COMPUTED BY:	CJH	DATE:	3/11/2022
CHECKED BY:	WJW	DATE:	5/4/2022

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROJECT NO.	SHEET NO.
I-5987A	3D-1

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	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, or PVC) SIZE 15	18	24	30	36	42	48	DO NOT USE RCP	DO NOT USE CSP	DO NOT USE CAAP	DO NOT USE HDPE
THICKNESS OR GAUGE																		
SR6 31+90	46 LT	401		126.70														
		401	449		120.30	120.10												
SR6 31+17	20 LT	402		127.51														
		402	411		120.90	120.80												
SR6 31+17	20 RT	403		127.51														
		403	402		121.10	120.90												
LA 67+40	72 LT	404		127.80														
		404	442		120.80	120.60												
LA 67+40	79 RT	405		126.90														
		405	445		125.00	124.90												
LA 69+00	79 RT	406		127.00														
		406	407		125.00	124.90												
LA 69+00	74 RT	407		128.60														
		407	445		121.80	121.30												
SR6 35+78	42 LT	408		127.10														
		408	440		120.70	120.60												
SR6 36+36	42 LT	409		127.20														
		409	408		120.80	120.70												
SR6 28+69	49 LT	410		125.40														
SR6 31+17	40 LT	411		128.00														
		411	450		120.80	120.10												
SR6 35+10	20 LT	412		127.19														
		412	422		124.00	123.40												
SR6 35+10	20 RT	413		127.19														
		413	403		122.70	121.40												
LA 71+50	72 LT	414		128.10														
		414	419		124.00	123.80												
LA 71+50	3 LT	415		128.80														
		415	420		124.90	124.60												
LA 71+50	3 RT	416		129.00														
		416	415		125.00	124.90												
LA 71+40	74 RT	417		128.30														
		417	407		122.50	121.80												
LA 71+40	79 RT	418		127.40														
		418	417		123.10	123.00												
LA 71+94	72 LT	419		128.10														
		419	424		123.80	123.60												
LA 71+94	3 LT	420		128.80														
		420	425		124.60	124.50												
LA 72+00	74 RT	421		128.30														
		421	417		122.70	122.50	.4											
SR6 35+72	20 LT	422		127.03														
		422	423		123.40	123.20												
SR6 35+72	20 RT	423		127.03														
		423	413		123.00	122.70												
LA 72+10	72 LT	424		128.10														
		424	423		123.50	123.40	.9											
LA 72+13	4 LT	425		128.90														
		425	424		124.20	123.50												
LA 72+13	3 RT	426		129.00														
						SHEET TOTAL												

SIZE	C. S. PIPE 15	18	24	30	36	42	48	R. C. PIPE CLASS III 15	18	24	30	36	42	48	R. C. PIPE CLASS IV 15	18	24	30	36	42	48
THICKNESS OR GAUGE	0.064	0.064	0.064	0.079	0.079	0.109	0.109														
SR6 31+90																					
																					284
SR6 31+17																					
																		20			
SR6 31+17																					
																		40			
LA 67+40																					
																					68
LA 67+40																					
															8						
LA 69+00																					
															8						
LA 69+00																					
																				160	
SR6 35+78																					
																					108
SR6 36+36																					
																					64
SR6 28+69																					
SR6 31+17																					
																		216			
SR6 35+10																					
															60						
SR6 35+10																					
																	392				
LA 71+50																					
															44						
LA 71+50																					
															44						
LA 71+50																					
															16						
LA 71+40																					
																				244	
LA 71+40																					
																		8			
LA 71+94																					
															16						
LA 71+94																					
															16						
LA 72+00																					
																				64	
SR6 35+72																					
															36						
SR6 35+72																					
																		60			
LA 72+10																					
																24					
LA 72+13																					
																68					
LA 72+13																					
SHEET TOTAL															248	92	452	284		468	524

LINE & STATION	16" WELDED STEEL PIPE 0.25" THICK, GRADE B IN SOIL	18" WELDED STEEL PIPE 0.25" THICK, GRADE B IN SOIL	24" WELDED STEEL PIPE 0.50" THICK, GRADE B IN SOIL	30" WELDED STEEL PIPE 0.50" THICK, GRADE B IN SOIL	36" WELDED STEEL PIPE 0.50" THICK, GRADE B IN SOIL	42" WELDED STEEL PIPE 0.625" THICK, GRADE B IN SOIL	48" WELDED STEEL PIPE 0.625" THICK, GRADE B IN SOIL	16" WELDED STEEL PIPE 0.25" THICK, GRADE B NOT IN SOIL	18" WELDED STEEL PIPE 0.25" THICK, GRADE B NOT IN SOIL	24" WELDED STEEL PIPE 0.50" THICK, GRADE B NOT IN SOIL	30" WELDED STEEL PIPE 0.50" THICK, GRADE B NOT IN SOIL	36" WELDED STEEL PIPE 0.50" THICK, GRADE B NOT IN SOIL	42" WELDED STEEL PIPE 0.625" THICK, GRADE B NOT IN SOIL	48" WELDED STEEL PIPE 0.625" THICK, GRADE B NOT IN SOIL	ENDWALLS STD. 838.01 OR STD.838.11 (UNLESS OTHERWISE NOTED) CY	REINFORCED ENDWALLS CY	QUANTITIES FOR DRAINAGE STRUCTURES *TOTAL L.F. FOR PAY QUANTITY SHALL BE COL. 'A' + (1.3 X COL.'B') 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 D.I. STD. 852.04 OR STD. 852.06	C.B. STD. 852.05	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. (W.S. FLAT) FRAME W/ 2 GRATES STD. 840.20	G.D.I. (W.S. SAG) FRAME W/ 2 GRATES STD. 840.22	G.D.I. (N.S. SAG) FRAME W/ 2 GRATES STD. 840.24	J.B. STD. 840.31 OR 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 AND TWO GRATES STD. 840.37	M.H. STD. 840.51, STD. 840.52, OR STD.53	M.H. FRAME AND COVER STD. 840.54	TEMP STEEL PLATE COVER MASONARY DRAINAGE	15" C.S. ELBOW	15" SIDE DRAIN PIPE ELBOW	FLOWABLE FILL, C.Y.	PIPE REMOVAL LIN. FT.	REMARKS
SR6 31+90																	1	1.4																														
																																														325	
SR6 31+17																	1	1.6		1		1																										
SR6 31+17																	1	1.4		1			1																									
LA 67+40																	1	2.0																								1	1						T.B. PRECAST DRAINAGE STRUCTURE (STD. 840.46)
LA 67+40																	1																									1	1						
LA 69+00																	1																									1	1						
LA 69+00																	1	1.8																								1	1						T.B. PRECAST DRAINAGE STRUCTURE (STD. 840.46)
SR6 35+78																	1	1.4																					1					1					
																																														108	
SR6 36+36																	1	1.4																					1					1					
																																														56	
SR6 28+69																											10.0																					SEE SPECIAL DETAIL SHEET 2C-8
SR6 31+17																	1	2.2																					1					1					
SR6 35+10																	1			1			1																									
SR6 35+10																	1			1		1																										
LA 71+50																	1																									1	1						
LA 71+50																	1																									1	1						
LA 71+50																	1																									1	1						
LA 71+40																	1	0.8																								1	1						T.B. PRECAST DRAINAGE STRUCTURE (STD. 840.46)
LA 71+40																	1																									1	1						
LA 71+94																	1																									1	1						
LA 71+94																	1																									1	1						
LA 72+00																	1	0.6																								1	1						T.B. PRECAST DRAINAGE STRUCTURE (STD. 840.46)
SR6 35+72																	1			1	1																											
																																														136	
SR6 35+72																	1			1	1																											
LA 72+10																	1																									1	1						
LA 72+13																	1																					1					1					
																																														140	
LA 72+13																	1																									1	1						
SHEET TOTAL																	25	14.6		6	2	2	2														4	1		14	14		5					765	

ABBREVIATIONS

C.A.A - CORRUGATED ALUMINUM INLET
C.B - CATCH BASIN
C.S. - CORRUGATED STEEL
D.I. - DROP INLET
G.D.I. - GRATED DROP INLET
P.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