

# CALCULATIONS

## I-22-6" SUBBASE UNDER PAVEMENT (CONT.)

Freeway Westbound	Sta. 293 + 50.53 to Sta. 299 + 21.74 =	571.21 x 36 ÷ 54 =	381 Cu.Yds.
" "	Sta. 299 + 21.74 to Sta. 306 + 20 =	698.26 x 24 ÷ 54 =	310 Cu.Yds.
" "	Sta. 306 + 20 to Sta. 310 + 29.21 =	409.21 x 36 ÷ 54 =	273 Cu.Yds.
" "	Sta. 313 + 07.19 to Sta. 314 + 42.20 =	135.01 x 36 ÷ 54 =	90 Cu.Yds.
" "	Sta. 314 + 42.20 to Sta. 320 + 04.06 =	561.86 x 24 ÷ 54 =	250 Cu.Yds.
" "	Sta. 320 + 04.06 to Sta. 335 + 05.71 =	1501.65 x 24 ÷ 54 =	667 Cu.Yds.
" "	Sta. 110 + 10 to Sta. 112 + 60 =	250 x 6 ÷ 54 =	28 Cu.Yds.
" "	Sta. 112 + 60 to Sta. 114 + 34.43 =	174.43 x 12 ÷ 54 =	39 Cu.Yds.
" "	Sta. 114 + 34.43 to Sta. 116 + 03 =	165.92 x 12 ÷ 54 =	37 Cu.Yds.
" "	Sta. 117 + 97.50 to Sta. 121 + 44.37 =	341.41 x 12 ÷ 54 =	76 Cu.Yds.
" "	Sta. 127 + 97.32 to Sta. 128 + 88.72 =	91.40 x 12 ÷ 54 =	20 Cu.Yds.
" "	Sta. 131 + 04.28 to Sta. 132 + 30 =	127.36 x 12 ÷ 54 =	28 Cu.Yds.
" "	Sta. 132 + 30 to Sta. 134 + 80 =	250 x 6 ÷ 54 =	28 Cu.Yds.
" "	Sta. 170 + 50 to Sta. 173 + 00 =	250 x 6 ÷ 54 =	28 Cu.Yds.
" "	Sta. 173 + 00 to Sta. 179 + 53.79 =	654.57 x 12 ÷ 54 =	145 Cu.Yds.
" "	Sta. 216 + 96.49 to Sta. 218 + 00 =	103.51 x 12 ÷ 54 =	23 Cu.Yds.
" "	Sta. 218 + 00 to Sta. 220 + 50 =	250 x 6 ÷ 54 =	28 Cu.Yds.
" "	Sta. 320 + 04.06 to Sta. 324 + 50 =	445.94 x 12 ÷ 54 =	99 Cu.Yds.
" "	Sta. 324 + 50 to Sta. 327 + 00 =	250 x 6 ÷ 54 =	28 Cu.Yds.
Ramp No. 1	Sta. 1 + 57.84 to Sta. 6 + 19.86 =	462.02 x 16 ÷ 54 =	137 Cu.Yds.
" " "	Sta. 5 + 33.94 to Sta. 11 + 97.45 =	663.51 x 16 ÷ 54 =	197 Cu.Yds.
Ramp No. 2	Sta. 2 + 00 to Sta. 5 + 33.94 =	333.94 x 16 ÷ 54 =	99 Cu.Yds.
" " "	Sta. 5 + 33.94 to Sta. 11 + 97.45 =	663.51 x 16 ÷ 54 =	197 Cu.Yds.
Ramp No. 3	Sta. 1 + 95.07 to Sta. 10 + 28.59 =	833.52 x 16 ÷ 54 =	247 Cu.Yds.
Ramp No. 4	Sta. 4 + 34.98 to Sta. 8 + 99.65 =	464.67 x 16 ÷ 54 =	138 Cu.Yds.
Ramp No. 5	Sta. 4 + 89.36 to Sta. 15 + 91.49 =	1102.13 x 16 ÷ 54 =	327 Cu.Yds.
Ramp No. 6	Sta. 5 + 55.10 to Sta. 20 + 15.09 =	1459.99 x 16 ÷ 54 =	432 Cu.Yds.
Ramp No. 7	Sta. 6 + 85 to Sta. 19 + 00 =	1215 x 16 ÷ 54 =	360 Cu.Yds.
Ramp No. 8	Sta. 6 + 94.82 to Sta. 18 + 57.06 =	1162.24 x 16 ÷ 54 =	344 Cu.Yds.
Ramp No. 9	Sta. 2 + 98.89 to Sta. 7 + 97.18 =	498.29 x 16 ÷ 54 =	148 Cu.Yds.
Ramp No. 10	Sta. 2 + 07.69 to Sta. 6 + 25.67 =	417.98 x 16 ÷ 54 =	124 Cu.Yds.
Ramp No. 11	Sta. 2 + 00 to Sta. 3 + 94.30 =	194.30 x 16 ÷ 54 =	58 Cu.Yds.
" " "	Sta. 9 + 04.72 to Sta. 10 + 07.93 =	103.21 x 16 ÷ 54 =	31 Cu.Yds.
" " "	Sta. 0 + 00 to Sta. 5 + 31.24 =	531.24 x 16 ÷ 54 =	157 Cu.Yds.
Ramp No. 12	Sta. 2 + 00 to Sta. 4 + 70.52 =	270.52 x 16 ÷ 54 =	80 Cu.Yds.
" " "	Sta. 10 + 22.58 to Sta. 11 + 36.99 =	114.41 x 16 ÷ 54 =	34 Cu.Yds.
" " "	Sta. 0 + 00 to Sta. 5 + 31.24 =	531.24 x 16 ÷ 54 =	157 Cu.Yds.
Ramp No. 13	Sta. 2 + 13.80 to Sta. 7 + 26.86 =	513.06 x 16 ÷ 54 =	152 Cu.Yds.
Ramp No. 14	Sta. 2 + 00 to Sta. 4 + 86.45 =	286.45 x 16 ÷ 54 =	84 Cu.Yds.
Ramp No. 15	Sta. 3 + 56.35 to Sta. 13 + 82.52 =	1026.17 x 16 ÷ 54 =	304 Cu.Yds.
Lloyd Rd. Connection	Sta. 0 + 00 to Sta. 3 + 91.96 =	391.96 x 32 ÷ 54 =	232 Cu.Yds.

I-22 Subtotal 6617 Cu.Yds.

## I-22-6" SUBBASE UNDER PAVEMENT (CONT.)

Lakeland Blvd. Relocation	Sta. 6 + 00 to Sta. 28 + 09.03 =	2209.03 x 29 ÷ 54 =	1186 Cu.Yds.
Marginal Road (Rush) N#2	Sta. 0 + 61.90 to Sta. 39 + 29.72 =	3867.82 x 24.5 ÷ 54 =	1755 Cu.Yds.
Marginal Road (Campbell)	Sta. 0 + 97.60 to Sta. 56 + 19.95 =	5522.35 x 24.5 ÷ 54 =	2505 Cu.Yds.
" " N#3	Sta. 24 + 48.49 to Sta. 24 + 77.51 =	-29.02 x 24.5 ÷ 54 =	-13 Cu.Yds.
Vine St.	9229 Sq.Yd. x 6 in. ÷ 36		= 1538 Cu.Yds.

I-22 Subtotal = 6971 Cu.Yds.  
27,125 Cu.Yds.  
6,617 Cu.Yds.

## TOTAL I-22-6" SUBBASE UNDER PAVEMENT

40713 Cu.Yds.

## I-22 SUBBASE UNDER PAVED BERM

Freeway Constants: 10' Berm =  $\left[ \left( 1.25 \times \frac{6}{12} \right) + 75 \left( \frac{3+86}{2} \times \frac{1}{12} \right) \right] \times \frac{1}{27} = \frac{0.51}{54}$  cu.yd. 5' Berm =  $\left[ 1.25 \times \frac{6}{12} + 2.5 \left( \frac{3+5}{2} \times \frac{1}{12} \right) \right] \times \frac{1}{27} = \frac{3.01}{54}$

Freeway Eastbound	Sta. 100 + 00 to Sta. 114 + 34.43 =	1434.43 x 11.5 ÷ 54 =	305 Cu.Yds.
" "	Sta. 114 + 34.43 to Sta. 116 + 28 =	193.57 x 8.5 ÷ 54 =	30 Cu.Yds.
" "	Sta. 114 + 34.43 to Sta. 116 + 28 =	193.57 x 3.0 ÷ 54 =	11 Cu.Yds.
" "	Sta. 117 + 72.50 to Sta. 120 + 58 =	285.50 x 3.0 ÷ 54 =	16 Cu.Yds.
" "	Sta. 117 + 72.50 to Sta. 120 + 58 =	289.93 x 8.5 ÷ 54 =	46 Cu.Yds.
" "	Sta. 124 + 88.56 to Sta. 129 + 13.72 =	425.16 x 8.5 ÷ 54 =	67 Cu.Yds.
" "	Sta. 120 + 58 to Sta. 129 + 13.72 =	855.72 x 3.0 ÷ 54 =	48 Cu.Yds.
" "	Sta. 130 + 79.28 to Sta. 134 + 80 =	395.88 x 8.5 ÷ 54 =	62 Cu.Yds.
" "	Sta. 134 + 80 to Sta. 139 + 03 =	423 x 8.5 ÷ 54 =	67 Cu.Yds.
" "	Sta. 141 + 15 to Sta. 146 + 16.64 =	493.87 x 8.5 ÷ 54 =	78 Cu.Yds.
" "	Sta. 146 + 16.64 to Sta. 155 + 41.40 =	924.76 x 8.5 ÷ 54 =	146 Cu.Yds.
" "	Sta. 130 + 79.28 to Sta. 155 + 41.40 =	2462.12 x 3.0 ÷ 54 =	137 Cu.Yds.
" "	Sta. 156 + 72.91 to Sta. 176 + 53.79 =	1980.88 x 8.5 ÷ 54 =	312 Cu.Yds.
" "	Sta. 183 + 53.63 to Sta. 185 + 77.33 =	223.70 x 8.5 ÷ 54 =	35 Cu.Yds.
" "	Sta. 185 + 77.33 to Sta. 195 + 14.24 =	936.91 x 8.5 ÷ 54 =	147 Cu.Yds.
" "	Sta. 156 + 72.91 to Sta. 195 + 14.24 =	3841.33 x 3.0 ÷ 54 =	214 Cu.Yds.
" "	Sta. 196 + 79.26 to Sta. 209 + 11 =	1231.74 x 8.5 ÷ 54 =	194 Cu.Yds.
" "	Sta. 215 + 96.49 to Sta. 216 + 96.49 =	100 x 8.5 ÷ 54 =	16 Cu.Yds.
" "	Sta. 216 + 96.49 to Sta. 234 + 69.16 =	1772.67 x 8.5 ÷ 54 =	280 Cu.Yds.
" "	Sta. 196 + 79.26 to Sta. 234 + 69.16 =	3789.90 x 3.0 ÷ 54 =	211 Cu.Yds.
" "	Sta. 236 + 17.60 to Sta. 291 + 88.11 =	5570.51 x 11.5 ÷ 54 =	1186 Cu.Yds.
" "	Sta. 293 + 25.53 to Sta. 299 + 21.74 =	596.21 x 11.5 ÷ 54 =	127 Cu.Yds.
" "	Sta. 302 + 74.96 to Sta. 306 + 20 =	348.59 x 8.5 ÷ 54 =	55 Cu.Yds.
" "	Sta. 299 + 21.74 to Sta. 306 + 20 =	698.26 x 3.0 ÷ 54 =	39 Cu.Yds.
" "	Sta. 306 + 20 to Sta. 310 + 54.21 =	4342.1 x 11.5 ÷ 54 =	92 Cu.Yds.
" "	Sta. 312 + 82.19 to Sta. 314 + 42.20 =	1600.1 x 8.5 ÷ 54 =	25 Cu.Yds.
" "	Sta. 314 + 42.20 to Sta. 316 + 38.20 =	196 x 8.5 ÷ 54 =	31 Cu.Yds.
" "	Sta. 318 + 51.76 to Sta. 321 + 60 =	308.24 x 8.5 ÷ 54 =	49 Cu.Yds.
" "	Sta. 323 + 03.35 to Sta. 335 + 05.71 =	1202.36 x 8.5 ÷ 54 =	189 Cu.Yds.
" "	Sta. 312 + 82.19 to Sta. 335 + 05.71 =	2223.52 x 3.0 ÷ 54 =	124 Cu.Yds.
" "	Sta. 260 + 10.49 to Sta. 260 + 39.51 =	-29.02 x 11.5 ÷ 54 =	-62 Cu.Yds.

I-22 SUBTotal A = 4277 Cu.Yds.