COMPUTED BY:	VWB	DATE:	9/26/2011
CHECKED BY:	JDL	DATE:	9/30/2011

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROJECT NO.	SHEET NO.
Berkeley Blvd. (U-3609A)	3-A

**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)

STATION / SIZE / THICKNESS OR GAUGE	LOCATION (LT, RT, OR CL)'	STRUCTURE NO. FROM	STRUCTURE NO. TO	TOP ELEVATION	INVERT ELEVATION	INVERT ELEVATION	SLOPE CRITICAL	DRAINAGE PIPE (RCP, CSP, CAAP, HDPE, or PVC) 12"	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 12" .064	15" .064	18" .064	24" .064	30" .079	36" .079	42" .109	48" .109
Sheet 4																											
17+99.00 -L-	LT	401		115.1	112.3																						
17+99.00 -L-	LT	401	402		112.3	110.8	0.006																				
Sheet 5																											
33+22.29 -L-	LT	514		114.8	111.8																						
33+22.29 -L-	LT	514	513		111.8	110.5	0.033		40								X	X									
33+28.00 -L-	RT	516		114.7	109.3																						
33+28.00 -L-	RT	516	515		109.3	109.0	0.010																				
33+91.00 -L-	RT	518		114.8	109.3																						
33+91.00 -L-	RT	518	517		109.3	109.0	0.017																				
37+42.80 -L-	LT	527		114.3	111.1																						
37+42.80 -L-	LT	527	524		111.1	110.8	0.021		14								X	X									
37+40.00 -L-	LT	524		116.1	110.4																						
37+40.00 -L-	LT	524	523		110.4	110.2	0.002																				
36+53.69 -L-	LT	523		115.7	110.2																						
36+48.64 -L-	LT	526		113.7	110.5																						
36+48.64 -L-	LT	526	523		110.5	110.4	0.007		15								X	X									
36+53.69 -L-	LT	523	522		110.2	110.1	0.005																				
36+29.49 -L-	LT	522		115.7	110.1																						
36+27.03 -L-	LT	525	522		112.0	111.0	0.016																				
36+29.49 -L-	LT	522	521		110.1	109.9	0.003																				
35+56.50 -L-	LT	521		115.5	109.9																						
34+25.00 -L-	LT	519		115.0	112.0																						
34+25.00 -L-	LT	519	521		112.0	110.3	0.013																				
35+56.50 -L-	LT	521	520		109.9	109.8	0.004					28															
11+79.61 -Y2-	RT	528																									
Sheet 6																											
38+34.00 -L-	LT	601		116.4	110.7																						
38+34.00 -L-	LT	601	524		110.7	110.4	0.003																				
38+34.00 -L-	LT	607	601		112.5	112.2	0.012			26							X	X									
41+15.00 -L-	LT	602		117.1	112.0																						
41+15.00 -L-	LT	602	601		112.0	110.7	0.005																				
42+80.00 -L-	LT	603		117.6	112.8																						
42+80.00 -L-	LT	603	602		112.8	112.0	0.005																				
42+80.00 -L-	LT	608		116.0	113.8																						
42+80.00 -L-	LT	608	603		113.8	113.0	0.050		16								X	X									
45+20.00 -L-	LT	604		118.2	113.9																						
45+20.00 -L-	LT	604	603		113.9	112.8	0.005																				
45+20.00 -L-	LT	609		116.4	114.2																						
45+20.00 -L-	LT	609	604		114.2	113.9	0.015		20								X	X									
47+90.00 -L-	LT	605		118.9	115.2																						
47+90.00 -L-	LT	605	604		115.2	113.9	0.005																				
50+58.00 -L-	LT	606		120.9	117.2																						
50+58.00 -L-	LT	606	605		117.2	115.2	0.008																				
50+58.00 -L-	LT	610	606		119.0	118.6	0.033		12								X	X									
SHEET TOTALS									117	26		28															

STATION	STRUCTURE NO. FROM	STRUCTURE NO. TO	R.C. PIPE CLASS III 12"	15"	18"	24"	30"	36"	42"	48"	R.C. PIPE CLASS IV 12"	15"	18"	24"	30"	36"	42"	48"	** " R.C. PIPE (CLASS V)	***" RC PIPE CULVERTS, CONTRACTOR DESIGN	****" RC PIPE CULVERTS, CONTRACTOR DESIGN	15" SIDE DRAIN PIPE	18" SIDE DRAIN PIPE	ENDWALLS STD. 838.01 OR STD. 838.11 (UNLESS NOTED OTHERWISE) CU. YARDS R.C.P.	C.S.P.	QUANTITIES FOR DRAINAGE STRUCTURES PER EACH (0' THRU 5.0')	*TOTAL L.F. FOR PAY QUANTITY SHALL BE COL. 'A' + (1.3 X COL.'B') LIN. FT. A 5.0' THRU 10.0'	B 10.0' AND ABOVE
Sheet 4																												
17+99.00 -L-	401																									1		
17+99.00 -L-	401	402									247																	
Sheet 5																												
33+22.29 -L-	514																									1		
33+22.29 -L-	514	513																										
33+28.00 -L-	516																									1	0.4	
33+28.00 -L-	516	515													29													
33+91.00 -L-	518																									1	0.5	
33+91.00 -L-	518	517													18													
37+42.80 -L-	527																									1		
37+42.80 -L-	527	524																										
37+40.00 -L-	524																									1	0.7	
37+40.00 -L-	524	523													83													
36+53.69 -L-	523																									1	0.5	
36+48.64 -L-	526																									1		
36+48.64 -L-	526	523																										
36+53.69 -L-	523	522													21													
36+29.49 -L-	522																									1	0.6	
36+27.03 -L-	525	522		62																								
36+29.49 -L-	522	521													70													
35+56.50 -L-	521																									1	0.6	
34+25.00 -L-	519																									1		
34+25.00 -L-	519	521										132																
35+56.50 -L-	521	520																										
11+79.61 -Y2-	528																					20						
Sheet 6																												
38+34.00 -L-	601																									1	0.7	
38+34.00 -L-	601	524													91													
38+34.00 -L-	607	601																										
41+15.00 -L-	602																									1	0.1	
41+15.00 -L-	602	601													278													
42+80.00 -L-	603																									1		
42+80.00 -L-	603	602													162													
42+80.00 -L-	608																									1		
42+80.00 -L-	608	603																										
45+20.00 -L-	604																									1		
45+20.00 -L-	604	603												237														
45+20.00 -L-	609																									1		
45+20.00 -L-	609	604																										
47+90.00 -L-	605																									1		
47+90.00 -L-	605	604												267														
50+58.00 -L-	606																									1		
50+58.00 -L-	606	605												265														
50+58.00 -L-	610	606																										
SHEET TOTALS				62							247	132		769	752							20				19	4.1	

STATION	STRUCTURE NO. FROM	STRUCTURE NO. TO	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 GRATE STD. 840.20	G.D.I. FRAME WITH TWO GRATES STD. 840.22	G.D.I. (N.S.) FRAME WITH GRATE STD. 840.24	G.D.I. (N.S.) FRAME WITH TWO GRATES STD. 840.24	J.B. STD. 840.31 OR 840.32	MANHOLE FRAME AND COVER STD. 840.54	TRAFFIC BEARING J.B. STD. 840.34			DRAINAGE PIPE ELBOWS NO. & SIZE	CONC. & BRICK PIPE PLUG, C.Y. STD. 840.71	CONC. COLLARS CL. "B" C.Y. STD. 840.72	PIPE REMOVAL LIN. FT.	REMARKS
Sheet 4																											
17+99.00 -L-	401		1			1																					
17+99.00 -L-	401	402																									Contractor to field adjust if necessary
Sheet 5																											
33+22.29 -L-	514		1	1																							
33+22.29 -L-	514	513																								136	Tie to Wing Wall
33+28.00 -L-	516		1	1																							
33+28.00 -L-	516	515																								18	Tie to RCBC
33+91.00 -L-	518		1	1																							
33+91.00 -L-	518	517																								16	Tie to RCBC
37+42.80 -L-	527								1	1																	
37+42.80 -L-	527	524																									
37+40.00 -L-	524		1		1																						
37+40.00 -L-	524	523																								37	
36+53.69 -L-	523		1		1																						
36+48.64 -L-	526								1	1																	
36+48.64 -L-	526	523																									
36+53.69 -L-	523	522																									
36+29.49 -L-	522																		1	1							
36+27.03 -L-	525	522																								33	
36+29.49 -L-	522	521																								45	
35+56.50 -L-	521		1		1																						
34+25.00 -L-	519		1		1																						
34+25.00 -L-	519	521																									
35+56.50 -L-	521	520																									
11+79.61 -Y2-	528																									17	
Sheet 6																											
38+34.00 -L-	601		1		1																						
38+34.00 -L-	601	524																									
38+34.00 -L-	607	601																									
41+15.00 -L-	602		1		1																						
41+15.00 -L-	602	601																								37	
42+80.00 -L-	603		1		1																						
42+80.00 -L-	603	602																									
42+80.00 -L-	608								1	1																	
42+80.00 -L-	608	603																									
45+20.00 -L-	604		1		1																						
45+20.00 -L-	604	603																								26	
45+20.00 -L-	609								1	1																	
45+20.00 -L-	609	604																									
47+90.00 -L-	605		1		1																						
47+90.00 -L-	605	604																									
50+58.00 -L-	606		1		1																						
50+58.00 -L-	606	605																									
50+58.00 -L-	610	606																									
SHEET TOTALS			14	3	10	1			4	4									1	1						365	

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