

BURLINGTON NORTHERN SANTA FE RAILROAD,
CAJON SUBDIVISION , STRUCTURE NO. 59.6X
Between Cajon Summit and Keenbrook
Devore vicinity
San Bernardino County
California

HAER CA-2259-F
CA-2259-F

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PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD
PACIFIC WEST REGIONAL OFFICE
National Park Service
U.S. Department of the Interior
1111 Jackson Street, Suite 700
Oakland, CA 94607

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Burlington Northern Santa Fe Railroad, Cajon Subdivision,
Structure No. 59.6X

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Location: BNSF Railway Company (BNSF) Railroad Structure No. 59.6X, a single-span I-beam bridge, is located at Milepost 59.6X on Main Track 1, Devore vicinity, San Bernardino County, California. It carries rail traffic over Forest Service Road 3N21 and is bounded by the Union Pacific Railroad to the north, BNSF Main Track 2 to the south, and Interstate 15 to the west.

The bridge lies within the NE ¼ of the NE ¼ of the SW ¼ of Section 23, Township 3 North, Range 6 West, on the 1956 Cajon, California, 7.5-minute U.S. Geological Survey quadrangle (photorevised 1988). Universal Transverse Mercator Coordinates: Zone 11, NAD83, Geodetic Reference System 1980 ellipsoid, 3799052.59 mN, 456002 mE (west abutment); 3799052.67 mN, 456014 mE (east abutment).

Date of Construction: 1931

Architect/Engineer: unknown

Builder: Atchison, Topeka and Santa Fe Railway (AT&SF)

Present Owner: BNSF

Present Use: Bridge on Main Track 1.

Significance: The section of railroad through Cajon Pass provided a vital link between the greater Los Angeles area and distant markets. In 1998, the California State Historic Preservation Office determined the historic route of the AT&SF (now BNSF) railroad alignment through Cajon Pass to be eligible for listing in the National Register of Historic Places under Criteria a and c. By connecting Los Angeles and San Bernardino to markets throughout the United States, the railroad dramatically affected demographic, commercial, and cultural trends in Southern California. Furthermore, construction of the long, winding alignment through rugged and often steep terrain represents a significant engineering feat for its time. Structure No. 59.6X contributes to the function and significance of the railroad line by affording a passage for rail traffic over a local thoroughfare.

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Tucson, Arizona

Date: March 2008

Architectural and Engineering Information

Located northeast of the now-abandoned Alray Station, Structure No. 59.6X is a single-span I-beam bridge that carries two tracks—Main Track 1 and a siding for maintenance vehicles—over Forest Service Road 3N21 (Figure 1). The dirt road was once part of U.S. Highway 66. The bridge, constructed in 1931, has a single 40'-0" span, a center height of 22'-0", and a bridge deck with an overall width of 37'-0". Two reinforced-concrete abutments support the bridge. The east abutment is 31'-3" wide and 22'-0" in height. Flared and tapered wing walls bonded to the north and south sides of the east abutment have lengths of 12'-0" and 24'-3", respectively. The west abutment is mostly obscured by soil but appears to be the same width as the east abutment. However, the flared and tapered wing walls are shorter than those on the east abutment and extend 7'-6". Eight steel I-beams form the superstructure, with each abutment supporting the respective ends of the beams. The I-beams have a web height of 33" and a width of 16" and are grouped in two sets of four beams each. A series of 6" x 8" treated timber beams, lying perpendicular to the I-beams, form the bridge deck on which the ballast and ties rest. The ballast curbs that run along the outer edges of the span are constructed of 6" x 10" lengths of treated timber. Hand rails on both sides of the bridge consist of 2" x 6" timber rails on 4" x 4" timber posts. On the southernmost I-beam at the point, where it intersects the west abutment, is a plaque noting the manufacturer of the steel beams and the date of construction. The plaque reads "AMERICAN BRIDGE COMPANY / U.S.A. / 1931." The construction date also appears on the upper face of the west abutment.

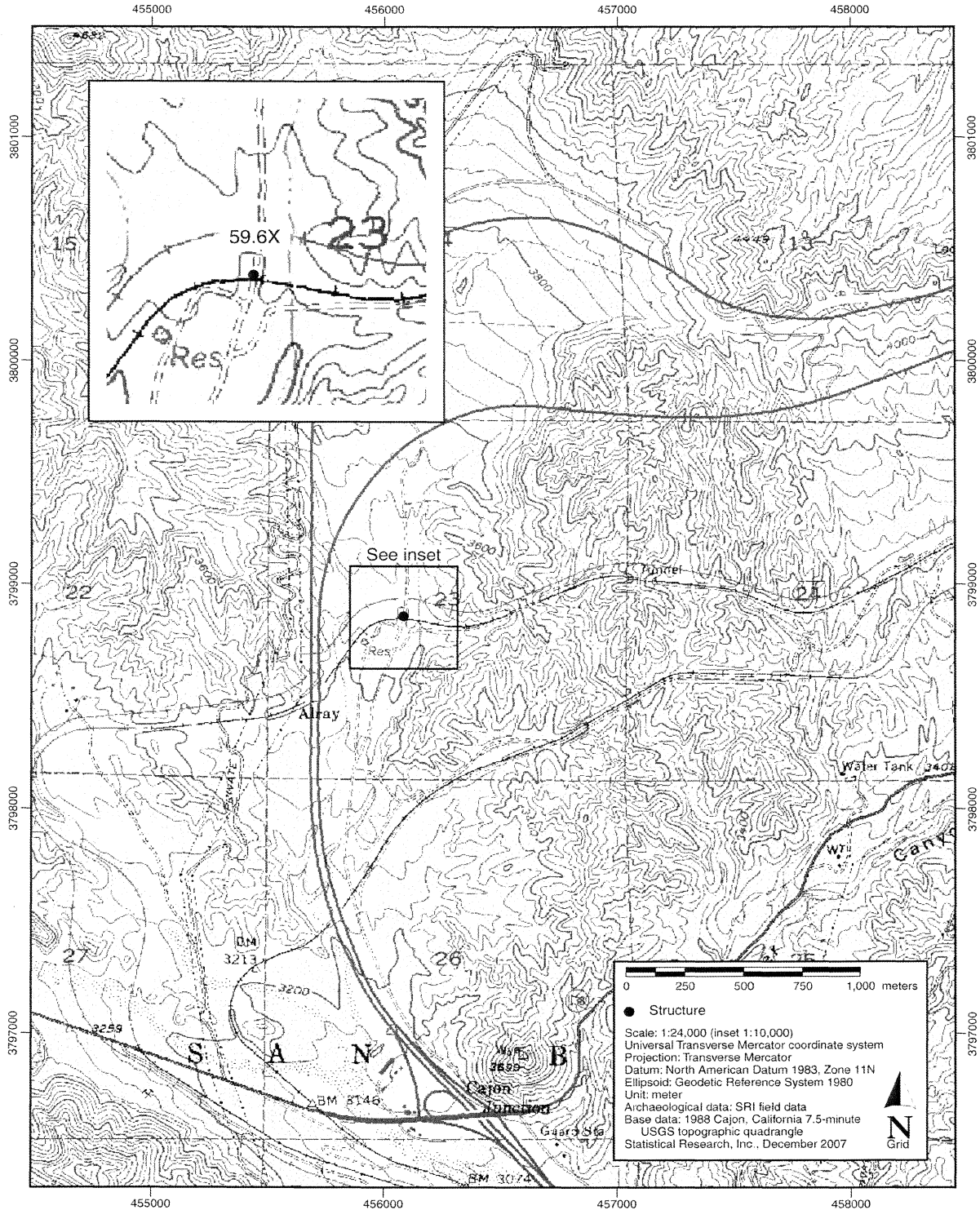


Figure 1. Project location (1956 Cajon, California, 7.5-minute U.S. Geological Survey quadrangle [photorevised 1988]).

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David G. De Vries, photographer

June 2007

CA-2259-B-1 OVERALL CONTEXT VIEW, TO THE SOUTH. [17]

CA-2259-B-2 NORTH ELEVATION. [15]

CA-2259-B-3 SOUTH ELEVATION, SHOWING SPRAYED CONCRETE SPILLWAY. SLIGHT
OBLIQUE TO NORTH NORTHWEST. [16]



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