COMPUTED BY: C.E. HARRIS DATE: 9/2013

CHECKED BY: J.L. TEAGUE DATE: 12/2014

RD248621

PROJECT NO.	SHEET NO.
B-4659	3D-1

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBREGIONAL

**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.B. CATCH BASIN
- N.D.I. NARROW DROP INLET
- D.I. DROP INLET
- G.D.I. GRATED DROP INLET
- G.D.I.(N.S.) GRATED DROP INLET (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

STATION (SIZE / THICKNESS OR GAUGE)	LOCATION (LT, RT, OR CL)	STRUCTURE NO. FROM	STRUCTURE NO. TO	TOP ELEVATION	INVERT ELEVATION	INVERT ELEVATION	SLOPE CRITICAL	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 PVC	DO NOT USE HDPE
-L-																			
11+19	RT	0402		321.17															
		0402	0401		317.40	316.55					12							x	x
11+19	RT	0401		320.55															
		0401	0403		316.55	315.22													
12+00	RT	0403		319.69															
		0403	0404		315.22	315.14					24							x	x
12+85	RT	0405		318.74															
		0405	0406		315.74	313.68													
13+64	RT	0407		317.67															
		0407	0406		314.67	313.68													
13+13	RT	0406		318.68															
		0406	0408		313.68	313.36			28									x	x
15+24	RT	0412		321.88															
		0412	0411		318.88	316.96													
14+55	RT	0411		319.96															
		0411	0409		316.96	311.72			32									x	x
19+85	RT	0417		341.87															
		0417	0416		338.87	323.52													
18+15	RT	0416		331.65															
		0416	0415		323.52	323.81			56									x	x
17+00	RT	0413		326.90															
		0413	0414		323.90	323.81													
17+20	RT	0414		327.75															
		0414	0416		323.81	323.52													
21+44	RT	0418		355.33															
		0418	0419		353.08	352.08			24									x	x
		0420	0419		354.13	352.08													
21+44	RT	0419		355.29															
		0419	0421		352.08	346.67													
21+00	LT	0421		350.18															
		0421	0422		346.67	339.36				104								x	x
20+00	LT	0422		342.36															
		0422	0423		339.36	323.00				160								x	x
SHEET TOTALS									140	264	36								

STATION	FROM	TO	C.S. PIPE 12" (.064)	15" (.064)	18" (.064)	24" (.064)	30" (.079)	36" (.079)	42" (.109)	48" (.109)	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"
11+19	0402																									
	0402	0401																								
11+19	0401																									
	0401	0403																				84				
12+00	0403																									
	0403	0404																								
12+85	0405																									
	0405	0406																		28						
13+64	0407																									
	0407	0406																		52						
13+13	0406																									
	0406	0408																								
15+24	0412																									
	0412	0411																		68						
14+55	0411																									
	0411	0409																								
19+85	0417																									
	0417	0416																		168						
18+15	0416																									
	0416	0415																								
17+00	0413																									
	0413	0414																		20						
17+20	0414																									
	0414	0416																		92						
21+44	0418																									
	0418	0419																								
	0420	0419											20													
21+44	0419																									
	0419	0421																			64					
21+00	0421																									
	0421	0422																								
20+00	0422																									
	0422	0423																								
SHEET TOTALS													20							428	64	84				

STATION	FROM	TO	** " 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.	QUANTITIES FOR DRAINAGE STRUCTURES PER EACH (0' THRU 5.0')	*TOTAL L.F. FOR PAY QUANTITY SHALL BE COL. 'A' + (1.3 X COL.'B') LIN. FT. A 5.0' THRU 10.0'	B 10.0' AND ABOVE	C.B. STD. 840.01 OR STD. 840.02	FRAME, GRATES, AND HOOD STANDARD 840.03 TYPE OF GRATE E	F	G	CONCRETE TRANSITIONAL SECTION DROP INLET	CATCH BASIN
11+19	0402									1								
	0402	0401																
11+19	0401									1			1		1			
	0401	0403																
12+00	0403									1			1		1			
	0403	0404																
12+85	0405									1			1		1			
	0405	0406																
13+64	0407									1			1			1		
	0407	0406																
13+13	0406									1			1	1				
	0406	0408																
15+24	0412									1			1			1		
	0412	0411																
14+55	0411									1			1			1		
	0411	0409																
19+85	0417									1			1			1		
	0417	0416																
18+15	0416									1	3.13		1			1		
	0416	0415																
17+00	0413									1			1			1		
	0413	0414																
17+20	0414									1			1			1		
	0414	0416																
21+44	0418									1								
	0418	0419																
	0420	0419																
21+44	0419									1			1			1		
	0419	0421																
21+00	0421									1								
	0421	0422																
20+00	0422									1								
	0422	0423																
SHEET TOTALS										16	3.13		12	1	3	8		
										SAY:	3.5							

STATION	FROM	TO	D.I. STD. 840.14 OR STD. 840.15	D.I. FRAME AND GRATE 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 GRATE STD. 840.20	G.D.I. FRAME WITH TWO GRATES STD. 840.22	G.D.I. (N.S.) FRAME WITH GRATE STD. 840.24	G.D.I. (N.S.) FRAME WITH TWO GRATES STD. 840.24	J.B. STD. 840.31 OR 840.32	PREFORMED SCOUR HOLE (SEE DETAIL 8, PLAN SHEET 4)	DRAINAGE PIPE ELBOWS NO. & SIZE	CONC. & BRICK PIPE PLUG, C.Y. STD. 840.71	CONC. COLLARS CL. "B" C.Y. STD. 840.72	PIPE REMOVAL LIN. FT.	REMARKS
11+19	0402											1						J.B. WITH SLAB LID
	0402	0401																
11+19	0401																	
	0401	0403																
12+00	0403																	
	0403	0404																
12+85	0405																	
	0405	0406																
13+64	0407																	
	0407	0406																
13+13	0406																	
	0406	0408																
15+24	0412																	
	0412	0411																
14+55	0411																	
	0411	0409											1					
19+85	0417																	
	0417	0416															30	REMOVE EXIST. 15" DRIVE PIPE
18+15	0416																	
	0416	0415																
17+00	0413																	
	0413	0414																
17+20	0414																	
	0414	0416																
21+44	0418					1					1							
	0418	0419																
	0420	0419																
21+44	0419																	
	0419	0421															50	REMOVE EXIST. 18" RCP
21+00	0421					1					1							
	0421	0422																
20+00	0422					1					1							
	0422	0423																
SHEET TOTALS						3					3	1	1				80	