

## ESTIMATE OF QUANTITIES

THIS PROJECT IS TO BE EXECUTED UNDER WISCONSIN STANDARD SPECIFICATIONS AS APPROVED BY

BUREAU OF PUBLIC ROADS

| FED. RD. DIST. NO. | STATE | FED. AID PROJ. NO. | SHEET NO. | TOTAL SHEETS |
|--------------------|-------|--------------------|-----------|--------------|
| 4                  | WISC. | 444H 304 REOP      | 6         | 57           |

| MILE NO     | STATION TO STATION | NET LENGTH OF CENTER LINE | CLEARING    | GRUBBING    | EXCAVATION     |                |                |                |                  |                |                      |                 | JOINTS         |              | 20 FOOT ONE COURSE PC. CONC. PAVEMENT | CEMENT, PAVEMENT & HEADERS | LIP CURB        |                 |                 | CONCRETE SURFACE DRAINS | CONCRETE HEADERS | BAR REENFORCING STEEL | STEEL FABRIC REINF. | FINISHING SHOULDERS | SHOULDER EMBANKMENT | HAUL          | SALVAGED GRAVEL SHOULDERS | CEMENT IN LIP CURB & SURFACE DRAINS | STEEL IN SURFACE DRAINS |          |          |      |
|-------------|--------------------|---------------------------|-------------|-------------|----------------|----------------|----------------|----------------|------------------|----------------|----------------------|-----------------|----------------|--------------|---------------------------------------|----------------------------|-----------------|-----------------|-----------------|-------------------------|------------------|-----------------------|---------------------|---------------------|---------------------|---------------|---------------------------|-------------------------------------|-------------------------|----------|----------|------|
|             |                    |                           |             |             | EARTH          | LOOSE ROCK     | SOLID ROCK     | BORROW         | MARSH EXCAVATION | SURFACE STONE  | INTERCEPTING DITCHES | SPECIAL DITCHES | SEEDING SLOPES | FINE GRADING |                                       |                            | EXPAN. JOINT    | CONTRACT ACTION | TYPE 'A'        |                         |                  |                       |                     |                     |                     |               |                           |                                     |                         | TYPE 'B' | TYPE 'C' |      |
|             |                    | LIN. FT.                  | 3.1.1 ACRES | 3.2.1 ACRES | 3.3.1 CU. YDS. | 3.3.2 CU. YDS. | 3.3.3 CU. YDS. | 3.3.1 CU. YDS. | 3.3.4 CU. YDS.   | 3.7.1 CU. YDS. | 3.8.1 LIN. FT.       | 3.9.1 CU. YDS.  | SQ. YDS.       | CU. YDS.     | NO.                                   | NO.                        | 3.19.1 SQ. YDS. | BBLs.           | 3.19.2 LIN. FT. | 3.19.3 LIN. FT.         | 27.4 LIN. FT.    | 3.19.5 CU. YDS.       | 3.19.6 LIN. FT.     | 27.7 LBS.           | 3.19.8 SQ. YDS.     | 22-1 SQ. YDS. | 22-2 CU. YDS.             | 22-3 CU. YD. MI.                    | 22-4 CU. YDS.           | BBLs.    | LBS.     |      |
| 1           | 408+52-468+00      | 5942.8                    | 0.71        | 1.64        | 16918          | 100            | 50             | 7941           | 2500             | 813            | 200                  | 25              |                |              | ON S. T. H. 33                        | 66                         | 132             | 13206.22        | 3567.0          | 3645                    | 1300             |                       | 11.27               | 50                  |                     | 268           |                           |                                     |                         |          | 385      | 791  |
| 2           | 468+00-479+485     | 1138.8                    |             |             | 2083           |                |                | 3463           |                  |                |                      |                 |                |              |                                       | 14                         | 28              | 2531.0          | 683.5           | 500                     | 900              |                       | 6.05                |                     |                     | 134           |                           |                                     |                         |          | 17.5     | 410  |
|             | F.A.P. 444H        |                           |             |             |                |                |                |                |                  |                |                      |                 |                |              |                                       |                            |                 |                 |                 |                         |                  |                       |                     |                     |                     |               |                           |                                     |                         |          |          |      |
| TOTAL       | 408+52-479+485     | 7081.6                    | 0.71        | 1.64        | 19001          | 100            | 50             | 11404          | 2500             | 813            | 200                  | 25              |                |              | 80                                    | 160                        | 15737.22        | 4250.5          | 4145            | 2200                    |                  | 17.32                 | 50                  |                     | 402                 |               |                           |                                     |                         |          | 560      | 1201 |
|             |                    |                           |             |             |                |                |                |                |                  |                |                      |                 |                |              | ON U. S. H. 41                        |                            |                 |                 |                 |                         |                  |                       |                     |                     |                     |               |                           |                                     |                         |          |          |      |
| F.A.P.      | 304 REOPENED       |                           |             |             |                |                |                |                |                  |                |                      |                 |                |              |                                       |                            |                 |                 |                 |                         |                  |                       |                     |                     |                     |               |                           |                                     |                         |          |          |      |
|             | 15+21-63+07        | 4786                      |             |             | 54972          | 2000           | 58             |                |                  |                |                      | 41              |                |              | 45                                    | 90                         | 10284.1         | 2466.5          |                 |                         |                  | 10.16                 | 10.16               |                     | 4268                |               |                           |                                     |                         |          |          |      |
|             |                    |                           |             |             |                |                |                |                |                  |                |                      |                 |                |              |                                       |                            |                 |                 |                 |                         |                  |                       |                     |                     |                     |               |                           |                                     |                         |          |          |      |
|             |                    |                           |             |             |                |                |                |                |                  |                |                      |                 |                |              |                                       |                            |                 |                 |                 |                         |                  |                       |                     |                     |                     |               |                           |                                     |                         |          |          |      |
|             |                    |                           |             |             |                |                |                |                |                  |                |                      |                 |                |              |                                       |                            |                 |                 |                 |                         |                  |                       |                     |                     |                     |               |                           |                                     |                         |          |          |      |
|             |                    |                           |             |             |                |                |                |                |                  |                |                      |                 |                |              |                                       |                            |                 |                 |                 |                         |                  |                       |                     |                     |                     |               |                           |                                     |                         |          |          |      |
| GRAND TOTAL | 444H & 304 RE.     | 11867.6                   | 0.71        | 1.64        | 73973          | 2100           | 108            | 11404          | 2500             | 813            | 200                  | 66              |                |              | 125                                   | 250                        | 26021.32        | 6717.0          | 4145            | 2200                    |                  | 27.48                 | 50                  |                     | 4670                |               |                           |                                     |                         |          | 560      | 1201 |
|             |                    |                           |             |             |                |                |                |                |                  |                |                      |                 |                |              | *                                     | *                          |                 | *               |                 |                         |                  |                       |                     |                     |                     |               |                           |                                     |                         |          | *        | *    |

| MILE NO.    | EXCAVATION         |                  |                  |                  | BRIDGES OVER 20'-0" SPAN |                    |               |              |               |              |                   |               | STRUCTURES 6' TO 20' SPAN |                   |              |              |               | CULVERTS 6' SP. UNDER |                   |                  |              |              |
|-------------|--------------------|------------------|------------------|------------------|--------------------------|--------------------|---------------|--------------|---------------|--------------|-------------------|---------------|---------------------------|-------------------|--------------|--------------|---------------|-----------------------|-------------------|------------------|--------------|--------------|
|             | BRIDGES 6'-20' SP. |                  | BRIDGES OVER 20' |                  | PORTLAND C. CONC.        | PIPE RAILING       | REINF. STEEL  | FLOOR DRAINS | STRUCT. STEEL | CAST STEEL   | TIMBER DELIVERED  | PILING DRIVEN | WATER-PROOF               | PORTLAND C. CONC. | REINF. STEEL | FLOOR DRAINS | STRUCT. STEEL | WATER-PROOF           | PORTLAND C. CONC. | CEMENT           | REINF. STEEL |              |
|             | DRY EXC.           | WET EXC.         | DRY EXC.         | WET EXC.         |                          |                    |               |              |               |              |                   |               |                           |                   |              |              |               |                       |                   |                  |              |              |
|             | 4.4.2<br>CU. YDS.  | 23-2<br>CU. YDS. | 23-3<br>CU. YDS. | 23-4<br>CU. YDS. | 4.7.1<br>CU. YDS.        | 4.21.1<br>LIN. FT. | 4.8.1<br>LBS. | 52-4<br>NO.  | 37-1<br>LBS.  | 37-2<br>LBS. | 4.25.1<br>SQ. FT. |               |                           | 34-2<br>CU. YDS.  | 38-2<br>LBS. | 52-4<br>NO.  | 37-1<br>LBS.  | 38<br>SQ. FT.         |                   | 45.7<br>CU. YDS. | 77.5<br>BBLs | 3255<br>LBS. |
| 1           |                    |                  |                  |                  |                          |                    |               |              |               |              |                   |               |                           |                   |              |              |               |                       |                   |                  |              |              |
| 2           |                    |                  |                  |                  |                          |                    |               |              |               |              |                   |               |                           |                   |              |              |               |                       |                   |                  |              |              |
| TOTAL       | F.A.P. 444H        |                  |                  |                  |                          |                    |               |              |               |              |                   |               |                           |                   |              |              |               |                       |                   |                  |              |              |
|             | 420                |                  |                  |                  | 821.3                    | 250                | 95590         |              |               |              |                   |               |                           |                   |              |              |               |                       |                   |                  |              |              |
|             | F.A.P. 304 REOP    |                  |                  |                  |                          |                    |               |              |               |              | 8600              |               |                           |                   |              |              |               |                       |                   |                  |              |              |
|             |                    |                  |                  |                  |                          |                    |               |              |               |              |                   |               |                           |                   |              |              |               |                       |                   |                  |              |              |
|             |                    |                  |                  |                  |                          |                    |               |              |               |              |                   |               |                           |                   |              |              |               |                       |                   |                  |              |              |
| GRAND TOTAL | 420                |                  |                  |                  | 821.3                    | 250                | 95590         |              |               |              | 8600              |               |                           |                   |              |              |               |                       |                   |                  |              |              |
|             |                    |                  |                  |                  |                          |                    |               |              |               |              |                   |               |                           |                   |              |              |               |                       |                   |                  |              |              |
|             |                    |                  |                  |                  |                          |                    |               |              |               |              |                   |               |                           |                   |              |              |               |                       |                   |                  |              |              |
|             |                    |                  |                  |                  |                          |                    |               |              |               |              |                   |               |                           |                   |              |              |               |                       |                   |                  |              |              |
|             |                    |                  |                  |                  |                          |                    |               |              |               |              |                   |               |                           |                   |              |              |               |                       |                   |                  |              |              |
|             |                    |                  |                  |                  |                          |                    |               |              |               |              |                   |               |                           |                   |              |              |               |                       |                   |                  |              |              |
|             |                    |                  |                  |                  |                          |                    |               |              |               |              |                   |               |                           |                   |              |              |               |                       |                   |                  |              |              |
|             |                    |                  |                  |                  |                          |                    |               |              |               |              |                   |               |                           |                   |              |              |               |                       |                   |                  |              |              |
|             |                    |                  |                  |                  |                          |                    |               |              |               |              |                   |               |                           |                   |              |              |               |                       |                   |                  |              |              |
|             |                    |                  |                  |                  |                          |                    |               |              |               |              |                   |               |                           |                   |              |              |               |                       |                   |                  |              |              |
|             |                    |                  |                  |                  |                          |                    |               |              |               |              |                   |               |                           |                   |              |              |               |                       |                   |                  |              |              |
|             |                    |                  |                  |                  |                          |                    |               |              |               |              |                   |               |                           |                   |              |              |               |                       |                   |                  |              |              |
|             |                    |                  |                  |                  |                          |                    |               |              |               |              |                   |               |                           |                   |              |              |               |                       |                   |                  |              |              |
|             |                    |                  |                  |                  |                          |                    |               |              |               |              |                   |               |                           |                   |              |              |               |                       |                   |                  |              |              |
|             |                    |                  |                  |                  |                          |                    |               |              |               |              |                   |               |                           |                   |              |              |               |                       |                   |                  |              |              |
|             |                    |                  |                  |                  |                          |                    |               |              |               |              |                   |               |                           |                   |              |              |               |                       |                   |                  |              |              |
|             |                    |                  |                  |                  |                          |                    |               |              |               |              |                   |               |                           |                   |              |              |               |                       |                   |                  |              |              |
|             |                    |                  |                  |                  |                          |                    |               |              |               |              |                   |               |                           |                   |              |              |               |                       |                   |                  |              |              |
|             |                    |                  |                  |                  |                          |                    |               |              |               |              |                   |               |                           |                   |              |              |               |                       |                   |                  |              |              |
|             |                    |                  |                  |                  |                          |                    |               |              |               |              |                   |               |                           |                   |              |              |               |                       |                   |                  |              |              |
|             |                    |                  |                  |                  |                          |                    |               |              |               |              |                   |               |                           |                   |              |              |               |                       |                   |                  |              |              |
|             |                    |                  |                  |                  |                          |                    |               |              |               |              |                   |               |                           |                   |              |              |               |                       |                   |                  |              |              |
|             |                    |                  |                  |                  |                          |                    |               |              |               |              |                   |               |                           |                   |              |              |               |                       |                   |                  |              |              |
|             |                    |                  |                  |                  |                          |                    |               |              |               |              |                   |               |                           |                   |              |              |               |                       |                   |                  |              |              |
|             |                    |                  |                  |                  |                          |                    |               |              |               |              |                   |               |                           |                   |              |              |               |                       |                   |                  |              |              |
|             |                    |                  |                  |                  |                          |                    |               |              |               |              |                   |               |                           |                   |              |              |               |                       |                   |                  |              |              |
|             |                    |                  |                  |                  |                          |                    |               |              |               |              |                   |               |                           |                   |              |              |               |                       |                   |                  |              |              |
|             |                    |                  |                  |                  |                          |                    |               |              |               |              |                   |               |                           |                   |              |              |               |                       |                   |                  |              |              |
|             |                    |                  |                  |                  |                          |                    |               |              |               |              |                   |               |                           |                   |              |              |               |                       |                   |                  |              |              |
|             |                    |                  |                  |                  |                          |                    |               |              |               |              |                   |               |                           |                   |              |              |               |                       |                   |                  |              |              |
|             |                    |                  |                  |                  |                          |                    |               |              |               |              |                   |               |                           |                   |              |              |               |                       |                   |                  |              |              |
|             |                    |                  |                  |                  |                          |                    |               |              |               |              |                   |               |                           |                   |              |              |               |                       |                   |                  |              |              |
|             |                    |                  |                  |                  |                          |                    |               |              |               |              |                   |               |                           |                   |              |              |               |                       |                   |                  |              |              |
|             |                    |                  |                  |                  |                          |                    |               |              |               |              |                   |               |                           |                   |              |              |               |                       |                   |                  |              |              |
|             |                    |                  |                  |                  |                          |                    |               |              |               |              |                   |               |                           |                   |              |              |               |                       |                   |                  |              |              |
|             |                    |                  |                  |                  |                          |                    |               |              |               |              |                   |               |                           |                   |              |              |               |                       |                   |                  |              |              |
|             |                    |                  |                  |                  |                          |                    |               |              |               |              |                   |               |                           |                   |              |              |               |                       |                   |                  |              |              |
|             |                    |                  |                  |                  |                          |                    |               |              |               |              |                   |               |                           |                   |              |              |               |                       |                   |                  |              |              |
|             |                    |                  |                  |                  |                          |                    |               |              |               |              |                   |               |                           |                   |              |              |               |                       |                   |                  |              |              |
|             |                    |                  |                  |                  |                          |                    |               |              |               |              |                   |               |                           |                   |              |              |               |                       |                   |                  |              |              |
|             |                    |                  |                  |                  |                          |                    |               |              |               |              |                   |               |                           |                   |              |              |               |                       |                   |                  |              |              |
|             |                    |                  |                  |                  |                          |                    |               |              |               |              |                   |               |                           |                   |              |              |               |                       |                   |                  |              |              |
|             |                    |                  |                  |                  |                          |                    |               |              |               |              |                   |               |                           |                   |              |              |               |                       |                   |                  |              |              |
|             |                    |                  |                  |                  |                          |                    |               |              |               |              |                   |               |                           |                   |              |              |               |                       |                   |                  |              |              |
|             |                    |                  |                  |                  |                          |                    |               |              |               |              |                   |               |                           |                   |              |              |               |                       |                   |                  |              |              |
|             |                    |                  | </               |                  |                          |                    |               |              |               |              |                   |               |                           |                   |              |              |               |                       |                   |                  |              |              |

|             | CAST IRON       |                 |                 |                 | C.G.S.M. PIPE      |                    | GUARD FENCE          |             |                    |                    | PROJ. MARKER | CURB AND GUTTER REMOVAL | CONCRETE       |                    | COMBINATION CURB & GUTTER | CEMENT IN CURB AND GUTTER | RIP RAP | REMOVING OLD PAV'T. | TOTAL CEMENT ON PROJECT | DOUBLE CATCH BASIN COMPLETE WITH SUMP | GRATE |  |  |  |
|-------------|-----------------|-----------------|-----------------|-----------------|--------------------|--------------------|----------------------|-------------|--------------------|--------------------|--------------|-------------------------|----------------|--------------------|---------------------------|---------------------------|---------|---------------------|-------------------------|---------------------------------------|-------|--|--|--|
|             | 24"             | 30"             | 12"             | 18"             | WIRE ROPE TYPE 'B' | WIRE ROPE TYPE 'C' | GUARD POSTS TYPE 'C' | ANCHOR AGES | WIRE ROPE TYPE 'B' | WIRE ROPE TYPE 'C' |              |                         | 6" CURB        | 30" SPECIAL GUTTER |                           |                           |         |                     |                         |                                       |       |  |  |  |
|             | 4.31.2 LIN. FT. | 4.31.3 LIN. FT. | 4.31.6 LIN. FT. | 4.31.8 LIN. FT. | 46-2 LIN. FT.      | 5.9.1 NO.          | 46-4 NO.             | NO.         | 46-2 LIN. FT.      | 5.9.1 NO.          | NO.          | NO.                     | 5.55 LIN. FT.  | 5.1.1 CU. YDS.     | SQ. YDS.                  | BBLs.                     |         |                     |                         |                                       |       |  |  |  |
| 1           | 54              |                 |                 | 286             |                    |                    | 20                   | 1           |                    |                    |              |                         | ON S. T. H. 33 |                    |                           | 3 1/2                     |         | 36880               |                         |                                       |       |  |  |  |
| 2           |                 | 56              |                 | 44              |                    |                    | 7                    | 1           |                    |                    | 40           |                         |                | 50                 | 50                        |                           |         | 7060                |                         |                                       |       |  |  |  |
| TOTAL       | F.A.P. 444H     | 54              | 56              | 330             |                    |                    | 27                   | 2           |                    |                    | 40           |                         |                | 50                 | 50                        | 3 1/2                     |         | 43890               |                         |                                       |       |  |  |  |
|             |                 |                 |                 |                 |                    |                    |                      |             |                    |                    |              |                         |                |                    |                           |                           |         |                     |                         |                                       |       |  |  |  |
|             |                 |                 |                 |                 |                    |                    |                      |             |                    |                    |              |                         |                |                    |                           |                           |         |                     |                         |                                       |       |  |  |  |
|             |                 |                 |                 |                 |                    |                    |                      |             |                    |                    |              |                         |                |                    |                           |                           |         |                     |                         |                                       |       |  |  |  |
|             |                 |                 |                 |                 |                    |                    |                      |             |                    |                    |              |                         |                |                    |                           |                           |         |                     |                         |                                       |       |  |  |  |
|             |                 |                 |                 |                 |                    |                    |                      |             |                    |                    |              |                         |                |                    |                           |                           |         |                     |                         |                                       |       |  |  |  |
|             |                 |                 |                 |                 |                    |                    |                      |             |                    |                    |              |                         |                |                    |                           |                           |         |                     |                         |                                       |       |  |  |  |
|             |                 |                 |                 |                 |                    |                    |                      |             |                    |                    |              |                         |                |                    |                           |                           |         |                     |                         |                                       |       |  |  |  |
|             |                 |                 |                 |                 |                    |                    |                      |             |                    |                    |              |                         |                |                    |                           |                           |         |                     |                         |                                       |       |  |  |  |
|             |                 |                 |                 |                 |                    |                    |                      |             |                    |                    |              |                         |                |                    |                           |                           |         |                     |                         |                                       |       |  |  |  |
| GRAND TOTAL | 54              | 56              | 40              | 384             |                    |                    | 1995                 |             |                    |                    |              |                         | 1282           | 700                |                           |                           | 33      |                     | 27330                   | 1                                     |       |  |  |  |
|             |                 |                 |                 |                 |                    |                    |                      |             |                    |                    |              |                         |                |                    |                           |                           |         |                     |                         |                                       |       |  |  |  |

\* Included in bid price for concrete.  
Total - Approximate haul over 500 feet = 276,422 station yards (not a bid item.)

444-H - Approximate haul over 500 feet = 28,545 station yards (not a bid item.)

ESTIMATE OF QUANTITIES  
FOR  
20 FOOT CONCRETE  
PORT WASHINGTON-HORICON-WEST BEND  
MILWAUKEE-FOND DU LAC ROAD  
FED. AID PROJECT #444H  
AND  
WISCONSIN HIGHWAY COMMISSION  
MADISON, WISC.