

FOUNDATION LAYOUT

DIMENSIONS LOCATING PILES ARE SHOWN TO PILE CENTERLINE AT BOTTOM OF THE CAP OR FOOTING, MEASURED FROM THE TANGENT TO -Y15FLYCA- AT EACH WORK POINT.

FOOTING IN THE TRANSVERSE DIRECTION IS COINCIDENT WITH THE BENT CONTROL LINE, AND RADIAL TO -Y15FLYCA-, AT ALL BENTS.

OBSERVE PILE ORIENTATION AND LOCATION OF OMITTED PILES IN EACH FOOTING.

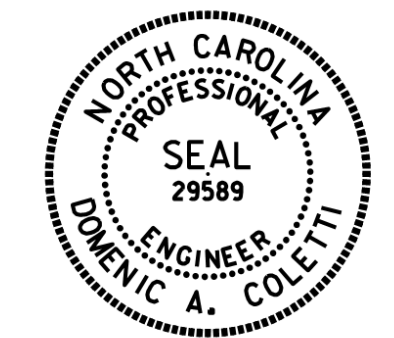
NOTES

- FOR PILES, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.
- PILES AT END BENT NO.1 ARE DESIGNED FOR A FACTORED RESISTANCE OF 147 TONS PER PILE.
- DRIVE PILES AT END BENT NO.1 TO A REQUIRED DRIVING RESISTANCE OF 245 TONS PER PILE.
- OBSERVE A 2 MONTH WAITING PERIOD AFTER CONSTRUCTING THE EMBANKMENT TO THE FINISHED GRADE BEFORE BEGINNING PILE DRIVING AND END BENT CONSTRUCTION AT END BENT NO.1.FOR BRIDGE WAITING PERIODS, SEE ROADWAY PLANS AND SECTION 235 OF THE STANDARD SPECIFICATIONS.
- PILES AT BENT NO.1 ARE DESIGNED FOR A FACTORED RESISTANCE OF 165 TONS PER PILE.
- DRIVE PILES AT BENT NO.1 TO A REQUIRED DRIVING RESISTANCE OF 275 TONS PER PILE.
- PILES AT BENT NO.2 ARE DESIGNED FOR A FACTORED RESISTANCE OF 150 TONS PER PILE.
- DRIVE PILES AT BENT NO.2 TO A REQUIRED DRIVING RESISTANCE OF 250 TONS PER PILE.
- PILES AT BENT NO.3 ARE DESIGNED FOR A FACTORED RESISTANCE OF 180 TONS PER PILE.
- DRIVE PILES AT BENT NO.3 TO A REQUIRED DRIVING RESISTANCE OF 300 TONS PER PILE.
- FOR DRILLED PIERS, SEE SECTION 411 OF THE STANDARD SPECIFICATIONS.
- DRILLED PIERS AT BENT NO.4 ARE DESIGNED FOR A FACTORED RESISTANCE OF 1660 TONS/PIER.CHECK FIELD CONDITIONS FOR THE REQUIRED TIP RESISTANCE OF 40 TSF.
- INSTALL DRILLED PIERS AT BENT NO.4 TO A TIP ELEVATION NO HIGHER THAN 810 FT, SATISFY THE REQUIRED TIP RESISTANCE AND HAVE A PENETRATION OF AT LEAST 35 FT INTO WEATHERED ROCK OR HARD ROCK.

- TO VERIFY BEARING STRATA, STANDARD PENETRATION TESTING (SPT) IS REQUIRED FOR DRILLED PIERS AT BENT NO.4.PERFORM SPTS AT ELEVATION 845 FT TO VERIFY TOP OF PARTIALLY WEATHERED ROCK AND AGAIN AT THE FINAL TIP ELEVATION INDICATED.FOR SPT TESTING, SEE SECTION 411 OF THE STANDARD SPECIFICATIONS.
- SID INSPECTIONS MAY BE REQUIRED FOR DRILLED PIERS AT BENTS NO.4.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 THE DRILLED PIERS.THE ENGINEER WILL DETERMINE THE NEED FOR CSL TESTING.FOR CSL TESTING, SEE SECTION 411 OF THE STANDARD SPECIFICATIONS.
- PILES AT BENT NO.5 ARE DESIGNED FOR A FACTORED RESISTANCE OF 162 TONS PER PILE.
- DRIVE PILES AT BENT NO.5 TO A REQUIRED DRIVING RESISTANCE OF 270 TONS PER PILE.
- PILES AT BENT NO.6 ARE DESIGNED FOR A FACTORED RESISTANCE OF 162 TONS PER PILE.
- DRIVE PILES AT BENT NO.6 TO A REQUIRED DRIVING RESISTANCE OF 270 TONS PER PILE.
- PREDRILLING FOR PILES IS REQUIRED FOR THE LEFT MOST 16 PILES AT BENT NO.6. PREDRILL PILE LOCATIONS TO AN ELEVATION NO LOWER THAN 880 FT WITH EQUIPMENT THAT WILL RESULT IN A MAXIMUM PREDRILLING DIAMETER OF 12".FOR PREDRILLING FOR PILES, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.
- PILES AT BENT NO.7 ARE DESIGNED FOR A FACTORED RESISTANCE OF 159 TONS PER PILE.
- DRIVE PILES AT BENT NO.7 TO A REQUIRED DRIVING RESISTANCE OF 265 TONS PER PILE.
- PILES AT END BENT NO.2 ARE DESIGNED FOR A FACTORED RESISTANCE OF 138 TONS PER PILE.
- DRIVE PILES AT END BENT NO.2 TO A REQUIRED DRIVING RESISTANCE OF 230 TONS PER PILE.
- COFFERDAMS ARE REQUIRED TO PERFORM THE FOUNDATION EXCAVATION AT BENT NO.1 DUE TO HIGH GROUNDWATER ELEVATIONS AT THIS LOCATION.FOR COFFERDAMS, SEE SECTION 410 OF THE STANDARD SPECIFICATIONS.

LEGEND

H	HP14X73 VERTICAL PILE
H with dash	HP14X73 BRACE PILE (BATTER 3H:12V)
(H)	HP14X73 TENSION PILE
Circle with cross	6'-0" Ø DRILLED PIER AND 5'-6" DRILLED PIER (ROCK SOCKET)



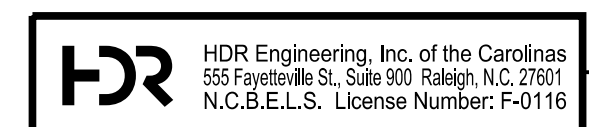
Dominic A. Coletti 10/15/2021

PROJECT NO. U-2579AB
FORSYTH COUNTY
 STATION: 58+33.94 -Y15FLYCA-
 SHEET 5 OF 10

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

GENERAL DRAWING
 BRIDGE ON -Y15FLYCA- IN INTERCHANGE CONNECTING WINSTON-SALEM NORTHERN BELTWAY AND I-40 BYPASS BETWEEN SR 4315 AND SR 2679

REVISIONS						SHEET NO. 506-005	
NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS 129	
1	--	--	3	--	--		
2	--	--	4	--	--		



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