



CHALLENGE

THE STANDARDSBURG ROAD BRIDGE, ORIGINALLY BUILT IN 1926, NEEDED A COMPLETE REHAB THAT WOULD KEEP THE ORIGINAL CHARACTERISTICS OF THE BRIDGE BY USING AS MANY ORIGINAL COMPONENTS AS POSSIBLE.

SERVICES

- Bridge Inspection
- Structural Load Rating Analysis
- Engineering Design
- Bridge Rehabilitation
- Roadway Improvements
- Environmental Documentation
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AWARDS



2014 OUTSTANDING SMALL
PROJECT AWARD
American Council of Engineering
Companies (ACEC) of Ohio

2013 HISTORIC BRIDGE AWARD
Federal Highway Administration
(FHWA), Ohio Department of
Transportation (ODOT), Ohio
Historic Preservation Office

STANDARDSBURG ROAD BRIDGE REHABILITATION

The bridge, originally built in 1926, spans the West Branch Huron River in Ridgefield Township, Ohio, located in the northern part of the state. As an east-west rural local route, the bridge is a single-span steel Warren Through Truss with a 115-foot clear span.

When Huron County officials brought in ms consultants to inspect the bridge, it was in very poor condition. It got a bridge inspection rating of 3 and was limited to a 20-ton vehicle load limit. The existing bridge and approach roadway were approximately 20 feet wide.

SAVING THE BRIDGE

Early in the planning stages, project manager Wade Harvey recognized the possibility of saving the bridge instead of having to replace the entire structure. He performed the initial load rating analysis, which identified the limiting capacity bridge members. He also evaluated alternate floor systems with options to lighten the floor loads and ways to strengthen or replace the controlling members so that the bridge could once again carry full legal truck loads.

The rehabilitation process involved dismantling the truss, by removing the rivets, and shipping it to a fabricator where deteriorated truss members – including the stringers, floor beams and bottom cords – were rehabbed or replaced. All steel members were then cleaned and galvanized.

The rehabbed truss members were then shipped back to the site where the structure was reassembled piece by piece back together on to the rehabilitated existing abutments.

The project also included replacement of the pin rocker bearings with new elastomeric bearing pads, a new waterproofed wooded floor system with asphalt wearing surface, new bridge rails and approach roadway guardrails, along with minor improvements to the existing wing walls and approach roadway drainage systems.

HONORING WADE HARVEY

Sadly, as the design work progressed, Mr. Harvey was succumbing to the advanced effects of cancer. In spite of ongoing cancer treatments, he continued developing comprehensive details and maintained a watchful eye over the design team preparing the rehabilitation plans.

He passed away on September 5, 2010.

The rehabilitated bridge was open to traffic in November 2012, and Huron County officials held a dedication ceremony to Mr. Harvey on July 30, 2013.