PROJECT REFERENCE NO. SHEET NO. 3B–3

## DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA

## SUMMARY OF EARTHWORK

IN CUBIC YARDS

LOCATION	UNCLASSIFIED EXCAVATION	UNDERCUT	EMBT+%	BORROW	WASTE
SUMMARY NO. 1					
-Y3- 13+25.00 TO 26+50.00	397		4,801	4,404	
-Y4- 10+10.00 TO 12+42.12	59		326	267	
-L- 373+00.00 TO 403+00.00	2,422		2,050,283	2,047,861	
-L- 403+00.00 TO 410+06.22	137,903		280		137,623
INCLUDES PORTION OF -Y1RPB-, -Y1RPC-,&-Y1LPB-)					
-Y1RPB- 19+00.00 TO 32+00.00	61,361		117,251	55,890	
-Y1RPC- 18+35.00 TO 31+11.75	5,112		138,502	133,390	
-Y1LPB- 13 + 50.00 TO 18 + 00.00	20,095		46		20,049
-Y1- 10+75.00 TO 28+13.39	3,334		12,398	9,064	
-Y1- 30+34.05 TO 48+50.00	26,661		32,983	6,322	
(INCLUDES -Y1DET- REMOVAL)					
-DR2- 10+16.50 TO 12+10.00	25		1,030	1,005	
(INCLUDES –DR3–)			,	, , , , ,	
-Y1DET- 15+93.03 TO 33+46.92	6,019		12,352	6,333	
SUBTOTAL	263,388		2,370,252	2,264,536	157,672
SUMMARY NO. 2					
-L- 410+06.22 TO 440+00.00	290,132		209,861		80,271
(INCLUDES PORTION OF -Y1RPD- & -SRSA-)			,		· · · · · · · · · · · · · · · · · · ·
-L- 440+00.00 TO 447+50.00	45,148		42,127		3,021
(INCLUDES PORTION OF -SRSA- & -Y2DET-)	·		,		
-Y1RPD- 18+60.00 TO 31+50.00	24,095		136,015	111,920	
-Y2- 10+00.00 TO 20+18.52	2,491		926	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1,565
-Y2- 22+40.27 TO 26+50.00	575		1,152	577	,
(INCLUDES -Y2DET- REMOVAL)			•		
-SRSA- 10+00.00 TO 12+00.00	493		13		480
-SRSA- 29 + 50.00 TO 31 + 00.00	438		20		418
-Y2DET- 15+00.00 TO 20+00.00	577		883	306	
-Y2DET- 23+00.00 TO 28+03.31	1,104		12		1,092
SUBTOTAL	·		391,009	112,803	86,847

LOCATION	UNCLASSIFIED EXCAVATION	UNDERCUT	EMBT+%	BORROW	WASTE
SUMMARY NO. 3					
-L- 447 + 50.00 TO 472 + 42.45	691,856		17,192		674,664
SUBTOTAL	691,856		17,192		674,664
SUMMARY NO. 4					
_L_ 474 + 52.45 TO 478 + 00.00	159		54,281	54,122	
SUBTOTAL	159		54,281	54,122	
TOTAL	1,320,456		2,832,734	2,431,461	919,183
MATERIAL FOR SHOULDER CONSTRUCTION			22,800	22,800	
LOSS DUE TO CLEARING & GRUBBING	-30,000		,	30,000	
WASTE IN LIEU OF BORROW				-919,183	-919,183
PROJECT TOTAL	1,290,456		2,855,534	1,565,078	
EST. 5% TO REPLACE TOP SOIL ON BORROW PIT				78,254	
GRAND TOTAL	1,290,456		2,855,534	1,643,332	
SAY	1,350,000			1,700,000	
PAVEMENT STRUCTURE VOLUME	47,500				
	EARTHWORK				
ADJUSTMENT FOR ALTERNATE PAVEMENT DESIGN	_13,000		15,600	28,600	
MATERIAL FOR SHOULDER CONSTRUCTION			18,000	18,000	
LOSS DUE TO CLEARING & GRUBBING	-30,000			30,000	
WASTE IN LIEU OF BORROW				-919,183	-919,183
PROJECT TOTAL	1,277,456		2,866,334	1,588,878	
EST. 5% TO REPLACE TOP SOIL ON BORROW PIT				79,444	
GRAND TOTAL	1,277,456		2,866,334	1,668,322	
SAY PAVEMENT STRUCTURE VOLUME	1,350,000 35,000			1,700,000	

QUANTITIES ARE APPROXIMATE ONLY. THE RESIDENT ENGINEER WILL RE-CROSS-SECTION THE WORK ACCURATELY WHEN THE PROJECT IS STAKED OUT. THESE CROSS-SECTION NOTES WILL BE USED IN COMPUTING THE FINAL QUANTITIES FOR WHICH THE CONTRACTOR WILL BE PAID.

EARTHWORK QUANTITIES ARE CALCULATED BY THE ROADWAY DESIGN UNIT. THESE EARTHWORK QUANTITIES ARE BASED IN PART ON SUBSURFACE DATA PROVIDED BY THE GEOTECHNICAL ENGINEERING UNIT.

EST. UNDERCUT = 10,000 CY CONTINGENCY PER GEOTECH RECOMMENDATIONS DATED SEPTEMBER 22, 2015.

EST. SELECT GRANULAR MATERIAL = 35,900 CY CONTINGENCY PER GEOTECH RECOMMENDATIONS DATED SEPTEMBER 22, 2015.

EST. SHALLOW UNDERCUT = 5,000 CY CONTINGENCY PER GEOTECH RECOMMENDATIONS DATED SEPTEMBER 22, 2015.

EST. DDE = 19,500 CY

EST. PAVEMENT STRUCTURE VOLUME = 47,500 CY

EST. PAVEMENT STRUCTURE VOLUME FOR ALTERNATIVE PAVEMENT DESIGN = 35,000 CY