COMPUTED BY:	S. Browde, PE	DATE:	4/27/16
CHECKED BY:	E. Stewart, EI	DATE:	5/25/16

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

PROJECT REFERENCE NO.	SHEET NO.
17BP.4.R.68	3B-1

"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			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 III	XI	GRAU 350	M-350	XIII	CAT-1	VI MOD	BIC	G	NG				
-L-	12+09.00	12+84.00	LT	75.00				12+84.00	4'	7'		50'		1'	1		1											
-L-	12+09.00	12+84.00	RT	75.00			12+84.00		4'	7'	50'		1'		1		1											
-L-	13+69.00	14+44.00	LT	75.00			13+69.00		4'	7'	50'		1'		1		1											
-L-	13+69.00	14+44.00	RT	75.00				13+69.00	4'	7'		50'		1'	1		1											
GUARDRAIL TOTALS:				**300.00**											**4**		**4**											
		ANCHOR DEDUCTIONS:																										
		TYPE III: 4 @ 18.75' EA		75.00																								
		GRAU-350: 4 @ 50' EA		200.00																								
		ANCHOR TOTALS:		**275.00**																								
		GUARDRAIL GRAND TOTALS:		**25.00**											**4**		**4**											
			SAY:	**50.00**																								
		ADDITIONAL GUARDRAIL POSTS = 5																										

ASPHALT PAVEMENT REMOVAL SUMMARY

LINE	STATION	STATION	LOCATION	AREA	SQ. YDS.
-L-	11+00.00	12+85.56	CL	3,896.76	432.97
-L-	13+67.44	16+30.00	CL	5,513.76	612.64
				TOTAL	1,045.61
				SAY	**1,100**

EARTHWORK SUMMARY

LINE	STATION	STATION	UNCL. EXCAV.	EMBANK. +%	BORROW	WASTE
-L-	11+00.00	12+75.00	112	46	0	66
-L-	13+75.00	16+25.00	29	180	151	
PROJECT TOTALS:			141	226	151	66
Waste in Lieu of Borrow					-66	-66
GRAND TOTALS:			141		85	0
SAY:			**400**		**120**	**0**

DDE = 200 Cu. Yds.

Note: Approximate quantities only. Unclassified Excavation, Borrow Excavation, Fine Grading, Clearing and Grubbing, and Removal of Asphalt Pavement will be paid for at the contract lump sum price for grading.

SHOULDER BERM GUTTER SUMMARY

LINE	STATION	STATION	LOCATION	LENGTH
-L-	12+25.00	12+72.00	RT	47.00
-L-	12+60.00	12+72.00	LT	12.00
			TOTAL	59.00
			SAY	**70**