COMPUTED BY: RCH	DATE: 11-2015
CHECKED BY: JMP	DATE: 11-2015

PROJECT REFERENCE NO.	SHEET NO.
U-5719	3D-1

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 48" & UNDER)

NOTE: Invert Elevations are for Bid Purposes only and shall not be used for project construction stakeout. See "Standard Specifications For Roads and Structures, Section 300-5".

STATION	LOCATION (LT, RT, OR CL')	STRUCTURE NO. FROM	STRUCTURE NO. TO	TOP ELEVATION	INVERT ELEVATION	INVERT ELEVATION	SLOPE CRITICAL	SIDE DRAIN PIPE (RCP, CSP, CAAP, HDPE, or PVC) 6"	12"	15"	18"	24"	30"	36"	42"	DO NOT USE RCP	DO NOT USE CSP	DO NOT USE CAAP	DO NOT USE HDPE	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"
L 15+37	RT	401		12.2																																							
		401	402		10.6	8.7																																					
L 16+00	RT	402		13.6																																							
		402	403		8.7	6.6																																					
L 15+97	RT	403		13.4																																							
		403	404		6.6	6.5																																					
L 16+06	LT	404		12.8																																							
		404	408		6.5	5.3																																					
L 16+08	LT	405		13.1																																							
		405	404		10.2	6.5																																					
L 16+81	LT	406	407		12.4	9.3																																					
L 17+00	LT	407		13.6																																							
		407	408		9.3	5.3																																					
L 17+04	LT	408		12.7																																							
		408	409		5.3	4.3																																					
L 18+35	LT	409		12.6																																							
		409	410		4.3	3.9																																					
L 19+02	LT	410		12.8																																							
		410	411		3.9	1.7																																					
L 22+79	LT	411		12.6																																							
		411	412		1.7	1.6																																					
Y121+50	LT	413		10.6																																							
		413	414		8.5	8.0																																	88					
Y123+03	RT	415		12.4																																							
		415	416		9.4	7.4																																56						
Y122+50	RT	416		10.4																																							
		416	418		6.4	4.9																																		76				
Y122+50	RT	417		10.0																																							
		417	416		7.0	6.4																																		28				
Y122+92	LT	419		12.2																																							
		419	420		8.4	6.0				32																																	
L 22+42	LT	421		12.2																																							
		421	422		9.2	8.9																																64						
L 23+07	LT	422		12.1																																							
		422	423		8.9	8.6																																64						
L 23+72	LT	423		12.2																																							
		423	424		8.6	8.2																																64						
L 24+39	RT	424		12.3																																							
		424	425		8.2	7.6	0.4			132																																	
L 23+73	RT	425		13.5																																							
		425	426		6.3	6.0	0.4			44																																	
L 25+73	LT	426																																									
L 23+07	RT	427		12.4																																							
		427	428		9.4	9.1																																64						
L 23+72	LT	430		12.7																																							
Y116+11	RT	432			25.6	25.2				24																																	
Y116+27	LT	433			24.0	23.3				24																																	
SHEET TOTALS										256																											312	88	104				

STATION	LOCATION	STRUCTURE NO. FROM	TO	** R.C. PIPE (CLASS V)	*** RC PIPE CULVERTS, CONTRACTOR DESIGN	*** RC PIPE CULVERTS, CONTRACTOR DESIGN	15" WELDED STEEL PIPE, 0.500" THK., GRADE 'B', IN SOIL (TRENCHLESS INSTALLATION)	15" WELDED STEEL PIPE, 0.500" THK., GRADE 'B', NOT IN SOIL (TRENCHLESS INSTALLATION)	ENDWALLS STD. 838.01 838.11 OR STD. 838.80 (UNLESS NOTED OTHERWISE) CU. YARDS R.C.P.	ENDWALLS CU. YARDS C.S.P.	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	FRAME, GRATES, AND HOOD STANDARD 840.03 TYPE OF GRATE E	F	G	CONCRETE TRANSITIONAL SECTION DROP INLET	CONCRETE TRANSITIONAL SECTION CATCH BASIN	J.B. STD. 840.31 OR STD. 840.32	M.H. FRAME AND COVER STD. 840.54	PREFORMED SCOUR HOLE (PER EACH)	CONVERT EXISTING D.I. TO J.B.	CONVERT EXISTING J.B. TO C.B.	CONVERT EXISTING C.B. TO T.B.J.B.	SIDE DRAIN PIPE ELBOWS NO. & SIZE	PIPE REMOVAL LIN. FT.	REMARKS
L 15+37	RT	401																										RETAIN EX. DI
		401	402																									RETAIN EX. 15" RCP
L 16+00	RT	402																										RETAIN EX. DI
		402	403																									RETAIN EX. 15" RCP
L 15+97	RT	403																										RETAIN EX. CB
		403	404																									RETAIN EX. 18" RCP
L 16+06	LT	404																										RETAIN EX. DI
		404	408																									RETAIN EX. 18" RCP
L 16+08	LT	405																										RETAIN EX. DI
		405	404																									RETAIN EX. 15" RCP
L 16+81	LT	406	407																									RETAIN EX. 15" RCP
L 17+00	LT	407																					1		1					
		407	408																									RETAIN EX. 15" RCP
L 17+04	LT	408																	1							1				
		408	409																									RETAIN EX. 18" RCP
L 18+35	LT	409									1	3.3		1			1											
		409	410																									RETAIN EX. 18" RCP
L 19+02	LT	410																					1				1			
		410	411																									RETAIN EX. 18" RCP
L 22+79	LT	411																					1				1			
		411	412																									RETAIN EX. 18" RCP
Y121+50	LT	413																										
		413	414																									
Y123+03	RT	415									1			1			1											
		415	416																									
Y122+50	RT	416									1			1			1											
		416	418																									
Y122+50	RT	417																										
		417	416																									
Y122+92	LT	419									1			1		1												
		419	420																							2 @ 15"		
L 22+42	LT	421									1			1			1											
		421	422																									
L 23+07	LT	422									1			1	1													
		422	423																									
L 23+72	LT	423									1			1		1												
		423	424																									
L 24+39	RT	424									1			1		1												
		424	425																									
L 23+73	RT	425									1	2.2								1	1							
		425	426																									
L 25+73	LT	426																				1						
L 23+07	RT	427									1			1	1													
		427	428																									
L 23+72	LT	430																					1				1			
Y116+11	RT	432																									24	REMOVE EX. 15" RCP
Y116+27	LT	433																										
SHEET TOTALS											10	5.5		9	2	3	5			1	5	1	1	1	3	2 @ 15"	24	

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

A + B: 5.5
SAY 6

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

5/28/99

29-MAR-2017 07:31
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$$$$USERNAME$$$$