

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

Vehicle 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 Andrew
Signature of the Keeper

9/30/88
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, Alchey 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)

HABS/HAER INVENTORY

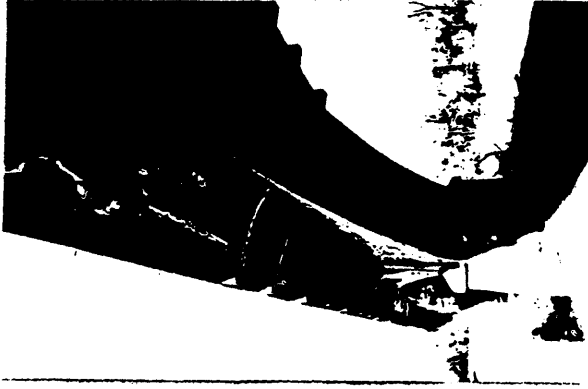
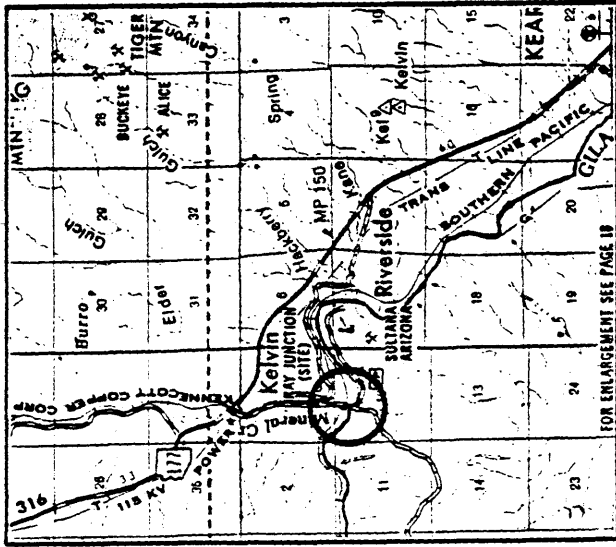
See "HABS/HAER Inventory Guidelines" before filling out the card.

1646

<p>1. NAME(S) OF STRUCTURE Kelvin Bridge (Gila River Bridge #2)</p> <p>2. LOCATION Florence-Kelvin Highway, over the Gila River Kelvin; NM1/4 S12 T4S R13E Pinal County, Arizona</p>	<p>ADOT: 8441</p> <p>3. DATE(S) OF CONSTRUCTION 1917</p> <p>4. USE (ORIGINAL/CURRENT) roadway bridge / roadway bridge</p> <p>5. RATING NRHP eligible: local significance</p>
<p>6. CONDITION fair; sufficiency rating: 33.7</p> <p>owner: Pinal County</p> <p>span number : 4</p> <p>span length : 95.0'</p> <p>total length: 364.0'</p> <p>roadway wdt.: 18.3'</p> <p>superstructure: reinforced concrete luten arch w/ cantilevered roadway substructure : concrete abutments, wingwalls and piers on driven piles floor/decking : asphalt over concrete deck w/ earth fill other features: incised concrete bulkheads w/ Armco steel guardrails; plain, tapered concrete cantilever brackets</p>	
<p>7. DESCRIPTION</p> <p>Early in 1915, the Pinal County Board of Supervisors appropriated \$52,000 from a \$500,000 bond issue to build bridges in the small towns of Kelvin and Winkelman on the Superior-Mammoth Road. At the advice of Assistant State Engineer T.M. Nichols, the two Gila River structures would use multi-span arches with cantilevered roadways, to be designed by Daniel Lutten. In August, R.V. Leeson, assistant engineer of the National Bridge Company, completed the drawings. A month later, the county's bid solicitation was answered by two Kansas-based bridge companies: the Missouri Valley Bridge and Iron Company and the Topeka Bridge and Iron Company. Topeka received the contract for \$43,995. To the supervisors' consternation, Topeka intended to build the two structures sequentially rather than simultaneously and first began the Winkelman bridge, completing it late in 1916. After a series of delays and excuses, the company finally got under way at Kelvin in March 1917. The bridge was completed in December. Since construction of State Route 177, the Kelvin Bridge functions only as a local crossing of the Gila.</p>	
<p>8. SIGNIFICANCE</p> <p>Although secondary to the Mesa-Florence-Tucson Highway (U.S. 89) as a southern Arizona route, the Superior-Mammoth Road functioned for decades as a locally important route in Pinal County. The Kelvin and Winkelman bridges are historically significant as early remnants of that route. Technologically, the two are important for their representation of an important structural type used on vehicular spans: the luten arch. Because of their relatively high construction cost, multi-span luten arches were infrequently constructed. Four are known to have been built in Arizona: the Kelvin and Winkelman bridges, a bridge over the Agua Fria River at Marinette in Maricopa County and a bridge over the Verde River at Camp Verde in Yavapai County. The latter two have since been razed, leaving the Kelvin and Winkelman structures as the only multi-span examples among the thirteen remaining luten arches identified in the state.</p>	

10. NAME(S) OF STRUCTURE
Kelvin Bridge (Gila River Bridge #2)

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



LOCATION MAP
TAKEN FROM DEPARTMENT OF TRANSPORTATION
GENERAL HIGHWAY MAP

Bridge Record, Arizona City Street and County Roads: 8441; Structures Section, Arizona Department of Transportation, Phoenix, AZ.

Proceedings of the Pinal County Board of Supervisors: 17 August 1915; 7 September 1915; 16 October 1915; 20 September 1916; 5 December 1916; 7 March 1917; 8 January 1918.

(Florence) Arizona Blade-Tribune: 24 July 1915, 21 August 1915; Winkelman Times, n.d.
Field inspection by Clayton Fraser, 22 February 1987.

13. INVENTORIED BY:
Clayton B. Fraser

AFFILIATION
Fraserdesign Loveland Colorado

DATE
1 April 1987