



### FOUNDATION LAYOUT

ALL PILES ARE VERTICAL.  
DIMENSIONS LOCATING PILES ARE TO  $\phi$  PILE.

### FOUNDATION NOTES

FOR PILES, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.

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

PILES AT END BENT 2 ARE DESIGNED FOR A FACTORED RESISTANCE OF 115 TONS PER PILE.

PILES AT BENT 1 ARE DESIGNED FOR A FACTORED RESISTANCE OF 200 TONS PER PILE.

DRIVE PILES AT END BENT 1 TO A REQUIRED DRIVING RESISTANCE OF 150 TONS PER PILE.

DRIVE PILES AT END BENT 2 TO A REQUIRED DRIVING RESISTANCE OF 155 TONS PER PILE.

DRIVE PILES AT BENT 1 TO A REQUIRED DRIVING RESISTANCE OF 340 TONS PER PILE. THIS REQUIRED DRIVING RESISTANCE INCLUDES ADDITIONAL RESISTANCE FOR SCOUR.

INSTALL PILES AT BENT 1 TO A TIP ELEVATION NO HIGHER THAN -29.0 FT.

THE SCOUR CRITICAL ELEVATION FOR BENT 1 IS ELEVATION -12.0 FT. SCOUR CRITICAL ELEVATIONS ARE USED TO MONITOR POSSIBLE SCOUR PROBLEMS DURING THE LIFE OF THE STRUCTURE.

IT HAS BEEN ESTIMATED THAT A HAMMER WITH AN EQUIVALENT RATED ENERGY IN THE RANGE OF 65,700 TO 122,200 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 SUBARTICLE 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 AND END BENT 1 OR END BENT 2. FOR PDA TESTING, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.

PROJECT NO. R-256ICA  
COLUMBUS COUNTY  
STATION: 71+06.00 -L-

SHEET 1 OF 2 BRIDGE NO. 418

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH

GENERAL DRAWING  
FOR BRIDGE ON NC 87  
OVER WEYMAN CREEK  
BETWEEN NC 11 AND  
SR 1811 (NARROW GAP RD.)  
RIGHT LANE

DocuSigned by:  
*Robert C. Larson*  
DB3C8E45B06D499  
8/15/2022

SEAL  
14114  
ENGINEER  
ROBERT C. LARSON

DESIGN ENGINEER OF RECORD:	<i>R. J. Flory</i>	DATE:	8/15/2022
DRAWN BY:	R.J. FLORY	DATE:	11/11/20
CHECKED BY:	R.C. LARSON	DATE:	11/17/20

**DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED**

ENGINEERS & PLANNERS & SCIENTISTS & CONSTRUCTION MANAGERS LICENSE NUMBER: C-0764  
**KCI Associates**  
of North Carolina, P.A.  
400 Falls of House Road, Suite 400 Raleigh, NC 27609-6270 Phone: 919-785-9241

REVISIONS				SHEET NO.	
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		

TOTAL SHEETS: 29

\$FILEL\$ \$TIME\$ \$USERS\$ \$PLTDRV\$ \$PENTBL\$ \$PLTDRV\$  
 KCI PROJECT NO. 241704391.04