

PENNDOT e-Notification

Bureau of Information Systems
Application Development Division



BAR7

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Release of Version 7.11.0.6

PENNDOT's Bridge Analysis and Rating (BAR7) program has been revised as described on the attached Summary of December 2004 Revisions – Version 7.11.0.6.

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**, can download Version 7.11.0.6 **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 7.10 or Version 7.10a** must perform two updates. Download and update to Version 7.11 first, then download and install Version 7.11.0.6.

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 DECEMBER 2004 REVISIONS—VERSION 7.11.0.6

BAR7 Version 7.11.0.6 contains the following revisions.

1. Add a warning message to clarify the situation where the user enters a shear distribution factor and designates that there is only one stringer and it is an interior stringer. The program will use the inputted value instead of the value calculated based on the interior stringer's spacing. (BAR7REV116)
2. Correct a problem where a Type GFS structure with no slab and very small stringers plus multiple stringer spans and multiple live loads caused an abnormal termination. (BAR7REV117)
3. Clarified the descriptions of the DL1 and DL2 input items in the User's Manual pertaining to their use in the application of sidewalk live load. (BAR7REV118)
4. Add two new codes for the LIVE LOAD input item on the PROJECT IDENTIFICATION data. Use code "I" to consider HS20 and ML80 loadings. Use code "J" to consider HS25, IML and ML80 loadings. (BAR7REV055)
5. Correct the User's Manual on page 1-2. Define AASHTO Specifications as AASHTO Standard Specifications for Highway Bridges, Fifteenth Edition, 1996. (BAR7REV120)
6. Correct a problem where a Type GFF structure with more than fourteen floorbeams caused an abnormal termination. (BAR7REV121)
7. Increase the size limit for the length of file names so that extra long file names (more than 100 characters) may be used. (BAR7REV122)
8. Correct an error in the calculation of the load factor rating based on concrete strength in a composite section. The program now computes the stress due to DL2 using the modular ratio of $3n$. Previously it was incorrectly using the modular ratio of n . (BAR7REV123)
9. Apply one-lane distribution factor instead of multi-lane distribution factor to the HS20 TRK STRESS $+(LL+I)$ and $-(LL+I)$ values printed in the FATIGUE LIFE ESTIMATION output. (BAR7REV060)
10. On the Girder Fatigue Detail input, add fatigue detail categories BP and EP, equivalent to B' and E', to work around an issue with Engineering Dataset Manager. (BAR7REV124)
11. Correct a problem where the program printed asterisks in some of the Fatigue Analysis output fields when running with Output Option 6. (BAR7REV126)
12. When calculating the live load factors for a floorbeam, neglect the wheel loads that do not fall within the limits of the length of the floorbeam. (BAR7REV127)
13. Add a new input item (END PANEL) to the Project Identification to act as a switch to disallow the shear in the end panel from governing the rating at that section. BAR7 version 7.9 and earlier erroneously allowed the shear capacity to include post buckling strength in the end panel of girders. This was also true for the interior and end panels of hybrid girders. BAR7 version 7.10 corrected this problem, however, the load rating for some girder structures are now controlled by low shear ratings in the end panel. (BAR7REV128)
14. Add an input error message when brace point spacing is entered greater than the span length. (BAR7REV129)