#### **United States Department of the Interior**

National Park Service

### **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 Hansen Bridge DRAFT
other names/site number Pearl Street Bridge, Downie River Bridge, Scott's Bridge, Bailey's Bridge, May's Bridge
2. Location
Street & Harrison Last river offeet between opper Main and real offeets
city or town Downieville vicinity
state California code CA county Sierra code 091 zip code 95936
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 the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60.
In my opinion, the property meets does not meet the National Register Criteria. I recommend that this property be considered significant at the following level(s) of significance:
national statewidelocal
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 Government
4. National Park Service Certification
I hereby certify that this property is:
entered in the National Register determined eligible for the National Register
determined not eligible for the National Register removed from the National Register
other (explain:)
Signature of the Keeper Date of Action

Ownership of Property (Check as many boxes as apply.)	Category of Property (Check only one box.)	Number of Resou (Do not include previous		
		Contributing	Noncontributir	<u>ıg</u>
private	building(s)			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	operty listing a multiple property listing)	Number of contri listed in the Natio		es previously
Historic Bridges in Ca	alifornia MPS			
6. Function or Use				
Historic Functions (Enter categories from instructions.)		Current Function (Enter categories from		
Transportation: Road related		Transportation: R	oad related	
		-		
7. Description				
Architectural Classification (Enter categories from instructions.)	_	Materials (Enter categories from	instructions )	
		foundation:		
,		walls:		
Low-side steel truss bridge		walls:		

#### **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 Hansen Bridge, built in 1935 across the Downie River, is a rare surviving example of a *single lane* low side-panel steel Pratt pony truss bridge that was once common throughout California. While 80 feet long but just 12 feet and 4 inches wide and still carrying contemporary automobile traffic, this bridge is a striking example of a structure now fast disappearing from the American landscape.

\_\_\_\_\_

#### **Narrative Description**

The Hansen Bridge is a Pratt pony truss steel bridge 80 feet long and 12 feet 4 inches wide, running east-west across the Downie River. The bridge trusses are constructed of steel I-beams secured by riveted steel plates. Steel guardrails extend beyond the edges of the pony truss on either side of the bridge, with a rolled sheet metal safety railing below the steel guardrails. The roadway deck is supported on wooden stringers running the entire length of the bridge, topped with corrugated metal and an asphalt road surface. The bridge is supported by two concrete pilings on each end, resting on concrete footings, with wooden boards between each piling. The boards on the western side appear to have partially collapsed but are still present. Steel struts from the canyon wall to the bridge are located on the eastern side of the bridge behind the pilings. A water pipe runs along the northern edge of the bridge. The remains of a granite retaining wall, possibly from an earlier bridge, are present on the northern side of the western bridge abutment.

The Hansen Bridge, 80 feet long, carries automotive and pedestrian traffic over the Downie River connecting Upper Main and Pearl Streets in the community of Downieville. The bridge was constructed and first put into service in 1935. While two bridges downstream were destroyed in a 1937 flood, this bridge sustained major damage to its underpinnings but was repaired, going back into service by 1938. While once common throughout California, a relatively small number of low side-panel steel truss bridges survive today within the state. Less common yet are such bridges that are just a single lane wide and still in use carrying automotive traffic.

The Hansen Bridge was built by Lord and Bishop of Sacramento, CA at a cost of \$1975.

#### Truss Bridges as a Bridge Type

Until the 1920s, metal truss bridges faced little competition from other bridge types. The metal trusses were stronger and more rigid than wooden bridges, and they were fire resistant. Due to competition among dozens of bridge firms then in operation and standardization of bridge designs, metal truss bridges were relatively inexpensive and easy to construct. Steel beam technology and reinforced concrete technology had not yet fully developed, so that metal truss bridges were the best way to span great distances. Concrete arches and beams would eventually supplant metal truss bridges as common waterway crossings. In the latter half of the twentieth century, very few truss bridges would be built. Because early truss bridges were often built for traffic either before or in the early stages of fossil-fuel-powered vehicles, many have become too narrow or unable to carry modern loads. In addition, their many exposed metal parts result in corrosion problems, further weakening them. As a result, metal truss bridges, once ubiquitous, are now becoming a rarity on the landscape. This bridge continues to carry vehicular traffic, making it a rare example of this type of bridge.

#### **Integrity of Property**

A layer of asphalt has replaced the original wooden driving surface, and the sheet metal safety railing does not appear to be original, but the original steel railings are still in place. The bridge has otherwise maintained a high degree of integrity of location, design, setting, materials, workmanship, feeling, and association.

8. Stat	ement of Significance	
	able National Register Criteria	Areas of Significance
`	" in one or more boxes for the criteria qualifying the property anal Register listing.)	(Enter categories from instructions.)
		Community planning and development
х	Property is associated with events that have made a significant contribution to the broad patterns of our history.	of Downieville
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	Period of Significance
	and distinguishable entity whose components lack individual distinction.	1935-1938
D Property has yielded, or is likely to yield, information important in prehistory or history.		Significant Dates
	a Considerations " in all the boxes that apply.) ty is:	Significant Person (Complete only if Criterion B is marked above.)
A	Owned by a religious institution or used for religious purposes.	
В	removed from its original location.	Cultural Affiliation
c	a birthplace or grave.	
D	a cemetery.	
E	a reconstructed building, object, or structure.	Architect/Builder  Lord and Bishop, Sacramento, CA
F	a commemorative property.	Lord and Biomop, Odoramomo, Ort
G	less than 50 years old or achieving significance within the past 50 years.	

#### **Period of Significance (justification)**

Period of significance is from 1935 when bridge was constructed through 1938 when the bridge was repaired and put back into service following damage by the 1937 flood

#### Criteria Considerations (explanation, if necessary)

None

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

The Hansen Bridge is eligible for the National Register under Criterion A at the local level of significance for its association with the development of the Sierra County community of Downieville, and its role in the community following the events of the 1937 Downieville flood that destroyed three downstream bridges and damaged this bridge. The property is nominated under the Historic Highway Bridges in California MPS as an example of the Truss Bridge property type. The period of significance is 1935-1938, the period from construction until its repair following the 1937 flood.

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

#### Community planning and development of Downieville

The geography surrounding the community of Downieville strongly influenced 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. This location required construction of two bridges to allow easy access across the river. Two more bridges were later added as the community grew. 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. The current Hansen Bridge was constructed in 1935.

The four one-lane bridges of Downieville limit this community, like the geography that surrounds it, to a rural and slow pace as reflected in 19<sup>th</sup> century California. These one lane structures limit traffic to a pace seldom seen in other California communities.

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 from the 1850s including one housing a local history museum. The four one lane bridges that connect the town add 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." While this quote was written for the one lane 1938 steel bridge spanning the Downie River downstream and carrying state route 49, it, in essence, describes all four surviving one lane bridges in Downieville, including the Hansen Bridge, 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. While the Hansen Bridge was damaged by the flood, it was repaired rather than replaced, and has survived subsequent floods, in part due to the suitability of steel truss bridges to this site. As a more modern style of truss bridge than the pin-connected Hospital Bridge (constructed of steel I-beams) its design may have influenced the decision of Sierra County's roads department to use modern I-beam girder bridges to replace the two wrecked spans.

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

Since the establishment of this community in 1848, bridges were important infrastructure to this community due to the nature of the geography of where Downieville is located, a mountainous community along the banks of a river that cuts through the center of town. 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 Forks" soon became Downieville, after Scottish born 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. While this application nominates the Hansen Bridge, it is one of four single lane bridges that remain in this community, with three still in use for vehicular traffic. Today, these four bridges together, a single lane each in every instance, reflect and portray a style and pace of travel in 1930s depression era California.

9.	Maj	jor	Bibl	iogra	ıphical	Ref	erences
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**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. Secrest, William J., *Juanita*, 1967

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"

Construction documents, County of Sierra, 1935

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Historic Res	ources Survey Numb	per (if assigned):					
10. Geogra	phical Data						
Acreage of (Do not include	Property Less the previously listed resource						
UTM Refere	ences al UTM references on a c	ontinuation sheet.)					
1 <u>10</u> Zone	686838 Easting	4381525 Northing	3	Zone	Easting	Northing	
2 Zone	Easting	Northing	4	Zone	Easting	Northing	

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

The property boundary is the bridge structure spanning the Downie River, connecting Pearl Street and Upper Main Street on East River Street, Downieville, Sierra County, California.

Boundary Justification (Explain why the boundaries were selected.)

The boundary is based on the existing footprint of the Hansen Bridge and its roadway.

11. Form Prepared By		
name/title Lee Adams, Supervisor, District One		
organization Sierra County Board of Supervisors date		
street & number PO Drawer D	telephone 530	289-3295
city or town Downieville	state CA	zip code 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: Hansen 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:

Property Owner				
Property Owner:  (Complete this item at the request of the SHPO or FPO.)				
	on)			
name County of Sierra (Tim H. Beals, Director of Transportation	011)			
street & number PO Drawer 98	telephone <u>530.289.3201</u>			
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.

Name of Property

County and State

Sierra County, California

Historic Highway Bridges in California MPD

Name of multiple listing (if applicable)

#### **United States Department of the Interior** National Park Service

### **National Register of Historic Places Continuation Sheet**

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#### **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 Hansen Bridge, date unknown

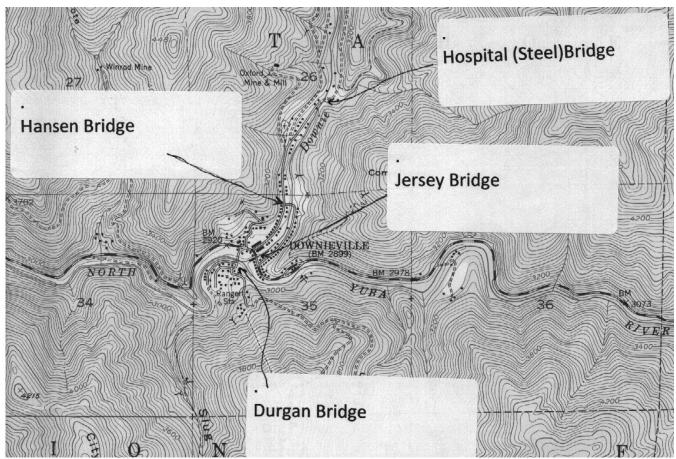


Figure 1. Downieville Site Map

#### **United States Department of the Interior** National Park Service

## **National Register of Historic Places Continuation Sheet**

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

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Figure 2. Historic photo of damaged highway bridge, 1937



Figure 3. Historic photo of damaged highway bridge, 1937

#### **United States Department of the Interior** National Park Service

# **National Register of Historic Places Continuation Sheet**

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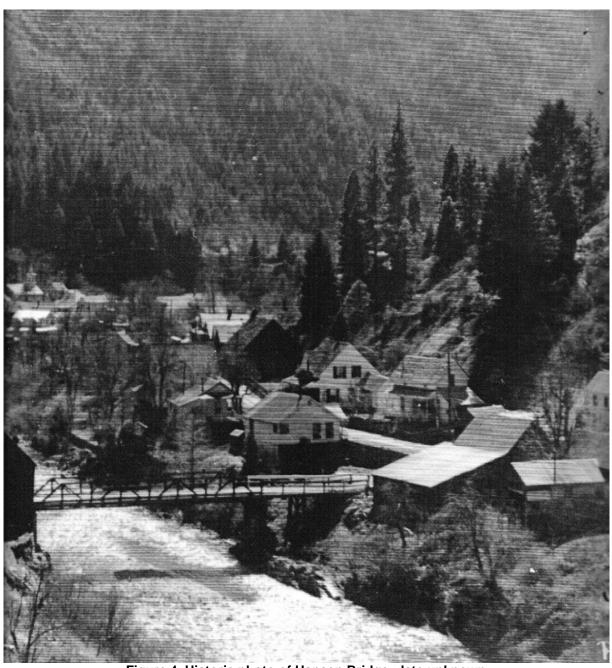


Figure 4. Historic photo of Hansen Bridge, date unknown