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-12

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 %
		1507	1508		147.50	144.00	
LA 243+50	87 RT	1509		151.23			
		1509	1510		149.40	148.99	
LA 254+30	85 LT	1511		152.49			
		1511	1512		148.30	144.57	
LA 257+69	3 LT	1601		152.57			
		1601	1602		147.30	147.00	
LA 258+03	3 RT	1602		152.72			
		1602	1613		147.00	146.00	.4
LA 264+79	3 LT	1603		152.71			
		1603	1604		148.30	148.00	
LA 264+79	3 RT	1604		152.55			
		1604	1614		147.30	146.20	.3
LA 257+25	3 LT	1605		152.60			
		1605	1601		148.10	147.60	.4
LA 257+25	3 RT	1606		152.87			
		1606	1605		148.20	148.10	
LA 258+50	3 LT	1607		152.67			
		1607	1608		148.00	147.90	
LA 258+50	3 RT	1608		152.77			
		1608	1602		147.90	147.30	
LA 264+29	3 LT	1609		152.76			
		1609	1610		148.60	148.40	
LA 264+29	3 RT	1610		152.59			
		1610	1604		147.90	147.60	
LA 265+29	3 LT	1611		152.74			
		1611	1612		148.60	148.40	
LA 265+29	3 RT	1612		152.58			
		1612	1604		147.90	147.60	
LA 272+35	3 LT	1701		153.39			
		1701	1719		147.60	147.40	
LA 271+85	3 RT	1702		152.03			
		1702	1789		147.00	146.80	
LA 278+18	3 LT	1703		151.76			
		1703	1704		143.70	143.60	.5
LA 278+18	3 RT	1704		151.75			
		1704	1718		143.60	143.30	
LA 278+18	120 RT	1718		146.00			
LA 291+11	3 LT	1707		153.34			
		1707	1717		149.00	148.30	
LA 291+11	3 RT	1708		153.73			
		1708	1707		149.10	149.00	
LA 296+56	3 LT	1709		154.04			
		1709	1807		146.80	145.10	
LA 296+56	3 RT	1710		153.89			
		1710	1709		149.80	149.50	
LA 283+38	3 LT	1711		152.27			
		1711	1712		148.10	148.00	
LA 283+38	3 RT	1712		152.28			
		1712	1706		148.00	147.50	.4

Pipes (SIZE / THICKNESS OR GAUGE):

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)	R. C. PIPE CLASS III 15	18	24	30	36	42	48	R. C. PIPE CLASS IV 15	18	24	30	36	42	48
1507	1508																										32						
1509	1510																										24						
1511	1512												32																				
1601	1602																											36					
1602	1613																																
1603	1604																											8					
1604	1614																																
1605	1601																										44						
1606	1605																										8						
1607	1608																										8						
1608	1602																										48						
1609	1610																										8						
1610	1604																										48						
1611	1612																										8						
1612	1604																										48						
1701	1719																										8						
1702	1789																																
1703	1704																													8			
1704	1718																																
1707	1717																											236					
1708	1707																											8					
1709	1807																														556		
1710	1709																										8						
1711	1712																										8						
1712	1706																										52						
SHEET TOTAL													32														352	288		8	556		

Welded steel pipe, endwalls, drainage structures:

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	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
1507	1508																																												314	
1509																		1																				1	1							
1509	1510																																													
1511																		1																				1	1							
1511	1512																																													
1601																		1	0.3																			1	1							
1601	1602																																													
1602																		1	0.8																			1	1							
1602	1613		56							56																																		4.5		
1603																		1																				1	1							
1603	1604																																													
1604																		1	0.3																			1	1							
1604	1614		48							48																																		5.2		
1605																		1																				1	1							
1605	1601																																													
1606																		1																				1	1							
1606	1605																																													
1607																		1																				1	1							
1607	1608																																													
1608																		1																				1	1							
1608	1602																																													
1609																		1																				1	1							
1609	1610																																													
1610																		1																				1	1							
1610	1604																																													
1611																		1																				1	1							
1611	1612																																													
1612																		1																				1	1							
1612	1604																																													
1701																		1	0.8																			1	1							
1701	1719																																													
1702																		1																				1	1							
1702	1789		44							44																																				
1703																		1	3.1																			1	1							
1703	1704																																													
1704																		1	3.2																			1	1							
1704	1718					60							60																																15	
1718																3.6																														
1707																		1																				1	1							
1707	1717																																											3.3	56	
1708																		1																				1	1							
1708	1707																																												53	
1709																		1	2.3																			1	1							
1709	1807																																													
1710																		1																				1	1							
1710	1709																																													
1711																		1																				1	1							
1711	1712																																													
1712																		1																				1	1							
1712	1706																																											27.2		
SHEET TOTAL			148			60				148			60			3.6		24	10.8																			24	24						40.2	438	

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