

**FOUNDATION LAYOUT**

(DIMENSIONS LOCATING PILES AND DRILLED PIERS ARE SHOWN TO THE CENTERLINE OF PILES AND DRILLED PIERS)

**FOUNDATION NOTES**

FOR PILES, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.

PILES AT END BENT NO. 1 ARE DESIGNED FOR A FACTORED RESISTANCE OF 120 TONS PER PILE.

DRIVE PILES AT END BENT NO. 1 TO A REQUIRED DRIVING RESISTANCE OF 400 TONS PER PILE.

FOR DRILLED PIERS, SEE SECTION 411 OF THE STANDARD SPECIFICATIONS.

DRILLED PIERS AT BENT NO. 1 ARE DESIGNED FOR A FACTORED RESISTANCE OF 910 TONS PER PIER. CHECK FIELD CONDITIONS FOR THE REQUIRED TIP RESISTANCE OF 75 TSF.

PERMANENT STEEL CASINGS ARE REQUIRED FOR DRILLED PIERS AT BENT NO. 1. DO NOT EXTEND PERMANENT CASINGS BELOW ELEVATION 122.4 FT (LT), 121.0 FT (CR), AND 117.0 FT (RT) WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

INSTALL DRILLED PIERS AT BENT NO. 1 TO A TIP ELEVATION NO HIGHER THAN 108.0 FT WITH THE REQUIRED TIP RESISTANCE.

THE SCOUR CRITICAL ELEVATION FOR BENT NO. 1 IS ELEVATION 122.0 FT (LT), 120.0 FT (CR), AND 116.0 FT (RT). SCOUR CRITICAL ELEVATIONS ARE USED TO MONITOR POSSIBLE SCOUR PROBLEMS DURING THE LIFE OF THE STRUCTURE.

DRILLED PIERS AT BENT NO. 2 ARE DESIGNED FOR A FACTORED RESISTANCE OF 911 TONS PER PIER. CHECK FIELD CONDITIONS FOR THE REQUIRED TIP RESISTANCE OF 75 TSF.

PERMANENT STEEL CASINGS ARE REQUIRED FOR DRILLED PIERS AT BENT NO. 2. DO NOT EXTEND PERMANENT CASINGS BELOW ELEVATION 123.0 FT (LT), 123.0 FT (CR), AND 116.0 FT (RT) WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

INSTALL DRILLED PIERS AT BENT NO. 2 TO A TIP ELEVATION NO HIGHER THAN 108.0 FT WITH THE REQUIRED TIP RESISTANCE.

THE SCOUR CRITICAL ELEVATION FOR BENT NO. 2 IS ELEVATION 122.0 FT (LT), 122.0 FT (CR), AND 115.0 FT (RT). SCOUR CRITICAL ELEVATIONS ARE USED TO MONITOR POSSIBLE SCOUR PROBLEMS DURING THE LIFE OF THE STRUCTURE.

PILES AT END BENT NO. 2 ARE DESIGNED FOR A FACTORED RESISTANCE OF 120 TONS PER PILE.

DRIVE PILES AT END BENT NO. 2 TO A REQUIRED DRIVING RESISTANCE OF 200 TONS PER PILE.

DO NOT USE SLURRY CONSTRUCTION FOR DRILLED PIERS AT BENT NO. 1 AND BENT NO. 2.

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.

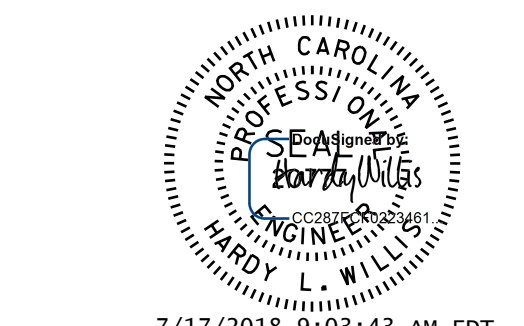
CSL TUBES ARE REQUIRED AND CSL TESTING MAY BE REQUIRED FOR DRILLED PIERS. THE ENGINEER WILL DETERMINE THE NEED FOR CSL TESTING. FOR CSL TESTING, SEE SECTION 411 OF THE STANDARD SPECIFICATIONS.

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PROJECT NO. R-3825B  
JOHNSTON COUNTY  
 STATION: 64+20.00 -L-

SHEET 4 OF 5

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH

**GENERAL DRAWING**  
**FOUNDATION LAYOUT**

FOR BRIDGE OVER  
 NEUSE RIVER ON NC42  
 BETWEEN SR 2008 AND SR 1705

DWN. BY: WDC DATE: 4/2017  
 CHKD. BY: ACO DATE: 12/2017  
 DES. EGR. OF RECORD: ACO DATE: 12/2017

REVISIONS						SHEET NO. S-4
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS
2			4			59