

## TRUSS BRIDGE INTENSIVE SURVEY FORM: BRIDGE NO. B-09-965

**WisDOT Designation:** B-09-965

**Historic Name:** Cobban Bridge (A)

**Other Name:**

**Current Owner:** State of Wisconsin

**Year Built:** 1908 (B)

**Engineer:** Unknown

**Fabricator:** Modern Steel Structural Company of Waukesha, WI (B)

**Contractor:** Modern Steel Structural Company of Waukesha, WI (B)

**Year Moved to Site:** 1919 (A)

**Contractors:** L. G. Arnold of Eau Claire; Cromby and Thilacker of Milwaukee (A)

**Status:** Extant as of 1996 and historically rehabilitated

### Geographical Data

**County:** Chippewa

**City, Village or Town:** Towns of Eagle Point and Arthur

**Legal Description:** Sections 2/3, Town 30N, Range 7W

**Crossing:** County Road TT over Chippewa River

**Sketch Diagram** (For survey photos, see contact sheet 02100/1)

### Technical Data

**Bridge Category:** Metal overhead truss

**Spans--No./Type:** 2 identical Pennsylvania (each 241' 1")

**Connection Type:** Pinned

**Substructure:** Concrete abutments and pier

**Overall Length x Width:** 486'5" x 16'1"

**Inclined Endpost/Upper Chord:** L0-U1-U11-L12: double upright channels (12" x 3") tied with cover plate (16 1/4" x 1/4") and V-lacing

**Lower Chord:** L0-L12: double rectangular-section eyebars (5" x 3/4")

**Verticals:** L1-U1, L11-U11: double back-to-back ("H" in section) angles (2 1/2" x 3 7/8") tied with V-lacing; L2-U2, L4-U4, L6-U6, etc.: double upright channels (8" x 2 1/8") tied with V-lacing

**Diagonals:** L2-U1, L4-U2, L6-U4, L6-U8, L8-U10, L10-U11: double rectangular-section eyebars (3 1/2" x 5/8")

**Sub-Verticals and Sub-Diagonals:** Double back-to-back angles ("H" in section) tied with V-lacing; double square eyebars

**Floor System:** Wood decking on rolled I-beam stringers and rolled I-beam girders

**Bracing:** **Portals:** Double back-to-back angles; **Sways:** Double back-to-back angles and cylindrical eyebars; **Top lateral:** Cylindrical eyebars; **Bottom laterals:** cylindrical eyebars; horizontal, **Intermediate struts:** Double angles tied with V-lacing

**Bearings:** Abutment ends, fixed; pier ends, roller-nest expansion bearings (at the northeast end of the west span, the rollers are sprung from the nest)

### Summary Description

Measuring over 480 feet in length, the Cobban Bridge crosses the Chippewa River in an east-west direction on County Road TT about 5 miles southwest of the city of Cornell. The structure is a pin-connected overhead truss with two identical Pennsylvania spans bordered by channel and angle-iron railings. It rests on concrete abutments and a single concrete pier. In addition to portal, top-lateral, and sway bracing, the bridge's webbing is stiffened with sub-diagonals, extended sub-verticals, and intermediate, horizontal struts. The wood decking is protected by metal runners.

## TRUSS BRIDGE INTENSIVE SURVEY FORM CONT: BRIDGE NO. B-09-965

The structure originally was located about 15 miles downstream where it was known as the "Yellow River Bridge," presumably because its site was near the confluence of the Chippewa and Yellow rivers. It was erected at county expense in 1908; the Modern Structural Steel Company of Waukesha apparently served as both fabricator and contractor for the superstructure. In 1915, the Wisconsin-Minnesota Power and Light Company approached the Chippewa County Board of Commissioners with a plan to build a hydroelectric dam about 4 miles downstream of the bridge. Since the impounded waters would inundate the river crossing, the company proposed relocating the existing bridge superstructure. In April 1916, after extended negotiations, the county finally approved the dam project and the company agreed to build a completely new bridge (C).

This decision attracted the attention of the small trading village of Cobban, located about 15 miles upstream on the west bank of the Chippewa. Cobban had no bridge, the nearest crossings being about 5 miles north at Cornell and an equal distance south at Jim Falls. With the strong support of Cobban merchants, local voters in December 1916 agreed to pay the cost of dismantling the abandoned Knife River Bridge, sledding the structural steel to Cobban, and reassembling the bridge at its present location. The entire project was completed by 1919. L. G. Arnold, a professional contractor from Eau Claire, put in the new concrete substructure, while Cromby and Thilacker, a bridge-building firm from Milwaukee, supervised the steel work (A).

### Statement of Significance

- (x) Represents type, period, technique
- ( ) Associated with significant persons/firms
- (x) Associated with significant events
- ( ) Possesses high aesthetic values

### **Period of Significance: 1908**

Fabricated in 1908, the Cobban Bridge was the oldest of four Pennsylvania truss bridges surviving on Wisconsin highways in 1986 (D). It is an excellent early twentieth-century example of the type, which is basically an overhead, sub-divided Pratt truss with a polygonal upper chord. Developed specifically for long spans in 1875 by the Pennsylvania Railroad (hence the name), the Pennsylvania truss was modified a decade later by the Chesapeake and Ohio Railway, which introduced intermediate horizontal struts to increase rigidity of the web (E). Another characteristic feature, also seen on the Cobban Bridge, is the upward extension of sub-verticals "for the purpose of stiffening the long upper chord members" (F). As is customary on highway bridges of the 1890s and 1900s, the Cobban Bridge displays built-up sections for its structural members -- a practice that was later replaced by the use of rolled sections, as can be seen on two previously extant Pennsylvania trusses of the 1930s (G).

In addition to its engineering significance as a highly representative example of its type, the Cobban Bridge is historically significant as one of the most ambitious cases of bridge moving in Wisconsin. Since metal truss bridges were specifically designed to be easily transported and assembled, it is not surprising that several were moved from one location to another. It is remarkable, however, that a small community should fund and supervise the relocation of a structure the size of the Cobban Bridge, which displays the longest, pre-World War II, highway, truss spans surviving in the state. Although the village of Cobban has long since vanished, the bridge remains as palpable evidence of its earlier, commercial aspirations. The structure is still recognized as a major landmark by local residents, whose campaign to commemorate the bridge resulted in the erection of an historical marker near the crossing in 1986 (B, H).

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**Sources of Information**

- A. Proceedings of the County Board of Chippewa County, 1908. Chippewa County, Wis. pp. 16-18, 20-21.
- B. Olson, Charlene. "Crusade to Save Cobban Bridge Leads to Historic Trail." Chippewa Herald Telegram, 11 December 1982.
- C. Bridge file for B-09-116, includes inspection reports. Bridge Section. Wisconsin Department of Transportation, Central Office. Madison, Wisconsin.
- D. Wyatt, Barbara, ed. Cultural Resource Management in Wisconsin. Volume 2. Madison, Wis.: State Historical Society of Wisconsin-Historic Preservation Division, 1986, pp. 12-16, 12-17.
- E. Condit, Carl W. American Building. Chicago: U of Chicago P, 1982, pp. 142-143.
- F. Merriman, Mansfield and Henry S. Jacoby. A Text-Book on Roofs and Bridges, Part 1. New York: John Wiley and Sons, 1926, p. 223.
- G. Olson, Charlene. "Bridge Could Be Oldest in State." Chippewa Herald Telegram. 22 March 1983.
- H. Intensive Survey Forms for B12/22-850 and B-22-829.

**National Register Status**

- ☐ Listed
- ☐ Determined Eligible
- ☒ Eligible
- ☐ Not Eligible

Date of Survey: November 1986

Surveyor: Jeffrey A. Hess

**Documentation:** HAER No. WI-28

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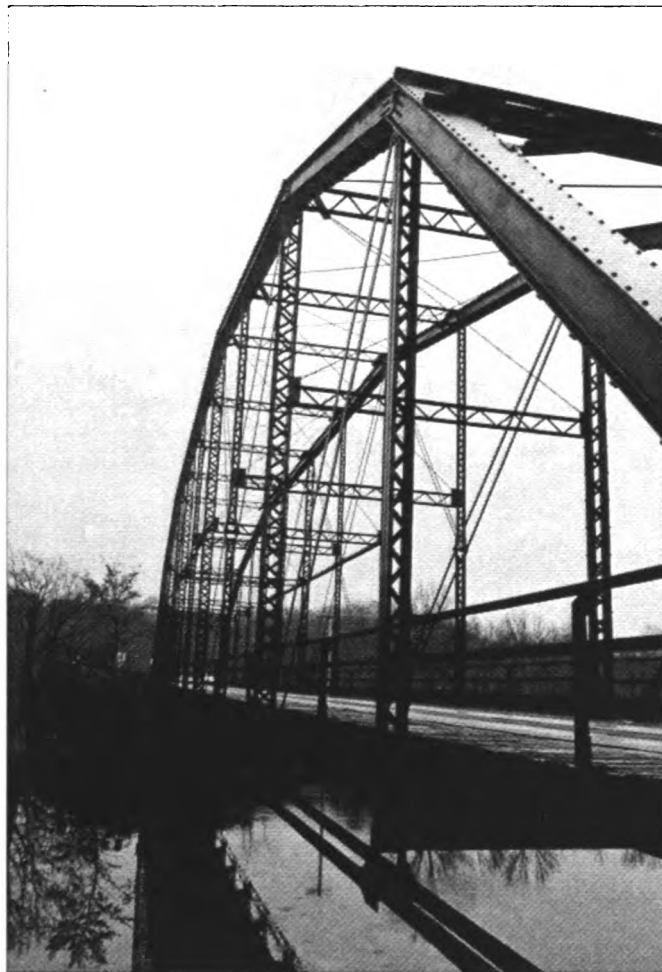
**Cobban Bridge (B-09-965), Towns of Eagle Point and Arthur, Chippewa County**  
North elevation - *Source: J.A. Hess, 1986*

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Cobban Bridge (B-09-965), Towns of Eagle Point and Arthur, Chippewa County  
Roller bearings, center pier, north elevation - *Source: J.A. Hess, 1986*

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**Cobban Bridge (B-09-965), Towns of Eagle Point and Arthur, Chippewa County  
West span, north elevation - Source: J.A. Hess, 1986**