

REFERENCE: B-5995

PROJECT: 48190

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<u>SHEET NO.</u>	<u>DESCRIPTION</u>
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**STATE OF NORTH CAROLINA**  
 DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 GEOTECHNICAL ENGINEERING UNIT

**STRUCTURE**  
**SUBSURFACE INVESTIGATION**

COUNTY PAMLICO  
 PROJECT DESCRIPTION BRIDGE NO. 57 ON -L- (SR 1302)  
OVER DAWSON CREEK AT STA. 18+91

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-5995	1	9

**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
- D.N. ARGENBRIGHT
- T.C. BOTTOMS
- S.N. ZIMARINO
- T.W. MILLER
- R.E. SMITH
- C.M. WALKER

INVESTIGATED BY T.C. BOTTOMS

DRAWN BY T.C. BOTTOMS

CHECKED BY D.N. ARGENBRIGHT

SUBMITTED BY D.N. ARGENBRIGHT

DATE JAN. 2022



DocuSigned by:  
Tyler Bottoms 03/15/2022

48A2D3BD08CF4A6...  
 SIGNATURE DATE

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

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
GEOTECHNICAL ENGINEERING UNIT

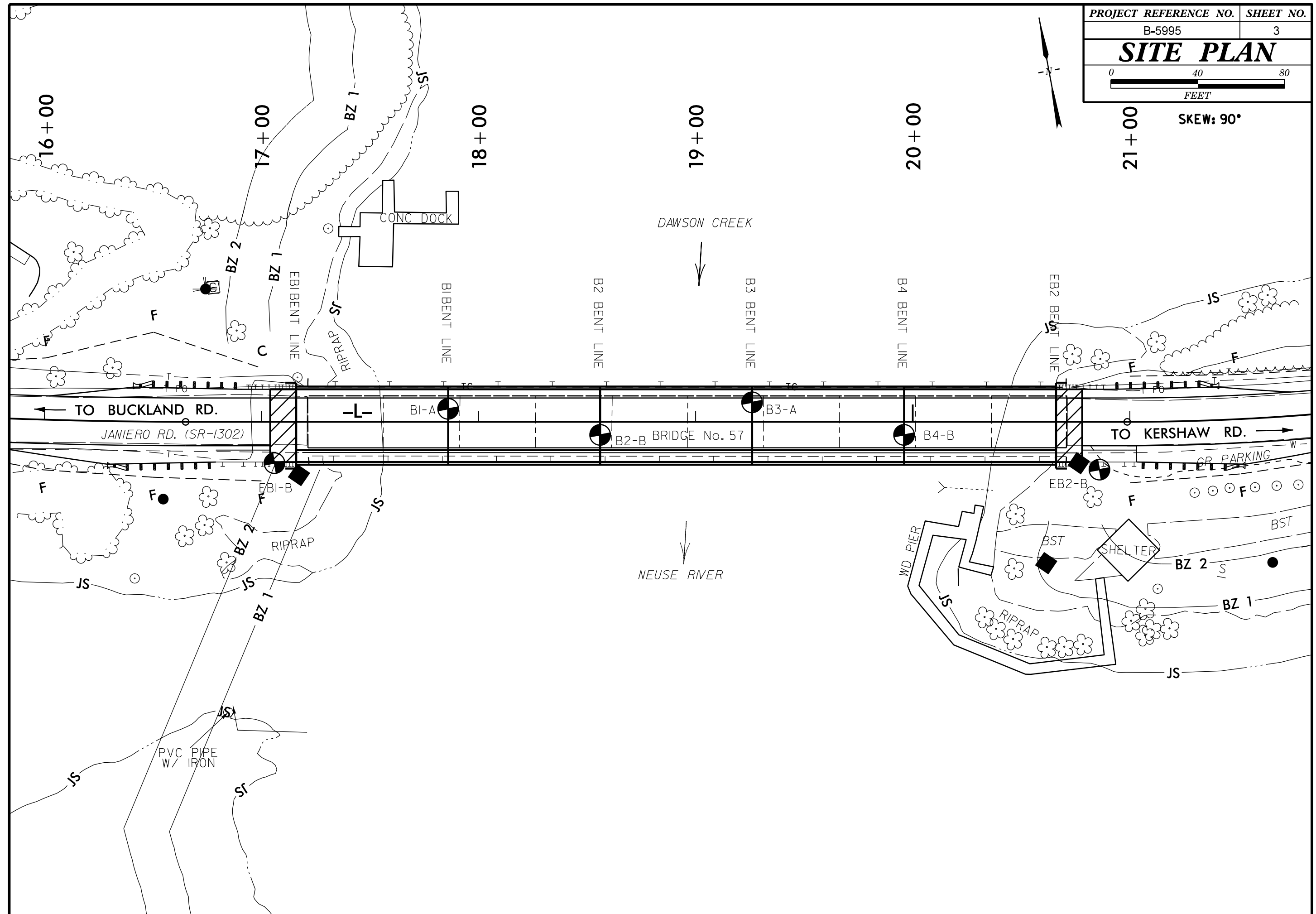
SUBSURFACE INVESTIGATION

SOIL AND ROCK LEGEND, TERMS, SYMBOLS, AND ABBREVIATIONS

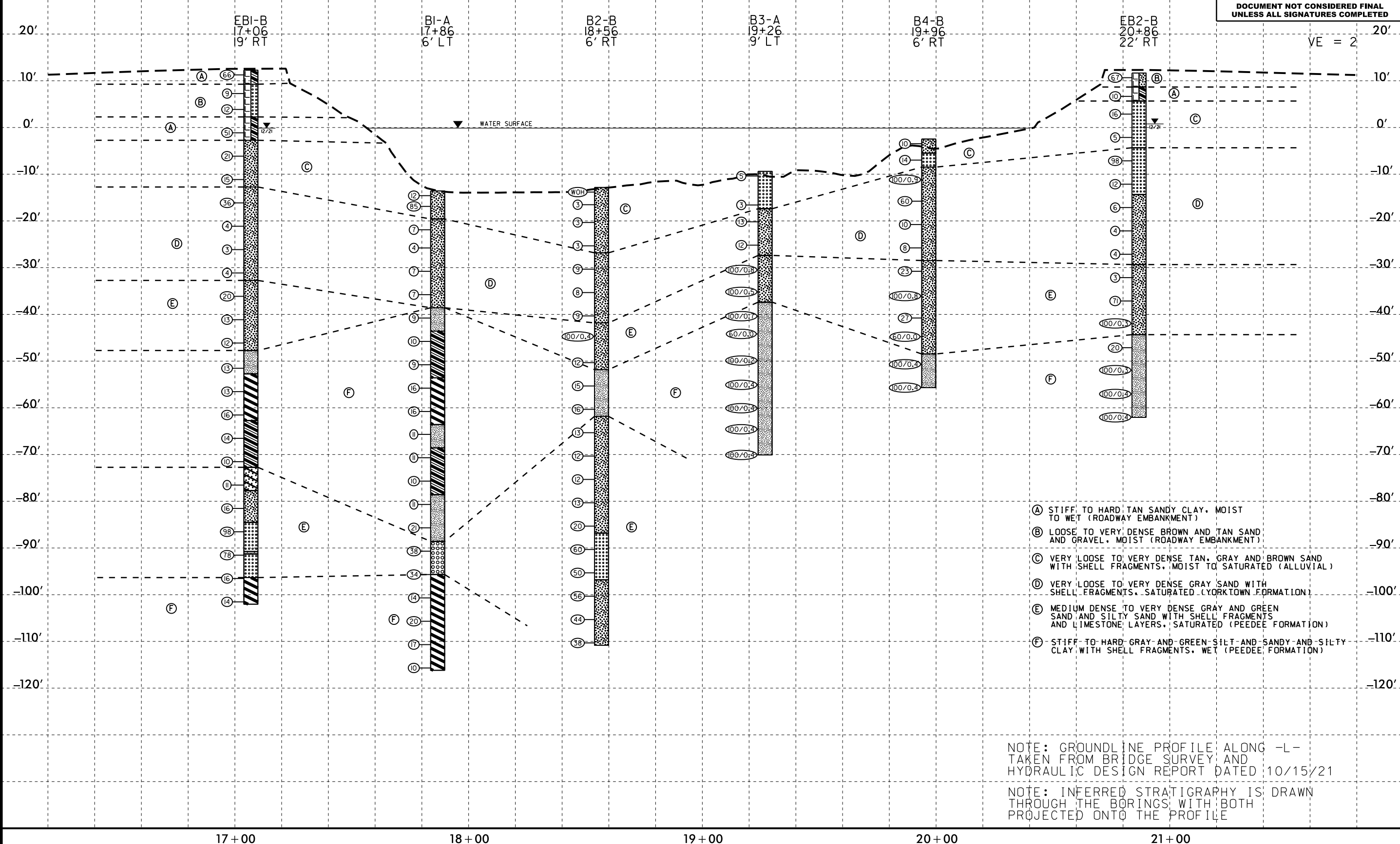
Table with 4 main columns: SOIL DESCRIPTION, GRADATION, ROCK DESCRIPTION, and TERMS AND DEFINITIONS. It contains detailed technical specifications, classification charts, and symbols for geotechnical engineering.



SKEW: 90°



## PROFILE THROUGH BORINGS PROJECTED ALONG -L-



5/14/99  
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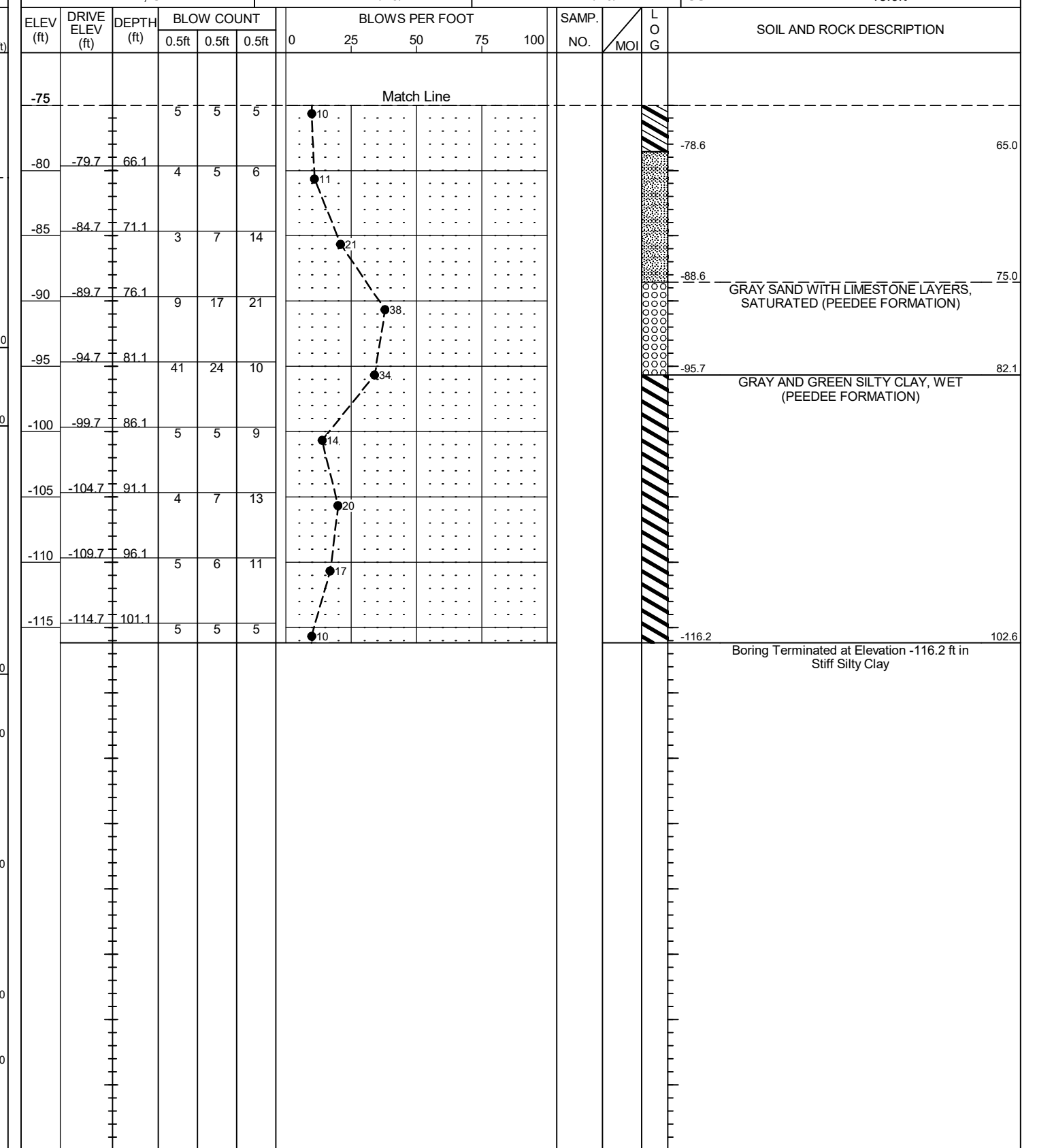
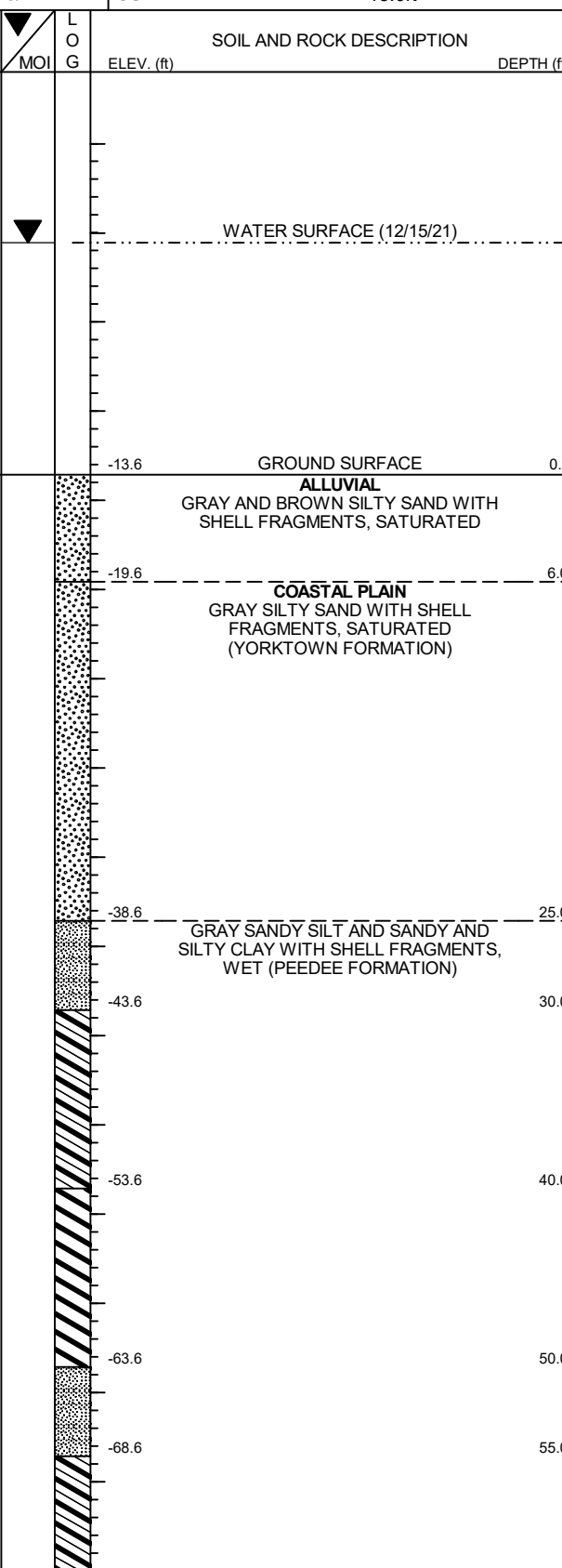
# GEOTECHNICAL BORING REPORT

## BORE LOG

WBS 48190.1.1		TIP B-5995		COUNTY PAMLICO		GEOLOGIST Bottoms, T. C.									
SITE DESCRIPTION Bridge No. 57 on -L- (SR 1302) over Dawson Creek							GROUND WTR (ft)								
BORING NO. B1-A		STATION 17+86		OFFSET 6 ft LT		ALIGNMENT -L-									
COLLAR ELEV. -13.6 ft		TOTAL DEPTH 102.6 ft		NORTHING 460,073		EASTING 2,671,581									
DRILL RIGHAMMER EFF./DATE GFC0075 CME-45C 87% 11/23/2021			DRILL METHOD Mud Rotary			HAMMER TYPE Automatic									
DRILLER Walker, C. M.		START DATE 12/15/21		COMP. DATE 12/20/21		SURFACE WATER DEPTH 13.0ft									
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					
5															
0															
-5															
-10															
-13.6	0.0														
-15	-15.9	2.3	39	16	69										
-20	-20.9	7.3	5	4	3										
-25	-24.8	11.2	1	1	3										
-30	-29.8	16.2	3	3	4										
-35	-34.8	21.2	3	3	4										
-40	-39.8	26.2	2	4	5										
-45	-44.8	31.2	13	5	5										
-50	-49.8	36.2	4	4	5										
-55	-54.8	41.2	5	7	9										
-60	-59.8	46.2	6	7	9										
-65	-64.7	51.1	4	4	7										
-70	-69.7	56.1	4	5	6										
-75	-74.7	61.1													

WBS 48190.1.1		TIP B-5995		COUNTY PAMLICO		GEOLOGIST Bottoms, T. C.									
SITE DESCRIPTION Bridge No. 57 on -L- (SR 1302) over Dawson Creek							GROUND WTR (ft)								
BORING NO. B1-A		STATION 17+86		OFFSET 6 ft LT		ALIGNMENT -L-									
COLLAR ELEV. -13.6 ft		TOTAL DEPTH 102.6 ft		NORTHING 460,073		EASTING 2,671,581									
DRILL RIGHAMMER EFF./DATE GFC0075 CME-45C 87% 11/23/2021			DRILL METHOD Mud Rotary			HAMMER TYPE Automatic									
DRILLER Walker, C. M.		START DATE 12/15/21		COMP. DATE 12/20/21		SURFACE WATER DEPTH 13.0ft									
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					
-75															
-80	-79.7	66.1	4	5	6										
-85	-84.7	71.1	3	7	14										
-90	-89.7	76.1	9	17	21										
-95	-94.7	81.1	41	24	10										
-100	-99.7	86.1	5	5	9										
-105	-104.7	91.1	4	7	13										
-110	-109.7	96.1	5	6	11										
-115	-114.7	101.1	5	5	5										

NCDOT BORE DOUBLE B5995\_GEO\_BRDG.GPJ NC\_DOT.GDT 1/14/22



# GEOTECHNICAL BORING REPORT

## BORE LOG

WBS 48190.1.1		TIP B-5995		COUNTY PAMLICO		GEOLOGIST Zimarino, S. N.										
SITE DESCRIPTION Bridge No. 57 on -L- (SR 1302) over Dawson Creek							GROUND WTR (ft)									
BORING NO. B2-B		STATION 18+56		OFFSET 6 ft RT		ALIGNMENT -L-										
COLLAR ELEV. -12.8 ft		TOTAL DEPTH 98.0 ft		NORTHING 460,048		EASTING 2,671,647										
DRILL RIGHAMMER EFF./DATE GFC0075 CME-45C 87% 11/23/2021			DRILL METHOD Mud Rotary			HAMMER TYPE Automatic										
DRILLER Walker, C. M.		START DATE 12/14/21		COMP. DATE 12/15/21		SURFACE WATER DEPTH 12.3ft										
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						
0																
-5																
-10																
	-12.8	0.0														
-15	-15.5	2.7	WOH	WOH	WOH											
-20	-19.3	6.5	1	2	1											
-25	-24.3	11.5	1	1	2											
-30	-29.3	16.5	2	3	6											
-35	-34.3	21.5	3	3	5											
-40	-39.3	26.5	3	4	5											
-45	-44.3	31.5	100/0.4													
-50	-49.3	36.5	4	6	6											
-55	-54.3	41.5	5	7	8											
-60	-59.3	46.5	5	7	9											
-65	-64.3	51.5	5	6	7											
-70	-69.3	56.5	5	6	6											
-75	-74.3	61.5	5	6	6											
-80	-79.3	66.5														

WBS 48190.1.1		TIP B-5995		COUNTY PAMLICO		GEOLOGIST Zimarino, S. N.										
SITE DESCRIPTION Bridge No. 57 on -L- (SR 1302) over Dawson Creek							GROUND WTR (ft)									
BORING NO. B2-B		STATION 18+56		OFFSET 6 ft RT		ALIGNMENT -L-										
COLLAR ELEV. -12.8 ft		TOTAL DEPTH 98.0 ft		NORTHING 460,048		EASTING 2,671,647										
DRILL RIGHAMMER EFF./DATE GFC0075 CME-45C 87% 11/23/2021			DRILL METHOD Mud Rotary			HAMMER TYPE Automatic										
DRILLER Walker, C. M.		START DATE 12/14/21		COMP. DATE 12/15/21		SURFACE WATER DEPTH 12.3ft										
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						
-80																
-85	-84.3	71.5	3	4	16											
-90	-89.3	76.5	8	28	32											
-95	-94.3	81.5	60	34	16											
-100	-99.3	86.5	10	26	30											
-105	-104.3	91.5	18	24	20											
-110	-109.3	96.5	6	18	20											

NCDOT BORE DOUBLE B5995\_GEO\_BRDG.GPJ NC\_DOT.GDT 1/14/22

# GEOTECHNICAL BORING REPORT

## BORE LOG

WBS 48190.1.1		TIP B-5995		COUNTY PAMLICO		GEOLOGIST Miller, T. W.	
SITE DESCRIPTION Bridge No. 57 on -L- (SR 1302) over Dawson Creek							GROUND WTR (ft)
BORING NO. B3-A		STATION 19+26		OFFSET 9 ft LT		ALIGNMENT -L-	
COLLAR ELEV. -9.4 ft		TOTAL DEPTH 60.7 ft		NORTHING 460,050		EASTING 2,671,719	
DRILL RIGHAMMER EFF./DATE GFC0075 CME-45C 87% 11/23/2021			DRILL METHOD Mud Rotary		HAMMER TYPE Automatic		
DRILLER Walker, C. M.		START DATE 12/01/21		COMP. DATE 12/02/21		SURFACE WATER DEPTH 9.6ft	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG MOI	LOG G	SOIL AND ROCK DESCRIPTION	DEPTH (ft)	
			0.5ft	0.5ft	0.5ft	0	25	50	75	100						
0																
																WATER SURFACE (12/01/21)
-5																
-10	-9.4	0.0	1	2	3											GROUND SURFACE
-15	-15.6	6.2	3	2	1											
-20	-19.2	9.8	6	5	8											
-25	-24.2	14.8	5	5	7											
-30	-29.2	19.8	11	39	61/0.3											
-35	-34.2	24.8	15	100/0.5												
-40	-39.2	29.8	6	40	60/0.2											
-45	-44.2	34.8	60/0.0													
-50	-49.2	39.8	24	100/0.2												
-55	-54.2	44.8	42	100/0.4												
-60	-59.2	49.8	20	100/0.4												
-65	-64.2	54.8	100/0.4													
-70	-69.2	59.8	36	100/0.4												
																Boring Terminated at Elevation -70.1 ft in Hard Clayey Silt

NCDOT BORE DOUBLE B5995\_GEO\_BRDG.GPJ NC\_DOT.GDT 1/4/22

WBS 48190.1.1		TIP B-5995		COUNTY PAMLICO		GEOLOGIST Miller, T. W.	
SITE DESCRIPTION Bridge No. 57 on -L- (SR 1302) over Dawson Creek							GROUND WTR (ft)
BORING NO. B4-B		STATION 19+96		OFFSET 6 ft RT		ALIGNMENT -L-	
COLLAR ELEV. -2.4 ft		TOTAL DEPTH 53.2 ft		NORTHING 460,022		EASTING 2,671,785	
DRILL RIGHAMMER EFF./DATE GFC0075 CME-45C 87% 11/23/2021			DRILL METHOD Mud Rotary		HAMMER TYPE Automatic		
DRILLER Walker, C. M.		START DATE 11/30/21		COMP. DATE 11/30/21		SURFACE WATER DEPTH 1.5ft	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG MOI	LOG G	SOIL AND ROCK DESCRIPTION	DEPTH (ft)	
			0.5ft	0.5ft	0.5ft	0	25	50	75	100						
0																
																WATER SURFACE (11/30/21)
-5	-2.4	0.0	3	5	5											GROUND SURFACE
-10	-9.7	7.3	13	26	74/0.4											
-15	-14.7	12.3	16	30	30											
-20	-19.7	17.3	2	4	6											
-25	-24.7	22.3	5	4	4											
-30	-29.7	27.3	8	9	14											
-35	-34.7	32.3	20	75	25/0.3											
-40	-39.7	37.3	7	12	15											
-45	-44.7	42.3	60/0.0													
-50	-49.7	47.3	26	100/0.4												
-55	-54.7	52.3	23	100/0.4												
																Boring Terminated at Elevation -55.6 ft in Hard Sandy Silt

