



FOUNDATION LAYOUT PLAN

DIMENSIONS LOCATING PILES AND DRILLED PIERS ARE SHOWN TO PILE AND DRILLED PIER CENTERLINE.

NOTES

- FOR PILES, SEE GEOTECHNICAL SPECIAL PROVISIONS AND SECTION 450 OF STANDARD SPECIFICATIONS.
- PILES AT END BENT NO.1 ARE DESIGNED FOR A FACTORED RESISTANCE OF 105 TONS PER PILE.
- DRIVE PILES AT END BENT NO.1 TO A REQUIRED DRIVING RESISTANCE OF 175 TONS PER PILE.
- FOR DRILLED PIERS, SEE SECTION 411 OF STANDARD SPECIFICATIONS.
- INSTALL DRILLED PIERS AT BENT NO.1 AND BENT NO.2 TO A TIP ELEVATION NO HIGHER THAN 670.6 FEET AND A PENETRATION OF 9 FEET INTO ROCK AS DEFINED BY ARTICLE 411-1 OF THE STANDARD SPECIFICATIONS.
- DRILLED PIERS AT BENT NO.1 AND BENT NO.2 ARE DESIGNED FOR A FACTORED RESISTANCE OF 835 TONS PER PIER. CHECK FIELD CONDITIONS FOR THE REQUIRED TIP RESISTANCE OF 30 TSF.
- THE SCOUR CRITICAL ELEVATION FOR BENT NO.1 AND BENT NO.2 IS 679 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 NO.1 AND BENT NO.2. DO NOT EXTEND PERMANENT CASINGS BELOW ELEVATION 690 FT WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- CSL TUBES ARE REQUIRED AND CSL TESTING MAY BE REQUIRED FOR DRILLED PIERS. THE ENGINEER WILL NEED TO DETERMINE THE NEED FOR CSL TESTING. FOR CSL TESTING, SEE SECTION 411 OF THE STANDARD SPECIFICATIONS.
- PILES AT END BENT NO.2 ARE DESIGNED FOR A FACTORED RESISTANCE OF 105 TONS PER PILE.
- DRIVE PILES AT END BENT NO.2 TO A REQUIRED DRIVING RESISTANCE OF 175 TONS PER PILE.
- DRILLED-IN PILES ARE REQUIRED FOR INTEGRAL END BENT NO.2. EXCAVATE HOLES AT PILE LOCATIONS TO ELEVATION 713 FT. FILL THE BOTTOM 3 FT OF HOLES FOR PILE EXCAVATION WITH CONCRETE AND THE REST OF THE HOLES WITH CLASS II OR CLASS III SELECT MATERIAL THAT MEETS SECTION 1016 OF THE STANDARD SPECIFICATIONS FOR PILE EXCAVATION, SEE SECTION 450 OF THE SPECIFICATIONS.
- STEEL H-PILE POINTS ARE REQUIRED FOR STEEL H-PILES AT END BENT NO.1 AND END BENT NO.2. FOR STEEL PILE POINTS, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.
- DRILLED-IN PILES AT END BENT NO.2 THAT DO NOT HAVE A MINIMUM PENETRATION OF 3 FEET INTO ROCK AS DEFINED BY ARTICLE 411 OF THE STANDARD SPECIFICATIONS WILL BE DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 175 TONS PER PILE.

PROJECT NO. R-2707C
CLEVELAND COUNTY
 STATION: 384+50.00 -L-

SHEET 2 OF 4

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STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

GENERAL DRAWING
 LEFT LANE BRIDGE OVER FIRST
 BROAD RIVER ON US 74
 SHELBY BYPASS BETWEEN
 NC 226 AND SR 1850

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S1-2
1			3			TOTAL SHEETS
2			4			36

DRAWN BY :	MAL	DATE :	11/2016
CHECKED BY :	JMR	DATE :	12/2016
DESIGN ENGINEER OF RECORD:	MAL	DATE :	11/2016

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED