RD266410

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NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROJECT NO.	SHEET NO.
R-2519B	3D-11

**Note: Invert Elevations indicated are for Bid Purposes only and shall not be used for project construction stakeout.
See "Standard Specifications For Roads and Structures, Section 300-5".**

LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 48 INCHES & UNDER)

STATION	LOCATION (LT, RT, OR CL)'	STRUCTURE NO. FROM	STRUCTURE NO. TO	TOP ELEVATION	INVERT ELEVATION	INVERT ELEVATION	SLOPE CRITICAL	SIDE DRAIN PIPE (RCP, CSP, CAAP, HDPE, or PVC) 12"	15"	18"	24"	30"	36"	42"	48"	DO NOT USE RCP	DO NOT USE CSP	DO NOT USE CAAP	DO NOT USE HDPE
-L- STA. 230+70	RT	1915		2634.46															
-L- STA. 230+10	RT	1914	1915		2635.59	2629.21						116'							
-L- STA. 230+70	RT	1916		2610.71															
-L- STA. 230+70	RT	1917		2606.58															
-L- STA. 230+70	RT	1915	1916		2629.21	2606.71													
-L- STA. 230+70	RT	1916	1917		2606.71	2598.78													
-L- STA. 230+70	RT	1917	1918		2598.78	2598.04													
SHEET 20																			
-L- STA. 232+50	LT	2001		2623.68															
-L- STA. 232+50	LT	2002	2001		2654.03	2620.93													
-L- STA. 234+00	LT	2003		2616.68															
-L- STA. 233+25.36	LT	2001	2003		2620.93	2613.93			152'										
-L- STA. 234+85.74	LT	2004		2610.10															
-L- STA. 234+27.68	CL																		
-L- STA. 234+43.31	LT	2003	2004		2613.93	2604.45													
-L- STA. 234+85.74	LT	2005	2004		2604.50	2604.45													
-L- STA. 234+80.46	CL	2028		2613.19															
-L- STA. 234+80.47	LT	2004	2028		2604.45	2608.47													
-L- STA. 234+75	RT	2006		2610.00															
-L- STA. 234+77.75	RT	2028	2006		2608.47	2603.84													
-L- STA. 234+73.81	RT	2006	2007		2603.84	2590.55													
-L- STA. 235+70	LT	2009		2607.52															
-L- STA. 235+70		2008		2621.55															
-L- STA. 235+63.73	LT	2008	2009		2619.38	2604.77													
-L- STA. 235+24.87	CL																		
-L- STA. 235+66.76	CL																		
-L- STA. 239+99.57	LT	2010		2582.15															
-L- STA. 237+82.53	LT	2009	2010		2604.77	2579.40			440'										
-L- STA. 239+99.57	LT	2011	2010		2622.24	2579.40													
-L- STA. 239+99.57	LT	2011		2624.41															
-L- STA. 239+30	CL	2020		2588.95															
-L- STA. 237+00	CL	2018		2601.34															
-L- STA. 237+00	RT	2018	2019		2596.74	2591.26													
-L- STA. 239+30	RT	2020	2021		2584.71	2582.06													
-L- STA. 240+00	RT	2030								36'									
-L- STA. 241+27.47	RT	2031								48'									
-L- STA. 241+07.27	RT																		
-L- STA. 241+85	LT	2012		2573.37															
-L- STA. 241+85	CL	2032		2577.18															
-L- STA. 241+85	LT	2012	2032		2566.38	2564.55													
-L- STA. 241+80.92	RT	2032	2015		2564.55	2562.72													
-L- STA. 241+80.92	RT	2015		2565.56															
-L- STA. 243+72.48	RT	2016		2545.05															
-L- STA. 242+76.23	RT	2015	2016		2562.22	2540.23													
-L- STA. 243+77.40	RT	2016	2017		2540.23	2540.34						16'							
-Y21- STA. 12+25.23	LT	2022			2543.97	2539.29									132'				
-L- STA. 242+15.45	RT																		
-L- STA. 242+15.46	CL																		
-L- STA. 243+00	LT	2014		2569.71															
-L- STA. 242+42.5	LT	2014	2012		2566.96	2566.63			112'										
-L- STA. 243+00	LT	2013		2580.59															
-L- STA. 243+00	LT	2013	2014		2578.42	2566.96													
-L- STA. 246+36.35	LT	2025		2568.05															
-L- STA. 246+22.43	LT	2026	2027		2563.85	2531.06													
-L- STA. 246+22.43	LT	2026		2568.06															
-L- STA. 246+15.68	LT	2025	2026		2564.05	2563.85			16'										
-L- STA. 246+36.35	RT	2024		2568.06															
-L- STA. 246+36.35	CL	2029		2568.90															
-L- STA. 246+36.35	LT	2029	2026		2564.06	2563.85													
-L- STA. 246+36.35	RT	2024	2029		2565.22	2565.22													
-L- STA. 246+37.52	RT	2023		2568.16															
-L- STA. 246+6012	RT	2023	2024		2565.11	2565.22			64'										
SHEET TOTALS									784'	84'		132'			132'				

STATION	C.S. PIPE 12" (.064)	15" (.064)	18" (.064)	24" (.064)	30" (.079)	36" (.079)	42" (.109)	48" (.109)	R.C. PIPE CLASS III 12"	15"	18"	24"	30"	36"	42"	48"	R.C. PIPE CLASS IV 12"	15"	18"	24"	30"	36"	42"	48"
-L- STA. 230+70																								
-L- STA. 230+10																								
-L- STA. 230+70																								
-L- STA. 230+70																								
-L- STA. 230+70					52'																			
-L- STA. 230+70					28'																			
-L- STA. 230+70					8'																			
SHEET 20																								
-L- STA. 232+50																								
-L- STA. 232+50		26'																						
-L- STA. 234+00																								
-L- STA. 233+25.36																								
-L- STA. 234+85.74																								
-L- STA. 234+27.68																								
-L- STA. 234+43.31		88'																						
-L- STA. 234+85.74																					16'			
-L- STA. 234+80.46																								
-L- STA. 234+80.47																					48'			
-L- STA. 234+75																								
-L- STA. 234+77.75																					52'			
-L- STA. 234+73.81					28'																			
-L- STA. 235+70																								
-L- STA. 235+70																								
-L- STA. 235+63.73		44'																						
-L- STA. 235+24.87																								
-L- STA. 235+66.76																								
-L- STA. 239+99.57																								
-L- STA. 237+82.53																								
-L- STA. 239+99.57		96'																						
-L- STA. 239+99.57																								
-L- STA. 239+30																								
-L- STA. 237+00																								
-L- STA. 237+00																		92'						
-L- STA. 239+30																		84'						
-L- STA. 240+00																								
-L- STA. 241+27.47																								
-L- STA. 241+07.27																								
-L- STA. 241+85																								
-L- STA. 241+85																								
-L- STA. 241+85												56'												
-L- STA. 241+80.92												84'												
-L- STA. 241+80.92																								
-L- STA. 243+72.48																								
-L- STA. 242+76.23					192'																			
-L- STA. 243+77.40																								
-Y21- STA. 12+25.23																								
-L- STA. 242+15.45																								
-L- STA. 242+15.46																								
-L- STA. 243+00																								
-L- STA. 242+42.5																								
-L- STA. 243+00																								
-L- STA. 243+00		28'																						
-L- STA. 246+36.35																								
-L- STA. 246+22.43		68'																						
-L- STA. 246+22.43																								
-L- STA. 246+15.68																								
-L- STA. 246+36.35																								
-L- STA. 246+36.35																								
-L- STA. 246+36.35																		40'						
-L- STA. 246+36.35																		44'						
-L- STA. 246+37.52																								
-L- STA. 246+6012																								
SHEET TOTALS		350'			308'							140'						260'			116'			

STATION	36 " R.C. PIPE (CLASS V)	42 " R.C. PIPE (CLASS V)	30" WELDED PIPE, .500" THICK, GRADE B	36" WELDED PIPE, .500" THICK, GRADE B	42" WELDED PIPE, .625" THICK, GRADE B	48" WELDED PIPE, .625" THICK, GRADE B	ENDWALLS STD. 838.01 838.11 OR STD. 838.80 (UNLESS NOTED OTHERWISE) CU. YARDS R.C.P.	C.S.P.	QUANTITIES FOR DRAINAGE STRUCTURES PER EACH (0' THRU 5.0')	*TOTAL L.F. FOR PAY QUANTITY SHALL BE COL. 'A' + (1.3 X COL.'B') LIN. FT. A 5.0' THRU 10.0'	B 10.0' AND ABOVE	C.B. STD. 840.01 OR STD. 840.02	FRAME, GRATES, AND HOOD STANDARD 840.03 TYPE OF GRATE E	F	G	CONCRETE TRANSITIONAL SECTION DROP INLET	CATCH BASIN
-L- STA. 230+70									1	0.25							
-L- STA. 230+10																	
-L- STA. 230+70									1								
-L- STA. 230+70									1	2.8							
-L- STA. 230+70																	
-L- STA. 230+70																	
-L- STA. 230+70																	
SHEET 20																	
-L- STA. 232+50									1								
-L- STA. 232+50																	
-L- STA. 234+00									1								
-L- STA. 233+25.36																	
-L- STA. 234+85.74									1	0.65							
-L- STA. 234+27.68																	
-L- STA. 234+43.31																	
-L- STA. 234+85.74																	
-L- STA. 234+80.46									1			1		1			
-L- STA. 234+80.47																	
-L- STA. 234+75									1	1.16							
-L- STA. 234+77.75																	
-L- STA. 234+73.81																	
-L- STA. 235+70									1								
-L- STA. 235+70									1								
-L- STA. 235+63.73																	
-L- STA. 235+24.87																	
-L- STA. 235+66.76																	
-L- STA. 239+99.57									1								
-L- STA. 237+82.53																	
-L- STA. 239+99.57																	
-L- STA. 239+99.57									1								
-L- STA. 239+30									1			1		1			
-L- STA. 237+00									1			1		1			
-L- STA. 237+00																	
-L- STA. 239+30																	
-L- STA. 240+00																	
-L- STA. 241+27.47																	
-L- STA. 241+07.27																	
-L- STA. 241+85									1	1.99							
-L- STA. 241+85									1	5	2.63						
-L- STA. 241+85																	
-L- STA. 241+80.92																	
-L- STA. 241+80.92									1								
-L- STA. 243+72.48									1								
-L- STA. 242+76.23																	
-L- STA. 243+77.40																	
-Y21- STA. 12+25.23																	
-L- STA. 242+15.45																	
-L- STA. 242+15.46																	
-L- STA. 243+00									1								
-L- STA. 242+42.5																	
-L- STA. 243+00									1								
-L- STA. 243+00																	
-L- STA. 246+36.35									1								
-L- STA. 246+22.43																	
-L- STA. 246+22.43									1								
-L- STA. 246+15.68																	
-L- STA. 246+36.35									1								
-L- STA. 246+36.35									1								
-L- STA. 246+36.35																	
-L- STA. 246+36.35																	
-L- STA. 246+37.52									1								
-L- STA. 246+6012																	
SHEET TOTALS									25	11.85	2.63	3		3			

STATION	D.I. STD. 840.14 OR STD. 840.15	D.I. FRAME AND GRATE STD. 840.16	G.D.I. TYPE "A" STD. 840.17 OR 840.26	G.D.I. TYPE "B" STD. 840.18 OR 840.27	G.D.I. TYPE "D" STD. 840.19 OR 840.28	SPRING BOX STD. 840.41	G.D.I. (N.S.) FRAME WITH TWO GRATES STD. 840.24	G.D.I. (N.S.) FRAME WITH TWO GRATES STD. 840.29	T.B.G.D.I. STD. 840.35	T.B.J.B. STD. 840.34	J.B. STD. 840.31 OR 840.32	PARALLEL PIPE END SECTION STD. 310.02 OR 310.04	M. H. FRAME AND COVER STD. 840.54	OT CATCH BASIN OR STD. 840D04 (SHEET 2C-10)	PREFORMED SCOUR HOLE	FLOWABLE FILL	J.B. STD. 840.52	G.D.I. (N.S.) FRAME WITH GRATE STD. 840.24	CS PIPE ELBOWS NO. & SIZE	CONC. & BRICK PIPE PLUG, C.Y. STD. 840.71	CONC. COLLARS CL. "B" C.Y. STD. 840.72	PIPE REMOVAL LIN. FT.	REMARKS
-L- STA. 230+70			1					1															
-L- STA. 230+10																							
-L- STA. 230+70				1			1																
-L- STA. 230+70											1												
-L- STA. 230+70																							
-L- STA. 230+70																			2@30"				
-L- STA. 230+70																							
SHEET 20																							
-L- STA. 232+50				1			1																
-L- STA. 232+50																			2@15"				
-L- STA. 234+00				1			1																
-L- STA. 233+25.36																							
-L- STA. 234+85.74											1		1										
-L- STA. 234+27.68																						27	REMOVE EXIST. 12" C M PIPE
-L- STA. 234+43.31																							
-L- STA. 234+85.74																							
-L- STA. 234+80.46																							
-L- STA. 234+80.47																							REMOVE EXIST. HW
-L- STA. 234+75											1		1									102	REMOVE EXIST. 24" C M PIPE
-L- STA. 234+77.75																12							
-L- STA. 234+73.81																			2@30"				
-L- STA. 235+70				1			1																
-L- STA. 235+70														1									
-L- STA. 235+63.73																			2@15"				
-L- STA. 235+24.87																						24	REMOVE EXIST. 12" C M PIPE
-L- STA. 235+66.76																						25	REMOVE EXIST. 12" C M PIPE
-L- STA. 239+99.57				1			1																
-L- STA. 237+82.53																							
-L- STA. 239+99.57																			2@15"				
-L- STA. 239+99.57														1									
-L- STA. 239+30																							
-L- STA. 237+00																							
-L- STA. 237+00																						63	REMOVE EXIST. 18" CM PIPE, REMOVE HW
-L- STA. 239+30																							
-L- STA. 240+00																							
-L- STA. 241+27.47																						32	REMOVE EXIST. 18" C M PIPE
-L- STA. 241+07.27																						34	REMOVE EXIST. 12" C M PIPE
-L- STA. 241+85				1			1																
-L- STA. 241+85													1				1						
-L- STA. 241+85																							
-L- STA. 241+80.92																							
-L- STA. 241+80.92														1									
-L- STA. 243+72.48											1											50	REMOVE EXIST. 18" C M PIPE
-L- STA. 242+76.23																			2@30"				PLUG EXIST. 18" C M PIPE
-L- STA. 243+77.40																							
-Y21- STA. 12+25.23																						20	REMOVE EXIST. 42" C M PIPE
-L- STA. 242+15.45																						59	REMOVE EXIST. 18" C M PIPE, REMOVE HW
-L- STA. 242+15.46																						20	REMOVE EXIST. 12" C M PIPE, REMOVE HW
-L- STA. 243+00					1		1																
-L- STA. 242+42.5																							
-L- STA. 243+00														1									
-L- STA. 243+00																			2@15"				
-L- STA. 246+36.35				1				1															
-L- STA. 246+22.43															1				2@15"				
-L- STA. 246+22.43				1				1															
-L- STA. 246+15.68																							
-L- STA. 246+36.35				1				1															
-L- STA. 246+36.35											1		1										
-L- STA. 246+36.35																							
-L- STA. 246+36.35																							
-L- STA. 246+37.52				1				1															
-L- STA. 246+6012																							
SHEET TOTALS			1	10	1		7	5			5		4	4	1	12	1		10@15",6@30"			456	

ABBREVIATIONS

C.B.	CATCH BASIN
N.D.I.	NARROW DROP INLET
D.I.	DROP INLET
G.D.I.	GRATED DROP INLET
G.D.I.(N.S.)	(NARROW SLOT)
J.B.	JUNCTION BOX
M.H.	MANHOLE
T.B.D.I.	TRAFFIC BEARING DROP INLET
T.B.J.B.	TRAFFIC BEARING JUNCTION BOX