

Mitchell-Griggs Road Bridge  
Spanning Caney Creek on Mitchell-Griggs Road  
Dixon Vicinity, Kentucky  
~~Bracken~~ County  
Webster

HAER No. KY-6

HAER  
KY  
117-DIX.V,  
1-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record  
National Park Service  
Southeast Region  
Department of the Interior  
Atlanta, Georgia 30303

HISTORIC AMERICAN ENGINEERING RECORD

MITCHELL-GRIGGS ROAD BRIDGE  
HAER KY-6

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KY  
117-DIX.V,  
1-

Date: ca. 1925

Location: Spanning Caney Fork near Dixon, Kentucky

Built by: Vincennes Bridge Company

Owner: demolished ca. 1982

Significance: The Mitchell-Griggs Road Bridge is an early riveted Warren pony truss, built on a slight skew.

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Transmitted by: Monica E. Hawley, Historian, 1984

The Mitchell-Griggs Road Bridge crossed Caney Creek in rural Webster County, Kentucky. Webster County is located in western Kentucky with the Tradewater River forming its western boundary. Mitchell-Griggs Road is a rural two-lane gravel secondary road while Caney Creek forms a portion of the Tradewater drainage basin.

The structural configuration of this truss identified it as a Warren pony truss. It had 5 panels and was 75 feet in length and 11.6 feet (one lane) in width. This bridge was constructed by the Vincennes Bridge Company of Vincennes, Indiana circa 1925.

The Mitchell-Griggs Road Bridge was constructed with rivet-connected rolled steel materials. The end posts and top chords were 2 channels with a cover plate and stay bars. The bottom chords were two angles held together with sections of angle bar. The diagonal members, which alternately act in compression then tension as a load passes, were 2 angles with stay bars. Bottom lateral bracing on each panel consisted of crossed single round rods.

The floor system on the bridge had rolled I-beam floor beams and stringers. The deck was wood planking.

Guardrailing on this structure was 2 angles and lacing bars. Vertical members and outriggers were constructed of paired angles and lacing bars. These vertical members are for bracing and cut the unsupported length of the top

chord between diagonals in half. The substructure of the Mitchell-Griggs Road Bridge was 2 concrete abutments.

The "Survey of Truss, Suspension, and Arch Bridges in Kentucky" completed in January, 1982, located 82 Warren pony truss bridges. All these trusses are rivet connected, and were constructed in the twentieth century. Most of these bridges were built between 1920-1940 with bridge plates identifying the builder on only 11 structures. Examples of the Warren pony truss are found in every Kentucky highway district.

The longest Warren pony truss is 105 feet in length, the shortest is 36 feet, and the average length is 59 feet. Many of these structures were built after 1920 but none are identified as State Department of Highways projects. This is surprising as most of the later bridge structures, especially those shorter spans, were constructed by the State of Kentucky. Some of the earlier Warren pony trusses were constructed of paired and single angle bars. A few of the later spans were constructed entirely of channels or I-beams. None of the Warren pony spans have I-bar members (acting in tension only) in their construction.

The Mitchell-Griggs Road Bridge was one of 14 Warren pony trusses in highway district 2. This structure was one of two remaining Warren pony trusses built by the Vincennes Bridge Company of Vincennes, Indiana. This structure was also notable as it was built on a slight skew to the roadway.