

PILE BENT NOTES:

THESE PIER BENTS ARE DESIGNED FOR USE IN LOCATIONS WHERE ICE AND DRIFT CONDITIONS ARE NOT SEVERE.

FOR DETAILS OF TRESTLE PILES, TYPES 1, 2 AND 3, SEE STANDARD PIOL.

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

PIER PILES SHALL BE DRIVEN TO VALUES SHOWN IN DESIGN PLANS.

REINFORCING BAR LIST AND ESTIMATED QUANTITIES - PER PILE BENT

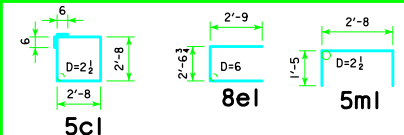
| BAR | LENGTH | SHAPE | 9 PILE BENT | | | 10 PILE BENT | | | 11 PILE BENT | | | 12 PILE BENT | | | 13 PILE BENT | | | 14 PILE BENT | | | 15 PILE BENT | | | 16 PILE BENT | | |
|--------------------------|--------|-------|-------------|------|--------|--------------|------|--------|--------------|------|--------|--------------|------|--------|--------------|------|--------|--------------|------|--------|--------------|------|--------|--------------|------|--------|
| | | | NO. | SIZE | WEIGHT | NO. | SIZE | WEIGHT | NO. | SIZE | WEIGHT | NO. | SIZE | WEIGHT | NO. | SIZE | WEIGHT | NO. | SIZE | WEIGHT | NO. | SIZE | WEIGHT | NO. | SIZE | WEIGHT |
| q1 | 40'-8 | | 6 | 9 | 830 | 6 | 9 | 830 | 6 | 9 | 830 | 6 | 9 | 830 | 6 | 9 | 830 | 6 | 9 | 830 | 6 | 9 | 830 | 4 | 9 | 553 |
| q2 | 40'-8 | | 4 | 8 | 434 | 4 | 8 | 434 | 4 | 8 | 434 | 4 | 8 | 434 | 4 | 8 | 434 | 4 | 8 | 434 | 4 | 8 | 434 | 4 | 8 | 434 |
| b1 | 40'-8 | | 4 | 9 | 553 | 4 | 9 | 553 | 4 | 9 | 553 | 4 | 9 | 553 | 4 | 9 | 553 | 4 | 9 | 553 | 4 | 9 | 553 | 4 | 8 | 434 |
| 5c1 | 11'-8 | | 34 | 5 | 414 | 38 | 5 | 462 | 42 | 5 | 511 | 46 | 5 | 560 | 50 | 5 | 608 | 41 | 5 | 499 | 44 | 5 | 535 | 32 | 5 | 389 |
| 8e1 | 8'-1 | | 4 | 8 | 86 | 4 | 8 | 86 | 4 | 8 | 86 | 4 | 8 | 86 | 4 | 8 | 86 | 4 | 8 | 86 | 4 | 8 | 86 | 4 | 8 | 86 |
| 5m1 | 5'-6 | | 8 | 5 | 46 | 8 | 5 | 46 | 8 | 5 | 46 | 8 | 5 | 46 | 8 | 5 | 46 | 8 | 5 | 46 | 8 | 5 | 46 | 8 | 5 | 46 |
| 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 |
| REINFORCING STEEL (LB.) | | | 2385 | | | 2433 | | | 2482 | | | 2531 | | | 2579 | | | 2470 | | | 2387 | | | 1964 | | |
| STRUCTURAL CONCRETE (CY) | | | 1, 2 | | | 14.1 | | | 14.0 | | | 14.0 | | | 14.5 | | | 13.9 | | | 14.5 | | | 13.8 | | |
| PILE TYPE | | | ----- | | | ----- | | | ----- | | | ----- | | | ----- | | | ----- | | | ----- | | | ----- | | |
| PILE TYPE | | | 3 | | | 14.5 | | | 14.5 | | | 14.5 | | | 14.5 | | | 14.5 | | | 14.5 | | | 14.5 | | |

NOTE: THE REINFORCING STEEL QUANTITY IS TO BE INCLUDED ON THE SUMMARY QUANTITIES SHEET IN THE PLAN.

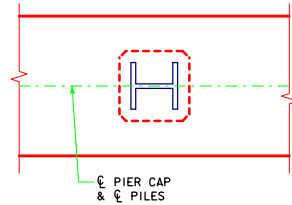
NOTE: THE CONCRETE QUANTITY IS TO BE INCLUDED ON THE SUMMARY QUANTITIES SHEET IN THE PLAN.

NOTE: THE NUMBER OF PILES AND THE PILE TYPE ARE TO BE INCLUDED ON THE SUMMARY QUANTITIES SHEET IN THE PLAN.

BENT BAR DETAILS



NOTE: ALL DIMENSIONS ARE OUT TO OUT. D=PIN DIAMETER.

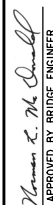



PILE ORIENTATION DETAIL FOR TYPE 3 TRESTLE BENT PILES

| E-E ABUTMENT BEARING | FRICTION BEARING PILING | | | FRICTION OR POINT BEARING PILING | | |
|----------------------|-------------------------|----------------|--|----------------------------------|-----------|--|
| | PIOL TYPE 1 OR 2 | | | PIOL TYPE 3 | | |
| | NUMBER OF TRESTLE PILES | ② "K" (INCHES) | ③ LRFD PU, STRENGTH I DES. LOAD (KIPS) | NUMBER OF TRESTLE PILES | PILE SIZE | ③ LRFD PU, STRENGTH I DES. LOAD (KIPS) |
| 138'-10 | 13 | 14 | 91 | 9 | HP10x57 | 131 |
| | 11 | 16 | 107 | 9 | HP12x53 | 131 |
| 151'-4 | 14 | 14 | 89 | 9 | HP10x57 | 138 |
| | 12 | 16 | 104 | 10 | HP12x53 | 124 |
| 163'-10 | ----- | ----- | ----- | 10 | HP10x57 | 134 |
| | ----- | ----- | ----- | 10 | HP12x53 | 134 |
| 176'-4 | ----- | ----- | ----- | 10 | HP10x57 | 141 |
| | ----- | ----- | ----- | 11 | HP12x53 | 128 |
| 188'-10 | ----- | ----- | ----- | 11 | HP10x57 | 133 |
| | ----- | ----- | ----- | 11 | HP12x53 | 133 |
| 201'-4 | ----- | ----- | ----- | 12 | HP10x57 | 136 |
| | ----- | ----- | ----- | 13 | HP12x53 | 126 |
| 213'-10 | ----- | ----- | ----- | 12 | HP10x57 | 143 |
| | ----- | ----- | ----- | 13 | HP12x53 | 132 |
| 226'-4 | ----- | ----- | ----- | 13 | HP10x57 | 139 |
| | ----- | ----- | ----- | 14 | HP12x53 | 129 |
| 243'-0 | ----- | ----- | ----- | 14 | HP10x57 | 136 |
| | ----- | ----- | ----- | 15 | HP12x53 | 127 |

- ① CONCRETE QUANTITIES SHOWN HAVE HAD THE VOLUME OF EMBEDDED PILES DEDUCTED FOR TYPES 1 AND 2 BASED ON 0.8 FT³ PER FOOT OF EMBEDMENT. THE CONCRETE QUANTITIES FOR TYPE 3 PILES DO NOT REQUIRE REDUCTION FOR PILE EMBEDMENT.
- ② SEE STANDARD PIOL FOR "K" DIMENSION.
- ③ NOTE: PU, STRENGTH I DESIGN LOAD (KIPS) IS NOT THE VALUE USED IN THE FIELD FOR DRIVING PILES.

NOTE: FRICTION BEARING INCLUDES SIDE FRICTION AND END BEARING IN SOIL. POINT BEARING INCLUDES SIDE FRICTION AND POINT BEARING IN ROCK.

| | | | |
|----------------------|--|---|------------------|
| LATEST REVISION DATE |  APPROVED BY BRIDGE ENGINEER |  STANDARD DESIGN - 40' ROADWAY, THREE SPAN BRIDGE PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGES SEPTEMBER, 2014 | |
| | | PILE BENT PIERS 0° SKEW | H40-46-14 |
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