North Platte River
Bowstring Truss Bridge
Fort Laramie Vicinity
Goshen County
Wyoming

HAER No. WY-1

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PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
National Park Service
Department of the Interior
Washington D.C. 20240

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HISTORIC AMERICAN ENGINEERING RECORD

WY-1

NORTH PLATTE RIVER BOWSTRING TRUSS BRIDGE

Date: 1875.

Location: Fort Laramie Vicinity, Goshen Co. WY.

Built by: King Bridge and Manufacturing Company.

Owned by: Originally: Department of the Army.
Presently: National Park Service.

Significance: The North Platte River Bowstring Truss Bridge is the first of its kind to be built in then the territory of Wyoming. It is also believed to be the first military bridge west of the Mississippi.

Transmitted by: Dan Clement, 1983 with historical data condensed from Fort Laramie's Iron Bridge by John Dishon McDermott.

Constructed in 1875 the North Platte River Bowstring Truss Bridge, lying two miles from Fort Laramie, is the oldest such structure in the state of Wyoming and is believed to be the oldest military bridge west of the Mississippi.

Fort Laramie in the territory of Wyoming was about halfway between St. Louis and the West Coast and so provided a logical stopping point for repairs, food and news. Those who wished to visit the post had to cross either the Larimie or North Platte rivers, depending upon the route taken. Before 1875 emigrants had to either ford or ferry the Platte. During the spring and early summer the river was at flood stage which made crossing extremely dangerous.

With the completion of the Union Pacific Railroad in 1869 came the end of the great covered wagon migrations. Interest turned from spanning the Larimie river to bridging the North Platte, for Montana and South Dakota produced gold and the Souix were temporarily settled on reservations in Northern Nebraska which had to be supplied by wagons from Cheyenne and other U.P. stations.

The citizens of Cheyenne took the initiative in the movement to build a bridge over the Platte near Fort Laramie. Cheyenne served as the great freight capital of the region. In 1873 rumors swept Cheyenne that the freighters might move their headquarters to other rival U.P. towns because of the difficulty in crossing the Platte. When an attempt to persuade the county to construct a ferry over the river was declined by county commissioners, the townspeople turned to the territorial delegate to Congress, W.R. Steele.

On February 24, 1874 Steele introduced a bill in the House Calling for the construction of a bridge to be built under direction of the military not exceeding fifteen thousand dollars. Two days later, Steele wrote Secretary of War W. W. Belknap asking for support of the bill. Belknap after conferring with General Ord, commander of the Department of the Platte, wired the appropriations committee on June 4 and requested the money for the bridge. Congress passed the bill on June 23, 1874 and the following day Belknap ordered Lt. General Sheridan, commander of the division of Missouri, to secure plans and estimates.

Bids were advertised and on August 10 the Department of the Platte received eleven bids for construction of the bridge. Three of these were from regular bridge builders and considered worthy of a second look. On August 15, the bid of the King Bridge and Manufacturing Co. of Cleveland, Ohio was accepted.

The King plan called for and iron truss bridge of three spans which would total 420 feet. Priced at $25 dollars a lineal foot the bridge would cost $10,500 dollars. Assistant Quartermaster Daniel Rucker felt that the remaining $4500 dollars would more than cover the cost of the substructure and additional expenses. Rucker also recommended that an army engineer be assigned to supervise all the work by the contractor and the government. On November 12, 1874 the contract with the King Bridge and Manufacturing Company was signed by the chief quartermaster.

The King Company shipped the fabricated bridge by rail to Cheyenne and in early February 1875, wagons filled with iron beams and girders headed fro Fort Laramie. Work on the piers and abutments had to wait until after high water so the bridges completion date was set for August or September. In the mean time the quartermaster of Fort Laramie was preparing a ferry to cross the river. Work on the substructure began in July when the level of the river returned to normal. Captain William S. Stanton of the Army Engineers supervised its construction.

Operating under rather primitive conditions, workers ran into considerable difficulty. One span broke loose and had to be raised from the river. Most of the labor pool in the territory saw the prospect of panning gold in the Black Hills more stimulating than working for wages. The Army had to eventually supply twelve men in order to see the bridge completed by mid-October.

By November 30th the Army had finished all but the approaches from each shore. During December Engineer Stanton inspected the bridge by leaving thirteen stone laden wagons over each of the arches for several days. However, the Army didn't officially accept the bridge until February, 1876. The finished bridge was made up of three spans that totaled 400 feet in length that humped the river with trusses about 12 feet on center. The three top chords were made of 8 inch channels riveted to two 3/8 inch by 10 inch plates while the bottom chords were common I bars. Workers formed the piers out of 8 inch I bars sloped from bottom to top.

The bridge served the Army faithfully for fifteen years. By 1890, Fort Laramie had out lived its usefulness. On March second of 1890 the last regular quarrison left For Laramie and aon April 9th the Army sold the building and fixtures at public auction.

The Interior Department took control of the Fort Laramie military reservation and turned over the bridge to the county on a revokable liscense. The county wishing to obtain more control of the bridge managed to get a bill introduced in Congress. On June 4, 1894. Congress donated the bridge to Laramie county on the condition that they keep it in good condition and open free of charge.

In 1911 the bridge came under the jurisdiction of newly formed Goshen county, and functioned perfectly for many years until 1958 when a new concrete bridge was built a few yards north. (see photograph WY-1-15). On September 6, 1961 the county waived all rights to the bridge which then reverted back to the United States. The bridge is now under the jurisdiction of the National Park Service, at Fort Laramie National Historic Site where it is preserved for the Public.

Addendum to:
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BOWSTRING TRUSS BRIDGE
Spanning North Platte River
Fort Laramie vicinity
Goshen County
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National Park Service
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Washington, DC 20013-7127

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(Fort Laramie Army Bridge)
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Data pages 1 through 5 were previously transmitted to the Library of Congress. This is data page 6.

INVENTORY OF PHOTOGRAMMETRIC IMAGES

The glass photogrammetric plates listed below are not reproducible except with special permission. However, reference prints and film copy negatives have been made from the plates indicated by an asterisk (*) and are included in the Library of Congress collection of formal HABS/HAER photographs.

13 5" x 7" glass plate negatives (5 stereopairs and one stereotriplet) produced by Perry E. Borchers of the Ohio State University in 1971.

One survey control contact print from each plate; survey control information for each pair/triplet.

LC-HAER-GS05-B-1971-1001L *	VIEW FROM MODERN BRIDGE TO THE NORTH--LEVEL
LC-HAER-GS05-B-1971-1001R	VIEW FROM MODERN BRIDGE TO THE NORTH--LEVEL
	Left and right overlap: 85%
LC-HAER-GS05-B-1971-1002L *	DIAGONAL VIEW FROM BANK TO NE--LEVEL
LC-HAER-GS05-B-1971-1002R	DIAGONAL VIEW FROM BANK TO NE--LEVEL
	Left and right overlap: 80%

LC-HAER-GS05-B-1971-1003L *	DIAGONAL VIEW FROM BANK TO SE--LEVEL
LC-HAER-GS05-B-1971-1003R	DIAGONAL VIEW FROM BANK TO SE--LEVEL
	Left and right overlap: 90%
LC-HAER-GS05-B-1971-1004L *	END VIEW OF BRIDGE FROM EAST--LEVEL
LC-HAER-GS05-B-1971-1004R	END VIEW OF BRIDGE FROM EAST--LEVEL
	Left and right overlap: 60%
LC-HAER-GS05-B-1971-1005L *	DIAGONAL VIEW FROM BANK TO SW--LEVEL
LC-HAER-GS05-B-1971-1005R	DIAGONAL VIEW FROM BANK TO SW--LEVEL
LC-HAER-GS05-B-1971-1005RC	DIAGONAL VIEW FROM BANK TO SW--LEVEL
	1005L and 1005RC overlap: 90% 1005RC and 1005R overlap: 90%
LC-HAER-GS05-B-1971-1006L *	VIEW FROM NEW BRIDGE TO NORTH OF EASTERN SPAN--LEVEL
LC-HAER-GS05-B-1971-1006R	VIEW FROM NEW BRIDGE TO NORTH OF EASTERN SPAN--LEVEL
	Left and right overlap: 95%

PROJECT INFORMATION STATEMENT

Photogrammetric images were incorporated into the HABS/HAER collections in the summers of 1985 and 1986. Inventories of the images were compiled and filed as data pages for each structure recorded. Since the glass photogrammetric plates are not reproducible except with special permission, a reference print and film copy negative were made from one plate of each stereopair and from the most informative plates in sequential sets. The reference prints and copy negatives were then incorporated into the formal HABS/HAER photograph collections.

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COLOR TRANSPARENCIES

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1849 C Street NW
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