

PROJECT: 48647

REFERENCE: U-6187

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

STRUCTURE
SUBSURFACE INVESTIGATION

COUNTY DAVIE

PROJECT DESCRIPTION CONSTRUCT 2-LANE EXTENSION
OF SR 1630 (BALTIMORE ROAD) ON NEW LOCATION
FROM SOUTH OF US 158 TO I-40

SITE DESCRIPTION PROPOSED BRIDGE ON -L-
(BALTIMORE ROAD) OVER -Y2- (I-40)

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-6187	1	

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.

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- 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

J. HILL

J. CRENSHAW

J. ROSE

CG2 EXPLORATION

INVESTIGATED BY J. JENKINS

DRAWN BY J. HOLLAND

CHECKED BY J. CRENSHAW

SUBMITTED BY SCHNABEL ENG.

DATE FEBRUARY 2024



NORTH CAROLINA

PROFESSIONAL

SEAL

050329

ENGINEER

JOSHUA JENKINS

DocuSigned by:

Joshua Jenkins

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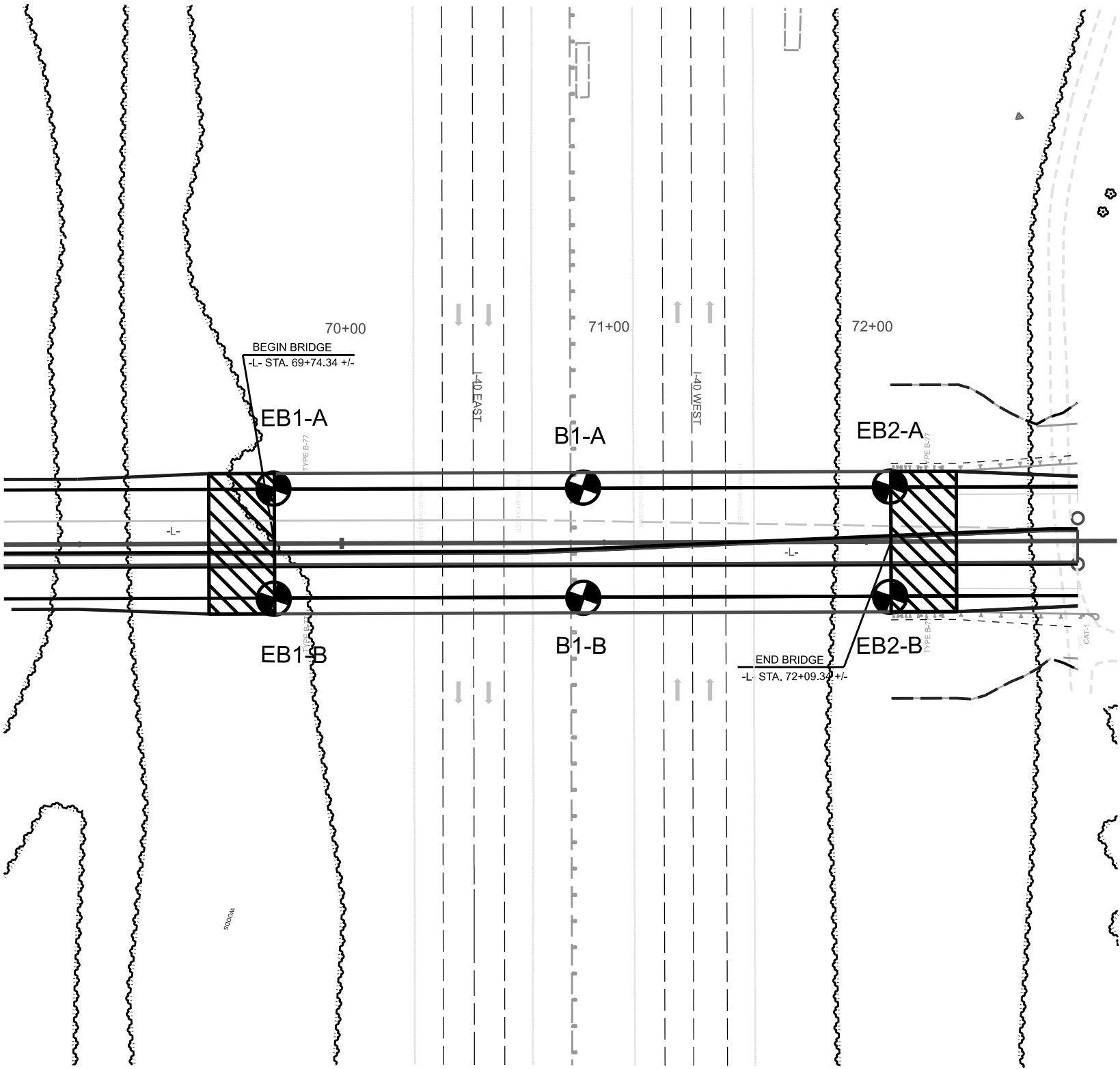
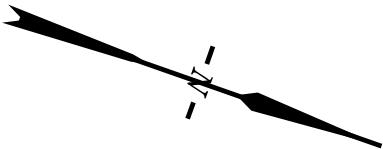
SIGNATURE

03/27/2024

DATE

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

SKEW = 90°



NCDOT BORE DOUBLE U6187 BORINGS.GPJ NC_DOT.GDT 2/21/24

WBS 48647.1.1			TIP U-6187			COUNTY DAVIE			GEOLOGIST Q. Hill					
SITE DESCRIPTION Bridge on -L- (Baltimore Road) over -Y2- (I-40)									GROUND WTR (ft)					
BORING NO. EB2-B			STATION 72+09			OFFSET 21 ft RT			ALIGNMENT -L-			0 HR. 31.5		
COLLAR ELEV. 806.7 ft			TOTAL DEPTH 68.6 ft			NORTHING 822,827			EASTING 1,567,589			24 HR. 30.0		
DRILL RIG/HAMMER EFF./DATE CG24116 CME 550X 74% 04/11/2022						DRILL METHOD H.S. Augers			HAMMER TYPE Automatic					
DRILLER D. Demby			START DATE 12/07/23			COMP. DATE 12/08/23			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
			0.5ft	0.5ft	0.5ft	0	25	50	75	100				
810														
	806.7	0.0	3	4	8									806.7 GROUND SURFACE 0.0
805														
	803.6	3.1	4	6	7									803.7 RESIDUAL Orange and brown, sandy CLAY (A-6), medium plasticity 3.0
	800.7	6.0	3	3	4									Orange, SILT (A-5), with mangense oxides, micaceous, medium to high plasticity
800														
	798.2	8.5	4	4	5									798.2 Orange, brown, and black, sandy SILT (A-4), with some rock fragments, micas, and manganese oxides, low to medium plasticity 8.5
795														
	793.2	13.5	4	4	4									
790														
	788.3	18.4	3	3	4									
785														
	783.3	23.4	2	3	4									
780														
	777.9	28.8	2	5	6									
775														
	773.1	33.6	3	3	7									774.7 Orange, brown, and black, sandy SILT (A-5), micaceous, low to medium plasticity 32.0
770														
	768.1	38.6	3	4	7									
765														
	763.1	43.6	3	5	7									764.7 Tan, brown, and black, sandy SILT (A-4), micaceous, low to medium plasticity 42.0
760														
	758.2	48.5	4	10	9									759.7 Black, tan, white, and gray, silty SAND (A-2-4), with trace rock fragments, micaceous 47.0
755														
	753.0	53.7	8	18	27									
750														
	748.1	58.6	11	18	37									
745														745.7 WEATHERED ROCK 61.0
	743.3	63.4	100/0.5											Gray and black, META-GABBRO
740														
	738.2	68.5	60/0.1											738.2 CRYSTALLINE ROCK 68.5
														738.1 Gray and black, META-GABBRO 68.6
														Boring Terminated with Standard Penetration Test Refusal at Elevation 738.1 ft on CRYSTALLINE ROCK (META-GABBRO)

	SOIL TEST RESULTS															
BORING ID	SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)			% MOISTURE	% ORGANIC
								C.SAND	F.SAND	SILT	CLAY	10	40	200		
EB2- A	SS- 394	7' LT	72+09	34. 4- 35. 9	A- 5(1)	54	5	16. 2	46. 2	26. 1	11. 5	100	96	46	66	-

SITE PHOTOGRAPHS
PROPOSED BRIDGE ON US -L- (BALTIMORE ROAD) OVER -Y2- (I-40)



View from northern proposed bridge end bents looking southeast.



View from grass median of Interstate 40 looking north.



View of proposed bridge over Interstate 40 looking northeast.