COMPUTED BY: KAP DATE: 09/26/16
CHECKED BY: DJC DATE: 09/26/16

PROJECT NO.	SHEET NO.
R-4753	3B-2

RD261649

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

"N" = DISTANCE FROM EDGE OF LANE TO FACE OF GUARDRAIL
TOTAL SHOULDER WIDTH = DISTANCE FROM EDGE OF TRAVEL LANE TO SHOULDER BREAK POINT.
FLARE LENGTH = DISTANCE FROM LAST SECTION OF PARALLEL GUARDRAIL TO END OF GUARDRAIL
W = TOTAL WIDTH OF FLARE FROM BEGINNING OF TAPER TO END OF GUARDRAIL

GUARDRAIL SUMMARY

G = GATING IMPACT ATTENUATOR TYPE 350
NG = NON-GATING IMPACT ATTENUATOR TYPE 350

SURVEY LINE	BEG. STA.	END STA.	LOCATION	LENGTH (WEATHERING STEEL BEAM GUARDRAIL WITH PAINTED LAP)			WARRANT POINT		"N" DIST. FROM E.O.L.	TOTAL SHOUL WIDTH	FLARE LENGTH		W		ANCHORS									IMPACT ATTENUATOR TYPE 350		SINGLE FACED CONCRETE BARRIER	REMOVE EXISTING GUARDRAIL	REMOVE & STOCKPILE EXISTING GUARDRAIL	REMARKS
				STRAIGHT	SHOP CURVED	DOUBLE FACED	APPROACH END	TRAILING END			APPROACH END	TRAILING END	APPROACH END	TRAILING END	TYPE B-77 (WEATHERING)	SPEC. B-77 SHOP CURVED (WEATHERING)	GRAU 350 (PAINTED)	GRAU 350 TL-2 (PAINTED)	TES (WEATHERING)	AT-1 (WEATHERING)	TEMP GRAU 350 TL-2	TEMP AT-1	TEMP GRAU 350	G	NG				
-L- RT	33+92.73	40+10.50	RT	600	18.75		34+50.00	39+00.00	8'	11'		50		1			1			1							710		
-L- RT	45+81.41	48+43.91	RT	262.5			46+50.00	48+43.91	8'	11'	243.75		4.875		1		1										215		
-L- RT	49+79.32	50+66.82	RT	87.5			49+79.32		8'	11'		68.75		1.375	1		1										104		
-L- RT	53+89.66	54+77.16	RT	87.5			54+50.00	54+77.16	8'	11'	50		1		1		1												
-L- RT	57+05.00	58+00.00	RT	95			57+05.00	58+00.00	8'	11'					2														
-L- RT	62+10.00	86+60.00	RT	2450			62+10.00	85+75.00	8'	11'		50		1	1		1										3318		
L RT/Y3 RT	88+89.75	10+48.33		737.5	50		90+00.00	Y3 10+48.33	8'	11'	50		1			1	1										907		
Y3 LT/L RT	10+48.76	97+72.37		56.25	50		Y3 10+48.76		8'	11'		50		1		1	1										72		
-L- RT	103+88.78	124+63.78	RT	2075			104+75.00	123+75.00	8'	11'	50	50	1	1			2										1485		
-L- RT	127+54.11	139+29.11	RT	1175			128+35.00	138+50.00	8'	11'	50	50	1	1			2										1543		
-L- RT	141+78.00	143+78.00	RT	200			142+69.25	142+88.15	8'	11'	50	50	1	1			2												
-L- RT	147+23.52	155+23.52	RT	800			148+00.00	154+16.77	8'	11'	50	50	1	1			2										303		
-L- RT	157+18.54	165+68.54	RT	850			158+00.00	164+75.00	8'	11'	50	50	1	1			2												
-L- RT/DRV 4	167+68.04	10+38.55		112.5	37.5		167+68.04	10+38.55	8'	11'	50	6.25	1				1			1									
DRV 4/-L- RT	168+92.40	182+05.00		1312.5			168+92.40	182+05.00	8'	11'	50	50	1	1			2										1152		
-L- RT	183+14.00	187+01.50	RT	387.5			184+00.00	186+50.00	8'	11'	50	50	1	1			2												
-L- RT	188+45.00	192+95.00	RT	450			189+50.00	192+23.25	8'	11'	50	50	1	1			2												
-L- RT	198+45.00	202+82.50	RT	437.5			199+75.00	202+50.00	8'	11'	50	50	1	1			2												
-L- RT	207+58.00	211+83.00	RT	425			208+50.00	211+50.00	8'	11'	50	50	1	1			2												
-L- LT	46+56.14	48+43.64	LT	187.5			48+43.64	47+00.00	8'	11'		168.75	3.375		1		1										216		
-L- LT	49+79.00	50+97.84	LT	93.75	31.25		49+79.00		8'	11'	75		1.5		1					1							66		
-L- LT	87+83.00	89+61.00	LT	100															2										
-L- LT	141+63.89	143+27.00	LT	150	37.5		142+78.54	142+50.00	8'	11'	50	6.25	1	1			1			1									
-L- LT	149+46.00	150+83.50	LT	137.5			150+09.70		8'	11'	50	50	1	1			2												
-L- LT	151+52.00	154+27.00	LT	275					4'	11'								2											
-L- LT	163+81.57	164+94.07	LT	112.5			164+81.37		8'	11'	50	50	1	1			2												
-L- LT	168+14.00	169+53.50	LT	125	37.5		168+60.77		8'	11'	50	6.25	1	1			1			1									
-L- LT	191+50.50	192+88.00	LT	137.5			192+23.25	192+00.00	8'	11'	50	50	1	1			2												
			SUBTOTAL	13920	262.5										8	2	37	2	2	5							10091		
			LESS DEDUCTIONS FOR ANCHORS																										
			GRAU-350 (PAINTED) 37 @ 50'	-1850																									
			TYPE B-77 (WEATHERING) 8 @ 18.75'	-150																									
			TYPE SPEC. B-77 (WEATHERING) 2 @ 18.75'		-37.5																								
			GRAU 350 TL-2 (PAINTED) 2 @ 25'	-50																									
			AT-1 (WEATHERING) 5 @ 6.25'		-31.25																								
			PROJECT TOTAL	11870	193.75										**8**	**2**	**38**	**2**	**2**	**5**							**10091**		
			SAY	**11875**	**200**																						**10100**		
ADDITIONAL GUARDRAIL POST = 20																													

SURVEY LINE	BEG. STA.	END STA.	LOCATION	LENGTH			WARRANT POINT		"N" DIST. FROM E.O.L.	TOTAL SHOUL WIDTH	FLARE LENGTH		W		ANCHORS									IMPACT ATTENUATOR TYPE 350		SINGLE FACED CONCRETE BARRIER	REMOVE EXISTING GUARDRAIL	REMOVE & STOCKPILE EXISTING GUARDRAIL	REMARKS
				STRAIGHT	SHOP CURVED	DOUBLE FACED	APPROACH END	TRAILING END			APPROACH END	TRAILING END	APPROACH END	TRAILING END	TYPE B-77	SPEC. B-77	GRAU 350	GRAU 350 TL-2	TES	AT-1	TEMP GRAU 350 TL-2	TEMP B-77	TEMP GRAU 350	G	NG				
-L- RT	15+50.00	33+25.00	RT	1775			15+50.00	32+50.00	8'	11'		50		1			1										8		TIE TO EXISTING GUARDRAIL WITH STANDARD STEEL BEAM GUARDRAIL
			SUBTOTAL	1775													1										8		
			LESS DEDUCTIONS FOR ANCHORS																										
			GRAU-350 1 @ 50'	-50																									
			PROJECT TOTAL	1725													**1**										**8**		
			SAY	**1725**																							**50**		
TEMPORARY GUARDRAIL																													
-L- RT	15+50.00	24+75.00	RT	925																	1								TIE TO EXIST. GUARDRAIL AT -L- STA. 15+50 RT
-L- RT	26+60.00	33+15.00	RT	656.25																	1	1							
-L- RT	53+12.00	63+12.00	RT	1000																	2								
-L- RT	69+64.00	82+85.00	RT	1312.5																	2								
-L- RT	89+92.00	96+55.00	RT	656.25																	1	1							
-L- RT	127+70.00	134+95.00	RT	731.25																	1	1							
-L- RT	140+57.00	144+60.00	RT	400																	2								
-L- LT	141+64.00	143+26.00	LT	162.5																	2								
-L- RT	145+66.00	154+72.00	RT	900																	2								
-DET2-	10+00.00	21+25.00	RT	1125																	1								TIE TO EXIST. GUARDRAIL AT -DET2- STA. 21+25 RT
			SUBTOTAL	7868.75																	15	3							
			LESS DEDUCTIONS FOR ANCHORS																										
			TEMP GRAU-350 TL-2 15 @ 25'	-375																									
			TEMP B-77 3 @ 18.75'	-56.25																									
			PROJECT TOTAL	7437.50																	**15**	**3**							
			SAY	**7450**																									
ADDITIONAL GUARDRAIL POST = 10																													