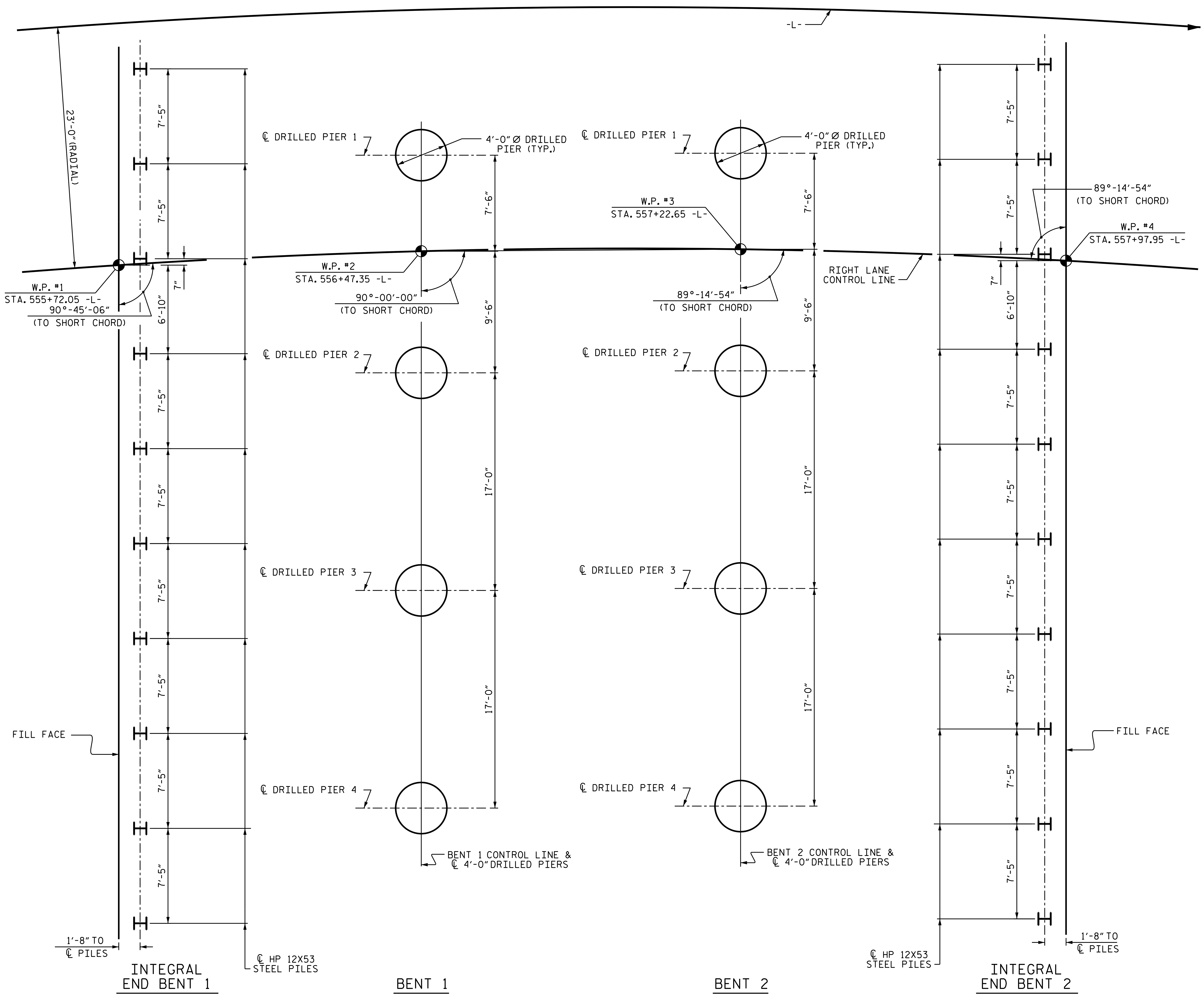

FOUNDATION LAYOUT

DIMENSIONS LOCATING PILES ARE SHOWN TO PILE CENTERLINE.

NOTES

FOR PILES, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.

OBSERVE A 2 MONTH WAITING PERIOD AFTER CONSTRUCTING THE EMBANKMENT TO WITHIN 2 FEET OF FINISHED GRADE BEFORE BEGINNING END BENT CONSTRUCTION AT END BENT 1 AND END BENT 2.

PILES AT END BENT 1 AND END BENT 2 ARE DESIGNED FOR A FACTORED RESISTANCE OF 100 TONS PER PILE.

DRIVE PILES AT END BENT 1 AND END BENT 2 TO A REQUIRED DRIVING RESISTANCE OF 167 TONS PER PILE.

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

DRILLED PIERS AT BENT 1 AND BENT 2 ARE DESIGNED FOR A FACTORED RESISTANCE OF 445 TONS PER PIER. CHECK FIELD CONDITIONS FOR THE REQUIRED TIP RESISTANCE OF 30 TSF.

INSTALL DRILLED PIERS AT BENT 1 TO A TIP ELEVATION NO HIGHER THAN EL. 821.5 (LT.), 799.5 (CT.) AND 803.00 (RT.), SATISFY THE REQUIRED TIP RESISTANCE AND HAVE A PENETRATION OF AT LEAST 8 FEET INTO ROCK AS DEFINED BY AARTICLE 411-1 OF THE STANDARD SPECIFICATIONS. INSTALL DRILLED PIERS AT BENT 2 TO A TIP ELEVATION NO HIGHER THAN EL. 798.00 (LT.), 792.00 (CT.) AND 784.5 (RT.), SATISFY THE REQUIRED TIP RESISTANCE AND HAVE A PENETRATION OF AT LEAST 8 FEET INTO ROCK AS DEFINED BY ARTICLE 411-1 OF THE STANDARD SPECIFICATIONS.

PERMANENT STEEL CASING MAY BE REQUIRED FOR DRILLED PIERS AT BENT 1 AND BENT 2. IF REQUIRED, DO NOT EXTEND PERMANENT CASING BELOW EL. 841.00 WITHOUT PRIOR APPROVAL FROM THE ENGINEER. THE ENGINEER WILL DETERMINE THE NEED FOR PERMANENT STEEL CASING.

THE SCOUR CRITICAL ELEVATION FOR BENT 1 IS EL. 836.00. SCOUR CRITICAL ELEVATIONS ARE USED TO MONITOR POSSIBLE SCOUR PROBLEMS DURING THE LIFE OF THE STRUCTURE.

THE SCOUR CRITICAL ELEVATION FOR BENT 2 IS EL. 835.00. SCOUR CRITICAL ELEVATIONS ARE USED TO MONITOR POSSIBLE SCOUR PROBLEMS DURING THE LIFE OF THE STRUCTURE.

SID INSPECTIONS MAY BE REQUIRED FOR DRILLED PIERS AT BENT 1 AND BENT 2. 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 AT BENT 1 AND BENT 2. THE ENGINEER WILL DETERMINE THE NEED FOR CSL TESTING. FOR CSL TESTING, SEE SECTION 411 OF THE STANDARD SPECIFICATIONS.

PROJECT NO. U-2579B
FORSYTH COUNTY
STATION: 556+85.00 -L-

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING
FOR BRIDGE OVER MARTIN MILL CREEK ON I-74 (FUTURE) BETWEEN SR 2407 AND SR 2410 (RIGHT LANE)

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-104
1			3			TOTAL SHEETS
2			4			707

STR. #4

NORTH CAROLINA PROFESSIONAL SEAL 10730 ENGINEER D. ANDRE' DAVENPORT, JR.
DocuSigned by: D. André Davenport, Jr.
895DC284F664495...
8/4/2014

DRAWN BY :	D.A. DAVENPORT	DATE :	3/21/14
CHECKED BY :	M.K. BEARD	DATE :	5/21/14
DESIGN ENGINEER OF RECORD:	G.W. DICKEY	DATE :	6/4/14

04-AUG-2014 13:44
R:\Structures\Plans\Str04\U2579B_SD_GD_04.dgn
lsutton