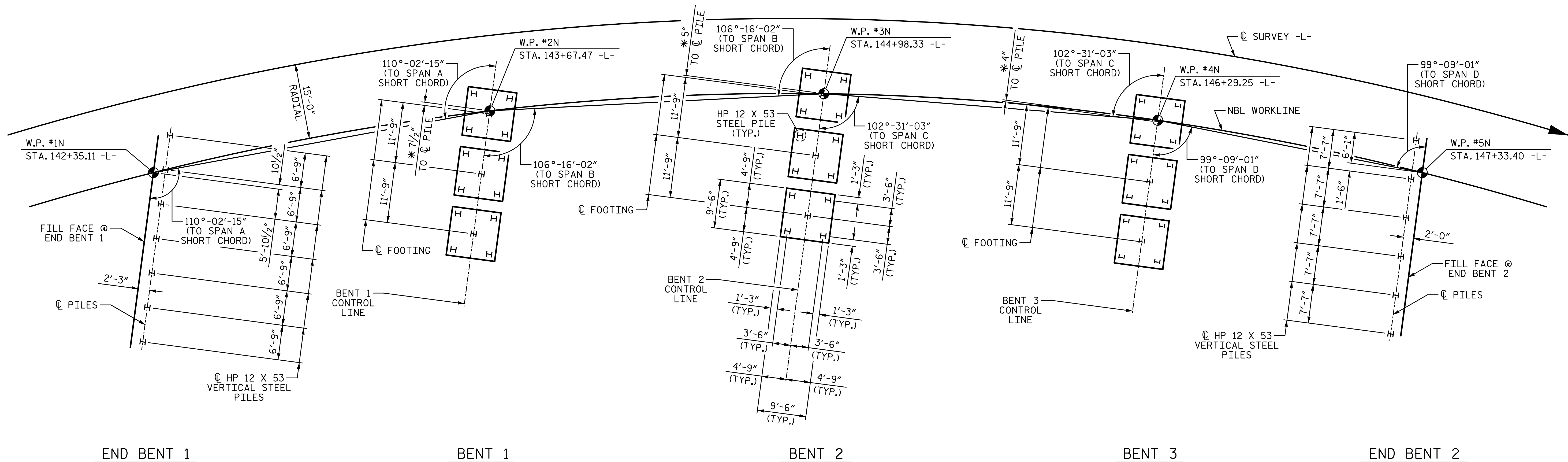


1/6/2017 8:11:05 AM G:\Projects\2014\U-3109A\Structures\Site 2\Site 2-Str 3 Bridge 435 (NBL)\Drawings\Final\403_U3109A_smu_gd.dgn



FOUNDATION LAYOUT

(DIMENSIONS LOCATING PILES ARE TO THE PILE CENTERLINE AT THE BOTTOM OF THE CAP OR FOOTING)
 (* DIMENSION SHOWN IS MEASURED FROM BENT WORK LINE TO C PILE, SEE "BENT" SHEETS.)
 (DIMENSIONS AND PILE LOCATIONS ARE TYPICAL FOR EACH FOOTING)

FOUNDATION NOTES:

FOR PILES, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.

PILES AT END BENT 1 AND END BENT 2 ARE DESIGNED FOR A FACTORED RESISTANCE OF 120 TONS PER PILE.

PILES AT BENT 1, BENT 2, AND BENT 3 ARE DESIGNED FOR A FACTORED RESISTANCE OF 140 TONS PER PILE.

DRIVE PILES AT END BENT 1 AND END BENT 2 TO A REQUIRED DRIVING RESISTANCE OF 200 TONS PER PILE.

DRIVE PILES AT BENT 1, BENT 2, AND BENT 3 TO A REQUIRED DRIVING RESISTANCE OF 235 TONS PER PILE.

IT HAS BEEN ESTIMATED THAT A HAMMER WITH AN EQUIVALENT RATED ENERGY IN THE RANGE OF 55,745 FT-LBS PER BLOW WILL BE REQUIRED TO DRIVE PILES AT END BENT 1, BENT 1, BENT 2, BENT 3, AND END BENT 2. THIS ESTIMATED ENERGY RANGE DOES NOT RELEASE THE CONTRACTOR FROM PROVIDING DRIVING EQUIPMENT IN ACCORDANCE WITH SUBARTICLE 450-3(D)(2) OF THE STANDARD SPECIFICATIONS.

IF PILES ARE INSTALLED AFTER MSE WALL CONSTRUCTION, USE A FORM TO BLOCK OUT PILE LOCATIONS DURING WALL CONSTRUCTION. DRIVE PILES INSIDE FORM AND FILL FORM WITH NON-EXCAVATABLE FLOWABLE FILL PER ARTICLE 340-2 OF THE STANDARD SPECIFICATIONS.

PLANS PREPARED BY:

SIMPSON
ENGINEERS
& ASSOCIATES
 5640 Dillard Drive
 Suite 200
 Cary, NC 27518
 (919) 852-0468
 (919) 852-0598 (Fax)
 www.simpsonengr.com
 LICENSURE NO. C-2521



PROJECT NO. U-3109A
ALAMANCE COUNTY
 STATION: 146+61.35 -L-
22+02.76 -Y16-

SHEET 5 OF 6

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
GENERAL DRAWING
 FOR NBL BRIDGE ON NC 119
 OVER HOLT ST., NORFOLK SOUTHERN
 RAILROAD (NSRR) AND US 70
 BETWEEN SR 1972 AND SR 1921
 (NBL)

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S03-5
1			3			TOTAL SHEETS
2			4			S03-53

DRAWN BY: T. BANKOVICH DATE: 9-15
 CHECKED BY: J.A. BATTS DATE: 9-15
 DESIGN ENGINEER OF RECORD: J.A. BATTS DATE: 9-15

STR. #3