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-7

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.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

LINE & STATION (SIZE / THICKNESS OR GAUGE)	OFFSET		STRUCTURE NUMBER FROM	STRUCTURE NUMBER TO	TOP ELEVATION FT.	INVERT ELEVATION FT.	INVERT ELEVATION FT.	MINIMUM REQUIRED SLOPE %
			663	639		127.40	126.90	
LA 112+47	86	RT	664		134.69			
			664	665		130.20	124.35	
Y1RPA 14+40	24	RT	667		130.20			
			667	668		127.40	125.00	
LA 117+00	3	RT	701		137.02			
			701	627		132.90	131.40	
LA 123+50	3	LT	702		137.57			
			702	703		133.50	133.00	
LA 124+28	3	LT	703		137.48			
			703	710		131.90	130.00	
LA 124+27	3	RT	704		137.75			
			704	703		133.70	133.40	
LA 124+92	3	RT	705		137.69			
			705	706		133.10	133.00	
LA 124+92	3	LT	706		137.54			
			706	703		133.00	132.40	
LA 125+50	3	RT	707		137.74			
			707	705		133.70	133.40	
LA 129+50	3	LT	708		139.49			
			708	711		134.80	132.10	.8
LA 129+50	3	RT	709		139.31			
			709	708		135.20	134.80	
LA 129+18	74	RT	712		138.46			
			712	713		134.40	131.40	
LA 139+00	3	LT	801		141.41			
			801	803		137.30	137.00	
LA 139+00	3	RT	802		143.22			
			802	801		137.80	137.30	
LA 139+65	3	LT	803		141.35			
			803	806		136.70	136.00	
LA 140+50	3	LT	804		141.46			
			804	806		137.40	136.00	.5
LA 140+07	105	LT	805		136.30			
LA 139+93	3	LT	806		141.36			
			806	805		132.40	132.00	
LA 139+93	105	RT	807		137.10			
			807	806		132.80	132.40	
LA 133+00	3	LT	808		141.05			
			808	708		136.60	134.80	
LA 133+00	3	RT	809		140.75			
			809	808		136.70	136.60	
LA 140+50	3	RT	810		143.84			
			810	804		137.60	137.40	
LA 134+72	74	LT	811		141.00			
			811	812		136.90	134.40	
LA 137+30	74	LT	813		141.20			
			813	814		137.00	133.70	
LA 146+00	3	LT	901		143.61			
			901	905		139.50	135.70	
								SHEET TOTAL

FROM	TO	Side Drain Pipe (RCP, CSP, CAAP, HDPE, or PVC) 15	18	24	30	36	42	48	DO NOT USE RCP	DO NOT USE CSP	DO NOT USE CAAP	DO NOT USE HDPE	C. S. PIPE 15 (0.064)	18 (0.064)	24 (0.064)	30 (0.079)	36 (0.079)	42 (0.109)	48 (0.109)
663	639																		
664																			
664	665												42						
667																			
667	668												18						
701																			
701	627																		
702																			
702	703																		
703																			
703	710																		
704																			
704	703																		
705																			
705	706																		
706																			
706	703																		
707																			
707	705																		
708																			
708	711																		
709																			
709	708																		
712																			
712	713												29						
801																			
801	803																		
802																			
802	801																		
803																			
803	806																		
804																			
804	806																		
805																			
806																			
806	805																		
807																			
807	806																		
808																			
808	708																		
809																			
809	808																		
810																			
810	804																		
811																			
811	812												28						
813																			
813	814												32						
901																			
901	905																		
SHEET TOTAL													149						

FROM	TO	R. C. PIPE CLASS III 15	18	24	30	36	42	48	R. C. PIPE CLASS IV 15	18	24	30	36	42	48
663	639								147						
664															
664	665														
667															
667	668														
701															
701	627								300						
702															
702	703								76						
703															
703	710														
704															
704	703								8						
705															
705	706									8					
706															
706	703									64					
707															
707	705								56						
708															
708	711														
709															
709	708								8						
712															
712	713														
801															
801	803								64						
802															
802	801								8						
803															
803	806									32					
804															
804	806								48						
805															
806															
806	805														
807															
807	806														
808															
808	708								352						
809															
809	808								8						
810															
810	804								8						
811															
811	812														
813															
813	814														
901															
901	905														
SHEET TOTAL									1083	104					

FROM	TO	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
663	639																
664																	
664	665																
667																	
667	668																
701																	
701	627																
702																	
702	703																
703																	
703	710			48							48						
704																	
704	703																
705																	
705	706																
706																	
706	703																
707																	
707	705																
708																	
708	711	52							52								
709																	
709	708																
712																	
712	713																
801																	
801	803																
802																	
802	801																
803																	
803	806																
804																	
804	806																
805																3.4	
806																	
806	805					52							52				
807																3.4	
807	806					56							56				
808																	
808	708																
809																	
809	808																
810																	
810	804																
811																	
811	812																
813																	
813	814																
901																	
901	905	52							52								
SHEET TOTAL		104		48		108			104		48		108			6.8	

FROM	TO	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
663	639																														
664		1																				1	1								
664	665																														
667		1																				1	1								
667	668																														
701		1																				1	1								
701	627																												5.5		
702		1																				1	1								
702	703																														
703		1	0.6																			1	1								
703	710																														
704		1																				1	1								
704	703																														
705		1																				1	1								
705	706																														
706		1																				1	1								
706	703																												5.9		
707		1																				1	1								
707	705																														
708		1																				1	1								
708	711																														
709		1																				1	1								
709	708																														
712		1																				1	1								
712	713																														
801		1																				1	1								
801	803																														
802		1	0.5																			1	1								
802	801																														
803		1																				1	1								
803	806																														
804		1																				1	1								
804	806																														
805																															
806		1	4.0																		1					1							
806	805																												13.9		
807																															
807	806																												16.9		
808		1																				1	1								
808	708																												4.6		
809		1																				1	1								
809	808																												5.0		
810		1	1.3																			1	1								
810	804																														
811		1																				1	1								
811	812																														
813		1																				1	1								
813	814																														
901		1																				1	1								
901	905																												4.8		
SHEET TOTAL		23	6.4																		1		22	22		1				56.7		