



**FOUNDATION LAYOUT**

DIMENSIONS LOCATING ALL END BENT PILES ARE HP 12 X 53 STEEL PILES. PILES ARE SHOWN TO THE PILE CENTERLINE AT THE BOTTOM OF THE CAP. ALL END BENT BRACE PILES ARE BATTERED AT 3:12.

**NOTES**

FOR PILES, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.  
 FOR DRILLED PIERS, SEE SECTION 411 OF THE STANDARD SPECIFICATIONS.  
 PILES AT END BENT 1 ARE DESIGNED FOR A FACTORED RESISTANCE OF 85 TONS PER PILE.  
 PILES AT END BENT 2 ARE DESIGNED FOR A FACTORED RESISTANCE OF 90 TONS PER PILE  
 TESTING THE FIRST PRODUCTION PILE WITH THE PDA DURING DRIVING, RESTRIKING AND REDRIVING IS REQUIRED AT END BENT 1 AND END BENT 2. FOR PDA TESTING, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.  
 DRIVE PILES AT END BENT 1 TO A REQUIRED DRIVING RESISTANCE OF 115 TONS PER PILE.  
 DRIVE PILES AT END BENT 2 TO A REQUIRED DRIVING RESISTANCE OF 120 TONS PER PILE.  
 DRILLED PIERS AT BENT 1 ARE DESIGNED FOR A FACTORED RESISTANCE OF 415 TONS PER PIER. CHECK FIELD CONDITIONS FOR THE REQUIRED TIP RESISTANCE OF 10 TSF.  
 INSTALL DRILLED PIERS AT BENT 1 TO A TIP ELEVATION NO HIGHER THAN -88.0 FEET WITH THE REQUIRED TIP RESISTANCE.  
 THE SCOUR CRITICAL ELEVATION FOR BENT 1 IS ELEVATION -19.2 FEET. SCOUR CRITICAL ELEVATIONS ARE USED TO MONITOR POSSIBLE SCOUR PROBLEMS DURING THE LIFE OF THE STRUCTURE.  
 DRILLED PIERS AT BENT 2 ARE DESIGNED FOR A FACTORED RESISTANCE OF 410 TONS PER PIER. CHECK FIELD CONDITIONS FOR THE REQUIRED TIP RESISTANCE OF 10 TSF.  
 INSTALL DRILLED PIERS AT BENT 2 TO A TIP ELEVATION NO HIGHER THAN -90.0 FEET WITH THE REQUIRED TIP RESISTANCE.

THE SCOUR CRITICAL ELEVATION FOR BENT 2 IS ELEVATION -31.4 FEET. SCOUR CRITICAL ELEVATIONS ARE USED TO MONITOR POSSIBLE SCOUR PROBLEMS DURING THE LIFE OF THE STRUCTURE.  
 PERMANENT STEEL CASINGS ARE REQUIRED FOR DRILLED PIERS AT BENT 2. DO NOT EXTEND PERMANENT CASINGS BELOW ELEVATION -30.0 FEET WITHOUT PRIOR APPROVAL FROM THE ENGINEER.  
 DRILLED PIERS AT BENT 3 ARE DESIGNED FOR A FACTORED RESISTANCE OF 400 TONS PER PIER. CHECK FIELD CONDITIONS FOR THE REQUIRED TIP RESISTANCE OF 10 TSF.  
 INSTALL DRILLED PIERS AT BENT 3 TO A TIP ELEVATION NO HIGHER THAN -91.0 FEET WITH THE REQUIRED TIP RESISTANCE.  
 THE SCOUR CRITICAL ELEVATION OF BENT 3 IS ELEVATION -27.7 FEET. SCOUR CRITICAL ELEVATIONS ARE USED TO MONITOR POSSIBLE SCOUR PROBLEMS DURING THE LIFE OF THE STRUCTURE.  
 PERMANENT STEEL CASINGS ARE REQUIRED FOR DRILLED PIERS AT BENT 3. DO NOT EXTEND PERMANENT CASING BELOW ELEVATION -26.0 FEET WITHOUT PRIOR APPROVAL FROM THE ENGINEER.  
 DRILLED PIERS AT BENT 4 ARE DESIGNED FOR A FACTORED RESISTANCE OF 400 TONS PER PIER. CHECK FIELD CONDITIONS FOR THE REQUIRED TIP RESISTANCE OF 10 TSF.  
 INSTALL DRILLED PIERS AT BENT 4 TO A TIP ELEVATION NO HIGHER THAN -91.0 FEET WITH THE REQUIRED RESISTANCE.  
 THE SCOUR CRITICAL ELEVATION FOR BENT 4 IS ELEVATION -29.0 FEET. SCOUR CRITICAL ELEVATIONS ARE USED TO MONITOR POSSIBLE SCOUR PROBLEMS DURING THE LIFE OF THE STRUCTURE.  
 PERMANENT STEEL CASINGS ARE REQUIRED FOR DRILLED PIERS AT BENT 4. DO NOT EXTEND PERMANENT CASING BELOW ELEVATION -28.0 FEET WITHOUT PRIOR APPROVAL FROM THE ENGINEER.



PROJECT NO. B-4786  
PITT COUNTY  
 STATION: 28+03.00 -L-

SHEET 3 OF 6

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
**GENERAL DRAWING**  
 FOR BRIDGE ON US 13  
 OVER TAR RIVER  
 BETWEEN  
 NC 43 AND SR 1530

DRAWN BY : STM DATE : 01/19  
 CHECKED BY : MGC DATE : 07/19  
 DESIGN ENGINEER OF RECORD: TBE DATE : 8-19

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-3
1			3			TOTAL SHEETS
2			4			57