

STATE OF NORTH CAROLINA  
 DIVISION OF HIGHWAYS

SUMMARY OF EARTHWORK

STATION	STATION	UNCL. EXCAV.	UNDERCUT	EMBANK %	BORROW	WASTE
-L- 10+00.00	20+67.67	1081	1511	5132	4915	2375
-Y1A- 10+07.02	11+50.00	45		72	57	30
-Y1B- 10+57.00	12+20.00	6	49	292	288	51
-L- (-ROUND-) 20+67.67	22+27.67	128	1431	1990	1862	1431
-Y3- 10+10.04	12+50.00	273				273
-Y4- 11+21.95	16+00.00	945		308		637
SUBTOTAL:		2478	2991	7794	7122	4797
-L- 22+27.67	30+23.11	786	772	37042	36256	772
BASIN EXC.		4250				4250
-Y2A- 12+50.00	19+61.13	2318	1407	265		3460
-Y2B- 10+20.20	16+00.00	368	288	2383	2158	431
-Y5A- 10+00.00	12+00.00	344		16		328
-Y5B- 10+75.00	12+12.27	7		190	187	4
-Y5B- 12+36.31	14+75.00	158		905	823	76
SUBTOTAL:		8231	2467	40801	39424	9321
-L- 35+01.11	48+50.00	1427	1372	71557	70612	1854
-Y9A- 10+00.00	11+78.01	748		23		725
-Y10A- 11+50.00	13+50.00	224	324	20	20	548
-Y10B- 10+50.00	11+99.93	26		16		10
-Y2C- 14+60.00	22+90.59	2762	2595	1477	1146	5026
-Y11A- 12+00.00	13+25.08	110		476	418	52
-Y11B- 11+63.31	12+75.00	83		218	135	
SUBTOTAL:		5380	4291	73787	72331	8215
PROJECT TOTALS:		16089	9749	122382	118847	22333
ADDITIONAL UNDERCUT			2250	2700	2700	2250
ADJUSTMENT FOR ADDITIONAL UNDERCUT				-2400	-2400	-2000
MATERIAL FOR SHOULDER CONSTRUCTION				4920	4920	
WASTE IN LIEU OF BORROW:					-5724	-5724
LOSS DUE TO CLEARING & GRUBBING		-250				250
5% TO REPLACE BORROW					5932	
GRAND TOTALS:		15839	11999	127602	124555	16859
SAY:		18000	14000		138000	

\*UNCLASSIFIED EXCAVATION - ACCEPTABLE, BUT NOT TO BE USED IN THE TOP 3' OF EMBANKMENT OR BACKFILL  
 -L- STA 21+75 TO 23+75, -Y1A- 10+25 TO 10+75, & -Y2C- 12+25 TO 14+25 (1,155 CY) PER GEOTECH

EST. DDE = 1,148 CY  
 EST. SHALLOW UNDERCUT EXCAVATION = 735 CY  
 EST. SELECT GRANULAR MATERIAL, CLASS III = 11,600 CY  
 EST. CLASS IV SUBGRADE = 1,220 TONS

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

SUMMARY OF BREAKING EXISTING ASPHALT PAVEMENT

SURVEY LINE	STATION	STATION	LOCATION LT/RT/CL	YD <sup>2</sup>
-L-	23+77	23+91	CL	70.69
-L-	41+77	42+14	CL	107.01
-Y5B-	11+20	12+13	CL	167.07
Y-4810K TOTAL:				344.77
Y-4810K SAY:				350

SUMMARY OF EXPRESSWAY GUTTER

SURVEY LINE	STATION	STATION	LOCATION LT/RT/CL	LENGTH
-Y4-	11+28.25	15+00.00	RT	381
-Y2C-	14+50.00	16+50.00	LT	208
-Y2B-	14+00.00	15+50.00	LT	150
Y-4810K TOTAL:				739
Y-4810K SAY:				750

EXISTING ASPHALT PAVEMENT REMOVAL SUMMARY

SURVEY LINE	STATION	STATION	LOCATION LT/RT/CL	YD <sup>1</sup>
-L-	14+24.00	17+05.00	RT	474.89
-L-	23+76.00	23+91.00	RT	141.04
-L-	23+77.00	23+92.00	LT	115.21
-L-	31+01.00	32+64.00	RT	803.57
-L-	38+03.00	38+19.00	LT	189.41
-L-	38+06.00	38+22.00	RT	175.41
-L-	41+81.00	41+99.00	LT	164.51
-Y1A-	9+34.00	10+35.00	RT	24.52
-Y2A-	14+57.00	16+89.00	RT	505.34
-Y2B-	11+87.00	12+96.00	RT	182.40
-Y2C-	15+48.00	19+79.00	LT	790.41
-Y2C-	16+48.00	16+62.00	RT	82.47
-Y2C-	17+66.00	17+87.00	RT	197.59
-Y2C-	21+77.00	22+23.00	LT	106.32
-Y4-	12+90.00	13+21.00	RT	2.46
-Y4-	12+71.00	15+27.00	LT	330.55
-Y4-	15+32.00	16+00.00	LT	3.48
-Y9A-	10+00.00	11+04.00	LT	1.02
-Y10A-	12+01.00	13+25.00	LT	7.11
-Y10B-	10+00.00	11+75.00	LT	93.65
-Y10B-	10+00.00	10+98.00	RT	7.92
-Y11A-	11+50.00	13+00.00	LT	11.22
-Y11A-	11+50.00	11+68.00	RT	0.29
-Y11B-	11+54.00	12+51.00	RT	25.51
-Y11B-	13+00.00	13+81.00	CL	112.86
TOTAL:				4549.18
SAY:				4550

EXISTING ASPHALT PAVEMENT REMOVAL SUMMARY BY OTHERS

SURVEY LINE	STATION	STATION	LOCATION LT/RT/CL	YD <sup>1</sup>
-Y7-	12+18.97	12+72.56	CL	234.34
TOTAL:				234.34
SAY:				235

GUARDRAIL SUMMARY

"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

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 350			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	TYPE III	CAT-1	AT-1	TES	B-77	NO.	PERMITTED	G	NG												
Y4	11+09.04		CL	25.00																																			
Y3	12+51.07		CL	25.00																																			
Y1A	END		CL	25.00																																			
Y5A	12+21.26		CL	25.00																																			
Y5B	10+66.57		CL	25.00																																			
L	22+91.86	30+23.11	RT	731.25				23+89.00	12	14	50		1									1		1															
L	22+91.86	30+23.11	LT	731.25				27+39.00	12	14		50			1								1		1														
EY7	12+40.00	12+77.00	LT	37.5																																			
L	35+01.11	41+82.36	RT	681.25				41+32.00	12	14	50		1										1		1														
L	35+01.11	42+32.36	LT	731.25				40+80.00	12	14		50			1									1		1													
TOTALS				3037.5																						4		4											
DEDUCTIONS FOR ANCHOR UNITS																																							
	GREU, TL-3	4	50.00	-200.00																																			
	TYPE III	4	18.75	-75.00																																			
GRAND TOTAL				2762.5																																			
SAY				2775.00																																			

6/16/99  
 4/24/11 PM  
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