COMPUTED BY:	GSBLELL	DATE:	3/29/2012
CHECKED BY:	AJFOSTER	DATE:	4/15/2014

RD266410

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROJECT NO.	SHEET NO.
R-2519B	3D-17

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. 335+92.62	CL																		
-L- STA. 339+50	RT	2721		2661.70															
-L- STA. 338+75	RT	2721	2722		2658.90	2654.73			148'										
-L- STA. 338+00	RT	2722		2657.53															
-L- STA. 338+00	CL	2725		2661.27															
-L- STA. 338+00	RT	2722	2725		2654.73	2657.03													
-L- STA. 338+00	CL	2725	2720		2657.03	2653.30													
-L- STA. 338+00	LT	2720		2656.95															
-L- STA. 337+98	LT	2720	2723		2653.05	2645.85													
-L- STA. 338+94.64	CL																		
-L- STA. 341+40	RT	2717		2668.18															
-L- STA. 341+40	RT	2717	2718		2665.38	2666.48													
-L- STA. 341+40	CL	2718		2670.60															
-L- STA. 341+26.03	LT	2718	2719		2666.48	2665.06													
-L- STA. 341+12	LT	2719		2668.71															
-L- STA. 339+55.64	LT	2719	2720		2665.06	2653.30			308'										
-L- STA. 341+79	CL																		
-L- STA. 343+00	RT	2714		2673.82															
-L- STA. 343+00	RT	2714	2715		2671.02	2670.84													
-L- STA. 343+00	CL	2715		2675.32															
-L- STA. 343+00	LT	2715	2716		2670.84	2670.16													
-L- STA. 343+00	LT	2716		2672.91															
-L- STA. 342+05	LT	2716	2719		2670.16	2665.06			184'										
-DR31- 11+25	CL	2726	2705		2661.95	2661.67			20'										
-DR31- 11+26	RT	2726		2664.70															
SHEET 28																			
-L- STA. 343+75	CL	2801	2715		2674.92	2670.84													
-L- STA. 344+50	CL	2801		2679.52															
-L- STA. 345+05.87	RT	2802		2682.29															
-L- STA. 344+98	RT	2803		2664.80															
-L- STA. 345+01.78	RT	2802	2803		2660.98	2661.30													
-L- STA. 345+01.79	RT	2803	2830		2661.30	2669.60													
-L- STA. 346+54.26	RT	2804		2672.33															
-L- STA. 346+56.19	RT	2804	2805		2662.95	2662.81						20'							
-L- STA. 349+92.66	RT	2806			2694.46	2676.97													
-L- STA. 350+89.29	CL	2824		2701.19															
-L- STA. 349+94.53	CL	2824	2807		2697.07	2690.50			192'										
-L- STA. 349+00	CL	2807		2694.25															
-L- STA. 348+85	CL	2807	2808		2690.50	2689.27													
-L- STA. 348+70	CL	2808		2693.02															
-L- STA. 348+70	LT	2808	2810		2689.27	2683.35													
-L- STA. 348+70	LT	2810		2686.10															
-L- STA. 349+50	LT	2809		2691.35															
-L- STA. 349+10.19	LT	2809	2810		2688.55	2683.35			80'										
-L- STA. 348+23.06	LT	2810	2811		2683.10	2677.42													
-Y34- STA. 12+50	RT	2811		2681.31															
-Y34- STA. 12+00	LT	2813		2681.10															
															42'				
-Y34- STA. 12+20	CL	2813	2811		2677.90	2677.67													
-Y34- STA. 12+47.71	RT	2811	2812		2676.92	2669.70													
-Y34- STA. 12+43.32	RT	2812		2673.50															
-Y34- STA. 12+38.20	RT	2812	2814		2664.28	2664.25					12'								
-Y34- STA. 11+00	RT	2815		2675.87															
-Y34- STA. 11+00	RT	2815	2816		2672.87	2666.56													
-L- STA. 356+00	LT	2820		2719.05															
-L- STA. 354+85	LT	2820	2819		2716.25	2705.90			228'										
-L- STA. 353+70	LT	2819		2708.65															
-L- STA. 353+60.49	CL	2825		2711.94															
-L- STA. 353+64.65	LT	2819	2825		2705.65	2705.48													
-L- STA. 353+59.97	CL	2825	2821		2705.48	2705.34													
SHEET TOTALS									1160'		12'	20'		42'					

STATION	C.S. PIPE 12"	15"	18"	24"	30"	36"	42"	48"	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"	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.
THICKNESS OR GAUGE	.064	.064	.064	.064	.079	.079	.109	.109																								
-L- STA. 335+92.62																																
-L- STA. 339+50																																
-L- STA. 338+75																																
-L- STA. 338+00																																
-L- STA. 338+00																																
-L- STA. 338+00										56'																						
-L- STA. 338+00										56'																						
-L- STA. 338+00																																
-L- STA. 337+98			44'																													
-L- STA. 338+94.64																																
-L- STA. 341+40																																
-L- STA. 341+40										48'																						
-L- STA. 341+40																																
-L- STA. 341+26.03										56'																						
-L- STA. 341+12																																
-L- STA. 339+55.64																																
-L- STA. 341+79																																
-L- STA. 343+00																																
-L- STA. 343+00																		48'														
-L- STA. 343+00																																
-L- STA. 343+00																		48'														
-L- STA. 343+00																																
-L- STA. 342+05																																
-DR31- 11+25																																
-DR31- 11+26																																
SHEET 28																																
-L- STA. 343+75																		148'														
-L- STA. 344+50																																
-L- STA. 345+05.87																																
-L- STA. 344+98																																
-L- STA. 345+01.78																				52'												
-L- STA. 345+01.79																				32'												
-L- STA. 346+54.26																																
-L- STA. 346+56.19																																
-L- STA. 349+92.66				132'																												
-L- STA. 350+89.29																																
-L- STA. 349+94.53																																
-L- STA. 349+00																																
-L- STA. 348+85																		28'														
-L- STA. 348+70																																
-L- STA. 348+70																		84'														
-L- STA. 348+70																																
-L- STA. 349+50																																
-L- STA. 349+10.19																																
-L- STA. 348+23.06											92'																					
-Y34- STA. 12+50																																
-Y34- STA. 12+00																																
-Y34- STA. 12+20										76'																						
-Y34- STA. 12+47.71				24'																												
-Y34- STA. 12+43.32																																
-Y34- STA. 12+38.20																																
-Y34- STA. 11+00																																
-Y34- STA. 11+00		24'																														
-L- STA. 356+00																																
-L- STA. 354+85																																
-L- STA. 353+70																																
-L- STA. 353+60.49																																
-L- STA. 353+64.65											56'																					
-L- STA. 353+59.97											64'																					
SHEET TOTALS		24'	44'	156'						292'	212'							356'		84'												

*TOTAL L.F. FOR PAY QUANTITY SHALL BE COL. 'A' + (1.3 X COL.'B')

STATION	QUANTITIES FOR DRAINAGE STRUCTURES PER EACH (0' THRU 5.0')	LIN. FT. A 5.0' THRU 10.0'	LIN. FT. 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	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. 335+92.62																									6							PLUG & FILL EXIST. 18" CMP
-L- STA. 339+50	1												1			1																
-L- STA. 338+75																																
-L- STA. 338+00	1												1			1																
-L- STA. 338+00	1																			1		1										
-L- STA. 338+00																																
-L- STA. 338+00																																
-L- STA. 338+00	1																			1		1										
-L- STA. 337+98																								1								
-L- STA. 338+94.64																									5							PLUG & FILL EXIST. 18" CMP
-L- STA. 341+40	1												1			1																
-L- STA. 341+40																																
-L- STA. 341+40	1			1		1			1																							
-L- STA. 341+26.03																																
-L- STA. 341+12	1												1				1															
-L- STA. 339+55.64																																
-L- STA. 341+79																									3							PLUG & FILL EXIST. 18" CMP
-L- STA. 343+00	1												1			1																
-L- STA. 343+00																																
-L- STA. 343+00	1			1		1			1																							
-L- STA. 343+00																																
-L- STA. 343+00	1												1				1															
-L- STA. 342+05																																
-DR31- 11+25																																
-DR31- 11+26	1												1			1																
SHEET 28																																
-L- STA. 343+75																																
-L- STA. 344+50	1			1		1			1																							
-L- STA. 345+05.87	1	5	11.31																			1				1						REMOVE EXIST. HW
-L- STA. 344+98	1											1				1																
-L- STA. 345+01.78																																
-L- STA. 345+01.79																																
-L- STA. 346+54.26	1	4.38																		1		1									87'	REMOVE PART OF EXIST. 30" CM PIPE
-L- STA. 346+56.19																																
-L- STA. 349+92.66																																
-L- STA. 350+89.29	1			1		1			1																							
-L- STA. 349+94.53																																
-L- STA. 349+00	1							1		1	1																					
-L- STA. 348+85																																
-L- STA. 348+70	1							1		1	1																					
-L- STA. 348+70																																
-L- STA. 348+70	1												1			1																
-L- STA. 349+50	1												1			1																
-L- STA. 349+10.19																																
-L- STA. 348+23.06																																
-Y34- STA. 12+50	1																1	1														
-Y34- STA. 12+00	1												1			1																
-Y34- STA. 12+20																																
-Y34- STA. 12+47.71																												2@24"				
-Y34- STA. 12+43.32	1	4.22																		1												
-Y34- STA. 12+38.20																																
-Y34- STA. 11+00	1																1	1														
-Y34- STA. 11+00																												2@15"				
-L- STA. 356+00	1												1			1																
-L- STA. 354+85																																
-L- STA. 353+70	1													1		1																
-L- STA. 353+60.49	1	1.46																		1		1										
-L- STA. 353+64.65																																
-L- STA. 353+59.97																									3							PLUG & FILL EXIST. 15" CMP, REMOVE HW
SHEET TOTALS	27	15.06	11.31	4		4		2		2	2	1	11	1		11	4	2		5		5		1	17	1		2@15", 2@24"			87'	

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