

# PAVEMENT CALCULATIONS

**T-35 1 1/2" ASPHALTIC CONCRETE SURFACE COURSE (TYPE "A")**  
 Sta. 105+25 To Sta. 108+00 (18' to 24' Wide)  
 $21 \times 275 \div 9 = 641.67 \text{ Sq. Yds.}$ ,  $641.67 \times 1.5 \div 36 = 26.73 \text{ Cu. Yds.}$   
 Sta. 108+00 To Sta. 108+50 (24' Wide)  
 $24 \times 50 \div 9 = 133.33 \text{ Sq. Yds.}$ ,  $133.33 \times 1.5 \div 36 = 5.56 \text{ Cu. Yds.}$   
 Feathered Area  $1.5 \times 50.0 \text{ Sq. Yds.} \div 36 = 2.08 \text{ Cu. Yds.}$   
 Drives & Mail Box Approaches = 10.00 Cu. Yds.  
**TOTAL CITY OF EASTLAKE (CODE 6807)**  
44.37 Cu. Yds.  
 Sta. 108+50 To Sta. 118+10.03 (24' Wide)  
 $24 \times 960.03 \div 9 = 2560.08 \text{ Sq. Yds.}$ ,  $2560.08 \times 1.5 \div 36 = 106.67 \text{ Cu. Yds.}$   
 Drives & Mail Box Approaches = 44.00 Cu. Yds.  
**TOTAL CITY OF EASTLAKE (CODE 6201)**  
150.67 Cu. Yds.  
 Sta. 118+10.03 To Sta. 125+00 (24' Wide)  
 $24 \times 689.97 \div 9 = 1839.92 \text{ Sq. Yds.}$ ,  $1839.92 \times 1.5 \div 36 = 76.66 \text{ Cu. Yds.}$   
 Drives & Mail Box Approaches = 27.00 Cu. Yds.  
**TOTAL CITY OF WILLOUGHBY (CODE 6201)**  
103.66 Cu. Yds.  
 Sta. 125+00 To Sta. 125+50 (24' Wide)  
 $24 \times 50 \div 9 = 133.33 \text{ Sq. Yds.}$ ,  $133.33 \times 1.5 \div 36 = 5.56 \text{ Cu. Yds.}$   
 Sta. 125+50 To Sta. 128+25 (24' to 18')  
 $21 \times 275 \div 9 = 641.67 \text{ Sq. Yds.}$ ,  $641.67 \times 1.5 \div 36 = 26.73 \text{ Cu. Yds.}$   
 Drives & Mail Box Approaches = 21.00 Cu. Yds.  
 Feathered Area  $1.5 \times 50.0 \text{ Sq. Yds.} \div 36 = 2.08 \text{ Cu. Yds.}$   
**TOTAL CITY OF WILLOUGHBY (CODE 6307)**  
55.37 Cu. Yds.  
**B-35 1 1/2" MIN. ASPHALTIC CONCRETE LEVELING COURSE**  
 Sta. 105+25 To Sta. 108+00 (18' to 24' Wide)  
 $21 \times 275 \div 9 = 641.66 \text{ Sq. Yds.}$ ,  $641.66 \times 1.5 \div 36 = 26.73 \text{ Cu. Yds.}$   
 Sta. 108+00 To Sta. 108+50 (24' Wide)  
 $24 \times 50 \div 9 = 133.33 \text{ Sq. Yds.}$ ,  $133.33 \times 1.5 \div 36 = 5.56 \text{ Cu. Yds.}$   
 Extra Leveling 150 Cu. Yds. per. Mile  $150 \times 0.0615 = 9.22 \text{ Cu. Yds.}$   
**TOTAL CITY OF EASTLAKE (CODE 6807)**  
41.51 Cu. Yds.  
 Sta. 125+00 To Sta. 125+50 (24' Wide)  
 $24 \times 50 \div 9 = 133.33 \text{ Sq. Yds.}$ ,  $133.33 \times 1.5 \div 36 = 5.56 \text{ Cu. Yds.}$   
 Sta. 125+50 To Sta. 128+25 (24' to 18' Wide)  
 $21 \times 275 \div 9 = 641.66 \text{ Sq. Yds.}$ ,  $641.66 \times 1.5 \div 36 = 26.73 \text{ Cu. Yds.}$   
 Extra Leveling, 150 Cu. Yds. per. Mile  $150 \times 0.0663 = 9.95 \text{ Cu. Yds.}$   
**TOTAL CITY OF WILLOUGHBY (CODE 6307)**  
42.24 Cu. Yds.  
**B-35 1 1/2" ASPHALTIC CONCRETE LEVELING COURSE**  
 Sta. 108+50 To Sta. 118+10.03 (24' Wide)  
 $24 \times 960.03 \div 9 = 2560.08 \text{ Sq. Yds.}$ ,  $2560.08 \times 1.5 \div 36 = 106.67 \text{ Cu. Yds.}$   
**TOTAL CITY OF EASTLAKE (CODE 6201)**  
106.67 Cu. Yds.  
 Sta. 118+10.03 To Sta. 125+00 (24' Wide)  
 $24 \times 689.97 \div 9 = 1839.92 \text{ Sq. Yds.}$ ,  $1839.92 \times 1.5 \div 36 = 76.66 \text{ Cu. Yds.}$   
**TOTAL CITY OF WILLOUGHBY (CODE 6201)**  
76.66 Cu. Yds.  
**B-35 3" ASPHALTIC CONCRETE BASE COURSE**  
 Sta. 105+25 To Sta. 108+00 (0.25' to 3.25' Wide)  
 $1.75 \times 2 \times 275 \div 9 = 1069.4 \text{ Sq. Yds.}$ ,  $1069.4 \times 3 \div 36 = 89.91 \text{ Cu. Yds.}$   
 Sta. 108+00 to Sta. 108+50 (3.25' Wide)  
 $3.25 \times 2 \times 50 \div 9 = 36.11 \text{ Sq. Yds.}$ ,  $36.11 \times 3 \div 36 = 3.00 \text{ Cu. Yds.}$   
**TOTAL CITY OF EASTLAKE (CODE 6807)**  
11.91 Cu. Yds.  
 Sta. 108+50 to Sta. 118+10.03 (24.5' Wide)  
 $24.5 \times 960.03 \div 9 = 2613.42 \text{ Sq. Yds.}$ ,  $2613.42 \times 3 \div 36 = 217.78 \text{ Cu. Yds.}$   
**TOTAL CITY OF EASTLAKE (6201)**  
217.78 Cu. Yds.  
 Sta. 118+10.03 To Sta. 125+00 (24.5' Wide)  
 $24.5 \times 689.97 \div 9 = 1878.25 \text{ Sq. Yds.}$ ,  $1878.25 \times 3 \div 36 = 156.52 \text{ Cu. Yds.}$   
**TOTAL CITY OF WILLOUGHBY (CODE 6201)**  
156.52 Cu. Yds.  
 Sta. 125+00 To Sta. 125+50 (3.25' Wide)  
 $3.25 \times 2 \times 50 \div 9 = 36.11 \text{ Sq. Yds.}$ ,  $36.11 \times 3 \div 36 = 3.00 \text{ Cu. Yds.}$   
 Sta. 125+50 To Sta. 128+25 (0.25' to 3.25' Wide)  
 $1.75 \times 2 \times 275 \div 9 = 106.94 \text{ Sq. Yds.}$ ,  $106.94 \times 3 \div 36 = 8.91 \text{ Cu. Yds.}$   
**TOTAL CITY OF WILLOUGHBY (CODE 6307)**  
11.91 Cu. Yds.

**B-119 8" CRUSHED AGGREGATE BASE COURSE**  
 Sta. 105+25 To Sta. 108+00 (0.75' to 3.75' Wide)  
 $2.25 \times 2 \times 275 \div 9 = 137.50 \text{ Sq. Yds.}$ ,  $137.50 \times 8 \div 36 = 30.55 \text{ Cu. Yds.}$   
 Sta. 108+00 To Sta. 108+50 (3.75' Wide)  
 $3.75 \times 2 \times 50 \div 9 = 41.66 \text{ Sq. Yds.}$ ,  $41.66 \times 8 \div 36 = 9.26 \text{ Cu. Yds.}$   
 Drives & Mail Box Approaches = 25.00 Cu. Yds.  
**TOTAL CITY OF EASTLAKE (CODE 6807)**  
64.81 Cu. Yds.  
 Sta. 108+50 To Sta. 118+10.03 (25.5' Wide)  
 $25.5 \times 960.03 \div 9 = 2720.08 \text{ Sq. Yds.}$ ,  $2720.08 \times 8 \div 36 = 604.46 \text{ Cu. Yds.}$   
 Drives & Mail Box Approaches = 103.00 Cu. Yds.  
**TOTAL CITY OF EASTLAKE (CODE 6201)**  
707.46 Cu. Yds.  
 Sta. 118+10.03 To Sta. 125+00 (25.5' Wide)  
 $25.5 \times 689.97 \div 9 = 1954.91 \text{ Sq. Yds.}$ ,  $1954.91 \times 8 \div 36 = 434.42 \text{ Cu. Yds.}$   
 Drives & Mail Box Approaches = 71.00 Cu. Yds.  
**TOTAL CITY OF WILLOUGHBY (CODE 6201)**  
505.42 Cu. Yds.  
 Sta. 125+00 To Sta. 125+50 (3.75' Wide)  
 $3.75 \times 2 \times 50 \div 9 = 41.66 \text{ Sq. Yds.}$ ,  $41.66 \times 8 \div 36 = 9.26 \text{ Cu. Yds.}$   
**TOTAL CITY OF WILLOUGHBY (CODE 6307)**  
9.26 Cu. Yds.  
 Sta. 125+50 To Sta. 128+25 (0.75' to 3.75' Wide)  
 $2.25 \times 2 \times 275 \div 9 = 137.50 \text{ Sq. Yds.}$ ,  $137.50 \times 8 \div 36 = 30.55 \text{ Cu. Yds.}$   
 Drives & Mail Box Approaches = 49.00 Cu. Yds.  
**TOTAL CITY OF WILLOUGHBY (CODE 6307)**  
88.81 Cu. Yds.  
**I-22 6" SUBBASE**  
 Sta. 105+25 To Sta. 108+00 (1.25' to 4.25' Wide)  
 $2.75 \times 2 \times 275 \div 9 = 168.05 \text{ Sq. Yds.}$ ,  $168.05 \times 6 \div 36 = 28.01 \text{ Cu. Yds.}$   
 Sta. 108+00 To Sta. 108+50 (4.25' Wide)  
 $4.25 \times 2 \times 50 \div 9 = 47.22 \text{ Sq. Yds.}$ ,  $47.22 \times 6 \div 36 = 7.87 \text{ Cu. Yds.}$   
**TOTAL CITY OF EASTLAKE (CODE 6807)**  
35.88 Cu. Yds.  
 Sta. 108+50 To Sta. 118+10.03 (26.5' Wide)  
 $26.5 \times 960.03 \div 9 = 2826.76 \text{ Sq. Yds.}$ ,  $2826.76 \times 6 \div 36 = 471.12 \text{ Cu. Yds.}$   
**TOTAL CITY OF EASTLAKE (CODE 6201)**  
471.12 Cu. Yds.  
 Sta. 118+10.03 To Sta. 125+00 (26.5' Wide)  
 $26.5 \times 689.97 \div 9 = 2031.57 \text{ Sq. Yds.}$ ,  $2031.57 \times 6 \div 36 = 338.60 \text{ Cu. Yds.}$   
**TOTAL CITY OF WILLOUGHBY (CODE 6201)**  
338.60 Cu. Yds.  
 Sta. 125+00 To Sta. 125+50 (4.25' Wide)  
 $4.25 \times 2 \times 50 \div 9 = 47.22 \text{ Sq. Yds.}$ ,  $47.22 \times 6 \div 36 = 7.87 \text{ Cu. Yds.}$   
 Sta. 125+50 To Sta. 128+25 (1.25' to 4.25' Wide)  
 $2.75 \times 2 \times 275 \div 9 = 168.05 \text{ Sq. Yds.}$ ,  $168.05 \times 6 \div 36 = 28.01 \text{ Cu. Yds.}$   
**TOTAL CITY OF WILLOUGHBY (CODE 6307)**  
35.88 Cu. Yds.  
**T-30 BITUMINOUS TACK COAT @ 0.10 GAL. PER. SQ. YD.**  
 Feathered Area Sta. 105+00 to 105+25 =  $50.00 \text{ Sq. Yds.}$   
 Sta. 105+25 to Sta. 108+50 (18' Wide)  $18 \times 325 \div 9 = 650.00 \text{ Sq. Yds.}$   
**TOTAL CITY OF EASTLAKE (CODE 6807)**  $700.00 \text{ Sq. Yds.} \times 0.10 = 70 \text{ Gals.}$   
 Sta. 125+00 to Sta. 128+25 (18' Wide)  $18 \times 325 \div 9 = 650.00 \text{ Sq. Yds.}$   
 Feathered Area Sta. 128+25 to 128+50 =  $50.00 \text{ Sq. Yds.}$   
**TOTAL CITY OF WILLOUGHBY (CODE 6307)**  $700.00 \text{ Sq. Yds.} \times 0.10 = 70 \text{ Gals.}$   
**T-30 BITUMINOUS PRIME COAT @ 0.35 Gal. per. Sq. Yd.**  
 Sta. 108+50 to 118+10.03 (25.5' Wide)  
 $960.03 \times 25.5 \div 9 = 2720.08 \text{ Sq. Yds.}$ ,  $2720.08 \times 0.35 = 952.03 \text{ Gals.}$   
**TOTAL CITY OF EASTLAKE (CODE 6201)**  
952 Gals.  
 Sta. 118+10.03 To 125+00 (25.5' Wide)  
 $689.97 \times 25.5 \div 9 = 1954.91 \text{ Sq. Yds.}$ ,  $1954.91 \times 0.35 = 684.22 \text{ Gals.}$   
**TOTAL CITY OF WILLOUGHBY (CODE 6201)**  
684 Gals.  
**E-101 COMPACTED SUBGRADE**  
 Sta. 108+50 To Sta. 118+10.03 (24' Wide)  
 $24 \times 960.03 \div 9 = 2560.08 \text{ Sq. Yds.}$   
**TOTAL CITY OF EASTLAKE (CODE 6201)**  
2560 Sq. Yds.  
 Sta. 118+10.03 To Sta. 125+00 (24' Wide)  
 $24 \times 689.97 \div 9 = 1839.92 \text{ Sq. Yds.}$   
**TOTAL CITY OF WILLOUGHBY (CODE 6201)**  
1840 Sq. Yds.

L-9 AGRICULTURAL LIMING MATERIAL @ 100 Lbs. per. 1000 Sq. Ft.  
 Sta. 105+00 To 108+50 Seeding table  $1290 \text{ Sq. Yds.} \times 9 \times 1290 \times 100 \div 1000 \times 2000 = 0.5805 \text{ Tons}$   
**TOTAL EASTLAKE**  
 Sta. 108+50 To 118+10.03 Seeding table  $19,726 \text{ Sq. Yds.} \times 9 \times 19,726 \times 100 \div 1000 \times 2000 = 8.8767 \text{ Tons}$   
**TOTAL EASTLAKE**  
 Sta. 118+10.03 To 125+00 Seeding table  $7060 \text{ Sq. Yds.} \times 9 \times 7060 \times 100 \div 1000 \times 2000 = 3.1770 \text{ Tons}$   
**TOTAL WILLOUGHBY**  
 Sta. 125+00 To 128+50 Seeding table  $1098 \text{ Sq. Yds.} \times 9 \times 1098 \times 100 \div 1000 \times 2000 = 0.4941 \text{ Tons}$   
**TOTAL WILLOUGHBY**