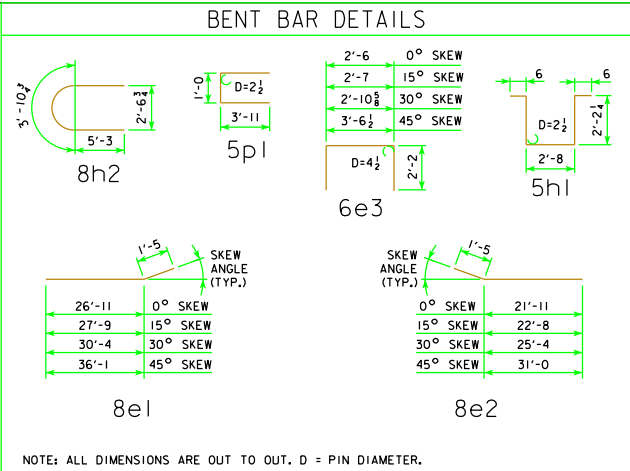


REVISED 12-07 - OPEN RAIL REINFORCING QUANTITY CHANGED

| BILL OF REINFORCING STEEL FOR SUPERSTRUCTURE - 130' BRIDGE |  |      |       |                              |                   |         |         |         |        |           |         |         |        |        |         |         |  |
|------------------------------------------------------------|--|------|-------|------------------------------|-------------------|---------|---------|---------|--------|-----------|---------|---------|--------|--------|---------|---------|--|
| LOCATION                                                   |  | SKEW | SHAPE | 0°                           |                   | 15°     |         | 30°     |        | 45°       |         |         |        |        |         |         |  |
|                                                            |  |      |       | BAR                          | NO.               | LENGTH  | WEIGHT  | BAR     | NO.    | LENGTH    | WEIGHT  | BAR     | NO.    | LENGTH | WEIGHT  |         |  |
| SLAB LONGITUDINAL BOTTOM                                   |  |      | ===== | 9a1                          | 58                | 29'-10  | 5883    | 58      | 29'-10 | 5883      | 58      | 29'-10  | 5883   | 58     | 29'-10  | 5883    |  |
| SLAB LONGITUDINAL BOTTOM                                   |  |      | ===== | 9a2                          | 58                | 44'-6   | 8775    | 58      | 44'-6  | 8775      | 58      | 44'-6   | 8775   | 58     | 44'-6   | 8775    |  |
| SLAB LONGITUDINAL BOTTOM                                   |  |      | ===== | 9a3                          | 58                | 41'-3   | 8135    | 58      | 41'-3  | 8135      | 58      | 41'-3   | 8135   | 58     | 41'-3   | 8135    |  |
| SLAB LONGITUDINAL BOTTOM                                   |  |      | ===== | 9a4                          | 58                | 33'-10  | 6672    | 58      | 33'-10 | 6672      | 58      | 33'-10  | 6672   | 58     | 33'-10  | 6672    |  |
| SLAB LONGITUDINAL BOTTOM                                   |  |      | ===== | 10a5                         | 29                | 41'-0   | 5116    | 29      | 41'-0  | 5116      | 29      | 41'-0   | 5116   | 29     | 41'-0   | 5116    |  |
| SLAB LONGITUDINAL BOTTOM, AT RAIL                          |  |      | ===== | 9a6                          | 8                 | 39'-8   | 1079    | 8       | 39'-8  | 1079      | 8       | 39'-8   | 1079   | 8      | 39'-8   | 1079    |  |
| SLAB LONGITUDINAL BOTTOM, AT RAIL                          |  |      | ===== | 9a7                          | 8                 | 13'-0   | 354     | 8       | 13'-0  | 354       | 8       | 13'-0   | 354    | 8      | 13'-0   | 354     |  |
| SLAB LONGITUDINAL BOTTOM, AT RAIL                          |  |      | ===== | 9a8                          | 4                 | 48'-8   | 662     | 4       | 48'-8  | 662       | 4       | 48'-8   | 662    | 4      | 48'-8   | 662     |  |
| SLAB LONGITUDINAL BOTTOM, AT RAIL                          |  |      | ===== | 8a9                          | 8                 | 32'-4   | 691     | 8       | 32'-4  | 691       | 8       | 32'-4   | 691    | 8      | 32'-4   | 691     |  |
| SLAB LONGITUDINAL BOTTOM, AT RAIL                          |  |      | ===== | 9a10                         | 4                 | 29'-0   | 394     | 4       | 29'-0  | 394       | 4       | 29'-0   | 394    | 4      | 29'-0   | 394     |  |
| SLAB LONGITUDINAL TOP                                      |  |      | ===== | 6b1                          | 58                | 6'-7    | 574     | 58      | 6'-7   | 574       | 58      | 6'-7    | 574    | 58     | 6'-7    | 574     |  |
| SLAB LONGITUDINAL TOP                                      |  |      | ===== | 11b2                         | 58                | 28'-9   | 8859    | 58      | 28'-9  | 8859      | 58      | 28'-9   | 8859   | 58     | 28'-9   | 8859    |  |
| SLAB LONGITUDINAL TOP                                      |  |      | ===== | 11b3                         | 58                | 30'-6   | 9399    | 58      | 30'-6  | 9399      | 58      | 30'-6   | 9399   | 58     | 30'-6   | 9399    |  |
| SLAB LONGITUDINAL TOP                                      |  |      | ===== | 7b4                          | 58                | 22'-7   | 2677    | 58      | 22'-7  | 2677      | 58      | 22'-7   | 2677   | 58     | 22'-7   | 2677    |  |
| SLAB LONGITUDINAL TOP                                      |  |      | ===== | 10b5                         | 58                | 25'-6   | 6364    | 58      | 25'-6  | 6364      | 58      | 25'-6   | 6364   | 58     | 25'-6   | 6364    |  |
| SLAB LONGITUDINAL TOP                                      |  |      | ===== | 6b6                          | 29                | 34'-4   | 1495    | 29      | 34'-4  | 1495      | 29      | 34'-4   | 1495   | 29     | 34'-4   | 1495    |  |
| SLAB LONGITUDINAL TOP, AT RAIL                             |  |      | ===== | 6b8                          | 8                 | 29'-1   | 349     | 8       | 29'-1  | 349       | 8       | 29'-1   | 349    | 8      | 29'-1   | 349     |  |
| SLAB LONGITUDINAL TOP, AT RAIL                             |  |      | ===== | 11b9                         | 8                 | 32'-9   | 1392    | 8       | 32'-9  | 1392      | 8       | 32'-9   | 1392   | 8      | 32'-9   | 1392    |  |
| SLAB LONGITUDINAL TOP, AT RAIL                             |  |      | ===== | 6b10                         | 4                 | 23'-0   | 138     | 4       | 23'-0  | 138       | 4       | 23'-0   | 138    | 4      | 23'-0   | 138     |  |
| SLAB LONGITUDINAL TOP, AT RAIL                             |  |      | ===== | 7b11                         | 8                 | 34'-4   | 561     | 8       | 34'-4  | 561       | 8       | 34'-4   | 561    | 8      | 34'-4   | 561     |  |
| SLAB LONGITUDINAL TOP, AT RAIL                             |  |      | ===== | 11b12                        | 8                 | 23'-9   | 1009    | 8       | 23'-9  | 1009      | 8       | 23'-9   | 1009   | 8      | 23'-9   | 1009    |  |
| SLAB TRANSVERSE BOTTOM                                     |  |      | ===== | 6c1                          | 127               | 25'-5   | 4848    | 127     | 26'-4  | 5023      | 118     | 25'-5   | 4505   | 108    | 25'-5   | 4123    |  |
| SLAB TRANSVERSE BOTTOM                                     |  |      | ===== | 6c2                          | 127               | 23'-3   | 4435    | 127     | 24'-1  | 4594      | 119     | 23'-3   | 4156   | 110    | 23'-3   | 3841    |  |
| SLAB TRANSVERSE ENDS, BOTTOM                               |  |      | ===== | 6c3                          | -                 | -       | -       | -       | -      | 12 VARIES | 255     | 20      | VARIES | 459    |         |         |  |
| SLAB TRANSVERSE ENDS, BOTTOM                               |  |      | ===== | 6c4                          | -                 | -       | -       | -       | -      | 11 VARIES | 267     | 20      | VARIES | 434    |         |         |  |
| SLAB TRANSVERSE ENDS, BOTTOM                               |  |      | ===== | 6c5                          | -                 | -       | -       | -       | -      | 11 VARIES | 213     | 19      | VARIES | 350    |         |         |  |
| SLAB TRANSVERSE ENDS, BOTTOM                               |  |      | ===== | 6c6                          | -                 | -       | -       | -       | -      | 11 VARIES | 230     | 18      | VARIES | 386    |         |         |  |
| SLAB TRANSVERSE TOP                                        |  |      | ===== | 5d1                          | 127               | 25'-9   | 3411    | 127     | 26'-8  | 3532      | 118     | 25'-9   | 3169   | 108    | 25'-9   | 2901    |  |
| SLAB TRANSVERSE TOP                                        |  |      | ===== | 5d2                          | 127               | 23'-3   | 3080    | 127     | 24'-1  | 3190      | 119     | 23'-3   | 2886   | 110    | 23'-3   | 2667    |  |
| SLAB TRANSVERSE ENDS, TOP                                  |  |      | ===== | 5d3                          | -                 | -       | -       | -       | -      | 12 VARIES | 186     | 20      | VARIES | 319    |         |         |  |
| SLAB TRANSVERSE ENDS, TOP                                  |  |      | ===== | 5d4                          | -                 | -       | -       | -       | -      | 11 VARIES | 177     | 20      | VARIES | 301    |         |         |  |
| SLAB TRANSVERSE ENDS, TOP                                  |  |      | ===== | 5d5                          | -                 | -       | -       | -       | -      | 11 VARIES | 148     | 19      | VARIES | 243    |         |         |  |
| SLAB TRANSVERSE ENDS, TOP                                  |  |      | ===== | 5d6                          | -                 | -       | -       | -       | -      | 11 VARIES | 160     | 18      | VARIES | 268    |         |         |  |
| SLAB, TRANSVERSE AT ABUTMENT                               |  |      | ===== | 8e1                          | 20                | 28'-4   | 1513    | 20      | 29'-2  | 1558      | 20      | 31'-9   | 1695   | 20     | 37'-6   | 2003    |  |
| SLAB, TRANSVERSE AT ABUTMENT                               |  |      | ===== | 8e2                          | 20                | 23'-4   | 1246    | 20      | 24'-1  | 1286      | 20      | 26'-9   | 1428   | 20     | 32'-5   | 1731    |  |
| SLAB, HAIRPINS, AT ABUTMENT                                |  |      | ===== | 6e3                          | 100               | 6'-10   | 1026    | 100     | 6'-11  | 1039      | 100     | 7'-3    | 1089   | 100    | 7'-11   | 1189    |  |
| PIER CAP HOOPS                                             |  |      | ===== | 5h1                          | 84                | 8'-1    | 708     | 84      | 8'-1   | 708       | 84      | 8'-1    | 708    | 112    | 8'-1    | 944     |  |
| PIER CAP ENDS                                              |  |      | ===== | 8h2                          | 4                 | 14'-5   | 154     | 4       | 14'-5  | 154       | 4       | 14'-5   | 154    | 4      | 14'-5   | 154     |  |
| PIER CAP, BOTTOM LONGITUDINAL                              |  |      | ===== | 8h3                          | 8                 | 27'-5   | 586     | 8       | 28'-8  | 612       | 8       | 31'-8   | 676    | 8      | 37'-10  | 808     |  |
| PIER CAP, BOTTOM LONGITUDINAL                              |  |      | ===== | 8h4                          | 8                 | 21'-11  | 468     | 8       | 22'-4  | 477       | 8       | 24'-6   | 523    | 8      | 29'-8   | 634     |  |
| PIER CAP, TOP LONGITUDINAL                                 |  |      | ===== | 8h5                          | 4                 | 28'-2   | 301     | 4       | 29'-6  | 315       | 4       | 32'-8   | 349    | 4      | 38'-11  | 416     |  |
| PIER CAP, TOP LONGITUDINAL                                 |  |      | ===== | 8h6                          | 4                 | 23'-5   | 250     | 4       | 23'-11 | 255       | 4       | 26'-3   | 280    | 4      | 31'-6   | 336     |  |
| TOP OF SLAB, TRANSVERSE, AT RAIL                           |  |      | ===== | 5j1                          | 252               | 8'-6    | 2234    | 252     | 8'-6   | 2234      | 246     | 8'-6    | 2181   | 244    | 8'-6    | 2163    |  |
| WING, VERTICAL                                             |  |      | ===== | 5m1-4                        | 32                | SHOWN   | 117     | 32      | SHOWN  | 117       | 32      | SHOWN   | 117    | 32     | SHOWN   | 117     |  |
| WING, HORIZONTAL                                           |  |      | ===== | 5n1                          | 24                | 6'-8    | 167     | 24      | 6'-8   | 167       | 24      | 6'-8    | 167    | 24     | 6'-8    | 167     |  |
| PAVING SUPPORT, TRANSVERSE                                 |  |      | ===== | 5p1                          | 44                | 8'-10   | 405     | 46      | 8'-10  | 424       | 50      | 8'-10   | 461    | 62     | 8'-10   | 571     |  |
| PAVING SUPPORT LONGITUDINAL                                |  |      | ===== | 5p3                          | 6                 | 24'-9   | 155     | 6       | 26'-1  | 163       | 6       | 28'-9   | 180    | 6      | 34'-7   | 216     |  |
| PAVING SUPPORT LONGITUDINAL                                |  |      | ===== | 5p4                          | 6                 | 22'-0   | 138     | 6       | 22'-10 | 143       | 6       | 25'-5   | 159    | 6      | 31'-1   | 195     |  |
| SUB TOTAL - LBS.                                           |  |      |       |                              |                   |         | 95,820  | 96,569  |        |           |         |         |        |        | 97,097  | 98,514  |  |
| BARRIER RAIL - SEE LIST ON RAIL SHEET J44-46-06            |  |      |       |                              |                   |         | 7746    | 7746    |        |           |         |         |        |        | 7746    | 7746    |  |
| OPEN RAIL - SEE LIST ON RAIL SHEET J44-49-06               |  |      |       |                              |                   |         | 8150    | 8150    |        |           |         |         |        |        | 8150    | 8150    |  |
| TOTAL - LBS.                                               |  |      |       | WITH MONOLITHIC PIER CAP     | WITH BARRIER RAIL |         | 103,566 | 104,315 |        |           |         | 104,843 |        |        |         | 106,260 |  |
|                                                            |  |      |       | WITH OPEN RAIL               |                   | 103,970 | 104,719 |         |        |           | 105,247 |         |        |        | 106,664 |         |  |
| TOTAL - LBS.                                               |  |      |       | WITH NON-MONOLITHIC PIER CAP | WITH BARRIER RAIL |         | 101,099 | 101,794 |        |           |         | 102,153 |        |        |         | 102,968 |  |
| SAME AS ABOVE EXCEPT ALL "h" BARS DELETED                  |  |      |       | WITH OPEN RAIL               |                   | 101,503 | 102,198 |         |        |           | 102,557 |         |        |        | 103,372 |         |  |

| ESTIMATED QUANTITIES FOR SUPERSTRUCTURE - 130' BRIDGE        |  |                               |                          |         |         |         |                              |         |         |         |      |
|--------------------------------------------------------------|--|-------------------------------|--------------------------|---------|---------|---------|------------------------------|---------|---------|---------|------|
| ITEM                                                         |  | SKEW                          | WITH MONOLITHIC PIER CAP |         |         |         | WITH NON-MONOLITHIC PIER CAP |         |         |         | C.Y. |
|                                                              |  |                               | 0°                       | 15°     | 30°     | 45°     | 0°                           | 15°     | 30°     | 45°     |      |
| WITH BARRIER RAIL                                            |  | *STRUCTURAL CONCRETE (BRIDGE) | 446.8                    | 448.2   | 453.1   | 463.7   | 440.4                        | 441.6   | 445.8   | 454.8   |      |
| REINFORCING STEEL EPOXY COATED                               |  | LBS.                          | 103,566                  | 104,315 | 104,843 | 106,260 | 101,099                      | 101,794 | 102,153 | 102,968 |      |
| CONCRETE BARRIER OR OPEN RAIL                                |  | LIN. FT.                      | 282.0                    | 282.2   | 282.9   | 284.5   | 282.0                        | 282.2   | 282.9   | 284.5   |      |
| WITH OPEN RAIL                                               |  | *STRUCTURAL CONCRETE (BRIDGE) | 446.5                    | 448.0   | 452.9   | 463.5   | 440.2                        | 441.4   | 445.5   | 454.6   |      |
| REINFORCING STEEL EPOXY COATED                               |  | LBS.                          | 103,970                  | 104,719 | 105,247 | 106,664 | 101,503                      | 102,198 | 102,557 | 103,372 |      |
| * INCLUDES 4 WINGS @ 0.71 C.Y. EACH; EXCLUDES RAIL CONCRETE. |  |                               |                          |         |         |         |                              |         |         |         |      |



NOTES:  
ALL REINFORCING STEEL SHALL BE EPOXY COATED.  
  
THE TRANSVERSE REBARS ARE DETAILED WITH A SPLICE LAP.  
AT THE CONTRACTOR'S OPTION, THIS LAP MAY BE ELIMINATED  
BY FURNISHING FULL LENGTH BARS WITH NO REDUCTION IN  
PAY WEIGHT FOR SAME.

|                               |                                 |                                                                                                            |  |
|-------------------------------|---------------------------------|------------------------------------------------------------------------------------------------------------|--|
| 12-07<br>LATEST REVISION DATE | <br>APPROVED BY BRIDGE ENGINEER | <br>STANDARD DESIGN - 44' ROADWAY, 3 SPAN BRIDGES<br>CONTINUOUS CONCRETE<br>SLAB BRIDGES<br>NOVEMBER, 2006 |  |
|                               |                                 | SUPERSTRUCTURE DETAILS<br>130'-0 BRIDGE                                                                    |  |
|                               |                                 | J44-15-06                                                                                                  |  |