

**APPENDIX B**  
**DPR523(A) FORMS<sup>1</sup>**

<sup>1</sup> In several of the copies of Primary Records included, text extends beyond the right margin and cannot be read. This reflects the original source material and is not a reproduction error.



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\*Resource Name or # (Assigned by recorder) Los Medanos Wasteway

\*Recorded by Cheryl Brookshear \*Date November 19, 2008  Continuation  Update

**P1. Other Identifier:** c. Address Los Medanos Wasteway and Culvert City Antioch Zip 94509

e. Other Locational Data: The wasteway runs north from the hillside and its connection with the Contra Costa Canal, downhill to Suisun Bay, in the city of Antioch.

**P3a. Description (continued):** The wasteway has been field checked and remains the same since the previous form was completed. Attached is a copy of the previous inventory and evaluation for this building prepared in 2002 by Meta Bunse and Bryan Larson of JRP Historical Consulting LLC for the HRER: SR4(e) Widening – Loveridge Road to SR 160.

\*P8. Recorded by: JRP Historical Consulting, LLC, 1490 Drew Ave., Suite 110, Davis, CA 95618

\*P9. Date Recorded: November 19, 2008

\*P11. Report Citation: JRP Historical Consulting, LLC, "Historic Resources Inventory and Evaluation Report Mirant Willow Pass Generation Station, 2008 – Data Request November 2008.

**B10. Significance:**

The wasteway was previously surveyed in 2002 by Meta Bunse and Bryan Larson of JRP Historical Consulting LLC for the HRER: SR4(e) Widening – Loveridge Road to SR 160. The previous survey evaluated the wasteway and concluded that the wasteway did not appear to meet the criteria for listing in the CRHR or the NRHP. While the wasteway is part of the Contra Costa Canal, it is not an integral engineered structure. Instead, the wasteway in the study area north of SR4 is a slightly modified natural waterway. This conclusion regarding its lack of historical significance is still valid and is fully documented in the previous evaluation. The property has been evaluated in accordance with Section 15064.5(a)(2)-(3) of the CEQA Guidelines, using the criteria outlined in Section 5024.1 of the California Public Resources Code, and the property does not appear to meet the significance criteria as outlined in these guidelines.

\*B14. Evaluator: Cheryl Brookshear

\*Date of Evaluation: November 2008



**Photograph 1: Los Medanos Wasteway looking south from Century Blvd.**



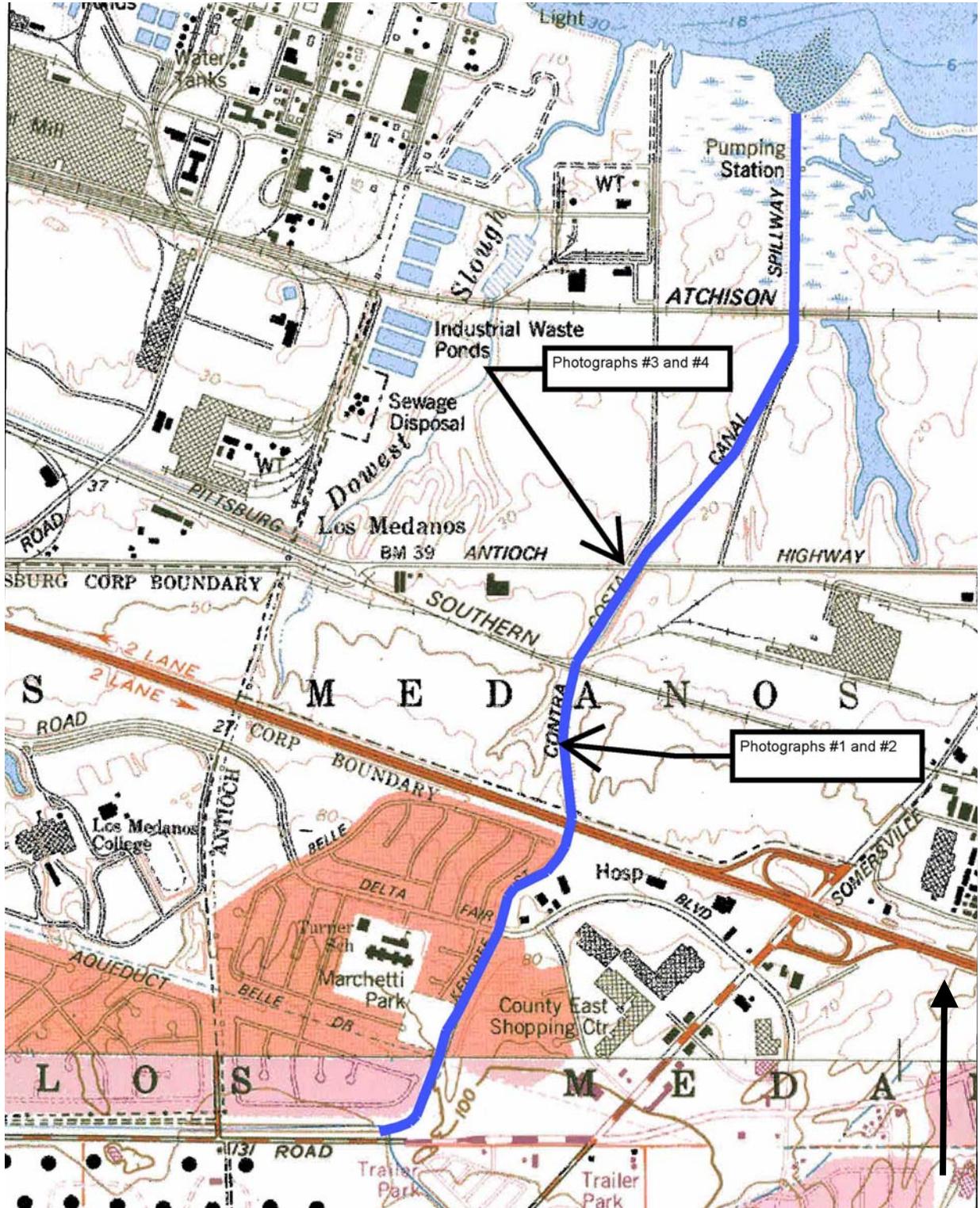
**Photograph 2: Los Medanos Wasteway looking north from Century Blvd.**



**Photograph 3: Los Medanos Wasteway looking south from Pittsburg Antioch Highway.**



**Photograph 4: Los Medanos Wasteway looking northeast from Pittsburg Antioch Highway.**



Sketch Map Antioch North USGS Quadrangle 1978, Antioch South USGS Quadrangle 1953 photo revised 1980.

State of California - The Resources Agency DEPARTMENT OF PARKS AND RECREATION <b>PRIMARY RECORD</b>	Primary # <u>P-07-002775</u> HRI # _____ Trinomial _____ NRHP Status Code <u>6</u>
Other Listings Review Code _____	Reviewer _____ Date _____

\*Resource Name or # (Assigned by recorder) Map Reference # C-0

**P1. Other Identifier:** Los Medanos Wasteway and Culvert

**\*P2. Location:**  Not for Publication  Unrestricted  
and (P2b and P2c or P2d. Attach a Location Map as necessary.)

\*a. County Contra Costa County

**\*b. USGS 7.5' Quad** Antioch North **Date** 1978 **T** \_\_\_\_\_; **R** \_\_\_\_\_; **1/4 of Sec** \_\_\_\_\_; **B.M.** \_\_\_\_\_

c. Address \_\_\_\_\_ City Antioch Zip 94509

d. UTM: (give more than one for large and/or linear resources) Zone \_\_\_\_\_; \_\_\_\_\_ mE/ \_\_\_\_\_ mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

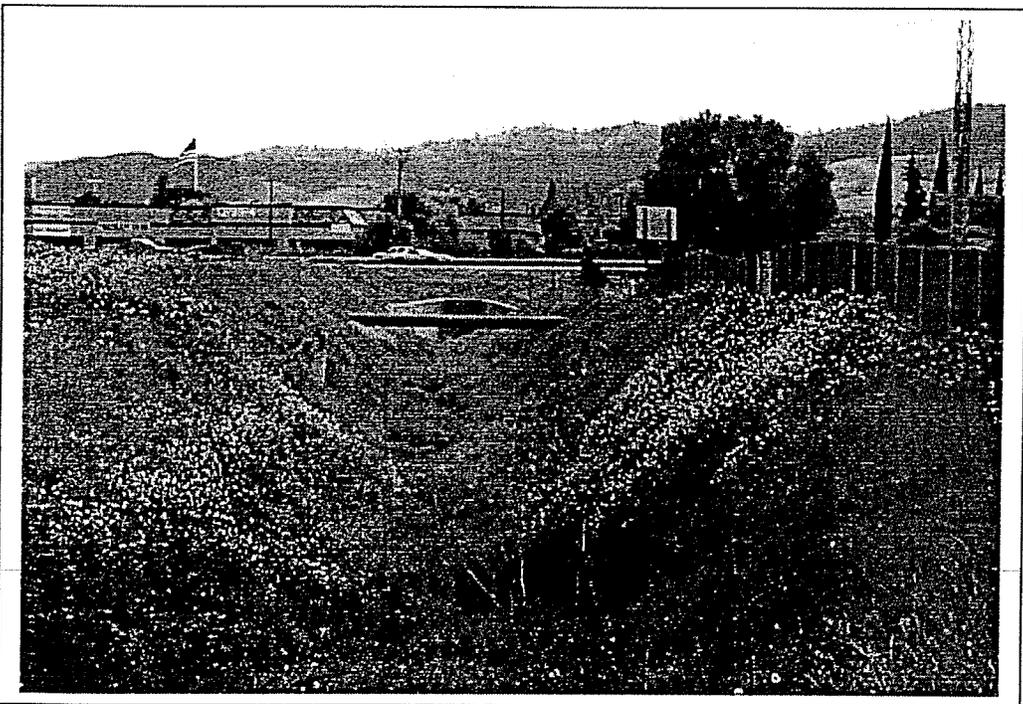
The wasteway runs north from the hillside and its connection with the Contra Costa Canal, downhill to Suisun Bay, in the city of Antioch.

**\*P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The Los Medanos Wasteway of the Contra Costa Canal is a generally "U" shaped earth-lined channel that runs north from the Contra Costa Canal on the hillside above Antioch and Pittsburg where the canal passes beneath Buchanan Road, through a mixed residential and commercial area, to its terminus in Suisun Bay. It is approximately 15 feet deep and 40 feet wide. Except for where it crosses underneath State Route 4, it is earth-lined. The crossing under State Route 4 is accomplished through a concrete box culvert measuring seven feet wide by eight feet tall, built in 1953 as a part of the highway construction. Each end of the culvert has flaring wing walls to control flows and reduce erosion. The culvert is approximately 208 feet long including the wing wall structures at either end (see Photograph 2).

**\*P3b. Resource Attributes:** (List attributes and codes)

**\*P4. Resources Present:**  Building  Structure  Object  Site  District  Element of District  Other (Isolates, etc.)



P5b. Description of Photo: (View, date, accession #) Camera facing south, March 6, 2002.

**\*P6. Date Constructed/Age and Sources:**  
 Historic  Prehistoric  Both  
1937 (wasteway), 1953 (culvert);  
Caltrans SR 4 As Built plans

**\*P7. Owner and Address:**  
USBR / Central Valley Project

**\*P8. Recorded by:** (Name, affiliation, address)  
Meta Bunse, Bryan Larson  
JRP Historical Consulting Services  
1490 Drew Ave., Suite 110  
Davis, CA 95616

**\*P9. Date Recorded:** March 6, 2002

**\*P10. Survey Type:** (Describe)  
Intensive

**\*P11. Report Citation:** (Cite survey report and other sources, or enter "none.") JRP Historical Consulting Services, "HREF State Route 4 (East) Widening Project: Loveridge Road to State Route 160."

**\*Attachments:** NONE  Location Map  Sketch Map  Continuation Sheet  Building, Structure, and Object Record  Archaeological Record  District Record  Linear Feature Record  Milling Station Record  Rock Art Record  Artifact Record  Photograph Record  Other (list) \_\_\_\_\_

S-31375

\*NRHP Status Code 6

\*Resource Name or # (Assigned by recorder) Map Reference # C-01

B1. Historic Name: Los Medanos Wasteway and Culvert

B2. Common Name: Contra Costa Canal Spillway

B3. Original Use: Canal Wasteway

B4. Present Use: Canal Wasteway

\*B5. Architectural Style: Utilitarian

\*B6. Construction History: (Construction date, alteration, and date of alterations) Wasteway built as a part of the Central Valley Project, Contra Costa Canal, on which construction began in 1937. The culvert was built in 1953 to carry water under State Route 4.

\*B7. Moved?  No  Yes  Unknown Date: \_\_\_\_\_ Original Location: \_\_\_\_\_

\*B8. Related Features: Contra Costa Canal

B9. Architect: Central Valley Project / USBR

b. Builder: USBR

\*B10. Significance: Theme n/a Area n/a

Period of Significance n/a Property Type n/a Applicable Criteria n/a

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

The Los Medanos Wasteway is a component of the Contra Costa Canal, one of the units of the Central Valley Project. It serves the canal by conducting local watershed flows away from the canal system, and as a means to drain a canal segment for maintenance or other purposes. The portion of the wasteway within the project area is a channelized natural drainage and therefore does not appear to meet the criteria for listing in the National Register of Historic Places, nor does it appear to be an historical resource for the purposes of CEQA. (See Continuation Sheet)

B11. Additional Resource Attributes: (List attributes and codes) \_\_\_\_\_

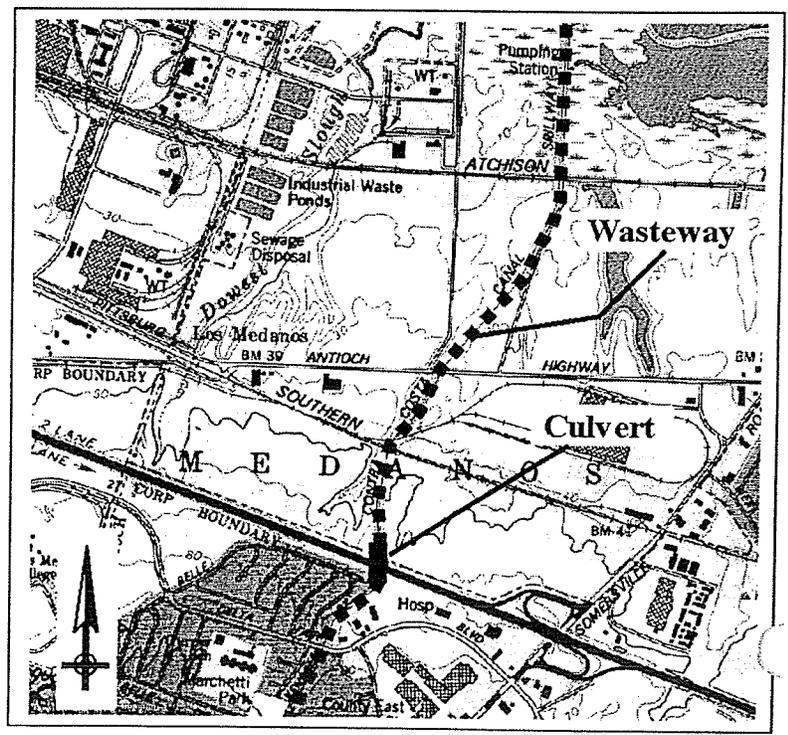
\*B12. References: U.S. Bureau of Reclamation, "Central Valley Project: Its Historical Background and Economic Impacts," (Sacramento: USBR, Mid-Pacific Region, 1981); Official County Maps; USGS 7.5 Minute Topographic Quadrangles: *Antioch North, Antioch South*, various years; Department of Public Works, Division of Highways, "Plan and Profile of State Highway in Contra Costa County," 1954, on file with Caltrans District 4. For additional references, see footnotes in text.

B13. Remarks:

\*B14. Evaluator: Rand F. Herbert

\*Date of Evaluation: May 23, 2002

(This space reserved for official comments.)



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\*Recorded by Meta Bunse and Bryan Larson

\*Resource Name or # (Assigned by recorder) Map Reference # C-0

\*Date March 6, 2002  Continuation  Update

### B10. Significance (continued):

The story of the development, planning, political background, and construction of the Central Valley Project (CVP) is well known and oft-told. The CVP represents one of the most ambitious and successful water development projects ever undertaken. Within the contexts of hydraulic engineering, the politics of public works, state-federal conflict over reclamation policy, and the economics of large-scale irrigation, the CVP is recognized as a great achievement on a national and even the international scale.

Although finally built by the federal government, the concept of a CVP was devised by the State of California to resolve chronic intra-state water shortage problems.<sup>1</sup> The history of the project may be traced back as far as the 1870s, but it was not until the late 1920s that the California Legislature recognized that California's water problems were so severe and systemic as to require the direct intervention of the state.

The key building block in development of the CVP was a series of studies undertaken by California's State Engineer Edward Hyatt between 1927 and 1931. Hyatt's vast plan borrowed aspects of USGS engineer Robert Marshall's 1911 plan for canals and irrigation in the Central Valley, but also made substantive changes. Released in 1931, it called for a huge system of canals and reservoirs throughout the state, including most of what became the CVP as well as a transfer system to bring Colorado River water to Southern California.<sup>2</sup> In 1933, California voters approved by initiative the Central Valley aspects of Hyatt's proposal; the project was called the Central Valley Project in that initiative, the origin of that name. However, given the depressed national financial circumstances of the period, the state was unable to market the bonds necessary to fund construction and construction was delayed.

The state then turned to the federal government, suggesting a role for construction of the CVP in President Franklin Roosevelt's New Deal. Through a complicated series of negotiations, California officials were finally able to secure federal funding for the project, in part by promoting the project as a major job-creation undertaking -- a convincing selling point during the early years of the Great Depression. Throughout these negotiations, state and federal officials wrangled over whether the project should be built by the Corps of Engineers or the Bureau of Reclamation (USBR), the two major dam and public works builders within the federal government, and whether the system would ultimately be controlled by the state or federal government. In 1935 the federal government decided to proceed with the undertaking as a federal reclamation project, a decision which ensured that the USBR would be the constructing agency and that the system would remain in federal ownership for the foreseeable future.<sup>3</sup> This also meant that federal reclamation laws would apply to the CVP, most importantly the 160-acre limitation on water deliveries.

In 1935 President Roosevelt released emergency funds so that construction could begin, with water thus developed subject to the reclamation law's acreage limitation. Two years later, Congress gave the USBR authority to take over the project. Construction of the project proceeded on a piecemeal basis.<sup>4</sup>

<sup>1</sup> The text for this section is derived from JRP's original manuscript for text included in *Water Conveyance systems in California: Historic Context Development and Evaluation Procedures*, prepared jointly by JRP Historical Consulting Services and California Department of Transportation, December 2000.

<sup>2</sup> Norris Hundley, *The Great Thirst: Californians and Water, 1770s-1990s* (Berkeley: University of California Press, 1992), 243.

<sup>3</sup> Hundley, *Great Thirst*; Erwin Cooper, *Aqueduct Empire: A Guide to Water in California, Its Turbulent History and Management Today* (Glendale: Arthur H. Clark Company, 1968.)

<sup>4</sup> Donald Pisani, *From Family Farm to Agribusiness: The Irrigation Crusade in California and the West, 1850-1931* (Berkeley: University of California Press, 1984), 434-439; Hundley, *Great Thirst*, 232-257.

From the outset, federal officials looked at the CVP in both the short and long term. In the long run, USBR officials regarded the CVP as including, essentially, all elements devised by Hyatt in the late 1920s. In the short run, however, the CVP was restricted to five fundamental units, operating as an integrated system: Shasta Dam, the Delta-Mendota Canal, Friant Dam, the Friant-Kern Canal, and the Contra Costa Canal. The Contra Costa Canal was the smallest segment and unlike the other major canals, being a relatively small conduit designed to deliver water to industries, farms and homes in eastern Contra Costa County. In replacing Suisun Bay water it also served, to a limited degree, to mitigate the effects on that area of pumping water from the Delta and thus further degrading water quality in Suisun Bay. The core of the system involved the coordinated operation of the other four units for the purpose of delivering Sacramento River water to the arid San Joaquin Valley.

The USBR designed the four units to operate in two groups of works. Shasta Dam and the Delta-Mendota Canal operated together to store and deliver Sacramento River water as far south as Fresno County, to irrigate new areas and supply replacement water for San Joaquin River diversions. Friant Dam and the Friant-Kern Canal also operated together to store and divert San Joaquin River water as far as the southern extremes of the San Joaquin Valley near Bakersfield. As noted, these four units worked in conjunction with one another, the Shasta/Delta-Mendota system providing replacement water for that which was displaced by the Friant/Friant-Kern system.<sup>5</sup>

Power generated at Shasta Dam and transmitted to CVP pumps provided electricity to supply the lift pumps raising water into the main canal system. The system utilized the natural channels of the Sacramento River and Sacramento-San Joaquin Delta to move water from Redding to Tracy, the head of the Delta Mendota Canal. The USBR later added the Delta Cross Canal to aid in directing flows more efficiently across the Delta to its pumps at Tracy.<sup>6</sup>

Even at the outset, the CVP did more than supply irrigation water. Shasta Dam releases, for example, were seen as facilitating more dependable navigation on the Sacramento River. Furthermore, water was released through turbines, generating surplus power for sale, which helped fund the project. Recreational, fish and wildlife, and other benefits were also seen as part of the basis for the system. As a reclamation project, however, the system was at its heart designed to deliver water to farmers, the purpose for which the system has operated for nearly half a century.<sup>7</sup>

The initial units were finished in the early 1950s. In subsequent decades, the USBR has greatly expanded the system, adding or absorbing reservoirs, canals, pipelines, pumping plants, and other units. Since the 1970s, the State of California's State Water Project has been operated in conjunction with the CVP, the state project drawing from the same Delta pool as the CVP and the stored water mingling in the Sacramento River flows.<sup>8</sup>

The great dams at Shasta and Friant are the linchpins of the original as well as the current system. They provide water for the CVP canals. The main canals are radically different in design from any of their predecessors in California, built to carry enormous amounts of water and built to last.<sup>9</sup> The largest of these, such as the Friant-Kern Canal and Delta-Mendota Canal, rival natural rivers in their flow capacities and their lengths. The Madera Canal is a

<sup>5</sup> U.S. Bureau of Reclamation, "Central Valley Project: Its Historical Background and Economic Impacts" (Sacramento: USBR, Mid-Pacific Region, 1981.)

<sup>6</sup> USBR, "Central Valley Project."

<sup>7</sup> Cooper, *Aqueduct Empire*; USBR, "Central Valley Project," 1981.

<sup>8</sup> Hundley, *Great Thirst*.

<sup>9</sup> The literature on the CVP from an engineering standpoint tends to emphasize the importance of dam designs, although the size and durability are emphasized as well. See, for example, Hunter Rouse's, *Hydraulics in the United States, 1776-1976*, 1976, and Norman Smith's, *Man and Water: A History of Hydro-Technology*, 1975, both of which discuss the CVP in terms of hydraulic engineering.

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\*Resource Name or # (Assigned by recorder) Map Reference # C-01

\*Recorded by Meta Bunse and Bryan Larson

\*Date March 6, 2002  Continuation  Update

relatively minor part of the original CVP units, being the shortest and second smallest canal in terms of flow; only the Contra Costa Canal is smaller than the Madera.

The CVP has had a profound impact on Central Valley agriculture. Delivery of water to the San Joaquin Valley can in 1951 through the Delta-Mendota and Friant-Kern canals, some 14 years after the Bureau began construction on the project.<sup>10</sup> They are, of course, dependent upon the massive storage reservoirs at Shasta and Friant. Like all dams the head of water projects, they are integral parts of the system and should be considered part of the greater whole. Their construction will not, however, be discussed in detail in this section.

The USBR has called the CVP "one of the most extensive artificial water transport systems in the history of the world." Extending through the length of the great Central Valley, these works include three major storage and two regulatory dams, four powerplants, one major and a number of lesser pumping plants, all connected by trunkline canals, and a power transmission system.<sup>11</sup> Furthermore, the CVP was seen as an integrated unit. "From its inception and formulation," wrote former USBR senior official L.B. Christiansen, "the Central Valley Project has been a single project in concept, design, and operation; it functions as an integrated whole, not as a grouping of separate or independent units." Congress made this explicit in the CVP authorizing legislation.<sup>12</sup>

In the years after its initial period of construction (roughly through 1951) a number of major dams constructed by the Corps of Engineers (Folsom, New Melones, Hidden, Buchanan, and Black Butte) have been incorporated into the CVP by their authorizing legislation, although they were not part of the original plan. Other major units, like the Trinity River Division's Trinity and Lewiston dams, and Clear and Spring creek tunnels, were part of a second wave of authorizations in 1955 and not completed until 1964. Even later were completed units like the Tehama-Colusa Canal. Similarly, in 1960 the CVP and State of California jointly developed the San Luis Unit (45% CVP, 55% State) as an off-stream storage facility in the Los Banos area to augment supplies to both systems and provide water to the San Luis Canal. Other segments remain authorized but not yet completed, such as the Auburn-Folsom South Unit.<sup>13</sup>

### Contra Costa Canal

The USBR initiated construction of the 46-mile long Contra Costa Canal in November 1937, and as such it was the first CVP canal under construction. The canal, devoted primarily to providing water for industries threatened by salinity intrusions into Suisun Bay, was included in the CVP at least in part as a concession to politically and economically powerful industries which might have otherwise opposed the CVP on the grounds that the project would have increased their problems with salinity. The canal drew upon the "Contra Costa County Conduit" concept promoted by these influential companies and supported by the State Water Plan Authority.<sup>1</sup>

The USBR opened an office in Antioch in 1936 to begin surveys of the proposed route. Over the next two years design studies gradually settled on a canal design capable of carrying 350 cfs; while this was above the USBR's

<sup>10</sup> Pisani, *Farm to Agribusiness*, 434-439; Hundley, *Great Thirst*, 232-257.

<sup>11</sup> USBR, *Delta-Mendota Canal: Technical Record of Design and Construction* (CVP - California: Denver, Colorado, June 1959.)

<sup>12</sup> USBR, "Central Valley Project," 4.

<sup>13</sup> USBR, "Central Valley Project," 3-4, 7. Folsom Dam, along with Nimbus Dam, Sly Park Dam, and the American River Fish Hatchery, are part of the American River Division authorized in October 1949 and completed in 1955. The Folsom South Canal is not part of this unit. The USBR's Solano and Orland projects are not part of the CVP, even though built by the USBR.

design, the Contra Costa Water District agreed to pay an extra \$500,000 to expand the canal.<sup>14</sup> Construction was underway in 1938, even before the canal's final capacity had been set. By 1940 the facility had reached Pittsburg, and test pumping began in July of that year.<sup>15</sup>

The canal had reached 38 miles west of the Rock Slough intake when the CVP as a whole was classified as a "limited defense activity"; in May of 1942 work was suspended for the duration of World War II. Construction began again on the Contra Costa Canal system after the War Production Board returned control of the CVP to the USBR in September 1945, and was completed in 1948.<sup>16</sup>

According to the USBR, the purpose of the Contra Costa Canal within the CVP was to deliver water to "... an upland agricultural area, many industrial plants in the upper Bay region, and a number of Contra Costa County municipalities." The Contra Costa County Water District purchases the water from the USBR and sells it to local retailers as it has since the first "interim contract" with the Bureau between 1948 and 1951, and by a finalized agreement since that date.<sup>17</sup>

The Contra Costa Canal gradually diminishes in size as it wends its way west from its intake at Rock Slough in the Delta to its terminus in Martinez. In its current configuration it is predominantly open concrete lined with occasional piped segments lain underground. It is relatively broad in the Delta near its intake, and narrow near its end in Martinez. Siphons, like that on Kirker Creek, carry the canal across important drainages, while smaller or intermittent waterways pass beneath the canal in culverts. Wasteways and turnouts are provided at regular intervals to drop water to consuming industries along the margin of Suisun Bay; some of these, like the Los Medanos Wasteway, have channelized structures at their junction with the canal, and take advantage of original natural drainages farther downhill. At Port Chicago the canal swings south and passes through Concord and Pleasant Hill before swinging north to Pacheco and terminating in Martinez Reservoir.<sup>18</sup>

Over the years since the construction of the CVP and major portions of the State Water Project (SWP), integration of planning and operations had developed so that the two major systems work together to manage the huge proportion of California's water they control. As noted, the CVP provides basic water supplies for a number of irrigation districts that were established specifically to take advantage of the newly developed supply provided. Likewise, the SWP provides water to more than 30 separate water agencies under contract. Through state jurisdiction over irrigation districts and post-1914 water rights, joint operating agreements, and supply of water under contract, the integration of major water systems in California has profoundly altered the distribution of this scarce resource across the state.<sup>19</sup>

<sup>14</sup> The Contra Costa County Board of Supervisors approved the organization of an agency to manage the distribution of water from this canal, the Contra Costa County Water District [CCCWD], in 1936.

<sup>15</sup> W. Turrentine Jackson and Alan Paterson, *The Sacramento-San Joaquin Delta*, 37-40.

<sup>16</sup> Jackson and Paterson, *The Sacramento-San Joaquin Delta: Evolution and Implementation of Water Policy, An Historical Perspective* (Davis: California Water Resources Center, University of California, 1977), 37-40; House Committee on Interior and Insular Affairs, *Central Valley Project Documents, Part II: Operating Documents*, 85th cong., 1st sess., H. Doc. 246, 1957, 56, 62; Teknekron, Inc., "An Overview of the Contra Costa Water District" (November 1977), 8.

<sup>17</sup> Jackson and Paterson, *Sacramento-San Joaquin Delta*, 37-40; USBR, "Technical Record of Design and Construction: Delta-Mendota Canal" (Denver 1959), 2; Teknekron, "Contra Costa Co. Water District," 8.

<sup>18</sup> Michael C. Robinson, *Water for the West: The Bureau of Reclamation, 1902-1977* (Chicago: Public Works Historical Society, 1979), 67-69; USGS, Antioch North, Honker Bay, Vine Hill, 7.5 m. quadrangles; JRP field observations 1993-94.

<sup>19</sup> DWR, *The State Water Project*, 4-5.

Evaluation

The Contra Costa Canal's Los Medanos Wasteway is a component of an original and integral unit of the CVP. The Contra Costa Canal is of historic significance as a part of the CVP, and for its importance in the economic and industrial development of eastern Contra Costa County. It, and its component parts of which the wasteway is one, thus would appear to meet the criteria for listing in the National Register of Historic Places under Criterion A. However, this observation applies only to those portions of the wasteway constructed specifically as a part of the Contra Costa Canal. The wasteway in the study area is simply a stretch of channelized natural drainage, and it should be considered a slightly altered natural feature. This is evident in aerial photographs taken in 1939, soon after the canal's construction. In these views the wasteway at the canal and a short distance downhill is clearly an engineered structure, while the portions downstream and through the project area retain their sinuous natural appearance. Furthermore, the wasteway is not associated with persons important in our history, so it would not appear to meet the criteria under Criterion B. The Contra Costa Canal is a more than 40-mile long concrete structure. The Los Medanos Wasteway, like the other wasteways along its length, serves the canal, controlling hillside water flows and keeping them out of the canal itself. It is a much more simple structure than the Contra Costa Canal, and formed primarily of earth lined sections of straightened natural drainages. As such, it has an important, but only an ancillary role in the functioning of the canal itself. As an earth lined structure, it would not appear to have any particular engineering significance and thus would not be eligible under Criterion C. The wasteway has suffered some reduction in integrity. The original structure flowed through open fields and sparsely populated sections of Antioch; the wasteway now wends its way north through densely populated residential areas and past commercial buildings; thus, it can be concluded that its setting and feeling has suffered some loss of integrity. Similarly, modern structures (such as the highway culvert) have been installed at several locations on the wasteway. Other aspects of integrity – workmanship, design, materials, location, and association, remain fairly good.

The highway culvert carrying the wasteway under Highway 4 was designed in 1951 and constructed in 1953. It is of a common and ubiquitous type and design. Nothing in its design, construction, or history of use suggests that it would appear to meet the criteria for listing in the National Register of Historic Places under any criteria. This property has also been evaluated in accordance with Section 15064.5(a)(2)-(3) of the CEQA Guidelines, using the criteria outlined in Section 5024.1 of the California Public Resources Code and does not appear to meet the significance criteria as outlined in these guidelines.

**CONTINUATION SHEET**

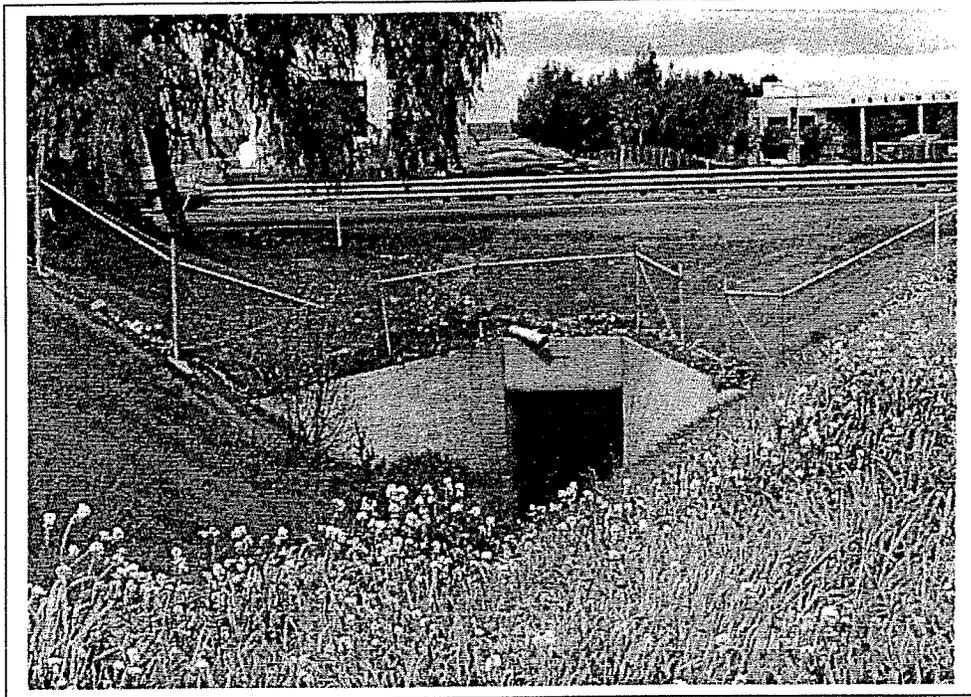
Page 8

\*Recorded by Meta Bunse and Bryan Larson

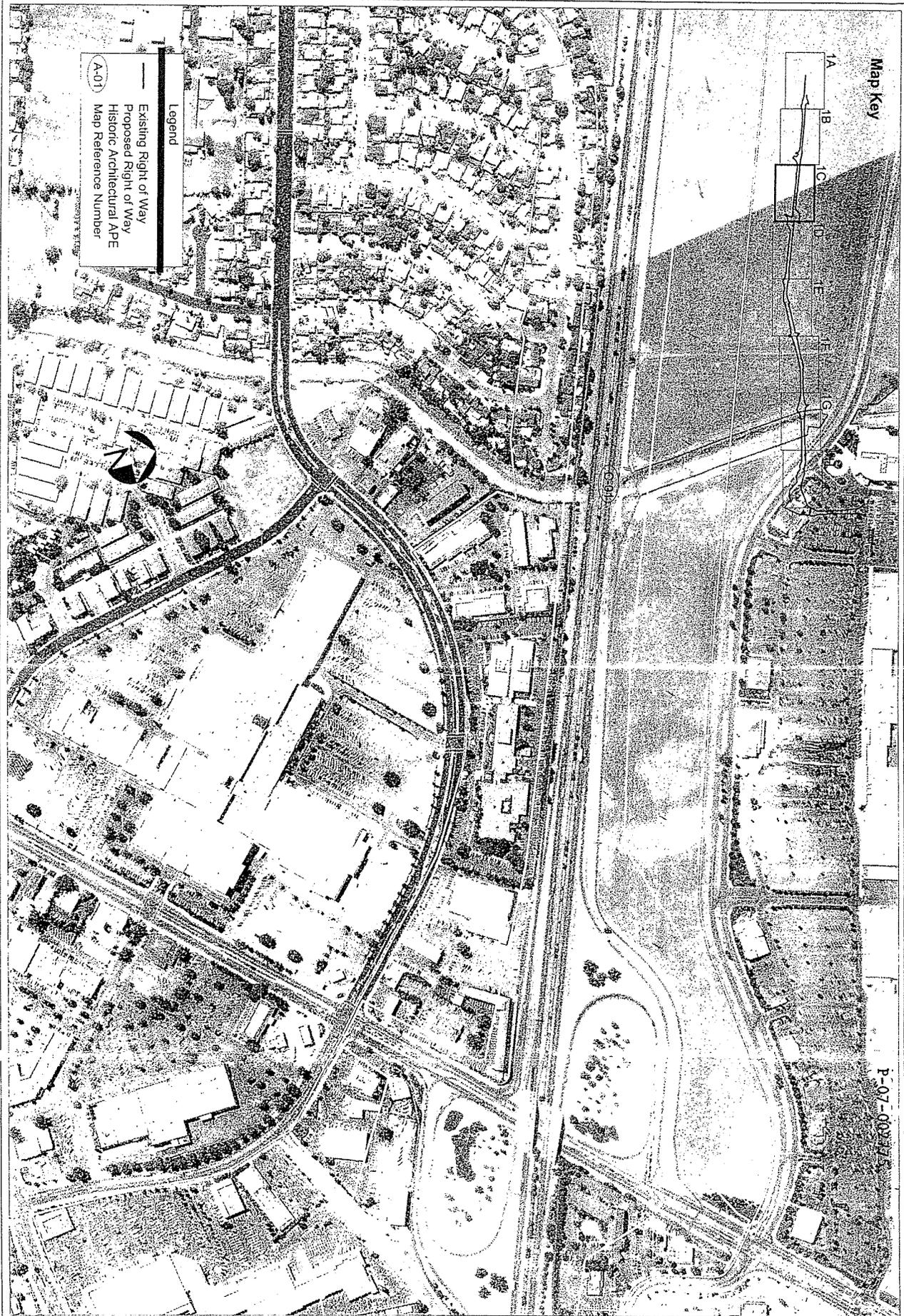
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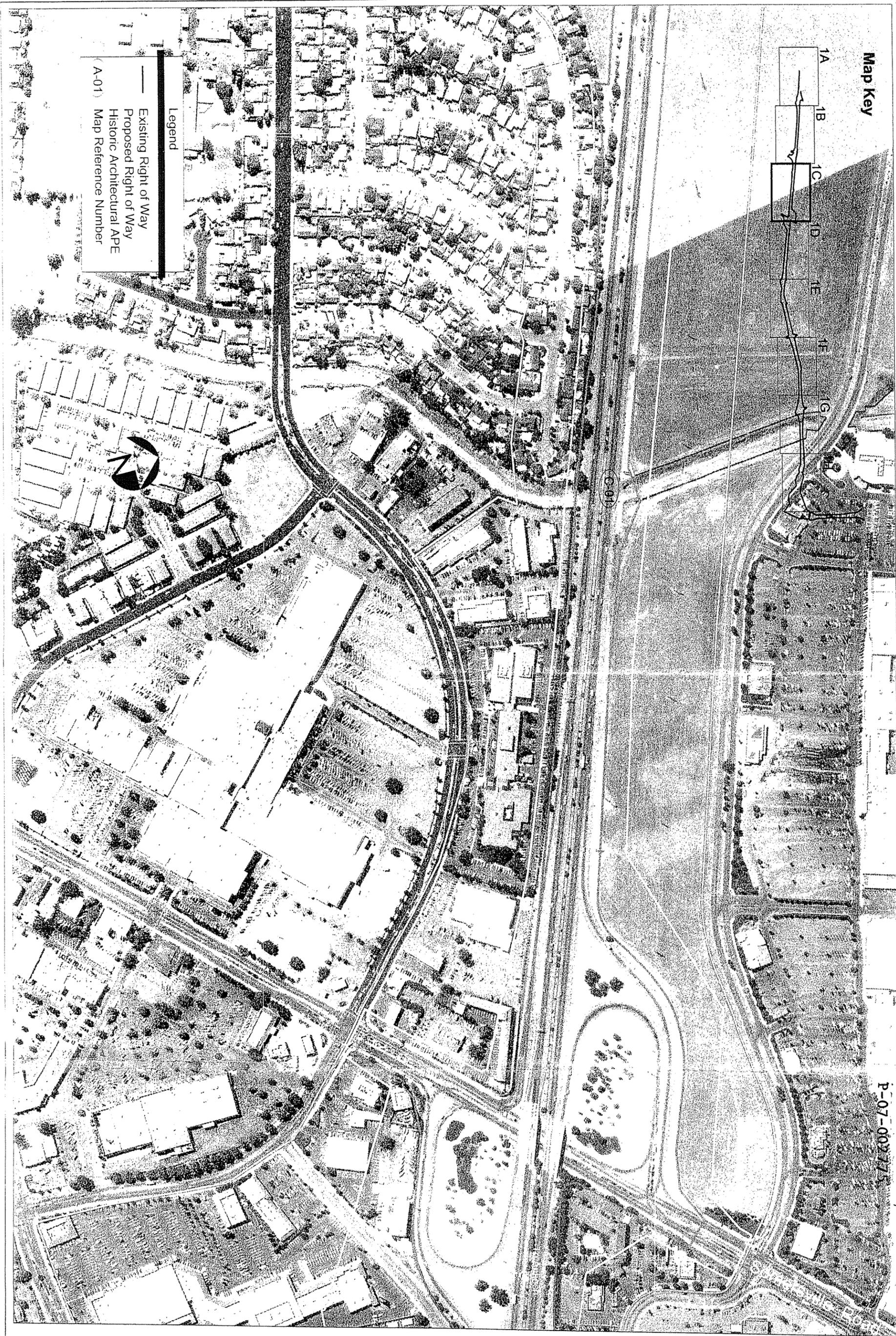
\*Date March 6, 2002  Continuation  Update

**Photographs**



**Photograph 2.** Culvert on south side of State Route 4.





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\*Resource Name or # (Assigned by recorder) Southern Pacific: Northern Contra Costa Route

\*Recorded by Cheryl Brookshear \*Date November 19, 2008  Continuation  Update

**P1. Other Identifier:** c. Address Southern Pacific - Northern Contra Costa Route City Antioch Zip 94509

e. Other Locational Data: The Southern Pacific Northern Contra Costa Route is a segment of the larger San Francisco to New Orleans line. The line travels north from Oakland, east along the southern edge of Suisun Bay, and southeast over Altamont Pass to Byron and points beyond.

**P3a. Description (continued):** This portion of the former Southern Pacific Railroad is now owned by Union Pacific, but began as a line between Tracy and Martinez, California. Points and segments of this route have been previously surveyed for historic significance. Recordation and evaluation prepared in 1994 recorded a point along the railroad at Loveridge Road, between Antioch and Pittsburg, (form attached). The Northwest Information Center record search results for the Mirant Willow Pass Generating Station project included this previous recordation form identified as **P-07-505**.

Additional recordation of the railroad was assigned **P-07-813**. S. Atchley, G. Roark, and Barry Scott of Jones and Stokes prepared two linear forms for the railroad segment between West Pittsburg and Antioch in 1999. These linear forms did not include an evaluation.

In 2006 Suzanne Baker of Archaeological/Historical Consultants prepared a full recordation of a segment including 15 railroad bridges and a full evaluation of the line from West Pittsburg to just south of Byron. The 34 page form updated the previous **P-07-813** and P-07-2568 forms. (Note: the 2006 Baker form is attached to and follows the 1999 Jones and Stokes forms in the electronic file provided by the Northwest Information Center. P-07-2568 was not provided by the Information Center and is presumed to be outside of the study area.)

The conditions recorded in these surveys for the portion of the railroad within the study area for Mirant Willow Pass Generating Station Project were field checked on May 14, 2008, and November 19, 2008, and appear unchanged. Limited access to the railroad right of way prevented close inspection of rail stamps.

\*P8. Recorded by: JRP Historical Consulting, LLC, 1490 Drew Ave., Suite 110, Davis, CA 95618

\*P9. Date Recorded: November 19, 2008

\*P11. Report Citation: JRP Historical Consulting, LLC, "Historic Resources Inventory and Evaluation Report Mirant Willow Pass Generation Station, 2008 – Data Request November 2008."

**B10. Significance:**

This railroad has been previously surveyed and this update was prepared to confirm the conclusions of those previous surveys, and to record the current appearance of the resources in updated photographs. The railroad has several historic names depending upon the period under discussion: San Pablo & Tulare Railroad, Central Pacific Railroad, Southern Pacific Railroad, Southern Pacific: Northern Contra Costa Route, Portion of Southern Pacific San Francisco to New Orleans Line and Union Pacific. Changes to the railroad company's name, several railroad company mergers, and the cultural resources evaluation practice of studying independent points or segments of the line have resulted in the assignment of multiple primary numbers to this linear resource. All surveys that included evaluations have determined that while the railroad appears significant within the context of the development of transportation in California and the development of Northern Contra Costa County, it does not retain sufficient integrity to be eligible for the NRHP. This conclusion is still valid. This property has been

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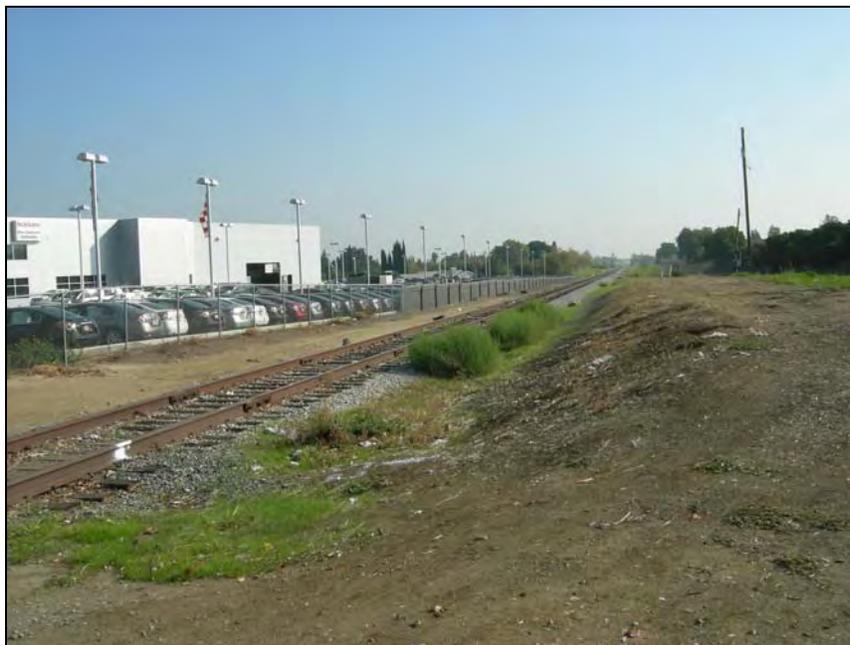
\*Resource Name or # (Assigned by recorder) Southern Pacific: Northern Contra Costa Route

\*Recorded by Cheryl Brookshear \*Date November 19, 2008  Continuation  Update

evaluated in accordance with Section 15064.5(a)(2)-(3) of the CEQA Guidelines, using the criteria outlined in Section 5024.1 of the California Public Resources Code. The property does not appear to meet the significance criteria as outlined in these guidelines and, therefore, is not eligible for listing in the California Register of Historical Resources.

\*B14. Evaluator: Cheryl Brookshear

\*Date of Evaluation: November 2008



**Photograph 1: Southern Pacific at Auto Plaza/Summerville Road  
camera facing northeast, November 19, 2008.**



Photograph 2: Southern Pacific at Auto Plaza/Summerville Road, camera facing southeast, November 19, 2008.



Photograph 3: Southern Pacific south side of Pittsburg Antioch Highway approximately 1/4 mile west of Loveridge Road, camera facing southeast, May 14, 2008.



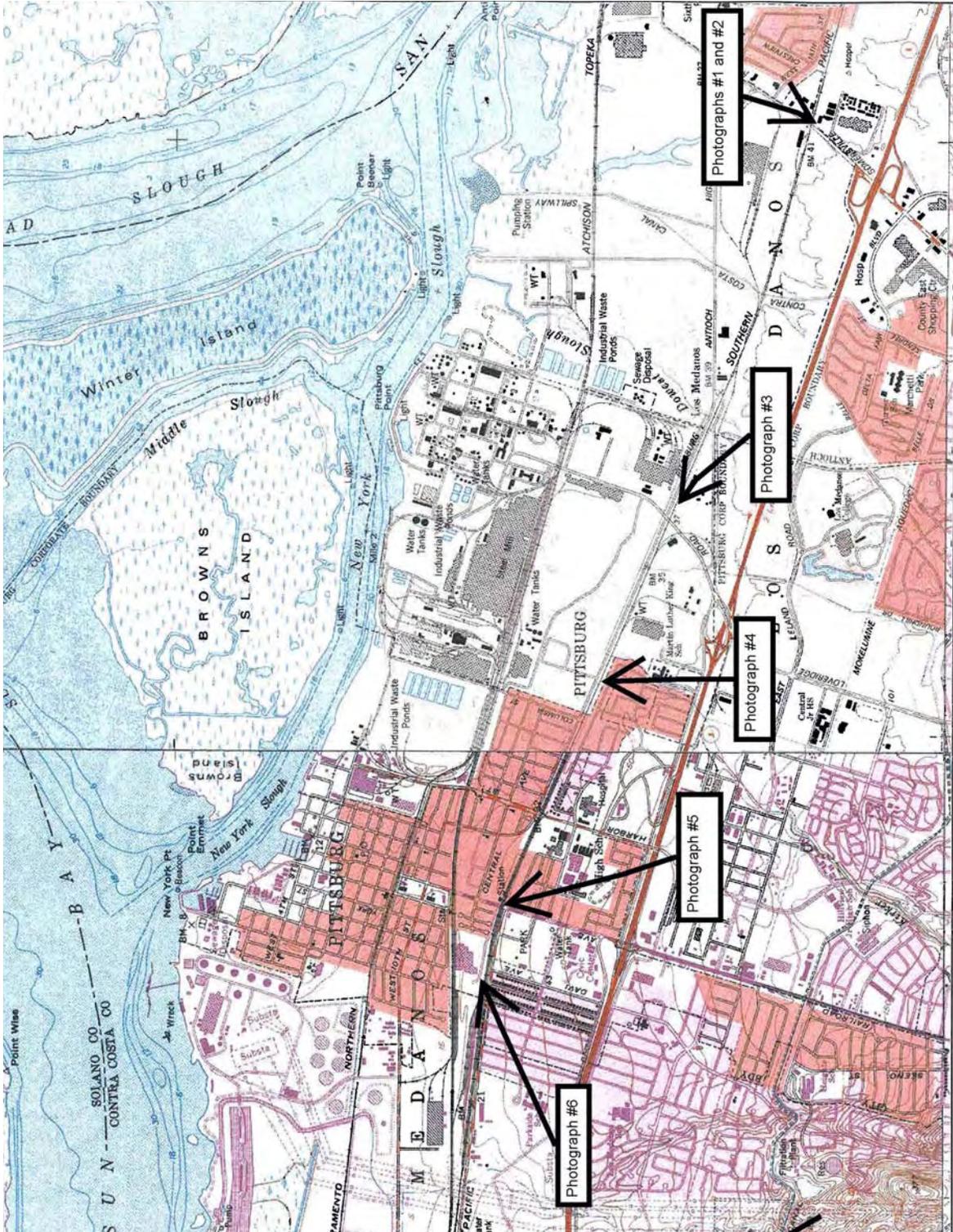
**Photograph 4: Southern Pacific south of 14<sup>th</sup> Street 300 yards west of the Pittsburg Antioch Highway turn. Camera facing southeast, November 19, 2008.**



**Photograph 5: Southern Pacific at Railroad Avenue, camera facing southeast, May 14, 2008.**



**Photograph 6: Southern Pacific north of Parkside Drive west of intersection with Andrew Ave.  
Camera facing north, May 14, 2008.**



Sketch Map Honker Bay USGS Quadrangle 1953 photo revised 1980, Antioch North USGS Quadrangle 1978

**SITE NAME:** Southern Pacific: Northern Contra Costa Route

**SITE NUMBERS:** SPN-1 through SPN-7 SPN-1

**QUAD SHEET:** Various: see site forms (Antioch North # 4814 1978)

**PIPELINE LOCATION:** Various: see site forms

(UTM:600690mE/4207640mN)

#### Description of Feature

The proposed Mojave pipeline alignment crosses the Southern Pacific Railroad's line from Tracy to Oakland via the Carquinez Straights at seven sites in Contra Costa County. Of the seven sites, four are on the mainline: one (SPN-3) is a single track at grade; two (SPN-1 and SPN-6) are mainline sites with sidings or side tracks; and one (SPN-2) is a single track to the east of where the tracks are carried over a street on a steel girder bridge. The remaining three are on spur lines built off the mainline to serve industrial sites. This area of Contra Costa County is typified by heavy industrial facilities, oil refineries, and other similar sites. All seven sites are in such areas.

Detailed information regarding the seven sites, with photographs and site maps showing location is provided in the attached "Railroad Feature Inventory Forms."

#### History of Feature

As early as July 1871 the Big Four organized a railroad company, the San Pablo & Tulare Railroad Company to connect the San Joaquin Valley with a tidewater port over a more level and economical route than Livermore Pass. A route was graded from Tracy to Antioch as early as 1872, but no construction followed until 1877. In 1875 when the Southern Pacific completed its main artery down the Central Valley to Los Angeles, the extension of a line to the Carquinez Straits took on an added importance. The difficult, steep, and winding route over Altamont Pass and through Niles Canyon hampered the railroad's operations because it required double heading (two engines) for west-bound trains. (An overview of California railroads can be found in Section 2.2 above.)

Between 1876 and 1878 the Northern Railway Company (NRC), a construction subsidiary of the Central Pacific, built what is today the Southern Pacific main line from West Oakland along the east shore of San Francisco and San Pablo Bays and the south shore of Carquinez Strait to Martinez, Port Costa, and Pittsburg. Beyond Pittsburg it turns southeast through Tracy to connect with the main San Joaquin Valley line at Lathrop Junction. Branch lines constructed by NRC split off from this line to cross Carquinez Strait at two locations: Port Costa and Vallejo Junction (*Sacramento Union*, September 10, 1878; Heath 1945:11).

The new Southern Pacific line fueled industrial dispersion from San Francisco to western Contra Costa County. The first explosives plant in the area, the Vulcan Powder Works, was established in what is now Richmond in 1878. The Giant Powder Company of San Francisco and the Hercules Powder Company followed in the early 1880s to sites on San

SH 17993

Pablo Bay north of Richmond. Closely allied to these explosives plants were the smelter and the cartridge factory of the Selby Smelting and Lead Company which relocated its smelter from Black Point in San Francisco to Selby on San Pablo Bay in 1884. The Southern Pacific also delivered wheat to the main shipping port of Port Costa, and had connections to the large oil refineries at Martinez and the lumber manufacturers, iron, and steel plants in the vicinity of Pittsburg. These terminal facilities had the usual sidetracks and warehouse arrangements for the accommodation of general freight. The Southern Pacific also built spur lines which ran out to various wharfs and warehouses that made connection with deep water ships. The Oakland, Antioch & Eastern and the Santa Fe railroads also maintained important deep water terminals, tracks, ferry slips, wharves and warehouses in the vicinity of Bay Point (Port Chicago). Southern Pacific had the largest yard there, but all three had connecting tracks in the vicinity of Bay Point, where cars were dropped and switched (House Doc. 986, 65th Cong., 2nd Sess. 1918: 1-8).

World War I placed a heavy burden on the major railroad companies in the United States. After the war, much new construction was necessary. In 1923 the Southern Pacific began a major program of rehabilitation and development that lasted through 1930 and cost \$387 million; it was one of the largest such programs in the company's history (Heath 1945: 25-30). During the Great Depression, Southern Pacific's revenue dropped and reduction of services followed; some branch lines were abandoned and torn up, unprofitable services curtailed, and old equipment scrapped.

In contrast during World War II the company set all time freight records, and passenger traffic rose even faster. The magnitude of change was probably greater on the West Coast than anywhere else. The ports on San Francisco Bay were the busiest in the nation and were served directly by Southern Pacific from three directions, of which the Northern Contra Costa Route was one. During this four year interval, the volume of traffic in California increased eight-fold, a major portion of which was handled over Southern Pacific lines into the ports of the greater San Francisco Bay region. During the war years, the Southern Pacific made great strides in improvement of its rolling stock, better traffic control, installation of 1,400 miles of heavier duty rails with additional sidings and siding extensions (necessary because so much of the line was single track), strengthening and improving bridges and trestles, installation of new roundhouse and shop facilities, and station expansion (Hofsommer 1986: 190-1207; Heath 1945:44-50).

After the war, Southern Pacific used its wartime gains to enhance its operating system. During the six years from 1946 through 1951, an average of 439 miles of track were outfitted each year with new and heavier rail on the main lines to carry larger locomotives and longer freight trains.

During the 1960s the Southern Pacific undertook a major improvement effort throughout its system, including construction of a new line near Palmdale, completed in 1967. The plan included upgrading the main line through the San Joaquin Valley with new welded rails called "ribbon rails" manufactured at the Tracy rail-welding plant. The company also began to employ a mechanized track laying machine that laid the ties, aligned rails, drove spikes, and spread ballast with precision impossible to obtain in the previous century. These rails are still functioning on hundreds of miles of Southern Pacific track throughout

the Great Central Valley (*Sacramento Bee*, May 14, 1967; Southern Pacific Bulletin, December 1967).

#### Evaluation of Feature

The seven sites (SPN-1 through SPN-7) on the Southern Pacific Northern Contra Costa Route between Tracy and Oakland via Carquinez Straights recorded as a part of this inventory do not appear to be eligible for listing in the National Register of Historic Places. The line was built between 1872 and 1878. While it played a major role in the history of transportation in California and the western United States, and to the development of the Suisun Bay and northern Contra Costa County region, SPN-1 through SPN-7 exhibit insufficient integrity of materials, setting, design, workmanship, feeling and association to the period of significance (1872-78) to be eligible to the National Register.

The resources that would be significant and eligible for the National Register would be those that were related to the original construction of the line, or which exhibit important characteristics (construction techniques, engineering features, etc.) of that period. None of the sites recorded on this line have resources from the period of significance, nor do they provide a feeling of time and place.

Like most heavily used main railroad routes, this line has aspects that are more similar to a machine than a structure. As with all pieces of heavy equipment, over time parts become worn out or break and are then replaced. In the case of SPN-1 through SPN-3 and SPN-6, the major resource related to the period of significance is the right of way itself; all other resources -- rails, tie plates, ties, ballasting, etc. -- have been replaced and exhibit either dates or characteristics that place their installation well after the period of significance. For example, rail rolling dates at SPN-1 through SPN-3 and SPN-6 range from 1925 through 1944. The spur line rails are older, running from 1900 to 1902 at SPN-4 and SPN-5, and 1921 at SPN-7. However, tie plates at SPN-4 and SPN-5 have dates of 1922-1925, suggesting that the lines were repaired, refurbished or relaid at that time. The mainline is uniformly shaped and evenly ballasted, suggesting recent maintenance and exhibiting a modern appearance. Therefore SPN-1 through SPN-7 are not eligible for listing in the National Register owing to an overall lack of integrity to the period of significance, primarily in setting, design, materials, workmanship, feeling and association.

# RAILROAD FEATURE INVENTORY FORM

P-07-000505

**PROJECT:** Mojave Natural Gas Pipeline, Northern Extension Project  
**MILEPOST:** 2.3 Antioch Segment  
**QUAD NAME & NO.:** Antioch North (44.1)

**LOCATION NO:** SPN-1  
**PHOTO DATE:** April 14, 1994

- Name of Line:** Southern Pacific - Northern Contra Costa Route
- Location of recordation:** This site is located where the Southern Pacific line parallels the south side of the Pittsburg-Antioch Highway, roughly 0.4 mile east of Loveridge Road in Pittsburg (**Photograph 1**).
- Structures at or near this location:** There are three sets of tracks and two roads running southeast-northwest through this study corridor. The main line runs roughly 50' south of, and parallel to, the Pittsburg-Antioch Highway. About 1/4 mile east of the APE a siding diverges south off the main line. This siding then extends parallel to and 20' south of California Avenue. California Avenue is roughly 150' south of the Pittsburg-Antioch Highway. Within the APE a second siding diverges south off the first siding, and then extends parallel to and about 50' south of California Avenue. A spur line extends south from this last siding, and parallels the east side of Pace Road (**Photographs 2 and 3**).
- Setting at this location:** This area is dominated by warehouses and industrial sites. A self storage business is located at the eastern end of California Avenue, between the mainline and the first siding. A gravel yard is situated between the mainline and California Avenue. North of the study corridor is a large industrial complex. Warehouses and trucking compounds are located south of the APE.
- Integrity considerations for this feature:** Recent commercial developments in the area have altered the area's original setting. The track at this site dates to sometime after 1944.
- Attributes at this location (measurements in feet):**

	Main	Siding 1	Siding 2
Width, berm-berm:	16	28	15, at grade
Top width (crown):	11	20	see above
Height or Depth:	1	2	at grade

**Ballast Material:** Crushed granite

**7. Observed dates:**

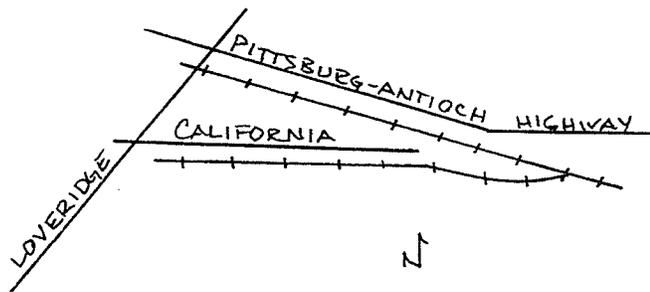
<b>Rails:</b> (consistently) Main: 1944	Siding 1: 1931	Siding 2: 1931
<b>Tieplates:</b> (consistently) Main: 1943	Siding 1: 1938	Siding 2: pat. 1931

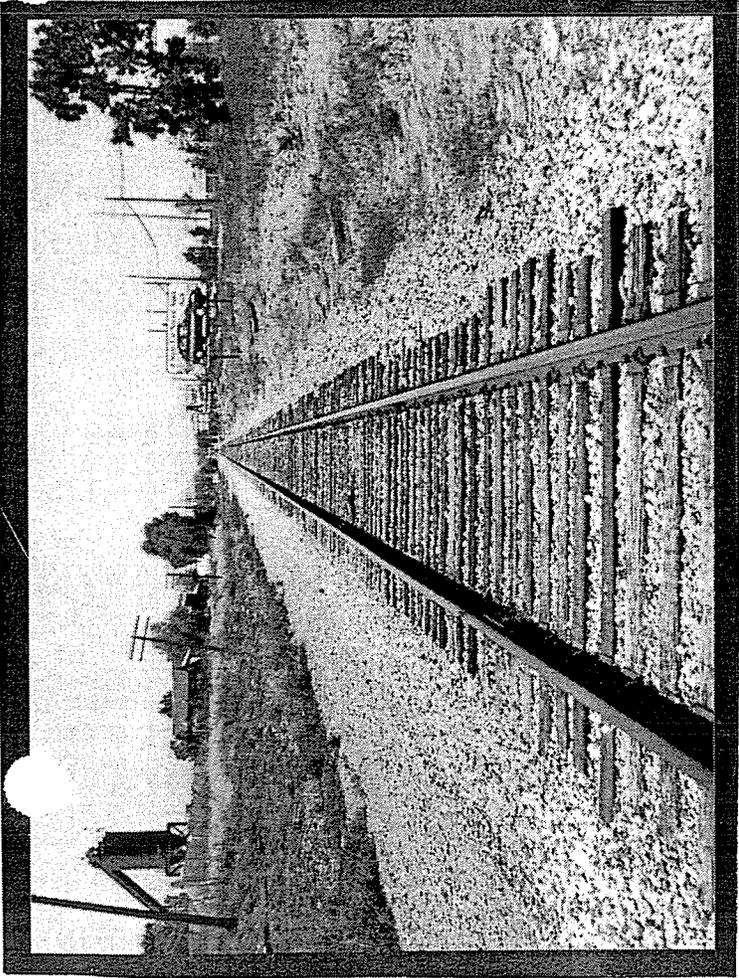
**Other:** The at-grade spur that diverges south measures 18' across the berm, 14' across the crown, and is 1' high. The ballast is crushed granite. The rails are dated 1914, with 1923 tieplates.

**Sketch, in cross section: Looking east**



**Location Sketch:**



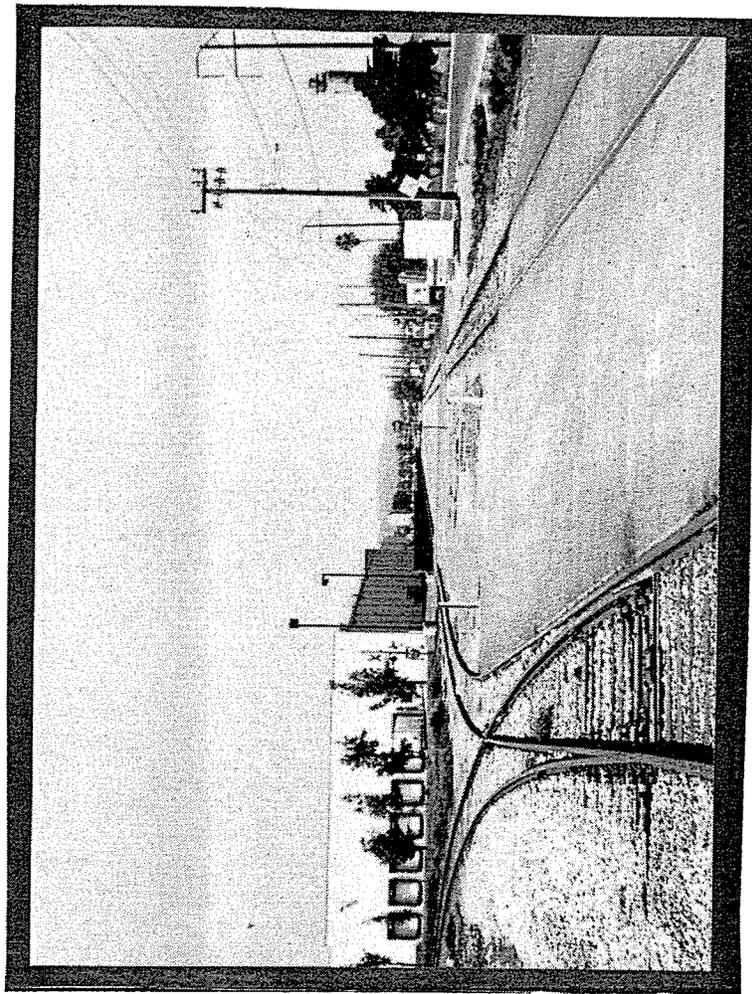


Photograph Number: 1  
Site Number: SPN-1  
Common Name: Southern Pacific - Northern  
Contra Costa Route

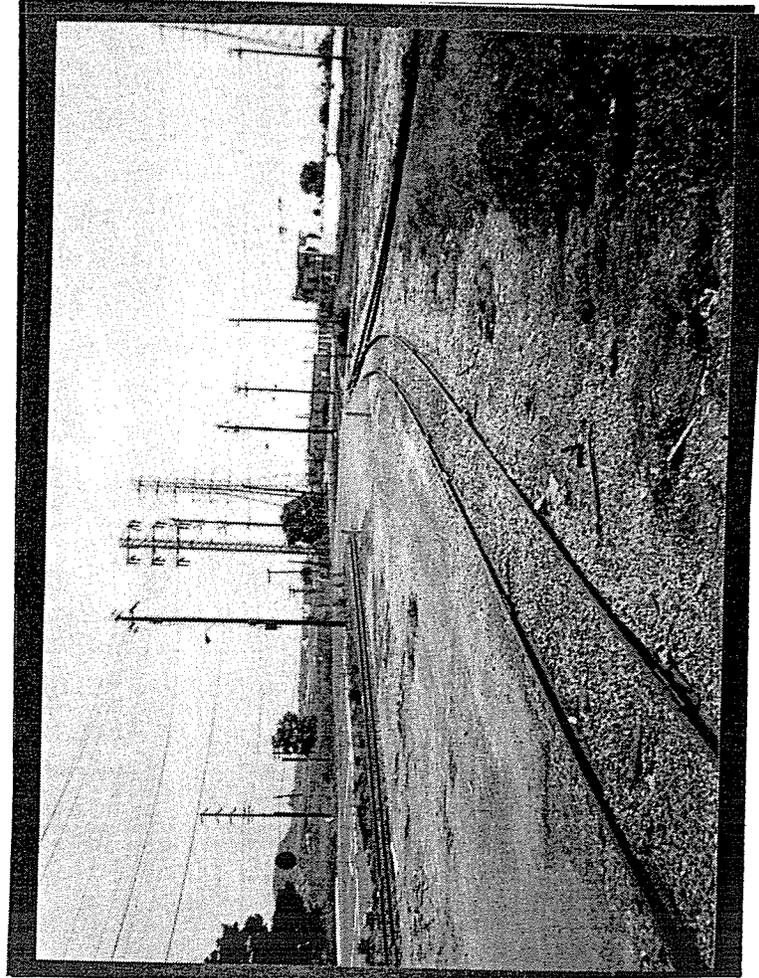
Photograph Number: 2  
Site Number: SPN-1  
Common Name: Southern Pacific - Northern  
Contra Costa Route

Photograph Number: 3  
Site Number: SPN-1  
Common Name: Southern Pacific - Northern  
Contra Costa Route

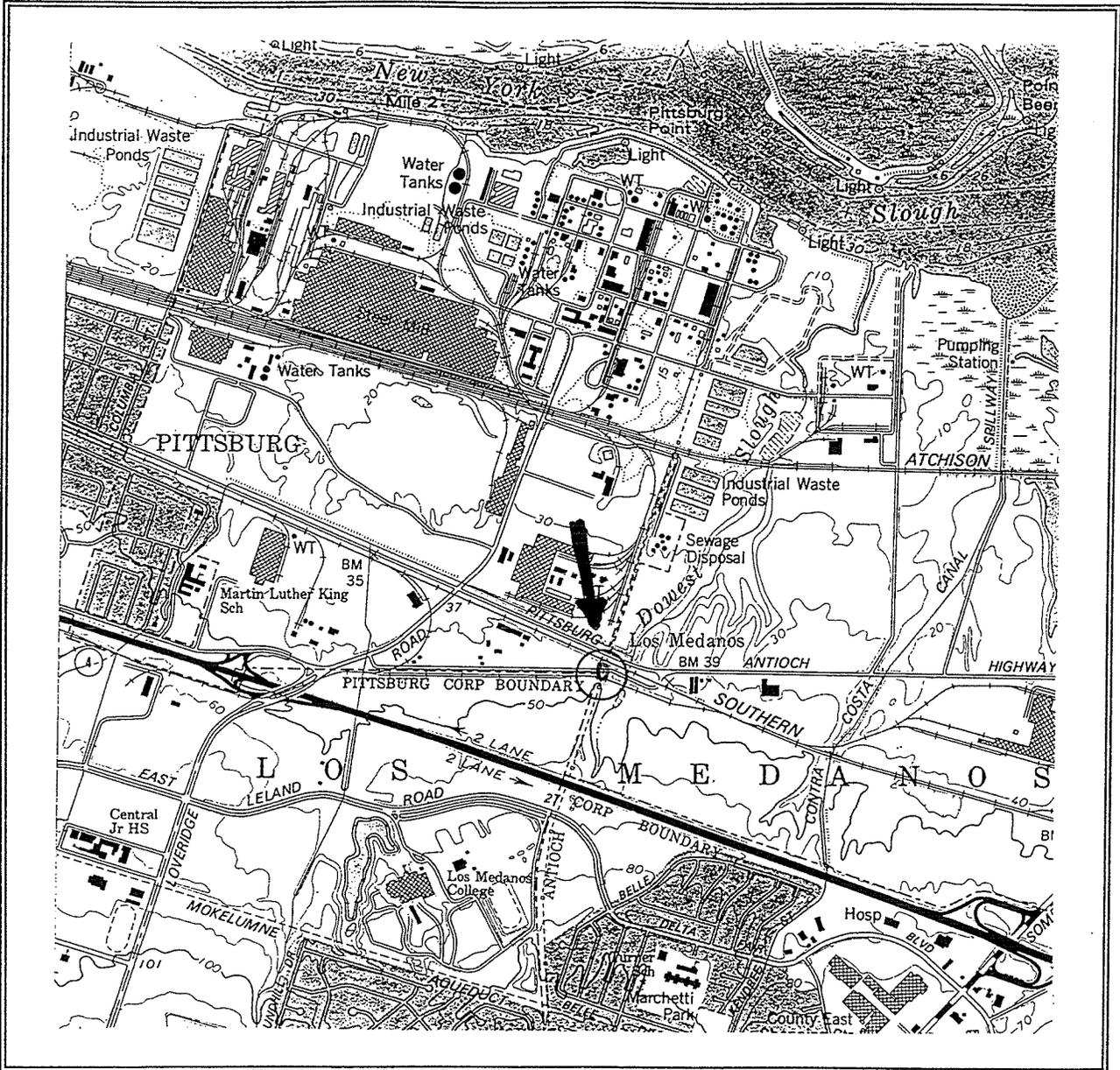
3



2



P-07-000505



**SITE NAME:** Southern Pacific - Northern Contra Costa Route, Contra Costa County  
**SITE NUMBER:** SPN-1  
**QUAD SHEET:** "Antioch North Quadrangle," USGS: 1978  
**PIPELINE LOCATION:** MP 2.3 Antioch Segment

Primary # P-07-000813

HRI # \_\_\_\_\_

Trinomial CA-CCO-733 H

NRHP Status Code \_\_\_\_\_

Other Listings \_\_\_\_\_

Review Code \_\_\_\_\_

Reviewer \_\_\_\_\_

Date \_\_\_\_\_

Page \_\_\_\_\_ of \_\_\_\_\_

\*Resource Name or #: (Assigned by Recorder) C-Antioch North-2

P1. Other Identifier: Southern Pacific Railroad line

\*P2. Location:  Not for Publication  Unrestricted

\*a. County Contra Costa

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

\*b. USGS 7.5' Quad North Antioch (#4814) Date 1978 T 3N ; R 1E ; \_\_\_\_\_ ¼ of \_\_\_\_\_ ¼ of Sec \_\_\_\_\_ ; M.D.M \_\_\_\_\_ B.M. \_\_\_\_\_

c. Address \_\_\_\_\_ City Pittsburg, CA Zip \_\_\_\_\_

d. UTM: (Give more than one for large and/or linear resources) Zone: 10 ; 599,330 <sup>(599270)</sup> mE/ 4,208,230 mN

e. Other Locational Data: (e.g. parcel #, directions to resource, elevation, etc., as appropriate) **(599400mE/4208190mN)**

\*P3a. Description (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The resource consists of a 400 foot segment of the Southern Pacific Railroad line approximately ½ mile west of Loveridge Road in Pittsburg, CA. The track is standard gauge and is oriented east/west. The track crosses Kirker Creek drainage via a wooden trestle. The trestle has 1 main support, and is approximately 45 feet in length and 8 feet in height. The trestle is flanked on each end by a concrete abutment. The track is currently in active use by the Union Pacific Railroad. The condition of the track and trestle are good. The track is situated in an urban area and runs parallel to State Route 4.

\*P3b. Resource Attributes: (List attributes and codes) AH7

\*P4. Resources present:  Building  Structure  Object  Site  District  Element of District  Other (isolates, etc.)

P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects)

P5b. Description of Photo: (View, date, accession #) \_\_\_\_\_  
none

\*P6. Date Constructed/Age and

Sources:  Historic  
 Prehistoric  Both

\*P7. Owner and Address:

Union Pacific Railroad

\*P8. Recorded by: (Name, affiliation, and address) \_\_\_\_\_

S. Atchley & G. Roark  
Jones & Stokes 2600 V St.  
Sacramento, CA 95818

\*P9. Date Recorded: 10/22/99

\*P10. Survey Type: (Describe)  
Pedestrian reconnaissance survey,  
20 meter transects.

\*P11. Report Citation: (Cite survey report and other sources, or enter "none.") Jones & Stokes 1999. Archaeological Survey Report for the Proposed State Route 4 Jflood Relief Project, Kirker Creek, City of Pittsburg, Contra Costa County, California.

\*Attachments: NONE  Location Map  Sketch Map  Continuation Sheet  Building, Structure, and Object Record

Archaeological Record  District Record  Linear Feature Record  Milling Station Record  Rock Art Record  
 Artifact Record  Photograph Record  Other (List): \_\_\_\_\_

AUG 1999 a.

State of California — The Resources Agency  
DEPARTMENT OF PARKS AND RECREATION  
**LINEAR FEATURE RECORD**

Primary # P-07-000813

HRI # \_\_\_\_\_

Trinomial CA-CCO-733 H

Page \_\_\_\_\_ of \_\_\_\_\_ \*Resource Name or #: (Assigned by Recorder) C-Antioch North-2

L1. Historic And/or Common Name: Southern Pacific Railroad

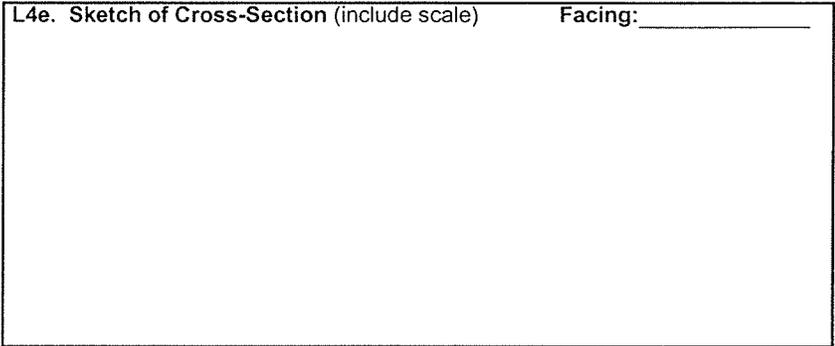
L2a. Portion Described:  Entire Resource  Segment  Point Observation Designation: \_\_\_\_\_

b. Location of point or segment: (Provide UTM coordinates, legal description, and any other useful locational data. Show the area that has been field inspected on a Location Map)  
USGS 7.5' Quad North Antioch 1978, T3N, R 1E, Los Medanos Rancho.  
UTM Zone 10: 599330E/4208230N

L3. Description: (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)  
The resource consists of 400 foot segment of the Southern Pacific Railroad line located approximately 1/2 mile west of Loveridge Road in Pittsburg, CA. The track is standard gauge and is oriented east/west. The track crosses Kirker Creek drainage via a wooden trestle. The trestle has 1 main support, and is approximately 45 feet in length and 8 feet in height. The trestle is flanked on each end by a concrete abutment. The track is currently in active use by the Union Pacific Railroad.

L4. Dimensions: (In feet for historic features and meters for prehistoric features)  
a. Top Width 36 feet  
b. Bottom Width 36 feet  
c. Height or Depth 8 feet  
d. Length of Segment 400 feet

L4e. Sketch of Cross-Section (include scale) Facing: \_\_\_\_\_

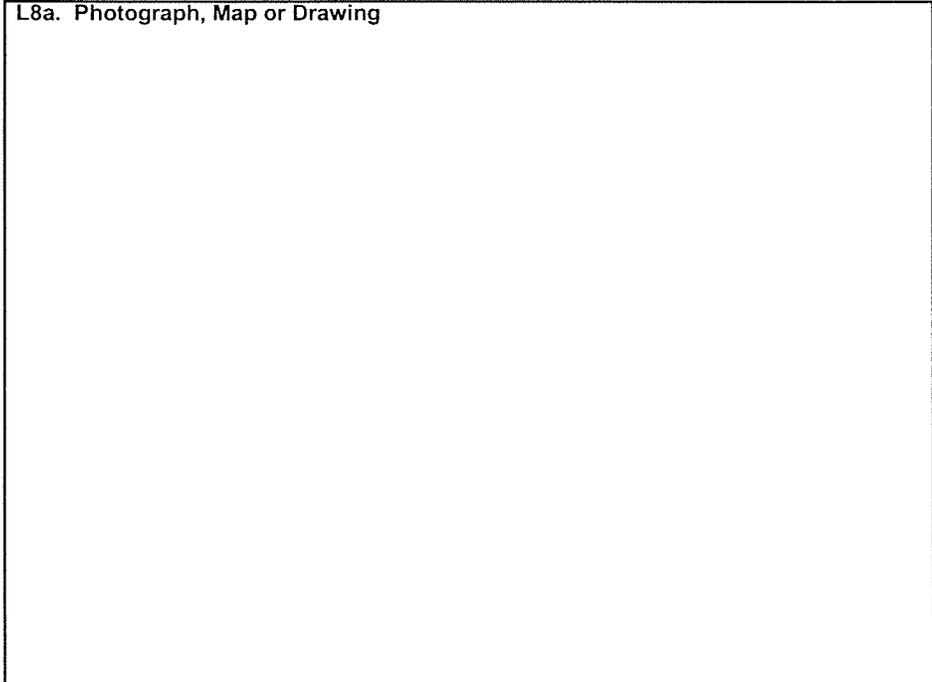


L5. Associated Resources:  
The track is associated with a wooden trestle.

L6. Setting: (Describe natural features, landscape characteristics, slope, etc., as appropriate.)  
The track is situated in an urban industrial area and runs parallel to State Route 4. The landscape is level. Nearby vegetation consists of introduced grasses and Eucalyptus trees.

L7. Integrity Considerations:  
The condition of the track and associated trestle are good.

L8a. Photograph, Map or Drawing



L8b. Description of Photo, Map, or Drawing (View, scale, etc.)  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

L9. Remarks:

L10. Form Prepared by: (Name, affiliation, and address)  
S. Atchley  
Jones & Stokes  
2600 V Street  
Sacramento, CA 95818

L11. Date: 11/8/99

a.

# LOCATION MAP

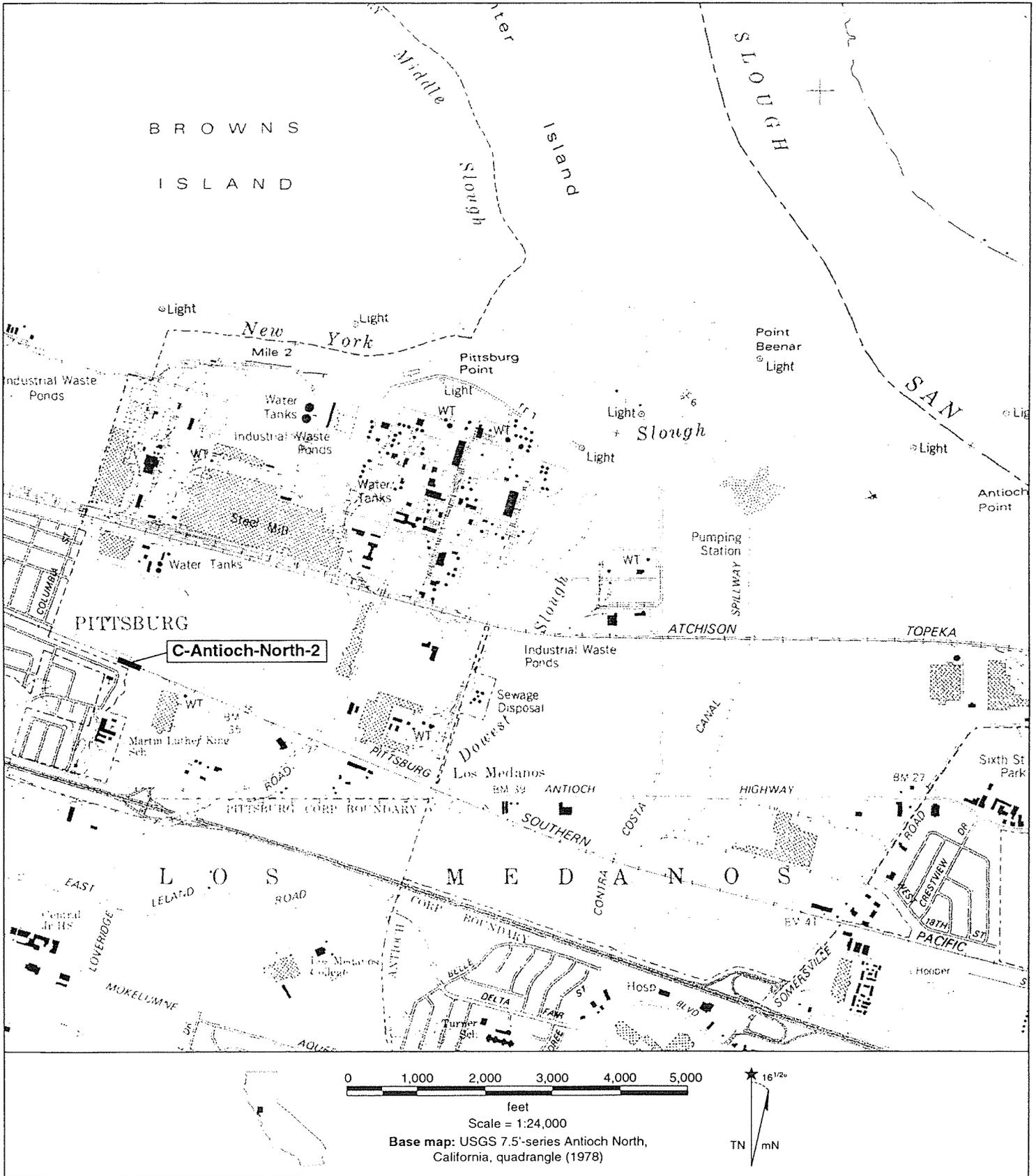
Page \_\_\_\_ of \_\_\_\_

\*Resource Name or #: C-Antioch North-2 (Atchison, Topeka, and Santa Fe Railroad)

\*Map Name: Antioch North, California

\*Scale: 1:24,000 (1"=2,000')

\*Date of Map: 1978



State of California — The Resources Agency  
 DEPARTMENT OF PARKS AND RECREATION  
**PRIMARY RECORD**

Primary # P-07-002568 P-07-000813  
 HRI # \_\_\_\_\_  
 Trinomial CA-CCo-749H CA-CCO-733H  
 NRHP Status Code \_\_\_\_\_

Other Listings \_\_\_\_\_  
 Review Code \_\_\_\_\_ Reviewer \_\_\_\_\_ Date \_\_\_\_\_

Page 1 of 5 \*Resource Name or #: (Assigned by Recorder) C-Antioch South-1

P1. Other Identifier: Central Pacific Railroad (now Union Pacific Railroad)

\*P2. Location:  Not for Publication  Unrestricted \*a. County Contra Costa

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

\*b. USGS 7.5' Quad Honker Bay Date 1980 T 2N ; R 1E ;     1/4 of     1/4 of Sec     ; MDM B.M.

c. Address (Map #4813) City \_\_\_\_\_ Zip \_\_\_\_\_

d. UTM: (Give more than one for large and/or linear resources) Zone: 10 ; See P2e     mE/     mN

e. Other Locational Data: (e.g. parcel #, directions to resource, elevation, etc., as appropriate)

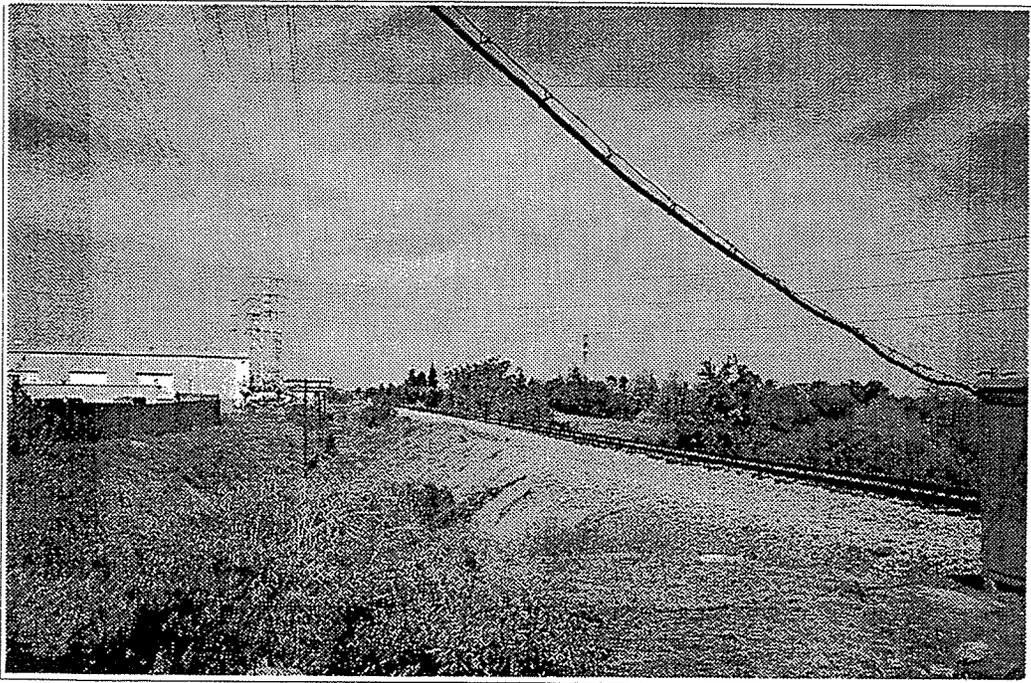
Segment of Railroad between West Pittsburg and Antioch. This segment is also located on the the Antich North and Antioch South quad. maps. 593840mE / 4209560mN to 607040mE / 4205990mN. T2N, R1W Section 12; T2N, R1E Unsectioned; T2N, R2E Section 19 & 20.  
**(593540E) (add utm: 601500E/4207340N)**

\*P3a. Description (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The resource consists of a portion of the Union Pacific Railroad alignment, originally the Central Pacific Railroad. The alignment is formed by an earthen berm and is currently in use. The berm elevates tracks above the surrounding land. The grade is variable, but is as large as about 50 feet high (10 feet high is typical) and the base the berm measures 166' across. The Central Pacific extended their lines to Contra Costa County in 1877 (Purcell 1940:487). In 1878 the Central Pacific Railroad through their subsidiary, the San Pablo & Tulare Railroad Company, served the cities of Richmond, San Pablo, Rodeo, Crockett, Port Costa, Martinez, Avon, Pittsburg, Antioch, Brentwood and Bryon in Contra Costa county. This railroad, constructed between 1876 and 1878, consisted of 46.51 miles of track between Martinez and Tracey. The SP&T Company was operated by the Central Pacific until 1885 when it became the Southern Pacific Company Railroad (Dunscomb 1967:407). The Union Pacific acquired the Southern Pacific in 1996.

\*P3b. Resource Attributes: (List attributes and codes) HP11. Engineering structure (Railroad Grade)

Resources present:  Building  Structure  Object  Site  District  Element of District  Other (isolates, etc.)



P5b. Description of Photo: (View, date, accession #) \_\_\_\_\_

\*P6. Date Constructed/Age and Sources:

Historic  Prehistoric  Both

\*P7. Owner and Address:

Union Pacific Railroad

\*P8. Recorded by: (Name, affiliation, and address)

Barry Scott Jones & Stokes Associates  
2600 V Street, Sacramento, CA

\*P9. Date Recorded: 4/15/99

\*P10. Survey Type: (Describe)

Reconnaissance survey using intensive pedestrian survey techniques

\*P11. Report Citation: (Cite survey report and other sources, or enter "none.") Cultural Resource Inventory Report for the Williams Communications Fiber Optic Cable Project, Pittsburg to Sacramento, California

\*\*Attachments:  NONE  Location Map  Sketch Map  Continuation Sheet  Building, Structure, and Object Record  
 Archaeological Record  District Record  Linear Feature Record  Milling Station Record  Rock Art Record  
 Artifact Record  Photograph Record  Other (List): \_\_\_\_\_

Page 2 of 5 \*Resource Name or #: (Assigned by Recorder) C-Antioch South-1

L1. Historic And/or Common Name: Central Pacific Railroad (now Union Pacific Railroad)

Portion Described:  Entire Resource  Segment  Point Observation Designation: C-Antioch South-1

b. Location of point or segment: (Provide UTM coordinates, legal description, and any other useful locational data. Show the area that has been field inspected on a Location Map)  
Segment of Railroad between West Pittsburg and Antioch. This segment is also located on the the Antich North and Antioch South quad. maps. 593840mE / 4209560mN to 607040mE / 4205990mN. T2N, R1W Section 12; T2N, R1E Unsectioned; T2N, R2E Section 19 & 20.

L3. Description: (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)  
The resource consists of the Central Pacific Railroad, now the Union Pacific Railroad. The railroad is currently in use and is maintained. The railroad grade is formed by an earthen berm surmounted by a set of tracks. The track is elevated on a bed of crushed rock ballast.

L4. Dimensions: (In feet for historic features and meters for prehistoric features)

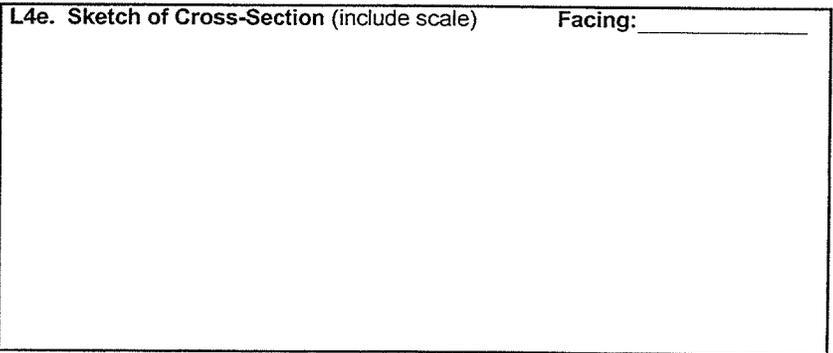
a. Top Width 60 feet (typical)

b. Bottom Width 166 feet (typical)

c. Height or Depth 10 feet (typical)

d. Length of Segment 8 miles

L4e. Sketch of Cross-Section (include scale) Facing: \_\_\_\_\_



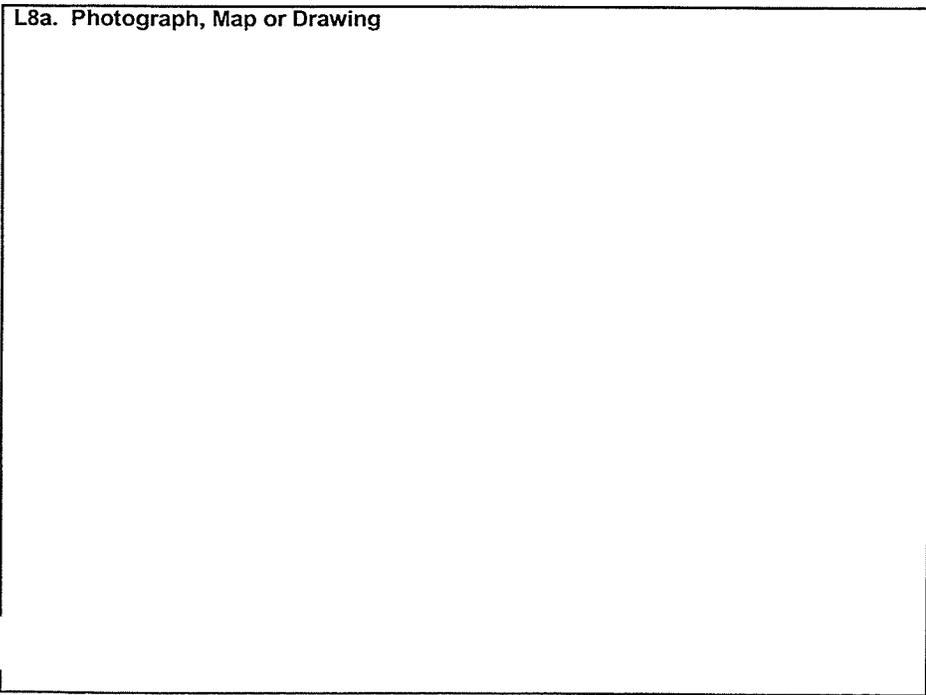
L5. Associated Resources:  
None.

Setting: (Describe natural features, landscape characteristics, slope, etc., as appropriate.)  
ie surrounding terrain is naturally floodplain associated with the Sacramento River, but is now mostly urban/industrial and residential.

L7. Integrity Considerations:

This segment of the railroad has been maintained and rebuilt since original construction. Other than location, the railroad does not appear to retain any other integrity.

L8a. Photograph, Map or Drawing



L8b. Description of Photo, Map, or Drawing  
(View, scale, etc.)  
Photo. view facing west from Hillcrest Road in Antioch.

L9. Remarks:  
None

L10. Form Prepared by: (Name, affiliation, and address)  
Barry G. Scott  
Jones & Stokes Associates  
2600 V Street, Sacramento, CA

L11. Date: April 15, 1999

# LOCATION MAP

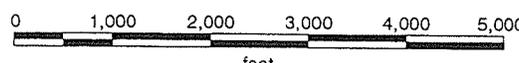
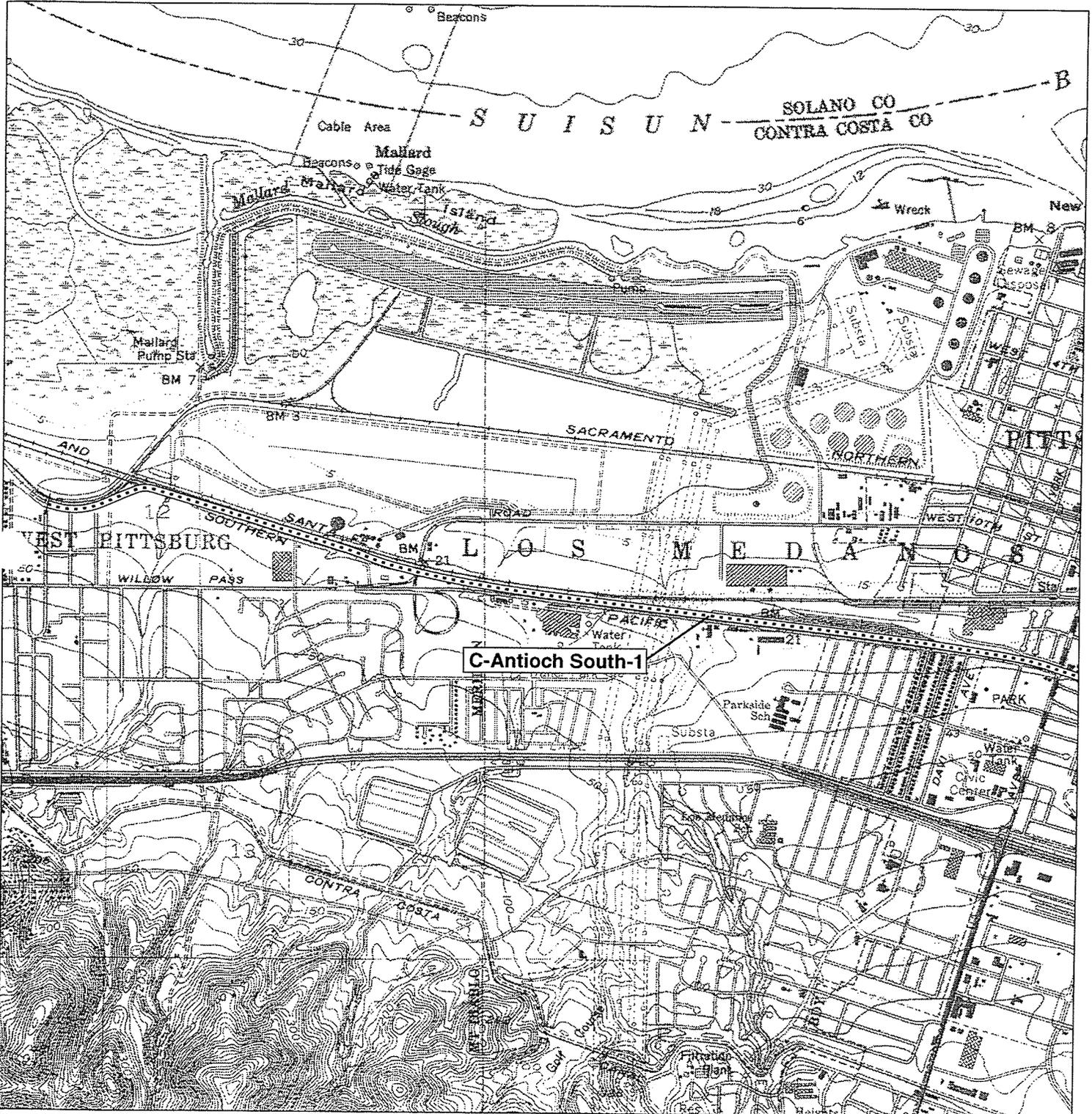
Page 3 of 5

Source Name or #: C-Antioch South-1

\*Map Name: Honker Bay, California

\*Scale: 1:24,000 (1"=2,000')

\*Date of Map: 1953/1980



Scale = 1:24,000

Base map: USGS 7.5'-series Honker Bay, California, quadrangle (1953, PR 1980)



b.

# LOCATION MAP

Page 4 of 5

source Name or #: C-Antioch South-1

\*Map Name: Honker Bay, Antioch North, & Antioch South, CA

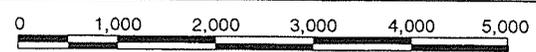
\*Scale: 1:24,000 (1"=2,000')

\*Date of Map: 1953/1980



Honker Bay quadrangle  
Antioch North quadrangle

Antioch South quadrangle



Scale = 1:24,000

Base map: USGS 7.5'-series quadrangles  
Honker Bay (1953, PR 1980), Antioch North (1953, PR 1980),  
and Antioch South (1953, PR 1980), California



b

# LOCATION MAP

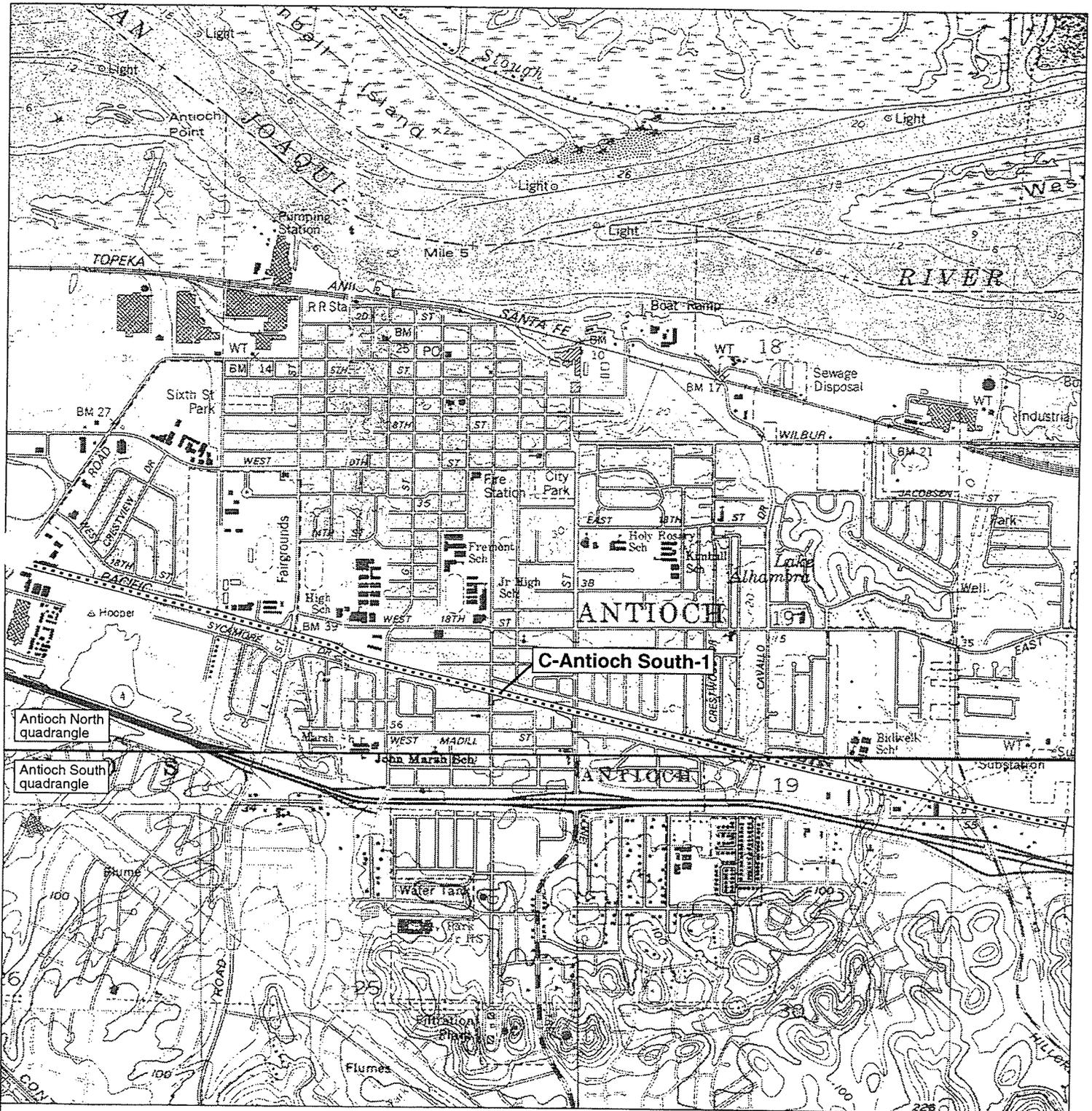
Page 5 of 5

source Name or #: C-Antioch South-1

\*Map Name: Antioch North and Antioch South, California

\*Scale: 1:24,000 (1"=2,000')

\*Date of Map: 1953/1980



Antioch North quadrangle

Antioch South quadrangle

C-Antioch South-1



feet  
Scale = 1:24,000

Base map: USGS 7.5'-series quadrangles  
Antioch North (1953, PR 1980), and  
Antioch South (1953, PR 1980), California



b

State of California — The Resources Agency  
DEPARTMENT OF PARKS AND RECREATION  
**PRIMARY RECORD**

Primary # P-07-000813  
HRI #  
Trinomial CA-CCo-733H  
NRHP Status Code 6Z

Other Listings  
Review Code

Reviewer

Date

Page 1 of 34

\*Resource Name or #: San Pablo & Tulare Railroad, Central Pacific Railroad, Southern Pacific Railroad, Union Pacific Railroad

**P1. Other Identifier:** P-07-002568 (CCA-CCO-749H) (This number was given to another segment of the railroad)

\***P2. Location:**  Not for Publication  Unrestricted

\***a. County:** Contra Costa

**and b. USGS Quad** Honker Bay 7.5' (1953, photorevised 1980), T2N, R1E and R1W, Los Medanos Landgrant; Antioch North 7.5' (1978), T2N, R1E, Los Medanos Landgrant and T2N, R2E, Section 19; Antioch South 7.5' (1953, photorevised 1980), T2N, R2E, Sections 19, 20, 28, 29; Brentwood 7.5' (1978), T2N, R 2E, Sections 27, 34, 35 and T1N, R2E, Sections 2 and Los Meganos Landgrant and T1N, R3E, Sections 29, 32, 33, and T1S, R3E, Section 4; Byron Hot Springs 7.5' (1953, photorevised 1968), T1S, R3E, Sections 3, 4, 10.; M.D. B.M.

**c. Southern end recorded:** 620420 mE/ 4190970 mN; **northern end recorded:** 601120mE/4207520 mN. A spur line also runs from 601120mE/4207520 westward along California Avenue to 0599860mE/4207620mN, just east of Loveridge Road.

**e. Other Locational Data:** Located in eastern Contra Costa County. This is a segment of the railroad running from near Loveridge Road in West Pittsburg east/southeast to about one half mile southeast of the town of Byron. Elevation: Varies from 30' to about 70' above above mean sea level.

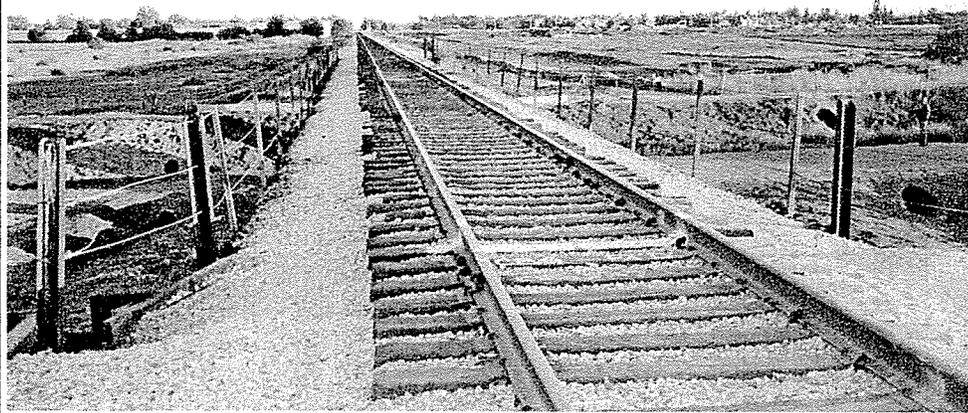
\***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

This record is an update to P-07-000813 and P-07-002568, both originally recorded in 1999. Those records described segments of the same railroad line. In 2006 these segments were part of a longer survey stretching from West Pittsburg to just south of the town of Byron, slightly more than 21 miles. The railroad is standard gauge (4' 8 1/2" wide), constructed on an earthen berm which varies in height from about 3' high to about 50' high. The base of the berm measures approximately 16' across. Within the area surveyed for this record, there are 15 railroad bridges that are over 50 years of age. These include wood trestles, wood and concrete, and concrete bridges. (See continuation sheet.)

\***P3b. Resource Attributes:** (List attributes and codes) HP11 (Railroad Grade); HP19 (Bridges/Trestles)

\***P4. Resources Present:**  Structure

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo: (View, date, accession #) Segment of rail line near Brentwood at Marsh Creek; 10/17/2006

\***P6. Date Constructed/Age and Sources:**  Historic  
Constructed between 1876 and 1878 and in use to present time. Historic bridges date from 1905 to 1955.

\***P7. Owner and Address:** Union Pacific Railroad Company

\***P8. Recorded by:** Suzanne Baker, Archaeological/ Historical Consultants, 609 Aileen St., Oakland, CA 94609

\***P9. Date Recorded:** October/November 2006

\***P10. Survey Type:** (Describe) Intensive pedestrian survey of railroad right-of-way from West Pittsburg to Byron.

\***P11. Report Citation:** *Archaeological Survey Report for the Proposed eBART Project, Eastern Contra Costa County, California, 2007*, Baker, Suzanne and Laurence H. Shoup; *Historic Resources Evaluation Report: Central/Southern/Union Pacific Railroad, eBART Project, Contra Costa County, 2007*, Shoup, Laurence H.; *General Inventory Report Between Mileposts 50 and 80 Maintained by UP for Tracy Subdivision, 08/10/2006*; *California Primary Record, P-07-000813, 10/22/1999*, Atchley S. and G. Roark; *Linear Feature Record, P-07-000813, 11/08/1999*, Atchley, S.; *Primary Record, P-07-002568, 04/15/1999*, Scott, Barry; *Linear Feature Record, P-002568, 04/15/1999*, Scott, Barry G.

\***Attachments:**  Location Map  Continuation Sheet  Linear Feature Record  Building, Structure, Object Record  
DPR 523A (1/95)

\*Required information

## Primary Record Continuation Sheet

Page 2 of 34 \*Resource Name or # (Assigned by recorder) San Pablo & Tulare Railroad, Central Pacific Railroad, Southern Pacific Railroad, Union Pacific Railroad

### P3a. Description (Cont.):

The railroad is maintained, but currently is little used. In the Antioch-Pittsburg area the line is presently used to store miles of railroad cars.

This railroad, originally known as the San Pedro and Tulare Railroad, was begun in 1876 and completed through the area in 1878. It consisted of 46.51 miles of track from Tracy to Martinez. Built by the Central Pacific/Southern Pacific Railroad, it was soon incorporated into SP's San Francisco and New Orleans Line and the original name was dropped. The railroad was built to capture the agricultural freight and passenger business of the region. The construction of a number of small stations along the line caused a realignment of the center of local settlement from Point of Timber on the San Joaquin River to Byron and later Brentwood, the two most important stations on the new railroad line. The SP had a railroad monopoly for over two decades, as the nearby Santa Fe Railroad was not built through the area until about 1900 (Baker and Shoup 2006; Shoup 2006). The Central Pacific Railroad changed its name to Southern Pacific in 1885. The Union Pacific Railroad acquired the line in 1996 (Scott 1999; Shoup 2007). The railroad line was of major significance in the development of agriculture in eastern Contra Costa County in the late 19<sup>th</sup> and early 20<sup>th</sup> centuries (see HRER, Shoup 2007).

## BUILDING, STRUCTURE, AND OBJECT RECORD

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\*NRHP Status Code 6Z

\*Resource Name or #: San Pablo & Tulare Railroad, Central Pacific Railroad, Southern Pacific Railroad, Union Pacific Railroad; P-07-002568 (CCA-CCO-749H) (This number was given to another segment of the railroad)

B1. Historic Name: San Pablo & Tulare Railroad, Central Pacific Railroad, Southern Pacific Railroad

B2. Common Name: Union Pacific Railroad (Mococo Segment) – current usage

B3. Original Use: Railroad

B4. Present Use: Railroad

\*B5. Architectural Style: NA

\*B6. Construction History: (Construction date, alterations, and date of alterations) 1876-1878, continued alternations into the late 20<sup>th</sup> century.

\*B7. Moved? No Yes Unknown Date: Original Location: Yes

\*B8. Related Features: Historic Bridges, concrete signal pads (see Linear Feature Record)

B9a. Architect:

b. Builder: Central Pacific/Southern Pacific Railroad

\*B10. Significance: Theme: Transportation history

Contra Costa County. The corridor right-of-way is approximately 100 feet wide. Area: ~21 miles from near Pittsburg to Byron in Eastern

Period of Significance: 1878-1925

Property Type: Railroad Line

Applicable Criteria: A, C

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

This railroad, originally known as the San Pedro and Tulare Railroad, was begun in 1876 and completed through eastern Contra Costa County in 1878. It consisted of 46.51 miles of track from Tracy to Martinez. Built by the Central Pacific/Southern Pacific Railroad, it was soon incorporated into SP's San Francisco and New Orleans Line and the original name was dropped. The railroad was built to capture the agricultural freight and passenger business of the region. The construction of a number of small stations along the line caused a realignment of the center of local settlement from Point of Timber on the San Joaquin River to Byron and later Brentwood, two stations on the new railroad line. The SP had a railroad monopoly for over two decades, as the nearby Santa Fe Railroad was not built through the area until about 1900 (Baker and Shoup 2006; Shoup 2006). The Central Pacific Railroad changed its name to Southern Pacific in 1885. The Union Pacific Railroad acquired the line in 1996 (Scott 1999; Shoup 2006).

The significance of this railroad line falls under Criterion A, association with events that have made a significant contribution to the broad patterns of our history. The railroad line was of major significance in the development of agriculture in eastern Contra Costa County in the late 19<sup>th</sup> and early 20<sup>th</sup> centuries (see Shoup 2007). The railroad established connections, cemented economic and social ties, and ended localized isolation. The arrival and operation of the CP/SP railroad in the project area created a corridor of modernity through a formerly isolated region. It made the shipment of goods, materials and people routine. Products could suddenly be shipped to and acquired from distant markets at an economically feasible cost. This transformed the project area, allowing the development of new kinds of agriculture and the rapid expansion of small towns along the railroad line. By 1925 the area had been completely transformed from a grain growing center to one with an emphasis on fruit, vegetables, and nuts.

For a property to qualify for the NRHP it must have integrity. Integrity involves the authenticity of a given property and its ability to convey its significance. Seven aspects—location, setting, design, workmanship, materials, feeling and association—are used to measure a property's integrity. Although this railroad is in the same location and has the same basic design, all of the other five integrity aspects are largely lacking. The setting of the railroad is frequently urban and suburban, not rural as it was during its period of significance. The materials, workmanship, feeling and association are characteristic of a diesel railroad of the last half-

(Continued)

B11. Additional Resource Attributes: (List attributes and codes) HP11 (Railroad Grade); HP19 (Bridges/Trestles)

(Sketch Map with north arrow required.) See attached.

\*B12. References: *Historic Resources Evaluation Report: Central/Southern/Union Pacific Railroad, eBART Project, Contra Costa County*, 2007, Shoup, Laurence H.

B13. Remarks: This line is undergoing study for consideration as a eventual BART extension line from Bay Point to Byron.

\*B14. Evaluator: Laurence H. Shoup

\*Date of Evaluation: January 2007

## BUILDING, STRUCTURE, AND OBJECT RECORD CONTINUATION SHEET

Page 4 of 34

\*Resource Name or # San Pablo & Tulare Railroad, Central Pacific Railroad, Southern Pacific Railroad, Union Pacific Railroad

### B10. Significance (continued).

century, not a steam railroad of a century ago. For example, among all of the railroad features still extant during the First World War period, as documented in the HRER (Shoup 2007), almost nothing remains (see Linear Feature Record attached). No depots, freight houses, loading platforms, ice houses, mail cranes or bunk houses are, for example, extant. Some of the road crossings are in the same location, but even these now have more modern electrical crossing gates, something installed in relatively recent times and not in place in the first decades of the 20<sup>th</sup> century. This fundamental change in the nature of the railroad has been due to the constant modernization of the line since 1920, but also because of dieselization since the late 1940s. Therefore most of the features characteristic of an early 20<sup>th</sup> Century steam railroad have been removed; what we see today are features of a modern (post-1940s) diesel railroad. Except for several bridges and trestles, discussed below, the early day features on this railroad are gone, and with these losses, this property's ability to convey its significance has also been lost. With five of seven aspects of integrity largely lacking, this railroad is not an authentic example of an early railroad during its period of significance, 1878-1920. Therefore, despite being significant under Criterion A, in the opinion of the author of this report, it cannot qualify for the National Register.

As mentioned above, and as documented in this site record, there are a number of historic wood and concrete railroad bridges and timber trestles, 15 in all, along this line. These structures reportedly date from 1904 to 1955, and range in length from a few feet to about 195 feet long. They were all recorded and photographed as part of this project. These structures generally have good integrity, marred in some cases by vandal-set fires on some of the timber trestles, leaving heavy charring on much of the wood. As engineering construction features, these bridges and trestles are evaluated here for possible significance under Criterion C, Design/Construction. The relevant part of this Criterion states that to qualify for the NRHP, a property must "embody distinctive characteristics of a type, period, or method of construction." To be eligible under this portion of Criterion C a property must clearly illustrate four aspects of "distinctive characteristics":

- The pattern of features common to this class of resource
- The individuality or variation of features that occurs within the class
- The evolution of that class
- The transition between classes of resources (U.S. Department of Interior 1991: 17-18).

Furthermore, "type period, or method of construction" means that a given property is only eligible "...if it is an important example (within its context) of building practices of a particular time in history...A property is not eligible, however, simply because it has been identified as the only such property ever fabricated; it must be demonstrated to be significant as well" (U.S. Department of Interior 1991: 18). In the opinion of the author of this report, the 15 bridges/trestles on this railroad line, although they have a measure of integrity and provide an interesting spectrum of bridge types, do not qualify as significant under Criterion C or any of the other NRHP significance criteria. They are not important examples of past building practices and fail to meet the requirements for illustrating the evolution of a class of resources or the transition between classes of resources.

C.

**Resource Name or #:** San Pablo & Tulare Railroad, Central Pacific Railroad, Southern Pacific Railroad, Union Pacific Railroad; P-07-002568 (CCA-CCO-749H) (This number was given to another segment of the railroad)

**L1. Historic and/or Common Name:** San Pablo & Tulare Railroad; Union Pacific Railroad

**L2a. Portion Described:**  Entire Resource  Segment  Point Observation **Designation:**

**b. Location of point or segment:** (Provide UTM coordinates, legal description, and any other useful locational data. Show the area that has been field inspected on a Location Map)

This is a segment of the railroad running from near Loveridge Road in West Pittsburg east-southeast to about one half mile southeast of the town of Byron in eastern Contra Costa County. **Southern end recorded:** 620420 mE/ 4190970 mN; **northern end recorded:** 601120mE/4207520 mN. A spur line also runs from 601120mE/4207520 westward along California Avenue to 0599860mE/4207620mN, just east of Loveridge Road. See also UTM's for individual bridges below.

**L3. Description:** (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.) This segment is ~21 miles long, stretching from West Pittsburg to just south of the town of Byron. The railroad is standard gauge (4' 8 1/2" wide), constructed on an earthen berm which varies in height from about 3' high to about 50' high. The base of the berm measures approximately 16' across.

**L4. Dimensions:** (In feet for historic features and meters for prehistoric features)

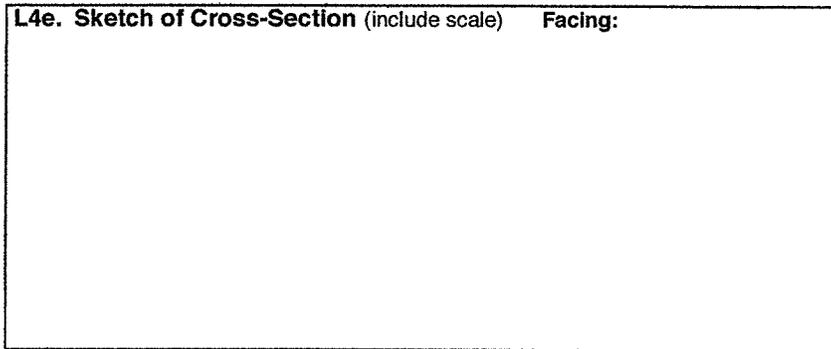
**a. Top Width:** ~4' 8-1/2"

**b. Bottom Width:** varies

**c. Height or Depth:** (varies)

**d. Length of Segment:** 21 miles

**L4e. Sketch of Cross-Section** (include scale) **Facing:**



**L5. Associated Resources:** There are 15 railroad bridges within the surveyed segment that are over 50 years of age. These include both wooden trestles and concrete bridges (see Continuation Sheets). In addition, the remains of a retaining wall and concrete base of a possible signal platform (Feature 1 and 1a) and two other signal platform remnants (Features 2 and 3) were observed (see Continuation Sheets).

**L6. Setting:** (Describe natural features, landscape characteristics, slope, etc., as appropriate.) The northern portion of this railroad segment, in the Pittsburg-Antioch area, is found south of the Carquinez Straits in an area of former sand dunes, today transformed into a highly urbanized environment. From Antioch south to Byron the railroad grade passes through relatively flat terrain west of the San Joaquin River. In the historic period much of this area was in farm land, but is rapidly urbanizing. From Brentwood south to Byron the land is still agricultural.

**L8a. Photograph, Map or Drawing**

(See Continuation Sheets)



**L7. Integrity Considerations:**

No associated features from the period of construction (1876-1878) or late 19<sup>th</sup> century remain. Features date from 1905 to late 20<sup>th</sup> century. Some of the wooden bridges have been charred by fire. The railroad is still maintained, but used only occasionally.

**L8b. Description of Photo, Map, or Drawing** (View, scale, etc.)  
(see attached)

**L9. Remarks:**

**L10. Form Prepared by:** (Name, affiliation, and address) Suzanne Baker, Archaeological/Historical Consultants, 609 Aileen St., Oakland, CA 94609

Date: 11/06/06

**CONTINUATION SHEET**

Trinomlal CA-CCo-733H

\*Resource Name or #: San Pablo & Tulare Railroad, Central Pacific Railroad, Southern Pacific Railroad, Union Pacific Railroad

Railroad Bridge 1.

Location: USGS 7.5 Byron Hot Springs Quadrangle (1953, photorevised 1968). T1S, R3E, Section 10; UTM: 620420mE4190970mN

On Union Pacific tracks, located at RR Milepost 67.78, approximately 150' south of where a farm road crosses the railroad tracks and about 3330' south of Camino Diablo in Byron.

Date: 1929

Built by the Southern Pacific Railroad, this timber bridge—measuring 15.17' long by about 12 feet wide—spans a small drainage. Now owned by the Union Pacific Railroad, the bridge is on a rail line that runs atop a raised aggregate bed, or levee, south of Byron.

The bridge is spanned by a large 18" wood beam resting on 12" cross beams on concrete supports at either end of the bridge. The bridge is approximately 3' high above the drainage.

The railway bed has borders of 12x8 beams and fill of compacted dirt and gravel. The steel tracks and wood ties of the railroad sit atop the bed. It has a wood fence on the east side and a modern wire and metal post safety fence on the west side.



Facing west

C.

Railroad Bridge 2.

Location: USGS 7.5' Byron Hotsprings Quadrangle (1953, photorevised 1968); T1S, R3E, Section 10; UTM 620280m E/ 4191160 mN. On the Union Pacific tracks, located at RR Milepost 67.58, approximately 700' north of a farm road that crosses the tracks and about 1500' south of where Camino Diablo Boulevard crosses the railroad tracks (at the south end of Main Street) in Byron.

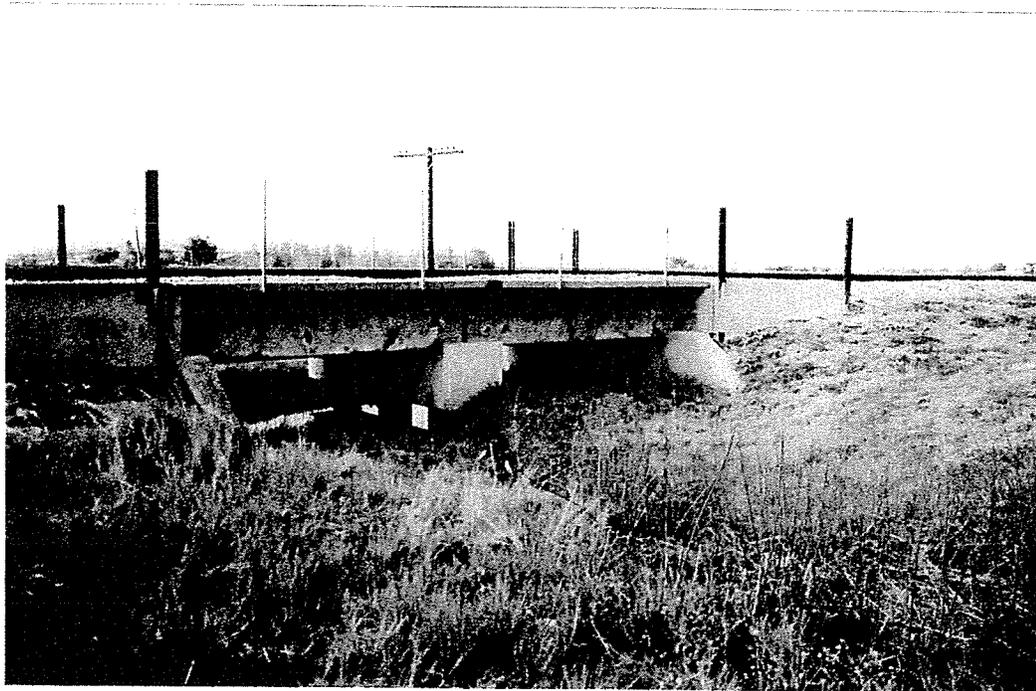
Date: 1904?

Built by the Southern Pacific Railroad, this bridge—measuring ~26' long by about 12 feet wide—spans a small drainage. Now owned by the Union Pacific Railroad, the bridge is on a rail line that runs atop a raised aggregate bed, or levee, south of Byron.

This is a concrete bridge, spanning a small drainage. A 28" wide concrete cross support rests on on three upright metal beam sections. The bridge is approximately 3.5'-4' high above the drainage. There are concrete retaining walls on the drainage sides under each end of the bridge.

The railway bed has fill of compacted dirt and gravel. The steel tracks and wood ties of the railroad sit atop the bed. There is a temporary modern wire safety fence paralleling both sides of the tracks.

Although Union Pacific information lists this bridge as dating to 1904, it appears much newer and may be a modern replacement of the original bridge.



Facing southwest

C.

Railroad Bridge 3.

Location: USGS 7.5' Byron Hotsprings Quadrangle (1953, photorevised 1968); T1S, R3E, Section 10; UTM 619860m E/4191740 mN. On Union Pacific tracks, located at RR Milepost 67.14, approximately 50' south of where Camino Diablo Boulevard crosses the railroad tracks (at the south end of Main Street) in Byron.

Date: 1905

Built by the Southern Pacific Railroad, this timber bridge—measuring 30.17' long by about 12 feet wide—spans a small drainage. Now owned by the Union Pacific Railroad, the bridge is on a rail line that runs atop a raised aggregate bed, or levee, in Byron. It is found just to the south of Byron's small Main Street.

The bridge is spanned by 8 x 16 wood beams and supported by 3 upright iron beams (the outer two slightly splayed) and an iron cross beam under the center of the bridge. The bridge is approximately 4' high above the drainage. There are concrete retaining walls on the drainage sides under each end of the bridge and wooden retaining walls below the track at each end of the bridge.

The railway bed has a base of 3x12 planks, borders of 8x16 beams, and fill of compacted dirt and gravel. The steel tracks and wood ties of the railroad sit atop the bed. There is a temporary modern wire safety fence paralleling both sides of the tracks.

The bridge appears intact, although it is probable that the steel supports and concrete retaining walls are a later addition. The wire fencing appears temporary and makeshift.



Facing west

**Railroad Bridge 4.**

Location: USGS 7.5' Byron Hotsprings Quadrangle (1953, photorevised 1968); T1S, R3E, Section 4; UTM 618300mE/ 4192480mN. On Union Pacific tracks, located at RR Milepost 66.58, approximately 1500' north of where Holoway Drive/Byron Highway crosses the railroad track in Byron. It is just west of Hannon Drive which runs through a trailer park.

Date: 1904/1935

Built by the Southern Pacific Railroad and now owned by the Union Pacific Railroad, this timber bridge—measuring 45' long by about 12 feet wide—spans a small drainage. The bridge is on a rail line that runs atop a raised aggregate bed, or levee, in Byron.

The bridge is spanned by two or three iron beams supported on two horizontal concrete supports. The bridge is approximately 2 ½' high above the ground surface. There are buttressed concrete retaining walls along the drainage sides under each end of the bridge, and wooden retaining walls that extend from the concrete another ~5' below and parallel to the track at each end of the bridge.

The railway bed has a base of 3x12 planks, borders of 2x4 planks, and fill of compacted dirt and gravel. The steel tracks and wood ties of the railroad sit atop the bed. There is a temporary modern wire safety fence paralleling the west side of the tracks and a wood rail fence on the east side.

Union Pacific information indicates that the bridge was built in 1904, although the concrete supports have a date of 1935. It is probable that the wood cross planks date to 1904, but that the iron beam and concrete date to a 1935 modification.



Facing east

C.

**Railroad Bridge 5.**

Location: USGS 7.5' Brentwood Quadrangle (1978); Boundary of T1S, R3E, Section 4 and T1N, R3E, Section 33; UTM 618680mE/4193370 mN.

On Union Pacific tracks, located at RR Milepost 65.89. This bridge crosses the Kellogg Creek Canal adjacent to Hoffman Lane. Approximately 0.9 miles north of where Byron Highway crosses the railroad tracks north of downtown Byron.

Date: 1955

Built by the Southern Pacific Railroad and now owned by the Union Pacific Railroad, this timber bridge—measuring 75' long by about 12 feet wide—spans the Kellogg Creek Canal, part of the Bryon-Bethany Irrigation District system. The bridge is on a rail line that runs atop a raised aggregate bed, or levee, north of Byron.

This is an iron beam bridge supported on five sets of concrete piers. The bridge is approximately 12 to 18" above the water of the canal.

The railway bed has a base of 3x12 planks, borders of 2x4 planks, and fill of compacted dirt and gravel. The steel tracks and wood ties of the railroad sit atop the bed. There is a temporary modern wire safety fence paralleling the west side of the tracks and a wood rail fence on the east side.

One of the concrete supports on the south end of the bridge has a 1955 date imprinted on it.



Facing southwest toward Hoffman Lane

C.

**CONTINUATION SHEET**

**Railroad Bridge 6.**

Location: USGS 7.5' Brentwood Quadrangle (1978); T1N, R3E, Section 33; UTM 618600m E/4193500 mN.

On the Union Pacific tracks, located at RR Milepost 65.84, 0.05 mile north of where the railroad crosses the the Kellogg Creek Canal near Hoffman Lane north of Byron. It is adjacent to an orchard on its east side.

Date: 1954 (?)

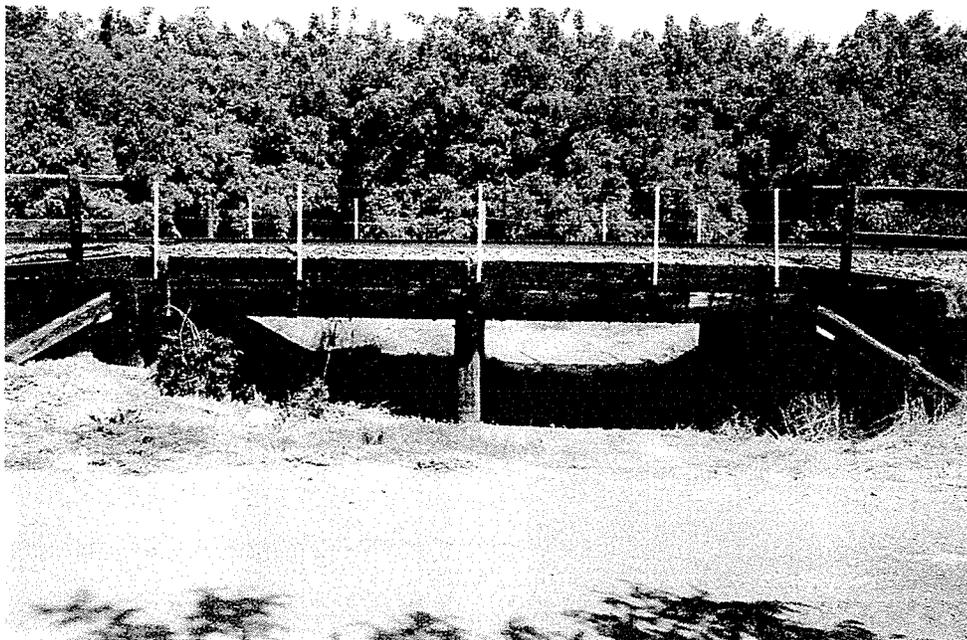
Built by the Southern Pacific Railroad and now owned by the Union Pacific Railroad, this is a timber bridge—measuring 30.17' long by about 12 feet wide—that spans a small drainage. The bridge is on a rail line that runs atop a raised aggregate bed, or levee, north of the town of Byron.

The bridge is spanned by 8 x 16 wood beams and supported by three sets of six ~12" diameter wooden piers (one set in the center of the drainage and a set at each side of the drainage). Piers are 5' high. There are wood retaining walls extending from each end of the bridge below the rails and diagonal wood braces extend from the embankment to the outer piers.

The numbers "28", "34", "33", and "32" are written in nails on the piers under the bridge.

The railway bed has a base of 3x12 planks, borders of 8x16 beams, and fill of compacted dirt and gravel. The steel tracks and wood ties of the railroad sit atop the bed. There is a temporary modern wire safety fence paralleling both sides of the tracks over the drainage with wood fencing extending beyond the drainage.

The bridge appears intact. Information from the Union Pacific Railroad indicates that this bridge was built in 1954, however, it appears much older than this. It is possible that the 1954 date refers to the last time that any maintenance was done on the bridge.



Facing east

C.

**Railroad Bridge 7.**

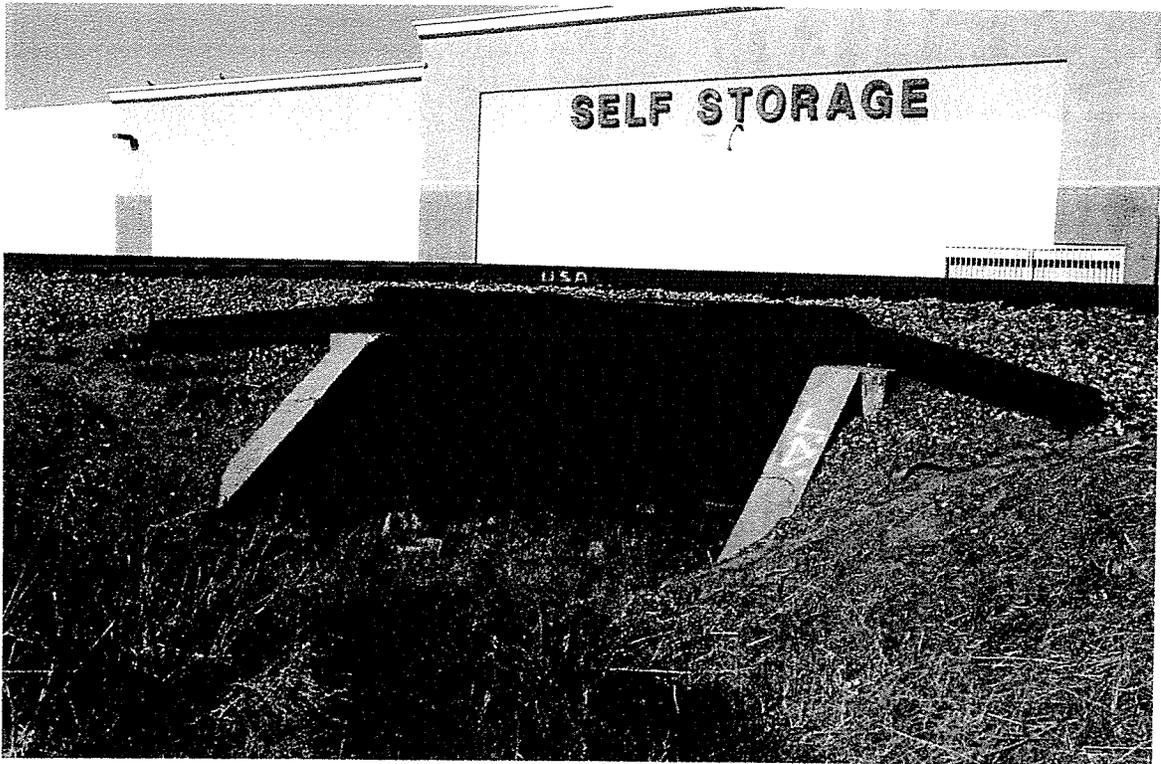
Location: USGS 7.5' Brentwood Quadrangle (1978); T1N, R2E, Unsectioned (Los Meganos Landgrant); UTM 614100m E/4199620 mN. On the Union Pacific tracks, located at RR Milepost 61.20. This bridge is over a small drainage, approximately 0.1 mile north of where Central Boulevard in Brentwood crosses the railroad track. It is adjacent to a self-storage building on its east side.

Date: 1922

Built by the Southern Pacific Railroad and now owned by the Union Pacific Railroad, this is a small timber bridge—measuring 15.17' long by about 12 feet wide—that spans a small drainage. The bridge is on a rail line that runs atop a raised aggregate bed, or levee. The bridge is spanned by 8 x 16 wood beams, resting on concrete supports/retaining walls laid perpendicular to the track on each side of the drainage.

The railway bed has a base of 3x12 planks, borders of 8x16 beams, and fill of compacted dirt and gravel. The steel tracks and wood ties of the railroad sit atop the bed.

The bridge appears intact, but is charred by fire. A local resident said that a fire was started by teenage vandals. There is a lot of trash under the bridge, including an old sofa, a chair, and four tires, probably the remains of a homeless encampment.



Facing east

**CONTINUATION SHEET**

Trinomial CA-CCo-733H

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\*Resource Name or # San Pablo & Tulare Railroad, Central Pacific Railroad, Southern Pacific Railroad, Union Pacific Railroad

**Railroad Bridge 8.**

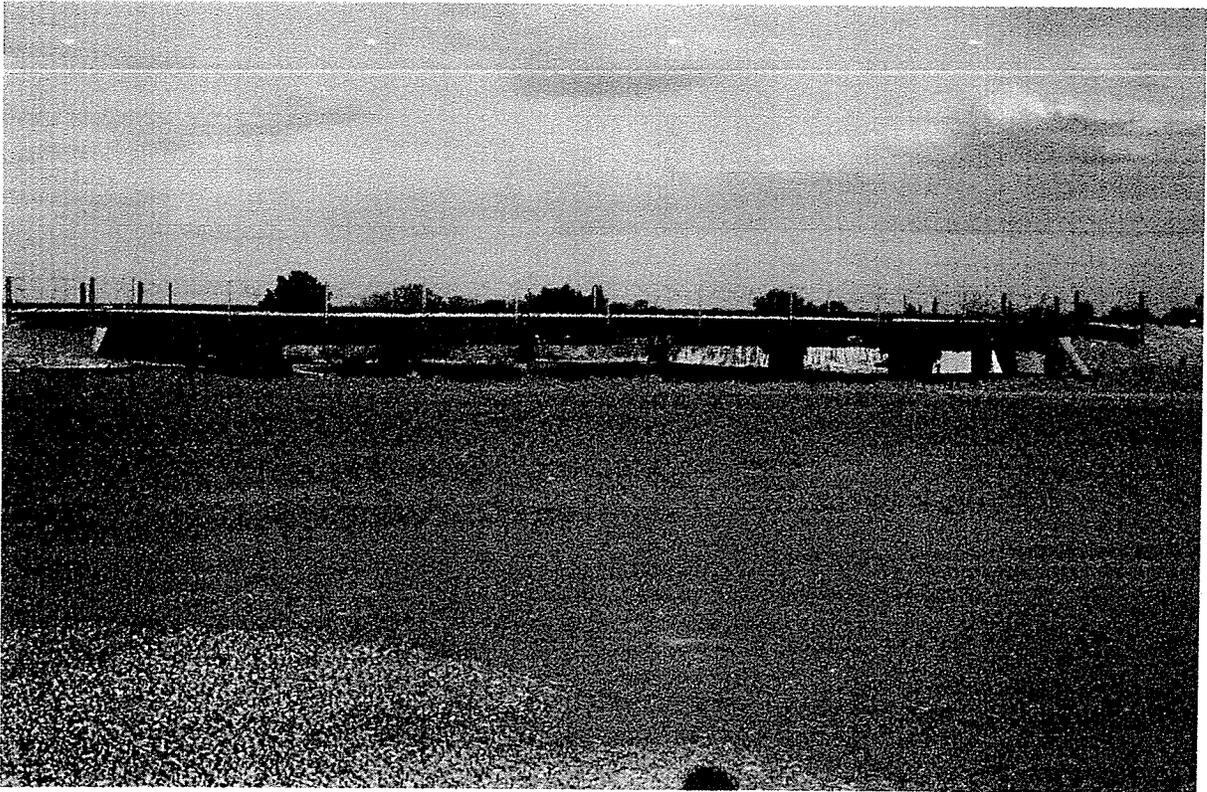
Location: USGS 7.5' Brentwood Quadrangle (1978); T1N, R2E, Unsectioned (Los Meganos Landgrant); UTM 613920m E/4199840 mN. On the Union Pacific tracks, located at RR Milepost at 60.91. This bridge is over a low area, part of the Marsh Creek floodplain, approximately 0.3 mile north of where Central Boulevard in Brentwood crosses the railroad track. It is approximately 750 feet south of Marsh Creek along the railroad tracks.

Date: 1929

This bridge was built by the Southern Pacific Railroad and is now owned by the Union Pacific Railroad.

The bridge 105.17 feet long and is supported by six trestles, each composed of five, slightly splayed, posts crossed by two diagonal braces and a 16 x 16 crossbeam. Posts are approximately 4 feet high. 8x16 beams span these crossbeams: one beam along each side of the bridge and five adjoining beams to carry the load of each rail. There are perpendicular concrete retaining walls under each end of the bridge. The railway bed has a base of 3x12 planks, borders of 8x16 beams, and fill of compacted dirt and gravel. The steel tracks and wood ties of the railroad sit atop the bed.

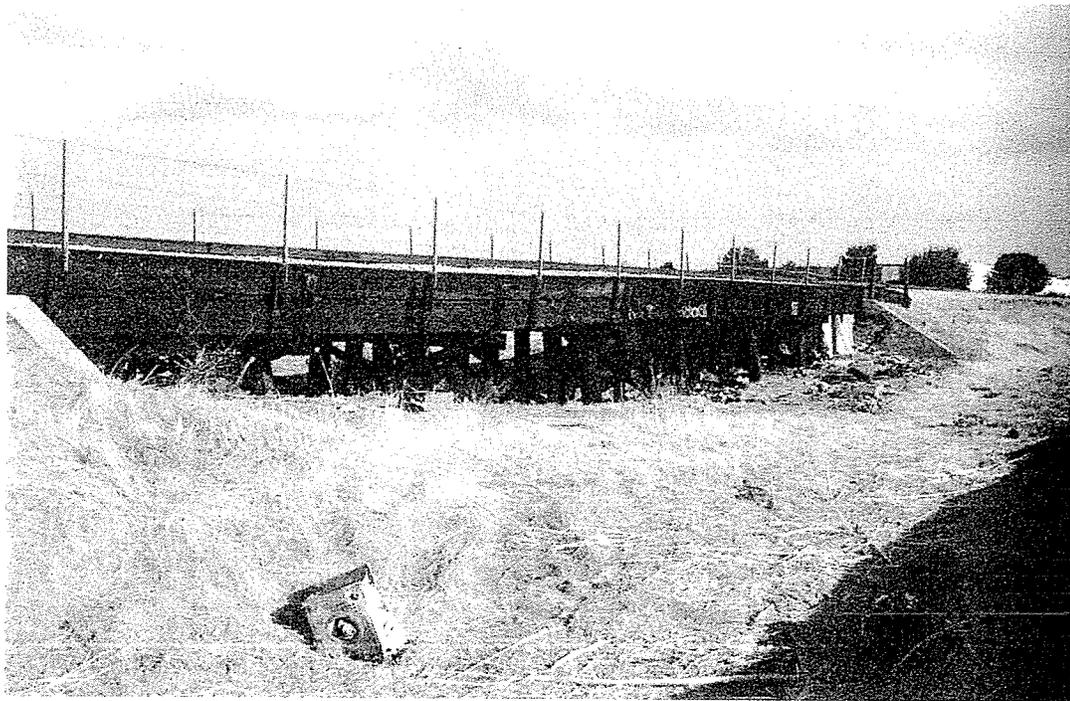
The bridge appears intact, but much of south half of the wood structure of the bridge is charred by a fire. A local resident said that a fire was started by teenage vandals. There is a lot of trash under the bridge, including a futon with mattress, a September 03, 2006 newspaper, and a lot of miscellaneous trash, probably the remains of a homeless encampment.



Facing east

C.

Railroad Bridge 8.



Facing southeast



Facing southeast, close-up of charring

C.

**CONTINUATION SHEET**

**Railroad Bridge 9.**

Location: USGS 7.5' Brentwood Quadrangle (1978); T1N, R2E, Unsectioned (Los Meganos Landgrant); UTM 613760m E/4200040 mN. On the Union Pacific tracks, located at RR Milepost at 60.74. This bridge spans Marsh Creek. It is located 900' south of Sand Creek Road along the railroad tracks and west of Ohara Avenue in Brentwood.

Date: 1938?

Built by the Southern Pacific Railroad and now owned by the Union Pacific Railroad, this timber trestle bridge—measuring about 195.17 feet long by ~12 feet wide—crosses Marsh Creek west of O'Hara Avenue. Now owned by the Union Pacific Railroad, the bridge is on a rail line that runs atop a raised aggregate bed, or levee, in a section of Brentwood undergoing rapid residential and commercial development. Fields and orchards border the site, with new subdivision activity to the north.

The bridge is supported by 14 timber trestles that vary in height from a few feet, near the wood retaining walls of the abutments, to about 20 feet at the center of the span, above the creek. Each trestle is constructed of six splayed poles with diagonal braces and a 16x16 crossbeam. Twelve 8x16 beams span these crossbeams: one beam along each side of the bridge and five adjoining beams to carry the load of each rail. The railway bed has a base of 3x12 planks, borders of 8x16 beams, and fill of compacted dirt and gravel. The steel tracks and wood ties of the railroad sit atop the bed, bordered by fencing of heavy-gauge steel wire strung on steel posts.

The bridge appears intact, with the possible exception of the fencing. The entire wood structure of the bridge is heavily charred by a fire. A local resident said that a fire was started by teenage vandals.

Information received from Union Pacific Railroad indicates that the bridge was built in 1938, but it appears older than that date. The 1938 date may indicate the last major maintenance phase.



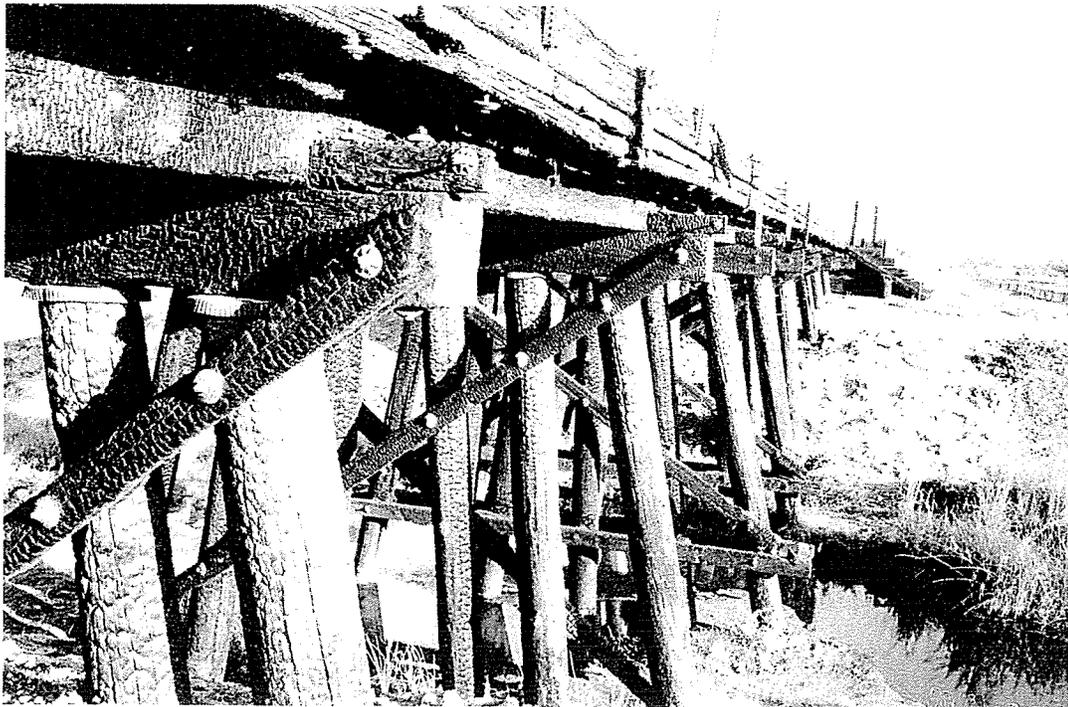
Facing south/southeast

C.

Railroad Bridge 9.



Facing southeast



Bridge facing south, west side of bridge showing charring from fire

C.

**CONTINUATION SHEET**

Trinomial CA-CCo-733H

Page 17 of 34

\*Resource Name or # San Pablo & Tulare Railroad, Central Pacific Railroad, Southern Pacific Railroad, Union Pacific Railroad

Railroad Bridge 10.

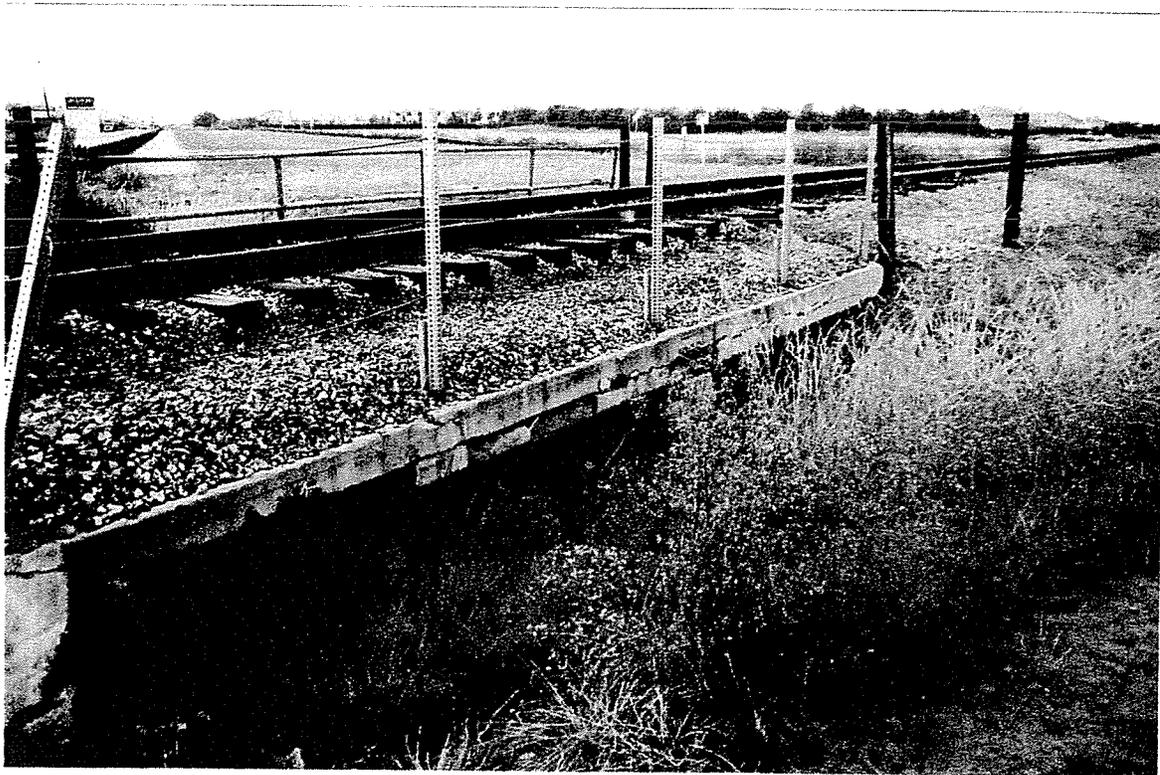
Location: USGS 7.5' Brentwood Quadrangle (1978); T1N, R2E, on the boundary between the Los Meganos Landgrant and Section 2. UTM 612830mE/4201320. On Union Pacific tracks, located at RR Milepost 59.8. This is found just east of the point where Minnesota Avenue makes a sharp turn to the south. The Mokelumne Aqueduct is apparently underground near this location. The bridge is over a small drainage. A large metal warehouse is immediately west of the bridge on the west side of Minnesota Avenue at the turn. A new subdivision is to the northeast.

Date: 1926

Built by the Southern Pacific Railroad, this timber bridge—measuring 30.9 feet long by about 12 feet wide—spans a small drainage. Now owned by the Union Pacific Railroad, the bridge is on a rail line that runs atop a raised aggregate bed, or levee, which in this area is about 25' across.

This is a concrete clad metal bridge made of iron girders, resting on a concrete piling in the center of the bridge and concrete supports at either end of the bridge. The bridge is approximately 2' high above the drainage. The remains of lettering saying "1926" is found on the east side of the bridge on the outside of the concrete piling.

The railway bed has fill of compacted dirt and gravel. The steel tracks and wood ties of the railroad sit atop the bed. It has a wire safety fence on the east side and a fence made of 4" pipes on the west side.



Facing northwest

Railroad Bridge 11.

Location: USGS 7.5' Brentwood Quadrangle (1978); T1N, R2E, Section 2; UTM 612700mE/4201500. On Union Pacific tracks, located at RR Milepost 59.53 This is found ~1375' north of Bridge 10 and the point where Minnesota Avenue makes a sharp turn to the south. A subdivision is found to the west of the bridge.

Date: 1905

Built by the Southern Pacific Railroad, this bridge—measuring 10 feet long by about 10 feet wide—spans a shallow drainage. Now owned by the Union Pacific Railroad, the bridge is on a rail line that runs atop a raised aggregate bed, or levee.

This bridge is constructed of two sets of three iron girders parallel to the tract, resting on a 12" x 8" wood cross beam at each end. Two 4" x 8" stacked wood beams create a retaining wall at each end. Ties sit directly on and perpendicular to the bridge girders. The bridge is approximately 1' high above the drainage.



Facing west, east side of bridge

C.

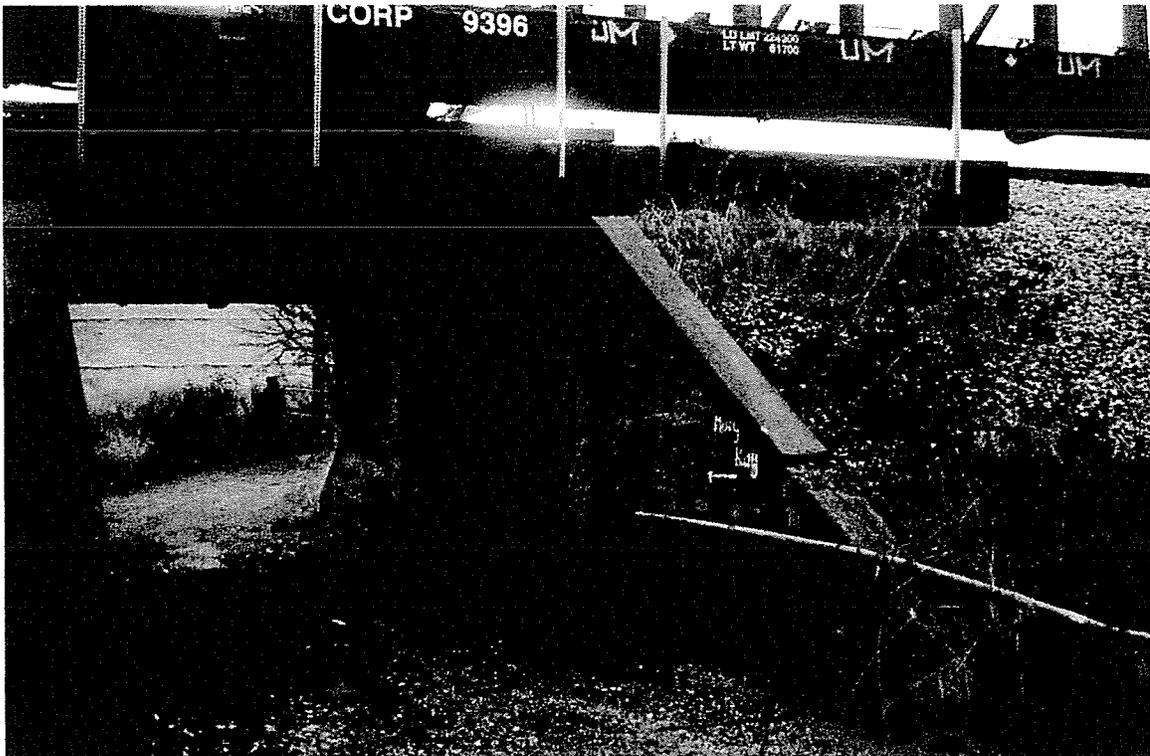
**Railroad Bridge 12.**

Location: USGS 7.5' Antioch South Quadrangle (1953, photorevised 1980); T2N, R2E, Section 28; UTM 608580mE/4205280mN. On the Union Pacific tracks, located at RR Milepost 56.57. This bridge is over a small road, which according to Union Pacific information, was called Giamone Lane. This probably once led to a residence which has been removed because of construction of the Highway 4 bypass. It is about 1100' southeast of the Highway 4 overcrossing.

Date: 1917

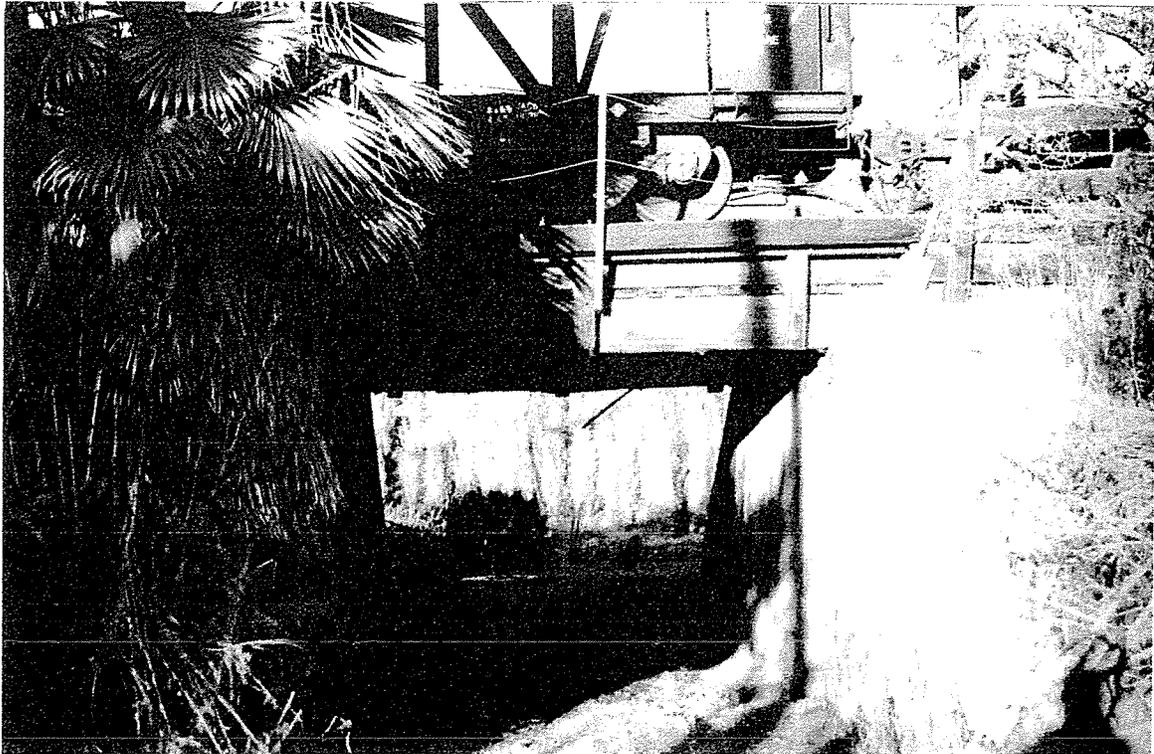
Built by the Southern Pacific Railroad and now owned by the Union Pacific Railroad, this is a small timber bridge—measuring 15.17' long by about 10 feet wide, which spans a former road or track. Rails and wood ties lie on thirteen 18" x 6" wood beams that rest on concrete retaining walls at each end of the bridge. The retaining walls are ~30' long and perpendicular to the track. The passage under the track is about 10' wide. The bridge is ~8' high above the road. The railway bed has borders of ~3x12 planks and fill of compacted dirt and gravel.

The bridge is on a rail line that runs atop a raised aggregate bed, or levee. A long line of stored railroad cars are found on the tracks in this vicinity, including on the bridge.



Facing west, east side bridge

Railroad Bridge 12.



Facing east, west side bridge



Railroad cars stored on tracks near bridge 12. Highway 4 in background.

C.

Railroad Bridge 13.

Location: USGS 7.5' Antioch South Quadrangle (1953, photorevised 1980); T2N, R2E, Section 29; UTM 607460mE/4205910mN. On Union Pacific tracks, located at RR Milepost 55.21, approximately ~2600' east of Hillcrest Avenue in Antioch.

Date: 1927

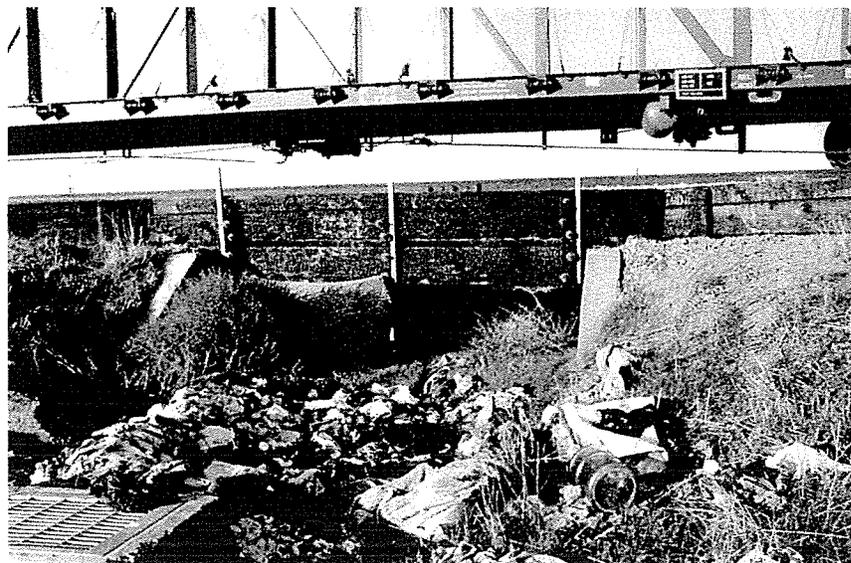
Built by the Southern Pacific Railroad, this timber bridge—measuring 15.17' long by about 12 feet wide—spans a small drainage. Now owned by the Union Pacific Railroad, the bridge is on a rail line that runs atop a raised aggregate bed, or levee.

The bridge is spanned by 18" wood beams resting on concrete retaining walls at either end. The bridge is approximately 3' high above the drainage. The railway bed has base of 3" x 12" planks, borders of ~12" and 4" planks, and fill of compacted dirt and gravel. The steel tracks and wood ties of the railroad sit atop the bed. The bridge is charred from fire, possibly set by people living under the bridge.

There are large amounts of modern trash under and adjacent to the bridge, remnants of a homeless encampment. There are stored railroad cars on the tracks above the bridge.



Facing south



Facing north

**Railroad Bridge 14.**

Location: USGS 7.5' Antioch North Quadrangle (1978); T2N, R1E, Unsectioned (Los Medanos Landgrant); UTM 603700mE/4206800. On the Union Pacific tracks, located at RR Milepost 52.78. This bridge spans L Street in Antioch.

Date: 1954

Built by the Southern Pacific Railroad and now owned by the Union Pacific Railroad, this is a large concrete bridge spanning L Street in Antioch. The concrete and metal bridge is on three sets of three concrete piers. There are also concrete abutments at either end. The concrete piers support seven metal beams running under the track. There is a metal safety fence on both sides of the bridge. The bridge has a 14"11" clearance above the road on its north side and 14" 10' on its south side. An elevated oil pipeline parallels the bridge's south side.



Facing north



Facing southeast

C.

**CONTINUATION SHEET**

Railroad Bridge 15.

Location: USGS 7.5' Antioch North Quadrangle (1978); T2N, R1E, Unsectioned (Los Medanos Landgrant); UTM 602780mE/4207020mN. On Union Pacific tracks, located at RR Milepost 52.15, approximately 800' east of Somersville Road in Antioch.

Date: 1953?

Built by the Southern Pacific Railroad, this concrete arch bridge/culvert measures about 15' long by about 12' wide. Including wood retaining walls, the entire bridge measures approximately 30' long. It spans a small drainage or channelized creek. Now owned by the Union Pacific Railroad, the bridge is on a rail line that runs atop a raised aggregate bed, or levee in Antioch.

The railway bed has borders of 6x18 planks, held in place by metal uprights, and fill of compacted dirt and gravel. The steel tracks and wood ties of the railroad sit atop the bed. There are two 6' long horizontal dressed granite slabs above the concrete on the north side and four ~3' long horizontal slabs on the south side. These appear to be ornamental facings, as they do not seem to support the bridge.

The General Inventory Report of bridges received from the Union Pacific appears to be in error with regard to its description of the bridge at MP 52.15. That description says the bridge is over Highway 4 and is 150' long. Bridge 15, described above, is at MP 52.15 (Somersville Road is at MP 52). Whether the date of construction is in error as well is unknown.



Facing south

Railroad Bridge 15.



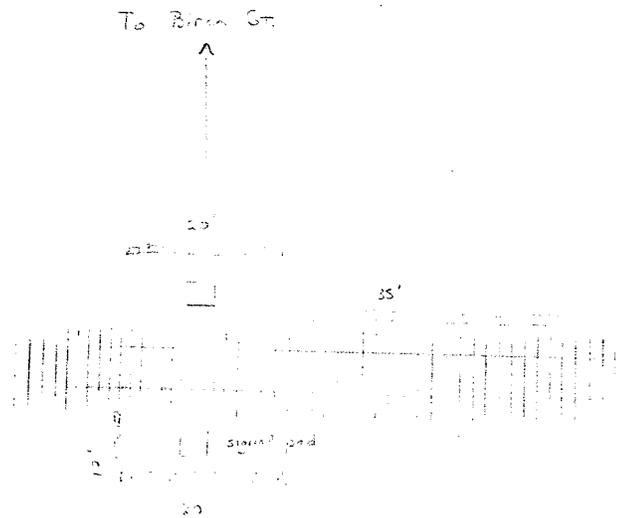
Facing north

C.

Feature 1:

Location: USGS 7.5 Brentwood Quadrangle (1978), T1N, R3E, Unsectioned (Los Meganos Landgrant). UTM 614820mE/4198610mN. Located at the foot of Birch Street in Brentwood, on both sides of the railroad track.

This roughly rectangular feature consists of lines of cut granite stones, remnants of stone retaining walls, which are found on either side of and just below the track. This may once have been the site of a road overcrossing of the track. Portions of a retaining wall continue to the south on the east side of the tracks. Only portions of the walls can be seen. Parts may have been either removed or buried in the railroad berm. Graffiti has been painted on the rocks. Two concrete pads can be seen on either side of the track, probable bases for former signals. These are roughly 4 1/2' square with a rectangular 2 1/2' extension on one side (see photo below, page 26). There are bolts embedded in the corners.



Feature 1, facing east. Birch Street in background

Feature 1



Feature 1, facing west.

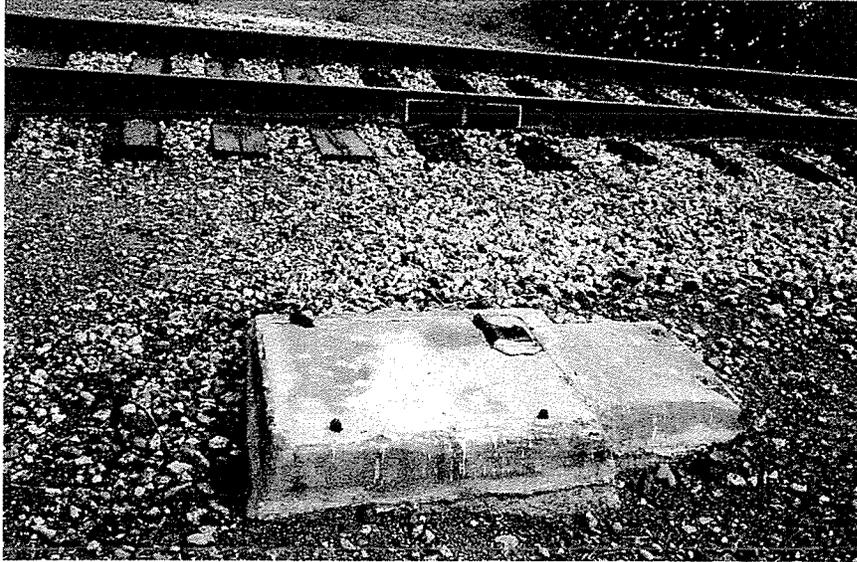


Feature 1, east side, facing southwest. Possible former signal pad in right foreground.

C.

**CONTINUATION SHEET**

Feature 1a: Possible concrete pad for former signal. Approximately 5' square with 3' extension on one side. It has bolts near the corners.



Facing west

Feature 2. A concrete pad similar to Feature 1a (above). Approximately 4' square with 2.5' extension. It has a 12" x 4" rectangular hole in it and remnants of electric wires.

Location: USGS 7.5' Brentwood Quadrangle (1978), T1N, R3E, Section 33. UTM 618320mE/ 4193900mN. Approximately 1300' northwest of Bridge 6, adjacent to the north side of the railroad track.

Feature 3. A concrete pad similar to Feature 1a (above). Approximately 5' square with 3' extension. It has bolts near the corners.

Location: USGS 7.5' Brentwood Quadrangle (1978), T1N, R3E, Section 33. UTM 618420mE/ 4193680mN. Approximately 800' northwest of Bridge 6, adjacent to the south side of the railroad track.

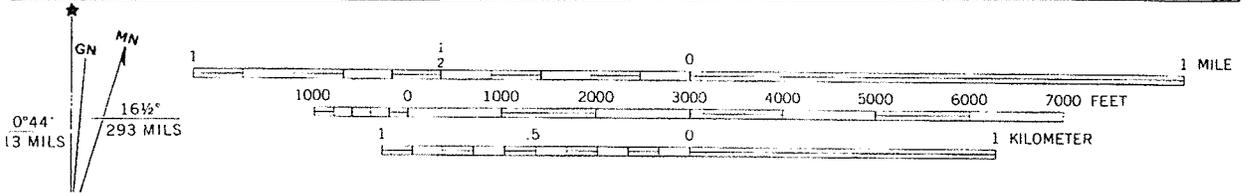
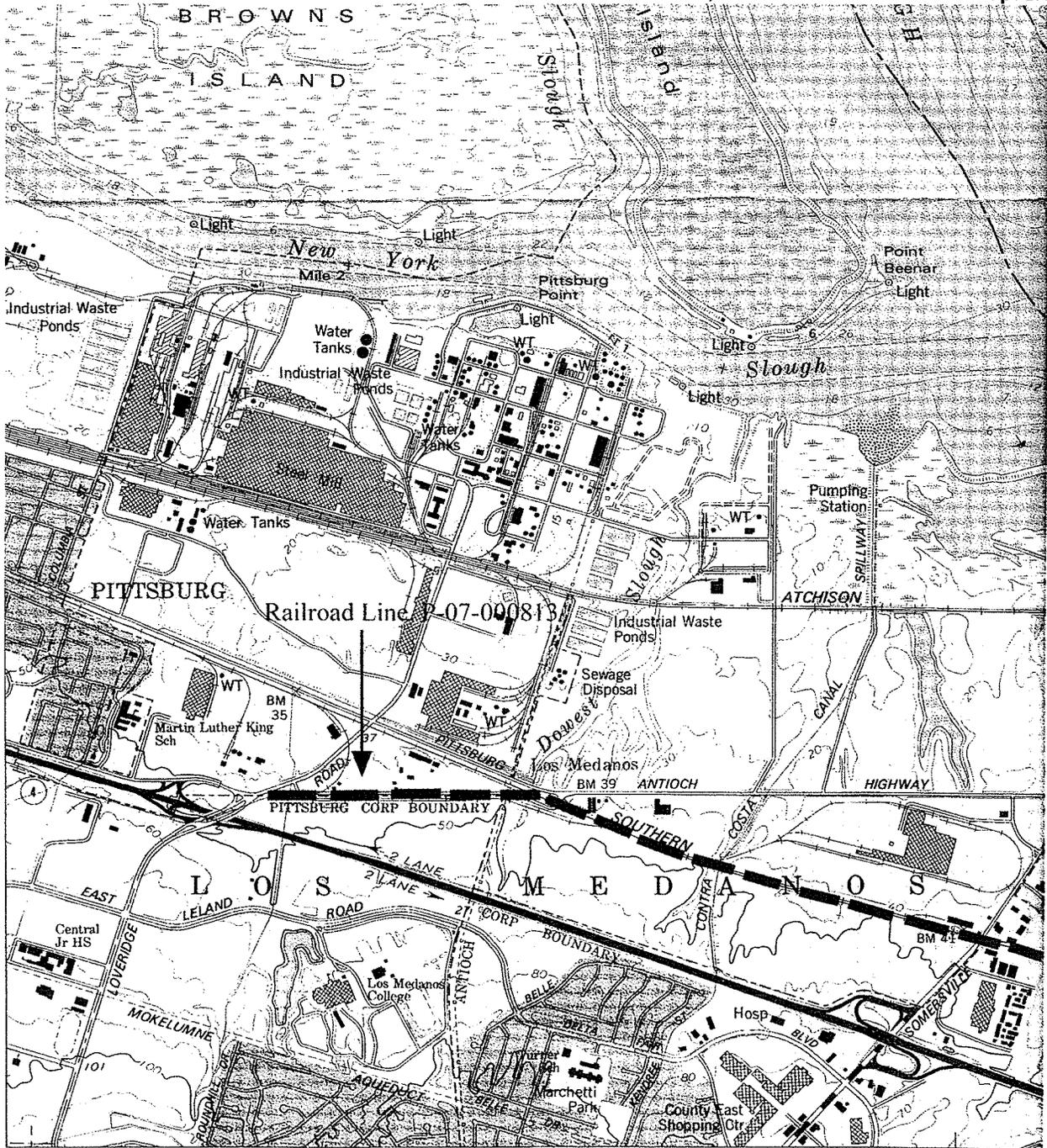
C.

**LOCATION MAP**

\*Map Name: Antioch N

\*Scale: 1:24,000

\*Date of Map: 1978



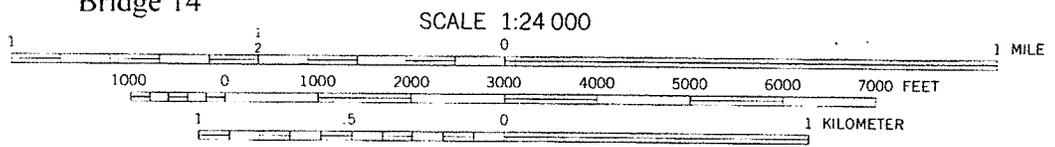
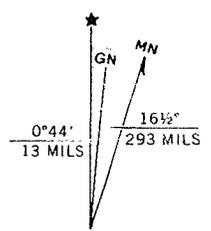
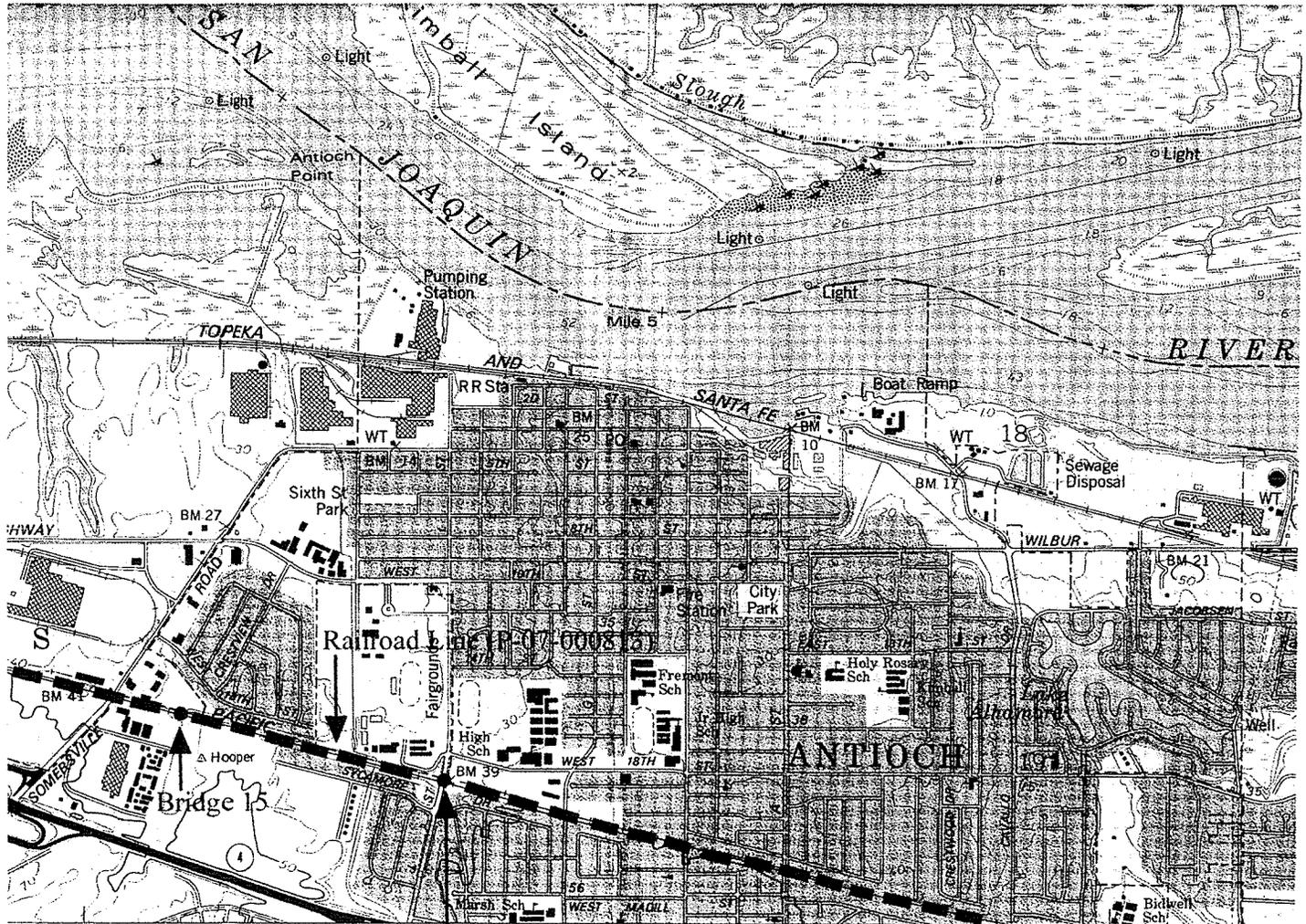
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**LOCATION MAP**

\*Map Name: Antioch N

\*Scale: 1:24,000

\*Date of Map: 1978



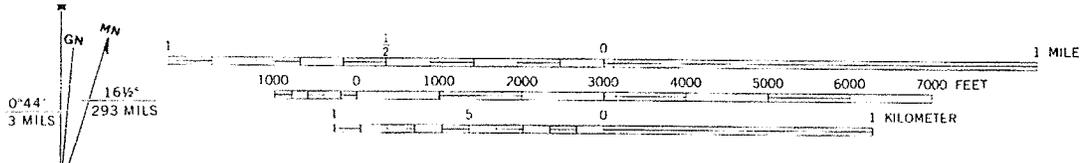
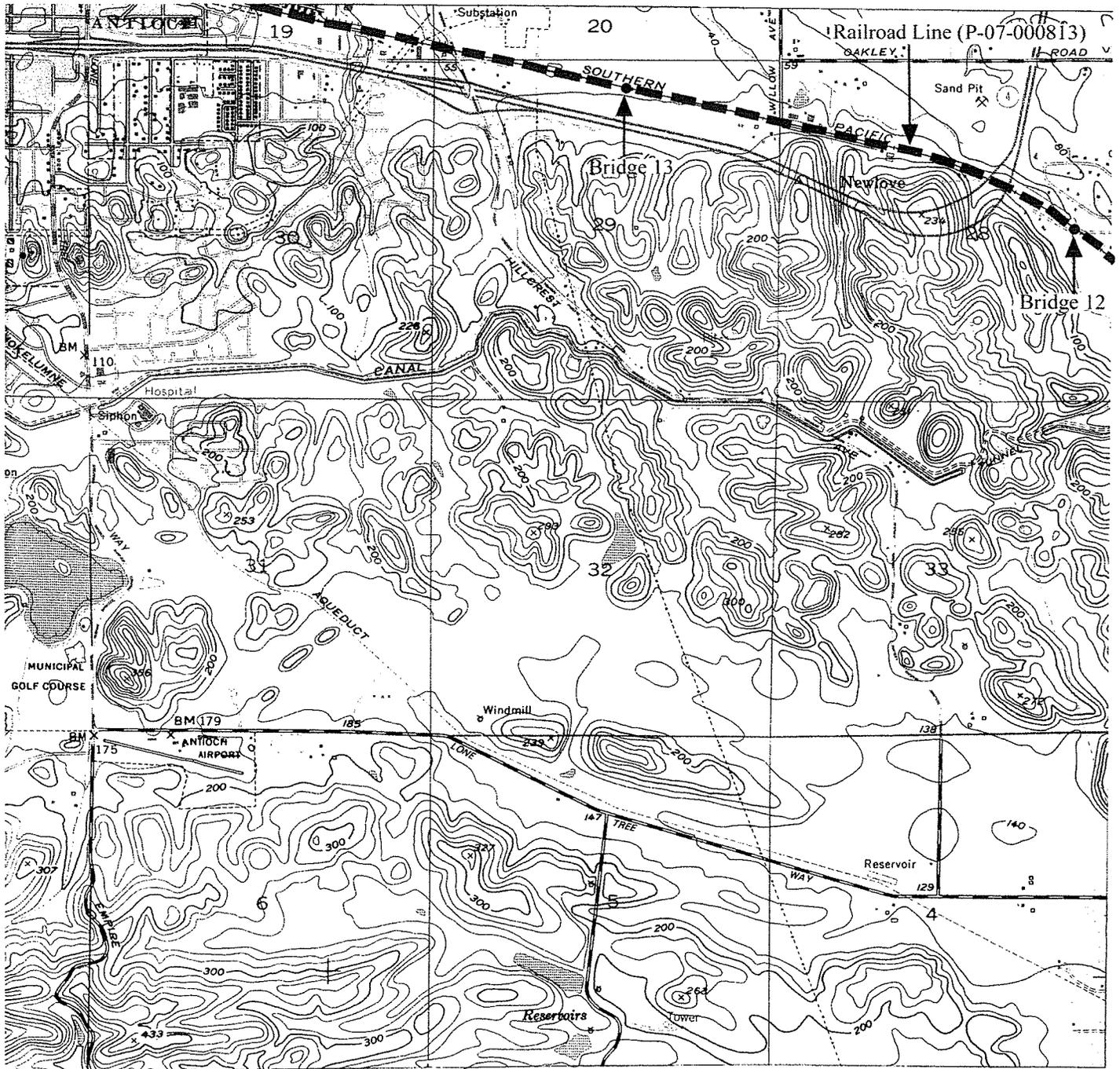
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**LOCATION MAP**

\*Map Name: Antioch S

\*Scale: 1:24,000

\*Date of Map: 1953, photorevised 1980

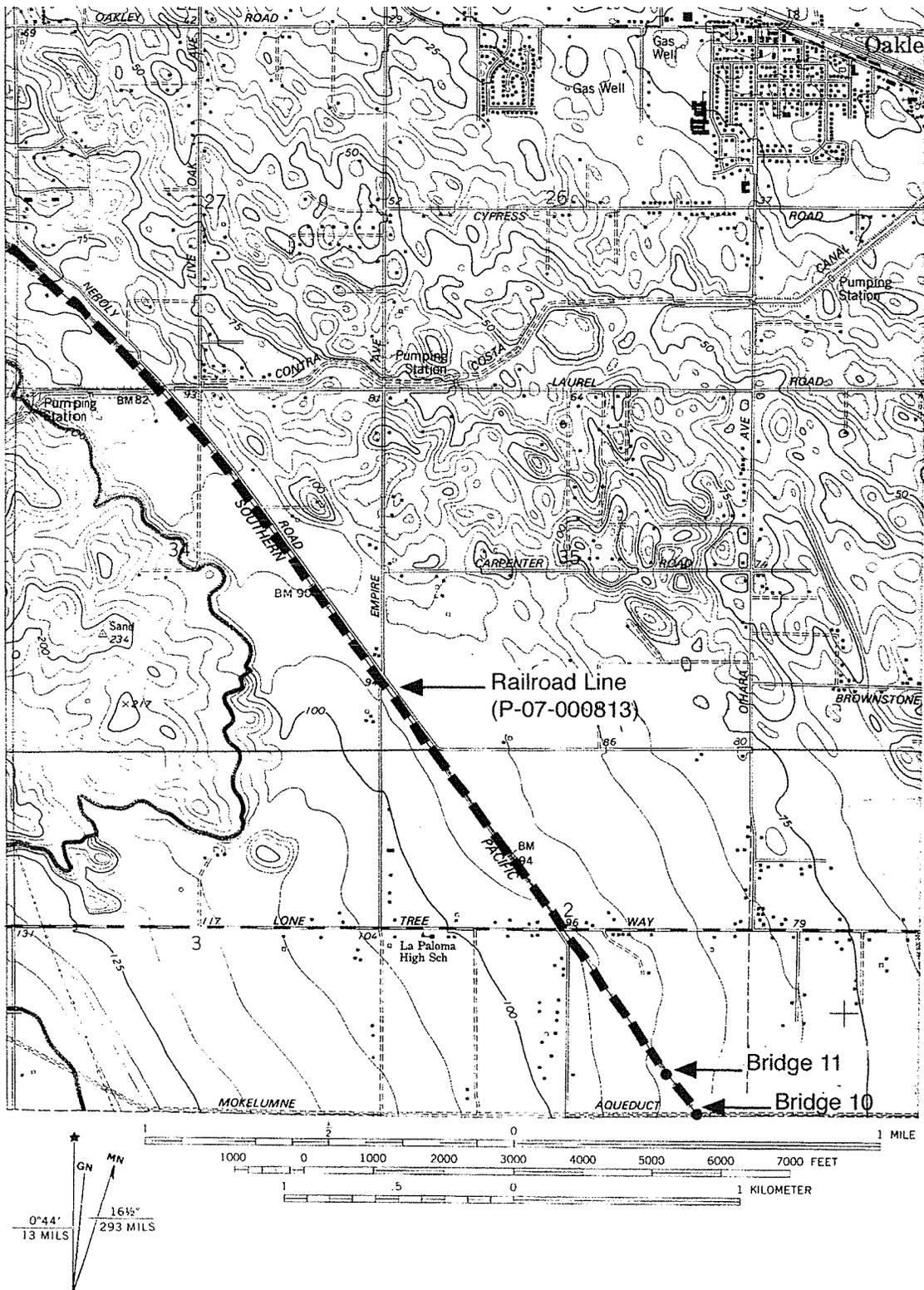


C

\*Map Name: Brentwood

\*Scale: 1:24,000

\*Date of Map: 1978

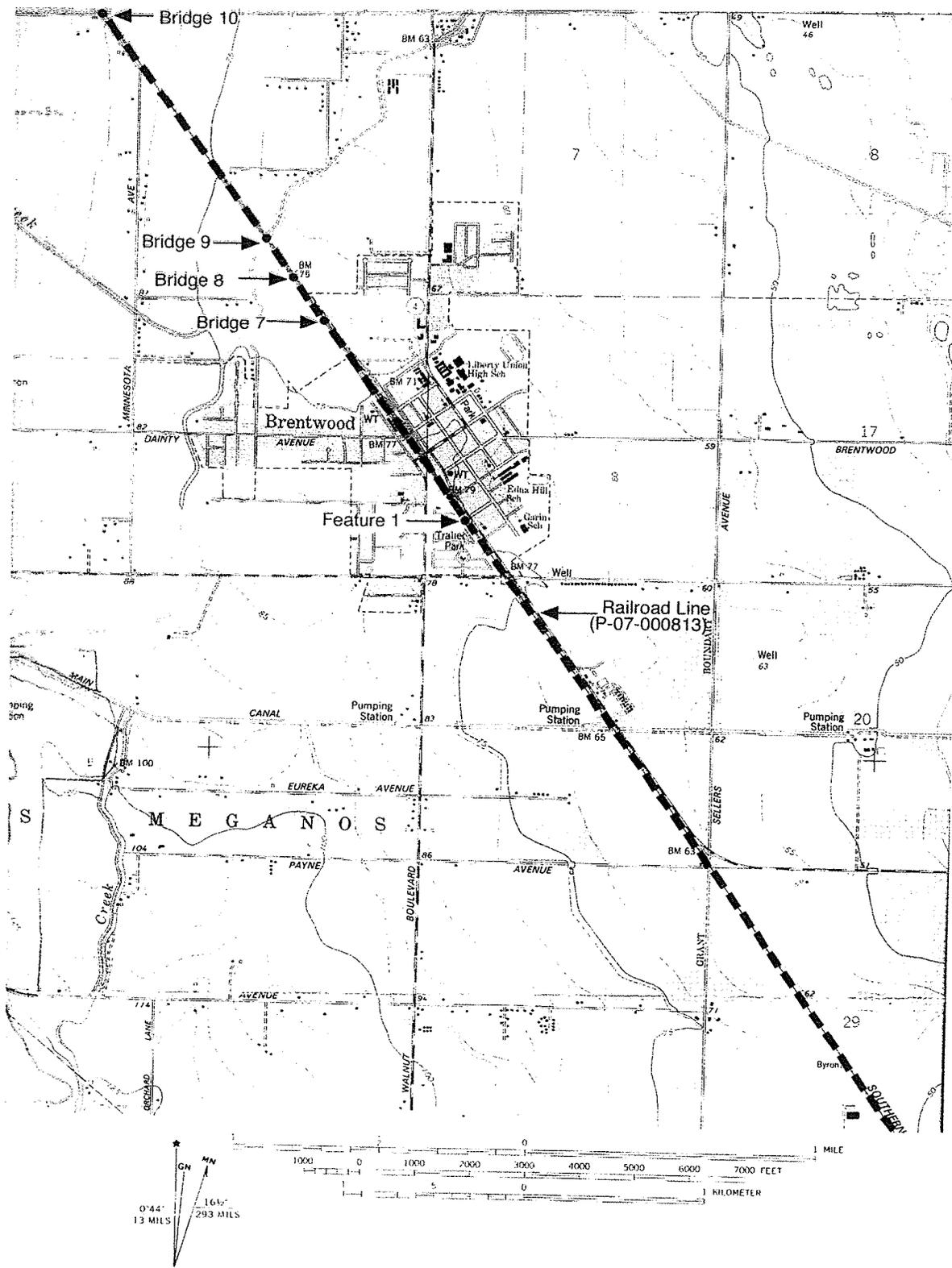


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\*Map Name: Brentwood

\*Scale: 1:24,000

\*Date of Map: 1978

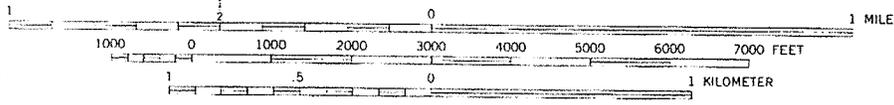
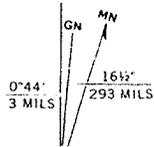
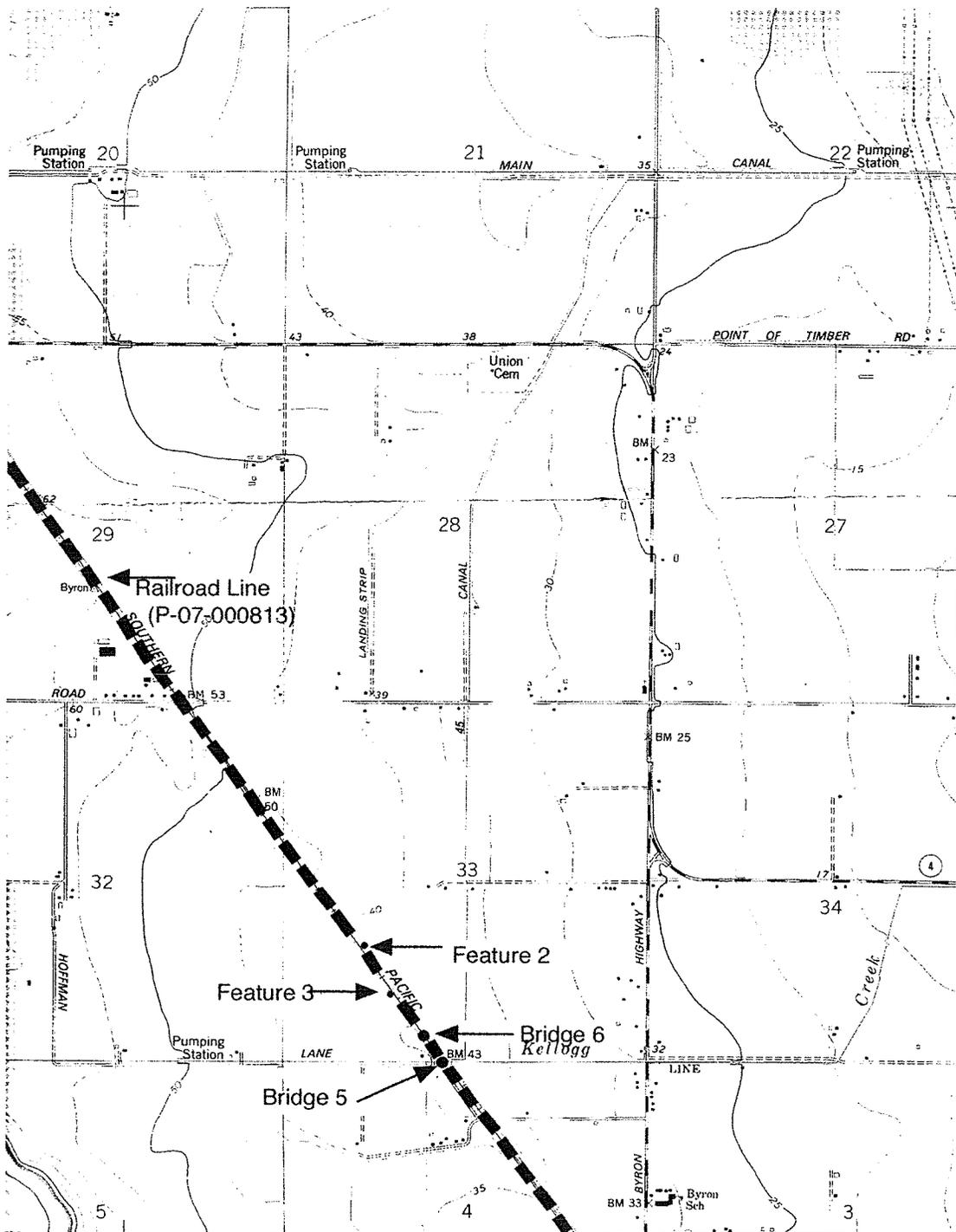


C.

\*Map Name: Brentwood

\*Scale: 1:24,000

\*Date of Map: 1978

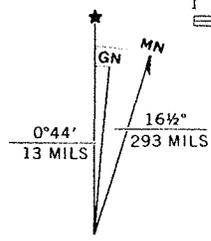
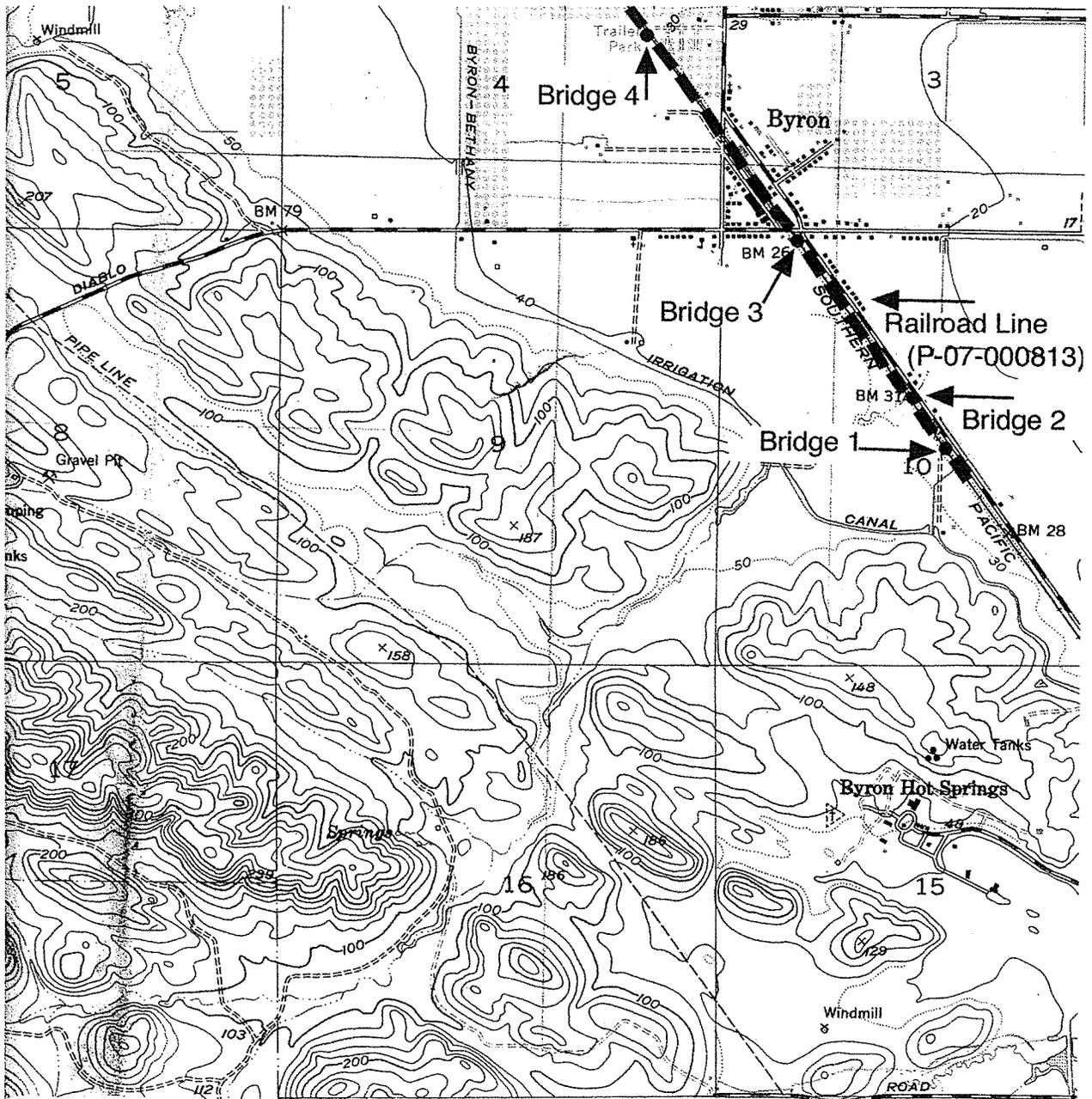


C.

\*Map Name: Byron Hot Springs

\*Scale: 1:24,000

\*Date of Map: 1953, photorevised 1968



C.