STATE OF VERMONT
AGENCY OF TRANSPORTATION

EARTHWORKS

STATION	DIST	TOTAL EXCAVATION EARTH AND ROCK AREA	TOTAL EXCAVATION EARTH AND ROCK VOLUME	ROCK EXCAVATION AREA	ROCK EXCAVATION VOLUME	EMBANKMENT AREA	EMBANKMENT VOLUME		
	FT.	S.F.	C.Y.	S.F.	C.Y.	S.F.	C.Y.	S.F.	C.Y.
US ROUTE 2									
6+00		0				0			
	50		65				0		
6+50		70				0			
	50		129				0		
7+00		69				0			
	50		185				3		
7+50		131				3			
	50		238				4		
8+00		126				1			
	50		225				1		
8+50		117				0			
	50		200				1		
9+00		99				1			
	50		125				1	CUT	2331
9+50		36				0		ROCK	0
	50		65				0	R.FAC	.495
10+00		34				0		FILL	9
	50		34				0	F.FAC	1.15
10+50		3				0		EX. C	2321
	50		2				0		
11+00		0				0			
	50		0				0		
11+50		0				0			
	50		0				0		
12+00		0				0			
	50		0				0		
12+50		0				0			
	50		0				0		
13+00		0				0			
	50		0				0		
13+50		0				0			
	50		0				0		
14+00		0				0			
	50		0				0		
14+50		0				0			
	50		0				0		
15+00		0				0			
	50		0				0		
15+50		0				0			
	50		29				0		
16+00		31				0			
	50		57				0		
16+50		31				0			
	50		61				0		
17+00		34				0			
	50		69				0		
17+50		41				0			
	50		38				0		
18+00		0				0			
	50		45				0		
18+50		48				0			
	50		89				0		
19+00		48				0			
	50		100				0		
19+50		60				0			
	50		106				0		
20+00		54				0			
	50		100				0		
20+50		54				0			
	50		98				0		
21+00		53				0			
	50		95				0		
21+50		50				0			
	50		82				0		
22+00		39				0			
	50		66				0		
22+50		32				0			
	50		30				0		
23+00		0				0			
	50		0				0		
23+50		0				0			
	50		0				0		
24+00		0				0			
	50		0				0		
24+50		0				0			

STATION	DIST	TOTAL EXCAVATION EARTH AND ROCK AREA	TOTAL EXCAVATION EARTH AND ROCK VOLUME	ROCK EXCAVATION AREA	ROCK EXCAVATION VOLUME	EMBANKMENT AREA	EMBANKMENT VOLUME		
	FT.	S.F.	C.Y.	S.F.	C.Y.	S.F.	C.Y.	S.F.	C.Y.
VT ROUTE 117									
30+00		2				0		CUT	6
	50		4				0	ROCK	0
30+50		2				0		R.FAC	.495
	50		2				0	FILL	0
31+00		0				0		F.FAC	1.15
								EX. C	6

STATION	DIST	TOTAL EXCAVATION EARTH AND ROCK AREA	TOTAL EXCAVATION EARTH AND ROCK VOLUME	ROCK EXCAVATION AREA	ROCK EXCAVATION VOLUME	EMBANKMENT AREA	EMBANKMENT VOLUME		
	FT.	S.F.	C.Y.	S.F.	C.Y.	S.F.	C.Y.	S.F.	C.Y.
I-89 RAMP "A/F"									
35+28			31			0		CUT	49
	22			25			0	ROCK	0
35+50			31			0		R.FAC	.495
	21			24			0	FILL	0
35+71			31			0		F.FAC	1.15
								EX. C	49
I-89 RAMP "D"									
51+83			31			0			
	17			20			0		
52+00			31			0		CUT	400
	50			61			0	ROCK	0
52+50			35			0		R.FAC	.495
	50			64			0	FILL	6
53+00			34			0		F.FAC	1.15
	50			87			3	EX. C	393
53+50			60			4			
	50			93			3		
54+00			40			0			
	32			76			0		
54+32			88			0			

STATION	DIST	TOTAL EXCAVATION EARTH AND ROCK AREA	TOTAL EXCAVATION EARTH AND ROCK VOLUME	ROCK EXCAVATION AREA	ROCK EXCAVATION VOLUME	EMBANKMENT AREA	EMBANKMENT VOLUME		
	FT.	S.F.	C.Y.	S.F.	C.Y.	S.F.	C.Y.	S.F.	C.Y.

SUMMARY AND BALANCES

RICHMOND STP 0284 (17)

STATION TO STATION		TOT EXC. EARTH & ROCK C.Y.	ROCK EXCAV C.Y.	EMBANK C.Y.	EXCESSES CUT	EXCESSES FILL	ACUMULATIVE EXCESSES CUT	ACUMULATIVE EXCESSES FILL
6+00	24+50	2321		9	2311		2311	
30+00	31+00	6		0	6		2317	
35+25	35+71	49		0	49		2365	
51+83	54+32	400		6	393		2758	
3% CONTINGENCY			83					
SUB-TOTAL		2776	83	15	2758			
TOTAL		2776	83	15	2758			

REMARKS

EARTH AND ROCK EXCAVATION		2776
SOLID ROCK EXCAVATION		83
EARTH EXCAVATION		2693
BACKFILL FOR TRENCH EXCAVATION (CB AND PIPES)		4
PLANIMETERED FILL		15
LESS FACTORED SOLID ROCK		
LESS DISPLACEMENT OF ANY LARGE STRUCTURES		
NET PLANIMETERED FILL		19
FACTOR		1.15
PLANIMETERED FILL INCLUDING FACTOR		22
MATERIALS AVAILABLE FOR FILLS		
EARTH EXCAVATION		2693
CHANNEL EXCAVATION		
UNDERDRAIN EXCAVATION		80
STRUCTURE EXCAVATION		
TRENCH EXCAVATION FOR DRAINAGE		17
TRENCH EXCAVATION OF ROCK		
TOTAL MATERIAL AVAILABLE FOR FILL		2790
TOTAL FILL INCLUDING FACTOR		22
TOTAL MATERIAL FOR FILL		2490
BORROW		
EXCESS EXCAVATION		2768

PROJECT NAME: **RICHMOND**
PROJECT NUMBER: **STP 0284 (17)**

FILE NAME: **Z97C186EWQTY.XLS**
PROJECT LEADER: **ERIK ATKINS**
DESIGNED BY: **T. BIGELOW**
EARTHWORK SHEET

PLOT DATE: **11/15/2012**
DRAWN BY: **A. ACHARYA**
CHECKED BY: **E.ATKINS**
SHEET **41** OF **133**