

Tom Creek Bridge

CALD31

GENERAL DATA

structure no.: 324000.6	city/town: 1.0 mile north of Bonanza
county: Caldwell	feature inters.: Tom Creek
	cadastral grid: S14, T56N, R27W
	highway route: County Road 324
	highway distr.: 1
	current owner: Caldwell County

STRUCTURAL DATA

superstructure: steel, 4-panel, pin-connected Pratt bedstead
substructure: concrete abutments and wingwalls

span number: 1	condition: fair
span length: 60.0'	alterations: none
total length: 61.0'	floor/decking : timber deck over steel stringers
roadway width: 11.7'	other features: upper chord and upright end post: 2 channels with cover plate and lacing; lower chord: 2 angles with lacing (outer panels), 2 looped rectangular eyebars (inner panels); 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: single channel

HISTORICAL DATA

erection date: 1904
erection cost: \$7900.00 (22-bridge contract)
designer: Canton Bridge Company, Canton OH
fabricator : Canton Bridge Company, Canton OH
contractor: Canton Bridge Company, Canton OH

references: Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure Number 324000.6; Caldwell County Court Record, Book O: page 181 (1 May 1903), page 343 (4 November 1903) - located at the Caldwell County Courthouse, Kingston MO; field inspection by Lon Johnson, 8 September 1990.

sign. rating: 44
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

Tom Creek Bridge
MHTD: 324000.6

CALD31

DATE(S) OF CONSTRUCTION

1904

LOCATION

County Road 324 over Tom Creek; S14, T56N, R27W
1.0 mile north of Bonanza; Caldwell County, Missouri

USE (ORIGINAL / CURRENT)

roadway bridge / roadway bridge

RATING NRHP non-eligible (score: 44)

CONDITION

fair

OWNER

Caldwell County

span number: 1
span length: 60.0'
total length: 61.0'
roadway wdt.: 11.7'

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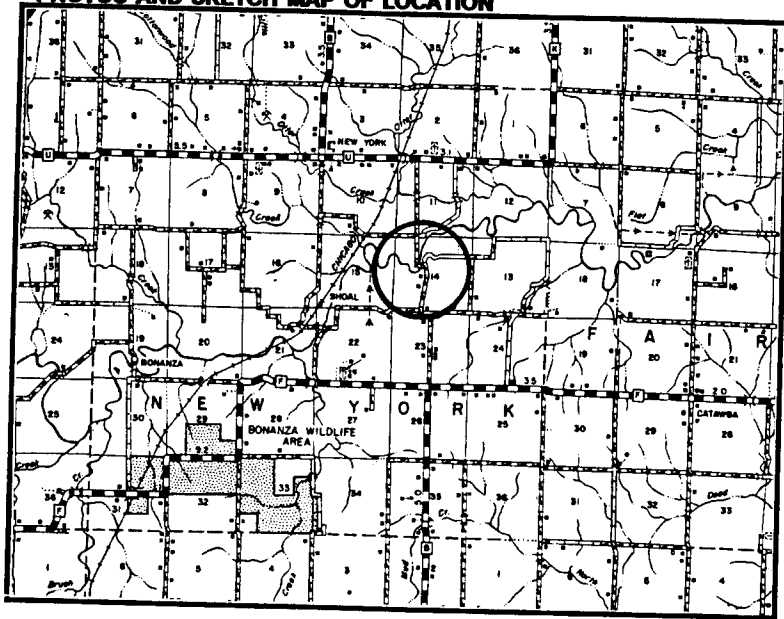
Located in New York Township, this medium-span steel truss carries a gravel-surfaced county road over Tom Creek. The structure is comprised of a pinned bedstead, supported by concrete abutments. The Tom Creek Bridge was one of 22 bridges erected in Caldwell County from a single contract let in November 1903. The bridges had been surveyed by the county road and bridge commissioner that spring and a contract let to the Canton Bridge Company for \$8990.00 to fabricate and build all 22 spans. For some reason this contract was never executed, however, and a second contract was signed with the Canton, Ohio, bridge firm in November for a thousand dollars less. Canton used steel components rolled in Pittsburgh by the Cambria steel works to fabricate this 60-foot bedstead, erecting it over Tom Creek a mile north of Bonanza in 1904. The Tom Creek Bridge has functioned in place since that time, with no major alterations and minimal maintenance.

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 Tom Creek Bridge is a well-preserved, though not particularly distinguished, example of this statewide bridge construction trend.

NAME(S) OF STRUCTURE

Tom Creek Bridge

PHOTOS AND SKETCH MAP OF LOCATION



LOCATION MAP

TAKEN FROM MISSOURI HIGHWAY AND TRANSPORTATION DEPARTMENT
GENERAL HIGHWAY MAP

SOURCES

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INVENTORIED BY

Clayton Fraser and Michelle Crow-Dolby

AFFILIATION

Fraserdesign, Loveland CO

DATE

7 July 1993