

HISTORIC AMERICAN ENGINEERING RECORD

LITTLE COSSATOT RIVER BRIDGE

HAER NO. AR-35

LOCATION: Spanning the Little Cossatot River on County Road 139 H where approximately two miles west of Lockesburg, Sevier County, Arkansas.

UTM: 15/3759825/388685

Quad: Lockesburg

DATE OF CONSTRUCTION: 1908

STYLE: Single span, pony Warren steel truss bridge.

BUILDER: Morava Construction Company, Chicago, Illinois.

SIGNIFICANCE: The Little Cossatot River Bridge is a unique Arkansas example of a pony Warren steel truss with verticals. It contains several significant design details, such as a solid I-beam top chord and angle outriggers. It is an early example of a bolt-connected (as opposed to rivet-connected) bridge. This bridge is also the only known Morava Construction Company bridge identified in Arkansas. It is a fine specimen of early twentieth century bridge construction in the state and reflects a time when county officials relied heavily on competing bridge companies to supply an inexpensive and reliable product.

SIGNIFICANT EXTERIOR FEATURES: A commemorative plaque is located on the south end of the west truss and states "Morava; Construction Co; Chicago; 1908".

MAJOR ALTERATIONS AND ADDITIONS: The original guardrail is missing. Date unknown.

PRESENT CONDITION AND USE: This bridge is in poor condition and is currently being used for vehicular traffic.

HISTORIAN: Michael Swanda
Survey Coordinator
Arkansas Historic Preservation Program

DATE: August 26, 1988.

STRUCTURAL SYSTEMS

This bridge uses Warren steel trusses. The steel I-beam top chord is connected to the bottom chord by plates. This connection rests directly on top of a cylindrical steel ring pier filled with concrete. Bearing blocks are not used. The bottom chord is the only built-up member in the truss and contains angles bolted together with batten plates. The diagonals and verticals are channels. I-beam floor girders at each vertical support timber stringers under the wood plank road deck. Channel sections extend out from the two end vertical floor girders. An angle section is attached to this extension up to the top chord and is used for an outrigger for sway bracing. The bracing for the floor consists of round rods diagonally spanning one panel. Round rods are also used diagonally for sway bracing between the piers. Two timber stringer spans connect to the bridge on each approach.

DIMENSIONS

This bridge consists of a 70-foot main span and two 17-foot approach spans for a total length of 104 feet.

ADDITIONAL INFORMATION

The W. Morava Construction Company started its operations in Chicago, Illinois, in 1889. AHTD Bridge No. 16902, AHPP Resource No. SV0057.

SOURCES OF INFORMATION

Bridge Division Files, Arkansas Highway and Transportation Department, Little Rock.

Historic Bridge File, Arkansas Historic Preservation Program, Little Rock.

McClurkan, Burney B. Arkansas' Historic Bridge Inventory, Evaluation Procedures 1987 and Preservation Plan. Manuscript of file, Environmental Division, Arkansas Highway and Transportation Department, Little Rock.