

HISTORIC BRIDGE INVENTORY

Wash Bridge

PROPERTY IDENTIFICATION

county	Pima	inventory number	01020
milepost	277.90	inventory route	Interstate 10; Frontage Road
location	3.8 mi West Jct SR 83	feature intersected	wash
city/vicinity	Vail	structure owner	Arizona Department of Transportation
USGS quad	Vail	UTM reference	12.524462.3544957

STRUCTURAL INFORMATION

main span number	3	main span type	1 01
appr. span number	0	appr. span type	
degree of skew	45	guardrail type	4
main span length	22.0	superstructure	concrete slab
structure length	66.0	substructure	concrete abutments, wingwalls and piers
roadway width	24.0	floor/decking	concrete deck with asphalt overlay
structure width	26.7	other features	concrete slotted guardrails

HISTORICAL INFORMATION

construction date	1929	designer/engineer	Arizona Highway Department
project number	FAP 90-A	builder/contractor	Veater & Davis, El Paso TX
info source:	ADOT bridge records	alteration date(s)	
		alterations	

NATIONAL REGISTER EVALUATION

inventory score	44	NRHP eligibility	eligible
interstate exemption	x	NRHP criteria	A <u>x</u> B <u> </u> C <u>x</u>
program comment	-	signif. statement	well-preserved example of AHD standard bridge type

FORM COMPLETED BY

Clayton B. Fraser, Principal

FRASERdesign
5700 Jackdaw Drive
Loveland, Colorado 80537
1 October 2018

WASH BRIDGE

Structure No. 01020



PHOTO INFORMATION

date of photo.: March 2018

view direction: northwest west

photo no.: DSCF6176 DSCF6180

CONSTRUCTION HISTORY

Early in 1927 Arizona Highway Department engineers began drafting plans for improvement to U.S. Highway 80 southeast of Tucson. Known locally as the Tucson-Benson Highway, the road was part of the national Ocean-to-Ocean Highway that extended east-west across southern Arizona. The proposed work was designated as Federal Aid Project 90, and involved grading, road surfacing and construction of drainage structures of some 21 miles of roadway for an aggregate cost of \$165,000. By May the drawings were complete. One part of the construction involved building a concrete bridge over an intermittent wash near Vail. As delineated by AHD, the structure was comprised of three concrete slab spans supported on a heavy skew by concrete abutments and piers on spread footings. The 27-foot-wide concrete deck was bounded on both sides by AHD-standard concrete guardrails with slotted "doghouse" cutouts.

The highway department received bids for FAP 90-A in December 1927 and awarded the construction contract to the Veeter & Davis Construction Company of El Paso, Texas. The contractors began work early the following year under the supervision of AHD Resident Engineer J.R. Van Horn. By September AHD reported the highway as almost complete; within weeks Veeter & Davis had the work finished. Since its completion, this small bridge carried mainline traffic until construction of Interstate 10 in the early 1960s. Since that time, the bridge and adjacent roadway have functioned as a frontage road to the interstate.

SIGNIFICANCE STATEMENT

This small-scale bridge in Pima County is historically noteworthy for its association with U.S. Highway 80. Alternately known as the Ocean-to-Ocean Highway, the road has served historically as the principal east-west transcontinental route across southern Arizona, carrying the heaviest traffic loads in the state. Built in the 1920s during a period of extensive highway construction in Arizona, the Wash Bridge was an integral part of this significant highway. The bridge is technologically important as a representative example of AHD bridge construction. The state had begun using concrete for bridge superstructures as early as 1910. The earliest girder bridges, such as the Antelope Hill Bridge [abd.] in Yuma County and the Santa Cruz River Bridge [08166] in Santa Cruz County, employed two deep girders that were cast integrally with the concrete deck. By 1922, after a brief dalliance with a three-girder design, AHD had refined its girder standard to incorporate four somewhat shallower girders, to create greater under-bridge clearance. This Wash Bridge uses the latter design. It is today distinguished as one of the earliest intact examples in Arizona of this revised configuration. As such it is a noteworthy remnant of early AHD concrete bridge engineering.

NATIONAL REGISTER EVALUATION

TECHNOLOGICAL SIGNIFICANCE

☐ represents the work of a master
☐ possesses high artistic values
☒ represents a type, period or method of construction

HISTORICAL SIGNIFICANCE

☐ associated with significant persons
☒ associated with significant events or patterns
☐ contributes to historical district

NATIONAL REGISTER CRITERIA

☒ Criterion A
☐ Criterion B
☒ Criterion C

NATIONAL REGISTER ELIGIBILITY

individually eligible ☒ yes ☐ no
 contributes to district ☐ yes ☒ no

AREA OF SIGNIFICANCE: Transportation; Engineering
 PERIOD OF SIGNIFICANCE: 1928-1978
 THEME(S): Transportation: Highways

Structure No. 01020



HISTORIC BRIDGE INVENTORY

Stone Avenue Underpass

PROPERTY IDENTIFICATION

county	Pima	inventory number	07987
milepost	0.00	inventory route	Southern Pacific Railroad
location	3.4 mi North Jct SR 86	feature intersected	Stone Avenue
city/vicinity	Tucson	structure owner	City of Tucson
USGS quad	Tucson	UTM reference	12.502604.3565615

STRUCTURAL INFORMATION

main span number	2	main span type	207
appr. span number	2	appr. span type	201
degree of skew	29	guardrail type	
main span length	25.0	superstructure	concrete rigid frame
structure length	76.0	substructure	concrete abutments, wingwalls and piers
roadway width	49.0	floor/decking	ballasted railroad grade over concrete slab
structure width	50.0	other features	Mission Style architectural treatment, with curvilinear parapet and arched copings; pierced concrete handrails; metal sconce lights

HISTORICAL INFORMATION

construction date	1936	designer/engineer	Arizona Highway Department
project number	NRM 9	builder/contractor	M.M. Sundt Construction Company, Tucson A
info source:	ADOT bridge records	alteration date(s)	
		alterations	

NATIONAL REGISTER EVALUATION

inventory score	68	NRHP eligibility	listed
interstate exemption	-	NRHP criteria	A _____ B _____ C <u>x</u> _____
program comment	-	signif. statement	well-preserved example of 1930s AHD architectural treatment on grade separation

FORM COMPLETED BY

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1 October 2018

STONE AVENUE UNDERPASS

Structure No. 07987



PHOTO INFORMATION

date of photo.: May 2018

view direction: southeast north

photo no.: DSCF5291 DSCF5298

CONSTRUCTION HISTORY

In 1867 the Territorial Legislature designated Tucson as the territorial capitol, which the town maintained for ten years. After the arrival of the Southern Pacific Railroad in 1880, Tucson found prosperity as a supply point for mines in southern Arizona and Mexico. The railroad provided a vital transportation link as it passed through the city center, and heavy traffic on its line posed logistical problems for travel on the streets, snarling traffic and creating dangerous on-grade crossings between pedestrians, wagons and trains. These problems increased considerably with the proliferation of motorcars after 1910.

In 1916 the City of Tucson built a grade separation at Fourth Avenue. Fourteen years later, in 1930, the city built a similar underpass at Sixth Avenue [07988]. The agency responsible for a third grade separation in downtown Tucson—at Stone Avenue—was the Arizona Highway Department. Early in 1934 the highway department drafted plans for this structure, which would carry U.S. Highway 89 beneath the railroad tracks. The Stone Avenue Underpass was comprised of a span for each double lane of vehicular traffic, with smaller barrels on both sides to accommodate pedestrian sidewalks. The skewed main barrels were 25-foot concrete rigid frames. The structure featured a Mission Style architectural treatment, with curvilinear parapets and arched copings, decorative iron lamps hung from sconces, concrete guardrails with decorative cutouts and cast concrete cartouches prominently mounted on the spandrels of both sides. In 1935 AHD contracted with the M.M. Sundt Construction Company under project NRM-9 to build the Stone Avenue Underpass. The Tucson contractor completed the structure in January 1936. Since that time, the Stone Avenue structure has functioned in place without substantial alteration. It no longer carries U.S. 89 and has recently undergone a substantial rehabilitation.

SIGNIFICANCE STATEMENT

Unlike bridges, which were typically located in rural settings, Arizona's urban grade separations were usually designed with consideration for their aesthetic impact. Most featured architectural treatments—either revivalist or modernist—intended to integrate the structures within their urban settings. The Fourth Avenue Underpass, recently replaced, featured relatively straightforward classical revival detailing. The Sixth Avenue Underpass, in contrast, features an eclectic expression that intermingles Egyptian Revival and Classical Revival elements. The Stone Avenue Underpass displays mainline Mission Style detailing. A prototypical Arizona style, this was an architectural treatment that AHD used for several of its underpasses undertaken during the Great Depression. It is significant for its well-preserved architectural expression.

NATIONAL REGISTER EVALUATION

TECHNOLOGICAL SIGNIFICANCE

☐ represents the work of a master
☐ possesses high artistic values
☒ represents a type, period or method of construction

HISTORICAL SIGNIFICANCE

☐ associated with significant persons
☐ associated with significant events or patterns
☐ contributes to historical district

NATIONAL REGISTER CRITERIA

☐ Criterion A
☐ Criterion B
☒ Criterion C

NATIONAL REGISTER ELIGIBILITY

individually eligible ☒ yes ☐ no
 contributes to district ☐ yes ☒ no

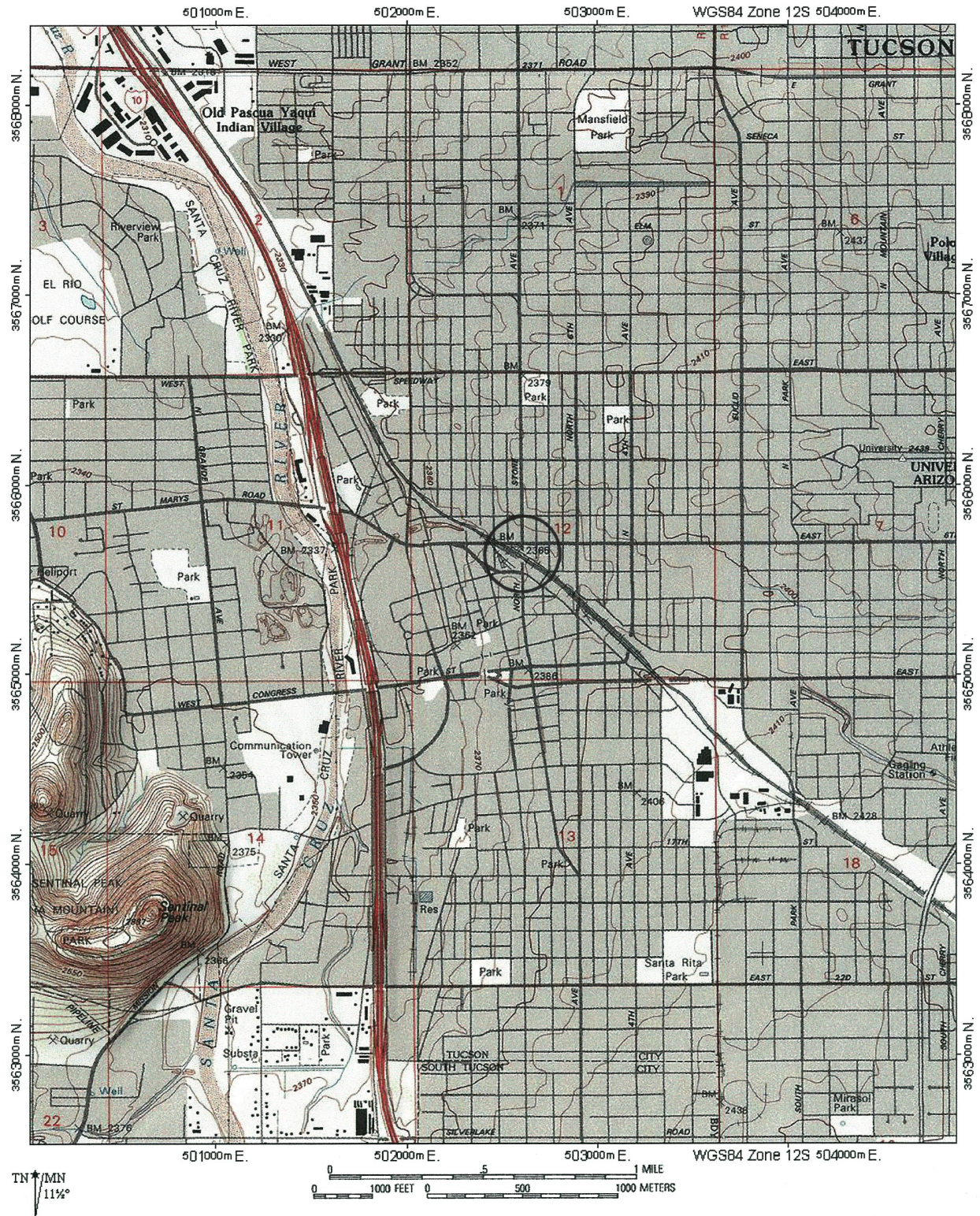
AREA OF SIGNIFICANCE: Engineering

PERIOD OF SIGNIFICANCE: 1936-1978

THEME(S): Transportation: Highways

STONE AVENUE UNDERPASS

Structure No. 07987



LOCATION MAP

HISTORIC BRIDGE INVENTORY

Sixth Avenue Underpass

PROPERTY IDENTIFICATION

county	Pima	inventory number	07988
milepost	0.00	inventory route	Southern Pacific Railroad
location	3.2 mi North Jct SR 86	feature intersected	6th Avenue
city/vicinity	Tucson	structure owner	City of Tucson
USGS quad	Tucson	UTM reference	12.502902.3565388

STRUCTURAL INFORMATION

main span number	4	main span type	302
appr. span number	0	appr. span type	
degree of skew	45	guardrail type	
main span length	14.0	superstructure	steel I-beam stringer
structure length	42.0	substructure	concrete abutments, wingwalls and piers with arched cantilevers
roadway width	80.0	floor/decking	ballasted railroad grade over concrete slab
structure width	88.0	other features	Egyptian Revival Style architectural treatment, with cast concrete squashed balusters and bud capitals; cast iron light standards; paneled concrete sidewalks

HISTORICAL INFORMATION

construction date	1929	designer/engineer	Tucson City Engineer
project number		builder/contractor	Lee Moor Contracting Company, El Paso TX
info source:	ADOT bridge records	alteration date(s)	
		alterations	

NATIONAL REGISTER EVALUATION

For additional information, see "Vehicular Bridges in Arizona 1880-1978" National Register Multiple Property Documentation Form

inventory score	54	NRHP eligibility	listed
interstate exemption	-	NRHP criteria	A _____ B _____ C <u>x</u>
program comment	-	signif. statement	well-preserved example of architectural treatment on urban grade separation

FORM COMPLETED BY

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1 October 2018

SIXTH AVENUE UNDERPASS

Structure No. 07988



PHOTO INFORMATION

date of photo.: May 2018

view direction: northeast northwest

photo no.: DSCF5303 DSCF5308

SIXTH AVENUE UNDERPASS

Structure No. 07988

CONSTRUCTION HISTORY

The settlement of Tucson has its origins in antiquity, with several waves of occupation by Spanish, Mexican, Mormon and Catholic contingents before the United States took possession of the region under the Gadsden Purchase in 1856. In 1867 the Territorial Legislature designated Tucson as the territorial capitol, which the town kept for ten years. After the arrival of the Southern Pacific Railroad in 1880, Tucson found prosperity as a supply point for mines in southern Arizona and Mexico. The railroad provided a vital transportation link as it passed through the city center, and heavy traffic on its line posed logistical problems for travel on the streets, snarling traffic and creating dangerous on-grade crossings between pedestrians, wagons and trains. These problems increased considerably with the proliferation of motorcars after 1910.

In 1916 the City of Tucson built a grade separation at Fourth Avenue. Twelve years later city engineer Glen-ton Sykes designed a similar underpass for Sixth Avenue. Sykes's structure was made up of two 14-foot-long steel stringer spans supported by concrete abutments and pier. One lane of traffic passes beneath each span. At 88 feet, the underpass was not as wide as its predecessor. It featured a vaguely Egyptian Revival architectural treatment, with squashed concrete balusters and bud capitals, paneled concrete parapet walls and cast iron lamp standards lining the sidewalks that passed beneath the spans on either side of the roadway. In May 1930 the city contracted with the Lee Moor Contracting Company of El Paso, Texas, to build this structure. Moor's crew completed work on the Sixth Avenue Underpass later that year. It has functioned in place since with no substantial alterations.

SIGNIFICANCE STATEMENT

Unlike bridges, which were typically located in rural settings, Arizona's urban grade separations were usually designed with consideration of their aesthetic impact. Most featured architectural treatments—either revivalist or modernist—intended to integrate the structures within their urban settings. The Fourth Avenue Underpass features relatively straightforward classical revival detailing. The Sixth Avenue Underpass, in contrast, features an eclectic expression that intermingles Egyptian revival and classical revival elements. The Stone Avenue Underpass [07987], built in 1936, displays mainline Mission Style detailing. Unfortunately, the Fourth Street Underpass has been demolished, leaving the Stone Avenue and Sixth Avenue structures. The Sixth Avenue Underpass is significant for its well-preserved architectural expression.

NATIONAL REGISTER EVALUATION

TECHNOLOGICAL SIGNIFICANCE

☐ represents the work of a master
☐ possesses high artistic values
☒ represents a type, period or method of construction

HISTORICAL SIGNIFICANCE

☐ associated with significant persons
☐ associated with significant events or patterns
☐ contributes to historical district

NATIONAL REGISTER CRITERIA

☐ Criterion A
☐ Criterion B
☒ Criterion C

NATIONAL REGISTER ELIGIBILITY

individually eligible ☒ yes ☐ no
contributes to district ☐ yes ☒ no

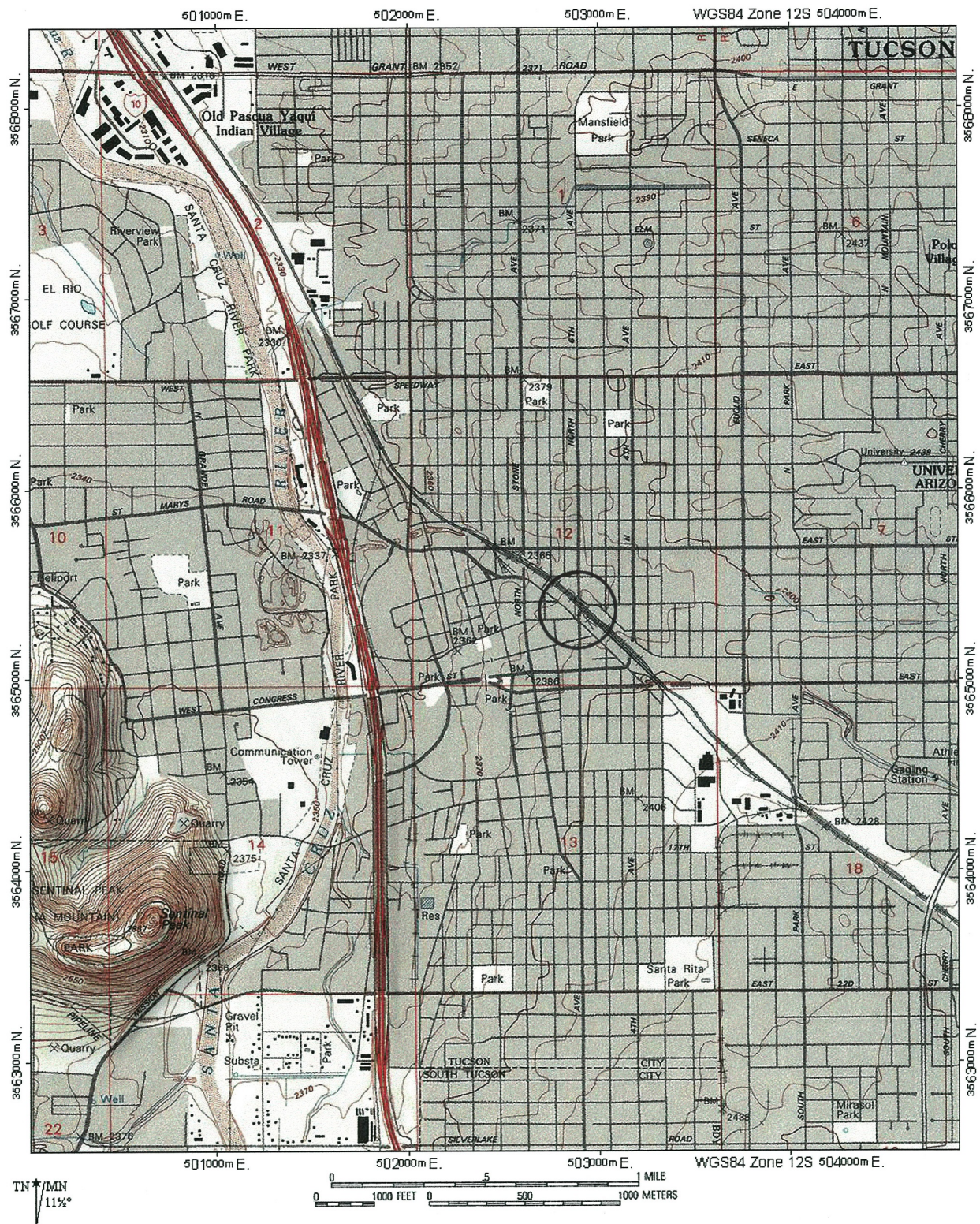
AREA OF SIGNIFICANCE: Engineering

PERIOD OF SIGNIFICANCE: 1930-1978

THEME(S): Transportation: Highways

SIXTH AVENUE UNDERPASS

Structure No. 07988



LOCATION MAP

HISTORIC BRIDGE INVENTORY

Cienega Bridge

PROPERTY IDENTIFICATION

county	Pima	inventory number	08293
milepost	0.00	inventory route	Marsh Station Road
location	6.1 mi N Benson Hwy	feature intersected	Cienega Creek & Railroad
city/vicinity	Vail	structure owner	Pima County
USGS quad	Vail	UTM reference	12.533437.3542675

STRUCTURAL INFORMATION

main span number	1	main span type	1 1 1
appr. span number	4	appr. span type	101
degree of skew	0	guardrail type	9
main span length	146.0	superstructure	concrete two-rib open-spandrel arch
structure length	278.0	substructure	concrete abutments, wingwalls and piers
roadway width	20.0	floor/decking	concrete deck with asphalt overlay
structure width	23.2	other features	moulded concrete guardrails w/ paneled parapet walls and square concrete balusters

HISTORICAL INFORMATION

construction date	1921	designer/engineer	Arizona Highway Department
project number	FAP 18	builder/contractor	English & Pierce
info source:	ADOT bridge records	alteration date(s)	1989
		alterations	guardrails replaced

NATIONAL REGISTER EVALUATION

inventory score	64	NRHP eligibility	listed
interstate exemption	-	NRHP criteria	A <input checked="" type="checkbox"/> B <input type="checkbox"/> C <input checked="" type="checkbox"/>
program comment	-	signif. statement	well-preserved, long-span example of uncommon structural type

FORM COMPLETED BY

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1 October 2018

CIENEGA BRIDGE

Structure No. 08293



PHOTO INFORMATION

date of photo.: March 2018

view direction: south northwest

photo no.: DSCF6162 DSCF6169

CONSTRUCTION HISTORY

With equal funding from a Pima County bond issue, the Cochise County Road Fund and Federal Aid Project 18, the Arizona Highway Department in 1920 began construction of a portion of the Borderland Highway across southern Arizona. The 27¾-mile-long section extended between Benson and Vail and included a major crossing of rugged Cienega Canyon near Vail, just east of the Southern Pacific Railroad bridge here. For this, AHD engineers designed a long-span concrete arch over the canyon with a two-span concrete girder viaduct over the railroad tracks. Extending 146 feet, the open spandrel arch was comprised of two tapered ribs that sprang from concrete foundations with spread footings. These ribs supported a series of concrete columns which in turn supported the concrete deck. The deck was bounded on both sides by concrete guardrails with square balusters and paneled bulkheads.

After completing the drawings for the bridge, AHD divided the construction into five sections. The grading and surfacing were undertaken by state work forces and contractors Goodman & Merrill and Eckerman & Chambers. The contract for Section F—the Cienega Bridge—went to Tucson contractors English & Pierce. Using concrete and reinforcing steel provided by the highway department, the contractors completed the structure in March 1921 for a cost of a little more than \$40,000. The Cienega Bridge carried mainline traffic on the highway (later redesignated U.S. Highway 80) until construction of Interstate 10 in the 1960s. Today the Cienega Bridge bears intermittent local traffic. The bridge's superstructure remains unaltered, but its guardrails have been replaced with a modified Jersey barrier configuration.

SIGNIFICANCE STATEMENT

In 1919-1920 the AHD bridge department designed three almost identical open spandrel concrete arches for Arizona highways: the Cienega Bridge and bridges over Queen Creek [abd.] in Pinal County and Hell Canyon [abd.] in Yavapai County. The design of the Hell Canyon bridge was later changed, and the Cienega and Queen Creek structures were built in 1920-1921. Both have survived largely unaltered. Of the three, the Cienega Bridge has the longest span. Additionally, it is the oldest of the surviving open spandrel arches in the inventory. As an excellent example of an uncommon structural type and an integral link on the regionally important Borderland Highway, the Cienega Bridge is one of Arizona's more historically and technologically significant vehicular structures. Replacement of the guardrails has diminished the bridge's structural integrity somewhat, but the sensitive design of the replacements mitigates the impact of this recent construction.

NATIONAL REGISTER EVALUATION

TECHNOLOGICAL SIGNIFICANCE

☐ represents the work of a master
☐ possesses high artistic values
☒ represents a type, period or method of construction

HISTORICAL SIGNIFICANCE

☐ associated with significant persons
☒ associated with significant events or patterns
☐ contributes to historical district

NATIONAL REGISTER CRITERIA

☒ Criterion A
☐ Criterion B
☒ Criterion C

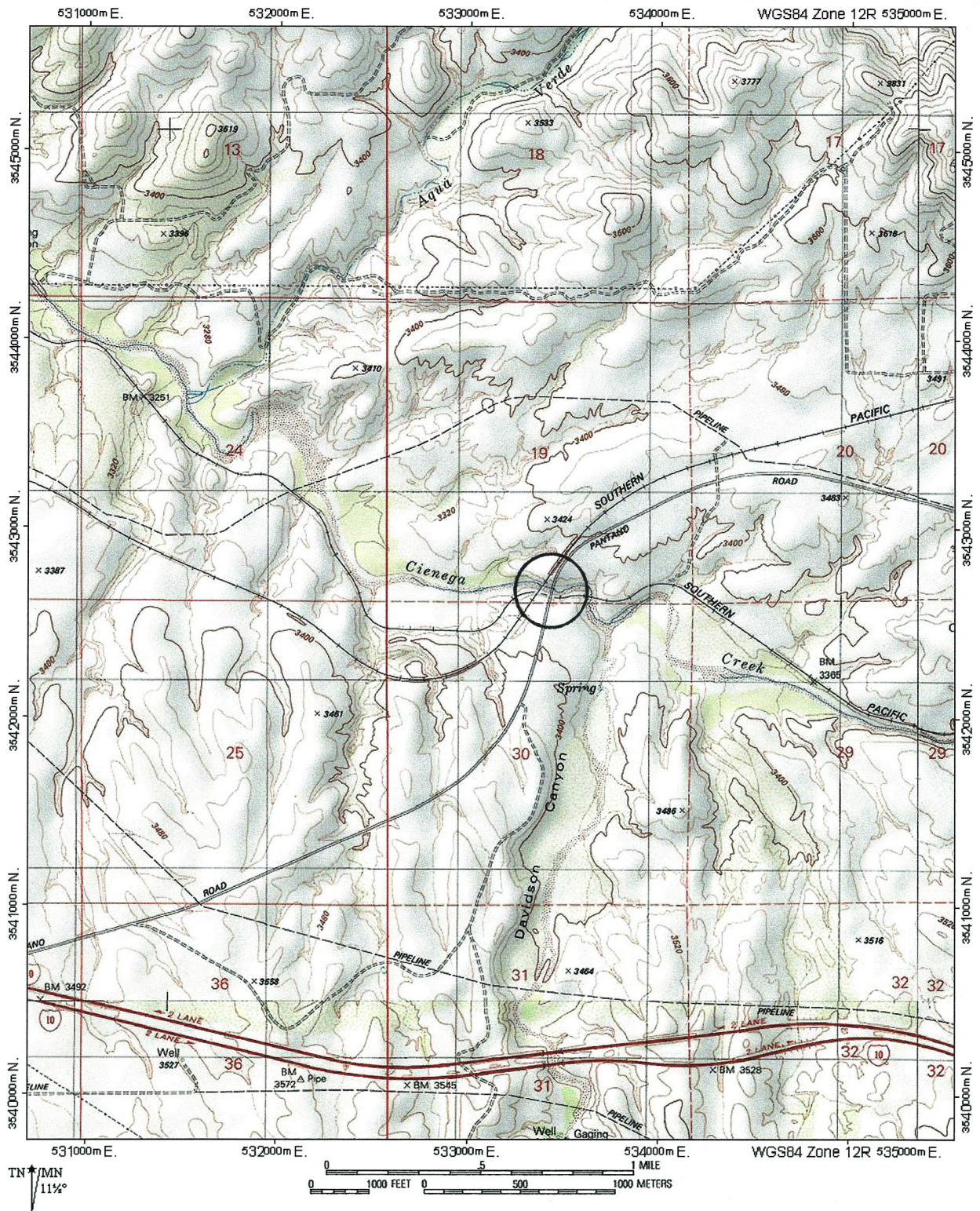
NATIONAL REGISTER ELIGIBILITY

individually eligible ☒ yes ☐ no
 contributes to district ☐ yes ☒ no

AREA OF SIGNIFICANCE: Transportation; Engineering
 PERIOD OF SIGNIFICANCE: 1921-1978
 THEME(S): Transportation: Highways

CIENEGA BRIDGE

Structure No. 08293



LOCATION MAP

HISTORIC BRIDGE INVENTORY

Wash Bridge

PROPERTY IDENTIFICATION

county	Pima	inventory number	08294
milepost	0.00	inventory route	Marsh Station Road
location	4.7 mi N of I 10 Exit 289	feature intersected	medium wash
city/vicinity	Vail	structure owner	Pima County
USGS quad	Rincon Peak	UTM reference	12.535638.3543068

STRUCTURAL INFORMATION

main span number	2	main span type	201
appr. span number	0	appr. span type	
degree of skew	0	guardrail type	4
main span length	15.0	superstructure	concrete slab
structure length	32.0	substructure	concrete abutments, wingwalls and pier
roadway width	25.6	floor/decking	concrete deck
structure width	27.3	other features	concrete guardrails with slotted cutouts

HISTORICAL INFORMATION

construction date	1933	designer/engineer	Arizona Highway Department
project number	FAP 18-B	builder/contractor	R.H. Martin Contracting Company, Tucson AZ
info source:	ADOT bridge records	alteration date(s)	
		alterations	

NATIONAL REGISTER EVALUATION

inventory score	41	NRHP eligibility	eligible
interstate exemption	-	NRHP criteria	A <u>x</u> B <u> </u> C <u>x</u>
program comment	-	signif. statement	well-preserved example of AHD standard structural type, located on important highway

FORM COMPLETED BY

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1 October 2018

WASH BRIDGE

Structure No. 08294



PHOTO INFORMATION

date of photo.: March 2018

view direction: north northwest

photo no.: DSCF6156 DSCF6160

CONSTRUCTION HISTORY

As part of the Borderland Highway across southern Arizona, the Benson-Vail Highway was among the oldest and most heavily traveled routes in the state. The highway underwent frequent upgrades, repairs and reconstructions, improving the roadway and associated drainage structures along the route. The largest bridge along the highway was the Cienega Bridge [08293], constructed in 1920-1921 over rugged Cienega Canyon. Other bridges and culverts along the route were comparably smaller. In 1932 the Arizona Highway Department undertook reconstruction of a section of the Benson-Vail Highway that extended from the north end of the Cienega Bridge for a little more than six miles eastward. The largest structure along this stretch would span a medium wash a mile-and-a-half from the Cienega Bridge. For this structure AHD engineers delineated a two-span concrete slab, with a concrete deck bounded on both sides by concrete guardrails with slotted walls and curvilinear bulkheads.

Deemed emergency work, the project was labeled Federal Aid Project 18-B. Competitive bids were opened in late December 1932, at which time the contract was awarded to the R.H. Martin Contracting Company of Tucson. By May Martin had the work half done; by August the project was complete. Later designated U.S. Highway 80, the road carried relatively heavy traffic until its realignment and later construction of Interstate 10. The Wash Bridge now bears intermittent local traffic in pristine condition.

SIGNIFICANCE STATEMENT

This small-scale bridge in Pima County is historically noteworthy for its association with U.S. Highway 80. Alternately known as the Ocean-to-Ocean Highway, the road has served historically as the principal east-west transcontinental route across southern Arizona, carrying the heaviest traffic loads in the state. Built in the 1920s during a period of extensive highway construction in Arizona, the Wash Bridge was an integral part of this significant highway. The bridge is technologically important as a representative example of AHD bridge construction. The Arizona State Engineer delineated standardized designs for concrete slab and girder bridges as early as 1912, updating them occasionally in subsequent years. As the state assumed greater responsibility for bridge design and construction, these structural types received widespread use on Arizona's roads in the 1920s and 1930s with little technological advances. As a concrete slab structure, this Wash Bridge displays standard superstructural configuration. What distinguishes this bridge is its level of integrity and the architectural design of its guardrails. The curvilinear lines and mid-span panel of the guardrail walls are unique among Arizona's early bridges, making this a noteworthy example of its type.

NATIONAL REGISTER EVALUATION

TECHNOLOGICAL SIGNIFICANCE

☐ represents the work of a master
☐ possesses high artistic values
☒ represents a type, period or method of construction

HISTORICAL SIGNIFICANCE

☐ associated with significant persons
☒ associated with significant events or patterns
☐ contributes to historical district

NATIONAL REGISTER CRITERIA

☒ Criterion A
☐ Criterion B
☒ Criterion C

NATIONAL REGISTER ELIGIBILITY

individually eligible ☒ yes ☐ no
 contributes to district ☐ yes ☒ no

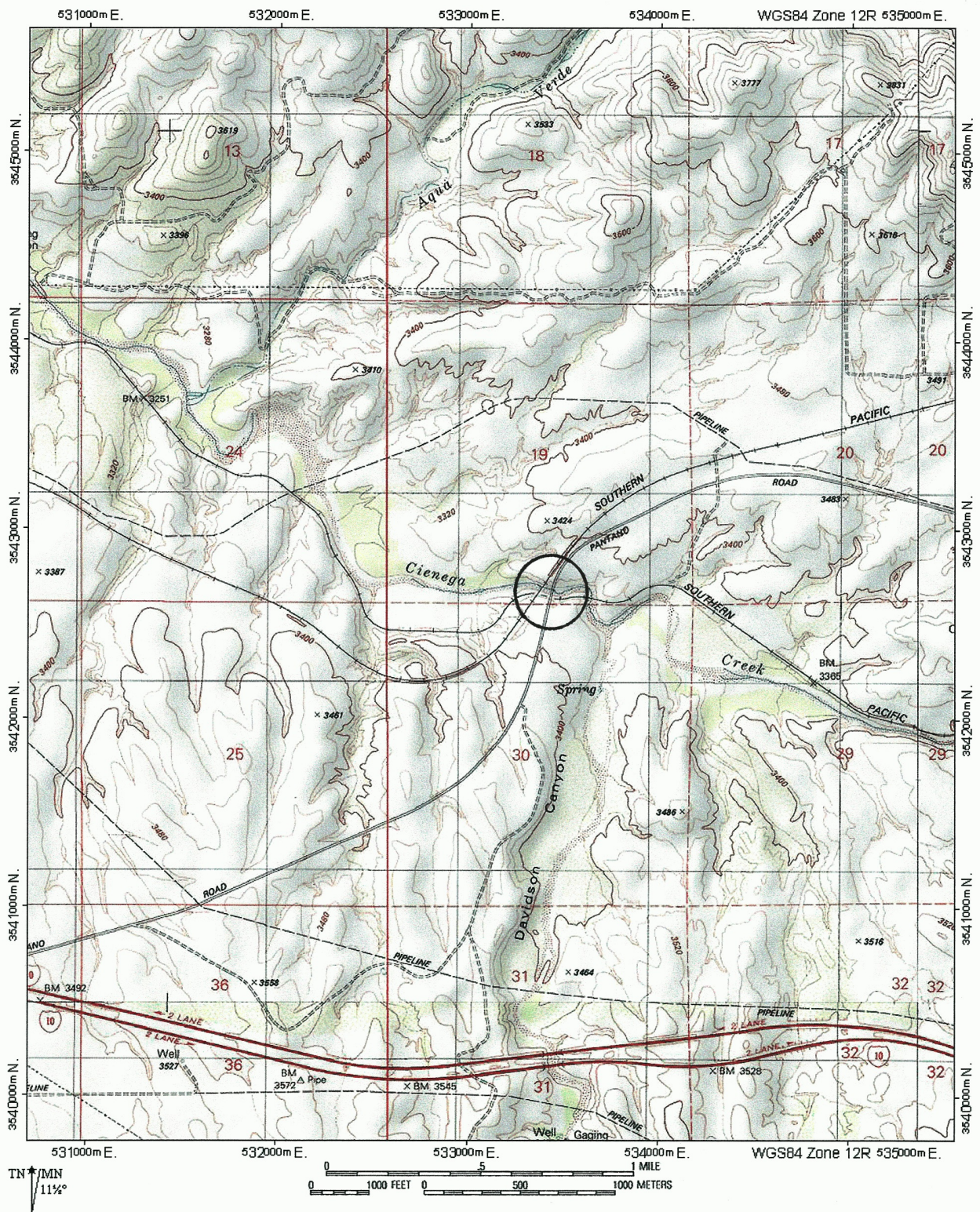
AREA OF SIGNIFICANCE: Transportation; Engineering

PERIOD OF SIGNIFICANCE: 1933-1978

THEME(S): Transportation: Highways

WASH BRIDGE

Structure No. 08294



LOCATION MAP

HISTORIC BRIDGE INVENTORY

Wash Bridge

PROPERTY IDENTIFICATION

county	Pima	inventory number	08306
milepost	0.00	inventory route	Old Nogales Highway
location	3.4 mi N Continental Rd	feature intersected	wash
city/vicinity	Continental	structure owner	Pima County
USGS quad	Sahuarita	UTM reference	12.503610.3529522

STRUCTURAL INFORMATION

main span number	3	main span type	1 04
appr. span number	0	appr. span type	
degree of skew	0	guardrail type	4
main span length	32.0	superstructure	concrete deck girder
structure length	95.0	substructure	concrete abutments, wingwalls and piers
roadway width	36.0	floor/decking	concrete deck
structure width	38.5	other features	concrete guardrails with incised panels

HISTORICAL INFORMATION

construction date	1938	designer/engineer	Arizona Highway Department
project number	FAP 86-A 3rd Reo.	builder/contractor	Pearson & Dickerson, Phoenix AZ
info source:	ADOT bridge records	alteration date(s)	
		alterations	

NATIONAL REGISTER EVALUATION

inventory score	42	NRHP eligibility	eligible
interstate exemption	-	NRHP criteria	A <u>x</u> B <u> </u> C <u>x</u>
program comment	-	signif. statement	well-preserved example of standard structural type, on important highway

FORM COMPLETED BY

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Loveland, Colorado 80537
1 October 2018

WASH BRIDGE

Structure No. 08306



PHOTO INFORMATION

date of photo.: March 2018

view direction: south east

photo no.: DSCF6171 DSCF6176

CONSTRUCTION HISTORY

Late in 1937 the Arizona Highway Department contemplated improving a segment of the Tucson-Nogales Highway (U.S. Highway 89) near Sahuarita. The agency purchased right-of-way from the I'm Alone Service Station through imminent domain, while other land owners sold their property voluntarily. The segment extended some 13½ miles in Pima County along the Santa Cruz River. The project included highway grading, draining and surfacing, as well as the construction of a substantial bridge over an unnamed wash. As delineated by AHD engineers, this structure was to be comprised of three concrete deck girder spans supported by concrete piers and abutments. The girders extended 32 feet; the roadway was 36 feet wide. The concrete deck cantilevered slightly over the spandrel beams on concrete brackets; it was bounded by concrete guardrails decorated with incised rectangular panels.

The construction was designated as Federal Aid Project 86-A (3rd Reo.). AHD advertised for competitive bids for the project, awarding the construction contract to Pearson & Dickerson Contractors of Phoenix. The contractors began work immediately. By the end of the year, under the supervision of AHD Resident Engineer Dan Lyons, they reported the work 80 percent complete. In January 1939 the Pearson & Dickerson crew completed the highway and bridges. The route carried mainline traffic until construction of Interstate 19 in 1967-1968. At that time this bridge was retired from the primary road system and left in place as a county-owned structure.

SIGNIFICANCE STATEMENT

The Wash Bridge is historically noteworthy for its association with U.S. Highway 89. As the latter-day iteration of the Territorial North-South Highway, the road has served historically as the principal north-south arterial through Arizona. Built in 1938-1939 during a period of extensive highway construction in Arizona, the bridge was an integral part of this significant highway. The structure is technologically important as a representative example of AHD bridge construction. The state had begun using concrete for bridge superstructures as early as 1910. The earliest girder bridges, such as the Antelope Hill Bridge [abd.] in Yuma County and the Santa Cruz River Bridge [08166] in Santa Cruz County, employed two deep girders that were cast integrally with the concrete deck. By the 1920s AHD had refined its girder standard to incorporate four or more shallower girders, to create greater under-bridge clearance. The Wash Bridge represents this latter design. It is today distinguished as one of the best-preserved early examples in Arizona of this revised configuration.

NATIONAL REGISTER EVALUATION

TECHNOLOGICAL SIGNIFICANCE

☐ represents the work of a master
☐ possesses high artistic values
☒ represents a type, period or method of construction

HISTORICAL SIGNIFICANCE

☐ associated with significant persons
☒ associated with significant events or patterns
☐ contributes to historical district

NATIONAL REGISTER CRITERIA

☒ Criterion A
☐ Criterion B
☒ Criterion C

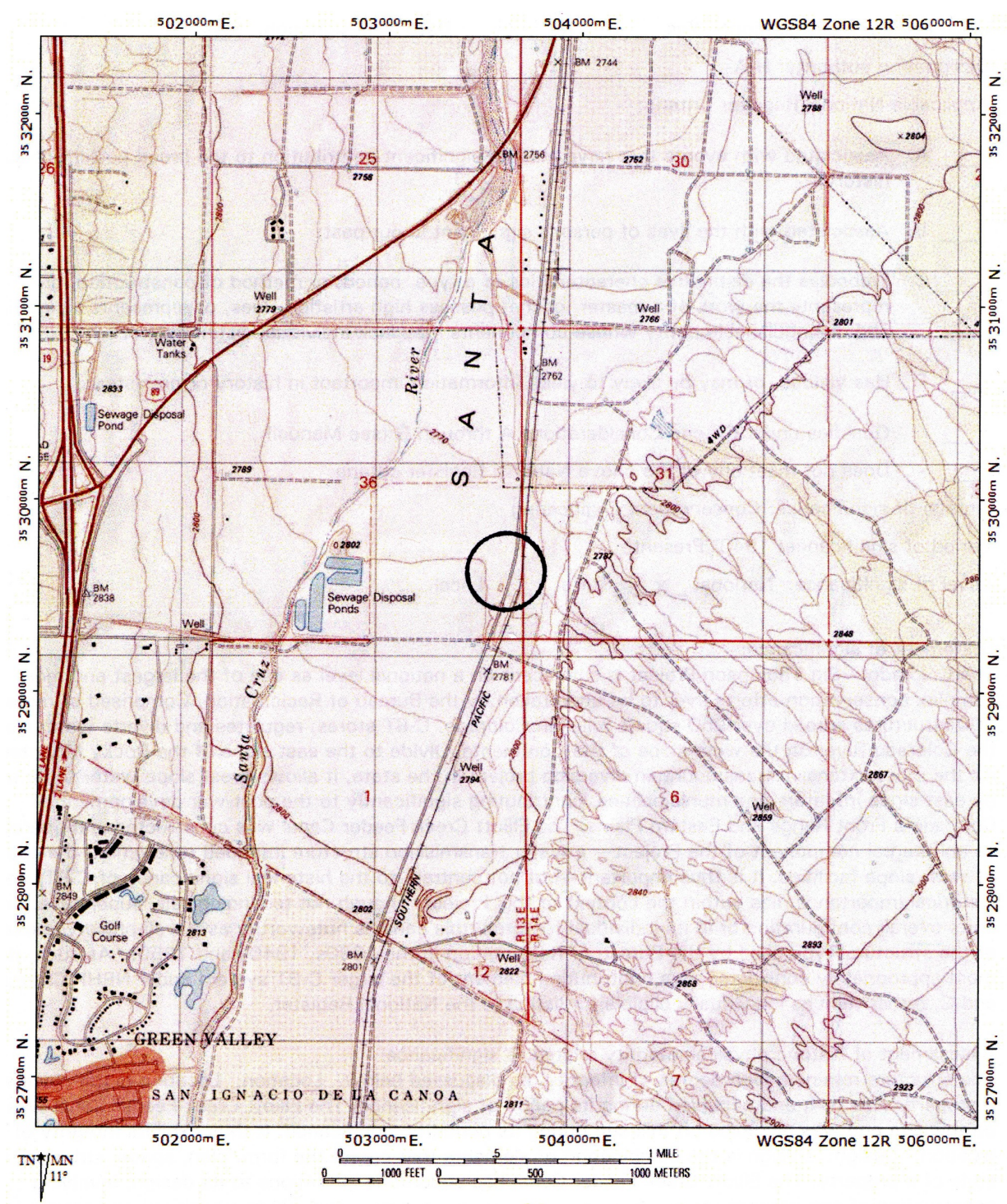
NATIONAL REGISTER ELIGIBILITY

individually eligible ☒ yes ☐ no
 contributes to district ☐ yes ☒ no

AREA OF SIGNIFICANCE: Transportation; Engineering
 PERIOD OF SIGNIFICANCE: 1938-1978
 THEME(S): Transportation: Highways

WASH BRIDGE

Structure No. 08306



LOCATION MAP