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PROJECT REFERENCE NO.	SHEET NO.
17BP.14.R.115	3B-1
R/W SHEET NO.	

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	XI	GREU TL-2	GREU MEDIAN	TYPE-III	CAT-1	VI MOD	B-77	AT-1	EA	G	NG				
PERMANENT GUARDRAIL																														
L	12+50.48	12+88.21	LT	25	18.25	–	–	12+86.37	3.4167′	6.4167′	–	–	–	–	–	–	–	–	1	–	–	–	1	–	–	–	–	–	–	–
L	12+37.37	12+88.21	RT	50	–	–	12+86.37	–	3.4167′	6.4167′	25′	–	0.5′	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–	–	–
L	13+29.80	13+80.84	LT	50	–	–	13+31.62	–	3.4167′	6.4167′	31.25′	–	0.625′	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–	–	–
L	13+29.80	13+80.84	RT	50	–	–	–	13+31.62	3.4167′	6.4167′	–	31.25′	–	0.625′	–	–	1	–	1	–	–	–	–	–	–	–	–	–	–	–
			SUB-TOTAL	175.0′	18.25										DEDUCTIONS FOR GUARDRAIL ANCHOR UNITS															
	DEDUCTIONS FOR GUARDRAIL ANCHOR UNITS			–150′	–6.25										GREU TL-2			3 @ 25.00′ =		75′										
			TOTAL	25′	12.5										TYPE III			4 @ 18.75′ =		75′										
															AT-1			1 @ 6.25′ =		6.25′										
			SAY	25′	12.5′		ADDITIONAL GUARDRAIL POSTS = 5											TOTAL =		156.25′										
TEMPORARY GUARDRAIL																														
DET	10+08.31	10+97.45	RT	75.00	31.25	–	10+43.50	–	1′	4′	–	25′	–	0.5′	–	–	1	–	–	–	–	–	1	–	–	–	–	–	–	TEMPORARY GUARDRAIL
DET	10+07.00	11+17.75	LT	75.00	43.75	–	10+43.50	–	1′	4′	–	25′	–	0.5′	–	–	1	–	–	–	–	–	1	–	–	–	–	–	–	TEMPORARY GUARDRAIL
DET	12+61.25	13+05.00 BEG BRIDGE	LT	43.75	–	–	13+05.00	–	1′	4′	50′	–	1′	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–	–	TEMPORARY GUARDRAIL
DET	12+61.25	13+05.00 BEG BRIDGE	RT	43.75	–	–	13+05.00	–	1′	4′	50′	–	1′	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–	–	TEMPORARY GUARDRAIL
DET	13+55.00 END BRIDGE	13+99.50	LT	37.50′	12.50′	–	–	13+55.00	1′	4′	–	50′	–	1′	–	–	–	–	1	–	–	–	1	–	–	–	–	–	–	TEMPORARY GUARDRAIL
DET	13+55.00 END BRIDGE	13+69.81	RT	6.25′	18.75′	–	–	13+55.00	1′	4′	–	–	–	–	–	–	–	–	1	–	–	–	1	–	–	–	–	–	–	TEMPORARY GUARDRAIL
			SUB-TOTAL	281.25′	106.25′										DEDUCTIONS FOR GUARDRAIL ANCHOR UNITS															
	DEDUCTIONS FOR GUARDRAIL ANCHOR UNITS			168.75′	31.25′										GREU TL-2			4 @ 25.00′ =		100′										
			TOTAL	112.5′	75′										TYPE III			4 @ 18.75′ =		75′										
															AT-1			4 @ 6.25′ =		25′										
			SAY	112.5′	75′													TOTAL =		200′										

SUMMARY OF EARTHWORK (IN CUBIC YARDS)

STATION	STATION	UNCL. EXCAV.	EMBANK. +%	BORROW	WASTE
PHASE I					
-DET- 10+07.52	13+05.00	90	1406	1316	–
-DET- 13+55.00	14+50.00	99	–	–	99
-DWY2- 10+10.00	11+50.00	13	8	–	5
WASTE TO BE USED FOR BORROW				-104	-104
TOTAL:		202	1414	1212	0
PHASE II					
-L- 10+00.00	12+85.38	36	49	13	–
-L- 13+32.63	15+25.00	104	35	–	69
-DWY1- 10+10.00	11+11.36	68	14	–	54
WASTE TO BE USED FOR BORROW				-13	-13
TOTAL:		208	98	0	110
PHASE III - DETOUR REMOVAL					
-L- 10+00.00	12+80.00	1332	95	–	1237
-L- 13+40.00	14+00.00	10	6	–	4
WASTE TO BE USED FOR BORROW		–	–	–	–
TOTAL:		1342	102	0	1241
PROJECT TOTALS:			1613	–	–
EST 5% TOPSOIL FROM BORROW PITS		–	81		–
GRAND TOTALS:		1752	1694	1212	1351
–		–	–	–	–
SAY:		1775	–	1225	

DDE = 50 CY
CONTINGENCY ITEMS
UNDERCUT EXCAVATION 50 CY
SELECT GRANULAR MATERIAL 50 CY

Note: Approximate quantities only. Unclassified Excavation, Fine Grading, and Clearing and Grubbing will be paid for at the contract lump sum price for "Grading."

SHOULDER BERM GUTTER SUMMARY

SURVEY LINE	STATION	STATION	LENGTH
L -LT-	12+63.37	12+74.25	11′
L -RT-	12+63.37	12+74.25	11′
		TOTAL:	22′
		SAY:	22′

DATE PRINTED: $DATE$ $TIME$
$FILEL$
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ROADWAY PLANS