



**LEGEND**  
 VERTICAL HP 12x53 STEEL PILE

**FOUNDATION LAYOUT**

ALL PILES ARE HP 12x53 STEEL PILES.  
 DIMENSIONS LOCATING PILES ARE SHOWN TO THE CENTERLINE OF PILES.

**FOUNDATION NOTES**

FOR PILES, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.  
 PILES AT END BENT NO.1 AND END BENT NO.2 ARE DESIGNED FOR A FACTORED RESISTANCE OF 95 TONS PER PILE.  
 DRIVE PILES AT END BENT NO.1 AND END BENT NO.2 TO A REQUIRED DRIVING RESISTANCE OF 160 TONS PER PILE.  
 STEEL H-PILE POINTS ARE REQUIRED FOR STEEL H-PILES AT END BENT NO.2. FOR STEEL PILE POINTS, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.  
 DRILLED-IN PILES ARE REQUIRED FOR END BENT NO.1. EXCAVATE HOLES AT PILE LOCATIONS TO ELEVATION 666 FT. FOR PILE EXCAVATION, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.  
 CONCRETE IS REQUIRED TO FILL HOLES FOR PILE EXCAVATION AT END BENT NO.1.  
 TESTING PILES WITH THE PDA DURING DRIVING, RESTRIKING OR REDRIVING MAY BE REQUIRED. THE ENGINEER WILL DETERMINE THE NEED FOR PDA TESTING. FOR PDA TESTING, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.  
 FOR DRILLED PIERS, SEE SECTION 411 OF THE STANDARD SPECIFICATIONS.  
 DRILLED PIERS AT BENT NO.1 ARE DESIGNED FOR A FACTORED RESISTANCE OF 395 TONS PER PIER. CHECK FIELD CONDITIONS FOR THE REQUIRED TIP RESISTANCE OF 10 TSF.

INSTALL DRILLED PIERS AT BENT NO.1 TO A TIP ELEVATION NO HIGHER THAN 645 FT WITH THE REQUIRED TIP RESISTANCE.  
 DRILLED PIERS AT BENT NO.2 ARE DESIGNED FOR A FACTORED RESISTANCE OF 390 TONS PER PIER. CHECK FIELD CONDITIONS FOR THE REQUIRED TIP RESISTANCE OF 5 TSF.  
 INSTALL DRILLED PIERS AT BENT NO.2 TO A TIP ELEVATION NO HIGHER THAN 656 FT (LT), 651 FT (CL), AND 651 FT (RT) WITH THE REQUIRED TIP RESISTANCE.  
 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.  
 DRILLED PIER EXCAVATIONS AT BENT NO.1 AND BENT NO.2 WILL EXTEND INTO MATERIAL THAT DETERIORATES WHEN EXPOSED TO THE ELEMENTS. CHECK FIELD CONDITIONS FOR THE REQUIRED TIP RESISTANCE AND PLACE CONCRETE IMMEDIATELY AFTER THE EXCAVATION IS COMPLETED.

PROJECT NO. B-5352  
ROCKINGHAM COUNTY  
 STATION: P.O.T. 22+16.89 -L-  
 SHEET 2 OF 4

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH

**GENERAL DRAWING**  
 FOUNDATION LAYOUT



DocuSigned by:  
 Matthew T. Neiheisel  
 2/20/2018  
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REVISIONS				SHEET NO.
BY:	DATE:	NO.	DATE:	S-2
		3		TOTAL SHEETS
		4		37

DRAWN BY : D. H. CARTER DATE : FEB 2018  
 CHECKED BY : M. T. NEIHEISEL DATE : FEB 2018  
 DESIGN ENGINEER OF RECORD: M. T. NEIHEISEL DATE : FEB 2018

**ICA Engineering, Inc.**  
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 Suite 900  
 Raleigh, NC 27601  
 NC License No: F-0258

PLOT DRIVER: NCDOT STRUCTURES DEFAULT PLOTTER.PH  
 USER: dcarter  
 DATE: 2/19/2018  
 TIME: 1:41:45 PM  
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