PROJECT REFERENCE NO.	SHEET NO.
B-4593	3B-1

Prepared in the Office of: SUMMIT DESIGN AND ENGINEERING SERVICES
NC FIRM LICENSE No: P-0339
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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.
G = GATING IMPACT ATTENUATOR TYPE 350
NG = NON-GATING IMPACT ATTENUATOR TYPE 350

GUARDRAIL SUMMARY

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 GUARDRAIL	REMOVE EXISTING GUARDRAIL	REMOVE AND STOCKPILE EXISTING GUARDRAIL	REMARKS
				STRAIGHT	SHOP CURVED	DOUBLE FACED	APPROACH END	TRAILING END			APPROACH END	TRAILING END	APPROACH END	TRAILING END	XI MOD	TYPE-III	GREU TL-3	GREU TL-2	TEMP GREU TL-3	TEMP TYPE-III	VI MOD	TYPE B-77	AT-1	EA	G	NG				
-L-	13+22.00	16+22.00	RT	300.00'			16+22.00		8'-0"	11'-0"	269'		4'-11"			1	1													
-L-	13+00.00	16+22.00	LT	325.00'				16+22.00	8'-0"	11'-0"		316'		5'		1	1													
-L-	17+82.00	19+19.50	RT	137.50'				17+82.00	8'-0"	11'-0"		115'		2'-3"		1	1													
-L-	17+82.00	22+75.00	LT	500.00'	81.25'		17+82.00		8'-0"	11'-0"	265'		4'			1							1							
SUB TOTAL				1262.50'	81.25'											4	3						1							
LESS ANCHOR DEDUCTIONS																														
		GREU TL-3	3@50.00'	150.00'																										
		TYPE III	4@18.75'	75.00'																										
		AT-1	1@6.25'		6.25'																									
PROJECT TOTAL				1037.5'	75.00'											4	3						1							

TEMPORARY GUARDRAIL SUMMARY

-LDET-	10+50.00	15+35.00	RT	485'			15+35.00		4'-0"	7'-0"	193'		1'						1	1										
-LDET-	14+47.50	15+35.00	LT	87.50'				15+35.00	4'-0"	7'-0"		69'		1'					1	1										
-LDET-	16+75.00	21+50.00	RT	475.00'				16+75.00	4'-0"	7'-0"		69'		1'					1	1										
-LDET-	16+75.00	18+87.50	LT	212.50'			16+75.00		4'-0"	7'-0"	194'		1'						1	1										
SUB TOTAL				1260'															4	4										
LESS ANCHOR DEDUCTIONS																														
		GREU TL-3	4@50.00'	200.00'																										
		TYPE III	4@18.75'	75.00'																										
PROJECT TOTAL				985'															4	4										

SUMMARY OF EARTHWORK

IN CUBIC YARDS

APPROXIMATE QUANTITIES ONLY. UNCLASSIFIED EXCAVATION, BORROW EXCAVATION, FINE GRADING, CLEARING AND GRUBBING, AND REMOVAL OF EXISTING PAVEMENT WILL BE PAID FOR AT THE LUMP SUM PRICE FOR "GRADING".

PHASE	LOCATION	UNCLASSIFIED EXCAVATION	UNDERCUT	EMBT+%	BORROW	WASTE
PHASE I DETOUR CONSTRUCTION	-L_DET- STA. 11+54.39 TO 16+32.21	7		3,405	3,398	
	-L_DET- STA. 17+72.21 TO 25+23.51	15		3,696	3,681	
	WASTE TO REPLACE BORROW					
	SUB TOTAL	22		7,101	7,079	
PHASE II MAINLINE CONSTRUCTION						
	-L- STA. 11+00.00 TO 16+22.00	29		1,076	1,047	
	-L- STA. 17+82.00 TO 26+00.00	52		1,609	1,557	
	WASTE TO REPLACE BORROW					
	SUB TOTAL	81		2,685	2,604	
PHASE III DETOUR REMOVAL						
	(DETREM) -L- STA. 12+00.00 TO 23+00.00	6,221				6,221
	SUB TOTAL	6,221				6,221
	TOTAL	6,324		9,786	9,683	6,221
	SELECT GRANULAR MATERIAL IN PLACE OF BORROW (SEE SHEET 2G-1)			-350	-350	
	PROJECT TOTAL	6,324		9,436	9,333	6,221
	5% TO REPLACE TOP SOIL				467	
	GRAND TOTALS	6,324		9,436	9,800	
	SAY	6,400			9,900	6,300

SUMMARY OF ASPHALT PAVEMENT REMOVAL

LOCATION	AREA (SQFT)	AREA (SQYD)
-L- STA. 14+50.00 TO 16+30.00	4,318.85	479.87
-L- STA. 17+75.00 TO 21+50.00	8,993.64	999.29
-LDET- STA. 11+92.00 TO 15+35.00	8,075.82	897.31
-LDET- STA. 16+75.00 TO 22+58.00	13,238.66	1,470.96
TOTAL	34,626.97	3,847.44
SAY	34,630	3,850

SHOULDER BERM GUTTER SUMMARY

SURVEY LINE	STATION	STATION	LOCATION (LT/RT/CL)	LINEAR FEET
-L-	15+34.93	15+97.83	LT	62.9
-L-	15+80.25	15+97.83	RT	16.8
-L-	18+06.17	18+24.00	LT	17.8
-L-	18+06.17	18+24.00	RT	17.8
-LDET-	16+75.00	16+96.08	LT	21.1
			TOTAL	136.4
			SAY	137

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