National Register of Historic Places Continuation Sheet

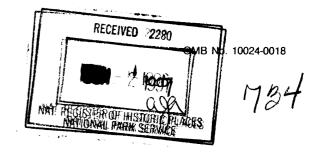
SUPPLEMENTA	ARY LISTING RECORD	
NRIS Reference Number: 97000734	Date Listed: 7/15/97	
Rio Grande Bridge at Radium Springs Property Name	Dona Ana County	
Historic Highway Bridges of NM Multiple Name		
This property is listed in the National Regattached nomination documentation subjamendments, notwithstanding the Nation nomination documentation.	ect to the following exceptions, excl	usions
attached nomination documentation subj amendments, notwithstanding the Nation	ect to the following exceptions, excl	usions
attached nomination documentation subjamendments, notwithstanding the Nation nomination documentation. Sell Bolane	ect to the following exceptions, excl	usions

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.

historic name Rio Grande Bridge at Radium Sprother names/site number NMSHTD # 2591	rings
other names/site numberNMSHID # 2791	
2. Location	
street & number NM 185, 1 M. S of Radium Spring	gs
city or townRadium Springs	□ vicinity
state New Mexico code NM county	
3. State/Federal Agency Certification	
Important	for additional comments.) 5-28-97 Date
Signature of certifying official/Title	Date
State or Federal agency and bureau	
I. National Park Service Certification	
hereby certify that the property is:	nature of the Keeper Date of Action
 ✓ entered in the National Register. ✓ See continuation sheet. 	Toland 7/15/97
☐ determined eligible for the National Register ☐ See continuation sheet.	
determined not eligible for the National Register.	
removed from the National Register.	
other, (explain:)	

Rio Grande	Bridge	at Ra	dium	Springs
Name of Property				

Dona	Ana,	NM	
County and	State		

5. Classification Ownership of Property	Category of Property	Number of Re	sources within Propert	y
(Check as many boxes as apply)	(Check only one box)	(Do not include pre	eviously listed resources in the	e count.)
private	☐ building(s)	Contributing	Noncontributing	
☐ public-local☑ public-State	☐ district	0	0	buildings
☐ public-State	☐ site structure ☐ object	0	0	sites
·		1	0	structures
		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 Const	truction in NM	N/A		
6. Function or Use				
Historic Functions (Enter categories from instructions)		Current Function: (Enter categories from		
Transportation: road-related		`	ation: road-relate	
			TOTOM: TOAK-TETALE	
				· · · · · · · · · · · · · · · · · · ·
***************************************		AND THE PARTY OF T		
44,000,000,000,000,000,000,000,000,000,				
\$40.5 Mark 18.5				
7. Description				
Architectural Classification (Enter categories from instructions)		Materials (Enter categories from	instructions)	
Timber beam		foundationtir	nber	
		wallstir	nber	
		roof		
		otheraspha	ılt	

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

Dona	Ana,	MM
County and	State	

tio Grande Bridge at Radium	Springs	Dona Ana, NM
ame of Property		County and State

2 5	tatement of Significance	
	<u> </u>	
(Mark	icable National Register Criteria "x" in one or more boxes for the criteria qualifying the property tional Register listing.)	Areas of Significance (Enter categories from instructions)
	,	transportation
₩ A	Property is associated with events that have made	engineering
	a significant contribution to the broad patterns of	
	our history.	
	-	
ПВ	Property is associated with the lives of persons	
	significant in our past.	
	S. M. Call Pines	
□ C	Property embodies the distinctive characteristics	
- X -	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.	1933–1965
	marriada distribust.	1777-1707
	Property has yielded, or is likely to yield,	
	information important in prehistory or history.	
	mornation important in premisiory of history.	
Crita	ria Considerations	
	"x" in all the boxes that apply.)	Significant Dates
`		1933
Prope	erty is:	
•	•	
\Box A	owned by a religious institution or used for	
	religious purposes.	
		Significant Person
□В	removed from its original location.	(Complete if Criterion B is marked above)
	Č	
\Box C	a birthplace or grave.	
		Cultural Affiliation
	a cemetery.	
	a reconstructed building, object, or structure.	
	a commemorative property.	
_		Architect/Duilder
	less than 50 years of age or achieved significance	Architect/Builder
	within the past 50 years.	N/A
	tive Statement of Significance	
(Explai	n the significance of the property on one or more continuation sheets.)	
9. Ma	njor Bibliographical References	
	graphy	
(Cite th	e books, articles, and other sources used in preparing this form on one	e or more continuation sheets.)
Previ	ous documentation on file (NPS):	Primary location of additional data:
П	preliminary determination of individual listing (36	☑ State Historic Preservation Office
1	CFR 67) has been requested	☐ Other State agency
	previously listed in the National Register	☐ Federal agency
	previously determined eligible by the National	☐ Local government
□ {	Register	☐ University
Π.	designated a National Historic Landmark	☐ Other
	recorded by Historic American Buildings Survey	Name of repository:
الا	•	raine of repository.
П.	#ecorded by Historic American Engineering	
L I	Record #	
	Π Ե СОГО #	

Rio Grande Bridge at Radium Springs	Dona Ana, 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 3 3 1 9 1 8 0 3 5 9 5 7 4 0 Zone Easting Northing 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3 Zone Easting Northing
Verbal Boundary Description (Describe the boundaries of the property on a continuation sheet.)	☐ See continuation sheet
Boundary Justification (Explain why the boundaries were selected on a continuation sheet.)	
11. Form Prepared By	
name/titleDavid Kammer, Ph.D.	
organizationcontract historian	date
street & number521 Aliso Dr. NE	telephone(505) 266-0586
city or townAlbuquerque	state zip code
Additional Documentation	
Submit the following items with the completed form:	
Continuation Sheets	
Maps	
A USGS map (7.5 or 15 minute series) indicating the prop	erty's location.
A Sketch map for historic districts and properties having I	arge acreage or numerous resources.
Photographs	
Representative black and white photographs of the prop	erty.
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	telephone
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.

National Register of Historic Places Continuation Sheet

Section 7,8 Page 1

Rio Grande Bridge at Radium Springs Dona Ana County, NM

Description

The Rio Grande Bridge near Radium Springs, located on NM 185 one mile south of the community and one-half mile north of Ft. Selden State Monument, is a 19-span timber beam bridge built in 1933. The bridge crosses the Rio Grande as it flows in a now well-defined channel some forty miles below Elephant Butte and Caballo Dams.

The substructure consists of 18 creosote-treated timber piers, or bents, each containing seven piles stiffened with diagonal timbers, or sways. The bents measure approximately 12 feet from the waterway to the deck. Timber abutments, protected by steel bulkheads, are located beneath each of the approaches. The superstructure consists of 19 spans, each measuring 25 feet in length. The deck, consisting of a 2"x4" timbers with an asphalt surface, rests on steel stringers. The roadway is 475 feet long and 29 feet wide and is flanked by timber felloes. The bridge's timber rails are lined with metal guardrails.

The bridge retains a high degree of integrity of setting, design, materials, workmanship and association. Alterations include the addition of the steel bulkheads protecting the timber abutments, an additional pile to each bent to widen the roadway, and the installation of the metal guardrails.

Statement of Significance

Well-preserved and serving local traffic in the agricultural communities of the upper Mesilla Valley, the Rio Grande Bridge at Radium Springs is significant for its long association with highway transportation in New Mexico dating to the 1930s. Listed on the New Mexico State Register of Cultural Properties in 1977 and one of the highest rated bridges of its type in the 1987 bridge survey, it is significant as one of the best examples of its type, embodying the design, materials and methods of construction associated with the timber and beam bridge sub-type.

During the 1920s and 1930s 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, engineers found that the timber beam bridge design offered an

National Register of Historic Places
 Continuation Sheet

Section 8 Page 2

Rio Grande Bridge at Radium Springs Dona Ana County, NM

Statement of Significance (continued)

inexpensive and easily maintained bridge type for crossing many of the state's arroyos and waterways. Although many of the bridges constructed using this design were relatively small, limited to a few spans, in southern New Mexico below the dams that controlled the flow of the Rio Grande the bridge design proved advantageous for the frequent crossings highways made over the river. Faced with constructing several crossings along U.S. 85, previously designated as the Camino Real Highway and NM 1, engineers relied on the timber beam bridge design. Their confidence derived, in part, from knowing that the upstream dams and irrigation district canals sufficiently regulated the flow of water, limiting flooding and the possibility of the waterway overflowing its channel.

Typically, these timber beam bridges were constructed with 25-foot spans and rested on substructures of pile-driven bents. Unlike the state's earliest timber beam bridges, those of the 1920s and 1930s were constructed with creosote-treated timber to prolong the life of the bridge. Later, as vehicles increased in size and weight, engineers often added an additional pile to each bent which permitted them to widen the roadway. improvements could easily be carried out by highway department crews, another advantage the bridge design offered. The Rio Grande Bridge near Radium Springs, constructed under FAP 107-A, typifies the design and subsequent alterations associated with this bridge design. As the norm for roadway widths changed from 18 to 24 feet by the mid-1930s, workers were easily able to drive additional piles to widen the bents, add an additional steel Ibeam, and then widen the deck to improve the safety and efficiency of the bridge.

The setting of the bridge over the Rio Grande with its embankments protecting nearby farmland imbues the bridge with a strong feeling of its historic appearance and the role it played in transforming the state's early Camino Real Highway into a component of the modern federal highway system, U.S. 85.

National Register of Historic Places Continuation Sheet

Section 9,10 Page 3

Rio Grande Bridge at Radium Springs Dona Ana County, NM

Bibliography

New Mexico State Highway Department. "Bridge Department Structure Report, Bridge No. 2591," Feb. 23, 1940

Van De Greyn, E.B. "New Mexico's Experience with Treated Timber Highway Bridges." New Mexico Highway Journal, Vol 6. No. 2 (February, 1928), pp. 7-9.

Verbal Boundary Description

The property is a rectangular parcel measuring approximately 475×30 feet.

Boundary Justification

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