D11CAD-274141

COMPUTED BY: DLH DATE: 12/5/2016

CHECKED BY: DON DATE: 1/3/2017

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROJECT NO.	SHEET NO.
R-5755	3-B

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)

Station	Location (LT,RT, OR CL)	Structure No. From	Structure No. To	Top Elevation	Invert Elevation	Invert Elevation	Slope Critical
13+59.00 -Y1-	RT	410		1106.97	1103.97		
13+80.00 -Y1-	RT	410	412		1103.97	1103.84	
14+00.00 -Y1-	RT	412		1107.24	1103.84		
14+20.00 -Y1-	RT	412	414		1103.84	1103.72	
14+39.00 -Y1-	RT	414		1107.48	1103.72		
14+39.00 -Y1-	RT	414	416		1103.72	1103.67	
14+39.00 -Y1-	RT	416		1107.70	1103.67		
14+45.00 -Y1-	RT	418			1103.67	1095.80	
14+00.00 -Y1-	LT	420		1106.60	1103.60		
14+25.00 -Y1-	LT	420	422		1103.60	1102.83	
14+50.00 -Y1-	LT	422		1105.83	1102.83		
13+04.00 -R-	RT	422	424		1102.83	1102.39	
10+00.00 -Y5-	LT	424		1105.39	1102.39		
10+15.00 -Y5-	LT	424	432		1102.39	1102.05	
10+32.00 -Y5-	LT	426			1102.10	1102.05	
10+32.00 -Y5-	LT	432		1105.05	1102.05		
10+32.00 -Y5-	LT	432	430		1102.05	1101.98	
10+32.00 -Y5-	CL	430		1105.46	1101.98		
10+08.00 -Y5-	CL	430	428		1102.47	1102.29	
12+62.00 -R-	LT	428		1105.64	1102.47		
10+40.00 -Y5-	RT	430	434		1101.98	1101.15	
10+50.00 -Y5-	RT	434		1105.30	1101.15		
10+70.00 -Y5-	RT	434	436		1101.15	1099.25	
10+93.00 -Y5-	RT	436		1102.00	1099.25		
11+36.00 -Y5-	RT	438			1099.25	1098.70	
11+90.00 -Y5-	LT	440		1103.90	1100.90		
11+92.00 -Y5-	RT	442			1100.90	1099.00	
12+00.00 -Y2-	LT	444		1108.18	1105.18		
12+00.00 -Y2-	LT	446			1105.18	1086.50	
PROJECT TOTALS							

Station (Size / Thickness or Gauge)	Drainage Pipe (RCP,CSP,CAAP,HDPE,or PVC) 12"	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	C.S. Pipe 12" (.064)	15" (.064)	18" (.064)	24" (.064)	30" (.079)	36" (.079)	42" (.109)	48" (.109)
13+59.00 -Y1-																					
13+80.00 -Y1-																					
14+00.00 -Y1-																					
14+20.00 -Y1-																					
14+39.00 -Y1-																					
14+39.00 -Y1-																					
14+39.00 -Y1-																					
14+45.00 -Y1-		32									X	X	X								
14+00.00 -Y1-																					
14+25.00 -Y1-																					
14+50.00 -Y1-																					
13+04.00 -R-																					
10+00.00 -Y5-																					
10+15.00 -Y5-																					
10+32.00 -Y5-		16									X	X	X								
10+32.00 -Y5-																					
10+32.00 -Y5-																					
10+32.00 -Y5-																					
10+08.00 -Y5-																					
12+62.00 -R-																					
10+40.00 -Y5-																					
10+50.00 -Y5-																					
10+70.00 -Y5-																					
10+93.00 -Y5-																					
11+36.00 -Y5-																					
11+90.00 -Y5-																					
11+92.00 -Y5-																					
12+00.00 -Y2-																					
12+00.00 -Y2-		56									X	X	X								
PROJECT TOTALS		104																			

Station	R.C. Pipe Class III 12"	15"	18"	24"	30"	36"	42"	48"	R.C. Pipe Class IV 12"	15"	18"	24"	30"	36"	42"	48"	**"R.C. PIPE (CLASS V)	***"RC PIPE CULVERTS, CONTRACTOR DESIGN	***"RC PIPE CULVERTS, CONTRACTOR DESIGN	15" SIDE DRAIN PIPE	18" SIDE DRAIN PIPE	Endwalls STD. 838.01, 838.11 OR STD. 838.80 (UNLESS NOTED OTHERWISE) CU. YARDS R.C.P.	C.S.P.
13+59.00 -Y1-																							
13+80.00 -Y1-										40													
14+00.00 -Y1-																							
14+20.00 -Y1-										40													
14+39.00 -Y1-																							
14+39.00 -Y1-										20													
14+39.00 -Y1-																							
14+45.00 -Y1-																							
14+00.00 -Y1-																							
14+25.00 -Y1-										48													
14+50.00 -Y1-																							
13+04.00 -R-										36													
10+00.00 -Y5-																							
10+15.00 -Y5-										36													
10+32.00 -Y5-																							
10+32.00 -Y5-																							
10+32.00 -Y5-										16													
10+32.00 -Y5-																							
10+08.00 -Y5-										48													
12+62.00 -R-																							
10+40.00 -Y5-										36													
10+50.00 -Y5-																							
10+70.00 -Y5-										44													
10+93.00 -Y5-																							
11+36.00 -Y5-										68													
11+90.00 -Y5-																							
11+92.00 -Y5-										48													
12+00.00 -Y2-																							
12+00.00 -Y2-																							
PROJECT TOTALS										480													

Station	Quantities for Drainage Structures PER EACH (0' THRU 5.0')	LIN. FT. A 5.0' THRU 10.0'	LIN. FT. B 10.0' AND ABOVE	C.B. STD. 840.01 OR STD. 840.02	OPEN THROAT C.B. STD. 840.04 OR 840.05	Frame, Grates, and Hood Standard 840.03 Type of Grate E	F	G	Concrete Transitional Section DROP INLET	CATCH BASIN	D.I. STD. 840.14 OR STD. 840.15	D.I. FRAME WITH TWO GRATES STD. 840.16	G.D.I. TYPE "A" STD. 840.17 OR 840.26	G.D.I. TYPE "B" STD. 840.18 OR 840.27	G.D.I. TYPE "D" STD. 840.19 OR 840.28	G.D.I. FRAME WITH TWO FLAT GRATES STD. 840.20	G.D.I. FRAME WITH TWO SAG GRATES STD. 840.22	G.D.I. (N.S.) FRAME WITH TWO SAG GRATES STD. 840.24	G.D.I. (N.S.) FRAME WITH TWO FLAT GRATES STD. 840.29	T.B.G.D.I. STD. 840.35	J.B. STD. 840.31 OR 840.32	T.B.J.B. STD. 840.34	M.H. FRAME AND COVER STD. 840.54	G.D.I. STEEL FRAME WITH TWO GRATES STD. 840.37	PREFORMED SCOUR HOLE (SEE DETAIL "F" SHEET 5)
13+59.00 -Y1-	1			1		1																			
13+80.00 -Y1-																									
14+00.00 -Y1-	1			1			1																		
14+20.00 -Y1-																									
14+39.00 -Y1-	1			1			1																		
14+39.00 -Y1-																									
14+39.00 -Y1-	1			1				1																	
14+45.00 -Y1-																									
14+00.00 -Y1-	1			1				1																	
14+25.00 -Y1-																									
14+50.00 -Y1-	1			1				1																	
13+04.00 -R-																									
10+00.00 -Y5-	1			1				1																	
10+15.00 -Y5-																									
10+32.00 -Y5-																									
10+32.00 -Y5-	1			1				1																	
10+32.00 -Y5-																									
10+32.00 -Y5-	1										1	1													
10+08.00 -Y5-																									
12+62.00 -R-	1																1			1					
10+40.00 -Y5-																									
10+50.00 -Y5-	1																					1	1		
10+70.00 -Y5-																									
10+93.00 -Y5-	1													1			1								
11+36.00 -Y5-																									
11+90.00 -Y5-	1			1				1																	
11+92.00 -Y5-																									
12+00.00 -Y2-	1			1			1																		
12+00.00 -Y2-																									
PROJECT TOTALS	14			10		1	3	6			1	1		1			2			1		1	1		

Station	DRAINAGE PIPE ELBOWS NO. & SIZE	FLOWABLE FILL, C.Y.	CONC. & BRICK PIPE PLUG, C.Y. STD. 840.71	PIPE REMOVAL LIN. FT.	REMARKS
13+59.00 -Y1-					
13+80.00 -Y1-					
14+00.00 -Y1-					
14+20.00 -Y1-					
14+39.00 -Y1-		4.06	0.13		PLUG & FILL EXISTING 18"CMP; REMOVE EXIST. CATCH BASIN
14+39.00 -Y1-					
14+39.00 -Y1-					
14+45.00 -Y1-	2-15"				ROD & LUG CONNECTOR WITH SLEEVE GASKETS
14+00.00 -Y1-					
14+25.00 -Y1-					
14+50.00 -Y1-					
13+04.00 -R-					
10+00.00 -Y5-					
10+15.00 -Y5-					
10+32.00 -Y5-					
10+32.00 -Y5-					
10+32.00 -Y5-					
10+32.00 -Y5-					
10+08.00 -Y5-					
12+62.00 -R-					
10+40.00 -Y5-					
10+50.00 -Y5-					
10+70.00 -Y5-					
10+93.00 -Y5-					
11+36.00 -Y5-		3.92	0.09		PLUG & FILL EXISTING 15"CMP
11+90.00 -Y5-					
11+92.00 -Y5-			0.065		PLUG ONE END OF EXIST. 18"CMP AT 12+73 -Y5-
12+00.00 -Y2-					
12+00.00 -Y2-	2-15"				ROD & LUG CONNECTOR WITH SLEEVE GASKETS
PROJECT TOTALS	4-15"	7.98	0.285		

ABBREVIATIONS

C.B.	CATCH BASIN
N.D.I.	NARROW DROP INLET
D.I.	DROP INLET
G.D.I.	GRATED DROP INLET
G.D.I.(N.S.)	(NARROW SLOT)
J.B.	JUNCTION BOX
M.H.	MANHOLE
T.B.D.I.	TRAFFIC BEARING DROP INLET
T.B.J.B.	TRAFFIC BEARING JUNCTION BOX

*TOTAL L.F. FOR PAY QUANTITY SHALL BE COL. 'A' + (1.3 X COL. 'B')