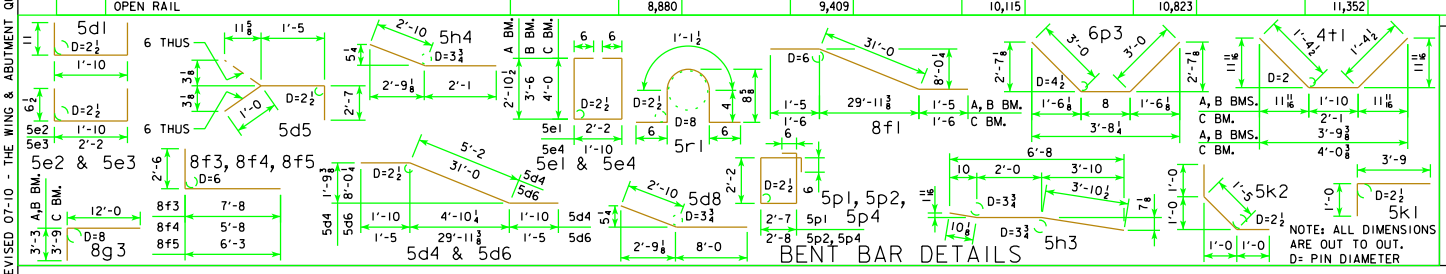
# REINFORCING BAR LIST

ONE SUPERSTRUCTURE AND TWO ABUTMENTS

| BAR | LOCATION | SHAPE | ℄-℄ ABUT. BRG. | 138'-10 | | | 151'-4 | | | 163'-10 | | | 176'-4 | | | 188'-10 | | | 201'-4 | | | 213'-10 | | | 226'-4 | | | 243'-0 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | ℄-℄ BEAM BRG. | 42'-6 | 50'-10 | 42'-6 | 46'-8 | 55'-0 | 46'-8 | 50'-10 | 59'-2 | 50'-10 | 55'-0 | 63'-4 | 55'-0 | 59'-2 | 67'-6 | 59'-2 | 63'-4 | 71'-8 | 63'-4 | 67'-6 | 75'-10 | 67'-6 | 71'-8 | 80'-0 | 71'-8 | 80'-0 | 80'-0 | 80'-0 |
| | | | BEAM SERIES | A BEAM | | | A BEAM | | | B BEAM | | | B BEAM | | | B BEAM | | | C BEAM | | | C BEAM | | | C BEAM | | | C BEAM | | |
| | | | | NO. | LENGTH | WEIGHT | NO. | LENGTH | WEIGHT | NO. | LENGTH | WEIGHT | NO. | LENGTH | WEIGHT | NO. | LENGTH | WEIGHT | NO. | LENGTH | WEIGHT | NO. | LENGTH | WEIGHT | NO. | LENGTH | WEIGHT | NO. | LENGTH | WEIGHT |
| 6a1 | SLAB TRANSV. TOP & BOTT. | | | 321 | 32'-10 | 15,830 | 351 | 32'-10 | 17,310 | 381 | 32'-10 | 18,789 | 411 | 32'-10 | 20,269 | 441 | 32'-10 | 21,748 | 471 | 32'-10 | 23,228 | 501 | 32'-10 | 24,707 | 531 | 32'-10 | 26,187 | 571 | 32'-10 | 28,159 |
| 6a2 | SLAB TRANSV. TOP ENDS | | | 20 | VARIES | 484 | 20 | VARIES | 484 | 20 | VARIES | 484 | 20 | VARIES | 484 | 20 | VARIES | 484 | 20 | VARIES | 484 | 20 | VARIES | 484 | 20 | VARIES | 484 | 20 | VARIES | 484 |
| 6a3 | SLAB TRANSV. BOTT. ENDS | | | 18 | VARIES | 436 | 18 | VARIES | 436 | 18 | VARIES | 436 | 18 | VARIES | 436 | 18 | VARIES | 436 | 18 | VARIES | 436 | 18 | VARIES | 436 | 18 | VARIES | 436 | 18 | VARIES | 436 |
| 5b1 | SLAB LONGITUDINAL, TOP & BOTT. | | | 152 | 40'-0 | 6,341 | 228 | 40'-0 | 9,512 | 228 | 40'-0 | 9,512 | 228 | 40'-0 | 9,512 | 228 | 40'-0 | 9,512 | 304 | 40'-0 | 12,683 | 304 | 40'-0 | 12,683 | 304 | 40'-0 | 12,683 | 380 | 40'-0 | 15,854 |
| 5b2 | SLAB LONGITUDINAL, TOP & BOTT., ENDS | | | 152 | 33'-10 | 5,364 | 152 | 21'-1 | 3,342 | 152 | 27'-4 | 4,333 | 152 | 33'-7 | 5,324 | 152 | 39'-10 | 6,315 | 152 | 27'-1 | 4,294 | 152 | 33'-4 | 5,285 | 152 | 39'-7 | 6,275 | 152 | 28'-11 | 4,584 |
| 6b3 | SLAB LONGITUDINAL, TOP @ PIERS | | | 66 | 12'-10 | 1,272 | 66 | 13'-10 | 1,371 | 66 | 14'-10 | 1,470 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 7b3 | SLAB LONGITUDINAL, TOP @ PIERS | | | — | — | — | — | — | — | — | — | — | 66 | 15'-10 | 2,136 | 66 | 17'-0 | 2,293 | 66 | 18'-0 | 2,428 | — | — | — | — | — | — | — | — | — |
| 8b3 | SLAB LONGITUDINAL, TOP @ PIERS | | | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 66 | 19'-0 | 3,348 | 66 | 20'-0 | 3,524 | 66 | 20'-0 | 3,524 |
| 5d1 | PIER DIAPH. ENDS | | | 12 | 3'-8 | 46 | 12 | 3'-8 | 46 | 12 | 3'-8 | 46 | 12 | 3'-8 | 46 | 12 | 3'-8 | 46 | 12 | 3'-8 | 46 | 12 | 3'-8 | 46 | 12 | 3'-8 | 46 | 12 | 3'-8 | 46 |
| 5d2 | PIER & ABUT. DIAPH. LONGIT. | | | 72 | 6'-3 | 469 | 72 | 6'-3 | 469 | 72 | 6'-3 | 469 | 72 | 6'-3 | 469 | 72 | 6'-3 | 469 | 72 | 6'-0 | 451 | 72 | 6'-0 | 451 | 72 | 6'-0 | 451 | 72 | 6'-0 | 451 |
| 5d3 | PIER & ABUT. DIAPH. LONGIT. | | | 24 | 5'-4 | 134 | 24 | 5'-4 | 134 | 24 | 5'-4 | 134 | 24 | 5'-4 | 134 | 24 | 5'-4 | 134 | 24 | 5'-1 | 127 | 24 | 5'-1 | 127 | 24 | 5'-1 | 127 | 24 | 5'-1 | 127 |
| 5d4 | PIER DIAPH. LONGIT. | | | 8 | 8'-10 | 74 | 8 | 8'-10 | 74 | 8 | 8'-10 | 74 | 8 | 8'-10 | 74 | 8 | 8'-10 | 74 | 8 | 8'-10 | 74 | 8 | 8'-10 | 74 | 8 | 8'-10 | 74 | 8 | 8'-10 | 74 |
| 5d5 | ABUT. DIAPH. ENDS | | | 12 | 5'-0 | 63 | 12 | 5'-0 | 63 | 12 | 5'-0 | 63 | 12 | 5'-0 | 63 | 12 | 5'-0 | 63 | 12 | 5'-0 | 63 | 12 | 5'-0 | 63 | 12 | 5'-0 | 63 | 12 | 5'-0 | 63 |
| 5d6 | ABUT. DIAPH. LONGIT. B.F. | | | 8 | 33'-10 | 282 | 8 | 33'-10 | 282 | 8 | 33'-10 | 282 | 8 | 33'-10 | 282 | 8 | 33'-10 | 282 | 8 | 33'-10 | 282 | 8 | 33'-10 | 282 | 8 | 33'-10 | 282 | 8 | 33'-10 | 282 |
| 5d7 | PAVING NOTCH LONGIT. | | | 4 | 33'-10 | 141 | 4 | 33'-10 | 141 | 4 | 33'-10 | 141 | 4 | 33'-10 | 141 | 4 | 33'-10 | 141 | 4 | 33'-10 | 141 | 4 | 33'-10 | 141 | 4 | 33'-10 | 141 | 4 | 33'-10 | 141 |
| 5d8 | ABUT. DIAPH. WING EXT. LONGIT. | | | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 24 | 10'-10 | 271 | 24 | 10'-10 | 271 | 24 | 10'-10 | 271 | 24 | 10'-10 | 271 |
| 5d9 | ABUT. DIAPH. WING EXT. LONGIT. | | | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 24 | 10'-9 | 269 | 24 | 10'-9 | 269 | 24 | 10'-9 | 269 | 24 | 10'-9 | 269 |
| 5e1 | PIER DIAPH. HOOPS | | | 32 | 8'-11 | 298 | 32 | 8'-11 | 298 | 32 | 10'-2 | 339 | 32 | 10'-2 | 339 | 32 | 10'-2 | 339 | 32 | 11'-2 | 373 | 32 | 11'-2 | 373 | 32 | 11'-2 | 373 | 32 | 11'-2 | 373 |
| 5e2 | PIER DIAPH. TIES ENDS | | | 4 | 2'-11 | 12 | 4 | 2'-11 | 12 | 4 | 2'-11 | 12 | 4 | 2'-11 | 12 | 4 | 2'-11 | 12 | 4 | 2'-11 | 12 | 4 | 2'-11 | 12 | 4 | 2'-11 | 12 | 4 | 2'-11 | 12 |
| 5e3 | PIER DIAPH. TIES | | | 32 | 3'-3 | 108 | 32 | 3'-3 | 108 | 32 | 3'-3 | 108 | 32 | 3'-3 | 108 | 32 | 3'-3 | 108 | 32 | 3'-3 | 108 | 32 | 3'-3 | 108 | 32 | 3'-3 | 108 | 32 | 3'-3 | 108 |
| 5e4 | PIER DIAPH. HOOPS ENDS | | | 4 | 8'-7 | 36 | 4 | 8'-7 | 36 | 4 | 9'-10 | 41 | 4 | 9'-10 | 41 | 4 | 9'-10 | 41 | 4 | 10'-10 | 45 | 4 | 10'-10 | 45 | 4 | 10'-10 | 45 | 4 | 10'-10 | 45 |
| 8f1 | ABUT. FOOTING LONGIT. | | | 18 | 33'-10 | 1,626 | 18 | 33'-10 | 1,626 | 18 | 33'-10 | 1,626 | 18 | 33'-10 | 1,626 | 18 | 33'-10 | 1,626 | 18 | 34'-0 | 1,634 | 18 | 34'-0 | 1,634 | 18 | 34'-0 | 1,634 | 18 | 34'-0 | 1,634 |
| 8f3 | ABUT. EXTENSION LONGIT. | | | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 16 | 10'-2 | 434 | 16 | 10'-2 | 434 | 16 | 10'-2 | 434 | 16 | 10'-2 | 434 |
| 8f4 | ABUT. EXTENSION LONGIT. | | | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 8 | 8'-2 | 174 | 8 | 8'-2 | 174 | 8 | 8'-2 | 174 | 8 | 8'-2 | 174 |
| 8f5 | ABUT. EXTENSION LONGIT. | | | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 8 | 8'-9 | 187 | 8 | 8'-9 | 187 | 8 | 8'-9 | 187 | 8 | 8'-9 | 187 |
| 8g1 | ABUT. VERT. | | | 114 | 6'-8 | 2,029 | 114 | 6'-8 | 2,029 | 114 | 7'-3 | 2,207 | 114 | 7'-3 | 2,207 | 114 | 7'-3 | 2,207 | 110 | 7'-9 | 2,276 | 110 | 7'-9 | 2,276 | 110 | 7'-9 | 2,276 | 110 | 7'-10 | 2,301 |
| 8g3 | ABUT. DIAPH. VERT. B.F. | | | 50 | 15'-3 | 2,036 | 50 | 15'-3 | 2,036 | 50 | 15'-3 | 2,036 | 50 | 15'-3 | 2,036 | 50 | 15'-3 | 2,036 | 50 | 15'-9 | 2,103 | 50 | 15'-9 | 2,103 | 50 | 15'-9 | 2,103 | 50 | 15'-9 | 2,103 |
| 6g4 | ABUT. DIAPH. WING EXT. VERT. | | | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 40 | 6'-6 | 391 | 40 | 6'-6 | 391 | 40 | 6'-7 | 396 | 40 | 6'-7 | 396 |
| 5h1 | ABUT. WING HORIZ. B.F. | | | 28 | 6'-8 | 195 | 28 | 6'-8 | 195 | 28 | 6'-8 | 195 | 28 | 6'-8 | 195 | 28 | 6'-8 | 195 | 36 | 6'-8 | 250 | 36 | 6'-8 | 250 | 36 | 6'-8 | 250 | 36 | 6'-8 | 250 |
| 5h2 | ABUT. TO WING ANCHOR | | | 56 | 4'-11 | 287 | 56 | 4'-11 | 287 | 56 | 4'-11 | 287 | 56 | 4'-11 | 287 | 56 | 4'-11 | 287 | 12 | 4'-11 | 62 | 12 | 4'-11 | 62 | 12 | 4'-11 | 62 | 12 | 4'-11 | 62 |
| 5h3 | ABUT. WING HORIZ. TRAFFIC FACE | | | 28 | 6'-9 | 197 | 28 | 6'-9 | 197 | 28 | 6'-9 | 197 | 28 | 6'-9 | 197 | 28 | 6'-9 | 197 | 36 | 6'-9 | 253 | 36 | 6'-9 | 253 | 36 | 6'-9 | 253 | 36 | 6'-9 | 253 |
| 5h4 | ABUT. TO WING ANCHOR | | | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 12 | 4'-11 | 62 | 12 | 4'-11 | 62 | 12 | 4'-11 | 62 | 12 | 4'-11 | 62 |
| 5j1 | TOP OF SLAB TRANSV. (AT RAIL) | | | 336 | 6'-3 | 2,190 | 366 | 6'-3 | 2,386 | 396 | 6'-3 | 2,581 | 426 | 6'-3 | 2,777 | 456 | 6'-3 | 2,973 | 486 | 6'-3 | 3,168 | 516 | 6'-3 | 3,364 | 546 | 6'-3 | 3,559 | 586 | 6'-3 | 3,820 |
| 5k1 | PAVING NOTCH | | | 54 | 4'-9 | 268 | 54 | 4'-9 | 268 | 54 | 4'-9 | 268 | 54 | 4'-9 | 268 | 54 | 4'-9 | 268 | 54 | 4'-9 | 268 | 54 | 4'-9 | 268 | 54 | 4'-9 | 268 | 54 | 4'-9 | 268 |
| 5k2 | PAVING NOTCH | | | 54 | 3'-5 | 192 | 54 | 3'-5 | 192 | 54 | 3'-5 | 192 | 54 | 3'-5 | 192 | 54 | 3'-5 | 192 | 54 | 3'-5 | 192 | 54 | 3'-5 | 192 | 54 | 3'-5 | 192 | 54 | 3'-5 | 192 |
| 5p1 | ABUTMENT HOOPS (WOOD/STEEL) | | | 80/96 | 10'-6 | 876/1051 | 88/96 | 10'-6 | 964/1051 | 96/100 | 10'-6 | 1051/1095 | 96/100 | 10'-6 | 1051/1095 | 96/100 | 10'-6 | 1051/1095 | 108 | 10'-6 | 1,183 | 104 | 10'-6 | 1,139 | 104 | 10'-6 | 1,139 | 104 | 10'-6 | 1,139 |
| 5p2 | ABUTMENT HOOPS | | | 8 | 10'-8 | 89 | 8 | 10'-8 | 89 | 8 | 10'-8 | 89 | 8 | 10'-8 | 89 | 8 | 10'-8 | 89 | 24 | 10'-8 | 267 | 24 | 10'-8 | 267 | 24 | 10'-8 | 267 | 24 | 10'-8 | 267 |
| 6p3 | ABUT. BOTT. AT PILES | | | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 24 | 6'-8 | 240 | 28 | 6'-8 | 280 | 28 | 6'-8 | 280 | 28 | 6'-8 | 280 |
| 5p4 | ABUT. HOOPS AT ENDS | | | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 8 | 10'-8 | 89 | 8 | 10'-8 | 89 | 8 | 10'-8 | 89 | 8 | 10'-8 | 89 |
| 5r1 | PAVING BLOCK LIFTING LOOPS | | | 8 | 2'-10 | 24 | 8 | 2'-10 | 24 | 8 | 2'-10 | 24 | 8 | 2'-10 | 24 | 8 | 2'-10 | 24 | 8 | 2'-10 | 24 | 8 | 2'-10 | 24 | 8 | 2'-10 | 24 | 8 | 2'-10 | 24 |
| 5s1 | WING VERT. | | | 64 | 5'-10 | 389 | 64 | 5'-10 | 389 | 64 | 6'-2 | 412 | 64 | 6'-2 | 412 | 64 | 6'-2 | 412 | 64 | 6'-11 | 462 | 64 | 6'-11 | 462 | 64 | 6'-11 | 462 | 64 | 6'-11 | 462 |
| 4t1 | UNDER BEAMS AT ABUTMENTS | | | 10 | 4'-7 | 31 | 10 | 4'-7 | 31 | 10 | 4'-7 | 31 | 10 | 4'-7 | 31 | 10 | 4'-7 | 31 | 10 | 4'-10 | 32 | 10 | 4'-10 | 32 | 10 | 4'-10 | 32 | 10 | 4'-10 | 32 |
| #2 | PILE SPIRAL (WOOD/STEEL)* | | | 22/10 | 38'-6 | 141/64 | 24/10 | 38'-6 | 154/64 | 26/12 | 38'-6 | 167/77 | 26/12 | 38'-6 | 167/77 | 26/12 | 38'-6 | 167/77 | 16 | 38'-6 | 103 | 18 | 38'-6 | 116 | 18 | 38'-6 | 116 | 18 | 38'-6 | 116 |
| | SPIRAL SPACERS, L 7/8 x 7/8 x 1/8 x 0.70 (WOOD/STL.)* | | | 66/30 | 1'-10 | 85/39 | 72/30 | 1'-10 | 92/39 | 78/36 | 1'-10 | 100/46 | 78/36 | 1'-10 | 100/46 | 78/36 | 1'-10 | 100/46 | 48 | 1'-10 | 62 | 54 | 1'-10 | 69 | 54 | 1'-10 | 69 | 54 | 1'-10 | 69 |
| | *EPOXY COATING NOT REQUIRED | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | SUB TOTAL W/ WOOD PILES** | | | | | 42,045 | | | 45,077 | | | 48,196 | | | 51,529 | | | 54,352 | | | — | | | — | | | — | | | — |
| | SUB TOTAL W/ STEEL H-PILES** | | | | | 42,097 | | | 45,021 | | | 48,096 | | | 51,429 | | | 54,252 | | | 59,731 | | | 63,333 | | | 66,179 | | | 69,917 |
| | **RAIL REINFORCING NOT INCLUDED | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | BARRIER RAIL | | | | | 8,215 | | | 8,788 | | | 9,347 | | | 9,879 | | | 10,478 | | | 11,445 | | | 12,003 | | | 12,576 | | | 13,312 |
| | OPEN RAIL | | | | | 8,880 | | | 9,409 | | | 10,115 | | | 10,823 | | | 11,352 | | | 13,289 | | | 13,756 | | | 14,526 | | | 15,308 |

EPOXY COATED REINFORCING




BENT BAR DETAILS

07-10
LATEST REVISION DATE

APPROVED BY BRIDGE ENGINEER

Iowa Department of Transportation
Highway Division

STANDARD DESIGN - 30' ROADWAY, THREE SPAN BRIDGES

PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGES

DECEMBER, 2006

DECK & ABUTMENT REINF.
15° SKEW

H30-16-06

REVISED 07-10 - THE WING & ABUTMENT QUANTITIES WERE CHANGED.