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W143-2

COMPUTED BY: BAM DATE: 08/04/15

CHECKED BY: DSW DATE: 08/05/15

PROJECT NO.	SHEET NO.
U-5104	3D-3

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

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)

LINE & STATION	OFFSET		STRUCTURE NUMBER FROM	STRUCTURE NUMBER TO	TOP ELEVATION FT.	INVERT ELEVATION FT.	INVERT ELEVATION FT.	MINIMUM REQUIRED SLOPE %
L 43+00	19	LT	0625		2209.4			
			0625	0627		2204.0	2203.4	
L 43+00	18	RT	0626		2209.4			
			0626	0625		2206.3	2204.0	
L 44+00	18	LT	0627		2206.6			
			0627	0633		2203.1	2202.8	
L 44+00	19	RT	0628		2206.8			
			0628	0627		2203.8	2203.4	
L 45+00	18	LT	0629		2206.1			
			0629	0631		2202.6	2201.0	0.6
L 45+30	19	RT	0630		2205.5			
			0630	0631		2202.8	2201.0	
L 45+44	17	RT	0631		2205.5			
			0631	0632		2201.0	2200.7	
L 44+65	19	LT	0633		2206.1			
			0633	0629		2202.8	2202.6	0.4
L 45+22	18	LT	0634		2206.2			
			0634	0629		2203.2	2203.0	
L 45+36	40	LT	0635		2208.8			
			0635	0636		2205.8	2205.3	
L 45+36	35	LT	0636		2208.5			
			0636	EX		2205.3	2205.0	
L 45+01	30	LT	0637		2206.3			
			0637	0629		2203.5	2202.9	
L 11+50	19	RT	0402A		2166.2			
			0402A	0402		2163.0	2160.2	
L 10+91	19	RT	0402B		2164.4			
			0402B	0402		2160.5	2160.2	
L 23+35	52	LT	0504A		2187.5			
			0504A	0504		2185.0	2184.4	
Y3 11+60	12	RT	0508A		2178.7			
			0508A	0529		2175.7	2172.8	
Y3 11+40	29	LT	0508D	0512B		2178.5	2175.0	
L 28+85	19	LT	0510A		2179.2			
			0510A	0518A		2175.4	2175.1	
L 28+S5	19	LT	0512A		2180.3			
			0512A	0512B		2175.3	2175.0	
Y3 11+47	12	LT	0512B		2179.5			
			0512B	0527		2175.0	2172.9	
L 31+50	19	RT	0515A		2191.0			
			0515A	0515		2188.0	2183.7	
Y3 10+51	11	RT	0518A		2178.8			
			0518A	0518		2175.1	2174.7	
Y3 7+95	11	LT	0521A		2174.0			
			0521A	0521		2170.2	2170.1	
Y4 12+01	16	RT	0601A		2201.1			
			0601A	0602B		2197.2	2196.8	
Y4 12+17	13	LT	0602A		2201.9			
			0602A	0602B		2197.5	2196.8	
Y4 11+97	19	LT	0602B		2200.9			

C. S. PIPE (SE: SHOP ELONGATED) — SIZE / THICKNESS OR GAUGE

FROM	TO	12 .064	15 .064	18 .064	24 .064		30 .079			36 .079			42 .109	48 .109	54	60	66	72	78	84		
0625																						
0625	0627																					
0626																						
0626	0625																					
0627																						
0627	0633																					
0628																						
0628	0627																					
0629																						
0629	0631																					
0630																						
0630	0631																					
0631																						
0631	0632																					
0633																						
0633	0629																					
0634																						
0634	0629																					
0635																						
0635	0636																					
0636																						
0636	EX																					
0637																						
0637	0629																					
0402A																						
0402A	0402																					
0402B																						
0402B	0402																					
0504A																						
0504A	0504																					
0508A																						
0508A	0529																					
0508D	0512B		16																			
0510A																						
0510A	0518A																					
0512A																						
0512A	0512B																					
0512B																						
0512B	0527																					
0515A																						
0515A	0515																					
0518A																						
0518A	0518																					
0521A																						
0521A	0521																					
0601A																						
0601A	0602B																					
0602A																						
0602A	0602B																					
0602B																						
SHEET TOTALS			16																			

R. C. PIPE CLASS IV

FROM	TO	12	15	18	24	30	36	42	48	54	60	66	72	78	84	
0625																
0625	0627		100													
0626																
0626	0625		36													
0627																
0627	0633			68												
0628																
0628	0627		36													
0629																
0629	0631			56												
0630																
0630	0631		8													
0631																
0631	0632			16												
0633																
0633	0629			36												
0634																
0634	0629		24													
0635																
0635	0636		28													
0636																
0636	EX		4													
0637																
0637	0629		12													
0402A																
0402A	0402			52												
0402B																
0402B	0402		4													
0504A																
0504A	0504		72													
0508A																
0508A	0529		60													
0508D	0512B															
0510A																
0510A	0518A		40													
0512A																
0512A	0512B		32													
0512B																
0512B	0527		100													
0515A																
0515A	0515		100													
0518A																
0518A	0518			24												
0521A																
0521A	0521				12											
0601A																
0601A	0602B		32													
0602A																
0602A	0602B		20													
0602B																
SHEET TOTALS			708	252	12											

QUANTITIES FOR DRAINAGE STRUCTURES — NOTE: TOTAL LIN. FT. FOR PAY QUANTITY SHALL BE A + (1.3 X B)

FROM	TO	ENDWALLS STD. 838.01 OR STD. 838.11 (UNLESS NOTED OTHERWISE) CY	REINFORCED ENDWALLS CY	DRAINAGE STRUCTURE MASONRY CY	0' THRU 5' EACH	A 5' THRU 10' LIN. FT.	B 10' AND ABOVE LIN. FT.	C.B. STD. 840.01 OR STD. 840.02	FRAME, GRATES, AND HOOD STD. 840.03 GRATE TYPE E	F	G
0625					1	0.4		1			1
0625	0627										
0626					1			1		1	
0626	0625										
0627					1			1			1
0627	0633										
0628					1			1		1	
0628	0627										
0629					1			1			1
0629	0631										
0630					1			1		1	
0630	0631										
0631					1						
0631	0632										
0633					1			1			1
0633	0629										
0634					1			1			1
0634	0629										
0635					1			1		1	
0635	0636										
0636					1			1			1
0636	EX										
0637					1						
0637	0629										
0402A					1			1			1
0402A	0402										
0402B					1			1	1		
0402B	0402										
0504A					1						
0504A	0504										
0508A					1			1		1	
0508A	0529										
0508D	0512B										
0510A					1						
0510A	0518A										
0512A					1			1	1		
0512A	0512B										
0512B					1			1			1
0512B	0527										
0515A					1			1			1
0515A	0515										
0518A					1			1			1
0518A	0518										
0521A					1						
0521A	0521										
0601A					1			1			1
0601A	0602B										
0602A					1			1		1	
0602A	0602B										
0602B					1			1		1	
SHEET TOTALS					25	0.4		20	2	7	11

FROM	TO	D.I. STD. 840.14 OR STD. 840.15	D.I. FRAME AND GRATES STD. 840.16	G.D.I. TYPE "A" STD. 840.17 OR STD. 840.26	G.D.I. TYPE "B" STD. 840.18 OR STD. 840.27	G.D.I. TYPE "D" STD. 840.19 OR STD. 840.28	G.D.I. (W.S. FLAT) FRAME WITH GRATE STD. 840.20	G.D.I. (W.S. FLAT) FRAME W/ 2 GRATES STD. 840.20	G.D.I. (W.S. SAG) FRAME W/ GRATE STD. 840.22	G.D.I. (W.S. SAG) FRAME W/ 2 GRATES STD. 840.22	G.D.I. (N.S. SAG) FRAME W/ GRATE STD. 840.24	G.D.I. (N.S. SAG) FRAME W/ 2 GRATES STD. 840.24	G.D.I. (N.S. FLAT) FRAME W/ GRATE STD. 840.29	G.D.I. (N.S. FLAT) FRAME W/ 2 GRATES STD. 840.29	J.B. STD. 840.31 OR STD. 840.32	T.B.J.B. STD. 840.34	T.B.D.I. STD. 840.35	T.B.D.I. FOR STEEL GRATES STD. 840.36	STEEL FRAME WITH TWO GRATES STD. 840.37	TB M.H. STD. 840.52 6' DIAMETER	M.H. FRAME AND COVER STD. 840.54	CONVERT EXISTING C.B. TO J.B.	15" C.S. ELBOW	18" C.S. ELBOW	24" C.S. ELBOW	30" C.S. ELBOW	OFFSET CB STD. 804.D02
0625																											
0625	0627																										
0626																											
0626	0625																										
0627																											
0627	0633																										
0628																											
0628	0627																										
0629																											
0629	0631																										
0630																											
0630	0631																										
0631																				1	1						
0631	0632																										
0633																											
0633	0629																										
0634																											
0634	0629																										
0635																											
0635	0636																										
0636																											
0636	EX																										
0637					1									1													
0637	0629																										
0402A																											
0402A	0402																										
0402B																											
0402B	0402																										
0504A		1	1																								
0504A	0504																										
0508A																											
0508A	0529																										
0508D	0512B																										
0510A																1					1						
0510A	0518A																										
0512A																											
0512A	0512B																										
0512B																											
0512B	0527																										
0515A																											
0515A	0515																										
0518A																											
0518A	0518																										
0521A				1						1																	
0521A	0521																										
0601A																											
0601A	0602B																										
0602A																											
0602A	0602B																										
0602B																											
SHEET TOTALS		1	1	1	1					1				1		1				1	2						

FROM	TO		FLOWABLE FILL CY	CONCRETE COLLARS CL. "B" STD. 840.72 CY	CONCRETE AND BRICK PIPE PLUG STD. 840.71 CY	PIPE REMOVAL LIN. FT.	REMARKS
0625							
0625	0627						
0626							
0626	0625						
0627							
0627	0633						
0628							
0628	0627						
0629							REMOVE EX CB
0629	0631						
0630							
0630	0631						
0631							
0631	0632			0.4465			
0633							
0633	0629						
0634							
0634	0629						
0635							
0635	0636						
0636							
0636	EX			0.3990			COLLAR AND EXTEND EXISTING PIPE
0637							
0637	0629						
0402A							
0402A	0402						
0402B							
0402B	0402						
0504A							
0504A	0504						
0508A							
0508A	0529						
0508D	0512B						OPEN END PIPE
0510A							
0510A	0518A						
0512A							
0512A	0512B						
0512B							
0512B	0527						
0515A							
0515A	0515						
0518A							
0518A	0518						
0521A							
0521A	0521						
0601A							
0601A	0602B			0.7980			COLLAR AND EXTEND EXISTING PIPE
0602A							
0602A	0602B						
0602B							
SHEET TOTALS				1.6435			

ABBREVIATIONS

C.A.A.	CORRUGATED ALUMINIUM ALLOY
C.B.	CATCH BASIN
C.S.	CORRUGATED STEEL
D.I.	DROP INLET
G.D.I.	GRATED DROP INLET
H.D.P.E.	HIGH DENSITY POLYETHYLENE
J.B.	JUNCTION BOX
M.H.	MANHOLE
N.S.	NARROW SLOT
P.V.C.	POLYVINYL CHLORIDE
R.C.	REINFORCED CONCRETE
T.B.D.I.	TRAFFIC BEARING DROP INLET
T.B.J.B.	TRAFFIC BEARING JUNCTION BOX
W.S.	WIDE SLOT