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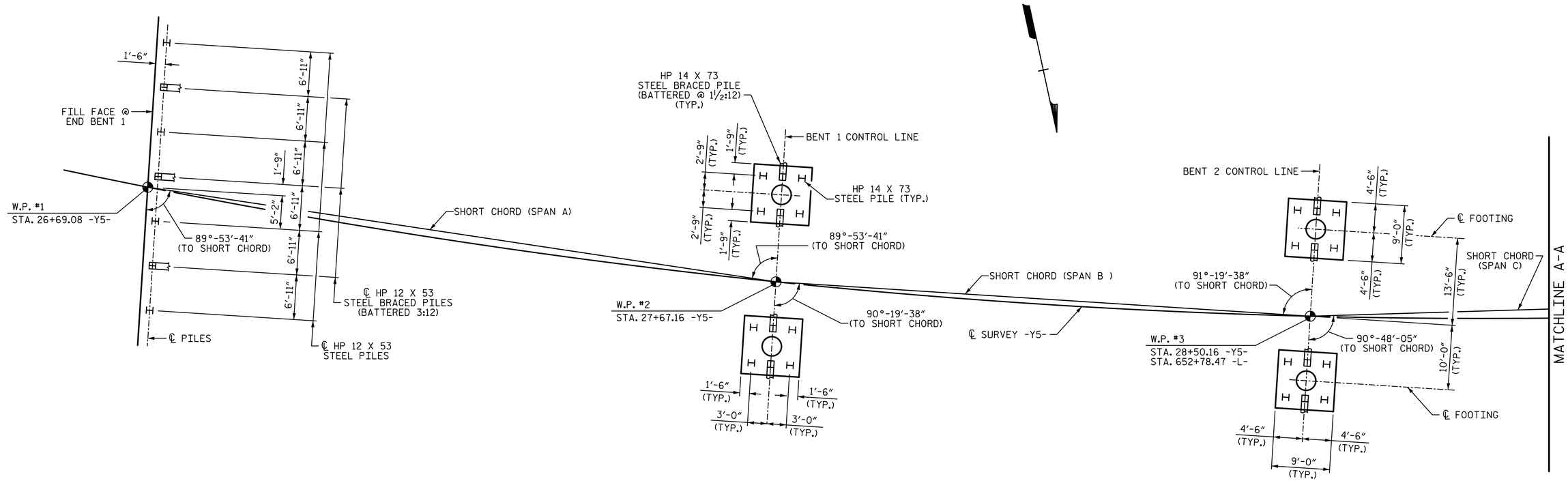

FOUNDATION LAYOUT

(DIMENSIONS LOCATING PILES ARE TO THE PILE CENTERLINE @ BOTTOM OF CAP OR FOOTING)

(DIMENSIONS AND PILE LOCATIONS FOR FOOTINGS ARE TYPICAL FOR EACH BENT)

FOUNDATION NOTES:

FOR PILES, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.

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

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

OBSERVE A 60 DAY WAITING PERIOD AFTER CONSTRUCTING THE EMBANKMENT TO WITHIN 2 FEET OF FINISHED GRADE BEFORE BEGINNING END BENT CONSTRUCTION AT END BENT 1.

PILES AT BENT 1 ARE DESIGNED FOR A FACTORED RESISTANCE OF 130 TONS PER PILE.

DRIVE PILES AT BENT 1 TO A REQUIRED DRIVING RESISTANCE OF 217 TONS PER PILE.

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

DRIVE PILES AT BENT 2 TO A REQUIRED DRIVING RESISTANCE OF 233 TONS PER PILE.

PILES AT BENT 3 ARE DESIGNED FOR A FACTORED RESISTANCE OF 145 TONS PER PILE.

DRIVE PILES AT BENT 3 TO A REQUIRED DRIVING RESISTANCE OF 242 TONS PER PILE.

FOUNDATION NOTES (CONTINUED):

STEEL H-PILE POINTS ARE REQUIRED FOR STEEL H-PILES AT BENT 3. FOR STEEL PILE POINTS, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.

TESTING PILES WITH PDA DURING DRIVING OR REDRIVING MAY BE REQUIRED FOR BENT 3. THE ENGINEER WILL DETERMINE THE NEED FOR PDA TESTING. FOR PDA TESTING, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS (AND FOR PILE DRIVING CRITERIA, SEE PILE DRIVING CRITERIA PROVISION).

IT HAS BEEN ESTIMATED THAT A HAMMER WITH AN EQUIVALENT RATED ENERGY IN THE RANGE OF 45,000 TO 65,000 FT-LBS PER BLOW WILL BE REQUIRED TO DRIVE PILES AT BENTS 1, 2, AND 3. 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.

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

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

OBSERVE A 60 DAY WAITING PERIOD AFTER CONSTRUCTING THE EMBANKMENT TO WITHIN 2 FEET OF FINISHED GRADE BEFORE BEGINNING END BENT CONSTRUCTION AT END BENT 2.

PROJECT NO. U-2579B
FORSYTH COUNTY
STATION: 28+50.16 -Y5-

SHEET 4 OF 6

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING
FOR BRIDGE ON SR 2657 (HASTINGS HILL RD.) BETWEEN SR 4393 & SR 2632 OVER -Y4CD-, -L-, & -Y4RPC- (WINSTON-SALEM NORTHERN BELTWAY)

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-661
1			3			TOTAL SHEETS
2			4			S-707

PLANS PREPARED BY:
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LICENSURE NO. C-2521

NORTH CAROLINA PROFESSIONAL SEAL 023908 ENGINEER MARK A. AVERETTE
DocuSigned by: Mark Averette
8/15/2014

DRAWN BY: R. SEALEY DATE: 3-14
CHECKED BY: M. AVERETTE DATE: 3-14
DESIGN ENGINEER OF RECORD: M. AVERETTE DATE: 3-14

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