

Central Pacific Transcontinental Railroad, Tunnel 36  
Southern Pacific Donner Pass Route Tunnels  
Milepost 176.92  
Yuba Pass vicinity  
Nevada County  
California

HAER No. CA-209

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**PHOTOGRAPHS**

**WRITTEN HISTORICAL AND DESCRIPTIVE DATA**

Historic American Engineering Record  
National Park Service  
Western Region  
Department of the Interior  
San Francisco, CA 94107

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## HISTORIC AMERICAN ENGINEERING RECORD

### INDEX TO PHOTOGRAPHS

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For written information regarding Tunnel 36, please refer to Central Pacific Transcontinental Railroad (HAER No. CA-196). Note also that all references to tunnel portals are given in Southern Pacific Railroad terminology. Headquartered in San Francisco, the SP considered all trains heading *away* from San Francisco to be eastbound, all trains heading *toward* San Francisco to be westbound, regardless of actual cardinal direction. Thus a train heading north from Los Angeles to Portland would be westbound until it passed San Francisco, at which time it would become eastbound. Similarly, the railroad referred to all tunnels and other structures along its lines in the same fashion, with tunnels always having west and east portals. Direction of view in the captions will indicate cardinal direction.

Documentation: 2 photographs (1997)

Ed Andersen, Photographer  
John Snyder, Field Director

### PHOTOGRAPHS

CA-209-1 West portal of Tunnel 36, view to northeast, 135mm lens. Note the notched wingwalls that originally held timber posts of the original timber snowsheds, miles of which once enclosed and protected the railroad from the ravages of Sierra winters. Note also that these tunnels, built in the 1920s, have dispensed with any use of stone masonry, and instead have all-concrete portals.

CA-209-2 East portal of Tunnel 36, view to southwest, 135mm lens with electronic flash fill.

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## HISTORIC AMERICAN ENGINEERING RECORD

### CENTRAL PACIFIC TRANSCONTINENTAL RAILROAD, TUNNEL 36

HAER No. CA-209

**Location:** Southern Pacific Donner Pass Route Tunnels  
Milepost 176.92, just east of Yuba Pass, Nevada County,  
California.

UTM: 10-707845-4355775  
Quad: Cisco Grove, Calif. 7.5', 1955, photorevised 1979.  
(west portal)

UTM: 10-707945-4355850  
Quad: Cisco Grove, Calif. 7.5', 1955 (photorevised 1979)  
(east portal)

**Date of Construction:** 1924.

**Engineer:** Southern Pacific Railroad Engineering Department.

**Present Owner:** Union Pacific Railroad, 1416 Dodge Street, Omaha NE 68101.

**Present Use:** Railroad Tunnel.

**Significance:** The Central Pacific First Transcontinental Railroad is a segment of the western half of the first transcontinental railroad, built from Sacramento, California to Promontory Summit, Utah between 1863 and 1869, where it joined the Union Pacific Railroad which had built west from Omaha. For the purpose of the current project, the first transcontinental railroad was found likely to be eligible for the National Register of Historic Places at the national level of significance under Criterion A for its significance in transportation history, in uniting the East and the West, and in the development of the West. The railroad's period of significance is 1869 to 1945, from the line's completion in 1869, through the years of its role in the settlement and development of the West, to the conclusion of the railroad's achievements in World War II. Tunnel 36 is a contributive element of this historic property.

**Report Prepared By:** John W. Snyder  
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## **I. DESCRIPTION**

Tunnel 36 is a 326-foot, single track railroad tunnel, with reinforced concrete portals and wingwalls. The wingwalls are notched, originally to carry supporting beams of adjacent timber snowsheds. The tunnel is on a three degree, thirty-five minute right curve, and carries the tracks of the Union Pacific Railroad's (formerly Southern Pacific) Donner Pass line.

## **II. HISTORICAL INFORMATION**

The Southern Pacific Railroad built Tunnel 36 in 1924 as an element of the reconstruction and double-tracking of the original Central Pacific line between Blue Cañon and Truckee. [For a full history of this line and of this undertaking, see the documentation set for the Central Pacific Transcontinental Railroad (Southern Pacific Overland Route) (Southern Pacific Donner Pass Route), Southern Pacific Donner Pass Route Tunnels, HAER No. CA-196.] After assuming control of the Southern Pacific/Central Pacific and merging them with the Union Pacific in 1901, Edward H. Harriman had embarked on a series of huge reconstruction projects system-wide. One of these was the double-tracking of the original Central Pacific line over Donner Pass, the first segment of which was from Rocklin to Colfax, completed in 1911; the second phase, from Colfax to Blue Cañon, opened on December 10, 1914. The federalization of the nation's railroads during World War I, coupled with government litigation aimed at dissolving the Harriman merger and forcing Southern Pacific to give up the Central Pacific, delayed completion of the third phase until the mid-1920s.

This last phase of double-tracking over "The Hill" included the construction of eight tunnels, including Tunnel 36. All were in virtually solid granite; all were in the area of heaviest snowfall on the line; all posed the same construction problems that had faced Central Pacific crews sixty years earlier. Only now the construction crews had the advantage of heavy mechanized equipment. During this construction phase, Fox Studios approached Southern Pacific seeking locations for a motion picture about the construction of the Central Pacific; among the locations used were the tunnels then under construction for the second track, since "...the rock is just as hard and jagged as it was in the early days..." At about the same time, and in connection with increased passenger traffic, Southern Pacific acquired the narrow-gauge Lake Tahoe Railway which ran from Truckee to Tahoe City, and standard-gauged the line, offering through Pullman service to Lake Tahoe. The same year--1925--that saw completion of double-tracking of the Donner Pass line, begun almost two decades earlier, also saw the company open major new depots on this line at Sacramento and Reno, as well as elsewhere on the system. Southern Pacific was ready to handle all the traffic--both passenger and freight--imaginable with its fully signalized, double-track line. And four years away lay the Great Depression.

## **III. SOURCES**

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- "The Days When The Central Pacific Was Young," *Southern Pacific Bulletin*, 9:5, May 1920.
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#### IV. PROJECT INFORMATION

As a result of the 1996 merger of the Union Pacific and Southern Pacific Railroads, a federal undertaking under the jurisdiction of the Surface Transportation Board of the U.S. Department of Transportation, and in order to accommodate freight trains utilizing longer and taller cars and loads--tri-level auto rack cars and cars carrying double-stacked containers, the Union Pacific will need to increase tunnel clearances on the former Southern Pacific Donner Pass Route. The tunnels, built between 1868 and 1925, are contributing elements of the National Register-eligible Southern Pacific Donner Pass Route Tunnels Historic District. All tunnels have been laser-measured and the railroad will determine clearance needs on a tunnel-by-tunnel basis. Some, because of curved alignment, will require interior work to allow for longer cars such as tri-level auto rack cars; others will require both interior and portal work to provide sufficient vertical clearance for "double-stack" container cars. The latter work may impact the character-defining tunnel portals if crown mining of the tunnels (as opposed to lowering the tunnel floors) is selected. Inasmuch as this would cause an adverse effect to the tunnels, Union Pacific has elected to record the tunnels for the Historic American Engineering Record. Documentation was carried

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out by P.S. Preservation Services, John Snyder Field Director and Historian, and Ed Andersen, Photographer. Photos were made in October 1997, and research was carried out from August 1997 through March 1998.