RAL-2TK9470H0P

COMPUTED BY: MKD DATE: 09/13/2021

CHECKED BY: WDY DATE: 09/14/2021

PROJECT NO.	SHEET NO.
U2579-AB	3D-15

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	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
			1402	1412		946.1	942.8															
			1403																			
			1403	1401		953.5	944.1				x			x	x	x	32					
Y4 44+26	54	LT	1405		959.8																	
			1405	1401		952.6	943.8															
Y1B 40+50	7	LT	1406		961.2																	
			1406	1405		953.0	952.6															
Y1B 40+50	42	LT	1407		956.2																	
			1407	1406		953.2	953.0															
			1408						24													
			1410						52													
			1411						28													
Y4 42+00	41	RT	1412		947.0																	
			1412	0655		942.8	935.0															
			1413						28													
Y1 12+70	29	RT	1414		956.1																	
			1414	1405A		952.9	949.8															
Y1 12+69	41	LT	1415		955.9																	
			1415	1402A		952.9	950.4	0.4														
Y1 12+69	11	RT	1416		956.7																	
			1416	1414		953.3	952.9															
Y4 47+33	67	RT	1417		958.5																	
			1417	1418		955.8	955.5															
Y4 47+17	63	RT	1418		958.5																	
			1418	1419		955.5	955.3															
Y1 11+81	45	LT	1419		958.3																	
			1419	1415		955.3	952.9															
Y1 13+54	2	LT	1401A		955.5																	
			1401A	1405A		949.4	949.3															
Y1 13+58	38	LT	1402A		954.5																	
			1402A	1401A		949.7	949.4															
			1403A	1402A		950.5	950.2															
Y1 14+25	31	LT	1403A		953.7																	
Y1 14+50	31	RT	1404A		953.9																	
			1404A	1413A		948.9	947.6															
Y1 13+59	27	RT	1405A		955.2																	
			1405A	1404A		949.3	948.9															
Y1 14+23	43	LT	1406A		954.6																	
			1406A	1403A		952.3	950.7															
Y1 14+87	51	LT	1407A		954.9																	
			1407A	1403A		951.7	950.5															
Y1 16+17	14	LT	1408A		954.6																	
			1408A	1409A		948.0	947.8															
Y1 16+19	26	RT	1409A		954.5																	
			1409A	1416A		947.8	947.5															
Y1 16+36	38	RT	1410A		952.3																	
			1410A	1409A		949.5	949.4															
Y1 16+35	28	LT	1411A		952.5																	
			1411A	1408A		949.7	948.8															
SHEET TOTALS									132								32					

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.	C.B. STD. 840.01 OR STD. 840.02	FRAME, GRATES, AND HOOD STD. 840.03 GRATE TYPE E	F	G
1402	1412									100																			
1403																													
1403	1401																												
1405																							1	2.2		1		1	
1405	1401										180																		
1406																							1	3.2					
1406	1405			76																									
1407																							1						
1407	1406			36																									
1408																													
1410																													
1411																													
1412																							1			1			1
1412	0655									144																			
1413																													
1414																							1			1		1	
1414	1405A										88																		
1415																							1			1			1
1415	1402A									88																			
1416																							1						
1416	1414										16																		
1417																							1						
1417	1418									16																			
1418																							1			1			1
1418	1419									44																			
1419																							1			1			1
1419	1415									88																			
1401A																							1	3.8					
1401A	1405A											24																	
1402A																							1	2.7		1			1
1402A	1401A											40																	
1403A	1402A										64																		
1403A																							1	1.7		1			1
1404A																							1	2.9		1		1	
1404A	1413A											80																	
1405A																							1	3.6		1		1	
1405A	1404A											92																	
1406A																							1						
1406A	1403A									12																			
1407A																							1	2.8		1			1
1407A	1403A										64																		
1408A																							1	0.6		1			1
1408A	1409A											36																	
1409A																							1	0.1		1		1	
1409A	1416A											72																	
1410A																							1						
1410A	1409A									20																			
1411A																							1						
1411A	1408A									24																			
SHEET TOTALS				112						536	412	344											21	23.6		13		5	8

FROM	TO	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	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
1402	1412																																						
1403																															1								BDO
1403	1401																								2														
1405																																							
1405	1401																																						
1406		1		1	1																																		
1406	1405																																						
1407							1				1																												
1407	1406																																						
1408																																							
1410																																							
1411																																							
1412																																							
1412	0655																																						
1413																																							
1414																																							
1414	1405A																																						
1415																																							
1415	1402A																																						
1416		1		1	1																																		
1416	1414																																						
1417							1			1																													
1417	1418																																						
1418																																							
1418	1419																																						
1419																																							
1419	1415																																						
1401A		1		1	1																																	122	122' PIPE REMOVAL FOR ALL OF SHEET 14A
1401A	1405A																																						
1402A																																							
1402A	1401A																																						
1403A	1402A																																						
1403A																																							
1404A																																							
1404A	1413A																																						
1405A																																							
1405A	1404A																																						
1406A				1	1																																		
1406A	1403A																																						
1407A																																							
1407A	1403A																																						
1408A																																							
1408A	1409A																																						
1409A																																							
1409A	1416A																																						
1410A							1			1																													
1410A	1409A																																						
1411A							1			1																													
1411A	1408A																																						
SHEET TOTALS		3		4	4		4			3	1														2						1							122	

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