

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 H40-02-06, H40-05-06, H40-06-06, H40-11-06, H40-12-06, H40-18-06, H40-19-06, H40-25-06, H40-26-06, H40-46-06, H40-47-06, H40-49-06, H40-50-06, H40-52-06, H40-53-06, H40-55-06, H40-56-06, H40-57-06, H40-58-06, H40-60-06, H40-61-06, H40-62-06, H40-64-06, H40-65-06, H40-66-06, H40-68-06, H40-69-06, H40-70-06, H40-72-06, H40-73-06, H40-74-06, H40-76-06, H40-77-06, H40-78-06, H40-80-06, H40-81-06, H40-82-06, H40-84-06, H40-85-06, H40-86-06, H40-88-06, H40-92-06, H40-93-06, H40-94-06, and H40-95-06.
(CADD M0169)

The revised standards are located in the H40-06.dgn file. Electronic copies are available in the following Office of Bridges and Structures standard directory

W:\Highway\BridgeStandardsBridges and on the Internet:

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

1. Standards H40-02-06 The sixth paragraph of the "Tee Pier Notes" was revised to provide additional information for Friction & Point Bearing piling.
2. H40-46-06, H40-47-06, H40-49-06, H40-50-06, H40-52-06, H40-53-06, H40-55-06, H40-56-06 were revised to add the following note:

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

3. Standards H40-05-06, H40-06-06, H40-11-06, H40-12-06, H40-18-06, H40-19-06, H40-25-06, H40-26-06 were revised to add the following note:
 - a. FOR DETERMINING ACTUAL PILE LENGTHS IN FIELD.
 - b. FOR ESTIMATING PILE LENGTHS USING AASHTO LRFD SPECIFICATIONS.
4. Standards H40-57-06, H40-65-06, H40-73-06, and H40-81-06 were revised to add the "PIER NOTES" as shown:

**PIER NOTES:
SEE "TEE PIER NOTES" ON H44-02-07 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.

FOR SIZE OF BEARING PADS, SEE H44-37-07.

SEE SHEET H44-09-07 FOR "U" DIMENSION.

5. Standards H40-58-06, H40-66-06, H40-74-06, and H40-82-06 were revised to delete the "PIER NOTES".
6. Standards H40-60-06, H40-61-06, H40-62-06, H40-68-06, H40-69-06, H40-70-06, H40-76-06, H40-77-06, H40-78-06, H40-84-06, H40-85-06, H40-86-06, and were revised to add the following "FOOTING NOTES", so these standard sheets could be used independently (Note shown is for sheet H40-60-06).

FOOTING NOTES:

THESE FOOTINGS ARE DESIGNED AND DETAILED TO BE USED WITH THE CAP AND COLUMN DETAILS OF THE TEE PIERS AS SHOWN ON SHEET H40-57-06.

BATTER PILES IN EXTERIOR ROWS 1:4 IN THE DIRECTION SHOWN. STEEL PILING USED AS POINT BEARING SHALL HAVE A MINIMUM DISTANCE OF APPROXIMATELY 10 FEET FROM BOTTOM OF FOOTING TO TOP OF BEARING ROCK. THE PILE LAYOUTS ARE SUCH THAT THE DISTANCE CENTER TO CENTER OF ADJACENT PILING SHALL NOT EXCEED 8'-0.

7. Standards H40-64-06, H40-72-06, H40-80-06, and H40-88-06 were revised to add the following "FOOTING NOTES", so these standard sheets could be used independently (Note shown is for sheet H40-64-06).

FOOTING NOTES:

THESE SPREAD FOOTINGS ARE DESIGNED AND DETAILED TO BE USED WITH THE CAP AND COLUMN DETAILS OF THE TEE PIERS AS SHOWN ON SHEET H40-57-06.

THESE SPREAD FOOTINGS SHALL EXTEND AT LEAST 6 INCHES INTO SUITABLE FOUNDATION ROCK AND THE LAST 6 INCHES OF ROCK EXCAVATION SHALL BE TO NEAT LINES OF MASONRY. THE FOUNDATION ROCK SHALL HAVE A MINIMUM LRFD NOMINAL BEARING RESISTANCE OF 30 kips PER SQUARE FOOT (ALLOWABLE BEARING VALUE OF AT LEAST 5 TONS PER SQUARE FOOT).

8. Standards H40-92-06, H40-93-06, H40-94-06, and H40-95-06 the table was revised to replace “PERMEABILITY” with “APPARENT OPENING SIZE” .

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

GAN/tos/bj