CIVILLAP122021D

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PROJECT NO.	SHEET NO.
HL-0008I	3D-4

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

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 / Size / Thickness or Gauge	Offset		Structure Number From	Structure Number To	Top Elevation (FT.)	Invert Elevation (FT.)	Invert Elevation (FT.)	Minimum Required Slope (%)	Drainage Pipe (RCP, CSP, CAAP, HDPE, PVC, or PP PIPE)									R. C. Pipe Class III									R. C. Pipe Class IV								
									12	15	18	24	30	36	42	48	54	12	15	18	24	30	36	42	48	54	12	15	18	24	30	36	42	48	54
L 36+51	16	LT	0000																																
L 36+24	41	LT	0000																																
L 36+44	4	LT	0000																																
L 37+64	38	LT	0000																																
L 38+07	6	LT	0000																																
L 38+40	38	LT	0000																																
L 38+47	6	LT	0000																																
L 38+86	38	LT	0000																																
L 40+93	38	LT	0000																																
L 42+00	39	LT	0000																																
L 42+90	39	LT	0000																																
L 49+60	44	LT	0000																																
L 52+68	2	RT	0000																																
L 52+77	101	LT	0000																																
Y3A 10+20	1	LT	0000																																
Y2 13+29	22	RT	0000																																
Y2 14+27	33	RT	0000																																
L 11+96	23	LT	0404							28																									
L 13+17	27	LT	0405							40																									
L 13+49	26	RT	0528							28																									
L 21+89	57	RT	0529							24																									
L 22+22	60	RT	0530							24																									
L 24+83	66	RT	0531							24																									
L 34+67	52	LT	0626							20																									
L 35+41	56	LT	0627							24																									
L 35+26	73	RT	0628							32																									
L 36+24	62	LT	0629							16																									
L 36+44	65	RT	0630							24																									
L 37+63	63	LT	0631							16																									
L 38+10	59	RT	0632							20																									
L 38+42	66	LT	0634							12																									
L 38+86	63	LT	0635							12																									
L 40+92	53	LT	0721							24																									
L 41+97	52	LT	0722							20																									
L 42+96	54	LT	0723							24																									
L 49+61	61	RT	0724							16																									
Y3A 10+50	1	RT	0725																										52						
			0515	0512		362.0	361.0																						52						
SHEET TOTALS										428																			104						
PROJECT TOTALS									20	428									712	456	132							3912	652	752	252				

Line & Station	Structure No. From	Endwalls Std. 838.01 or Std. 838.11 (Unless noted otherwise) (CY)	Reinforced Endwalls (CY)	Drainage Structure Masonry (CY)	Quantities for Drainage Structures (Note: Total Lin. Ft. for pay quantity shall be A + (1.3 X B)) 0' thru 5' (Each)	5' thru 10' (A) (Lin. Ft.)	10' and Above (B) (Lin. Ft.)	C.B. Std. 840.01 or Std. 840.02	Frame, Grates, and Hood Std. 840.03 Grate Type E	F	G		Concrete Transitional Section D.I. Std. 852.04 or Std. 852.06	C.B. Std. 852.05	Open Throat C.B. Std. 840.04 or Std. 840.05	Concrete Bridge Approach D.I. Std. 840.13	D.I. Std. 840.14 or Std. 840.15	D.I. Frame and Grates Std. 840.16	G.D.I. Type "A" Std. 840.17 or Std. 840.26	G.D.I. Type "B" Std. 840.18 or Std. 840.27	G.D.I. Type "D" Std. 840.19 or Std. 840.28	G.D.I. (W.S. Flat) Frame with Grate Std. 840.20	G.D.I. (W.S. Flat) Frame w/ 2 Grates Std. 840.20	G.D.I. (W.S. Sag) Frame w/ Grate Std. 840.22	G.D.I. (W.S. Sag) Frame w/ 2 Grates Std. 840.22	G.D.I. (N.S. Sag) Frame w/ Grate Std. 840.24	G.D.I. (N.S. Sag) Frame w/ 2 Grates Std. 840.24	G.D.I. (N.S. Flat) Frame w/ Grate Std. 840.29	G.D.I. (N.S. Flat) Frame w/ 2 Grates Std. 840.29	Driveway D.I. Std. 840.30	Frame w/ Grate for Driveway Std. 840.30	J.B. Std. 840.31 or Std. 840.32	Angled Vane Grates and Frames Std. 840.33	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 with Two Grates Std. 840.37	Temp Steel Plate Cover Masonry Drainage	M.H. Std. 840.51, Std. 840.52, or Std. 840.53	M.H. Frame and Cover Std. 840.54	Convert Existing C.B. to J.B.	Convert Existing C.B. to D.I.	Convert Existing D.I. to J.B.	Convert Existing J.B. to D.I.	Adjust C.B.	Adjust D.I.	Special Detail Catch Basin	Modified Conc. Flume	Preformed Scour Hole (Per Each)	Energy Dissipation Basin	Flowable Fill (CY)	Concrete Collars Cl. "B" Std. 840.72 (CY)	Concrete and Brick Pipe Plug Std. 840.71 (CY)	Pipe Removal (Lin. Ft.)	Remarks
L 36+51	0000																																																				53	
L 36+24	0000																																																				40	
L 36+44	0000																																																				28	
L 37+64	0000																																																				19	
L 38+07	0000																																																				24	
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L 42+90	0000																																																				34	
L 49+60	0000																																																				20	
L 52+68	0000																																																				119	
L 52+77	0000																																																				84	
Y3A 10+20	0000																																																				50	
Y2 13+29	0000																																																				161	
Y2 14+27	0000																																																				40	
																																																							Overflow pipe
SHEET TOTALS																																																					788	
PROJECT TOTALS					60	30.7		45	9	18	18		9				3	3			1						1		9			1			9					1							1							1890	

ABBREVIATIONS

- C.A.A. CORRUGATED ALUMINIUM ALLOY
- C.B. CATCH BASIN
- C.S. CORRUGATED STEEL
- D.I. DROP INLET
- G.D.I. GRATED DROP INLET
- H.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