DOCKETED	
Docket Number:	24-OPT-04
Project Title:	Potentia-Viridi Battery Energy Storage System
TN #:	260825
Document Title:	DR Response 1 - Appendix C Part 4, DPRs to Attachment 1, Revised Cultural Resources Inventory and Evaluation Report
Description:	Part 4 of the DPR forms that are included as Appendix C of the Revised Cultural Resources Inventory and Evaluation Report
Filer:	Ronelle Candia
Organization:	Dudek
Submitter Role:	Applicant Consultant
Submission Date:	12/26/2024 8:25:03 AM
Docketed Date:	12/26/2024

Attachment 1 Appendix C Part 4

Revised Cultural Resources Inventory and Evaluation Report:DPRs

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET 5

Primary # P-39-000098
HRI #
Trinomial CA-SJO-2924

Resource Name: TC-7
Recorded by: Joy Longfellow
Date: December 27, 2006
☒ Continuation

Single rail on ties, parallel rail has been removed. Rails missing from ties near center of photo. View to west.

Ties with rails removed; some tie plates remain. View to west.

DPR 523L (1/95)

Remnant rails inside airport business park. View northwest toward Airport Way.

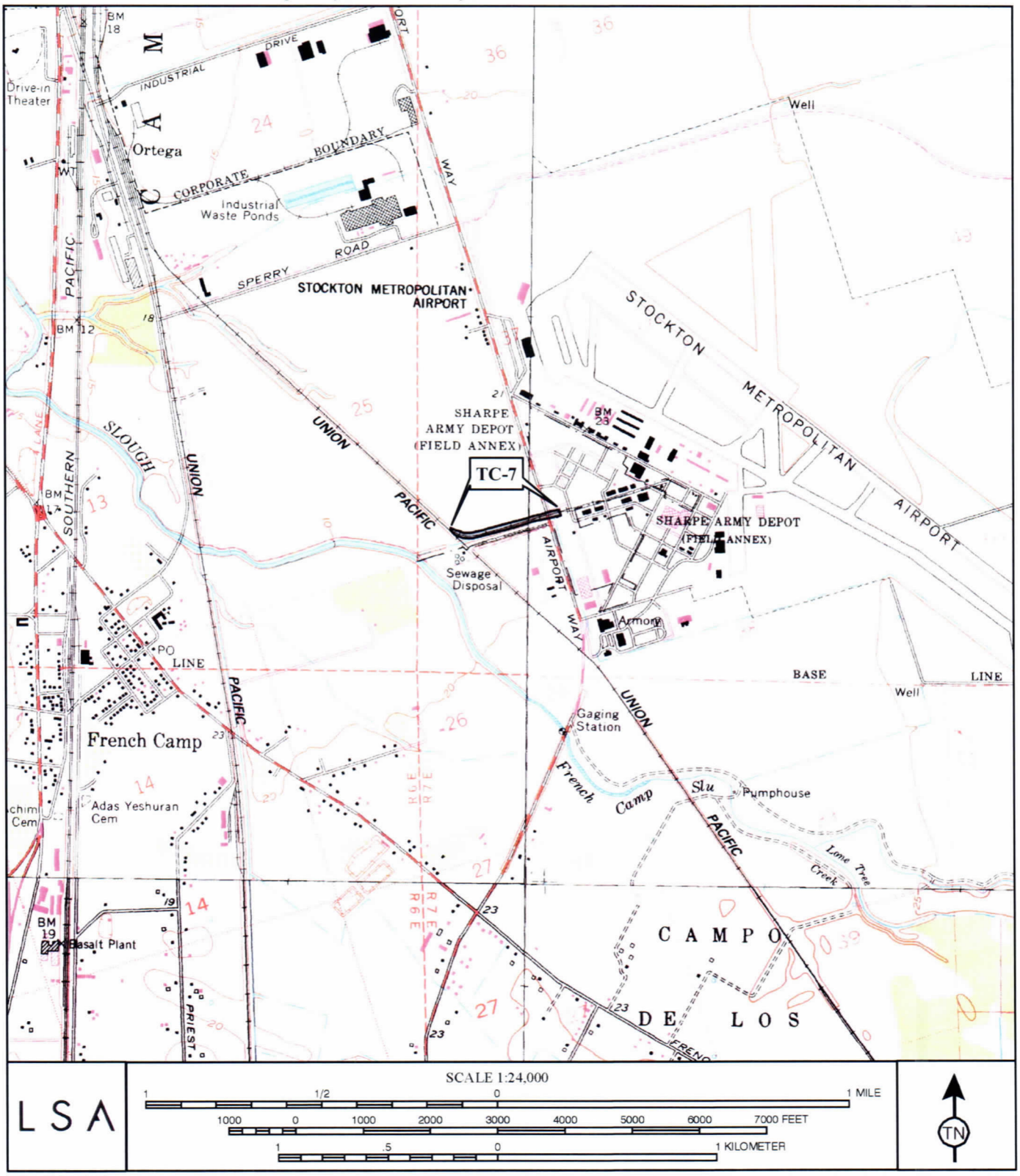
Close up of crossing signal remains, with vertical guard rails.

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

Primary # P-39-000098
HRI #
Trinomial CA-SJO-292H

Resource Name: TC-7

Map Name: USGS 7.5' Quad, *Stockton West, Calif.*; *Stockton East, Calif.*; *Lathrop, Calif.*; *Manteca, Calif.*; **Scale:** 1:24,000 **Date of Map**: 1968 (1987); 1968 (1987); 1952 (1987); 1996



LSA

DPR 523J (1/95)

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

PRIMARY RECORD

Primary # P-39-000098
HRI #
Trinomial
NRHP Status Code 6
Other Listings
Review Code _____ Reviewer _____ Date _____

Page 1 of 8 (6) *Resource Name or #: (Assigned by Recorder) WPRR Segment (MR #5) 8/05

P1. Other Identifier:

*P2. Location: ☐ Not for Publication ☒ Unrestricted *a. County Sacramento San Joaquin

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

*b. USGS 7.5' Quad Stockton West, CA Date 1978 T 1N ; R 6E ; ___ ¼ of ___ ¼ of Sec ___ ; MD B.M.

c. Address N/A City Zip N/A

d. UTM: (Give more than one for large and/or linear resources) Zone: 10 ; 652186 mE/ 4195694 mN

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

The segment of railroad recorded is located within the boundaries of Campo de los Franceses land grant in a semi-rural area at the intersection of Sperry Road and McKinley Avenue. The track segment parallels McKinley Road and crosses Sperry Road.

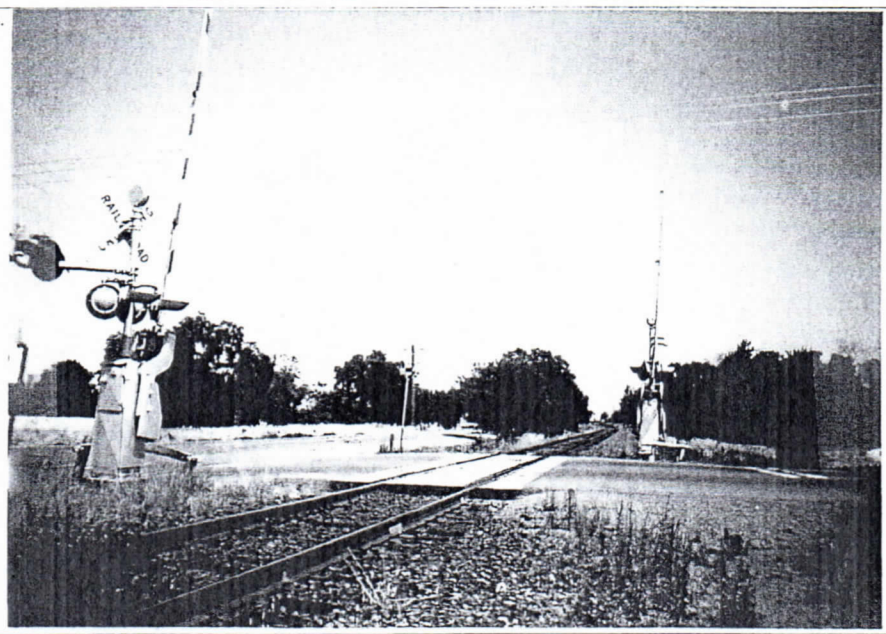
*P3a. Description (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The segment of Western Pacific Railroad line that crosses the study area is typical of a well-maintained rail line. The ties and track rest on very fresh basalt rock ballast. The ties are uniform and exhibit little wear or weathering. The rails bear date stamps "E CC CF&I 1979 III" indicating that they were manufactured in 1979 and laid in this location around that time. Vegetation on the tracks and ballast is minimal indicating regular clearing. A recently constructed concrete grade crossing carries the line across Sperry Road. The grade crossing features modern safety equipment (warning lights, bells, gates, and so forth.) About 1/8-mile north the intersection a modern bridge carries the track over French Camp Slough. This bridge has iron bents and cross ties, an iron girder substructure, iron faced concrete abutments, and steel railings.

*P3b. Resource Attributes: (List attributes and codes) HP39 Other

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

P5a.



P5b. Description of Photo: (View, date, accession #) facing northeast

*P6. Date Constructed/Age and Sources: ☒ Historic ☐ Prehistoric ☐ Both
1909

*P7. Owner and Address:
Union Pacific Railroad
1416 Dodge Street
Omaha, NE 68179

*P8. Recorded by: (Name, affiliation, and address)
David S. Byrd, Jones & Stokes
2600 V Street
Sacramento CA, 95818

*P9. Date Recorded: 06/12/02

*P10. Survey Type: (Describe)
Intensive

*P11. Report Citation: (Cite survey report and other sources, or enter "none.") Jones & Stokes 2002 *Historic Resources Evaluation Report, I-5/French Camp Road Interchange and Sperry Road Extension Project, San Joaquin County, California.* July 2002. Sacramento CA.

*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):

DPR 523A (1/95) *Required Information

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

Primary # P-39-000098
HRI #

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 2 of 5

*NRHP Status Code 6

*Resource Name or # (Assigned by recorder) WPRR Segment (MR #5)

B1. Historic Name: Western Pacific Railroad

B2. Common Name: Union Pacific Railroad

B3. Original Use: Railroad B4. Present Use: Railroad

*B5. Architectural Style: Utilitarian

*B6. Construction History: (Construction date, alterations, and date of alterations)
Completed in 1909. Various alterations and upgrades over the years.

*B7. Moved? [X] No [ ] Yes [ ] Unknown Date: Original Location:

*B8. Related Features:

B9a. Architect: Unknown b. Builder: Unknown

*B10. Significance: Theme: Transportation Area: San Joaquin County, California

Period of Significance: 1909-1957 Property Type: Railroad 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 segment of railroad within the study area is in the alignment of the Western Pacific main line. The Western Pacific Railroad (WPRR) began when the Western Pacific Railway (WPRy) was incorporated in 1903 to build a line from Salt Lake City across the northern Great Basin, through the Feather River Canyon to Marysville and Sacramento. From Sacramento the line extended south to Stockton then northwest to Oakland and San Francisco. Initial construction took 6 years, with the last spike being driven on the Spanish Creek Trestle near Keddie, California in 1909. In 1916, WPRy was sold and reorganized as the Western Pacific Railroad (WP). Over the next decade, WP bought out several smaller lines in the Central Valley, extending service south of Stockton and north to Chico. In 1926, Arthur Curtis James, who already had large holding in the Great Northern, Northern Pacific, and Burlington railroads, acquired WP and set about linking the line with the Great Northern line in Bieber. The completion of that link in 1931 made WP a major north-south carrier in addition to its already established east-west service. (See Continuation Sheet)

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

*B12. References:

See references cited in Jones and Stokes, *Historic Resource Evaluation Report: I-5/French Camp Road Interchange and Sperry Road Extension Project, San Joaquin County, California*. July 2002. Sacramento, CA.

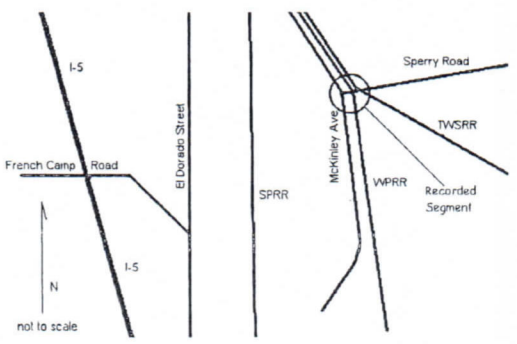
B13. Remarks:

*B14.Evaluator: David S. Byrd

*Date of Evaluation: June 28, 2002

(This space reserved for official comments.)

(Sketch Map with north arrow required.)



*Required Information

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

Primary # P-39-000098
HRI #
Trinomial

Page 3 of 5 *Resource Name or #: (Assigned by Recorder) WPRR Segment (MR #5)

L1. Historic And/or Common Name:

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)
North end of segment: 10/ 652155mE;4195867mN
South end of segment: 10/ 652242mE;4195470mN

L3. Description: (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

The segment of Western Pacific Railroad line that crosses the study area is typical of a well-maintained rail line. The bed is supported by a well maintained earthen berm. The ties and track rest on what appears to be fresh basalt rock ballast. The ties are uniform and exhibit little wear or weathering.

L4. Dimensions: (In feet for historic features and meters for prehistoric features)
a. Top Width 20-24 feet
b. Bottom Width 40 feet
c. Height or Depth 10 feet
d. Length of Segment 1500'

L5. Associated Resources:

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

L6. Setting: (Describe natural features, landscape characteristics, slope, etc., as appropriate.)
Riparian lands and agricultural fields; modern industrial buildings, modern roads.

L7. Integrity Considerations:
See Significance Statement on Building, Structure, and Object Record

L8b. Description of Photo, Map, or Drawing (View, scale, etc.)
Facing south

L9. Remarks:

L10. Form Prepared by: (Name, affiliation, and address)
David S. Byrd
Jones & Stokes
2600 V Street
Sacramento, CA 95816

L11. Date: 6/28/02

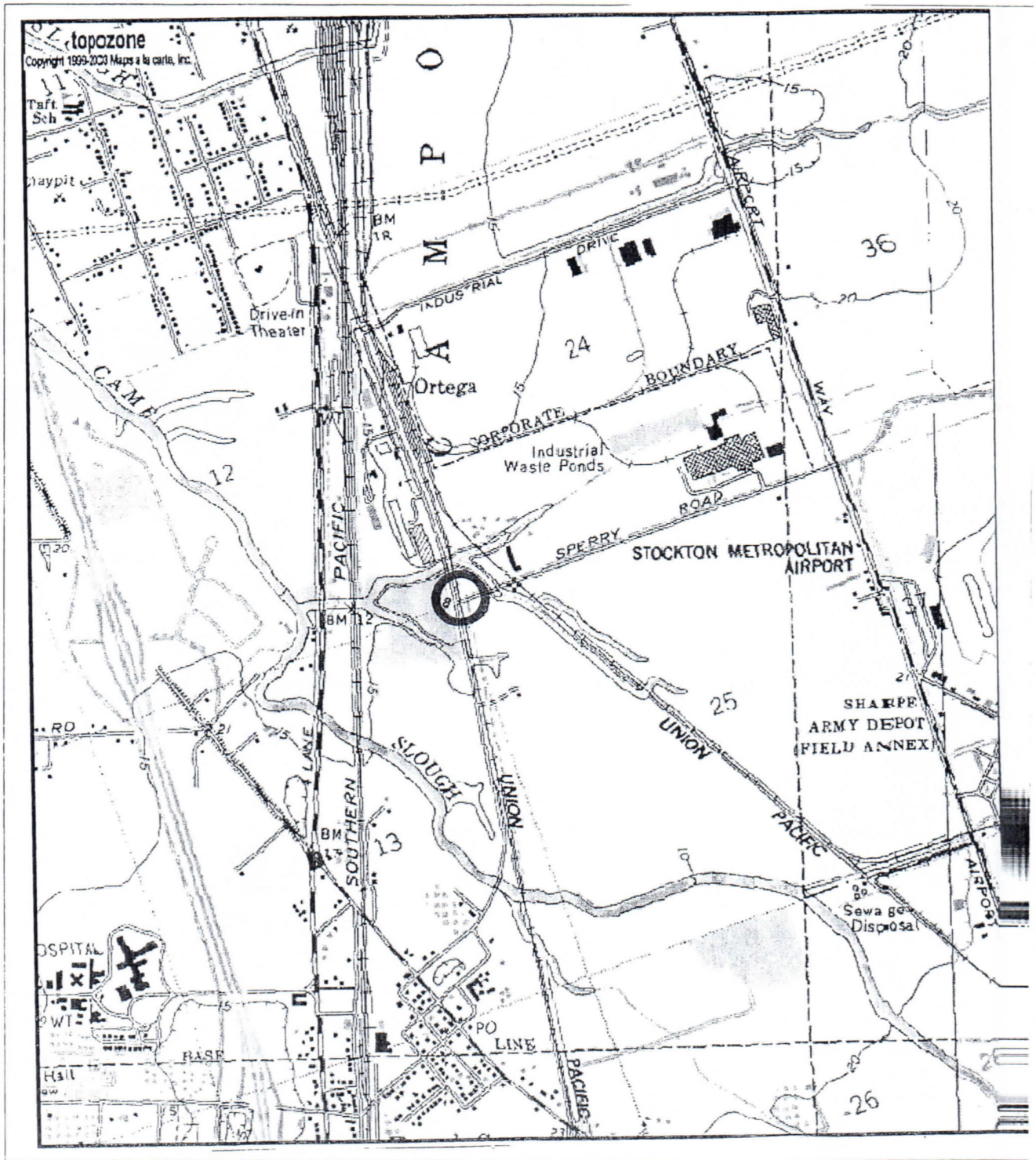
State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary # P-39-000098
HRI #
Trinomial

Page 4 of 5 *Resource Name or #: (Assigned by Recorder) WPRR Segment (MR #5)

*Map Name: Stockton West, USGS topo *Scale: 1:24 *Date of Ma p: 1978



DPR 523J (1/95) *Required Inform

Significance (Continued)

Three years later, WP reorganized yet again, this time teaming with the Rio Grande and Burlington railroads to operate the *Exposition Flyer* between Chicago and Oakland. In 1949, the three railroads inaugurated their most famous line, the *California Zephyr*, a streamlined, high-speed train also running from Chicago to Oakland. Scheduled to travel the most scenic part of the trip by day, the *California Zephyr* was equipped with "Vista-Domes" so that passengers could better enjoy the view. WP continued operate its section of the *California Zephyr* until 1970. Although WP managed to fend off attempts at acquisition by Southern Pacific Railroad (SPRR) in the early 1960s, Union Pacific Railroad (UPRR) successfully bought out WP in early 1980. Two years later, WP became the Fourth Operating District of UPRR. In response to employee requests, that designation changed to the Feather River Division of the Western District in 1985.

The segment of WPRR does not appear to meet the criteria for listing in the National Register primarily because it lacks integrity to its period of significance. The period of significance for this railroad segment is from 1909 to 1957, or the period of initial construction to an arbitrary date 45 years prior to the date of evaluation. The railroad line does not appear to have an association with a person or persons significant to our past nor does it appear to have embody the characteristics of a type, period, or method of construction, as such it does not appear to meet National Register Criteria B or C. An argument for significance under Criterion A might possibly be made because during this period WP operated successfully as a regional-size railroad that opened up markets not available to other larger railroad companies. This is especially important in light of the fact that it operated for this time in the shadow of the giants SPRR, UPRR, and Sante Fe RailRoad. It was also during the period of significance that WP, along with Burlington Railroad and the Rio Grande Railroad began running its signature *California Zephyr* service.

However, even though an argument for historical significance might be made under Criterion A, the segment of railroad within the study area does not appear to be eligible for listing because it lacks integrity of design, materials, workmanship, setting, and feeling to its period of significance. Loss of integrity, if sufficiently great, will render a resource ineligible for listing in the National Register irrespective of significance. The segment of WP line that crosses the study area is typical of a well-maintained railroad line. In other words, it does not appear that this section retains any of the engineering features or materials from the period of significance 1909 to 1957. The berm that supports the track is well maintained, with even geometry and indication of machined maintenance. The ties and track rest on fresh basalt rock ballast. The ties are uniform and exhibit little wear or weathering. The rails bear date stamps 1979 indicating that the track in this segment was laid just over 20 years ago. The bridge that carries the railroad across French Creek Slough is of decidedly modern construction. In essence, the segment of railroad in the study area is a modern railroad track that happens to follow a historic alignment. Furthermore, the sense of time and place is diminished by the intrusion of a large modern warehouse and other industrial buildings. Standing at the recorded point, one does not get the sense of an early twentieth century railroad line. Because it lacks integrity of design, materials, workmanship, setting, and feeling, the segment of WPRR does not appear to meet the criteria for listing in the National Register. Additionally, in accordance with Section 15064.5(a)(2)-(3) of the CEQA Guidelines and using the criteria outlined in Section 5024.1 of the California Public Resources Code, the buildings do not appear to be historical resources for the purposes of CEQA.

Sheet 5

P-39-000098 ME #5

SJO-226

***P2. Location:**

***b. USGS 7.5' Quad:** Thornton, Lodi North, Lodi South **Date:** 1968, photoreviesed 1976

T 3N, **R** 5E, **N ¼ of Sec** 1;
T 3N, **R** 6E, **E ½ of Sec** 6, NE ¼ & S ½ **of Sec** 7;
T 4N, **R** 5E, **N ½** & SE ¼ **of Sec** 36;
M.D. **B.M.**

d. UTM Zone 10, NAD83:

Northwest corner: 641855 mE, 4224465 mN
Southeast corner: 643942 mE, 4219952 mN

***P3a. Description:** 643942

SWCA documented a 3-mile long segment of the Union Pacific Railroad (formerly the Western Pacific Railroad) within the project area for the proposed PG&E Line 108 gas pipeline segment replacement. The railroad is a single track on a raised ballast bed running north-northwest–south-southeast, and it makes crossings at intersections with several roads running east–west. The railroad crosses the Main Canal with a small wooden trestle bridge (Figure 1, see also: Sketch Map), and it crosses an unnamed canal with two large steel culvert pipes (Figure 2). SWCA observed the track to be in identical condition to that described by Larson and Johnson (2003). The current project proposes to use a jack-and-bore method to directionally drill beneath the railroad and associated structures and avoid direct impacts to the resource (see Sketch Map). The following update documents the presence of the railroad segment near the current project area and excluded a formal significance evaluation.

Larson and Johnson (2003) recorded an approximately 0.5-km-long (0.31-mile-long) segment of P-39-000098 at its intersection with Highway 12 (Kettleman Lane). This recording included a segment measuring approximately 250 m (820 feet) long within the project area at its southern terminus. Larson and Johnson noted a single track with heavy-gauge modern rails, pressure-treated ties, and a crushed granite ballast berm. The ballast berm at that location was 30–40 feet wide and 8 feet high. Modern crossing guards and a concrete plate deck were present at the crossing with Highway 12. Larson and Johnson stated that "the integrity of this resource has been compromised through replacement of its track, ballast, ties, and other engineering features following Union Pacific's 1983 acquisition of the Western Pacific." Additionally, Garcia and Associates (2009) recorded a 150-m-long (500-foot-long) segment of the Western Pacific Railroad at a location 1.5 km (0.93 mile) north of the project area. The rails they observed appeared to date to the late 1960s.

According to site records provided by the CCIC, the Western Pacific Railroad was built ca. 1905–1909 to link the San Francisco Bay to the Great Basin via the Central Valley. Numerous upgrades and replacements have been made to the line since its original construction. Western Pacific sold to Union Pacific in 1983, and Union Pacific subsequently modernized the line to accommodate for larger trains and heavier loads (Hatoff et al. 1995).

***P8. Recorded by:** (Name, affiliation, and address)
T. Spillane and D. Alexander, SWCA Environmental Consultants, 60 Stone Pine Rd. Half Moon Bay, CA 94019

***P9. Date Recorded:**
June 2, 2015

***P10. Survey Type:** (Describe)
Intensive pedestrian survey

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.")

Garcia and Associates (GANDA)
2009 *Site Form, P-39-000098*. On file at Central California Information Center, California State University, Stanislaus.

Hatoff, Brian, B. Voss, S. Waechter, S. Wee, and V. Bente
1995 *Cultural Resources Inventory Report for the Proposed Mojave Northward Expansion Project*. Unpublished technical report submitted by Woodward-Clyde Consultants to Mojave Pipeline Company. On file at Central California Information Center, California State University, Stanislaus, Report No. 246897.

Larson, B. and E. Johnson
2003 *Site Form, P-39-000098*. California DPR 523A, E, K, J, L Forms. On file at Central California Information Center, California State University, Stanislaus.

Van der Porten, Peter, Heather Gibson, and Chris Millington
2015 *Archaeological Survey Report for the Pacific Gas and Electric Company's Line 108 Replacement Project, Route 9 (R-009), San Joaquin County, California*. Unpublished technical report prepared by SWCA Environmental Consultants and submitted to PG&E. On file at Central California Information Center, California State University, Stanislaus.

Figure 1. P-39-000098, Western Pacific/Union Pacific Railroad bridge over Main Canal, view facing east.

Figure 2. Canal running through culverts beneath Western Pacific/Union Pacific Railroad, view facing west.

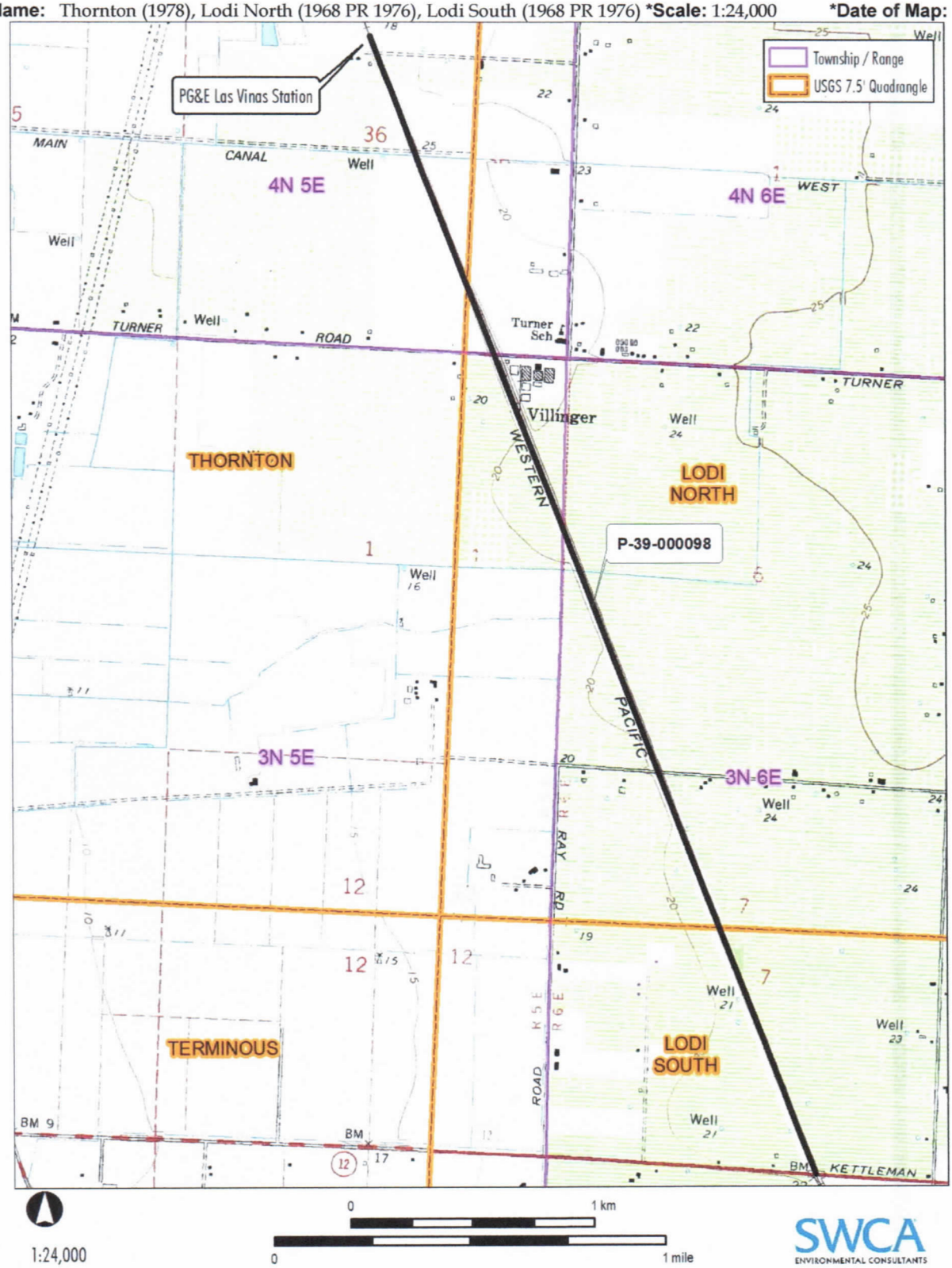
State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary # P-39-000098
HRI#
Trinomial CA-SJO-000292H

 ***Resource Name or #:**

***Map Name:** Thornton (1978), Lodi North (1968 PR 1976), Lodi South (1968 PR 1976) ***Scale:** 1:24,000 ***Date of Map:** 2015



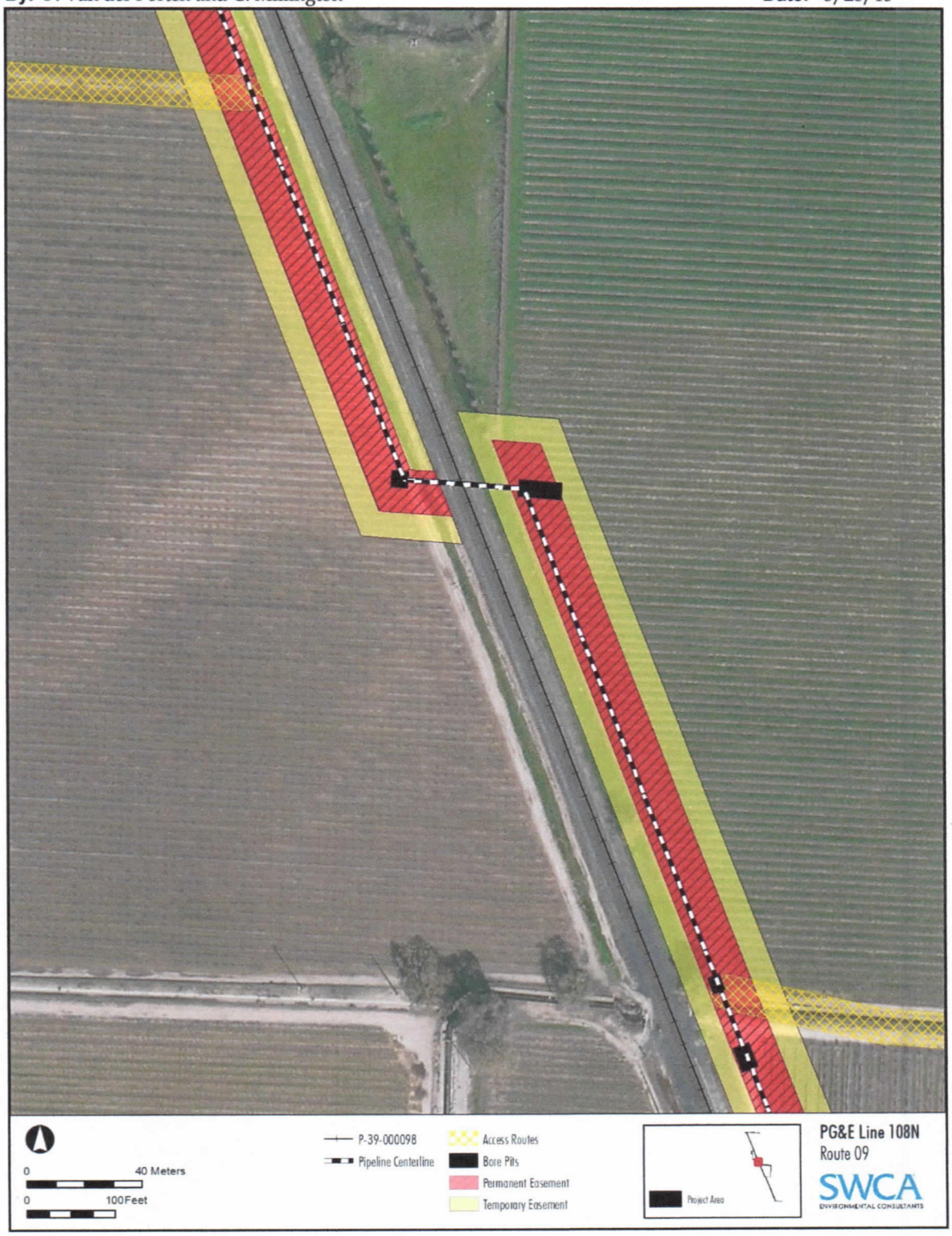
*Required information

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
SKETCH MAP

Primary # P-39-000098
HRI#
Trinomial CA-SJO-000292H

 ***Resource Name or #:**

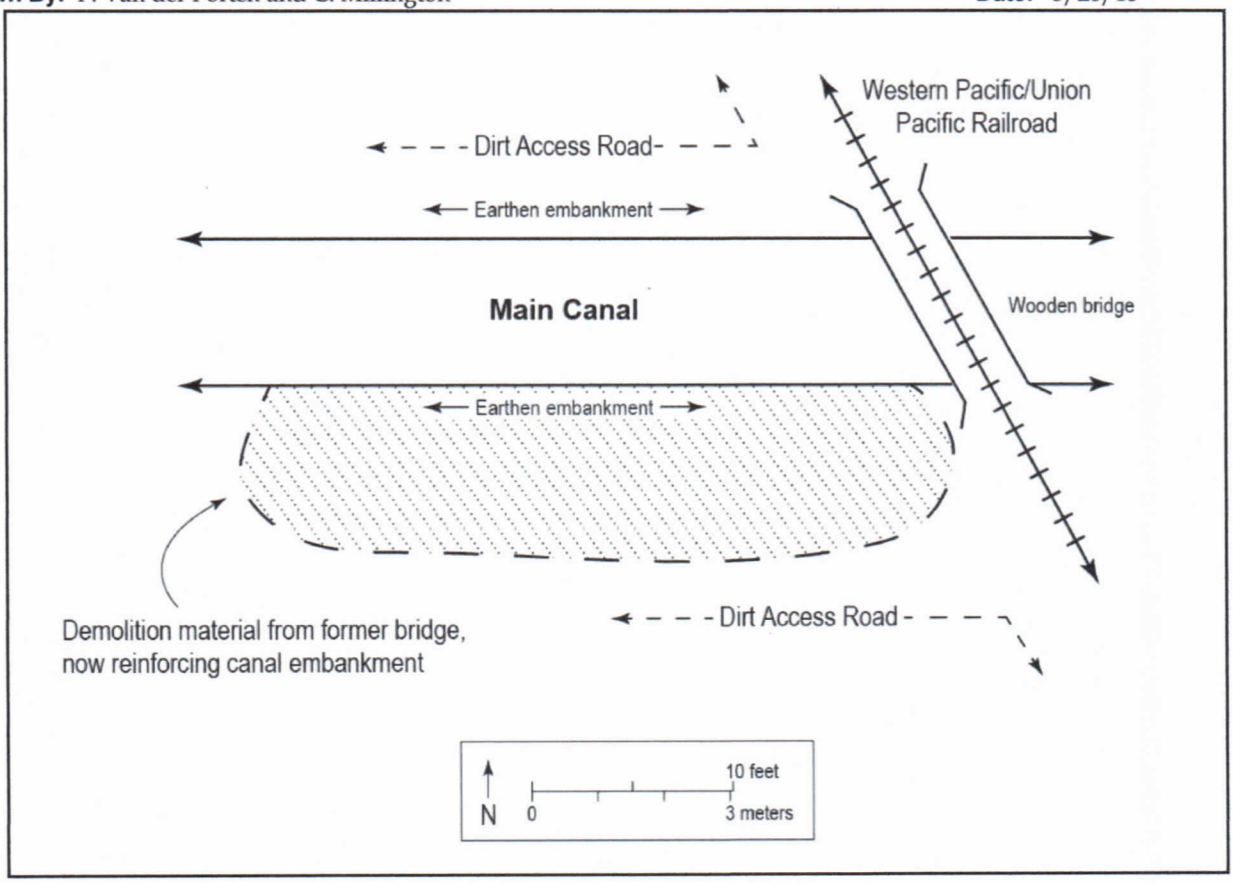
***Drawn By:** P. Van der Porten and C. Millington ***Date:** 8/20/15



P-39-000098, detail map showing relationship to project alignment.

***Required information**

***Drawn By:** P. Van der Porten and C. Millington ***Date:** 8/20/15



Archaeologists from Garcia and Associates (GANDA) recorded a short segment of this railroad in July, 2009, while conducting a cultural resource survey on behalf of the Western Area Power Administration. The survey encompassed a 250-foot-wide right-of-way for Western's 230kV Hurley-Tracy No. 1 and 2 transmission lines that span the railroad, which in this area heads northwest-southeast through the northern San Joaquin Valley northwest of Lodi and east of I-5, and is bounded by Acompo Road to the north and Woodbridge Road to the south. The segment's 500-foot length, which bisects hundreds of acres of vineyards, is currently owned and operated by Union Pacific Railroad and is in regular use. It has seen multiple maintenance and replacement activities over the years and appears to be in good overall condition. A few large rodent burrows are on the south side.

The ballast of this segment is a mottled but overall uniformly dark, exposed mix of angular basalt, more rounded granite, and slag. The bottom width of the bed is 40 feet and the top 12 feet; height is about 5 feet. The ties are wood and 8 feet long each and the rails are of standard gauge, and contain stampings of 1190 CC CF&I 1967 IIII. Some of the tie plates are stamped USS 7 5.5" 6. Discarded and very weathered and rusty spikes litter the ballast. On and alongside the ballast the GANDA crew also found at least six aqua insulator fragments (MNI = 2) including two "Hemingray - 42 Made in USA" insulators on the south side, one of which was mostly complete and still affixed to its threaded wooden pin (see Page 5, Continuation Sheet); this item, which was near an articulating fragment, was at the foot of the ballast 9° from the center of Western tower no. 41/4 on both 230kV Hurley-Tracy No. 1 and 2 transmission lines . Another was found on the north side as were scraps of treated wood, iron, and copper wire suggestive of railroad maintenance and the removal of a utility pole route; a separate route is marked by existing poles south of the right-of-way. The crew also discovered a tan-glazed, improved earthenware, probable plate fragment advertising the "Feather River Route" in red transfer print. One fragment of sun-colored amethyst glass was found on the south side. All artifacts were left in place.

GANDA recorded the two ends and center, as well of the two associated artifacts, with a Trimble GeoXT GPS unit which yielded the following UTMs (UTM Zone 10; *NAD 83*):

center) 641203 mE/ 4225865 mN
NW end) 641168 mE/ 4225944 mN
SE end) 641232 mE/ 4225805 mN

The elevation of the railroad was recorded at 21' amsl. Its location is encompassed by the 1978 Thornton 7.5' USGS quadrangle map on land managed by the U.S. Bureau of Reclamation and is in the NW 1/4 of the SE 1/4 of Section 25, T 4N, R 5E, M.D. B.M.

This site was oringally recorded by Jones & Stokes (David S. Byrd) in 2002 and updated by JRP Historical Consulting Serivices (B. Larson and E. Johnson) in 2003.

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

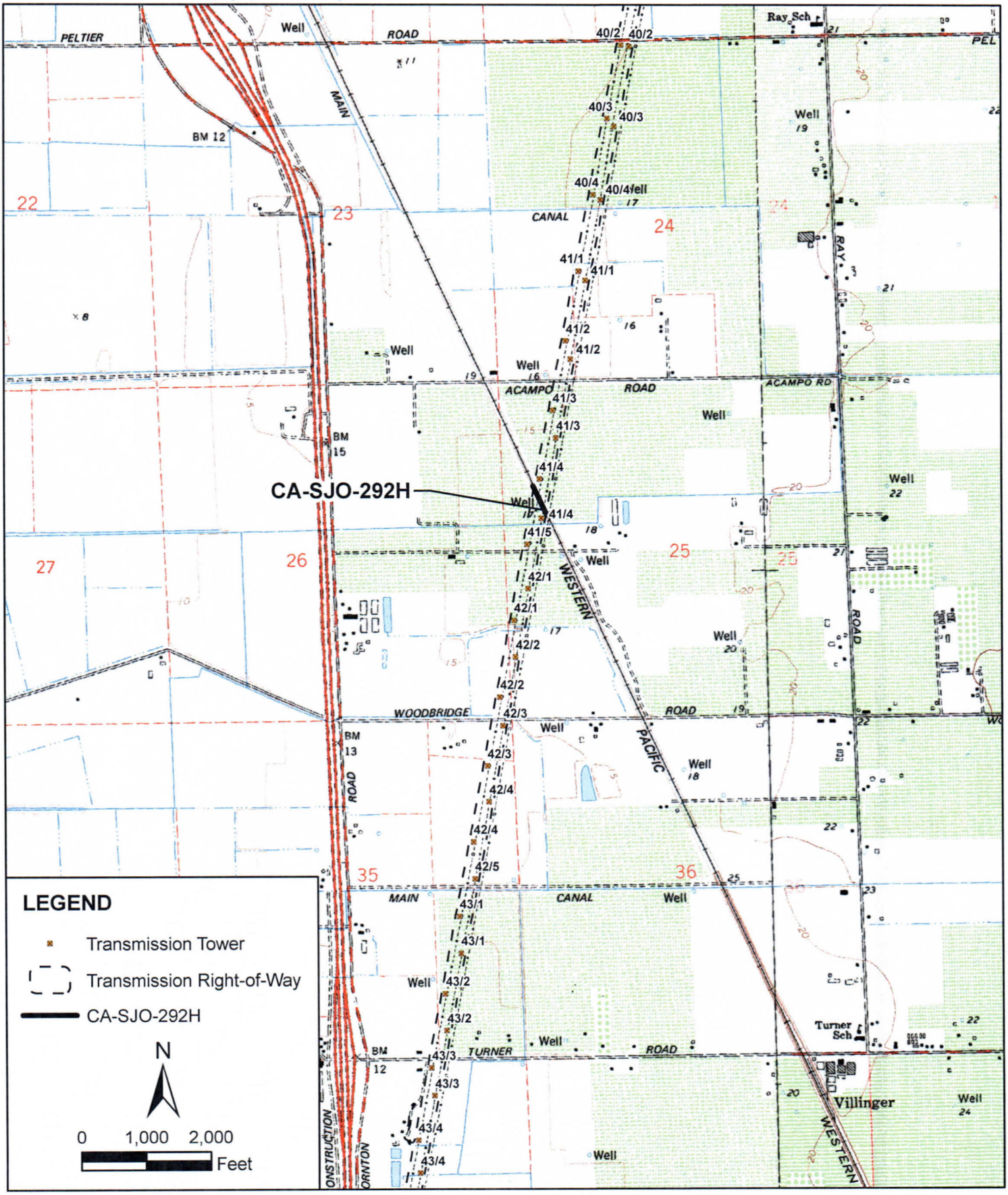
Primary # P-39-000098
HRI #
Trinomial: CA-SJO-292H

Resource Name or #: Western Pacific Railroad

Map Name: Lodi North 7.5 min Topographic Quadrangle
Thornton 7.5 min Topographic Quadrangle

Scale: 1:24,000

Date of Map: 1976
1978



Primary # P-39-000098
HRI#
Trinomial CA-SJO-292H
*Resource Name or #

*Recorded by: Thomas Martin, Kruger Frank, Scott Campbell *Date: 7-9-09 ☐ Continuation ☒ Update

Site overview facing south, with Western tower nos. 41/4 and 41/5 beyond.

Site overview facing northwest, with Western tower no. 41/4 at right; note utility pole at left.

Close-up of Hemingray - 42 aqua glass insulator with original wood pin

Close-up of ceramic "Feather River Route" dishware fragment

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
SKETCH MAP

Primary # P-39-000098
HRI #
Trinomial: CA-SJO-292H

Resource Name: Western Pacific Railroad
Page 2 of 5

Drawn by: Ira Eisen
Date of Map: 10/07/09

***Recorded by:** C. Flanegin, MA, Dudek ***Date:** October 2, 2024 ☐ Continuation ☒ Update

***NRHP Status Code** 6Z

***P3a. Description:** Property access was not granted for the survey of this resource and because of safety concerns the resource could not be surveyed from the public right-of-way. Therefore, this description is based on Google Earth imagery from 2021. The TTP-3 Telegraph Line within the study area extends approximately 1.44 miles in northeastern Alameda County, situated southwest of the Tesla Substation near the unincorporated community of Midway (see Location Map). The telegraph line consists of wooden poles. Farther east of the study area, a segment was recorded that noted several of the poles appeared to have been replaced (Egherman 2001).

P5b. Description of Photo: (View, date, accession #) Camera facing east, Google Earth image 2021

***P8. Recorded by:** (Name, affiliation, address)
Claire Flanegin, MA
Dudek
1904 Franklin Street, Suite 600
Oakland, CA 94612

***P9. Date Recorded:**
October 2, 2024

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.") Dudek. 2024. *Cultural Resources Inventory and Evaluation Report Potentia Viridi BESS Project, Alameda County, California*.

***Attachments:** ☒Location Map ☒Other (List): DPR 523 Form Set for P-39-004290

***B10. Significance:** The telegraph line was previously recorded in 2001, by URS Corporation but was not evaluated for its potential historical significance. Therefore, Dudek evaluated the telegraph line and has determined that the resource does not meet the criteria for the National Register of Historic Places (NRHP) or the California Register of Historical Resources (CRHR). Dudek also evaluated the line using the criteria of the Alameda County Register and determined that it does not meet any of the criteria, which are nearly identical criteria to those of the NHRP and the CRHR. The resource was 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 is not considered a historical resource under CEQA. As such, this evaluation assigns a 6Z California Historical Resources Status Code to telegraph line.

Under NRHP/CRHR/Alameda County Register Criterion A/1/A, the telegraph line has no specific important associations with significant historic events or patterns of development. Under NRHP/CRHR/Alameda County Register Criterion B/2/B, the resource has no demonstrable association with the lives of persons important to history. The telegraph line is not significant under NRHP/CRHR Criterion C/3 and Alameda County Register Criterion C/D/E because the line is not an important example of its type, period, or method of construction, nor is it the work of a master, and it does not possess high artistic value. The resource is a common example of a telegraph line and is not considered important for its engineering. Under NRHP/CRHR/Alameda County Register Criterion D/4/F the resource is not significant as a source (or likely source) of important information regarding history, and it does not appear to have any likelihood of yielding important information about historic construction materials or technologies.

Integrity is the ability of a property to convey its significance and can only proceed after significance has been fully established. The assessment of integrity requires consideration under the seven aspects or qualities. To retain integrity, a property will always possess several, and generally most, aspects of integrity. Determining which aspects are most important requires an understanding of why, where, and when the property is significant. Because the subject property does not meet any of the criteria for listing in the NRHP, CRHR, or Alameda County Register, an integrity analysis is considered immaterial for the subject resource

***B12. References:** Egherman, R. 2001. DPR 523 Form for the TPP-3 Telegraph Poles along the Western Pacific Railroad. URS Corporation. July 12, 2001.

***B14. Evaluator:** Danielle Baza, BA and Patricia Ambacher, MA

***Date of Evaluation:** October 2024


N MIDWAY RD
Patterson Run
Midway
MIDWAY RD
ALAMEDA COUNTY
SAN JOAQUIN COUNTY
0 1,000 2,000 Feet
0 260 520 Meters
P-39-004920 Telegraph Line

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

PRIMARY RECORD

Primary # P-39-004790
HRI #
Trinomial
NRHP Status Code
Other
Review Code ____ Reviewer ____ Date 2/2002

Page 1 of 7 **Resource Name or #:** (Assigned by recorder) TPP-3

P1. Other Identifier: Historic telegraph line along Western Pacific Railroad

***P2. Location:** ☒ **Not for Publication** ☐ **Unrestricted** ***a. County** San Joaquin County

and (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)

*b. **USGS 7.5' Quad** Midway **Date** 1953 (photorevised 1980) **T** 3 S ; **R** 4 E; ~~NW~~ SW and ~~NE~~ SE ¼ **of** NE ¼ **of Sec** 5; SW and SE ¼ **of** NE ¼ **of Sec** 3 MD **B.M.**

c. Address ____ City ____ Zip ____

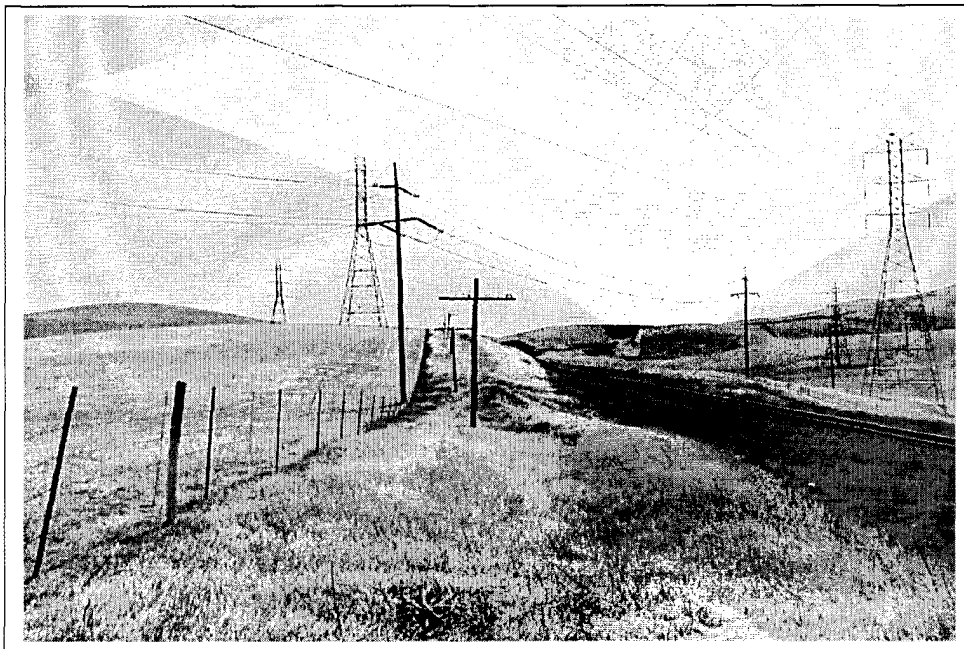
d. UTM: (Give more than one for large and/or linear resources) Zone 10, point A: 627,569 mE/ 4,173,807 mN
point B 630,685 mE/ 4,173,659 mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)
Traveling South on Highway 580 exit at Patterson Pass. Turn right at stop sign onto Midway Road. Continue west on Midway Road for approximately 1.5 miles. Turn left (south) on unnamed dirt road and drive 0.8 miles until the road intersects with the railroad tracks. Park and walk east along the path of tracks for approximately 0.3 miles. This is point A. From point A, continue walking east for approximately 2.0 miles to reach point B.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries) This resource consists of two sections (point A and point B) of an historic telegraph line running parallel on the north side of the Western Pacific Railroad. Point A is the western terminus of a segment of four telegraph poles. Point B is the western terminus of a segment of 5 telegraph poles. This telegraph line is associated with the railroad, which was previously recommended by the JRP Historical Consulting Services to be ineligible for listing in the National Register (See Continuation Sheet).

***P3b. Resource Attributes:** (List attributes and codes) HP11; Engineering structure

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



P5b. Description of Photo: (view, date, accession #) View of Point A, telegraph pole in center of frame, Western Pacific Railroad to the south; view to the east.

***P6. Date Constructed/Age and Sources:** ☒Historic ☐Prehistoric ☐Both

***P7. Owner and Address:** Union Pacific Railroad Company, 1416 Dodge St., Rm 830, Omaha, NE 68179

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

URS Corporation
500 12th St., Suite 200
Oakland, CA 94607-4014

***P9. Date Recorded:** 7/12/01

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

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.") URS Corp., 2001. Technical Report: GWF Tracy Peaker Project: Appendix C of Application for Certification.

***Attachments:** ☐NONE ☒Location 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): Photos

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

Primary # P-39-004290
HRI #
Trinomial

Page 2 of 7 **Resource Name or #:** (Assigned by recorder) TPP-3

L1. Historic and/or Common Name: Telegraph Poles along the Western Pacific Railroad

L2a. Portion Described: Entire Resource **X 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.) (See Primary Record)

L3. Description: (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)
This resource consists of two sections (point A and point B) of an historic telegraph line running parallel to the north side of the Western Pacific Railroad. Point A is the western terminus of a segment of four telegraph poles. Point B is the western terminus of a segment of 5 telegraph poles. This telegraph line is associated with the railroad, which was previously recommeded by the JRP Historical Consulting Services to be ineligible for listing in the National Register (See Continuation Sheet).

L4. Dimensions: (In feet for historic features and meters for prehistoric features)
- **a. Top Width**
- **b. Bottom Width**
- **c. Height or Depth**
- **d. Length of Segment** 800 feet total

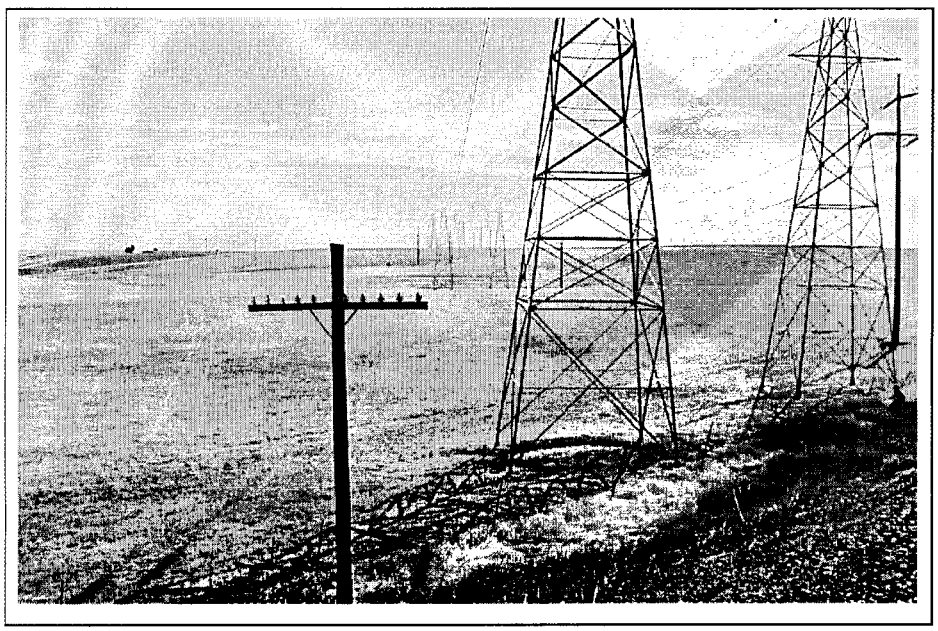
L4e. Sketch of Cross-Section (include scale) Facing:

L5. Associated Resources:
None

L6. Setting: (Describe natural features, landscape characteristics, slope, etc., as appropriate.):
The recorded section of telegraph poles is located in between railroad tracks and undeveloped farm land. Wild grasses and shrubs are growing around the poles.

L7. Integrity Considerations:
Currently the telegraph line is in good condition; the poles are standing, connected, and still in use. Five of the nine poles have previously been replaced, which is evident by the fact that the original pole has been cut off at the base, with a stump remaining in the ground adjacent to the new pole.

L8b. Description of Photo, Map, or Drawing (View, scale, etc.) Telegraph pole at point B, transmission lines in background. View to the east-southeast.



L9. Remarks: None

L10. Form Prepared by: (Name, affiliation, and address)
Rachael Egherman
URS Corporation
500 12th Street, Ste 200
Oakland, CA 94607

L11. Date: 7/12/01

Continued from Primary Record
P3a Description

Currently the telegraph line is in good condition; the poles are standing, connected, and still in use. Five of the nine poles have previously been replaced, which is evident by the fact that the original pole has been cut off at the base, with a stump remaining in the ground adjacent to the new pole. Maker marks and stamps still exist on some poles, although some are difficult to decipher. Most of the glass insulators are attached to the single crossbar, but a few were found lying on the ground near the poles. The insulator colors varied from pole to pole with clear, aqua, and brown glass used. An aqua insulator found on the ground was embossed "HEMINGRAY". This embossing first appeared on insulators in the 1890s.

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary # P-39-004290
HRI #
Trinomial

 *Resource Name or # (Assigned by recorder) TPP-3
*Recorded by: R.Egherman *Date Recorded 7-12-01 ☒ Continuation ☐ Update

POINT A

Pole #	Standing	Insulators	Stamps/marks	Comments
1	Yes – in use	Several pierce brown	5 0 3 3	2 cross bars. This pole ties into a small communication shed.
2	Yes - in use	8 clear glass, 1 aqua glass	CFP P6 SPC 3-26	1 cross bar
3	Yes – in use	8 aqua glass, 2 clear glass	OFP p-6 3-K 3-26	-
4	Yes – in use	4 clear glass, 1 aqua	PCP ?8 ?6 Metal stamp: "Rodchester Washington 565"	-

POINT B

Pole #	Standing	Insulators	Stamps/marks	Comments
1	Yes – in use	4 clear glass, 11 black rubber	None	2 rows of insluators on 1 crossbar, flat top, old post stump next to this pole.
2	Yes – in use	3 clear glass, 7 aqua glass	6SC 64 or 84 SPC	Flat top, 1 row of insulators, 1 crossbar
3	Yes – in use	10 clear glass, 4 aqua	Tin letters nailed to pole: F F 52 38	Metal cap with ceramic rim on ground, pointed top, 1 cross bar
4	Yes – in use	5 clear glass, 5 aqua	B 947 26 6	Pointed top 1 crossbar
4	Yes – in use	10 clear glass, 4 aqua	Tin letter nailed to pole: F Stamp on pole: 26 6	Pointed top, aqua insulator on ground reads "Patent Oct. 8, 1907 Hemingrey"

*Required information

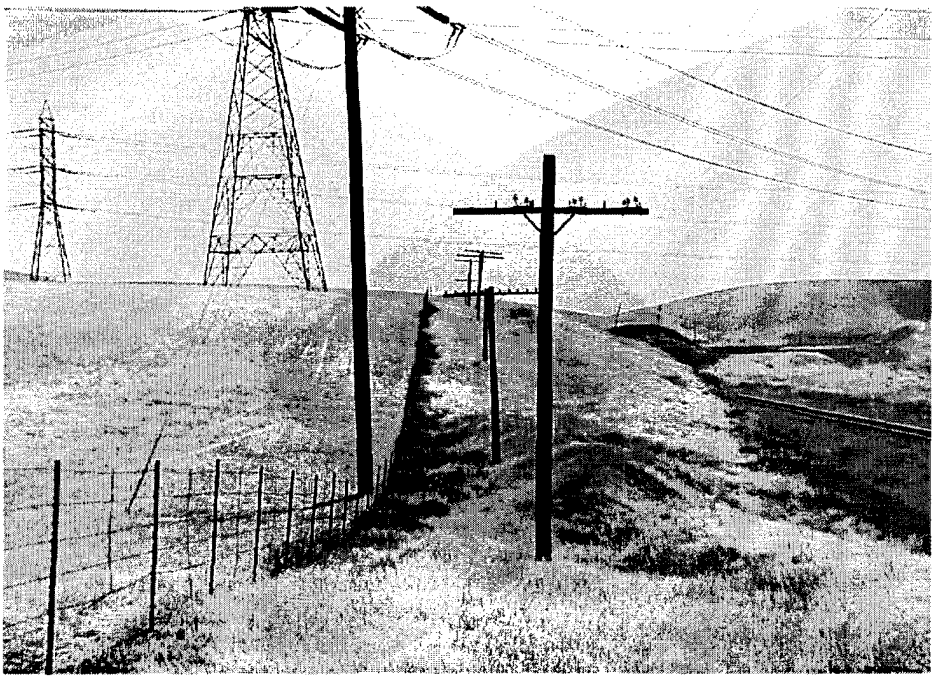


Photo 1: View of telegraph line from point A, Western Pacific Railroad at right of frame, transmission lines in background. View to the east.

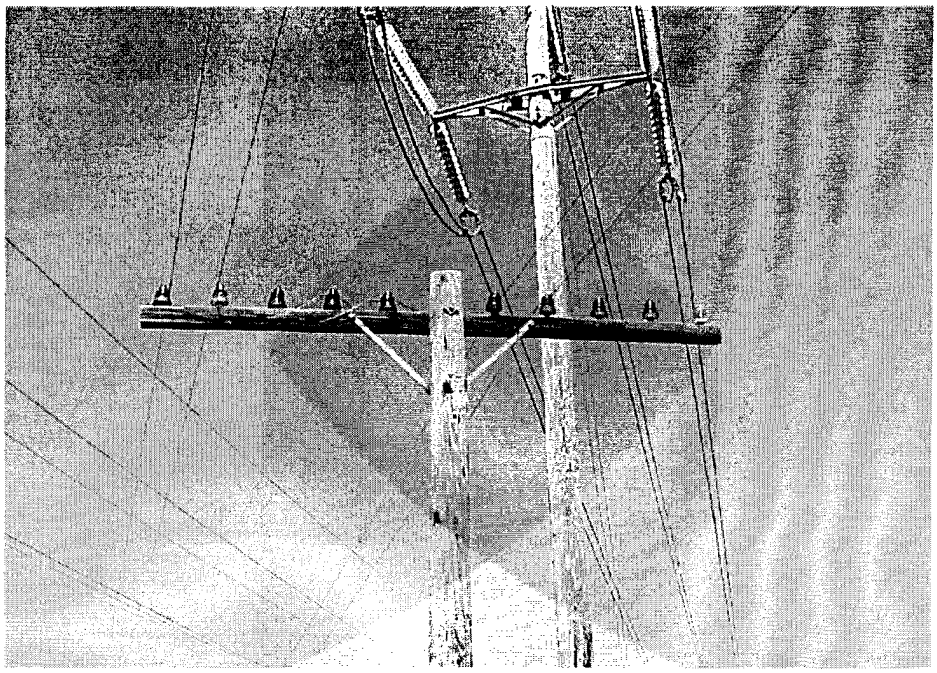


Photo 2: Close up of telegraph pole at point B, all aqua and clear glass insulators in tact, transmission line crossing above telegraph pole. View to the west.

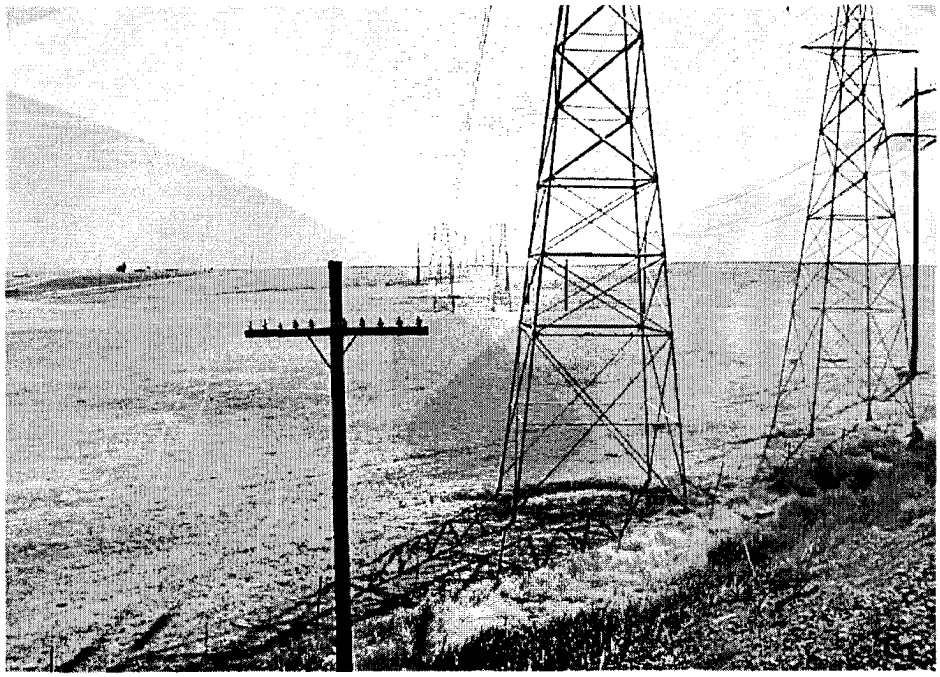


Photo 3; Telegraph pole at point B, transmission lines in background. View to the east-southeast.

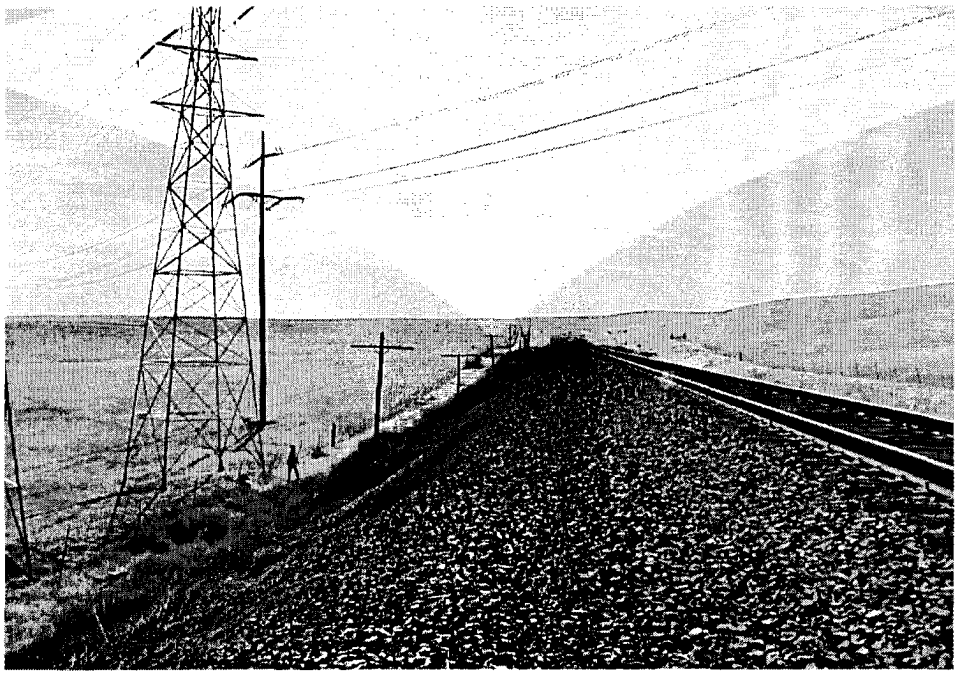


Photo 4: Telegraph line at point B, Western Pacific railroad at right of frame, transmission lines at left of frame. View to the south.

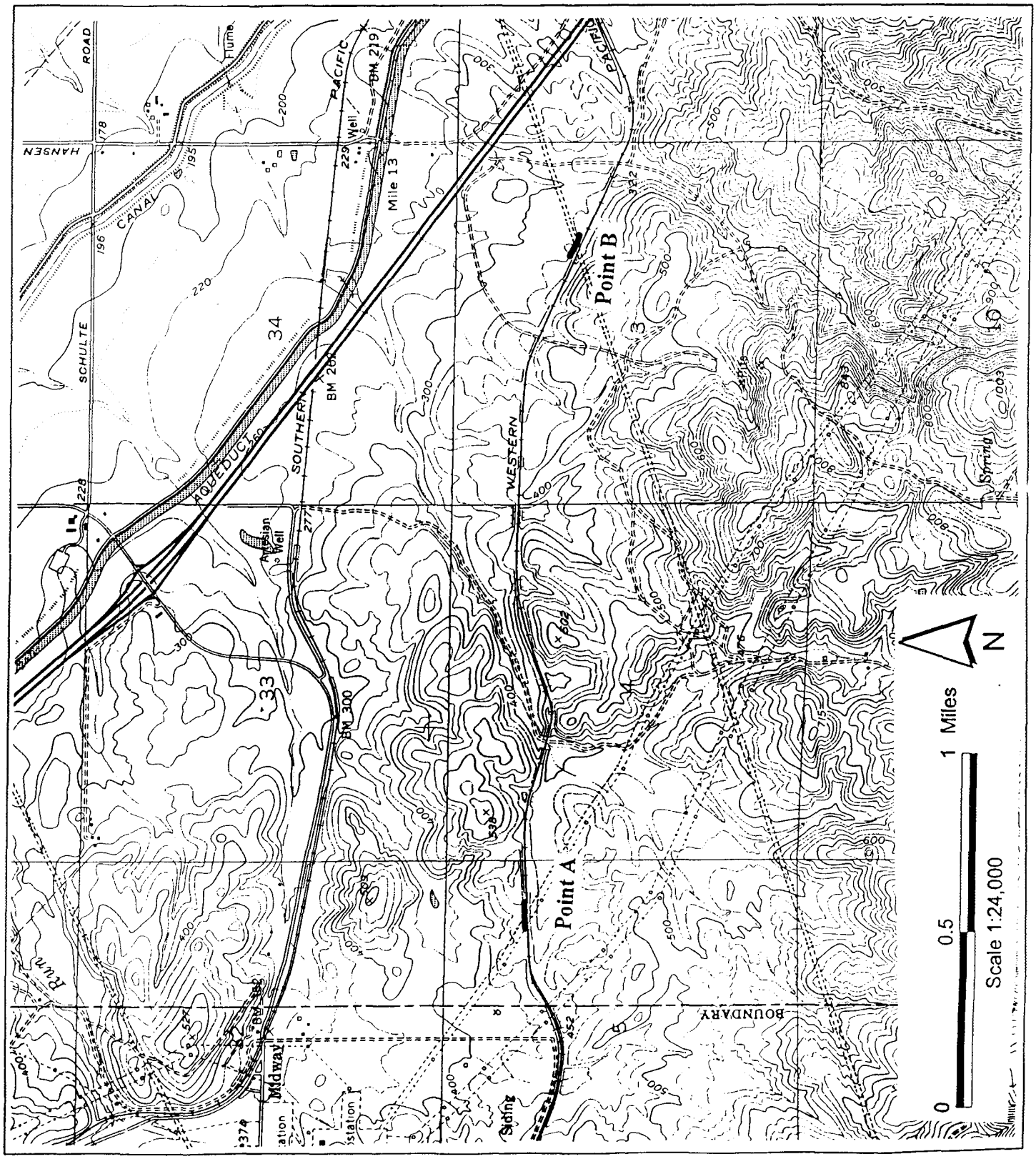
State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary # P-39-004290
HRI#
Trinomial

Page 7 of 7 *Resource Name or # (Assigned by recorder) TPP-3

*Map Name: Midway *Scale: 1:24,000 *Date of map: 1953 (photorevised 1980)



DPR 523J (1/95)

*Required information

*__NRHP Status Code__ 6Z

***P3a. Description:** The segment of the Tesla-Salado-Manteca Transmission Line within the survey area extends approximately 0.93-miles from the Tesla Substation in northeastern Alameda County near the community of Midway. The segment is part of an approximately 50-mile-long transmission line that runs from the Tesla Substation to the Manteca Substation in the north and the Salado Substation to the south. A detailed description of the subject property is provided in the attached DPR form set.

P5b. Description of Photo: (View, date, accession #) Camera facing south, October 2, 2024

***P8. Recorded by:** (Name, affiliation, address)
Claire Flanegin, MA
Dudek
1904 Franklin Street, Suite 600
Oakland, CA 94612

***P9. Date Recorded:**
October 2, 2024

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.")
Dudek. 2024. *Cultural Resources Inventory and Evaluation Report Potentia Viridi BESS Project, Alameda County, California*.

***Attachments:** ☒Other (List): DPR 523 Form Set for P-39-005337

***B10. Significance:** This transmission line was evaluated in 2017, using the National Register of Historic Places (NRHP) and California Register of Historical Resources (CRHR) criteria. That evaluation concluded the resource was not eligible for the NRHP and the CRHR because of a lack of significance and integrity (Walker 2017: 2). Dudek discovered no new information that would require a re-evaluation of the transmission line's NRHP and CRHR eligibility. For the same reasons that the line is not eligible for the NRHP and the CRHR Dudek determined that it does not meet the criteria for the Alameda County Register, which are nearly identical criteria to that those of the NRHP and the CRHR. The resource was 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 is not considered a historical resource under CEQA. As such, this evaluation assigns a 6Z California Historical Resources Status Code to telegraph line.

Integrity is the ability of a property to convey its significance and the assessment of a property's integrity can only proceed after its significance has been fully established. The assessment of integrity requires consideration under the seven aspects or qualities. To retain integrity, a property will always possess several, and generally most, aspects of integrity. Determining which aspects are most important requires an understanding of why, where, and when the property is significant. Because the subject property does not meet any of the criteria for listing in the NRHP, CRHR, or Alameda County Register, an integrity analysis is considered immaterial for the subject resource

***B14. Evaluator:** Danielle Baza, BA and Patricia Ambacher, MA

***Date of Evaluation:** October 2024

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

Primary # P-39-005337 (SJO Co.); P-50-002328 (STA Co.)
HRI #
Trinomial
NRHP Status Code

Other Listings _____
Review Code _____ Reviewer _____ Date

***Resource Name or #:** (Assigned by recorder) Tesla-Salado-Manteca 115 kV Transmission Line

P1. Other Identifier: _____

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted** ***a. County** Alameda; San Joaquin; Stanislaus

***b. USGS 7.5' Quad** Patterson; Vernalis; Solyo; Lathrop; Manteca; Lone Tree Creek; Tracy; Midway

Date 1953; 1991; 1991; 1952; 1952, 1955; 1954; 1953 **T** __; **R** __ **Sec** __ M.D. **B.M.**

4/2019

c. Address _____ City _____ Zip _____

d. UTM: (Give more than one for large and/or linear resources) Tesla Substation Zone 10S, 626234.93 mE/ 4174737.80 mN; Manteca Substation Zone 10S, 656369.73 mE/ 4185116.20 mN; Salado Substation Zone 10S, 663858.78 mE/ 4143283.15 mN

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

The Tesla-Salado-Manteca 115 kV Transmission Line travels primarily through unincorporated San Joaquin and Stanislaus counties with a portion of the line at Tesla Substation located in Alameda County. The line is accessed by public roads and traverses through sparsely developed agricultural land and through the hills just east of Interstate 5 as well as scattered residential communities.

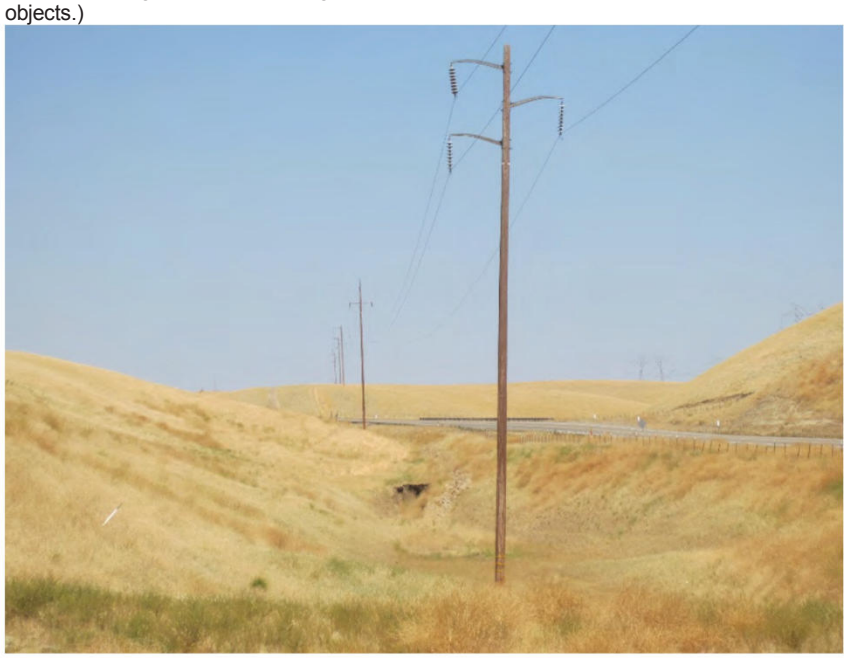
***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

This DPR 523 documents Pacific Gas and Electric Company's (PG&E) Tesla-Salado-Manteca 115kV Transmission Line, an approximately 50-mile-long electrical transmission line extending between Tesla Substation and Manteca Substation in the north and Salado Substation in the south (**Photograph 1**). The single circuit line consists of a variety of pole and tower types from a range of periods, spanning the 1920s-2000s, with the majority consisting of wood poles (see Linear Feature Records and Continuation Sheets).

***P3b. Resource Attributes:** (List attributes and codes) HP11 – Engineering Feature

***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 #)
Photograph 1: Transmission line corridor near Del Puerto Canyon Road, camera facing southwest, 8/1/2017.

***P6. Date Constructed/Age and Source:**
☒ Historic ☐ Prehistoric ☐ Both
1925 (alignment), 1952, 1978, Ongoing (PG&E)

***P7. Owner and Address:**
Pacific Gas & Electric Company
77 Beale Street
San Francisco, CA 94105

***P8. Recorded by:** (Name, affiliation, and address)
Matt Walker (Cardno, Inc.)
2890 Gateway Oaks Drive, Suite 200
Sacramento, CA 95833

***P9. Date Recorded:** August 1, 2017

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

***P11. Report Citation**: (Cite survey report and other sources, or enter "none.")
Cardno, Inc. Historic Resource Evaluation Report, Tesla-Salado-Manteca 115 kV Tower Replacement Project, August 2017.

***Attachments:** ☐NONE ☒Location 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):

BUILDING, STRUCTURE, AND OBJECT RECORD

***Resource Name or #** (Assigned by recorder) Tesla-Salado-Manteca 115 kV Transmission Line ***NRHP Status Code** ___

B1. Historic Name: Manteca-Salinas 110 kV Transmission Line (portion of)

B2. Common Name: Tesla-Salado-Manteca 115 kV Transmission Line

B3. Original Use: 110 kV electrical transmission B4. Present Use: 115 kV electrical transmission

***B5. Architectural Style:** Utilitarian

***B6. Construction History:** (Construction date, alterations, and date of alterations) The transmission corridor is a partial component of the 1925 Manteca-Salinas Transmission Line, although most historic period material has been replaced, including wood poles, insulators, and cable. Portions of the line date to 1952, and were constructed in association with Salado Substation. Portions of the alignment date to the late 1970s, when the original alignment was enlarged and reconfigured to tap into Tesla Substation.

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

***B8. Related Features:** N/A

B9a. Architect: PG&E (Engineer)

b. Builder: Unknown contractors under contract to PG&E

***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.)

This DPR 523 Form documents the approximately 50 mile transmission line segment located between Tesla Substation, Manteca Substation, and Salado Substation, operationally named the Tesla-Salado-Manteca 115 kV Transmission Line. While contextual analysis of the resource included review of the historical development of the larger Manteca-Salinas Transmission Line, of which portions of this alignment are historically associated with, California Register of Historical Resources (CRHR) and National Register of Historic Places (NRHP) inventory and evaluation included only this operational portion and management segment of the transmission line.

Under this analysis, the Tesla-Salado-Manteca 115 kV Transmission Line does not appear to meet the criteria for listing in the NRHP or the CRHR because of a lack of overall significance under any of the criteria for listing and a lack of integrity, and as such does not appear to be a historic property under Section 106 of the National Historic Preservation Act (NHPA) or a historical resource for the purposes of CEQA (Section 15064.5 [a][2]-[3]) (see continuation sheet).

B11. Additional Resource Attributes: N/A

***B12. References:** See Footnotes

B13. Remarks:

***B14. Evaluator:** Polly Allen, Cardno

***Date of Evaluation:** August 2017

This space reserved for official comments.

See Location Map

LINEAR FEATURE FORM

L1. Historic/Common Name: Tesla-Salado-Manteca 115 kV Transmission Line

L2a. Portion Described: ☐ Entire Resource ☐ Segment ☒ Point Observation **Designation:** Tower 000/015

b. Location of point or segment: (Provide UTM coordinates, decimal degrees, legal description, and any other useful locational data. Show the area that has been field inspected on a Location Map.) Tower 000/015: Zone 10S, 627026 mE/ 4174343 mN

Tower 000/015 is located near the south end of Midway Road near Tesla Substation in unincorporated Alameda County, west of Tracy, CA. Please refer to DPR 523 J for location of documentation point depicted by pole number.

L3. Description: (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

This location records a single, standard, double-circuit structural steel tower near Tesla Substation (**Photograph 2**). The subject Tesla-Salado-Manteca 115 kV line is carried on the right side of the tower. The riveted steel tower is anchored in a concrete footing on all four legs. The tower features a wide body tapering to a narrow cage with three sets of wide cross arms with suspension insulators at the ends of each arm. The line wraps around the substation and enters it on its west side.

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

- **a. Top Width** Unknown
- **b. Bottom Width** Unknown
- **c. Height or Depth** Unknown
- **d. Length of Segment** N/A

L5. Associated Resources: N/A

L6. Setting: (Describe natural features, landscape characteristics, slope, etc., as appropriate.):

This location is industrial, with numerous transmission corridors entering Tesla Substation.

L4e. Sketch of Cross-Section(include scale)

See Photograph

L7. Integrity Considerations: The tower remains in operation and is well-maintained with no visible damage or alterations other than general maintenance. Research indicates it dates to circa 1970.

L8a. Photograph, Map or Drawing

L8b. Description of Photo, Map, or Drawing (View, scale, etc.) **Photograph 2:** Tesla-Salado-Manteca Tower, camera facing northwest, August 1, 2017.

L9. Remarks: N/A

L10. Form Prepared by: (Name, affiliation, and address)

Matt Walker
Cardno, Inc.
2890 Gateway Oaks Drive, Suite 200
Sacramento, CA 95833

L11. Date:
August 1, 2017

LINEAR FEATURE FORM

Property Name: Tesla-Salado-Manteca 115 kV Transmission Line

L1. Historic/Common Name: Tesla-Salado-Manteca 115 kV

L2a. Portion Described: ☐ Entire Resource ☐ Segment ☒ Point Observation **Designation:** Tower 006/040

b. Location of point or segment: (Provide UTM coordinates, decimal degrees, legal description, and any other useful locational data. Show the area that has been field inspected on a Location Map.) Tower 006/040 Zone 10S, 634798 mE/ 4169077 mN

Tower 006/040 is located south of Corral Hollow Road, west of Interstate 580, southwest of Tracy, in San Joaquin County. Please refer to DPR 523 J for location of documentation point depicted by pole number.

L3. Description: (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

At this point, three towers stand in the transmission corridor. The Tesla-Salado-Manteca 115 kV line is carried on the left side of the far right tower (**Photograph 3**). The three lines on the right side of the study tower in addition to the lines on the middle and left tower are separate alignments and not recorded herein. The riveted steel tower is anchored in a concrete footing on all four legs. The tower features a wide body tapering to a narrow cage with a pointed peak. Three sets of wide cross arms with strain insulators at the ends of each arm project from the cage.

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

- **a. Top Width** Unknown
- **b. Bottom Width** Unknown
- **c. Height or Depth** Unknown
- **d. Length of Segment** N/A

L5. Associated Resources: N/A

L6. Setting: (Describe natural features, landscape characteristics, slope, etc., as appropriate.):
This location is open grassland dominated by an industrial transmission corridor.

L4e. Sketch of Cross-Section (include scale)

See Photograph

L8a. Photograph, Map or Drawing

L7. Integrity Considerations: The tower remains in operation and appears well-maintained with no visible damage or alterations other than general maintenance. Research indicates it dates to circa 1970.

L8b. Description of Photo, Map, or Drawing (View, scale, etc.) **Photograph 3:** Tesla-Salado-Manteca Tower, camera facing southeast, August 1, 2017.

L9. Remarks: N/A

L10. Form Prepared by: (Name, affiliation, and address)
Matt Walker
Cardno, Inc.
2890 Gateway Oaks Drive, Suite 200
Sacramento, CA 95833

L11. Date:
August 1, 2017

LINEAR FEATURE FORM

Property Name: Tesla-Salado-Manteca 115 kV Transmission Line

L1. Historic/Common Name: Tesla-Salado-Manteca 115 kV

L2a. Portion Described: ☐ Entire Resource ☐ Segment ☒ Point Observation **Designation:** Pole 025/146

b. Location of point or segment: (Provide UTM coordinates, decimal degrees, legal description, and any other useful locational data. Show the area that has been field inspected on a Location Map.) Pole 025/146 Zone 10S, 658613 mE/ 4149193 mN

Pole 025/146 is located just west of Del Puerto Canyon Road, approximately 1.5 miles north of Diablo Grande Parkway in Stanislaus County. Please refer to DPR 523 J for location of documentation point depicted by pole number.

L3. Description: (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

This location records one wood pole carrying a single circuit. The pole is set directly into the ground and features two arched metal arms on one side with a single arched metal arm opposite, each carrying a single conductor using a suspension insulator (**Photograph 4**).

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

- **a. Top Width** Unknown
- **b. Bottom Width** Unknown
- **c. Height or Depth** Unknown
- **d. Length of Segment** N/A

L4e. Sketch of Cross-Section (include scale)

N/A

L5. Associated Resources: N/A

L6. Setting: (Describe natural features, landscape characteristics, slope, etc., as appropriate.):

This location is rural and open, characterized by rolling hills, tall grasses, and chaparral.

L7. Integrity Considerations: The wood pole remains in operation and appears well-maintained with no visible damage or alterations other than general maintenance. Construction date unknown.

L8a. Photograph, Map or Drawing

L8b. Description of Photo, Map, or Drawing (View, scale, etc.) **Photograph 4**: Tesla-Salado-Manteca wood pole, camera facing northwest, August 1, 2017.

L9. Remarks: N/A

L10. Form Prepared by: (Name, affiliation, and address)

Matt Walker
Cardno, Inc.
2890 Gateway Oaks Drive, Suite 200
Sacramento, CA 95833

L11. Date: August 1, 2017

LINEAR FEATURE FORM

Property Name: Tesla-Salado-Manteca 115 kV Transmission Line

L1. Historic/Common Name: Tesla-Salado-Manteca 115 kV

L2a. Portion Described: ☐ Entire Resource ☐ Segment ☒ Point Observation **Designation:** Pole 029/184

b. Location of point or segment: (Provide UTM coordinates, decimal degrees, legal description, and any other useful locational data. Show the area that has been field inspected on a Location Map.) Pole 029/184 Zone 10S, 660546 mE/ 4143350 mN

Pole 029/184 is located south of Diablo Grande Parkway, approximately 0.1 mile east of Oak Flat Road in Stanislaus County. Please refer to DPR 523 J for location of documentation point depicted by pole number.

L3. Description: (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

This location records a single circuit wood pole set directly into the ground, with one set of metal cross arms with strain insulators at each end and a rigid strut insulator projecting from its peak. The line extends to meet three rigid strut insulators attached to a single wood deviation pole, where the line shifts east toward Salado Substation.

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

- **a. Top Width** Unknown
- **b. Bottom Width** Unknown
- **c. Height or Depth** Unknown
- **d. Length of Segment** N/A

L4e. Sketch of Cross-Section (include scale)

N/A

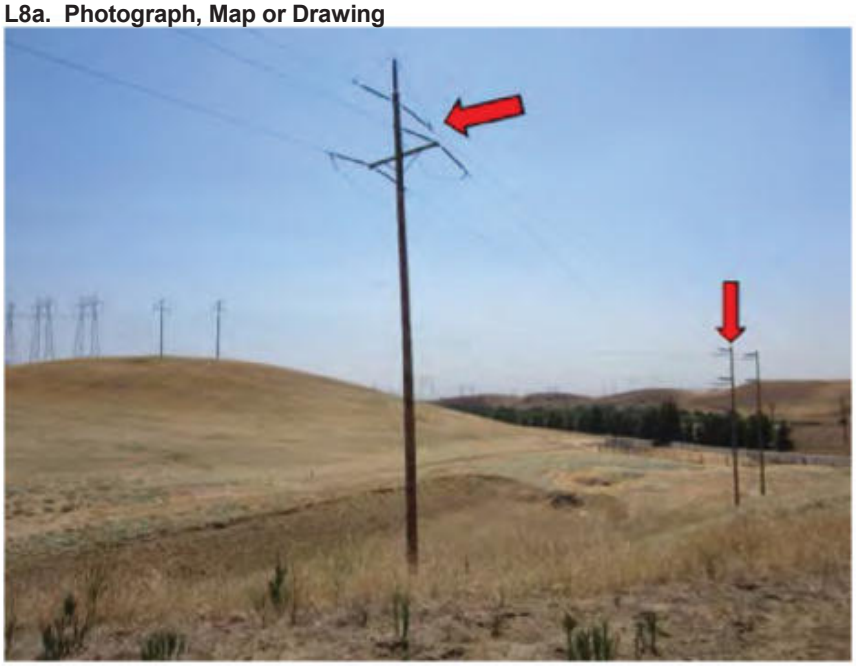
L5. Associated Resources: N/A

L6. Setting: (Describe natural features, landscape characteristics, slope, etc., as appropriate.):

This location is rural and characterized by grassy rolling hills. A wide electrical transmission corridor, including the Tesla-Los Banos 500 kV and Quinton-Westley 230 kV lines, is located just east of the subject pole.

L7. Integrity Considerations: This pole segment remains in operation and is well-maintained with no visible damage or alterations other than general maintenance. Construction date unknown.

L8a. Photograph, Map or Drawing



L8b. Description of Photo, Map, or Drawing (View, scale, etc.) **Photograph 5**: Tesla-Salado-Manteca wood poles, camera facing south, August 1, 2017.

L9. Remarks: N/A

L10. Form Prepared by: (Name, affiliation, and address)

Matt Walker
Cardno, Inc.
2890 Gateway Oaks Drive, Suite 200
Sacramento, CA 95833

L11. Date:
August 1, 2017

LINEAR FEATURE FORM

Property Name: Tesla-Salado-Manteca 115 kV Transmission Line

L1. Historic/Common Name: Tesla-Salado-Manteca 115 kV

L2a. Portion Described: ☐ Entire Resource ☐ Segment ☒ Point Observation **Designation:** Pole 031/205

b. Location of point or segment: (Provide UTM coordinates, decimal degrees, legal description, and any other useful locational data. Show the area that has been field inspected on a Location Map.) Pole 031/205 Zone 10S, 663247 mE/ 4143083 mN

Pole 031/205 is located south of Oak Flat Road, approximately 0.1 mile west of Interstate 5. Please refer to DPR 523 J for location of documentation point depicted by pole number.

L3. Description: (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

This location records a single wood pole with metal wishbone cross arms carrying a single circuit (**Photograph 6**). Suspension insulators are positioned at the end of each arm.

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

- **a. Top Width** Unknown
- **b. Bottom Width** Unknown
- **c. Height or Depth** Unknown
- **d. Length of Segment** N/A

L4e. Sketch of Cross-Section (include scale)

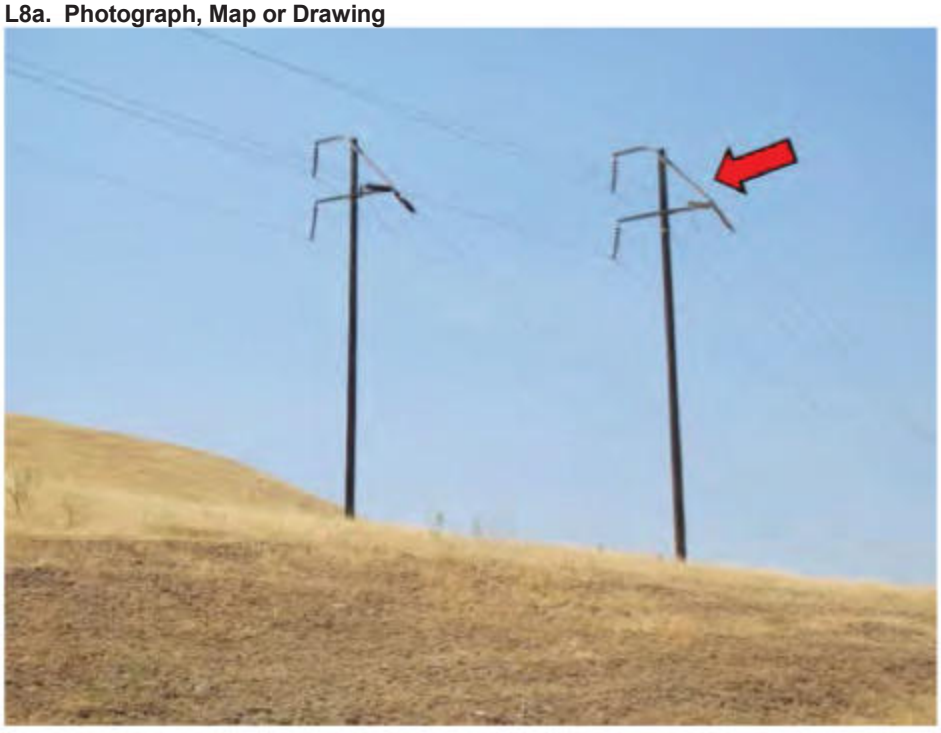
N/A

L5. Associated Resources: N/A

L6. Setting: (Describe natural features, landscape characteristics, slope, etc., as appropriate.):
The location is rural and characterized by rolling grassy hills. The Tesla-Salado No. 1 115 kV line runs adjacent—not part of this resource.

L7. Integrity Considerations: This pole segment remains in operation and is well-maintained with no visible damage or alterations other than general maintenance. Construction date unknown.

L8a. Photograph, Map or Drawing



L8b. Description of Photo, Map, or Drawing (View, scale, etc.) **Photograph 6**: Tesla-Salado-Manteca wishbone wood pole (right), camera facing southwest, August 1, 2017.

L9. Remarks: N/A

L10. Form Prepared by: (Name, affiliation, and address)
Matt Walker
Cardno, Inc.
2890 Gateway Oaks Drive, Suite 200
Sacramento, CA 95833

L11. Date: August 1, 2017

LINEAR FEATURE FORM

Property Name: Tesla-Salado-Manteca 115 kV Transmission Line

L1. Historic/Common Name: Tesla-Salado-Manteca 115 kV

L2a. Portion Described: ☐ Entire Resource ☐ Segment ☒ Point Observation **Designation:** Pole 031/209

b. Location of point or segment: (Provide UTM coordinates, decimal degrees, legal description, and any other useful locational data. Show the area that has been field inspected on a Location Map.) Pole 031/209 Zone 10S, 663810 mE/ 4143277 mN

Pole 031/209 is located adjacent to Salado Substation, approximately 0.2 mile east of Interstate 5 in Stanisluas County. Please refer to DPR 523 J for location of documentation point depicted by pole number.

L3. Description: (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

This location records one, complex single circuit wood pole structure adjacent to Salado Substation (**Photograph 7)**. The structure consists of three parallel wood poles joined by a horizontal metal pole at its peak. The line's conductors meet strain insulators and suspension insulators at the three poles before crossing over to Salado Substation. An identical structure serving the Tesla-Salado No. 1 115 kV line is located just south of the study structure.

L4e. Sketch of Cross-Section (include scale)

N/A

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

- **a. Top Width** Unknown
- **b. Bottom Width** Unknown
- **c. Height or Depth** Unknown
- **d. Length of Segment** N/A

L5. Associated Resources: N/A

L6. Setting: (Describe natural features, landscape characteristics, slope, etc., as appropriate.):

This location is rural, situated just east of a segment of the California Aqueduct, at the approach to the Salado Substation. The Tesla-Salado No. 1 115 kV line runs adjacent.

L8a. Photograph, Map or Drawing

L7. Integrity Considerations: The tower is well-maintained with no visible damage or alteration other than general maintenance. Construction date unknown.

L8b. Description of Photo, Map, or Drawing (View, scale, etc.) **Photograph 7:** Tesla-Salado-Manteca wood pole structure, camera facing southeast, August 1, 2017.

L9. Remarks: N/A

L10. Form Prepared by: (Name, affiliation, and address)
Matt Walker
Cardno, Inc.
2890 Gateway Oaks Drive, Suite 200
Sacramento, CA 95833

L11. Date:
August 1, 2017

LINEAR FEATURE FORM

Property Name: Tesla-Salado-Manteca 115 kV Transmission Line

L1. Historic/Common Name: Tesla-Salado-Manteca 115 kV

L2a. Portion Described: ☐ Entire Resource ☐ Segment ☒ Point Observation **Designation:** Tower A031/248

b. Location of point or segment: (Provide UTM coordinates, decimal degrees, legal description, and any other useful locational data. Show the area that has been field inspected on a Location Map.) Tower A031/248 Zone 10S, 653044 mE/ 4171362 mN

Tower A031/248 is located north of Airport Way, just east of the San Joaquin River, in San Joaquin County. Please refer to DPR 523 J for location of documentation point depicted by pole number.

L3. Description: (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

This location records a single, damaged metal lattice tower on the east side of the San Joaquin River (**Photograph 8**). The riveted steel tower consists of a narrow cage that has sustained severe damage and is currently bent at its center to the west, meeting the ground at its peak. An identical, undamaged steel tower is located on the west side of the river (**Photograph 11**). No conductors currently pass between the two poles.

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

- **a. Top Width** unknown
- **b. Bottom Width** unknown
- **c. Height or Depth** unknown
- **d. Length of Segment** N/A

L4e. Sketch of Cross-Section (include scale)

N/A

L5. Associated Resources: N/A

L6. Setting: (Describe natural features, landscape characteristics, slope, etc., as appropriate.):

This location is situated on the east side of the San Joaquin River in a rural area with sparse residential development.

L7. Integrity Considerations: This 1920s tower is severely damaged, bent over at its center, and is no longer operational.

L8a. Photograph, Map or Drawing

L8b. Description of Photo, Map, or Drawing (View, scale, etc.) **Photograph 8:** Tesla-Salado-Manteca steel lattice tower, camera facing northeast, August 1, 2017.

L9. Remarks: N/A

L10. Form Prepared by: (Name, affiliation, and address)

Matt Walker
Cardno, Inc.
2890 Gateway Oaks Drive, Suite 200
Sacramento, CA 95833

L11. Date: August 1, 2017

LINEAR FEATURE FORM

L1. Historic/Common Name: Tesla-Salado-Manteca 115 kV

L2a. Portion Described: ☐ Entire Resource ☐ Segment ☒ Point Observation **Designation:** Pole A030//243

c. Location of point or segment: (Provide UTM coordinates, decimal degrees, legal description, and any other useful locational data. Show the area that has been field inspected on a Location Map.) Pole A031/248 Zone 10S, 652605 mE/ 4170970 mN

Pole A031/248 is located on the west side of South Kasson Road, approximately 0.1 mile south of Durham Ferry Road, in San Joaquin County. Please refer to DPR 523 J for location of documentation point depicted by pole number.

L3. Description: (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

This location records one wood pole of the Tesla-Salado- Manteca Transmission Line carrying a single circuit (**Photograph 9**). The pole is set directly into the ground and features offset rigid strut insulator on either side with a single rigid strut extending from its peak.

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

- **e. Top Width** Unknown
- **f. Bottom Width** Unknown
- **g. Height or Depth** Unknown
- **h. Length of Segment** N/A

L4e. Sketch of Cross-Section (include scale)

N/A

L5. Associated Resources: N/A

L6. Setting: (Describe natural features, landscape characteristics, slope, etc., as appropriate.):

This location is situated along South Kasson Road in a rural area, adjacent to agricultural land.

L7. Integrity Considerations: This pole segment is in operation and is well-maintained with no visible damage or alteration other than general maintenance.

L8a. Photograph, Map or Drawing

L8b. Description of Photo, Map, or Drawing (View, scale, etc.) **Photograph 9:** Tesla-Salado-Manteca wood pole, camera facing southwest, August 1, 2017.

L9. Remarks: N/A

L10. Form Prepared by: (Name, affiliation, and address)
Matt Walker
Cardno, Inc.
2890 Gateway Oaks Drive, Suite 200
Sacramento, CA 95833

L11. Date:
August 1, 2017

LINEAR FEATURE FORM

Property Name: Tesla-Salado-Manteca 115 kV Transmission Line

L1. Historic/Common Name: Tesla-Salado-Manteca 115 kV

L2a. Portion Described: ☐ Entire Resource ☐ Segment ☒ Point Observation **Designation:** Pole 023/168

d. Location of point or segment: (Provide UTM coordinates, decimal degrees, legal description, and any other useful locational data. Show the area that has been field inspected on a Location Map.) Pole 023/168 Zone 10S, 656271 mE/ 4185097 mN

Pole 023/168 is located north of West Center Street along a railroad corridor, just west of Manteca Substation, in Manteca, CA. Please refer to DPR 523 J for location of documentation point depicted by pole number.

L3. Description: (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

At this location is a metal pole and a standard tower, both carrying double circuits. Tesla-Salado-Manteca is carried on the left side of the metal pole. The three conductors on the right side of the pole as well as the lines on the tower are separate alignments and not recorded on this form. The tubular steel pole is anchored by a concrete pad and features three sets of wide cross arms, each with strain insulators on their ends.

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

- **i. Top Width** Unknown
- **j. Bottom Width** Unknown
- **k. Height or Depth** Unknown
- **l. Length of Segment** N/A

L4e. Sketch of Cross-Section (include scale)

N/A

L5. Associated Resources: N/A

L6. Setting: (Describe natural features, landscape characteristics, slope, etc., as appropriate.):

This location is generally urban, characterized by a clear-cut transmission corridor surrounded by residential properties and vegetation. The Manteca No. 1 60 kV line runs adjacent to the study line at this location.

L8a. Photograph, Map or Drawing

L7. Integrity Considerations: The pole is well-maintained with no visible damage or alteration other than general maintenance.

L8b. Description of Photo, Map, or Drawing (View, scale, etc.) **Photograph 10:** Tesla-Salado-Manteca metal pole (left), camera facing southwest, August 1, 2017.

L9. Remarks: N/A

L10. Form Prepared by: (Name, affiliation, and address)
Matt Walker
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2890 Gateway Oaks Drive, Suite 200
Sacramento, CA 95833

L11. Date:
August 1, 2017

P3a. Description (Continued):

While the entirety of the publicly accessible portions of the Tesla-Salado-Manteca Transmission Line were subject to survey under this documentation project, documentation for this form consists of nine representative data points on the attached Linear Feature Records (DPR523E) as well as a general discussion of the overall physical components of the transmission corridor, detailed below.

The Tesla-Salado-Manteca alignment consists of three distinct segments: one traveling from Tesla Substation and another from Manteca Substation, before joining to form a single alignment leading to Salado Substation. The configuration of the alignment is reflective of multiple development periods, with the alignment from Manteca to Salado reflective of the earliest development as a component of the 1925 Manteca-Salinas Transmission Line and the alignment from Tesla to Salado reflective of more modern 1970s infrastructural development that rearranged the line's operations (see Historic Context Section).

The three-phase transmission line is primarily in a single circuit configuration, except in select areas where the line is jointly carried with additional lines and in a double circuit. The line utilizes a wide variety of wood pole and steel tower-types, reflective of the line's expansion and alteration since its initial development. From Tesla Substation, the line begins with a steel tower segment and travels southeast after wrapping around the substation from its west side. The steel tower line traverses roughly 20 miles through rolling grassy hills in a wide transmission corridor. These double-circuit towers generally consist of tall, riveted steel towers featuring wide bodies tapering to a narrow cage with three sets of wide cross arms. The Tesla-Salado-Manteca line is carried on the west side of each tower. Similarly, the line leaving Manteca Substation begins with a steel tower segment. This approximately 1.6-mile-long tower span travels southwest through a narrow transmission corridor cutting through Manteca's urban core. The Tesla-Salado-Manteca line is carried on the south side of the standard steel double-circuit towers.

The line from Manteca Substation transfers to a single circuit wood pole line at Airport Way. The line continues in a generally southerly direction approximately 18 miles along county roads, including Airport Way, South Kasson Road, South Greenwood Road, and McCracken Road. The utilitarian wood poles are anchored directly into the ground and typically feature rigid strut insulators on each side and a vertical rigid strut insulator extending from their peak. Two narrow steel lattice towers are located on either side of the San Joaquin River crossing. The western tower, Tower A031/248, is damaged and bent over at its center. While some of these wood poles may date to the initial construction period of the 1920s, PG&E Tower Data Records document 271 pole replacements along the line, as the majority of wood poles required replacement over time because of structural decay.

The tower line from Tesla Substation and the wood pole line from Manteca Substation merge just south of Vernalis and continue south toward Salado Substation as a single circuit wood pole line. The approximately 11.5-mile-long wood pole segment leading to Salado Substation consists of two primary pole types. The first span extends approximately 9 miles and consists of wood poles anchored directly into the ground with two arched metal arms on one side and a single arched metal arm on the other. Following this, the wood pole line continues using a wishbone arm configuration. The line enters Salado Substation on its west side via a complex wood pole structure consisting of three wood poles joined near their peak by a metal bar.

According to PG&E Engineering Records, the majority of poles in the alignment are replacements to the original, with replacements dating from the 1940s to the 2000s. See Historic Context for additional development and reconfiguration of the line.

B10. Significance (Continued):

Historic Context

Overview

The development of PG&E's Tesla-Salado-Manteca 115 kV Transmission Line is representative of the utility company's steady expansion and reconfiguration of California's electrical grid during the twentieth century. The line, which serves to link PG&E's diversified Tesla and Manteca Substations with the small Salado Distribution Substation, is an amalgamation of utility planning efforts and dates to a range of development periods. Although portions of the right of way of the alignment have origins to the mid-1920s, the majority of the alignment's physical features and much of its operating alignment date to the 1950s through the present. In this manner, the transmission line is indicative of the increasingly complex and dense utility network that has come to define development in California, with overlapping infrastructural layers forming a sprawling modern utility network.

Early Development and Expansion of PG&E

California's growth in the first half of the twentieth century was due in large part to the establishment of revolutionary hydroelectric and transmission systems that allowed development across the geographically expansive state. Under this transformative framework, technologically innovative long-distance transmission lines linked the power generating mountainous regions with Central Valley farms, coastal centers, and distant cities, allowing a pace of growth that was unprecedented in scope and pace. By the 1910s, large swaths of the state were exposed to intensive power development. In 1908, Northern California utility Great Western Power initiated development in the North Fork of the Feather River, with the Big Bend Powerhouse supplying power to the Bay Area. In 1913, Pacific Light and Power broke all records with their twin 241 mile, 150 kV Big Creek East and West Transmission Lines, which coursed from the mountains above Fresno to a surging Los Angeles. By 1927, transmission voltages jumped yet again, to 220 kV, another notable record, with the completion of Southern California Edison's 220 kV Vincent Transmission Line and PG&E's Northern California Pit River 220 kV Transmission Line. These significant engineering achievements served to both set the standard for electrical technology and application and transform the ways in which Californians lived, consumed, and worked.[1]

During this period of rapid innovation, PG&E emerged as a dominant force in electrical development. Formed in 1905, the company had developed from the consolidation of a number of nineteenth century gas and electrical interests centered in the Bay Area, most notably California Gas and Electric Company and the San Francisco Gas and Electric Company. By the 1910s, the utility was one of the most dominant utility fixtures in Northern California, and by the 1920s PG&E had embarked on a program of even more rapid expansion, absorbing a slew of regional utilities and creating a sprawling service area that included much

[1] James C. Williams, Energy and the Making of Modern California (Akron, OH: The University of Akron Press, 1997) 168-237; Charles M. Coleman, PG&E of California: The Centennial Story of Pacific Gas and Electric Company 1852-1952 (New York: Mcgraw Hill Book Company, Inc., 1952), 138-140.

of the state. Although the 1920s was a time of great expansion for the electrical industry as a whole, the period was also one of escalating consolidation, driven by both geographic considerations and increased financial pressures. While the industry was largely born of small, geographically-focused entities, by the 1920s increases in transmission ability and economic consolidation had winnowed the field substantially. One of the primary beneficiaries of this consolidation was PG&E, who more than doubled the number of customers served during the decade. The company purchased a slew of additional utilities during the period, including Western States Gas and Electric Company, Great Western Power Company, San Joaquin Light and Power Company, California Telephone and Light Company, Sierra and San Francisco Power Company, and Coast Valley Gas and Electric Company.[2]

Construction of Manteca-Salinas 110 kV Transmission Line

With the 1920s absorption of Sierra and San Francisco Power Company and Coast Valley Gas Company, PG&E cemented its territorial hold over their former service areas, the Northern San Joaquin Valley and the north-central coastal regions of Monterey, Santa Cruz, and San Benito counties. Almost immediately upon acquisition, PG&E initiated an expansion program in this newly held service area, constructing a 98 mile 110 kV single circuit wood pole transmission line from a central distribution substation in Manteca to a newly-built substation in Salinas (**Figure 1**). The line extended south from Manteca along the west side of the San Joaquin Valley, through the foothills to Pacheco Pass, and southwest across Santa Clara Valley, extending through Sargent to the Salinas Valley. As described by PG&E planners, the line was estimated to provide sufficient capacity to the Salinas region for ten years given period load projections. Construction was initiated in October of 1925 and was completed in 1926 at a cost of $598,500.[3]

Figure 1: Salinas Substation, 1925
(PG&E Archives, San Francisco)

[2] Charles M. Coleman, *PG&E of California: The Centennial Story of Pacific Gas and Electric Company 1852-1952*, 277-283.
[3] "Pacific Service in New Territory," *Pacific Service Magazine*, January 1928; PG&E ERIM, Box 265884, Folder 22749; "Building Program for the Current Year Given by Corporation," *Santa Cruz Evening News*, January 7, 1926.

Despite PG&E's optimistic projections that the Manteca-Salinas 110 kV Transmission Line would readily serve demand for the coming decade, by 1928 the company was again initiating a major construction project in the region. Citing rapid agricultural and urban demand throughout the Central Coast, PG&E spearheaded the construction of an additional transmission line to Salinas, extending from Newark Substation, located north of San Jose. The line was of double circuit construction and carried by steel towers. As described by PG&E planners, the alignment was selected for its adaptability, with Newark Substation connected to a host of generating facilities, including the Stanislaus, Drum, and Electra Hydroelectric Projects (**Figure 2**). Following construction, the line became a primary corridor connecting Salinas and its surrounding communities to PG&E's increasingly expansive energy grid. While the Manteca-Salinas Line continued to operate, it was no longer as central to the utility landscape of the coastal region and acted in concert with the larger Newark line.[4]

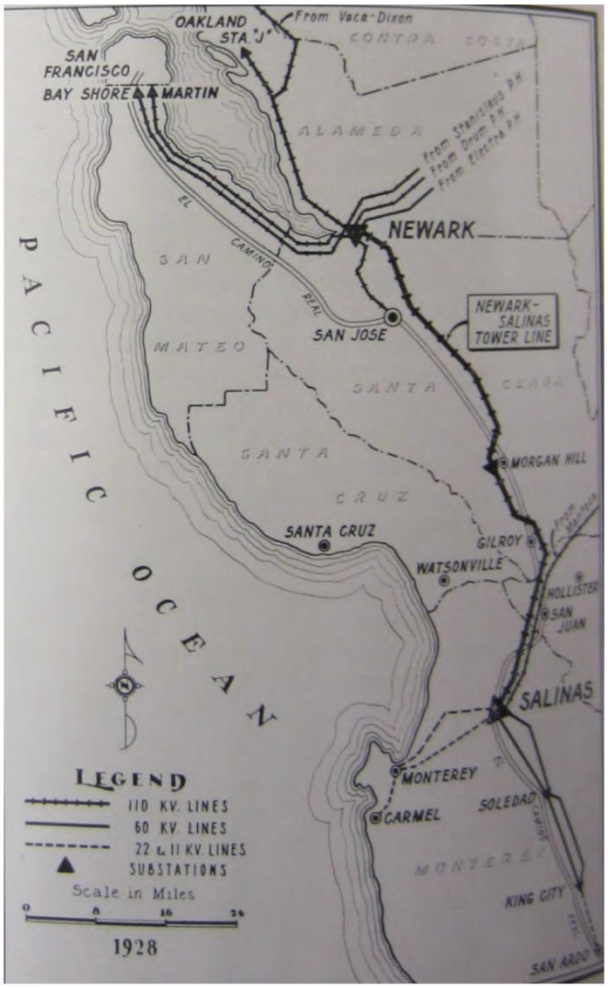

Figure 2: PG&E Newark-Salinas Transmission Line, 1928
(*Pacific Service Magazine*, 1928)

[4] "Pacific Service in New Territory," *Pacific Service Magazine*, January 1928.

Construction of Salado Substation

The Manteca-Salinas 110 kV Transmission Line continued to operate as designed through the 1940s, with little evident reconfiguration other than ongoing maintenance. In the 1940s, many of the original insulators and wiring were replaced along the alignment. In addition, a number of the wood poles were replaced during the 1940s and 1950s because of heavy deterioration and rot, a cyclical maintenance program that has continued to the present. The first major operational reconfiguration of the line occurred in 1951, with the construction of Salado Substation, a distribution substation immediately west of the agricultural community of Patterson. The substation was developed to distribute power via a small line feeder from the Manteca-Salinas Transmission line to the surrounding San Joaquin Valley towns of Westley, Patterson, Newman, and Gustine (**Figure 3**). Like much of California during the post-war period, these valley communities were undergoing rapid growth, with PG&E projections indicating that the area load demand would double from 1945 to 1955. By 1953, the substation and associated transmission loop was in operation, built at a cost of nearly one million dollars. Following completion, power from the Manteca-Salinas 110 kV was disseminated to the growing pool of San Joaquin Valley towns in addition to its original service area of Salinas and its environs.[5]

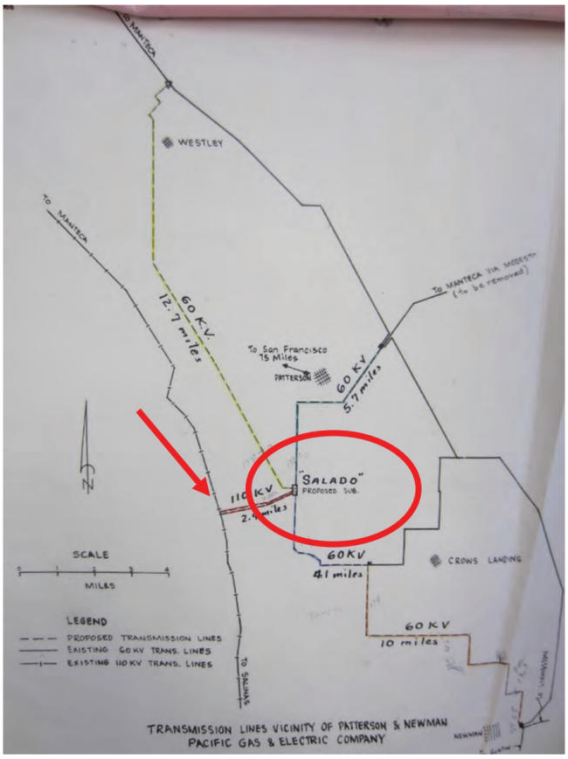

Figure 3: PG&E Planning Document, Salado Substation, 1952
(PG&E ERIM G.M. 116254, Red Arrow indicates Manteca-Salinas Alignment, Red Circle Salado Substation)

[5] PG&E ERIM, Box 42272, G.M. 89944, General Construction Department; PG&E ERIM, Box 267011, G.M. 128019; PG&E Tower Data Sheet: Tesla-Salado-Manteca 115 kV Transmission Line; PG&E ERIM, Box 044671, G.M. 116254.

Integration of Tesla Substation

By the late 1970s, load demand in the northern San Joaquin Valley continued to strain available facilities. Although the 1950s construction of Salado Substation had solved part of the energy puzzle for the surrounding agricultural communities, continuing exurban and industrial growth in the region was outpacing available energy supplies from the originating substation—Manteca Substation. To combat this shortfall, PG&E planners developed a proposal to link Tesla Substation, in neighboring Alameda County, with the Manteca-Salado corridor, thereby creating a three circuit system 115 kV system that could accommodate growing demand and allow flexibility in shifting power supplies between Tesla and Manteca. Under this new alignment, approximately 18 miles of new line was extended from Tesla south toward Salado, merging with the historical Manteca-Salinas corridor several miles above Salado Substation. Following this reconfiguration, the three-circuit system was termed "Tesla-Salado-Manteca 115 Kilovolt Transmission Line," with power to Salado Substation generated largely from Tesla Substation rather than Manteca and the line existing in a tripartite wishbone configuration (see DPR 523 Mapping).[6]

Conclusions: A System of Overlapping Layers

The modern-named Tesla-Salado-Manteca corridor has continued to be altered to the present, with PG&E engineering records indicating that the majority of the poles have been recently replaced into the 2000s (likely many of the poles that were replaced were also not original). As such, little, if any, of the corridor is physically reflective of the alignment's earliest development origins as a portion of the Manteca-Salinas 110 kV Transmission Line. Despite this lack of physical association, the historical context of the alignment's development is generally indicative of California's expansive utility growth during the twentieth century. Originating from a small number of key utility corridors, the state's present energy landscape exists as a dense and ever-changing network that has built upon its early twentieth century foundation to the present. In the case of the subject alignment, the infrastructural evolution has been incremental, with the redirecting of energy to Salado Substation and as such new service areas followed by the reconfiguration of the alignment's orientation to Tesla Substation. These incremental changes have served to alter the form and function of the resource, while maintaining it as an operating component of PG&E's energy grid.[7]

Evaluation

The inventoried Tesla-Salado-Manteca 115 kV Transmission Line does not appear eligible for listing in the NRHP under Criterion A or CRHR under Criterion 1 because it is not an important or significant engineering component of PG&E's twentieth century utility expansion. The origins of the alignment date to a number of development periods, including the 1920s (establishment of Manteca-Salinas Line), 1950s (establishment of Salado Substation), and 1970s (integration of Tesla Substation). While these associations are generally representative of PG&E's continuous growth and expansion during the period, the evolving transmission line was a modest component of a statewide expansion program that included numerous high voltage transmission lines, substations, and generating facilities across the state. When viewed through the lens of this widespread expansion program, the transmission line was a basic infrastructural addition that lacks significance in relation to PG&E's overall engineering program. Additionally, while the transmission line afforded a more consistent supply of energy in the region, it served to shore up and

[6] PG&E ERIM, Box BZ473, G.M. 189127
[7] PG&E Tower Data Sheet: Tesla-Salado-Manteca 115 kV Transmission Line.

regulate supplies rather than usher in significant new facets of development to the PG&E service area. As such, it does not appear to be significant in relation to community development in the San Joaquin Valley.

Under NRHP Criterion B or CRHR Criterion 2, there is no evidence that the Tesla-Salado-Manteca Transmission Line has important associations with any person or persons who made significant contributions to history at the local, state, or national level. The line was a utilitarian infrastructural component of PG&E's ongoing twentieth century expansion, and research did not reveal any direct associations with key figures in PG&E's development or regional development.

The Tesla-Salado-Manteca Transmission Line does not appear eligible for the NRHP under Criterion C or CRHR under Criterion 3 because it is not an important example of any type, period, or method of construction or engineering and it does not represent the important work of a master engineer. The line was constructed according to established and common engineering and design methods. Lines surpassing this voltage had been in common use since the early 1910s, with this line employing no technological advancements in relation to voltage. Similarly, the length of the line was standard, with lines surpassing 200 miles by the early 1910s. The original wood pole design of the structure was in keeping with design and engineering norms, with wood poles like those used in the construction of the line standardized and ubiquitous during the period. Wood poles like those used in the studied line had been used for electrical distribution since the earliest examples of electrical transmission, dating to the mid-19th century, and generally lack any significant design or engineering associations that would qualify for listing under this Criterion. Steel replacement towers added to the alignment over time are similarly standard in design and do not represent any engineering advancements from any development period.

Under NRHP Criterion D or CRHR Criterion 4, the Tesla-Salado-Manteca Transmission Line is not significant as a source, or likely source, of important information pertaining to history, building materials, construction techniques, or advancement in transmission line design. This type of infrastructure is well documented and common in the region, state, and nation.

In addition to lacking significance under any criteria for listing, the Tesla-Salado-Manteca Transmission Line lacks integrity to any single period, as it has been structurally and functionally augmented continuously since construction. With portions of the alignment relating to the 1920s Manteca-Salinas Transmission Line coupled with 1950s distribution spurs and a 1970s reconfiguration to Tesla Substation, the line lacks integrity of design, materials, association, and workmanship. This lack of significance and integrity precludes eligibility for listing in the NRHP, CRHR, or recognition as a historic resource for the purposes of Section 106 of the NHPA or CEQA.

While the development of an appropriate historical context for this evaluation included research and archival documentation of the Manteca-Salinas Transmission Line as a whole, this inventory and evaluation is limited to the documented Tesla-Salado-Manteca Transmission Line. It is recommended that any additional documentation of the former Manteca-Salinas line as a whole should be informed by the development themes and historic context developed as a part of this study.

Photographs (continued from Linear Feature Record):

Photograph 11: Tower A030/247, Tesla-Salado-Manteca 115 kV Transmission Line, note no conductors crossing though the tower, camera facing northwest, August 1, 2017.

LOCATION MAP

Page 20 **of** 36 ***Resource Name or #** (Assigned by recorder) Tesla-Salado-Manteca 115 kV Transmission Line
***Map Name:** Midway, Calif. ***Scale:** 1:24,000) ***Date of map:** 1980