

**IOWA DEPARTMENT OF TRANSPORTATION**

To Office Bridges and Structures Date January 1, 2010  
Attention All Employees Ref No. 521.1  
From Gary Novey  
Office Bridges and Structures  
Subject Revision of the English Bridge Standards Series H24-06.  
(CADD M0166)

The revised standards are located in the H24-06.dgn files. Electronic copies are available in the following Office of Bridges and Structures standard directory

**W:\Highway\Bridge\Standards\Bridges** and on the Internet:

<http://www.iowadot.gov/bridge/standard.htm>

1. Index and Notes: H24-01-06 and H24-02-06.
  - a. The T-Pier Notes were revised to the LRFD specifications.
  - b. References to the Iowa DOT Construction Specifications were revised for the new 2009 series.
  - c. The index of sheets was revised for the additional substructure sheets.
2. Superstructure Details: H24-03-06 and H24-04-06.
  - a. The details and notes for the Concrete Sealer Limits on the Open Rails were revised to show increased sealing limits.
  - b. References to the Iowa DOT Construction Specifications were updated for the new 2009 series.
3. Abutment Details (all skews): H24-05-06, H24-06-06, H24-11-06, H24-12-06, H24-18-06, H24-19-06, H24-25-06, and H24-26-06
  - a. Piling number and design loads were revised to meet the LRFD Specifications.
  - b. The abutment wing was revised to the new office standard.
4. Longitudinal Section (all skews): H24-07-06, H24-08-06, H24-13-06, H24-14-06, H24-20-06, H24-21-06, H24-27-06, and H24-28-06
  - a. The wing details were revised to the Office of Bridges and Structures' new standards.
  - b. Details A was revised to show the centerline of bearing for the prestressed beams.

5. Superstructure Details (all skews): H24-09-6, H24-15-06, H24-22-06 and H24-29-06
  - a. The Estimated Quantities and Concrete Placement Quantities were revised to include changes to piling, prebore, reinforcement, and concrete quantities in the detail sheets.
  - b. The concrete placement note was revised.
6. Deck & Abutment Reinforcement. (all skews): H24-10-6, H24-16-06, H24-23-06, and H24-30-06
  - a. The wing and abutment reinforcing quantities were revised to include changes in reinforcement quantities in the detail sheets from the wing revisions and changes in piling number.
7. A, B and C Beam Details: H24-32-06 to H24-37-06
  - a. Beam notes were revised to the 2007 LRFD specifications, 4<sup>th</sup> ed.
  - b. The beam details were revised to agree with the office's standards.
  - c. References to the Iowa DOT Construction Specifications were updated for the new 2009 series.
8. Intermediate Steel Diaphragms: H24-38-06
  - a. Minor revisions were made to the sheet to agree with the office's standards.
9. Open Rail Details: H24-39-06 and H43-40-06
  - a. The end section was revised to agree with the new wing details.
  - b. References to the Iowa DOT Construction Specifications were updated for the new 2009 series.
  - c. The reinforcing and concrete quantities were revised due to the revisions.
  - d. View A-A and Section B-B were added.
10. Pier Bearing Details (all skews): H24-41-06
  - a. The bearing details were revised to agree with the revised office standards, which included the shear stud details and revised keeper bar details.
11. Pile Bent Piers (all skews): H24-42-06, H24-44-06, H24-46-06, and H24-48-06
  - a. Sheets were revised to meet the LRFD specifications.
  - b. In the pile table, LRFD design bearing values were added for piling design.
  - c. Pile orientation details were added.
12. Pile Bent Piers HP14 Piles (all skews): H24-43-06, H24-45-06, H24-47-06, and H24-49-06

- a. New sheets were added for the 14 in. pile option, which were designed using the LRFD specifications.
  - b. Pile cap depths up to 3 ft – 6 in were used.
13. T-pier Cap and Column (all skews): H24-50-06, H24-57-06, H24-64-06, and H24-71-06
  - a. Sheets were revised to meet the LRFD design specification.
14. T-Pier, Steel Pile Footing, 50 Tons, 6 ksi service (all skews): H24-51-06, H24-52-06, H24-58-06, H24-59-06, H24-65-06, H24-66-06, H24-72-06 and H24-73-06
  - a. Sheets were revised to meet the LRFD design specifications.
15. T-Pier, Steel Pile Footing, 75 Tons, 9 ksi service (all skews): H24-53-06, H24-54-06, H24-60-06, H24-61-06, H24-67-06, H24-68-06, H24-74-06 and H24-75-06
  - a. Sheets were added for a 75 ton steel pile option, which was designed to meet the LRFD design specifications.
16. Spread Footing (all skews): H24-55-06, H24-56-06, H24-62-06, H24-63-06, H24-69-06, H24-70-06, H24-76-06, and H24-77-06
  - a. Sheets were revised to meet the LRFD design specifications.
17. Subdrains Details: H24-78-06
  - a. The Granular Backfill Detail was deleted and a note was added referring to the Abutment Backfill details not shown on this sheet.
18. Wing Armoring Details: H24-79-06 and H24-80-06
  - a. References to the Iowa DOT Construction Specifications were updated for the new 2009 series.
19. Abutment Backfill Details: H24-81-06 to H24-84-06
  - a. The sheet was revised to meet the Office of Bridges and Structures standards for floodable backfill.
  - b. The table was updated to show “Apparent Opening Size”.

If you have any questions about these revised standards, please check with Thayne Sorenson or Stuart Nielsen.

GAN/tos/bj