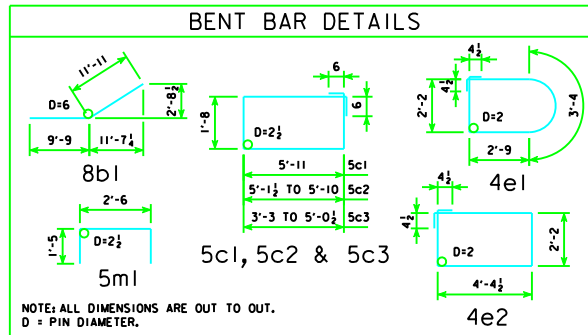




| CAP                      |                      |        |         |     |      |        |     |      |         |     |      |        |     |      |         |     |      |        |     |      |         |     |      |        |     |      |        |  |  |
|--------------------------|----------------------|--------|---------|-----|------|--------|-----|------|---------|-----|------|--------|-----|------|---------|-----|------|--------|-----|------|---------|-----|------|--------|-----|------|--------|--|--|
| REINFORCING STEEL        | 6 - 5 ABUT. BEARINGS |        | 138"-10 |     |      | 151"-4 |     |      | 163"-10 |     |      | 176"-4 |     |      | 188"-10 |     |      | 201"-4 |     |      | 213"-10 |     |      | 226"-4 |     |      | 243"-0 |  |  |
|                          | BAR                  | LENGTH | SHAPE   | NO. | SIZE | WEIGHT | NO. | SIZE | WEIGHT  | NO. | SIZE | WEIGHT | NO. | SIZE | WEIGHT  | NO. | SIZE | WEIGHT | NO. | SIZE | WEIGHT  | NO. | SIZE | WEIGHT | NO. | SIZE | WEIGHT |  |  |
|                          | a1                   | 40'-8" |         | 6   | 9    | 830    | 6   | 9    | 830     | 6   | 10   | 1050   | 6   | 10   | 1050    | 6   | 10   | 1050   | 6   | 11   | 1296    | 6   | 11   | 1296   | 6   | 11   | 1296   |  |  |
|                          | a2                   | 40'-8" |         | 6   | 9    | 830    | 6   | 9    | 830     | 6   | 9    | 830    | 6   | 9    | 830     | 6   | 10   | 1050   | 6   | 10   | 1050    | 6   | 10   | 1050   | 6   | 11   | 1296   |  |  |
|                          | 6a3                  | 40'-8" |         | 6   | 6    | 366    | 6   | 6    | 366     | 6   | 6    | 366    | 6   | 6    | 366     | 6   | 6    | 366    | 6   | 6    | 366     | 6   | 6    | 366    | 6   | 6    | 366    |  |  |
|                          | 6a4                  | VARIES |         | 4   | 6    | 182    | 4   | 6    | 182     | 4   | 6    | 182    | 4   | 6    | 182     | 4   | 6    | 182    | 4   | 6    | 182     | 4   | 6    | 182    | 4   | 6    | 182    |  |  |
|                          | 8b1                  | 21'-8" |         | 8   | 8    | 463    | 8   | 8    | 463     | 8   | 8    | 463    | 8   | 8    | 463     | 8   | 8    | 463    | 8   | 8    | 463     | 8   | 8    | 463    | 8   | 8    | 463    |  |  |
|                          | 5c1                  | 16'-2" |         | 30  | 5    | 506    | 30  | 5    | 506     | 30  | 5    | 506    | 30  | 5    | 506     | 30  | 5    | 506    | 30  | 5    | 506     | 30  | 5    | 506    | 30  | 5    | 506    |  |  |
|                          | 5c2                  | VARIES |         | 16  | 5    | 255    | 16  | 5    | 255     | 16  | 5    | 255    | 20  | 5    | 319     | 20  | 5    | 319    | 20  | 5    | 319     | 28  | 5    | 447    | 28  | 5    | 447    |  |  |
|                          | 5c3                  | VARIES |         | 24  | 5    | 316    | 24  | 5    | 316     | 24  | 5    | 316    | 24  | 5    | 316     | 24  | 5    | 316    | 36  | 5    | 474     | 36  | 5    | 474    | 36  | 5    | 474    |  |  |
| 5m1                      | 5'-4"                |        | 8       | 5   | 45   | 8      | 5   | 45   | 8       | 5   | 45   | 8      | 5   | 45   | 8       | 5   | 45   | 8      | 5   | 45   | 8       | 5   | 45   | 8      | 5   | 45   |        |  |  |
| 5n1                      | 2'-8"                |        | 8       | 5   | 22   | 8      | 5   | 22   | 8       | 5   | 22   | 8      | 5   | 22   | 8       | 5   | 22   | 8      | 5   | 22   | 8       | 5   | 22   | 8      | 5   | 22   |        |  |  |
| TOTAL (LB.)              |                      |        | 3815    |     |      | 3815   |     |      | 4035    |     |      | 4099   |     |      | 4099    |     |      | 4477   |     |      | 4851    |     |      | 4851   |     |      | 5097   |  |  |
| STRUCTURAL CONCRETE (CY) |                      |        | 24.3    |     |      | 24.3   |     |      | 24.3    |     |      | 24.3   |     |      | 24.3    |     |      | 24.3   |     |      | 24.3    |     |      | 24.3   |     |      | 24.3   |  |  |

| COLUMN    |               |                          |         |      |        |        |         |      |        |        |         |      |        |        |         |      |        |        |                    |  |  |  |  |  |  |  |  |  |
|-----------|---------------|--------------------------|---------|------|--------|--------|---------|------|--------|--------|---------|------|--------|--------|---------|------|--------|--------|--------------------|--|--|--|--|--|--|--|--|--|
|           |               | REINFORCING STEEL        |         |      |        |        |         |      |        |        |         |      |        |        |         |      |        |        |                    |  |  |  |  |  |  |  |  |  |
| H IN FEET | COLUMN HEIGHT | STRUCTURAL CONCRETE (CY) | 4#1 BAR |      |        |        | 4#1 BAR |      |        |        | 4#2 BAR |      |        |        | 4#2 BAR |      |        |        | TOTAL WEIGHT (LB.) |  |  |  |  |  |  |  |  |  |
|           |               |                          | NO.     | SIZE | LENGTH | WEIGHT | NO.     | SIZE | LENGTH | WEIGHT | NO.     | SIZE | LENGTH | WEIGHT | NO.     | SIZE | LENGTH | WEIGHT |                    |  |  |  |  |  |  |  |  |  |
| 16        | 6'-3"         | 9.5                      | 44      | 9    | 9'-0"  | 1346   | 14      | 4    | 11'-9" | 110    | 28      | 4    | 13'-0" | 259    | 1715    |      |        |        |                    |  |  |  |  |  |  |  |  |  |
| 17        | 7'-3"         | 11.1                     | 44      | 9    | 10'-0" | 1496   | 16      | 4    | 11'-9" | 126    | 32      | 4    | 13'-0" | 296    | 1918    |      |        |        |                    |  |  |  |  |  |  |  |  |  |
| 18        | 8'-3"         | 12.6                     | 44      | 9    | 11'-0" | 1646   | 18      | 4    | 11'-9" | 141    | 36      | 4    | 13'-0" | 333    | 2120    |      |        |        |                    |  |  |  |  |  |  |  |  |  |
| 19        | 9'-3"         | 14.1                     | 44      | 9    | 12'-0" | 1796   | 20      | 4    | 11'-9" | 157    | 40      | 4    | 13'-0" | 370    | 2322    |      |        |        |                    |  |  |  |  |  |  |  |  |  |
| 20        | 10'-3"        | 15.6                     | 44      | 9    | 13'-0" | 1945   | 22      | 4    | 11'-9" | 173    | 44      | 4    | 13'-0" | 407    | 2525    |      |        |        |                    |  |  |  |  |  |  |  |  |  |
| 21        | 11'-3"        | 17.1                     | 44      | 9    | 14'-0" | 2094   | 24      | 4    | 11'-9" | 188    | 48      | 4    | 13'-0" | 444    | 2726    |      |        |        |                    |  |  |  |  |  |  |  |  |  |
| 22        | 12'-3"        | 18.7                     | 44      | 9    | 15'-0" | 2242   | 26      | 4    | 11'-9" | 204    | 52      | 4    | 13'-0" | 481    | 2929    |      |        |        |                    |  |  |  |  |  |  |  |  |  |
| 23        | 13'-3"        | 20.2                     | 44      | 9    | 16'-0" | 2394   | 28      | 4    | 11'-9" | 220    | 56      | 4    | 13'-0" | 517    | 3131    |      |        |        |                    |  |  |  |  |  |  |  |  |  |
| 24        | 14'-3"        | 21.7                     | 44      | 9    | 17'-0" | 2543   | 30      | 4    | 11'-9" | 235    | 60      | 4    | 13'-0" | 554    | 3332    |      |        |        |                    |  |  |  |  |  |  |  |  |  |
| 25        | 14'-9"        | 22.5                     | 44      | 9    | 17'-6" | 2618   | 30      | 4    | 11'-9" | 235    | 60      | 4    | 13'-0" | 554    | 3407    |      |        |        |                    |  |  |  |  |  |  |  |  |  |
| 26        | 15'-9"        | 24.0                     | 44      | 9    | 18'-6" | 2768   | 32      | 4    | 11'-9" | 251    | 64      | 4    | 13'-0" | 591    | 3610    |      |        |        |                    |  |  |  |  |  |  |  |  |  |
| 27        | 16'-9"        | 25.5                     | 44      | 9    | 19'-6" | 2917   | 34      | 4    | 11'-9" | 267    | 68      | 4    | 13'-0" | 628    | 3812    |      |        |        |                    |  |  |  |  |  |  |  |  |  |
| 28        | 17'-9"        | 27.1                     | 44      | 9    | 20'-6" | 3067   | 36      | 4    | 11'-9" | 283    | 72      | 4    | 13'-0" | 665    | 4015    |      |        |        |                    |  |  |  |  |  |  |  |  |  |
| 29        | 18'-9"        | 28.6                     | 44      | 9    | 21'-6" | 3216   | 38      | 4    | 11'-9" | 298    | 76      | 4    | 13'-0" | 702    | 4216    |      |        |        |                    |  |  |  |  |  |  |  |  |  |
| 30        | 19'-9"        | 30.1                     | 44      | 9    | 22'-6" | 3366   | 40      | 4    | 11'-9" | 314    | 80      | 4    | 13'-0" | 739    | 4419    |      |        |        |                    |  |  |  |  |  |  |  |  |  |
| 31        | 20'-9"        | 31.6                     | 44      | 9    | 23'-6" | 3515   | 42      | 4    | 11'-9" | 330    | 84      | 4    | 13'-0" | 776    | 4622    |      |        |        |                    |  |  |  |  |  |  |  |  |  |
| 32        | 21'-9"        | 33.2                     | 44      | 9    | 24'-6" | 3665   | 44      | 4    | 11'-9" | 345    | 88      | 4    | 13'-0" | 813    | 4823    |      |        |        |                    |  |  |  |  |  |  |  |  |  |
| 33        | 22'-9"        | 34.7                     | 44      | 9    | 25'-6" | 3815   | 46      | 4    | 11'-9" | 361    | 92      | 4    | 13'-0" | 850    | 5026    |      |        |        |                    |  |  |  |  |  |  |  |  |  |
| 34        | 23'-9"        | 36.2                     | 44      | 9    | 26'-6" | 3964   | 48      | 4    | 11'-9" | 377    | 96      | 4    | 13'-0" | 887    | 5228    |      |        |        |                    |  |  |  |  |  |  |  |  |  |
| 35        | 24'-9"        | 37.7                     | 44      | 9    | 27'-6" | 4114   | 50      | 4    | 11'-9" | 392    | 100     | 4    | 13'-0" | 924    | 5430    |      |        |        |                    |  |  |  |  |  |  |  |  |  |
| 36        | 25'-9"        | 39.3                     | 44      | 9    | 28'-6" | 4264   | 52      | 4    | 11'-9" | 408    | 104     | 4    | 13'-0" | 961    | 5633    |      |        |        |                    |  |  |  |  |  |  |  |  |  |
| 37        | 26'-9"        | 40.8                     | 44      | 9    | 29'-6" | 4413   | 54      | 4    | 11'-9" | 424    | 108     | 4    | 13'-0" | 998    | 5835    |      |        |        |                    |  |  |  |  |  |  |  |  |  |
| 38        | 27'-9"        | 42.3                     | 44      | 9    | 30'-6" | 4563   | 56      | 4    | 11'-9" | 440    | 112     | 4    | 13'-0" | 1035   | 6038    |      |        |        |                    |  |  |  |  |  |  |  |  |  |
| 39        | 28'-9"        | 43.8                     | 44      | 9    | 31'-6" | 4712   | 58      | 4    | 11'-9" | 455    | 116     | 4    | 13'-0" | 1072   | 6239    |      |        |        |                    |  |  |  |  |  |  |  |  |  |
| 40        | 29'-9"        | 45.4                     | 44      | 9    | 32'-6" | 4862   | 60      | 4    | 11'-9" | 471    | 120     | 4    | 13'-0" | 1109   | 6442    |      |        |        |                    |  |  |  |  |  |  |  |  |  |

### PIER NOTES:

SEE "TEE PIER NOTES" ON H40-01-06 FOR NOTES REGARDING APPLICATION OF THESE PIER STANDARDS.

MINIMUM CLEAR DISTANCE FROM FACE OF CONCRETE TO NEAR REINFORCING BAR SHALL BE 2 INCHES UNLESS OTHERWISE NOTED OR SHOWN.

ELIMINATE 2x8 BEVELED KEYWAY ON TOP OF CAP FOR EXPANSION PIERS.

SEE SHEET H40-09-06 FOR "U" DIMENSION.

|                                                                                     |                                                                                                               |                   |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|-------------------|
| LATEST REVISION DATE<br><br>APPROVED BY BRIDGE ENGINEER<br><i>Thomas E. McQuinn</i> |                                                                                                               |                   |
|                                                                                     | STANDARD DESIGN - 40' ROADWAY, THREE SPAN BRIDGE<br><b>PRETENSIONED PRESTRESSED<br/>CONCRETE BEAM BRIDGES</b> |                   |
|                                                                                     | HL93 SUPERSTRUCTURE<br>DECEMBER, 2006                                                                         | HS25 SUBSTRUCTURE |
|                                                                                     | <b>TEE PIER<br/>CAP AND COLUMN</b><br>0° SKEW                                                                 |                   |
|                                                                                     |                                                                                                               | <b>H40-54-06</b>  |