

United States Department of the Interior  
Heritage Conservation and Recreation Service

# National Register of Historic Places Inventory—Nomination Form

See instructions in *How to Complete National Register Forms*  
Type all entries—complete applicable sections

For HCRRS use only  
received DEC 31 1980  
date entered FEB 12 1981

## 1. Name

historic Colorado Street Bridge

and/or common Colorado Street Bridge

## 2. Location

street & number Colorado Boulevard over the Arroyo Seco — not for publication

city, town Pasadena — vicinity of congressional district 22nd

state California code 06 county Los Angeles code 037

## 3. Classification

<b>Category</b>	<b>Ownership</b>	<b>Status</b>	<b>Present Use</b>
<input type="checkbox"/> district	<input checked="" type="checkbox"/> public	<input type="checkbox"/> occupied	<input type="checkbox"/> agriculture
<input type="checkbox"/> building(s)	<input type="checkbox"/> private	<input checked="" type="checkbox"/> unoccupied	<input type="checkbox"/> commercial
<input checked="" type="checkbox"/> structure	<input type="checkbox"/> both	<input type="checkbox"/> work in progress	<input type="checkbox"/> educational
<input type="checkbox"/> site	<b>Public Acquisition</b>	<b>Accessible</b>	<input type="checkbox"/> entertainment
<input type="checkbox"/> object	<input type="checkbox"/> in process	<input type="checkbox"/> yes: restricted	<input type="checkbox"/> government
	<input type="checkbox"/> being considered	<input checked="" type="checkbox"/> yes: unrestricted	<input type="checkbox"/> industrial
		<input type="checkbox"/> no	<input type="checkbox"/> military
			<input checked="" type="checkbox"/> transportation
			<input type="checkbox"/> other:

## 4. Owner of Property

name City of Pasadena

street & number 100 North Garfield Avenue

city, town Pasadena — vicinity of 91101 state California

## 5. Location of Legal Description

courthouse, registry of deeds, etc. Office of County Recorder of Los Angeles, California

street & number 227 North Broadway

city, town Los Angeles state California

## 6. Representation in Existing Surveys

title See continuation sheet no. 1 has this property been determined eligible? ☐ yes ☐ no

date ☐ federal ☐ state ☐ county ☐ local

depository for survey records

city, town state

## 7. Description

### Condition

☐ excellent

☐ good

☒ fair

☐ deteriorated

☐ ruins

☐ unexposed

### Check one

☐ unaltered

☒ altered

### Check one

☒ original site

☐ moved

date \_\_\_\_\_

### Describe the present and original (if known) physical appearance

The Colorado Street Bridge is an open spandrel arch bridge of reinforced concrete construction. The bridge consists of a series of nine large parabolic arches, six spans of 113 feet, two spans of 151.5 feet and one span of 223 feet together with six small girder spans also in the form of arches and abutments at each end, giving the structure a total length of 1,467.5 feet and a maximum height of 148-1/2 feet. Each of the longer arch spans consists of two continuous elastic arch ribs carrying spandrel columns and in part spandrel walls. Spandrel columns are embellished with decorative bases and capitals. *- embellished*

The bridge's 28-foot roadway and 5-foot wide sidewalks are supported by a deck system of hollow spandrel construction. Each span is divided into ten panels by cross girders, supported by columns resting on arch ribs. The sidewalk's cantilever is supported by small arches located above each spandrel column and along spandrel walls and piers. A precast concrete railing and eight-foot refuge bays over each pier are provided for both sidewalks. Although the railing has lost its classical balusters, lower pilasters and moldings still remain. The bridge is lit by single spherical-shaped lights on ornate cast iron posts with finely detailed bases, two lampposts per each bay.

The bridge is currently in use, although some deterioration has been identified in studies by the California Department of Transportation from 1976 through 1978.. Two lanes wide, the bridge was considered inadequate for the traffic load as early as the 1930s. When studies concluded the bridge could not be successfully widened, the decision was made that only minimal maintenance be performed. Lack of maintenance and a high chloride content in the cement were principal factors leading to the current problem of spalling, failure of expansion joints and bearings, and some rusting of structural steel.

(11/78)

UNITED STATES DEPARTMENT OF THE INTERIOR  
HERITAGE CONSERVATION AND RECREATION SERVICE

**NATIONAL REGISTER OF HISTORIC PLACES  
INVENTORY -- NOMINATION FORM**

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CONTINUATION SHEET 1

ITEM NUMBER 6

PAGE 1

American Society of Civil Engineers, Los Angeles Section: Certificate of Recognition to the City of Pasadena for the Old Arroyo Seco Colorado Street Bridge in Pasadena, California as an Historic Civil Engineering Landmark. September 1975.

City of Pasadena: Designation of Colorado Street Bridge as a Cultural Heritage Landmark. April 1979.

David Gebhard and Robert Winter: A Guide to Architecture in Los Angeles and Southern California. (Santa Barbara, 1977)

Mel Green and Associates: Study of Colorado Street Bridge pursuant to its restoration and preservation. 1980

## 8. Significance

Period	Areas of Significance—Check and justify below			
<input type="checkbox"/> prehistoric	<input type="checkbox"/> archeology-prehistoric	<input type="checkbox"/> community planning	<input type="checkbox"/> landscape architecture	<input type="checkbox"/> religion
<input type="checkbox"/> 1400-1499	<input type="checkbox"/> archeology-historic	<input type="checkbox"/> conservation	<input type="checkbox"/> law	<input type="checkbox"/> science
<input type="checkbox"/> 1500-1599	<input type="checkbox"/> agriculture	<input type="checkbox"/> economics	<input type="checkbox"/> literature	<input type="checkbox"/> sculpture
<input type="checkbox"/> 1600-1699	<input checked="" type="checkbox"/> architecture	<input type="checkbox"/> education	<input type="checkbox"/> military	<input type="checkbox"/> social/
<input type="checkbox"/> 1700-1799	<input type="checkbox"/> art	<input checked="" type="checkbox"/> engineering	<input type="checkbox"/> music	<input type="checkbox"/> humanitarian
<input type="checkbox"/> 1800-1899	<input checked="" type="checkbox"/> commerce	<input type="checkbox"/> exploration/settlement	<input type="checkbox"/> philosophy	<input type="checkbox"/> theater
<input checked="" type="checkbox"/> 1900-	<input type="checkbox"/> communications	<input type="checkbox"/> industry	<input type="checkbox"/> politics/government	<input checked="" type="checkbox"/> transportation
		<input type="checkbox"/> invention		<input type="checkbox"/> other (specify)

**Specific dates** 1912-13 **Builder/Architect** Waddell and Herrington, engineers

### Statement of Significance (In one paragraph)

Impressive both technically and visually, the Colorado Street Bridge over the Arroyo Seco has long been a Southern California landmark. Standing some 148 feet above the canyon's riverbed, the structure was proclaimed "the highest concrete bridge in the world" at its completion in December 1913. The bridge, designed by the engineering firm Waddell and Harington of Kansas City, is a transitional structure in design, combining modern scale with period finish and detail, detailing that would be difficult or impossible to reproduce today. The impetus to build the bridge was taken by the far-thinking citizens of Pasadena in an effort to connect their growing community to Los Angeles. The bridge has contributed significantly to that city's growth and has become an object of civic pride. The bridge has been named both a Cultural Heritage Landmark by the City of Pasadena and an Historic Civic Engineering Landmark by the Los Angeles section of the American Society of Civil Engineers.

The Colorado Street Bridge is a product of necessity. In 1912, there was only a single direct crossing over the Arroyo Seco, that being an old-timber-truss bridge located about 100 feet north of the present bridge. Realizing that the rapidly growing numbers of automobiles could not negotiate its steep approaches, Edwin Sover, executive director of Pasadena's Board of Trade, predecessor of the Chamber of Commerce, consulted with highway commissioner C. D. Daggett the feasibility of building a street-level bridge to replace it. Daggett estimated the cost of such a bridge to be \$250,000, a prohibitive figure even for the wealthy community of Pasadena. Sover, however, realized that the west end of the bridge would touch Los Angeles and appealed to the Los Angeles City Council for financial assistance. The Los Angeles City Council agreed to allocate \$98,640 towards the bridge's construction and acquired partial ownership of the future structure. In the Spring of 1912, Pasadena voters overwhelmingly approved a forty-year \$100,000 bond issue to fund their portion of the construction.

Sover employed John Alexander Low Waddell of the engineering firm Waddell and Herrington as his design consultant. Waddell was renowned for his bridges and had developed several important innovations in bridge design. With twenty-five years experience in bridge construction, Waddell originated the vertical span lift and did important work in "intermittent foundations," a major problem at the Arroyo site. His vast experience included international work for which he was decorated by the Emperor of Japan and honored by the Grand Duchess of Russia. Waddell's proposal, an eleven-arch structure laid out across the most direct east-west route, would, however, have cost \$241,640, \$6000 more than Sover wished to pay. Sover petitioned John Drake Mercerau, a Los Angeles Contractor who had submitted the lowest bid for construction and had been named the bridge's contractor, to devise a lower-cost alternative. After conferring with his consulting engineer, C.K. Allin, Mercerau announced that the bridge could be built for less at the desired location



## 9. Major Bibliographical References

See continuation sheet no. 3

UTM NOT VERIFIED

## 10. Geographical Data

ACREAGE NOT VERIFIED

Acreage of nominated property 1 acre (apx.)

Quadrangle name Pasadena, C

Quadrangle scale 1:24,000

UMT References

A 1 1 3 92 7 1 0 3 77 86 1 0  
Zone Easting Northing

B                                
Zone Easting Northing

C                              

D                              

E                              

F                              

G                              

H                              

### Verbal boundary description and justification

A 43'6" wide arc, corresponding to the width of the bridge's piers, beginning at the bridge's eastern termination, then extending 1,467' west to the bridge's western termination.

List all states and counties for properties overlapping state or county boundaries

state	code	county	code
state	code	county	code

## 11. Form Prepared By

name/title Michael Zimny

organization Pasadena Heritage

date June 24, 1980

street & number 54 West Colorado Boulevard

telephone (213) 793-0617

city or town Pasadena

state California

## 12. State Historic Preservation Officer Certification

The evaluated significance of this property within the state is:

   national X state    local

As the designated State Historic Preservation Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the Heritage Conservation and Recreation Service.

State Historic Preservation Officer signature

*Kenneth M. Zimny*

title

date 12/1/80

For HCRS use only

I hereby certify that this property is included in the National Register

*Beth Grosvenor*  
Keeper of the National Register

date 2/12/81

Attest: *Patrick Andrews*

date 2/12/81

Chief of Registration

**NATIONAL REGISTER OF HISTORIC PLACES  
INVENTORY -- NOMINATION FORM**

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FEB 12 1980

CONTINUATION SHEET

2

ITEM NUMBER

8

PAGE

1

if it were curved about fifty degrees to the south to take advantage of stronger foundations. The new bridge would be longer but less complicated and most importantly less expensive than Waddell's proposal.

Despite Waddell's protests, Merçeau's alteration to his design was accepted and work begun in July 1912. Construction took eighteen months and employed 40 to 100 men. Construction materials were brought down the gorge's steep sides by horse cart. Records show that some 10,000 barrels or 11,000 cubic yards of concrete and 600 tons of steel reinforcing went into the bridge. From the company's single cement mixer, concrete was poured, half a yard at a time, into the bridge's hundreds of wooden "false work" forms that when removed would reveal the bridge's many arches, girders, spandrels and other decorative details. Total cost of the project was about \$240,000.

The engineering marvel of its day, the bridge officially opened on December 13, 1913, thousands of Pasadenans taking part in the festivities. The bridge soon became a local landmark and an object of intense pride and admiration. Two years after its opening, when the eastern access of the bridge was widened for safety reasons, wealthy Pasadenans contributed substantially to the project's \$80,000 cost. In 1931, Pasadenans again came to the rescue of their beloved bridge as it was marked for demolition and replacement by a new freeway bridge. Through an intense letter-writing campaign, Pasadenans convinced the state to build the new bridge alongside the old bridge using a design that blend in with the old structure. Recently, Pasadenans have again rallied to the support of their bridge. In response to a 1977 Caltrans study that showed the aging bridge to be severely deteriorating, a Bridge Party was held on September 22, 1979, to increase public and private awareness of the condition of the Bridge. Part of the revenue from the party was used to hire a consultant to make a study of ways to preserve the bridge. His completed report is expected in the summer of 1980.

UNITED STATES DEPARTMENT OF THE INTERIOR  
HERITAGE CONSERVATION AND RECREATION SERVICE

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CONTINUATION SHEET 3

ITEM NUMBER 9

PAGE 1

City Facts, "Colorado Street Bridge One of City Wonders," vol. 1, no. 4, December 1923.

Hool, George A., Bridges and Culverts. New York: McGraw-Hill Book Co., 1916.

Howard, E.E. "Colorado Street Bridge Over Arroyo Seco," Engineering Record, vol. 67, no. 21, May 24, 1913.

Pasadena Star News, "Panorama Section," December 1978.

Schmidt, Richard. "Weathered Crossing," Westways, December 1978.









USGS KODAK AEROGRAPHIC SAFETY

USGS KODAK AEROGRAPHIC SAFETY



1536-14

## Missing Core Documentation

**Property Name**

Colorado Street Bridge

**County, State**

Los Angeles, CA

**Reference Number**

81000156

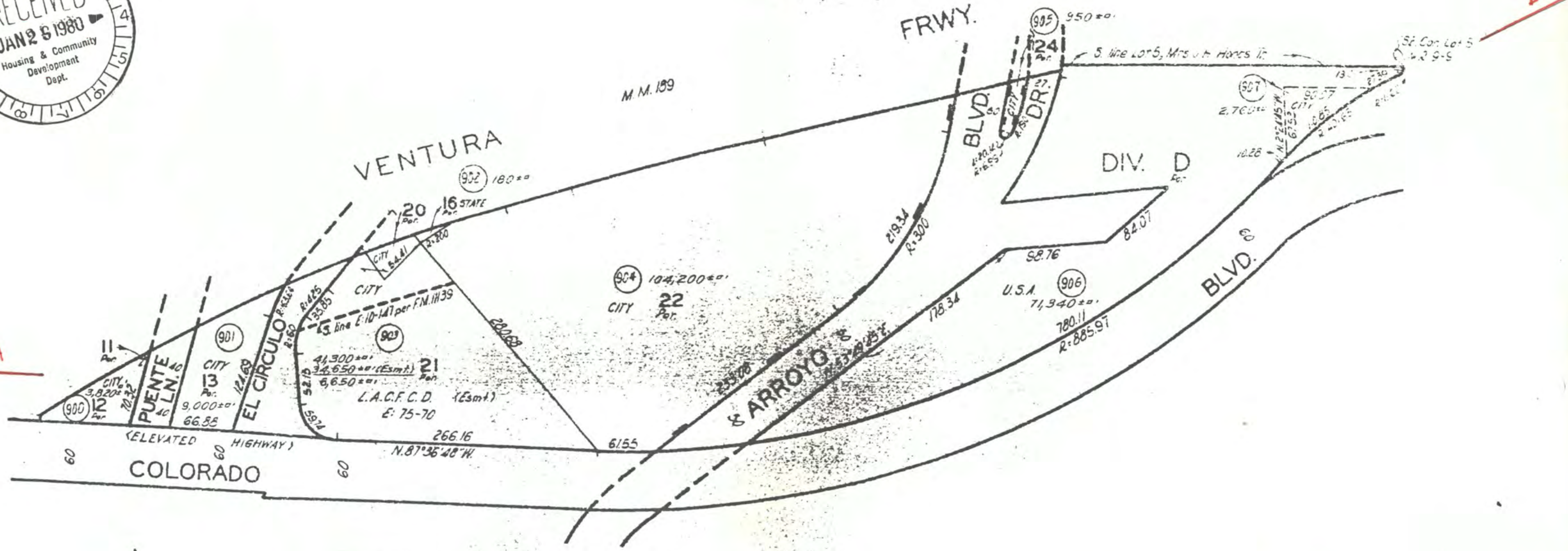
The following Core Documentation is missing from this entry:

☐ Nomination Form

☒ Photographs (#1)

☐ USGS Map





TRACT NO. 8601  
M.B. 116-43-44

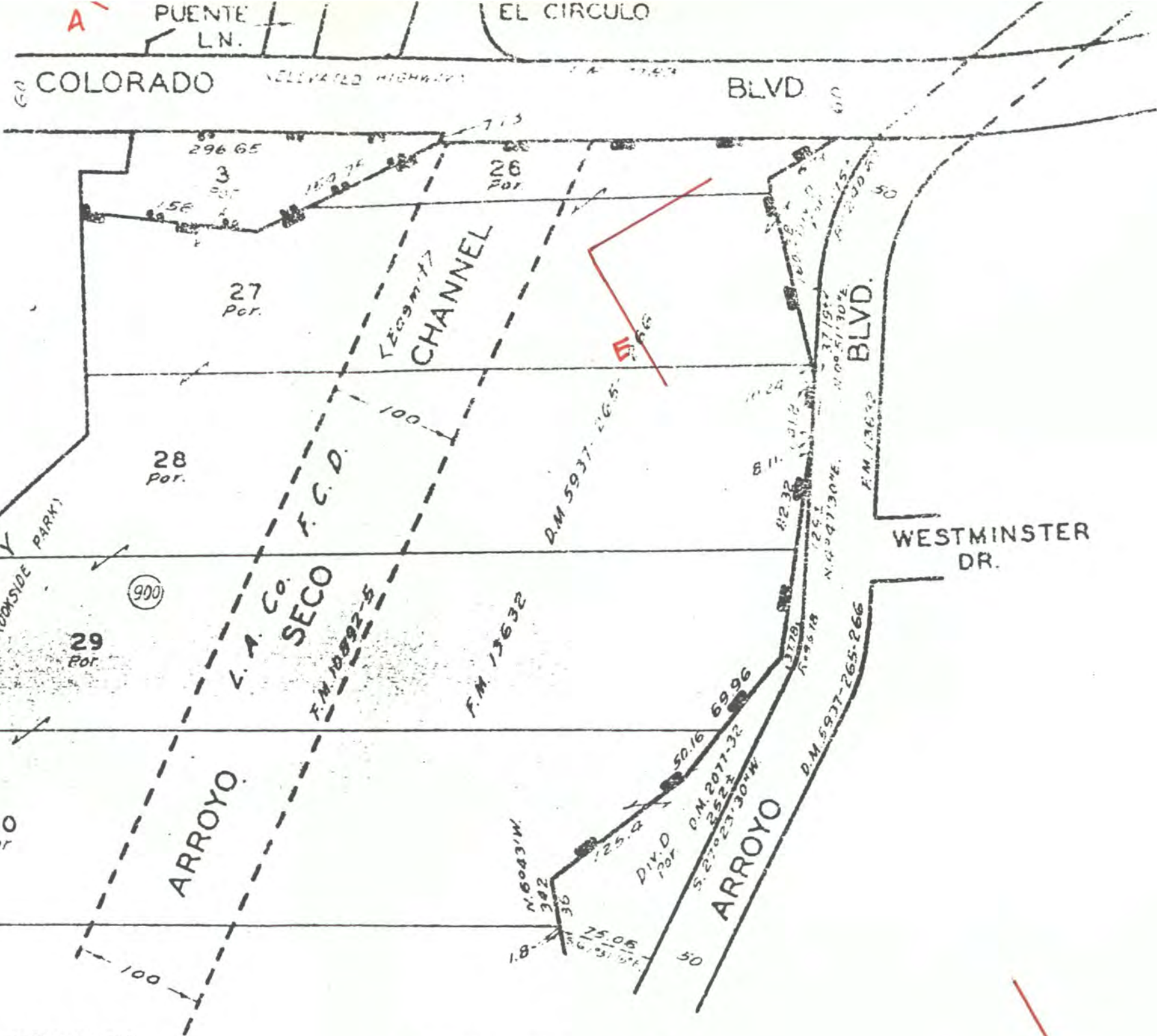
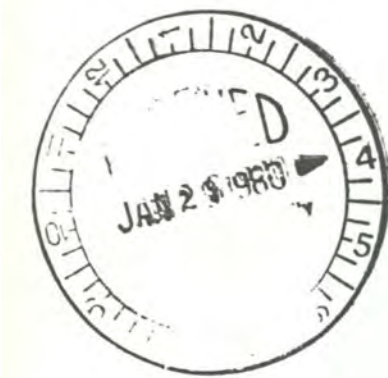
SAN GABRIEL ORANGE  
GROVE ASSN'S LANDS  
M.R. 2-556-559



CODE  
7500



(2)



SAN GABRIEL ORANGE GROVE ASSN'S LANDS

M.R. 2 - 556 - 559

TRACT NO. 4116

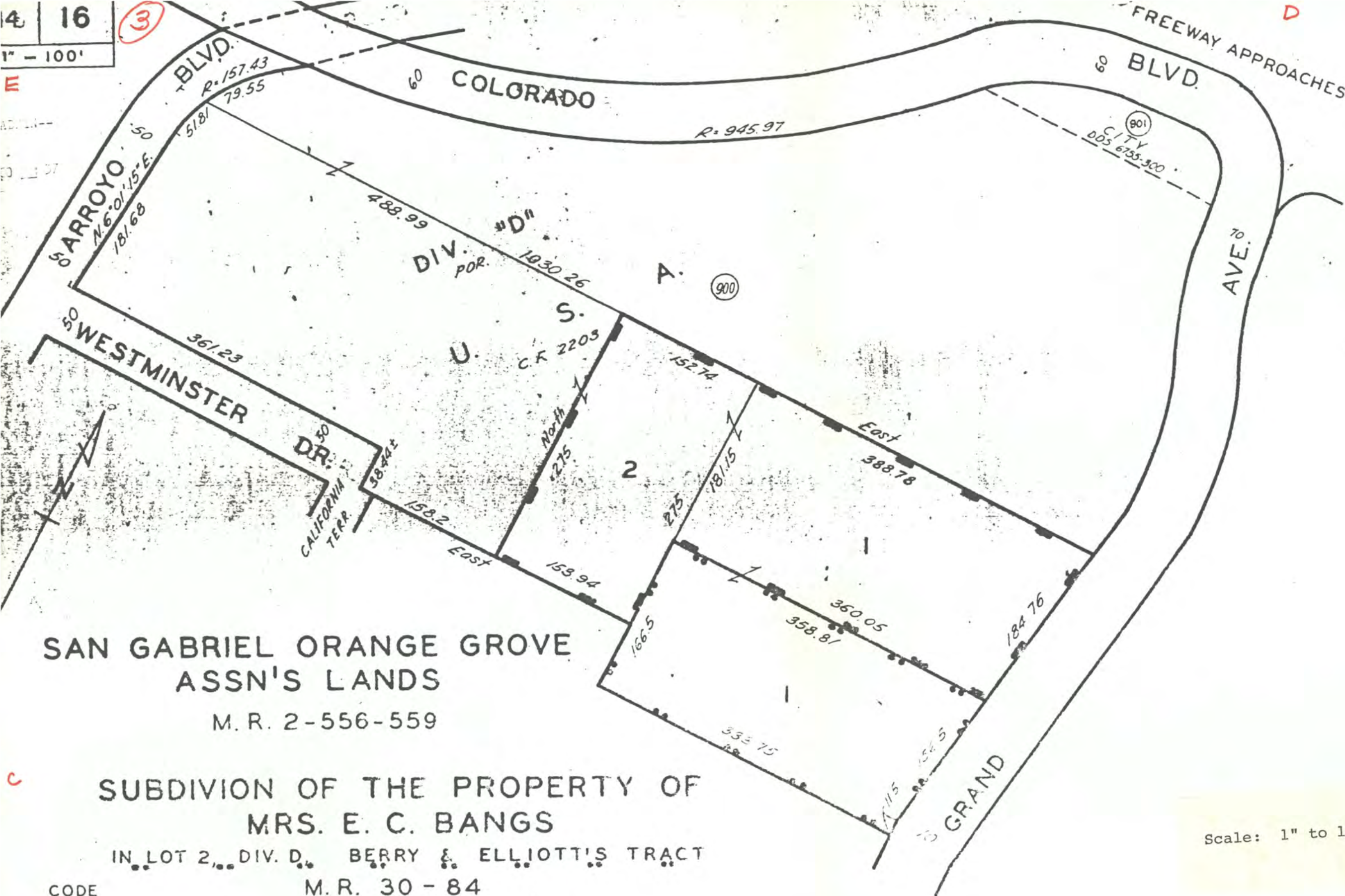
M.B. 44 - 4 - 5

PLAT OF LAND IN THE ARROYO SECO BELONGING TO THE SAN GABRIEL ORANGE GROVE ASSOCIATION

ALL PROPERTY SHOWN ON THIS PAGE ASSESSED TO CITY

CODE 7500





SAN GABRIEL ORANGE GROVE  
ASSN'S LANDS

M. R. 2-556-559

SUBDIVISION OF THE PROPERTY OF  
MRS. E. C. BANGS

IN LOT 2, DIV. D, BERRY & ELLIOTT'S TRACT  
M. R. 30-84

CODE  
7500

VISTA CREST  
M. B. 5-34

Scale: 1" to 100'



Revised  
8-23-61  
1-14-64  
680822  
700209  
73052-  
750207  
750716  
760831  
771130  
780302  
780403  
790619  
790706  
800219

HCD ADMIN

MAR 80

Note outline of  
Colorado Bridge

Scale 1" to 400'

Pasadena Heritage  
Colorado Street Bridge







MEMBERS OF THE BOARD  
PETER F. SCHABARUM  
KENNETH HAHN  
EDMUND D. EDELMAN  
YVONNE B. BURKE  
BAXTER WARD

**BOARD OF SUPERVISORS  
COUNTY OF LOS ANGELES**

869 HALL OF ADMINISTRATION / LOS ANGELES, CALIFORNIA 90012

**BAXTER WARD**  
SUPERVISOR, FIFTH DISTRICT  
974-5555

September 26, 1980

Dr. Knox Mellon  
State Historic Preservation Officer  
Department of Parks and Recreation  
Post Office Box 2390  
Sacramento, California 95811

RECEIVED  
OCT 2 1980  
OHP

Dear Dr. Mellon:

Please accept my support for the designations of the Colorado Street Bridge and the Hotel Green for nomination to the National Register of Historic Places.

Each of these structures is an important landmark in the City of Pasadena -- and we feel that their nomination would be appropriate.

Best wishes,

  
BAXTER WARD

BW:eva





COUNTY OF LOS ANGELES  
HISTORICAL LANDMARKS COMMITTEE

320 W. TEMPLE STREET  
POST OFFICE BOX 111  
LOS ANGELES, CALIFORNIA 90053  
974-6577

OFFICERS

MRS. BARBARA HENDERSON  
CHAIRMAN

MEMBERS

MICHAEL BORAN  
MRS. BARBARA HENDERSON  
MRS. EFFIE JOHNSON ROOD  
MAYER ROYAL  
MRS. LINDA TURNER

EX-OFFICIO MEMBERS

DIRECTOR OF MUSEUM OF  
NATURAL HISTORY

COUNTY LIBRARIAN

October 28, 1980

RECEIVED  
NOV 4 1980  
OHP

Dr. Knox Mellon  
State Historic Preservation Officer  
Department of Parks and Recreation  
P.O. Box 2390  
Sacramento, CA 95811

Dear Dr. Mellon:

The Los Angeles County Landmarks/Records Commission (formerly the Los Angeles County Historical Landmarks Committee) at its October 28, 1980 meeting unanimously recommended the submission of the Golden Gate Theater, 5170-88 E. Whittier Blvd., Los Angeles; the Colorado Street Bridge, Colorado Blvd. over the Arroyo Seco, Pasadena; and the Hotel Green, 99 South Raymond Ave., Pasadena, for the National Register of Historic Places.

The Commission was particularly impressed and interested in the detailed background information in the Hotel Green application.

Sincerely yours,

*Barbara L. Wight*

Barbara L. Wight  
Los Angeles County Landmarks/  
Records Commission

c: Supervisor Edelman  
Supervisor Ward  
Historical Landmarks/Records Commission  
Chairperson Barbara Henderson  
and members:  
Michael Boran  
Effie Rood  
Mayer Royal  
Linda Turner  
Linda F. Crismond  
William Mason



# City of Pasadena

ONE HUNDRED NORTH GARFIELD AVENUE

PASADENA, CALIFORNIA 91109

*Survey unit*



COMMUNITY DEVELOPMENT DEPARTMENT

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OCT 30 1980

OHP

October 28, 1980

Dr. Knox Mellon  
State Historic Preservation Officer  
Department of Parks and Recreation  
P.O. Box 2390  
Sacramento, CA 95811

Re: Colorado Street Bridge  
Pasadena  
Los Angeles County  
California

Dr. Mellon:

The Cultural Heritage Commission, City of Pasadena, in response to your inquiry regarding the Colorado Street Bridge wishes to convey its support of the nomination of the bridge to the National Register of Historic Places.

Immediately upon completion, the Colorado Street Bridge became a visual landmark of the City. It has been named both a Cultural Heritage Landmark by the City of Pasadena and a Historic Civic Engineering Landmark by the Los Angeles section of the American Society of Civil Engineers.

Sincerely,

*Robert W. Winter*

Dr. Robert W. Winter, Chairman  
Cultural Heritage Commission

RW/ws



## DEPARTMENT OF PARKS AND RECREATION

P.O. BOX 2390  
SACRAMENTO 95811



(916) 445-8006

December 18, 1980

Mr. Jerry Rogers  
Acting Keeper of the National Register  
U.S. Department of the Interior  
Heritage Conservation and Recreation Service  
440 G Street, NW  
Washington, DC 20243

Dear Mr. Rogers:

We submit the Colorado Street Bridge for nomination to the National Register of Historic Places. This nomination is located in Los Angeles County in the 22nd California Congressional District.

Sincerely,

A handwritten signature in dark ink, appearing to read "Knox Mellon".

Dr. Knox Mellon  
State Historic Preservation Officer  
Office of Historic Preservation

Enclosure

F-5901D





ENTRIES IN THE NATIONAL REGISTER

STATE CALIFORNIA

Date Entered FEB 12 1981

Name

Location

Colorado Street Bridge

Pasadena  
Los Angeles County

Also Notified

Honorable S. I. Hayakawa

Honorable Alan Cranston

Honorable Carlos J. Moorhead

Pacific Southwest Region, HCRS

State Historic Preservation Officer

Dr. Knox Mellon

Office of Historic Preservation

California Department of Parks &

Recreation

P.O. Box 2390

Sacramento, California 95811

NR Byers/bjr/2/23/81

For further information, please call the National Register at (202)343-6401.