

## FOUNDATION LAYOUT

NOTE: ALL PILES ARE VERTICAL

## FOUNDATION NOTES

FOR PILES, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.

PILES AT END BENT 1 AND END BENT 2 ARE DESIGNED FOR A FACTORED RESISTANCE OF 110 TONS PER PILE.

PILES AT BENT 1 ARE DESIGNED FOR A FACTORED RESISTANCE OF 245 TONS PER

DRIVE PILES AT END BENT 1 AND END BENT 2 TO A REQUIRED DRIVING RESISTANCE OF 185 TONS PER PILE.

DRIVE PILES AT BENT 1 TO A REQUIRED DRIVING RESISTANCE OF 470 TONS PER PILE. THIS REQUIRED DRIVING RESISTANCE INCLUDES ADDITIONAL RESISTANCE FOR

INSTALL PILES AT BENT 1 TO A TIP ELEVATION NO HIGHER THAN -16.0 FT.

IT HAS BEEN ESTIMATED THAT A HAMMER WITH AN EQUIVALENT RATED ENERGY IN THE RANGE OF 70,000 FT-LBS TO 200,000 FT-LBS PER BLOW WILL BE REQUIRED TO DRIVE PILES AT BENT 1. THIS ESTIMATED ENERGY RANGE DOES NOT RELEASE THE CONTRACTOR FROM PROVIDING DRIVING EQUIPMENT IN ACCORDANCE WITH SUB ARTICLE 450-3(D)(2) OF THE STANDARD SPECIFICATIONS.

TESTING THE FIRST PRODUCTION PILE WITH THE PDA DURING DRIVING, RESTRIKING OR REDRIVING IS REQUIRED AT BENT 1. FOR PDA TESTING, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.

PIPE PILE PLATES ARE NOT REQUIRED FOR STEEL PIPE PILES AT BENT NO.1.

THE SCOUR CRITICAL ELEVATION FOR BENT 1 IS ELEVATION 9.0 FT. SCOUR CRITICAL ELEVATIONS ARE USED TO MONITOR POSSIBLE SCOUR PROBLEMS DURING THE LIFE OF THE STRUCTURE.

B-5671 PROJECT NO. \_\_\_ EDGECOMBE \_ COUNTY STATION: \_\_\_\_17+00.00 -L-

SHEET 2 OF 4

DEPARTMENT OF TRANSPORTATION RALEIGH

STATE OF NORTH CAROLINA

GENERAL DRAWING

FOR BRIDGE ON NC 97 OVER SWIFT CREEK BETWEEN SR 1254 & NC 33

1/24/2020 SHEET NO. REVISIONS S-2 NO. BY: DATE: BY: DATE: KCI Associates of North Carolina, P.A. TOTAL SHEETS

DocuSigned by

DESIGN ENGINEER OF RECORD: Docusigned DATE: 1/24/2020 R.J. FLORY DB3C8E45B06D499. TE : 08/30/19 DRAWN BY : CHECKED BY: R.C. LARSON DATE: 11/06/19

**DOCUMENT NOT CONSIDERED FINAL** 

UNLESS ALL SIGNATURES COMPLETED