United Statea Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

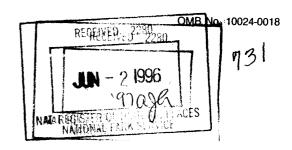
SUPPLEMEN	TARY LISTING RECORD	
NRIS Reference Number: 97000731	Date Listed: 7/15/97	
Percha Creek Bridge	Sierra	N
Property Name	County	Sta
Historic Highway Bridges of NM		
This property is listed in the National R		
This property is listed in the National Rattached nomination documentation su amendments, notwithstanding the Nationomination documentation.	bject to the following exceptions, exc	clusions, or
This property is listed in the National Rattached nomination documentation su amendments, notwithstanding the Nationomination documentation.	bject to the following exceptions, exc	clusions
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DISTRIBUTION:

National Register property file Nominating Authority (without nomination attachment) NPS Form 10-900 (Oct. 1990)

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 *How to Complete the National Register of Historic Places Registration 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.

Name of Prop	erty									
storic name	Percha	Creek	Bridge							
her names/site	number	NMSH	ITD # 15	519	J					
Location										
reet & number_	10 yds	s. S of	NM 152	2, 2 M. V	V of Hillsbo	oro		_ 0	not for p	ublication
y or town	Hillsbo	oro							U vicini	ty
ate <u>New</u>	Mexico	c	code <u>NM</u>	county _	Sierra		code _	051 z	ip code	88042
State/Federal	Agency C	Certificati	ion							
State of Federa	l agency and	d bureau			5-28-97 Date ational Register cr		continuati	on sheet	for addition	nal
Signature of ce					Date					
State or Federa	al agency and	d bureau								
National Park	Service C	ertificati	ion							
ereby/certify that the		egister.			Signature of the K					Date of Action
determined eli National Re	igible for the									<i></i>
determined no	gister.			-						
National Re										
removed from Register.										

Percha	Creek	Bridge
Name of Property		

Sierra, NM

County	and	State	•

5. Classification						
Ownership of Property (Check as many boxes as apply)	Category of Property (Check only one box)	Number of Resources within Property (Do not include previously listed resources in the count.)				
☐ private	☐ building(s)	Contributing	Noncontributing			
☐ public-local	☐ district	0	0	buildings		
☑ public-State ☐ public-Federal	☐ site ☑ structure	0	0	sites		
pasio i sasiai	□ object	1	0	structure		
		0	0	objects		
		1	0	Total		
Name of related multiple p (Enter "N/A" if property is not part	roperty listing of a multiple property listing.)	Number of cor in the National	ntributing resources pro Register	eviously listed		
Highway Bridge Cons	truction in NM	N/A				
6. Function or Use						
Historic Functions (Enter categories from instructions)		Current Functions (Enter categories from				
Transportation:	road-related	Transportation: pedestrian-related				
7. Description						
Architectural Classification (Enter categories from instructions)		Materials (Enter categories from	instructions)			
Steel deck trus	S	foundationcond	rete			
		walls		•		
		roof				
		other steel	-			

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

Name of Property

Sierra, NM County and State

8 S	tatement of Significance			
Applicable National Register Criteria (Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing.)		Areas of Significance (Enter categories from instructions)		
		transportation		
A Property is associated with events that have made a significant contribution to the broad patterns of our history.		engineering		
□В	Property is associated with the lives of persons significant in our past.			
₽ C	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	Period of Significance		
	individual distinction.	1927–1965		
□ D	Property has yielded, or is likely to yield, information important in prehistory or history.			
Criteria Considerations (Mark "x" in all the boxes that apply.)		Significant Dates 1927		
Prope	erty is:			
□ A	owned by a religious institution or used for religious purposes.			
□в	removed from its original location.	Significant Person (Complete if Criterion B is marked above)		
□с	a birthplace or grave.	<u> </u>		
□ D	a cemetery.	Cultural Affiliation		
□ E	a reconstructed building, object, or structure.			
□F	a commemorative property.			
□ G	less than 50 years of age or achieved significance within the past 50 years.	Architect/Builder William S. Henderson		
Narra (Expla	ntive Statement of Significance in the significance of the property on one or more continuation sheet	s.)		
9. M	ajor Bibliographical References			
Bibik	ography ne books, articles, and other sources used in preparing this form on	one or more continuation sheets)		
•	ous documentation on file (NPS):	Primary location of additional data:		
□ preliminary determination of individual listing (36		☐ State Historic Preservation Office ☐ Other State agency ☐ Federal agency ☐ Local government ☐ University ☐ Other Name of repository:		
	recorded by Historic American Engineering			

Percha Creek Bridge	Sierı	ra, NM	
Name of Property	County and State		
10. Geographical Data			
Acreage of Property less than one acre			
UTM References (Place additional UTM references on a continuation sheet.)			
1 1 13 2 5 16 3 14 10 3 16 4 14 8 16 10 Northing 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3 Zone 4 □ s	Easting No	thing
Verbal Boundary Description (Describe the boundaries of the property on a continuation sheet.)			
Boundary Justification (Explain why the boundaries were selected on a continuation sheet.)			
11. Form Prepared By			
name/titleDavid Kammer, Ph.D.			
organization <u>contract historian</u>	date _	Dec., 1996	
street & number 521 Aliso Dr. NE	telephon	e (505) 266–0586)
city or townAlbuquerque	stateNM	zip code8710	08
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 properties have	ving 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			
(Complete this item at the request of SHPO or FPO.)			
name			
street & number	telephon	e	···
city or town	state	zip code	

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.

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National Register of Historic Places
 Continuation Sheet

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Percha Creek Bridge Sierra County, NM

Description

The Percha Creek Bridge, located immediately south of the current highway bridge crossing Percha Creek on NM 152 two miles west of Hillsboro, is a one span Warren-design steel deck truss built in 1927 by the Ware Company of El Paso. The bridge crosses a deep canyon carved by the Rio Percha as it flows eastward out of the Black Range toward the Rio Grande.

The substructure consists of two concrete abutments and two concrete foundations located approximately forty feet below the deck of the bridge and situated on two flat rock surfaces carved into the canyon walls. The superstructure consists of a single span measuring 160 feet in length and flanked by to two 25-foot timber approaches. The lower chords of the truss rest on the two foundations, and the top chords carry the deck load. Typical of a Warren design, the truss consists of four triangular-shaped panels measuring 40 feet in length and with each diagonal acting alternately in tension and compression. Vertical members bisecting each triangle provide stiffening. All of the truss members are riveted to the top and bottom chords. The roadway is 210 feet long and 19 feet wide and consists of a timber deck with an asphalt surface.

The bridge retains a high degree of integrity of setting, design, materials, workmanship and association with few alterations other than the continuous molded metal guardrails installed as a part of the bridge's routine upkeep. In 1995 the bridge was bypassed, but NMSHTD has preserved the bridge, installing parking areas at both ends of the bridge, offering pedestrian access, and erecting a sign noting its history.

Statement of Significance

Well-preserved and marked by a brown and white sign briefly recounting its history, the Percha Creek Bridge near Hillsboro is significant for its long association with highway transportation in New Mexico dating to the late 1920s. It is also significant as the oldest and highest rated bridge Warren design steel deck truss bridge in New Mexico, embodying the design, materials and methods of construction associated with that bridge sub-type.

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Section 8 Page 2

Percha Creek Bridge Sierra County, NM

Statement of Significance (continued)

During the 1920s as the highway department sought to complete the first phase of the state's modern road system by connecting all of the principle communities of the state, citizens from southwestern New Mexico lobbied strenuously for a road through the Black Range that would connect Silver City with the Rio Grande Valley north of Las Cruces. Delegations from Grant County often journeyed to Santa Fe to discuss their request with the State Highway Commission. In time, the citizens of Grant and Sierra Counties even agreed to the assessment of two additional mill levies to help fund the project. Nevertheless, the construction of the so-called Black Range Highway, now NM 152, proved to be a difficult task, achieved only incrementally during the late 1920s and not completed until the mid-1930s.

An early phase of the project on the east side of the mountains was constructing a road to the isolated village of Kingston, site of an early mining district. Funds raised by the mill levies were used to match federal funds under FAP 148-B to complete this section. The most challenging aspect of the project was the difficult terrain engineers faced, especially the deep canyons carved by Percha Creek, as they attempted to build a roadway through the foothills of the Black Range. Two miles west of Hillsboro where the creek had cut a canyon some 120 feet deep through precambrian granite, William S. Henderson, the project engineer, designed a deck truss to span the creek. Although the highway department had never used the design before, Henderson realized that with the waterway in the deep gorge well below the lower chords there was little danger of flooding and debris damaging the structure. Like many engineers who were aware of the susceptibility of through truss superstructures to damage from passing vehicles, he took the opportunity the deep gorge offered to avoid using a design with a trussed superstructure. Based on this precedent, in future projects New Mexico's highway engineers spanned other deep canyons with similar bridge designs.

The setting of the bridge over the deep gorge at Percha Creek imbues the bridge with a strong feeling of its historic appearance and the role it played in providing a highway link to one of the state's most remote mining districts. Contributing to this feeling of a bridge set in rugged terrain are the granite foothills of the Black Range, vegetated by cactus and yucca, that

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Percha Creek Bridge Sierra County, NM

Statement of Significance (continued)

surround the crossing site. When a new bridge was completed in 1995, NMSHTD preserved this unique steel deck truss bridge.

Bibliography

"Brief History of the Black Range Road." New Mexico Highway Journal, Vol. 7, No. 2 (February, 1929), pp. 10-11.

New Mexico State Highway Department. "Bridge Department Structure Report, Bridge No. 1519," March 13, 1930.

Verbal Boundary Description

The property is a rectangular parcel measuring approximately 210×20 feet.

Boundary Justification

The boundary includes the bridge's substructure and superstructure which comprise the historic bridge.

