

# HABS/HAER INVENTORY

U.S. Department of the Interior  
National Park Service  
Washington, DC 20240

1. SITE I.D. NO

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2. NAME(S) OF STRUCTURE Sutherland Bridge Bridge over Rio Grande River		RG10	5. ORIGINAL USE roadway bridge	7. CLASSIFICATION BT&A: TRUSS: WOOD				7	6	0	0	9. RATING local
3. SITE ADDRESS (STREET & NO) 3.7 miles southeast of Del Norte NW¼ S2, T39N, R6E Private road over Rio Grande River			6. PRESENT USE roadway bridge									10. DATE 1924
4. CITY/VICINITY Del Norte vicinity		COUNTY Rio Grande	STATE Colorado	8. UTM ZONE 13		EASTING 383000			NORTHING 4170540			11. REGION RMRO
				SCALE 1:24 OTHER		1:62.5		QUAD NAME Del Norte				

12. OWNER/ADMIN ADDRESS

Samuel Holland Del Norte Colorado 81132

13. DESCRIPTION AND BACKGROUND HISTORY INCLUDING CONSTRUCTION DATE(S), PHYSICAL DIMENSIONS, MATERIALS, MAJOR ALTERATIONS, EXTANT EQUIPMENT, AND IMPORTANT BUILDERS, ARCHITECTS, ENGINEERS, ETC.

Rigid-connected, 6-panel timber Warren pony truss w/ verticals at all panel points; log kingpost pony truss approach

span number:	2	end/top chrd:	2 4x12 timbers
span length:	50'0"	bottom chord:	2 4x12 timbers
overall length:	128'0"	vertical:	8x8 timber
roadway width :	10'0"	diagonal:	8x10 timber
		flr./decking:	timber decking and stringers w/ 6x12 floor beams
		substructure:	concrete wingwalls w/ solid concrete piers

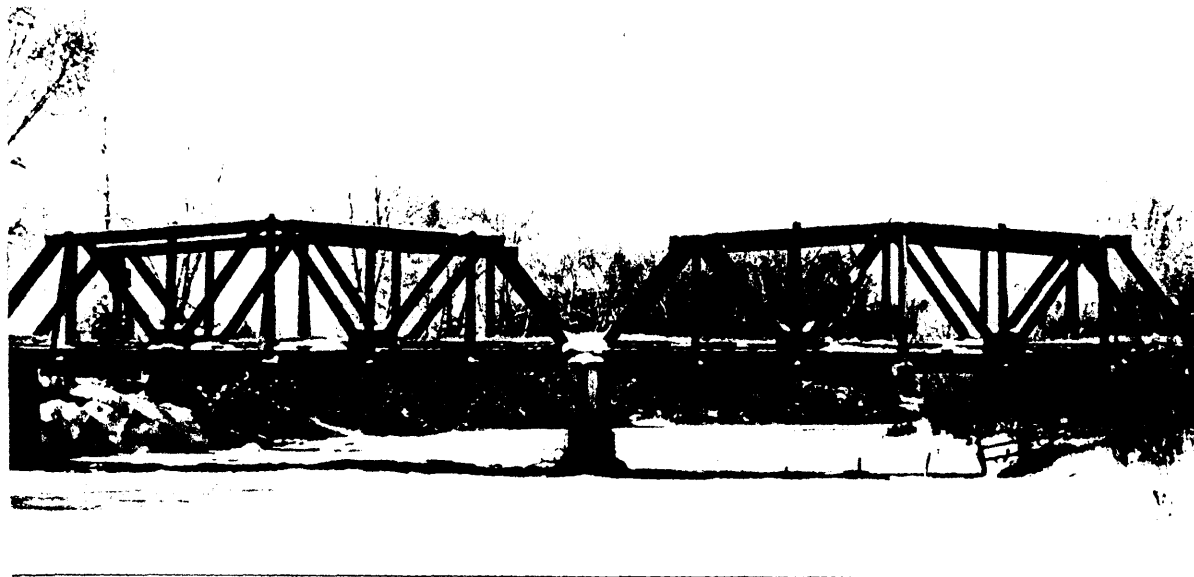
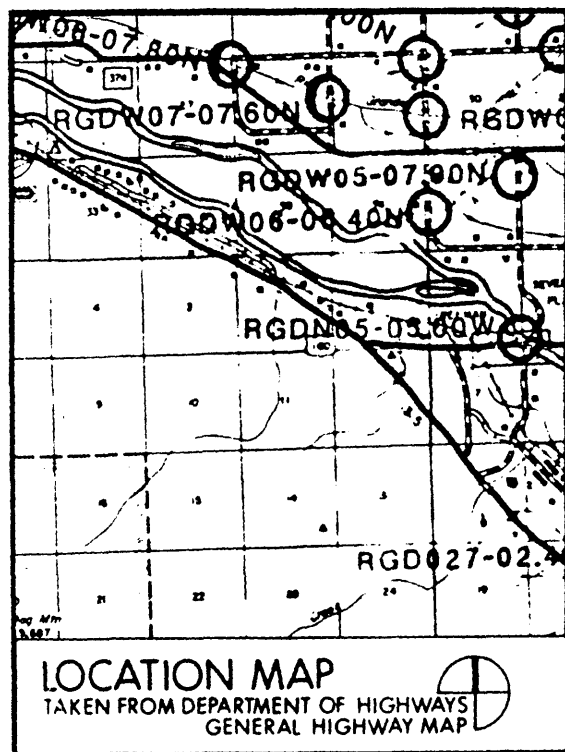
Erected in 1924, probably by local labor, the Sutherland Bridge was put up over the Rio Grande River as a private access to the Sutherland Ranch east of Del Norte. It is a replacement span for an earlier wood bridge at this location, and the log kingpost approach span on the north portal appears to be a remnant of the earlier structure. The Sutherland Bridge is identical to another privately owned crossing, two miles downstream, built four years later. Both are rigidly connected, with steel gusset plates at the connections of the diagonals with the upper and lower chords; both also feature unusual sloped top chords. Still privately owned, the Sutherland Bridge is today in fair condition, under relatively light usage.

14. CONDITION  EXCELLENT  GOOD  FAIR  DETERIORATED  RUINS

15. DANGER OF DEMOLITION? (SPECIFY THREAT)  YES  NO  UNKNOWN

16. SIGNIFICANCE AREA OF SIGNIFICANCE: Engineering

The older of the two examples of this structural type, the Sutherland Bridge features an unusual adaptation of a bridge type usually associated with steel construction, executed with heavy timbers. It is a Warren pony truss - common enough for steel, but unusual as a timber structure. As such it is an interesting deviation from standard form, an unusual later truss example.



18 LOCATED IN AN HISTORIC DISTRICT?  YES  NO  NAME

19 PUBLIC ACCESSIBILITY  YES, LIMITED  YES, UNLIMITED  NO  UNKNOWN

20. EXISTING SURVEYS  NR  NHL  HABS  HAER-1  HAER  NPS  STATE  
 COUNTY  LOCAL  OTHER

21 REFERENCES—HISTORICAL REFERENCES, PERSONAL CONTACTS, AND/OR OTHER

Fred Olne, Rio Grande County Road Supervisor. Oral interview with Clayton Fraser, 9 January 1984.  
 Ralph Off. Oral interview with Clayton Fraser, 15 March 1984. Off owns the adjacent ranch.  
 Field inspection by Clayton Fraser, 4 January 1984

22 INVENTORIED BY  Clayton Fraser and Carl Hallberg

AFFILIATION  Fraserdesign  Loveland Colorado

DATE  15 March 1984