

FOUNDATION LAYOUT

NOTES

FOR DRILLED PIERS, SEE GEOTECHNICAL SPECIAL PROVISIONS AND SECTION 411 OF THE STANDARD SPECIFICATIONS.

DRILLED PIERS AT BENT No. 1 ARE DESIGNED FOR A FACTORED RESISTANCE OF 550 TONS PER PIER. CHECK FIELD CONDITIONS FOR THE REQUIRED TIP RESISTANCE OF 65 TSF.

DRILLED PIERS AT BENT No. 2 ARE DESIGNED FOR A FACTORED RESISTANCE OF 650 TONS PER PIER. CHECK FIELD CONDITIONS FOR THE REQUIRED TIP RESISTANCE OF 80 TSF.

DRILLED PIERS AT BENT No. 3 ARE DESIGNED FOR A FACTORED RESISTANCE OF 615 TONS PER PIER. CHECK FIELD CONDITIONS FOR THE REQUIRED TIP RESISTANCE OF 75 TSF.

PERMANENT STEEL CASINGS MAY BE REQUIRED FOR DRILLED PIERS AT BENT No. 1 (LEFT & CENTER). IF REQUIRED, DO NOT EXTEND PERMANENT CASINGS BELOW ELEVATION 1973.6 WITHOUT PRIOR APPROVAL FROM THE ENGINEER. THE ENGINEER WILL DETERMINE THE NEED FOR PERMANENT STEEL CASINGS.

PERMANENT STEEL CASINGS MAY BE REQUIRED FOR DRILLED PIER AT BENT No. 1 (RIGHT). IF REQUIRED, DO NOT EXTEND PERMANENT CASINGS BELOW ELEVATION 1989.5 WITHOUT PRIOR APPROVAL FROM THE ENGINEER. THE ENGINEER WILL DETERMINE THE NEED FOR PERMANENT STEEL CASINGS.

PERMANENT STEEL CASINGS ARE REQUIRED FOR DRILLED PIERS AT BENT No. 2 (LEFT & CENTER). DO NOT EXTEND PERMANENT CASINGS BELOW ELEVATION 1978.0 WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

PERMANENT STEEL CASINGS ARE REQUIRED FOR DRILLED PIER AT BENT No. 2 (RIGHT). DO NOT EXTEND PERMANENT CASINGS BELOW ELEVATION 1981.6 WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

PERMANENT STEEL CASINGS ARE REQUIRED FOR DRILLED PIERS AT BENT No. 3 (LEFT & CENTER). DO NOT EXTEND PERMANENT CASINGS BELOW ELEVATION 1965.0 WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

PERMANENT STEEL CASINGS ARE REQUIRED FOR DRILLED PIER AT BENT No. 3 (RIGHT). DO NOT EXTEND PERMANENT CASINGS BELOW ELEVATION 1962.8 WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

INSTALL DRILLED PIERS AT BENT No. 1 (LEFT & CENTER) TO A TIP ELEVATION NO HIGHER THAN 1964.6 WITH THE REQUIRED TIP RESISTANCE AND A PENETRATION OF AT LEAST 10 FT. INTO ROCK AS DEFINED BY ARTICLE 411-1 OF THE STANDARD SPECIFICATIONS.

INSTALL DRILLED PIER AT BENT No. 1 (RIGHT) TO A TIP ELEVATION NO HIGHER THAN 1981.0 WITH THE REQUIRED TIP RESISTANCE AND A PENETRATION OF AT LEAST 10 FT. INTO ROCK AS DEFINED BY ARTICLE 411-1 OF THE STANDARD SPECIFICATIONS.

INSTALL DRILLED PIERS AT BENT No. 2 (LEFT & CENTER) TO A TIP ELEVATION NO HIGHER THAN 1958.0 WITH THE REQUIRED TIP RESISTANCE AND A PENETRATION OF AT LEAST 10 FT. INTO ROCK AS DEFINED BY ARTICLE 411-1 OF THE STANDARD SPECIFICATIONS.

INSTALL DRILLED PIER AT BENT No. 2 (RIGHT) TO A TIP ELEVATION NO HIGHER THAN 1971.0 WITH THE REQUIRED TIP RESISTANCE AND A PENETRATION OF AT LEAST 10 FT. INTO ROCK AS DEFINED BY ARTICLE 411-1 OF THE STANDARD SPECIFICATIONS.

INSTALL DRILLED PIERS AT BENT No. 3 (LEFT & CENTER) TO A TIP ELEVATION NO HIGHER THAN 1933.0 WITH THE REQUIRED TIP RESISTANCE AND A PENETRATION OF AT LEAST 10 FT. INTO ROCK AS DEFINED BY ARTICLE 411-1 OF THE STANDARD SPECIFICATIONS.

INSTALL DRILLED PIER AT BENT No. 3 (RIGHT) TO A TIP ELEVATION NO HIGHER THAN 1953.0 WITH THE REQUIRED TIP RESISTANCE AND A PENETRATION OF AT LEAST 10 FT. INTO ROCK AS DEFINED BY ARTICLE 411-1 OF THE STANDARD SPECIFICATIONS.

THE SCOUR CRITICAL ELEVATION FOR BENT No. 1, 2 & 3 IS ELEVATION 1980.4. SCOUR CRITICAL ELEVATIONS ARE USED TO MONITOR POSSIBLE SCOUR PROBLEMS DURING THE LIFE OF THE STRUCTURE.

SPT MAY BE REQUIRED FOR DRILLED PIERS. THE ENGINEER WILL DETERMINE THE NEED FOR SPT. FOR SPT TESTING, SEE SECTION 411 OF THE STANDARD SPECIFICATIONS.

DO NOT DEWATER DRILLED PIER EXCAVATIONS AT BENTS No. 1, 2 & 3. CLEAN THE BOTTOM OF EXCAVATIONS WITH A SUBMERSIBLE PUMP OR AN AIRLIFT. WET PLACEMENT OF CONCRETE IS REQUIRED.

DO NOT USE SLURRY CONSTRUCTION FOR DRILLED PIERS AT BENTS No. 1, 2 & 3.

SID INSPECTIONS MAY BE REQUIRED FOR DRILLED PIERS. THE ENGINEER WILL DETERMINE THE NEED FOR SID INSPECTIONS. FOR SID INSPECTIONS, SEE SECTION 411 OF THE STANDARD SPECIFICATIONS.

FOR PILES, SEE GEOTECHNICAL SPECIAL PROVISIONS AND SECTION 450 OF THE STANDARD SPECIFICATIONS.

CSL TUBES ARE REQUIRED AND CSL TESTING MAY BE REQUIRED FOR DRILLED PIERS. THE ENGINEER WILL DETERMINE THE NEED FOR CSL TESTING. FOR CSL TESTING, SEE SECTION 411 OF THE STANDARD SPECIFICATIONS.

PILES AT END BENT No. 1 ARE DESIGNED FOR A FACTORED RESISTANCE OF 75 TONS PER PILE.

PILES AT END BENT No. 2 ARE DESIGNED FOR A FACTORED RESISTANCE OF 100 TONS PER PILE.

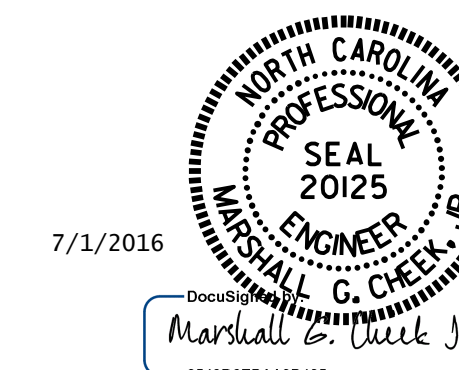
DRIVE PILES AT END BENT No. 1 TO A REQUIRED DRIVING RESISTANCE OF 125 TONS PER PILE.

DRIVE PILES AT END BENT No. 2 TO A REQUIRED DRIVING RESISTANCE OF 170 TONS PER PILE.

STEEL H-PILE POINTS ARE REQUIRED FOR STEEL H-PILES AT END BENT No. 1. FOR STEEL PILE POINTS, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.

TESTING PILES WITH THE PDA DURING DRIVING, RESTRIKING OR REDRIVING MAY BE REQUIRED. THE ENGINEER WILL DETERMINE THE NEED FOR PDA TESTING. FOR PDA TESTING, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.

DRAWN BY : M. POOLE DATE : 01-16
 CHECKED BY : H. I. BARBOUR DATE : 4-20-16



DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PROJECT NO. B-5125
MACON COUNTY
 STATION: 13+25.89 -L-

SHEET 2 OF 3

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH					
GENERAL DRAWING FOR BRIDGE ON US 441 BUS. OVER LITTLE TENNESSEE RIVER BETWEEN SR 1724 AND SR 1324					
REVISIONS					SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		
					S-2
					TOTAL SHEETS 43