

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

<u>Property Name</u>	<u>County</u>	<u>State</u>
<u>Various</u>	<u>Various</u>	<u>Arizona</u>

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 Andrews
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, 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)

HABS/HAER INVENTORY

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

1681

1. NAME(S) OF STRUCTURE Devil's Canyon Bridge	3. DATE(S) OF CONSTRUCTION 1921-22
2. LOCATION Abandoned grade of U.S. 60 over Devil's Canyon 4.7 miles northeast of Superior; NW1/4 S22 T1S R13E Pinal County, Arizona	4. USE (ORIGINAL/CURRENT) highway bridge / abandoned 5. RATING NRI: P eligible; local significance
6. CONDITION fair / good owner: Pinal County span number : 1 span length : 65.0' total length: 108.0' roadway wdt. : 20.0' superstructure: reinforced concrete filled spandrel arch substructure : concrete abutments and wingwalls on spread footings floor/decking : concrete deck over earth fill other features: paneled concrete parapet walls w/ steel pipe guardrails; incised line on concrete arch ring	
7. DESCRIPTION <p>Federal Aid Project 16 - Miami-Superior Highway in Gila and Pinal counties (later U.S. 60) - involved some of the most difficult highway construction ever undertaken by the Arizona Highway Department. The heaviest portion of the work conducted in the late 1910s and early 1920s consisted of 1.75 miles of road blasted through rugged Queen Creek Canyon. Designated as Section C, it was completed in 1921 at a cost of approximately \$300,000. In addition to numerous small drainage structures, the project involved construction of substantial concrete arch bridges over Queen Creek and Devil's Canyon. The AHD bridge department engineered the Devil's Canyon Bridge in October 1921 as a medium-span, filled-spandrel arch, with a moderate arch barrel rise, a roadway which cantilevered over the arches on both sides, a corbeled arch ring and paneled concrete parapets with steel pipe guardrails. Under the supervision of AHD Resident Engineer H.B. Wright, a force account labor crew constructed the Devil's Canyon Bridge in 1921-22 for a total cost of \$23,780. It carried traffic until its replacement in 1941. The Devil's Canyon Bridge now stands abandoned beside U.S. 60.</p> <p>The Devil's Canyon Bridge is historically significant as an integral part in one of the state's most important early highway projects. Additionally, this structure is technologically important as an early example of a statewide bridge design trend. The Arizona Highway Department used three basic concrete arch configurations in the 1910s and 1920s: the Luten arch, the open spandrel arch, and what it termed the "common arch" - or segmental filled spandrel - design. Long-span examples of the former were engineered by their inventor, Daniel Luten, or his assistants. The latter two were designed in-house by AHD bridge engineers for medium-to-long-span applications. The Devil's Canyon Bridge is noteworthy as the oldest such AHD-designed common arch remaining in Arizona. It was followed soon by other similar AHD spans: among them the Lynx Creek Bridge (1922), Verde River Bridge (1922-23) and Fossil Creek Bridge (1924), all featuring similar Luten-like reinforcing, span lengths and concrete detailing.</p>	
8. HISTORICAL DATA	
9. SIGNIFICANCE	

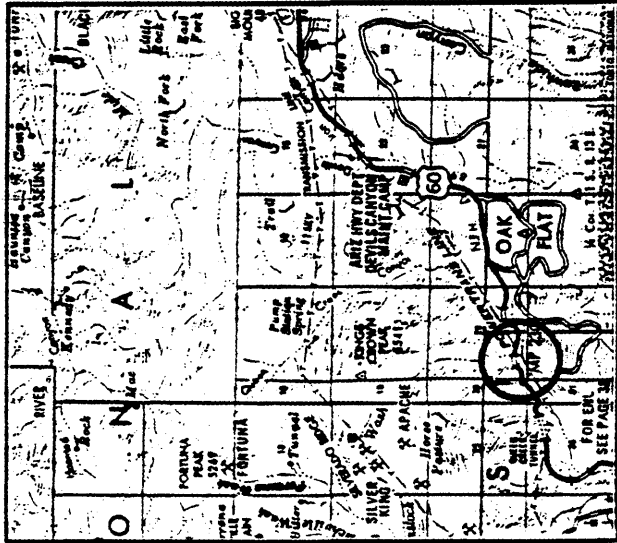
NPS FORM 10-500 (4/66)

Historic American Buildings Survey / Historic American Engineering Record
National Park Service, U.S. Department of the Interior, P.O. Box 37127, Washington, DC 20019-7127

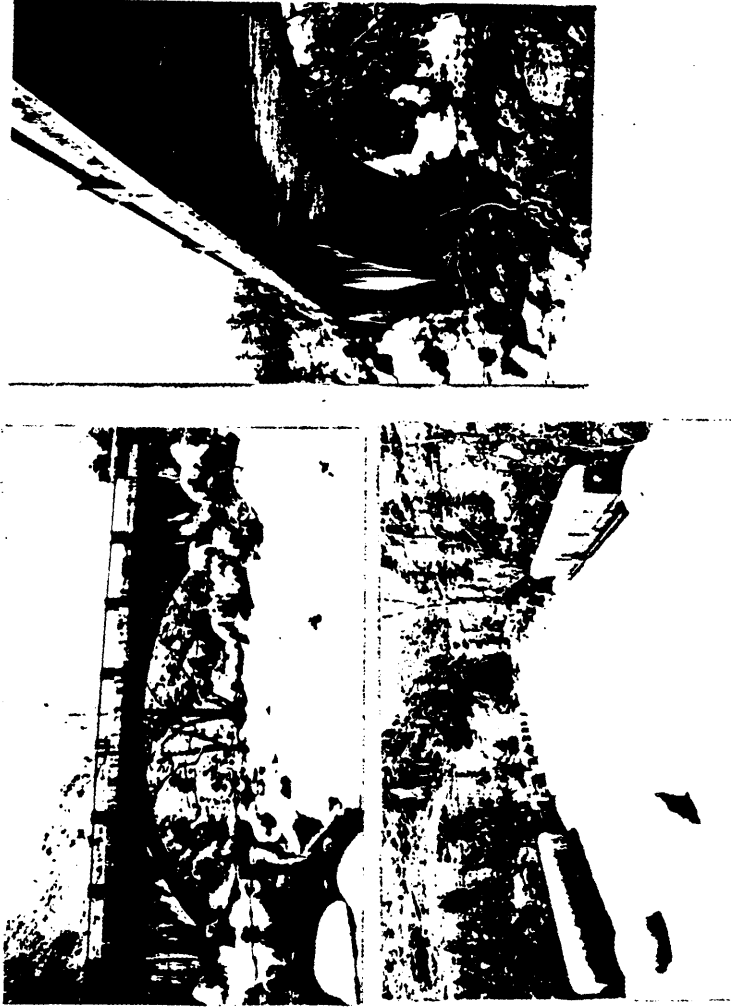
10. NAME(S) OF STRUCTURE

Devil's Canyon Bridge

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



LOCATION MAP
 TAKEN FROM DEPARTMENT OF TRANSPORTATION
 GENERAL HIGHWAY MAP



Fourth Biennial Report of the State Engineer of Arizona, 1918-1920 (Phoenix: Republican Print Shop, 1920), pages 38-39, 62.

Fifth Biennial Report of the State Engineer of Arizona, 1920-1922 (n.p., 1922), pages 48, 51, 99-101.

Original construction drawings, Structures Section, Arizona Department of Transportation, Phoenix AZ.

Field inspection by Clayton Fraser, 26 February 1987.

13. INVENTORIED BY:

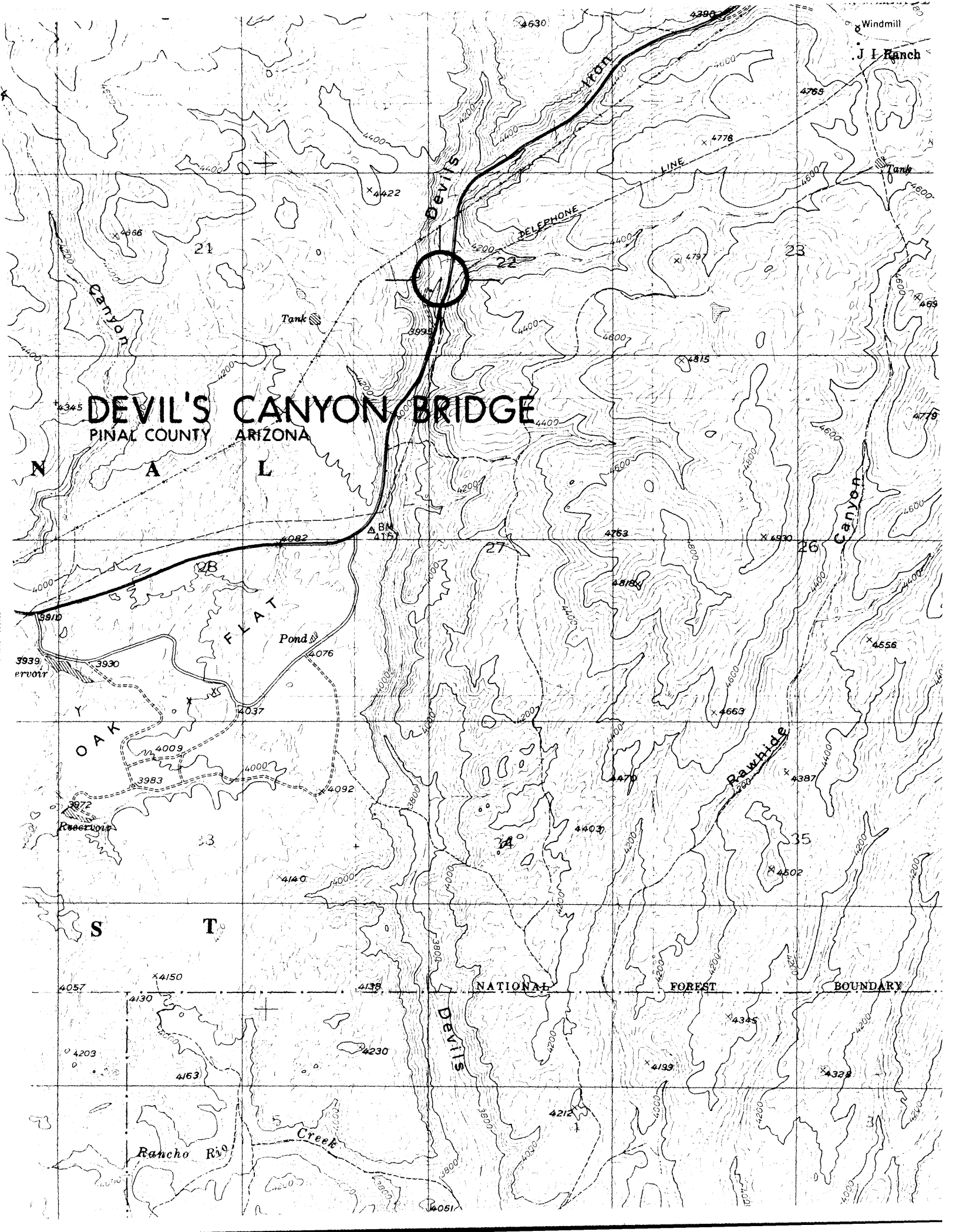
Clayton B. Fraser

AFFILIATION

Fraserdesign Loveland Colorado

DATE

1 April 1987



DEVIL'S CANYON BRIDGE

PINAL COUNTY ARIZONA

N A L

O A K

S T

NATIONAL FOREST BOUNDARY

Rancho Rio

Creek

Rawhide

Canyon

Devils

DELEPHONE

LINE

Windmill
J. I. Ranch

Tank

Tank

Pond

Reservoir

Reservoir



BM

4157

3995

4082

4037

3972

4140

4138

4230

4051

4051

4630

4380

4765

4778

479

4815

3995

4082

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