

TECH NEWS

TECHNOLOGY NEWS

June-August 2004

Video documents rare bridge construction method in Iowa

The Iowa River Greenbelt is one of the few remaining fragments of Iowa's old-growth woodland. The area is a secluded haven for bald eagles and other native wildlife and a favorite retreat for canoeists and other non-native species.

To minimize the environmental impact of constructing the U.S. Highway 20 river valley crossing in Hardin County, the Iowa DOT used a unique construction technique, called launching. At the time of construction the bridge was the first launched steel girder bridge in the country.

The bridge frame was constructed span by span in a launching pit behind one abutment, then rolled out over piers in the river valley. The bridge has five, 302-foot spans supported on four concrete piers and two end abutments. Two 66-foot spans connect the bridge to the roadway approaches.

The bridge was extensively instrumented and its behavior documented during construction.



Iowa River Bridge. *Illustration courtesy of the Iowa DOT.*

Witness the construction yourself

Now an excellent, 32-minute VHS video of this fascinating construction process is available. Borrow *The Iowa River Bridge: Progress through Preservation* from the LTAP library by contacting Jim Hogan, CTRE's library coordinator, 515-294-9481, hoganj@iastate.edu.

Copies of the video have been sent to many public libraries across the state. Your own local library may have a copy.

You can receive your own free copy of the show on DVD, plus photos and the project technical report, *Monitoring and Evaluation of the Westbound Roadway of the Iowa River Bridge*, on CD. Contact Max Grogg, programs engineer, FHWA, Iowa Division, 515-233-7306, max.grogg@fhwa.dot.gov. Or write to him at 105 Sixth Street, Ames, IA 50010.

A summary and a complete version of the technical report are online, along with contact information for the ISU researchers who monitored the bridge during construction.
