

CALCULATIONS

LAKE COUNTY
LAK 91-(0.00)-(2.38)

T-35 ASPHALTIC CONCRETE SURFACE COURSE

MAYFIELD VILLAGE

STA 0+398.73 To STA 0-388.73	=	10.00 x 20.00	x (0+1) (1/2)	÷ 324	=	0.3 Cu. Yds.
STA 0-388.73 To STA 0-46.73	=	342.00 x (20.00 + 54.10) (1/2)	x 1	÷ 324	=	39.1 Cu. Yds.
STA 0-46.73 To STA 0+00	=	46.73 x 55.13	x 1	÷ 324	=	8.0 Cu. Yds.

TOTAL T-35 ASPHALTIC CONCRETE SURFACE COURSE (MAYFIELD VILLAGE) = 47.4 Cu. Yds.

WILLOUGHBY HILLS VILLAGE

STA 0+00 To STA 60+66.49	=	6066.49 x 56.17	x 1	÷ 324	=	1051.7 Cu. Yds.
STA 60+66.49 To STA 62+16.49	=	150.00 x (56.17 + 68.17) (1/2)	x 1	÷ 324	=	28.8 Cu. Yds.
STA 62+16.49 To STA 63+66.49	=	150.00 x 68.17	x 1	÷ 324	=	31.6 Cu. Yds.
STA 65+93.83 To STA 71+18.79	=	524.96 x 68.17	x 1	÷ 324	=	110.5 Cu. Yds.
STA 75+55.35 To STA 96+20.84	=	2065.49 x 58.17	x 1	÷ 324	=	370.8 Cu. Yds.

TOTAL T-35 ASPHALTIC CONCRETE SURFACE COURSE (WILLOUGHBY HILLS VILLAGE) = 1783.5 Cu. Yds.

CHARDON ROAD - USR 6

STA 0-93.00 To STA 0-83.00	=	10.00 x 20.00	x (0+1) (1/2)	÷ 324	=	0.3 Cu. Yds.
STA 0-83.00 To STA 2+50.00	=	333.00 x (20.00 + 54.00) (1/2)	x 1	÷ 324	=	38.0 Cu. Yds.
STA 2+50.00 To STA 4+27.00	=	177.00 x (56.17 + 68.17) (1/2)	x 1	÷ 324	=	34.0 Cu. Yds.
STA 7+67.00 To STA 9+47.00	=	180.00 x (68.17 + 56.17) (1/2)	x 1	÷ 324	=	34.5 Cu. Yds.
STA 9+47.00 To STA 12+77.00	=	330.00 x (54.00 + 20.00) (1/2)	x 1	÷ 324	=	37.7 Cu. Yds.
STA 12+77.00 To STA 12+87.00	=	10.00 x 20.00	x (1+0) (1/2)	÷ 324	=	0.3 Cu. Yds.

TOTAL T-35 ASPHALTIC CONCRETE SURFACE COURSE (CHARDON ROAD - USR 6) = 107.1 Cu. Yds.

EDDY ROAD

STA 0-100.00 To STA 3+87.41	=	487.41 x 20.00	x 1	÷ 324	=	30.1 Cu. Yds.
STA 6+53.13 To STA 9+00.00	=	246.87 x 20.00	x 1	÷ 324	=	15.2 Cu. Yds.

TOTAL T-35 ASPHALTIC CONCRETE SURFACE COURSE (EDDY ROAD) = 45.3 Cu. Yds.

CITY OF WILLOUGHBY

STA 132+2 To STA 134+82.45	=	256.31 x 58.17	x 1	÷ 324	=	46.1 Cu. Yds.
STA 138+50.35 To STA 141+18.00	=	267.65 x 56.17	x 1	÷ 324	=	46.4 Cu. Yds.
STA 141+18.00 To STA 144+98.00	=	380.00 x (54.00 + 18.00) (1/2)	x 1	÷ 324	=	42.2 Cu. Yds.
STA 144+98.00 To STA 145+08.00	=	10.00 x 18.00	x (1+0) (1/2)	÷ 324	=	0.3 Cu. Yds.

TOTAL T-35 ASPHALTIC CONCRETE SURFACE COURSE (CITY OF WILLOUGHBY) = 179.5 Cu. Yds.

B-35 ASPHALTIC CONCRETE LEVELING COURSE

MAYFIELD VILLAGE

STA 0-388.73 To STA 0-46.73	=	342.00 x 17.00 x 1/2 x 2	x 1.5	÷ 324	=	26.9 Cu. Yds.
STA 0-46.73 To STA 0+00	=	46.73 x 35.13	x 1.5	÷ 324	=	7.6 Cu. Yds.

TOTAL B-35 ASPHALTIC CONCRETE LEVELING COURSE (MAYFIELD VILLAGE) = 34.5 Cu. Yds.

WILLOUGHBY HILLS VILLAGE

STA 0+00 To STA 49+25.00	=	4925.00 x 38.17	x 1.5	÷ 324	=	870.3 Cu. Yds.
STA 49+25.00 To STA 60+66.49	=	1141.49 x 56.17	x 1.5	÷ 324	=	296.8 Cu. Yds.
STA 60+66.49 To STA 62+16.49	=	150.00 x (56.17 + 68.17) (1/2)	x 1.5	÷ 324	=	43.2 Cu. Yds.
STA 62+16.49 To STA 63+66.49	=	150.00 x 68.17	x 1.5	÷ 324	=	47.9 Cu. Yds.
STA 65+93.83 To STA 71+18.79	=	524.96 x 68.17	x 1.5	÷ 324	=	165.7 Cu. Yds.
STA 75+55.35 To STA 96+20.84	=	2065.49 x 58.17	x 1.5	÷ 324	=	556.3 Cu. Yds.

TOTAL B-35 ASPHALTIC CONCRETE LEVELING COURSE (WILLOUGHBY HILLS VILLAGE) = 2220.9 Cu. Yds.

STA 0-83.00 To STA 2+50.00	=	333.00 x 17.00 x 1/2 x 2	x 1.5	÷ 324	=	26.2 Cu. Yds.
STA 2+50.00 To STA 4+27.00	=	177.00 x (56.17 + 68.17) (1/2)	x 1.5	÷ 324	=	50.9 Cu. Yds.
STA 7+67.00 To STA 9+47.00	=	183.00 x (68.17 + 56.17) (1/2)	x 1.5	÷ 324	=	52.7 Cu. Yds.
STA 9+47.00 To STA 12+77.00	=	327.00 x 17.00 x 1/2 x 2	x 1.5	÷ 324	=	25.5 Cu. Yds.

TOTAL B-35 ASPHALTIC CONCRETE LEVELING COURSE (CHARDON ROAD - USR 6) = 107.1 Cu. Yds.

STA 0-100.00 To STA 3+87.41	=	487.41 x 20.00	x 1.5	÷ 324	=	45.1 Cu. Yds.
STA 6+53.13 To STA 9+00.00	=	246.87 x 20.00	x 1.5	÷ 324	=	22.9 Cu. Yds.

TOTAL B-35 ASPHALTIC CONCRETE LEVELING COURSE (EDDY ROAD) = 45.3 Cu. Yds.

B-35 ASPHALTIC CONCRETE LEVELING COURSE (CON'T)

CITY OF WILLOUGHBY

STA 132+23.54 To STA 134+82.45	=	258.91 x 58.17	x 1.5	÷ 324	=	69.7 Cu. Yds.
STA 138+50.35 To STA 141+18.00	=	267.65 x 56.17	x 1.5	÷ 324	=	69.6 Cu. Yds.
STA 141+18.00 To STA 144+98.00	=	380.00 x 18.00 x 1/2 x 2	x 1.5	÷ 324	=	31.7 Cu. Yds.

TOTAL B-35 ASPHALTIC CONCRETE LEVELING COURSE (CITY OF WILLOUGHBY) = 237.8 Cu. Yds.

STA 3+50.00 To STA 4+30.52	=	80.52 x 20.00	x 1.5	÷ 324	=	7.5 Cu. Yds.
STA 5+76.02 To STA 12+16.00	=	639.98 x 20.00	x 1.5	÷ 324	=	59.3 Cu. Yds.

B-21 WATERPROOFED AGGREGATE BASE COURSE

MAYFIELD VILLAGE

STA 0-388.73 To STA 0-46.73	=	342.00 x (85+175) x 1/2 x 2	x 7	÷ 324	=	133.0 Cu. Yds.
STA 0-46.73 To STA 0+00	=	46.73 x 37.58 x 1/2 x 2	x 7	÷ 324	=	37.9 Cu. Yds.

TOTAL B-21 WATERPROOFED AGGREGATE BASE COURSE (MAYFIELD VILLAGE) = 170.9 Cu. Yds.

WILLOUGHBY HILLS VILLAGE

STA 0+00 To STA 49+25.00	=	4925.00 x 39.17	x 7	÷ 324	=	4167.9 Cu. Yds.
STA 49+25.00 To STA 60+66.49	=	1141.49 x 57.17	x 7	÷ 324	=	1409.9 Cu. Yds.
STA 60+66.49 To STA 62+16.49	=	150.00 x (57.17 + 69.17) (1/2)	x 7	÷ 324	=	204.7 Cu. Yds.
STA 62+16.49 To STA 63+66.49	=	150.00 x 69.17	x 7	÷ 324	=	224.2 Cu. Yds.
STA 65+93.83 To STA 71+18.79	=	524.96 x 69.17	x 7	÷ 324	=	784.5 Cu. Yds.
STA 75+55.35 To STA 96+20.84	=	2065.49 x 59.17	x 7	÷ 324	=	2640.5 Cu. Yds.
DEDUCT FOR INTERSECTIONS *	=	447.90 x 1.58	x 7	÷ 324	=	-15.3 Cu. Yds.

TOTAL B-21 WATERPROOFED AGGREGATE BASE COURSE (WILLOUGHBY HILLS VILLAGE) = 10164.5 Cu. Yds.

STA 0-83.00 To STA 2+50.00	=	333.00 x (85+175) x 1/2 x 2	x 7	÷ 324	=	129.5 Cu. Yds.
STA 2+50.00 To STA 4+27.00	=	177.00 x (57.17 + 69.17) (1/2)	x 7	÷ 324	=	241.6 Cu. Yds.
STA 7+67.00 To STA 9+47.00	=	183.00 x (69.17 + 57.17) (1/2)	x 7	÷ 324	=	249.8 Cu. Yds.
STA 9+47.00 To STA 12+77.00	=	327.00 x (85+175) x 1/2 x 2	x 7	÷ 324	=	127.2 Cu. Yds.

TOTAL B-21 WATERPROOFED AGGREGATE BASE COURSE (CHARDON ROAD - USR 6) = 1016.5 Cu. Yds.

CITY OF WILLOUGHBY

STA 132+23.54 To STA 134+82.45	=	258.91 x 59.17	x 7	÷ 324	=	331.0 Cu. Yds.
STA 138+50.35 To STA 141+18.00	=	267.65 x 57.17	x 7	÷ 324	=	330.6 Cu. Yds.
STA 141+18.00 To STA 144+98.00	=	380.00 x (85+175) x 1/2 x 2	x 7	÷ 324	=	147.8 Cu. Yds.

TOTAL B-21 WATERPROOFED AGGREGATE BASE COURSE (CITY OF WILLOUGHBY) = 809.4 Cu. Yds.

B-19 AGGREGATE BASE COURSE

WILLOUGHBY HILLS VILLAGE

STA 0-100.00 To STA 3+87.41	=	487.41 x 21.00	x 5	÷ 324	=	158.0 Cu. Yds.
STA 6+53.13 To STA 9+00.00	=	246.87 x 21.00	x 5	÷ 324	=	80.0 Cu. Yds.

TOTAL B-19 AGGREGATE BASE COURSE (WILLOUGHBY HILLS VILLAGE) = 238.0 Cu. Yds.

* WHITE RD., PARKVIEW DR., METROPOLITAN PARK DR., MARTIN RD., DIXON RD. & TIMBERLINE DR.