

LAKE COUNTY
LAK-1-12.89

*This sheet supersedes sheet no. 12
of the original plan.*

EARTHWORK				
SHEET NO.	STATION		E-101 ROADWAY EXCAVATION	EMBANKMENT PLUS 17.5%
	FROM	TO	CU. YDS.	CU. YDS.
17	325+90	330+00	12,526	95,344
18	330+00	340+00	147,285	2,765
19	340+00	350+00	25,490	28,198
20	350+00	360+00	9,805	39,815
21	360+00	370+00	68,545	26,779
22	370+00	380+00	75,318	69,365
23	380+00	390+00	10,293	116,768
24	390+00	400+00	123,953	44,426
25	400+00	410+00	191,146	5
26	410+00	420+00	67,255	716
27	420+00	430+00	185,105	0
28	430+00	440+00	156,821	0
29	440+00	450+00	169,287	117,126
30	450+00	460+00	152,324	183,247
32	460+00	470+00	8,490	487,884
33	470+00	480+00	0	699,267
34	480+00	490+00	500,688	121,338
35	490+00	500+00	455,152	0
36	500+00	510+00	227,530	0
37	510+00	520+00	34,785	5,048
RELOCATED SR.44				
280	118+50	120+00	0	26,756
281	120+00	130+00	0	252,953
282	130+00	130+75	65	8,060
RAMP "A"				
283	8+41	15+80	550	79,164
RAMP "B"				
283	1+00	7+83	9,689	44,735
RAMP "C"				
284	5+00	10+90	1,416	122,144
RAMP "D"				
284	1+00	14+18	1,484	104,936
RAMP "D" SPUR				
284	0+68	4+66.30	16	61,774
EXISTING S.R.44				
350	25+00	35+00	7,544	133
B.&O. R.R. DETOUR				
357	2328+50	2339+00	2,939	3,388
358	2339+00	2348+50	3,654	412
361	FILL EXISTING BIG CREEK CHANNEL		0	1,531
RELOC. HUNTOON RD.				
367	37+00	98+00	4,402	2,748
368	98+00	109+00	3,981	181
S.R. 86				
276	24+00	25+00	359	43
277	25+00	35+00	626	18,268
278	35+00	40+25	222	3,816
277-278	PRIVATE DRIVES		139	3,244
ADDITIONAL EXC. THRU ROCK CUT AREAS			20,000	23,500
REMOVAL OF RAILROAD EMBANKMENT			3,800	
RELOC. CONCORD RD.				
336	78+17	88+00	18,327	9,635
337	88+00	98+00	19,369	9,951
338	98+00	108+00	17,074	5,049
339	108+00	113+50	2,514	575
SUB-TOTALS			2,739,968	2,821,087
DEDUCT L-1 TOPSOIL STOCKPILED			23,500	
TOTALS			2,716,468	2,821,087

E-4, BORROW	
EMBANKMENT PLUS 17.5%	2,821,087
E-101 ROADWAY EXCAVATION	2,739,968
E-3 CHANNEL EXCAVATION	49,421
E-3 CHANNEL EXCAVATION FROM	
BIG CREEK STRUCTURE	11,150
TOTALS	2,800,539 2,821,087
TOTAL E-4 BORROW	20,548 C.Y.

E-11, WATER M-GAL. = $\frac{VOL. \times 5}{1000}$	
EMBANKMENT	2,400,925
I-22	37,786
I-18	10,913
B-119	2,779
TOTAL VOLUME C.Y.	2,452,403
M-GAL.	12,262

E-101, COMPACTED SUBGRADE	
AREA AS T-71	= 99,975 SQ. YDS.
AREA AS B-33	= 62,818 SQ. YDS.
TOTAL	= 162,793 SQ. YDS.

B-33, BITUMINOUS MACADAM BASE COURSE	
TOTAL NET LENGTH AS PER I-18	= 18,845.37 LIN. FT.
WIDTH 2 SHOULDERS @ 5 FT.	= 10 FT.
WIDTH 2 SHOULDERS @ 10 FT.	= 20 FT.
TOTAL WIDTH	= 30 FT.
18,845.37 X 30 ÷ 9	= 62,818 SQ. YDS.

T-31, BITUMINOUS SURFACE TREATMENT	
BITUMINOUS MATERIAL, 2 SEAL OPERATION OF 0.25 GAL. PER SQ. YD. OF B-33 EACH	
AREA AS ABOVE	= 62,818 SQ. YDS.
62,818 X 0.25 X 2	= 31,409 GAL.
NO. 46 AGGREGATE (1st OPERATION)	
APPLIED @ .008 CU. YDS. PER SQ. YD. B-33	
62,818 X .008	= 502.5 CU. YDS.
NO. 6 AGGREGATE (2nd OPERATION)	
APPLIED AT SAME RATE AS NO. 46 AGGREGATE	
	= 502.5 CU. YDS.

T-71, 10" REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT	
TOTAL NET LENGTH AS PER S.R. 1	
TYPICAL SECTIONS	= 18,745.37 FT.
WIDTH, 4 LANES @ 12 FT.	= 48 FT.
18,745.37 X 48 ÷ 9	= 99,975 SQ. YDS.

I-18, STABILIZED CRUSHED AGGREGATE SHOULDER MATERIAL	
TOTAL NET LENGTH AS PER S.R. 1	
TYPICAL SECTIONS PLUS 4 APPROACH SLABS @ 25 FT.	= 18,845.37 FT.
WIDTH, 2 SHOULDERS @ 5.5 FT.	= 11 FT.
WIDTH, 2 SHOULDERS @ 10.5 FT.	= 21 FT.
TOTAL WIDTH	= 32 FT.
18,845.37 X 32 X $\frac{5}{12}$ ÷ 27	= 9,306 CU. YDS.

I-22, SUBBASE	
TOTAL NET LENGTH AS PER S.R. 1	
NORMAL TYPICAL SECTIONS, 2 LANES PLUS 8 APPROACH SLABS @ 25 FT.	= 29,190.74 FT.
END AREA, 2 LANES	= 19.71 SQ. FT.
ROCK CUT TYPICAL SECTIONS, 2 LANES	= 8,500 FT.
END AREA, 2 LANES	= 26.92 SQ. FT.
29,190.74 X 19.71 ÷ 27	= 21,309 CU. YDS.
8,500 X 26.92 ÷ 27	= 8,475 CU. YDS.
TOTAL	= 29,784 CU. YDS.

EDGE LINES	
TOTAL NET LENGTH AS PER SHEET NO. 1	= 19,347.47 FT.
LENGTH 4 EDGES	
4 X 19,347.47	= 77,389.88 FT.
ADD FOR 2 RAMP EXITS	200 FT.
ADD FOR 2 RAMP ENTRANCES	750 FT.
TOTAL LENGTH	= 78,339.88 FT.
78,339.88 ÷ 5,280	= 14.88 MILES

CENTER LINES	
TOTAL NET LENGTH AS PER SHEET NO. 1	= 19,347.47 FT.
2 PAVEMENTS, 15 FT. LINES AND 25 FT. SPACES	
19,347.47 X 2 X $\frac{15}{40}$ ÷ 5,280	= 2.75 MILES