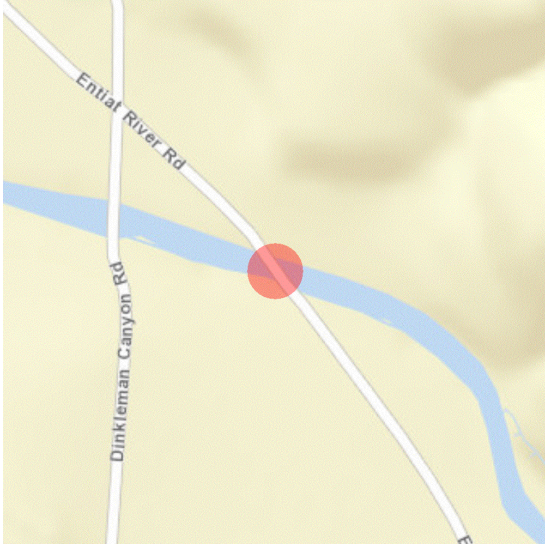


# Historic Property Report

Resource Name: Old Griffith Bridge (08105800)

Property ID: 718995

## Location



**Geographic Areas:** Chelan County, T25R20E11, ARDENVOIR Quadrangle

## Information

**Number of stories:** N/A

### Construction Dates:

Construction Type	Year	Circa
Built Date	1921	<input type="checkbox"/>

### Historic Use:

Category	Subcategory
Transportation	
Transportation	

### Historic Context:

Category
Transportation

### Architect/Engineer:

Category	Name or Company
Engineer	Daniel B. Luten
Engineer	John Duff
Builder	Union Bridge Company



# Historic Property Report

Resource Name: Old Griffith Bridge (08105800)

Property ID: 718995

## Thematics:

### Local Registers and Districts

Name	Date Listed	Notes
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### Project History

Project Number, Organization, Project Name	Resource Inventory	SHPO Determination	SHPO Determined By, Determined Date
2019-05-03827, WSDOT, Chelan County Historic Bridge Inventory - W. Cashmere Bridge MOA	5/28/2019		

## Photos



20190114\_142113.jpg



20190114\_142408.jpg



20190114\_142256.jpg



20190114\_142854.jpg



20190114\_142833.jpg



20190114\_142743.jpg



# Historic Property Report

Resource Name: Old Griffith Bridge (08105800)

Property ID: 718995



20190114\_142306.jpg



20190114\_142119.jpg



# Historic Property Report

Resource Name: Old Griffith Bridge (08105800)

Property ID: 718995

## Inventory Details - 5/28/2019

**Common name:** Old Griffith Bridge (08105800)

**Date recorded:** 5/28/2019

**Field Recorder:** Stephen Austin

**Field Site number:**

**SHPO Determination**

## Detail Information

### Characteristics:

Category	Item
Foundation	Concrete - Poured
Form Type	Bridge - Arch

## Surveyor Opinion

**Property appears to meet criteria for the National Register of Historic Places:** Yes

**Property is located in a potential historic district (National and/or local):** No

**Property potentially contributes to a historic district (National and/or local):** No



## Historic Property Report

Resource Name: Old Griffith Bridge (08105800)

Property ID: 718995

**Significance narrative:** The Old Griffith Bridge (08105800) is eligible for inclusion in the National Register of Historic Places under Criterion C for its intact earth-filled “Luten Arch” design. Erected in 1921, the structure is a prime example of an earth-filled concrete arch as designed by nationally famous bridge engineer Daniel B. Luten. The bridge was designated a Category II bridge in 1980, indicating it was engineering significant but did not rise to the level of NRHP-eligibility at that time (Soderberg 1980). Since then, the context of Luten Arch bridges in Washington has changed as few remain on local and state roads. In 2007, a retired WSDOT bridge engineer noted that the Old Griffith Bridge was “a good representative of a long span Luten Arch” (Krier 2007). The structure is one of two patented Luten arches in Chelan County and among a dwindling population of true Luten designed bridges in the state. It possesses a high degree of integrity of location, design, materials, workmanship, feeling, setting, and association.

The Old Griffith Bridge was construction in 1921 and is owned by Chelan County. Due to its ownership, few records detailing its construction remain at the county and state level. A steel plaque located on the structure’s north end reports that the Union Bridge Company built the structure on behalf of the county. Chelan County Engineer John Duff oversaw the construction.

The bridge’s design was that of a patented earth-filled reinforced concrete arch known as the “Luten Arch” for its designer, Daniel B. Luten. Awarded several bridge design patents by 1900, Luten was the owner of the Union Bridge Company and claimed to have overseen the design of approximately 20,000 concrete bridge projects during his twenty-three years in practice (Purdue 2019).

Though records pertaining to the Old Griffith Bridge are scant, its connection with Daniel Luten and the Union Bridge Company are clear. The bridge is in good physical condition and retains a high degree of all seven aspects of integrity.



# Historic Property Report

Resource Name: Old Griffith Bridge (08105800)

Property ID: 718995

**Physical description:**

The Old Griffith Bridge is a 124-ft. long reinforced concrete Luten Arch located near Entiat, Washington in eastern Chelan County. The bridge bears the hallmarks of a concrete Luten Arch as it possesses both iron reinforcing elements and earthen fill. Plan drawings are limited to a single profile view but depict its concrete reinforcing and delineate between two 17-ft. approaches that abut its main 90-ft. arch span. The bridge possesses some minor embossed paneling on the exterior of its rails and arch barrel. Its abutments and approach spans are not founded on piles. A metal plaque located on the west approach end reads,

1921  
Chelan County  
Commissioners  
E.F. Cadman  
E.C. Long  
Stewart Johnson

-----  
John Duff  
County Engineer

-----  
Built by  
Union Bridge Company

A conditional note attached to its plan drawing stipulated the required percentage and payment owed to Daniel Luten for use of his patented design:  
“...bridge construction required by these plans and specification is of Luten Design and includes improvements, devices, methods of construction, inventions and copyrights owned by Daniel B. Luten. Designing and consulting designers of Indianapolis, Indiana. Each bidder is directed to include in his bid and pay to said Daniel B. Luten at Indianapolis Indiana, ten percent of the contract price of everything included in those plans and specification, payments to be made at the same time that estimates are drawn, an in amounts proportional to the estimates allowed; and by sustaining a bid span this work and agreeing to build said work, the contractor agrees to pay to said Daniel B. Luten, at Indianapolis Indiana, said ten percent of the owner [indecipherable] at the same time that estimates are drawn and in amounts proportional to the estimates allowed the contractor. The said Daniel B. Luten will furnish the necessary working drawings and hereby agree to protect the contractor against suits for infringement [indecipherable] of any patents required by those plans and specifications.”

**Bibliography:**

Bridge Engineering Information System (BEIS). Old Griffith 08105800. Plan drawings, inspection reports, and photos. Online, Tumwater.  
<http://beist/InventoryAndRepair/Inventory/BRIDGE/Details/Index/63ff765c-f49d-42bf-902b-ea3406f58a67>  
Krier, Robert H. “Old Griffith Bridge (Chelan Co.). 2007 Category 2 Bridges Evaluation Project, June 1, 2007.  
Purdue University. “Luten, Daniel B., 1869-1946.” Archives and Special Collections. Accessed March 2019. <https://archives.lib.purdue.edu/agents/people/982>  
Wilson, Thomas. “Elk Avenue Bridge Marks time in Nation’s Architectural work.” Elizabethton Star Online, April 11, 2005.