12/06/07

COMPUTED BY: DTD DATE: 08-03-2022
CHECKED BY: EM DATE: 4-3-2023

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PROJECT REFERENCE NO.	SHEET NO.
U-4424	3B-1

PLANS PREPARED BY:

WSP USA
434 FAYETTEVILLE STREET
SUITE 1500
RALEIGH, NC 27601
TEL: 1.919.836.4040
FAX: 1.919.836.4099
LICENSE NO. F-0165

SUMMARY OF EARTHWORK

STATION	STATION	UNCL. EXCAV. (CY)	EMBANK. +% (CY)	BORROW (CY)	WASTE (CY)
-L- 13+90	-L- 44+00	815	9,881	9,066	
-Y- 10+00	-Y- 10+96	62	13		49
-Y1- 10+00	-Y1- 14+00	17	6		11
-Y2- 11+25	-Y2- 11+75	12	53	41	
-Y3- 11+00	-Y3- 11+75	30	75	45	
-Y4- 10+25	-Y4- 11+00	55	58	3	
SUBTOTALS:		991	10,086	9,155	60
-L- 44+00	-L- 64+94.20	287	10,032	9,745	
-US64- 1002+50	-US64- 1006+50	563	63		500
SUBTOTALS:		850	10,095	9,735	500
-L- 68+00.00	-L- 98+00.00	391	12,996	12,605	
-Y5- 11+25.00	-Y5- 11+75.00	81	228	147	
SUBTOTALS:		472	13,224	12,752	
-L- 98+00.00	-L- 128+00.00	1,003	5,181	4,178	
-Y6- 10+25.00	-Y6- 11+25.00	28	107	79	
-Y7- 11+50.00	-Y7- 12+00.00	13	22	9	
-Y8- 12+50.00	-Y8- 13+75.00	57	142	85	
-DR1- 11+50.00	-DR1- 11+80.96	22	15		7
SUBTOTALS:		1,123	5,467	4,351	7
-L- 128+00.00	-L- 133+00.00	416	703	287	
SUBTOTALS:		416	703	287	
TOTAL:		3,852	39,575	36,290	567

	UNCL. EXCAV. (CY)	EMBANK. +% (CY)	BORROW (CY)	WASTE (CY)
MATERIAL FOR SHOULDER CONSTRUCTION		750	750	
LOSS DUE TO CLEARING & GRUBBING	-500		500	
ROCK WASTE TO REPLACE BORROW				
ADJUST FOR ROCK WASTE				
WASTE IN LIEU OF BORROW			-567	-567
PROJECT TOTALS:	3,352	40,325	36,973	0
EST. 5% TO REPLACE TOP SOIL ON BORROW PIT			1,849	
GRAND TOTALS:	3,352	40,325	38,821	
SAY:	3,400		39,000	

-L- PAVEMENT STRUCTURE VOLUME = 1,761 CY

EST. DDE = 170 CUBIC YARDS

CONTINGENCY: EST. SHALLOW UNDERCUT = 750 CY
EST. CLASS IV SUBGRADE STABILIZATION = 1,500 TONS
EST. UNDERCUT EXCAVATION = 1,000 CY

Earthwork quantities are calculated by the Roadway Designer.
These earthwork quantities are based in part on subsurface data provided by the Geotechnical Engineering Unit.

Unclassified Excavation - Acceptable, but not to be used in top 3' of embankment of backfill from -L- STA. 29+75 to 32+25 LT (100 CY)

Approximate quantities only. Unclassified Excavation, Fine Grading, Clearing and Grubbing, and Removal of Existing Pavement will be paid for at the contract lump sum price for "Grading".

PAVEMENT REMOVAL SUMMARY

SURVEY LINE	STATION	STATION	LOCATION LT/RT/CL	YD²
-L-	13+90	-Y1- RADIUS	RT	23
-L-	18+37.28	26+38.43	RT	166
-L-	29+98.68	39+00.23	RT	291
-L-	42+14.34	48+80.44	RT	121.50
-L-	50+17.28	65+21.20	RT	329.50
-L-	67+57.09	114+72.00	RT	959.50
-L-	118+57.14	127+75.69	RT	171
-L-	13+93	21+13.58	LT	201
-L-	35+76.44	64+97.26	LT	595.50
-L-	67+33.73	117+10.45	LT	1123
-L-	117+31.61	133+17.45	LT	295.50
-Y8-	13+24	13+72	LT	22.58
			TOTAL:	4,299.08
			SAY:	4,300

SHOULDER BERM GUTTER SUMMARY

SURVEY LINE	STATION	STATION	LENGTH
L (RT)	64+89.00	65+07.36	18.4
L (RT)	67+72.74	67+98.92	26.2
		TOTAL:	44.5
		SAY:	50

"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							WOOD RUB RAIL (SEE SHEET 2C-2)	IMPACT ATTENUATOR MASH-TL3			SINGLE FACED CONCRETE BARRIER	REMOVE EXISTING GUARDRAIL	REMOVE AND RESET EXISTING GUARDRAIL	REMOVE AND RESET EXISTING GUIDERAIL	REMARKS
				STRAIGHT	SHOP CURVED	DOUBLE FACED	APPROACH END	TRAILING END			APPROACH END	TRAILING END	APPROACH END	TRAILING END	XI MOD	XI	GREU TL-3	M-350	XIII	CAT-1	B-77	TYPE III		EA	G	NG					
L	24+72.23	30+72.23	LT	600.00'			28+23.11		2'		50'		1'				1			1										
L	61+40.37	65+09.12	RT	368.75'			65+09.12 BRIDGE		4'	VARIES	50'		1'				1					1	318.75'					401'			
L	67+70.85	71+64.60	RT	393.75'				67+70.85 BRIDGE	4'	VARIES										1		1	343.75'					439'			
L	61+36.42	64+98.92	LT	362.50'				64+98.92 BRIDGE	4'	VARIES										1		1						340'			
L	67+36.21	71+61.21	LT	425.0'			67+36.21 BRIDGE		4'	VARIES	50'		1'				1					1						463'			
L	85+16.93	86+79.43	LT	162.5'				85+25.50	2'		50'		1'				1			1										
L	88+84.40	89+96.90	LT	112.5'				89+09.33	2'		50'		1'				1			1										
US64	1003+62.08	1004+22.44	MED	120.75'			1004+22.44		8'	8'	37.5'		2.5'								2			1			60'				ON US-64 UNDER BRIDGE, MASH-TL3
US64	1004+82.44	1005+42.79	MED	120.75'				1004+82.44	8'	8'		37.5'		2.5'							2			1			60'				ON US-64 UNDER BRIDGE, MASH-TL3
US64	1005+34.20	1007+94.58	LT	260.375'			1005+34.20		10'	14'	50'		1'				1				1						20'				
US64	1002+37.07	1003+12.07	MED																										75'		GUIDERAIL ON US-64 MEDIAN
US64	1005+98.69	1006+73.91	MED																										75'		GUIDERAIL ON US-64 MEDIAN
US64	1004+18.61	1004+38.45	RT																								20'				
			SUBTOTALS	2,926.875																											
			LESS DEDUCTIONS																												
			GREU TL-3 (6 x 50)=	300'																											
			B-77 (5 x 22.875)=	114.375'																											
			TYPE III (4 x 18.75)=	75'																											
			CAT-1 (5 x 6.25)=	31.25'																											
			SUBTOTAL	2,406.25'																											
			TOTALS	2,406.25'													6			5	5	4	662.50'	2			160'	1,643'	TOTALS	150'	
			SAY	2,412.50'			ADDITIONAL GUARDRAIL POSTS = 10																665'				160'	1,650'	SAY	150'	

01-JUN-2023 10:09
\Roadway\Proj\U4424_Rdy_3B-1.dgn
WSP