

**FOUNDATION NOTES**

FOR PILES, SEE GEOTECHNICAL SPECIAL PROVISIONS AND SECTION 450 OF THE STANDARD SPECIFICATIONS.

PILES AT END BENTS NO.1 AND 2 ARE DESIGNED FOR A FACTOR RESISTANCE OF 95 TONS PER PILE.

DRIVE PILES AT END BENT NO.1 TO A REQUIRED DRIVING RESISTANCE OF 395 TONS PER PILE. THIS REQUIRED DRIVING RESISTANCE INCLUDES ADDITIONAL RESISTANCE FOR DOWNDRAG.

DRIVE PILES AT END BENT NO.2 TO A REQUIRED DRIVING RESISTANCE OF 295 TONS PER PILE. THIS REQUIRED DRIVING RESISTANCE INCLUDES ADDITIONAL RESISTANCE FOR DOWNDRAG.

IT HAS BEEN ESTIMATED THAT A HAMMER WITH AN EQUIVALENT RATED ENERGY IN THE RANGE OF 55,000 TO 120,000 FT-LBS. PER BLOW WILL BE REQUIRED TO DRIVE PILES AT END BENT NO.1. 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.

IT HAS BEEN ESTIMATED THAT A HAMMER WITH AN EQUIVALENT RATED ENERGY IN THE RANGE OF 35,000 TO 80,000 FT-LBS. PER BLOW WILL BE REQUIRED TO DRIVE PILES AT END BENT NO.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.

TESTING THE FIRST PRODUCTION OR TEST PILES WITH THE PDA DURING DRIVING, RESTRIKING, OR REDRIVING IS REQUIRED FOR BOTH END BENTS NO.1 AND 2. FOR PDA TESTING, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.

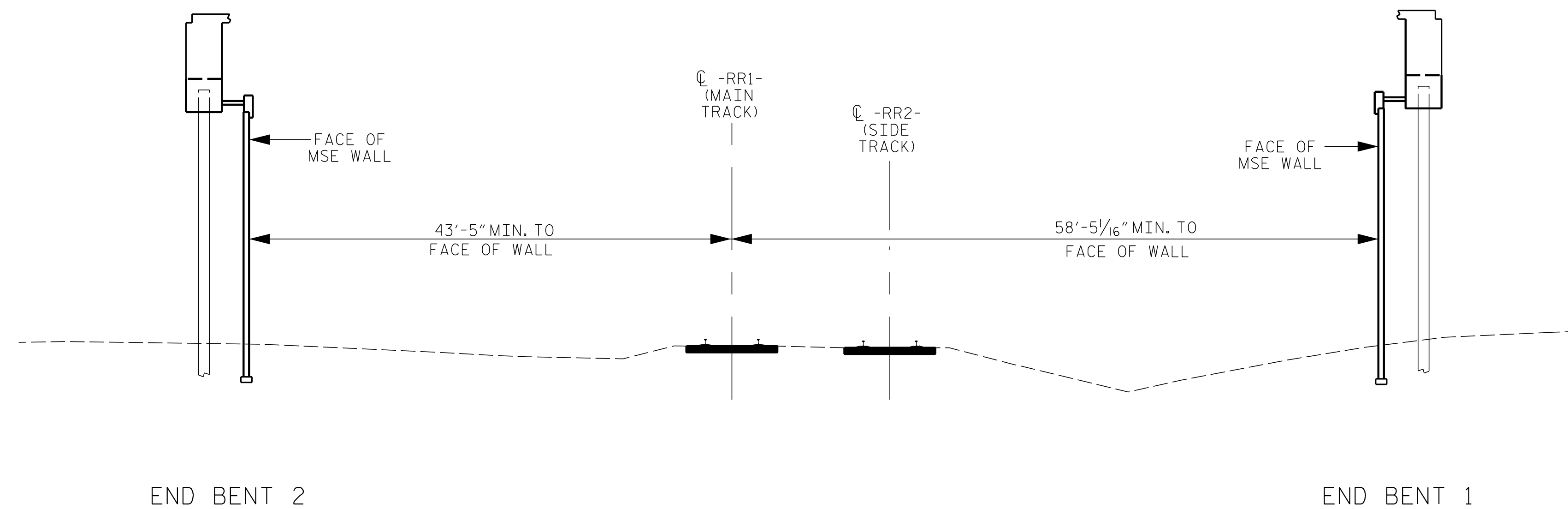
PILES AT END BENTS NO.1 AND 2 ARE TO BE DRIVEN BEFORE THE CONSTRUCTION OF THE MSE WALL.

PILES AT END BENTS NO.1 AND 2 ARE TO BE SLEEVED IN THE MSE WALL REINFORCED BACKFILL ZONE. SEE MSE WALL PLANS. NO SEPARATE PAYMENT WILL BE MADE FOR PIPE SLEEVES AND SHALL BE CONSIDERED INCIDENTAL TO OTHER CONTRACT ITEMS.

PILES AT END BENTS NO.1 AND 2 WILL REQUIRE PILE SLEEVES TO REDUCE DOWNDRAG LOADS.



**FOUNDATION LAYOUT**



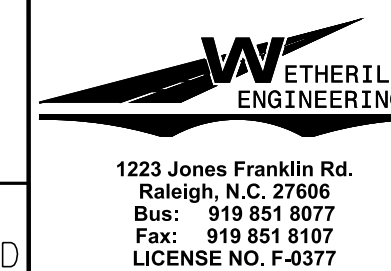
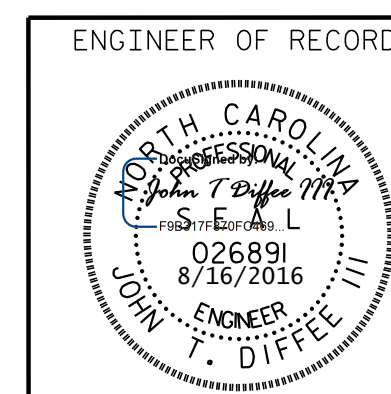
**SECTION THROUGH RAILROAD**

LOOKING IN DIRECTION OF INCREASING STATIONS ON RAILROAD  
(SPAN LENGTH BASED ON THIS SECTION)  
(FUTURE TRACKS NOT SHOWN FOR CLARITY)

TOP OF RAIL ELEVATIONS							
-RR1- (MAIN TRACK)				-RR2- (SIDE TRACK)			
LEFT RAIL		RIGHT RAIL		LEFT RAIL		RIGHT RAIL	
STA.	ELEV.	STA.	ELEV.	STA.	ELEV.	STA.	ELEV.
10+00.00	294.41	10+00.01	294.45	9+99.99	294.14	10+00.01	294.13
11+12.22	294.37	11+12.18	294.36	11+11.28	294.08	11+11.01	294.09
12+18.09	294.26	12+18.09	294.22	12+17.76	294.03	12+18.08	294.03
13+16.80	294.15	13+16.62	294.13	13+15.79	293.92	13+15.99	293.91
14+10.87	293.99	14+10.71	293.99	14+10.08	293.77	14+10.19	293.79
14+97.32	293.81	14+97.38	293.81	14+96.45	293.64	14+96.56	293.64
15+27.14	293.73	15+27.16	293.74	15+26.36	293.58	15+26.36	293.58
15+99.23	293.53	15+98.88	293.53	15+98.52	293.39	15+98.58	293.40
16+66.57	293.36	16+66.57	293.35	16+66.19	293.20	16+66.16	293.21
16+90.88	293.26	16+91.29	293.27	16+90.40	293.14	16+90.57	293.17
18+00.72	292.98	18+00.77	292.99	18+00.20	292.84	18+00.23	292.84
19+08.30	292.61	19+08.31	292.61	19+07.34	292.41	19+07.32	292.44
20+21.58	292.21	20+21.39	292.22	20+20.71	291.99	20+20.78	291.99

PROJECT NO. R-5769  
JOHNSTON COUNTY  
 STATION: 33+26.33 -L-

SHEET 2 OF 3



STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH

**GENERAL DRAWING**

FOR BRIDGE ON NOVO  
 NORDISK ACCESS ROAD OVER  
 NORTH CAROLINA RAILROAD  
 OFF SR 1913 (GORDON RD.)

REVISIONS

NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		

SHEET NO.  
 S-2  
 TOTAL SHEETS  
 23

DOCUMENT NOT CONSIDERED FINAL  
 UNLESS ALL SIGNATURES COMPLETED

DRAWN BY : J. C. PENDERGRAFT DATE : 5-16  
 CHECKED BY : J. T. DIFFIE DATE : 5-16