Z10267

COMPUTED BY: VHB DATE: 5/9/2024

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PROJECT NO.	SHEET NO.
B-5982	3D-1

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)

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

LINE & STATION	OFFSET		STRUCTURE NUMBER FROM	STRUCTURE NUMBER TO	TOP ELEVATION FT.	INVERT ELEVATION FT.	INVERT ELEVATION FT.	MINIMUM REQUIRED SLOPE %
			0401	0402		2624.1	2613.6	3.8
L 13+00	59	LT	0401		2628.1			
			0402	0403		2613.6	2601.6	5.5
L 15+00	59	LT	0402		2616.3			
			0403	0405		2601.3	2588.5	3.0
L 17+00	62	LT	0403		2604.3			
			0404	2B03		2599.9	2590.3	
L 17+75	42	RT	0404		2602.6			
			0405	0406		2588.0	2587.9	
L 19+15	65	LT	0405		2591.5			
			2B03	0414		2587.4	2554.2	
L 19+37	120	RT	0414		2558.6			
			0414	0407		2548.3	4548.2	
L 19+19	43	LT	0406		2589.9			
			0408	0410		2579.9	2573.8	
L 21+28	44	LT	0408		2582.6			
			0409	0411		2579.0	2573.7	
L 21+47	44	RT	0409		2581.8			
			0410	2B07		2573.8	2567.8	
L 22+75	42	LT	0410		2576.5			
			0411	0412		2573.7	2569.7	
L 22+75	42	RT	0411		2576.5			
			0412	0413		2569.7	2523.1	0.4
L 24+05	40	RT	0412		2572.4			
L 22+43	87	RT	0000					
L 24+06	84	RT	0000					
L 23+83	43	LT	0000					
L 21+87	42	LT	0000					
L 19+66	32	RT	0000					
L 18+88	88	RT	0000					
L 15+18	58	RT	0000					
L 23+87	137	RT	0000					
L 21+65	135	RT	0000					
			2B01	2B02		2596.0	2588.4	
L_DET 17+22	36	RT	2B02		2591.9			
			2B02	2B03		2587.9	2587.4	
L_DET 19+37	43	RT	2B03		2593.0			
			2B03	2B04		2587.4	2548.9	
L_DET 21+00	23	RT	2B05		2575.4			
			2B05	2B06		2572.7	2569.2	
L_DET 22+50	19	RT	2B06		2571.9			
			2B06	2B07		2569.2	2568.8	
L_DET 25+58	15	LT	2B07		2571.5			
			2B07	2B08		2566.7	2529.0	

LINE & STATION	FROM	TO	Side Drain Pipe (RCP, CSP, CAAP, HDPE, PVC, or PP PIPE) 12	15	18	24	30	36	DO NOT USE RCP	DO NOT USE CSP	DO NOT USE CAAP	DO NOT USE HDPE	DO NOT USE PVC	DO NOT USE PP PIPE	C. S. PIPE 12 (.064)	15 (.064)	18 (.064)	24 (.064)	R. C. PIPE CLASS III 12	15	18	24	R. C. PIPE CLASS IV 12	15	18	24	30	R. C. PIPE CLASS V 12	15	18	24	STRUCTURAL PLATE PIPE 60	66	72	24" WELDED STEEL PIPE 0.312" THICK, GRADE B IN SOIL	24" WELDED STEEL PIPE 0.312" THICK, GRADE B NOT IN SOIL
	0401	0402		200																															
L 13+00	0401																																		
	0402	0403		200																															
L 15+00	0402																																		
	0403	0405			212																														
L 17+00	0403																																		
	0404	2B03																						160												
L 17+75	0404																																		
	0405	0406																								24									
L 19+15	0405																																		
	2B03	0414				76																													
L 19+37	0414																																		
	0414	0407					24																												
L 19+19	0406																																		
	0408	0410																						144												
L 21+28	0408																																		
	0409	0411																						128												
L 21+47	0409																																		
	0410	2B07																						176												
L 22+75	0410																																		
	0411	0412																						128												
L 22+75	0411																																		
	0412	0413		100																															
L 24+05	0412																																		
L 22+43	0000																																		
L 24+06	0000																																		
L 23+83	0000																																		
L 21+87	0000																																		
L 19+66	0000																																		
L 18+88	0000																																		
L 15+18	0000																																		
L 23+87	0000																																		
L 21+65	0000																																		
	2B01	2B02																								84									
L_DET 17+22	2B02																																		
	2B02	2B03																																44	44
L_DET 19+37	2B03																																		
	2B03	2B04				84																													
L_DET 21+00	2B05																																		
	2B05	2B06																						148												
L_DET 22+50	2B06																																		
	2B06	2B07																						32												
L_DET 25+58	2B07																																		
	2B07	2B08		100																															
SHEET TOTALS				600	212	160	24																	916		108									44	44
PROJECT TOTALS				600	212	160	24																	916		108									44	44

LINE & STATION	FROM	TO	ENDWALLS STD. 838.01 OR STD. 838.11 (UNLESS NOTED OTHERWISE) CY	REINFORCED ENDWALLS CY	DRAINAGE STRUCTURE MASONRY CY	QUANTITIES FOR DRAINAGE STRUCTURES (NOTE: TOTAL LIN. FT. FOR PAY QUANTITY SHALL BE A + (1.3 X B)) 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		CONCRETE TRANSITIONAL SECTION D.I. STD. 852.04 OR STD. 852.06	C.B. STD. 852.05	OPEN THROAT C.B. STD. 840.04 OR STD. 840.05	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. (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
	0401	0402																					
L 13+00	0401					1											1			1	1		
	0402	0403																					
L 15+00	0402					1												1			1		
	0403	0405																					
L 17+00	0403					1												1			1		
	0404	2B03																					
L 17+75	0404					1												1					1
	0405	0406																					
L 19+15	0405					1												1			1		
	2B03	0414																					
L 19+37	0414					1	5.0	0.3															
	0414	0407																					
L 19+19	0406																						
	0408	0410																					
L 21+28	0408					1												1					1
	0409	0411																					
L 21+47	0409					1												1					1
	0410	2B07																					
L 22+75	0410					1												1					1
	0411	0412																					
L 22+75	0411					1												1					1
	0412	0413																					
L 24+05	0412					1												1					1
L 22+43	0000																						
L 24+06	0000																						
L 23+83	0000																						
L 21+87	0000																						
L 19+66	0000																						
L 18+88	0000																						
L 15+18	0000																						
L 23+87	0000																						
L 21+65	0000																						
	2B01	2B02																					
L_DET 17+22	2B02					1												1			1		
	2B02	2B03																					
L_DET 19+37	2B03					1	0.6											1					1
	2B03	2B04																					
L_DET 21+00	2B05					1												1			1		
	2B05	2B06																					
L_DET 22+50	2B06					1												1			1		
	2B06	2B07																					
L_DET 25+58	2B07					1																	
	2B07	2B08																					
SHEET TOTALS						16	5.6	0.3									1	13		1	7		7
PROJECT TOTALS						16	6.0										1	13		1	7		7

LINE & STATION	FROM	TO	DRIVEWAY D.I. STD. 840.30	FRAME W/ GRATE FOR DRIVEWAY STD. 840.30	J.B. STD. 840.31 OR STD. 840.32	ANGLED VANE GRATES AND FRAMES STD. 840.33	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	TEMP STEEL PLATE COVER MASONRY DRAINAGE	M.H. FRAME AND COVER STD. 840.54	ADJUST DI		15" SIDE DRAIN PIPE ELBOW	18" SIDE DRAIN PIPE ELBOW	24" SIDE DRAIN PIPE ELBOW	ENERGY DISSIPATION BASIN		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
	0401	0402																						
L 13+00	0401																							3GI
	0402	0403																						
L 15+00	0402																							
	0403	0405																						
L 17+00	0403																							
	0404	2B03																						
L 17+75	0404																							
	0405	0406																						
L 19+15	0405																							
	2B03	0414																2						
L 19+37	0414				1							1												
	0414	0407																						
L 19+19	0406																					0.6000			COLLAR - 0.5526 CY, SAY 0.6
	0408	0410																						
L 21+28	0408																							
	0409	0411																						
L 21+47	0409																							
	0410	2B07																						
L 22+75	0410																							
	0411	0412																						
L 22+75	0411																							
	0412	0413												2										
L 24+05	0412																							
L 22+43	0000																						98	
L 24+06	0000																						90	
L 23+83	0000																						7	
L 21+87	0000																						8	
L 19+66	0000																						160	
L 18+88	0000																						188	
L 15+18	0000																						47	
L 23+87	0000																						21	
L 21+65	0000																						39	
	2B01	2B02																					84	TEMPORARY
L_DET 17+22	2B02																							
	2B02	2B03																						
L_DET 19+37	2B03																							
	2B03	2B04															2						84	TEMPORARY
L_DET 21+00	2B05																							
	2B05	2B06																					148	TEMPORARY
L_DET 22+50	2B06																							
	2B06	2B07																					32	TEMPORARY
L_DET 25+58	2B07								1	1			1											INSTALL AND ADJUST TB 2GI
	2B07	2B08													3									6' OF PIPE FOR FINAL DESIGN
SHEET TOTALS					1				1	1		1	1		5		4				0.6000		1006	
PROJECT TOTALS					1				1	1		1	1		5		4				0.6000		1006	