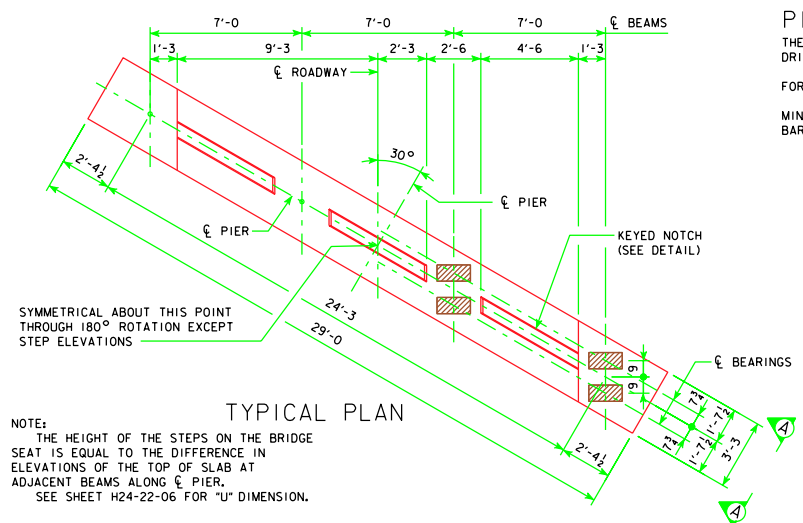
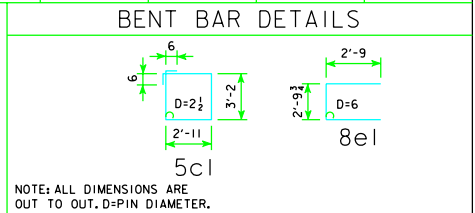


REVISED 01-10 - SHEET WAS REVISED TO MEET LRFD SPECIFICATIONS.



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

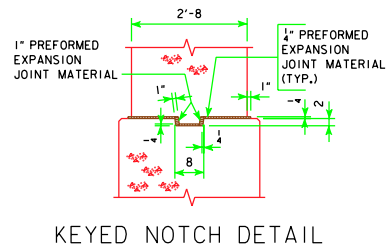
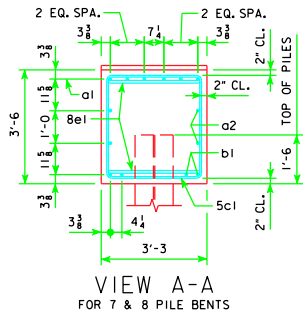
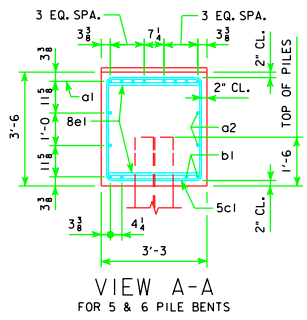
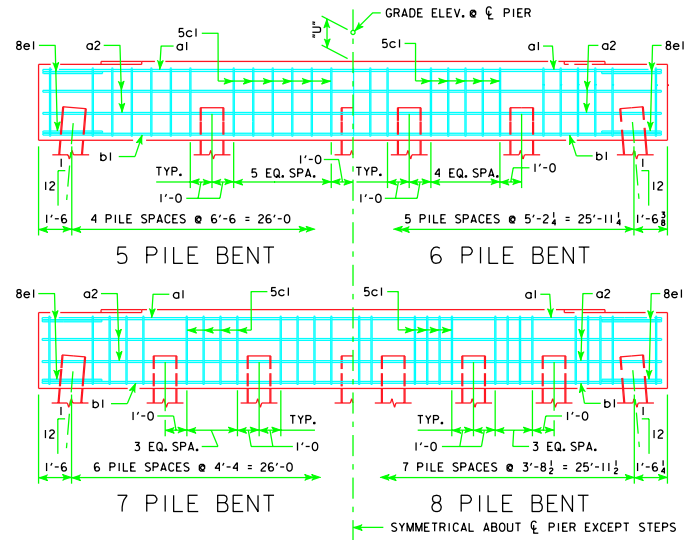
| REINFORCING BAR LIST AND ESTIMATED QUANTITIES - PER PILE BENT |        |                                                                                     |             |      |        |             |      |        |             |      |        |             |      |        |
|---------------------------------------------------------------|--------|-------------------------------------------------------------------------------------|-------------|------|--------|-------------|------|--------|-------------|------|--------|-------------|------|--------|
|                                                               |        |                                                                                     | 5 PILE BENT |      |        | 6 PILE BENT |      |        | 7 PILE BENT |      |        | 8 PILE BENT |      |        |
| BAR                                                           | LENGTH | SHAPE                                                                               | NO.         | SIZE | WEIGHT | NO.         | SIZE | WEIGHT | NO.         | SIZE | WEIGHT | NO.         | SIZE | WEIGHT |
| a1                                                            | 28'-8" |  | 8           | 9    | 780    | 8           | 9    | 780    | 6           | 9    | 585    | 6           | 9    | 585    |
| a2                                                            | 28'-8" |  | 4           | 8    | 306    | 4           | 8    | 306    | 4           | 8    | 306    | 4           | 8    | 306    |
| b1                                                            | 28'-8" |  | 4           | 8    | 306    | 4           | 8    | 306    | 4           | 8    | 306    | 4           | 8    | 306    |
| 5c1                                                           | 13'-2" |  | 26          | 5    | 357    | 27          | 5    | 371    | 26          | 5    | 357    | 30          | 5    | 412    |
| 8e1                                                           | 8'-4"  |  | 4           | 8    | 89     | 4           | 8    | 89     | 4           | 8    | 89     | 4           | 8    | 89     |
| REINFORCING STEEL (LB.)                                       |        |                                                                                     | 1838        |      |        | 1852        |      |        | 1643        |      |        | 1698        |      |        |
| STRUCTURAL CONCRETE (CY)                                      |        |                                                                                     | 3           |      |        | 3           |      |        | 3           |      |        | 3           |      |        |



| $\xi$ - $\xi$ ABUTMENT BEARING | FRICTION OR POINT BEARING PILING |           |                         |                         |
|--------------------------------|----------------------------------|-----------|-------------------------|-------------------------|
|                                | PIOL TYPE 3                      |           |                         |                         |
|                                | NUMBER OF TRESTLE PILES          | PILE SIZE | ② DES. PILE BRG. (TONS) | ③ LRFD DES. BRG. (KIPS) |
| 138'-10"                       | 5                                | HP14x73   | 60                      | 175                     |
|                                | 5                                | HP14x89   | 60                      | 175                     |
| 151'-4"                        | 5                                | HP14x73   | 63                      | 184                     |
|                                | 5                                | HP14x89   | 63                      | 184                     |
| 163'-10"                       | 6                                | HP14x73   | 57                      | 165                     |
|                                | 5                                | HP14x89   | 68                      | 198                     |
| 176'-4"                        | 6                                | HP14x73   | 59                      | 172                     |
|                                | 5                                | HP14x89   | 71                      | 207                     |
| 188'-10"                       | 6                                | HP14x73   | 62                      | 180                     |
|                                | 5                                | HP14x89   | 74                      | 216                     |
| 201'-4"                        | 7                                | HP14x73   | 59                      | 170                     |
|                                | 6                                | HP14x89   | 68                      | 199                     |
| 213'-10"                       | 7                                | HP14x73   | 62                      | 179                     |
|                                | 6                                | HP14x89   | 72                      | 208                     |
| 226'-4"                        | 8                                | HP14x73   | 57                      | 165                     |
|                                | 6                                | HP14x89   | 76                      | 219                     |
| 243'-0"                        | 8                                | HP14x73   | 60                      | 173                     |
|                                | 7                                | HP14x89   | 68                      | 198                     |

- ① SEE SHEET H24-24-06 FOR STEP REINFORCING STEEL QUANTITIES AND DETAILS.
- ② FOR DETERMINING ACTUAL PILE LENGTHS IN FIELD.
- ③ FOR ESTIMATING PILE LENGTHS USING AASHTO LRFD SPECIFICATIONS.

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



LATEST REVISION DATE

01-10

APPROVED BY BRIDGE ENGINEER

*Thomas E. McQuinn*

STANDARD DESIGN - 24' ROADWAY, THREE SPAN BRIDGE  
PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGES  
DECEMBER, 2006

PILE BENT PIERS  
HP14 PILES  
30° SKEW

H24-47-06