IOWA DEPARTMENT OF TRANSPORTATION

To Office   Bridges and Structures   Date   November 1, 2007

Attention   All Employees   Ref No.   521.1

From   Gary Novey

Office   Bridges and Structures

Subject   The issuance of the new 3'-8 Barrier Rail Standards (1018C, 1018D, 1020D, 1020E and 1020F and Revisions to 1018, 1018A, 1020A, 1020B, and 1020C.
(CADD M0089)

The following new standards have been issued 1018C, 1018D, 1020D, 1020E & 1020F. These standards have a 3'-8 tall F-shape barrier rails and meet the TL-5 test level crash requirements. The rail heights taper from 3'-8 to 2'-10 over 4'-0 at the ends. The standard 2'-10 end section for guard rail attachment was unchanged. In addition, minor revisions were made to standards 1018, 1018A, 1020A, 1020B, and 1020C as noted below.

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.dot.state.ia.us/bridge/standard.htm

The new Standards are:

1. 1018C is the R.A. (Right Ahead) Skewed Stub Abutment with Wing Extensions standard.

2. 1018D is the L.A. (Left Ahead) Skewed Stub Abutment with Wing Extensions standard.

3. 1020D is the Integral Abutment without Wing Extensions standard.

4. 1020E is the non-Skewed Stub Abutment with Wing Extensions standard.

5. 1020F is the Integral Abutment with Wing Extensions standard.

These standards should be used on any new bridge project that that requires 3'-8 barrier rail height. See MM No. 162 (June 29, 2007) for guideline on 3'-8 barrier rails use.

Standards 1018, 1018A, 1020A, 1020B, and 1020C were revised as follows:

1. The reinforcing quantities for the barrier rail end section were corrected for 1020A, 1020B, and 1020C to 408 lbs and 1632 lbs.
2. The vertical leg of the 5c3 bar was lengthened from 2'-5 to 2'-10 for 1018, 1018A, 1020B, and 1020C.

3. The vertical leg of the 5c16 bar was lengthened from 2'-5 to 2'-10 for 1018 and 1018A.

If you have any questions on the updated sheets, please check with Thayne Sorenson or Dean Bierwagen.

GAN/dgb/bj