

CALCULATIONS

| DESCRIPTION | QUAN. | UNIT | DESCRIPTION | QUAN. | UNIT | DESCRIPTION | QUAN. | UNIT |
|---|-------|------|--|-------|------|---|-------|--------|
| ITEM 404 - ASPHALT CONCRETE, AC-20 U.S. ROUTE 20: (1 1/4" THICK) STA. 9+58 TO 10+50; (PLANIMETERED) = 1072 S.F. STA. 10+50 TO 14+00; (PLANIMETERED) = 5164 S.F. STA. 14+00 TO 15+40; (PLANIMETERED) = 2416 S.F. STA. 15+80 TO 18+00; (PLANIMETERED) = 2790 S.F. STA. 18+00 TO 19+25; (PLANIMETERED) = 692 S.F. ADD FOR PAVEMENT REPLACEMENT (TRAFFIC ISLAND) (SHEET No. 12) @ STA. 15+60, LT. = 5' x 25' = 125 S.F. ADD FOR PAVEMENT REPLACEMENT (TRENCH - SEE SHEET No. 12) @ STA. 16+93, LT. & RT. = 10' x 48' = 480 S.F. STATE ROUTE 91: (1 1/4" THICK) STA. 201+02 TO 203+00; (PLANIMETERED) = 3762 S.F. STA. 203+00 TO 206+00; (PLANIMETERED) = 4712 S.F. 21,213 S.F. $21,213 \text{ S.F.} \times 0.104' \div 27 = \underline{81.7 \text{ C.Y.}}$ | 82 | C.Y. | ITEM 203 - SUBGRADE COMPACTION U.S. ROUTE 20: STA. 9+58 TO 10+50; (PLANIMETERED) = 992 S.F. STA. 10+50 TO 14+00; (PLANIMETERED) = 5164 S.F. STA. 14+00 TO 15+40; (PLANIMETERED) = 2374 S.F. STA. 15+80 TO 18+00; (PLANIMETERED) = 2730 S.F. STA. 18+00 TO 19+25; (PLANIMETERED) = 460 S.F. PAVEMENT REPLACEMENT STA. 16+93 10' x 48' = 480 S.F. STATE ROUTE 91: STA. 201+02 TO 203+00; (PLANIMETERED) = 3642 S.F. STA. 203+00 TO 206+00; (PLANIMETERED) = 4712 S.F. 20,554 S.F. $20,554 \text{ S.F.} \div 9 = \underline{2284 \text{ S.Y.}}$ | 2284 | S.Y. | ITEM 659 - WATER APPROX. 120 GAL./1000 S.F. OF PERMANENT SEEDING AREA; $3063 \text{ S.Y.} \times 9 = 27,567 \text{ S.F. (28,000 S.F.)}$ $28 \times 120 \text{ GAL.} = 3360 \text{ GAL.} \times 2 = 6720 \text{ GAL.}$ | 7 | M.GAL. |
| ITEM 404 - ASPHALT CONCRETE, AC-20 (DRIVEWAYS) @ U.S.20 STA. 18+70, LT.; (1" THICK) $5' \times 49' \times 0.083' \div 27 = \underline{0.8 \text{ C.Y.}}$ | 1 | C.Y. | ITEM 609 - CURB, TYPE 6 U.S. ROUTE 20: STA. 9+60 TO 9+99.7, LT. = 65.8 L.F. STA. 9+99.7 TO 15+04.4, LT. = 504.7 L.F. STA. 15+04.4 TO 15+34, LT. = 51.3 L.F. STA. 15+72 TO 16+11.9, LT. = 42.9 L.F. STA. 16+11.9 TO 17+00, LT. = 88.1 L.F. STA. 17+00 TO 17+50, LT. = 52.0 L.F. STA. 17+50 TO 19+25, LT. = 175.4 L.F. STA. 16+88 TO 16+98, RT. = 10.0 L.F. STATE ROUTE 91: STA. 201+04 TO 201+52, LT. = 64.7 L.F. STA. 201+52 TO 202+34, LT. = 82.0 L.F. TOTAL = <u>1136.9 L.F.</u> | 1137 | L.F. | ITEM 659 - AGRICULTURAL LIMING APPROX. 100 LBS./1000 S.F. OF PERMANENT SEEDING AREA; $3063 \text{ S.Y.} \times 9 = 27,567 \text{ S.F. (28,000 S.F.)}$ $28 \times 100 \text{ LBS.} = 2800 \text{ LBS.} = \underline{1.40 \text{ TONS}}$ | 1.40 | TONS |
| ITEM 402 - 1 3/4" ASPHALT CONCRETE, AC-20 AREA FROM ITEM 404 = 21,213 S.F. $21,213 \text{ S.F.} \times 0.146' \div 27 = \underline{114.7 \text{ C.Y.}}$ | 115 | C.Y. | ITEM 612 - CONCRETE TRAFFIC ISLAND (6" THICK) U.S. 20 STA. 15+60, LT.; $(\pi R^2) \div 2 = \pi (2.2)^2 \div 2 = 7.6 \text{ S.F.}$ $7.6 \text{ S.F.} \div 9 = \underline{0.84 \text{ S.Y.}}$ | 1 | S.Y. | ITEM 659 - COMMERCIAL FERTILIZER APPROX. 20 LBS./1000 S.F. OF PERMANENT SEEDING AREA; $3063 \text{ S.Y.} \times 9 = 27,567 \text{ S.F. (28,000 S.F.)}$ $28 \times 20 \text{ LBS.} = 560 \text{ LBS.} = \underline{0.28 \text{ TONS}}$ | 0.28 | TONS |
| ITEM 301 - 8 1/2" BITUMINOUS AGGREGATE BASE, AC-20 AREA FROM ITEM 404 = 21,213 S.F. $21,213 \text{ S.F.} \times 0.708' \div 27 = \underline{556.2 \text{ C.Y.}}$ | 557 | C.Y. | ITEM 452 - 8" PLAIN CONCRETE PAVEMENT AREA OF DRIVE @ U.S. STA. 19+08, LT. = 162 S.F. $162 \text{ S.F.} \div 9 = \underline{18 \text{ S.Y.}}$ | 18 | S.Y. | THESE QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY, SHEET No. <u>8</u> | | |
| ITEM 304 - AGGREGATE BASE, AS PER PLAN U.S. ROUTE 20 & STATE ROUTE 91: (6" THICK) AREA FROM ITEM 404 = 21,213 S.F. AREA FROM UNDER ITEM 609, CURB, TYPE 6 = 0.50' x 1137 = 568.5 S.F. $21,781.5 \text{ S.F.} \times 0.50' \div 27 = 403.4 \text{ C.Y.}$ ADD FOR DRIVE @ U.S. 20 STA. 18+70, LT.: (5" THICK) $5' \times 49' \times 0.417' \div 27 = \underline{3.8 \text{ C.Y.}}$ TOTAL = <u>407.20 C.Y.</u> | 407 | C.Y. | | | | | | |

U.S. ROUTE 20