COMPUTED BY: GRM DATE: 3/8/2022
CHECKED BY: TAK DATE: 3/10/2022

PROJECT NO.	SHEET NO.
B-5717	3B-1

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

SUMMARY OF EARTHWORK

IN CUBIC YARDS

Station	Station	Uncl. Excav.	Embank. +%	Borrow	Waste
-L- Sta. 11+00.00	-L- Sta. 20+14 +/- (Begin Bridge)	166	4,801	4,635	
SUBTOTALS:		166	4,801	4,635	
-L- Sta. 22+29 +/- (End Bridge)	-L- Sta. 28+10.00	249	4,582	4,333	
-Y1- Sta. 10+44.00	-Y1- Sta. 13+00.00	73	560	487	
SUBTOTALS:		322	5,141	4,819	
PROJECT TOTALS:		488	9,942	9,454	
MATERIAL FOR SHOULDER CONSTRUCTION			84	84	
WASTE IN LIEU OF BORROW					
PROJECT TOTALS:		488	10,026	9,538	
EST. 5% TO REPLACE TOP SOIL ON BORROW PIT				477	
GRAND TOTALS:		488		10,015	
SAY:		**500**		**10,100**	
PAVEMENT STRUCTURE VOLUME = 4,300 CY					

DDE = 140 CY

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

Note: These earthwork quantities are based in part on subsurface data provided by the Geotechnical Engineering Unit.

CONTINGENCY ITEMS PER NCDOT GEOTECHNICAL REPORT - DESIGN AND CONSTRUCTION RECOMMENDATIONS, DATED MAY 7, 2020:
UNDERCUT EXCAVATION = 400 CY
SELECT GRANULAR MATERIAL = 200 CY
GEOTEXTILE FOR SOIL STABILIZATION = 500 SY
SHALLOW UNDERCUT = 100 CY
CLASS IV SUBGRADE STABILIZATION = 200 TONS
6" PERFORATED SUBDRAIN PIPE = 200 LF

PAVEMENT REMOVAL SUMMARY

IN SQUARE YARDS

SURVEY LINE	Station	Station	LOCATION LT/RT/CL	SY
-LDET-1-	12+50	17+28	CL	847
-LDET-1-	24+70	29+20	CL	801
-LDET-2-	12+43	15+55	CL	559
-LDET-2-	25+99	28+03	CL	366
		TOTAL:		**2,573**
		SAY:		**2,580**

PAVEMENT BREAKING SUMMARY

IN SQUARE YARDS

SURVEY LINE	Station	Station	LOCATION LT/RT/CL	SY
-L-	17+01	20+11	RT	895
-L-	21+95	25+96	RT	2,003
-L-	15+50	20+48	LT	1,745
-L-	22+33	25+96	LT	1,310
-Y1-	10+44	11+39	CL	694
		TOTAL:		**6,646**
		SAY:		**6,650**

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

SUMMARY OF GUARDRAIL

SURVEY LINE	BEG. STA.	END STA.	LOCATION	LENGTH			WARRANT POINT		"N" DIST. FROM E.O.L.	TOTAL SHOUL WIDTH	FLARE LENGTH		W		ANCHORS									IA TL-3		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	B-77	GREU, TL-3	GREU, TL-2	CAT-1	AT-1	Type III SC	B-77 SC		G	NG				
-L-	16+00.00	19+84.78 (BRG)	RT	384.78			17+00.00		VAR		325		6.5		1		1										441		
-L-	21+99.78 (BRG)	22+24.78	RT	25					7.5						1				1										
-L-	18+57.00	20+07.00 (BRG)	RT	150			20+07.00 (BRG)		VAR		125		2.5			1	1										199		
-L-	22+22.01 (BRG)	23+59.84	RT	138.55				22+22.01 (BRG)	2							1	1												
-L-	18+72.02	20+22.02 (BRG)	LT	150				20+22.02 (BRG)	VAR			125		2.5		1	1												
-L-	22+37.02 (BRG)	23+87.02	LT	150			22+37.02 (BRG)		VAR		125		2.5			1	1										127		
-L-	12+27.13	20+44.24 (BRG)	LT	806.47					VAR			325		6.5	1				1								752		
-L-	22+59.25 (BRG)	24+09.25	LT	150			22+59.25 (BRG)		VAR		125		2.5		1		1										203		
-Y1-	12+40.00	12+97.10	LT	57.1					4			50		1			1										45		
			SUBTOTAL	**2,011.90**											**4**	**4**	**7**		**2**								**1,767**		
ANCHOR UNIT DEDUCTIONS																													
	GREU, TL-3	7 @ 50.00' EACH		-350.00																									
	B-77	4 @ 22.875' EACH		-91.500																									
	TYPE III	4 @ 18.75' EACH		-75.00																									
	CAT-1	2 @ 6.25' EACH		-12.50																									
ADDITIONAL GUARDRAIL POSTS = 10 EACH																													
			TOTAL	**1,482.90**											**4**	**4**	**7**		**2**								**1,767**		
			SAY	**1,487.5**											**4**	**4**	**7**		**2**								**1,770**		