

**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

**1. Name**

historic Pacific Electric Sub-Station #14 (Santa Ana)

and/or common Pacific Electric Sub-Station

**2. Location**

street & number 802 East <sup>5th St.</sup> ~~Fifth Street~~

N/A not for publication

city, town Santa Ana

N/A vicinity of

congressional district 38th

state California

code 06

county Orange

code 059

**3. Classification**

**Category**

☒ district  
☒ building(s)  
☐ structure  
☐ site  
☐ object

**Ownership**

☒ public  
☐ private  
☐ both

**Public Acquisition**

NA in process  
NA being considered

**Status**

☒ occupied  
☒ unoccupied  
☐ work in progress

**Accessible**

☐ yes: restricted  
☒ yes: unrestricted  
☐ no

**Present Use**

☐ agriculture  
☐ commercial  
☐ educational  
☐ entertainment  
☐ government  
☐ industrial  
☐ military

☐ museum  
☐ park  
☐ private residence  
☐ religious  
☐ scientific  
☐ transportation  
☒ other: Vacant

**4. Owner of Property**

name William Baker

street & number 317 E. 61st St.

city, town Long Beach

N/A vicinity of

state California 90805

**5. Location of Legal Description**

courthouse, registry of deeds, etc. Orange County Records Office

street & number 630 N. Broadway

city, town Santa Ana

state California

**6. Representation in Existing Surveys**

title Santa Ana Historic Resources Inventory  
has this property been determined eligible? ☐ yes ☒ no

date 6/79 ☒ federal ☒ state ☒ county ☒ local

depository for survey records State Historic Preservation Office

P. O. Box 2390

city, town Sacramento

state CA 95811

## 7. Description

### Condition

☐ excellent  
☒ good  
☐ fair

☐ deteriorated  
☐ ruins  
☐ unexposed

### Check one

☐ unaltered  
☒ altered

### Check one

☒ original site  
☐ moved date N/A

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

Pacific Electric Substation #14, constructed in 1907, is a rectangular brick building of the early 20th Century industrial design. Its simple classical detailing was revealed by its pedimented end gables which are emphasized by the corbelling supporting the pediment and repeated under the eave lines. Four end buttresses and multiple side buttresses emphasize the substation's solid construction and separate the side windows and arched door openings.

Six twelve-inch tile pipes served as high tension insulators in each end gable. A larger circular vent is located immediately above the conduit openings.

A wooden cooling tower topped by a small hipped roof protrudes through the northeast end of the roof and remains intact today.

The substation is in fair physical condition today due to deferred maintenance, however, it is physically unaltered from the original exterior appearance and the original window sash and door materials are present despite the effects of time. There exists no extant historical photograph of the structure despite extensive research. It can be reasonably assumed upon inspection of the existing structure and historical photographs of other substations of similar design that the structure is completely unaltered.

The building's interior is accessed through large wooden sliding doors that open up into a large industrial space. The interior roof is supported by timber purlins and trusses. The interior has a poured slab concrete floor and thick white-washed walls.

The building has been used for industrial storage for twenty years and has recently (1980) been abandoned and boarded up. The building, approximately 30' x 45', is subject to the seismic rehabilitation requirements of the City of Santa Ana.

The only alteration to the building has been the removal of the machinery from the interior after Pacific Electric ceased operations in 1950. Also, corrugated plastic sheeting has been placed over the wooden louvers in the shed dormers on the west and east sides; these minor additions are easily reversible.

## 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 type="checkbox"/> engineering	<input type="checkbox"/> music	<input type="checkbox"/> humanitarian
<input type="checkbox"/> 1800-1899	<input type="checkbox"/> commerce	<input type="checkbox"/> exploration/settlement	<input type="checkbox"/> philosophy	<input type="checkbox"/> theater
<input checked="" type="checkbox"/> 1900-07	<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** May 1907 **Builder/Architect** Pacific Electric Construction Dept.

### Statement of Significance (In one paragraph)

Pacific Electric Sub-Station #14 was built in 1907 and is the oldest standing structural feature of the Pacific Electric system in Orange County. The building serves as a landmark in the region's transportation and commercial history and has architectural significance as an outstanding remnant of early 20th Century industrial design.

The Santa Ana Pacific Electric Sub-Station was a conversion plant where alternating current from the Main Watts Steam Generating Station was converted to direct current to run the cars on the Santa Ana area train lines. This station powered the Main Santa Ana-Watts Line, the Santa Ana Orange line, and the Santa Ana-Huntington Beach freight line. This was originally one of four Pacific Electric Power Stations in the county and is the only one remaining. The station continued to power the county system until the abandonment of service on 7/2/50.

The building was built in May of 1907 to house equipment that had been operating in a temporary building in the adjacent lot. This temporary facility was constructed in 1905 with the arrival of the tracks from Garden Grove. In November of 1905, the Pacific Electric passenger service began in Santa Ana and by 1907 the convertor had been moved to a permanent building. The substation's double thick walls with outer brick buttresses and pedimented gable roof supported by brick corbelling represents an architecturally significant style of early 20th Century industrial design. The structure is architecturally unaltered and has maintained its historic design integrity over time. The substation's architectural style is duplicated in the design of the other remaining Pacific Electric facilities in Los Angeles County. Historic pictures indicate that the buttressing and pedimented gable style were distinctive traits seen in the now demolished Newport and Los Patos stations although not all substations were of brick construction. The Santa Ana substation #14 is unaltered from the classical design characteristic of the Pacific Electric Railway System.

In summary, the structure is an architecturally and historically significant remnant of the region's major historic transportation system. Its classically influenced industrial architecture shows a quality of historic integrity of substantial importance to Orange County.

## 9. Major Bibliographical References

Santa Ana Daily Register, 6/11/07

Daily Evening Blade Newspaper, 11/6/05

Lines of the Pacific Electric, Southern District, Interurban Pub. Co., 1967

Santa Ana City Directories, 1904-1910

Santa Ana Cultural Heritage Committee Reports E-5, E-15

REC-113

## 10. Geographical Data

APR 25 1983

Acreage of nominated property .143

Quadrangle name Tustin

Quadrangle scale 1:24000

### UMT References

A 11 420400 3734430  
Zone Easting Northing

B           
Zone Easting Northing

C         

D         

E         

F         

G         

H         

**Verbal boundary description and justification** Property occupies its historic 50'x125' lot, described as Lot 14 of Block B of Dr. J.M.Lacy's Addition to the City of Santa Ana, County of Orange, California. The building occupies most of the subdivided lot 14.

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

state N/A code county N/A code

state code county code

## 11. Form Prepared By

name/title Harold Thomas, President

organization Heritage Orange County

date 4/30/83

street & number 106 W. 4th St., Suite 503

telephone (714) 835-7287

city or town Santa Ana,

state California

## 12. State Historic Preservation Officer Certification

The evaluated significance of this property within the state is:

   national    state X 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

*K m ellon*

title State Historic Preservation Officer

date 8/16/83

For HCRS use only

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

Entered in the  
National Register

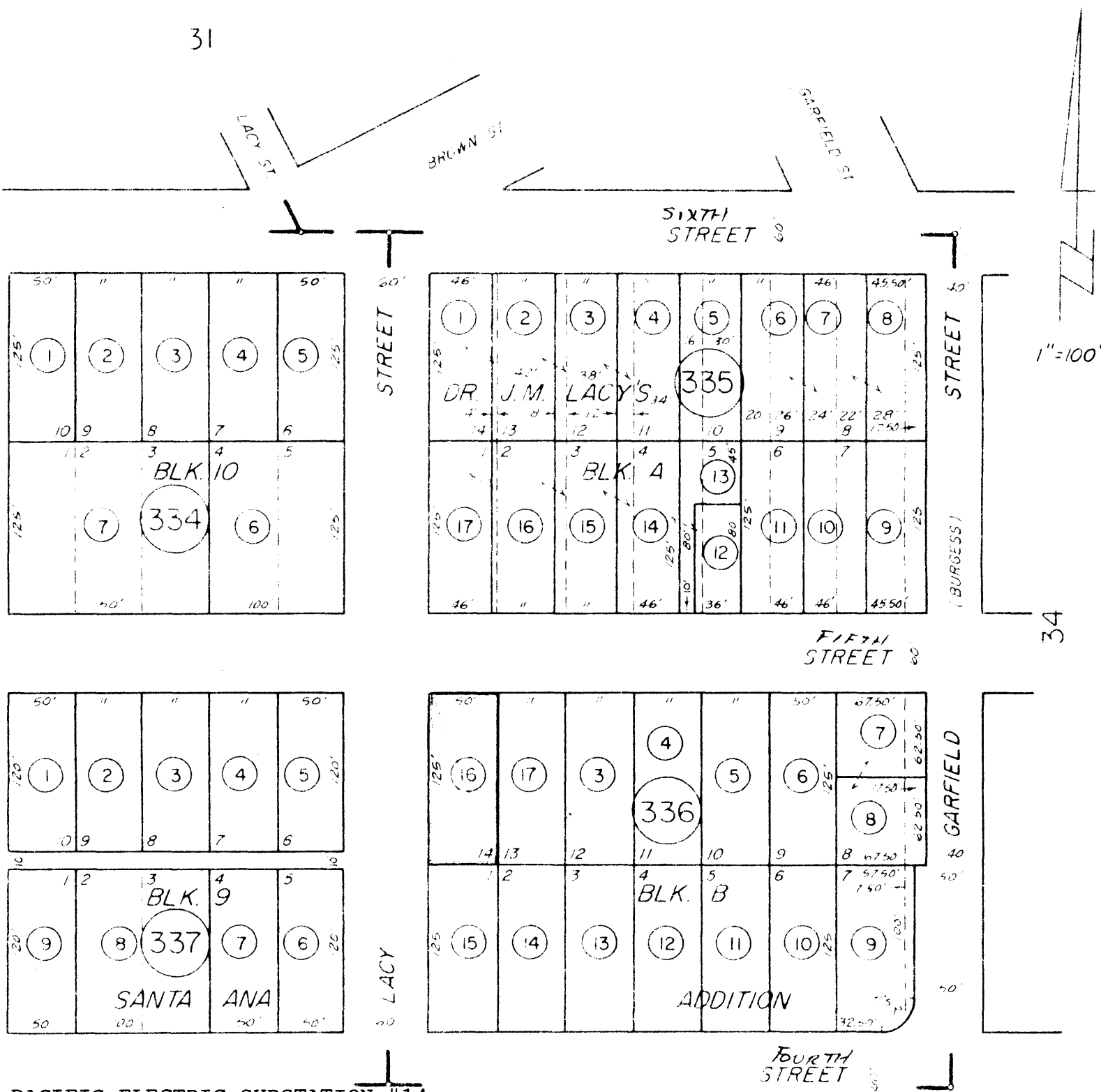
date 9/22/83

for *Alfonso B. ...*  
Keeper of the National Register

Attest:

Chief of Registration

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PACIFIC ELECTRIC SUBSTATION #14  
802 EAST FIFTH ST., SANTA ANA, CA 92701

A.P. 398-336-16

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NOTE ASSESSOR'S BLOCK &  
PARCEL NUMBERS  
SHOWN IN CIRCLES

ASSESSOR'S MAP  
BOOK 398 PAGE 33  
COUNTY OF ORANGE