

REFERENCE: B-4433

PROJECT: 17BP.2.R.93

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

STRUCTURE  
SUBSURFACE INVESTIGATION

COUNTY BEAUFORT  
PROJECT DESCRIPTION BRIDGE NUMBER 40 ON -L-  
(SR 1932) OVER DURHAM CREEK TRIBUTARY  
AT -L- STA. 16+20.00

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| 2         | LEGEND (SOIL & ROCK) |
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| 5-6       | BORE LOGS            |

| STATE | STATE PROJECT REFERENCE NO. | SHEET NO. | TOTAL SHEETS |
|-------|-----------------------------|-----------|--------------|
| N.C.  | B-4433                      | 1         | 6            |

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

S.N. ZIMARINO

R.E. SMITH

R.E. CLARKE

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INVESTIGATED BY T.C. BOTTOMS

DRAWN BY S.N. ZIMARINO

CHECKED BY D.N. ARGENBRIGHT

SUBMITTED BY D.N. ARGENBRIGHT

DATE JULY 2018



DocuSigned by:

Tyler C. Bottoms

1/10/2019

48A2D3BD08C8A6 SIGNATURE

DATE

DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

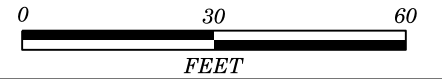
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
GEOTECHNICAL ENGINEERING UNIT

SUBSURFACE INVESTIGATION

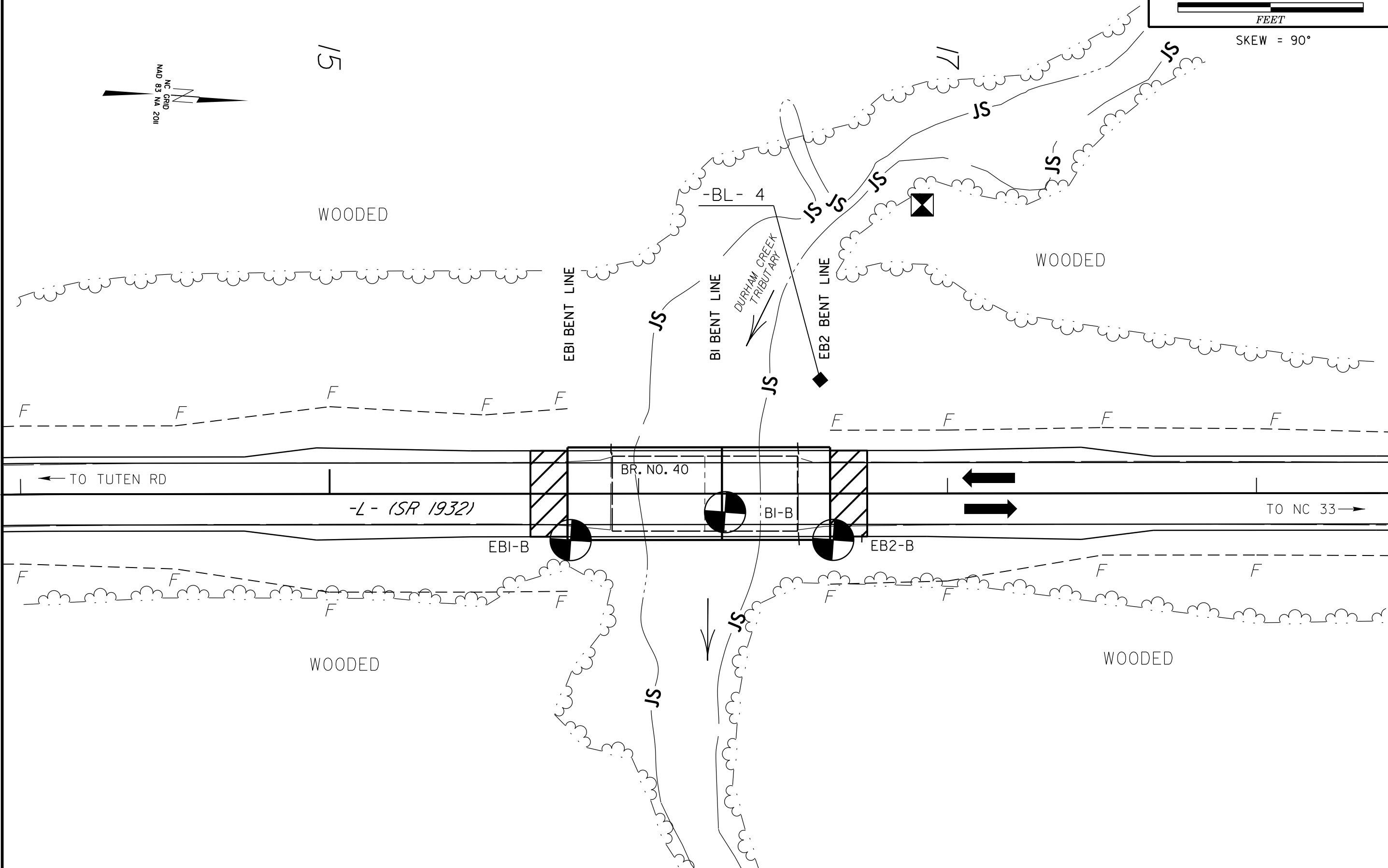
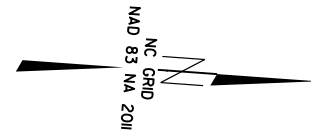
SOIL AND ROCK LEGEND, TERMS, SYMBOLS, AND ABBREVIATIONS

Table with 4 main columns: SOIL DESCRIPTION, GRADATION, ROCK DESCRIPTION, and TERMS AND DEFINITIONS. It contains detailed technical specifications, classification tables, and symbols for soil and rock analysis.

# SITE PLAN



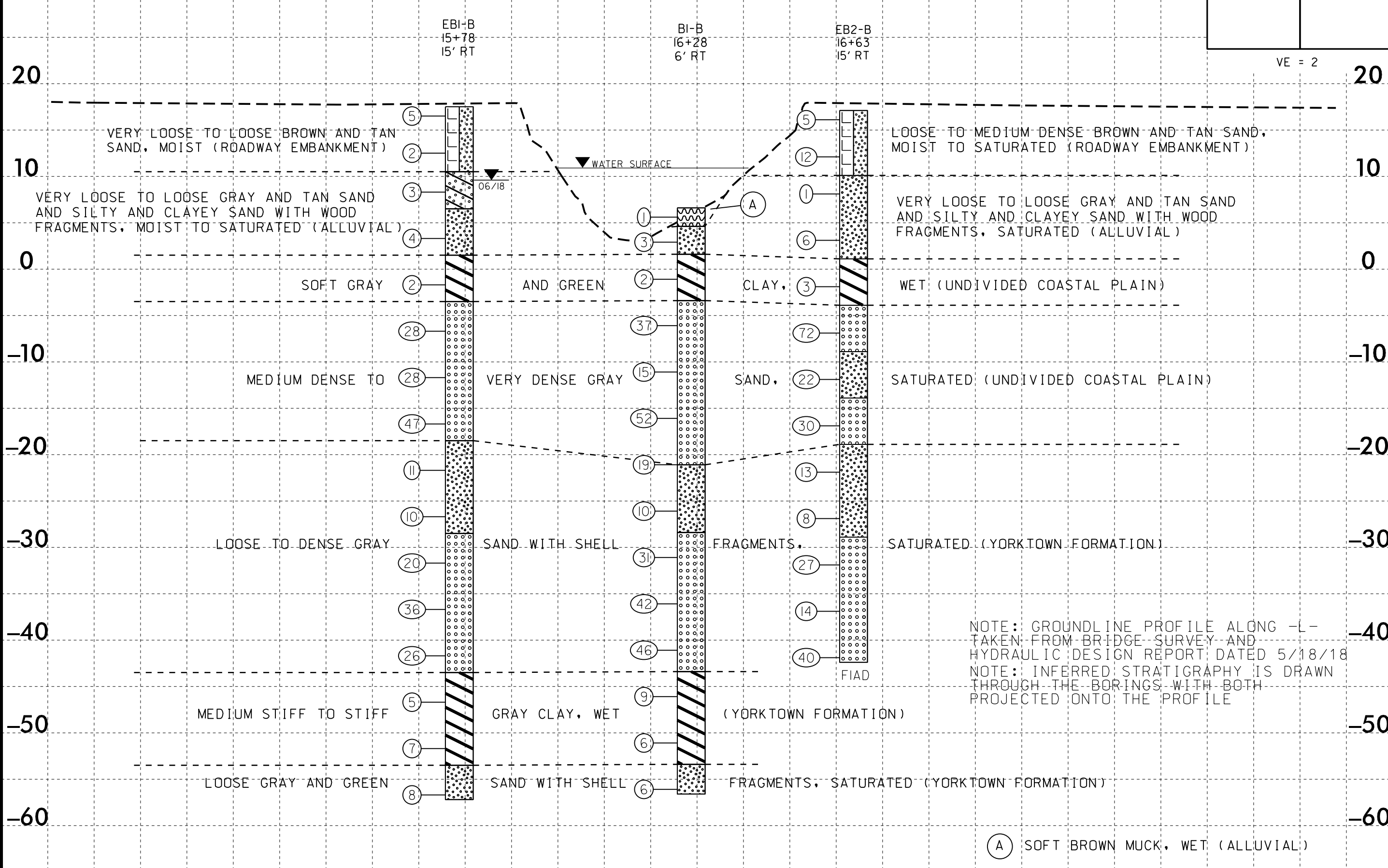
SKREW = 90°



VE = 2

PROFILE THROUGH BORINGS PROJECTED ALONG -L-

5/14/99  
20-JUL-2018 08:18  
S:\PROJ\Greenville\_S&B\STANDARD\20-0718\Investigation\TIP\B4433\GEO.GEO.BRDG0040\CADD.GEOTECH\PlanPof\B4433.GEO.BRDG-PFL.dgn



NOTE: GROUNDLINE PROFILE ALONG -L- TAKEN FROM BRIDGE SURVEY AND HYDRAULIC DESIGN REPORT DATED 5/18/18  
NOTE: INFERRED STRATIGRAPHY IS DRAWN THROUGH THE BORINGS WITH BOTH PROJECTED ONTO THE PROFILE

(A) SOFT BROWN MUCK, WET (ALLUVIAL)

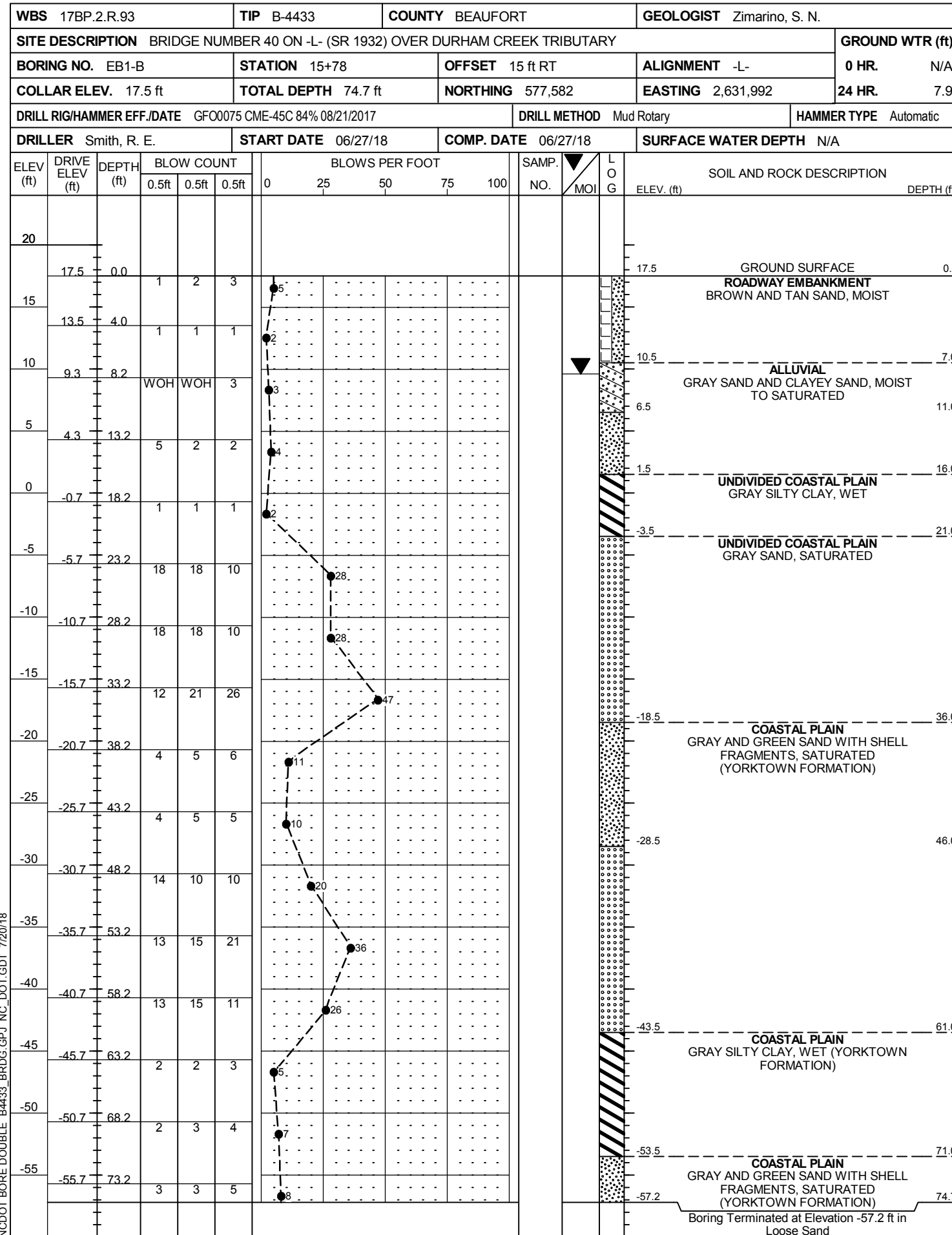
15

16

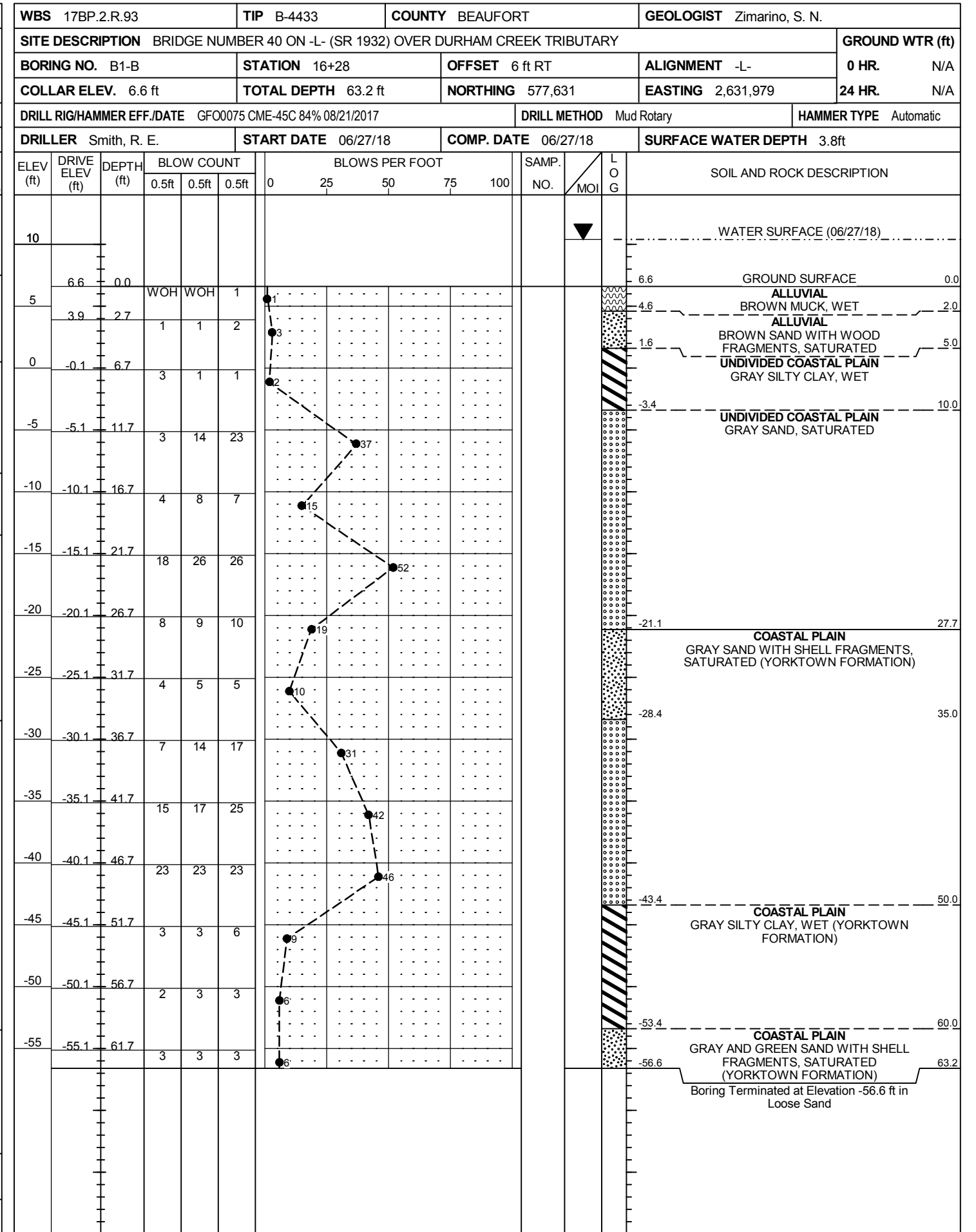
17

# GEOTECHNICAL BORING REPORT

## BORE LOG

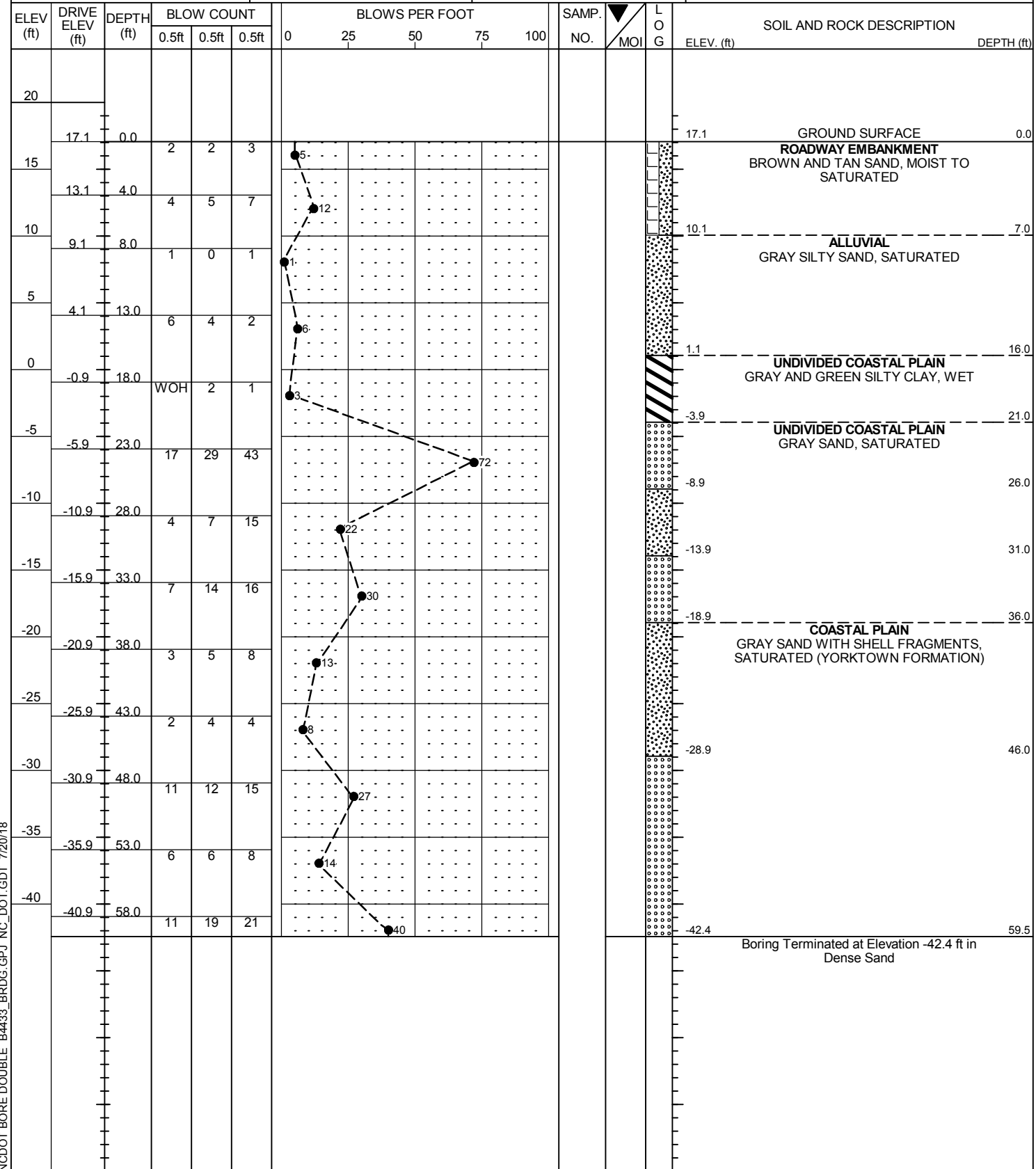


NCDOT BORE DOUBLE B4433\_BRDG.GPJ NC\_DOT.GDT 7/20/18



## GEOTECHNICAL BORING REPORT BORE LOG

|   |                            |                                |                                  |
|---|----------------------------|--------------------------------|----------------------------------|
| <b>WBS</b> 17BP.2.R.93  | <b>TIP</b> B-4433          | <b>COUNTY</b> BEAUFORT         | <b>GEOLOGIST</b> Zimarino, S. N. |
| <b>SITE DESCRIPTION</b> BRIDGE NUMBER 40 ON -L- (SR 1932) OVER DURHAM CREEK TRIBUTARY |                            |                                | <b>GROUND WTR (ft)</b>           |
| <b>BORING NO.</b> EB2-B   | <b>STATION</b> 16+63       | <b>OFFSET</b> 15 ft RT         | <b>ALIGNMENT</b> -L-             |
| <b>COLLAR ELEV.</b> 17.1 ft   | <b>TOTAL DEPTH</b> 59.5 ft | <b>NORTHING</b> 577,667        | <b>EASTING</b> 2,631,986         |
| <b>DRILL RIG/HAMMER EFF./DATE</b> GFO0075 CME-45C 84% 08/21/2017                      |                            | <b>DRILL METHOD</b> Mud Rotary | <b>HAMMER TYPE</b> Automatic     |
| <b>DRILLER</b> Edmondson, J. M.   | <b>START DATE</b> 07/09/18 | <b>COMP. DATE</b> 07/09/18     | <b>SURFACE WATER DEPTH</b> N/A   |



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