

MAY 20 1980

HISTORIC NAME: Kern Bridge COUNTY: Blue Earth  
 CURRENT NAME: Yaeger Bridge CITY/TWP.: Mankato/South Bend Townships  
 LEGAL DESC.: The nomination includes the bridge itself and area extending 30' to the ends and sides of each abutment, in T108N,R27W, Section 35, SW $\frac{1}{2}$ SE $\frac{1}{2}$ SW $\frac{1}{2}$ . ADDRESS: Township Road 190 over LeSueur River (.3 miles east of State Highway 66)

CLASSIFICATION:	CONDITION:	SIGNIFICANCE:	THEME/S:
Building _____	Excellent _____	Local _____	Primary <u>Engineering</u>
Structure <u>X</u>	Good _____	State <u>X</u>	Secondary _____
Object _____	Fair _____	National _____	Others _____
District _____	Deteriorated _____		

OPEN TO THE PUBLIC: Yes X No \_\_\_\_\_ Restricted \_\_\_\_\_ PRESENT USE: Bridge  
 VISIBLE FROM THE ROAD: Yes X No \_\_\_\_\_  
 OCCUPIED: Yes X No \_\_\_\_\_

DATE CONSTRUCTED: 1873 ORIGINAL USE: Bridge  
 ORIGINAL OWNER: Blue Earth County ARCHITECT/BUILDER: Wrought Iron Bridge Co. Canton, Ohio

OWNER'S NAME AND ADDRESS: Blue Earth County  
 County Courthouse  
 Mankato, MN 56001 ACREAGE: Less than one acre X

LOCAL CONTACT/ORG.: Blue Earth County Historical Society  
 606 South Broad, Mankato, Minnesota 56001 UTM REFERENCE:  
 Good Thunder Quad. 7.5

FORM PREPARED BY: Dennis Gimmetad  
 DATE: January 1980 15 / 416620 / 4884380

## DESCRIPTION:

The Kern Bridge is located on the boundary between Mankato and South Bend Townships, approximately two miles south of the city of Mankato. The bridge is on a gravel township road and connects the east and west banks of the LeSueur River.

The structure is a single-span bowstring arch through truss, with a total length of 189 feet. The top (arched) cord is a broad unit of four individual side components riveted together into a hollow beam. The bottom (tie) and top cords rest on stone piers. The thirteen verticals consist of alternating lattice girders and double connected rods, and support a 20-foot wide wooden deck. Latticed lateral bracing is located between the four central latticed verticals, and double rods are used as laterals between the five central double-rod verticals. Diagonal bracing is utilized on both the vertical and the lateral members. A cable has been strung across the verticals to act as a rail.

The crossing was adjacent to the John Kern property, and the bridge first became known by that name. In subsequent years, the structure has also been known as the Yaeger Bridge after a later landowner. It has also been referred to as the Red Jacket Bridge, but this name now correctly refers to another bridge approximately one-half mile downstream.

## SIGNIFICANCE:

The Kern Bridge is significant as the only example of a bowstring through truss bridge in Minnesota, and as the oldest known roadway bridge in use in the state. Patented by Squire Whipple, a well known engineer, the bowstring arch truss type was utilized nationally between 1840 and the late nineteenth century, and is characterized by <sup>1</sup>"a tied arch with the diagonals serving as bracing and the verticals supporting the deck".<sup>1</sup> Unique as an example of the type in Minnesota, the Kern Bridge may also be unusual on a larger scale; its 189-foot length exceeds the standard lengths of 70'-175'. The bridge was built by the Wrought Iron Bridge Company of Canton, Ohio; the stone piers were constructed by a John Mahowald. The bridge has been and continues to be an important link between the east and west banks of the LeSueur River in the hilly and wooded area south of Mankato.

<sup>1</sup>Comp, T. Allan, and Donald Jackson. Bridge Truss Types: A Guide to Dating and Identifying. AASLH Technical Leaflet 95, History News, Vol. 32, No. 5, May 1977.

MAY 20 1980

Kern Bridge

Mankato/South Bend Townships  
Blue Earth County, MN

Condit, Carl W. American Building. Chicago: University of Chicago Press,  
1968. pp. 97-98.

Kerns Bridge. Unpublished article in files of Blue Earth County Highway  
Department, 1973. (Copy in Minnesota SHPO files.)

Minnesota Department of Transportation. Structure Inventory Sheet (Bridge  
# (166) L5669). 1978.