R0268441

COMPUTED BY:	HYDRAULICS UNIT	DATE:	9-3-13
CHECKED BY:	ESM	DATE:	9-4-13

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROJECT NO.	SHEET NO.
B-4511	3D-1

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, or PVC) 12	15	18	24	30	36	42	48	54	60
L 17+98	16 LT	0401		813.2													
		0401	0402		810.5	810.4											
L 17+98	19 RT	0402		813.1													
		0402	0403		810.4	806.8			16								
L 17+98	32 RT	0403															
SHEET TOTALS								16									
PROJECT TOTALS								16									

LINE & STATION	C. S. PIPE (SE: SHOP ELONGATED) 12	15	18	24	30	36	42	48
THICKNESS OR GAUGE	.064	.064	.064	.064	.079	.079	.109	.109
L 17+98								
L 17+98								
L 17+98								
SHEET TOTALS								
PROJECT TOTALS								

LINE & STATION	R. C. PIPE CLASS III 12	15	18	24	30	36	42	48	54	60
L 17+98										
L 17+98										
L 17+98										
SHEET TOTALS										
PROJECT TOTALS										

LINE & STATION	R. C. PIPE CLASS IV 12	15	18	24	30	36	42	48	54	60
L 17+98										
		32								
L 17+98										
L 17+98										
SHEET TOTALS		32								
PROJECT TOTALS		32								

LINE & STATION	R. C. PIPE CLASS V 12	15	18	24	30	36	42	48	54	60
L 17+98										
L 17+98										
L 17+98										
SHEET TOTALS										
PROJECT TOTALS										

LINE & STATION	ENDWALLS STD. 838.01 OR STD. 838.11 (UNLESS NOTED OTHERWISE) CY	REINFORCED ENDWALLS CY	QUANTITIES FOR DRAINAGE STRUCTURES (NOTE: TOTAL LIN. FT. FOR PAY QUANTITY SHALL BE A + (1.3 X B)) A: 0' THRU 5' EACH	A: 5' THRU 10' LIN. FT.	B: 10' AND ABOVE 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	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	ANGLED VANE GRATES AND FRAMES STD. 840.33	T.B.D.I. STD. 840.35	STEEL FRAME WITH TWO GRATES STD. 840.37	TEMP STEEL PLATE COVER MASONRY DRAINAGE	SPRING BOX STD. 840.41	M.H. STD. 840.51, STD. 840.52, OR STD. 840.53	M.H. FRAME AND COVER STD. 840.54	15" DRAINAGE PIPE ELBOW	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 17+98			1									1				1											
L 17+98			1									1				1											
																					2						
L 17+98																						1					
SHEET TOTALS			2									2				2					2	1					
PROJECT TOTALS			2									2				2					2	1					

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