2008
Bridge Load Rating
Class 101
I. Introductions
II. Load Rating Basics
III. General Equations
IV. Load Rating Procedure
V. Incorporating Member Distress
VI. Posting, SHV’s and Permitting
VII. Load Rating Example #1
  • Simple Span Non-composite Steel
Workshop Agenda

VIII. Load Rating Example #2
  - Simple Span Nail Laminated Timber Deck (without distress)

IX. Class Exercise
  - Simple Span Nail Laminated Timber Deck (with distress)

X. Review of worked out examples

XI. Submittal to MN/DOT and Review of Process

XII. Common mistakes and questions
Bridge Load Rating Class 101

Presenters

• Dave Conkel, P.E.
  State Aid Bridge Engineer

• Brian Homan, P.E.
  Assistant State Aid Bridge Engineer

• Ed Lutgen, P.E.
  North Region Bridge Engineer
Special Thanks to our Class Sponsors

• Minnesota County Engineers Association
  Bridge Committee
  Alan Forsberg, Blue Earth Co.
  Jim Grube, Hennepin Co.,
  & Members

Standards Committee
Gary Danielson, Kandiyohi Co.
Dave Enblom, Cass Co.,
& Members
Special Thanks to our Class Sponsors

- **Special County Engineers**
  Class Planning
  Duane Blanck (Retired), Crow-Wing Co.
  David Halbersma, Pipestone Co.

- **Mn/DOT**
  State Aid Office
  Patti Loken, Mary Ann Hillyer, Julie Skallman, Rick Kjonaas & Staff
  Bridge Office
  Dan Dorgan, Gary Peterson, Lowell Johnson, Kevin Western, Jim Pierce, Steve Brown & Staff
Bridge Load Rating Class 101

Course Goal

• The class was born from legislation, dubbed the “Timber Haulers Bill”, which allows special permits with appropriate fees for increased vehicle loading.

• This class is financed with money from the Timber Haulers Bill, and was developed due to an overall general interest of the Minnesota County Engineer in load rating and posting.
Bridge Load Rating Class 101

Course Goal

• This class was created with input from other Minnesota County Engineers and Mn/DOT Bridge Rating Engineers to give us:
  
  ▪ A basic understanding of local bridge rating and posting.

  ▪ Provide information on the use of load rating equations, and load rating procedures.

  ▪ Provide informational handouts with rating and posting examples for various types of bridges.
Bridge Load Rating Class 101

Course Goal

- Provide information on special hauling vehicles, posting rules and overweight permits.

- Provide information on bridge load rating forms, culvert rating sheets, and other Mn/DOT related materials.

- Note, this class is not intended, however, to make all class participants proficient at rating bridges.