



Illinois Department of Transportation

2300 South Dirksen Parkway / Springfield, Illinois / 62764

August 30, 2007

CIRCULAR LETTER 2007-14

IMMEDIATE INSPECTION OF DECK TRUSS BRIDGES CONTAINING FRACTURE CRITICAL MEMBERS (FCM) (FHWA TECHNICAL ADVISORY 5140.27)

County Engineers/Superintendent of Highways
Municipal Engineers/Director of Public Works
Consulting Engineers

On August 2, 2007, the Federal Highway Administration issued Technical Advisory 5140.27 regarding the Immediate Inspection of Deck Truss Bridges containing Fracture Critical Members (FCM)(see attachment). The Technical Advisory was in response to the uncertainty surrounding the cause of the I-35 W Bridge collapse in Minneapolis. Technical Advisory 5140.27 strongly advises that all State Transportation Agencies and other bridge owners re-inspect all Steel Deck Truss Bridges with Fracture Critical Members. At a minimum, State Transportation Agencies and other bridge owners should review inspection reports, including those for Routine, In-Depth, Fracture Critical, and Underwater, to determine whether more detailed inspections are warranted.

The Department has contacted owners of all know structures in this designated category, based on information in the Illinois Structure Information System (ISIS).

At this time the Department is recommending that in addition to steel deck truss bridges, all Fracture Critical structures under your jurisdiction be reviewed. The review should include all inspection reports, including those for the Routine NBIS Inspections, Fracture Critical Inspections, Underwater Inspections and Special Feature Inspections to determine if a more detailed inspection is necessary. We suggest that you review your inventory to verify that all Fracture Critical Bridges are accounted for and are properly coding in the ISIS. Any errors found should be reported to the District Bureau of Local Roads and Streets.

We also recommend that all owners take this opportunity to verify that all Routine NBIS Inspections, Fracture Critical Inspections, Underwater Inspections and Special Feature Inspection for structures under their jurisdiction are up to date, and that the structure files are in order.

If you have any questions, please contact Mr. Jayme Schiff at 217/785-8748.

Very truly yours,

Handwritten signature of Ralph E. Anderson in cursive.

Ralph E. Anderson, P.E., S.E.
Engineer of Bridges and Structures

Handwritten signature of Charles J. Ingersoll in cursive.

Charles J. Ingersoll, P.E.
Engineer of Local Roads and Streets

cc FHWA, Illinois Division/Attn: Dan Brydl
Illinois Department of Natural Resources
Illinois State Toll Highway Authority



U.S. Department
of Transportation
**Federal Highway
Administration**

Memorandum

Subject: Technical Advisory 5140.27 - Immediate Inspection of Deck Truss Bridges Containing Fracture Critical Members (FCM) Date: August 2, 2007

From: Frederick G. Wright (Bud)
Executive Director (HOA-3)

To: Division Administrators
Directors of Field Services
Federal Land Highway Division
Engineers

PURPOSE

In light of the uncertainty surrounding the cause of the I-35 W Bridge collapse in Minneapolis, Minnesota, we strongly advise that all State Transportation Agencies and other bridge owners immediately re-inspect all steel deck truss bridges with fracture critical members. At a minimum, State Transportation Agencies and other bridge owners should review inspection reports, including those for routine, in-depth, fracture critical, and underwater, to determine whether more detailed inspections are warranted.

BACKGROUND

At 6:05 P.M. EST on Wednesday, August 1, 2007, the bridge over the Mississippi River between University Avenue and Washington Avenue on highway I-35 W in Minneapolis, MN, collapsed. Numerous vehicles were on the bridge at the time.

To assist with this undertaking we are attaching the Structural Inventory and Assessment. We will provide State Transportation Agencies with additional information as it becomes available.

Please refer any question to Benjamin Tang at 202-366-4592 or benjamin.tang@dot.gov.

Attachment

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