

PROJECT: BP8.R011 REFERENCE: BP8.R011

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

STRUCTURE
SUBSURFACE INVESTIGATION

COUNTY MOORE
 PROJECT DESCRIPTION REPLACE BRIDGE 620119 ON
SR 1251 (BRINKLEY ROAD) OVER WADS CREEK

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	BP8.R011	1	15

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

RUSSEK, S. C.

TURNAGE, J. R.

MARPLES, Z. J.

INVESTIGATED BY TERRACON CONSULTANTS

DRAWN BY KENNEDY, E. J.

CHECKED BY ALEXANDER, M. J.

SUBMITTED BY AGHAZADEH, Z.

DATE AUGUST 2021

Terracon
 Consulting Engineers and Scientists
 2401 BRENTWOOD ROAD, SUITE 107
 RALEIGH, NORTH CAROLINA 27604
 NC REGISTERED ENGINEERING FIRM: F-0869
 NC REGISTERED GEOLOGIC FIRM: C-367



DocuSigned by:

Zahra Aghazadeh

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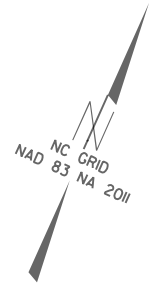
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**DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED**

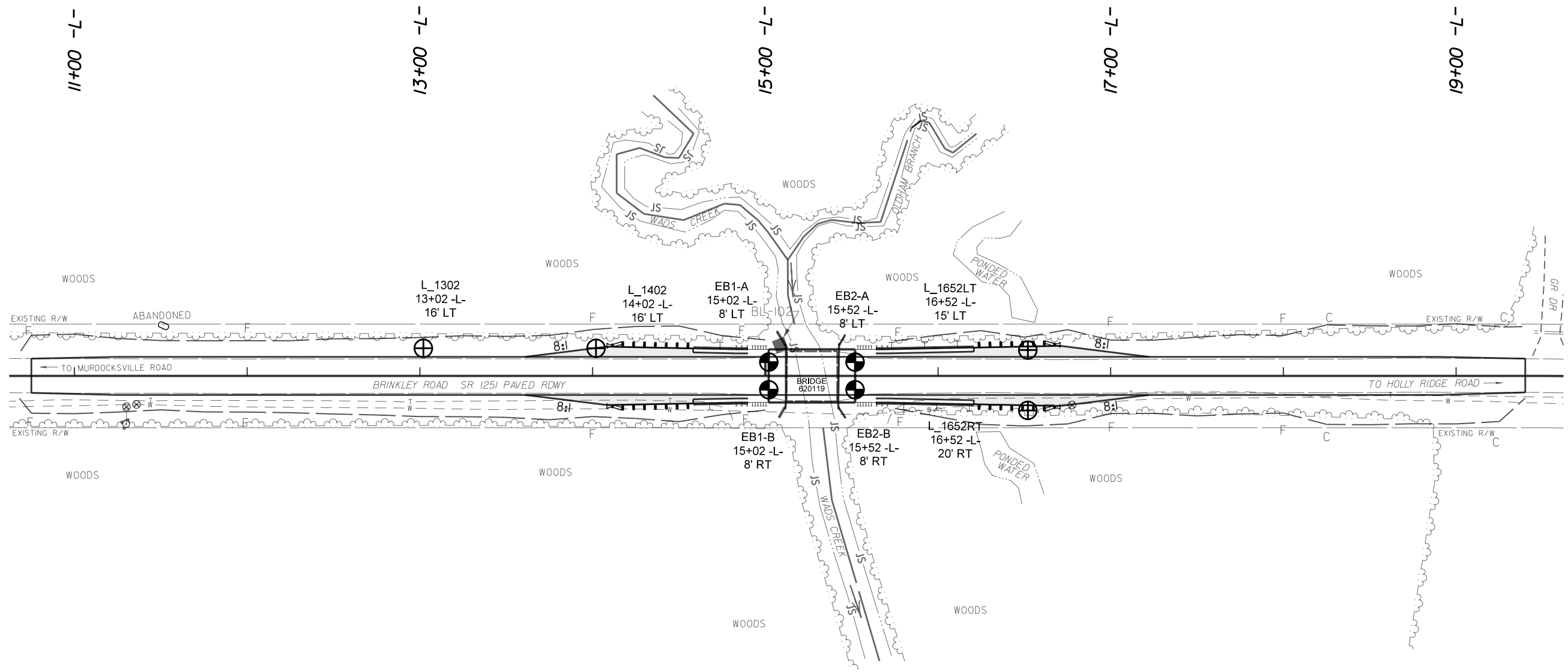
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
GEOTECHNICAL ENGINEERING UNIT
SUBSURFACE INVESTIGATION
SOIL AND ROCK LEGEND, TERMS, SYMBOLS, AND ABBREVIATIONS

Table with 4 main columns: SOIL DESCRIPTION, GRADATION, ROCK DESCRIPTION, and TERMS AND DEFINITIONS. Includes sub-sections like SOIL LEGEND AND AASHTO CLASSIFICATION, MINERALOGICAL COMPOSITION, COMPRESSIBILITY, PERCENTAGE OF MATERIAL, GROUND WATER, MISCELLANEOUS SYMBOLS, RECOMMENDATION SYMBOLS, ABBREVIATIONS, EQUIPMENT USED ON SUBJECT PROJECT, FRACTURE SPACING, BEDDING, and INDRURATION.

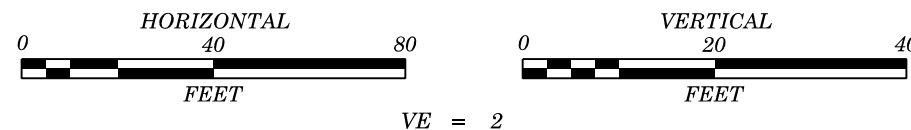
PROJECT REFERENCE NO.	SHEET NO.
BP8.R011	3
SITE PLAN	
 0 100 200 FEET	



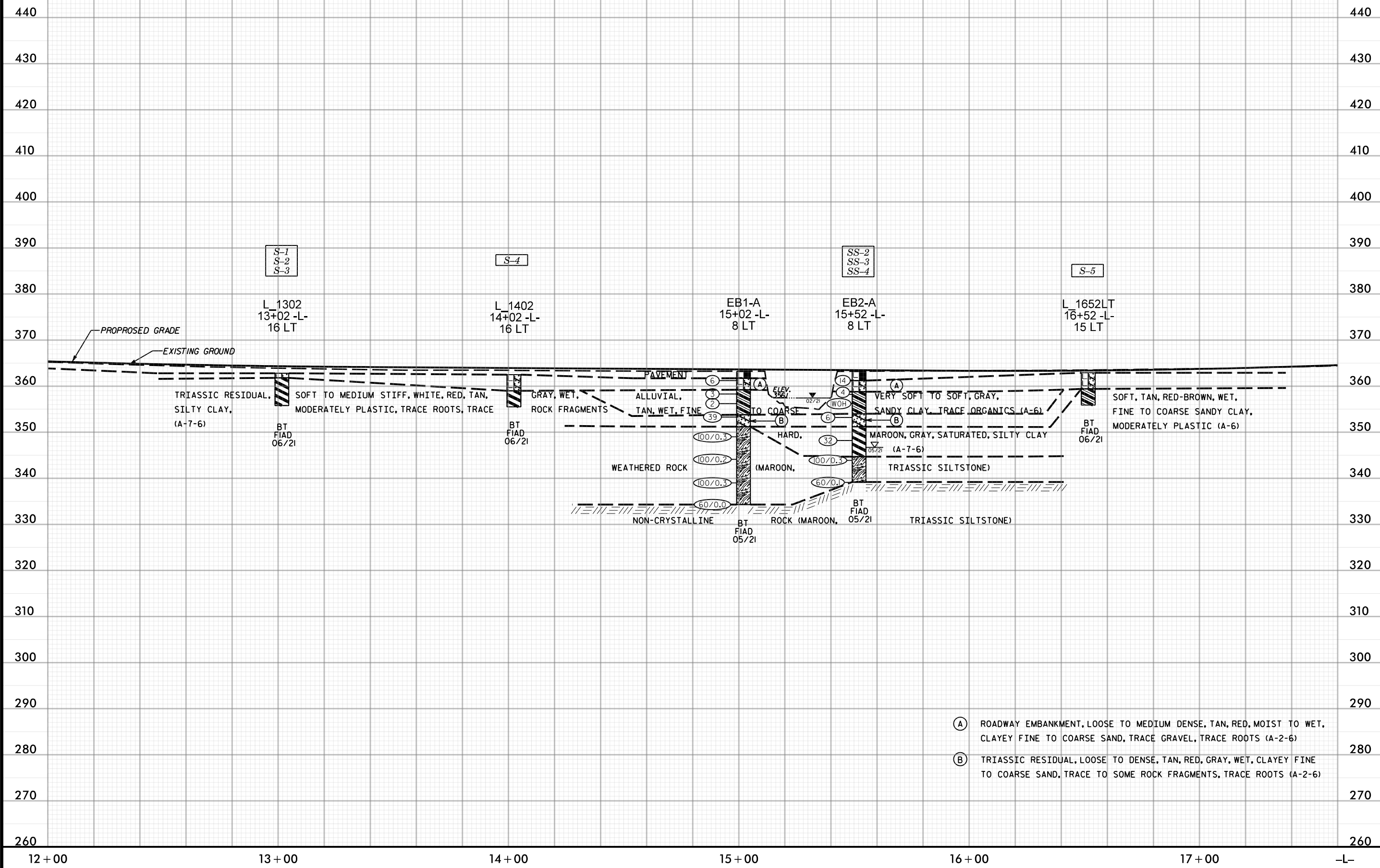
SKREW ANGLE - 90°



NOTE: INFERRED STRATIGRAPHY IS DRAWN THROUGH THE BORINGS WITH BOTH PROJECTED ON TO THE EXISTING GROUND PROFILE ALONG THE CENTERLINE OF -L- TAKEN FROM THE PROVIDED PROJECT TIN FILE (b620119_ls_tin.tin)

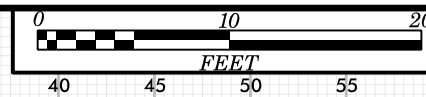


PROJECT REFERENCE NO.	SHEET NO.
BP8.R011	4
CENTERLINE PROFILE ALONG -L-	



- (A) ROADWAY EMBANKMENT, LOOSE TO MEDIUM DENSE, TAN, RED, MOIST TO WET, CLAYEY FINE TO COARSE SAND, TRACE GRAVEL, TRACE ROOTS (A-2-6)
- (B) TRIASSIC RESIDUAL, LOOSE TO DENSE, TAN, RED, GRAY, WET, CLAYEY FINE TO COARSE SAND, TRACE TO SOME ROCK FRAGMENTS, TRACE ROOTS (A-2-6)

6/23/16
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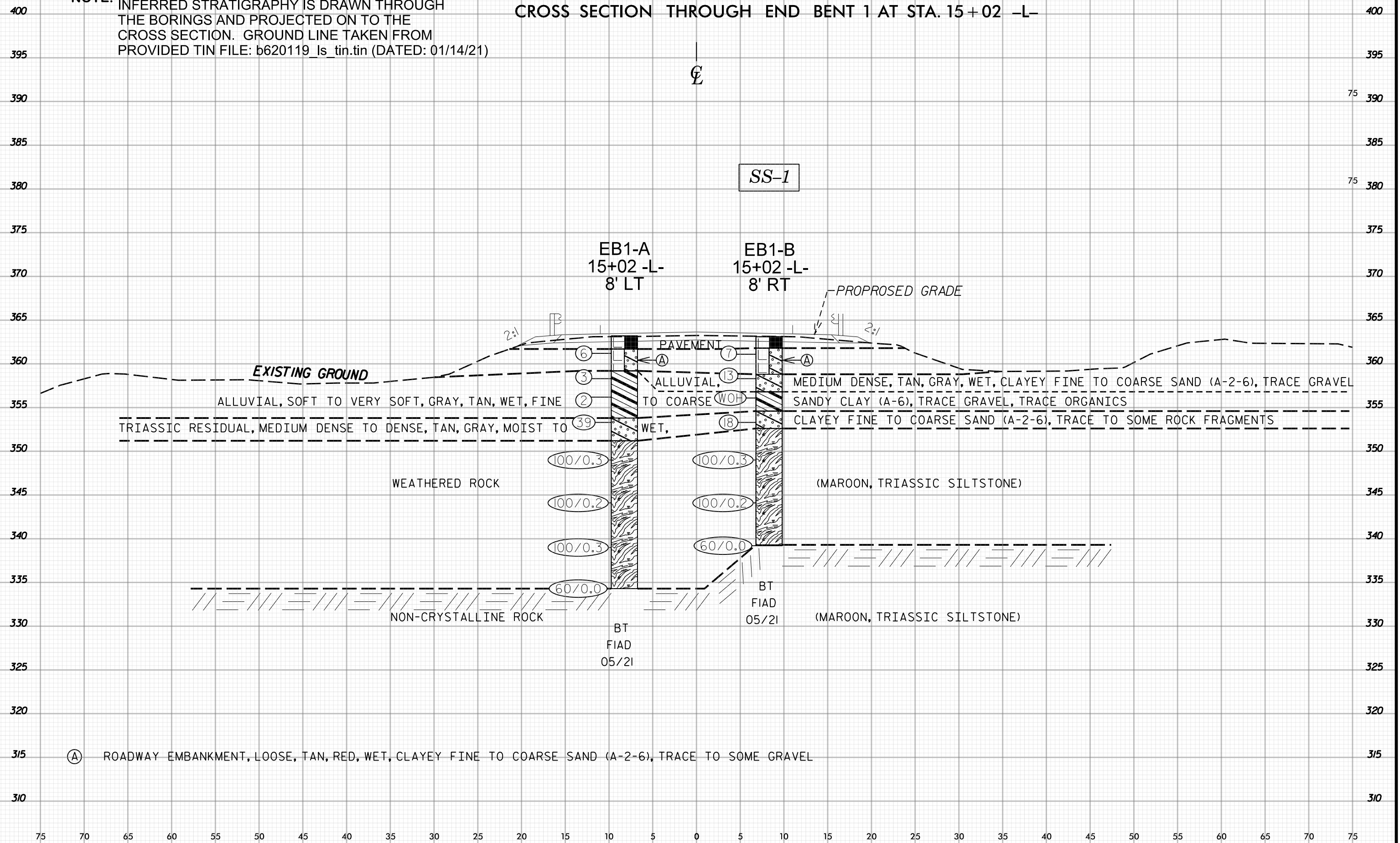


PROJ. REFERENCE NO.	SHEET NO.
BP8.R011	5

SKEW ANGLE 90°

CROSS SECTION THROUGH END BENT 1 AT STA. 15+02 -L-

NOTE: INFERRED STRATIGRAPHY IS DRAWN THROUGH THE BORINGS AND PROJECTED ON TO THE CROSS SECTION. GROUND LINE TAKEN FROM PROVIDED TIN FILE: b620119_ls_tin.tin (DATED: 01/14/21)



6/23/16

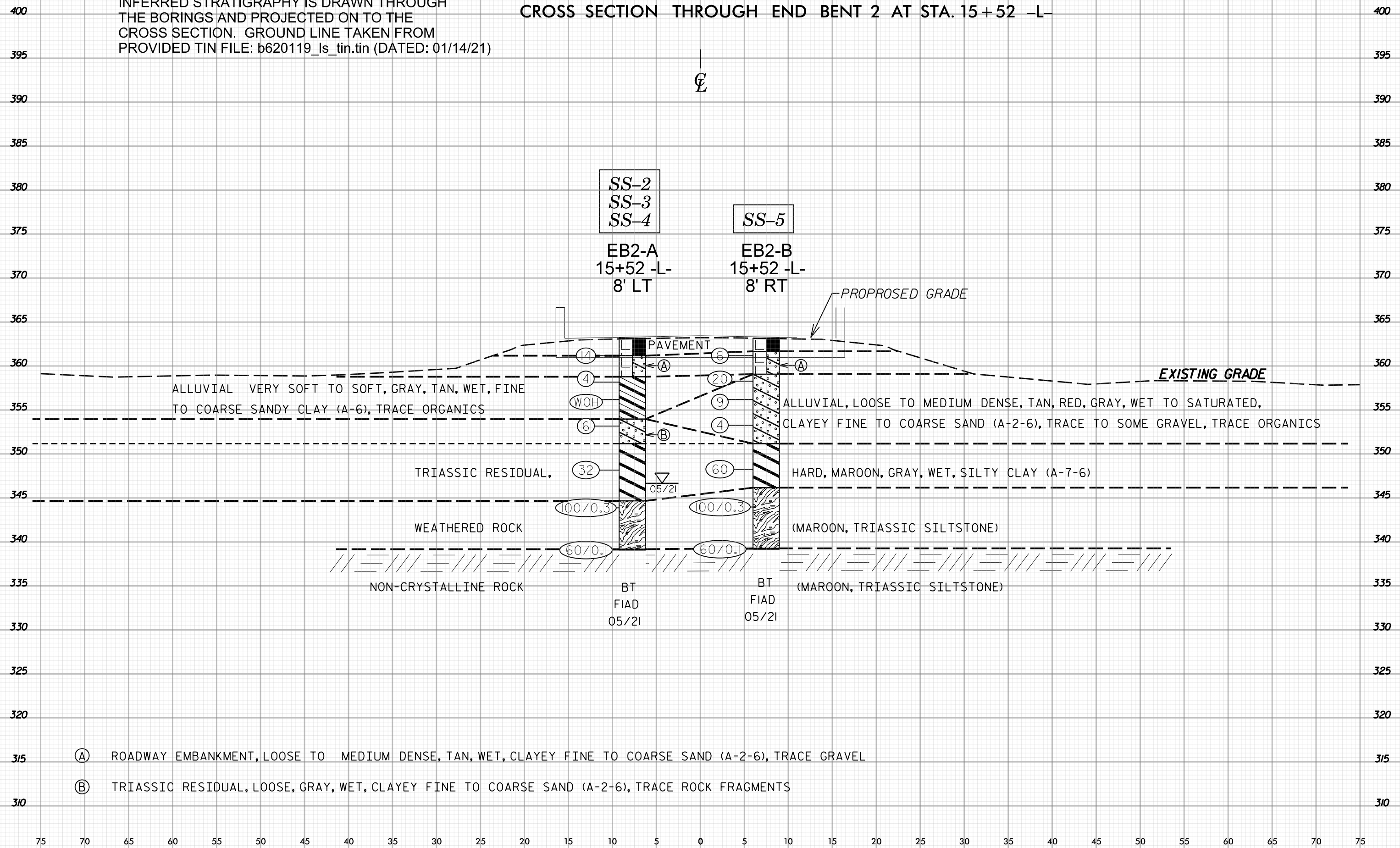


PROJ. REFERENCE NO.	SHEET NO.
BP8.R011	6

SKEW ANGLE 90°

NOTE: INFERRED STRATIGRAPHY IS DRAWN THROUGH THE BORINGS AND PROJECTED ON TO THE CROSS SECTION. GROUND LINE TAKEN FROM PROVIDED TIN FILE: b620119_ls_tin.tin (DATED: 01/14/21)

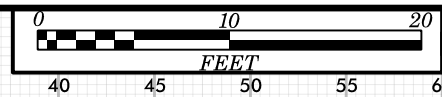
CROSS SECTION THROUGH END BENT 2 AT STA. 15+52 -L-



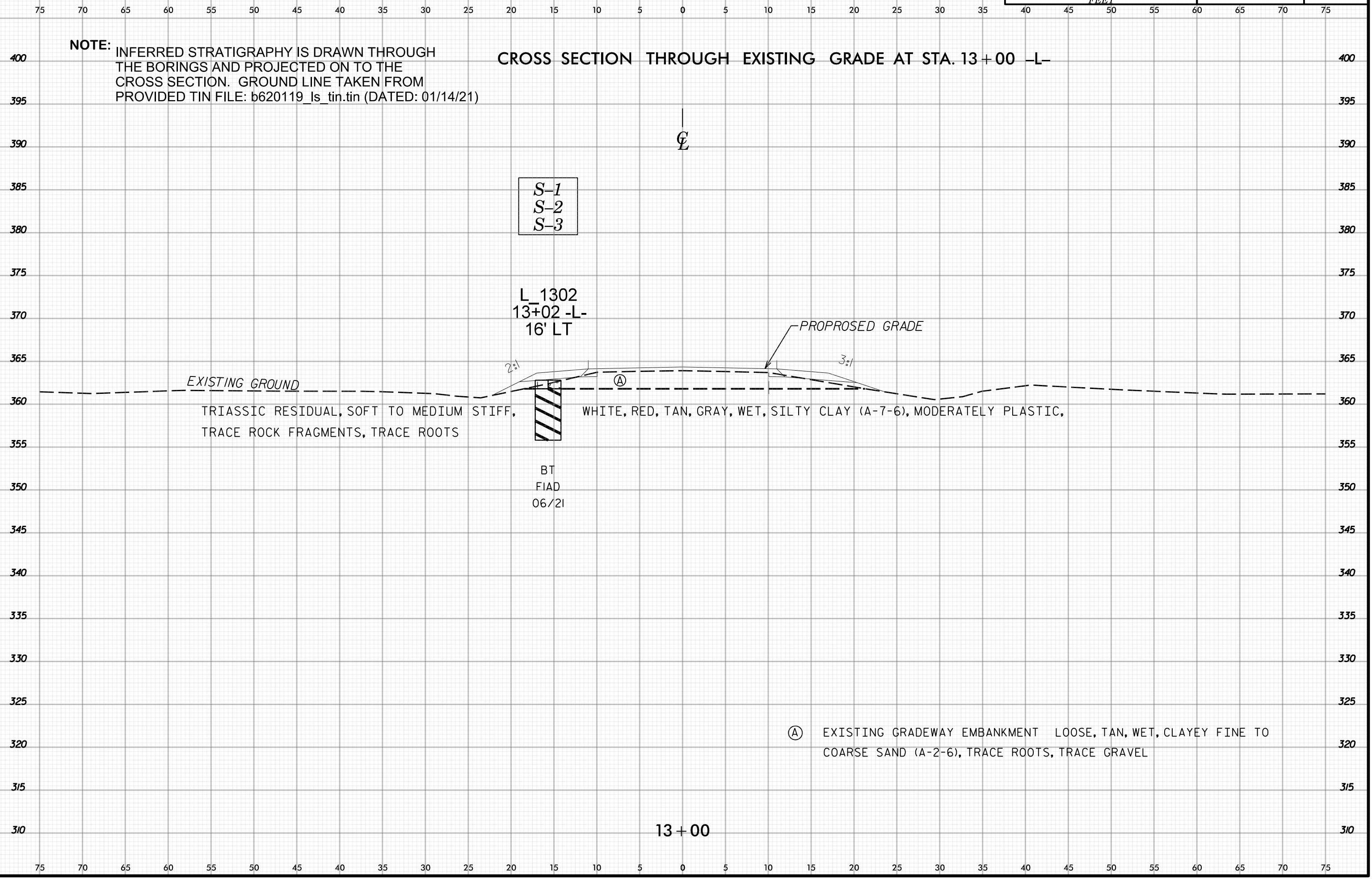
- (A) ROADWAY EMBANKMENT, LOOSE TO MEDIUM DENSE, TAN, WET, CLAYEY FINE TO COARSE SAND (A-2-6), TRACE GRAVEL
- (B) TRIASSIC RESIDUAL, LOOSE, GRAY, WET, CLAYEY FINE TO COARSE SAND (A-2-6), TRACE ROCK FRAGMENTS

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PROJ. REFERENCE NO.	SHEET NO.
BP8.R011	7



NOTE: INFERRED STRATIGRAPHY IS DRAWN THROUGH THE BORINGS AND PROJECTED ON TO THE CROSS SECTION. GROUND LINE TAKEN FROM PROVIDED TIN FILE: b620119_ls_tin.tin (DATED: 01/14/21)

CROSS SECTION THROUGH EXISTING GRADE AT STA. 13+00 -L-

S-1
S-2
S-3

L_1302
13+02 -L-
16' LT

EXISTING GROUND

PROPOSED GRADE

TRIASSIC RESIDUAL, SOFT TO MEDIUM STIFF, TRACE ROCK FRAGMENTS, TRACE ROOTS

WHITE, RED, TAN, GRAY, WET, SILTY CLAY (A-7-6), MODERATELY PLASTIC,

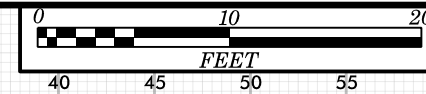
BT
FIAD
06/21

Ⓐ EXISTING GRADEWAY EMBANKMENT LOOSE, TAN, WET, CLAYEY FINE TO COARSE SAND (A-2-6), TRACE ROOTS, TRACE GRAVEL

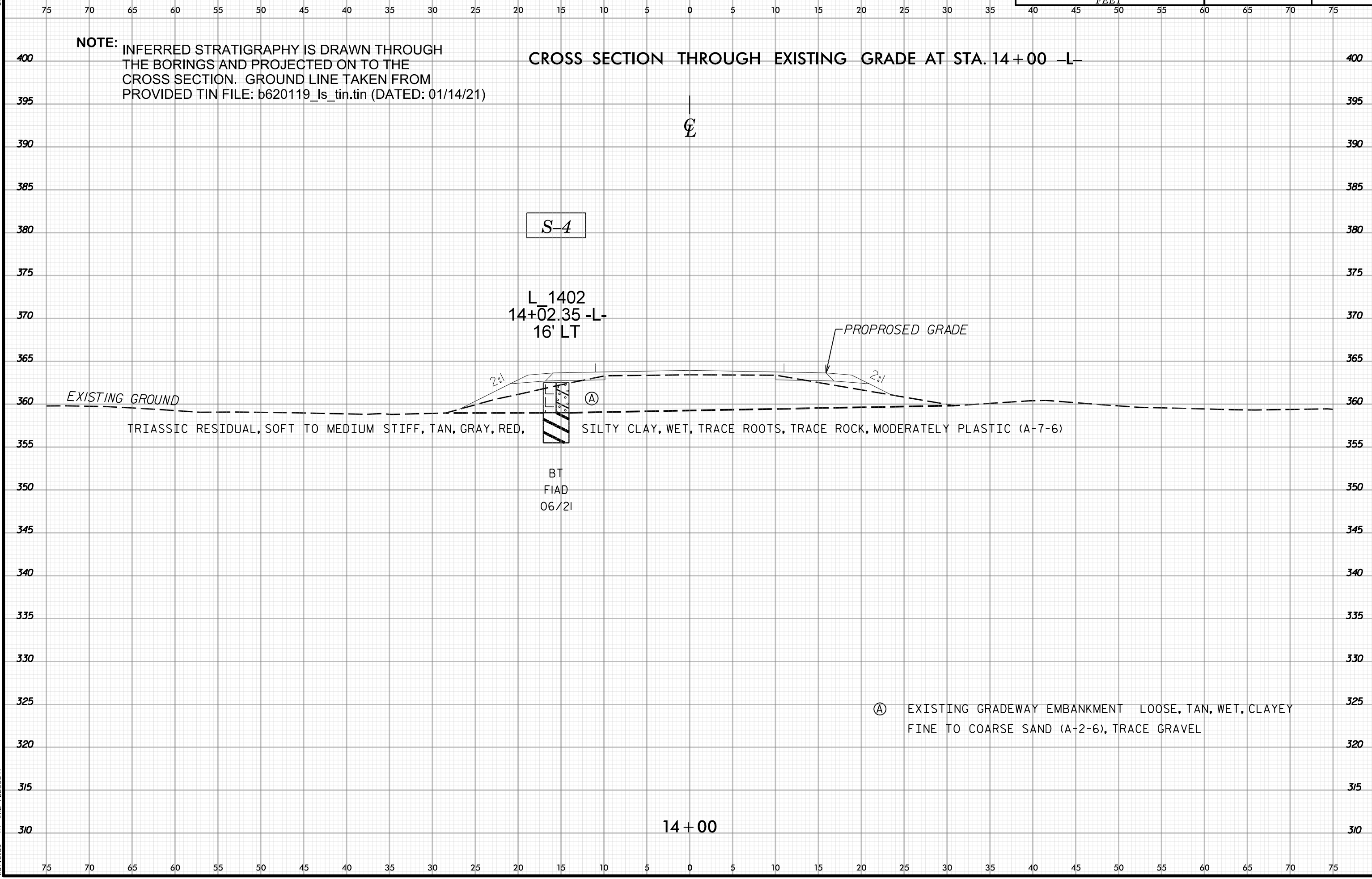
13+00

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6/23/16

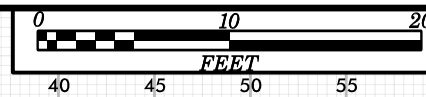


PROJ. REFERENCE NO.	SHEET NO.
BP8.R011	8

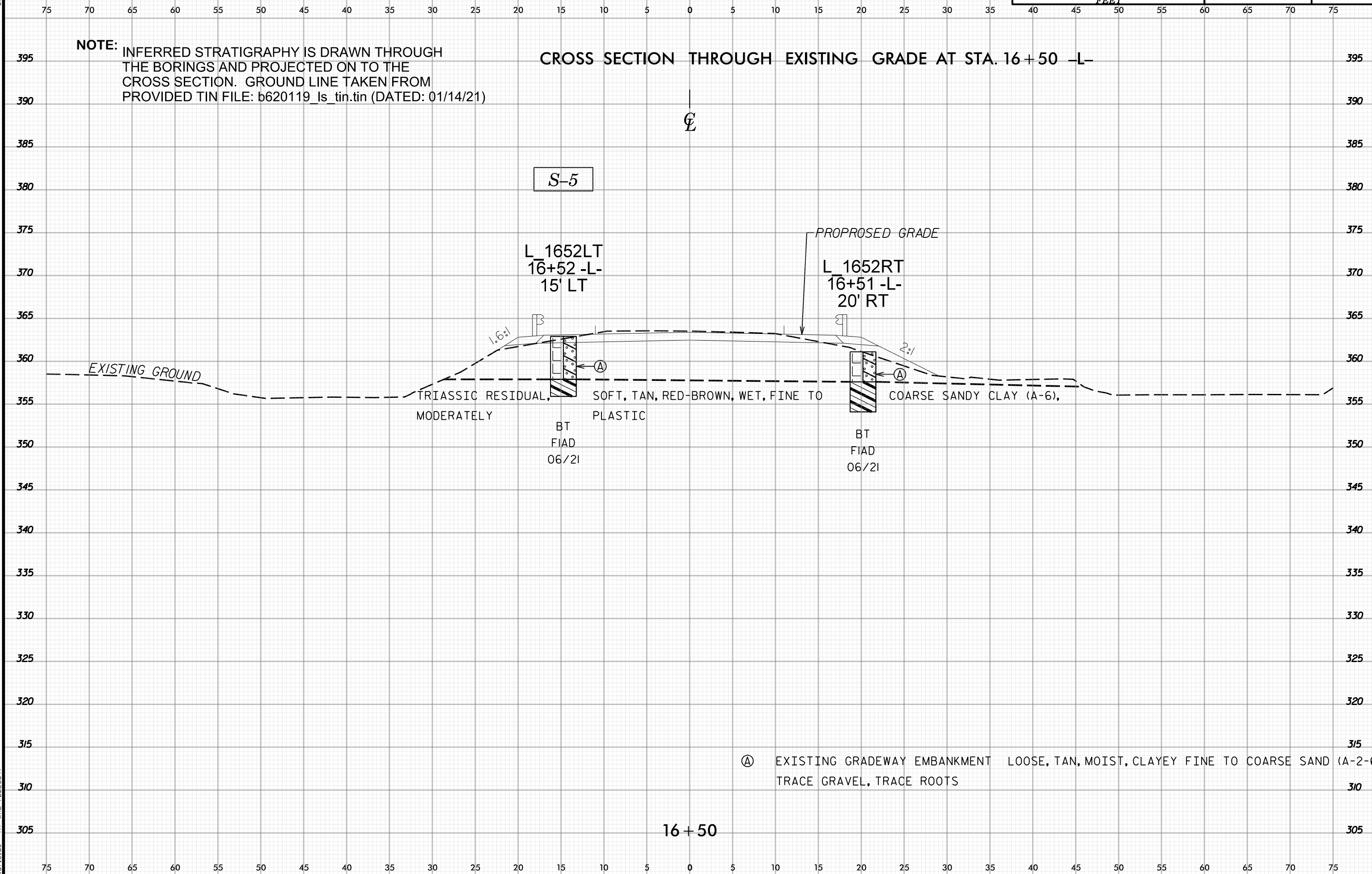


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PROJ. REFERENCE NO.	SHEET NO.
BP8.R011	9



NOTE: INFERRED STRATIGRAPHY IS DRAWN THROUGH THE BORINGS AND PROJECTED ON TO THE CROSS SECTION. GROUND LINE TAKEN FROM PROVIDED TIN FILE: b620119_ls_tin.tin (DATED: 01/14/21)

CROSS SECTION THROUGH EXISTING GRADE AT STA. 16+50 -L-

S-5

L_1652LT
16+52 -L-
15' LT

L_1652RT
16+51 -L-
20' RT

EXISTING GROUND

PROPOSED GRADE

TRIASSIC RESIDUAL,
MODERATELY

SOFT, TAN, RED-BROWN, WET, FINE TO
PLASTIC

COARSE SANDY CLAY (A-6),

BT
FIAD
06/21

BT
FIAD
06/21

(A) EXISTING GRADEWAY EMBANKMENT LOOSE, TAN, MOIST, CLAYEY FINE TO COARSE SAND (A-2-G), TRACE GRAVEL, TRACE ROOTS

16+50

GEOTECHNICAL BORING REPORT BORE LOG

WBS BP8.R011.1		TIP BP8.R011		COUNTY MOORE		GEOLOGIST RUSSEK, S.C.										
SITE DESCRIPTION Bridge 620119 on SR 1251 (Brinkley Road) over Wads Creek							GROUND WTR (ft)									
BORING NO. EB1-A		STATION 15+02		OFFSET 8 ft LT		ALIGNMENT -L-										
COLLAR ELEV. 363.2 ft		TOTAL DEPTH 28.9 ft		NORTHING 560,677		EASTING 1,865,545										
DRILL RIG/HAMMER EFF./DATE TER373 DIEDRICH D-50 95% 02/06/2021		DRILL METHOD H.S. Augers		HAMMER TYPE Automatic												
DRILLER TURNAGE, J.R.		START DATE 05/24/21		COMP. DATE 05/24/21		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						
365														363.2	GROUND SURFACE	0.0
	362.2	1.0	4	3	3									361.7	PAVEMENT 0.8' ASPHALT, 0.7' ABC	1.5
	359.3	3.9												359.2	ROADWAY EMBANKMENT LOOSE, TAN, WET, CLAYEY FINE TO COARSE SAND (A-2-6), TRACE GRAVEL	4.0
	357.2	6.0	WOH	1	1									353.8	ALLUVIAL SOFT, GRAY, TAN, WET, FINE SANDY CLAY (A-6), TRACE ORGANICS	9.4
	354.3	8.9		5	17	22								351.2	TRIASSIC RESIDUAL DENSE, TAN, GRAY, WET, CLAYEY FINE TO COARSE SAND (A-2-6), SOME ROCK FRAGMENTS	12.0
	349.3	13.9	100/0.3											339.3	WEATHERED ROCK (MAROON, TRIASSIC SILTSTONE)	100/0.3
	344.3	18.9	100/0.2											334.3	Boring Terminated with Standard Penetration Test Refusal at Elevation 334.3 ft ON TRIASSIC NON-CRYSTALLINE ROCK (SILTSTONE)	100/0.2
	339.3	23.9	100/0.3											334.3		100/0.3
	334.3	28.9	60/0.0											334.3		60/0.0

NCDOT BORE DOUBLE BP8.R011_GEO_BRDG620119_MOORE.GPJ_NC_DOT.GDT 7/29/21

WBS BP8.R011.1		TIP BP8.R011		COUNTY MOORE		GEOLOGIST RUSSEK, S.C.										
SITE DESCRIPTION Bridge 620119 on SR 1251 (Brinkley Road) over Wads Creek							GROUND WTR (ft)									
BORING NO. EB1-B		STATION 15+02		OFFSET 8 ft RT		ALIGNMENT -L-										
COLLAR ELEV. 363.1 ft		TOTAL DEPTH 23.9 ft		NORTHING 560,662		EASTING 1,865,552										
DRILL RIG/HAMMER EFF./DATE TER373 DIEDRICH D-50 95% 02/06/2021		DRILL METHOD H.S. Augers		HAMMER TYPE Automatic												
DRILLER TURNAGE, J.R.		START DATE 05/24/21		COMP. DATE 05/24/21		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						
365														363.1	GROUND SURFACE	0.0
	362.1	1.0	4	4	3									361.8	PAVEMENT 0.7' ASPHALT, 0.6' ABC	1.3
	359.3	3.8												358.8	ROADWAY EMBANKMENT LOOSE, TAN, RED, WET, CLAYEY FINE TO COARSE SAND (A-2-6), SOME GRAVEL	4.3
	357.1	6.0	WOH	3	10									356.8	ALLUVIAL MEDIUM DENSE, TAN, GRAY, WET, CLAYEY FINE TO COARSE SAND (A-2-6), TRACE GRAVEL, 0.3' SILTY CLAY LAYER FROM A DEPTH OF 4.3 FEET TO 4.6 FEET	6.3
	354.3	8.8		7	10	8								352.6	TRIASSIC RESIDUAL MEDIUM DENSE, GRAY, MOIST, CLAYEY FINE TO COARSE SAND (A-2-6), TRACE ROCK FRAGMENTS	8.5
	349.3	13.8	100/0.3											339.3	WEATHERED ROCK (MAROON, TRIASSIC SILTSTONE)	100/0.3
	344.3	18.8	100/0.2											339.2	NON-CRYSTALLINE ROCK (MAROON, TRIASSIC SILTSTONE)	100/0.2
	339.3	23.8	60/0.1											339.2	Boring Terminated with Standard Penetration Test Refusal at Elevation 339.2 ft IN TRIASSIC NON-CRYSTALLINE ROCK (SILTSTONE)	60/0.1

GEOTECHNICAL BORING REPORT

BORE LOG

WBS BP8.R011.1		TIP BP8.R011		COUNTY MOORE		GEOLOGIST RUSSEK, S.C.											
SITE DESCRIPTION Bridge 620119 on SR 1251 (Brinkley Road) over Wads Creek							GROUND WTR (ft)										
BORING NO. EB2-A		STATION 15+52		OFFSET 8 ft LT		ALIGNMENT -L-											
COLLAR ELEV. 363.2 ft		TOTAL DEPTH 24.1 ft		NORTHING 560,697		EASTING 1,865,591											
DRILL RIG/HAMMER EFF./DATE TER373 DIEDRICH D-50 95% 02/06/2021		DRILL METHOD H.S. Augers		HAMMER TYPE Automatic													
DRILLER TURNAGE, J.R.		START DATE 05/24/21		COMP. DATE 05/24/21		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							
365																	
	362.2	1.0	5	9	5										363.2	GROUND SURFACE	0.0
															361.2	PAVEMENT 0.6' ASPHALT, 1.4' ABC	2.0
															359.0	ROADWAY EMBANKMENT MEDIUM DENSE, TAN, WET, CLAYEY FINE TO COARSE SAND (A-2-6), TRACE GRAVEL	4.2
	359.2	4.0	2	1	3										354.0	ALLUVIAL VERY SOFT TO SOFT, GRAY, TAN, WET, FINE TO COARSE SANDY CLAY (A-6), TRACE ORGANICS	9.2
	357.2	6.0	WOH	WOH	WOH										351.2	TRIASSIC RESIDUAL LOOSE, GRAY, WET, CLAYEY FINE TO COARSE SAND (A-2-6), TRACE ROCK FRAGMENTS	12.0
	354.2	9.0	WOH	2	4										349.3	TRIASSIC RESIDUAL HARD, MAROON, GRAY, SATURATED, SILTY CLAY (A-7-6)	18.5
	349.2	14.0	23	19	13										344.7	WEATHERED ROCK (MAROON, TRIASSIC SILTSTONE)	18.5
	344.2	19.0	100/0.3												339.2	NON-CRYSTALLINE ROCK (MAROON, TRIASSIC SILTSTONE)	24.0
	339.2	24.0	60/0.1												339.1	NON-CRYSTALLINE ROCK (MAROON, TRIASSIC SILTSTONE) Boring Terminated with Standard Penetration Test Refusal at Elevation 339.1 ft IN TRIASSIC NON-CRYSTALLINE ROCK (SILTSTONE)	24.1

WBS BP8.R011.1		TIP BP8.R011		COUNTY MOORE		GEOLOGIST RUSSEK, S.C.											
SITE DESCRIPTION Bridge 620119 on SR 1251 (Brinkley Road) over Wads Creek							GROUND WTR (ft)										
BORING NO. EB2-B		STATION 15+52		OFFSET 8 ft RT		ALIGNMENT -L-											
COLLAR ELEV. 363.2 ft		TOTAL DEPTH 24.0 ft		NORTHING 560,683		EASTING 1,865,597											
DRILL RIG/HAMMER EFF./DATE TER373 DIEDRICH D-50 95% 02/06/2021		DRILL METHOD H.S. Augers		HAMMER TYPE Automatic													
DRILLER TURNAGE, J.R.		START DATE 05/24/21		COMP. DATE 05/24/21		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							
365																	
	362.2	1.0	4	3	3										363.2	GROUND SURFACE	0.0
															361.7	PAVEMENT 0.7' ASPHALT, 0.7' ABC	1.5
															359.1	ROADWAY EMBANKMENT LOOSE, TAN, WET, CLAYEY FINE TO COARSE SAND (A-2-6), TRACE GRAVEL	4.1
	359.3	3.9	2	8	12										354.0	ALLUVIAL LOOSE TO MEDIUM DENSE, TAN, RED, GRAY, WET TO SATURATED, CLAYEY FINE TO COARSE SAND (A-2-6), TRACE TO SOME GRAVEL, TRACE ORGANICS, 0.6' SILTY CLAY LAYER FROM A DEPTH OF 4.1 FEET TO 4.7 FEET	12.0
	357.2	6.0	5	5	4										349.3	TRIASSIC RESIDUAL HARD, MAROON, GRAY, WET, SILTY CLAY (A-7-6)	17.0
	354.3	8.9	4	1	3										346.2	WEATHERED ROCK (MAROON, TRIASSIC SILTSTONE)	17.0
	349.3	13.9	5	32	28										339.3	NON-CRYSTALLINE ROCK (MAROON, TRIASSIC SILTSTONE)	23.9
	344.3	18.9	100/0.3												339.2	NON-CRYSTALLINE ROCK (MAROON, TRIASSIC SILTSTONE) Boring Terminated with Standard Penetration Test Refusal at Elevation 339.2 ft IN TRIASSIC NON-CRYSTALLINE ROCK (SILTSTONE)	24.0
	339.3	23.9	60/0.1												339.2	NON-CRYSTALLINE ROCK (MAROON, TRIASSIC SILTSTONE) Boring Terminated with Standard Penetration Test Refusal at Elevation 339.2 ft IN TRIASSIC NON-CRYSTALLINE ROCK (SILTSTONE)	24.0

NCDOT BORE DOUBLE BP8.R011_GEO_BRDG620119_MOORE.GPJ_NC_DOT.GDT 7/29/21

GEOTECHNICAL BORING REPORT BORE LOG

WBS BP8.R011.1		TIP BP8.R011		COUNTY MOORE		GEOLOGIST RUSSEK, S.C.										
SITE DESCRIPTION Bridge 620119 on SR 1251 (Brinkley Road) over Wads Creek							GROUND WTR (ft)									
BORING NO. L_1302		STATION 13+02		OFFSET 16 ft LT		ALIGNMENT -L-										
COLLAR ELEV. 362.8 ft		TOTAL DEPTH 7.0 ft		NORTHING 560,602		EASTING 1,865,359										
DRILL RIG/HAMMER EFF./DATE N/A				DRILL METHOD Hand Auger		HAMMER TYPE Automatic										
DRILLER N/A		START DATE 06/04/21		COMP. DATE 06/04/21		SURFACE WATER DEPTH N/A										
ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION	ELEV. (ft)	DEPTH (ft)
			0.5ft	0.5ft	0.5ft	0	25	50	75	100						
365															362.8	0.0
														W	361.8	1.0
														S-1		
														S-2		
														S-3		
															355.8	7.0

GROUND SURFACE
ROADWAY EMBANKMENT
LOOSE, TAN, WET, CLAYEY FINE TO COARSE SAND (A-2-6), TRACE ROOTS, TRACE GRAVEL
TRIASSIC RESIDUAL
SOFT TO MEDIUM STIFF, WHITE, RED, TAN, GRAY, WET, SILTY CLAY (A-7-6), MODERATELY PLASTIC, TRACE ROCK FRAGMENTS, TRACE ROOTS
Boring Terminated at Elevation 355.8 ft IN TRIASSIC RESIDUAL SILTY CLAY

WBS BP8.R011.1		TIP BP8.R011		COUNTY MOORE		GEOLOGIST RUSSEK, S.C.										
SITE DESCRIPTION Bridge 620119 on SR 1251 (Brinkley Road) over Wads Creek							GROUND WTR (ft)									
BORING NO. L_1402		STATION 14+02		OFFSET 16 ft LT		ALIGNMENT -L-										
COLLAR ELEV. 362.5 ft		TOTAL DEPTH 7.0 ft		NORTHING 560,643		EASTING 1,865,451										
DRILL RIG/HAMMER EFF./DATE N/A				DRILL METHOD Hand Auger		HAMMER TYPE Automatic										
DRILLER N/A		START DATE 06/04/21		COMP. DATE 06/04/21		SURFACE WATER DEPTH N/A										
ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION	ELEV. (ft)	DEPTH (ft)
			0.5ft	0.5ft	0.5ft	0	25	50	75	100						
365															362.5	0.0
														W		
														W		
														S-4		
															359.0	3.5
															355.5	7.0

GROUND SURFACE
ROADWAY EMBANKMENT
LOOSE, TAN, WET, CLAYEY FINE TO COARSE SAND (A-2-6), TRACE GRAVEL
TRIASSIC RESIDUAL
SOFT TO MEDIUM STIFF, TAN, GRAY, RED, WET, SILTY CLAY (A-7-6), MODERATELY PLASTIC, TRACE ROOTS, TRACE ROCK FRAGMENTS
Boring Terminated at Elevation 355.5 ft IN TRIASSIC RESIDUAL SILTY CLAY

NCDOT BORE DOUBLE BP8.R011_GEO_BRD620119_MOORE.GPJ NC_DOT.GDT 7/29/21

GEOTECHNICAL BORING REPORT BORE LOG

WBS BP8.R011.1		TIP BP8.R011		COUNTY MOORE		GEOLOGIST RUSSEK, S.C.											
SITE DESCRIPTION Bridge 620119 on SR 1251 (Brinkley Road) over Wads Creek							GROUND WTR (ft)										
BORING NO. L_1652LT		STATION 16+52		OFFSET 15 ft LT		ALIGNMENT -L-											
COLLAR ELEV. 362.9 ft		TOTAL DEPTH 7.0 ft		NORTHING 560,744		EASTING 1,865,679											
DRILL RIG/HAMMER EFF./DATE N/A			DRILL METHOD Hand Auger		HAMMER TYPE Automatic												
DRILLER N/A		START DATE 06/04/21		COMP. DATE 06/04/21		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							
365															362.9	0.0	GROUND SURFACE
360													S-5	10%	357.9	5.0	ROADWAY EMBANKMENT LOOSE, TAN, MOIST, CLAYEY FINE TO COARSE SAND (A-2-6), TRACE GRAVEL, TRACE ROOTS
														W	355.9	7.0	TRIASSIC RESIDUAL SOFT, TAN, RED-BROWN, WET, FINE TO COARSE SANDY CLAY (A-6), MODERATELY PLASTIC
																	Boring Terminated at Elevation 355.9 ft IN TRIASSIC RESIDUAL SANDY CLAY

WBS BP8.R011.1		TIP BP8.R011		COUNTY MOORE		GEOLOGIST RUSSEK, S.C.											
SITE DESCRIPTION Bridge 620119 on SR 1251 (Brinkley Road) over Wads Creek							GROUND WTR (ft)										
BORING NO. L_1652RT		STATION 16+52		OFFSET 20 ft RT		ALIGNMENT -L-											
COLLAR ELEV. 361.1 ft		TOTAL DEPTH 7.0 ft		NORTHING 560,712		EASTING 1,865,693											
DRILL RIG/HAMMER EFF./DATE N/A			DRILL METHOD Hand Auger		HAMMER TYPE Automatic												
DRILLER N/A		START DATE 06/04/21		COMP. DATE 06/04/21		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							
365															361.1	0.0	GROUND SURFACE
360														W	357.6	3.5	ROADWAY EMBANKMENT LOOSE, TAN, RED- BROWN, WET, CLAYEY FINE TO COARSE SAND (A-2-6), TRACE ROOTS, TRACE GRAVEL
														W	354.1	7.0	TRIASSIC RESIDUAL VERY SOFT TO SOFT, TAN, GRAY, WET, FINE TO COARSE SANDY CLAY (A-6), MODERATELY PLASTIC
																	Boring Terminated at Elevation 354.1 ft IN TRIASSIC RESIDUAL SANDY CLAY

NCDOT BORE DOUBLE BP8.R011_GEO_BRD620119_MOORE.GPJ NC_DOT.GDT 7/29/21

LABORATORY TESTING SUMMARY

PROJECT NUMBER: BP8.R011.1

TIP: BP8.R011

COUNTY: Moore

DESCRIPTION: Bridge 620119 on SR 1251 (Brinkley Road) over Wads Creek

Sample No.	Station	Alignment	Offset (feet)	Depth Interval (feet)	AASHTO Class.	L.L.	P.I.	% by Weight				% Retained #4 Sieve	% Passing (sieves)			% Moisture	% Organic
								Coarse Sand	Fine Sand	Silt	Clay		#10	#40	#200		
S-1	L-1302	-L-	16 LT	1.0 - 1.5	A-7-6 (13)	44	23	19.8	17.4	27.8	35.0	1	97	85	64	20.0	--
S-2	L-1302	-L-	16 LT	3.0 - 3.5	-	-	-	-	-	-	-	-	-	-	-	15.3	--
S-3	L-1302	-L-	16 LT	6.5 - 7.0	-	-	-	-	-	-	-	-	-	-	-	25.5	--
S-4	L-1402	-L-	16 LT	4.0 - 4.5	A-7-6 (16)	45	24	14.4	18.8	31.0	35.8	0	99	91	70	22.3	--
SS-1	EB1-B	-L-	8 RT	8.8 - 10.3	A-2-6 (0)	25	11	63.1	16.1	10.4	10.4	41	46	24	10	8.1	--
SS-2	EB2-A	-L-	8 LT	1.0 - 2.5	-	-	-	-	-	-	-	-	-	-	-	11.2	--
SS-3	EB2-A	-L-	8 LT	4.0 - 5.5	-	-	-	-	-	-	-	-	-	-	-	20.0	--
SS-4	EB2-A	-L-	8 LT	6.0 - 7.5	A-6 (5)	31	13	11.1	36.9	28.8	23.2	1	98	93	58	20.2	--
SS-5	EB2-B	-L-	8 RT	13.9 - 15.4	A-7-6 (19)	46	24	0.9	1.0	59.9	38.2	0	79	79	78	13.6	--
S-5	L-1652 LT	-L-	15 LT	0.5 - 1.0	A-2-6 (0)	29	13	51.1	18.9	18.1	11.9	11	85	58	28	10.4	--

Stephanie H. Huffman
 Certified Lab Technician Signature

114-01-1203
 Certification Number

SITE PHOTOGRAPHS

BRIDGE 620119 ON SR 1251 (BRINKLEY ROAD)
OVER WADS CREEK



LOOKING EAST FROM END BENT 1 TOWARD END BENT 2



SOUTHEAST OF BRIDGE DOWN STATION TOWARD END BENT 1