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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-2

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	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 258+68	36 RT	2303	2304		2404.4	2302.8													
		2304	2305	2307.1															
L 256+83	36 RT	2303	2304	2302.3	2298.1	1.3				184						X	X		
		2305	2306	2302.9															
L 255+50	36 RT	2305	2306	2298.1	2295.1	1.7				132						X	X		
		2306	2307	2299.9															
L 254+00	36 RT	2306	2307	2295.1	2291.7	1.9				152						X	X		
		2307	2309	2296.5															
L 252+50	79 RT	2307	2309	2291.7	2288.1	2.1				152						X	X		
		2308	2309	2311.2															
L 252+50	36 RT	2308	2309	2307.7	2287.1	0.8													
		2309	2311	2292.9								60				X	X		
L 251+90	63 RT	2309	2311	2287.1	2285.6	1.8							60			X	X		
		2310	2311	2299.5															
L 251+88	36 RT	2310	2311	2298.0	2287.1														
		2311	2312	2291.4															
L 251+18	36 RT	2311	2312	2285.6	2283.9	2.0							68			X	X		
		2312	2313	2289.7															
L 250+50	32 RT	2312	2313	2283.9	2282.3	2.1							68			X	X		
		2313	2314	2289.0															
L 262+06	36 RT	2313	2314	2282.3	2280.7	0.5													
		2315	2316	2314.8															
L 267+41	0 CL	2315	2316	2311.3	2304.4														
L 272+55	42 RT	2401		2322.7	2319.0														
		2402		2338.1															
L 272+16	31 RT	2402	2403	2336.6	2334.4	1.4			40							X	X		
		2403		2337.9															
L 270+82	46 RT	2403	2406	2334.4	2331.0	0.4													
		2404		2340.2															
L 270+90	34 RT	2404	2405	2336.7	2329.6	1.0													
		2405		2337.6															
L 270+90	29 RT	2405	2406	2329.6	2329.5														
		2406		2335.0															
L 272+11	29 LT	2406	2407	2329.5	2328.0	0.3													
		2408						36											
L 275+94	41 RT	2410						64											
L 279+13	52 LT	2501			2356.8	2351.0													
L 279+85	34 RT	2502		2370.9															
		2502	2503		2367.7	2366.2													
L 279+62	34 RT	2503		2369.4															
		2503	2504		2366.2	2357.8	0.3	108								X	X		
L 281+76	59 LT	2505																	
L 282+26	47 LT	2506																	
L 285+93	30 LT	2508		2419.6															
		2508	2509		2416.8	2407.9	0.7												
L 284+88	30 LT	2509		2410.7															
		2509	2510		2407.7	2399.7													
L 287+00	33 RT	2511		2425.9															
		2511	2512		2423.9	2423.7		12								X	X		
L 290+20	45 RT	2513		2448.6															
						SHEET TOTALS		220	40	620		196							

LINE & STATION	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 258+68				160																														
L 256+83																																		
L 255+50																																		
L 254+00																																		
L 252+50																																		
L 252+50										44																								
L 251+90																																		
L 251+88				28																														
L 251+18																																		
L 250+50																																		
L 262+06				80																														
L 267+41																80																		
L 272+55				92																														
L 272+16																																		
L 270+82																						124												
L 270+90										16																								
L 270+90				4																														
L 272+11				68																														
L 279+13																												148						3.400
L 279+85																						20												
L 279+62																																		
L 281+76				28																														
L 282+26																																		
L 285+93																																		
L 284+88																																		
L 287+00																120																		
L 290+20																																		
SHEET TOTALS		28		188				60								120	80					20	124		92	152		148						3.400

QUANTITIES FOR DRAINAGE STRUCTURES

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

LINE & STATION	0' THRU 5' EACH	A: 5' THRU 10' LIN. FT.	B: 10' AND ABOVE LIN. FT.	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
																													1																	
L 258+68	1						1				1																																			
L 256+83	1						1				1																																			
L 255+50	1						1				1																																			
L 254+00	1						1				1																																			
L 252+50																																								31						
L 252+50																																				1										
L 251+90	1	0.8					1				1																																			
L 251+88																													1									11								
L 251+18	1	0.8					1				1																																			
L 250+50	1	0.8					1				1																																			TIE EXISTING 6" HDPE INTO BOX
L 262+06	1	1.7					1				1																																			
L 267+41	1							1			1																																			
L 272+16	1								1				1																																	
L 270+90	1	3.0						1		1																																				
L 270+90	1	0.5								1				1																																
L 279+13																																														BURY 0.6 FEET
L 279+85	1							1			1																																			
L 279+62	1							1			1																																			
L 281+76	1																		40	1										2																
L 282+26	1																		32	1																										
L 285+93	1							1			1																																			
L 284+88	1							1			1																																			
L 287+00	1								1	1																																				
L 290+20	1							1			1																																			
SHEET TOTALS	20	7.6					8	7	1	7		11			2	72	2												2	2			2				11		62							

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