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TGSZJR-LAPTOP

COMPUTED BY:	Zachary Richard, PE	DATE:	3/23/2022
CHECKED BY:	David Petty, PE	DATE:	5/25/2022

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROJECT NO.	SHEET NO.
A-0009CB	3D-1

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 / SIZE / THICKNESS OR GAUGE	OFFSET	STRUCTURE NUMBER FROM	STRUCTURE NUMBER TO	TOP ELEVATION FT.	INVERT ELEVATION FT.	INVERT ELEVATION FT.	MINIMUM REQUIRED SLOPE %	Drainage Pipe (RCP, CSP, CAAP, HDPE, or PVC) 15	18	24	30	36	42	48	DO NOT USE RCP	DO NOT USE CSP	DO NOT USE CAAP	DO NOT USE HDPE	DO NOT USE PVC
L 210+31	0 CL	2001			2212.8	2211.0													
L 212+83	0 CL	2002			2217.1	2212.9													
L 213+18	47 RT	2003						68											
L 215+79	0 CL	2004			2223.2	2218.3													
L 216+79	35 RT	2005								52									
L 222+63	47 RT	2101		2240.2															
		2101	2103		2238.2	2231.4													
L 223+01	34 RT	2102		2236.5															
		2102	2103		2235.2	2232.2	0.4												
L 222+63	36 RT	2103		2235.0															
		2103	2104		2231.4	2229.4													
L 222+85	42 LT	2105						44											
L 227+16	0 CL	2106			2239.5	2235.8													
L 229+76	28 RT	2107		2248.0															
		2107	2108		2244.8	2243.7													
L 229+05	28 RT	2108		2246.9															
		2108	2109		2243.7	2242.2		56								X	X		
L 234+00	28 RT	2110		2255.2															
		2110	2111		2252.0	2250.2													
L 232+99	28 RT	2111		2253.4															
		2111	2112		2250.2	2247.8													
L 231+42	28 RT	2112		2251.0															
		2112	2115		2247.8	2246.2	0.6												
L 230+50	51 RT	2113		2261.0															
		2113	2114		2260.0	2247.4													
L 230+52	35 RT	2114		2249.9															
		2114	2115		2245.9	2245.5	0.9			8						X	X		
L 230+52	28 RT	2115		2249.5															
		2115	2116		2245.5	2240.8	0.5												
L 230+56	38 LT	2116		2247.3															
L 235+17	40 RT	2201		2257.5															
		2201	2203		2254.0	2250.9	0.5												
L 236+00	36 RT	2202		2256.7															
		2202	2203		2253.7	2252.9			80							X	X		
L 235+19	28 RT	2203		2257.2															
		2203	2212		2250.9	2250.5													
L 239+54	0 CL	2204			2259.7	2257.5													
L 239+56	37 RT	2204																	
L 239+52	35 LT	2204																	
L 240+20	36 RT	2205		2264.7															
		2205	2206		2261.7	2261.3	0.4		60							X	X		
L 246+00	39 RT	2207		2275.5															
		2207	2208		2274.0	2272.0	0.6		52										
L 245+50	37 RT	2208		2274.4															
		2208	2209		2271.0	2270.5													
L 247+60	34 RT	2210		2281.4															
		2210	2211		2278.6	2278.4		60								X	X		
L 260+00	36 RT	2302		2310.1															
		2302	2304		2305.3	2302.3	0.7			132						X	X		
L 258+68	193 RT	2303																	
SHEET TOTALS								228	192	192									

LINE & STATION / SIZE / THICKNESS OR GAUGE	C. S. PIPE .064	15	.064	18	.064	24	.064	30	.064	36	.064	42	.064	48	R. C. PIPE CLASS III 15	18	24	30	36	42	48	R. C. PIPE CLASS IV 15	18	24	30	36	42	36" CAA PIPE, 0.075" THICK	48" CAA PIPE, 0.105" THICK	36" WELDED STEEL PIPE 0.5" THICK, GRADE B, IN SOIL	36" WELDED STEEL PIPE 0.5" THICK, GRADE B, NOT IN SOIL	18" PIPE REHABILITATION CIPP LINER	24" PIPE REHABILITATION CIPP LINER	ENDWALLS STD. 838.01 OR STD. 838.11 (UNLESS NOTED OTHERWISE) CY
L 210+31																	100																
L 212+83																				88													4.500
L 213+18																																	
L 215+79																					100												6.000
L 216+79																																	
L 222+63																																	
				12																													
L 223+01																																	
																						40											
L 222+63																																	
																	84																
L 222+85																																	
L 227+16																	88																
L 229+76																																	
																						68											
L 229+05																																	
L 234+00																																	
																						100											
L 232+99																																	
																						152											
L 231+42																																	
																						88											
L 230+50																																	
L 230+52																																	
L 230+52																																	
																								64									
L 230+56																																	
L 235+17																																	
																													12				
L 236+00																																	
L 235+19																																	
				12																													
L 239+54																																	
L 239+56																																	6.000
L 239+52																																	6.000
L 240+20																																	
L 246+00																																	
L 245+50																																	
																	76																
L 247+60																																	
L 260+00																																	
L 258+68																																	
SHEET TOTALS				12				12									272	76		88	100	448		64			144						22.500

LINE & STATION / SIZE / THICKNESS OR GAUGE	QUANTITIES FOR DRAINAGE STRUCTURES (NOTE: TOTAL LIN. FT. FOR PAY QUANTITY SHALL BE A + (1.3 X B)) A: 0' THRU 5' EACH	A: 5' THRU 10' LIN. FT.	A: 10' AND ABOVE LIN. FT.	B	4-SIDED OTCB, SEE DETAIL SHEET 2D-1	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, 840.26, OR 840.45	G.D.I. TYPE "B" STD. 840.18, 840.27, OR 840.45	G.D.I. TYPE "D" STD. 840.19 OR STD. 840.28	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	J.B. STD. 840.31 OR STD. 840.32	T.B.J.B. STD. 840.34	T.B.D.I. STD. 840.35	6" PVC PIPE (SPRING BOX)	SPRING BOX STD. 840.41	6" HDPE PIPE (LF)	M.H. FRAME AND COVER STD. 840.54	TB PRECAST DRAINAGE STRUCTURE STD. 840.46	PRECAST 4' DIA MH STD 840.52	CONTRACTOR DESIGN 4' DIA MH OVER 30'	T.B. G.D.I TYPE "A" SEE SHEET 2D-3	CONVERT EXISTING D.I. TO J.B. SEE SHEET 2D-2	ADJUST D.I.	MIN DEPTH TYPE A SPECIAL DSN SEE SHEET 2D-7	15" C.S. ELBOW, 0.064" THICK	18" C.S. ELBOW, 0.064" THICK	24" C.S. ELBOW, 0.064" THICK	30" C.S. ELBOW, 0.064" THICK	36" C.S. ELBOW, 0.064" THICK	42" C.S. ELBOW, 0.064" THICK	48" C.S. ELBOW, 0.064" THICK	48" C.A.A. ELBOW, 0.105" THICK	BERM DRAINAGE OUTLET STD. 850.10 (SY)	BERM DRAINAGE OUTLET STD. 850.11 (SY)	BERM DRAINAGE OUTLET 36" DSN,SHT 2D-4 (SY)	BERM DRAINAGE OUTLET 42" DSN,SHT 2D-5 (SY)	BERM DRAINAGE OUTLET 48" DSN,SHT 2D-6 (SY)	FLOWABLE FILL CY	CONCRETE COLLARS CL. "B" STD. 840.72 CY	PIPE REMOVAL LIN. FT.	REMARKS
L 210+31																																																		
L 212+83																																																		BURY 0.7 FEET
L 213+18																																																		
L 215+79																																																		BURY 0.8 FEET
L 216+79																																																		
L 222+63																																																		
L 223+01																																																		
L 222+63	1							1				1																																						
L 222+85																																																		
L 227+16																																																		
L 229+76	1							1			1																																							
L 229+05	1							1			1																																							
L 234+00	1							1			1																																							
L 232+99	1							1			1																																							
L 231+42	1							1			1																																							
L 230+50																																																	0.3528	6" PIPE COLLAR
L 230+52	1							1				1																																						
L 230+52	1							1			1																																							
L 230+56	1	1.5				1	1																																											
L 235+17																																													31					42" BDO SPECIAL DSN SEE SHEET 2D-5
																																						1												
L 236+00	1							1				1																																						
L 235+19	1	1.3					1			1																																								
L 239+54																																																		BURY 0.8 FEET
L 239+56																																																		
L 239+52																																																		
L 240+20	1							1				1																																						
L 246+00																																																		
L 245+50	1				1																																													4-SIDED OTCB, SEE SHEET 2D-1
L 247+60	1							1				1																																						
L 260+00	1						1				1	1																																						3GI
L 258+68																																											11							
SHEET TOTALS	15	2.8		1	1	1	2	11		7	1	6							16														1			11			31			0.3528	

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