

Old China Township Bridge is going to Purdue

Bob Gross, St Clair Times Herald 4:51 p.m. EDT April 11, 2015



Indian Trail Road crosses the Belle River over a bridge that was replaced in 2008. The bridge is being donated to Purdue University. (Photo: NATHAN HOLTH)

A steel truss bridge that spanned 88 feet across the Belle River in China Township for 71 years is heading to West Lafayette, Indiana, where it will become a teaching aid at Purdue University for budding civil engineers.

“That little bridge is getting famous,” said Linda Schwehofer, China Township supervisor. “It was such a charming bridge. I wished we could have kept it and figured out something to do with it.”

The bridge, which carried Indian Trail Road across the Belle River at what was then called Radike Mills, opened to traffic in 1937 and was replaced in 2008 with a modern bridge.

Since then it’s been at the Calhoun County Historic Bridge Park, in that county’s Emmett Township. Within the next two weeks, it’s going to be shipped to Purdue’s Steel Bridge Research, Inspection, Training and Engineering Center.

Robert Connor, an associate professor in civil engineering at Purdue and director of S-BRITE, said the bridge will become part of the center’s bridge component gallery.

Students will be able to learn how age and corrosion affects steel bridges, he said.

“All the risk is with bridges that have been built, not with bridges we haven’t built,” he said.

He said the average age of steel bridges in the U.S. is about 50 years — and bridges in the railroad industry are even older, around 70 years on average. The people who engineered and built those bridges no longer are around.

Connor said very few universities have the time or space in their civil engineering curricula to teach students how to fix and maintain old bridges,

“It’s like we’re producing people who are really good pediatricians, they are ready for the new kid, the new bridge ... but there’s a whole population of people out there who are in their 70s,” he said.

“They’re ready to go design new things — clean sheet of paper, design a new bridge,” he said. “But when you drive home tonight, you’re going to cross over a bunch of existing bridges.”

He said Purdue is trying to fill that knowledge gap.

“Old structures like this are to me a real treasure to have,” he said. “I can show pictures and talk all day about corrosion ... but there’s nothing better than taking somebody down there and showing it.”

Nathan Holth, a bridge historian who lives in DeWitt, said the bridge is historically significant.

“In terms of Michigan, it’s a fairly unusual bridge because in Michigan we don’t have a lot of large rivers, and by the 1930s they weren’t building metal truss bridges that often,” he said.

The bridge was funded through the Depression-era Federal Emergency Administration of Public Works — which became the Public Works Administration — Holth said.

“This bridge was part of that, trying to create jobs for people while at the same time improving our infrastructure,” he said.

According to information from the Michigan Historic Bridge Inventory, Couse and Saunders of Detroit received the contract to build the bridge with the low bid of \$33,200.78. The St. Clair County Road Commission accepted the completed structure on July 22, 1937.

Schweihofer said she’s glad to find out the bridge will be going to Purdue.

“Now it has gotten even more famous,” she said. “It’s kind of neat to think it has a new life, that it will become a teaching aid.”

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MORE INFORMATION

INDIAN TRAIL ROAD BRIDGE

- To find out more about Purdue University’s Steel Bridge Research, Inspection, Training and Engineering Center, go to <https://engineering.purdue.edu/CAI/SBRITE/Facilities/BCG>.

- Nathan Holth’s historic bridge website is at www.historicbridges.org

- The main span of the Indian Trail Road Bridge is 88 feet; the length of the structure is 93.8 feet; and the roadway is 24 feet wide. It was built in 1937 for \$33,200.78.