# National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in National Register Bulletin, *How to Complete the National Register of Historic Places Registration Form.* If any 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 certification comments, entries, and narrative items on continuation sheets if needed (NPS Form 10-900a).** 

1. Name of Property		
historic name Jersey Bridge <b>DRAFT</b>		
other names/site number Highway 49 Bridge, Bridge #13-0005		
2. Location	<u> </u>	
street & number Carrying State Route 49 from Main to Commercial Streets	n/a	not for publication
city or town Downieville	n/a	vicinity
state California code CA county Sierra code 091	zip cod	e <u>95936</u>
3. State/Federal Agency Certification		
As the designated authority under the National Historic Preservation Act, as amended,		
I hereby certify that this nomination request for determination of eligibility meets registering properties in the National Register of Historic Places and meets the procedura set forth in 36 CFR Part 60.		
In my opinion, the property meets does not meet the National Register Criteria. be considered significant at the following level(s) of significance:	I recomr	nend that this property
nationalstatewidelocal		
Signature of certifying official/Title Date	_	
State or Federal agency/bureau or Tribal Government		
In my opinion, the property meets does not meet the National Register criteria.		
Signature of commenting official Date	_	
	_	
Title State or Federal agency/bureau or Tribal G	overnment	
4. National Park Service Certification		
I hereby certify that this property is:		
entered in the National Register determined eligible for the N	lational Re	gister
determined not eligible for the National Register removed from the National I	Register	
other (explain:)		
Signature of the Keeper		
Signature of the Keeper Date of Action		

## 5. Classification

Ownership of Property (Check as many boxes as apply.)	Category of Property (Check only one box.)	Number of Reso (Do not include prev	ources within Properiously listed resources in t	<b>erty</b> the count.)
		Contributing	Noncontributing	
private	building(s)	oontributing	Noncontinbuting	– buildings
x public - Local	district			district
public - State	site			site
public - Federal	x structure	1	0	_ structure
	object			object
		1	0	Total
Name of related multiple pro (Enter "N/A" if property is not part of a		Number of cont listed in the Nat	ributing resources tional Register	previously
Historic Bridges of Cal	ifornia MPS		0	
6. Function or Use				
Historic Functions (Enter categories from instructions.)		Current Functio		
Transportation: Road related		Transportation:	Road related	
7. Description				
Architectural Classification (Enter categories from instructions.)		Materials (Enter categories fro	m instructions.)	
Single lane, steel, rigid-connec	ted polygonal	foundation:		
Parker truss steel span.		walls:		
		roof:		
		other: Steel str	ucture	

## **Narrative Description**

(Describe the historic and current physical appearance of the property. Explain contributing and noncontributing resources if necessary. Begin with **a summary paragraph** that briefly describes the general characteristics of the property, such as its location, setting, size, and significant features.)

## Summary Paragraph

The Jersey Bridge, built in 1938 across the Downie River, is a rare surviving example of one lane, steel, rigid-connected polygonal Parker through truss span. Designed to carry local traffic connecting Main and Commerical Streets, the single lane bridge has also carried Route 49 on its one lane (12 foot, 6 inch) roadway since built in 1938.

## **Narrative Description**

The Jersey Bridge was designed by county surveyor George F. Taylor and built by the Judson Pacific Company in 1938. The bridge is a one lane, steel, rigid-connected polygonal Parker through truss span measuring 120 feet long, running north-south over the Downie River. The roadway is 12.5 feet wide, with a four-foot pedestrian walkway on its eastern side. Stringers, chords, verticals and diagonals are riveted steel I-beams. There are no top struts or top lateral bracing. Bottom lateral bracing is of steel L-girders. A builder plate reading "Judson Pacific Co., San Francisco, 1938" is located on the right end post on each end of the bridge. The pedestrian walkway consists of wooden boards supported by steel I-beams with steel posts and a steel balustrade, topped by a wooden guardrail with secondary wooden handrails on either side of the walkway. The roadway deck is concrete, and the main roadway is flanked with metal guardrails supported on wooden brackets. The north end of the pier sits on a concrete abutment. The south end of the bridge is supported by a pier of board-formed concrete with two concrete cylinders wrapped in riveted steel, one at either end of the pier and serving as support for the bearing seats of the bridge. A concrete abutment is located behind the pier.

This bridge is located in the heart of this gold rush community and remains a symbol of this community that straddles two rivers. One of four historic bridge crossings in Downieville, the Jersey Bridge has a prominent place in the community's history. Named for connecting the downtown area with Jersey Flat, the bridge along with nearby Durgan Bridge were the most important to early commerce and retain their importance to the present day. A 1851 lithograph shows the first Jersey Bridge in place. Destroyed by flood in 1852, destroyed by fire in 1858, seriously damaged by flood in 1861, collapsed by weight in 1875, and destroyed by flood in 1937, an event that also destroyed the nearby Durgan Bridge as well as a concrete arch bridge built by the state of California in 1936 to carry state route 49, a bridge that lasted just 18 months. With the Highway 49 bridge never replaced, the current Jersey Bridge has carried state route 49 on its one lane (12 foot, 6 inch) roadway since built in 1938.

The Warren truss was patented in 1848 by its designers and consists of longitudinal members joined only by angled crossmembers, forming alternately inverted equilateral triangle shaped spaces along its length, ensuring that no individual strut, beam, or tie is subject to bending or straining forces, but only to tension or compression. Loads on the diagonals alternate between compression and tension (approaching the center), with no vertical elements, while elements near the center must support both tension and compression in response to live loads. This configuration combines strength with economy of materials and can therefore be relatively light.

The bridge has maintained a high degree of integrity of location, design, setting, materials, workmanship, feeling, and association. There is limited loss of integrity of materials: A historic photo shows that the original wooden posts supporting the pedestrian walkway's guardrails were replaced with metal posts, but the walkway itself and its guardrails are wooden and similar in appearance to the original. The historic photo also shows a paved road surface over the bridge. Sheet metal guardrails have replaced wooden guardrails along the inside of the road surface, but the guardrail is supported on wooden brackets.

## 8. Statement of Significance

#### **Applicable National Register Criteria**

(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing.)				
x A	Property is associated with events that have made a significant contribution to the broad patterns of our history.			
В	Property is associated with the lives of persons significant in our past.			

С	Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack
	and distinguishable entity whose components lack individual distinction.

Property has yielded, or is likely to yield, information important in prehistory or history.

## Areas of Significance

(Enter categories from instructions.)

### Community planning and development

**Period of Significance** 

1938

## Significant Dates

#### **Criteria Considerations**

(Mark "x" in all the boxes that apply.)

## Property is:

D

A Owned by a religious institution or used for religious purposes.

B removed from its original location.

#### C a birthplace or grave.

- D a cemetery.
- E a reconstructed building, object, or structure.
  - F a commemorative property.
  - G less than 50 years old or achieving significance within the past 50 years.

## Period of Significance (justification)

The period of significance is the year of construction, 1938.

## Criteria Considerations (explanation, if necessary)

**Cultural Affiliation** 

Significant Person

## Architect/Builder

Judson Pacific Company, builder

(Complete only if Criterion B is marked above.)

Taylor, George, county engineer, designer

**Statement of Significance Summary Paragraph** (Provide a summary paragraph that includes level of significance and applicable criteria.)

The Jersey Bridge is eligible for the National Register under Criterion A at the local level of significance for its contribution to the planning and development of the city of Downieville. Built to replace an earlier bridge and fill the role of another bridge constructed in 1935 and destroyed by flood, the Jersey Bridge serves as the main highway through Downieville but limits the speed and intensity of traffic due to its narrow one-lane width. The period of significance of the property is 1938, the year of construction. The property is nominated under the Historic Highway Bridges in California MPS as an example of the Truss Bridge property type.

Narrative Statement of Significance (Provide at least one paragraph for each area of significance.)

## **Criterion A: Community planning and development**

Like many communities, the geography surrounding the community of Downieville would be tied closely to its founding, development, and continued existence. Situated at the confluence of two deep mountain canyons carrying two significant rivers, the community was forced to straddle these rivers to exist in this location of heavy gold deposits. Such a location would require the early building of two bridges in order for the community to exist and two more were early viewed as likewise for the community that developed. In each instance, a single lane bridge was viewed as all that was necessary to supply the community with its necessary traffic system. While each bridge has been replaced multiple times due to flood, fire, or collapse, in each instance the successor bridges that now date from between 1910 and 1938 continue to represent the type, style, design, and capacity of bridges that have served this community for 161 years.

These bridges limit this community, like the geography that surrounds it, to a rural and slow pace reflected in 18<sup>th</sup> century California. The one lane structure of the Jersey limits traffic to a certain pace not seen in most modern California communities. The Jersey Bridge carries a state highway in a single lane configuration, the only such point for the entire length of state highway 49 through California's gold country from Oakhurst, Mariposa County to Vinton, Plumas County, forcing north bound traffic to stand an wait while south bound traffic passes, and vice versa.

Downieville's economy has shifted from its historic resource based origins of gold mining and timber production to that of tourism today. Both recreational and historic tourism is the town's draw. Camping, fishing, hunting, hiking, and mountain biking are all pursuits undertaken in this community surrounded by public lands of the Tahoe National Forest. With roots dating to 1848, Downieville remains much of its gold rush charm and is a draw due to its isolation, scenic beauty, and dramatic setting. A number of buildings in town date to the 1850s including that housing a local history museum. The survival of these four one lane bridges adds to the unique ambiance of this community that straddles the Yuba and Downie Rivers. From National Geographic's "Guide to Small Town Escapes", in which Downieville is one of four towns representing California (along with Catalina, Ojai, and Mendocino), Geoffrey O'Gara writes of Downieville as "A trestle bridge spans the Downie River just above its junction with the North Yuba River, and there, if you any aspiration to continue into Northern California's high country, you must wait your turn, because the bridge is only wide enough for one lane of traffic. The narrow bridge provides one assurance that Downieville will likely be no more than the very small town it's always been. There is only a small level area in the vicinity were the rivers join, and the rest of the town anchors precariously on steep, forested canyon walls." This quote was written for the Jersey Bridge, yet describes all four surviving one lane bridges in Downieville, believed to be the only community in the state with such a period transportation system.

## The 1937 Downieville Flood

In 1937, Downieville had a total of five bridges. The easternmost (and farthest upstream on the Downie River) was the Hospital Bridge, originally called the Downieville Steel Bridge (due to its status as the town's first steel truss bridge) constructed in 1908. Next was the Hansen Bridge, a Pratt pony truss bridge completed in 1936. Third was a concrete arch bridge constructed by the State of California to carry traffic on Highway 49. Just downstream of the highway bridge was the Jersey Bridge, a wooden bridge constructed in 1875, and the Durgan Bridge, just downstream of where the Downie River met the Yuba, constructed in 1881. Aside from the highway bridge, all were constructed as single-lane bridges by the county government.

On December 10, 1937, major storms sent a torrent of water through Downieville via both rivers. Nearly ten years had passed since the last high water, and an enormous amount of debris was swept into the river by the storm. State highway crews, aware of the storm's danger, stood by to clear debris from the bridges, but as the river rose to the point where the highway bridge's arches were underwater, clearing debris became impossible. The storm passed mostly under the Hospital Bridge and damaged the footings of the Hansen Bridge. The Highway 49 concrete arch bridge, unlike the truss

bridges, had several pillars that extended into the river, and once road crews could no longer reach the bridge, debris collected on the piers and blocked the passage of water through the arches. The temporary dam brought the water level high enough to send the river through the streets of Downieville, lifting homes from their foundations and sending them floating downstream. The highway bridge could not withstand the pressure of the water and debris for long, and collapsed after approximately 30 minutes. The catastrophic break-through of water and debris caused more damage to the buildings of Downieville, and utterly destroyed the two wooden bridges downstream from the highway bridge, the Jersey and Durgan Bridges.

With Downieville devastated by the flood and cut off from the rest of the state, several groups responded immediately to the community's crisis. The American Red Cross was mobilized to provide food, clothing and bedding. A California Conservation Corps camp was established to clear flood debris in the wake of the storm. The Lord Shoto Douglas Chapter of E Clampus Vitus declared a proclamation of emergency and mobilized their membership to assist the citizens of Downieville, providing food and material assistance, and obtaining the name of every child in Downieville and delivering each a Christmas present.

Bridge design in the 20<sup>th</sup> century, and selection of bridge types, was influenced by "City Beautiful" design. In 1909, Charles Mulford Robinson reported that the city of Los Angeles should substitute more aesthetically pleasing concrete arch bridges for the utilitarian but unattractive truss bridges used at river crossings. California Highway Commission designers like Harlan D. Miller and his successor Charles E. Andrew both insisted that California highway bridges should be beautiful as well as practical, following Robinson's dictates regarding bridge materials. Their work established the tradition of the concrete highway bridge in California. When the California Division of Highways constructed their bridge across the Downie River in 1936, they followed this tradition. Many of these California bridges still stand today. Examples span the state, from Los Angeles' network of concrete river crossings and the Diestelhorst Bridge in Redding. Unfortunately, the aesthetics of the Highway 49 bridge did not match up to the force of the 1937 flood, with disastrous consequences for the mountain community.

When Sierra County officials selected designs to replace the Jersey and Durgan Bridge in 1938, county engineer George Taylor designed two steel truss bridges, rather than concrete spans, to replace the wooden bridges. Both bridges were constructed by the Judson Pacific company of San Francisco, who specialized in truss bridge construction well after most California engineering firms had abandoned truss bridge design for more contemporary styles. Taylor also chose to repair the damaged Hansen Bridge and retain the Hospital Bridge, whose unfashionable steel trusses had survived the disastrous 1937 flood. By the end of 1938, the town of Downieville was again connected by its four traditional single-lane bridges, all of steel truss design.

The California Division of Highways rerouted Highway 49 temporarily over the Jersey Bridge as a temporary expedient until a new highway bridge could be constructed to replace the fallen 1936 bridge. As of 2012, no replacement bridge has been constructed, and the temporary expedient of the Jersey Bridge still carries Highway 49 through the city. California's Department of Transportation has maintained the bridge in the interim, but bridge ownership rests with Sierra County.

## Developmental history/additional historic context information (if appropriate)

Since the establishment of this community in 1848, bridges were to be important infrastructure to this community due to the nature of the geography of where Downieville is located. As gold brought settlers to the area, rivers were the source of that precious metal and there was an early interest on the part of settlers to live near those waterways. Additionally, little flat ground was to be found in the area adjacent the confluence of the North Yuba and Downie Rivers, forcing the location of any community that developed to be adjacent both rivers. The community first known as "The Fork's" soon became Downieville, after Scottish born and early settler William Downie. As the community developed on different 'flats' adjacent each side of each rivers, Zumwalt, Durgan, Jersey, and Washington District, a number of bridges were early built and have been maintained (built, destroyed, rebuilt) since that time.

Primary location of additional data:

Other State agency

Federal agency

x Local government

University

Name of repository:

Other

State Historic Preservation Office

## 9. Major Bibliographical References

**Bibliography** (Cite the books, articles, and other sources used in preparing this form.) Lutes, Virginia, "The Great Flood of 1937, Downieville, California," *The Sierran*, Volume XXXVI, Number 1, Winter 2008. Sinnott, James J., *Downieville, Gold town on the Yuba*, 1972 Sinnott, James J., *A General History of Sierra County*, 1978 North Fork of Yuba River (Nevada Street) Bridge Improvement Report, JRP Historical Construction Services, Feb 2001 National Geographic, "Guide to Small Town Escapes"

## 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 #
- recorded by Historic American Engineering Record #

Historic Resources Survey Number (if assigned):

## 10. Geographical Data

Acreage of Property Less than one acre

(Do not include previously listed resource acreage.)

## **UTM References**

(Place additional UTM references on a continuation sheet.)

1	<u>10</u> Zone	686601 Easting	4381151 Northing	3	Zone	Easting	Northing
2	7		Nextbine	4	7	Faction	No othin a
	Zone	Easting	Northing		Zone	Easting	Northing

## Verbal Boundary Description (Describe the boundaries of the property.)

Bridge structure spanning the Downie River and connecting Main Street and Commerical Streets, Downieville, Sierra County, California.

Boundary Justification (Explain why the boundaries were selected.)

The boundary is limited to the physical footprint of the bridge and its approaches.

## 11. Form Prepared By

name/title Lee Adams, Sierra County Supervisor, District One			
organization County of Sierra date 2 February 2012			
street & number PO Drawer D telephone 530.289.3295			
city or town Downieville state CA 95936			
e-mail <u>hangman@sierracounty.ws</u>			
Additional Documentation			

Submit the following items with the completed form:

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

A **Sketch map** for historic districts and properties having large acreage or numerous resources. Key all photographs to this map.

- Continuation Sheets
- Additional items: (Check with the SHPO or FPO for any additional items.)

## Photographs:

Submit clear and descriptive photographs. The size of each image must be 1600x1200 pixels at 300 ppi (pixels per inch) or larger. Key all photographs to the sketch map.

Name of Property: Jersey Bridge City or Vicinity: Downieville County: Sierra State: CA Photographer: Lee Adams Date Photographed: 3/1/11 – 7/1/11 Description of Photograph(s) and number:

1 of \_\_5\_.

- 1. Jersey Bridge looking east with a vehicle mid span.
- 2. Jersey Bridge builder's plate reading 'Judson Pacific Co, San Francisco, 1938
- 3. Jersey Bridge close up of bridge structure.
- 4. Jersey Bridge view from downstream showing side view of bridge.
- 5. Jersey Bridge side view close up.

## Property Owner:

(Complete this	Complete this item at the request of the SHPO or FPO.)				
name	County of Sierra (Tim H. Beals, Director of Transportation)				
street & num	nber PO Box 98	telepho	one <u>530.28</u>	9.3201	
city or town	Downieville	state	CA	95936	

**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.460 et seq.).

**Estimated Burden Statement**: Public reporting burden for this form is estimated to average 18 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 Office of Planning and Performance Management. U.S. Dept. of the Interior, 1849 C. Street, NW, Washington, DC.

## National Register of Historic Places Continuation Sheet

Name of Property
Sierra County, California
County and State
Historic Highway Bridges in California MPD
Name of multiple listing (if applicable)

Section number <u>Additional Documentation</u>

Page 1

Figure Log

Figure 1: Site Map showing nominated property and other Downieville bridges

Figure 2: Historic photo of damaged highway bridge, 1937

Figure 3: Historic photo of damaged highway bridge, 1937

Figure 4: Historic photo of Jersey Bridge, date unknown

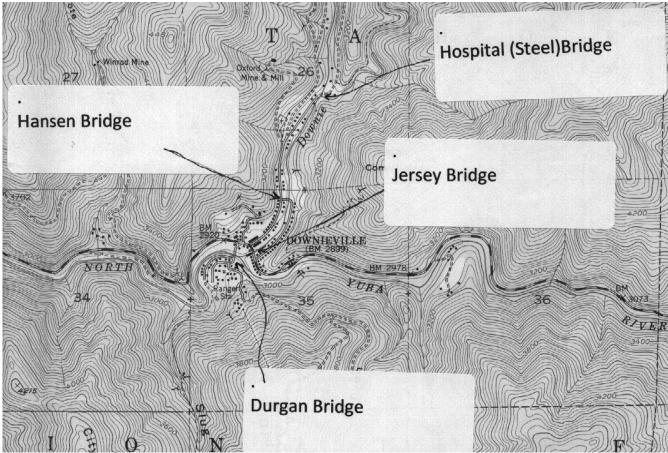


Figure 1. Downieville Site Map

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Figure 2. Historic photo of damaged highway bridge, 1937



Figure 3. Historic photo of damaged highway bridge, 1937

## National Register of Historic Places Continuation Sheet

Name of F	roperty
Sierra Co	unty, California
County an	J State
Historic Hi	hway Bridges in California MPD
Name of n	ultiple listing (if applicable)
Page	3



Figure 4. Historic photo of Jersey Bridge, date unknown