COMPUTED BY: G. Mwebaza DATE: 05/30/2023
CHECKED BY: M. Fallaha DATE: 10/16/2023

PROJECT NO.	SHEET NO.
B-5898	3B-2

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

SUMMARY OF EARTHWORK

IN CUBIC YARDS

Station	Station	Uncl. Excav.	Embank. + %	Borrow	Waste
-DET01_EB- 28+05.94	-DET01_EB- 33+98.55	54	3,856	3,802	
SUBTOTALS:		**54**	**3,856**	**3,802**	**0**
-DET01_WB- 28+05.94	-DET01_WB- 31+56.00	33	15,523	15,490	
-DET01_WB- 32+89.00	-DET01_WB- 40+50.17	173	3,903	3,730	
-L_LT- 28+05.94	-L_LT- 31+56.00	51	6,028	5,977	
-L_LT- 32+89.00	-L_LT- 40+47.50	413	990	577	
GEOTECH SURCHARGE PLACEMENT			920	920	
GEOTECH SURCHARGE REMOVAL		800			800
SUBTOTALS:		**1,470**	**27,364**	**26,694**	**800**
Removal of -DET01_WB- & -DET01_EB- Included:					
-L_RT- 28+06.26	-L_RT- 40+04.68	10,985	2,095		8,890
SUBTOTALS:		**10,985**	**2,095**	**0**	**8,890**
-Y1_RT- 16+83.00	-Y1_RT- 28+83.27	3,001	599	0	2,402
SUBTOTALS:		**3,001**	**599**	**0**	**2,402**
TOTAL:		**15,510**	**33,914**	**30,496**	**12,092**
MATERIAL FOR SHOULDER CONSTRUCTION			1357	1357	
LOSS DUE TO CLEARING & GRUBBING		-600		600	
REDUCTION OF UNCLASS. EXC. - UNSUIT. WASTE			575	575	500
WASTE IN LIEU OF BORROW				-3,202	-3,202
PROJECT TOTALS:		**14,910**	**35,846**	**29,826**	**9,390**
EST. 5% TO REPLACE TOP SOIL ON BORROW PIT				1,491	
B-5898 TOTAL		**14,910**		**31,317**	**9,390**
B-5898 SAY		**15,000**		**32,000**	**9,390**
B-3186 SAY		**23,000**		**53,000**	**18,111**
GRAND TOTAL		**38,000**		**85,000**	**27,501**

DDE = 30 CY UNSUITABLE WASTE = 500 CY
UNDERCUT EXCAVATION = 625 CY SELECT GRANULAR MATERIAL = 500 CY

Note: Approximate quantities only. Unclassified Excavation, Fine Grading, Clearing and Grubbing, Breaking of Existing Asphalt Pavement and Removal of Existing 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.

SUMMARY OF ASPHALT PAVEMENT REMOVAL

IN SQUARE YARDS

SURVEY LINE	BEG. STA.	END STA.	LOCATION	AREA (SY)
-L_LT-	32+50	35+75	LT	586.78
-DET01_EB-	28+06	35+99	LT/RT	2,585.21
-DET01_WB-	28+06	30+00	RT	107.52
			B-5898 TOTAL	**3,280**
			B-5898 SAY	**3,280**
			B-3186 SAY	**7,910**
			GRAND TOTAL	**11,190**

SHOULDER BERM GUTTER SUMMARY

IN LINEAR FEET

SURVEY LINE	BEG. STA.	END STA.	LOCATION	LENGTH
-L_RT-	25+56.96	39+23.44	RT	1355
-L_LT-	32+63.09	35+65.93	LT	307
-L_LT-	33+71.86	40+49.18	RT	670
-Y1_LT-	16+83.20	20+70.94	LT	387
			B-5898 TOTAL	**2,718**
			B-5898 SAY	**2,720**
			B-3186 SAY	**1,000**
			GRAND TOTAL	**3,720**

SUMMARY OF ASPHALT PAVEMENT BREAKING

IN SQUARE YARDS

SURVEY LINE	BEG. STA.	END STA.	LOCATION	AREA (SY)
-L_RT-	28+06	33+00	LT/RT	2,030
-L_LT-	28+06	31+00	LT/RT	990
-L_LT-	32+50	34+50	LT/RT	713
			B-5898 TOTAL	**3,733**
			B-5898 SAY	**3,740**
			B-3186 SAY	**12,800**
			GRAND TOTAL	**16,540**

WOVEN WIRE FENCE SUMMARY

SURVEY LINE	BEG. STA.	END STA.	47" FABRIC LF	4" POSTS	5" POSTS
-L_RT-			1,976	108	61
		TOTAL	1,976	108	61
		SAY:	**1,980**	**110**	**70**

"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 TL-3
G = GATING IMPACT ATTENUATOR TYPE TL-3

SUMMARY OF GUARDRAIL

SURVEY LINE	BEG. STA.	END STA.	LOCATION	LENGTH			WARRANT POINT		"N" DIST. FROM E.O.L.	TOTAL SHOULDER WIDTH	FLARE LENGTH		W		ANCHORS							IMPACT ATTENUATOR TYPE TL-3		SINGLE FACED CONCRETE BARRIER	REMOVE EXISTING GUARDRAIL	CONCRETE CAP FOR SINGLE FACED BARRIER FILL	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	TEMP THRIE-BEAM	G	NG				
-L_LT-	26+00.95 (BR)	31+17.33 (BR)	LT	520.75			26+00.95 (BR)	31+17.33 (BR)	12	15						2												
-L_LT-	32+42.19 (BR)	35+65.97	LT	310.38			32+42.19 (BR)		12	15						1								1				
-L_LT-	34+25.11	35+45.39	LT	137.50					VAR	VAR																		
-L_LT-	33+52.76	40+74.50	RT	722.88					17	20						1												
-L_LT-	38+69.00	42+88.53	LT	418.75					VAR	VAR	50		1				1		1									
-L_RT-	2533.31 (BR)	40+04.68	RT	1472.88			25+33.31 (BR)		6	9	100		10			1												
-L_RT-	27+96.10	30+81.15	LT	291.63			27+96.10	30+50	12	15	150		11.95			1			1									
-Y1_RT-	17+36.56	18+63.97	RT	135.38				18+63.97	VAR	VAR	50		1			1	1											
-Y1_RT-	17+64.87	20+70.94	LT	310.38				20+70.94	VAR	VAR	50		1			1	1											
-Y1_RT-	23+82.51	28+83.27	LT	516.63			23+83.51		6	9						1			1									
-Y1_RT-	18+63.97	20+75.63	RT																						214			
-Y1_RT-	20+70.94	23+82.51	LT																						310			
-L_RT-	28+08.00	39+23.00	RT																							1,103.00		
-L_LT-	28+06.00	30+93.00	LT																							289.00		
-L_LT-	28+06.00	30+45.00	LT																							243.00		
-L_LT-	32+16.00	34+48.00	LT																							267.00		
-L_LT-	32+78.00	40+75.00	RT/LT																							800.00		
-L_LT-	38+75.00	42+66.00	LT																							389.00		
DMS-1				293.75			DMS-1 POLE										1		1									SEE SHEET ITS 13, DMS-1 200' AT APPROACH END 93.75' AT TRAILING END
			SUBTOTAL	**5,130.88**																								
	ANCHOR UNIT DEDUCTIONS																											
	GREU, TL-3	3 @ 50.00' EACH		-200.00																								
	B-77	9 @ 22.875' EACH		-205.875																								
	CAT-1	3 @ 6.25' EACH		-25.00																								
	ADDITIONAL GUARDRAIL POSTS = 10 EACH																											
			B-5898 TOTAL	**4,700.00**												**9**	**4**		**4**					**1**	**524**	**3,091**		
			B-5898 SAY	**4,700.00**												**9**	**4**		**4**					**1**	**530**	**3,100**		
			B-3186 SAY	**4,500**												**3**			**2**			**4**			**400**	**5,200**	**280**	
			GRAND TOTAL	**9,200.00**												**12**	**4**		**6**			**4**		**1**	**930**	**8,300**	**280**	