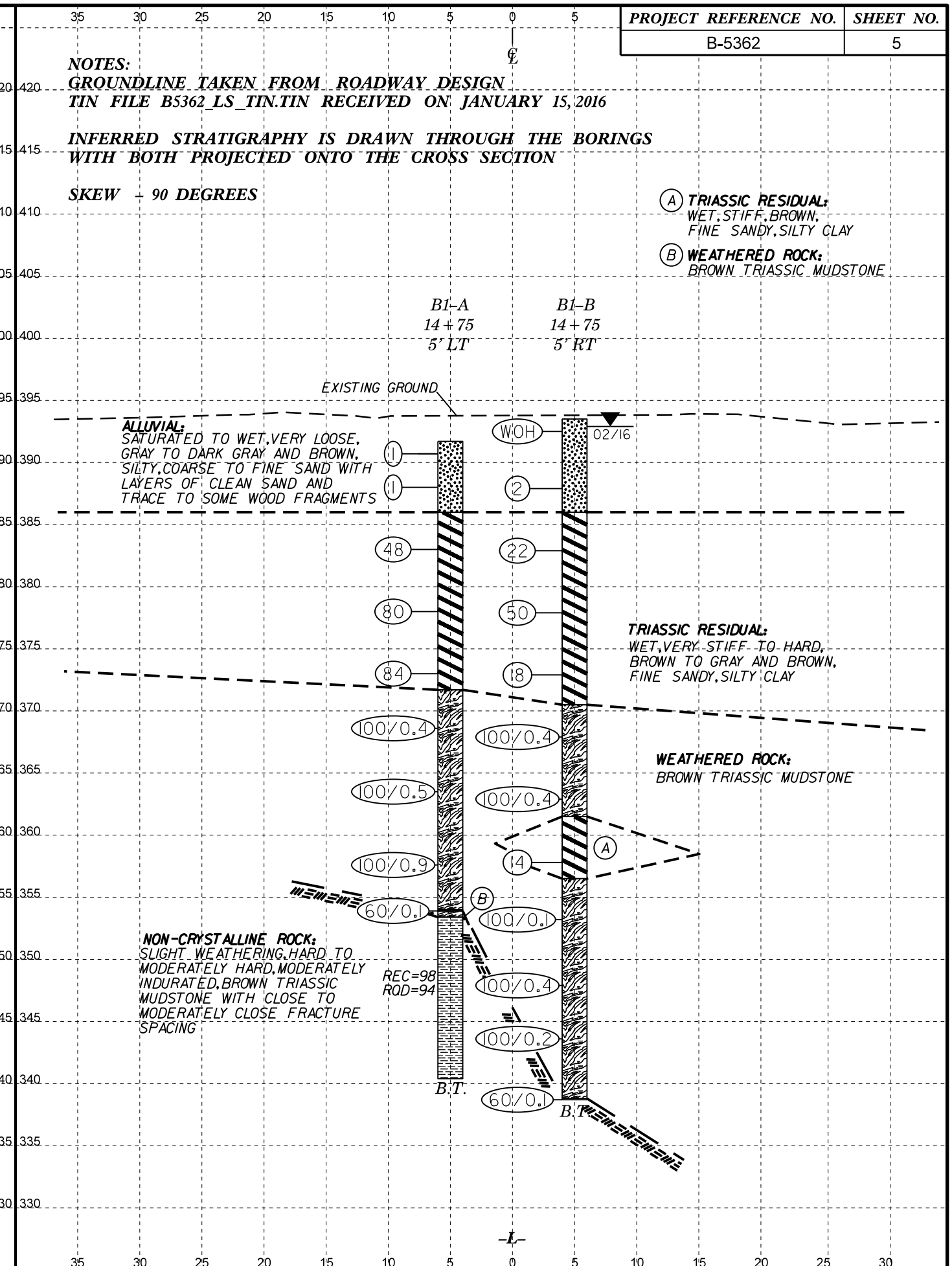
330

12+00    12+50    13+00    13+50    14+00    14+50    15+00    15+50    16+00    16+50    17+00    17+50    18+00    18+50



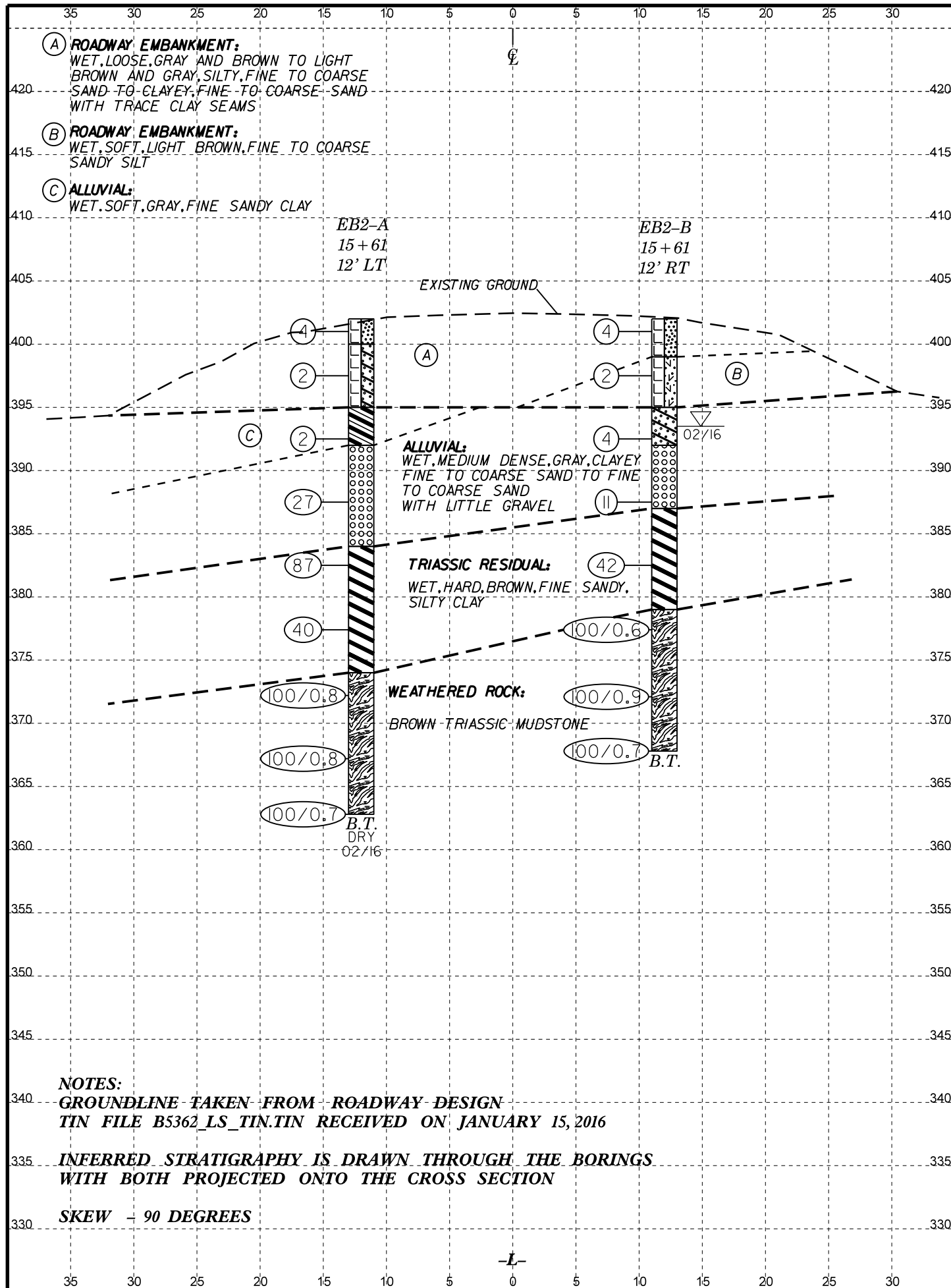
HORIZ. SCALE 0 10 20 (FEET) VE = 1:1

**END BENT NO. 1 CROSS SECTION AT STA. 14+13.38**



HORIZ. SCALE 0 10 20 (FEET) VE = 1:1

**BENT NO. 1 CROSS SECTION AT STA. 14+75.50**



## GEOTECHNICAL BORING REPORT BORE LOG

<b>WBS</b> 46077.1.1		<b>TIP</b> B-5362		<b>COUNTY</b> MONTGOMERY		<b>GEOLOGIST</b> Pruitt, A.	
<b>SITE DESCRIPTION</b> Replace Bridge 53 on NC 73 over Drowning Creek							<b>GROUND WTR (ft)</b>
<b>BORING NO.</b> EB1-A	<b>STATION</b> 14+13		<b>OFFSET</b> 12 ft LT		<b>ALIGNMENT</b> -L-		0 HR. 6.8
<b>COLLAR ELEV.</b> 402.1 ft	<b>TOTAL DEPTH</b> 29.1 ft		<b>NORTHING</b> 523,822		<b>EASTING</b> 1,806,151		24 HR. FIAD
<b>DRILL RIG/HAMMER EFF./DATE</b> TRI9435 CME-55 84% 02/20/2015				<b>DRILL METHOD</b> H.S. Augers		<b>HAMMER TYPE</b> Automatic	
<b>DRILLER</b> Toothman, R. E.		<b>START DATE</b> 02/12/16	<b>COMP. DATE</b> 02/12/16	<b>SURFACE WATER DEPTH</b> N/A			

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG MOI	SOIL AND ROCK DESCRIPTION	DEPTH (ft)	
			0.5ft	0.5ft	0.5ft	0	25	50	75	100					
405														402.1 GROUND SURFACE 0.0	
	402.1	0.0		2	4	4								ROADWAY EMBANKMENT	
	399.6	3.5	WOH	1	WOH									Gray and Brown, Silty, Coarse to Fine SAND	3.0
	398.6	3.5												Brown, Clayey, Fine to Coarse Sandy SILT	
	395.6	6.5												ALLUVIAL	6.5
	393.6	8.5	WOH	1	1									Gray, Silty, Fine to Coarse SAND with Trace Clay Seams	
	390.1	12.0												Gray, Fine Sandy, Silty CLAY with Trace Wood Fragments	12.0
	388.6	13.5	1	5	3										
	383.6	18.5	12	50	50/0.4									WEATHERED ROCK	18.0
	378.6	23.5	28	100/0.2										Brown TRIASSIC MUDSTONE	
	373.6	28.5	60	40/0.1										Boring Terminated at Elevation 373.0 ft in WEATHERED ROCK: TRIASSIC MUDSTONE	29.1

<b>WBS</b> 46077.1.1		<b>TIP</b> B-5362		<b>COUNTY</b> MONTGOMERY		<b>GEOLOGIST</b> Pruitt, A.	
<b>SITE DESCRIPTION</b> Replace Bridge 53 on NC 73 over Drowning Creek							<b>GROUND WTR (ft)</b>
<b>BORING NO.</b> EB1-B	<b>STATION</b> 14+14		<b>OFFSET</b> 11 ft RT		<b>ALIGNMENT</b> -L-		0 HR. 9.8
<b>COLLAR ELEV.</b> 402.1 ft	<b>TOTAL DEPTH</b> 34.1 ft		<b>NORTHING</b> 523,808		<b>EASTING</b> 1,806,170		24 HR. FIAD
<b>DRILL RIG/HAMMER EFF./DATE</b> TRI9435 CME-55 84% 02/20/2015				<b>DRILL METHOD</b> H.S. Augers		<b>HAMMER TYPE</b> Automatic	
<b>DRILLER</b> Toothman, R. E.		<b>START DATE</b> 02/12/16	<b>COMP. DATE</b> 02/12/16	<b>SURFACE WATER DEPTH</b> N/A			

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG MOI	SOIL AND ROCK DESCRIPTION	DEPTH (ft)	
			0.5ft	0.5ft	0.5ft	0	25	50	75	100					
405														402.1 GROUND SURFACE 0.0	
	402.1	0.0		2	4	5								ROADWAY EMBANKMENT	
	399.1	3.0												Gray to Brown, Silty, Coarse to Fine SAND	3.0
	398.6	3.5	1	1	2									Light Brown, Clayey, Fine to Coarse Sandy SILT	
	395.6	6.5												ALLUVIAL	7.0
	393.6	8.5	WOH	2	3									Gray, Silty, Fine to Coarse SAND	
	390.1	12.0												Gray, Fine Sandy, Silty CLAY with Little Gravel	12.0
	388.6	13.5	WOH	4	4										
	383.6	18.5	12	20	32									RESIDUAL	16.5
	378.6	23.5	65	35/0.2										Brown, Fine Sandy, Silty CLAY	
	373.6	28.5	100/0.3											WEATHERED ROCK	21.0
	368.6	33.5	80	20/0.1										Brown TRIASSIC MUDSTONE	
														Boring Terminated at Elevation 368.0 ft in WEATHERED ROCK: TRIASSIC MUDSTONE	34.1

NCDOT BORE DOUBLE\_B5362\_GINT.GPJ NC\_DOT.GDT 5/25/16



# GEOTECHNICAL BORING REPORT BORE LOG

WBS 46077.1.1		TIP B-5362		COUNTY MONTGOMERY		GEOLOGIST Wells, T. R.								
SITE DESCRIPTION Replace Bridge 53 on NC 73 over Drowning Creek							GROUND WTR (ft)							
BORING NO. B1-A		STATION 14+75		OFFSET 5 ft LT		ALIGNMENT -L-								
COLLAR ELEV. 391.7 ft		TOTAL DEPTH 51.3 ft		NORTHING 523,865		EASTING 1,806,196								
DRILL RIG/HAMMER EFF./DATE TRI9435 CME-55 84% 02/20/2015		DRILL METHOD Mud Rotary/NQ Core		HAMMER TYPE Automatic										
DRILLER Toothman, R. E.		START DATE 02/10/16		COMP. DATE 02/11/16		SURFACE WATER DEPTH 1.2ft								
ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION	
			0.5ft	0.5ft	0.5ft	0	25	50	75	100				
395														
	391.7	0.0												WATER SURFACE (02/10/16)
														GROUND SURFACE
390	389.0	2.7	1	1	WOH								Sat.	ALLUVIAL Gray and Dark Gray, Silty, Coarse to Fine SAND with Trace Layers of Clean Sand and Wood Fragments
			WOH	WOH	1									
385	384.0	7.7	10	22	26								W	TRIASSIC RESIDUAL Brown, Fine Sandy, Silty CLAY
380	379.0	12.7	14	34	46								W	
375	374.0	17.7	9	16	68								W	
370	369.0	22.7	100/0.4											WEATHERED ROCK Brown TRIASSIC MUDSTONE
365	364.0	27.7	100/0.5											
360	359.0	32.7	9	11	88/0.4									
355	354.0	37.7	60/0.1											NON-CRYSTALLINE ROCK Brown TRIASSIC MUDSTONE
350														WEATHERED ROCK Brown TRIASSIC MUDSTONE
345														NON-CRYSTALLINE ROCK Brown TRIASSIC MUDSTONE
														Boring Terminated at Elevation 340.4 ft in NON-CRYSTALLINE ROCK: TRIASSIC MUDSTONE

NCDOT BORE SINGLE B5362 GEO\_BRDG\_0053\_GINT.GPJ NC\_DOT.GDT 5/25/16

# GEOTECHNICAL BORING REPORT CORE LOG

WBS 46077.1.1		TIP B-5362		COUNTY MONTGOMERY		GEOLOGIST Wells, T. R.				
SITE DESCRIPTION Replace Bridge 53 on NC 73 over Drowning Creek							GROUND WTR (ft)			
BORING NO. B1-A		STATION 14+75		OFFSET 5 ft LT		ALIGNMENT -L-				
COLLAR ELEV. 391.7 ft		TOTAL DEPTH 51.3 ft		NORTHING 523,865		EASTING 1,806,196				
DRILL RIG/HAMMER EFF./DATE TRI9435 CME-55 84% 02/20/2015		DRILL METHOD Mud Rotary/NQ Core		HAMMER TYPE Automatic						
DRILLER Toothman, R. E.		START DATE 02/10/16		COMP. DATE 02/11/16		SURFACE WATER DEPTH 1.2ft				
ELEV (ft)	RUN ELEV (ft)	DEPTH (ft)	RUN (ft)	DRILL RATE (Min/ft)	RUN		STRATA		LOG	DESCRIPTION AND REMARKS
					REC. (%)	ROD (%)	REC. (%)	ROD (%)		
										Begin Coring @ 37.8 ft
353.9	353.9	37.8	3.5	0:15/0.5 6:40/1.0 4:30/1.0 5:05/1.0	(2.9) 83%	(2.8) 80%	(0.0) 0%	(0.0) 0%		WEATHERED ROCK Very Severe Weathering, Very Soft, Friable, Brown TRIASSIC MUDSTONE
350	350.4	41.3	5.0	11:18/1.0 7:03/1.0 5:11/1.0 4:27/1.0 5:07/1.0	(4.9) 98%	(4.4) 88%	(12.8) 98%	(12.2) 94%		NON-CRYSTALLINE ROCK Slight Weathering, Hard to Moderately Hard, Moderately Indurated, Brown TRIASSIC MUDSTONE with Close to Moderately Close Fracture Spacing
345	345.4	46.3	5.0	7:10/1.0 6:58/1.0 5:39/1.0 3:00/1.0 4:48/1.0	(5.0) 100%	(5.0) 100%				7 Fractures at 0 Degrees to 5 Degrees 1 Fracture Spacing at 40 Degrees to 50 Degrees
	340.4	51.3								Boring Terminated at Elevation 340.4 ft in NON-CRYSTALLINE ROCK: TRIASSIC MUDSTONE

NCDOT CORE SINGLE B5362 GEO\_BRDG\_0053\_GINT.GPJ NC\_DOT.GDT 5/25/16

**CORE PHOTOGRAPH**  
**REPLACE BRIDGE 53 ON NC 73 OVER DROWNING CREEK**

**B1-A**  
**BOXES 1 & 2: 37.8 - 51.3 FEET**



APPROXIMATE SCALE IN FEET

# GEOTECHNICAL BORING REPORT

## BORE LOG

<b>WBS</b> 46077.1.1		<b>TIP</b> B-5362		<b>COUNTY</b> MONTGOMERY		<b>GEOLOGIST</b> Wells, T. R.	
<b>SITE DESCRIPTION</b> Replace Bridge 53 on NC 73 over Drowning Creek							<b>GROUND WTR (ft)</b>
<b>BORING NO.</b> B1-B		<b>STATION</b> 14+75		<b>OFFSET</b> 5 ft RT		<b>ALIGNMENT</b> -L-	
<b>COLLAR ELEV.</b> 393.5 ft		<b>TOTAL DEPTH</b> 54.8 ft		<b>NORTHING</b> 523,858		<b>EASTING</b> 1,806,204	
<b>DRILL RIG/HAMMER EFF./DATE</b> TRI9435 CME-55 84% 02/20/2015				<b>DRILL METHOD</b> Mud Rotary		<b>HAMMER TYPE</b> Automatic	
<b>DRILLER</b> Toothman, R. E.		<b>START DATE</b> 02/09/16		<b>COMP. DATE</b> 02/10/16		<b>SURFACE WATER DEPTH</b> N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION				
			0.5ft	0.5ft	0.5ft	0	25	50	75	100			ELEV. (ft)	DEPTH (ft)			
395														393.5	0.0	GROUND SURFACE	
	393.5	0.0	WOH	WOH	WOH												<b>ALLUVIAL</b> Brown, Silty, Coarse to Fine SAND with Some Wood Fragments
390	388.9	4.6	2	1	1								W				
385	383.9	9.6	7	9	13								W				<b>TRIASSIC RESIDUAL</b> Brown to Gray and Brown, Fine Sandy, Silty CLAY
380	378.9	14.6	18	22	28								W				
375	373.9	19.6	4	5	13								W				
370	368.8	24.7	30	100/0.4						100/0.4			W				<b>WEATHERED ROCK</b> Brown TRIASSIC MUDSTONE
365	363.8	29.7	25	100/0.4						100/0.4			W				
360	358.8	34.7	25	9	5								W				<b>TRIASSIC RESIDUAL</b> Brown, Fine Sandy, Silty CLAY
355	353.8	39.7	27	100/0.1						100/0.1							<b>WEATHERED ROCK</b> Brown TRIASSIC MUDSTONE
350	348.8	44.7	24	100/0.4						100/0.4							
345	343.8	49.7	100/0.2							100/0.2							
340	338.8	54.7	60/0.1							60/0.1							<b>NON-CRYSTALLINE ROCK</b> TRIASSIC MUDSTONE Boring Terminated with Standard Penetration Test Refusal at Elevation 338.7 ft in NON-CRYSTALLINE ROCK: TRIASSIC MUDSTONE

NCDOT BORE DOUBLE B5362\_GEO\_BRDG\_0053\_GINT.GPJ NC\_DOT.GDT 5/25/16

# GEOTECHNICAL BORING REPORT

## BORE LOG

WBS 46077.1.1		TIP B-5362		COUNTY MONTGOMERY		GEOLOGIST Pruitt, A.									
SITE DESCRIPTION Replace Bridge 53 on NC 73 over Drowning Creek							GROUND WTR (ft)								
BORING NO. EB2-A		STATION 15+61		OFFSET 12 ft LT		ALIGNMENT -L-									
COLLAR ELEV. 402.0 ft		TOTAL DEPTH 39.2 ft		NORTHING 523,936		EASTING 1,806,246									
DRILL RIG/HAMMER EFF./DATE TRI9435 CME-55 84% 02/20/2015			DRILL METHOD H.S. Augers		HAMMER TYPE Automatic										
DRILLER Toothman, R. E.		START DATE 02/16/16		COMP. DATE 02/16/16		SURFACE WATER DEPTH N/A									
ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION	DEPTH (ft)	
			0.5ft	0.5ft	0.5ft	0	25	50	75	100					
405															
	402.0	0.0	2	1	3									402.0	0.0
400														400.0	2.0
	398.5	3.5	WOH	WOH	2									399.0	3.0
395														395.0	7.0
	393.5	8.5	WOH	WOH	2									392.0	10.0
390														388.5	13.5
	388.5	13.5	11	17	10									384.0	18.0
385														383.5	18.5
	383.5	18.5	14	29	58									378.5	23.5
380														378.5	23.5
	378.5	23.5	14	22	18									374.0	28.0
375														373.5	28.5
	373.5	28.5	17	56	44/0.3									374.0	28.0
370														368.5	33.5
	368.5	33.5	8	32	68/0.3									374.0	28.0
365														363.5	38.5
	363.5	38.5	33	67/0.2										362.8	39.2

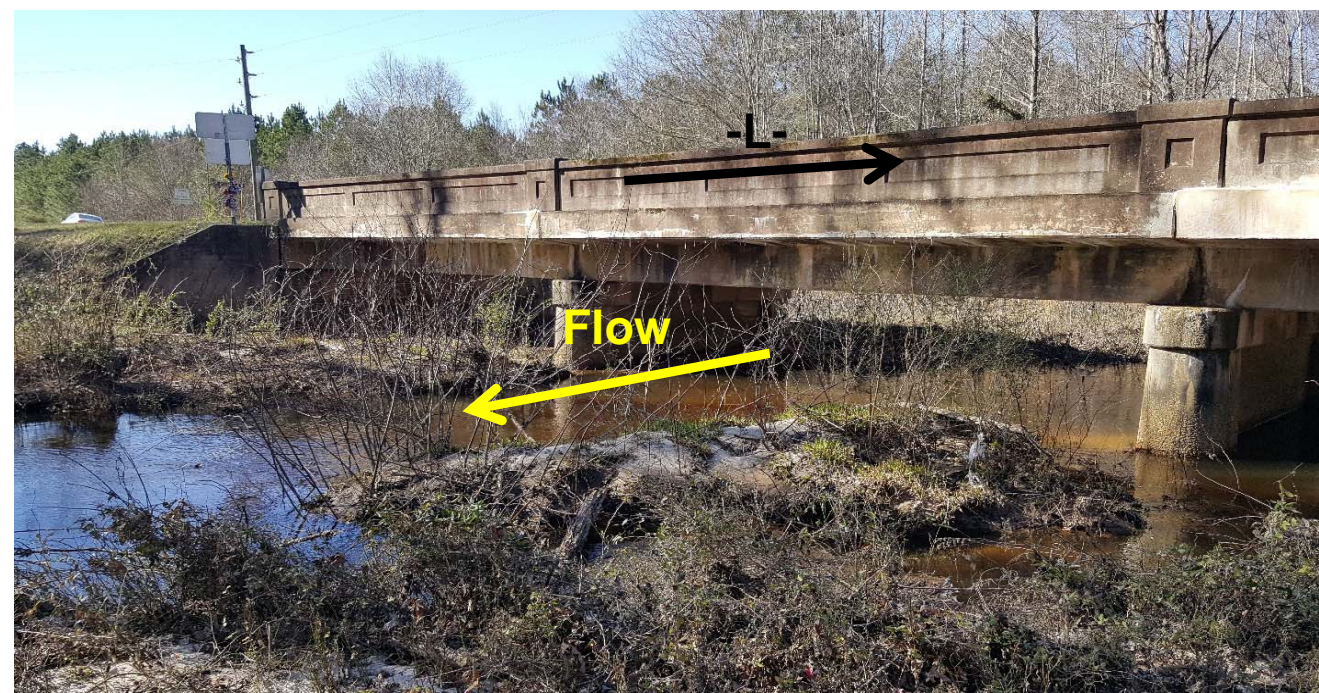
WBS 46077.1.1		TIP B-5362		COUNTY MONTGOMERY		GEOLOGIST Pruitt, A.									
SITE DESCRIPTION Replace Bridge 53 on NC 73 over Drowning Creek							GROUND WTR (ft)								
BORING NO. EB2-B		STATION 15+61		OFFSET 12 ft RT		ALIGNMENT -L-									
COLLAR ELEV. 402.0 ft		TOTAL DEPTH 34.2 ft		NORTHING 523,920		EASTING 1,806,264									
DRILL RIG/HAMMER EFF./DATE TRI9435 CME-55 84% 02/20/2015			DRILL METHOD H.S. Augers		HAMMER TYPE Automatic										
DRILLER Toothman, R. E.		START DATE 02/16/16		COMP. DATE 02/16/16		SURFACE WATER DEPTH N/A									
ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION	DEPTH (ft)	
			0.5ft	0.5ft	0.5ft	0	25	50	75	100					
405															
	402.0	0.0	2	2	2									402.0	0.0
400														400.0	2.0
	398.5	3.5	WOH	1	1									399.0	3.0
395														395.0	7.0
	393.5	8.5	1	1	3									392.0	10.0
390														388.5	13.5
	388.5	13.5	5	6	5									384.0	18.0
385														383.5	18.5
	383.5	18.5	10	17	25									378.5	23.5
380														378.5	23.5
	378.5	23.5	27	56	44/0.1									374.0	28.0
375														373.5	28.5
	373.5	28.5	26	42	58/0.4									374.0	28.0
370														368.5	33.5
	368.5	33.5	34	66/0.2										367.8	34.2

NCDOT BORE DOUBLE B5362\_GINT.GPJ NC\_DOT.GDT 5/25/16

**SITE PHOTOGRAPHS**  
**REPLACE BRIDGE NO. 53 ON NC 73 OVER DROWNING CREEK**



View looking upstation along NC 73



View of Drowning Creek from northeast of End Bent No. 2