COMPUTED BY:	BRC	DATE:	1/26/16
CHECKED BY:	BJH	DATE:	8/22/16

PROJECT NO.	SHEET NO.
R-2915C	3D-3

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	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, or HDPE) 15	18	24	30	36	48	DO NOT USE RCP	DO NOT USE HDPE	DO NOT USE PVC	C. S. PIPE 15 .064	18 .064	24 .064	30 .079	42 .109	48 .109	R. C. PIPE CLASS III 12	15	18	24	30	36	42	48	R. C. PIPE CLASS IV 12	15	18	24	15" WELDED STEEL PIPE 0.28" THICK, GRADE B IN SOIL	15" WELDED STEEL PIPE 0.28" THICK, GRADE B NOT N SOIL	18" WELDED STEEL PIPE 0.31" THICK, GRADE B IN SOIL	18" WELDED STEEL PIPE 0.31" THICK, GRADE B NOT IN SOIL	24" WELDED STEEL PIPE 0.38" THICK, GRADE B IN SOIL	24" WELDED STEEL PIPE 0.38" THICK, GRADE B NOT IN SOIL	30" WELDED STEEL PIPE 0.47" THICK, GRADE B IN SOIL	30" WELDED STEEL PIPE 0.47" THICK, GRADE B NOT IN SOIL	36" WELDED STEEL PIPE 0.53" THICK, GRADE B IN SOIL	36" WELDED STEEL PIPE 0.53" THICK, GRADE B NOT IN SOIL	6" PVC PIPE (SPRING BOX)	6" DUCTILE IRON PIPE (SPRING BOX)	ENDWALLS STD. 838.01 OR STD. 838.11 (UNLESS NOTED OTHERWISE) CY
L 313+00	11 LT	0812		2994.9																																											
		0812	0811		2985.9	2985.6																			56																						
L 312+71	60 RT	0813		2989.3																																											
		0813	0812		2986.5	2986.1	0.4																	76																							
L 315+50	96 LT	0814		2991.7																																											
		0814	0901		2988.9	2988.4																										100															
L 315+64	62 RT	0815						32																																							
L 316+50	97 LT	0901		2992.6																																											
		0901	0902		2988.4	2987.9																										104															
L 316+60	5 RT	0902		2994.4																																											
		0902	0903		2987.9	2986.1																										68															
L 316+75	71 RT	0903		2988.8																																											
		0903	0904		2985.8	2984.0	0.6																		76																						
L 317+56	74 RT	0904		2987.0																																											
L 318+11	44 LT	0905		2992.7																																											
		0905	0906		2990.0	2989.8																										36															
L 318+48	44 LT	0906		2992.8																																											
		0906	0907		2989.8	2989.6																										40															
L 318+48	5 LT	0907		2993.6																																											
		0907	0904		2989.6	2984.3																										120															
L 321+29	44 LT	0908		2996.3																																											
		0908	0906		2993.6	2990.0																										280															
		0909	OUT		2923.5	2919.8																					72																				
L 317+59	115 LT	0909		2927.7																																											
L 322+00	61 RT	0910		2994.9																																											
		0910	0912		2991.9	2991.5																			68																						
L 321+97	92 RT	0911																																													
		0911	0910		3007.3	2991.9	0.6		32					X																																	
L 322+70	61 RT	0912		2996.2																																											
		0912	OUT		2991.5	2990.7	0.6																		128																						
L 326+57	61 RT	0913		3006.3																																											
		0913	0914		2996.3	2991.0	0.9																			56																					
L 326+47	7 RT	0914		2994.8																																											
		0914	OUT		2991.0	2975.0																																			67	66							
L 327+08	7 RT	0915																																												60	
L 328+00	61 LT	0916		3009.2																																											
		0916	0917		3006.4	3004.9																		124																							
L 327+81	61 RT	0917		3008.9																																											
		0917	0913		3004.6	2996.8	1.8																		124																						
L 332+20	56 LT	1001		3017.9																																											
		1001	1004		3015.2	3014.2																										176															
L 333+14	136 LT	1002		2958.5																																											
		1002	1003		2952.6	2925.3												104																													
L 333+40	236 LT	1003		2929.3																																											
		1003	OUT		2923.8	2920.2												20																													
L 334+00	56 LT	1004		3020.9																																											
		1004	1005		3014.2	3013.6	0.3																									124															
L 334+00	68 RT	1005		3017.1																																											
		1005	OUT		3013.6	3010.5	1.4	52							X	X																															
L 337+00	61 RT	1006		3024.2																																											
SHEET TOTALS								84	32										124					200	452	56	72					1048							67	66						60	

LINE & STATION	FROM	TO	QUANTITIES FOR DRAINAGE STRUCTURES 0' THRU 5' EACH	A 5' THRU 10' LIN. FT.	B 10' AND ABOVE LIN. FT.	CONCRETE TRANSITIONAL SECTION D.I. STD. 852.06	CONCRETE TRANSITIONAL SECTION G.D.I. (SEE DETAIL SHEET 2C-2)	OPEN THROAT C.B. STD. 840.04 OR STD. 840.05	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 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. FLAT) FRAME W/ 2 GRATES STD. 840.29	J.B. STD. 840.31 OR STD. 840.32	T.B.J.B. STD. 840.34 OR STD. 840.46	T.B.D.I. STD. 840.35 OR STD. 840.46	T.B. 2GI SPECIAL DESIGN	T.B. 3GI SPECIAL DESIGN	SPRING BOX STD. 840.41	15" PARALLEL PIPE END SECTION STD. 310.02	CONVERT EXIST. DI TO 3GI SPECIAL DESIGN	CONVERT EXISTING D.I. TO J.B.	CONVERT EXISTING J.B. TO D.I.	CONVERT EXISTING T.B.J.B. TO 2GI	CONVERT TB2GI TO TBJB W/ SLAB LID	15" SIDE DRAIN PIPE ELBOW	18" SIDE DRAIN PIPE ELBOW	24" SIDE DRAIN PIPE ELBOW	36" SIDE DRAIN PIPE ELBOW	18" C.S. ELBOW	30" C.S. ELBOW	BERM DITCH OUTLET (PER EACH)	PREFORMED SCOUR HOLE (PER EACH)	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 313+00	0812		1	4.0			1							1						1																						
	0812	0811																																								
L 312+71	0813		1									1				1																										
	0813	0812																																								
L 315+50	0814		1									1				1																										
	0814	0901																																								
L 315+64	0815																								1																	
L 316+50	0901		1									1		1																												
	0901	0902																																								
L 316+60	0902		1	1.5		1			1	1																																
	0902	0903																																								
L 316+75	0903		1									1				1																										
	0903	0904																																								
L 317+56	0904														1	1										1																CONVERT EXIST. DI TO 3GI, See Detail Sheet 2C-4
L 318+11	0905		1									1		1																												
	0905	0906																																								
L 318+48	0906		1									1		1																												
	0906	0907																																								
L 318+48	0907		1			1			1	1																																
	0907	0904																																								
L 321+29	0908		1									1		1																												
	0908	0906																																								
	0909	OUT																																							24	REMOVE PART 30" CMP, LINE W/ CCCP, L=188'
L 317+59	0909		1															1																								
L 322+00	0910		1									1				1																										
	0910	0912																																								
L 321+97	0911																																				1						18" BDO STD. 850.10
	0911	0910																														1										
L 322+70	0912		1									1				1																										
	0912	OUT																																								
L 326+57	0913		1	5.0											1	1						1																				TB3GI SPECIAL DESIGN, See Detail Sheet 2C-13
	0913	0914																																								
L 326+47	0914		1																1																							
	0914	OUT																																								
L 327+08	0915		1																				1																			TB SPRING BOX
L 328+00	0916		1									1				1																										
	0916	0917																																								
L 327+81	0917		1								1				1	1																										
	0917	0913																																								
L 332+20	1001		1									1		1																												
	1001	1004																																								
L 333+14	1002		1	0.8														1																								
	1002	1003																																								
L 333+40	1003		1	0.6														1																								
	1003	OUT																																								
L 334+00	1004		1	1.6								1		1																												
	1004	1005																																								
L 334+00	1005		1									1				1																										
	1005	OUT																																								
L 337+00	1006		1									1				1																										
SHEET TOTALS			24	13.5		2	1		2	2	1	14		7	3	11		3	1	1		1	1	1	1						1					1					24	

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