RAL-2TK9470H0P

COMPUTED BY:	MKD	DATE:	09/13/2021
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PROJECT NO.	SHEET NO.
U2579-AB	3D-17

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 / SIZE / THICKNESS OR GAUGE	OFFSET		STRUCTURE NUMBER FROM	STRUCTURE NUMBER TO	TOP ELEVATION FT.	INVERT ELEVATION FT.	INVERT ELEVATION FT.	MINIMUM REQUIRED SLOPE %	Side Drain Pipe (RCP, CSP, CAAP, HDPE, PVC, or PP PIPE) 15	18	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 15 .064	18 .064	24 .064	30 .079	36 .079	42 .109
			1712	1711		819.0	812.2	1.3			x			x	x	x		24				
			1712																			
Y15 37+77	3	RT	1713		816.7																	
			1713	1703		812.2	808.0															
Y15 37+77	1	LT	1714		816.7																	
			1714	1713		812.2	812.2															
Y15 42+17	1	LT	1715		818.7																	
			1715	1730		809.6	809.0	0.4														
Y15 36+88	136	RT	1716		816.5																	
			1716	1705		814.8	810.3	0.4			x			x	x	x		24				
Y15 35+50	3	RT	1717		816.7																	
			1717	1703		812.2	808.0															
Y15 44+00	3	RT	1718		819.6																	
			1718	1708		815.7	810.4															
Y15 44+00	1	LT	1719		819.4																	
			1719	1718		815.7	815.7															
Y15 39+97	72	LT	1720		815.5																	
			1720	1724		811.1	811.0															
Y15 40+35	99	LT	1721		810.0																	
Y15 39+36	104	RT	1722		815.9																	
			1722	1705		809.6	808.8															
Y15 39+36	119	RT	1723		816.3																	
			1723	1722		814.3	810.1	1.6			x			x	x	x				16		
Y15 40+35	72	LT	1724		817.1																	
			1724	1721		811.0	810.0				x			x	x	x	28					
Y15 44+79	72	LT	1725		819.5																	
			1725	1726		816.8	811.5										32					
Y15 35+50	1	LT	1727		817.2																	
			1727	1717		813.4	812.7															
Y15 36+77	83	LT	1728		814.2																	
			1728	1701		807.6	807.5															
Y15 36+76	90	RT	1729		815.9																	
			1729	1703		808.3	807.8															
Y15 41+94	3	LT	1730		818.7																	
			1730	1706		809.5	808.8															
Y15 35+00	95	LT	1731		809.3																	
Y15 35+00	65	LT	1732		815.2												32					
			1732	1731		812.2	809.3															
Y15 36+00	67	LT	1733		816.0																	
			1733	1732		813.0	812.2															
Y15 37+50	71	LT	1734		816.1																	
			1734	1735		813.4	809.5															
Y15 36+76	2	LT	1736		816.8																	
			1736	1728		807.8	807.6															
Y15 48+77	3	RT	1801		821.9																	
			1801	1829		814.4	814.3															
Y15 48+94	61	RT	1802		821.7																	
Y15 49+01	119	RT	1803		815.5																	
			1803	1802		815.5	815.2	0.3														
			1805																			
							SHEET TOTALS										92	48		16		

FROM	TO	R. C. PIPE CLASS III 12	15	18	24	30	36	42	48	R. C. PIPE CLASS IV 15	18	24	30	36	42	48	R. C. PIPE CLASS V 42	24" WELDED STEEL PIPE, IN SOIL(OUT OF SOIL)	30" WELDED STEEL PIPE, IN SOIL (OUT OF SOIL)	42" WELDED STEEL PIPE, IN SOIL (OUT OF SOIL)	48" WELDED STEEL PIPE, IN SOIL (OUT OF SOIL)	ENDWALLS STD. 838.01 OR STD. 838.11 (UNLESS NOTED OTHERWISE) 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.
1712	1711																								
1712																									
1713																							1		
1713	1703				100																				
1714																							1		
1714	1713				4																				
1715																							1	3.9	
1715	1730				20																				
1716																									
1716	1705																								
1717																							1		
1717	1703		124																						
1718																							1		
1718	1708		180																						
1719																							1		
1719	1718		4																						
1720																							1		
1720	1724		36																						
1721																									
1722																							1		
1722	1705						248																		
1723																									
1723	1722																								
1724																							1		
1724	1721																								
1725																							1		
1725	1726																								
1727																							1		
1727	1717		4																						
1728																							1		
1728	1701							20																	
1729																							1		
1729	1703																			44(44)					
1730																							1		
1730	1706																	54(54)							
1731																									
1732																							1		
1732	1731																								
1733																							1		
1733	1732		96																						
1734																							1		
1734	1735		32																						
1736																							1		
1736	1728																			40(40)					
1801																							1	2.5	
1801	1829								4																
1802																							1	2.0	
1803																						4.500			
1803	1802							60																	
1805																						4.500			
SHEET TOTALS			476		124		248	80	4									54(54)		84(84)		9.000	20	8.4	

FROM	TO	C.B. STD. 840.01 OR STD. 840.02	FRAME, GRATES, AND HOOD STD. 840.03 GRATE TYPE E	F	G	CONCRETE TRANSITIONAL D.I. STD. 852.04 OR STD. 852.06	OPEN THROAT C.B. STD. 840.04 OR STD. 840.05	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 W/ 2 GRA. STD. 840.20	G.D.I. (W.S. SAG) FRAME W/ GRA. STD. 840.22	G.D.I. (W.S. SAG) FRAME W/ 2 GRA. STD. 840.22	G.D.I. (N.S. SAG) FRAME W/ GRATE STD. 840.24	G.D.I. (N.S. SAG) FRAME W/ 2 GRA. STD. 840.24	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	PIPE CLEANOUT (PER EACH)	M.H. FRAME AND COVER STD. 840.54
1712	1711																							
1712																								
1713																					1	1		
1713	1703																							
1714																					1	1		
1714	1713																							
1715																					1	1		
1715	1730																							
1716																								
1716	1705																							
1717																					1	1		
1717	1703																							
1718																					1	1		
1718	1708																							
1719																					1	1		
1719	1718																							
1720																					1	1		
1720	1724																							
1721																								
1722											1				1									
1722	1705																							
1723																								
1723	1722																							
1724											1		1											
1724	1721																							
1725																					1	1		
1725	1726																							
1727											1		1											
1727	1717																							
1728																		1						1
1728	1701																							
1729																		1						1
1729	1703																							
1730																			1					1
1730	1706																							
1731																								
1732																					1	1		
1732	1731																							
1733																					1	1		
1733	1732																							
1734																					1	1		
1734	1735																							
1736																					1	1		
1736	1728																							
1801																					1	1		
1801	1829																							
1802																			1					1
1803																								
1803	1802																							
1805																								
SHEET TOTALS											3		2		1			2	2		13	13		4

FROM	TO	CONVERT EXISTING C.B. TO J.B.	CONVERT EXISTING C.B. TO D.I.	CONVERT EXISTING D.I. TO J.B.	ADJUST D.I.	15" C.S. ELBOW	18" C.S. ELBOW	24" C.S. ELBOW	30" C.S. ELBOW	36" C.S. ELBOW	42" C.S. ELBOW	BERM DITCH OUTLET STD. 850.10 (PER EACH)	##" SLUICE GATE (42" SIZE SLUICE GATE)	TRASH RACK	PREFORMED SCOUR HOLE (PER EACH)		FLOWABLE FILL CY	CONCRETE COLLARS CL. "B" STD. 840.72 CY	PIPE REMOVAL LIN. FT.	REMARKS
1712	1711						2													
1712												1								BDO
1713																				
1713	1703																			
1714																				
1714	1713																			
1715																				
1715	1730																			
1716												1								BDO
1716	1705						2													
1717																				
1717	1703																			
1718																				
1718	1708																			
1719																				
1719	1718																			
1720																				
1720	1724																			
1721															1					
1722																				
1722	1705																			
1723												1								BDO
1723	1722								2											
1724																				
1724	1721					2														
1725																				
1725	1726					2														
1727																				
1727	1717																			
1728																				
1728	1701																			
1729																				
1729	1703																			54FT IN SOIL; 34FT OUT OF SOIL
1730																				
1730	1706																			56FT IN SOIL; 52FT OUT OF SOIL
1731															1					
1732						2														
1732	1731																			
1733																				
1733	1732																			
1734																				
1734	1735																			
1736																				
1736	1728																			54FT IN SOIL; 26FT OUT OF SOIL
1801																			134	134' PIPE REMOVAL FOR ALL OF SHEET 18
1801	1829																			
1802																				
1803																				HEADWALL
1803	1802																			
1805																				HEADWALL
SHEET TOTALS						6	4		2			3			2				134	

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