NPS Form 10-900-a
(8-86)

OMB Approval No. 1024-0018

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number _____ Page _____

SUPPLEMENTARY LISTING RECORD

NRIS Reference Number: Various Date Listed: 9/30/88

Various	Various	Arizona
Property Name	County	State

Vehicular Bridges in Arizona
Multiple Name

This property is listed in the National Register of Historic Places in accordance with the attached nomination documentation subject to the following exceptions, exclusions, or amendments, notwithstanding the National Park Service certification included in the nomination documentation.

for Patrick Andrus 9/30/88
Signature of the Keeper Date of Action

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Amended Items in Nomination:

There were several nominations included with this multiple property submission which defined and justified periods of significance extending into the less than fifty year old range to correspond with criterion A significance although the resources' dates of construction actually occurred well over fifty years ago. For all of these bridges, the period of significance should be concluded in 1938 to conform with National Register requirements. The following bridges are included in this category:

Petrified Forest, Querino, Hereford, Douglas Underpass, Dead Indian Canyon, Pumphouse Wash, Walnut Canyon, Fossil Creek, Black River, Salt River, Salt River Canyon, Reppy Avenue, Black Gap, Gila River, Park Avenue, Solomonville Road Overpass, Solomonville Road Overpass (Clifton), Gila Bend Overpass, Hassayampa River, Lewis and Pranty Creek, Mormon Flat, Fish Creek, Pine Creek, Sand Hollow Wash, Old Trails, Corduroy, Cedar Canyon, Holbrook, Jack's Canyon, Little Lithodendron Wash, Lithodendron Wash, St. Joseph, Woodruff, Cienega, Fourth Avenue Underpass, Sixth Avenue Underpass, Stone Avenue Underpass, Alchesay Canyon, Devil's Canyon, Queen Creek (Florence Junction vicinity), Queen Creek (Superior vicinity), Kelvin, Mineral Creek, Sacaton Dam, San Tan Canal, Winkelman, Santa Cruz No. 1, Broadway, Hell Canyon, Little Hell Canyon, Lynx Creek, Verde River, and Walnut Grove. (Period of significance issues discussed with Pat Stein of the AZ SHPO.)

DISTRIBUTION:
National Register property file
Nominating Authority (without nomination attachment)

1628

HABS/HAER INVENTORY

See "HABS/HAER Inventory Guidelines" before filling out this card.

1. NAME(S) OF STRUCTURE
Gila River Bridge (Clifton Bridge) ADOT: 8152

2. LOCATION
Old Safford Road over Gila River
6.8 miles southeast of Clifton; SE1/4 S25 T5S R29E
Greenlee County, Arizona

3. DATE(S) OF CONSTRUCTION
1918

4. USE (ORIGINAL/CURRENT)
highway bridge / roadway bridge

5. RATING
NRHP eligible: state significance

6. CONDITION
fair; sufficiency rating: 68.7 owner: Greenlee County

7. DESCRIPTION

span number : 2
span length : 123.0'
total length: 288.0'
roadway wdt.: 17.0'

superstructure: reinforced concrete Luten arch w/ cantilevered roadways
substructure : concrete abutments, wingwalls and pier
floor/decking : concrete deck over earth fill
other features: moulded concrete guardrails w/ turned concrete balusters and paneled bulkheads

8. HISTORICAL DATA

The Arizona State Engineer designed the Clifton-Solomonville Road in 1917 to follow mountain ridges and thus avoid the need for numerous bridges and drainage structures, but a major crossing of the Gila River in Greenlee County was unavoidable. Keeping to the high route, the preliminary survey showed the highway crossing the river 101.5' above the streambed. Accordingly, in March 1917 State Engineer Thomas Maddock designed a 312' steel deck arch bridge and budgeted $60,000 for its construction. When the bids came in far over budget, the design was scrapped. World War I made steel construction impractical, so R.V. Leeson, the Assistant Chief Engineer of the Topeka Bridge and Iron Company, was hired to design a single 270' open spandrel arch with concrete girder approaches. In March 1918, the new state engineer, B.M. Atwood, ordered the design changed to two equal-span Luten arches and the highway grade dropped closer to the river level. This was the design followed, and that year a convict work force built the Gila River Bridge for $60,191. The highway has since been rerouted, but the bridge remains unaltered as a county structure.

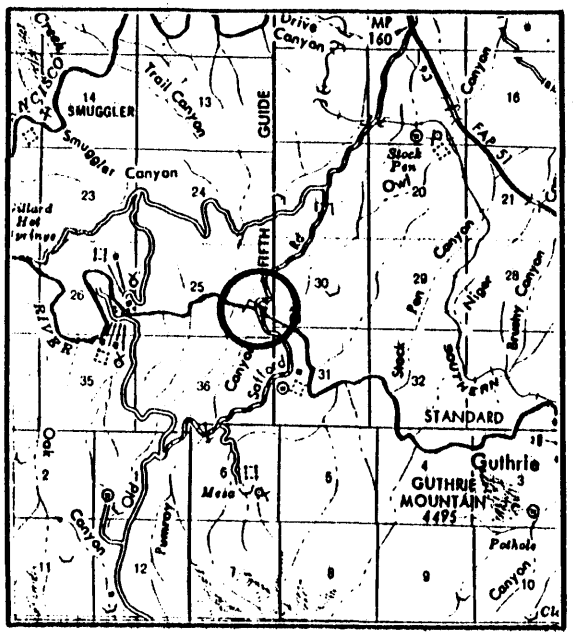
9. SIGNIFICANCE

Had the state engineer built the single-span concrete arch, it would have been one of the longest of its kind in America. The steel arch, if built, would have been the first vehicular deck arch constructed in the state - a harbinger of the Navajo Bridge built a decade later. The Gila River Bridge, as built, was more conservative than either of the two earlier designs, but still is a visually striking and historically and technologically important structure. It was the most significant structure on the Clifton-Solomonville Highway, an important early regional route. The bridge is one of a handful of structures remaining in Arizona which were built using convict labor. Of the three most important convict-built bridges in the inventory (others: Tempe Bridge (1911-13) and Antelope Hill Bridge (1914)), it is the only one still open to vehicular traffic. Finally, the Gila River Bridge is an outstanding long-span example of the Luten arch design, patented and marketed by Daniel B. Luten - one of the most significant vehicular bridges in Arizona.

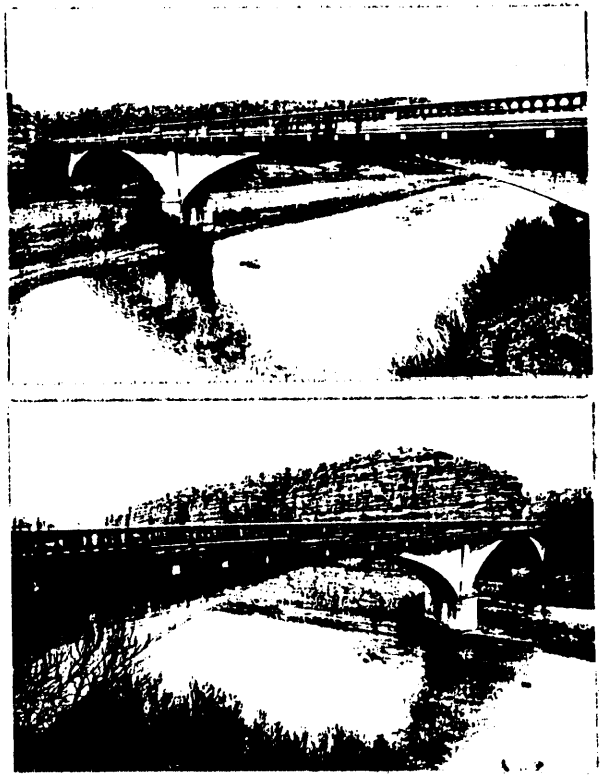
10. NAME(S) OF STRUCTURE

Gila River Bridge (Clifton Bridge)

11. PHOTOS (W/ FILM ROLL & FRAME NO.) AND SKETCH MAP OF LOCATION



LOCATION MAP
TAKEN FROM DEPARTMENT OF TRANSPORTATION
GENERAL HIGHWAY MAP



12. SOURCES

Bridge Record, Arizona City Streets and County Roads: 8152; Structures Section, Arizona Department of Transportation, Phoenix AZ.

Third Biennial Report of the State Engineer, Arizona, 1916-1918,(Phoenix: Arizona State Press, 1918), pages 100-101.

Fourth Biennial Report of the State Engineer, Arizona, 1918-1920, (Phoenix: Republican Print Shop, 1920), page 60.

Proceedings of the Greenlee County Board of Supervisors: 4 March 1918 (Book 2, page 515).

Field inspection by Clayton Fraser, 26 February 1987.

13. INVENTORIED BY:	**AFFILIATION**	**DATE**
Clayton B. Fraser	Fraserdesign Loveland Colorado	1 April 1987