

United States Department of the Interior
National Park Service

National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in National Register Bulletin, *How to Complete the National Register of Historic Places Registration Form*. If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. **Place additional certification comments, entries, and narrative items on continuation sheets if needed (NPS Form 10-900a).**

1. Name of Property

historic name Niles Canyon Transcontinental Railroad Historic District (NCTR)
 other names/site number Niles Canyon Railway

2. Location

street & number N/A (Railway corridor from Niles to Pleasanton, CA) not for publication
 city or town Fremont, Sunol, and Pleasanton vicinity
 state California code CA county Alameda code 001 zip code N/A

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended,
 I hereby certify that this ___ nomination ___ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60.
 In my opinion, the property ___ meets ___ does not meet the National Register Criteria. I recommend that this property be considered significant at the following level(s) of significance:
 ___ national ___ statewide ___ local

Signature of certifying official Date

Title State or Federal agency/bureau or Tribal Government

In my opinion, the property ___ meets ___ does not meet the National Register criteria.

Signature of commenting official Date

Title State or Federal agency/bureau or Tribal Government

4. National Park Service Certification

I, hereby, certify that this property is:
 ___ entered in the National Register ___ determined eligible for the National Register
 ___ determined not eligible for the National Register ___ removed from the National Register
 ___ other (explain:) _____

Signature of the Keeper Date of Action

5. Classification

Ownership of Property
 (Check as many boxes as apply)

- private
- public - Local
- public - State
- public - Federal

Category of Property
 (Check only **one** box)

- building(s)
- district
- site
- structure
- building(s)
- object

Number of Resources within Property
 (Do not include previously listed resources in the count.)

Contributing	Noncontributing	
		buildings
10	1	sites
97	35	structures
		objects
1	3	buildings
108	39	Total

Name of related multiple property listing
 (Enter .N/A" if property is not part of a multiple property listing)

Number of contributing resources previously listed in the National Register

0

6. Function or Use

Historic Functions

(Enter categories from instructions)

TRANSPORTATION / rail-related

COMMUNICATION / telegraphy

LANDSCAPE / unoccupoid land, natural feature

RECREATION and CULTURE / outdoor recreation

Current Functions

(Enter categories from instructions)

RECREATION and CULTURE / museum

TRANSPORTATION / rail-related, pipeline

LANDSCAPE / unoccupoid land, natural feature

COMMUNICATION / fiber optics

7. Description

Narrative Description

(Describe the historic and current physical appearance of the property. Explain contributing and noncontributing resources if necessary. Begin with a **summary paragraph** that briefly describes the general characteristics of the property, such as its location, setting, size, and significant features.)

Summary Paragraph

The Niles Canyon Transcontinental Railroad Historic District (NCTR) is an 11.6 mile-long segment of the first Transcontinental Railroad as it passes through Niles Canyon (Alameda Cañon), Sunol Valley, and Arroyo de la Laguna between the San Francisco Bay area and the Amador Valley. This rail line and its right-of-way winds from the Niles district of Fremont to Pleasanton via Sunol. The NCTR contains many features and characteristics of early western railroading that have been otherwise lost. Additionally, the NCTR has a rural setting largely unchanged from the time of the line's original construction in 1865-69. Located in the San Francisco metropolitan area with over seven million people the NCTR retains much of the historic integrity and character from the time of its construction. The construction of the roadbed is now particularly unique in the western United States. Stemming from the 1853 survey and 1865 design, the narrow roadbed and sharp turns were characteristic of the formative period of railway construction. Most similar roadbeds were obliterated as railroad practice modernized beginning in the 1890's. The ruggedness of the canyon precluded efforts to improve the roadbed. Except for the bridge replacements (1896-1906) the roadbed remained essentially unaltered. This was because the line was relegated to secondary service only about ten years after it was built. As a result many of the landscapes through the canyon remain pristine. Principal contributing resources include stone works from the original 1865 construction, the 1884 Sunol Depot and three major steel bridges including a rare pin connected Pratt Truss. The right of way also contains the remains of the transcontinental telegraph line of 1869.

Narrative Description

(see Continuation sheets)

8. Statement of Significance

Applicable National Register Criteria

(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing)

- A Property is associated with events that have made a significant contribution to the broad patterns of our history.
B Property is associated with the lives of persons significant in our past.
C Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
D Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations

(Mark "x" in all the boxes that apply)

Property is:

- A owned by a religious institution or used for religious purposes.
B removed from its original location.
C a birthplace or grave.
D a cemetery.
E a reconstructed building, object, or structure.
F a commemorative property.
G less than 50 years old or achieving significance within the past 50 years.

Period of Significance (justification)

The Period of Significance was chosen to encompass the commencement of construction of this portion of the Transcontinental Railroad in 1865 to the end of its significance as a major transportation corridor after World War II and its final incorporation in to the Southern Pacific Railroad in 1958.

Criteria Consideratons (explanation, if necessary)

Areas of Significance

(Enter categories from instructions)

- Transportation
Communication
Settlement
Engineering / Architecture
Ethnic Heritage
Entertainment / Recreation

Period of Significance

1865-1958

Significant Dates

1865, 1866, 1869, 1870, 1879, 1893-1911, 1930, 1941, 1958

Significant Persons

(Complete only if Criterion B is marked above)

Cultural Affiliation

Architect/Builder

McLaughlin, Charles
Cox, Jerome B.
Strobridge, James

8. Statement of Significance cont.

Statement of Significance Summary Paragraph

Summary:

The Niles Canyon Transcontinental Railroad Historic District was completed in 1869 as a part of the final segment of the First Transcontinental Railroad. The completion of this railroad is considered one of the most significant engineering achievements of the Nineteenth Century. This project reduced the coast-to-coast travel times from months to days. It was a milestone in the settlement of this nation and contributed greatly to the industrial and cultural unification of the post-Civil War United States. The railroad had a massive impact on the economy, development, and population of California and the West, and at the same time opened trade and immigration from the far east. The railroad employed hundreds of Chinese laborers, and eventually became a major employer of Mexican-Americans. Later, the scenic beauty of Niles Canyon and its accessibility from the urban areas of San Francisco and Oakland led to the development of recreational picnic-grounds in the canyon and hotels in Sunol.

The railway in Niles Canyon was part of the Western Pacific Railroad (WPRR), which was a pawn in the financing of construction of the transcontinental railroad. The Central Pacific Railroad (CPRR) assigned the rights for the San Francisco to Sacramento leg of the railroad to a group from San Francisco, in an attempt to raise local support for the project in December 1862. The SF group including Peter Donahue, Timothy Dane, Alexander Houston, and Charles McLaughlin incorporated the Western Pacific Railroad and the assignment of the rights was confirmed in the March 1865 amendment of the Transcontinental Railroad Act. The WPRR completed construction of its first twenty miles in 1866. Subsequently, in 1867, it was forced by financial difficulties into an agreement with CPRR stockholders. Construction was completed and service commenced in September 1869. In June 1870 The WPRR and CPRR filed for consolidation.

The NCTR contains a number of features from its construction, including most of its original grade, and a number of stone piers, abutments, and culverts. These resources were built to high-standards of quality and permanence as evidenced by their nearly continuous railroad use over 140 years. Other resources are representative of early 20th Century mainline railroading. The landscape and setting of the NCTR has changed little from the time of the railroad's construction. Niles Canyon is the only remaining corridor entering the San Francisco Bay region that has not been massively altered for modern transportation projects, as a result, the NCTR may be one of the best preserved segments of the First Transcontinental Railroad, and one of the only examples of a mainline railroad in the west to retain most of its features from the early 20th Century.

Narrative Statement of Significance

(see Continuation sheets)

Developmental history/additional historic context information

(see Continuation sheets)

9. Major Bibliographical References

Bibliography (Cite the books, articles, and other sources used in preparing this form on one or more continuation sheets)

Previous documentation on file (NPS):

preliminary determination of individual listing (36 CFR 67 has been requested)
 previously listed in the National Register
 previously determined eligible by the National Register
 designated a National Historic Landmark
 recorded by Historic American Buildings Survey # _____
 recorded by Historic American Engineering Record # _____

Primary location of additional data:

CA State Historic Preservation Office
 Other State agency, CSRM, CALTRANS, District 4
 Federal agency, National Archives
 Local government, Alameda County
 University
 Other
Name of repository: _____

(see Continuation sheets)

10. Geographical Data

Acreege of Property Approximately 200

UTM References of ends of the Linear District

(Place additional UTM references on a continuation sheet)

Table with 3 columns: Zone, Easting, Northing. Row 1: 10, 5 8995, 41 5941. Row 2: 10, 5 9906, 41 6810.

Verbal Boundary Description (describe the boundaries of the property)

The proposed Niles Canyon Transcontinental Railroad Historic District totals approximately 200 acres. Most is stretched out 11.6 miles between the Niles District in the City of Fremont and the City of Pleasanton. This portion of the property varies in width from 100 feet to 400 feet along its length depending upon the manner in which the railroad acquired it. About ten acres of the property are a portion of the former Niles rail yard. The property boundaries are detailed in the PLA lease (County of Alameda License Agreement C-2007-137) which is derived from four deeds recorded at the Office of the Recorder of Alameda County. The deeds are;

- 1) Southern Pacific Transportation Company, recorded April 23, 1985, document No. 85-077991
2) Southern Pacific Transportation Company, recorded June 23, 1988, document No. 88-150572
3) Southern Pacific Transportation Company, recorded December 31, 1997, document No. 97-348924
4) Union Pacific Railroad, recorded June 4, 2003, document No. 200321121

(See Continuation sheets for complete verbal and legal boundary description.)

Boundary Justification (explain why the boundaries were selected)

These boundaries were selected in that they are the original properties of the Transcontinental Railroad (WPRR, CPRR, SPRR) in this segment. They are currently owned by The County of Alameda and leased to the non-profit Pacific Locomotive Association for its preservation and use as an operating railroad museum. Other portions of right of way also owned by The County of Alameda are not included herein, as they are neither contiguous nor currently subject to preservation and/or conservation.

This 11.6 mile-long railroad right-of-way segment not only maintains a high level of integrity for its period of significance, its setting and feeling reflects that of late-19th and early 20th century rural Northern California. As a result, a direct relationship may be seen between the railroad's 1860s engineering and the scenic and rugged setting it was designed to traverse.

11. Form Prepared By

name/title Al Minard, Historian
organization date September 21, 2009
street & number 1201 Valdez Way telephone 510-656-3936
city or town Fremont state CA zip code 94539
e-mail alminard@comcast.net

Additional Documentation

• **Maps:**

- USGS 7.5min Series, Niles, La Costa Valley & Dublin Quadrangles
- Sketch map reference composite of USGS quadrangles showing NCTR
- Sketch map showing stations & mile posts of NCTR
- Sketch map showing the locations of significant contributing structures
- Sketch map showing the locations of signals and etc.
- Sketch map showing the locations of photographs

• **Continuation Sheets**

Continuation sheets are attached for sections 7, 8, 9, & 10

• **Additional Documentation**

- SHPO Determination (FHWA 041116A), 2004
- Copies of Historic Photographs
- Digital copies of this application including TIFF files of photographs.

Photographs:

Twenty eight contemporary photographs are attached of the district as well as significant resources.

Photo locations, direction of view, are indicated in the photo log and on the attached sketch map.

Photographs are printed on HP Premium Plus Photo Paper using HP Vivera inks.

Property Owner:

(complete this item at the request of the SHPO or FPO)

name County of Alameda Public Works Agency, ATTN: Rory MacNeil

street & number 399 Elmhurst Street telephone (510) 670 5587

city or town Hayward state California zip code 94544

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C.460 et seq.).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 18 hours per response including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Office of Planning and Performance Management, U.S. Dept. of the Interior, 1849 C. Street, NW, Washington, DC.

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**Niles Canyon Transcontinental Railroad
Historic District**
Alameda County, California

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NARRATIVE DESCRIPTION

The Niles Canyon Transcontinental Railroad Historic District is an 11.6 mile-long segment of the first Transcontinental Railroad as it passes through Niles Canyon (Alameda Cañon), Sunol Valley, and Arroyo de la Laguna between the San Francisco Bay area and the Amador Valley. This rail line and its right-of-way winds from the Niles district of Fremont to Pleasanton via Sunol. It contains many features and characteristics, including a rural setting largely unchanged from the time of the line's original construction in 1865-69. Located in the San Francisco metropolitan area with over seven million people the NCTR retains much of the historic integrity and character from the time of its construction.

The route of this rail line was largely selected to provide an all-land route from Sacramento to San Francisco. Alameda Creek's path through the Diablo Range provided a rare and gentle "water level" grade from San Francisco Bay into California's interior. Continuing over Altamont Pass, the railroad could reach the Central Valley with a maximum grade of 1% while also circumventing the engineering challenges posed by the Carquinez Strait and the Sacramento River Delta. The construction of the roadbed is now particularly unique in the western United States. Stemming from the 1853 survey and 1865 design, the narrow roadbed and sharp turns were characteristic of the formative period of railway construction. Most similar roadbeds were obliterated as railroad practice modernized beginning in the 1890's. The ruggedness of the canyon limited efforts to improve the roadbed. The roadbed remained essentially unaltered except for the bridge replacements, the addition of passing sidings and signals (1893-1911). This was because the line was relegated to secondary service only about ten years after it was built. As a result many of the viewsacpes through the canyon remain pristine.

The railroad was originally graded through the rugged canyon using Chinese manual labor. Culverts, retaining walls, and bridge piers were built of locally quarried stone, and four major timber through-Howe truss bridges were built to cross Alameda Creek and Arroyo de la Laguna Creek. Within 40 years, these wood bridges were replaced with steel plate-girder and Pratt truss bridges, including an 1896 pin-connected truss at Farwell. Other later improvements included cast iron, concrete, treated-wood, and corrugated metal culverts; an automatic signaling system; and the use of heavier rails.

While built ahead of most of the area's commercial development, some land along the route was already used for raising cattle and growing grains such as wheat. The railroad's construction allowed other enterprises to be established along the route and the delivery of locally produced goods to distant markets. Niles Canyon's geology was able to support a brick works and several quarries. The railroad also allowed more intensive, and higher-value agricultural land uses. Extensive fields of grains gave way to fruit and nuts. The more rugged terrain along the railroad continues to be used for cattle grazing, but were also used for vineyards.

The historic district encompasses the right-of-way acquired by Alameda County from the SPRR and licensed to the non-profit Pacific Locomotive Association. This property varies in width from 100 feet to 400 feet along its length depending upon the manner in which the railroad acquired it. The right-of-way hosts a variety of structures that together create a nearly complete picture of the late 19th and early 20th century rural and industrial railroad landscapes. These structures include the railroad's earthen grade, rural village and farm structures, wayside buildings, station sites, pole lines, and the tracks themselves. The historic district is primarily organized around the hand-excavated railroad grade built between 1865 and 1869. Other features are either specialized structures set along this grade, or are linear features that run its length such as tracks and telegraph lines.

The grade through Niles Canyon consists of many curves, cuts, and fills necessary to carve a path along its winding course, and steeply sloping sides. Less grading was needed through the Sunol Valley and Arroyo de la Laguna, but was again necessary where the line climbed out of the arroyo to reach Pleasanton. The tracks themselves were supported by a roadbed of crushed rock ballast, approximately 12' wide, and elevated 18"-24" above the earthwork grade. The rails

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were removed by the SPRR in the 1980s. The railroad track has been restored along 9.3 miles of this grade from Niles to Verona. Most ties were left in place preserving the historic trace of the alignment. Ties were removed along portions of the grade from Verona to Pleasanton. The non-profit Pacific Locomotive Association is restoring rails and ties on the historic alignment, using materials similar to those used during the period of significance. Railroad track required continuous maintenance and the rails, ties, and ballast were replaced in-kind frequently during regular use.

In addition to the earthen grade, a number of structures were built to support the railroad's path. Culverts were built during several periods to direct water beneath the grade. Five major bridges and three smaller ones were built, rebuilt, and replaced. Stone and concrete retaining walls of various eras are also present to support the grade at locations where the line was too close to the creek or highway. The right-of-way also hosts two parallel pole lines for telegraphy and railroad signaling. Both pole lines are in poor condition and have not been maintained since the early 1980s. Of the line's numerous buildings, several survive, but most have been relocated from their original locations or altered. The survivors include all three depots along the line. The second Niles passenger depot and the second freight house survive in good condition, and while both maintain a high-level of integrity, they have been relocated from their original sites. The city of Fremont intends to return them to close to their original sites and restore them to their 1950s appearance. The 1884 Victorian-stick style Sunol depot has been restored and returned to a site very close to where it was built. Its setting is nearly indistinguishable from its historic site.

The railroad, its grade, and structures are in generally good condition, and have a high level of historic integrity. Construction reflects standard railroad practices from throughout the line's period of significance. As a result, the historic district contains examples of a variety of 19th and early 20th century construction technologies common to railroads and other industrial sites. Although these standards evolved as trains became longer, heavier, and faster, later additions and changes did little to disrupt the earlier characteristics of the railroad. Most of the line is still on the original alignment that was graded by Chinese workers in the 1860s, and continues to feature many structures from its initial construction.

The Niles Canyon Railroad was declared eligible, for the NRHP, by the California State Historic Preservation Officer in 2004¹ (FHWA 041116A). The canyon was officially designated a scenic corridor by Caltrans in 2007.

Due to the linear and dispersed nature of the district's features, the narrative description is broken up into several parts that organize the resources of the historic district into two groups and then describe them from west to east.

A. Locations & Names

Historic railroad practice uses mileposts to locate resources. The NCTR and NCRy continue this practice using the historic CPRR/SPRR mileposts from the San Francisco Ferry Building, as corrected by the 1911 survey.

Milepost and map coordinates of the limits of the property and most significant structures are:

	Mile-post	Latitude	Longitude	UTM Zone 10 Easting	Northin g
West End of Property (Niles)	29.2	37°34.705'	121°58.949'	⁵ 89.95	⁴¹ 59.41
Farwell Bridge (center span)	31.6	37°35.862'	121°56.851'	⁵ 93.07	⁴¹ 61.45
Mile Post 34 (Brightside yard)	34.00	37°35.724'	121°55.028'	⁵ 95.85	⁴¹ 61.40
Sunol Depot	35.6	37°35.653'	121°53.337'	⁵ 98.30	⁴¹ 61.21
East end of Property (Pleasanton)	40.6	37°39.370'	121°52.707'	⁵ 99.06	⁴¹ 68.10

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The following is a summary of the many names that referred to the railroad through the proposed district.

"Niles Canyon Transcontinental Railroad Historic District"

A general term for the railroad segment under consideration for the National Register is the "Niles Canyon Transcontinental Railroad," (NCTR)

"Niles Canyon Railway" (also "NCRy") 1987-Present

Name for the non-profit heritage railway operation currently operating the rail line between Niles and Pleasanton.

"Pacific Railroad" 1845-1870s

Common name used for during the promotion and construction of the first Transcontinental Railroad.

First proposed to the 28th Congress by Asa Whitney in 1845. This name described the rail line necessary to connect the then existing U.S. rail network to the Pacific Ocean. Later, the "Pacific Railroad" was defined by the Pacific Railroad Act of 1862 as a line connecting the Pacific Ocean to the Missouri River near Council Bluffs, Iowa.

"Transcontinental Railroad"

Common name for the "Pacific Railroad" as described above, and built by the Western Pacific, Central Pacific, and Union Pacific Railroads.

"Overland Route" 1869-1960s

Common name for the "Pacific Railroad" as described above.

"Western Pacific Railroad" (WPRR) 1862-1870

Corporation name of the company formed to construct the portion of the Transcontinental Railroad between San Jose and Sacramento, California. The 1864 amendment to the Pacific Railroad Act formally recognized their participation in the construction of the Transcontinental Railroad. This company came under the control of the "Associates" (owners of the Central Pacific Railroad) in 1867, and was merged into the Central Pacific in 1870. Another company was established with the same name in the early 20th century. This company built a competing rail line through Niles Canyon in 1909-10, now owned by the Union Pacific Railroad.

"Central Pacific Railroad" (CPRR) 1861-1958

(Variously reincorporated as the Central Pacific Railroad of California, Central Pacific Railroad Company, Central Pacific Railway and Central Pacific Railroad)

Corporation name for the railroad owned by the "Associates." The Pacific Railroad Act of 1862 granted them the rights to construct the western portion of "Pacific Railroad". Initially seeing little profit in the line between San Francisco and Sacramento, they informally granted their rights to build this portion to the WPRR. In 1867 the CPRR Associates took possession of the financially moribund WPRR, completing construction of the line in 1869. The WPRR was formally rolled into the CPRR corporation in 1870.

"The Governor's Road" 1868-1880s

Common name for the lines of the Central Pacific referring to the partial ownership and management by Governor Leland Stanford.

"Southern Pacific Railroad" (SPRR, also "Southern Pacific," "SP," or "Espee") 1865-1996

Corporation name for a railroad that came under the control of the "Associates" in 1868. In 1885, Central Pacific operations were consolidated under the "Southern Pacific Company" name. Formal corporate consolidation of the CPRR into the SP did not actually occur until 1958. The SPRR was merged into the Union Pacific Railroad in 1996.

"Southern Pacific Transportation Company" 1969-1996

Corporation name for a holding company for the "Southern Pacific" railroad.

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“Union Pacific Railroad” (UPRR) 1861-Present,

The company chartered in the Pacific Railroad Act to build the eastern segment of the Transcontinental Railroad.

“Western Division”

An organizational entity within the Southern Pacific that was headquartered in Oakland, and managed the maintenance and operations of the rail lines that radiated from there to San Jose, and Sacramento via several different lines.

“Niles Subdivision”

An organizational entity within the “Western Division” that managed the maintenance and operations of the rail lines that radiated from Niles to Oakland, San Jose, Redwood City, and Tracy.

“Niles Line”, “Tracy Line”, “Oakland – Tracy Line”, “Niles – Tracy Line” & “Altamont Pass Line”

Informal designations for the segment of the rail line between Oakland and Tracy via Niles, Niles Canyon & the Altamont Pass.

A note on names:

This document will refer to the abbreviated corporate names for the companies that operated the rail line at the time in question. Therefore,

Western Pacific Railroad (1865-1870) = WPRR

Central Pacific Railroad (1870-1958) = CPRR

Southern Pacific Railroad (1885-1985)* = SPRR

Niles Canyon Railway (1988-Present) = NCRy

*The CPRR was owned by essentially the same ‘associates’ as the SPRR. It was operated under the SPRR banner after 1885 though legally a different company.

B. Vernacular Landscape/Geography/Setting

The route connects several distinct landscapes over its short length. These landscapes may be characterized by their topography, geology, vegetation, and use.

1. San Francisco Bay Alluvial Shore/Niles

Niles retains its small town character and generally reflects its development in the early 20th century as a railroad town and agricultural center. The station site is relatively flat and is set between the track of the UPRR and Niles business district to the south, the Ford Tract residential district to the north, and a residential tract from the late 1970s set below the level of the railroad to the east. Further to the north, and visible from most of the site are the open and rolling hills of the East Bay. The UPRR track is one of two rail lines currently in operation between Oakland and San Jose. It is very close to the alignment of the original CPRR mainline and San Jose branch as they were during the period of significance. There are no switches or passing tracks along this route through Niles, and the track reflects current standards for heavy use with heavy welded-rail and an elevated ballast roadbed. Many freight and passenger trains operate regularly on this line throughout the day. The downtown area is largely unchanged from the 1930s and was developed along the south side of Niles Boulevard since the railroad owned almost all of the north side. Parts of the former station site to the south have been turned into public parking lots, and another portion is slated to become a new public plaza that will feature the 2nd Passenger Depot and 2nd Freight House near their original locations. The Ford Tract was mostly developed during the period of significance, in the 1920s. The working class bungalows of the Ford Tract are typical of residential areas built next to railroads and other industrial facilities. The yards of these houses feature many mature trees that serve to partially screen the houses from the historic district. The residential area east of the wye was built on the site of the original town of Vallejo Mills, and some of the Niles Station. Its lower elevation, and landscaping reduce its visual impact from the site, but it is otherwise the most glaring intrusion into the historic setting of the Niles Station.

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The UPRR line was once connected to the NCTRR. The UPRR line to the northwest from the Niles station was the final portion of the transcontinental route as it stretched straight across the flat lands of the East Bay toward the port of Oakland. The tracks of the NCTRR start in Niles at the west end of the station near the Sullivan Underpass. Upon passing the station site, they curve north toward the mouth of the canyon. The historic station site has a variety of landscape features that were created by the railroad. The main area of trees and plantings is at the site of the worker housing. Most of the trees were planted in the gardens of the worker housing. The preference seems to have been for productive trees, as many of the specimens are Avocado trees. A number of Pepper trees are also present. There is a large area of Prickly Pear cactus near the former site of the Roadmaster's House. This cactus garden does not appear to be from the period of significance. A number of Canary Island Palm trees remain south of the UPRR and mark the former location of the 2nd Passenger Depot. These trees are to be preserved as part of the Niles Town Plaza. There is also a row of eucalyptus trees on the opposite side of the property line along Henderson Court to the east of this area. Eucalyptus trees were commonly found along railroad lines. They had been imported and planted in large numbers for the lumber they would produce. This was not successful, but the trees were found to be useful for windbreaks and lined the tracks of the SPRR in many locations.

Niles was established by the railroad due to its location at the mouth of Niles Canyon. It is set at on the very edge of the flat and fertile land that surrounds much of San Francisco Bay. Originally an area of grassy meadows and wooded watercourses, the area became an agricultural area renowned for fruit and nut orchards. The hills above the town continue to be used for cattle grazing, although they had been planted with grape vines for a period in the 19th century. The town has gradually been surrounded by suburban development. The landscape of the site was designed and reshaped to serve the needs of the railroad. The station was composed of this landscape, and a district of buildings and facilities designed to concentrate the operations of the railroad in a manageable area limited by walking distance and the evolving length of trains. A junction and extensive railroad facilities had been located in Niles, but little remains on the site.

2. Niles Canyon/Diablo Range, Niles Junction to Sunol

Originally known as Alameda Cañon for the creek that created it, this narrow and winding canyon connects the San Francisco Bay's eastern shore area to the Sunol Valley through a portion of the Diablo Range. Despite its many curves, the canyon runs roughly east to west. Alameda Creek drains a large portion of Alameda County and forms one of the few "water level" routes into the Bay Area. The rail line took advantage of the relatively slight ascent of the creek to build a route towards Sacramento, but had to accept the tight curves and narrow banks of the canyon. The approximately 1% grade is still considerable by railroad standards. When initially built, the railroad crossed the creek three times to ease the extensive earthwork and curves necessary to follow it through the canyon. A later route change eliminated one of these bridges. The south facing slopes are primarily grassland and grazing areas for cattle with some trees and scrub in the lower laying areas. North facing slopes are heavily wooded with Oak trees. The narrow bottom of the canyon features the rock-strewn course of Alameda Creek and is lined with Buckeye, Cottonwood, Oak, and other trees.

The remains of several industries and recreational facilities are visible along the railroad. These include a brick works, several picnic grounds, ranches, and a large quarry. All of these activities had been served by the railroad. Several stations were located in the canyon including a passing siding at Farwell. The roadbed features substantial earthwork cuts and fills and is crossed by many culverts.

3. Sunol Valley, Sunol

The track emerges from the canyon just west of the unincorporated community of Sunol set within its eponymous valley. This area is still rural in character and occurs at the junction of Alameda Creek and several tributaries. The valley had been a part of a Spanish rancho and was sparsely settled before the railroad was built. The unincorporated village of Sunol gradually developed near the tracks after the railroad's construction, and for a time featured a number of hotels that catered to vacationing San Franciscans. Sunol is the site of a passing siding, and from here, the tracks curve northward to follow one of Alameda Creek's major tributaries toward Pleasanton. The valley has been the site of cattle ranching, farmland, nurseries, quarries, and a golf course.

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4. Arroyo de la Laguna, Sunol to Verona

This creek drains the entire Tri-Valley area and flows through a narrow valley that runs from north to south along the eastern side of the Sunol Ridge and the Calaveras Fault. The tracks cross the Arroyo de la Laguna once south of the station site of Bonita. The course of the railroad is straighter through this valley, but the line had to twist its way up the western side of the arroyo in order to exit it on its way to Pleasanton. The tracks currently end just shy of the Verona Station, but the right-of-way is largely intact from this location to Pleasanton. Long used for cattle ranches, the arroyo has seen an increase in suburban-style development, but the wooded nature of the western side of the valley conceals some of this development from the tracks. The eastern side of the valley drier and is mostly grassland. The northern end of the valley near Verona had been the site of a large estate owned by Phoebe Apperson Hearst, but is now the site of Castlewood Country Club. I-680 also runs through the arroyo along its eastern slope.

5. Amador Valley, Verona to Pleasanton

This landscape has been compromised by suburban development that has occurred starting in the 1970s. These developments include a larger office park, several housing tracts, and a senior living facility. The Amador valley is set within the Diablo Range as part of the "Tri-Valley" area, which includes the Livermore and San Ramon Valleys. Amador Valley was once the site of a large pre-historic lake. Upon climbing up the "Diablo Grade" out of the Arroyo de la Laguna, the tracks follow a broad curve to the east through a cut. This curve passes beneath I-680 and aims the tracks toward Pleasanton. Past Pleasanton, the tracks had cut across the Livermore Valley on a straight path toward Altamont Pass to exit the Diablo Range. The Amador Valley is more arid due to its inland setting. The valley supported cattle ranching, vineyards, and orchards of nuts and olives. Settlement at the site of Pleasanton pre-dates the railroad and was a center for local agricultural production. Pleasanton is now a large a prosperous city. Although the city is largely suburban, its historic Main Street maintains a character typical of small agricultural towns in northern California. Pleasanton's Main Street starts at the end of the historic district's right-of-way.

C. Linear Resources

The Niles to Pleasanton segment is a small portion of the nearly 2,000 miles of Transcontinental Railroad completed in 1869, and is an even smaller portion of the eventual Southern Pacific network of 13,848 miles as it peaked in 1929. Yet this segment is unique in its combination of natural setting, construction history, and state of preservation. It is the only portion of the Niles – Tracy line still in operation, and it retains many features from the time of its construction. It is also representative of the solutions that arose when 1860s railroad engineers had to face challenging terrain. Niles Canyon and Arroyo de la Laguna were difficult places to build and maintain a railroad. As a result this segment has a large number of the dramatic features that were necessary to address this landscape. The corridor established by the railroad's right of way had immediate applications for used other than moving people and goods. In addition to its obvious role in revolutionizing transportation, the transcontinental railroad contributed to a revolution in communication. The Pacific Railroad Act required the participating railroads to construct a parallel telegraph line. This was the first of several uses that shared the right-of-way with the railroad. These currently include a telegraph line, a signal code line, a petroleum pipeline, and a fiber optic line.

C1 Railroad Grade

Railroad alignments are largely defined by two criteria; these are ruling grade (Number of feet of ascent per hundred feet of track or percent), and maximum curvature (measured in degrees of curve per hundred feet of track). These two factors determine the size and speed of the trains that can be operated along a given route. The engineers of the NCTR endeavored to build the railroad as flat and straight as possible, while providing curves and grades to economically negotiate the natural terrain. The Pacific Railroad Act, which authorized the construction of the NCTR, required grades to not exceed 2%, and curves to not exceed 10° (per 100 feet). The grade was also to be elevated above the adjacent terrain to provide drainage and to move surface runoff from the area around, and under the tracks. The roadbed is typically crowned in the middle and flanked by parallel drainage ditches that are occasionally connected via culverts.

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The grade consists of a continuous earthen roadbed approximately 20 feet wide. Its alignment is constrained by the determining factors of grade and curvature previously mentioned, and the topography of the terrain to be traversed. As a result, the railroad curves a great deal to thread its way through Niles Canyon and Arroyo de la Laguna. The grade has many cuts and fills to maintain its approximately 1% ascending grade across the hills and valleys encountered by the tracks. The slopes of the cuts and fills extend at the natural angle of repose away from the roadbed's shoulders. Along much of the canyon, the grade has the form of a shelf cut into the steep sides of the canyon. A drainage ditch runs along the uphill side of this shelf to collect runoff. The alignment has many sharp and compound curves as was typical of 19th century railroads through rough terrain. This design resulted from the desire to balance the expense of grading with the need to allow reasonable train speeds that would have been hindered by an excess of curvature.

The current roadbed may be placed into the following categories based on its integrity and the degree to which it has been modified since construction;

Class A	Roadbed along the original 1860s alignment
Class B	Roadbed that has been realigned or modified during the first half of the 20 th Century
Class C	Roadbed that has been modified since the conclusion of the Period of Significance

The majority of the current grade falls into Class A and is largely unchanged from when Chinese laborers built it from 1865 to 1869. Several stretches of Class B grade exist where the alignment was altered to reduce the line's curvature or to accommodate improvements to the parallel state highway through Niles Canyon. These changes primarily occurred in the early twentieth century to accommodate faster and heavier trains through the canyon. Another line change occurred in 1942 to allow the improvements to the state highway through the canyon. The only portion of Class C grade occurs in Niles and resulted from the widening of Mission Boulevard in 2005.

The swath of land owned by a railroad is known as a Right of Way (ROW). The Pacific Rail Act provided a 400' wide ROW where the line was built across federally owned land. The railroad was able to acquire privately owned land through purchase or Eminent Domain. The width of the ROW varied in such cases but is never less than 100'. The unused portions of the ROW were either open land, leased to adjacent ranches, or occupied by the parallel state highway. Portions of this land were also leased for recreational picnic grounds, billboards, businesses, parking lots, and even homes.

C1.1 Niles –Class C

Current trackage consists of a mainline, a 900 foot passing siding, and a portion of the wye track that had served as the junction with the line to San Jose. The construction of this track has all occurred since 2005 since the original alignment was altered to accommodate the new Mission Boulevard underpass and the adjacent Union Pacific right-of-way, which divides the former Niles Station site. Both sets of tracks are on an alignment that is close to that from 1901. The tracks within the historic district use materials consistent with track from the 1920s-1930s. The line through Niles had three tracks through the station area. From the depot to the north, these were the San Jose Branch, the mainline, and the corral track. The line to San Jose branched off to the southeast, and was connected again to the mainline to create a "wye." A small freight yard was further to the south. The Niles Canyon mainline is approximately where the Corral track had been, and the current siding is north of that. The Pacific Locomotive Association is reconstructing the wye using the segments currently in place.

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C1.2 Niles Junction –Class A

A new pair of welded steel through plate girder bridges carries the mainline and the east leg of the wye on parallel spans to Niles Junction from the southwest. These bridges replaced a smaller streamline-moderne underpass with a riveted steel plate girder bridge and concrete abutments in 2005. The earlier underpass was built when Mission Boulevard was upgraded to serve as a state highway in 1936. East of the new highway underpass, a new concrete culvert was built as part of the same project to replace an earlier structure. The two tracks converge at Niles Junction on their original alignments. This switch was originally the east end of the Niles passing siding.

C1.3 Merienda –Class A

A short tangent separates reverse curves at this location where the original line from San Jose had joined the current alignment north of Alameda Creek. Originally known as San Jose Junction, the original grade is visible curving to the south. It has been eroded to resemble a sharply peaked berm and is now covered with Oak trees. Note that the one mile segment of road bed from Niles Junction to Merienda was built by the San Francisco Bay Railroad in 1869 to connect the WPRR into Alameda and Oakland.

C1.4 Dresser –Class B

A right hand switch at this location had served the brick works located on the large flat area south of the tracks. Traces of this spur remain. A later left hand switch is currently located east of here along the mainline, but no track has been added to the end of the diverging route. This switch dates from the 1990s and a non-contributing resource. A minor track re-alignment from the 1920s at this location altered the relationship between the track and the roadbed. As a result, the roadbed and several cuts are wider than they need to be to accommodate the single track.

C1.5 Farwell –Class A

A mile long passing siding was constructed east of the bridge by 1911. The west switch of Farwell passing siding had been located here along with a short freight spur. Neither of these features survive, but the roadbed of the parallel passing siding is in evidence.

C1.6 Mayborg –Class A

Just west of this location was the east switch of the Farwell passing siding. The Pacific Locomotive Association has reconstructed this switch and a portion of the siding, in the 1990s. A 500-foot long storage spur has been built along the alignment of the passing siding.

C1.7 Brightside –Class A, B

The Pacific Locomotive Association's storage yard and maintenance facilities are located east of this station. This includes a passing siding, two-track car shop, two-track engine shop, and a four-track yard. Kaiser established a quarry east of this station in the 1940s to extract a lightweight aggregate used in concrete. A spur was built here to load the material from an overhead tippie after the period of significance. With the exception of the mainline, all of the tracks and facilities near Brightside are non-contributing.

C1.8 Sunol –Class A

There is passing siding here that stretches from just west of the depot to a point just west of Bond Street. A separate storage spur extends east of Bond Street on the roadbed of the original Sunol passing siding. Originally, these tracks had been part of a continuous passing siding that had been constructed when the line was built in 1869. The siding had been extended several times through the 1920s as trains were lengthened. There had also been a third "house track" south of the mainline. This track was connected to the mainline with switches at both ends and served a corral west of the depot, the depot's freight platform, and another freight platform east of Kilcare Road. The new depot location is too close to the mainline to allow reconstruction of the house track. Past the east end of the Sunol passing siding, a short stretch of track has been reconstructed with concrete ties. This technology was developed after the period of significance and represents a non-contributing track segment.

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C1.9 Bonita –Class A

A new track was completed in 2004 between the mainline and the UPRR (formerly the new Western Pacific) at Hearst siding. This is the only rail connection between the Niles Canyon Railway and the national rail network and was built to allow the interchange of equipment to the outside world. This track and its crossing of the Sunol - Pleasanton Road is a non-contributing resource. There had been a spur at the Bonita station for loading local freight, but this was removed around 1910.

C1.10 Verona –Class A, C

Restored rail currently ends immediately after crossing the Sunol – Pleasanton Road, beneath the UPRR overpass. From here the railroad grade continues uphill into Pleasanton. Verona had a short freight spur, but this was removed in the early 20th century.

C1.11 Pleasanton –Class A

A few hundred feet of track sit isolated on the grade west of Bernal Avenue.

C2. Rail, Ties and Ballast

The tracks currently in place along the Niles Canyon Railway are representative of the railroad construction practices of the 1920s. The original tracks were built to be expedient and cheap. They used lighter rails, 55 pounds per yard, placed directly on rough-hewn wood ties. The tracks were initially ballasted with earth instead of crushed rock. Such construction was not durable and could not support the weight of more modern trains, and the tracks were repeatedly upgraded throughout their use. The steel rails used during the period of significance were removed by the SPRR thus the rails are a non-contributing resource.

The standardization of railroad track is at the root of the industry's success at creating an international, integrated transportation network. Eight-foot long pressure treated wood ties on approximately twenty-inch centers are set in crushed rock ballast and support continuous steel rails resting on steel tie plates. The rails are spiked to the ties through the tie plates and are spaced 4'-8 1/2" apart to form a standard gauge railroad track. The rails are classed by their weight per yard, and vary along the railroad from 85 to 132 pounds per yard. The track itself has evolved over time as the railroad replaced the rails, ties and ballast through the course of regular maintenance. The rails wore out with regularity, particularly on lines with tight curves. As time went on, they were upgraded with heavier rails and additional crushed rock ballast.

Wood ties, treated with creosote, typically have a useful lifetime of about fifty years. With clean, well drained ballast they can last significantly longer. The ties were left in the ground when the SPRR removed its rail. Date nails with a year stamped in the head identify when the ties were installed. Many ties still in the ground have date nails from the 1920s. Although many ties date from the period of significance, they are a non-contributing resource. Their significance is that they preserved the historic trace of the rail.

At the peak of the railroad's development, the ballasted roadbed was lined with a cobble stone "toe-line" to form a neat edge between the crushed rock and the adjacent earthen grade. These stones are still present and visible in several locations, though most have been buried by subsequent layers of ballast. The toe-line is a contributing resource.

C3 Telegraph Line

The Western Union telegraph line was constructed concurrently with railroad and completed in 1869. The line served the dual purpose of providing communication for railroad operations as well as the commercial message service. Its location adjacent to the rail line provided vastly improved access for servicing over earlier lines.

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The original telegraph poles along the line were square, but it is unlikely that these surviving poles are that old. Square redwood poles continued to be installed by Western Union into the early part of the 20th century. The poles are from fifteen to twenty feet tall and have four cross arms each. These cross arms have ten glass or ceramic insulators each, to support up to forty steel wires along the pole line. Most poles are round, but a large number of older poles are square. The telegraph line has not been maintained in several decades and is in poor condition. About thirty square poles remain standing. Some poles have fallen over and many were replaced with round poles during the period of significance. Most poles have lost some or all of their cross arms and little wire remains. The telegraph line was one of the original features of the line, but when built, the line only carried two wires. It is also likely that the alignment of the telegraph line has been altered in some places. The remains of the existing telegraph line are largely representative of its appearance during the first half of the 20th century.

C4 Code Line

This pole line's construction is very similar to that of the telegraph line, but all of the poles are round, and they only support one cross arm with eight steel conductor wires. This "code line" or signal line" was used to control the automatic block signal system that had been installed around 1909. This line is on the opposite side of the tracks from the telegraph line. This is generally on the south side of the tracks. Code line poles with wood junction boxes were located adjacent to the signals. Wires ran from these boxes located just below the cross arm to the adjacent signal's mast. A nearby battery vault was set in the ground and allowed the signals to remain operational during power interruptions. This line has not been maintained since 1984 and is in poor condition, with some segments of the line completely gone.

C5 Petroleum Pipeline

This pipeline parallels the track from Pleasanton to a point just west of Sunol. Its construction below grade is mostly concealed from view. Warning signs indicate its presence along with a number of pressure relief valves distributed along its route. It was originally built by the Southern Pacific to connect the refineries of northern Contra Costa County with a number of industrial customers in around San Francisco Bay, including San Francisco Airport and PG&E. Although built by the railroad, a company that specializes in energy and pipelines currently owns this feature. It is a non-contributing resource.

C6 Fiber Optic Line

Continuing the railroad's role as a corridor for communication, a fiber optic line was placed along the right-of-way in the 1980s. This line runs below grade and is largely out of sight. Warning signs and fiberglass splice vaults mark its presence at regular intervals. The fiber optic line is a non-contributing resource.

C7 Right of Way Fences

A large portion of the NCTR ROW is bounded by privately owned ranch land. The fences between the ROW and these ranches appear to date to the early part of the 20th century. All of them rely upon several strands of barbed steel wire reaching to approximately 4' above grade. They use a variety of post-types for their support, including treated wood, formed steel, and used locomotive boiler tubes.

D. Sites & Structures

D1. Station Sites

The following is a list of historic stations along the NCTR. Note that a station is simply a site along the rail line identified by name in the timetable.²

D1.1 Niles (MP 29-29.5, El. 87) Niles was named in 1869 by the railroad for Judge Addison C. Niles, a major Central Pacific stockholder, who was elected to the State Supreme Court in 1871. The place had been known as Vallejo Mills in the 1850s for Jose de Jesus Vallejo, who had built a flour mill on Alameda Creek.

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This station site is largely open area of approximately ten acres located north the Niles commercial district. The area is divided by two sets of railroad tracks that run parallel for most of its length. Overall, there is little left on the site from the period of significance. The site's historic value is to be found primarily in its setting and function.

Three buildings of the Niles Station site still exist. All have been moved and otherwise modified and are non contributing resources. About a quarter of the original depot (1870) still exists as a private residence in Niles. The Second Passenger Depot (1901) has been returned to its original site from a nearby park. The Second Freight House (1876) has been moved for the fourth time for the construction of a new public plaza. The latter two buildings are owned by the City of Fremont, which is restoring them as features of the Niles Plaza Project. The Niles Plaza is not included the proposed NCTR.

D1.2 Niles Junction (MP 29.6, EL. 103) is the east end of the Niles wye, the junction of the lines from Oakland and San Jose. It is adjacent to the actual site of Vallejo's mill. Established in 1909 to provide direct connection to the canyon from San Jose and the Dumbarton line.

D1.3 Merienda (MP 30.6) is the site of San Jose Junction 1869-70, called Kimballs 1897, was renamed Merienda in 1898.

D1.4 Dresser (MP 30.9, EL. 132') first appears on SP records in 1923 when a station sign was put up. It was the location of a spur track into the brick plant. The brick plant, which existed through the 1990s as Mission Clay Products, was originally built in 1905.

D1.5 Alston (31.0) served the adjacent brick plant 1909-1916. Alston also served the popular Joyland Park.

D1.6 Farwell, (MP 31.7) initially Farwell's Spur, never had more than a station sign and a telephone booth. It marked the west end of a passing siding and a short set out spur. The station often served picnic trains at Stony Brook Park.

D1.7 Mayborg, (MP 32.7) was at the east end of the mile-long siding that began at Farwell. It was the site of a 'China Camp' during the WPRR construction in 1865-6. It is now called **The Spot** by the Niles Canyon Railway to commemorate the location of a long gone legendary house of ill repute of that name.

D1.8 Brightside, MP 33.5 served a popular resort hotel. There was a 9'x18' passenger shelter shed there, board and batten with a hip roof, which SP retired and tore down on November 11, 1930. The station was later reestablished to serve Kaiser's Kilite quarry. It is currently the yard and operations center of the NCR. With the exception of the mainline, all of the tracks and facilities near Brightside are non-contributing.

D1.9 Sunol, (MP 35.6, EL. 265') **Sunol Station (MP 35.6) and Depot**

Sunol was named for Antonio Maria Sunol, a native of Spain, who deserted the French ship *Bordelais* in 1818, and in 1839 was part owner of the Rancho El Valle de San Jose, on which the town and Sunol Valley are situated. Sunol's hospitality and his rich garden are repeatedly mentioned by early travelers. His place is shown on an 1844 map.

Sunol, too, was a destination for the city people. In the 1880s there were four hotels there. The Hazel Glen Hotel, on Kilkare Road across from the depot, advertised itself as one of the "... largest and most commodious hotels in the township, and constructed on a scale of magnificence unsurpassed in the county outside San Francisco or Oakland." All of the hotels burned down at various dates and they're nearly forgotten now.

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The Sunol Valley was already settled prior to the arrival of the railroad, but the village was not established until after the line's construction. Facilities typical to rural railroad towns were established here including corrals and grain warehouses. Sunol remains one of the only unincorporated villages in Alameda County and retains much of its character from the early part of the twentieth century.

D1.10 Bonita, (MP 37.2) at the east end of the Arroyo de la Laguna Bridge served local dairy farmers as well as a popular picnic ground. SP had a 12'x20' two-sided passenger shelter there, open at the front and back, built circa 1901 and retired in March 1939.

D1.11 Verona, (MP 38.4) was the station for Phoebe Apperson Hearst's *Hacienda del Pozo de Verona*. The name refers to a five-ton stone wellhead that her son, William Randolph Hearst, had purchased in Verona, Italy and installed in the *Hacienda* gardens. The SP never owned a building there, but one of their 1912 photographs shows a wooden platform at track level and small stucco Spanish-style building to shelter passengers (and probably also freight and express). In 1895 William Randolph Hearst commissioned a young San Francisco architect, A. C. Schweinfurth, to design the *Hacienda*. After Schweinfurth's sudden death in 1900, the project remained unfinished, although habitable. In 1903 Mrs. Hearst hired Julia Morgan, who the year before had become the first woman to graduate from the Architecture program at the Ecole des Beaux-Arts in Paris. Between then and 1910, Julia Morgan designed additions to the *Hacienda*. The main building grew to 92 rooms. One of Morgan's additions included a banquet room and heated indoor swimming pool, while a complementary addition at the other side had a 40 by 60-foot music room with a 30-foot ceiling. It seems likely that Julia Morgan designed the Verona station building too. If so, it was apparently the only railroad structure of her long and distinguished career.

Mrs. Hearst died in 1919. In 1924 William Randolph sold the *Hacienda* to the Castlewood Country Club. By then he and Julia Morgan were busy creating *La Cuesta Encantada* (later called Hearst Castle) on a hilltop above San Simeon. A fire in 1969 burned the main Verona structures to the ground. The Castlewood people built a new clubhouse along lines similar to the old one in 1972, but little or nothing was salvaged of the original. The small station was probably gone by the 1920s.

D2 Buildings & Structures

D2.1 Buildings

D2.1.1 Sunol Depot

The SPRR constructed this standard one-story combination depot No. 7 in 1884. Railroads such as the SPRR created standard depot designs to served the many towns along its lines and represents an early move towards the application of standard architectural designs on a large scale. More than economical, this standardization created a predictable experience for employees and customers, and contributed to the company's branding. A "combination depot" such as this housed facilities for a company agent, freight and passengers in one building and were designed to serve small towns such as Sunol. Out of at least ten other No. 7 depots, Sunol is the last one remaining.

The depot building is of wood construction and was designed in the Stick style that was fashionable at the time. It is 19 feet wide and 67 feet long. The roof is divided into two parts with a gable roof over the east end, and an elevated hip roof over the freight room to the west. Shingles are of green asphalt but would have originally have been green-stained shingles. Decorative scroll cut brackets supported the eaves and similar barge boards adorn the east gable end. The depot is divided into a series of rooms to serve a variety of functions. Starting from the east, the first room is the passenger waiting room which is currently used a gift shop. The agents office is next to the west and features a five-window bay on the track side from which the company's agent would conduct business related to train operations. The room also contained a public counter at which business could be conducted with shippers, and a small ticket window connects this office with the passenger waiting room. This room is now used as the ticket office for the Niles Canyon Railway. The next room was the baggage room and is currently used for storage. Finally, the freight room takes up the

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rest of the building and is set about forty inches above grade so that its floor would be level with the floor of freight cars and teamsters' wagons. This room is now used for exhibits and meetings. The freight room had been surrounded on three sides by a freight platform to facilitate the loading and unloading of freight from rail cars that would have been positioned next to this platform. A track had been located north of the building between the platform and the mainline for this purpose.

The depot was closed in 1941 and sold to a private owner. The structure was relocated to site about three quarters of a mile west of Sunol and was used as a restaurant and residence until November 1998, when it was relocated to its current site adjacent to the NCTR. The original location was not available due to the widening of Kilkare Road that occurred immediately after the depot's removal. The new location is approximately 75 feet to the west and 14 feet north of the original site and retains much of the context and setting of the original site. The new location has reestablished the building's relationship to the railroad, town, Kilkare Road and the surrounding landscape restoring its historic integrity. The building has been restored to represent its appearance in the 1920s and once again serves as a railroad depot for the passengers of the NCTR. The restoration is not yet complete as the freight platform, train order board, and chimney still need to be restored.

D2.1.2 Brightside Yard Buildings

Three buildings within Brightside Yard include the Back Shop, Car Barn and Yard Office. The Back Shop was fashioned from the remains of the gravel tipple of the quarry that occupied the property from the late 1940's until 1984. The Car Barn is a new structure erected in 2007 by the PLA as a restoration facility for historic rail cars. The yard office is a former SPRR wooden maintenance shed that was trucked into the site. None of the buildings at Brightside are contributing resources.

D2.2 Bridges

Bridges that allowed the line to cross various water courses, drainages, and roadways along its route. Bridge piers were built of locally quarried stone, and four major timber through-Howe truss bridges were built to cross Alameda Creek and Arroyo de la Laguna Creek. All four major bridges were constructed by the WPRR between 1865 and 1866. The first bridge crossing Alameda Creek was destroyed by flood in 1870 and never replaced. The large timber bridges used a minimum of iron hardware was used for connections and tension rods. These bridges were enclosed within shingled covers by the CPRR to protect the wooden structure and prolong their lives. The bridges were set upon coursed sandstone piers and abutments. Unable to support heavier trains, these bridges began to be replaced starting in 1893.

D2.2.1 Dresser Bridge (MP 30.78)

When built, the Dresser Bridge was the second crossing of Alameda Creek. It became the first crossing when the earlier first crossing was destroyed and San Jose Branch was rerouted through Niles in 1870. It eventually came to be known to the SPRR as "Structure 30F." The State Route 84 undercrossing portion of the bridge is also known by Caltrans as the Rosewames Underpass.

The current bridge is a four-span structure, which features two early U.S. examples of riveted Warren through truss structures. The current superstructure was manufactured in 1906 by the American Bridge Company to replace the second truss at this location, which had been constructed in 1893. It is thought the 1893 structure was damaged in the 1906 earthquake as a result of a landslide into the west end of the bridge. The original coursed-ashlar sandstone piers from 1865-66 are still in use and have been supplemented by concrete piers from 1893 and 1906. The bridge consists of two 125 ft. through Warren trusses and two 60 ft. deck plate girder spans with one at each end of the bridge. The abutments and piers are angled parallel to the course of the river below and are not perpendicular to the railroad's alignment. As a result, the bridge spans are laterally offset from one another.

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The western approach deck plate girder span carries the tracks over State Route 84. The western abutment has been encased within concrete by Caltrans and includes an arched opening through which a water flume had passed to reach Vallejo's Mills near Niles. To the west of this concrete and stone abutment structure, a dry stone work retaining wall supports the roadbed on its approach to the bridge. This bridge was identified as a major contributing resource of the NCTR³.

D2.2.2 Farwell Bridge (MP 31.56)

Farwell Bridge was initially known as the third crossing of Alameda Creek, but within a few years of its construction, it came to be known as the second crossing. The original covered wooden Howe truss was replaced by a steel truss manufactured by Edge Moor Bridge Works in 1896. This structure is a now rare example of a pin-connected truss on an active rail line. The design widely used in the latter half of the 19th century allowed rapid onsite assembly of prefabricated elements using a minimum of skilled field labor. Stonework for two of the bridge's piers dates to the original construction in 1865-66 while later concrete piers and abutments were added in 1896, 1907, and 1932. Stone work at the bridge dates to the original construction in 1865-66. Caltrans encased the eastern pier in steel and concrete in the 2000s to protect the highway in the event of an earthquake.

This bridge consisted of the primary 196 ft. Pratt through pin connected truss of 1896, a 98 ft. Warren through pin connected pony truss, and three 30ft deck plate spans from 1907. A 70' deck plate girder span was added to the east end 1932 to cross over a rerouted portion of State Route 84. As at Dresser, the piers are at an angle to the bridge, and the spans are offset as a result. This bridge was identified as a major contributing resource of the NCTR⁴.

D2.2.3 Arroyo de la Laguna Bridge (MP 36.9)

The Arroyo de la Laguna Bridge at Bonita, is a riveted through plate girder structure of five spans, which replaced the original covered Howe truss in 1899. The stone abutments and two of the piers date from the initial construction. Although nearly four miles beyond the end of WPRR track the stonework is indicative of WPRR construction c.a.1866. Known as CPRR/SPRR Structure "36G," This bridge consists of three 101 ft. and two 86 ft. through plate girder spans. Two additional concrete piers were added in 1899 to reduce the length of the new bridge spans.

D2.2.4 Smaller Bridges

Mission Blvd Overcrossing (MP 29.5) was constructed in 2005 by Caltrans to replace a 1937 grade separation of State Highway 238. It is a double track steel girder on concrete abutments and center piers. (not contributing)

Estates Creek (MP 33.6) bridge spans both a hillside drainage and a narrow road serving the Chs. Hadzel farmstead at the time of the original construction⁵. It has coursed ashlar stone abutments from the original construction. It probably originally supported a timber structure which was replaced by rivited steel girders ca 1905.

Sinbad Creek {also called Sunol} (MP 35.6) was replaced, ca. 1905, with concrete headwals and three rivited plate girder spans. The spans carry the main track and passing siding. The third span carried the house track for the Sunol depot and currently carries a pedestrian crossing.

The Western Pacific RR (new WPRR) overcrossing (MP 38.4) which also spans the Pleasanton-Sunol road, was constructed in 1909. This bridge spans the NCTR but is the property of the UPRR.

Happy Valley Road (MP 39.0) constructed ca.1905, spans a one lane road into a Pleasanton subdivision. The road cuts through a high fill as the rail line climbs the "Diablo Grade" out of the Arroyo de la Laguna. The tall vertical headwalls are concrete slabs with a rivited plate girder span.

Pleasanton-Sunol Rd Overcrossing (MP 39.2) and the I-680 Under Crossing (MP 39.6) were constructed in the 1960's. Neither are contributing.

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D2.3 Culverts

As the railroad curved through Niles Canyon, the tracks crossed many small and seasonal tributaries to Alameda Creek. The designers attempted to anticipate the flows of these creeks and built stone culverts to divert the water beneath the tracks. Over the course of the line's use, culverts were rebuilt and new ones installed to address drainage problems as they arose. As a result, the rail line has representative examples of every manner of culvert technology employed by the railroad from the 1860s to the 1920s. Most of them can be divided into several broad categories based on materials and form. In areas where the roadbed was widened to accommodate sidings many of the culverts are hybrids. That is an original stone headwall on one side and concrete on the other. Only eight of the sixty five culverts have been replaced or modified since the period of significance and are not contributing.

Coursed Stone Box –These substantial culverts date from the railroad's original construction between 1865-1869. They feature rectangular, box-shaped openings of varying sizes and set some distance below the tracks. The passage is lined with coursed ashlar sandstone blocks and headwalls were of battered coursed ashlar sandstone. The NCTR has examples originally built by both the WPRR and CPRR, but differences in design and materials are not apparent.

Concrete Pipe –Starting in the early 20th century, concrete was used to create cast-in-place headwalls and drop inverts for the NCTR's culverts. These generally used a pre-cast concrete pipe, but some also incorporated clay or iron pipe.

- **Type I** -The earliest concrete headwalls have a ~6" tall cornice projecting beyond the face of the concrete. Cornices were typically incorporated into structures to reduce the amount of water that would flow down its face and were common in brick construction. The cornice also incorporates a curb for the ballast. The presence of the cornice suggests the railroad's engineers were concerned that this water would damage the concrete.

- **Type II** -Later concrete headwalls do not have a cornice. We have not been able to determine when this design change was made. Several of the later examples include surveyor monuments. A few of these also had construction dates stamped into the headwalls. The earliest of these is dated 1924.

Treated Wood Box –Reserved for locations with very little runoff, these small culverts were made from treated wood planks 2-4" thick arranged to create a rectangular opening generally 18-24" in width. These culverts do not use headwalls, and their floors are also lined with wood. These culverts typically date from the early twentieth century. One of these structures was recently replaced due to rot and at least one more is in need of replacement. Creosote treated redwood is no longer available.

Metal Pipe –Cast iron and corrugated galvanized steel have been used for light-duty drainage; typically without headwalls. The cast iron pipe would be buried below the tracks and may be from 6-12" in diameter. Corrugated galvanized steel pipes were larger in size (12-30") and were used for later, more economical culverts. The light-gauge steel does not appear hold up to corrosion for more than a few decades.

Non-Contributing –A variety of culverts have been installed since the period of significance, primarily by the volunteers of the NCRy and Caltrans. These have included pre-cast concrete headwalls, corrugated plastic, and one headwall made of concrete core samples.

The sixty five culverts on the NCTR are listed by mile post from west to east.

MP 29.5 Modern concrete (not contributing, 2004)

MP 29.78 Concrete type 1

MP 29.93 Steel pipe no headwalls

MP 29.99 Steel pipe no headwalls

MP 30.29 Wood box

MP 30.41 Stone box

MP 30.5 Hybrid concrete and stone

MP 30.55 Steel pipe no headwalls

MP 30.76 Stone and Concrete west headwall for Dresser bridge, Has large cast concrete culvert for Valejo Mill flume.

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- MP 30.96 Wood box
MP 31.65 Corrugated galvanized steel pipe, double track
MP 31.71 Hybred steel pipe with stone headwall north side, double track
MP 31.98 Hybred steel pipe with stone headwalls, double track
MP 32.01 Hybred steel pipe with stone headwalls, double track
MP 32.13 Hybred steel pipe and Stone, double track
MP 32.16 Hybred concrete and Stone, double track
MP 32.21 Corrugated plastic (Modern not contributing ca 2000)
MP 32.25 Hybred concrete type 2 and Stone, double track, stamped 1924.
MP 32.47 Concrete type 2, double track, stamped 1926
MP 32.50 Concrete type 2 with dry laid stone extended headwall.
MP 32.52 Concrete type 2, Concrete vertical extension with a Coast and Geodetic Survey benchmark dated 1947 on north side of track. South side pipe extends through older stone and concrete retaining structure.
MP 32.53 Concrete pipe through stone retaining wall.
MP 32.57 Wooden box culvert
MP 32.61 Corrugated steel replaced a colapsed wood box (not contributing ca. 1994)
MP 32.67 Concrete type 2
MP 32.7 Concrete type 2
MP 32.8 Concrete type 2
MP 33.0 Stone box with a 20 foot tall headwall. A three foot concrete vertical extension and side wings were added in 1936 (date engraved)
MP 33.3 Concrete type 2
MP 33.46 Concrete type 1, north side has cemented cored sandstone drop inlet
MP 33.6 Stone Box
MP 33.7 Concrete type 1
MP 33.8 Concrete type 1
MP 34.1 Corrugated pipe (not contributing) replaced a colapsed wood box culvert (ca.1915) built over a dry laid stone headwall of an early trestle. The site was excivated and archived in 2007 by historian Randy Hees. The stone work was not disturbed and preserved in place.
MP 34.2 Stone Box
MP 34.4 Stone Box
MP 34.5 Large concrete drop and box (modern not contributing ca. 1980)
MP 34.55 Concrete type 1
MP 34.78 Concrete type 1, North headwall extended with cemented concrete cores (Not contributing)
MP 34.85 Concrete box drop inlet, type 2 culvert
MP 35.15 Concrete type 1
MP 35.78 Concrete type 1, double pipe, double track.
MP 36.16 Concrete type 1, double track
MP 36.25 Hybred stone, type 2, double track
MP 36.37 Concrete type 2, double track, wood extension wing retainers south side
MP 36.45 Concrete type 2, double track, concrete wing retainers south side
MP 36.70 Stone Box
MP 36.93 Large concrete type 1, Six foot concrete arch, dated 1909
MP 37.08 Concrete box
MP 37.15 Stone Box
MP 37.8 Concrete type 1.
MP 37.9 Clay pipe, no headwals. Scattered cut stones may be remains of earlier structure.
MP 38.2 Stone Box
MP 38.4 Stone Box

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MP 38.5 Concrete type 1 with double pipe.

MP 38.6 Hybrid stone and brick culvert. East side of culvert is early stone box but west side was reconstructed with brick including a full brick arch. This reconstruction is unique on the NCTR possibly dating to the 1870's when local brick works were established.

MP 38.8 Stone box culvert with concrete patch on west face.

MP 39.3 Concrete date stamped 1927, type 2.

MP 39.4 Collapsed wood box culvert repaired on west side with corrugated steel pipe.

MP 39.6 Stone box culvert at foot of major fill.

MP 39.8 Large concrete box culvert with wood cornices, type 2.

MP 39.9 Large modern concrete box culvert constructed at time of new crossing in 2006. (Not Contributing)

MP 40.4 Steel drop box on either side of track leading to underground drainage structure (Not Contributing).

D2.4 Retaining Walls

West of Dresser Bridge (MP 31.8) there is a combination dry laid sandstone and cast in place concrete retaining wall. The sandstone portion appears to be from the original construction and was probably the western headwall of a trestle approach to the bridge. The concrete portion forms the current headwall for the bridge. The date of the concrete portion is probably from the 1893 reconstruction but before 1906. The concrete portion contains an archway for the flume to Valejo's mill. The flume was destroyed and the archway blocked by the earthquake and landslide in 1906, neither were repaired.

About a 300 foot stone retaining wall at East Farwell (MP 32.5) is a combination of dry laid and cemented sandstone. The dry laid portion probably dates from the original construction as the head walls of a trestle. The trestle was later replaced by the cemented stone wall and filled. It appears to have been modified with the upgrade of the Farwell siding (ca. 1911). A portion of the wall was buried with the widening of the roadbed. A concrete cap and pipe safety railing were added. A pipe culvert through the wall appears to have been added through a dry laid portion of the wall.

The dry-laid buttressed retaining wall at MP 32.7 of coursed ashlar sandstone is a prominent feature in historic photo #1 of the commissioners train in 1866 at the end of track, twenty miles from San Jose. A part of the wall was subsequently buried when the adjacent cut was widened c.a. 1900. A portion of the wall including several of the buttresses, is visible today though heavily overgrown.

A 200 foot long rail and tie retaining wall at MP 33.2 on the "south" side of the tracks probably dates to the 1940s when a new concrete highway bridge was constructed near the tracks. The realignment of the State Highway 84 through Niles Canyon cut across the railroad's right of way and the new grading necessitated this wall. It does not appear to have been carefully built as the rails protrude in uneven lengths. The wall is in poor shape. The rail supports have started to bend and many of the ties are decayed or missing.

A small dry laid rubble stone retaining structure at MP 38.1 is above the rails in a cut. Probably from the late 19th century to prevent slumping of the cut.

D2.5 Grade Crossings

Eight of the nine grade crossings over the rail line are at historic locations (not counted in resource tally as included in historic sites above). One, within the City of Pleasanton, was constructed in the last decade and is non contributing. Structures at each of the crossings have been maintained and/or reconstructed to modern standards and can not be considered contributing.

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D2.6 Signals

The automatic block signal system consists of the code line, battery boxes, relay cases, signal masts, and signals. The signals were located at the ends of passing sidings and spaced in between to keep trains separated from one another while traveling on the single-track railroad. Electrically operated block signals were just being developed by the start of the twentieth century. Signalization was included c.a. 1911 extension of Farwell siding⁶ and upgraded in the late 1930's or early 40's. Most of the signal masts are in place but the indicators on the masts had been removed. Signal indicators are being restored to the historic masts to either the original semaphore or the later target searchlight stiles. All signals are paired one each for eastbound and westbound traffic. All signals and related artifacts were obliterated by the SPRR at the Niles station site. Some masts have been vandalized or are missing as indicated below. Additionally concrete signal bases locate the sites of signals that had been removed by SPRR at former spur siding locations at Alston MP 31.0 and Verona MP 38.4.

None of the block signals are currently restored to function. The Niles Canyon Railroad is an operating railroad under Federal Railroad Administration (FRA) jurisdiction consequently operating signals must meet certain standards. The extremely poor condition of the signal lines is slowing the signal restoration to both federal and historic standards.

Twenty two remaining signals are contributing resources, located at given mile posts from west to east are as follows;

- MP 29.5, Niles Junction, one of three signals remains unrestored at this site. The signals indicated clearance for trains entering the canyon or leaving the canyon towards either Oakland or San Jose.
- MP 30.4, Signal pair partially restored with target searchlight heads.
- MP 31.6, Signal pair at West Farwell siding switch site one mast has been removed for repair and restoration. The other has been partially restored with target searchlight head.
- MP 32.6, Unrestored signal pair at east switch of Farwell siding.
- MP 33.6, Unrestored signal pair.
- MP 34.5, Partially restored signal pair with semaphore heads.
- MP 35.4, Partially restored signal pair with semaphore heads at west Sunol siding switch.
- MP 36.5, East end of Sunol siding, one mast is missing the other is unrestored.
- MP 37.1, Unrestored signal pair.
- MP 38.2, Unrestored signal pair.
- MP 39.4, One unrestored mast has been vandalized and one is missing. Debris from missing mast is scattered at site.
- MP 40.5, Signal pair partially restored with target searchlight heads.

Another type of signaling system is used to warn motorists and pedestrians at grade crossings. These systems consist of various assemblies of masts, flashing lights, bells, and moving parts. These devices have been restored to operation meeting FRA requirements at five locations along the portion of the railroad. Crossing gates have been operationally restored at Kilkare Road (MP 35.6) and Bond Street (MP 35.8). Signals at three crossings at Estates Rd (MP 33.7), Brightside (MP 33.8) and Farmers Crossing (MP 34.9) have been restored with wig-wag indicators. The above signals are automatic. Temporary manual signals have also been installed at Hearst Interchange (MP 37.6) and Verona Rd (MP 39.4). Although the crossing signals have been restored with historic units at five locations they can not be considered contributing, as they were not left in place by the SPRR.

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D2.7 Phone Booths

In 1918 the SPRR began installing a closed circuit field telephone system. From 1921 through the 1930s they installed precast concrete phone booths at strategic locations along the line. Four of the phone booths of the post 1922 design remain on the NCTR. Three of the four have been vandalized and moved from their historic placement. The booth at Farwell (MP 31.6) is in its historic location and is a contributing resource.

D2.8 Track Oilers

Automated track oilers (or greasers) are located at three locations near the most severe curves on the railway at mile posts 30.1, 31.9 and 32.8. They are mechanically activated by the wheel flanges of a passing train. They squirt a small amount of grease on the side of the rail. The grease is distributed around the curve by the wheel flanges and eliminates wheel squeak and excessive wear of both the wheels and rails. These are modern devices that replaced the locomotive mounted flange oilers which had previously replaced track walkers with a pot of grease. The oilers are not contributing resources.

Notes

¹ SHPO Determination (FHWA 041116A), 2004 **See Additional Documents**

² Frank, A.M. & Bender, H.E., *Stations and Depots along the Niles Canyon Railway*, Club Car #489, Pacific Locomotive Association, May 2004

³ Op.Cit. SHPO Determination

⁴ Op.Cit. SHPO Determination

⁵ WPRR bond map. National Archive, College Park MD, Record Group, 49, Stack area 331, Tube 67

⁶ Central Pacific Railroad, Farwell detail, 1911, California State Railroad Museum (CSRM), Sacramento

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Historic Narrative

Niles Canyon connected inland Sunol and Amador Valleys with San Francisco Bay, and was a natural trade route through the Diablo Range for the Coastanoan Peoples. Later it became a wagon route connecting Mission San Jose to the Spanish and Mexican land grant rancho's during the first half of the nineteenth century. After California statehood, the US Congress and President Franklin Pierce in 1853 ordered Secretary of War Jefferson Davis to commission surveys of potential routes for a Pacific Railroad. A military party from the Benicia Barracks surveyed the railway route across Livermore's Pass (Altamont Pass), thence through Alameda Canón (Niles Canyon), in July of that year. It was selected as the most practical route from the Central Valley to the San Francisco Bay. North-South rivalries prevented the selection of the final route until after the succession of the Southern states. The Central Pacific Railroad (CPRR) was incorporated in June 1861 by a group of Sacramento businessmen with the intention of building a railroad east across the Sierra to be a part of a transcontinental railroad. The owners of the CPRR, known as 'The Associates', were eventually dominated by the 'Big Four', Hopkins, Huntington, Crocker and Stanford. President Abraham Lincoln signed The Pacific Railway act on July 1, 1862. It authorized *aid in the construction of a railroad and telegraph line from the Missouri River to the Pacific Ocean* and authorizing the CPRR to construct east from the Pacific Ocean. The CPRR worked out a deal with the owners of the San Francisco and San Jose Railroad on December 4, 1862, ceding to them the rights to build and collect the federal subsidies on the segment between San Francisco and Sacramento. The deal both overcame rivalry between the SF&SJ and the CPRR and opened financial opportunities in San Francisco for the CPRR. On December 13, 1862 Peter Donahue, Timothy Dane, Alexander Houston, and Charles McLaughlin incorporated the Western Pacific Railroad (WPRR). They were principles of the SF&SJ, and transferred the rights granted by the CPRR to the WPRR. The amendment to the Pacific Railway Act on March 3, 1865, ratified the assignment of rights to the WPRR.

Contracts for construction of the WPRR were let to Houston and McLaughlin. McLaughlin subsequently hired Jerome B. Cox for the actual construction. Construction began in 1865 with the assistance of 500 Chinese workmen. Construction halted in 1866 when the WPRR ran out of money after the first twenty miles were completed. Cox sued McLaughlin for nonpayment of construction costs. In 1867 WPRR contracted with the Contract and Finance Company (C&F) for the completion of construction. In return C&F collected the federal bonds and a majority of WPRR stock. However, McLaughlin retained the claim to the federal land grants. C&F was the construction company principally owned by the CPRR's Associates.

The completion of the first twenty miles of track in 1866 allowed the WPRR to collect its first federal bonds, though not in time to rescue McLaughlin from his financial and legal predicaments. No further work was done in Niles Canyon until 1869. Once The Associates (C&F) took control of the WPRR, materials and supplies were diverted for the work on Donner Pass.

Some grading and culvert work had continued several miles distance to the east past the end of track. The railroad was built to high standards and featured several major bridges that used heavy stone piers and abutments to support long-span timber Howe trusses. These bridges and the extensive earthwork required to carve an acceptable grade along the narrow and twisting canyon were clearly expensive and intended to stand the test of time. The stonework for the bridge piers and retaining structures remain in service to this day. In contrast, the CPRR was built with expedience and economy in mind. Wood trestles and bridge piers were common as The CPRR's Associates sought to stretch their line as far to the east as possible before meeting the westward building UPRR.

As crews from the CPRR's race to Promontory completed their tasks they were sent to the WPRR in early 1869. Construction was completed and service inaugurated in September 1869 just five months after the Golden Spike ceremony. The WPRR was planned to run from Sacramento to San Jose connecting to San Francisco via the completed San Francisco & San Jose Railway. In 1868 The CPRR's Associates chartered the San Francisco Bay Railroad (SFBRR) to connect the WPRR to Oakland. The SFBRR was consolidated with the WPRR and opened for service together with the WPRR in 1869. In June 1870 the CPRR and WPRR filed articles of consolidation. The CPRR was operated by The Associates and their successors, under the umbrella of the SPRR, until they were finally merged in 1958.

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In 1870, the railroad established an important junction and station facilities at the western mouth of Alameda Cañon and laid out a small town at this location next to Vallejo's Mill. It was named for Judge Addison C. Niles, a prominent supporter of the CPRR, and eventually, the canyon came to be known by his name. At about this same time the first crossing of Alameda Creek was destroyed in a flood. A new bridge was constructed south of Niles and the junction of the lines to Oakland and San Jose was moved from the original San Jose Junction a mile west to Niles. With the move of the junction, thru trains only served Oakland. San Jose was served by connecting local trains.

The lengthy all-land route through Niles Canyon was the most direct connection possible from inland to the Bay, while avoiding the Sacramento River Delta. By 1879 a more direct and efficient route between Sacramento and Oakland was opened via a ferry crossing at the Carquinez Strait between Port Costa and Benicia. The Delta route was 75 miles shorter and eliminated a significant climb over the Altamont Pass, becoming the primary route for transcontinental traffic. After this change, operations through the canyon were mostly limited to local traffic primarily intended to serve the intermediate communities along the line and into the San Joaquin Valley.

Despite becoming a secondary line, the agricultural and industrial development along the railroad flourished, boosting freight loadings. Proximity to San Francisco, Oakland and San Jose increased local passenger traffic for both business and recreation. The towns of Pleasanton and Livermore were both incorporated in 1869. The town of Niles began to be developed in the 1880s. Sunol received a freight and passenger depot in 1884, and a number of picnic grounds and resort hotels catering to the urbanites of San Francisco were established within Niles Canyon by the 1890s.

As traffic from the Bay Area increased, and trains became heavier, the limitations of the ferry connection at Carquinez Strait led to the return of through freight traffic via Niles Canyon. Collis Huntington took over the sole leadership of the SPRR and implemented a number of significant improvements in the 1890s. The three major Howe wood truss bridges along the NCTR were replaced in the 1890s to accommodate heavier traffic. Edward Harriman continued the improvements program after Huntington's death. Most of these modifications took place away from the NCTR, but his effects were felt nonetheless. Electrically operated block signals were introduced. The station facilities at Niles were reconfigured and modernized. A new Beaux Arts passenger depot was built in 1901, and a small yard was established south of the mainline and San Jose Branch. Freight traffic through the canyon received a significant boost with the completion of Harriman's Dumbarton Cutoff project in 1909. With the completion of this new shortcut across the southern end of San Francisco Bay, all freight traffic United States from San Francisco, the Peninsula, and areas to the south was routed through Niles Canyon. Once again, the original mainline was a crucial part of the national freight network, and the facilities at Niles grew to include worker housing for the largely Mexican-American maintenance employees and their supervisors.

The Gould family realized its own transcontinental railroad ambitions with the completion of their Western Pacific Railroad in 1910. The new WPRR, with no corporate relation to its earlier namesake, was specifically built to challenge the CPRR/SPRR monopoly in northern California. The new line, built with gentler curves and grades, paralleled the earlier line through Niles Canyon. The line provided long haul passenger competition to the SPRR, especially after WWII with its Zephyr service. It also significantly cut into local freight service. In 1930, the completion of the Suisun Bay Bridge eliminated the train ferry across the Carquinez Strait. Consequently, the NCTR swiftly lost more traffic. The affects of the Great Depression combined with the construction of roads and the Bay Bridge, sapped the local passenger and freight traffic. The last scheduled passenger train through the canyon was in January 1941. The war significantly, but temporarily boosted freight service but that rapidly declined after 1945.

The corporate structure of the CPRR was maintained separately from the other ventures of The Associates, principally to shield them from the large debt represented by the federal bonds granted for the building of the railroad. The Associates' profits were funneled into consolidating the smaller railroads in California and constructing the 'Sunset Route' into southern California. All of these subsequent ventures, without federal debt, were carried forward under the banner of the

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Southern Pacific Railroad. The CPRR was operated by the SPRR as one railroad and by the turn of the century virtually all CPRR public identity was gone. Even after the debt was retired the CPRR corporate structure remained. The CPRR persisted throughout the first half of the twentieth century. Then finally on June 30, 1958 the CPRR was formally merged with the SPRR.

The post war decline in business through the canyon slowed, but the downtrend continued over the succeeding decades. By 1984 local freight service had dwindled along with the rest of SPRR's business to the point that it was no longer worth battling the competition and elements to keep open a secondary line that retained many antiquated features. SPRR pulled up its rails and but left intact most of the ties and the entire roadbed and some signaling equipment. In 1987, Alameda County acquired the entire line from Niles to Tracy rather than allow full abandonment. This was done to preserve the right-of-way for potential future transportation corridors. Without the action of the County the property would have reverted to the descendants of the original land grant families, as called for by the Pacific Railroad act and subsequent amendments. In 1987, a six-mile segment through the Canyon was leased to the Pacific Locomotive Association (PLA) (County of Alameda Contract C-87-608) a, not for profit, operating museum of railroading. The lease was later expanded in the 1990s to include the entire 11.6 miles of right of way from Niles to Pleasanton. Starting in 1988, the PLA began restoring rails in the exact location of the original railroad using the SP ties as a guide. Using mostly volunteer labor the PLA has to date restored over nine miles of track now known as the Niles Canyon Railway. The track restoration continues to the present day, and is being done to the configuration and standards as it was operated during its heyday in the early part of the twentieth century. This era was chosen to be both consistent with the history of the canyon and safety standards required by the Federal Railroad Administration and the Public Utilities Commission. Currently seven of the 11.6 miles are operated for public interpretive train rides between Sunol and Niles. Historic rail equipment owned by the PLA is used for these operations. The equipment is representative of the operational period of the railroad after 1900. In 2007, a new twenty-five year lease was enacted covering the entire twelve-mile ROW from Niles to Pleasanton (County of Alameda Contract C-2007-137). The right of way is shared by two underground utilities including a petroleum pipeline and fiber-optic line.

Historic Themes

Transportation

The opening of the First Transcontinental Railroad was a revolution in transportation both nationally and locally. An overland trip once hazardous and measured in months, could now be accomplished in relative comfort over the course of days. Locally, a round trip into San Francisco or Oakland 30-40 miles away was a several day undertaking before the railroad. After the railroad was completed the round trip could be accomplished in a day. Whereas settlers had been limited to producing grains that could survive long journeys, the railroad enabled higher-value products such as fruits and even milk to be shipped to urban markets. With the later advent of refrigerated boxcars, perishables could be transported anywhere in the country.

Commodities imported by ship from Asia could now be delivered throughout the country, while domestic products could easily reach markets across the nation and abroad. As a result, manufacturers were able to market their wares anywhere in the country. Initially, this resulted in a local economic recession as cheap goods from the east and unskilled laborers flooded into California. Eventually, the west adapted to become a producer of agriculture, materials, and goods for the rest of the country. This transportation revolution enabled the development of a industrialized consumer economy that was national in scope.

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The NCTR represents the key, final rail connection to California's most significant urban area and its deep water ports (with access to Asia). The NCTR's route through Niles Canyon became the very threshold through which passengers and commerce entered the San Francisco Bay Area. Additionally, the local interface between the new national economy and the local community was present at Niles, Sunol, and Pleasanton. A number of preserved station facilities at these locations are a testament to this once vertically integrated transportation system.

Communication

The telegraph, built along with the railroad was a significant improvement over earlier lines and had important symbiotic relationships. The telegraph not only carried messages for the public but was also an important tool in the management and operation of the railroad. Remote station agents were spread throughout the railroad's network and were able to communicate with centralized managers and train dispatchers. Station agents were essentially ambassadors representing the interests and services of the railroad to the local communities along the line. Telegraph agencies were located along the NCTR at Niles, Sunol, and Pleasanton. The location parallel to the railroad allowed easy access for repair and maintenance of the fragile telegraph line.

Although in poor condition overall, there are many remains of the NCTR's telegraph line as it evolved into the 20th Century under the control of Western Union. The surviving poles, cross arms, insulators, and conductors reflect the state of this line from about 1900-1960 and carried up to forty conductors on five cross arms.

The railroad carrying mail and newspapers brought mass communication to every community along the line. The improved communications also brought California into the active national political scene. The combination of the telegraph and railroad were instrumental to harnessing the nation's production to the demands of local consumers, and was key part of the transformation of the United States to an industrial economy.

Another example of the railroad's communication technology is in the form of the Automatic Block Signal System. The NCTR was one of the first lines of the SPRR to receive such a system c.a.1909. This system consisted of movable "semaphore" blades with colored lenses mounted on steel masts, which are in turn mounted on machinery cabinets bolted to concrete footings. These signals were mounted at regular intervals along the tracks and at the ends of passing sidings. They were designed to keep trains traveling the same direction spaced apart, and to prevent trains heading in opposite directions from colliding. In addition to the signals themselves, the system required the installation of a pole line to transmit signal code information and provide electricity. Searchlight signal heads replaced the semaphores towards the end of the period of significance. Portions of this system, including many signals are still present in along the NCTR and do much to contribute to the historic sense of the railroad.

Settlement

The railroad was a key player in the settlement and development of California and the American west. Not only did the railroad alleviate the hardships of traveling to the region, it also became the principle land agent and political force. The land grants to the railroad of alternate sections along the right of way made the railroad the most prominent landholder in the region. The community of Niles owes its existence to the NCTR. Despite the lack of land grants in the area, The Associates acquired the privately held land for the purpose of establishing a town next to their new junction. It was platted and lots were sold starting in the 1880s. The business of attracting settlers and selling land was initially a greater income source than the railroad itself and kept the Southern Pacific Company solvent through the economic turbulence in the late nineteenth century. Niles is one of many communities and cities established by the railroad in California.

Most of the property along the NCTR was already claimed through the Spanish and Mexican land grants. The Pacific Railroad Act recognized the grants but unscrupulous claims over boundaries by the WPRR (McLaughlin) eventually led to the breakup of several of the rancheros. In 1871, the Federal Land Commission ruled in favor of McLaughlin's claims. Therefore, most of the railroad-owned land along the NCTR is limited to the right of way itself. Nevertheless, portions of these properties were leased for agricultural purposes to adjacent landowners, and some residences were built on the ROW land within Sunol. Two of these structures remain from the 1880s.

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Recreation

As the west became civilized and tame, public interest in the pleasures and health benefits of the outdoors rose. and hotels developed along the NCTR and were serviced by the railroad until the great depression. Fern Brook Park (Stony Brook Park) and Joyland Park were established on either side of Farwell Bridge and further east at Bonita. Many of these parks were built on land leased from the railroad alongside the creek. Some remains of these parks are still visible within the ROW. Other lesser known parks and picnic grounds included Sim's Place, Idleweld, K&M, Cobble Crest,

Rosewarner, and Old Dan Flakes Place. Hotels were also located at Brightside and Sunol. The railroad provided trains on special occasions to bring people to the parks from San Francisco and Oakland. John Philip Sousa and his band performed at Fern Brook Park. Much of the park properties are today maintained in their natural state by the San Francisco and Alameda County Water Departments.

Verona was the station for *Hacienda del Pozo de Verona*, which was initially envisioned as a hunting lodge for William Randolph Hearst. His mother Phoebe Apperson Hearst took over the project and had Julia Morgan finish the design. Julia Morgan ostensibly designed a small passenger shelter at Verona. After Mrs. Hearst's death in 1919 the lodge was sold to the Castlewood Country Club, which today maintains a golf course on the site. The station shelter probably disappeared in the 1920's.

Engineering and Architecture

The NCTR reflects the evolution of railroad engineering and construction technology as it evolved from the early American industrial revolution of the 1860s to its apogee in the mid 20th century. Although the NCTR does not contain significant engineering innovations or architectural achievements, it is a remarkably complete representation typical of single-track mainline railroads from the period of significance typical of the west. The expansion and improvements undertaken by the railroads over the past two decades have swept away most of the defining characteristics of these eras from other lines.

Design practice in the building of the Transcontinental Railroad was generally intended to minimize expense and maximize speed of construction. This was certainly the philosophy of the CPRR, but the WPRR seemed to be more committed to building lasting structures with extensive use of stone, and major long-span bridge structures. The CPRR built with future improvements in mind, and as technology evolved, standards for railroad construction changed to accommodate longer, heavier, and faster trains. After 1879, the NCTR became redundant and was protected from many of the major improvements that large portions of the original CPRR line over the Sierra was subjected to. Although the line once again became important at various times over its use, the company did not commit to significant modernization projects along its route. Consequently, a variety of 19th and early 20th century construction technologies were preserved.

The NCTR is still primarily on the original alignment despite its severe curves. The railroad, its hand-dug grade, and various structures are in generally good condition, and have a high level of historic integrity. This includes the line's bridges, culverts, and retaining walls. There are a few short sections where the tracks have been relocated to reduce the line's curvature or to accommodate nearby highway construction. These changes would not even be apparent without the use of historic maps. These modifications do not significantly impact the 19th century character of the line, and were undertaken during the period of significance. The ruggedness of the canyon has precluded development through most of the canyon preserving historic views. The most significant change to views has been the re-growth of trees, which had been cut for firewood at the time of construction. Physical changes to the original construction were concentrated in the period between 1896 and 1909 with the replacement of the bridges, the addition of the mile long Farwell siding and the addition of the block signal system.

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The construction of the tracks and ballasted roadbed is the most apparent departure from the railroad original appearance. Within a few years of the lines opening, the wooden ties would have been upgraded; steel ties plates installed beneath the rails; and heavier rails installed. These in-kind replacements and upgrades were common through the life of any railroad and show the evolution of railroad construction practices. The tracks of the NCTR currently reflect their appearance from the 1910s to 1940s.

As built, the line passed through four large wood Howe truss bridges. One of these was abandoned and destroyed within a few years of its construction. The remaining three spans were replaced with steel structures in the years straddling the turn of the century. Original bridge piers constructed with locally quarried sandstone are still in use today supplemented with newer concrete piers placed to reduce the length of the bridges' spans.

Some of the other features of the railroad have not fared as well. The telegraph pole lines along the railroad survive, but are in poor condition. The wood poles were old at the time of the line's sale, and have not been maintained since the early 1980s. Square redwood telegraph poles were used in the original construction and until the early twentieth century. Approximately thirty of the square poles remain standing across the district.

The Stick style Sunol Depot was built in 1884 is one of the early standard design depots constructed by the CPRR and SPRR between 1877 and 1894. It is design number 7 of a series of 26 plans developed under the supervision of Bridges and Buildings chief Arthur Brown. The Depot was decommissioned in January 1941, with the end of passenger and mail service on the line. Shortly thereafter the building was sold, cut in two and moved to a private site west of the village. In 1998 the derelict structure was acquired by Alameda County and returned to the station site. Use of the original site was precluded by changes to the road's location and the presence of a petroleum pipeline. The current placement of the structure is about 100 feet from the original. It was chosen to best reflect its original context with the railroad, roadways and the town. The depot was restored by PLA volunteers and opened for passenger service on the NCRy in 2004. It is an excellent example of how standardization was applied by the railroad to adapt to unique local conditions while providing economy of scale, interoperability, and branding.

Ethnic Heritage

Chinese labor was initially used in the construction of the San Jose and San Francisco Railroad, by Charles McLaughlin, as early as 1863ⁱ, two years before their introduction to the CPRR. He subsequently used 500 Chinese to build the WPRR into Niles Canyonⁱⁱ. The Chinese labor force was also used for the completion of the road in 1869 under the direction of James Harvey Strobridge.

Chinese immigration to California started during the gold rush in the 1840's. However, it was the construction of the Transcontinental Railroad in the 1860's that brought in a significant population. Charles Crocker had observed the successful use of Chinese labor on the WPRR. Failing to secure a sufficient labor force by other means, Crocker brought thousands from China, thus initiating the first significant Asian migrations to the United States.

Starting the early 20th Century, the bulk of SPRR's track maintenance workers were Mexican-Americans or Mexican nationals. These men and their families were housed in company facilities spaced at regular intervals along the SPRR network. Railroad worker housing was provided at Pleasanton, Sunol, and Niles. The housing at Sunol was eliminated around the turn of the century. Niles had as many as seven buildings dedicated to housing track workers and their

ⁱ Chiu, Ping, *Chinese Labor in California, 1850-1880*, State Hist. Soc. Of Wisconsin, Madison, 1963

ⁱⁱ Provisioning invoices from the Journal of Sam Brown (a Teamster), 1866, Collection of Patterson House, Fremont CA

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managers. Housing was provided for an employee and up to three dependents in cramped bungalow-type structures alongside the tracks. Yards were fenced in around these structures adjacent to busy railroad tracks to create a play area for children as well as to enclose gardens and domesticated animals.

Period of Significance

The Period of Significance for the NCTR began in 1865 with the start of construction by the WPRR and concludes with the merger of the CPRR into the SPRR in 1958.

The route was initially surveyed in 1853. It was constructed starting in 1865 and placed into service in 1869 as part of the first transcontinental railroad mainline. This rail line was rendered redundant as a main line within ten years of its opening, and its use was therefore sensitive to the vicissitudes of the economy. The volatility of rail traffic on the NCTR discouraged the implementation of major modernization programs. These conditions allowed much of the original character of the NCTR to be maintained. Almost all considerable improvements or modernizations to the NCTR ceased by 1930 upon the completion of the Suisun Bay Bridge and the onset of the Great Depression. The NCTR once again saw intense use during WWII as the Bay Area contained a number of vital industries and was a major point of embarkation for the Pacific Theater. The corporation that built the first transcontinental railroad officially vanished on June 30, 1958, when it was merged into the SPRR. The merger allowed the SPRR to file for abandonment as traffic over the line diminished significantly after WWII. All service ended in the early 1980's and track removed by 1984. The line was never formally abandoned but eventually acquired by the County of Alameda. The railroad continues to reflect its appearance from the period of significance as a result of minimal improvements over its history. Contemporary photographs and those taken throughout the period of significance demonstrate how little the NCTR has changed since its inception.

Significant Dates

- 1865, Construction of WPRR begins in Niles canyon;
- 1866, WPRR completed the first twenty miles of track into Niles Canyon and construction faltered;
- 1869, The line was completed under the control of the CPRR owners;
- 1870, The WPRR was merged into the CPRR
- 1879, A faster route between Oakland and Sacramento was completed via Benicia;
- 1893-1911 Upgrade of rail line, bridges and addition of signals.
- 1910, New WPRR competes over NCTR route;
- 1910, Various improvements including the Dumbarton Cutoff again made the NCTR a significant freight line;
- 1930, Completion of the Suisun Bay Bridge eliminating the Benicia ferry slowed the line's use;
- 1941, Passenger and mail service were discontinued;
- 1958, The CPRR was merged into the SPRR

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Bibliography

Articles

Bender, Henry E. Jr, *Southern Pacific Lines Standard Passenger Depots: Parts 1 & 2*, SP Trainline, Southern Pacific Historical & Technical Society #57-8, 1998

Bender, Henry E. Jr and Frank, Alan M, *The Stations of Niles Canyon, Club Car #489*, Pacific Locomotive Association, May 2004

San Francisco Morning Call, 24 Dec. 1891

Sheer, Frank, *SP's Unique Concrete Telephone Booths*, SP Trainline, Southern Pacific Historical & Technical Society #79, 2004

Southern Pacific, From Trail to Rail, Southern Pacific Bulletin, series 1927-1931

New Station for the Town of Niles, San Francisco Call Bulletin, 26 July 1901

Will Change Niles Roads, Oakland Tribune, 25 Jun. (1901)

Books

Bain, David Howard, *Empire Express*, Penguin Books, New York, 1999

Chiu, Ping, *Chinese Labor in California, 1850-1880*, State Historical Society of Wisconsin, Madison 1963

Country Club of Washington Township Research Committee, *History of Washington Township*, Second Edition, Stanford University Press, Stanford, 1950

Croft, George, *Croft's Trans-Continental Tourist*, G.W. Carelton & Co. New York, 1875

Daggett, Stuart, *Chapters on the History of the Southern Pacific*, Ronald Press, New York, 1922

Fickewirth, Alvin A, *California Railroads*, Golden West Books, San Marino CA, 1992

Hees, Randy, *Niles Canyon and its Railroads*, A history in progress, Author's notes.

Holmes, Phillip and Singleton, Jill M, *Niles Fremont*, Arcadia Publishing, Charleston, SC, 2004

Luna, Henry and the Pacific Locomotive Association, *Niles Canyon Railways*, Arcadia Publishing, Charleston, SC, 2005

Moody, John, *The Railroad Builders, A Chronicle of the Welding of the States*, Yale University Press, New Haven, 1919

Morton, Don, *Historical Sites and Landmarks in Alameda County*, Ed. George Tays, 1938

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Munro-Fraser, J.P., *History of Alameda County California*, M.W.Wood, Oakland, 1883, reprinted 1969

Orsi, Richard J., *Sunset Limited*, University of California Press, Berkeley, 2005

Root, Henry, *Surveyor, Engineer, and Inventor, Personal History and Reminiscences with Personal Opinions on Contemporary Events, 1845-1921*, Private Printing, San Francisco, 1921

Scott, Mel, *The San Francisco Bay Area: A Metropolis in Perspective*, University of California Press, Berkeley, 1983

Signor, John R., *Southern Pacific's Western Division*, Signature Press, Wilton, CA, 2003

Thompson and West. *Alameda County Atlas*, Thompson & West, Oakland, 1878

Manuscripts and Documents

California Dept. of Industrial Relations. Division of Immigration and Housing records. Misc. correspondence with Southern Pacific Railroad Company (1914-1935)

Central Pacific Railroad. "Niles Station Plan," Western Division Station Plans, Undated, California State Railroad Museum (CSRM), Sacramento

Donaldson, Milford Wayne, SHPO, *Determinations of Eligibility for Properties within the Project Area of the Niles Canyon Road Safety Project, State Route 84*, State of California Office of Historic Preservation (FHWA 041116A) November 30, 2004

Southern Pacific. Form #2303; Station changes; Niles. (circa 1909 to circa 1931), *ibid.*

Southern Pacific. Maintenance of Way Drawings, Miscellaneous (circa 1904 to circa 1944), *ibid.*

Southern Pacific. Partial station plan from the Fisher Collection at the Museum of Local History; Fremont, California (Undated)

Southern Pacific. Western Division W 1213 / 1 – 30. "1943 Housing facilities Chart" (1943), *op.cit.*, CSRM

The Pacific Railroad Act, Thirty Seventh Congress of the United States, Session 2, Chapter CXX, July 1, 1862, Subsequent amendments;

March 3, 1863

July 2, 1864

March 3, 1865

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Maps

Southern Pacific Railroad Valuation Maps, 1912, op.cit, CSRM

Central Pacific Railroad, Farwell detail, 1911, op.cit, CSRM

USGS, Niles, Dublin, La Costa Valley & Livermore Quadrangles, Alameda County, California, 7.5 minute series (Topographic), edit 1980

USGS, San Jose, California, 1x2 degree series (1:250,000), 1962

Bond Map of WPRR 1869(Probably the last of the first transcontinental RR). Western Pacific Railroad Maps, National Archive, College Park MD, Record Group, 49, Stack area 331, Tube 67, 1865-1873

Reports and Studies

Pastron, Allen and Engberg, Anna, Archeo-Tec, *Archaeological Research Design and Treatment Plan:Niles Dam Removal*, 2006

Basin Research Associates. *Kraftile Company, Historic Recordation Report*, San Leandro, California, 1998

Biggs Cardosa Assoc. Inc, *Structural Assessment Report for Niles Canyon Railroad Bridges*, San Jose, 2009

Caltrans District 4, *Western Pacific/Southern Pacific Railroad – Alameda County Line*, Department of Parks and Recreation District Record (DPR 523D) (2004)

City of Fremont Redevelopment Agency. *Niles Concept Plan*, 2001

Judah, Theodore, *Report of the Chief Engineer on the Preliminary Survey*, 1866, California State Railroad Museum (CSRM), Sacramento CA.

Osmundson, Gordon, *Niles Canyon Railway Master Plan*, Pacific Locomotive Association, 2003

Ruiz, Randolph *Central Pacific Railroad Niles Station Historic Resource Survey*, AAAArchitecture, San Francisco, 2008

Page & Turnbull, *Niles Freight Depot Historic Resource Evaluation*, 2005

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Note on railway directions; 'Railway east' is the direction of travel going from Niles to Pleasanton no matter which way the track actually twists and turns. Thus 'railway north & south are to the left and right of the track respectively while travelling 'east'. For example the Western Union telegraph line is on the 'north' side of the track. Actual direction of view for each photo is given below in the photo log after the mile post location. Photographs 1-20 traverse the district from Niles to Pleasanton. Several of the photographs were taken from the approximate viewpoint of the historic images to demonstrate both the historic integrity and the evolution of the district. Additional images 21-28 are included to sample resources within the district.

CA_ALA_NCTR_0001

Niles Station Site taken from approximately the same location and direction as the historic photos #3&4. The site had been cleared of structures by the SPRR in its declining years. A replica of the 1870 depot is planned for this site at the left center of the photo. This site will eventually become the primary public portal to the NCTR. The railroad track in the foreground belongs to the UPRR and is not part of the NCTR. The tracks further back belong to the NCRy and are a part of the NCTR. Visible buildings are in the Niles District within the City of Fremont. Some of the buildings were initially built by the SPRR for staff housing and are now in private hands. The proposed NCTR property ends at the fence and tree line and does not include the buildings.

Photographer Alan Frank, 1/9/2010

MP 29.3 looking Northeast

CA_ALA_NCTR_0002

Two poles of the Western Union telegraph line are visible in this photo looking to the northeast. The wood poles are on the north side of the railway between Dresser and Farwell. The poles are square and may date to the 19th Century. A round signal line pole may be seen on the opposite side of the tracks. The roadbed is in a small cut at this location, and was widened to accommodate a minor realignment that occurred in the 1920s. This photo is in approximately the same location as historic photo #8.

Photographer Randolph Ruiz, 3/30/2008

MP 31.2 looking Northeast

CA_ALA_NCTR_0003

The original wooden Howe truss at Farwell (historic photo# 9) was replaced in 1896 by the pin connected truss seen today. Farwell Bridge has changed relatively little since the c.a. 1911 post card, (historic photo 10). The major changes are the 1932 move of the Highway 84 grade crossing (from a former location behind the photographer) to the subway shown. The deck plate girder replaced the trestle at that time. The other change was the 2000 encasement of the near pier for earthquake protection. Note that the most distant pier is still the unaltered 1865 stone construction. The encasement date of the center pier is not known. However, the nature of the concrete is similar to that of the 1932 headwall beneath the photographer.

Photographer Alan Frank 1/7/2010

MP 31.7, looking Southwest

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CA_ALA_NCTR_0004

Looking east from Farwell towards the berm from which historic photo #11 was taken. The major change from the end of the period of significance was the removal of track. The mainline track has been restored but the siding and stub spur are still awaiting restoration. The west switch of the siding was between the curves in the foreground and background. The signal at the right has been restored with a searchlight target indicator. The cylindrical concrete structure with the conical top at the left center is the only phone booth from the period of significance remaining in its original location. The signal base at the left just below the phone booth is for the mast that has been temporarily moved to the Brightside facilities for restoration.

Photographer Alan Frank 1/7/2010

MP 31.7 looking East

CA_ALA_NCTR_0005

Modern photograph from the same location as historic photo #12. Looking west from milepost 31.8, the approach to Farwell bridge. The primary change has been the widening of the cut to accommodate a second track for the Farwell siding built c.a. 1911. All track was removed by the SPRR in 1984. The mainline was restored by the PLA in the early 1990's and the siding is currently being restored. The significant regrowth of vegetation prevents seeing Farwell bridge.

Photographer Alan Frank, 3/24/2008

MP 31.8 looking West.

CA_ALA_NCTR_0006

Combination dry and cemented retaining wall at the east end of Farwell siding from the initial construction. A portion of the wall from the forefront of this image to well behind the photographer was buried to widen the roadbed for the extension of the siding in 1911. The switch track into the siding is directly behind the photographer. The concrete cap and pipe railing as well as the precast culvert also probably date from the siding extension. The double white bands on the signal pole are the half mile marker. Unrestored signal masts are seen in the distance. The person in the photograph is Alan Frank.

Photographer Randolph Ruiz, 3/30/2008

MP 32.5 looking Southeast

CA_ALA_NCTR_0007

Looking towards the east end of the Farwell siding viewed from approximately the same location as historic photo #13. The switch into the siding is directly behind the unrestored signal posts. The railing is atop a stone retaining wall that is from the original construction but appears to have been reinforced at the time of the extension of the siding c.a. 1911. The telegraph pole is part of the signal line. Changes in the viewscape include increased vegetation. The ranch access road on the hillside and the communication structure on the ridge are outside the proposed district.

Photographer Randolph Ruiz, 2/1/2008

MP 32.65, looking Northwest

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Approaching Mayborg, photographed from approximately the same location as historic photo #14. This section was originally at the east end of a deep cut. The berm at the right was plowed into the creek and used for fill in the extension of the Farwell siding (c.a. 1911). Much of the retaining wall seen in the 1866 commissioner's train photo (historic photo 1) was also buried at that time. The telegraph poles on the left and center are from the Western Union and signal lines respectively. Additional changes to the scene include the power lines across the hill top and the significant regrowth of vegetation.

Photographer, Alan M. Frank, 10/27/2007

Location MP 32.7, looking East

CA_ALA_NCTR_0009

Estates Creek Bridge crosses both an access road to a small development at Brightside adjacent to proposed district and a minor creek. The stone headwalls appear to be from the initial construction. The steel plate girder span is from 1905.

Photographer; Alan Frank 2/1/2008

MP 33.6 looking South

CA_ALA_NCTR_0010

Non-contributing Brightside storage and maintenance facility for the Pacific Locomotive Association and the Niles Canyon Railway viewed from southeast with the original 1860s mainline at left. The tracks were completed through here in 1869, but there are indications that the grade and some structures may have been completed in 1866. The yard was constructed by the volunteers of the Niles Canyon Railway to preserve historic railroad equipment and to serve the operational needs of the demonstration railway. The non-contributing Back Shop maintenance and machine shop building is at left mid-distance. The building and site were used as a mine for light weight aggregates from the late 1940's to 1984. The cylindrical tipples to the right are a part of the adjacent continuing quarry operation.

Photographer; Randolph Ruiz, 2/18/2008

MP 33.9 looking Northwest

CA_ALA_NCTR_0011

A square Western Union telegraph pole line in the foreground to the left on the hillside. A partly restored pair of semaphore signals stand along the track between Brightside and Sunol. Non-contributing resources include: the concrete drop inlet visible behind the left semaphore, and a warning sign marking the path of the underground fiber optic line visible just to the left of the right semaphore. Highway 84 and the remains of the signal pole line are concealed by the trees to the right. This portion of the line was completed in 1869 while under control of the owners of the Central Pacific. The hillsides visible in this photo have recently been acquired by the East Bay Regional Park District from a descendant of the original Mexican land grant holder.

Photographer; Alan Frank 9/15/2009

MP 34.4 looking East

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CA_ALA_NCTR_0012

Restored SPRR locomotive #2472 passing between the partly restored semaphore signals approaching Sunol. The 1921 Baldwin locomotive is the same Pacific class that pulled the last scheduled SPRR service in the canyon (historic photo #4). The locomotive belongs to the Golden Gate Railroad Museum. The dual signals are for the main line above and the passing siding below.

Photographer Alan Frank 2/18/2008

MP 35.4 looking West

CA_ALA_NCTR_0013

Sunol Depot constructed in 1884 is the only historic building in the proposed district. It was moved from the site in 1941 when the road in the foreground was widened. It was returned to the site and restored in 1998. The building is a sighted north and west of its original location but its context with respect to the Widened Kilkare Road and the landscape remains essentially the same. The crossing arms are from the period of significance and have been restored and upgraded to meet current federal operational standards.

Photographer, Alan Frank 1/8/2010

MP 35.6 looking Southwest

CA_ALA_NCTR_0014

Arroyo de la Laguna Bridge crossing the broad wash of the arroyo was reconstructed in 1898 to replace the earlier covered wooden Howe truss. The headwalls and two piers are sandstone dating from the original construction. Two concrete piers were added to shorten the unsupported spans. The significant regrowth of trees and brush makes it difficult to photograph in total.

Photographer, Alan Frank 2/1/2010

MP 36.8 looking Southwest.

CA_ALA_NCTR_0015

Open countryside along the Arroyo de la Laguna looking north of the Bonita Station site was used for cattle ranching and dairy farming since the days of the Spanish Rancho el Valle de San Jose c.a. 1820. The land adjacent to the proposed district is part of the City of San Francisco watershed and still supports cattle grazing. The telegraph and fence lines are seen on the left.

Photographer; Alan Frank 9/18/2009

MP 37.2 looking Northwest

CA_ALA_NCTR_0016

Hearst Interchange is the NCTR connection with the UPRR. The UPRR Hearst Siding is across the Pleasanton-Sunol Road to the right of this photo. Interstate 680 is hidden behind the vegetation further to the right. The NCRY track beyond this point is undergoing restoration and not currently in public service (September 2009). Hearst interchange is a non contributing resource.

Photographer; Alan Frank 9/18/2009

MP 37.5 looking North

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Verona Crossing is the eastern most extent of track restoration to date (September 2009). Here the NCTR crosses the Pleasanto-Sunol road at grade and under the UPRR track. The UPRR overcrossing was built by the Western Pacific RR in 1909. The vehicle seen in the background just under the overcrossing, is on Interstate 680. The site of the private Verona Station built for Phoebe Apperson Hearst, mother of William Randolph Hearst, is beyond the overcrossing.

Photographer; Alan Frank 9/18/2009

MP 38.3 looking Northeast

CA_ALA_NCTR_0018

North & east of Verona the right of way is unrestored. Most of the historic SPRR ties have been removed by local ranchers for use as fence posts. Here the telegraph line is on the left and the signal line on the right.

Photographer; Alan Frank 9/18/2009

MP 38.8 looking Northwest

CA_ALA_NCTR_0019

The roadbed enters the Amador Valley and approaches the urban development of Pleasanton. Ahead the proposed district separates the residential development on the left and a commercial district on the right. The grading of a former spur into a still existing lumber yard is hidden in the trees to the right. Mount Diablo looms over the valley several miles to the north.

Photographer; Alan Frank 1/14/2010

MP 39.6 looking Northeast

CA_ALA_NCTR_0020

The unrestored eastern terminus of the NCTR. Bernal Ave. in the City of Pleasanton is in the foreground and Sunol Blvd. is to the left. A pair of partially restored searchlight signals flank the temporary track section. Housing built to the property line is hidden by vegetation on the right. Pleasanton Ridge, site of Castlewood Country Club, formerly the Phoebe Apperson Hearst Estate is in the background.

Photographer; Alan Frank 9/18/2009

MP 40.8 looking Southwest

CA_ALA_NCTR_0021

Dry laid buttressed stone retaining wall from the initial construction. This is a portion of the wall seen in the 1866 historic photo #1. The wall is now heavily overgrown and not visible at a distance. Part of the wall was buried when the riverside berm of the big cut was leveled (ca. 1911)

Photographer Randolph Ruiz, 2/1/2008

MP 32.75, looking Southwest

**United States Department of the Interior
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National Register of Historic Places Continuation Sheet

**Niles Canyon
Transcontinental
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District**

Alameda County, California

Photo Log

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CA_ALA_NCTR_0022

Detail of butress of retaining wall shown in photo # and historic photo #1.

Photographer Randolph Ruiz, 2/1/2008

MP 32.75, looking Southwest

CA_ALA_NCTR_0023

Dry sandstone retaining wall at the west Dresser Bridge approach. This wall may be from the original construction of the line in 1866. A cast-in-place concrete retaining wall is barely visible to the right of the sandstone wall (behind the small tree). This later concrete wall was built before 1906, probably in 1893, to replace an earlier wood trestle approach. The railroad is out of sight over the top of the wall. The right-of-way fence is visible on the hillside beyond.

Photographer Randolph Ruiz, 3/30/2008

MP 30.76 looking Northwest

CA_ALA_NCTR_0024

A track oiler, one of three on the NCTR placed in straight rail just before major curves. The passage of a train pumps a small amount of greast from the pot on the left to the applicators on the inside of each rail. They are necessary to limit the wear on rails and the wheels of the historic railroad equipment negotiating the the severe curves characteristic of 1860's design. Lubricating the side of the rail where it contacts the wheel flanges helps eliminate the squeeking and wear rounding curves. In the period of significance a track walker carying a pot of grease would would dab some on the inside edge of the rail. Later flange oilers were incorporated into locomotives to drip oil on the wheel flanges for the same purpose. It is important that the oil only be applied only to the side of the rail or wheel flange. Oil or grease on the rail head causes locomotives to slip and reduces the effectiveness of breaks. These modern devices use a biodegradable grease and are non-contributing resources.

Photographer Randolph Ruiz, 2/1/2008

MP 32.9, looking South

CA_ALA_NCTR_0025

This is the north headwall of a sandstone box culvert. It was a part of the line's original construction. Although this portion of the line was completed in 1869 while under control of the owners of the Central Pacific, the culvers as far east as Pleasanton were completed in advance of track laying before construction was paused in 1866. It is typical of the culverts by the WPRR and demonstrates the investors' commitment to costlier permanent construction. Note the horizontal texture change line just above midway between the top course of stone and the rail. This is the demarcation from the dirt ballast below to stone ballast above. The ballast conversion occurred in the 1893-1911 upgrade of the line.

Photographer; Randolph Ruiz 8/12/2008

MP 34.43 looking South

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CA_ALA_NCTR_0026

Treated wooden box culvert draining the trackside ditch. The slab stone floor probably from the original construction. The wood side walls are probably from early twentieth century. The head block was replaced when the track was restored in the early 1990's.

Photographer Randolph Ruiz, 2/1/2008

MP 32.7, looking North

CA_ALA_NCTR_0027

This brick culvert is unique on the NCTR. Its date of construction is unknown but it is probably from before cast concrete culverts were developed. It is likely to have replaced an earlier culvert that had been washed out. Local brick works were established in the area shortly after the completion of the railroad including Esdon (1874) in Livermore and Remillard (1881) Pleasanton.

Photographer; Alan Frank 1/14/2010

MP 38.5 looking Northeast

CA_ALA_NCTR_0028

A cast in place concrete culvert dating from 1927. Various sizes and designs of cast in place culverts are in place along the right of way.

Photographer; Alan Frank 1/14/2010

MP 39.3 looking Southwest

Photographs are printed on HP Premium Plus Photo Paper using HP Viverra inks. Digital files are in Tiff format with the above file names

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Page **1**

Verbal Boundary Description

The proposed Niles Canyon Transcontinental Railroad Historic District totals approximately 200 acres. Most is stretched out 11.6 miles between the Niles District in the City of Fremont and the City of Pleasanton. This portion of the property varies in width from 100 feet to 400 feet along its length depending upon the manner in which the railroad acquired it. About ten acres of the property are a portion of the former Niles rail yard.

UTM References of ends of the Linear District

1	<u>10</u> Zone	<u>5 8995</u> Easting	<u>41 5941</u> Northing	_____	_____
2	<u>10</u> Zone	<u>5 9906</u> Easting	<u>41 6810</u> Northing	_____	_____

Verbal Boundary Description

The fully detailed and surveyed property boundaries are given in the PLA lease (County of Alameda License Agreement C-2007-137) as exhibits A through D. They are derived from four deeds recorded at the Office of the Recorder of Alameda County. The deeds are;

- 1) Southern Pacific Transportation Company, recorded April 23, 1985, document No. 85-077991 (Exhibit A)
- 2) Southern Pacific Transportation Company, recorded June 23, 1988, document No. 88-150572 (Exhibit B)
- 3) Southern Pacific Transportation Company, recorded December 31, 1997, document No. 97-348924 (Exhibit C)
- 4) Union Pacific Railroad, recorded June 4, 2003, document No. 200321121 (Exhibit D)

These surveyed property boundary descriptions, labled Exhibit A through D, are included on the following pages. They are the complete verbal boundary descriptions that describe railroad properties.

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Verbal Boundary Description

Deed of record from Southern Pacific Transportation Company, recorded in the County of Alameda April 23, 1985, document No. 85-077991 (Exhibit A)

All that certain real property situated in the unincorporated area of the Township of Pleasanton and Washington, and the incorporated area of the Cities of Union City and Fremont, County of Alameda, State of California, described as follows:--

Those strips of land varying in width acquired by (a) the Central Pacific Railroad Company by an Act of Congress, dated July 1, 1862 (as shown on that certain map entitled "C.P.R.Y. Co. Oakland to Sacramento Main Line Via Niles and Tracy MAP OF Real Estate and Right of Way Properties through ALAMEDA COUNTY, CALIFORNIA" dated 1914, Alameda County Road Department Files numbered A 77-26, A 77-27 and A 77-28), and by (b) The Western Pacific Railroad Company by that certain Order and Declaration dated June 22, 1868, concerning the Report of Commissioners in the matter of the Western Pacific Railroad Company vs. Matthew W. Dixon, et al., in the District Court of the Third Judicial District in and for the County of Alameda, State of California, a certified copy of which said Order was recorded September 7, 1869, in Book 43 of Deeds at page 262 thereof, Records of Alameda County, California, and by (c) Western Pacific Railroad Company by deed dated April 15, 1870, from Jonas G. Clark, recorded June 14, 1870, in Book 55 of Deeds at page 347 Records of Alameda County, the center line of said strips of land being described as follows:

Beginning at a point in the original surveyed center line of the Southern Pacific Transportation Company's right of way, at Engineer's Station 1365 + 90.0; thence Southerly on a curve to the right (concave

EXHIBIT "A"

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Niles Canyon Transcontinental Railroad
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Historic Photo #1 of 18

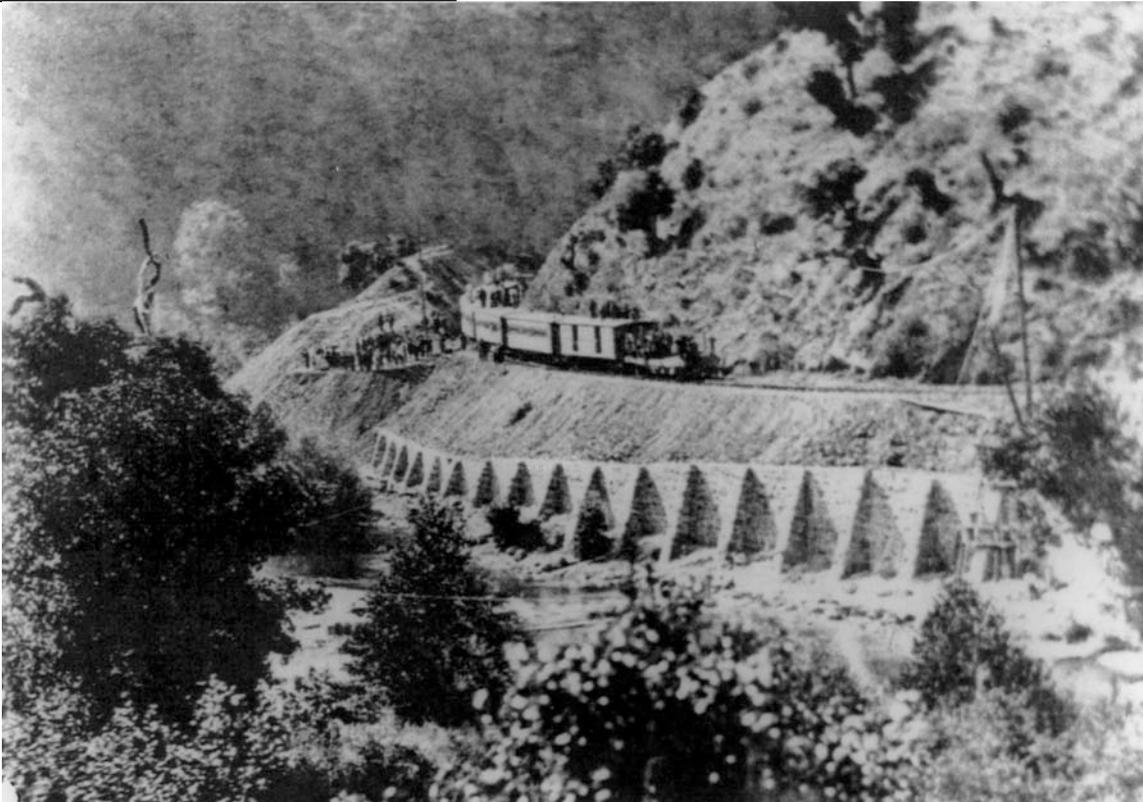


Photo taken of the Commissioner's train, in Niles Canyon at end of track. The Federal commissioner's inspection qualified the WPRR to receive the government bond for the construction of the first twenty miles of the railroad. The buttressed retaining wall is still in place and portions are visible today though heavily obscured by vegetation. A portion of the wall was buried when the berm to the left of the train, was plowed into the creek, c.a. 1911.

Date October 2, 1866

Photographer, J.H Heering, San Jose CA, from the collection of Clyde Arbuckle, by permission from Patterson House at Ardenwood Historic Farm, City of Fremont, CA.

Location MP 32.75(Mile 20 from San Jose) looking West

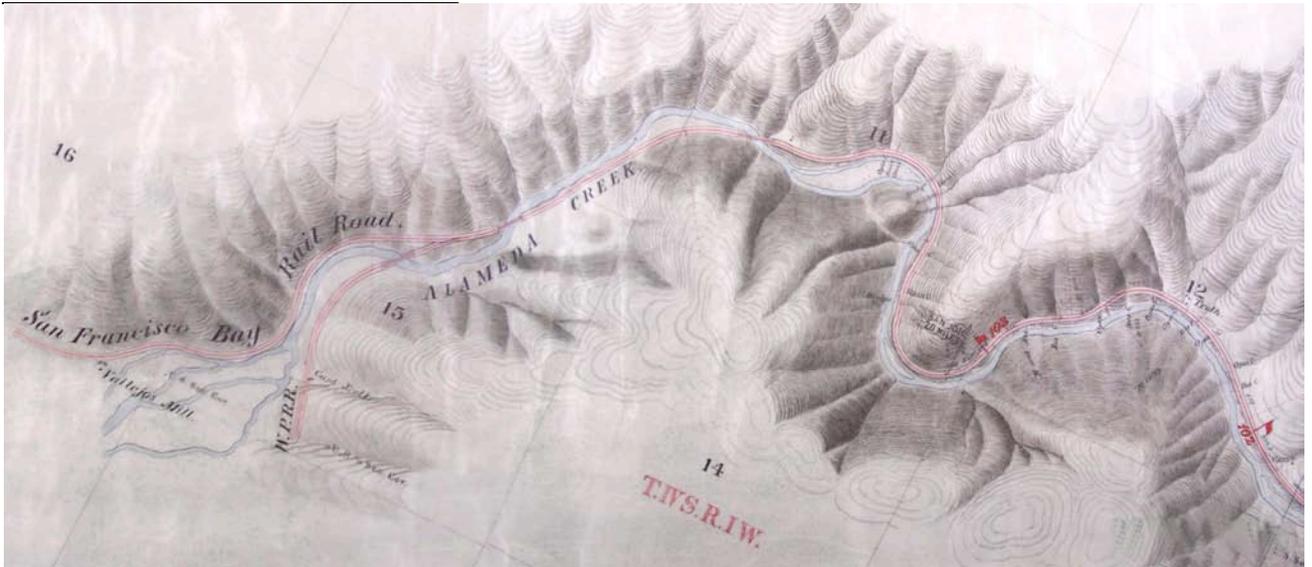
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Niles Canyon Transcontinental Railroad
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Alameda County, California

Historic Photo 2 of 18



A portion of the final bond map submitted for the construction of the WPRR 1869. The numbered flags are miles from Sacramento. They end just before the twenty-mile mark from San Jose, the bond for the first twenty miles having been previously issued in 1866. Note that Vallejo's Mill appears on the map but not Niles.

National Archive, College Park MD, Record Group, 49, Stack area 331, Tube 67

Image by permission from Patterson House at Ardenwood Historic Farm, City of Fremont, CA.

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Historic Photo 3 of 18



The first Niles Depot built in 1870. This is the final configuration of the building after it was extended in 1890. The building was removed from the site in 1901.

Photographer unknown, PLA collection.

Date is unknown but context places it between 1890 and 1901.

MP 29.3 looking North East

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Historic Photo 4 of 18



The last scheduled SPRR passenger service through Niles Canyon at Niles Station.

Photographer, Robert Searle, PLA collection.

Date January 1941

MP 29.3 looking North East

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Historic Photo 5 of 18



Dresser Bridge (CALTRANS, Hy-84 Rosewarnes Underpass) seen at the commencement of rail restoration. Note, the ties on the ground were left by the SPRR, preserving the precise location of the historic track.

Photographer Alan M. Frank (AMF 3-13-93-B1, B&W negative), PLA collection

Date March 13, 1993

Location MP 30.8 looking South West

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Niles Canyon Transcontinental Railroad
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Historic Photo 6 of 18



Unaltered center pier of Dresser Bridge as built by the WPRR c.a. 1866. Photo taken at the time of completion of track restoration across the bridge in 1993.

Photographer Alan M. Frank (AMF 8/31/93-B12, B&W Negative), PLA collection.
Date August 31, 1993 looking South West
Location MP 30.8

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Historic Photo 7 of 18



Maintenance of way equipment during rail replacement on Dresser Bridge. The riveted Pratt truss replaced the earlier wood truss in 1906. In 2002 the west pier shown here was encased in steel and concrete for earthquake stabilization.

Photographer Alan M. Frank (AMF 7/2/93-B10), PLA collection

Date July 2, 1993

Location MP 30.8 looking East.

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Niles Canyon Transcontinental Railroad
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Historic Photo 8 of 18



Alameda Cañon above the second crossing. Photograph was published by the firm of Lawrence and Houseworth, by permission from the collection of The Society of California Pioneers, San Francisco, CA (SCP-1253). Note the rail laid directly on the ties without tie plates and dirt ballast typical of the initial construction.

Photograph is attributed to Houseworth. Other photographers published by Lawrence and Houseworth included Muybridge and Hering.

Date is not known but historic context places it c.a. 1870.
Location MP 31.2 looking North East.

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Historic Photo 9 of 18



The dual Howe truss as initially constructed at Farwell. The bridge was covered after 1869.

Photographer, J.H Heering, From stereo card, collection of the New York Public Library (NYPL ID:G89F349_011F)

Date October 2, 1866

Location Farwell MP 31.7 looking South West

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Historic Photo 10 of 18



Postcard at Farwell, postmarked 1911 on back. The original Howe truss had been replaced in 1896. The original trestle in the foreground was replaced with a plate girder span in 1932, when the road (State Route 84) was relocated from an at grade crossing to an underpass.

Photographer, Unknown, PLA Collection

Date, c.a. 1911

Location, Farwell, MP 31.7 looking South West.

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Historic Photo 11 of 18



Freight rains passing at Farwell Siding near the end of the period of significance. The bridge is seen in the background. Note the concrete phone booth to the right above center and the stub track between the booth and signal.

Photographer, Jack Wirick, PLA Collection

Date, 1952

Location, Farwell, MP 31.6 looking West.

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Historic Photo 12 of 18



Above the third Bridge, Alameda Canñn. Looking west from milepost 31.8, the approach to Farwell (third) Bridge. Photograph was published by the firm of Lawrence and Houseworth, by permission from the collection of The Society of California Pioneers, San Francisco, CA (SCP-1257).

Photograph is attributed to Houseworth. Other photographers published by Lawrence and Houseworth included Muybridge and Heering.

Date is not known but historic context places it c.a. 1869-70. Note that Farwell Bridge is covered at this time.

Location MP 31.8 looking West.

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Historic Photo 13 of 18



Looking down Alameda Canõn from the big cut. Photograph was published by the firm of Lawrence and Houseworth, by permission from the collection of The Society of California Pioneers, San Francisco, CA (SCP-1261).

Photograph is attributed to Houseworth. Other photographers published by Lawrence and Houseworth included Muybridge and Heering.

Date is not known but historic context places it c.a. 1870.
Location MP 32.65 looking North West.

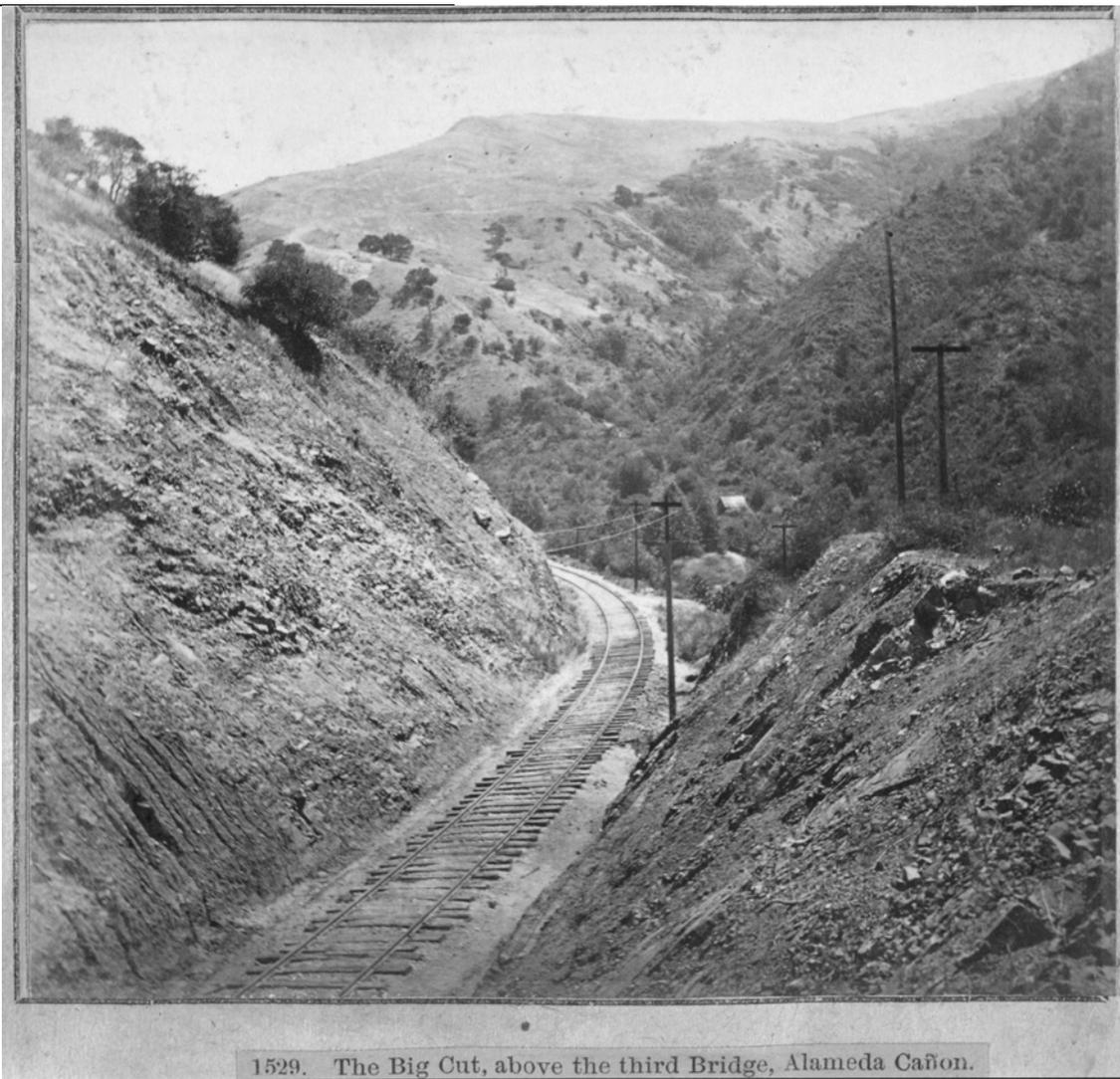
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Photographs

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Historic Photo 14 of 18



Looking east from the big cut towards Mayborg (MP 32.7, c.a. 1870) Laurence and Houseworth collection, by permission from the collection of The Society of California Pioneers, San Francisco, CA (SCP-1258)

Photograph is attributed to Houseworth. However other railroad photographers published by the firm of Lawrence and Houseworth included Muybridge and Hering.

Date is not known but historic context places it from 1866-71.

Location MP 32.7 looking East.

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Historic Photo 15 of 18



Sunol Depot viewed from east of Sinbad Creek.

Photographer Unknown, SPRR Photographer, PLA collection

Date June 1928

Location MP 35.6 looking South West.

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Historic Photo 16 of 18



NCRy excursion arriving at the restored Sunol Depot, viewed from Sinbad Creek bridge looking west similar to historic photo 14. Note that when the depot was returned to the station site, the underground petroleum pipeline prevented precise historic placement. This eliminated the space for restoration of the third track shown in historic photo 14. Other major changes include the widening and reconstruction of the road crossing and signals and the growth of trees to the right of the track. The span of the bridge previously used for the third track is in place left of the fence and is currently used for pedestrians.

Photographer Alan M. Frank, (B&W Print from Color Negative) PLA Collection

Date September 5, 2004

Location MP 35.6 looking South West.

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Historic Photo 17 of 18



Covered Howe truss bridge at Arroyo de la Laguna (Sunōl Creek) just before replacement. Note temporary bypass track in foreground.

Photographer, Unknown, CPRR Bridge Renewal drawing set. PLA collection.

Date 1898

Location MP 36.9 looking North East.

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Historic Photo 18 of 18



Span 4 of the Arroyo de la Laguna bridge. The plate girder bridge was erected in 1898 on four original and two new piers. Pier #5 shown here is original WPRR sandstone c.a.1866. Note that although track construction by the WPRR was only completed to MP 32.75 culvert and bridge construction extended well beyond. Photo was taken at the time track was being relayed across the bridge. A major change since the time of its construction has been the ingrowth of vegetation making viewing of the entire bridge impossible.

Photographer Alan M. Frank (AMF 6/24/00-5) PLA collection.

Date June 24, 2000

Location MP 36.9 looking North West.

Station Sites

Niles Canyon Transcontinental Railroad

Historic District

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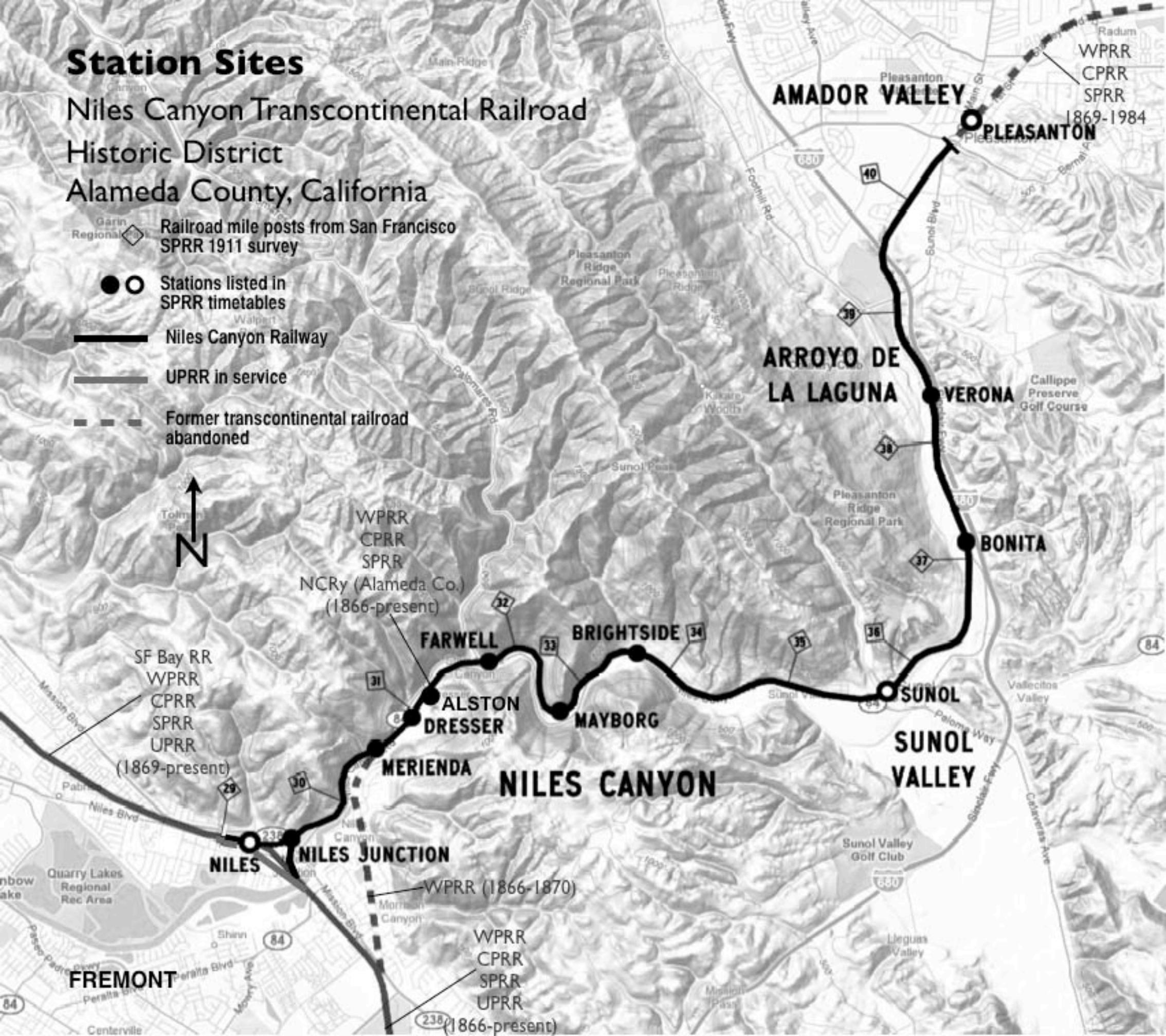
 Railroad mile posts from San Francisco
SPRR 1911 survey

 Stations listed in
SPRR timetables

 Niles Canyon Railway

 UPRR in service

 Former transcontinental railroad
abandoned



AMADOR VALLEY

PLEASANTON

ARROYO DE LA LAGUNA

VERONA

BONITA

SUNOL

SUNOL VALLEY

NILES CANYON

FARWELL

BRIGHTSIDE

ALSTON DRESSER

MAYBORG

MERIENDA

NILES

NILES JUNCTION

FREMONT

WPRR
CPRR
SPRR
1869-1984

WPRR
CPRR
SPRR
NCRy (Alameda Co.)
(1866-present)

SF Bay RR
WPRR
CPRR
SPRR
UPRR
(1869-present)

WPRR (1866-1870)

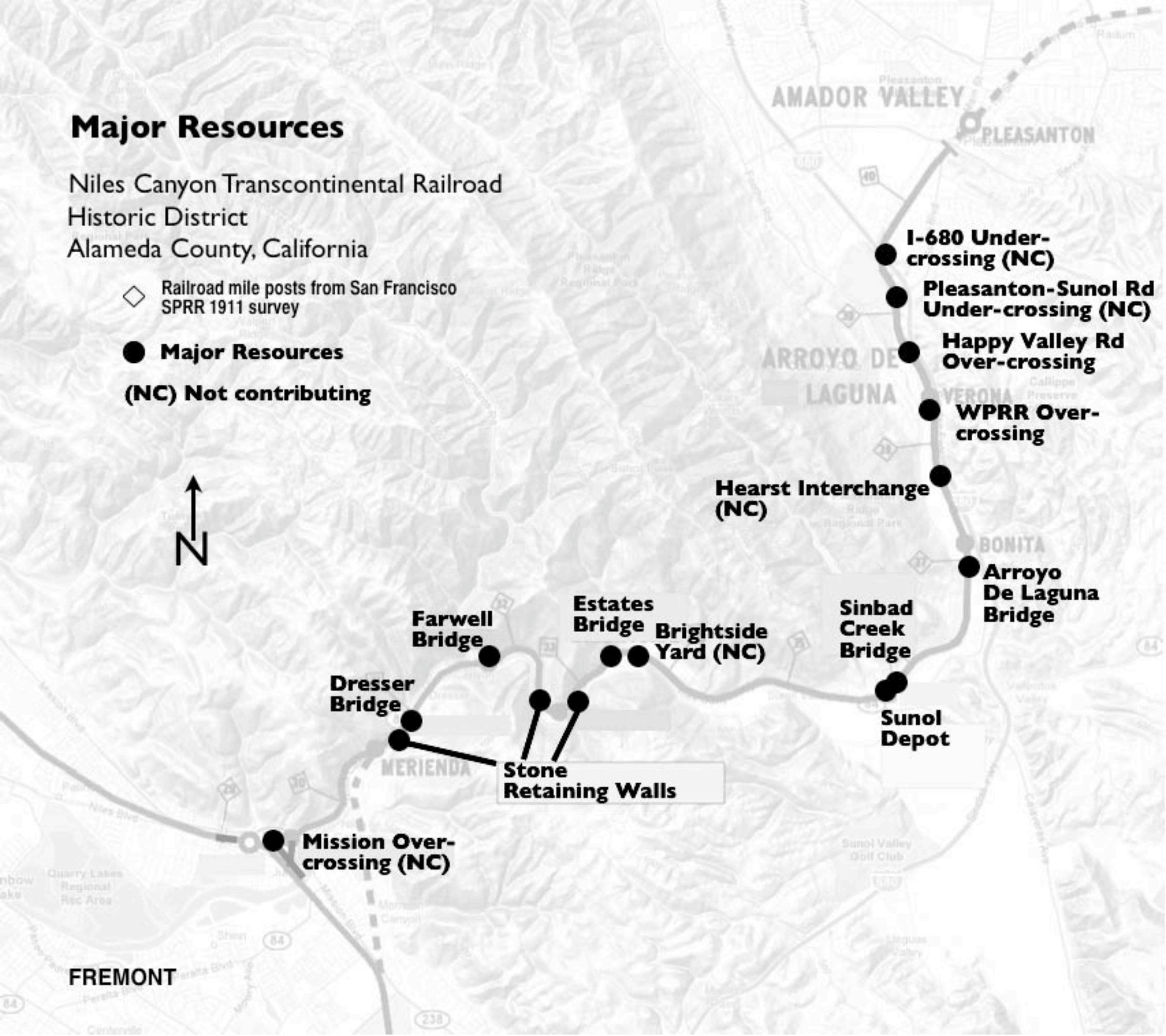
WPRR
CPRR
SPRR
UPRR
(1866-present)

Major Resources

Niles Canyon Transcontinental Railroad
Historic District
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◇ Railroad mile posts from San Francisco
SPRR 1911 survey

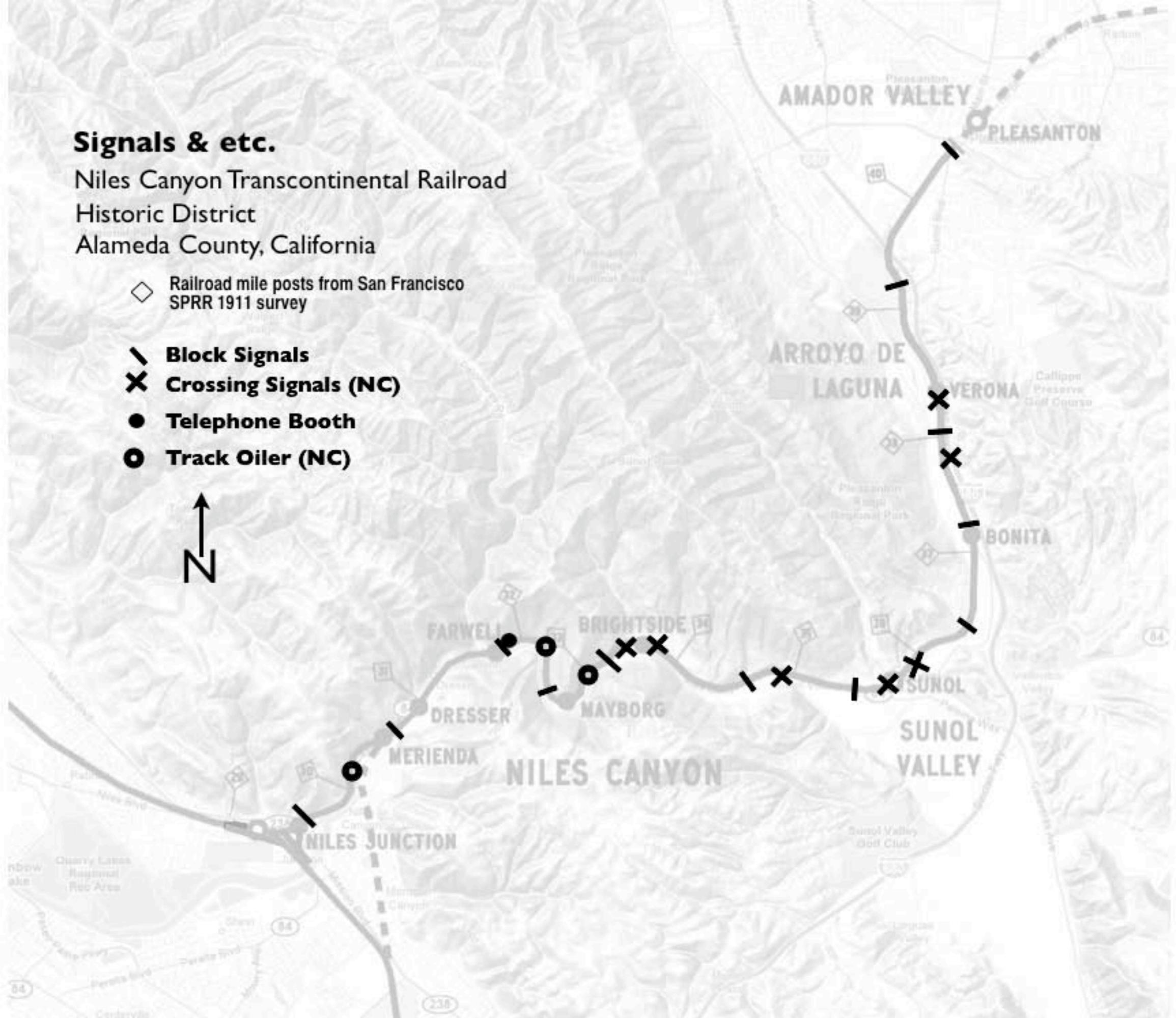
● Major Resources
(NC) Not contributing



Signals & etc.

Niles Canyon Transcontinental Railroad
Historic District
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- ◇ Railroad mile posts from San Francisco
SPRR 1911 survey
- Block Signals
- ✕ Crossing Signals (NC)
- Telephone Booth
- Track Oiler (NC)

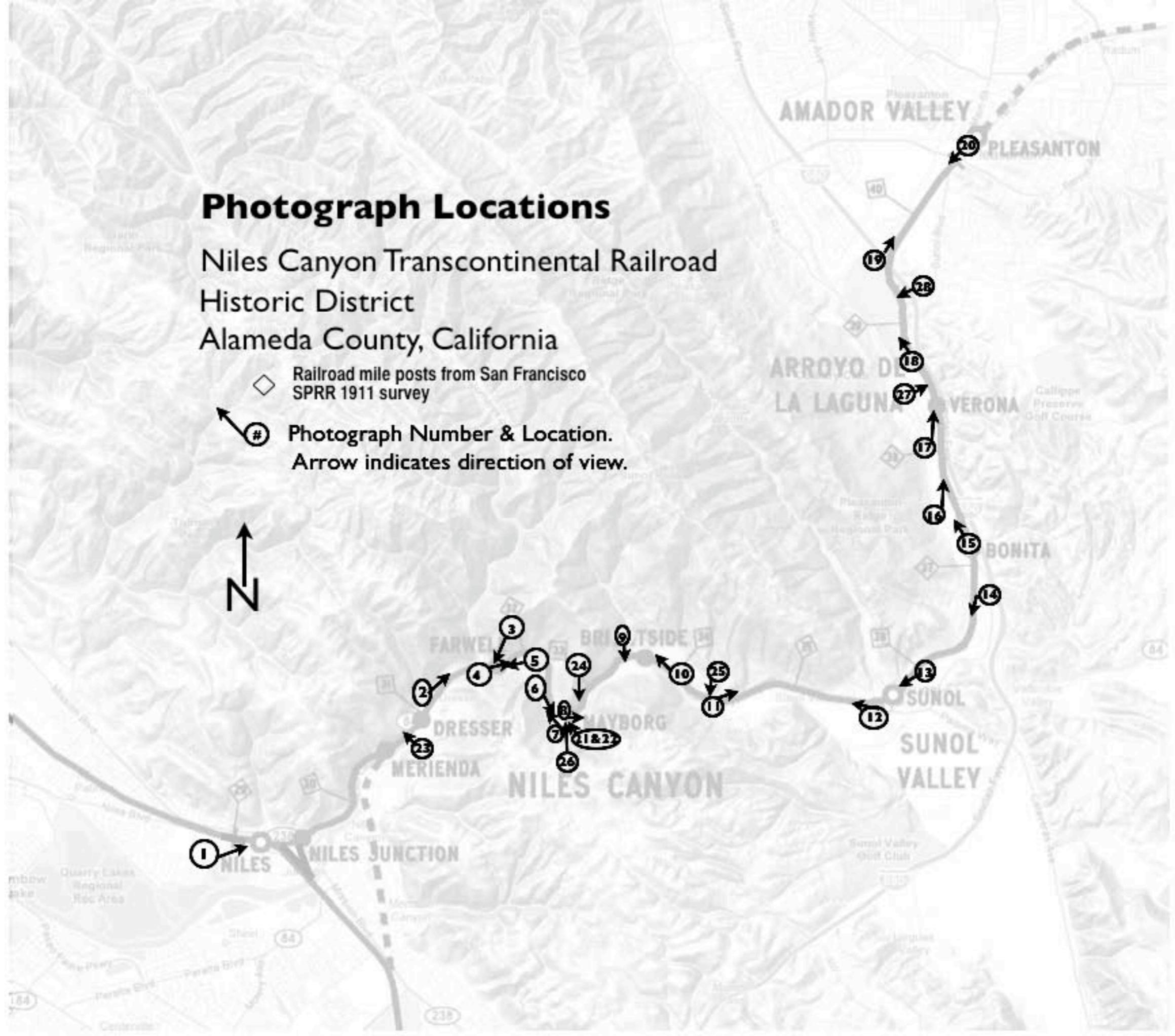


Photograph Locations

Niles Canyon Transcontinental Railroad
Historic District
Alameda County, California

◇ Railroad mile posts from San Francisco
SPRR 1911 survey

① Photograph Number & Location.
Arrow indicates direction of view.



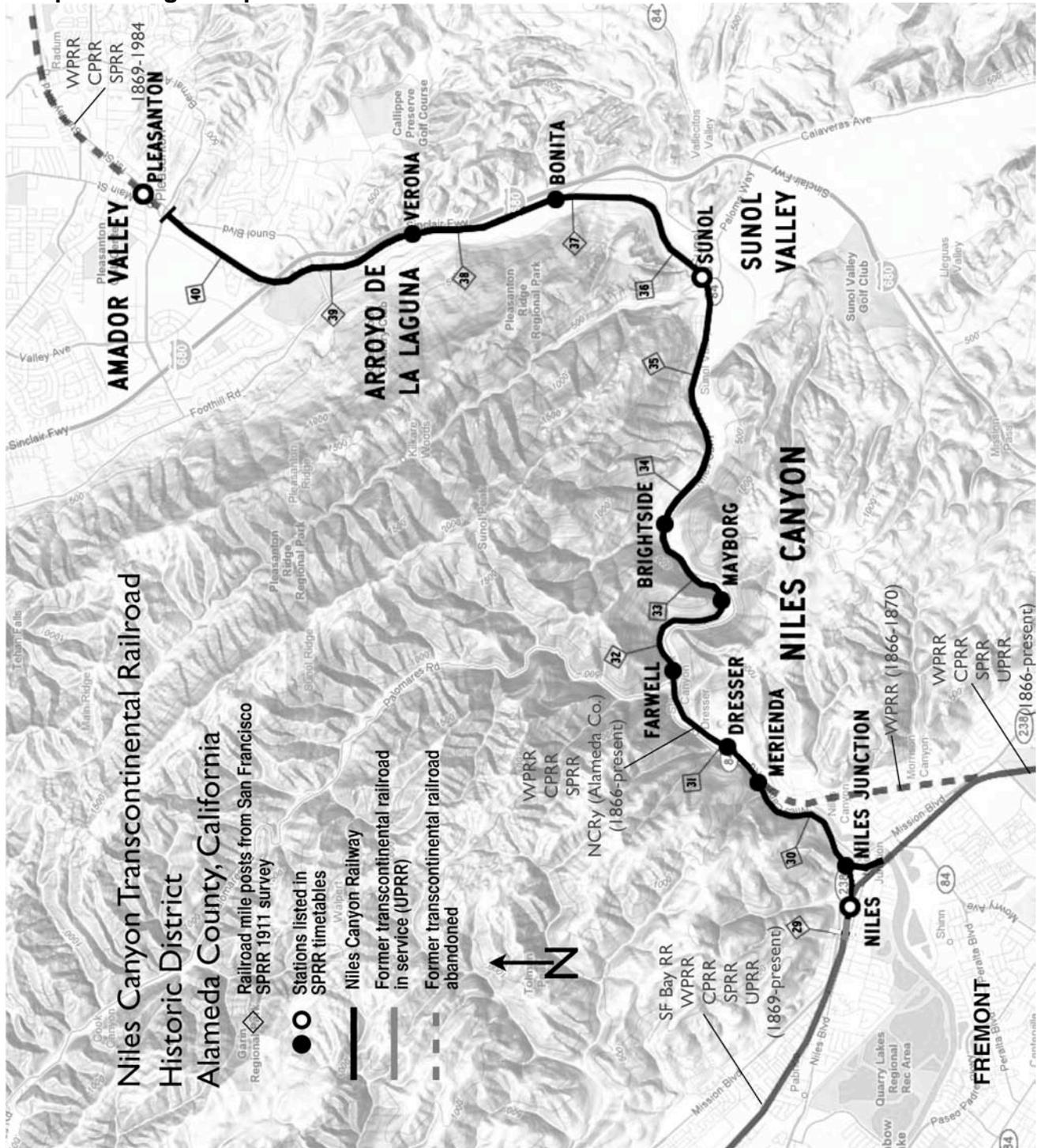
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MAPS

Sketch Map showing mile post and station locations.



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MAPS
USGS Reference Composite



Composite map from four USGS 7.5 minute quadrangles showing the location of the Niles Canyon Transcontinental Railroad Historic District (black line).

USGS 7.5 minute Niles, LaCosta Valley and Dublin Quadrangles attached.

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Appendix A

Catalogue of Historic Resources

Niles Canyon Railroad Historic District

This catalogue is a living document and a work in progress.

Notes;

Name is generally by function and location. CPRR / SPRR designations are used where known. A variety of structures are designated by mile and sequentially by letter within a given mile; i.e. "34C." These structures include Bridges, Culverts, and Grade Crossings. Signals are by tenth of a mile, but omit the decimal point; i.e. "304."

Mile Post (MP) CPRR / SPRR mileposts from the San Francisco Ferry Building, as adjusted in the 1911 survey.

Station Point (Sta. Pt.) locations are derived from CPRR chain measurements. A chain is one hundred feet. Station points are the number of chains from a point of departure. Locations are the station point plus the number of feet from the station point.

Coordinates are latitude and longitude from GPS surveys to date.

Appendix A: Niles Canyon Railway Resource Database 9/14/09

Rsrc.	Name	#	Classification	Type	Construction	Style	Year Built	MP	Sta. Pt.	Coordinates
0. Linear Resources										
0 A	Railroad Grade (11.5 miles)	1	Linear Structure	RR Grade	Earth	Railroad Standard	1866-1869	29-40.5	-	-
0 B	Railroad Track (9.3 miles)	1	Linear Structure	RR Track	Steel / Wood	Railroad Standard	1866-1869	29-38.5	-	-
0 C	Telegraph Line (11.5 miles)	1	Linear Structure	Comm. Utility	Wd. Poles/Wire	Railroad Standard	Various	29-40.5	-	-
0 D	Code Line (11.5 miles)	1	Linear Structure	Comm. Utility	Wd. Poles/Wire	Railroad Standard	Various	29-40.5	-	-
0 E	Petroleum Pipeline (~5.2 m)	1	NC Linear Struct.	Pipeline	Steel Pipe	Industrial Vernacular	1960s	35.3-40.5	-	-
0 F	Fiber Optic Line(11.5 miles)	1	NC Linear Struct.	Comm. Utility	Plastic Conduit	Industrial Vernacular	1980s	29-40.5	-	-
0 G	ROW Fences (varies)	1	Linear Structure	Fence	Stl. Posts/Wire	Railroad Standard	Various	Various	-	-
0 H	State Highway 84	1	NC Linear Struct.	Road/Highway	Asph/Conc/etc.	Various / Caltrans Stds.	Various	Various	-	-
1. Niles Station (29.2) & Vicinity (29.0-29.4)										
1 A	2 nd Passenger Depot	1	Building	Depot	Wood Frame	"Colonnade" (Beaux Arts)	1901	29.2	NA	37°34.647N 121°58.688W
1 B	2 nd Freight House	1	Building	Freight House	Wood Frame	Carpenter Gothic	1876	29.2	NA	37°34.654N 121°58.731W
1 C	5 th Water Tank Site	1	Structure	Foundations	Concrete	Railroad Standard	1909	29.2	NA	37°34.673N 121°58.669W
1 D	Grain Warehouse Site	1	Site	No Vis. Remains	NA	NA	1870s	29.2	NA	37°34.675N 121°58.725W
1 E	Corral Site	1	Site	No Vis. Remains	NA	NA	1874	29.1	NA	37°34.682N 121°58.756W
1 F	Train Boarding Platform	1	NC Structure	Boarding Plat.	Earth/DG	Railroad Standard	2006	29-29.1	NA	37°34.691N 121°58.844W
1 G	NCRy "Depot"	1	Building	Shed	Wood Frame	Railroad Standard Shed	1920s?	29	NA	37°34.691N 121°58.832W
1 H	Worker Housing Site	2	Structure	Foundations	Concrete	Partial Remains	1928, 1929	29.3	NA	37°34.660N 121°58.582W
2. Niles Junction (29.6) & Vicinity (29.4-30.0)										
2 A	Bridge 29B (Mission Blvd.)	1	NC Structure	Bridge	Steel / Conc.	Thru Plt Girder + Conc. Abut.	2004	29.46	NA	37°34.66N 121°58.43W
2 B	Track Tool House Site	1	Structure	Retaining Wall	Stone	Industrial Vernacular	Early 20thC	29.5	NA	37°34.675N 121°58.387W
2 C	Culvert 29C	1	NC Structure	Drainage Struct.	Conc Pipe	Industrial Vernacular	2004	29.5	64+65.7	37°34.68N 121°58.36W
2 D	3 Signals	1	Structure	Signaling Equip.	Steel / Conc.	Railroad Standard	Early 20thC	29.55	NA	37°34.69N 121°58.33W
2 E	Switch	1	Structure	RR Track	Steel / Wood	Railroad Standard	Various	29.58	60+67.5	37°34.71N 121°57.29W
2 F	Spring Valley Water Equip.	1	Structure	Misc. Pipes	Iron	Industrial Vernacular	Early 20thC	NA	NA	37°34.708N 121°58.276W
2 G	Culvert 29D	1	Structure	Drainage Struct.	Concrete	Concrete Pipe Culvert Type 1	Early 20thC	29.78	57+40	37°34.80N 121°58.11W
2 H	Culvert 29E	1	NC Structure	Drainage Struct.	Concrete	Industrial Vernacular	1990s	NA	NA	37°34.85N 121°57.95W
2 I	Culvert 29F	1	Structure	Drainage Struct.	Steel	Steel Pipe w/o Headwalls	20thC	29.93	41+69	37°34.87N 121°57.93W
2 J	Culvert 29G	1	Structure	Drainage Struct.	Steel	Steel Pipe w/o Headwalls	20thC	29.99	38+43	37°34.88N 121°57.92W
2 K	Mile Post 30	1	Object	Sign	Steel / Wood	Sign on Sig. Line Pole	Mid 20thC	30	38+43.9	37°34.89N 121°57.41W
3. Merienda & Vicinity										
3 A	Signal Base + Batt. Boxes	1	Structure	Signaling Equip.	Steel	Railroad Standard	Early 20thC	~30.1	NA	37°34.94N 121°57.89W
3 B	Flange Greaser	1	NC Structure	Lubrication Device	Metal/Rub. Tube	Industrial Vernacular	2008	~30.15	NA	37°35.02N 121°57.90W
3 C	Culvert 30A	1	Structure	Drainage Struct.	Wood	Wood Box Culvert	Mid 20thC	30.29	23+11	37°35.15N 121°57.89W
3 D	Culvert 30B	1	Structure	Drainage Struct.	Dry Stone	Sandstone Box Culvert	1869	30.41	16+56.5	37°35.22N 121°57.81W
3 E	Signal Pair #304	1	Structure	Signaling Equip.	Steel	Railroad Standard	Early 20thC	30.47	13+02	37°35.25N 121°57.73W
3 F	Culvert 30C	1	Structure	Drainage Struct.	Conc/Stone/Rail	Conc/Stone Railtop Culvert	1869, 1914	30.5	11+47.6	37°35.27N 121°57.68W
3 G	Culvert 30D	1	Structure	Drainage Struct.	Steel	Steel Pipe w/o Headwalls	Early 20thC	30.5	NA	NA
3 H	WPRR ROW	1	Structure	RR Grade	Earth	Industrial Vernacular	1865	30.6	943+00	37°35.30N 121°57.61W

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3 I	San Jose Jct. Site	1	Site	Grade/Remains	Stone/Earth	NA	1869	30.6	943+00	37°35.28N 121°57.59W
3 J	Whistle Post	1	NC Structure	Sign	Metal	Later Railroad Standard	Late20thC	30.6	943+00	37°35.28N 121°57.59W

4. Dresser & Vicinity

4 A	Retaining Wall/Culvert 30E	1	Structure	Retaining Wall	Conc / Stone	Railroad Standard	1908	30.76	948+00	37°35.88N 121°57.46W
4 B	Bridge 30F (Dresser)	1	Structure	RR Bridge	Steel/Stone/Conc.	Riveted Warren Truss	1865, 1906	30.78	952+66.2	37°35.88N 121°57.46W
4 C	Signal Component	1	Structure	Signaling Equip.	Steel	Railroad Standard	Early 20thC			37°35.48N 121°57.36W
4 D	Spur Site	1	Site	Ties / Grade	Earth/Wd. Ties	Railroad Standard	Early 20thC		958+14.2	37°35.48N 121°57.36W
4 E	Culvert 30G	1	Structure	Drainage Struct.	Wood	Wood Box Culvert	Mid 20thC	30.96	960+56.7	37°35.50N 121°57.33W
4 F	Battery Boxes	1	Structure	Signaling Equip.	Steel / Conc.	Railroad Standard	Early 20thC			37°35.51N 121°57.33W
4 G	Switch	1	NC Structure	RR Track	Steel / Wood	Railroad Standard	1990s		960+56.7	37°35.53N 121°57.32W
4 H	Mile Post 31	1	Object	Sign	Steel / Wood	Sign on Sig. Line Pole	Mid 20thC	31	960+56.7	37°35.53N 121°57.32W
4 I	Whistle Post	1	NC Structure	Sign	Metal	Later Railroad Standard	Late20thC	-31.1		37°35.56N 121°57.29W
4 J	Signal Base	1	Structure	Signaling Equip.	Concrete	Railroad Standard	Early 20thC	-31.25		37°35.77N 121°57.12W
4 K	Joyland Park Site	1	Site	Foundations	Conc/Stone/Pipes	Partial Remains	Late19thC	31.4		37°35.847N 121°57.007W

5. Farwell & Vicinity

5 A	Whistle Post	1	NC Structure	Sign	Metal	Later Railroad Standard	Late20thC	31.5	NA	37°35.82N 121°57.02W
5 B	Bridge 31D (Farwell)	1	Structure	Bridge	Steel/Stone/Conc.	Pin-Connected Pratt Truss	1866, 1896	31.56	999+32.1	37°35.87N 121°56.81W
5 C	Aband. Grade Crossing	1	Site	Xing/Safety Equip	Asph/Conc	Railroad Standard	Early 20thC	-31.65	NA	37°35.867N 121°56.769W
5 D	Telltale	1	Structure	Safety Device	Steel / Wood	Railroad Standard	Early 20thC	-31.65	NA	37°35.866N 121°56.781W
5 E	Culvert 31E	1	Structure	Drainage Struct.	Galvanized Steel	Corrugated Pipe Culvert	Mid 20thC	-31.65	NA	37°35.867N 121°56.751W
5 G	Signal Bases	1	Structure	Signaling Equip.	Steel	RR Std. - 2 Found, 1 Base	Early 20thC		NA	37°35.867N 121°56.744W
5 G	Farwell Site	1	Site	No Vis. Remains	NA	NA	NA	NA	NA	37°35.873N 121°56.742W
5 H	Telephone Booth	1	Structure	Signaling Equip.	Precast Concrete	Railroad Standard	Early 20thC	NA	NA	37°35.873N 121°56.722W
5 I	Culvert 31F -Dbl Track	1	Structure	Drainage Struct.	Steel	Iron Pipe w/N. Stone HdWall	Early 20thC	31.71	1003+33	37°35.869N 121°56.715W
5 J	Flange Greaser	1	NC Structure	Lubrication Device	Metal/Rub. Tube	Industrial Vernacular	2000s	NA	NA	37°35.923N 121°56.532W
5 K	Culvert 31G -Dbl Track	1	Structure	Drainage Struct.	Steel / Stone	Iron Pipe / Stone Headwalls	Late19thC	31.98	1014+45	37°35.967N 121°56.461W
5 L	Mile Post 32	1	Object	Sign	Steel / Wood	Sign on Sig. Line Pole	Mid 20thC	32	1015+16	37°35.968N 121°56.455W
5 M	Culvert 32A -Dbl Track	1	Structure	Drainage Struct.	Steel / Stone	Iron Pipe / Stone Headwalls	Late19thC	32.01	1015+91	37°35.970N 121°56.433W
5 N	Culvert 32B -Dbl Track	1	Structure	Drainage Struct.	Conc / Stone	Hybrid Conc Pipe Type 1+2	Early 20thC	NA	NA	37°35.950N 121°56.307W
5 O	Culvert 32C -Dbl Track	1	Structure	Drainage Struct.	Steel / Conc.	Hybrid Stl Pipe/Conc	Early 20thC	32.13	1022+43	37°35.936N 121°56.282W
5 P	Culvert 32D -Dbl Track	1	Structure	Drainage Struct.	Conc / Stone	Hybrid Conc Pipe/Stone	Early 20thC	32.16	1023+83	37°35.926N 121°56.266W
5 Q	Culvert 32E -Dbl Track	1	NC Structure	Drainage Struct.	Corrugated Plastic	Industrial Vernacular	2000s	32.21	1024+85	37°35.936N 121°56.282W
5 R	Culvert 32F -Dbl Track	1	Structure	Drainage Struct.	Conc / Stone	Hybrid Conc Pipe/Stone	1924	32.25	1027+86	37°35.875N 121°56.244W
5 S	Culvert 32G -Dbl Track	1	Structure	Drainage Struct.	Conc Pipe	Concrete Pipe Culvert Type 2	1926	32.47	1033+98	37°35.765N 121°56.247W
5 T	Retaining Wall/Culvert 32H	1	Structure	Drainage Struct.	Conc / Stone	Conc. Pipe / Coursed Ashlar	Early 20thC	32.5	1040+06	37°35.682N 121°56.225W
5 U	East Farwell Switch	1	Structure	RR Track	Steel / Wood	Railroad Standard	Various	32.51	1040	37°35.662N 121°56.222W
5 V	Retaining Wall/Culvert 32I	1	Structure	Drainage Struct.	Conc / Stone	Conc. Pipe / Coursed Ashlar	Early 20thC	32.52	1041+65	37°35.655N 121°56.218W
5 W	East Farwell Signals #326	1	Structure	Signaling Equip.	Steel	RR Std. -Missing Heads	Early 20thC	32.58	~1048	37°35.625N 121°56.211W
5 X	Culvert 32J	1	Structure	Drainage Struct.	Creosoted Wood	Wood Box Culvert	Mid 20thC	32.57	1045+74	37°35.592N 121°56.191W
5 Y	Culvert 32K	1	Structure	Drainage Struct.	Galvanized Steel	Corrugated Pipe Culvert	Mid 20thC	32.59	1046+40	37°35.581N 121°56.181W

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6. Mayborg & Vicinity

6 A	Culvert 32L	1	NC Structure	Drainage Struct.	Galvanized Steel	Corrugated Pipe Culvert	2000s	32.61	1047+76	37°35.550N 121°56.156W
6 B	Culvert 32M	1	Structure	Drainage Struct.	Concrete	Concrete Pipe Culvert Type 1	Early 20thC	32.67	1050+84	37°35.538N 121°56.124W
6 C	Culvert 32N	1	Structure	Drainage Struct.	Concrete	Concrete Pipe Culvert Type 2	Early 20thC	32.72	1053+29	37°35.531N 121°56.076W
6 D	Retaining Wall	1	Structure	Drainage Struct.	Sandstone	Buttressed Coursed Ashlar	1866	~32.8	~1056	37°35.530N 121°56.064W
6 E	Culvert 32O	1	Structure	Drainage Struct.	Concrete	Concrete Pipe Culvert Type 2	Early 20thC	32.85	1059+31	37°35.568N 121°55.962W
6 F	Flange Greaser	1	NC Structure	Lubrication Device	Metal/Rub. Tube	Industrial Vernacular	1990s	32.9	NA	NA
6 G	Mile Post 33	1	Object	Sign	Steel / Wood	Sign on Sig. Line Pole	Mid 20thC	33	1067+85	37°35.713N 121°55.889W
6 H	Culvert 33A	1	Structure	Drainage Struct.	Conc / Stone	Conc. Culvert/Ashlar Ret.W	Early 20thC	33.06	1071+31	37°35.752N 121°55.854W
6 I	Retaining Wall	1	Structure	Retaining Wall	Rails/Ties	Railroad Standard	1940s	33.2	~1077	37°35.810N 121°55.720W
6 J	Culvert 33C	1	Structure	Drainage Struct.	Concrete	Concrete Pipe Culvert Type 2	Early 20thC	33.26	1081+69	37°35.855N 121°55.670W
6 K	Culvert 33D	1	Structure	Drainage Struct.	Stone	Stone Box Culvert	Late19thC	33.36	1087+39	37°35.923N 121°55.612W

7. Brightside & Vicinity

7 A	Culvert 33E	1	Structure	Drainage Struct.	Conc / Stone	Concrete Pipe Culvert Type 1	Early 20thC	33.46	1092+31	37°35.949N 121°55.520W
7 B	Signal Pair #336	1	Structure	Signaling Equip.	Steel	Single-Blade Semaphore	Early 20thC	33.6	1095+33	37°35.953N 121°56.461W
7 C	Bridge 33F	1	Structure	Bridge	Steel / Stone	24' DPG / Stone Abut.	1866, 1906	33.6	1095+78	37°35.950N 121°55.446W
7 D	Brightside Site	1	Site	No Vis. Remains	NA	Station Shelter Site	NA	33.6	1097+16	NA
7 E	Culvert 33G	1	Structure	Drainage Struct.	Sandstone	Stone Box Culvert	1866	33.63	1099+36	37°35.938N 121°55.376W
7 F	Private Grade Xing 33H	1	Structure	Estates Grade Xing	Misc	Automatic Flagman	20thC	33.66	1102+43	37°35.919N 121°55.319W
7 G	Culvert 33I	1	Structure	Drainage Struct.	Concrete	Concrete Pipe Culvert Type 1	Early 20thC	33.76	1102+85	37°35.915N 121°55.309W
7 H	Yard Limit Sign	1	NC Structure	Sign	Steel / Wood	Railroad Standard	1990s	~33.71	~1105	37°35.886N 121°55.249W
7 I	Private Grade Xing 33J	1	Structure	B-side Grade Xing	Misc	Automatic Flagman	20thC	NA	1106+30	37°35.886N 121°55.249W
7 J	Culvert 33K	1	Structure	Drainage Struct.	Concrete	Concrete Pipe Culvert Type 1	Early 20thC	33.76	1108+24	37°35.863N 121°55.220W
7 K	Brightside Siding & Yard	1	NC Structure	RR Track	Steel / Wood	Railroad Standard	1988-	33.9	NA	37°35.766N 121°55.055W
7 L	Engine Hse/Machine Shop	1	NC Building	Building	Steel / Conc.	Industrial Vernacular	1990s	NA	NA	37°35.769N 121°55.083W
7 M	Car Shop	1	NC Building	Building	Steel / Conc.	Premanufactured Steel Struct.	2007	NA	NA	37°35.783N 121°55.101W
7 N	"White House"	1	NC Building	Building	Metal / Wood	Modular Portable Structure	1980s	NA	NA	37°35.767N 121°55.039W
7 O	Yard Office	1	NC Building	Building	Metal / Wood	Modular Portable Structure	1960s	NA	NA	37°35.831N 121°55.138W
7 P	Sheds/Storage Containers	12	NC Structure	Sheds	Metal / Wood	Industrial Vernacular	Various	NA	NA	NA
7 Q	Settling Basin	1	Structure	Drainage Struct.	Earth / Concrete	Industrial Vernacular	20thC	NA	NA	37°35.839N 121°55.153W
7 R	Mile Post 34	1	Object	Sign	Steel / Wood	Sign on Sig. Line Pole	Mid 20thC	34	1120+76	NA
7 S	Culvert 34A	1	NC Structure	Drainage Struct.	Galvanized Steel	Corrugated Pipe Culvert	2008	34.06	1123+48	NA
7 T	Gate	1	NC Structure	Security Fence	Galvanized Steel	Chain Link Fence	2008	NA	NA	NA
7 U	Yard Limit Sign	1	NC Structure	Sign	Wood	Railroad Standard	1990s	NA	NA	NA
7 V	Culvert 34B	1	Structure	Drainage Struct.	Stone	Sandstone Box Culvert	1866	34.22	NA	37°35.641N 121°54.810W
7 W	Culvert 34C	1	Structure	Drainage Struct.	Stone	Sandstone Box Culvert	1866	34.43	1143+67	37°35.663N 121°54.606W
7 X	Whistle Post	1	Structure	Sign	Wood	RR Std. - Wood Post	Early 20thC	NA	NA	NA
7 Y	Signal Pair	1	Structure	Signaling Equip.	Steel	RR Std. -Complete	Early 20thC	34.5		37°35.689N 121°54.522W
7 Z	Culvert	1	NC Structure	Drainage Struct.	Concrete	Large Drop Inlet -Caltrans?	Mid 20thC	34.5		37°35.692N 121°54.516W
7 AA	Culvert 34D	1	Structure	Drainage Struct.	Concrete	Concrete Pipe Culvert Type 1	Early 20thC	34.5	1147+51	37°35.692N 121°54.514W

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7 BB	Culvert 34G	1	Structure	Drainage Struct.		Railroad Standard			
7 CC	Culvert 34H	1	Structure	Drainage Struct.		Railroad Standard			
7 DD	Private Grade Xing 34I	1	Structure	Grade Crossing	Misc	Automatic Flagman	20thC		
7 EE	Culvert 34J	1	Structure	Drainage Struct.		Railroad Standard			

8. Sunol & Vicinity

8 A	Mile Post 35	1	Object	Sign	Steel / Wood	Sign on Sig. Line Pole	Mid 20thC	35		
8 B	Battery Box	1	Structure	Signaling Equip.	Steel / Conc.	Railroad Standard	Early 20thC	35		
8 C	Culvert 35A	1	Structure	Drainage Struct.	Conc. Pipe	Railroad Standard		35.15		
8 D	Battery Boxes	1	Structure	Signaling Equip.	Steel	Railroad Standard		35.2		
8 E	Signal Pair 353, 354	1	Structure	Signaling Equip.	Steel	RR Std. -Complete	Early 20thC	35.3		37°35.628N 121°53.493W
8 F	West Sunol Switch	1	Structure	RR Track	Steel / Wood	Railroad Standard	Various			37°35.637N 121°53.427W
8 G	Screen Fence	1	NC Structure	Fence	Wood	Contemporary Residential	2008			37°35.630N 121°53.390W
8 H	Shed	1	NC Structure	Mobile Structure	Wood / Various	Industrial Vernacular	Late20thC			37°35.636N 121°53.366W
8 I	Parking Lot	1	NC Structure	Paved Surface	Asphalt	Industrial Vernacular	Late20thC			37°35.663N 121°53.353W
8 J	Sunol Depot	1	Building	Depot	Wood Frame	Stick-Style Victorian	1884	35.6	1204+43	37°35.645N 121°53.337W
8 K	Grade Crossing 35B	1	Structure	Grade Crossing	Misc	Griswald Gates + Flashers	20thC			37°35.657N 121°53.319W
8 L	Bridge 35C (Sinbad)	1	Structure	RR Bridge	Steel / Conc.	20ft DPG -dbl track	1905	35.65		37°35.665N 121°53.299W
8 M	Sunol Park	1	NC Structure	Community Park	Misc	Community Park	1990s	NA	NA	37°35.663N 121°53.266W
8 N	Culvert 35D -Dbl Track	1	Structure	Drainage Struct.	Concrete	Dbl. Conc Pipe Culvert Type 1	Early 20thC	35.74	1211+87	37°35.708N 121°53.223W
8 O	East Sunol Switch	1	NC Structure	RR Track	Steel / Wood	Railroad Standard				37°35.714N 121°53.211W
8 P	Grade Xing 35E (Bond St.)	1	Structure	Grade Crossing	Misc	Griswald Gates + Flashers	20thC		1216+38	37°35.751N 121°53.175W
8 Q	Phone Booth	1	Structure	Signaling Equip.	Precast Concrete	Railroad Standard	Early 20thC			
8 R	Track Indicator Base	1	Structure	Signaling Equip.	Concrete/Steel	Railroad Standard				
8 S	Mile Post 36	1	Object	Sign	Steel / Wood	Sign on Sig. Line Pole	Mid 20thC	36		
8 T	Culvert 36A -Dbl Track	1	Structure	Drainage Struct.		Railroad Standard				
8 U	Switches	1	NC Structure	RR Track	Steel / Wood	Railroad Standard	1990s			37°35.968N 121°52.821W
8 V	Culvert 36B -Dbl Track	1	Structure	Drainage Struct.		Railroad Standard				
8 W	Culvert 36C -Dbl Track	1	Structure	Drainage Struct.		Railroad Standard				
8 X	Sunol East Switch Site	1	Site	No Vis. Remains	NA	NA				37°36.053N 121°52.616W
8 Y	Signal Pair	1	Structure	Signaling Equip.	Steel	Railroad Standard	Mid 20thC			

9. Bonita & Vicinity

9 G	Bridge 36G	1	Structure	RR Bridge	Steel/Stone/Conc.	5-TPG+Stn,Conc Pier/Abut.	1869, 1898	36.87		37°36.455N 121°52.561W
9 H	Mile Post 37	1	Object	Sign	Steel / Wood	Sign on Sig. Line Pole	Mid 20thC	37		
9 I	Culvert 37A	1	Structure	Drainage Struct.	Concrete	Conc. Arch	Early 20thC		1280	
9 J	Signal Base	1	Structure	Signaling Equip.	Steel	RR Std. -Missing Head	Early 20thC			
9 K	Culvert 37B	1	Structure	Drainage Struct.		Railroad Standard				
9 L	Bonita Station Site	1	Site	No Vis. Remains	NA	NA	NA	37.2	1288+91	37°36.692N 121°52.574W
9 M	Private Grade Xing 37C	1	Structure	Grade Crossing	Misc./Earth	Railroad Standard	Early 20thC			37°36.716N 121°52.582W
9 N	Culvert 37D	1	Structure	Drainage Struct.	Steel / Conc.	6' Rail Top Box Culvert	Early 20thC		1290	37°36.721N 121°52.583W
9 O	Culvert 37E	1	Structure	Drainage Struct.		Railroad Standard				

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9 P	Signal Base	1	Structure	Signaling Equip.	Steel	Railroad Standard	Early 20thC			
9 Q	Switch	1	NC Structure	RR Track	Steel / Wood	Railroad Standard	2006			37°36.906N 121°52.680W
9 R	Culvert 37F	1	Structure	Drainage Struct.		Railroad Standard				
9 S	Culvert 37G	1	Structure	Drainage Struct.	Steel	Steel Pipe w/o Headwalls	Early 20thC		1320	
9 T	Private Grade Xing	1	Structure	Grade Crossing	Misc./Asphalt	Railroad Standard	Mid 20thC			37°37.070N 121°52.767W

10. Verona & Vicinity

10 A	Mile Post 38	1	Object	Sign	Steel / Wood	Sign on Sig. Line Pole	Mid 20thC	38		
10 B	Culvert 38A	1	Structure	Drainage Struct.		Railroad Standard			1335	
10 C	Culvert 38B	1	Structure	Drainage Struct.	Sandstone	Stone Box Culvert	1869			
10 D	NC Grade Crossing 38C	1	Structure	Grade Crossing	Precast Concrete	Contemp. Railroad Standard	2006			37°37.584N 121°52.882W
10 E	WP Overpass	1	Structure	RR Bridge	Steel / Conc.	TPG + Conc. Abut.	1908			37°37.621N 121°52.882W
10 F	Private Grade Xing 38D	1	Structure	Grade Crossing	Misc./Earth	Railroad Standard	Early 20thC			37°37.651N 121°52.883W
10 G	Culvert 38E	1	Structure	Drainage Struct.	Concrete	Concrete Pipe Culvert Type 1	Early 20thC			37°37.655N 121°52.884W
10 H	Telephone Booth	1	Structure	Signaling Equip.	Precast Concrete	Railroad Standard	Early 20thC			37°37.664N 121°52.889W
10 I	Verona Site	1	Site	No Vis. Remains	NA	NA	NA	38.4	1352+27	37°37.673N 121°52.887W
10 J	Culvert 38F	1	Structure	Drainage Struct.		Railroad Standard				
10 K	Culvert 38G	1	Structure	Drainage Struct.		Railroad Standard				
10 L	Bridge 39A (Happy Valley)	1	Structure	RR Bridge	Steel / Conc.	25'-DPG + Conc. Abut.	1905			37°38.226N 121°53.160W
10 M	Bridge 39C (Plsntn/Sunol)	1	NC Structure	RR Bridge	Conc. Box Girder	CA Hwy. Dept	1968			37°38.341N 121°53.169W
10 N	Signal Pair	1	Structure	Signaling Equip.	Steel	Railroad Standard	Early 20thC			
10 O	Culvert 39D	1	Structure	Drainage Struct.		Railroad Standard				
10 P	I-680 Overpass	1	NC Structure	Concrete	Conc. Box Girder	CA Hwy. Dept	1968			37°38.648N 121°53.302W

11. Pleasanton & Vicinity

11 A	Culvert 40A	1	Structure	Drainage Struct.	Concrete/Steel	Rail Top Box Culvert	Early 20thC			37°38.910N 121°53.117W
11 B	Culvert 40B	1	NC Structure	Drainage Struct.	Concrete	Flood Control Box Culvert	Mid 20thC			37°39.031N 121°53.015W
11 C	Grade Crossing 40C	1	NC Structure	Grade Crossing	Precast Concrete	Contemporary RR Std.	2006			37°39.043N 121°53.006W
11 D	Ped. Grade Crossing	1	NC Structure	Grade Crossing	Concrete	Conc. path -no rails	1980s			37°39.155N 121°52.914W
11 E	Signal Pair (Target)	1	Structure	Signaling Equip.	Steel	RR Std. -Complete Target Style	Early 20thC	40.5		37°39.337N 121°52.744W

Resource Count	
Classification	Total
Site	13
Object	9
Linear Structure	5
Structure	105
Building	4
NC Linear Struct.	3
NC Structure	43
NC Building	4
Grand Total	186

Contributing Resources: 136

Non-Contributing Resources: 50