

TURN-OF-RIVER BRIDGE  
(Old North Stamford Road Bridge)  
Spanning Rippowam River on Old North Stamford Road  
Stamford  
Fairfield County  
Connecticut

HAER CT-192  
*HAER CT-192*

WRITTEN HISTORICAL AND DESCRIPTIVE DATA  
REDUCED COPIES OF MEASURED DRAWINGS  
FIELD RECORDS

HISTORIC AMERICAN ENGINEERING RECORD  
National Park Service  
U.S. Department of the Interior  
1849 C Street NW  
Washington, DC 20240-0001

# HISTORIC AMERICAN ENGINEERING RECORD

## TURN-OF-RIVER BRIDGE

HAER No. CT-192

**Location:** Spanning the Rippowam River on Old North Stamford Road (Turn-of-River Road), Stamford, Fairfield County, Connecticut.

The center of the span is located at latitude 41°6'47.2"N, longitude 73°32'42.5"W. This coordinate was obtained June 30, 2013 using Google Maps, and accuracy is unknown. Although the bridge appears to have been abandoned, access from High Ridge Road is unrestricted. It is closed to vehicular traffic, but not to pedestrians.

**Date(s) of Construction:** The foundations were built by the Town of Stamford in the fall or winter of 1892, and the bridge was erected in the middle of January 1893 over a period of 7-10 days.

**Engineer:** William O. Douglas & Charles M. Jarvis are both credited with the design of this type of bridge, although Douglas had passed away two or three years prior to the construction of this one. Douglas published an early design for one in the Scientific American in 1877, and was granted two patents for the lenticular bridge in 1878 and 1885.

**Builder:** The Berlin Iron Bridge Company, Berlin, Connecticut. Charles M. Jarvis was the President and Chief Engineer.

**Original Owner and Use:** Town of Stamford, Connecticut. Built to replace a failing wooden bridge connecting the industrial village of Turn-of-River with the Town of Stamford.

**Present Owner and Use:** City of Stamford, Connecticut. Structure is closed to vehicular traffic and does not appear to be maintained.

**Significance:** With the exception of Gustav Lindenthal's Smithfield Street Bridge in Pittsburgh, PA, The Berlin Iron Bridge Company was the only manufacturer of lenticular bridges in the United States. Additionally, unlike Lindenthal's bridge, the BIBCO bridges were mass-produced: the factory-fabricated components, many of which were used for multiple spans at different locations, were shipped to the site and then quickly assembled. Despite the mass-production nature of their construction, each has individual character as many of the components vary from site to site due most likely to what the original owners picked from the catalog. As well, there are slight variations in the dimensions of riveted components that belie the hand-craftsmanship

required in working wrought iron. BIBCO fabricated nearly 400 lenticular truss bridges, mostly in the east and New England, with 4 as far west as Texas. Approximately 38 survive.

**Description:** The bridge is a wrought-iron lenticular or parabolic truss approximately 53' long, 22' wide and spans an opening of roughly 50' between embankments. The deck is roughly 6'-6" above the water at high water, the high-point of the top chord is 87" above the deck, and the end posts come down to 41" above the deck. It has tapered lattice-girder uprights, untapered floor beams, and originally had cast-iron finials on the end posts as well as at least one builder's plate.

Most of the ironwork, despite no longer being maintained, shows only surface corrosion. The end posts are in the worst condition, naturally, as they come in contact with the stone foundations. There does not seem to have been much thought about this particular point of contact, as all four baseplates are deeply covered in soil. The iron is thick, and has held up well, but the lateral braces are heavily corroded here. As well, the deck c-channels have sagged at these points and deformed over the braces. The 3/16" iron plating on the end posts is in the worst condition as water has been trapped between the layers and forced their deformation. Thick woody vines have been growing through the southwest end post and adjacent top chord.

Some minor repairs to the bridge over the years not in keeping with its original character are visible, but the largest alteration was to the original wood bridge deck. This has been replaced with a concrete deck approximately 5" thick formed over plywood on 4x10 wood joists and intermittent 4x7 I-beams with wood blocking above. The nearest neighbor just to the north of the bridge, who has been residing there for 40 years, recalls the bridge still having its original wooden deck, although it was rotten and filled with holes. After the deck had been reinforced, he remembers a good deal of stone being hauled over it, but since it has served only as a pedestrian bridge. He noted as well, that when he first moved there, the original finials topping the end posts as well as a builder's plate naming the Town Selectmen at the time of his construction were still attached to the bridge. These have been removed, presumably by vandals.

**History:** Turn of River was once an industrial village nestled in a bend of the Rippowam River just north of the Town of Stamford. Today, it is a residential neighborhood incorporated within the city. In the 1890s, there were a number of manufacturers, notably a shoe factory and a wire mill, evidenced today by the place name "Wire Mill Road" nearby. The house of the same neighbor mentioned above has been on that site since the late 18<sup>th</sup> century, and he stated that it was the

residence of the commander of Fort Stamford.

The Stamford Town Meeting approved the construction of the bridge, built to replace an older wooden one, on October 3, 1892. The foundations were built before the winter, and the Berlin Iron Bridge Company installed the bridge in the middle of January 1893. It only saw about 40-45 years of use as the construction of the Merritt Parkway through Old Stamford Road (also known as Turn-of-River Road) blocked that road.

**Sources:** Adel, Hojjat, editor. *Historic Bridges: Evaluation, Preservation, and Management*. Boca Raton: CRC Press, 2008.

Bruce Clouette, "Berlin Iron Bridge Company",  
< <http://www.past-inc.org/bibco/index.htm> > (August, 2001).

Douglas, W.O., Bridge. U.S. Patent 315,259, April 7, 1885.

Connecticut Department of Transportation:  
Karen M. Riemer, Bridge Management Group  
Mary E. Baker, Bridge Consultant Design

City of Stamford:  
Paul Ginotti, City Engineer

**Likely Sources**

**Not Yet**

**Investigated:**

The Historic Neighborhood Preservation Program, Inc.  
The Stamford Historical Society

**Historian:**

Morgen L. Fleisig, July 1, 2013.

**Project**

**Information:**

This report, along with a single-sheet measured drawing and accompanying field notes were submitted on July 1, 2013 in competition for The Leicester B. Holland Prize.

**Appendix A:**

Four photographs by author (2013) to illustrate current conditions and appearance.







