

# EARTHWORKS

1) VT 125										3) DETOUR *										SUMMARY AND BALANCES																			
STATION	DIST	AREA	VOLUME	AREA	VOLUME	AREA	VOLUME	AREA	VOLUME	STATION	DIST	AREA	VOLUME	AREA	VOLUME	AREA	VOLUME	AREA	VOLUME	STATION	DIST	AREA	VOLUME	AREA	VOLUME	AREA	VOLUME	AREA	VOLUME	STATION TO STATION	TOT EXC. EARTH & ROCK C.M.	ROCK EXCAV C.M.	EMBANK C.M.	EXCESSES	ACCUMULATIVE EXCESSES				
M.	S.M.	C.M.	S.M.	C.M.	S.M.	C.M.	S.M.	C.M.	S.M.	M.	S.M.	C.M.	S.M.	C.M.	S.M.	C.M.	S.M.	C.M.	S.M.	C.M.	M.	S.M.	C.M.	S.M.	C.M.	S.M.	C.M.	S.M.	C.M.	CUT	FILL	CUT	FILL						
1+040		0.000			0.000					3+040		0.423			0.000															1+040	1+440	4,611.7			1139.8	3,300.8		3,300.8	
1+060	**	1.775	17.75		0.318	3.18				3+060	20.0	0.783	12.06		0.339	3.39														2+004.5	2+120	3,855.1			1.1	3,853.8		7,154.6	
1+080	**	8.765	105.40		1.062	13.80				3+080	20.0	0.503	12.86		6.209	65.48															TOPSOIL	1,033.3			0.0	1,033.3		8,187.9	
1+100	**	8.094	168.59		2.010	30.72				3+100	20.0	0.000	5.03		28.186	343.95															SUB-TOTAL	9,500.1 (SEE NOTE 1)			1,141.0	8,187.9			
1+109.5	**	9.5	75.67		1.436	16.37				3+112.764	12.764	0.000	0.00		40.311	437.15															1. QUANTITY TO BE PAID UNDER ITEM 203.15 COMMON EXCAVATION								
1+115.5	**	6.0	49.61		0.333	5.31				3+120.0	7.236	0.000	0.00		0.000	145.85																							
1+120		4.5	32.14		0.000	0.75				3+140	20.0	0.000	0.00		0.000	0.00	CUT =	205.4																					
1+140		20.0	55.84		0.000	0.00				3+160	20.0	0.000	0.00		0.000	0.00	FILL =	2,590.2												3+040	3+260	205.4			2,590.2			2773.3	2773.3
1+160		20.0	11.46		0.000	0.00				3+170.676	10.676	0.000	0.00		0.000	252.83	FILL =	2,773.3													REMOVAL OF DETOUR	2,449.9			0.0	2,449.9			2,449.9
1+161.5	**	1.5	7.35		2.738	27.38				3+180	9.324	0.000	0.00		47.365	443.18															TOPSOIL	149.3			0.0	149.3			2,599.2
1+180	**	18.5	94.13		4.257	52.5				3+200	20.0	0.542	5.42		19.281	669.79															SUB-TOTAL	2,804.6 (SEE NOTE 2)			2,590.2	2,599.2			2773.3
1+200	**	20.0	15.67		8.679	200.79				3+220	20.0	2.005	25.47		0.384	196.65															2. QUANTITY SHALL BE INCIDENTAL TO PAY ITEM 528.11 TWO-WAY TEMPORARY BRIDGE								
1+220	**	20.0	100.91		11.400	157.56	CUT =	4,611.7		3+240	20.0	4.846	68.51		1.867	22.51															ESTIMATED QUANTITY OF SOLID ROCK EXCAVATION								
1+220	**	20.0	235.80		4.356	44.91	FILL =	1,139.8		3+250	10.0	5.179	50.13		0.005	9.36																							
1+240		20.0	13.540		0.135	1.68	F-FAC =	1.15		3+260	10.0	0.000	25.90		0.000	0.03																							
1+260		20.0	56.726		0.033	0.81	EX_C =	3,300.8																															
1+280		20.0	24.349		0.048	0.81																																	
1+300		20.0	248.30		12.976	130.24																																	
1+302.713		2.713	0.65		3.917	22.92																																	
1+320		17.287	94.52		1.969	50.88																																	
1+320		10.935	313.63		0.143	21.12																																	
1+340		20.0	20.428		0.143	59.08																																	
1+360		20.0	232.98		5.765	59.08																																	
1+360		2.585	2.870		5.765	21.06																																	
1+362.585		17.415	97.44		10.526	114.59																																	
1+380		20.0	8.144		2.634	46.91																																	
1+400		20.0	412.00		2.057	46.91																																	
1+420		20.0	525.66		1.216	32.73																																	
1+440		20.0	195.10		12.16	12.16																																	
1+440		20.0	0.000		0.000	0.000																																	
2) TH 33										4) REMOVAL OF DETOUR *										REMARKS																			
2+004.5		15.5	813.77		0.000	0.00				-THE AMOUNT TO BE EXCAVATED WHEN DETOUR IS NO LONGER NEEDED WILL BE ADDED TO COMMON EXCAVATION FOR DETOUR * INCIDENTAL TO ITEM 528.11										EARTH AND ROCK EXCAVATION 12,405																			
2+020		20.0	963.93		0.000	0.00				TOTAL EARTH BORROW = 2978.7 C.M.										SOLID ROCK EXCAVATION 100																			
2+040		20.0	876.83		0.000	0.00				AMOUNT TO STAY IN PLACE FOR VT 125 = 528.8 C.M.										EARTH EXCAVATION 12,305																			
2+060		20.0	718.74		0.000	0.00				EXCAVATION NEEDED FOR REMOVAL OF DETOUR = 2449.9 C.M.										BACKFILL FOR TRENCH EXCAVATION (CB, MH, AND PIPES) 24																			
2+080		10.0	247.10		0.000	0.00				5) 100 TOPSOIL										PLANIMETERED FILL 3,731																			
2+080		20.0	28.083		0.000	0.00				-EXCAVATION FOR 100 TOPSOIL										LESS FACTORED SOLID ROCK																			
2+080		10.0	21.337		0.000	0.00				ROADWAY = 1033.3 C.M.										LESS DISPLACEMENT OF ANY LARGE STRUCTURES																			
2+100		20.0	149.37		0.075	0.38				DETOUR = 149.3 C.M.										NET PLANIMETERED FILL 3,755																			
2+120		20.0	85.36		0.000	0.75				TOTAL COMMON EXCAVATION = 1182.6 C.M.										FACTOR 1.15																			
										NOTES:										PLANIMETERED FILL INCLUDING FACTOR 4,318																			
										1) ** ITEM 203.30 EARTH BORROW VOLUME ONLY TAKEN ON LEFT SIDE OF ROADWAY AT THESE STATIONS DUE TO REUSE OF DETOUR BORROW.										MATERIALS AVAILABLE FOR FILLS																			
										2) COMMON EXCAVATION VALUES BASED ON EXISTING CONDITIONS. INCLUDED IN THE TOTAL IS EARTH BORROW TO BE EXCAVATED DUE TO REMOVAL OF DETOUR.										EARTH EXCAVATION 12,305																			
										3) EXCESS MATERIAL SHALL BE RE-USED ON SITE WHEN APPROVED BY THE ENGINEER.										UNCLASSIFIED CHANNEL EXCAVATION 310																			
																				STRUCTURE EXCAVATION 528																			
																				TRENCH EXCAVATION OF EARTH 642																			
																				TRENCH EXCAVATION OF ROCK 12																			
																				TOTAL MATERIAL AVAILABLE FOR FILL 13,797																			
																				TOTAL FILL INCLUDING FACTOR 4,318																			
																				TOTAL MATERIAL FOR FILL 13,797																			
																				BORROW 4,318																			
																				EXCESS EXCAVATION 9,478																			
															PROJECT NAME: CORNWALL																								
															PROJECT NUMBER: BRS 0172(6)																								
															FILE NAME: z85e04earthworks.xls PLOT DATE: 8/28/2007																								
															PROJECT LEADER: MARTHA EVANS-MONGEON DRAWN BY: V.KAPLAN																								
															DESIGNED BY: E.ATKINS/W.WONG CHECKED BY: K.ISHIKURA																								
															EARTHWORK DETAIL SHEET SHEET 17 OF 144																								