

PennDOT e-Notification

Bureau of Business Solutions and Services
Highway/Engineering Applications Division



SPLRFD

No. 003
May 10, 2010

Release of Version 1.3.0.0

PENNDOT's LRFD Steel Girder Splice Design and Analysis Program (SPLRFD) has been revised as described on the attached Summary of February 2010 Revisions – Version 1.3.0.0.

The new version has been placed on PENNDOT servers for use by the Districts. Consultants and others, who have a current license agreement for SPLRFD, can obtain Version 1.3.0.0 by submitting a Software Update Request form with the appropriate update fee. Updates for SPLRFD Version 1.2.0.0 require an update fee of \$300 for consultants and \$50 for governmental agencies and educational institutions. Updates for SPLRFD Version 1.1.0.0, Version 1.0, or Version 1.0a require an update fee of \$600 for consultants and \$100 for governmental agencies and educational institutions. No update fee is required for Federal and State Transportation Agencies.

The Software Update Request form can be obtained on the PENNDOT Engineering Software Support website at <http://penndot.engrprograms.com> by clicking on "Ordering/Updating" and, then, "Update Form".

Please direct any questions concerning the above to:

Shyh-hann Ji, P.E.

PENNDOT Bureau of Information Systems

Application Development Division

Phone: (717)783-8822 | Fax: (717) 705-5529

e-mail: sji@state.pa.us

Attachment

Archived copies of all previously distributed e-Notifications can be obtained from the PENNDOT LRFD and Engineering Programs website at <http://penndot.engrprograms.com/home> and clicking on "e-Notification" and then "Mailing List Archives."

SUMMARY OF FEBRUARY 2010 REVISIONS - VERSION 1.3.0.0

Since the release of SPLRFD Version 1.2.0.0 several revision requests and user requested enhancements have been received. This release of SPLRFD Version 1.3.0.0 contains the following revisions and enhancements.

User's Manual Revisions

1. Chapter 5 of the user's manual has been revised to clarify bolt hole diameter input for parameter 2 and parameter 3 for Section 5.13 and 5.16 respectively (Request 065).
2. Chapter 9 of the user's manual has been updated for issues regarding the PennDOT Bureau name. Two instances of "Engineering Unit" and one instance of "Bureau of Information Systems" have been placed by "Engineering Software Section" and "Bureau of Business Solutions and Services", respectively (Request 068).

Output Revisions

3. SPLRFD will now produce PDF versions of all output in addition to the text-only files (Request 070).

Design Revisions

4. SPLRFD has been corrected for issues regarding the designed splice showing a web specification failure. The web splice plate thickness can now be automatically incremented if the web splice bolt pitch is greater than the maximum allowable bolt spacing (eliminating the possibility of a web specification failure). This feature is available via the 'BOLT PITCH CORRECTION' parameter in the WSB command. In addition to the bolt pitch correction, SPLRFD has been modified to calculate the minimum allowable number of bolts per gage line to start the design process, according to the upper bound of the *Maximum Spacing for Sealing Bolts* from the AASHTO LRFD Bridge Design Specifications (6.13.2.6.2-1 and 6.13.2.6.2-2), to reduce the number of design cycles. This enhancement will be enabled when the 'Minimum Bolts per Gage Line' parameter from the WSB command is left blank (Request 061).

Input Revisions

5. SPLRFD has been revised to prevent a crash that results from the design live load moment exceeding the factored flexural resistance. This problem has been remedied by checking if the design live load is greater than the factored flexural resistance input by the user, and then aborting with an error message (Request 071).
6. SPLRFD has been revised to allow negative values to be entered for all DDL command parameters within the EngAsst program (Request 066).
7. As a result of a decision by the AASHTO Subcommittee on Bridges and Structures to no longer publish SI unit specifications, the program only supports US customary (US) units. The only acceptable entry for the CTL command parameter 1, System of Units, is "US" (Request 072).