

# CALCULATIONS

LAKE COUNTY  
LAK. 2-0.00

## I-22 SUBBASE BEYOND CURB

Marginal Road N <sup>o</sup> 2	Sta. 0+61.90 to Sta. 39+29.72	= 3867.82 x 1 x .5 ÷ 27 =	71 Cu. Yds.
" " "	Minus Nike Site Rd.	= -115 x 1 x .5 ÷ 27 =	- 2 Cu. Yds.
Marginal Road N <sup>o</sup> 3	Sta. 0+97.60 to Sta. 56+19.95	= 5522.35 x 1 x .5 ÷ 27 =	102 Cu. Yds.
Relocated Lakeland	Sta. 6+00 to Sta. 28+09.03	= 2203.03 x 2 x .5 ÷ 27 =	82 Cu. Yds.
" " "	Minus E. 365 <sup>th</sup> St.	= - 88 x 1 x .5 ÷ 27 =	- 2 Cu. Yds.
" " "	" " 367 <sup>th</sup> "	= - 50 x 1 x .5 ÷ 27 =	- 1 Cu. Yds.
Vine St.		= 2191 x 1 x .5 ÷ 27 =	41 Cu. Yds.
Slab Bridge Marg. Rd. N <sup>o</sup> 3	Sta. 24+43 to Sta. 25+04	= - 61 x 1 x .5 ÷ 27 =	- 1 Cu. Yds.
		I-22 Subtotal =	290 Cu. Yds.

## I-22 SUBBASE UNDER MEDIAN

Ramps 1 & 2	Sta. 5+33.94 to Sta. 11+97.45	= 663.51 x 5.5 ÷ 27 =	135 Cu. Yds.
Lloyd Rd. Connection	Sta. 0+00 to Sta. 6+21	= 621 x 1 ÷ 27 =	126 Cu. Yds.
Vine St.	600 x 2 x 1.5 ÷ 27	=	7 Cu. Yds.
		Subtotal "D"	= 268 Cu. Yds.
		Subtotal "A"	= 4277 Cu. Yds.
		Subtotal "B"	= 5545 Cu. Yds.
		Subtotal "C"	= 2601 Cu. Yds.
		I-22 Under Pavement =	40713 Cu. Yds.

## TOTAL I-22 SUBBASE

53694 Cu. Yds.

## I-18 STABILIZED CRUSHED AGGREGATE

Freeway Constants: 10' Berm =  $\frac{7+5}{2} \times \frac{1}{12} \times 10.25 \times \frac{1}{27} = \frac{5.1}{27}$  cu.yd. 5' Berm =  $\frac{7+5}{2} \times \frac{1}{12} \times 5.25 \times \frac{1}{27} = \frac{2.6}{27}$  cu.yd.

Freeway Eastbound	Sta. 100+00 to Sta. 114+34.43	= 1434.43 x 7.7 ÷ 27 =	409 Cu. Yds.
" "	Sta. 114+34.43 to Sta. 116+28	= 193.57 x 5.1 ÷ 27 =	37 Cu. Yds.
" "	Sta. 114+34.43 to Sta. 116+28	= 193.57 x 2.6 ÷ 27 =	19 Cu. Yds.
" "	Sta. 117+72.50 to Sta. 120+58	= 285.50 x 2.6 ÷ 27 =	27 Cu. Yds.
" "	Sta. 117+72.50 to Sta. 120+58	= 289.93 x 5.1 ÷ 27 =	55 Cu. Yds.
" "	Sta. 124+88.56 to Sta. 129+13.72	= 425.16 x 5.1 ÷ 27 =	80 Cu. Yds.
" "	Sta. 120+58 to Sta. 129+13.72	= 855.72 x 2.6 ÷ 27 =	83 Cu. Yds.
" "	Sta. 130+79.28 to Sta. 134+80	= 395.88 x 5.1 ÷ 27 =	75 Cu. Yds.
" "	Sta. 134+80 to Sta. 139+03	= 423 x 5.1 ÷ 27 =	80 Cu. Yds.
" "	Sta. 141+15 to Sta. 146+16.64	= 493.87 x 5.1 ÷ 27 =	93 Cu. Yds.
" "	Sta. 146+16.64 to Sta. 155+41.40	= 924.76 x 5.1 ÷ 27 =	174 Cu. Yds.
" "	Sta. 130+79.28 to Sta. 155+41.40	= 2462.12 x 2.6 ÷ 27 =	237 Cu. Yds.
" "	Sta. 156+72.91 to Sta. 176+53.79	= 1980.88 x 5.1 ÷ 27 =	374 Cu. Yds.
" "	Sta. 183+53.63 to Sta. 185+77.33	= 223.70 x 5.1 ÷ 27 =	42 Cu. Yds.
" "	Sta. 185+77.33 to Sta. 195+14.24	= 936.91 x 5.1 ÷ 27 =	177 Cu. Yds.
" "	Sta. 156+72.91 to Sta. 195+14.24	= 3841.33 x 2.6 ÷ 27 =	370 Cu. Yds.
" "	Sta. 196+79.26 to Sta. 209+11	= 1231.74 x 5.1 ÷ 27 =	214 Cu. Yds.
" "	Sta. 215+96.49 to Sta. 216+96.49	= 100 x 5.1 ÷ 27 =	19 Cu. Yds.
" "	Sta. 216+96.49 to Sta. 234+69.16	= 1772.67 x 5.1 ÷ 27 =	335 Cu. Yds.
" "	Sta. 196+79.26 to Sta. 234+69.16	= 3789.90 x 2.6 ÷ 27 =	365 Cu. Yds.
" "	Sta. 236+17.60 to Sta. 291+88.11	= 5570.51 x 7.7 ÷ 27 =	1589 Cu. Yds.
" "	Sta. 293+25.53 to Sta. 299+21.74	= 596.21 x 7.7 ÷ 27 =	170 Cu. Yds.
" "	Sta. 302+74.96 to Sta. 306+20	= 348.59 x 5.1 ÷ 27 =	66 Cu. Yds.
" "	Sta. 299+21.74 to Sta. 306+20	= 698.26 x 2.6 ÷ 27 =	67 Cu. Yds.
" "	Sta. 306+20 to Sta. 310+54.21	= 434.21 x 7.7 ÷ 27 =	124 Cu. Yds.
" "	Sta. 312+82.19 to Sta. 314+42.20	= 160.01 x 5.1 ÷ 27 =	30 Cu. Yds.
" "	Sta. 314+42.20 to Sta. 316+38.20	= 196 x 5.1 ÷ 27 =	37 Cu. Yds.
" "	Sta. 318+51.76 to Sta. 321+60	= 308.24 x 5.1 ÷ 27 =	58 Cu. Yds.
" "	Sta. 323+03.35 to Sta. 335+05.71	= 1202.36 x 5.1 ÷ 27 =	227 Cu. Yds.
" "	Sta. 312+82.19 to Sta. 335+05.71	= 2223.52 x 2.6 ÷ 27 =	214 Cu. Yds.
(Slab Bridge) Eastbound	Sta. 260+10.49 to Sta. 260+39.51	= -29.02 x 7.7 ÷ 27 =	- 8 Cu. Yds.
" " West "	Sta. 260+10.49 to Sta. 260+39.51	= -29.02 x 7.7 ÷ 27 =	- 8 Cu. Yds.

I-18 Subtotal = 5831 Cu. Yds.

## I-18 STABILIZED CRUSHED AGGREGATE (CONT.)

Freeway Westbound	Sta. 100+00 to Sta. 114+34.43	= 1434.43 x 7.7 ÷ 27 =	409 Cu. Yds.
" "	Sta. 114+34.43 to Sta. 116+28	= 193.57 x 5.1 ÷ 27 =	37 Cu. Yds.
" "	Sta. 114+34.43 to Sta. 116+28	= 193.57 x 2.6 ÷ 27 =	19 Cu. Yds.
" "	Sta. 117+72.50 to Sta. 120+58	= 285.50 x 2.6 ÷ 27 =	27 Cu. Yds.
" "	Sta. 117+72.50 to Sta. 121+44.37	= 365.42 x 5.1 ÷ 27 =	69 Cu. Yds.
" "	Sta. 122+59 to Sta. 125+83.68	= 323.52 x 5.1 ÷ 27 =	61 Cu. Yds.
" "	Sta. 127+97.32 to Sta. 129+13.72	= 116.40 x 5.1 ÷ 27 =	22 Cu. Yds.
" "	Sta. 120+58 to Sta. 129+13.72	= 855.72 x 2.6 ÷ 27 =	83 Cu. Yds.
" "	Sta. 130+79.28 to Sta. 134+80	= 406.21 x 5.1 ÷ 27 =	77 Cu. Yds.
" "	Sta. 134+80 to Sta. 139+03	= 423 x 5.1 ÷ 27 =	80 Cu. Yds.
" "	Sta. 139+03 to Sta. 146+16.64	= 722.83 x 5.1 ÷ 27 =	136 Cu. Yds.
" "	Sta. 146+16.64 to Sta. 155+41.40	= 924.76 x 5.1 ÷ 27 =	174 Cu. Yds.
" "	Sta. 130+79.28 to Sta. 155+41.40	= 2462.12 x 2.6 ÷ 27 =	237 Cu. Yds.
" "	Sta. 156+72.91 to Sta. 176+53.79	= 1980.88 x 5.1 ÷ 27 =	374 Cu. Yds.
" "	Sta. 176+53.79 to Sta. 179+53.79	= 300.80 x 5.1 ÷ 27 =	57 Cu. Yds.
" "	Sta. 185+77.33 to Sta. 195+14.24	= 936.91 x 5.1 ÷ 27 =	177 Cu. Yds.
" "	Sta. 156+72.91 to Sta. 195+14.24	= 3841.33 x 2.6 ÷ 27 =	370 Cu. Yds.
" "	Sta. 196+79.26 to Sta. 209+11	= 1231.74 x 5.1 ÷ 27 =	214 Cu. Yds.
" "	Sta. 209+11 to Sta. 211+42.10	= 231.10 x 5.1 ÷ 27 =	44 Cu. Yds.
" "	Sta. 216+96.49 to Sta. 234+69.16	= 1772.67 x 5.1 ÷ 27 =	335 Cu. Yds.
" "	Sta. 196+79.26 to Sta. 234+69.16	= 3789.90 x 2.6 ÷ 27 =	365 Cu. Yds.
" "	Sta. 236+17.60 to Sta. 291+88.11	= 5570.51 x 7.7 ÷ 27 =	1589 Cu. Yds.
" "	Sta. 293+25.53 to Sta. 299+21.74	= 596.21 x 7.7 ÷ 27 =	170 Cu. Yds.
" "	Sta. 300+80 to Sta. 304+02.76	= 320.11 x 5.1 ÷ 27 =	60 Cu. Yds.
" "	Sta. 299+21.74 to Sta. 306+20	= 698.26 x 2.6 ÷ 27 =	67 Cu. Yds.
" "	Sta. 306+20 to Sta. 310+54.21	= 434.21 x 7.7 ÷ 27 =	124 Cu. Yds.
" "	Sta. 312+82.19 to Sta. 314+42.20	= 160.01 x 5.1 ÷ 27 =	30 Cu. Yds.
" "	Sta. 315+54 to Sta. 317+90.42	= 236.42 x 5.1 ÷ 27 =	45 Cu. Yds.
" "	Sta. 320+04.06 to Sta. 323+03.35	= 299.29 x 5.1 ÷ 27 =	57 Cu. Yds.
" "	Sta. 323+03.35 to Sta. 335+05.71	= 1202.36 x 5.1 ÷ 27 =	227 Cu. Yds.
" "	Sta. 312+82.19 to Sta. 335+05.71	= 2223.52 x 2.6 ÷ 27 =	214 Cu. Yds.
Ramp Constants: 3' Berm = $\frac{7}{12} \times 3.25 \times \frac{1}{27} = 1.9$ cu.yds. 8' Berm = $\frac{5+7}{2} \times \frac{1}{12} \times 8.25 \times \frac{1}{27} = 4.1$ cu.yds.			
Ramp No. 1	Sta. 2+25.60 to Sta. 6+19.86	= 394.26 x 6.0 ÷ 27 =	88 Cu. Yds.
" " "	Sta. 5+33.94 to Sta. 11+97.45	= 663.51 x 6.0 ÷ 27 =	147 Cu. Yds.
Ramp No. 2	Sta. 2+00 to Sta. 5+33.94	= 347.27 x 1.9 ÷ 27 =	24 Cu. Yds.
" " "	Sta. 2+00 to Sta. 5+33.94	= 317.10 x 4.1 ÷ 27 =	48 Cu. Yds.
" " "	Sta. 5+33.94 to Sta. 11+97.45	= 663.51 x 6.0 ÷ 27 =	147 Cu. Yds.
Ramp No. 3	Sta. 1+08.28 to Sta. 10+28.59	= 920.21 x 4.1 ÷ 27 =	140 Cu. Yds.
" " "	Sta. 3+00 to Sta. 10+28.59	= 728.59 x 1.9 ÷ 27 =	51 Cu. Yds.
Ramp No. 4	Sta. 4+34.98 to Sta. 7+65.64	= 330.66 x 6.0 ÷ 27 =	73 Cu. Yds.
Ramp No. 5	Sta. 4+89.36 to Sta. 15+91.49	= 1102.13 x 6.0 ÷ 27 =	245 Cu. Yds.
" " "	Sta. 15+91.49 to Sta. 16+04.81	= 13.32 x 1.9 ÷ 27 =	1 Cu. Yds.
Ramp No. 6	Sta. 5+55.10 to Sta. 7+23.03	= 167.93 x 6.0 ÷ 27 =	37 Cu. Yds.
" " "	Sta. 7+23.03 to Sta. 11+78.59	= 454.42 x 1.9 ÷ 27 =	32 Cu. Yds.
" " "	Sta. 7+23.03 to Sta. 11+78.59	= 456.99 x 4.1 ÷ 27 =	69 Cu. Yds.
" " "	Sta. 11+78.59 to Sta. 19+65.09	= 786.50 x 6.0 ÷ 27 =	175 Cu. Yds.
Ramp No. 7	Sta. 6+84.65 to Sta. 19+00	= 1215.55 x 6.0 ÷ 27 =	270 Cu. Yds.
		I-18 Subtotal =	7497 Cu. Yds.