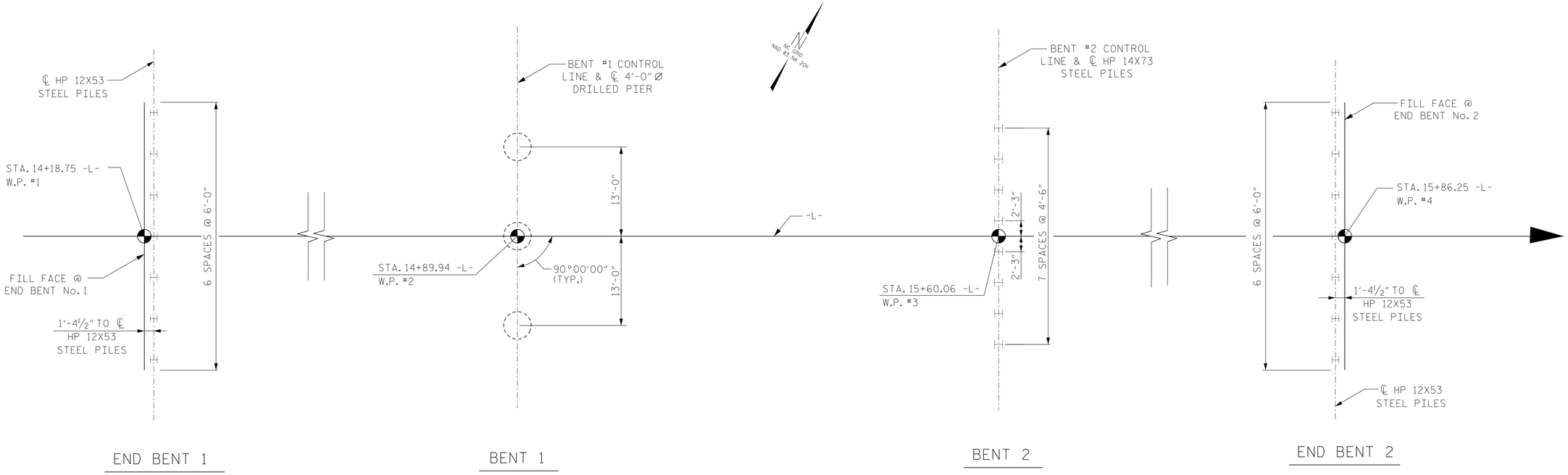

FOUNDATION LAYOUT

ALL BENTS ARE PARALLEL

FOUNDATION NOTES

1) FOR PILES, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.

2) PILES AT END BENT NO. 1 ARE DESIGNED FOR A FACTORED RESISTANCE OF 85 TONS PER PILE.

3) PILES AT BENT NO. 2 ARE DESIGNED FOR A FACTORED RESISTANCE OF 120 TONS PER PILE.

4) PILES AT END BENT NO. 2 ARE DESIGNED FOR A FACTORED RESISTANCE OF 50 TONS PER PILE.

5) DRIVE PILES AT END BENT NO. 1 TO A REQUIRED DRIVING RESISTANCE OF 145 TONS PER PILE.

6) DRIVE PILES AT BENT NO. 2 TO A REQUIRED DRIVING RESISTANCE OF 200 TONS PER PILE.

7) DRIVE PILES AT END BENT NO. 2 TO A REQUIRED DRIVING RESISTANCE OF 85 TONS PER PILE.

8) INSTALL PILES AT BENT NO. 2 TO A TIP ELEVATION NO HIGHER THAN 146 FT.

9) THE SCOUR CRITICAL ELEVATION FOR BENT NO. 2 IS ELEVATION 161 FT. SCOUR CRITICAL ELEVATIONS ARE USED TO MONITOR POSSIBLE SCOUR PROBLEMS DURING THE LIFE OF THE STRUCTURE.

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

11) DRILLED PIERS AT BENT NO. 1 ARE DESIGNED FOR A FACTORED RESISTANCE OF 425 TONS PER PIER. CHECK FIELD CONDITIONS FOR THE REQUIRED TIP RESISTANCE OF 65 TSF.

12) INSTALL DRILLED PIERS AT BENT NO. 1 TO A TIP ELEVATION NO HIGHER THAN 122 FT. WITH THE REQUIRED TIP RESISTANCE AND A PENETRATION OF AT LEAST 6 FT INTO ROCK AS DEFINED BY ARTICLE 411-1 OF THE STANDARD SPECIFICATIONS.

13) THE SCOUR CRITICAL ELEVATION FOR BENT NO. 1 IS ELEVATION 140 FT. SCOUR CRITICAL ELEVATIONS ARE USED TO MONITOR POSSIBLE SCOUR PROBLEMS DURING THE LIFE OF THE STRUCTURE.

14) PERMANENT STEEL CASINGS ARE REQUIRED FOR DRILLED PIERS AT BENT NO. 1. DO NOT EXTEND PERMANENT CASINGS BELOW ELEVATION 128 FT WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

15) 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.

16) 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.

17) SPT MAY BE REQUIRED FOR DRILLED PIERS. THE ENGINEER WILL DETERMINE THE NEED FOR SPT. FOR SPT TESTING, SEE SECTION 411 OF THE STANDARD SPECIFICATIONS.

PROJECT NO. 17BP.5.R.77

WARREN COUNTY

STATION: 15+02.50 -L-

SHEET 2 OF 3

DocuSigned by: David Ruggles
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7/17/2018

NORTH CAROLINA PROFESSIONAL SEAL 11725 ENGINEER DAVID R. RUGGLES

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

FOUNDATION LAYOUT

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-2
1			3			TOTAL SHEETS
2			4			22

DRAWN BY:	E. PHELPS	DATE :	2/18
CHECKED BY:	J. LOFTUS	DATE :	2/18
DESIGN ENGINEER OF RECORD:	J. LOFTUS	DATE :	2/18

WARREN 77

6/29/2018
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