

# PENNDOT e-Notification

Bureau of Information Systems  
Application Development Division



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## BAR7

No. 005  
August 8, 2005

**Release of Version 7.11.0.8**

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PENNDOT's Bridge Analysis and Rating (BAR7) program has been revised as described on the attached Summary of July 2005 Revisions – Version 7.11.0.8.

The new program has been placed on PENNDOT servers for use by the Districts. Consultants and others, who have a current license for **BAR7 Version 7.11.0.6**, can download Version 7.11.0.8 **free** of charge from our support website at <http://penndot.engrprograms.com>. Installation instructions are provided at the website.

Those who have a current license for **BAR7 Version 7.11** must perform two updates. Download and update to Version 7.11.0.6 first and then download and install Version 7.11.0.8.

Those who have a current license for **BAR7 Version 7.10 or Version 7.10a** must perform three updates. Download and update to Version 7.11 first, download and install Version 7.11.0.6 second and then download and install Version 7.11.0.8.

Updates for **BAR7 Version 7.9 or earlier** will require an **update fee**. Update Request and Ordering forms can be downloaded from the website. Calculate the update fee based on the Version of the program, i.e., \$50 for Version 7.9, \$100 for Version 7.8, etc.

Direct any questions concerning the above to:

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## SUMMARY OF JULY 2005 REVISIONS -VERSION 7.11.0.8

BAR7 Version 7.11.0.8 contains the following revisions.

1. A problem has been corrected where a truss analyzed for a uniform lane load entered via the Special Live Load input gives the same incorrect result for LL forces regardless of the value entered for the Uniform Lane Load. (BAR7REV131)
2. The revision to BAR7 v7.10 (BAR7REV047) required the use of AASHTO 10.48.8.3 Equation (10-149) when calculating the allowable shear force for hybrid girders. This was causing unusually low ratings for some existing structures. A new input item (HYB) has been added to act as a switch. The purpose of this new input switch will be to select the shear rating equation to use for hybrid sections, AASHTO 10.48.8.3 equation (10-149) or equation (10-113). (BAR7REV132)
3. The revision to BAR7 v7.11.0.6 (BAR7REV128) did not change the calculation of the allowable shear force in an end panel. It simply provided a switch to disallow end panel shear governing. This sometimes resulted in a rating of 999.99 reported at that section. Instead of using the new END PANEL input switch to override the end panel shear rating, the switch is now used to determine whether to use AASHTO Equation (10-118) or (10-113). (BAR7REV133)
4. For a continuous composite girder, the program attempts to compute a negative moment rating based on the amount of reinforcement in the slab. When zero area of steel is entered for the longitudinal slab reinforcement, the program abnormally terminated with a divide by zero. A check has been added to print an input error when no longitudinal slab reinforcement is entered for a continuous composite girder. (BAR7REV134)
5. Figure 2.4.1 Standard Live Loadings has been revised to reflect the more accurate value of 13.68 kips for the first axle of the ML80 live load. (BAR7REV135)