COMPUTED BY:	MJB	DATE:	1/16/2023
CHECKED BY:	ASB	DATE:	11/7/2023

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROJECT REFERENCE NO.	SHEET NO.
R-2577A	3D-17

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" & UNDER)

LINE & STATION / SIZE / THICKNESS OR GAUGE	OFFSET		STRUCTURE NO. FROM	STRUCTURE NO. TO	TOP ELEVATION	INVERT ELEVATION	INVERT ELEVATION	% MINIMUM REQUIRED SLOPE	SIDE DRAIN PIPE (RCP, CSP, CAAP, HDPE, PP or PVC) 15"	18"	24"	30"	DO NOT USE RCP	DO NOT USE CSP	DO NOT USE CAAP	DO NOT USE HDPE, PP, OR PVC	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"	PIPE AS NOTED 24"	24"	30"	30"	48"	48"	ENDWALLS STD. 838.01 OR STD. 838.11 (UNLESS NOTED OTHERWISE) R.C.P.	C.S.P.
																	.064	.064	.064	.079	.079	.109	.109													Trenchless W.S. (IN SOIL)	Trenchless W.S. (NOT IN SOIL)	Trenchless W.S. (IN SOIL)	Trenchless W.S. (NOT IN SOIL)	Trenchless W.S. (IN SOIL)	Trenchless W.S. (NOT IN SOIL)	CU. YARDS	
SHEET 15																																											
- Y14- 10+67.00	20	RT	1426	1511		871.6	858.9	0.4%																	188																		
- Y14- 12+50.00	-20	LT	1512		861.2																																						
- Y14- 12+50.00	-20	LT	1512	1511		858.2	858.0	0.5%																								40											
- Y14- 12+50.00	20	RT	1511		861.9																																						
- Y14- 12+50.00	20	RT	1511	1514		858.0	854.3	0.4%																	96																		
- L- 138+92.00	48	RT	1501		876.0																																						
- L- 138+92.00	48	RT	1501	1530		872.0	845.1	2.1%									60																										
- L- 139+28.80	95	RT	1530		847.9																																						
- L- 139+28.80	95	RT	1530	1502		842.1	841.8	0.5%																36																			
- L- 140+46.68	111	RT	1529	OUT		859.0	843.0	1.5%												36																							
- L- 147+00.00	-41	LT	1505		886.4																																						
- L- 147+00.00	-41	LT	1505	1506		882.4	875.7	0.5%																							152												
- L- 145+50.00	-41	LT	1506		879.7																																						
- L- 145+50.00	-41	LT	1506	1507		875.7	870.1	0.5%																							204												
- L- 143+50.00	-42	LT	1507		874.1																																						
- L- 143+50.00	-42	LT	1507	1516		870.1	868.8	0.5%																							100												
- L- 142+50.00	-46	LT	1516		872.8																																						
- L- 142+50.00	-46	LT	1516	1517		868.8	868.5	0.6%																							72												
- L- 141+79.89	-48	LT	1517		872.6																																						
- L- 141+79.89	-48	LT	1517	1523		868.5	868.1	0.7%																							96												
- L- 147+00.00	41	RT	1518		886.4																																						
- L- 147+00.00	41	RT	1518	1519		882.4	877.7	0.5%																							100												
- L- 146+00.00	41	RT	1519		881.7																																						
- L- 146+00.00	41	RT	1519	1520		877.7	872.4	0.5%																							152												
- L- 144+50.00	41	RT	1520		876.4																																						
- L- 144+50.00	41	RT	1520	1521		872.4	870.0	0.5%																							112												
- L- 143+40.00	41	RT	1521		874.0																																						
- L- 143+40.00	41	RT	1521	1523		870.0	868.6	0.5%																							160												
- L- 141+30.12	48	RT	1522		872.7																																						
- L- 141+30.12	48	RT	1522	1523		868.7	868.5	0.4%																							48												
- L- 141+79.89	48	RT	1523		872.6																																						
- L- 141+79.89	48	RT	1523	1524		865.0	862.8	0.7%																	40																		
- Y13- 11+29.91	-22	LT	1534		871.4																																						
- Y13- 11+29.91	-22	LT	1534	1525		867.7	867.0	0.6%																52																			
- Y13- 10+75.00	-24	LT	1525		872.3																																						
- Y13- 10+75.00	-24	LT	1525	1526		867.0	863.7	0.4%																84																			
- Y13- 11+50.00	-35	LT	1503	OUT		867.2	867.0	0.4%																										68									
- L- 139+40.00	-48	LT	1509		874.3																																						
- L- 139+40.00	-48	LT	1509	1510		870.3	867.4	0.7%																32																			
- L- 139+40.00	-77	LT	1510		870.1																																						
- L- 139+40.00	-77	LT	1510	1527		867.4	853.1	2.9%									80																										
- L- 140+16.19	-70	LT	1527		856.1																																						
- L- 140+16.19	-70	LT	1527	1528		846.5	846.0	0.7%																44																			
3D-17 SHEET TOTALS																	**140**			**36**				**248**	**324**						**1196**	**40**		**68**									

LINE & STATION / SIZE / THICKNESS OR GAUGE	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 DROP INLET	CATCH BASIN	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 TWO FLAT GRATES STD. 840.20	G.D.I. FRAME WITH TWO GRATES STD. 840.22	G.D.I. (N.S.) FRAME WITH TWO GRATES STD. 840.24	G.D.I. (N.S.) FR. WITH TWO FLAT GRATES STD. 840.29	DRIVEWAY DROP INLET LIN. FT. STD. 840.30	SPRING BOX, STD. 840.41	J.B. STD. 840.31 OR 840.32	TBJB STD. 840.34	T.B.D.I. STD. 840.35	STEEL GRATE AND FRAME STD. 840.37	M.H. FRAME AND COVER STD. 840.54	ADJUST MH	ADJUST CB	BERM DRAINAGE OUTLET	OTCB STD. 840.04 OR 840.05	FLOWABLE FILL (CY)	C.S. PIPE ELBOWS NO. & SIZE	CONC. & BRICK PIPE PLUG, C.Y. STD. 840.71	PIPE REMOVAL LIN. FT.	REMARKS
SHEET 15																																	
- Y14- 10+67.00																																	
- Y14- 12+50.00	1											1			1																		
- Y14- 12+50.00																																	
- Y14- 12+50.00	1											1			1																		
- Y14- 12+50.00																																42	
- L- 138+92.00	1			1		1																											
- L- 138+92.00																																	
- L- 139+28.80	1	0.8																1				1						2 @ 15					
- L- 139+28.80																																	
- L- 140+46.68																																	
- L- 147+00.00	1			1		1																						2 @ 30					
- L- 147+00.00																																	
- L- 145+50.00	1			1		1																											
- L- 145+50.00																																	
- L- 143+50.00	1			1		1																											
- L- 143+50.00																																104	
- L- 142+50.00	1			1		1																											
- L- 142+50.00																																	
- L- 141+79.89	1			1	1																												
- L- 141+79.89																																182	
- L- 147+00.00	1			1			1																										
- L- 147+00.00																																	
- L- 146+00.00	1			1			1																										
- L- 146+00.00																																	
- L- 144+50.00	1			1			1																										
- L- 144+50.00																																	
- L- 143+40.00	1			1			1																										
- L- 143+40.00																																	
- L- 141+30.12	1			1		1																											
- L- 141+30.12																																	
- L- 141+79.89	1	2.6		1	1																												
- L- 141+79.89																																	
- Y13- 11+29.91	1			1	1																												
- Y13- 11+29.91																																	
- Y13- 10+75.00	1	0.4		1			1																										
- Y13- 10+75.00																																	
- Y13- 11+50.00																																	
- L- 139+40.00	1			1			1																									38	
- L- 139+40.00																																	
- L- 139+40.00	1																	1			1												
- L- 139+40.00																																	
- L- 140+16.19	1	4.6																1			1							2 @ 15					
- L- 140+16.19																																	
																												4 @ 15					
3D-17 SHEET TOTALS	**20**	**8.3**		**15**	**3**	**6**	**6**					**2**			**2**			**3**			**3**							**2 @ 30**			**366**	

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

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