National Register of Historic Places Registration Form



This form is for use in nominating or requesting determinations of eligibility for individual properties or districts. See instructions in *How to Complete the National Register of Historic Places Form* (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer to complete all items.

1. Name of Property

historic name Owsley Bridge

other names/site number <u>IHSI #47-5153</u>

2. Location

street &	ξ nι	umber	Appro	ox. 20	0 yds.	N.	of Intersection of Old US 30 and Bell Rapic	s	Rd.	<u>N/A</u>	not	for	publication
city or	to	n <u>H</u>	agermar	ו								<u> </u>	<u> vicinity</u>
state _	I da	<u>ho</u>	code _	ID	coun	ty	Gooding	_	code	047	zip	code	e <u>83332</u>

3. State/Federal Agency Certification

In my opinion, the property ____meets ___does not meet the National Register criteria. (____ See continuation sheet for additional comments.)

Signature of certifying official/Title

Date

State or Federal agency and bureau

4. National Park Service Certification

_other, (explain:)___

tion

OMB No. 10024-0018

Ows	ley	Bridge
Name	of	Property

Ownership of Property (Check as many boxes as apply)	Category of Property (Check only one box)	Number of Resource (Do not include previous	es within Property sly listed resources in the count	.)		
private	<pre> building(s)</pre>	Contributing	Noncontributing			
<u>x</u> public-local	district	<u></u>		buildings		
<pre> public-State</pre>	site			sites		
public-Federal	<u>x</u> structure		0			
	object			_ objects		
		1	0	_ Total		
Name of related multiple p (Enter "N/A" if property is not part of		Number of contrib the National Regis	uting resources previou ster	sly listed in		
N/A		<u> </u>				
6. Function or Use						
Historic Functions (Enter categories from inst	tructions)	Current Functions (Enter categories from instructions)				
-		(Enter categories				
TRANSPORTATION, vehicular		TRANSPORTATION	vehicular			
7. Description						
Architectural Classification (Enter categories from inst		Materials (Enter	r categories from instru	uctions)		
OTHER: cantilevered Warrer	n through-truss bridge	foundation <u>CONCRE</u>	ETE			
		roof				

Narrative Description

(Describe the historic and current condition of the property on one or more continuation sheets.)

 \underline{X} See continuation sheet(s) for Section No. 7

8. Statement of Significance	
Applicable National Register Criteria (Mark "x" on one or more lines for the criteria qualifying the property for National Register listing.)	Areas of Significance (Enter categories from instructions)
<u>x</u> A Property is associated with events that have	Engineering
made a significant contribution to the broad	Transportation
patterns of our history.	
B Property is associated with the lives of persons	
significant in our past.	
<u>x</u> C Property embodies the distinctive characteristics	
of a type, period, or method of construction, or	Period of Significance
represents the work of a master, or possesses	1921
high artistic values, or represents a	
significant and distinguishable entity whose	
components lack individual distinction.	Significant Dates
D Property has yielded, or is likely to yield,	1921
information important in prehistory or history.	
Criteria Considerations (Mark "x" on all that apply.)	
Property is:	Significant Person (Complete if Criterion B is marked above)
A owned by a religious institution or used for	N/A
religious purposes.	Cultural Affiliation
B removed from its original location.	N/A
C a birthplace or grave.	
D a cemetery.	
<pre> E a reconstructed building, object, or</pre>	Architect/Builder
structure.	Charles A. Kyle, Engineer
F a commemorative property.	
G less than 50 years of age or achieved	
significance within the past 50 years.	

Narrative Statement of Significance

(Explain the significance of the property on one or more continuation sheets.)

X See continuation sheet(s) for Section No. 8

9. Major Bibliographical References

Bibliography

(Cite the books, articles, and other sources used in preparing this form on one or more continuation sheets.)

Previous documentation on file (NPS):

- ____ preliminary determination of individual listing (36 CFR 67) has been requested
- ____ previously listed in the National Register
- ____ previously determined eligible by the National Register
- _____ designated a National Historic Landmark
- _____ recorded by Historic American Buildings Survey
 # _____
- ____ recorded by Historic American Engineering Record # _____

Primary location of additional data:

- x State Historic Preservation Office
- Other State agency
- ____ Federal agency
- ____ Local government
- ____ University
- ____ Other

Name of repository:

10. Geographical Data

Acreage of property less than one acre

UTM References

(Place additional UTM references on a continuation sheet.)

A <u>1/1</u>	<u>6/7/2/7/2/0</u>	<u>4/7/3/6/6/0/0</u>	B/	<u>/////</u>	<u>/////</u>
Zone	Easting	Northing	Zone	Easting	Northing
c _/_			D _/	_////	

Verbal Boundary Description

(Describe the boundaries of the property.)

The property is bounded by the exterior dimensions of the bridge and its supporting piers and abutments.

See continuation sheet(s) for Section No. 10

(Explain why the boundaries were selected.)

The boundary is the minimum necessary to convey the bridge's historic significance as an engineering structure. See continuation sheet(s) for Section No. 10

11. Form Prepared By

Boundary Justification

name/title Donald W. Watts, Historic Preservation Planner

organization Idaho State Historic Preservation Office	date
street & number _210 Main Street	telephone (208) 334-3861
city or town Boise	state <u>ID</u> zip code <u>83702</u>

Additional Documentation

Submit the following items with the completed form:

- Continuation Sheets
- Maps: A USGS map (7.5 or 15 minute series) indicating the property's location.

A Sketch map for historic districts and/or properties having large acreage or numerous resources.

- Photographs: Representative black and white photographs of the property.
- Additional items (Check with the SHPO or FPO for any additional items.)

Property Owner

name <u>Gooding Highway District (north half) see continuation sheet</u>	
street & number <u>P.O. Box 266</u>	telephone <u>(208) 934-5723</u>
city or town <u>Gooding</u>	state <u>ID</u> zip code <u>83330</u>

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C. 470 *et seq.*).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 18.1 hours per response including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, P.O. Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Projects (1024-0018), Washington, DC 20503.

National Register of Historic Places Continuation Sheet

Section number 7 Page 1 Name of Property Owsley Bridge

County and State Gooding County, Idaho

NARRATIVE DESCRIPTION¹

Location:

Owsley Bridge spans the Snake River between Twin Falls and Gooding counties approximately 3.6 miles south of Hagerman, Idaho, on an old segment of U.S. Highway 30 (now named 1000 East).

Substructure:

The bridge is supported by a reinforced concrete wingwall abutment at each end and two reinforced concrete piers in the riverbed. The base of each pier is 33 feet long by 9 feet wide, tapered on the upstream side for water flow. Each of the wingwall abutments is approximately 50 feet wide. The height of the abutments and piers is approximately 15 feet which provides a clearance of about 7 feet from the extreme high-water line to the bottom of the superstructure.

Superstructure:

The superstructure is a continuous cantilevered Warren through-truss composed of five 16.5foot panels at the south end (82.5 feet), a center span of sixteen 16.5-foot panels (264 feet), and five 16.5-foot panels at the north end (82.5 feet). The total length of the bridge was to be 429 feet. In actuality, the center joint of the bridge was extended one foot during construction when it was found that the piers were set too far apart; thus the actual length of the bridge is 430 feet (see Narrative Statement of Significance). The superstructure is composed of riveted steel channel beams with lacing bars. The floor system consists of steel I-beams and stringers. The road deck is comprised of laminated $2" \times 6"$ timbers laid perpendicular to the roadway and surfaced with asphalt.

The maximum height of the truss above the piers is 30 feet, and the upper chord tapers down to a height of 20 feet at the centerpoint and at either end. This provides a vehicular clearance from the roadbed to the portal of 15 feet. The width of the usable roadbed between the two $6" \times 8"$ timber curbs is 17 feet.

A metal lattice railing runs continuously on either side of the bridge, terminating at the north end with cast-iron decorative end posts; at the southern end only one end post remains. Running horizontally at the top and bottom of the lattice railing are continuous 2" x 6" board rails. The horizontal portal at the center of each cantilever tower is perforated with "OWSLEY BRIDGE," and bridgeplates at each end identify the construction date and other details.

National Register of Historic Places Continuation Sheet

Section number 7 Page 2 Name of Property Owsley Bridge
County and State Gooding County, Idaho

The bridge carries two water pipes; an 18" diameter pipe on the downstream side and a 10" diameter pipe on the upstream side. Each of the pipes is mounted outside the truss system on outriggers and are just below the level of the roadbed.

Alterations:

The bridge was repainted and the deck replaced in 1932-33. Construction drawings called for removing the original flooring and replacement with laminated 2" x 6" timbers with a 1" asphalt road surface. It is probable that the existing floor system (and possibly the majority of the asphalt surface) dates from the 1933 repairs. Although other surfacing repair and repainting has probably occurred since that time, there have been no structural alterations since the bridge's original construction. The bridge is now painted silver. Owsley Bridge, thus, retains a very high degree of historic integrity.

Construction date: 1920-21 Engineer: Charles A. Kyle, Bureau of Highways, Division of Public Works Builder: United States Bridge Company, Boise, Idaho Fabricator: Minneapolis Steel & Machinery Company Cost: approximately \$127,000 Source of Funding: State of Idaho and federal (Federal Aid Project #8) Association: Idaho-Pacific Highway, U.S. Highway 30

National Register of Historic Places Continuation Sheet

Section number <u>8</u> Page <u>1</u> Name of Property <u>Owsley Bridge</u>

County and State Gooding County, Idaho

NARRATIVE STATEMENT OF SIGNIFICANCE

Completed in 1921, Owsley Bridge is eligible for the National Register of Historic Places under Criterion A for its association with the early history of the Idaho state highway system. A major reorganization of state government in 1919 established the Bureau of Highways, Division of Public Works, which took the lead in bridge and highway construction as part of a major effort to build a coordinated state highway system. Owsley Bridge is also eligible under Criterion C for its engineering significance. The bridge is the only continuous cantilevered through-truss on the state highway system and one of the very few cantilevered structures of any kind in the state.

Owsley Bridge's significance under Criterion A is supported by its historic association with the early years of the Idaho Bureau of Highways.² Prior to World War I, the primary responsibility for bridge and road construction in Idaho rested with individual counties. While serving the rural population well until that point, the increased demand for a high-quality road network for longdistance transportation of goods and people, particularly to link the growing markets in Utah to the south and Oregon and Washington to the west, necessitated a larger-scale approach than individual counties could efficiently provide. A coordinated state highway system was a practical way such new 20th-century demands could be met.

After an ineffective start with a state highway commission from 1913 to 1918, the Bureau of Highways under the Division of Public Works was established in 1919 as part of a major reorganization of Idaho state government. Aided by federal funds, the new Bureau greatly extended the state highway system to include thirty-one highways. During the early 1920s almost all vehicular bridges constructed in Idaho were by the Bureau, with the counties gradually tapering off in their bridge-building efforts.

The depth of the Snake River at the selected location for Owsley Bridge precluded a more traditional truss system which would have required several supporting piers. Owsley Bridge's cantilevered design kept the expense and construction requirements at a minimum while still providing for a long-span crossing. Nevertheless, it was still an expensive proposition at a final cost of just over \$127,000. Gooding and Twin Falls counties were financially responsible for constructing their respective approaches to the bridge, and the State and federal government funded the bridge itself. Federal involvement was instigated because the highway was designated as a federal post road.³

Although this was the first vehicular crossing of the river at this point, it was only about three hundred yards downstream from the Owsley Ferry, a cumbersome operation subject to long delays. Difficulties with the ferry operator apparently increased once the decision was made to locate a bridge there. A resolution passed by the Buhl Chamber of Commerce implored the state to

National Register of Historic Places Continuation Sheet

Section number 8 Page 2 Name of Property Owsley Bridge

County and State Gooding County, Idaho

name the structure the "Buhl-Hagerman Bridge," stating in part, "Several Buhl business men voiced opposition to calling this the Owsley bridge, on account of the quality of service rendered at the ferry since there has been talk of a new bridge."⁴

Surveying, final site selection, and engineering drawings for Owsley Bridge were conducted in 1919 and construction begun in June 1920. Aside from a few delays in delivering the steel, construction proceeded normally until it was discovered that the two supporting piers had been located one foot farther apart than the original specifications called for. The bridge's designer, Charles A. Kyle, devised a means to lengthen the center joint of the upper chord by 12" and two joints at the lower chord by 6"; thus, when completed the bridge was one foot longer than originally designed.⁵

Dedication of the bridge on June 22, 1921, was the occasion for a major celebration by the local residents. Businesses in Hagerman and Buhl closed for the day, and a crowd estimated at over 5,000 congregated in Hagerman for foot and horse races, dancing, band concerts, free movies, and a baseball game (Buhl 3, Hagerman 2). A highlight of the day was a wedding held in the middle of the bridge on a special flowered platform built for the occasion. The dedication ceremony itself was keynoted by a speech by Idaho Governor D. W. Davis, and the bridge was formally tendered over to the State of Idaho from the contractors. Over 800 automobiles converged at the crossing for the ceremonies.⁶

Owsley Bridge is also eligible under Criterion C for its engineering significance. This crossing of the Snake River was a major achievement, and its 1919 design date makes it one of the earliest projects undertaken by the newly established Bridge Engineering division. In addition, it is the only cantilevered through-truss ever built on the state highway system and one of the few cantilevered bridges of any kind in the state. The only other historic cantilevered structure is a deck-truss bridge designed by the U.S. Forest Service and built in 1934 on the Idaho-Montana Highway (Forest Highway Route #33) near Spencer in eastern Idaho.

Charles A. Kyle, who served as State Bridge Engineer from 1919 until his death in 1936, was responsible for leading the Bureau in implementing many bridge designs. Owsley Bridge introduced the cantilevered truss to Idaho and was the first truly original design by the division. During his career, Kyle was also instrumental in the large-scale application of the riveted Warren truss in Idaho which was soon adopted as a standard design. Another major contribution by Kyle was the use of the open-spandrel concrete arch, a design used at Salmon Bridge near Salmon in 1926, Capitol Boulevard Memorial Bridge in Boise in 1931, and Rainbow Bridge near Smiths Ferry in 1933. These and other structures established the bridge division of the Bureau of Highways as an innovator in modern bridge design for Idaho.

National Register of Historic Places Continuation Sheet

Section number <u>8</u> Page <u>3</u> Name of Property <u>Owsley Bridge</u> County and State <u>Gooding County, Idaho</u>

ENDNOTES

1. Dimensions are from original engineering drawings cited in the Bibliography. Some dimensions have been field-verified.

2. Most of the information for this Statement of Significance is based on the historic context developed in the Idaho Bridge Inventory, Idaho Historic Sites Inventory Report #17, 1983.

- 3. Twin Falls Daily News, July 1, 1920, p 1.
- 4. Twin Falls Daily News, September 23, 1920, p 2.

5. Letter dated May 28, 1930, from Charles A. Kyle, Chief Engineer, Idaho Bureau of Highways, to B. J. Finch, District Engineer, Bureau of Public Roads, Ogden, Utah. Microfiche on file at Idaho Transportation Department, Boise, Idaho. The 6" channel beam extensions are clearly visible on the lower chords of the truss near the water pipes. Most of the 12" extension of the upper chord is obscured but still discernible.

6. Gooding Leader, June 23, 1921, p 1.

National Register of Historic Places Continuation Sheet

Section number 9 Page 1 Name of Property Owsley Bridge

County and State Gooding County, Idaho

BIBLIOGRAPHY

Beal, Merrill D. and Merle W. Wells; <u>History of Idaho</u> (New York: Lewis Historical Publishing Company, Inc.), 1959.

Bureau of Highways, Department of Public Works, State of Idaho; "Owsley Bridge", File No. 15, Drawings #20 (Oct 11, 1919), #36 (Jan 19, 1920), #37 (Feb 13, 1920), #38 (Feb 10, 1920), #57 (Jan 20, 1921), #89 (Sep 17, 1920), #105 (Dec 20, 1920), #112 (May 11, 1921); construction drawings.

-----; File No. 485, Drawing #1687 (Jan 16, 1932), Reflooring and Painting Owsley Bridge.

Gooding Leader, Gooding, Idaho; January 1919 - December 1921.

Herbst, Rebecca; "Idaho Bridge Inventory"; Idaho Transportation Department; Idaho Historic Sites Inventory Report #17, 1983.

Huntley, James L.; Ferry Boats in Idaho (Caldwell, Idaho: Caxton Printers, Ltd.), 1979.

Kyle, Charles A.; letter to B. J. Finch, District Engineer, Bureau of Public Roads, Ogden, Utah; May 28 1930.

Twin Falls Daily News, Twin Falls, Idaho; January 1919 - December 1921.

National Register of Historic Places Continuation Sheet

Section number 9 Page 2 Name of Property Owsley Bridge

County and State Gooding County, Idaho

PROPERTY OWNER (south half)

Twin Falls Highway District P.O. Box 605 Twin Falls, ID 83303 Telephone: (208) 733-4062