

Cottonwood Creek Bridge

CALD30

GENERAL DATA

structure no.:	316000.7	city/town:	2.5 miles northeast of Bonanza
county:	Caldwell	feature inters.:	Cottonwood Creek
		cadastral grid:	S8/9, T56N, R27W
		highway route:	County Road 316
		highway distr.:	1
		current owner:	Caldwell County

STRUCTURAL DATA

superstructure:	steel, 3-panel, pin-connected Pratt bedstead		
substructure:	truss leg abutments with timber back- and wingwalls		
span number:	1	condition:	fair
span length:	48.0'	alterations:	none
total length:	48.0'	floor/decking :	timber deck over steel stringers
roadway width:	13.8'	other features:	upper chord and upright end post: 2 channels with cover and batten plates; lower chord: 2 angles with batten plate (outer panels), 2 looped rectangular eyebars (inner panel); vertical: 4 angles with lacing; diagonal: 2 looped square eyebars; lateral bracing: round rod with threaded ends; floor beam: I-beam, U-bolted to lower chord pins; guardrail: 2 angles

HISTORICAL DATA

erection date:	1904
erection cost:	\$579.00
designer:	unknown
fabricator :	Cambria Steel Company, Pittsburgh PA
contractor:	John H. Sparks, St. Joseph MO
references:	Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure Number 316000.7; Caldwell County Court Record, Book O: n.p. (12 June 1902), page 592 (6 September 1904); Caldwell County Bridge Record, n.p. - both located at the Caldwell County Courthouse, Kingston MO; field inspection by Lon Johnson, 8 September 1990.
sign. rating:	38
evaluation:	NRHP non-eligible (typical example of common structural type)

Inventoried by: Michelle Crow-Dolby 7 July 1993

HAER INVENTORY

Missouri Historic Bridge Inventory

NAME(S) OF STRUCTURE

Cottonwood Creek Bridge
MHTD: 316000.7

CALD30

DATE(S) OF CONSTRUCTION

1904

LOCATION

County Road 316 over Cottonwood Creek; S8/9, T56N, R27W
2.5 miles northeast of Bonanza; Caldwell County, Missouri

USE (ORIGINAL / CURRENT)

roadway bridge / roadway bridge

RATING NRHP non-eligible (score: 38)

CONDITION

fair

OWNER

Caldwell County

span number: 1
span length: 48.0'
total length: 48.0'
roadway wdt.: 13.8'

superstructure: steel, 3-panel, pin-connected Pratt bedstead
substructure: truss leg abutments with timber back- and wingwalls
floor/decking: timber deck over steel stringers
other features: upper chord and upright end post: 2 channels with cover and batten plates; lower chord: 2 angles with batten plate (outer panels), 2 looped rectangular eyebars (inner panel); vertical: 4 angles with lacing; diagonal: 2 looped square eyebars; lateral bracing: round rod with threaded ends; floor beam: I-beam, U-bolted to lower chord pins; guardrail: 2 angles

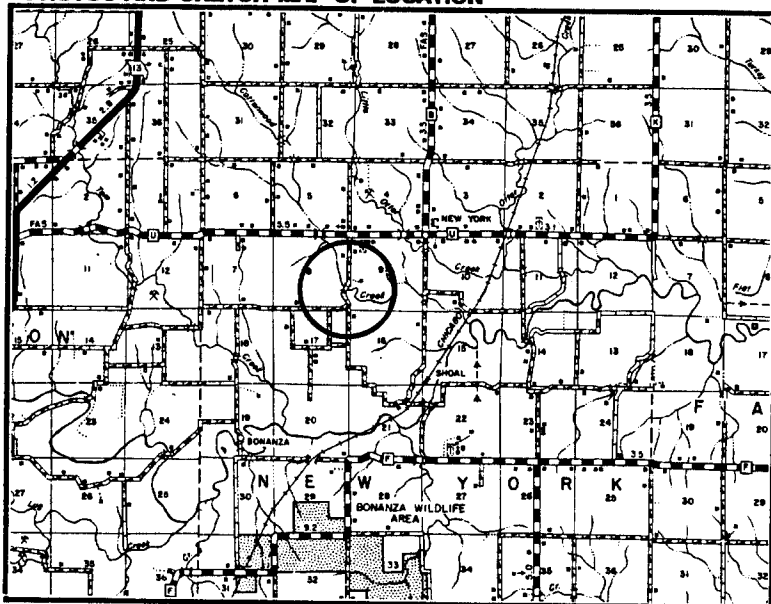
Carrying County Road 316 in central Caldwell County northeast of Bonanza, this bridge spans Cottonwood Creek. Configured as a single-span pin-connected Pratt bedstead, the truss is supported by a steel and timber substructure. Preceding this truss was a crossing which dates to 1902. In June of that year county officials entered into a contract with John H. Sparks to erect a bridge at this location. The bridge, costing \$125.00, however, was short-lived. Only two years later, in September of 1904, county officials were again contracting with Sparks for a 48-foot bedstead crossing Cottonwood Creek. The cost of the bridge had increased to \$579.00. Since its completion in 1904, the Cottonwood Creek has carried intermittent traffic with no major alterations of note.

In a bedstead truss, a single "leg" functioned as both end post and support at each corner of the structure. This combined super- and substructure reduced erection costs somewhat, but bedsteads were prey to flood and collision damage and suffered from inherent structural weaknesses relating to compression stress in the lower chords. Despite these weaknesses, numerous truss leg bedsteads were erected throughout Missouri in the late 1890s and early 1900s. Hundreds remain in place today -in fact, Missouri has probably more bedsteads than any other state. The Cottonwood Creek Bridge is a well-preserved, though not particularly distinguished, example of this statewide bridge construction trend.

NAME(S) OF STRUCTURE

Cottonwood Creek Bridge

PHOTOS AND SKETCH MAP OF LOCATION



LOCATION MAP

TAKEN FROM MISSOURI HIGHWAY AND TRANSPORTATION DEPARTMENT
GENERAL HIGHWAY MAP

SOURCES

Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure Number 316000.7; Caldwell County Court Record, Book O: n.p. (12 June 1902), page 592 (6 September 1904); Caldwell County Bridge Record, n.p. - both located at the Caldwell County Courthouse, Kingston MO; field inspection by Lon Johnson, 8 September 1990.

INVENTORIED BY

Clayton Fraser and Michelle Crow-Dolby

AFFILIATION

Fraserdesign, Loveland CO

DATE

7 July 1993