

## FOUNDATION LAYOUT

DIMENSIONS LOCATING PILES AND DRILLED PIERS ARE SHOWN TO CENTERLINE OF PILES AND DRILLED PIERS

■ INDICATES PILE BATTER IN DIRECTION SHOWN BRACE PILES BATTERED AT 3:12

## NOTES

FOR PILES, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.

PILES AT END BENTS 1 & 2 ARE DESIGNED FOR A FACTORED RESISTANCE OF 85 TONS PER PILE.

DRIVE PILES AT END BENTS 1 & 2 TO A REQUIRED DRIVING RESISTANCE OF 142 TONS PER PILE.

FOR DRILLED PIERS, SEE SECTION 411 OF THE STANDARD SPECIFICATION.

DRILLED PIERS AT BENT 1 AND AT BENT 2 ARE DESIGNED FOR A FACTORED RESISTANCE OF 483 TONS PER PIER. CHECK FIELD CONDITIONS FOR THE REQUIRED TIP RESISTANCE OF 115 TSF.

INSTALL DRILLED PIERS AT BENT 1 TO A TIP ELEVATION NO HIGHER THAN EL. 2649.5 FT. WITH THE REQUIRED RESISTANCE AND A PENETRATION OF AT LEAST 6 FT. INTO ROCK AS DEFINED BY ARTICLE 411-1 OF THE STANDARD SPECIFICATIONS.

INSTALL DRILLED PIERS AT BENT 2 TO A TIP ELEVATION NO HIGHER THAN EL. 2650.5 FT. WITH THE REQUIRED RESISTANCE AND A PENETRATION OF AT LEAST 6 FT. INTO ROCK AS DEFINED BY ARTICLE 411-1 OF THE STANDARD SPECIFICATIONS.

THE SCOUR CRITICAL ELEVATION FOR BENT 1 IS ELEVATION 2654.5 FT. SCOUR CRITICAL ELEVATIONS ARE USED TO MONITOR POSSIBLE SCOUR PROBLEMS DURING THE LIFE OF THE STRUCTURE.

THE SCOUR CRITICAL ELEVATION FOR BENT 2 IS ELEVATION 2655.5 FT. THE SCOUR CRITICAL ELEVATIONS ARE USED TO MONITOR POSSIBLE SCOUR PROBLEMS DURING THE LIFE OF THE STRUCTURE.

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.

STEEL H-PILE POINTS ARE REQUIRED FOR STEEL H-PILES AT END BENT 1 AND END BENT 2. FOR STEEL PILE POINTS. SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.

BR-0002 PROJECT NO. ASHE COUNTY STATION: 23+80.00 -L-

SHEET 2 OF 3

031021

\* NCINEER

Amber Male

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH

> GENERAL DRAWING FOR BRIDGE OVER NORTH FORK OF NEW RIVER ON NC 194 BETWEEN NC 88 AND SR 1349

8/3/2021 SHEET NO. REVISIONS S-2 DATE: DATE: NO. BY: BY: DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED 40

\_ DATE : 06/2020 M. G. SHAIKH DRAWN BY : \_ \_ DATE :06/2020 H. LOCKLEAR CHECKED BY : \_\_\_ DESIGN ENGINEER OF RECORD: K. PUROHIT \_ DATE : 11/2019