

CALCULATIONS

FHWA REGION	STATE	PROJECT	
5	OHIO		

8
41

7-24-78
5-29-79
J.T.O.

MUS - CITY OF ZANESVILLE
TAYLOR STREET

STA. 24+50 TO STA. 28+00 (Quantities carried to sheet 10)		
ITEM 404 ASPHALT CONCRETE	I-P Sta. 24+33 Lt. to Sta. 24+50 Lt.=17'x11.5'(Ave.)÷9x.0417 (Ave.) =0.90 C.Y. Sta. 24+50 Lt. to Sta. 25+00 Lt.=50'x11.75'(Ave.)÷9x.0347=2.27 C.Y. Sta. 25+00 Lt. to Sta. 28+00 Lt.=300'x12'÷9x.0347=13.88 C.Y. Sta. 24+33 Rt. to Sta. 25+49 Rt. =116'x12'÷(Planimeter 350 ft. ²) ÷9x.0417 (Ave.) = 8.07 C.Y. Sta. 25+49 Rt. to Sta. 25+69 Rt.= 20'x12.15'÷9x.0347= 0.94 C.Y. Sta. 25+69 Rt. to Sta. 28+00 Rt.=231'x12'÷9x.0347=10.69 C.Y. 0.90+2.27+13.88+8.07+0.94+10.69 = 36.75 C.Y.	
ITEM 402 ASPHALT CONCRETE	I-P Sta. 24+50 to Sta. 26+40 & Sta. 27+20 to Sta. 28+00 (Estimated by exaggerated scale) = 24.00 C.Y. Sta. 26+40 to Sta. 27+20 = 80'x24'÷9x.0486 = 10.37 C.Y. 34.37 C.Y.	
ITEM 301 BIT. AGGR. BASE	I-P Sta. 24+50 to Sta. 26+40 & Sta. 27+20 to Sta. 28+00 (Estimated by exaggerated scale) = 40.67 C.Y. Sta. 26+40 to Sta. 27+20 = 80'x24'÷9x.1944 = 41.47 C.Y. 82.14 C.Y.	
ITEM 203 SUBGRADE COMPACTION	I-P Sta. 26+40 to Sta. 27+20 = 80'x29'÷9 = 257.78 S.Y.	
ITEM 609 COMB. CURB & GUTTER STD. TYPE 2	I-C Sta. 25+49 Rt. to Sta. 27+50 Rt. = 201 L.F. 2-C Sta. 24+50 Lt. to Sta. 26+30 Lt. = 180 L.F. 3-C Sta. 27+04 Lt. to Sta. 28+00 Lt. = 96 L.F.	
ITEM 608 CONCRETE WALK	I-SW Sta. 24+50 Lt. to Sta. 25+08.5 Lt. =58.5'x4' = 234 S.F. 3-SW Sta. 26+05 Lt. to Sta. 26+30 Lt. = 19.5'x4' = 78 S.F. 5-SW Sta. 25+49 Rt. to Sta. 25+83.2 Rt. =34.2'x4'÷3'x.5' =138.3 S.F. 7-SW Sta. 26+54 Rt. to Sta. 27+39.7 Rt. = 85.7'x4' = 342.8 S.F.	2-SW Sta. 25+32.5 Lt. to Sta. 25+98.5 Lt. =66'x4' = 264 S.F. 4-SW Sta. 27+04 Lt. to Sta. 28+00 Lt. = 96'x4' = 384 S.F. 6-SW Sta. 26+07.6 Rt. to Sta. 26+29 Rt. = 21.4'x4' = 85.6 S.F. 8-SW Sta. 27+28 Rt. 9.2'x2.5' = 23 S.F.
ITEM 608 CURB RAMP	I-CR Sta. 43+50.8 Lt. to Sta. 43+62.6 Lt. (Planimeter) 68 S.F. 2-CR Sta. 43+55.6 Rt. to Sta. 43+65.1 Rt. 13.5'x5' = 67.5 S.F.	
ITEM 660 SODDING	I-G Sta. 24+50 Lt. to Sta. 26+30 Lt. = 180' - (2.5'x4'x3x12' = 46') =134'x5'÷9 =744 S.Y. 2-G Sta. 27+04 Lt. to Sta. 28+00 Lt. = 96'x5'÷9 =53.3 S.Y.	
DRIVES	ITEM 452 PLAIN PORTLAND CEMENT CONC. PAVT. I-D Sta. 25+14.5 Lt. 5'x3.75'x2'x9'x24'÷9 = 28.17 S.Y. (8") 2-D Sta. 25+26.5 Lt. Carried With I-D 3-D Sta. 25+95.4 Rt. 13'x4'x4'x11.4'÷9 =10.84 S.Y. (6") 4-D Sta. 26+04.5 Lt. 5'x3.75'x2'x9'x12'÷9 = 16.17 S.Y. (6") 5-D Sta. 26+41.5 Rt. 13'x4'x4'x12'÷9 = 11.11 S.Y. (8") 6-D Sta. 27+52.2 Rt. 6.5'x4'x4'x12'x3.5'x2'x12'x13.1'x1'÷9 = 26.36 S.Y. (6")	ITEM 304 AGGREGATE BASE (10") 6.5'x10.75' (AVE)x .8333÷27 = 2.16 C.Y. (8") 11.5'x10' x .6667÷27 = 2.84 C.Y. (8") 12'x9'x.6667÷27 = 2.67 C.Y. (10") 9.5'x13.5'x.8333÷27 = 3.96 C.Y.
REMOVALS	I-R Sta. 43+50.8 Lt. to Sta. 43+62.6 Lt. Item 202 Curb removed 14 L.F. Item 202 Sidewalk removed 68 S.F. - 14'x.5' = 61 S.F. 2-R Sta. 43+55.6 Rt. to Sta. 43+65.1 Rt. Item 202 Curb removed 14 L.F. Item 202 Sidewalk removed 68 S.F. - 14'x.5' = 61 S.F. 3-R Sta. 25+90.6 Rt. to Sta. 26+02 Rt. Item 202 Pavement removed 785'(AVE.)x11.4'÷9 =9.94 S.Y. 4-R Sta. 27+03.4 Rt. to Sta. 27+46.8 Rt. Item 202 Sidewalk removed 43.4'x3.8' =164.92 S.F. 5-R Sta. 27+28 Rt. Item 202 Sidewalk removed 2.5'x4.9' =12.25 S.F. 6-R Sta. 27+46.8 Rt. to Sta. 27+58.3 Rt. Item 202 Pavement removed 11.5'x12.5'÷9 =15.97 S.Y.	
ITEM 601 R.C.P. TYPE B w/ Bedding	I-S 6'x4'x2'÷27 = 1.8 Cu.Yds.	
STA. 28+00 TO STA. 32+00(Quantities carried to sheet 11)		
ITEM 404 ASPHALT CONCRETE	I-P Sta. 28+00 Rt. & Lt. to Sta. 32+00 Rt. & Lt. =400'x24'÷9x.0347 = 37.01 C.Y.	
ITEM 402 ASPHALT CONCRETE	I-P Sta. 28+00 Rt. & Lt. to Sta. 32+00 Rt. & Lt. (Estimated by exaggerated scale) 43.75 C.Y.	
ITEM 301 BIT. AGGREGATE BASE	I-P Sta. 28+00 Rt. & Lt. to Sta. 32+00 Rt. & Lt. (Estimated by exaggerated scale) 57.83 C.Y.	
ITEM 609 COMB. CURB & GUTTER STD. TYPE 2	I-C Sta. 28+00 Lt. to Sta. 29+33.5 Lt. = 133.5 L.F. 2-C Sta. 30+07.5 Lt. to Sta. 32+00 Lt. = 192.5 L.F. 3-C Sta. 28+24 Rt. to Sta. 32+00 Rt. = 376.0 L.F.	
ITEM 608 CONCRETE WALK & CONCRETE STEPS	I-SW Sta. 28+00 Lt. to Sta. 28+13 Lt. = 13'x4' = 52 S.F. 3-SW Sta. 30+07.5 Lt. to Sta. 31+16.5 Lt. =109'x4' = 436 S.F. 5-SW Sta. 28+24 Rt. to Sta. 28+52.23 (AVE.) Rt. =28.23'x4' =112.92 S.F. 7-SW Sta. 30+82 Rt. to Sta. 32+00 Rt. = 118'x4' = 472 S.F. 9-SW Sta. 29+24 Lt. 2x4' = 8 L.F. (conc. steps)	2-SW Sta. 28+25 Lt. to Sta. 29+33.5 Lt. =108.5'x4' = 434 S.F. 4-SW Sta. 31+28.5 Lt. to Sta. 32+00 Lt. = 71.5'x4' = 286 S.F. 6-SW Sta. 28+65.95 Rt. to Sta. 30+52 Rt. =186.05'x4' = 744.2 S.F. 8-SW Sta. 28+72 Lt. 4.5'x2' = 9 S.F. 10-SW Sta. 30+41 Lt. 4x3' = 12 L.F. (conc. steps)
ITEM 660 SODDING	I-G Sta. 28+00 Lt. to Sta. 29+33.5 Lt. =133.5' - (2.5'x2'x12' =17') =116.5'x5'÷9 =64.7 S.Y. 3-G Sta. 28+24 Rt. to Sta. 32+00 Rt. = 376' - (2.5'x4'x42' = 52') = 324'x5'÷9 = 180 S.Y.	2-G Sta. 30+07.5 Lt. to Sta. 32+00 =192.5' -17' =175.5'x5'÷9 = 97.5 S.Y.
DRIVES	ITEM 452 PLAIN PORTLAND CEMENT CONC. PAVT. I-D Sta. 28+19 Lt. 5'x3.75'x2'x9'x12'÷9 = 16.17 S.Y. (8") 2-D Sta. 28+71 Rt. 5'x3.75'x2'x5'x13.72'x15.70'x12'÷9 = 32.72 S.Y. (6") 3-D Sta. 30+67 Rt. 5'x3.75'x2'x9'x30'÷9 = 34.17 S.Y. (8") 4-D Sta. 31+22.5 Lt. 5'x3.75'x2'x9'x12'÷9 = 16.17 S.Y. (8")	ITEM 304 AGGR. BASE (10") 10.5'x10.75' (AVE.)x .8333÷27 = 3.48 C.Y. 6.7'x30'x.0833÷27 = 0.62 C.Y. 6.7'x31'x.4167÷27 = 3.21 C.Y. ITEM 404 ASPH. CONC. ITEM 301 BIT. AGGR. BASE

REMOVALS	I-R Sta. 28+72 Lt. 2-R Sta. 29+24 Lt. 3-R Sta. 30+41 Lt. 4-R Sta. 28+49.3 Rt. to Sta. 28+72.0 Rt. ITEM 660 SODDING 13-S 62.7'x4'5'÷9 = 31.4 S.Y.	ITEM 202 Sidewalk removed 12.6'x2' = 25.2 S.F. ITEM 202 Sidewalk removed 6.97'x3.1' = 21.6 S.F. ITEM 202 Sidewalk removed 13.27'x2' = 26.5 S.F. ITEM 202 Pavement removed (Planimeter) 380 S.F. ÷ 9 = 42.22 S.Y.
STA. 32+00 TO STA. 36+00 (Quantities carried to sheet 12)		
ITEM 404 ASPHALT CONCRETE	I-P Sta. 32+00 to Sta. 36+00 = 400'x24'÷9x.0347 = 37.01 C.Y. 2-P Sta. 34+84.3 Lt. to Sta. 36+00 Lt. = 4'x15'+8.5'x15'+4'x4'+10.2'x16.5'÷9 = 205.89 S.Y. 0.278 = 57.22 C.Y.	
ITEM 402 ASPHALT CONCRETE	I-P Sta. 32+00 to Sta. 36+00 = 400'x24'÷9x.0486 = 51.84 C.Y.	
ITEM 301 BITUMINOUS AGGREGATE BASE	I-P Sta. 32+00 to Sta. 36+00 = 400'x24'÷9x.1944 = 207.36 C.Y. 2-P Sta. 34+83.8 Lt. to Sta. 36+00 Lt. = 205.89 S.Y. + (17'x5'÷9) = 206.83 S.Y. x 1.389 = 28.73 C.Y.	
ITEM 203 SUBGRADE COMPACTION	I-P Sta. 32+00 to Sta. 36+00 = 400'x29'÷9 = 1288.89 S.Y.	
ITEM 609 COMBINATION CURB AND GUTTER STANDARD TYPE 2	I-C Sta. 32+00 Lt. to Sta. 32+34.2 Lt. = 34.2 L.F. 2-C Sta. 33+54.2 Lt. to Sta. 36+00 Lt. = 245.8 L.F. 3-C Sta. 32+00 Rt. to Sta. 36+00 Rt. = 400.0 L.F.	
ITEM 608 CONCRETE WALK	I-SW Sta. 32+00 Lt. to Sta. 32+34.2 Lt. = 34.2'x4' = 136.8 S.F. 3-SW Sta. 34+75.5 Lt. to Sta. 35+00 Lt. = 24.5'x4' = 98.0 S.F. 5-SW Sta. 35+87.7 Lt. to Sta. 36+00 Lt. = 12.3'x4' = 49.2 S.F. 7-SW Sta. 32+56.14 Rt. to Sta. 33+24.5 Rt. = 68.36'x4' = 273.44 S.F. 9-SW Sta. 33+96.5 Rt. to Sta. 34+10.94 Rt. = 14.44'x4' = 57.76 S.F. 11-SW Sta. 34+77.8 Lt. to Sta. 36+00 Lt. = 121'x4' = 484 S.F. 10-SW Sta. 34+22.04 Rt. to Sta. 36+00 Rt. = 177.96'x4' = 711.84 S.F. 34.67 44.76 177.84	
ITEM 660 SODDING	I-G Sta. 32+00 Lt. to Sta. 32+34.2 Lt. = 34.2'x5'÷9 = 19 S.Y. 2-G Sta. 33+54.2 Lt. to Sta. 36+00 Lt. = 245.8' - (2.5'x7'x60' = 77.5') = 168.3'x5'÷9 = 93.5 S.Y. 3-G Sta. 32+00 Rt. to Sta. 36+00 Rt. = 400' - (2.5'x8'x57.9' = 77.9') = 322.1'x5'÷9 = 172.9 S.Y. 10+69.9 94.9 305.1 169.5	
DRIVES	ITEM 452 PLAIN PORTLAND CEMENT CONCRETE PAVEMENT I-D Sta. 32+63 Rt. 5'x3.75'x2'x5'x27.8'x4'x27.8'÷9 = 31.97 S.Y. (8") 2-D Sta. 33+29 Rt. 5'x3.75'x2'x9'x9'÷9 = 13.17 S.Y. (6") 3-D Sta. 33+91.5 Rt. 5'x3.75'x2'x9'x10'÷9 = 14.17 S.Y. (6") 4-D Sta. 34+19.5 Rt. 5'x3.75'x2'x9'x11.1'÷9 = 15.27 S.Y. (6") 5-D Sta. 34+69.5 Lt. 5'x3.75'x2'x9'x12'÷9 = 16.17 S.Y. (8") 6-D Sta. 35+12.5 Lt. 5'x3.75'x2'x9'x25'÷9 = 29.17 S.Y. (8") 7-D Sta. 35+75.2 Lt. 5'x3.75'x2'x9'x25'÷9 = 29.17 S.Y. (8") 8-D Sta. 34+73 Rt. 5'x3.75'x2'x9'x12'÷9 = 16.17 S.Y. (6")	ITEM 304 AGGR. BASE (8") 20.5'x9'x.6667÷27 = 4.56 C.Y. (8") 26.5'x10'x.6667÷27 = 6.54 C.Y. (8") 26.27'x11'x.6667÷27 = 7.14 C.Y. (10") 20.5'x12'x.8333÷27 = 7.59 C.Y. (Carried with 2-P) (Carried with 2-P)
STA. 36+00 TO STA. 40+00 (Quantities carried to sheet 13)		
ITEM 404 ASPHALT CONCRETE	I-P Sta. 36+00 to Sta. 40+00 = 400'x24'÷9x.0347 = 37.01 C.Y. 2-P Sta. 36+00 Lt. to Sta. 37+07.5 Lt. 100'x24.9'x16.5'x7.5'x38.5'x52.79 S.F. ÷ 9 = 169.77 S.Y. x 0.278 = 47.2 C.Y.	
ITEM 402 ASPHALT CONCRETE	I-P Sta. 36+00 to Sta. 38+50 = 250'x24'÷9x.0486 = 32.4 C.Y. Sta. 38+50 to Sta. 40+00 (Estimated by exaggerated scale) 19.3 C.Y. 51.7 C.Y.	
ITEM 301 BIT. AGGR. BASE	I-P Sta. 36+00 to Sta. 38+50 = 250'x24'÷9x.1944 = 129.60 C.Y. 2-P Sta. 36+00 Lt. to Sta. 37+08 Lt. 169.77 S.Y. + (13.5'x5'÷9) = 170.52 S.Y. x 1.389 = 23.69 C.Y. Sta. 38+50 to Sta. 40+00 (Estimated by exaggerated scale) = 32.03 C.Y. 161.63 C.Y.	
ITEM 203 SUBGRADE COMPACTION	I-P Sta. 36+00 to Sta. 38+50 = 250'x24'÷9 = 666.67 S.Y.	
ITEM 609 COMB. CURB AND GUTTER STD. TYPE 2	I-C Sta. 36+00 Lt. to Sta. 38+48.4 Lt. = 248.4 L.F. 2-C Sta. 39+24.3 Lt. to Sta. 40+00 Lt. = 75.7 L.F. 3-C Sta. 36+00 Rt. to Sta. 38+47.6 Rt. = 247.6 L.F. 4-C Sta. 39+24 Rt. to Sta. 40+00 Rt. = 76.0 L.F.	
ITEM 608 CONC. WALK & CONC. STEPS	I-SW Sta. 36+00 Lt. to Sta. 36+03.2 Lt. = 3.2'x4' = 12.8 S.F. 3-SW Sta. 36+81.8 Lt. to Sta. 37+08.5 Lt. = 26.7'x4' = 106.8 S.F. 6-SW Sta. 36+00 Rt. to Sta. 37+08.5 Rt. = 108.5'x4' = 434.0 S.F. 8-SW Sta. 39+24 Rt. to Sta. 39+45.0 Rt. = 21'x4' = 84 S.F. 10-SW Sta. 39+43.5 Lt. 5.5'x4' = 22 S.F. 12-SW Sta. 36+94.0 Rt. (Conc. Steps) 3.7'x5' = 18.5 L.F. 14-SW Sta. 38+10.9 Lt. (Conc. Walk) 7.9'x3' = 23.7 S.F. (Conc. Steps) II-SW Sta. 39+88.0 Lt. 11.5'x3.9' = 44.9 S.F. 13-SW Sta. 39+37.5 Rt. 7.8'x4.7' = 36.7 S.F.	
ITEM 660 SODDING	I-G Sta. 36+00 Lt. to Sta. 38+48.4 Lt. = 248.4' - (2.5'x7'x78' = 95.5') = 152.9'x5'÷9 = 84.9 S.Y. 2-G Sta. 36+00 Rt. to Sta. 38+47.6 Rt. = 247.6' - 17' = 230.6'x5'÷9 = 128.1 S.Y.	