

**Mn/DOT E-mail Concerning Jacobs Engineering
Party Submission**

From: Daniel Dorgan [mailto:Dan.Dorgan@dot.state.mn.us]
Sent: Wed 11/12/08 9:02 AM
To: Thomas.Everett@dot.gov; Walsh Daniel; Bagnard Mark; kgulden@pciroads.com
Cc: John.Finke@jacobs.com
Subject: Mn/DOT Response to Submission by Jacobs Engineering November 7, 2008

Mark,

Unfortunately at this late date we are unable to conduct a thorough review of this submission by Jacobs. I am departing in a few minutes for a legislative hearing, followed by the flight to Washington for the NTSB hearing tomorrow.

In doing a quick read of the document, I did however note an error in the Jacobs Submission that requires noting. In Section 5.1 it is stated the "a 3/16 section loss at a critical location, resulted in a 37% loss of structural capacity". The 37% is incorrectly calculated by Jacobs. The 1993 inspection report noted there was corrosion parallel to the bottom chord at L11 with pitting up to 3/16" over a length of 18". The gusset was over 8 foot long in this direction and 1/2 in thickness. Even if the loss was a full 3/16" over 18" along a section over 8 foot in length, that is approximately a 6% loss. Given the fact two gussets were present at L11 the loss becomes 3% in the absence of other corrosion. At that levels, the amount of section loss is not significant for a correctly designed plate with full safety factors.

As we are all aware, later measurements in 2007-08 by the NTSB have found the corrosion at L11 ranges from 5.6 to 17.3% using laser scanning. At any rate, the loss was never 37%. So the assertions in 5.1 are based on incorrect facts and logic.

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