TECHNICAL REPORT

Cultural Resources Assessment for the Anaheim Canyon Metrolink Station Project, Orange County, California

Prepared for

Orange County Transportation Authority

February 2017

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Contents

Acronyms and Abbreviations

ADA	Americans with Disabilities Act
APE	Area of Potential Effects
ATN	Anaheim Transit Network
ATSF	Atchison, Topeka and Santa Fe Railway
BN	Burlington Northern
BNSF	Burlington Northern Santa Fe Railway
B.P.	before present
CFR	Code of Federal Regulations
CHRIS	California Historical Resources Information System
City	City of Anaheim
CMAQ	Congestion Mitigation and Air Quality
CP	Control Point
CRHR	California Register of Historical Resources
DPR	Department of Parks and Recreation
EIC	Employee in Charge
FTA	Federal Transit Administration
GIS	geographic information system
GPS	global positioning system
NHPA	National Historic Preservation Act
NRHP	National Register of Historic Places
OCTA	Orange County Transportation Authority
OHP	Office of Historic Preservation
Project	Anaheim Canyon Metrolink Station Project
SCE	Southern California Edison
TOFC	trailer-on-flat-car
SCRRA	Southern California Regional Rail Authority
SHPO	State Historic Preservation Officer
USGS	U.S. Geological Survey
WPA	Works Progress Administration

1.0 Introduction

As part of the Anaheim Canyon Metrolink Station project (Project), Orange County Transportation Authority (OCTA), in coordination with the lead federal agency Federal Transit Administration (FTA), is proposing a second station track and platform within OCTA's existing rail right-of-way and includes associated signal warning devices and street and pedestrian safety improvements to adjacent at-grade crossings without permanently disrupting existing vehicular or rail traffic circulation or requiring land acquisition. The most visible improvement will be the construction of a second station track and platform to allow more than one train to serve the station and/or pass through the station area at a time. This will increase the on-time performance and safety of the train operations. The Project will also include fully Americans with Disabilities Act (ADA)-compliant improvements to the pedestrian circulation elements at the station. The design and construction of the Project is planned to be funded through the Congestion Mitigation and Air Quality (CMAQ) Program and FTA formula funds 5337 and 5307. In September 2012, the OCTA Board approved the allocation of $20,051,000 from Federal funds received by the agency for the Project.

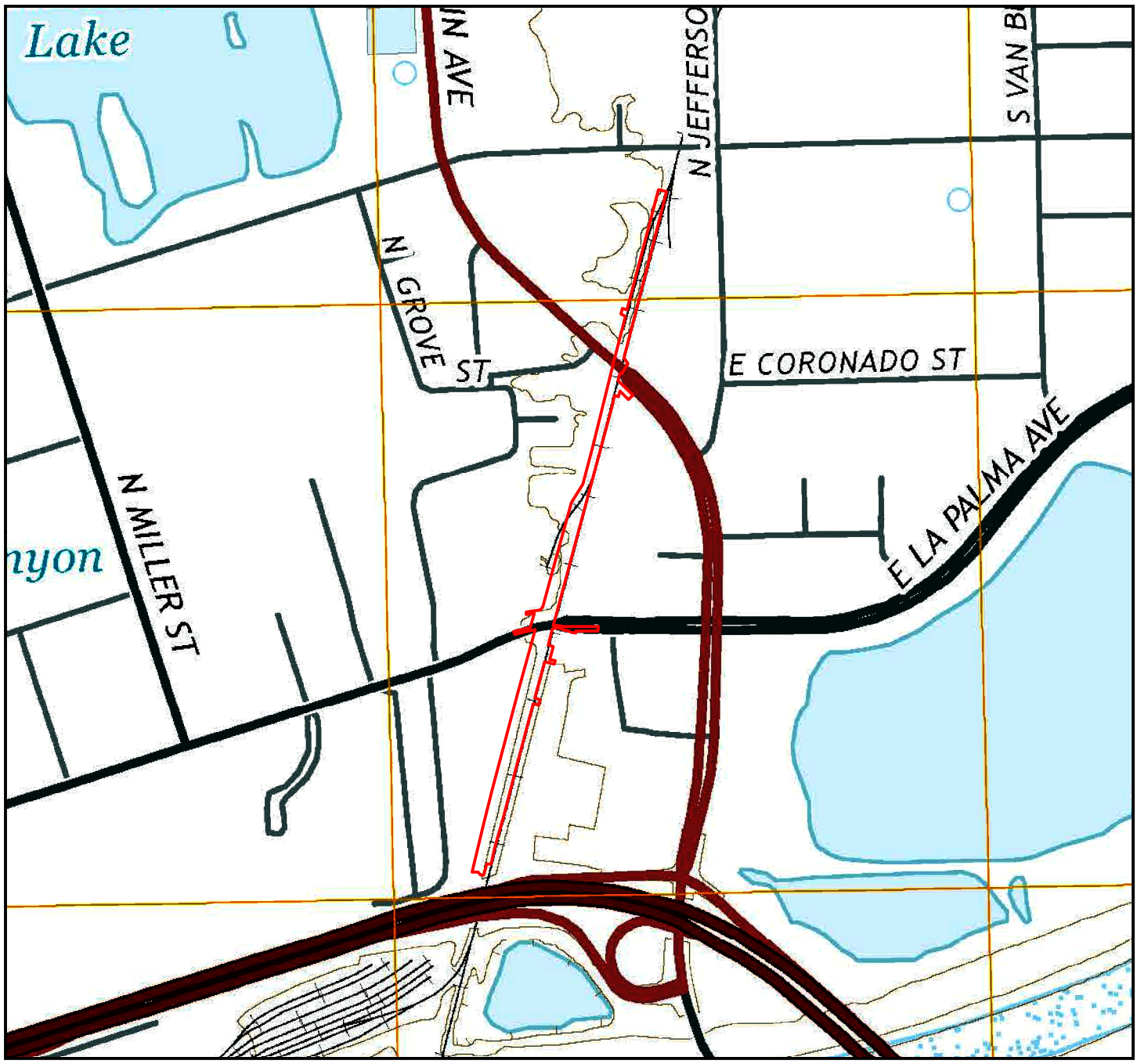
In compliance with Section 106 of the National Historic Preservation Act (NHPA), this technical report describes the Project, identifies archaeological and architectural properties, presents evaluations of the identified properties, and provides an assessment of effects associated with the Project. The implementing regulation for the NHPA is the Protection of Historic Properties (36 Code of Federal Regulations [CFR] Part 800), which defines historic properties as any prehistoric or historic district, site, building, structure, or object that is included in, or eligible for inclusion in, the National Register of Historic Places (NRHP) (36 CFR §800.16).

1.1 Project Description

The Anaheim Canyon Metrolink Station provides commuter rail service on the Inland Empire/Orange County Metrolink Line between San Bernardino and Oceanside. The Anaheim Canyon Metrolink Station also provides commuters with local and community bus routes, Stationlink rail feeder routes, and Anaheim Transit Network (ATN) shuttle services. It is located at 1039 N. PacifiCenter Drive in the northeast part of the City of Anaheim (City) (Figure 1). The station is situated within a 100-foot wide OCTA-owned right-of-way along the western edge of the PacifiCenter Development south of E. La Palma Avenue. The current station consists of one platform with shade structures, benches and ticket vending machines. The station is served by a single track. The City has an exclusive use easement with the adjacent PacifiCenter landowner for parking which includes 100 spaces in a parking lot located immediately east of the station platform. The station parking lot area also includes four bus bays.

OCTA proposes to construct a second station track and platform to allow more than one train to serve the station and/or pass through the station area at a time. This will increase the on-time performance of train operations and improve operational flexibility. Grade crossing safety will be enhanced by closing or moving driveways away from the crossings; and overall system safety will be enhanced by allowing trains operating in opposing directions to each have their own dedicated track under normal operation, rather than requiring trains moving in opposing directions sharing a single track.

The Project will also include fully ADA compliant improvements to the pedestrian circulation elements at the station.



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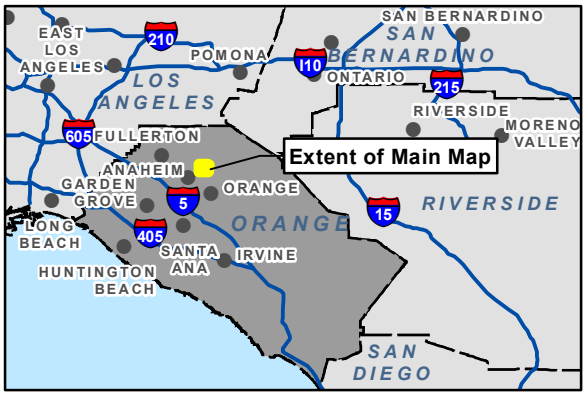
Area of Potential Effects (APE)



Orange, CA 7.5 USGS Quad, 2015
Township 3 S, Range 9 W Sections 32, 33
Township 4 S, Range 9 W, Sections 4 , 5

N

0 0.1 0.2 0.3 0.4 Miles

Figure 1
Project Location
Anaheim Canyon Metrolink Station Project
Orange County, California

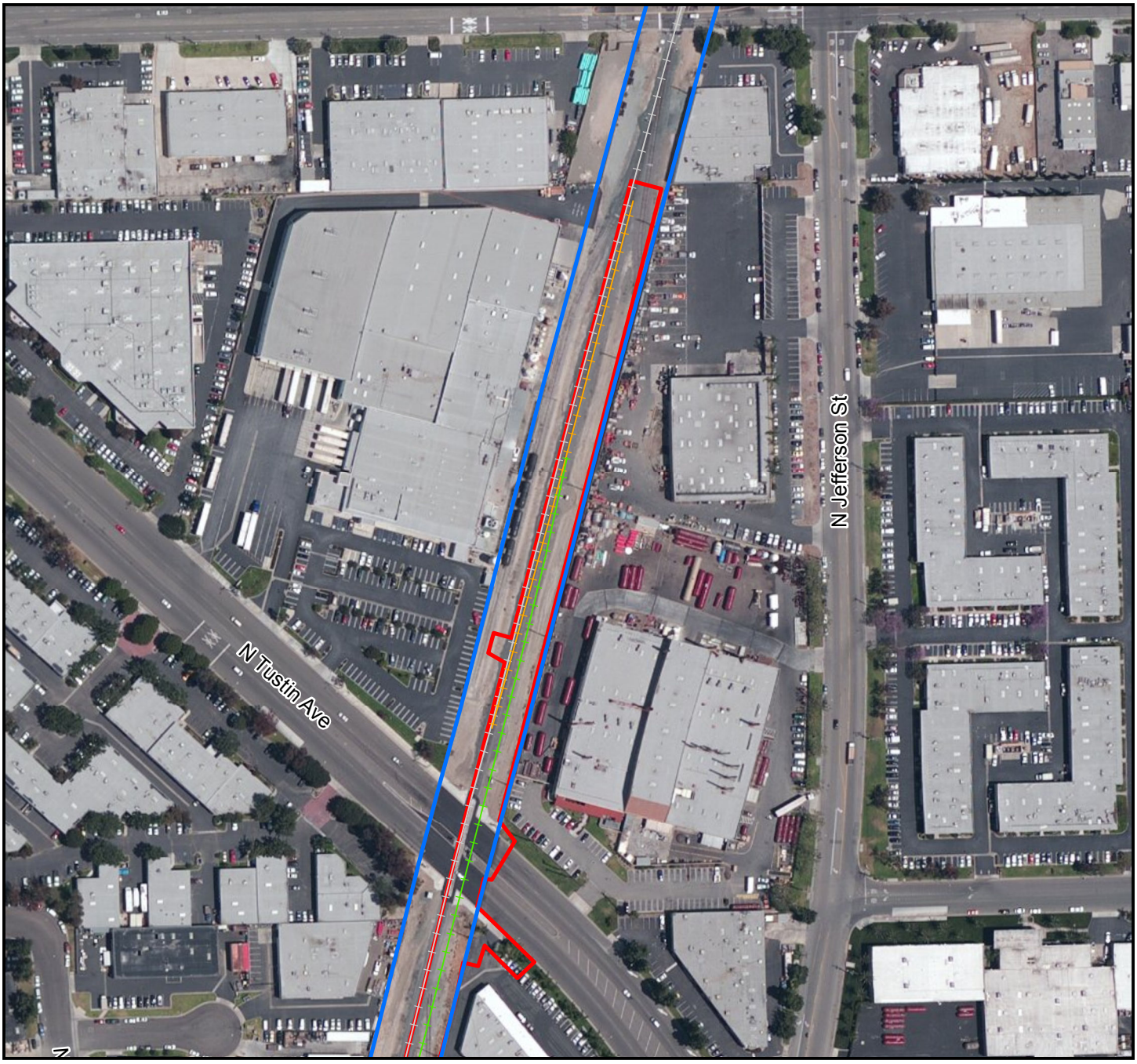
All improvements will be built within existing OCTA and City public right-of-way, and no disturbance to private parcels or other public property is anticipated to occur, with the exception of reconstruction of several existing parking lot pedestrian ramps to meet ADA compliance, which are located within private property being leased by the City for station parking, as well as for limited temporary construction easements. Temporary construction easements for work adjacent to private property are anticipated where noted below.

The improved Anaheim Canyon Metrolink Station will remain a multi-modal transit center that accommodates Metrolink commuter rail service, OCTA local and community bus service, Stationlink rail feeder service and Anaheim Resort Transit, along with parking facilities. The cultural resources Area of Potential Effects (APE) was developed to include the following Project elements (as described in Section 1.2.1):

- Construction of approximately 3,400 linear feet of new siding track (2nd track) and two new turnouts. In the station area, the new track will be built to the west of the existing single track, then to the north of E. La Palma Avenue, the new track will transition to be built on the east side of the existing track.
- Establish two new Control Points (CPs) at the new turnouts. Associated railroad signal and communications modifications will be required to accommodate new 2nd track and pedestrian safety improvements at grade crossings.
- Construction of improvements to the existing at-grade crossings of E. La Palma Avenue and Tustin Avenue to accommodate the new 2nd track; including new street improvements, relocation of existing railroad signal warning devices and pedestrian safety improvements. Includes reconstruction and widening of sidewalk elements to accommodate the relocation of the pedestrian grade crossing warning devices, gates and channelization railing.
- Closure of an existing driveway along the north edge of E. La Palma Avenue, just west of the railroad tracks, to accommodate the second track and provide for grade crossing safety improvements. This work will be within City public right-of-way; however, a temporary construction easement is anticipated to be required for this work. This driveway closure will not impact access to the private property, because the property has a main driveway approach from E. La Palma Avenue located approximately 295 feet to the west, which will not be affected by the Project.
- Relocation of an existing driveway along the south edge of Tustin Avenue, just east of the railroad tracks, to accommodate the second track and provide the required area for at-grade crossing safety improvements. This work will be within the City public right-of-way, however a temporary construction easement is anticipated to be required for this work and the reconfiguration of parking stalls for no net loss of parking to the private property owner.
- Extension of the existing 510-foot long station platform to meet the current required Metrolink standard platform length of 680 feet, which supports an eight-car train.
- Construction of a new 680-foot long second platform and associated facilities on the west side of the new 2nd track.
- Construction of 832 linear feet of retaining wall west of new platform to accommodate the difference in grade from the top of proposed platform to existing ground and to protect excessive fill over an existing 36-inch SoCal Gas line located within a 10-foot easement along the western boundary of the railroad right-of-way.
- Construction of new ADA-compliant pedestrian pathways and sidewalks to provide pedestrian access between the existing parking lot and proposed second platform.

- Construction of improvements to existing parking lot pedestrian ramps to meet ADA compliance. This work will occur within private property currently being leased by the City for station parking. The Project would not improve or expand the parking lot.
- Reconstruction of a portion of the existing sidewalk, curb and gutter and roadway, and associated striping to provide a Class II bike path extension across the railroad grade crossing area, along the south edge of eastbound E. La Palma Avenue up to Tustin Avenue. This work will be within OCTA right-of-way and the City public right-of-way.
- Construction of a bus pad/stop on eastbound E. La Palma Avenue on the nearside of the railroad grade crossing.
- Relocation of an existing Positive Train Control communications tower located in the area proposed for the new second platform. The new location for the tower will be at the south end of new platform.
- Minor grading and drainage improvements, including a culvert extension to accommodate the second track.
- Relocate one Southern California Edison (SCE) power pole in the south east quadrant of the E. La Palma Avenue grade crossing, and relocate one SCE power pole guy wire on the east side of the railroad right-of-way between E. La Palma Avenue and Tustin Avenue.
- Extend to the west of the existing track, two existing 60-inch Reinforced Concrete Pipe with concrete collar just south of the Tustin Avenue grade crossing.

Figure 2 (Sheets A, B, and C) shows the Project elements and Photographs 1 to 3 show the existing railroad tracks within the OCTA right-of-way.



Legend

- Area of Potential Effects (APE)
- Existing Railroad
- Proposed Siding Track
- Proposed Main Track
- Railroad ROW
- Proposed Platforms
- Platform Access

Sheet A

N

Aerial Imagery Source: National Agricultural Imagery Program (NAIP). Flown 5/13/14

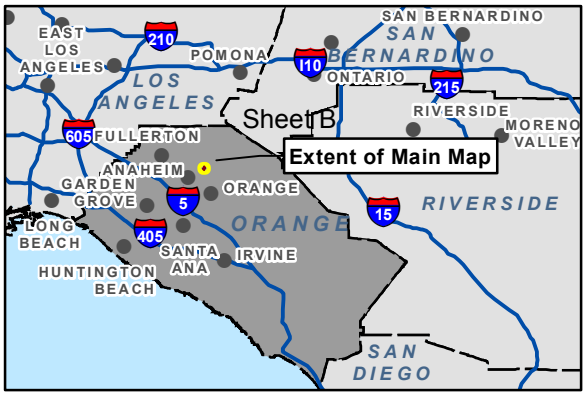
0 200 400 600 Feet

Figure 2 Sheet A
Project Elements
Anaheim Canyon Metrolink Station Project
Orange County, California

Legend

- Area of Potential Effects (APE)
- Existing Railroad
- Proposed Siding Track
- Proposed Main Track
- Railroad ROW
- Proposed Platforms
- Platform Access

Sheet B



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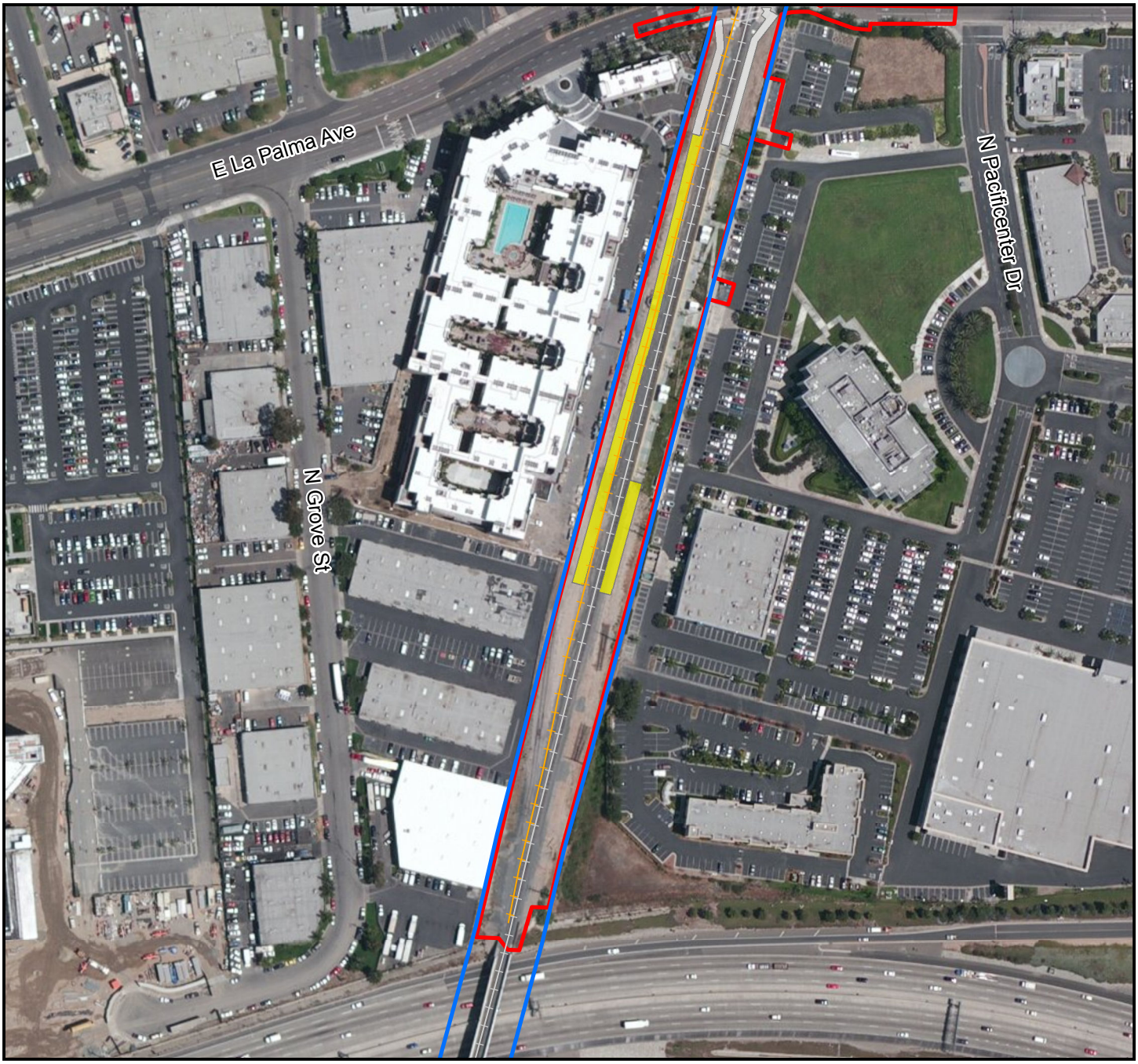
Aerial Imagery Source: National Agricultural Imagery Program (NAIP). Flown 5/13/14

Figure 2 Sheet B
Project Elements
Anaheim Canyon Metrolink Station Project
Orange County, California



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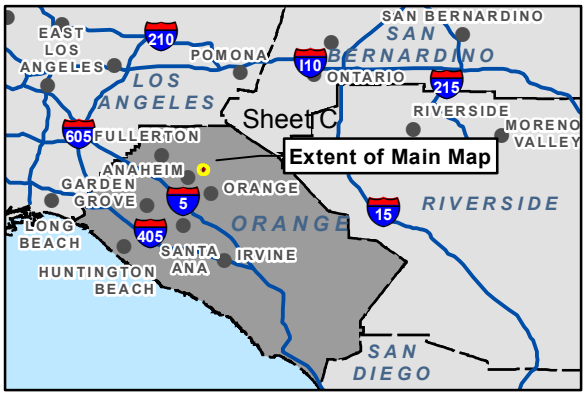
- Area of Potential Effects (APE)
- Existing Railroad
- Proposed Siding Track
- Proposed Main Track
- Railroad ROW
- Proposed Platforms
- Platform Access

Sheet C



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Aerial Imagery Source: National Agricultural Imagery Program (NAIP). Flown 5/13/14

0 200 400 600 Feet

Figure 2 Sheet C
Project Elements
Anaheim Canyon Metrolink Station Project
Orange County, California

Photograph 1. Anaheim Canyon Metrolink Station
Project overview taken from just north of State Route 91, view roughly north.
November 30, 2016

Photograph 2. Anaheim Canyon Metrolink Station
East side of OCTA right-of-way (north of Tustin Avenue), view looking north.
November 30, 2016

Photograph 3. Anaheim Canyon Metrolink Station
Existing platform (left) taken from at grade crossing at E. La Palma Avenue, view roughly south.
November 30, 2016

1.2 Methodology

1.2.1 Area of Potential Effects

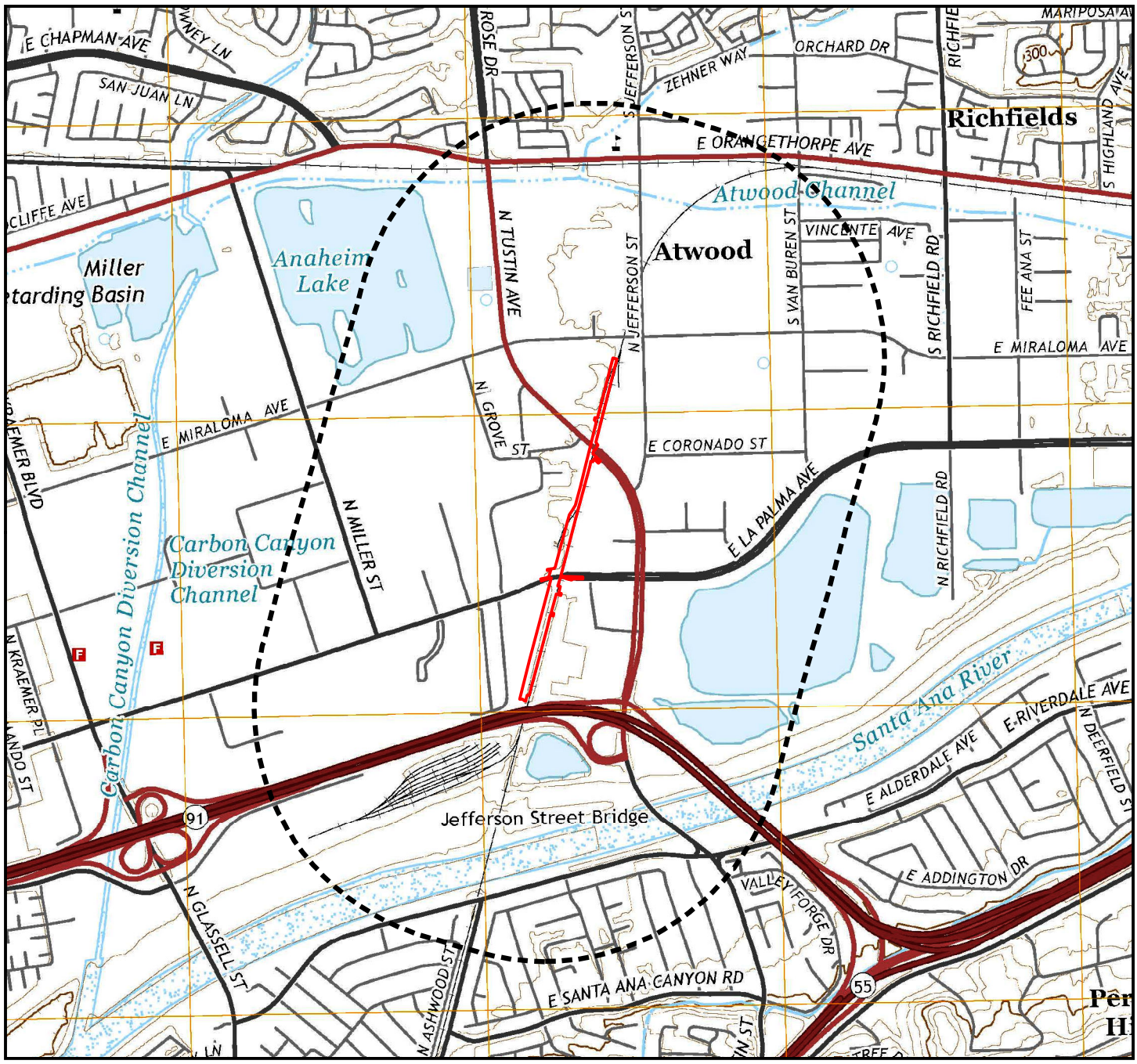
Consistent with 36 CFR §800.16(D), the Project's APE represents the area within which the Project may "directly or indirectly cause alterations in the character or use of historic properties if such properties exist." The APE boundary for the cultural resources assessment and survey encompasses the limits of construction on both sides of the existing OCTA right-of-way. As shown on Figure 2, the APE is located almost entirely within the OCTA right-of-way, with the exception of a few Project elements, including the closure of an existing driveway, sidewalk and ramp improvements, and some minor street improvements in the City public right-of-way. The APE includes all temporary construction easements, all areas of permanent disturbance necessary to construct and operate the Project, the existing segment of track associated with the Inland Empire/Orange County Metrolink Line between California State Route 91 and E Miraloma Avenue, and the existing station.

1.2.2 Literature Review

MaryNell Nolan-Wheatley, a Secretary of the Interior-qualified architectural historian for CH2M, reviewed the NRHP online database, known as the National Register Information System in October 2016. Ms. Nolan-Wheatley conducted a literature review through the South Central Coastal Information Center of the California Historical Resources Information System (CHRIS) to identify prior cultural resources studies and previously recorded historic properties within 0.5 mile of the APE. The APE and the study area are shown on Figure 3. The review focused on the APE, but also included a 0.5-mile radius around the APE, defined as the study area, to add context for the types of archaeological sites that might be found within the APE. The CHRIS search included the NRHP, California Register of Historical Resources (CRHR), California Inventory of Historic Resources, California Points of Historical Interest, and California State Historic Landmarks. Resumes of the cultural resources staff that worked on this assessment are included as Appendix A. Additional research was conducted to prepare a historical context for the railroad line, including research on the development of railroads in Southern California. Research included a review of published materials, online web pages, and historic U.S. Geological Survey (USGS) maps. State of California Department of Parks and Recreation (DPR) Primary and Linear Feature Records were completed for the segment of railroad within the APE (Appendix B).

1.2.3 Cultural Resources Survey

Nina Delu, a Secretary of the Interior-qualified archaeologist with HDR, conducted a Phase I cultural resources survey of the Project's APE on November 30, 2016. The records provided with the 2016 CHRIS literature review results were reviewed before fieldwork commenced and a map was generated to identify the location of previously recorded cultural resources in the vicinity of the APE using a geographic information system (GIS). The HDR archaeologist conducted a systematic cultural resources survey to identify known and unknown cultural resources within the APE. The survey was conducted using the locational data provided in the October 2016 literature review. The APE was photographed with a digital camera and mapped with a sub meter accurate Trimble GeoTX global positioning system (GPS) unit. Ms. Delu, accompanied by an Employee in Charge (EIC) flagman, surveyed the portion of the Project APE not occupied by the existing rail line in two north-south linear transects covering the unpaved ground on either side of the railroad ballast. No subsurface testing was performed as part of the cultural resources survey. Geotechnical borings were performed as part of the Project by a geotechnical engineer in October 2016. Information from the associated preliminary geotechnical report was used to describe the existing soil conditions within the cultural resources APE. The results of the cultural resources survey are included in Section 3.3.



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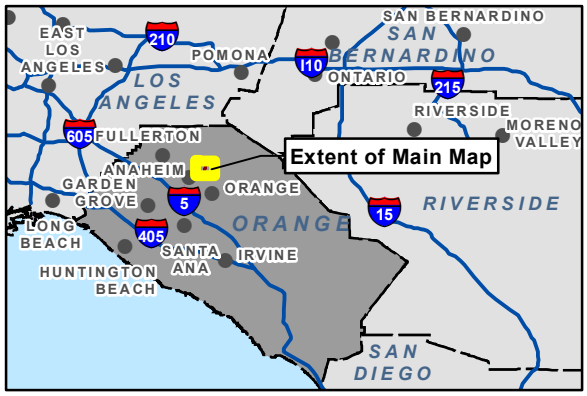
Area of Potential Effects (APE)

0.5 Mile Study Area



Orange, CA 7.5 USGS Quad, 2015
Township 3 S, Range 9 W Sections 32, 33
Township 4 S, Range 9 W, Sections 4 , 5

N

0 0.25 0.5 0.75 1 Miles

Figure 3
Study Area
Anaheim Canyon Metrolink Station Project
Orange County, California

2.0 Literature Review

The results of the Project's cultural resources literature review found that portions of the APE and the 0.5-mile study area had been previously surveyed. No archaeological or architectural resources have been previously recorded within the APE. Prior surveys identified previously recorded archaeological resources and architectural resources within the 0.5-mile study area, beyond the APE.

According to the information obtained through the CHRIS literature review, five cultural resources studies have been conducted within the APE and 23 additional studies have been conducted in the study area, six of which are overview studies. The letter summarizing the literature review results from CHRIS is attached as Appendix C. The literature review indicates that three archaeological isolates were previously recorded in the 0.5-mile study area, adjacent to the APE: site P-30-1000473, site P-30-100474, and site P-30-100475. The isolates have not been evaluated for eligibility for listing in the NRHP. No architectural resources have been previously recorded within the APE; however, 13 architectural resources have been previously recorded within the study area. All 13 architectural resources were previously determined not eligible for the NRHP.

Relevant pages from the California Office of Historic Preservation's (OHP's) Directory of Properties in the Historic Property Data File for Orange County were also provided by CHRIS. The directory identified four architectural properties that may be located within the 0.5-mile study area. The locations of these four properties (715 N. Tustin Street and 1155 N. Street in Orange, California; and 1301 E. Orangethorpe Avenue and 518 Ramona Street in Placentia, California) were located using Google Earth. All four properties were determined to be more than one mile away from the APE, and are therefore not included in this analysis.

Table 1 lists previous cultural resources studies that have been carried out within the APE and within the 0.5-mile study area.

Table 1. Previous Cultural Resources Studies in APE and 0.5-Mile Study Area

Report	Report Author(s); Date	Report Title	APE or Study Area
OR-00041	Desautels, Roger (EMA); 1977	A report on Cultural/Scientific Resources for County of Orange	Not within APE; Within Study Area (overview report)
OR-00270	Leonard, Nelson N. III and Mathew C. Hall (Archaeological Research Unit, UC Riverside); 1975	Description and Evaluation of Cultural Resources within the US Army Corps of Engineers' Santa Ana River Project	Not within APE; Within Study Area
OR-00609	Desautels, Mark (Scientific Resource Surveys, Inc.); 1981	Cultural Resources Report on 5 Proposed Hazardous Waste Storage Sites Located in Northern Orange County	Not within APE; Within Study Area
OR-00801	Langenwalter, Paul E. and James Brock; 1985	Phase II Archaeological Studies Prado Basin and the Lower Santa Ana River	No
OR-01232	Hall, M.C. (Pacific Coast Archaeological Society Quarterly, Vol. 24, No. 4); 1988	For the Record: Notes and Comments on "Obsidian Exchange in Prehistoric Orange County"	Not within APE; Within Study Area (overview report)
OR-01596	Clewlow, William C. Jr. (University of California, Los Angeles); 1974	Preliminary Report of the Potential Impact on Archaeological Resources of the Proposed Gas Transmission Pipeline from Los Angeles Harbor	Not within APE; Within Study

Table 1. Previous Cultural Resources Studies in APE and 0.5-Mile Study Area

Report	Report Author(s); Date	Report Title	APE or Study Area
		to Yorba Linda – Southern California Gas Co.: Environmental Analysis	Area (adjacent to APE)
OR-01633	Robinson, Cecil V. (Works Progress Administration [WPA]); 1936	A History of Irrigation in Orange County. WPA Research Project #3105; Orange County California 1769-1889	Not within APE; Within Study Area (overview report)
OR-01661	McLean, Deborah K. (LSA Associates, Inc.); 1998	Archaeological Assessment for Pacific Bell Mobile Services, Telecommunications Facility Cm 144-08, 3939 East Coronado St., City of Anaheim, Orange County, Ca	Not within APE; Within Study Area
OR-01857	Strandt, H.F.; 1935	Orange County California Historical Project: Life and Customs and Peculiar Artifacts SW Coast Indians. INCLUDES: Peculiar Artifacts of the Prehistoric Indians of the South West, 1935; Life and Customs of the Southwestern Coast Indians in Prehistoric Times, 1935; Burial Customs of the Orange County Indian, 1935; Orange County Indians, 1936	Not within APE; Within Study Area (overview report)
OR-01889	Bradshaw, M.F. (Department of Agriculture); 1936	The California Vine Disease Bulletin No. 2; WPA Research Project #3105-1936, Santa Ana CA	Not within APE; Within Study Area (overview report)
OR-01964	Dibble, Stephen D. (Army Corps of Engineers); 1993	Staging Area Reaches 5 and 6 Lower Santa Ana River Project	Not within APE; Within Study Area
OR-01995	Mitchell, Laura Lee (Pacific Coast Archaeological Society Quarterly); 1979	A Catalogue of Significant Data Derived from Orange County Site Records	Not within APE; Within Study Area (overview report)
OR-02254	Slawson, Dana N. (Greenwood and Associates); 2000	Historic Property Survey Report Tustin Avenue Widening at State Route 91	
OR-02256	Demcak, Carol R. (Archaeological Resource Management Corp.); 1999	Cultural Resources Assessment for Orange County Sanitation Districts	Within APE and Study Area
OR-02558	McLean, Deborah K. (LSA Associates, Inc.); 2002	Cultural Resource Assessment: Orange County Water District Lakeview Water Transfer Pipeline Project, Cities of Placentia and Anaheim, County of Orange, CA	Not within APE; Within Study Area
OR-02588	McKenna, Jeanette A. (McKenna et al.); 2002a	Highway Project Located in the City of Anaheim, Orange County, on Tustin Avenue from the North City Limits to La Palma Avenue	Not within APE; Within Study Area
OR-02700	Shepard, Richard S. (BonTerra Consulting); 2003	Highway Project Consisting of the Rehabilitation of a Portion of Orangethorpe Avenue in the City of Placentia, Orange County	Not within APE; Within Study Area

Table 1. Previous Cultural Resources Studies in APE and 0.5-Mile Study Area

Report	Report Author(s); Date	Report Title	APE or Study Area
OR-02712	Duke, Curt (LSA Associates, Inc.); 2002	Cultural Resources Assessment Cingular Wireless Facility No. Sc 041-01 Orange County, California	Not within APE; Within Study Area (adjacent to APE)
OR-02731	McKenna, Jeanette A. (McKenna et al.); 2002b	Tustin Avenue Widening Survey	Not within APE; Within Study Area
OR-03111	McKenna, Jeanette A. (Caltrans); 2002c	Located in the City of Anaheim, Orange County, on La Palma Avenue Between Tustin Ave. and Grove St. Rehabilitation Will Convert the Existing Structure from 7 Inches Ac with 12 Inches Ab to 6.5 Inches Ac with 6 Inches Ab	Within APE and Study Area
OR-03268	Maki, Mary K. (Conejo Archaeological Consultants); 2000	Phase I Archaeological Investigation of Limited Areas Within the Torrance Refinery and Atwood, Southwestern Marine and Vernon Terminals, Los Angeles and Orange Counties, California	Not within APE; Within Study Area
OR-03531	Pierson, Larry J. (Brian F. Smith and Associates); 2008a	Results of an Archaeological Survey and Monitoring of the Crossing at Anaheim Project	Within APE and Study Area
OR-03532	Kennedy, George and Gerald Shiller (Brian F. Smith and Associates); 2008	Paleontological Monitoring Report, "The Crossing at Anaheim" Residential Development, 1032 North Grove Street, City of Anaheim, Orange County, California (Tract No. 16943; Grading Permit No. GRA-2007-02603)	Within APE and Study Area
OR-03657	Bonner, Wayne H. (Michael Brandman Associates); 2007	Cultural Resources Records Search and Site Visit Results for Royal Street Communications, LLC Candidate LA2665A (Orange/Olive SCE), Northeast Corner of Riverdale and Orange Olive Road, Orange, Orange County, California	Not within APE; Within Study Area
OR-03916	Tang, Bai "Tom" (CRM Tech); 2010	Preliminary Historical/Archaeological Resources Study, Olive Subdivision Positive Train Control (PTC) Project, Southern California Regional Rail Authority (SCRRA) Cities of Anaheim, Orange, and Placentia, Orange County, California	Within APE and Study Area
OR-04079	deGraaf, Larry, Pat Jertberg, Marie Schmidt, April Octtavain, Elvia Torres, Cecil Rospaw, Karen Aunis, Karen Nebeker, John Clark, Robert Carlson, Deborah Deeble, Timothy Nagle, Gretchen Snyder, Gloria Villarea, William Myers, Laura Turner, David Cox, Alice Gardner, Gwendolyn Pickens, and Judy Haas (Marsh and Associates); 1988	Placentia Historic Resources Survey	Not within APE; Within Study Area
OR-04104	Antram, Mari, Shannon Orr, Liliana L. Vasquez, L de Graaf, and Pat Jertberg (City of Placentia and Placentia Historical Committee); 2002	Historic Resource Inventory for the City of Placentia: Update 2002	Not within APE; Within Study Area

Table 1. Previous Cultural Resources Studies in APE and 0.5-Mile Study Area

Report	Report Author(s); Date	Report Title	APE or Study Area
OR-04277	Maxon, Pat (BonTerra); 2010	Initial Study and Mitigated Negative Declaration Tustin Avenue and La Palma Avenue Roadway Improvement Project	Within APE and Study Area

* Shaded rows indicate cultural resources studies that have occurred within the APE.

2.1 Archaeological

The existing Anaheim Canyon Metrolink Station is located in the Orange, California, USGS 7.5-minute topographic quadrangle in Orange County (2015). The results of the literature review indicate that parts of the APE have been surveyed for archaeological resources by previous projects and no archaeological sites have been previously recorded within the OCTA right-of-way or the Project APE. Three archaeological resources have been previously recorded within the study area: site P-30-1000473, site P-30- 100474, and site P-30-100475. These three archaeological resources were recorded in 2008 on DPR Primary Records as isolates (identified as Isolates 1, 2, and 3) and are coded with CHRIS status 7, which indicates they were not evaluated for the NRHP or CRHR, or they need reevaluation. The three isolates were identified during the Crossing at Anaheim project (Report OR-03531) and are discussed further below. Table 2 lists the previously recorded archaeological resources within the study area.

Table 2. Previously Recorded Archaeological Resources within the Study Area

CHRIS Site	Description	Site Type	NRHP Status	Recorded by
P-30-100473	The Crossing at Anaheim (Isolate 1); damaged fragmentary chert tool cataloged as retouched debitage	Archaeological isolate	Not evaluated for the NRHP or CRHR	Pierson, Larry J. Brian F. Smith and Associates 2008b
P-30-100474	The Crossing at Anaheim (Isolate 2); portable granite mortar	Archaeological isolate	Not evaluated for the NRHP or CRHR	Pierson, Larry J. Brian F. Smith and Associates 2008c
P-30-100475	The Crossing at Anaheim (Isolate 3); large granite basin metate and fragmentary basalt chopper	Archaeological isolate	Not evaluated for the NRHP or CRHR	Pierson, Larry J. Brian F. Smith and Associates 2008d

The DPR form associated with Isolate 1 describes the resource as a “fragmentary chert tool that, because of its damaged condition, was cataloged as retouched debitage” (Pierson, 2008b). The form also notes that the “specimen was found on the ground surface…without any other artifacts nearby” (Pierson, 2008b). Isolate 2 was described in 2008 as a “portable mortar made from granite” (Pierson, 2008c). The isolate was exposed during grading activities associated with the Crossing at Anaheim project and recovered by an archaeologist who was monitoring construction (Pierson, 2008c). Isolate 3 was described as a “large granite basin metate and a fragmentary basalt chopper” (Pierson, 2008d). The third isolate was also recovered during grading activities associated with the Crossing at Anaheim project. The associated DPR form notes: “The basalt chopper is largely unremarkable due to its fragmentary condition and common tool type. The metate, on the other hand, is an interesting specimen due to its large size and excellent state of preservation. The fact that the metate is dressed (shaped) on all sides and the bottom is also notable” (Pierson, 2008d). The three isolates have not been

evaluated for the NRHP. The information on the DPR forms for Isolates 2 and 3 notes that they were "recovered" during grading activities, which would indicate that the resources are no longer extant within the study area. In addition, isolates such as these are generally considered ineligible for the NRHP because they do not retain enough physical information to be eligible for the NRHP under Criterion D, which applies to resources that have yielded or may be likely to yield information important in prehistory or history.

In 2010, CRM Tech conducted a preliminary historical and archaeological resources study of a 5.5-mile-long segment of the existing railroad right-of-way extending between Walnut Avenue in Orange, California, and Wood Junction in Placentia, California, as part of the Olive Subdivision Positive Train Control Project (OR-03916). The railroad segment investigated by CRM Tech included the full length of the current Project APE. The 2010 study was conducted in order "to review past survey coverage of the APE, inventory previously recorded historical/archaeological sites located within or partially within the APE for future statutory/regulatory compliance considerations, and assess the APE's potential for as-yet undocumented historical/archaeological resources" (Tang, 2010). As part of the study, CRM Tech conducted a records search, preliminary background research, a field reconnaissance survey, and consultation with Native American representatives. During the field reconnaissance, no historic or prehistoric archaeological features were encountered. CRM Tech described the ground surface within the Project APE as "heavily disturbed in the past, leaving it rather unlikely for any subsurface archaeological deposits, especially those of prehistoric origin, to survive intact" (Tang, 2010). The letter report associated with the survey concluded that the area "appears to be relatively low in sensitivity for subsurface archaeological remains" (Tang, 2010). Other archaeological surveys have occurred within the APE and study area, but no additional archaeological resources have been identified.

2.2 Architectural

A search of the National Register Information System showed that the existing Anaheim Canyon Metrolink Station and the associated segment of railroad track are not listed in the NRHP and no NRHP-listed architectural resources are located within the APE.

The literature review did not identify any previously recorded architectural resources within the APE. A total of 13 architectural resources have been previously recorded within the 0.5-mile study area. The 13 buildings, which are primarily residences, were recorded in 2003 as part of the Orange County Gateway Project. All 13 resources are coded by CHRIS as 6Z, which indicates that they have been previously found ineligible for the NRHP and CRHR. Therefore, no historic buildings or structures have been previously recorded within the APE or the 0.5-mile study area. Table 3 identifies architectural resources that were previously recorded within the 0.5-mile study area.

Table 3. Previously Recorded Architectural Resources within the 0.5-Mile Study Area

CHRIS Site	Location	Site Type	Description	Recorded by
P-30-176708	6591 N. Jefferson Street; outside of APE, within 0.5-mile study area	Historic-era commercial building	Country Estate Fence, commercial building; found ineligible for the NRHP, CRHR, and local designation through survey evaluation	Marvin, J. (LSA Associates, Inc.) 2003
P-30-176715	431 S. Van Buren Street; outside of APE, within 0.5-mile study area	Historic-era residential building	Single family residence, ancillary building; found ineligible for the NRHP, CRHR, and local designation through survey evaluation	Marvin, J. (LSA Associates, Inc.) 2003
P-30-176716	437 S. Van Buren Street; outside of APE, within 0.5-mile study area	Historic-era residential building	Single family residence, ancillary building; found ineligible for the NRHP, CRHR, and local designation through survey evaluation	Marvin, J. (LSA Associates, Inc.) 2003

Table 3. Previously Recorded Architectural Resources within the 0.5-Mile Study Area

CHRIS Site	Location	Site Type	Description	Recorded by
P-30-176717	503 S. Van Buren Street; outside of APE, within 0.5-mile study area	Historic-era residential building	Single family residence; found ineligible for the NRHP, CRHR, and local designation through survey evaluation	Marvin, J. (LSA Associates, Inc.) 2003
P-30-176718	513 S. Van Buren Street; outside of APE, within 0.5-mile study area	Historic-era residential building	Single family residence, ancillary building; found ineligible for the NRHP, CRHR, and local designation through survey evaluation	Marvin, J. (LSA Associates, Inc.) 2003
P-30-176719	636 S. Van Buren Street; outside of APE, within 0.5-mile study area	Historic-era religious building	St. Teresita de Liseur Catholic Church; found ineligible for the NRHP, CRHR, and local designation through survey evaluation	Marvin, J. (LSA Associates, Inc.) 2003
P-30-176720	606 S. Van Buren Street; outside of APE, within 0.5-mile study area	Historic-era residential building	Single family residence; found ineligible for the NRHP, CRHR, and local designation through survey evaluation	Marvin, J. (LSA Associates, Inc.) 2003
P-30-176721	500 S. Van Buren Street; outside of APE, within 0.5-mile study area	Historic-era residential building	Single family residence; found ineligible for the NRHP, CRHR, and local designation through survey evaluation	Marvin, J. (LSA Associates, Inc.) 2003
P-30-176722	1604 Oak Street; outside of APE, within 0.5-mile study area	Historic-era residential building	Single family residence; found ineligible for the NRHP, CRHR, and local designation through survey evaluation	Marvin, J. (LSA Associates, Inc.) 2003
P-30-176723	1608 Oak Street; outside of APE, within 0.5-mile study area	Historic-era residential building	Single family residence, ancillary building; found ineligible for the NRHP, CRHR, and local designation through survey evaluation	Marvin, J. (LSA Associates, Inc.) 2003
P-30-176724	1612 Oak Street; outside of APE, within 0.5-mile study area	Historic-era residential building	Single family property; found ineligible for the NRHP, CRHR, and local designation through survey evaluation	Marvin, J. (LSA Associates, Inc.) 2003
P-30-176725	1616 Oak Street; outside of APE, within 0.5-mile study area	Historic-era residential building	Single family property; found ineligible for the NRHP, CRHR, and local designation through survey evaluation	Marvin, J. (LSA Associates, Inc.) 2003
P-30-176726	1620 Oak Street; outside of APE, within 0.5-mile study area	Historic-era residential building	Single family property; found ineligible for the NRHP, CRHR, and local designation through survey evaluation	Marvin, J. (LSA Associates, Inc.) 2003

During the 2010 historical and archaeological resources study of a 5.5-mile-long segment of the existing railroad right-of-way that included most of the current Project APE, CRM Tech stated that “While no cultural resources have been recorded within the APE, it is worth noting that the rail line lying within the APE was constructed in 1885-1888 as part of the Riverside, Santa Ana and Los Angeles Railway, a subsidiary of the Atchison, Topeka, and Santa Fe Railway Company” (Tang, 2010). In addition, the surveyors noted that another segment of the same railway, which is south of (and outside of) the APE for the current Project, was previously recorded as Site 30-176663 and “due to a lack of historic integrity, the site was determined not to be eligible for listing in the [NRHP] or the [CRHR]” (Tang, 2010). During CRM Tech’s 2010 field reconnaissance survey “it was confirmed that the rail line in the APE remain[s] under heavy use and, as a result of repeated upgrading and constant maintenance, does not demonstrate any particular historical characteristics through their physical components” (Tang, 2010).

3.0 Project Setting

3.1 Cultural Setting

The earliest evidence for human occupations in Southern California dates to the Terminal Pleistocene/Early Holocene period. This interval is characterized by a long period of adaptation to environmental changes brought about by the transition from the Late Pleistocene to the Early Holocene (12,000–7,500 before present [B.P.]). During the Middle Holocene Period (7,500–5,000 B.P.), general settlement-subsistence patterns were characterized by a greater emphasis on seed gathering (Beedle et al., 2008). Adaptation to various ecological niches, further population growth, and an increase in sedentism typify the subsequent periods of cultural history in Southern California. This growing dependence on both hunting and plant gathering continued into the historic period. During the Middle to Late Holocene (5,000–1,500 B.P.) cultural patterns remained similar; however, artifacts at many coastal sites became more elaborate, reflecting an increase in sociopolitical complexity and efficiency in subsistence strategies (Beedle et al., 2008). One example of such a strategy is the introduction of the bow and arrow for hunting. A reliance on the bow and arrow for hunting along with the use of bedrock mortars and milling slicks occurred during the Late Holocene (1,500 B.P.–present). Elaborate mortuary customs along with the widespread use of asphaltum and the development of extensive trade networks are also characteristic of this period. The Late Horizon appears to represent increases in population size, economic and social complexity, and the appearance of social ranking (Beedle et al., 2008).

The Project APE falls within the ethnographic boundaries of the Gabrielino band of Native Americans and lies about 15 miles west of the western extent of Cahuilla territory, on the eastern side of the Santa Ana Mountains. The area also has cultural significance and ties to the Juaneño band of Native Americans, whose territory lies about 20 miles southeast of the APE. Background on these Native American groups is given below.

Gabrielino

The historical and ethnographic pre-contact record for many of California's Native American tribes is relatively sparse. It has been speculated that the Native American people known today as the Gabrielino, Gabrieleño, Tongva, or Kizh (Kitc) migrated to the California region from the Great Basin area in successive waves beginning anywhere from 4,000 to 1,300 years ago (McCawley, 2006). The Cupan language spoken by this group belongs to the Takic branch of the Uto-Aztecan language family (Bean and Smith, 1978). The traditional territory of the Gabrielino covers approximately 1,500 square miles and extends across most of modern-day Los Angeles and Orange counties, from Topanga Creek in the north to Aliso Creek in the south, and includes the Santa Catalina, San Clemente, San Nicolas, and Santa Barbara Islands (Jurmain and McCawley, 2009; Bean and Smith, 1978). Of the roughly 50 major Gabrielino villages spread throughout their traditional territory (Figure 4) historical records identify at least one in Anaheim in the 1850s named Hotuuknga (or Jutucunga). It was located on the north bank of Wanawna (the Santa Ana River), downstream of Santa Ana Canyon and approximately a quarter of a mile upstream from the old Yorba church (McCawley, 2006).

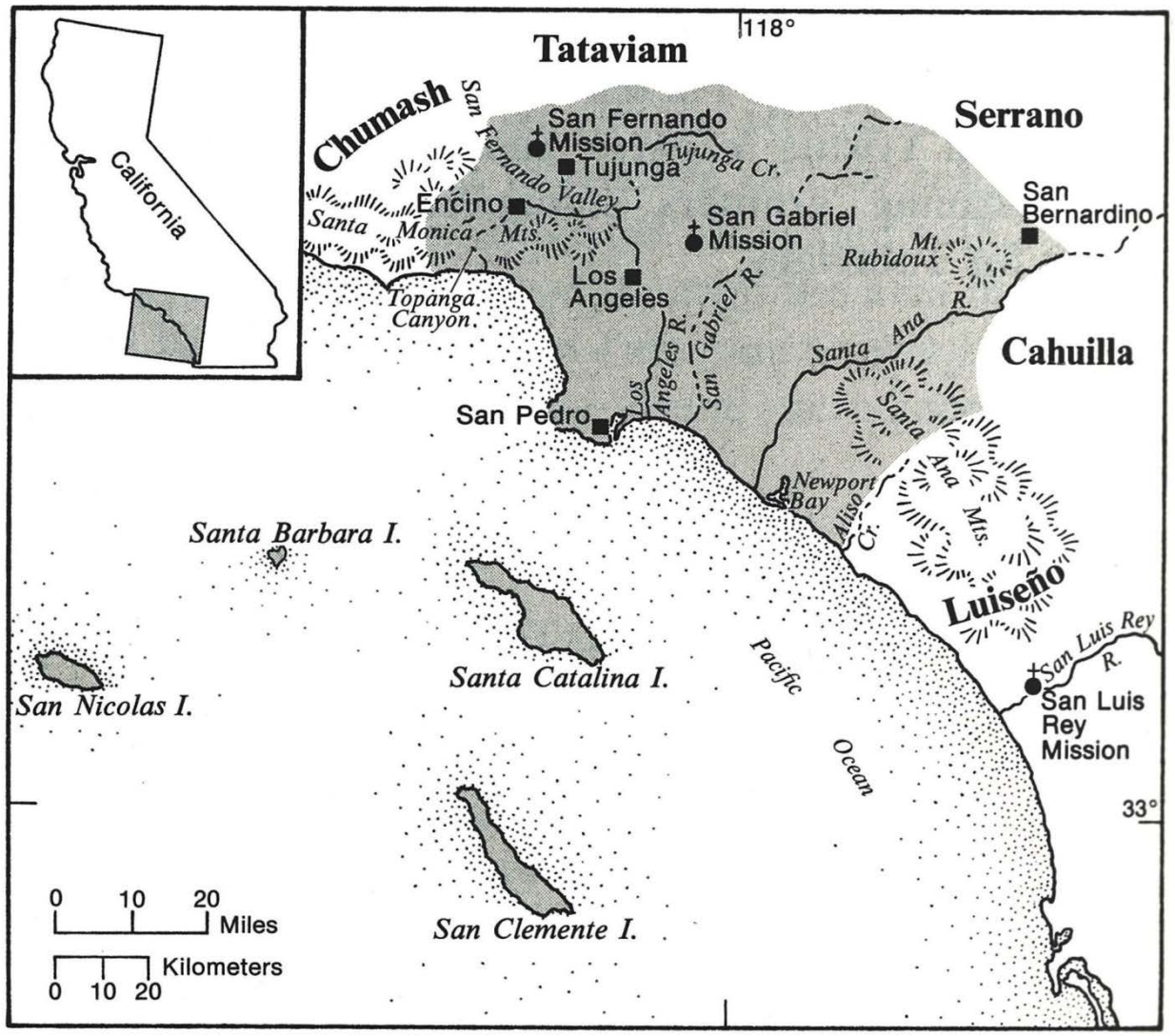


Figure 4. Map of Gabrielino Territory with known settlement locations in darkened area (Bean and Smith, 1978).

The first contact between Gabrielinos and Europeans took place when Juan Rodríguez Cabrillo arrived at Santa Catalina Island in 1542 (McCawley, 2006; Bean and Smith 1978). Although subsequent and sporadic interactions with European explorers may have occurred over ensuing decades, it was not until the Gaspar de Portolá expedition in 1769 that traditional Gabrielino ways of life were drastically altered (see McCawley, 2006). The Gabrielino received their modern name from Mission San Gabriel Arcángel, established in the heart of traditional Gabrielino territory on September 8, 1771. The construction of the missions, which "essentially [served as] coercive religious labor camps organized primarily to benefit the colonizers" (Castillo, 1998), had drastic social, cultural, and economic effects. Beginning in 1778, the Mission clergy begin mass conversions of Gabrielinos to Christianity. Despite numerous acts of revolt, rebellion, and resistance (Jurmain and McCawley, 2009; McCawley, 2006; Bean and Smith, 1978), by 1800 "most Gabrielinos [were] missionized, dead, or [had] fled to other areas" (Bean and Smith, 1978).

Following independence from Spain, Mexican authorities instituted a process of mission secularization. By 1834 all missions in Southern California had been largely secularized and ranchos established on their lands. While historical records from the secularization period are scarce, it is known that many Native Americans in Southern California were exploited as forced labor during this time by Mexican rancheros (Shipek, 1977). The aftermath of the Mexican-American War (1846–1848) and the establishment of the

state of California in 1850 brought an increasing number of settlers into the territory. A series of moves designed to displace and dispossess California Indians from their land soon followed (see Castillo, 1998; Shipek, 1977). As the ranchos began to decline in the 1860s, farming, citrus production, and sheep ranching began to dominate the Southern California landscape (Jurmain and McCawley, 2009). The need for farm and ranch labor grew, and many Gabrielinos filled these positions. Concurrently, the spread of diseases such as the 1860–1900 smallpox epidemic devastated the Gabrielino population. With the exception of a few "isolated families and Gabrielinos living in remote areas," by 1900 Gabrielino culture remained "only in the minds of a few people" (Bean and Smith, 1978).

Through the Indian Citizenship Act of 1924, the United States granted the opportunity for Native Americans to become citizens while retaining their tribal citizenship. This act was to both acknowledge the role many Native Americans played in World War I and "to further the government's goal of assimilating them into the general population" (Jurmain and McCawley, 2009). The State of California officially recognized the Gabrielino ("Gabrielino-Tongva Tribe") as the aboriginal tribe of the Los Angeles Basin, their living ties to the land, and the perseverance of their community, in Assembly Joint Resolution 96, Chapter 146 of the Statutes of 1994. At present, no less than four groups represent Gabrielino interests in Southern California: the Gabrielino/Tongva Tribe; the Gabrielino-Tongva Tribe; the Gabrieleño/Tongva Tribal Council; and the Kizh Nation, or Gabrieleño Band of Mission Indians.

Cahuilla

The Cahuilla group of Native Americans lived at the geographic center of Southern California. They occupied land from the "summit of the San Bernardino Mountains in the north to Borrego Springs and the Chocolate Mountains in the south, a portion of the Colorado desert west of Orocopia Mountain to the east, and the San Jacinto Plain near Riverside and the eastern slopes of Palomar Mountain to the west" (Bean, 1978) (Figure 5). The Colorado Desert separated the Cahuilla from other native bands to the east and south, and the Peninsular Ranges and plains separated them from the Gabrielino, Luiseño, and Serrano bands to the north and west (Bean, 1978).

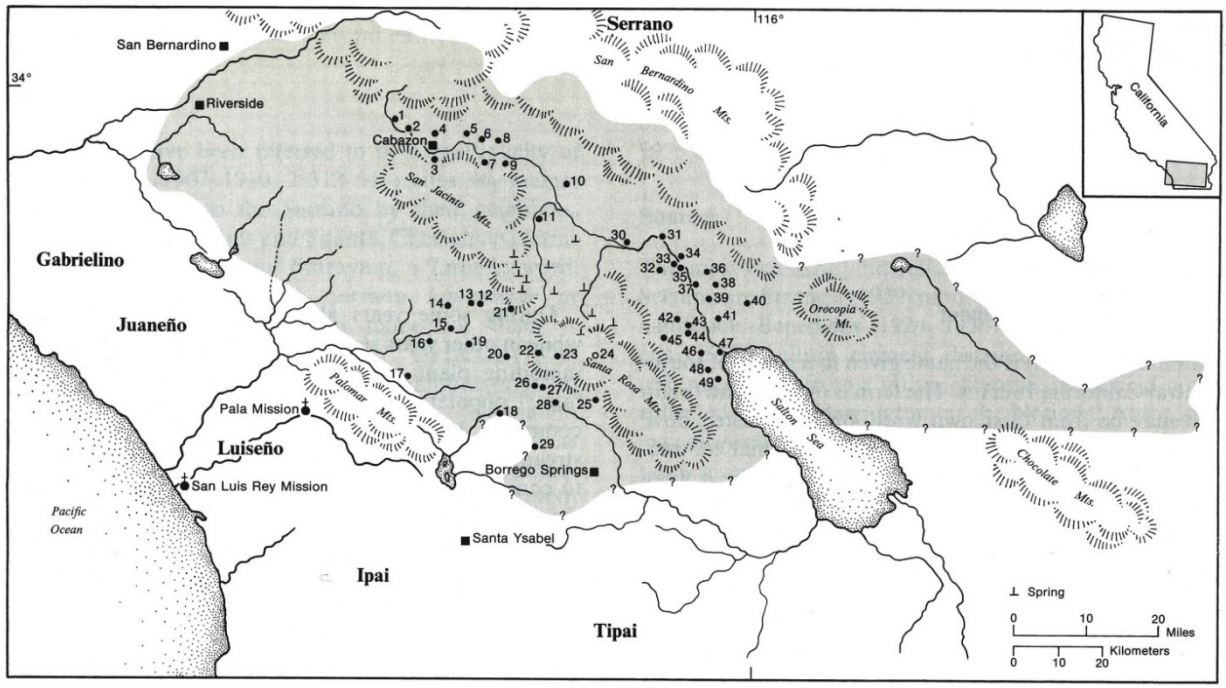


Figure 5. Map of Cahuilla Territory with tribal territory in darkened area and villages numbered (Bean, 1978).

The Cahuillan language belongs to the Cupan subgroup of the Takic family of the Uto-Aztecan stock. Cahuilla villages were usually positioned in canyons or on alluvial fans near adequate sources of water and food in the hopes of protecting the village from the seasonal extremes of temperature, precipitation, and especially wind. Buildings varied in size from brush shelters to dome-shaped or rectangular houses 15 to 20 feet long. A chief's house, a communal men's sweathouse, several granaries, and ceremonial houses were also usually part of the village (Bean, 1978).

Like their neighboring Colorado River tribes, the Cahuilla used marginal agriculture techniques to grow corn, beans, squash, and melon. Stone mortars and pestles were used to process acorns and dried berries, manos and metates were used to grind seeds and soft nuts, and wooden mortars were used to pound fibrous food like mesquite. Pottery was also part of the Cahuilla tradition, and it was often painted and incised and used as cooking pots, open bowls, dishes, or pipes. Soapstone arrow makers, bows, and ceremonial instruments are also known to be part of the Cahuilla tradition. Unlike many of their neighbors, the Cahuilla were never completely brought under the control of the mission fathers, probably due to their more remote locations in the eastern desert. However, by the early twentieth century the band extensively spoke Spanish and self-identified as Catholic (Kroeber, 1925).

Juaneño

About 1,300 years ago the Takic-speaking Juaneño (or Acjachemen, as they called themselves) began to settle in northern San Diego County and southern Orange County. The boundaries of their traditional territory are Las Pulgas Creek to the south, Aliso Creek in the north, and the Santa Ana Mountains to the east (Figure 6). Juaneño Villages were mostly located along San Juan Creek, Trabuco Creek and San Mateo Creek.

According to early twentieth-century ethnographers, Juaneño culture is similar to Luiseño culture directly to the south. Juaneños, like Luiseños, lived in exogamous patrilineal groups (or living in groups where one could not marry any relative of their father) (Kroeber, 1925). Houses were typically conical in shape and thatched with locally available plant materials. Work areas were often shaded by rectangular brush-covered roofs known in Spanish as *ramadas*. Each village had a ceremonial structure in the center enclosed by a circular fence where all religious activities were performed (Bean and Smith, 1978). There was a well-developed political system including a hereditary chief who received voluntary contributions of food from his people. Religious ceremonies included rites of passage at puberty and mourning rituals, and shamans were part of Juaneño religion (Kroeber, 1925).

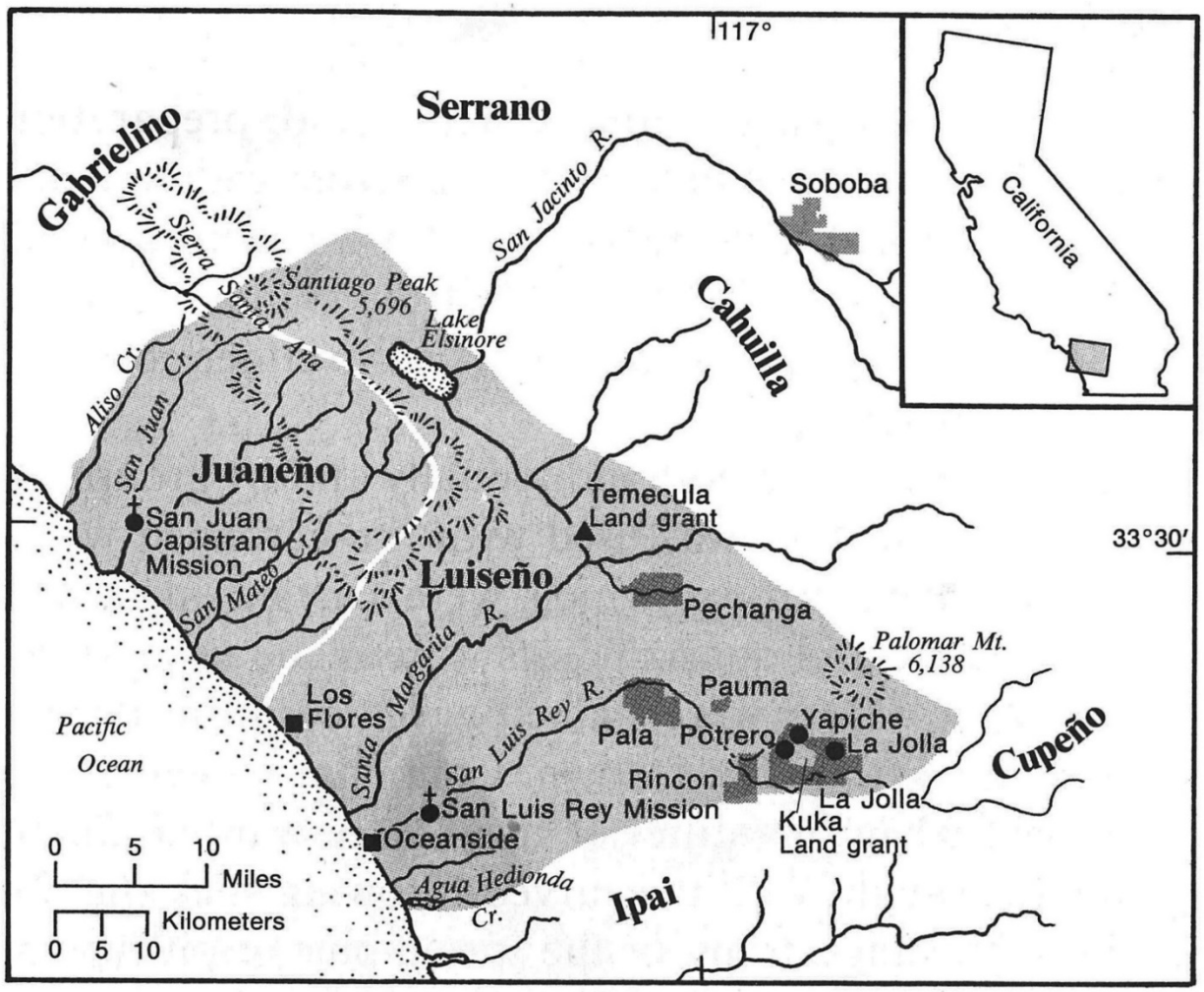


Figure 6. Map of Juaneño Territory shown on the left side of the shaded area (Bean and Smith, 1978).

3.2 Historical Context

The segment of the Inland Empire/Orange County Metrolink Line between California State Route 91 and E Miraloma Avenue in Anaheim was originally constructed 1887 (Dodge, 1959). The Riverside, Santa Ana and Los Angeles Railway started construction on the railroad segment as part of a larger route between Orange, California, and Highgrove, California. However, it was the California Central Railway Company that completed the railroad segment. The California Central Railway Company soon after became a subsidiary of the Atchison, Topeka and Santa Fe Railway (ATSF).

Anaheim, California

A group of German settlers founded Anaheim in 1857, which at the time encompassed a total of 1,165 acres of land. The colony's name was originally Annaheim, which combined references to the Santa Ana River and the German word for home, *heim*. By 1860, the spelling of the city's name was changed to Anaheim, likely to match the spelling used for the river. Soon after its establishment, the "community quickly grew into what was then the state's wine capital" by 1867, containing 47 wineries and "scores of vineyards" (Orange County, 2014). The community was incorporated as a city on February 10, 1870; however, "the tax burden was too great for the people to bear, so two years later it was dis-incorporated" (Grimshaw, 1931).

An east-west route of the Southern Pacific Railroad located south of the APE for the current Project arrived in Anaheim in 1875 and "for nearly two years Anaheim was the terminus" (Grimshaw, 1931). On March 18, 1878, the town was again incorporated as a city, and this time, the designation was permanent (Grimshaw, 1931). Anaheim remained for "nearly twenty-five years…the greatest wine-producing district in California" (Grimshaw, 1931). However, a series of viruses devastated the grape plants in the region during the late 1880s; "within five years the two million vines that made up this huge vineyard were dead" (Grimshaw, 1931). Settlers were forced to invest in other crops and industries, and several new companies were founded including the Anaheim Hide and Leather Company, the Alden Fruit Drying Company, the Guy Smith Planing and Grist Mill, Hinds Brewery, and the California Brewery (Grimshaw, 1931). However, citrus, namely oranges, became the region's most popular crop (Orange County, 2014).

The Origins and Development of the Atchison, Topeka and Santa Fe Railway

The origins of the ATSF lie with its original company, the Atchison and Topeka Railroad Company, which was chartered by Kansas legislation in 1859 to build through the "coal fields of Kansas and in a subsequent evolution built further westward, first through the prairies of Kansas, thence into Colorado and New Mexico, opening up new agricultural, grazing and mining country approximately along the line of what was known in the early days of wagon traffic as the 'Santa Fe Trail'" (Holterhoff, 1914). In 1863, the company was renamed the ATSF and by 1889 the ATSF system included 7,100 miles of track, including a number of lines "jointly owned with other companies" (Holterhoff, 1914). Due to a number of factors, the company experienced serious financial difficulties starting in the late 1880s and early 1890s. As a result, the company, including its numerous holdings, was forced into receivership in 1893. The company was reorganized in 1895 under the same name and Edward P. Ripley assumed the position of president. A history of the ATSF written by G. Holterhoff in 1914 described how "under [Ripley's] conservative management the lines of this railway have not only been rebuilt throughout, but much of the mileage has been relaid two and three times and rock ballasted to carry safely the increasing traffic developed" (Holterhoff, 1914).

During its history, the ATSF "accomplished its growth through a combination of takeover and new construction" (American-Rails, 2016). The ATSF started acquiring smaller railroads during the nineteenth century and officially absorbed most of these routes during the early twentieth century. Most of the mileage absorbed by the ATSF was constructed in 1886 and 1887. Holterhoff's 1914 history argues that the "[ATSF] maybe, therefore, [can] be said to have been primarily instrumental in bringing about the phenomenal growth of Southern California in particular. During 1886 and 1887 practically all of the present (June, 1914) [ATSF] mileage in Southern California south of the Tehachapi was constructed …" (Holterhoff, 1914). One such subsidiary of the ATSF was the Riverside, Santa Ana and Los Angeles Railway, which was incorporated on September 29, 1885. Holterhoff notes that the railway was "chartered by Santa Fe [ATSF] interests to build from Town of San Bernardino in a general westerly direction by way of Riverside, Arlington and the Santa Ana Valley to the City of Los Angeles" (Holterhoff, 1914).

In 1886, the Riverside, Santa Ana and Los Angeles Railway started construction on a 40.69-mile segment of track between Orange and Highgrove, terminating just south of San Bernardino, as shown in Figure 7 (Holterhoff, 1914; ATSF Railway, 2016). Another route was also started between Orange and Redondo Junction, terminating just south of Los Angeles, in order to ultimately complete a route between San Bernardino and Los Angeles. However, construction of both railroad segments, including the segment between Orange and Highgrove (which encompasses the track that passes through the Anaheim Canyon Metrolink Station), was completed by the California Central Railway Company, which was formed in 1887. Eight smaller lines were consolidated to form the California Central Railway, including: the Riverside, Santa Ana and Los Angeles Railway; the San Jacinto Valley Railway Company; the San Bernardino Valley Railway Company; the San Bernardino and Los Angeles Railway Company; the San Bernardino and San Diego Railway; the San Diego Central Railroad Company; the Los Angeles and Santa

Monica Railroad; and the Los Angeles and San Gabriel Valley Railroad Company (Holterhoff, 1914). In 1888, the California Central Railway Company finished the line between Orange and Highgrove, including the segment of track within the APE which was completed in 1887 (Dodge, 1959). That same year, the company "began operations as a subsidiary of the Atchison, Topeka and Santa Fe Railway" (Riverside, Santa Ana and Los Angeles Railway, 2016).

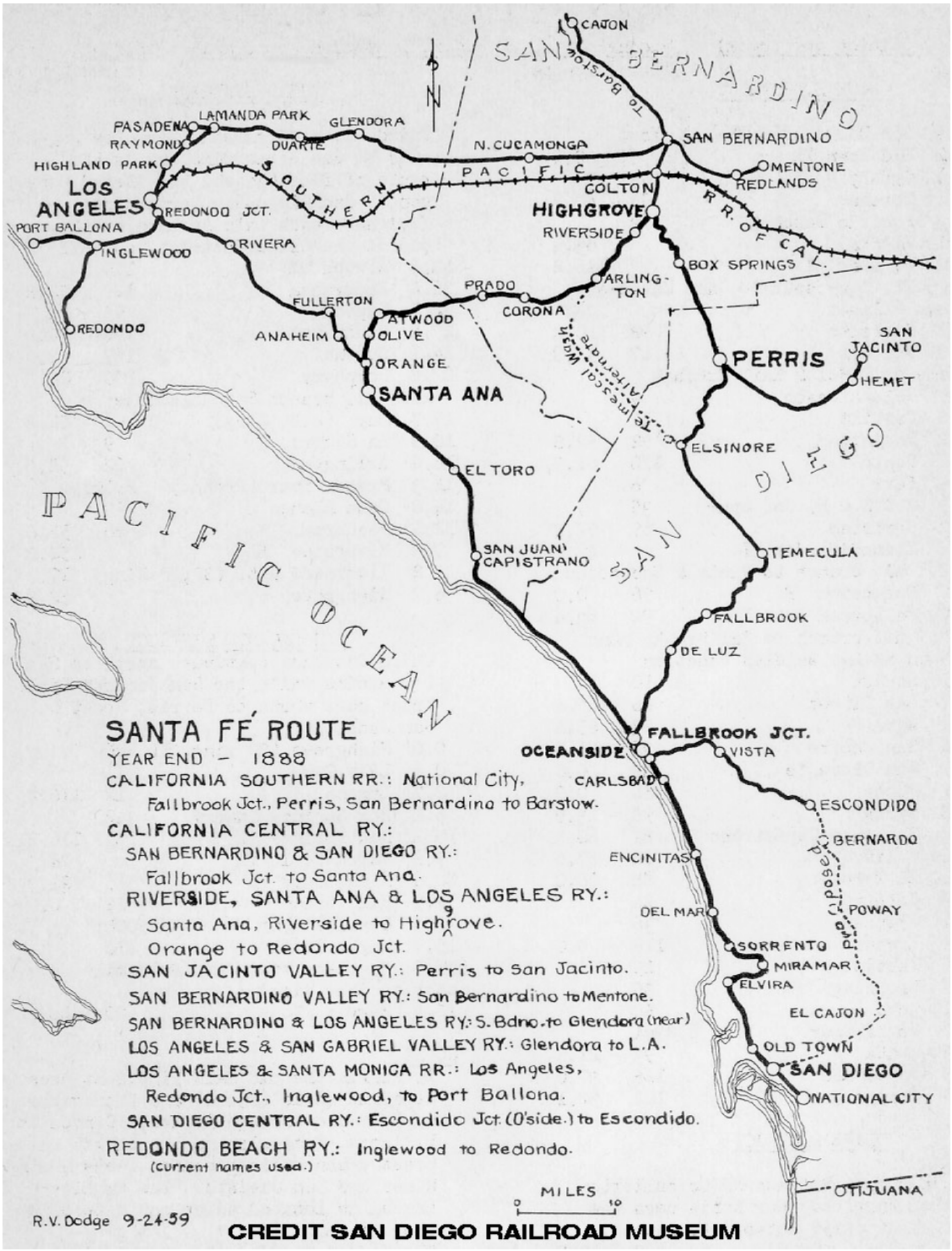


Figure 7. Map of the ATSF routes in Southern California (Dodge, 1959).

As a result of "stricter economies, forced by the collapse of the great Land Boom" in California, the California Central Railway Company was consolidated with the California Southern Railroad Company, and the Redondo Beach Railway Company in 1889 to form the Southern California Railway Company, which continued to function as a subsidiary of the ATSF (Dodge, 1959; Holterhoff, 1914). In 1904, the ATSF leased the Southern California Railway Company and in January 1906, it was formally absorbed by the ATSF (Holterhoff, 1914; Dodge, 1959).

At the peak of its operations, ATSF "would own well over 13,000 miles and the routes which made up its system would become some of the most heavily and strategically used throughout the West… [the ATSF] system was very important in allowing for fast movement of goods in transit from Chicago and other gateway cities to the west coast and vice versa" (American-Rails, 2016). The ATSF became known for its quality service and its ability to incorporate new technologies to improve its operations. The railroad is remembered for having pioneered the use of certain equipment including "autoracks, a term describing a railroad car built specifically with two or three levels to haul automobiles, and the innovative TOFC [trailer-on-flat-car] or piggyback service" (American-Rails, 2016). Passenger services on the ATSF were transferred to Amtrak in 1971 and the ATSF merged with the Burlington Northern (BN) to form the Burlington Northern Santa Fe Railway (BNSF) in 1995 (American-Rails, 2016; BNSF Railway, n.d.).

3.3 Cultural Resources Eligibility Criteria

To be eligible for inclusion in the NRHP, a property must meet the requirements of at least one of the four primary NRHP criteria (National Park Service, 1997):

- A. Associated with events that have made a significant contribution to the broad patterns of our history; or
- B. Associated with the lives of persons significant in our past; or
- C. Embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. Have yielded or may be likely to yield, information important in prehistory or history.

In addition, properties must retain enough integrity to demonstrate their significance under the criteria. The NRHP recognizes seven aspects of integrity: setting, feeling, association, location, materials, design, and workmanship. Even if a property meets the criteria, it must retain sufficient integrity to convey that significance in order to be eligible for listing in the NRHP. Generally, properties must be at least 50 years of age to be eligible for the NRHP, unless they are proven to have exceptional importance.

3.4 Cultural Resources Survey Results and Eligibility Determinations

3.4.1 Archaeological

The literature review identified no NRHP-eligible or –listed archaeological resources within the APE. In October 2016, six geotechnical borings were performed for the Project within the OCTA right-of-way. The associated geotechnical report described the subsurface soils within the right-of-way as generally consisting of "1 to 2 feet of fill material underlain by natural alluvial soils. The fill material consisted of sands and silts with debris (organic debris and artificial debric that included paper, plastic, and glass), and the natural alluvial soils consisted of interlayered hard to very stiff silts and clays, and medium

dense sands…" (Diaz Yourman, 2016). Archaeological resources are unlikely to occur in the area due to the amount of fill present within the APE.

During the 2016 archaeological field survey for the Project, the HDR archaeologist conducted a Phase I archaeological survey that included an exhaustive ground inspection of the APE. The ground visibility was quite good, averaging 95 percent in most areas. Soils within the OCTA right-of-way were observed as brown sandy loam that have been graded for the original construction of the railroad and are entirely disturbed. In general, water sources tend to attract human activity and river sediment tends to bury artifacts. Since the APE is located north of the Santa Ana River, this could slightly elevate the potential to encounter buried cultural resources. However, the area is highly disturbed and very urbanized and potential for buried archaeological resources is considered low along the Project location.

No archaeological sites have been previously recorded in the APE or the OCTA right-of-way. No archaeological sites or isolate finds were discovered during the survey; therefore, the results of the archaeological survey were negative. Based on the literature review and the survey, there are no known archaeological resources that are eligible for or listed in the NRHP located within the APE.

The Preliminary Engineering (30% design) for the Project proposes excavation for the track, including grade crossings, drainage ditches and trenches for utilities to be limited to a depth of approximately 3 feet below existing ground. The station platform, including a retaining wall supporting the platform, will require excavation up to a depth of approximately 5 feet for the wall footing. A limited number of small drilled holes will be required for railroad signal mast foundations (up to 5 feet deep) and one positive train control tower foundation (2.5 feet in diameter and up to 9 feet deep). The excavations to build the proposed second track and platform, and the holes drilled for the proposed signal mast and positive train control tower foundations will match the approximate size and depth of excavations that were used to construct the existing track and platform and holes drilled for the existing signal mast and positive train control tower foundations; no archaeological resources are known to be found during previous excavations within the alignment.

3.4.2 Architectural

The literature review identified no NRHP-eligible or –listed architectural resources within the APE. The cultural resources survey identified one architectural resource within the APE that is more than 50 years old, which is the existing railroad segment. The segment of railroad that passes through the APE, originally constructed in 1887 by the Riverside, Santa Ana and Los Angeles Railway and the California Central Railway Company, which were subsidiaries of the ATSF, has not previously been evaluated for listing in the NRHP. This report recommends that the railroad segment is not eligible for listing in the NRHP.

Within the historical context of railroads in California, no specific events marking an important moment in American history are associated with this particular segment of the former ATSF. Although railroads, including the ATSF, have been acknowledged as making significant contributions to the history and development of Southern California, this section of railroad has not demonstrated significance within the greater context of railroads, the Riverside, Santa Ana and Los Angeles Railway, the California Central Railway, the ATSF, or the BNSF. The ATSF was one of the dominant railroad companies in the nineteenth and twentieth centuries, linking Chicago, Texas, and California: "Few railroads, or companies of any kind, can boast as rich or interesting a heritage as the Atchison, Topeka and Santa Fe Railway Company" (Blaszak, 1995). However, the former ATSF system was formed through a combination of new construction and the acquisition of many other smaller railroads, with varying levels of significance. Mere association with the ATSF is not enough to qualify a resource as NRHP-eligible under Criterion A; a property's specific association with the ATSF must also be considered significant. The railroad segment located within the Project APE was built by two small railroad companies, the Riverside, Santa Ana and Los Angeles Railway and the California Central Railway Company, and was one of many routes that were

ultimately absorbed by the ATSF; the railroad segment is not considered a significant component of the former ATSF. Therefore, the railroad segment is recommended as not eligible for the NRHP under Criterion A, which applies to properties associated with events that have made a significant contribution to the broad patterns of history.

To be eligible for the NRHP under Criterion B, a property must be directly associated with a person considered significant within a historical context, whose specific contributions to history have been both identified and documented. No such person who meets that definition is linked to this railroad segment. Therefore, the railroad segment is recommended not eligible for the NRHP under Criterion B.

The segment of the railroad located within the APE is similar in design to railroads found elsewhere that display the same designs, materials, and construction techniques. The railroad segment does not embody the distinctive characteristics of a type, period, or method of construction, nor does it possess high artistic value. It is a typical, unremarkable design used on railroads all over the country and does not represent the work of a master. In addition, the line has remained in continuous use; as a result, many of the rails, ties, and other components have been replaced. As part of the historical and archaeological resources study conducted in 2010 for the Olive Subdivision Positive Train Control Project, CRM Tech concluded that “Although more than a century old, the rail line itself and its associated features are generally unlikely to be considered eligible for listing in the [NRHP] or the [CRHR] due to the lack of the necessary integrity to relate to their potential period of significance” (Tang, 2010). CRM Tech added, “In fact, another segment of the line, recorded as Site 30-176663 [located outside of the Project APE], has been previously determined not to be historically significant for that reason” (Tang, 2010). Therefore, the railroad segment is recommended not eligible for the NRHP under Criterion C.

The railroad segment is also recommended not eligible under Criterion D for information potential. As noted above, it represents a standard type of railroad construction, and its materials and construction methods do not convey important information contributing to understanding history or prehistory.

In summary, the segment of the railroad located within the APE is recommended not eligible for listing in the NRHP because it does not meet any of the NRHP criteria. The railroad segment is not associated with specific events that have made significant contributions to the broad patterns of local, regional, or national history, and is not associated with any persons considered important in local, state, or national history. The track segment is a common design and does not represent a design or engineering achievement. The railroad segment is not likely to yield information important in prehistory or history. This railroad segment is an unexceptional example of a standard railroad corridor and does not meet the criteria for listing in the NRHP.

4.0 Finding of Effect

A cultural resources literature review was conducted for the APE and included a 0.5-mile study area for cultural context. No archaeological or architectural resources that are listed in or eligible for listing in the NRHP have been previously identified within the APE. The APE was surveyed for archaeological resources and none were identified. Field inspections conducted during the 2016 cultural resources survey indicate that the APE is entirely disturbed from prior railroad construction and maintenance activities. Given that the extent of ground disturbance from proposed improvements for the addition of a second track, station platform and appurtenant facilities is similar to the extent of ground disturbance from past development of the railroad in the Project area, and that most Project elements will occur within OCTA right-of-way, sensitivity for archaeological resources in this location is considered low and no further work is recommended. The Project is expected to have no effect on archaeological sites at this location. In the highly unlikely event that cultural resources or materials are discovered during ground-disturbing activities, work in the vicinity of the discovery will cease and the area will be protected until the find can be evaluated by a qualified archaeologist.

The segment of the railroad within the APE is recommended as not eligible for listing in the NRHP and there are no known NRHP-eligible or –listed properties located within the Project APE. The recommended finding of effect is that the Project will have no effect on historic properties.

5.0 Conclusion

In 2016, the APE was surveyed for cultural resources and no historic properties were identified in the APE. The results of the archaeological field survey were negative; no archaeological sites were identified within or directly adjacent to the APE. The segment of the railroad track (formerly part of the Riverside, Santa Ana and Los Angeles Railway, the California Central Railway, the Southern California Railway, and the ATSF) that passes through the APE is recommended as not eligible for listing in the NRHP. There are no NRHP-eligible or –listed properties located within the APE and the recommended finding of effect is that the Project would have no effect on historic properties.

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Appendix A
Resumes of Professional Staff

Sara S. Orton

Cultural Resource Specialist

Education

M.S., Preservation Studies, Tulane University, 2000
Associates Degree, Spanish, Universidad de Sevilla, 1991
B.A., Political Science, Miami University, 1988

Distinguishing Qualifications

- Qualified as a historian, an architectural historian, and a historic preservationist under the Secretary of the Interior's Historic Preservation Professional Qualification Standards, as defined in 36 *Code of Federal Regulations* (CFR) 61.
- Experienced in cultural resource investigations in compliance with the National Environmental Policy Act (NEPA), the National Historic Preservation Act (NHPA), and a variety of other federal cultural resource regulations, including federal permits.
- Sixteen years' experience in cultural resource projects from local, state, and federal perspectives.

Relevant Experience

Ms. Orton has sixteen years' experience in cultural resource technical reporting and compliance with federal, state, and local laws relating to cultural and community resources and land use planning. Ms. Orton has extensive experience with Section 106 and Section 4(f) regulations. She has worked in a variety of environments, managing, writing, designing, researching, and reviewing technical and planning reports to serve a wide variety of client needs, including local government planning, large-scale transportation projects, preservation planning and disaster recovery. Ms. Orton has been trained in Section 106 and Section 4(f) procedures and compliance for federal projects as well as NEPA documentation and cumulative effects analysis.

Representative Projects and Dates of Involvement

Market Segment Projects

Architectural Historian, Historic Architectural Survey of Post World War II Residential Developments Abutting the US 36 Highway Corridor, Westminster, Adams County, Colorado. November 2006 to June 2007. Researching and analyzing ten post-World War II planned residential developments for potential National Register eligibility as part of an Environmental Impact Statement on the expanded highway.

Task Lead, Space Shuttle Transition Programmatic Environmental Assessment, National Aeronautics and Space Administration. December 2006 to December 2008. Wrote and oversaw the cultural resources section for twelve NASA centers in six states, from Palmdale in California to Kennedy Space Station in Florida. Described the affected environment and the environmental consequences of the planned transition and retirement of Space Shuttle assets. Analyzed potential effects of the reuse, mothballing, demolition, or conveyance of Space Shuttle properties.

Project Technical Staff; Historic Building Maintenance Plan and Programmatic Agreement; Scott Air Force Base (AFB), Illinois; February 2007 to May 2007. Provided research and drafting for a historic building maintenance plan at Scott AFB. This project developed a plan to guide base staff in the maintenance of historic resources on the base. The Programmatic Agreement will help the base coordinate with the State Historic Preservation Office regarding the base's goals to meet its mission and help preserve its historic resources.

Task Lead, Cultural Resources, New Pueblo Freeway, Interstate 25, Environmental Impact Statement, Colorado Department of Transportation, Pueblo, Colorado. March 2007 to 2013. Researched, surveyed and analyzed the

potential impacts to properties along the widened alignment of I-25 through Pueblo. Following Section 106 requirements and NEPA regulations, determined National Register eligibility and project effects as part of an Environmental Impact Statement. Author of the Architectural Resources Survey Report and the Determination of Effects to Historic Properties Report. Senior Technical Review for Section 4(f) evaluation and Draft Environmental Impact Statement cultural resources section.

Project Technical Staff, Fort Wainwright Army Base, Fairbanks, Alaska, May 2009 to March 2010. Researched and prepared Historic American Building Survey documentation for several base buildings, including two World War II era hangars. This includes conducting a site visit for research, building surveys and photographing structures, as well as preparing as-built drawings.

Project Technical Staff, Survey Task Lead, Teledyne Ryan Aeronautical Site, San Diego, California, September 2009 – June 2010. Field surveyed all buildings on the site and prepared Historic American Building Survey documentation for half those buildings. Prepared a salvage plan of architectural fabric and artifacts for salvage from the site prior to demolition, to meet the requirements of their previous Environmental Impact Review. Photographed and measured the HABS buildings and researched the history of the site. Wrote the history of the site and of each HABS buildings and prepared the documentation. Assisted with the creation of a brochure and website about the historic site.

Project Technical Staff, Nike Site Summit Retention Plan, Fort Richardson, Anchorage, Alaska, July 2009 – June 2010. Researched and prepared Historic American Building Survey documentation for several buildings at the Nike Missile site outside Anchorage, Alaska. Researched the history of the Nike missile program in Alaska and the US. Senior Technical review of the retention plan drafts.

Project Technical Staff and author, Cultural Resources Assessment Discipline Report, I-5 to Medina: Bridge Replacement and HOV Project, SR 520 Bridge Replacement and HOV Program, Final Environmental Impact Statement, Seattle, Washington. January 2010 - June 2011. Conducted architectural resources survey and completed Washington state Historic Property inventory forms. Recommended property eligibility based on field survey and research on neighborhood significance. Primary author on the Cultural Resources Assessment Discipline Report and the Section 4(f) Evaluation.

Task Lead, Cultural Resources Federal Compliance. St. Elizabeths Hospital East Campus Transportation Network. Washington. DC. March 2011 – August 2012. Conducted the cultural resource surveys, coordinated the Section 106 process with the DCSHPO and the ACHP for the District Department of Transportation. Wrote determinations of eligibility for some properties, as well as the effects analysis of the transportation network on the National Historic Landmark. In the EA, wrote the cultural resources chapter and the Section 4(f) evaluation. Prepared Section 106 presentations and meetings with consulting and interested parties. Managed the archaeology and cultural landscape subcontractors.

Task Lead, Field Manager, Cultural Resources Technical Report and Historic American Landscape Survey, Fort Hunter Liggett, California. March 2012 – June 2013. Conducted cultural resources field survey and background research of resources onsite as well as photographic documentation. Researched and wrote Historic American Landscape Survey documentation on the Mission San Antonio de Padua, one of the 21 missions built by Franciscan friars in the 18th and 19th centuries.

Task Lead, Field Manager, Cemetery Management Plans, Fort Lawton and Vancouver Barracks Post Cemeteries, Seattle and Vancouver, Washington. March 2012 – May 2013. Conducted field surveys and research of the post cemeteries for the US Army Reserve 88TH Regional Support Command. Producing comprehensive Cemetery Maintenance Plans and creating a process for managing the resources in the Fort Lawton and Vancouver Barracks Post Cemeteries, while maintaining the operational mandate. The plans present a strategy for the evaluation, management, and treatment of the cemeteries.

Task Lead, Cultural Resources Federal Compliance. Environmental Cleanup and Demolition at Santa Susana Field Laboratory, NASA Areas I and II, Ventura County, California. April 2012 – present. Coordinating Section 106 process and consultation with California SHPO; ACHP; local, state and federal tribes; federal and state agencies and 36 identified consulting parties. Managed the Cultural Resources study and technical report which was an appendix to the Environmental Impact Statement and wrote the effects analysis in the Environmental Impact Statement. Assisted NASA with Section 106 consultation and creation of a Programmatic Agreement to address identified adverse effects. Currently, managing on-site cultural resources staff, Native American monitoring, and Programmatic Agreement implementation, including updates to the Santa Susana Integrated Cultural Resources Management Plan.

Task Lead, Author, Historic American Engineering Record documentation. Union Pacific Railroad, Brooklyn Subdivision Bridge at Milepost 662.98. Linn and Lane Counties, Oregon. June 2012 – April 2014. Photographed the Brooklyn Subdivision Bridge at MP 662.98 for the documentation and conducted the field survey and historical research for the historic context of the bridge. Wrote and produced the Historic American Engineering Record documentation to National Park Service standards.

Task Lead, Cultural Resources Federal Compliance. Environmental Assessment, Pennsylvania and Potomac Avenues SE Intersection Improvements Project, Anacostia Waterfront Initiative, Federal Highways Administration, Washington, DC. April 2013 – present. Coordinating the Section 106 consultation process with DC SHPO; National Park Service; ACHP; local, state and federal tribes; federal and state agencies and consulting parties. Authoring the Cultural Resources technical report to be an appendix to the Environmental Assessment and writing the cultural resources and visual impacts sections of the Environmental Assessment, as well as the Section 4(f) evaluation. Managing the archaeological surveys and review of reports, as well as on-site cultural resources staff.

Task Lead, Cultural Resources Federal Compliance. South Capitol Street Supplemental Final Environmental Impact Statement. Anacostia Waterfront Initiative, Federal Highways Administration, Washington, DC. August 2013 – September 2015. Brought in to review and update the Cultural Resources, Visual and Aesthetics, and Section 4(f) Evaluation chapters of the Supplemental Environmental Impact Statement. Also reviewed and coordinated updates to the Section 106 Effects Assessment Report attached as an appendix. Reviewing previous and coordinating current consultation with DC SHPO; ACHP; local, state and federal tribes; federal and state agencies and identified consulting parties.

Professional Organizations/Affiliations

American Planning Association

National Association of Environmental Professionals

National Trust for Historic Preservation

Honors and Awards

San Diego Chapter of the Association of Environmental Professionals' Outstanding Technical Report Award for the Teledyne Ryan Aeronautical Site documentation completed for the Sand Diego Airport Authority and the Port of San Diego. 2011.

Charles E. Peterson Prize for the Historic American Buildings Survey of the Musee Rosette Rochon in New Orleans, LA. Honorable Mention. 1999.

Professional Development

Section 106: An Overview, February 2001, National Preservation Institute.

Section 4(f): Compliance for Transportation Projects, October 2003, National Preservation Institute.

Sara S. Orton

The Secretary of the Interior's Standards: Treatment Considerations, April 2006, National Preservation Institute.

NEPA Compliance and Cultural Resources Seminar, April 2008, National Preservation Institute.

How to Manage the NEPA Process and Write Effective NEPA Documents, August 2009, The Shipley Group.

NEPA Cumulative Effects Analysis and Documentation. February 2011, The Shipley Group.

Languages

Spanish - fluent

Supplemental Information

Years Experience Prior to CH2M HILL: 7
CH2M HILL Hire Date: 11/8/2006

Customer Contacts

Lisa Schoch, Colorado Department of Transportation, 4201 E Arkansas Ave, Denver CO 80222, lisa.schoch@state.co.us. Ms. Schoch is the senior staff historian at DDOT. Orton worked closely with Schoch on organization and implementation of the cultural resources surveys and the consequent technical report for the New Pueblo Freeway, Interstate 25 improvements in Pueblo, Colorado. Orton also coordinated the Section 106 compliance process with Schoch.

Faisal Hameed, District Department of Transportation, 55 M Street, SE, Suite 500, Washington, DC, 20003, 202-671-2326, faisal.hameed@dc.gov. Mr. Hameed is the manager of the Project Development and Environment Division at DDOT. Orton conducted and managed the cultural resources survey at St. Elizabeths Hospital and assisted Mr. Hameed with Section 106 compliance, correspondence, and consulting party meetings.

MaryNell Nolan-Wheatley

Cultural Resources Planner/ Architectural Historian

Education

M.P.S., Master of Preservation Studies, Tulane University, 2012
B.A., Anthropology, Columbia University, 2008

Distinguishing Qualifications

- Qualified as a historian, an architectural historian, and a historic preservationist under the Secretary of the Interior's Historic Preservation Professional Qualification Standards as defined in 36 CFR 61
- Experience performing research on historic properties and writing historical contexts
- Experience with evaluating properties for listing in the National Register of Historic Places (NRHP)
- Experience performing cultural resources field surveys and architectural evaluations
- Knowledge of Section 106 of the National Historic Preservation Act (NHPA)
- Knowledge of the National Environmental Policy Act (NEPA)

Relevant Experience

Ms. Nolan-Wheatley is an architectural historian with four years of experience and a background in anthropology, historic preservation, and architectural history. She has strong writing skills and experience producing technical reports that clearly convey data and analyses. Ms. Nolan-Wheatley's experience includes producing historical contexts, photo-documenting architectural resources, conducting survey projects, completing determinations of NRHP eligibility, and analyzing project effects on historic properties. Her experience prior to CH2M includes working with several preservation organizations in New Orleans, LA, including Louisiana Landmarks Society, Save Our Cemeteries, and the Preservation Resource Center.

Representative Projects and Dates of Involvement

National Cemetery Projects:

Architectural Historian; Section 106 Consultation for the Gravesite Expansion at the Salisbury National Cemetery Annex, Salisbury, North Carolina; National Cemetery Administration under the United States Department of Veterans Affairs (VA); October 2015 to present. Consult with SHPO and prepare necessary Section 106 documentation for the proposed improvements to the Salisbury National Cemetery Annex.

Architectural Historian; Section 106 Consultation for the Install 5,000 Preplaced Crypts and 1,000 In-Ground Cremains Project at Alabama National Cemetery, Shelby County, Alabama; National Cemetery Administration under the United States Department of Veterans Affairs (VA); October 2015 to present. Consult with SHPO and prepare necessary Section 106 documentation for the proposed improvements to the Alabama National Cemetery.

Architectural Historian; Section 106 Consultation for Drainage Improvements for the 5101 Building's Parking Lot at Quantico National Cemetery, Prince William County, Virginia; National Cemetery Administration under the United States Department of Veterans Affairs (VA); September 2015 to present. Conduct literature search for the area of potential effects for the proposed project at the Quantico National Cemetery. Consult with SHPO and prepare Section 106 documentation, identifying existing historic properties and assessing the impacts of the project on those properties.

Architectural Historian; Section 106 Consultation for the Repair Road Project at Baton Rouge National Cemetery, Baton Rouge, Louisiana; National Cemetery Administration under the United States Department of Veterans Affairs (VA); October 2015. Prepared and conducted Section 106 requirements of the NHPA for improvements at the Baton Rouge National Cemetery. Consulted with the Louisiana SHPO and assessed project effects on the historic property.

Architectural Historian; Section 106 Consultation for the Riverside Columbarium 5,000 Niches Project at the Riverside National Cemetery, Riverside, California; National Cemetery Administration under the United States Department of Veterans Affairs (VA); October 2015. Prepare and conduct Section 106 requirements of the NHPA for improvements at the Riverside National Cemetery. Consultation with the California State Historic Preservation Officer (SHPO) and assess project effects on the historic property. Provided review of the Investigative Submittal and Design Development for the rostrum renovation. Conducted research to assist with the historically appropriate sourcing of brick, concrete, and other materials to support the design strategy. Drafted the Narrative for the Historic Preservation Strategy for the Restoration and Rehabilitation of the Rostrum at Fort Scott National Cemetery.

Architectural Historian; Section 106 Consultation for Renovation of the Rostrum at Fort Scott National Cemetery, Fort Scott, Kansas; National Cemetery Administration under the United States Department of Veterans Affairs (VA); October 2014 to August 2015. Prepared and conducted Section 106 requirements of the NHPA for improvements at the Fort Scott National Cemetery. Consultation with the Kansas State Historic Preservation Officer (SHPO) and assess project effects on the historic property.

Architectural Historian; Section 106 Consultation for the Renovations and Demolition Project at Nashville National Cemetery, Nashville, Tennessee; National Cemetery Administration under the United States Department of Veterans Affairs (VA); February 2014 to present. Prepared and conducted Section 106 requirements of the NHPA for improvements at the Nashville National Cemetery. Consulted with the Tennessee SHPO and assessed project effects on the historic property. Performed a site visit in September 2014.

Architectural Historian; Section 106 Consultation for the Installation of a 1,000 Traditional Burial Casket Site at the Santa Fe National Cemetery, Santa Fe, New Mexico; National Cemetery Administration under the United States Department of Veterans Affairs (VA); September 2014. Prepared and conducted Section 106 requirements of the NHPA for improvements at the Santa Fe National Cemetery. Consulted with the New Mexico SHPO and assessed project effects on the historic property.

Architectural Historian; Section 106 Consultation for Improvements at Fort Logan National Cemetery, Denver, Colorado; National Cemetery Administration under the United States Department of Veterans Affairs (VA); July 2014. Prepared and conducted Section 106 requirements of the NHPA for improvements at the Fort Logan National Cemetery. Consulted with the Colorado SHPO and assessed project effects on the historic property.

National Science Foundation:

Architectural Historian; Cultural Resource Evaluation, Green Bank Observatory; National Science Foundation; Green Bank, West Virginia; October 2014 to present. Prepared the Cultural Resources Evaluation for the Green Bank Observatory (GBO). Evaluation of the property was conducted to assess potential effects on historic built environment properties from future decommissioning activities or alternate operational agreements. Conducted field investigations and surveyed 47 built environment resources including: five telescope structures, 2 horn instruments, 1 antenna, 1 airstrip, 1 water tower, 1 recreation area, 24 residential buildings, and 12 operational and administrative buildings. Analyzed

background research and field investigations to determine NRHP eligibility of the surveyed resources individually and as a potential historic district.

Architectural Historian; Cultural Resource Evaluation, National Solar Observatory (Sacramento Peak Observatory); National Science Foundation; Sunspot, New Mexico; January 2015 to present. Evaluation of the property was conducted to determine if there are historic properties present at Sac Peak, and if so, to assess possible effects on historic built environment properties from future divestment or alternative operational agreements. Conducted a field survey that encompassed 65 standing structures built in or before 1970. Archival research and interviews with observatory staff were conducted at Sac Peak. Further online research was performed in order to produce a historic context for the observatory. Assessed all potential built environment resources within Sac Peak, including a determination of eligibility for listing in the NRHP. Evaluated buildings and structures individually as well as part of a potential historic district.

Architectural Historian; Cultural Resource Evaluation, Kitt Peak National Observatory; National Science Foundation; Tucson, Arizona; January 2015 to March 2015. Prepared the Cultural Resources Evaluation for three telescopes located at the Kitt Peak National Observatory (KPNO), a National Science Foundation facility. The three telescopes include: the 2.1-Meter Telescope, the McMath-Pierce Solar Telescope, and the Vacuum Tower. Evaluation of these properties was conducted to determine if the three facilities are historic properties, and if so, to assess possible effects on historic built environment properties from future decommissioning activities or alternate operational agreements in order to characterize future needs regarding cultural resources management. Performed the field survey, which encompassed standing structures within the APE. Conducted archival research and interviews with observatory staff at KPNO and at the National Optical Astronomy Observatory (NOAO) headquarters in Tucson. Produced a historical context for the observatory and the field of solar and optical astronomy. Surveyed and assessed all potential built environment resources within the APE, including a determination of eligibility for listing in the NRHP. Evaluated the resources individually and as contributing resources to a potential KPNO historic district.

Architectural Historian; Cultural Resource Evaluation, Very Long Baseline Array (VLBA); National Science Foundation; Pie Town & Los Alamos, New Mexico; Kitt Peak, Arizona; Hancock, New Hampshire; North Liberty, Iowa; Owens Valley, California; St. Croix, US Virgin Islands; Mauna Kea, Hawaii; Fort Davis, Texas; and Brewster, Washington; January 2015 to March 2015. The VLBA is a system of ten identical radio telescopes located across the United States and its territories that function as a single instrument. Conducted an evaluation of the property to determine if the VLBA is a historic property, and if so, to assess possible effects on historic built environment properties from future decommissioning activities or alternate operational agreements.

Union Pacific Railroad Projects:

Architectural Historian; Cultural Resources Assessment for Union Pacific Railroad Bridge Replacement Projects, Fresno Subdivision, Mileposts 56.20, 57.27, 57.69, 88.00, 88.32, 145.57, 148.33, 234.23, 235.05, 235.13, 274.66; Union Pacific Railroad; San Joaquin, Merced, Tulare counties, California; April 2014 to present. Multiple projects that required acquisition of a Nationwide Permit 14 (under the Clean Water Act Section 404), which is considered an undertaking and triggers compliance with Section 106 of the NHPA. Authored the technical memorandums that described the proposed bridge replacement, presented archaeological and architectural identifications and evaluations, and provided an assessment of impacts associated with the project.

Architectural Historian; Cultural Resources Assessment for Union Pacific Railroad Bridge Replacement Project, Adams Subdivision, Mileposts 238.74; Union Pacific Railroad; Marquette County, Wisconsin; November 2015 to present. Project requires acquisition of a Nationwide Permit 14

(under the Clean Water Act Section 404), which is considered an undertaking and triggers compliance with Section 106 of the NHPA. Author the technical memorandum that describes the proposed bridge replacement, presents archaeological and architectural identifications and evaluations, and provides an assessment of impacts associated with the project.

Architectural Historian; Cultural Resources Assessment for Union Pacific Railroad Bridge Replacement Project, Falls City Subdivision, Milepost 390.44; Union Pacific Railroad; Richardson County, Nebraska; November 2015. Project required acquisition of a Nationwide Permit 14 (under the Clean Water Act Section 404), which is considered an undertaking and triggers compliance with Section 106 of the NHPA. Authored the technical memorandum that described the proposed bridge replacement, presented archaeological and architectural identifications and evaluations, and provided an assessment of impacts associated with the project.

Architectural Historian; Cultural Resources Assessment for Union Pacific Railroad Bridge Projects, Valley Subdivision, Mileposts 126.77 and 203.17; Union Pacific Railroad; Tehama and Placer counties, California; January 2015 - September 2015. Both projects required acquisition of a Nationwide Permit 14 (under the Clean Water Act Section 404), which is considered an undertaking and triggers compliance with Section 106 of the NHPA. Authored the technical memorandums that described the proposed bridge replacements, presented archaeological and architectural identifications and evaluations, and provided an assessment of impacts associated with the projects.

Architectural Historian; Cultural Resources Assessment for Union Pacific Railroad Bridge Projects, Martinez Subdivision, Mileposts 20.89, 44.95, and 46.87; Union Pacific Railroad; Solano County, California; May 2015 - present. Projects required acquisition of a Nationwide Permit 14 (under the Clean Water Act Section 404), which is considered an undertaking and triggers compliance with Section 106 of the NHPA. Authored the technical reports that described the proposed bridge replacements, presented archaeological and architectural identifications and evaluations, and provided an assessment of impacts associated with the projects.

Architectural Historian; Cultural Resources Assessment for Union Pacific Railroad Bridge, Black Butte Subdivision; Union Pacific Railroad; Siskiyou County, California; March 2015. Project required acquisition of a Nationwide Permit 14 (under the Clean Water Act Section 404), which is considered an undertaking and triggers compliance with Section 106 of the NHPA. Authored the technical memorandum that described the proposed bridge replacement, presented archaeological and architectural identifications and evaluations, and provided an assessment of impacts associated with the project.

Architectural Historian; Cultural Resources Assessment for North Fork Subdivision Bridge Replacement at Milepost 57.87 & North Fork Subdivision Bridge at Milepost 57.87 Level II Historic Resource Documentation; Union Pacific Railroad; Delta County, Colorado; May 2014 to present. Prepared the Technical Memorandum for the planned replacement of a UPRR bridge in Colorado. Researched and wrote the historical contexts for the railroad and the region, assessed the NRHP eligibility of the bridge and associated culverts and determined effects on historic properties. Conducted the research for and authored historic documentation of the bridge that met the Colorado Office of Archeology and Historic Preservation's (OAHP) standards for Level II Historic Resource Documentation, in accordance with the Memorandum of Agreement between the U.S. Army Corps of Engineers, Sacramento District and the Colorado SHPO.

Architectural Historian; Cultural Resources Assessment for Union Pacific Railroad ERCO Project, Monroe Subdivision, Milepost 505.56 to 508.08; Louisiana; September 2014. Prepared the technical memorandum for the proposed construction of railroad siding track along the Monroe Subdivision in

Louisiana. Evaluated the railroad segment and structures within the area of potential effects (APE) for NRHP eligibility and assessed project effects on historic properties. Researched and wrote the historical contexts for the railroad and the region.

Architectural Historian; Cultural Resources Assessment for Union Pacific Railroad J.R. Davis Yard Storm Water Drainage Repair Project; Roseville, California; August 2014. Prepared the technical report for the proposed construction activities in California. Evaluated the railroad yard, associated track segments and structures within the APE for NRHP eligibility and assessed project effects on historic properties. Researched and wrote the historical contexts for the railroad and the region.

Architectural Historian; Cultural Resources Assessment for Union Pacific Railroad Chopin Siding Project, Reisor Subdivision, Milepost 220.40 to 222.58; Louisiana; July 2014. Prepared the technical memorandum for the proposed construction of railroad siding track along the Reisor Subdivision in Louisiana. Evaluated the railroad segment and structures within the APE for NRHP eligibility and assessed project effects on historic properties. Researched and wrote the historical contexts for the railroad and the region.

Architectural Historian; Cultural Resources Assessment for Union Pacific Railroad Palestine Stormwater Drainage Project, Anderson County, Texas; May 2014. Prepared the technical memorandum for the planned rerouting of stormwater runoff from an existing facility site located near the City of Palestine in Anderson County, Texas. Evaluated the two existing drainage ditches in the APE for NRHP eligibility and assessed project effects on historic properties. Researched and wrote the historical contexts for the railroad and the region.

Architectural Historian; Cultural Resources Assessment for Union Pacific Railroad Second Mainline Track Project, Wasco County, Oregon; May 2014. Prepared the built environment sections for the technical memorandum for the planned project. Evaluated an existing structure along the mainline and the railroad segment for NRHP eligibility and assessed project effects on historic properties. Researched and wrote the historical contexts for the railroad and the region.

Architectural Historian; Cultural Resources Assessment for Union Pacific Railroad Extend Gravity Road and Construct Access Road Project in Pine Bluff, Jefferson County, Arkansas; April 2014. Prepared the technical memorandum for the planned improvements to a section of Gravity Road along the Frenchtown-Auburn Levee in Pine Bluff, Arkansas. Evaluated the NRHP-eligibility of the level and assessed project effects on historic properties. Researched and wrote the historical contexts for the levee and the region.

Architectural Historian; Brooklyn Subdivision Bridge replacement; Union Pacific Railroad; Oregon; February to May 2013. Assisted with the research and written history of the railroad and the region for a Historic American Engineering Record (HAER) documentation project on a five-span, steel railroad bridge in rural Oregon. The documentation of the bridge to HAER standards was a requirement of a Memorandum of Agreement indicating that the documentation had to be completed prior to demolition and replacement of the bridge.

Architectural Historian; Cultural Resources Assessment for Three Union Pacific Railroad Bridges in the Valentine Subdivision; Union Pacific Railroad; Texas; March to April 2013. Prepared the Technical Memorandum for the planned replacement of three UPRR bridges in Texas. Researched and wrote the historical contexts for the railroad and the region.

Architectural Historian; Cultural Resources Assessment for Union Pacific Railroad Bridge Deck Replacement, Portland Subdivision; Union Pacific Railroad; Oregon; March 2013. Prepared the

technical memorandum for the planned replacement of a bridge deck in Oregon. Researched and wrote the historical contexts for the railroad and the region.

Transportation Projects:

Architectural Historian; Cultural Resources Assessment for the Trinity Railway Express Valley View Bridge and Double Track Project; Dallas Area Rapid Transit Authority (DART); Dallas County, Texas; September 2015 to October 2015. The proposed project was funded by the Federal Transit Administration and was considered an undertaking, triggering compliance with Section 106 of the NHPA. Authored the technical memorandum, which described the proposed project, presented archaeological and architectural identifications and evaluations, and provided assessment of impacts associated with the project.

Architectural Historian; Seattle Center City Connector; Federal Transit Administration; Seattle Department of Transportation; Seattle, Washington; August 2014 to present. Author of the cultural resources technical report and Environmental Assessment. Conducted an architectural survey of the area in August 2014. Completed over 40 Historic Property Inventory survey forms for properties along the project alignment in Washington State's online database, WISAARD. Evaluated each property for inclusion in the NRHP and assessed the project impacts to historic properties.

Architectural Historian; Federal Way Link Extension; Sound Transit; SeaTac, Des Moines, Kent, Federal Way, Washington; March 2013 to present. Authored the Environmental Impact Statement (EIS) and the cultural resources technical report. Conducted an architectural survey of the area in October 2013. Completed over 400 Historic Property Inventory survey forms for properties along the project alternatives in Washington State's online database, WISAARD. Evaluated each property for inclusion in the NRHP and assessed the project impacts to historic properties.

Architectural Historian; Oregon Passenger Rail Project; Oregon Department of Transportation; Oregon; July 2014 to present. Authored Historic Built Environment Properties Technical Memorandum. Assessed and documented the potential environmental consequences associated with the project alternatives for the Oregon Passenger Rail Project. The environmental analysis was based on a preliminary conceptual level of engineering and passenger rail service planning of two build alternatives and a No Action Alternative, evaluating the potential impacts at a corridor level.

Architectural Historian; Snug Harbor Road Paving and Bike Trail; Federal Highway Administration; Cooper Landing, Alaska; June to August 2013. Co-authored the Cultural Resources Technical Report. Visited the Alaska State Historic Preservation Office in Anchorage to conduct archival research and acquire previous reports, surveys and records in order to produce a comprehensive historical context. Conducted field investigations in Cooper Landing to photo-document and survey 13 properties. Evaluated the architectural integrity and NRHP eligibility of each building and completed an Alaska Heritage Resources Survey form and an Alaska Building Inventory Form for the properties.

Architectural Historian; Willbridge Crossovers Project; Oregon Department of Transportation; Multnomah County, Oregon; June 2013. Authored a Section 106 Finding of Effect Letter for submittal to the Oregon SHPO for the upgrade of existing railroad crossovers on the BNSF Railway line.

Architectural Historian; Pennsylvania Avenue SE, Potomac Avenue SE, and 14th Street SE Transportation Improvements; Anacostia Water Initiative; Federal Highway Administration; Washington D.C.; April 2013. Researched and wrote the historical context sections. Prepared statements of significance for the built environment resources.

Military Projects:

Architectural Historian; Tinker Air Force Base Historic Inventory and Building Evaluation Survey; United States Air Force (USAF); Tinker Air Force Base (AFB), Oklahoma City, Oklahoma; August 2015 to present. Conducted an intensive pedestrian architectural survey on Tinker AFB. The architectural field survey included standing structures constructed between 1966 and 1970. Properties were evaluated to determine if they were individually eligible for listing in the NRHP. An Oklahoma Historic Preservation Resource Identification Form was completed for 30 resources surveyed. Additional on-site research was conducted on Tinker AFB using the annual historical contexts prepared by the base historian and available real property records. As-built drawings and floor plans of the surveyed buildings as well as historical aerial images from the 1960s were reviewed. Information collected onsite and further online research were used to prepare a historical context for the base.

Architectural Historian; Cultural Resources Section of the Environmental Impact Statement (EIS) for the National Geospatial-Intelligence Agency (NGA) Actions in St. Louis, Missouri; NGA; St. Louis, Missouri; May 2015 to present. Authored the Affected Environment and Environmental Consequences chapters for the (EIS), for four proposed project locations, three in Missouri and one in Illinois.

Architectural Historian; Supplemental Environmental Assessment (EA) for Construction of a New Entry Control Complex, Homestead Air Reserve Base (HARB); 482nd Fighter Wing, Air Force Reserve Command; Miami-Dade County, Florida; May 2015 to present. Drafted a Supplemental EA to evaluate the resource impacts that would result from the construction of a new entry control complex at HARB, in accordance with NEPA. Conducted research and systematically evaluated the potential environmental consequences associated with the Preferred Alternative and the No Action Alternative, including potential direct, indirect, and cumulative impacts. Addressed five resource categories to identify potential impacts: traffic, socioeconomics, environmental justice (EJ), threatened and endangered species (T&E), and hazardous materials and waste management.

Architectural Historian; Mitigation Plan for the Demolition of Building 9570; United States Air Force (USAF); Joint Base Elmendorf-Richardson (JBER), Anchorage, Alaska; June 2013 to June 2014. Documented a large warehouse according to the Historic American Building Survey (HABS) standards as part of mitigation measures in order to meet State Historic Preservation Office requirements and to satisfy Section 106 of the National Historic Preservation Act. Conducted field investigations and archival research on JBER and performed further online research. Photo-documented the building, verified overall measurements of the structure, and authored the written HABS documentation. Contributed to the Environmental Assessment document.

Architectural Historian; Environment Property Disposal Documentation, Architectural Assessment and Determination of Eligibility for the Douglas L. Wilcombe United States Army Reserve Center (USARC); United States Army Reserve Command; Hammond, Louisiana; July to August 2013. Produced an architectural assessment for a USARC facility in Hammond, which consisted of an administrative building and maintenance shop. Photo-documented the buildings and verified construction dates. Evaluated the historic significance of the facility. In accordance with Section 110 of the National Historic Preservation Act of 1966, completed the Louisiana Historic Resource Inventory form for both buildings and made a determination of eligibility, with a request for concurrence from the Louisiana SHPO.

Architectural Historian; Evaluation of Six Schools for NRHP Eligibility; United States Army Corps of Engineers (USACE), Department of Defense Education Activity (DoDEA); Fort Campbell, Kentucky; March 2013 to present. Completed intensive evaluations of six schools at Fort Campbell as part of upcoming Military Construction Projects (MILCON projects). Tasks included conducting field investigations, archival research, a comprehensive review of existing historical contexts, and analysis of

all data collected to determine if any of the six schools evaluated at Fort Campbell, individually or as part of a district, retain the significance and integrity that would make them eligible for listing on the NRHP. Produced a comprehensive investigation report and developed appropriate historical contexts for individual schools and the schools as a group of contributing resources to a possible district.

Architectural Historian; Draft Environmental Assessment for Installation Development; Joint Base-Charleston—Weapons Station and Air Base, South Carolina; March to May 2013.
Filled out intensive survey forms for 11 military buildings that are more than 50 years old on Joint Base-Charleston.

Architectural Historian; Environmental Assessment for a Proposed Construction Project; U.S. Army Reserve; Fort McCoy, Wisconsin; April 2013. Reviewed archaeological survey reports, compared them to the current project area, and drafted part of the "Cultural Resources" section for the Environmental Assessment summarizing the findings.

Airport Projects:

Architectural Historian; Great Falls International Airport Architectural Assessment; Great Falls International Airport Authority (GFIAA); Great Falls, Montana; January 2014 to May 2014. Conducted a study of potential built environment resources in the project area in accordance with Section 106 of the NHPA. Performed background research and a field survey that encompassed standing structures and runways built in or before 1969 within the airport. Archival research was conducted at the airport and at the Historic Museum in Great Falls, Montana. Montana Historic Property Record (HPR) forms were completed for all potential historic built environment resources, including determinations of eligibility for listing in the NRHP. Buildings and structures were evaluated individually as well as part of a potential historic district. Authored the technical memorandum.

Architectural Historian; Hobby International Expansion Project; Houston, Texas; March to July 2013.
Researched and wrote the historical context for Hobby International Airport for the Affected Environment-Cultural Resources report and for the Technical Memorandum.

Port Projects:

Architectural Historian; Cultural Resources Assessment for the Port Newark Container Terminal Public Private Partnership Project; Port Newark Container Terminal (PNCT); Newark, New Jersey; February 2015 to present. Conducted a literature review to locate records of previously identified historic resources within the project study area, defined as a 0.5-mile buffer around the PNCT boundary. Performed two site visits to survey buildings and structures constructed in or before 1970 within PNCT. Resources were documented using digital photography. A New Jersey Department of Environmental Protection Base Form was completed for each resource that was surveyed. Additional online research was conducted to develop a historical context for the project area in order to assess NRHP eligibility of surveyed resources and overall project effects.

Publications

2013. "519 State Street" for the Shotgun House and Art Tour. *Preservation in Print*. Preservation Resource Center, New Orleans, Louisiana.

2012. Excerpt from Master's Thesis, entitled "Expanding the Sacred: The Cultural Consecration of Secular Spaces and its Role in Historic Preservation." *Tulane School of Architecture reView 2011-2013.* Tulane University. New Orleans, Louisiana.

2012. "1260 Moss Street" and "2918 Esplanade Avenue" for the Shotgun House Tour. *Preservation in Print*. Preservation Resource Center, New Orleans, Louisiana.

2012. "Documenting Tombs and Restoring Ironwork in St. Louis Cemetery #2." *SOCGram*. Save Our Cemeteries. New Orleans, Louisiana.

2011. "Preserving Sacred Spaces in New Orleans: Historical Narratives, Tourism and Myth." *Tulane School of Architecture reView 2011-2013.* Tulane University. New Orleans, Louisiana.

Antonina (Nina) Delu, RPA

Environmental Planner

Nina has 23 years as an environmental consultant, with a specific focus in cultural resource management and historic preservation. She has extensive experience writing, reviewing, and editing technical reports in support of CEQA/NEPA documents. Nina has provided guidance for federal, state, and local agencies where compliance with CEQA, NEPA, and Section 106 of the NHPA are concerned. She is qualified under the Secretary of Interior's Standards for Archaeology and is certified by the Register of Professional Archaeologists.

Nina has worked on numerous large and complex transportation projects, including Metro's Link US, SANBAG's RPRP, California High Speed Rail Project – Palmdale to Burbank Section, and as a Task Manager for the Caltrans District 8 On-Call Cultural contract.

EDUCATION

MA, Anthropology, University of Albany, SUNY, 2003

BA, Anthropology, University of California, Riverside, 1994

CERTIFICATIONS/REGISTRATIONS

Register of Professional Archaeologists, No. 15812

TRAINING

ICF International Successful CEQA Compliance Course, Sacramento, 2011

Advisory Council on Historic Preservation Section 106 Essentials Course, Santa Fe, New Mexico, 2008

RELEVANT EXPERIENCE

LA Metro, Link US EIS/EIR, Los Angeles, CA. HDR is performing preliminary engineering and environmental documentation for LA Metro's Link US Project. The environmental document that will be prepared for Link US is an EIS/EIR. The purpose of Link US is to increase the overall capacity of Los Angeles Union Station and prepare Southern California for the expected future growth of both commuter rail and intercity rail and to accommodate the California High Speed Rail Project. Link US has been identified as the No. 1 needed regional rail project in Southern California. With numerous potential impacts to historic properties, Nina serves as the HDR Team Cultural Resources Lead and assists as an Environmental Planner for the project. She provides Quality Control and sub-consultant oversight for cultural resources, paleontological resources, and Section 4(f) documentation.

City of Rancho Santa Margarita, Rancho Santa Margarita Parkway Bridge Hinge Rehabilitation Project, Rancho Santa Margarita, CA. The City of Rancho Santa Margarita, in cooperation with the Caltrans District 12, proposes improvements to the existing bridge. HDR is providing NEPA support for the City by working with Caltrans District 12 Local Assistance on the approval of a Categorical Exclusion (CE) with supporting technical studies. Nina serves as the Deputy Project Manager for this project and assists with quality assurance/quality control reviews for technical studies conducted in support of the CE.

Orange County Transportation Authority (OCTA), Santa Ana-Garden Grove/Orange County Fixed Guideway Project Management Services, Orange County, CA. In cooperation with the Cities of Santa Ana and Garden Grove, OCTA is building the OC Streetcar to fulfill a Measure M promise to broaden the reach of Metrolink. The route alignment will run along Santa Ana Boulevard and Fourth Street and will use the former path of the old Pacific Electric Railway. Federal Transit Administration (FTA) served as the federal lead agency for NEPA, and the City of Santa Ana served as the state lead agency for CEQA. Environmental clearance for the proposed project was obtained through preparation of an EA/EI. In 2015, HDR was awarded the design-build contract by OCTA to complete the engineering and construct the project. Initial engineering review by HDR of

the previously-approved project indicates that project modifications are warranted in order to maximize the efficiency of the street care operations and minimize construction costs, such as stop locations and traffic signal prioritization. Design modifications also include potential modifications to an historic bridge structure, which was not considered in the originally adopted EA/EIR. Nina is serving as HDR's Environmental Planner/Cultural Lead as part of the design-build contract, and is assisting the engineering team with identifying potential implications (budget, schedule constraints, mitigation alternatives) and will be assisting with SHPO consultation and historic group meetings to present potential bridge repurposing options, such as use for a pedestrian and bicycle path.

SunEdison Beacon Photovoltaic Solar Project, Kern County, CA. HDR was retained by SunEdison to provide civil site design and entitlement/environmental pre-construction services. The Beacon Solar Project is on approximately 2,300 acres located north of California City, just east of State Route (SR) 14, and approximately 12 miles north of the intersection of SR-14 with SR-58. Nina serves as an Environmental Planner, assisting with the acquisition of County permits to construct and operate two of the five solar sites that comprise the Beacon Solar Project.

Los Angeles County Metropolitan Transportation Authority (LA Metro), Southern California Regional Interconnector Project (SCRIP), Los Angeles, CA. HDR is performing preliminary engineering, environmental document, final design, and construction support for LA Metro's SCRIP. The environmental document that will be prepared for SCRIP is a Supplemental EIR/EIS. The purpose of SCRIP is to increase the overall capacity of Los Angeles Union Station and prepare Southern California for the expected future growth of both Regional Rail (commuter rail and intercity rail) and the California High Speed Rail Blended System. SCRIP has been identified as the No. 1 needed regional rail project in Southern California. Nina serves as the HDR Internal Cultural Lead and as an Environmental Planner for the project.

NON-HDR EXPERIENCE

Riverside County Transportation Department, Route 60 Rubidoux PEAR, Rubidoux, CA. Principal Investigator and lead author for the cultural section of the Caltrans PEAR document for the Route 60 Rubidoux Project.

California Department of Transportation (Caltrans) District 8, On-Call Cultural and Paleontological Services, San Bernardino, CA. Task Manager and Principal Investigator for the sole on-call services contract for cultural resources in Caltrans District 8, Riverside and San Bernardino counties. Duties include agency consultation, project coordination, Native American coordination, archaeological site evaluation, all levels of technical document preparation including Finding of Effect, Memorandum of Agreement, Data Recovery Plans, and Buried Site Testing Plans.

California Rail Authority (Authority), California High Speed Rail, Palmdale to Burbank Section, CA. Nina was part of the project team that provided technical studies in support of the Authority's CEQA/NEPA studies for the proposed high speed rail connection between the Cities of Palmdale and Burbank in Los Angeles County, CA. Nina was the Lead Archaeologist for this segment of the project and has been responsible for preparing the scope and budget, attending public scoping meetings in support of the

Authority/Federal Railroad Association (FRA), and coordinating with the subject matter specialists with the Angeles National Forest. She is the primary author of technical reports in support of the Project CEQA/NEPA document. She has authored the cultural resource sections for the Draft Environmental Assessment for proposed geotechnical investigations along both corridors.

Riverside County Transportation Commission (RCTC), State Route 79 Realignment Project, Gilman Springs Road to Domenigoni Parkway, Hemet and San Jacinto, CA. Nina was part of a project team that provided the full range of cultural resource management services to RCTC and Caltrans District 8 for the realignment of State Route 79 in the cities of Hemet and San Jacinto, and portions of Riverside County. Nina was responsible for preparing the First Supplemental Archaeological Survey Report, First Supplemental Historic Property Survey Report, and assisting with the preparation of the Finding of Effect document, Environmentally Sensitive Area Action Plan, Memorandum of Agreement, and the Monitoring and Post-Review Discovery Plan for the SR 79 project pursuant to Section 106 of the National Historic Preservation Act (NHPA) and in accordance with the Caltrans Standard Environmental Reference (SER) guidelines. Nina also assisted with the preparation of the cultural sections for the Recirculated Draft EIR/Supplemental EIS/Section 4(f) Evaluation.

RCTC, Mid County Parkway, Riverside County, CA. While at another firm, Nina provided cultural resource management for the Mid County Parkway (MCP) project. From 2007 to 2009, Nina was the Principal Investigator of Prehistoric and Historic Archaeology for this complex CEQA/NEPA project. The MCP was a proposed 32-mile east to west limited-access transportation route for western Riverside County; this project was downsized to a 16-mile corridor. The study was conducted by the RCTC, and the team worked closely with both the Federal Highway Administration (FHWA) and Caltrans District 8. With four alternatives and over 100 archaeological sites and a Traditional Cultural Property within the original APE, this road building project was contentious with Native American Tribes. Nina coordinated multiple meetings that focused on relaying Project related cultural resource information, including determinations and mitigation, to the involved agencies and consulting Tribes, including the ACHP and SHPO. Nina was the primary author of cultural resource technical studies related to identification and evaluation of resources, as well as authored the cultural resource sections for the DEIR/DEIS.

Caltrans District 8 and 12 in Cooperation with RCTC and OCTA, SR-91 Corridor Improvements Project, Cities of Anaheim, Yorba Linda, Corona, Norco, and Riverside, Orange and Riverside Counties, CA. Nina was the Project cultural resources Task Manager and Senior Archaeologist. The SR 91 CIP was a series of capacity, operational, and safety improvements proposed along approximately 16 miles of SR 91 and I-15. Duties included development of an Area of Potential Effect map, coordination of archaeological survey, conducting background research, and technical report preparation including authoring the Archaeological Survey Report for the project (approved in 2009).

Appendix B
Department of Parks and Recreation Forms – Primary and Linear Feature Records, Continuation Sheets, and Location Map

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

PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code
Other Listings
Review Code Reviewer Date

Page 1 of 2 * Resource Name or #: (Assigned by recorder) Segment of the Former Atchison, Topeka and Santa Fe Railway at the Anaheim Canyon Metrolink Station

P1. Other Identifier: Cultural Resources Assessment for the Anaheim Canyon Metrolink Station Project, Orange County, California

*P2. Location: ☐ Not for Publication ☒ Unrestricted

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

* b. USGS 7.5' Quad Orange, CA Date 1981 T 3S ; R 9W ; 32, 33 ; San Bernardino B.M.

USGS 7.5' Quad Orange, CA Date 1981 T 4S ; R 9W ; 4, 5 ; San Bernardino B.M.

c. Address 1039 N PacifiCenter Drive City Anaheim Zip 92806

d. UTM: (Give more than one for large and/or linear resources)

South end: Zone 11S, 422159.113 mE/ 3746028.558 mN

North end: Zone 11S, 422485.267 mE/ 3747177.882 mN

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

An approximately 3,800-linear-foot segment of railroad track located between California State Route 91 and East Miraloma Avenue in Anaheim, California.

South end - Latitude: 33' 51' 6.028" N; Longitude: 117' 50' 29.178" W

North end – Latitude: 33' 51' 43.428" N; Longitude: 117' 50' 16.852" W

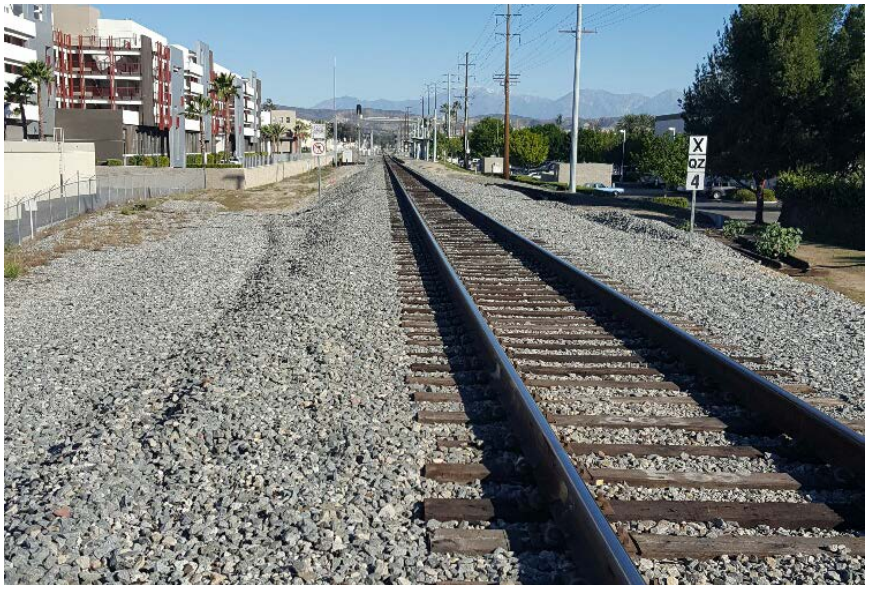
* P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The evaluated segment of railroad track is part of the Inland Empire/Orange County Metrolink Line between San Bernardino, California, and Oceanside, California. The approximately 3,800-linear-foot segment of track evaluated on this form was originally constructed 1887, as part of an approximately 40-mile-long route between Orange, California, and Highgrove, California. Construction on the route was started in 1886 by the Riverside, Santa Ana and Los Angeles Railway and was finished in 1888 by the California Central Railway Company, which became a subsidiary of the Atchison, Topeka and Santa Fe Railway (ATSF). The evaluated railroad segment, which appears to retain its original alignment, has been continuously maintained and repaired as needed over its lifetime, so railroad ties, rails and other components are not original to the early railroad.
(See Linear Feature Record for additional information and continuation sheet for complete historical context).

* P3b. Resource Attributes: (List attributes and codes) HP17/HP18. Railroad/Train - Approximately 3,800-foot track segment

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

P5a.



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

PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code
Other Listings
Review Code Reviewer Date

Page 2 of 2 * Resource Name or #: (Assigned by recorder) Segment of the Former Atchison, Topeka and Santa Fe Railway at the Anaheim Canyon Metrolink Station

P1. Other Identifier: Cultural Resources Assessment for the Anaheim Canyon Metrolink Station Project, Orange County, California

P5b. Description of Photo: (view, date, accession #) Railroad tracks just north of SR 91; view north.

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

Railroad - 1887

Source: Dodge, Richard. 1959. Perris and its Railroad. Dispatcher. Issue 29. November 15. http://sdrm.info/history/cs/perris.html. Accessed December 16, 2016.

* P7. Owner and Address:

Orange County Transportation Authority (OCTA)
550 South Main Street
Orange, California 92863-1584

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

MaryNell Nolan-Wheatley
CH2M – 22 Cortlandt Street
New York, NY 10007

* P9. Date Recorded: December 22, 2016

* P10. Survey Type: (Describe)

Intensive

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

CH2M. 2017. Cultural Resources Assessment for the Anaheim Canyon Metrolink Station Project, Orange County, California

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

State of California ♦ Natural Resources Agency | Primary # |
DEPARTMENT OF PARKS AND RECREATION | HRI # | LINEAR
FEATURE RECORD | Trinomial

Page 1 of 4 Resource Name or #: (Assigned by recorder) Segment of the Former Atchison, Topeka and Santa Fe Railway at the Anaheim Canyon Metrolink Station

L1. Historic and/or Common Name: Segment of the former Atchison, Topeka and Santa Fe Railway

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

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

An approximately 3,800-linear-foot segment of railroad track located between California State Route 91 and East Miraloma Avenue in the northeast part of the City of Anaheim, Orange County, California. The railroad segment passes the Anaheim Canyon Metrolink Station at 1039 N PacifiCenter Drive. The station is situated within a 100-foot wide Orange County Transportation Authority (OCTA-owned right-of-way along the western edge of the PacifiCenter Development south of La Palma Avenue. See Location Map.

UTM: South end: Zone 11S, 422159.113 mE/ 3746028.558 mN
North end: Zone 11S, 422485.267 mE/ 3747177.882 mN

South end - Latitude: 33' 51' 6.028" N; Longitude: 117' 50' 29.178" W
North end – Latitude: 33' 51' 43.428" N; Longitude: 117' 50' 16.852" W

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

The segment of railroad track evaluated on this form, originally constructed in 1887 by the Riverside, Santa Ana and Los Angeles Railway and the California Central Railway Company, which were subsidiaries of the Atchison, Topeka, and Santa Fe Railway (ATSF), is not eligible for listing in the NRHP.

Within the historical context of railroads in California, no specific events marking an important moment in American history are associated with this particular segment of the former ATSF. Although railroads have been acknowledged as making significant contributions to the history and development of Southern California, this section of railroad has not demonstrated significance within the greater context of railroads, the Riverside, Santa Ana and Los Angeles Railway, the California Central Railway, the ATSF, or the BNSF. The ATSF was one of the dominant railroad companies in the nineteenth and twentieth centuries, linking Chicago, Texas, and California: “Few railroads, or companies of any kind, can boast as rich or interesting a heritage as the Atchison, Topeka and Santa Fe Railway Company” (Blaszak, 1995). However, the former ATSF system was formed through a combination of new construction and the acquisition of many other smaller railroads with varying levels of significance. Mere association with the ATSF is not enough to qualify a resource as NRHP-eligible under Criterion A; a property’s specific association with the ATSF must also be considered significant. The 3,800-linear-foot railroad segment was built by two small railroad companies - the Riverside, Santa Ana and Los Angeles Railway and the California Central Railway Company - and was one of many routes that were ultimately absorbed by the ATSF; the railroad segment is not considered a significant component of the former ATSF. Therefore, the railroad segment is not eligible for the NRHP under Criterion A, which applies to properties associated with events that have made a significant contribution to the broad patterns of

history.

To be eligible for the NRHP under Criterion B, a property must be directly associated with a person considered significant within a historical context, whose specific contributions to history have been both identified and documented. No such person who meets that definition is linked to this railroad segment. Therefore, the railroad segment is not eligible for the NRHP under Criterion B.

The 3,800-linear-foot segment of railroad track is similar in design to railroads found elsewhere that display the same designs, materials, and construction techniques. The railroad segment does not embody the distinctive characteristics of a type, period, or method of construction, nor does it possess high artistic value. It is a typical, unremarkable design used on railroads all over the country and does not represent the work of a master. In addition, the line has remained in continuous use; as a result, many of the rails, ties, and other components have been replaced. In 2010, CRM Tech conducted a historical and archaeological resources study of a 5.5-mile-long segment of the existing railroad right-of-way extending between Walnut Avenue in Orange, California, and Wood Junction in Placentia, California, as part of the Olive Subdivision Positive Train Control Project (OR-03916). The railroad segment investigated by CRM Tech included the full length of the 3,800-linear-foot railroad segment evaluated on this form. CRM Tech concluded that "Although more than a century old, the rail line itself and its associated features are generally unlikely to be considered eligible for listing in the [NRHP] or the [CRHR] due to the lack of the necessary integrity to relate to their potential period of significance" (Tang, 2010). CRM Tech added, "In fact, another segment of the line, recorded as Site 30-176663 [located outside of the Project APE], has been previously determined not to be historically significant for that reason" (Tang, 2010). Therefore, the railroad segment is not eligible for the NRHP under Criterion C.

The railroad segment is also not eligible under Criterion D for information potential. As noted above, it represents a standard type of railroad construction, and its materials and construction methods do not convey important information contributing to understanding history or prehistory.

In summary, the segment of the railroad is not eligible for listing in the NRHP because it does not meet any of the NRHP criteria. The railroad segment is not associated with specific events that have made significant contributions to the broad patterns of local, regional, or national history, and is not associated with any persons considered important in local, state, or national history. The track segment is a common design and does not represent a design or engineering achievement. The railroad segment is not likely to yield information important in prehistory or history. This railroad segment is an unexceptional example of a standard railroad corridor and does not meet the criteria for listing in the NRHP.

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

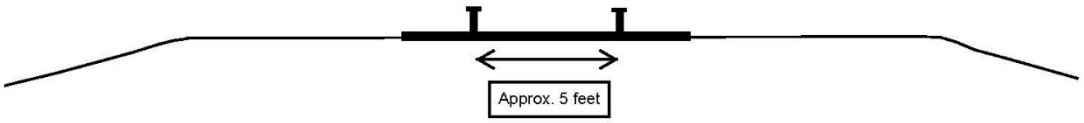
- **a. Top Width -** Track Width: approximately 5 feet
- **b. Bottom Width –** N/A

Page 3 **of** 4 **Resource Name or #: (Assigned by recorder)** Segment of the Former Atchison, Topeka and Santa Fe Railway at the Anaheim Canyon Metrolink Station

c. **Height or Depth –** N/A
d. **Length of Segment –** Approximately 3,800 feet of track; measurement (extrapolated from maps) from just north of California State Route 91 to just south of East Miraloma Avenue
e. **Cross Section Sketch below:**

Cross Section Sketch:

South end of evaluated railroad segment, view roughly north



L5. Associated Resources:
P-30-176663: Previously recorded segment of the same railroad, located further south; evaluated as not eligible for listing in the NRHP.

L6. Setting: (Describe natural features, landscape characteristics, slope, etc., as appropriate.):
Soils within the right-of-way were previously graded for the original construction of the railroad, and are entirely disturbed.

L7. Integrity Considerations:
As part of the 2010 historical and archaeological resources study for the Olive Subdivision Positive Train Control Project, CRM Tech stated that "While no cultural resources have been recorded within the APE, it is worth noting that the rail line lying within the APE was constructed in 1885-1888 as part of the Riverside, Santa Ana and Los Angeles Railway, a subsidiary of the Atchison, Topeka, and Santa Fe Railway Company" (Tang, 2010). In addition, the surveyors noted that another segment of the same railway, which is south of the segment evaluated on this form, was previously recorded as Site 30-176663 and "due to a lack of historic integrity, the site was determined not to be eligible for listing in the [NRHP] or the [CRHR]" (Tang, 2010). During the field reconnaissance survey "it was confirmed that the rail line in the APE remain[s] under heavy use and, as a result of repeated upgrading and constant maintenance, does not demonstrate any particular historical characteristics through their physical components" (Tang, 2010).

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L8a. Photo, Map, or Drawing

L8b. Description of Photo, Map, or Drawing (View, scale, etc.):
Railroad tracks, taken from at-grade crossing at E. La Palma Avenue, view to the south. November 2016. Location Map attached.

L9. Remarks:
See continuation sheets for historical context and full list of references.

L10. Form Prepared by: (Name, affiliation, and address)
MaryNell Nolan-Wheatley/ CH2M
22 Cortlandt Street
New York, NY 10007

L11. Date: December 29, 2016

Historical Context

The segment of the Inland Empire/Orange County Metrolink Line between California State Route (SR) 91 and E Miraloma Avenue in Anaheim was originally constructed 1887 (Dodge, 1959). The Riverside, Santa Ana and Los Angeles Railway started construction on the railroad segment as part of a larger route between Orange, California, and Highgrove, California. However, it was the California Central Railway Company that completed the railroad segment. The California Central Railway Company soon after became a subsidiary of the Atchison, Topeka and Santa Fe Railway (ATSF).

Anaheim, California

A group of German settlers founded Anaheim in 1857, which at the time encompassed a total of 1,165 acres of land. The colony's name was originally *Annaheim*, which combined references to the Santa Ana River and the German word for home, *heim*. The spelling of the city's name was eventually changed to Anaheim. Soon after its establishment, the "community quickly grew into what was then the state's wine capital" by 1867, containing 47 wineries and "scores of vineyards" (Orange County, 2014). The community was incorporated as a city on February 10, 1870; however, "the tax burden was too great for the people to bear, so two years later it was dis-incorporated" (Grimshaw, 1931).

The Southern Pacific Railroad arrived in Anaheim in 1875 and "for nearly two years Anaheim was the terminus" (Grimshaw, 1931). On March 18, 1878, the town was again incorporated as a city, and this time, the designation was permanent (Grimshaw, 1931). Anaheim remained for "nearly twenty-five years…the greatest wine-producing district in California" (Grimshaw, 1931). However, a series of viruses devastated the grape plants in the region during the late 1880s; "within five years the two million vines that made up this huge vineyard were dead" (Grimshaw, 1931). Settlers were forced to invest in other crops and industries, and several new companies were founded including the Anaheim Hide and Leather Company, the Alden Fruit Drying Company, the Guy Smith Planing and Grist Mill, Hinds Brewery, and the California Brewery (Grimshaw, 1931). However, citrus, namely oranges, became the region's most popular crop (Orange County, 2014).

The Origins and Development of the Atchison, Topeka and Santa Fe Railway

The origins of the ATSF lie with its original company, the Atchison and Topeka Railroad Company, which was chartered by Kansas legislation in 1859 to build through the "coal fields of Kansas and in a subsequent evolution built further westward, first through the prairies of Kansas, thence into Colorado and New Mexico, opening up new agricultural, grazing and mining country approximately along the line of what was known in the early days of wagon traffic as the 'Santa Fe Trail'" (Holterhoff, 1914). In 1863, the company was renamed the ATSF and by 1889 the ATSF system included 7,100 miles of track, including a number of lines "jointly owned with other companies" (Holterhoff, 1914). Due to a number of factors, the company experienced serious financial difficulties starting in the late 1880s and early 1890s. As a result, the company, including its numerous holdings, was forced into receivership in 1893. The company was reorganized in 1895 under the same name and Edward P. Ripley was named president. A history of the ATSF written by G. Holterhoff in 1914 described how "under [Ripley's] conservative management the lines of this railway have not only been

rebuilt throughout, but much of the mileage has been relaid two and three times and rock ballasted to carry safely the increasing traffic developed" (Holterhoff, 1914).

During its history, the ATSF "accomplished its growth through a combination of takeover and new construction" (American-Rails, 2016). The ATSF started acquiring smaller railroads during the nineteenth century and officially absorbed most of these routes during the early twentieth century. Most of the mileage absorbed by the ATSF was constructed in 1886 and 1887. Holterhoff's 1914 history argues that the "[ATSF] maybe, therefore, [can] be said to have been primarily instrumental in bringing about the phenomenal growth of Southern California in particular. During 1886 and 1887 practically all of the present (June, 1914) [ATSF] mileage in Southern California south of the Tehachapi was constructed …" (Holterhoff, 1914). One such subsidiary of the ATSF was the Riverside, Santa Ana and Los Angeles Railway, which was incorporated on September 29, 1885. Holterhoff notes that the railway was "chartered by Santa Fe [ATSF] interests to build from Town of San Bernardino in a general westerly direction by way of Riverside, Arlington and the Santa Ana Valley to the City of Los Angeles" (Holterhoff, 1914).

In 1886, the Riverside, Santa Ana and Los Angeles Railway started construction on a 40.69-mile segment of track between Orange and Highgrove, terminating just south of San Bernardino (Holterhoff, 1914; Atchison, Topeka and Santa Fe Railway, 2016). Another route was also started between Orange and Redondo Junction, terminating just south of Los Angeles, in order to ultimately complete a route between San Bernardino and Los Angeles. However, construction of both railroad segments, including the segment between Orange and Highgrove (which encompasses the track that passes through the Anaheim Canyon Metrolink Station), was completed by the California Central Railway Company, which was formed in 1887. Eight smaller lines were consolidated to form the California Central Railway, including: the Riverside, Santa Ana and Los Angeles Railway; the San Jacinto Valley Railway Company; the San Bernardino Valley Railway Company; the San Bernardino and Los Angeles Railway Company; the San Bernardino and San Diego Railway; the San Diego Central Railroad Company; the Los Angeles and Santa Monica Railroad; and the Los Angeles and San Gabriel Valley Railroad Company (Holterhoff, 1914). In 1888, the California Central Railway Company finished the line between Orange and Highgrove, including the segment of track evaluated on this form which was completed in 1887 (Dodge, 1959). That same year, the company "began operations as a subsidiary of the Atchison, Topeka and Santa Fe Railway" (Riverside, Santa Ana and Los Angeles Railway, 2016).

As a result of "stricter economies, forced by the collapse of the great Land Boom" in California, the California Central Railway Company was consolidated with the California Southern Railroad Company, and the Redondo Beach Railway Company in 1889 to form the Southern California Railway Company, which continued to function as a subsidiary of the ATSF (Dodge, 1959; Holterhoff, 1914). In 1904, the ATSF leased the Southern California Railway Company and in January 1906, it was formally absorbed by the ATSF (Holterhoff, 1914; Dodge, 1959).

At the peak of its operations, ATSF "would own well over 13,000 miles and the routes which made up its system would become some of the most heavily and strategically used throughout the West… [the ATSF] system was very important in allowing for fast movement of goods in transit from Chicago and other gateway cities to the west coast and vice versa" (American-Rails, 2016). The ATSF became known for its

quality service and its ability to incorporate new technologies to improve its operations. The railroad is remembered for having pioneered the use of certain equipment including "autoracks, a term describing a railroad car built specifically with two or three levels to haul automobiles, and the innovative TOFC [trailer-on-flat-car] or piggyback service" (American-Rails, 2016).

Passenger services on the ATSF were transferred to Amtrak in 1971 and the ATSF merged with the Burlington Northern (BN) to form the Burlington Northern Santa Fe Railway (BNSF) in 1995 (American-Rails, 2016; BNSF Railway, n.d.).

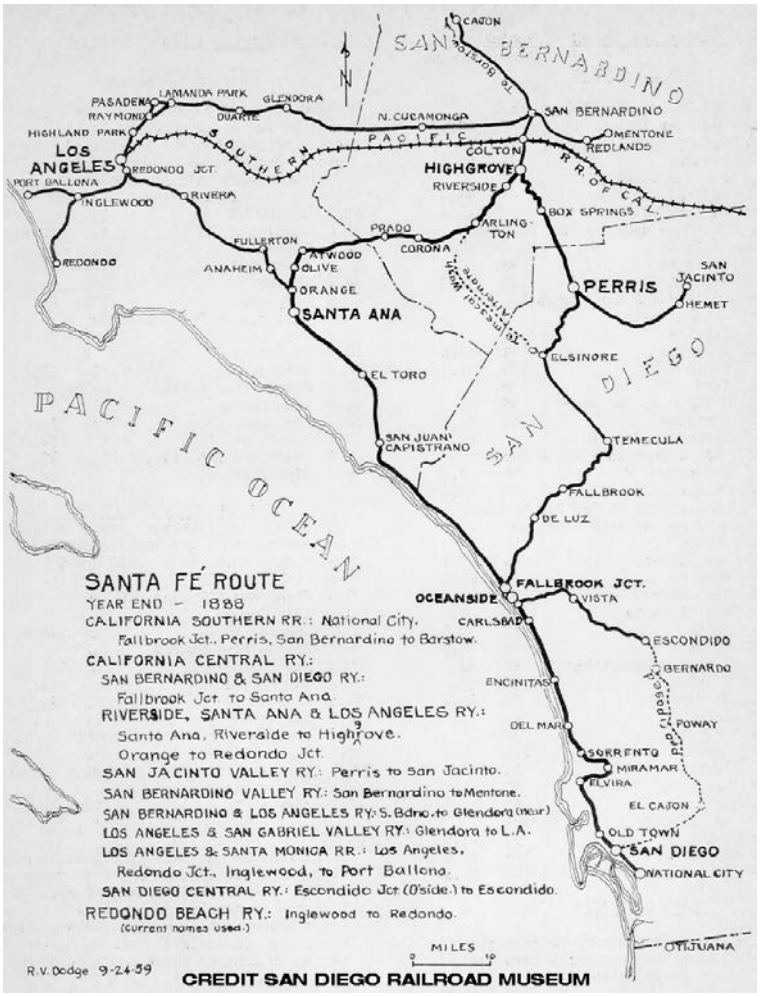

Photo: Map of the ATSF routes in Southern California (Dodge, 1959).

References:

American-Rails. 2016. "The Iconic Atchison, Topeka and Santa Fe Railway: Ship Santa Fe All the Way!" http://www.american-rails.com/atchison-topeka-and-santa-fe.html. Accessed December 16, 2016.

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BNSF Railway. N.d. History and Legacy: The History of BNSF: A Legacy for the 21st Century. http://www.bnsf.com/about-bnsf/our-railroad/company-history/pdf/History_and_Legacy.pdf. Accessed December 22, 2016.

Dodge, Richard. 1959. Perris and its Railroad. Dispatcher. Issue 29. November 15. http://sdrm.info/history/cs/perris.html. Accessed December 16, 2016.

Grimshaw, Alice. 1931. History of Early Anaheim. Orange County History Series, Volume 1. Orange County Historical Society. http://www.orangecountyhistory.org/history/grimshaw-anaheim.html. Accessed December 22, 2016.

Holterhoff, G. 1914. Historical Review of the Atchison, Topeka and Santa Fe Railway Company. Western Assistant Secretary. Los Angeles, California. https://archive.org/stream/historicalreview00holtrich/historicalreview00holtrich_djvu.txt. Accessed December 16, 2016.

Orange County. 2014. History of the City of Anaheim. City Guide. http://www.orangecounty.net/cities/anaheim_history.html. Accessed December 22, 2016.

Riverside, Santa Ana and Los Angeles Railway. 2016. https://www.revolvy.com/main/index.php?s=Riverside,%20Santa%20Ana%20and%20Los%20Angeles%20Railway&item_type=topic. Accessed December 16, 2016.

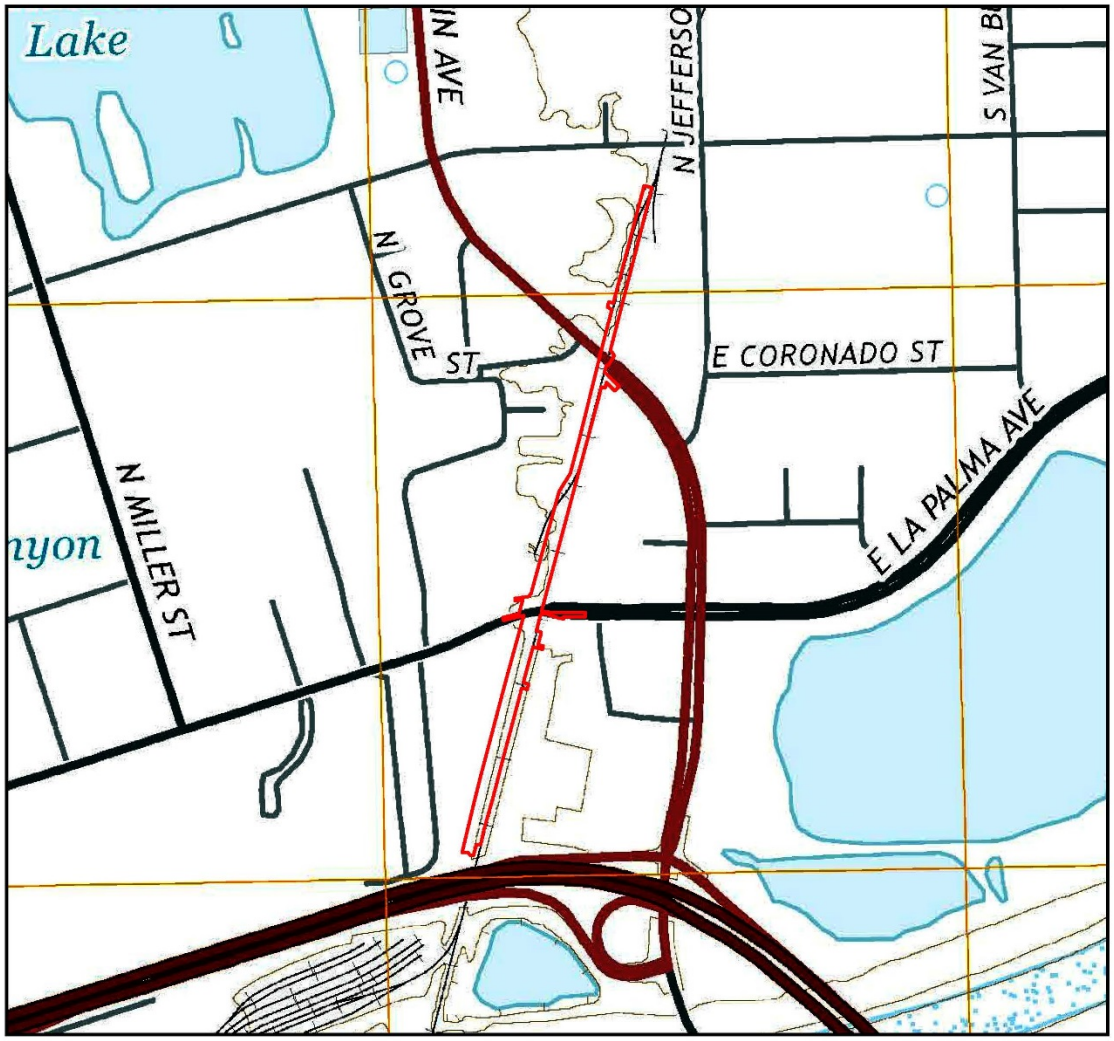
State of California ◆ Natural Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary #
HRI#
Trinomial

Page 1 of 1 * Resource Name or # (Assigned by recorder) Segment of the Former Atchison, Topeka and Santa Fe Railway at the Anaheim Canyon Metrolink Station

* Map Name: Orange, California * Scale: 7.5′ *Date of map: 2015



Legend

Area of Potential Effects (APE)

Orange, CA 7.5 USGS Quad, 2015
Township 3 S, Range 9 W Sections 32, 33
Township 4 S, Range 9 W, Sections 4 , 5

N
0 0.1 0.2 0.3 0.4 Miles

Figure 1
Project Location
Anaheim Canyon Metrolink Station Project
Orange County, California

Appendix C
Literature Review Results

South Central Coastal Information Center
California State University, Fullerton
Department of Anthropology MH-426
800 North State College Boulevard
Fullerton, CA 92834-6846
657.278.5395 / FAX 657.278.5542
sccic@fullerton.edu
California Historical Resources Information System
Orange, Los Angeles, and Ventura Counties

10/20/2016 Records Search File No.: 16914.2971

MaryNell Nolan-Wheatley
CH2M
22 Cortlandt St, Floor 31
New York, NY 10007

Re: Records Search Results for the OCTA Anaheim Metrolink Station Project, Project No. 674694.01.06

The South Central Coastal Information Center received your records search request for the project area referenced above, located on the Orange, CA USGS 7.5' quadrangle. The following reflects the results of the records search for the project area and a ½-mile radius:

As indicated on the data request form, the locations of resources and reports are provided in the following format: ☒ custom GIS maps ☐ shape files ☐ hand-drawn maps

Resources within project area: 3	30-100473, 30-100474, 30-100475
Resources within ½-mile radius: 13	See attached list
Reports within project area: 8	See attached map
Reports within ½-mile radius: 20	See attached map and list

Resource Database Printout (list):	☒ enclosed	☐ not requested	☐ nothing listed
Resource Database Printout (details):	☒ enclosed	☐ not requested	☐ nothing listed
Resource Digital Database (spreadsheet):	☐ enclosed	☒ not requested	☐ nothing listed
Report Database Printout (list):	☐ enclosed	☒ not requested	☐ nothing listed
Report Database Printout (details):	☒ enclosed	☐ not requested	☐ nothing listed
Report Digital Database (spreadsheet):	☐ enclosed	☒ not requested	☐ nothing listed
Resource Record Copies:	☒ enclosed	☐ not requested	☐ nothing listed
Report Copies:	☐ enclosed	☒ not requested	☐ nothing listed
OHP Historic Properties Directory:	☒ enclosed	☐ not requested	☐ nothing listed

Archaeological Determinations of Eligibility: ☐ enclosed ☐ not requested ☒ nothing listed

Historical Maps: ☒ enclosed ☐ not requested ☐ nothing listed

Ethnographic Information: ☒ not available at SCCIC

Historical Literature: ☒ not available at SCCIC

GLO and/or Rancho Plat Maps: ☒ not available at SCCIC

Caltrans Bridge Survey: ☒ not available at SCCIC; please go to http://www.dot.ca.gov/hq/structur/strmaint/historic.htm

Shipwreck Inventory: ☒ not available at SCCIC; please go to http://shipwrecks.slc.ca.gov/ShipwrecksDatabase/Shipwrecks_Database.asp

Soil Survey Maps: (see below) ☒ not available at SCCIC; please go to http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

Please forward a copy of any resulting reports from this project to the office as soon as possible. Due to the sensitive nature of archaeological site location data, we ask that you do not include resource location maps and resource location descriptions in your report if the report is for public distribution. If you have any questions regarding the results presented herein, please contact the office at the phone number listed above.

The provision of CHRIS Data via this records search response does not in any way constitute public disclosure of records otherwise exempt from disclosure under the California Public Records Act or any other law, including, but not limited to, records related to archeological site information maintained by or on behalf of, or in the possession of, the State of California, Department of Parks and Recreation, State Historic Preservation Officer, Office of Historic Preservation, or the State Historical Resources Commission.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the CHRIS Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

Should you require any additional information for the above referenced project, reference the record search number listed above when making inquiries. Requests made after initial invoicing will result in the preparation of a separate invoice.

Thank you for using the California Historical Resources Information System,

Michelle Galaz
Assistant Coordinator

Enclosures:

(X) Custom Maps – 2 pages

(X) Resource Database Printout (list) – 2 pages

(X) Resource Database Printout (details) – 16 pages

(X) Report Database Printout (details) – 43 pages

(X) Resource Record Copies – (all) – 66 pages

(X) OHP Historic Properties Directory – 3 pages

(X) National Register Status Codes – 1 page

(X) Historical Maps – 4 pages

(X) Invoice #16914.2971

Resource List

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-30-176708		Resource Name - Country Estate Fence; Other - APE Map #04; Other - zip 92870	Building	Historic	HP06 (1-3 story commercial building)	2003 (J. Marvin, LSA Associates, Inc)	
P-30-176715		Resource Name - 431 S Van Buren St; Other - APE Map #11; Other - zip 92870	Building	Historic	HP02 (Single family property); HP04 (Ancillary building)	2003 (J. Marvin, LSA Associates, Inc)	
P-30-176716		Resource Name - 431 S Van Buren St; Other - APE Map #11; Other - zip 92870	Building	Historic	HP02 (Single family property); HP04 (Ancillary building)	2003 (J. Marvin, LSA Associates, Inc)	
P-30-176717		Resource Name - 503 S Van Buren St; Other - APE Map #13; Other - zip 92870	Building	Historic	HP02 (Single family property)	2003 (J. Marvin, LSA Associates, Inc)	
P-30-176718		Resource Name - 513 S Van Buren St; Other - APE Map #14; Other - zip 92870	Building	Historic	HP02 (Single family property); HP04 (Ancillary building)	2003 (J. Marvin, LSA Associates, Inc)	
P-30-176719		Resource Name - St Teresita de Liseur Catholic Church; Other - APE Map #15; Other - zip 92870	Building	Historic	HP16 (Religious building)	2003 (J. Marvin, LSA Associates, Inc)	
P-30-176720		Resource Name - 606 S Van Buren St; Other - APE Map #16; Other - zip 92870	Building	Historic	HP02 (Single family property)	2003 (J. Marvin, LSA Associates, Inc)	
P-30-176721		Resource Name - 500 S Van Buren St; Other - APE Map #17; Other - zip 92870	Building	Historic	HP02 (Single family property)	2003 (J. Marvin, LSA Associates, Inc)	
P-30-176722		Resource Name - 1604 Oak St; Other - APE Map #18; Other - zip 92870	Building	Historic	HP02 (Single family property)	2003 (J. Marvin, LSA Associates, Inc)	
P-30-176723		Resource Name - 1608 Oak St; Other - APE Map #19; Other - zip 92870	Building	Historic	HP02 (Single family property); HP04 (Ancillary building)	2003 (J. Marvin, LSA Associates, Inc)	

Resource List

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-30-176724		Resource Name - 1612 Oak St; Other - APE Map # 20; Other - zip 92870	Building	Historic	HP02 (Single family property)	2003 (J. Marvin, LSA Associates, Inc)	
P-30-176725		Resource Name - 1616 Oak St; Other - APE Map #21; Other - zip 92870	Building	Historic	HP02 (Single family property)	2003 (J. Marvin, LSA Associates, Inc)	
P-30-176726		Resource Name - 1620 Oak St; Other - APE Map #22; Other - zip 92870	Building	Historic	HP02 (Single family property)	2003 (J. Marvin, LSA Associates, Inc)	