

# CALCULATIONS

### ITEM 609 CURB, TYPE 6

A. STA 524+90 TO STA 526+13, LT	= 123.00 LIN.FT.
B. STA 526+13, LT TO STA 9+71.73, RT (WATSON ST.)	= 36.33 LIN.FT.
C. STA 9+34 TO STA 9+71.73, RT, WATSON ST.	= 37.73 LIN.FT.
D. STA 524+90 TO STA 525+29.50, RT	= 39.50 LIN.FT.
E. STA 525+29.50, RT TO STA 10+90.22, RT (WOOD ST.)	= 43.98 LIN.FT.
F. STA 10+90.22 TO STA 10+95, RT (WOOD ST.)	= 4.78 LIN.FT.
G. STA 9+34, LT (WATSON ST.) TO STA 527+02, LT	= 42.11 LIN.FT.
H. STA 527+02 TO STA 527+22.27, LT	= 20.27 LIN.FT.
I. STA 527+22.27 TO STA 533+64.89, LT	= 642.62 LIN.FT.
J. STA 533+64.89, LT TO STA 9+23.13, RT (RICHMOND ST.)	= 94.07 LIN.FT.
K. STA 9+10 TO STA 9+23.13, RT, RICHMOND ST.	= 13.13 LIN.FT.
L. STA 10+84.84 TO STA 10+95, LT (WOOD ST.)	= 10.16 LIN.FT.
M. STA 10+84.84, LT (WOOD ST.) TO STA 51+64.27, RT (MENTOR AVE.)	= 39.28 LIN.FT.
N. STA 51+64.27 TO STA 51+80, RT, MENTOR AVE.	= 15.73 LIN.FT.
O. ERIE ST./MENTOR AVE. ISLAND	= 82.00 LIN.FT.
P. STA 52+64.50, LT (MENTOR AVE.) TO STA 527+18.40, RT	= 35.00 LIN.FT.
Q. STA 527+18.40 TO STA 527+22.27, RT	= 3.87 LIN.FT.
R. STA 527+22.27 TO STA 533+94.89, RT	= 672.62 LIN.FT.
S. STA 533+94.89, RT TO STA 10+51.68, RT (RICHMOND ST.)	= 58.56 LIN.FT.
T. STA 10+51.68 TO STA 10+82, RT, RICHMOND ST	= 30.32 LIN.FT.
U. STA 9+10 TO STA 9+48.32, LT RICHMOND ST	= 38.32 LIN.FT.
V. STA 9+48.32, LT (RICHMOND ST.) TO STA 535+07.17, LT	= 58.56 LIN.FT.
W. STA 535+07.17 TO STA 547+10.52, LT	= 1203.35 LIN.FT.
X. STA 547+10.52, LT TO STA 9+61.91, RT (ST. CLAIR ST.)	= 50.35 LIN.FT.
Y. STA 9+13 TO STA 9+61.91, RT, ST. CLAIR ST.	= 48.91 LIN.FT.
Z. STA 10+81.67 TO STA 10+82, LT, RICHMOND ST.	= 0.33 LIN.FT.
AA. STA 10+81.67, LT (RICHMOND ST.) TO STA 535+36.30, RT	= 92.27 LIN.FT.
AB. STA 535+36.30 TO STA 536+15.89, RT	= 79.59 LIN.FT.
AC. STA 536+15.89, RT TO STA 10+44.69, RT (LIBERTY ST. EXT.)	= 20.42 LIN.FT.
AD. STA 10+44.69 TO STA 10+49, RT, LIBERTY ST. EXT.	= 4.31 LIN.FT.
AE. STA 10+48.29 TO STA 10+49, LT, LIBERTY ST. EXT.	= 0.71 LIN.FT.
AF. STA 10+48.29, LT (LIBERTY ST. EXT.) TO STA 536+86.41, RT	= 54.96 LIN.FT.
AG. STA 10+37.41 TO STA 11+22, LT, ST. CLAIR ST.	= 82.59 LIN.FT.
AH. ERIE ST./ST. CLAIR ST. ISLAND	= 68.00 LIN.FT.
AI. STA 536+86.41 TO STA 541+17, RT	= 430.59 LIN.FT.
AJ. STA 541+17 TO STA 542+34, RT	= 124.00 LIN.FT.
AK. STA 542+34 TO STA 546+31.44, RT	= 397.44 LIN.FT.
AL. STA 546+31.44, RT TO STA 11+15.89, RT (ST. CLAIR ST.)	= 96.77 LIN.FT.
AM. STA 11+15.89 TO STA 11+20, RT, ST. CLAIR ST.	= 4.11 LIN.FT.
AN. STA 9+13 TO STA 9+13.48, LT, ST. CLAIR ST.	= 0.48 LIN.FT.
AO. STA 9+13.48, LT (ST. CLAIR ST.) TO STA 548+32.75, LT	= 54.47 LIN.FT.
AP. STA 548+32.75 TO STA 548+65.51, LT	= 32.76 LIN.FT.
AQ. STA 10+37.41, LT (ST. CLAIR ST.) TO STA 547+82.36, RT	= 49.56 LIN.FT.
AR. STA 547+82.36 TO STA 548+65.51, RT	= 83.15 LIN.FT.
AS. STA 548+65.51 TO STA 549+78.32, LT	= 109.80 LIN.FT.
AT. STA 548+65.51 TO STA 549+78.32, RT	= 112.81 LIN.FT.
AU. STA 549+78.59 TO STA 552+69.51, LT	= 290.92 LIN.FT.
AV. STA 552+69.51, LT TO STA 9+70.60, RT (STATE ST.)	= 41.92 LIN.FT.
AW. STA 8+91 TO STA 9+70.60, RT, STATE ST.	= 79.60 LIN.FT.
AX. STA 549+78.59 TO STA 551+92.08, RT	= 213.49 LIN.FT.
AY. STA 551+92.08, RT TO STA 11+08.63, RT (STATE ST.)	= 69.10 LIN.FT.
AZ. STA 10+29.40 TO STA 11+10, LT, STATE ST.	= 80.60 LIN.FT.
BA. STA 11+08.63 TO STA 11+10, RT, STATE ST.	= 1.37 LIN.FT.
BB. STA 8+91 TO STA 8+91.37, LT, STATE ST.	= 0.37 LIN.FT.
BC. STA 8+91.37, LT (STATE ST.) TO STA 554+10.22, LT	= 69.10 LIN.FT.
BD. STA 554+10.22 TO STA 556+51, LT	= 240.78 LIN.FT.
BE. STA 10+29.40, LT (STATE ST.) TO STA 553+32.79, RT	= 41.92 LIN.FT.
BF. STA 553+32.79 TO STA 556+51, RT	= 318.21 LIN.FT.
BG. STA 556+51 TO STA 570+92.64, LT	= 1441.64 LIN.FT.
BH. STA 570+92.64, LT TO STA 9+88.00, RT (ELM ST.)	= 11.24 LIN.FT.
BI. STA 9+19 TO STA 9+88.00, RT, (ELM ST.)	= 69.00 LIN.FT.
BJ. STA 556+51 TO STA 556+64.74, RT	= 13.74 LIN.FT.
BK. STA 556+64.74, RT TO STA 10+40.50, RT (ROCKWOOD DR.)	= 39.27 LIN.FT.
BL. STA 10+40.50 TO STA 10+41, RT, ROCKWOOD DR.	= 0.50 LIN.FT.
BM. STA 10+40.50 TO STA 10+41, LT, ROCKWOOD DR.	= 0.50 LIN.FT.
BN. STA 10+40.50, LT (ROCKWOOD DR.) TO STA 557+37.74, RT	= 39.27 LIN.FT.
BO. STA 557+37.74 TO STA 559+35.44, RT	= 197.70 LIN.FT.
BP. STA 559+35.44, RT TO STA 10+35.61, RT (PARMLY PL.)	= 31.49 LIN.FT.

SUBTOTAL = 15156.91 LIN.FT.  
**TOTAL OF ITEM 609 CURB, TYPE 6 = 15167 LIN.FT.**

BQ. STA 10+35.61 TO STA 10+36, RT, PARMLY PL.	= 0.39 LIN.FT.
BR. STA 10+35.39 TO STA 10+36, LT, PARMLY PL.	= 0.61 LIN.FT.
BS. STA 10+35.39, LT (PARMLY PL.) TO STA 559+98.44, RT	= 31.34 LIN.FT.
BT. STA 559+98.44 TO STA 570+71.25, RT	= 1072.81 LIN.FT.
BU. STA 570+71.25 TO STA 572+01.97, RT	= 122.63 LIN.FT.
BV. STA 9+19.00, LT (ELM ST.) TO STA 571+73.00, LT	= 41.15 LIN.FT.
BW. STA 571+73.00 TO STA 572.01.97, LT	= 28.97 LIN.FT.
BX. STA 572+05.01 TO STA 579+49.63, LT	= 744.62 LIN.FT.
BY. STA 572+05.01 TO STA 574+94.55, RT	= 289.54 LIN.FT.
BZ. RECREATION DR. TURNING RADIUS	= 27.28 LIN.FT.
CA. RECREATION DR. TURNING RADIUS	= 26.00 LIN.FT.
CB. STA 575+74.20 TO STA 579+49.63, RT	= 375.43 LIN.FT.
CC. STA 579+49.63 TO STA 581+49.09, RT	= 199.46 LIN.FT.
CD. STA 579+49.63 TO STA 581+49.09, LT	= 199.46 LIN.FT.
CE. STA 581+51.79 TO STA 593+06.09, LT	= 1154.30 LIN.FT.
CF. STA 581+51.79 TO STA 582+54.05, RT	= 102.26 LIN.FT.
CG. STA 582+54.05, RT TO STA 10+40.36, RT (PARKVIEW DR.)	= 39.17 LIN.FT.
CH. STA 10+40.36 TO STA 10+41, RT, PARKVIEW DR.	= 0.64 LIN.FT.
CI. STA 10+40.64 TO STA 10+41, LT, PARKVIEW DR.	= 0.36 LIN.FT.
CJ. STA 10+40.64, LT (PARKVIEW DR.) TO STA 583+25.05, RT	= 39.37 LIN.FT.
CK. STA 583+25.05 TO STA 586+04.54, RT	= 279.49 LIN.FT.
CL. STA 586+04.54, RT TO STA 50+40.36, RT (PARKVIEW DR.)	= 39.17 LIN.FT.
CM. STA 50+40.36 TO STA 50+41, RT, PARKVIEW DR.	= 0.64 LIN.FT.
CN. STA 50+40.64 TO STA 50+41, LT, PARKVIEW DR.	= 0.36 LIN.FT.
CO. STA 50+40.64, LT (PARKVIEW DR.) TO STA 586+74.54, RT	= 39.37 LIN.FT.
CP. STA 586+74.54 TO STA 594+56.38, RT	= 781.84 LIN.FT.
CQ. STA 593+06.09, LT TO STA 9+70.03, RT (NOTTINGHAM PL.)	= 23.21 LIN.FT.
CR. STA 9+68 TO STA 9+70.03, RT, NOTTINGHAM PL.	= 2.03 LIN.FT.
CS. STA 9+68 TO STA 9+68.96, LT, NOTTINGHAM PL.	= 0.96 LIN.FT.
CT. STA 9+68.96, LT (NOTTINGHAM PL.) TO STA 593+52.10, LT	= 23.91 LIN.FT.
CU. STA 593+52.10 TO STA 595+25.28, LT	= 173.18 LIN.FT.
CV. STA 594+56.38, RT TO STA 10+30.50, RT (BLAIR PL.)	= 23.56 LIN.FT.
CW. STA 10+30.50 TO STA 10+31, RT, BLAIR PL.	= 0.50 LIN.FT.
CX. STA 10+30.50 TO STA 10+31, LT, BLAIR PL.	= 0.50 LIN.FT.
CY. STA 10+30.50, LT (BLAIR PL.) TO STA 595+02.38, RT	= 23.56 LIN.FT.
CZ. STA 595+25.28, LT TO STA 9+69.64, RT (FOBES ST.)	= 31.53 LIN.FT.
DA. STA 9+52 TO STA 9+69.64, RT, FOBES ST.	= 17.64 LIN.FT.
DB. STA 9+52 TO STA 9+52.17, LT, FOBES ST.	= 0.17 LIN.FT.
DC. STA 9+52.17, LT (FOBES ST.) TO STA 595+98.23, LT	= 37.61 LIN.FT.
DD. STA 595+02.38 TO STA 598+13.55, RT	= 311.17 LIN.FT.
DE. STA 595+98.23 TO STA 598+13.55, LT	= 215.32 LIN.FT.

### ITEM 203 SUBGRADE COMPACTION

A. WOOD STREET, NORTHWEST	= 10.22 SQ.YDS.
B. WOOD STREET, NORTHEAST	= 3.00 SQ.YDS.
C. WATSON STREET, NORTHEAST	= 11.19 SQ.YDS.
D. RICHMOND STREET, NORTHWEST	= 21.80 SQ.YDS.
E. RICHMOND STREET, NORTHEAST	= 7.83 SQ.YDS.
F. RICHMOND STREET, SOUTHEAST	= 64.49 SQ.YDS.
G. LIBERTY STREET EXT., SOUTHEAST	= 19.45 SQ.YDS.
H. ST. CLAIR STREET, NORTHWEST	= 6.72 SQ.YDS.
I. ST. CLAIR STREET, NORTHEAST	= 81.67 SQ.YDS.
J. ST. CLAIR STREET, SOUTHEAST	= 11.06 SQ.YDS.
K. STATE STREET, NORTHWEST	= 9.33 SQ.YDS.
L. STATE STREET, NORTHEAST	= 85.22 SQ.YDS.
M. STATE STREET, SOUTHWEST	= 94.82 SQ.YDS.
N. ROCKWOOD DRIVE, NORTHWEST	= 3.28 SQ.YDS.
O. ROCKWOOD DRIVE, SOUTHEAST	= 6.56 SQ.YDS.
P. PARMLY PLACE, SOUTHWEST	= 5.91 SQ.YDS.
Q. PARMLY PLACE, SOUTHEAST	= 6.86 SQ.YDS.
R. PARKVIEW DRIVE (WEST), SOUTHEAST	= 10.89 SQ.YDS.
S. PARKVIEW DRIVE (EAST), SOUTHWEST	= 5.87 SQ.YDS.
T. PARKVIEW DRIVE (EAST), SOUTHEAST	= 29.86 SQ.YDS.
U. NOTTINGHAM PLACE, NORTHWEST	= 1.49 SQ.YDS.
V. NOTTINGHAM PLACE, NORTHEAST	= 3.20 SQ.YDS.

SUBTOTAL = 500.72 SQ.YDS.  
**TOTAL OF ITEM 203 - SUBGRADE COMPACTION = 501 SQ.YDS.**

### ITEM 254 PAVEMENT PLANING, PORTLAND CEMENT CONCRETE

A. INTERSECTION OF ERIE STREET AND RECREATION DRIVE	= 81.78 SQ.YD.
736 SQ.FT. / 9 SQ.FT. / SQ.YD.	= 81.78 SQ.YD.
SUBTOTAL	= 81.78 SQ.YD.
<b>TOTAL OF ITEM 254 PAVEMENT PLANING, PORTLAND CEMENT CONCRETE = 82 SQ.YD.</b>	

### ITEM 202 PAVEMENT REMOVED (BUTT JOINT AS PER DETAIL ON SHEET 20)

A. STA 526+54 TO STA 527+08, ERIE STREET	= 46.67 CU.YDS.
420.0 SQ.FT. / 9 SQ.FT. / SQ.YD.	= 46.67 CU.YDS.
B. STA 51+67.5 TO STA 51+80, MENTOR AVENUE	= 50.00 CU.YDS.
12.5 FT. x 36 FT. / 9 SQ.FT. / SQ.YD.	= 50.00 CU.YDS.
C. STA 9+19 TO STA 9+31.5, ELM STREET	= 40.89 CU.YDS.
368.0 SQ.FT. / 9 SQ.FT. / SQ.YD.	= 40.89 CU.YDS.
SUBTOTAL	= 137.56 CU.YDS.
<b>TOTAL OF ITEM 202 - PAVEMENT REMOVED = 138 CU.YDS.</b>	

### ITEM 301 6" BITUMINOUS AGGREGATE BASE, AC-20 (BUTT JOINT AS PER DETAIL ON SHEET 20)

A. STA 526+54 TO STA 527+08, ERIE STREET	= 7.78 CU.YDS.
420.0 SQ.FT. x 0.5 FT. / 27 CU.FT. / CU.YD.	= 7.78 CU.YDS.
B. STA 51+67.5 TO STA 51+80, MENTOR AVENUE	= 8.34 CU.YDS.
12.5 FT. x 36 FT. x 0.5 / 27 CU.FT. / CU.YD.	= 8.34 CU.YDS.
C. STA 9+19 TO STA 9+31.5, ELM STREET	= 6.82 CU.YDS.
368.0 SQ.FT. x 0.5 FT. / 27 CU.FT. / CU.YD.	= 6.82 CU.YDS.
SUBTOTAL	= 22.94 CU.YDS.
<b>TOTAL OF ITEM 301 BITUMINOUS AGGREGATE BASE, AC-20 = 23 CU.YDS.</b>	

### ITEM 304 6" AGGREGATE BASE, AS PER PLAN (BUTT JOINT AS PER DETAIL ON SHEET 20)

A. STA 526+54 TO STA 527+08, ERIE STREET	= 7.78 CU.YDS.
420.0 SQ.FT. x 0.50 FT. / 27 CU.FT. / CU.YD.	= 7.78 CU.YDS.
B. STA 51+67.5 TO STA 51+80, MENTOR AVENUE	= 8.34 CU.YDS.
12.5 FT. x 36 FT. x 0.5 / 27 CU.FT. / CU.YD.	= 8.34 CU.YDS.
C. STA 9+19 TO STA 9+31.5, ELM STREET	= 6.82 CU.YDS.
368.0 SQ.FT. x 0.50 FT. / 27 CU.FT. / CU.YD.	= 6.82 CU.YDS.
SUBTOTAL	= 22.94 CU.YDS.
<b>TOTAL OF ITEM 304 AGGREGATE BASE, AS PER PLAN = 23 CU.YDS.</b>	

### ITEM 402 1 3/4" ASPHALT CONCRETE, AC-20 (BUTT JOINT AS PER DETAIL ON SHEET 20)

A. STA 526+54 TO STA 527+08, ERIE STREET	= 2.27 CU.YDS.
420.0 SQ.FT. x 0.14583 FT. / 27 CU.FT. / CU.YD.	= 2.27 CU.YDS.
B. STA 51+67.5 TO STA 51+80, MENTOR AVENUE	= 2.44 CU.YDS.
12.5 FT. x 36 FT. x 0.14583 FT. / 27 CU.FT. / CU.YD.	= 2.44 CU.YDS.
C. STA 9+19 TO STA 9+31.5, ELM STREET	= 1.99 CU.YDS.
368.0 SQ.FT. x 0.14583 FT. / 27 CU.FT. / CU.YD.	= 1.99 CU.YDS.
SUBTOTAL	= 6.70 CU.YDS.
<b>TOTAL OF ITEM 402 ASPHALT CONCRETE, AC-20 = 7 CU.YDS.</b>	

### ITEM 404 1 1/2" ASPHALT CONCRETE, AC-20 (BUTT JOINT AS PER DETAIL ON SHEET 20)

A. STA 526+54 TO STA 527+08, ERIE STREET	= 1.95 CU.YDS.
420.0 SQ.FT. x 0.125 FT. / 27 CU.FT. / CU.YD.	= 1.95 CU.YDS.
B. STA 51+67.5 TO STA 51+80, MENTOR AVENUE	= 2.09 CU.YDS.
12.5 FT. x 36 FT. x 0.125 FT. / 27 CU.FT. / CU.YD.	= 2.09 CU.YDS.
C. STA 9+19 TO STA 9+31.5, ELM STREET	= 1.71 CU.YDS.
368.0 SQ.FT. x 0.125 FT. / 27 CU.FT. / CU.YD.	= 1.71 CU.YDS.
SUBTOTAL	= 5.75 CU.YDS.
<b>TOTAL OF ITEM 404 ASPHALT CONCRETE, AC-20 = 6 CU.YDS.</b>	