Attachment D - Cultural Resources Monitoring and Data Recovery Plan

EAST SAN FERNANDO VALLEY TRANSIT CORRIDOR PROJECT
CULTURAL RESOURCES MONITORING AND DATA RECOVERY PLAN

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Acronyms and Abbreviations

ACHP	Advisory Council on Historic Preservation
APE	Area of Potential Effects
B.P.	before present
BHT	backhoe trench
CFR	Code of Federal Regulations
CRHR	California Register of Historical Resources
CRMDRP	cultural resources monitoring and data recovery plan
DPR	Department of Parks and Recreation
FTA	Federal Transit Administration
GIS	geographic information system
GPS	Global Positioning System
HSC	Health and Safety Code
LACMTA	Los Angeles County Metropolitan Transportation Authority
LRT	Light Rail Transit
MSF	maintenance and storage facility
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
OCS	overhead contact system
PA	Programmatic Agreement
PRC	Public Resources Code
Project	East San Fernando Valley Transit Corridor Project
ROW	right-of-way
SCCIC	South Central Coastal Information Center
SHPO	State Historic Preservation Officer
TPSS	traction power substation

Chapter 1
Introduction and Project Description

This cultural resources monitoring and data recovery plan (CRMDRP) has been prepared to guide the protocol for cultural resource monitoring and discovery scenarios during construction activities when conducted in the vicinity of the two sites (CA-LAN-1124 and CA-LAN-2681) identified for monitoring which are located in the Area of Potential Effects (APE) for the East San Fernando Valley Transit Corridor Project (Project) in Los Angeles and San Fernando, California. This Plan is part of the Los Angeles County Metropolitan Transportation Authority (LACMTA) and Federal Transit Administration (FTA) actions undertaken to assure compliance with Section 106 of the National Historic Preservation Act (NHPA), the California Environmental Quality Act (CEQA), and other federal and local regulations. FTA is providing financial assistance to LACMTA for this Project. Because the Project involves federal funding, compliance with Section 106 of the NHPA is required. It is FTA's responsibility to ensure that LACMTA fulfills the actions of the CRMDRP.

Section 106 consultation efforts have included the Fernandeño Tataviam Band of Mission Indians and the Gabrieleno Band of Mission Indians-Kizh Nation as consulting parties to the project and monitoring efforts. As a result of ongoing consultation, this plan is an attachment to the cultural resources technical report prepared for the project and reviewed by the State of California Historic Preservation Officer (SHPO), FTA and LACMTA. The plan provides a framework for cultural resources monitoring, discovery, evaluation and data recovery protocol for cultural resources found in the Project's Area of Potential Effects (APE).

1.1 Project Description

FTA and LACMTA propose to construct a project called the East San Fernando Valley Transit Corridor Project (Project). The FTA is the Lead Agency under the National Environmental Policy Act (NEPA) and LACMTA is the Lead Agency under CEQA. As the Project will be partially funded with federal funds, it is subject to review under Section 106 of the NHPA.

The East San Fernando Valley Transit Corridor Project study area is located within the San Fernando Valley in the County of Los Angeles (see Figure 1-1, Project Location and Area of Potential Effects Overview Map). Generally, the Project study area extends from the City of San Fernando and the Sylmar/San Fernando Metrolink Station to the north to the Van Nuys Metro Orange Line Station within the City of Los Angeles to the south.

The FTA and LACMTA considered the following six alternatives for the Project, including four build alternatives, a Transit Systems Management Alternative, and a No-Build Alternative.

- Transit Systems Management Alternative
- Build Alternative 1—Curb-Running Bus Rapid Transit Alternative
- Build Alternative 2—Median-Running Bus Rapid Transit Alternative
- Build Alternative 3—Low-Floor Light Rail Transit (LRT/Tram) Alternative
- Build Alternative 4—Light Rail Transit (LRT) Alternative
- No-Build Alternative

Figure 1-1. Project Location and Area of Potential Effects Overview Map

*Alignment generalized for this overview map only for clarity at this scale. Detailed alignments for each alternative are included on the map segments.

Source: GPA Consulting, 2015.

After much study and consideration of public comments, the LACMTA Board, in coordination with FTA, have selected Build Alternative 4- the LRT (modified) Alternative as the Locally Preferred Alternative (LPA).

The LPA would be similar to Alternative 4 described in the Draft Environmental Impact Statement/Environmental Impact Report (DEIS/DEIR), but would not include a subway segment. Instead the LPA would be at grade for its entire 9.2-mile length. Similar to the LRT alternative described in the DEIS/DEIR, the LPA would include 14 stations and would extend north from the Van Nuys Metro Orange Line Station, in the median of Van Nuys Boulevard for a distance of approximately 6.7 miles. At the intersection Pinney Street and San Fernando Road, the alignment would cross San Fernando road and transition onto the Metro-owned railroad right-of-way that runs parallel to San Fernando Road and where the Antelope Valley Metrolink line currently operates. It would proceed northwest along the San Fernando railroad right-of-way for approximately 2.5 miles, terminating at the Sylmar/San Fernando Metrolink station.

Factors that were considered by Metro in identifying Alternative 4: LRT (modified) as the LPA include: the greater capacity of LRT compared to the BRT alternatives, the LPA could be constructed in less time and at reduced cost compared to the DEIS/DEIR Alternative 4, fewer construction impacts compared to DEIS/DEIR Alternative 4, and strong community support for a rail alternative. Additionally, Metro determined the LPA best fulfilled the Project's purpose and need to:

- Improve north-south mobility
- Provide more reliable operations and connections between key transit hubs/routes
- Enhance transit accessibility/connectivity to local and regional destinations
- Provide additional transit options in a largely transit-dependent area
- Encourage mode shift to transit.

Subsequent to identification of Alternative 4 (modified) as the LPA by the Metro Board in June of 2018, additional refinements were made to the Project plans to improve pedestrian connectivity and safety, minimize right-of-way impacts and displacements, and improve operational efficiencies. These improvements included refinements to the station locations and footprints, track alignment, intersection configurations, and TPSS locations. The reader is referred to Appendix HH_ to the FEIS/FEIR, which contains the revised Advanced Conceptual Plans for Alternative 4 (modified) for more details regarding these improvements.

1.1.1 Locally Preferred Alternative - Alternative 4 (modified)

The LPA (Alternative 4 –modified) would include a LRT line along a 9.2-mile dedicated guideway from the Sylmar/San Fernando Metrolink Station along San Fernando Road to the north, to the Van Nuys Metro Orange Line Station to the south. Portions of the LRT line would be similar to other existing street-running Metro LRT lines, such as the Metro Blue Line, the Metro Exposition Line, and the Metro Gold Line. The LPA includes a segment in exclusive ROW along the Antelope Valley Metrolink railroad corridor and a segment with semi-exclusive ROW in the middle of Van Nuys Boulevard. On the surface-running segment, the LRT trains would operate at prevailing traffic speeds and would be controlled by standard traffic signals. Alternative 4 (modified) would be electrically powered using overhead wires and would travel along the median of Van Nuys Boulevard for most of the route (see Figure 1-2). This alternative includes supporting facilities, such as an overhead contact system (OCS), traction power substations (TPSS), signaling, and a maintenance and storage facility (MSF).

Figure 1-2. Architectural Rendering for LPA (At-Grade Crossing)

Source: KOA Corporation, 2014.

The following fourteen stations are proposed for the LPA, at approximately 3/4-mile intervals. The fourteen stations are listed below and illustrated in Figure 1-3:

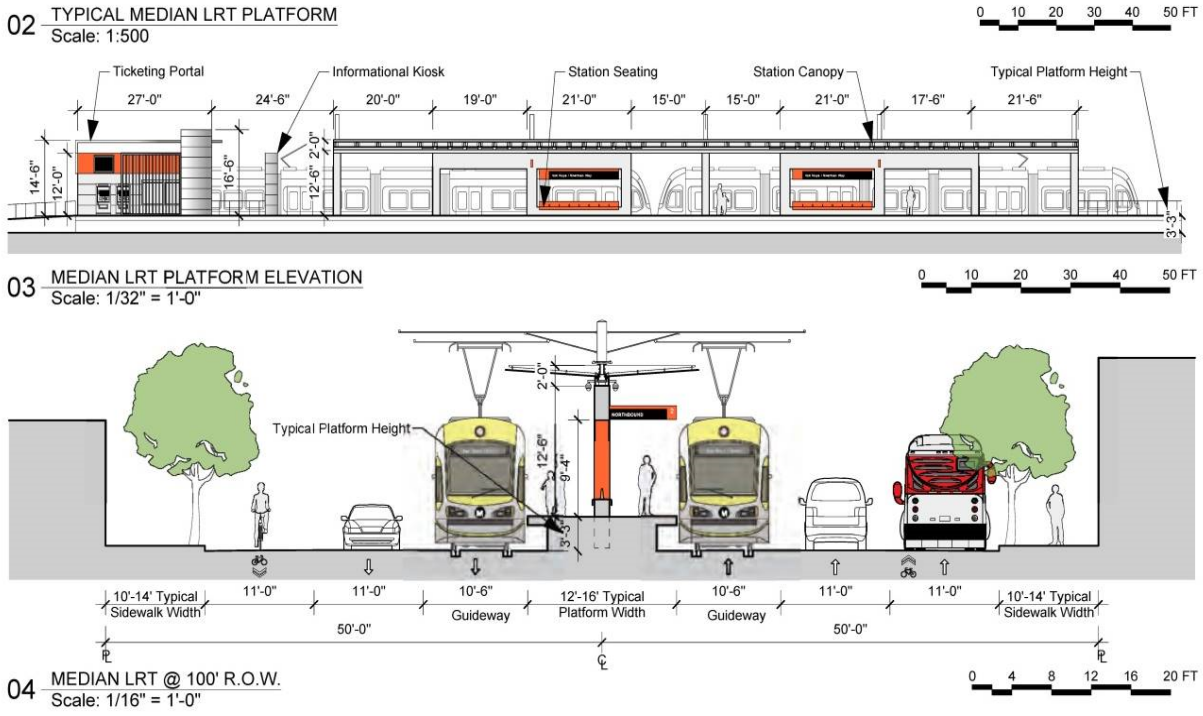
1. Sylmar/San Fernando Metrolink Station
2. Maclay Station
3. Paxton Station
4. Pacoima Station
5. Laurel Canyon Station
6. Arleta Station
7. Woodman Station
8. Nordhoff Station
9. Roscoe Station
10. Van Nuys Metrolink Station
11. Sherman Way Station
12. Vanowen Station
13. Victory Station
14. Van Nuys Metro Orange Line Station

Figure 1-3. Locally Preferred Alternative

Source: KOA and ICF International, 2014.

The new station platforms for the LPA would be located near the center of the street. The platforms would be raised up to 3 feet 3 inches from the street with an Americans with Disabilities Act-accessible ramp. On the platform, there would be a ticketing portal, seating, and an informational kiosk. The seating would be located under a station canopy. The metal canopy would be approximately 10 to 12 feet high, 8 to 10 feet wide, and approximately 150 feet long. The platform would be approximately 270 feet long. The kiosk and ticketing portal would be approximately 12 to 14 feet high. OCS poles would be approximately 30 feet tall and placed every 90 to 170 feet between the two tracks. The TPSSs, electrical substations, would be placed every 3/4 miles, with approximately fourteen along the entire route; TPSSs would be approximately 60 by 80 feet and 12 to 14 feet high. Figure 1-4 illustrates a typical station with a canopy that would be constructed under the LPA.

Figure 1-4. Illustrative Section and Elevation of LPA Streetscape and Platform



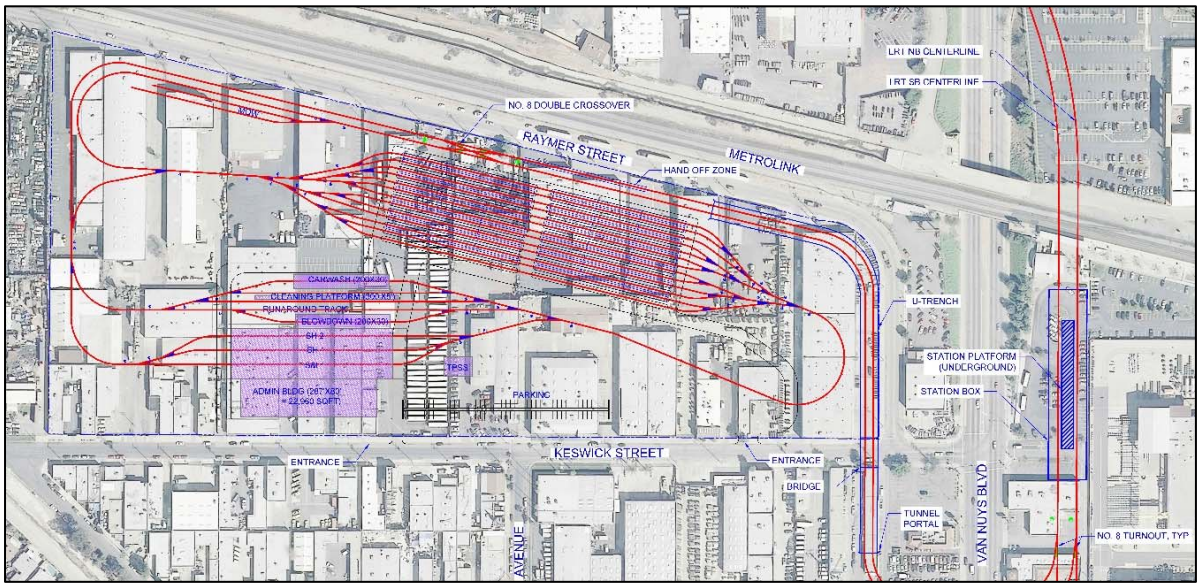
Source: KOA and John Kaliski Architects, 2014.

Three possible MSF sites were evaluated in the DEIS/DEIR:

- MSF Option A—Van Nuys Boulevard/Metro Orange Line
- MSF Option B—Van Nuys Boulevard/Keswick Street
- MSF Option C—Van Nuys Boulevard/Arminta Street

MSF Option B has been identified as the preferred MSF site by the LACMTA Board. MSF Option B would require 37 full acquisitions along Keswick Street and Raymer Street. A majority of the property that would be acquired consists of light manufacturing and commercial properties, most of which contain businesses oriented toward automobile repair and supplies or raw materials supply and manufacturing. None of the properties identified in the MSF Option B were identified as being a historic property.

Figure 1-5. LPA—Location of Proposed MSF Site B



Source: KOA, 2018.

1.2 Construction Scenario

Construction would include at-grade and underground facilities. Excavation methods would involve a variety of heavy construction equipment including but not limited to tracked excavators, graders, rail specific equipment, and drilling rigs.

At-grade construction would consist of demolition of existing track, preparation of the track bed, construction of the supporting track slab, and laying of rail.

These impacts are detailed below.

1.2.1 Track/Guideway

Excavation required for the track, including grade crossings and ductbank or signal cable would generally be limited to a maximum depth of approximately 3 feet below existing ground. In addition to this, there are underground facilities and utilities that would be deeper, as follows:

- Systems vaults (up to 6 feet deep)

- OCS pole foundations: Cast-in-drilled-holes approximately 36 inches in diameter by 12 feet deep (these would be located along the center of guideway spaced approximately every 100 feet).
- Signal Foundations: 24-inch diameter by 5 feet deep.
- Storm drainage systems: Up to 6 feet deep
- Limited number of other miscellaneous small foundations generally limited to 6 feet deep.
- Other utility work to relocate existing lines and vaults that are in conflict. These depths may be 10 to 12 feet deep or deeper.
- Bridge foundations at Pacoima Wash: cast-in-drilled-hole foundations could be up to 4 feet in diameter and 30 feet deep. Or may be smaller, driven piles up to 60 feet deep (or potentially deeper based on poor soil conditions).

1.2.2 Stations

Excavation for station platforms would be approximately 4 feet deep. The other items noted in Track/Guideway above (bulleted list) might also apply in station areas. Additionally, there is the option for a pedestrian underpass at the Sylmar/San Fernando terminal station. These excavations would be approximately 16 feet deep by 16 feet wide by 50 feet long for the main tunnel portion and then ramps and stairs for several hundred additional feet, approximately 10 feet wide. However, a pedestrian bridge may be more likely. In that scenario, the following would apply: elevator pit depth (one on each side of the pedestrian bridge: 10 feet (approximately 10 by 20 feet for two elevators).

1.2.3 TPSS

The TPPS would typically require excavation to a depth of 5 to 6 feet under the actual TPSS building plus approximately 10 feet around it, to install the ground mat under the TPSS. This occasionally may need to be deeper (approximately 8 feet) depending on soil conditions.

1.3 Project Area of Potential Effects

The Project's APE includes the area of direct and indirect effect to historic properties and the horizontal and vertical extent of ground disturbance associated with construction of the Project. The overall APE is depicted on Figure 1-1 and the specific APE for Site CA-LAN-2681 is depicted on Figure 2-1.

For this Project, a preliminary study area was identified for research and records search purposes, which encompassed a 1/2-mile radius on either side of the proposed alignment areas. This preliminary study area was used to identify the locations of previously identified historic properties and to gauge the historic sensitivity of the area. However, conducting an intensive-level historical resources survey within this entire study area would have been too expansive, as the likelihood of properties 1/2 mile away from the alignment being affected by the introduction of the proposed transit Project are negligible within a dense urban environment. Further, the study area included thousands of properties, most of which would likely not be historically significant. Thus, the FTA and LACMTA consulted with SHPO's reviewer (Kathleen Forrest) via conference call on April 14, 2013, to discuss the appropriate level of effort for the identification and evaluation of historical resources and to determine the appropriate APE. Due to the size and linear nature of the Project, and due to the minimal potential for effects on historic properties, the FTA and LACMTA proposed a streamlined approach to evaluating potential historical resources within the approximate 10- mile length of the Project corridor.

Following the introduction of additional build alternatives in 2014 that added several new stop locations along the proposed alignment, and once the FTA and LACMTA had a better understanding of where potential MSF sites and TPSS locations would be, the Project team revised the APE. The new APE was expanded to include the parcels immediately adjacent to each proposed Bus Rapid Transit or LRT stops for all alternatives, additional parcels along the street front to accommodate for potential visual impacts caused by the elevated LRT stops within the median, as well as tunnel locations, potential MSF sites, and TPSS locations for all build alternatives.

1.4 Legal Compliance

1.4.1 Federal: National Historic Preservation Act

The FTA is providing LACMTA financial assistance for this Project. Therefore, the Project must be compliant with Section 106 of the NHPA.

The FTA is the federal lead agency responsible for identifying historic properties and considering project-related effects on those properties. Section 106 requires federal agencies to take into account effects of undertakings on historic properties and allow the Advisory Council on Historic Preservation (ACHP) an opportunity to comment on those undertaking.

1.4.2 State: Public Resources Code Section 5024

LACMTA is the CEQA lead agency responsible for identifying historical resources and considering Project-related impacts on those properties. CEQA requires lead agencies to take into account Project impacts on historical resources and develop mitigation measures to mitigate impacts.

Identified resources will also be evaluated for listing in the California Register of Historical Resources (CRHR). Determination of CRHR eligibility is guided by specific legal context outlined in Sections 15064.5 (b), 21083.2, and 21084.1 of the Public Resources Code (PRC), and the CEQA Guidelines (California Code of Regulations Title 14, Section 15064.5). A cultural resource may be eligible for listing in the CRHR if:

1. It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States; or
2. It is associated with the lives of persons important to local, California, or national history;
3. It embodies the distinctive characteristics of a type, period, region, or method of construction or represents the work of a master or possesses high artistic values; or
4. It has yielded, or has the potential information important to the prehistory or history of the local area, California, or the nation.

1.4.3 State Health and Safety Code, Section 7050.5 and California Public Resources Code, Section 5097.9

Archaeological sites containing human remains shall be treated in accordance with the provisions of State Health and Safety Code (HSC) Section 7050.5 and California PRC Section 5097.9. Under HSC Section 7050.5, if human remains are discovered during any project activity, the County Coroner must be notified immediately. If human remains are exposed, HSC Section 7050.5 states that no further disturbance shall occur until the county coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98. Construction must halt in the area of the discovery of human remains, the area of

the discovery shall be protected, and consultation and treatment shall occur as prescribed by law. If the remains are determined by the coroner to be Native American, the coroner is responsible for contacting the Native American Heritage Commission within 24 hours. The Native American Heritage Commission, pursuant to Section 5097.98, will immediately notify those persons it believes to be most likely descended from the deceased person so they can inspect the burial site and make recommendations for treatment or disposal.

1.5 Summary

This CRMDRP outlines the roles and responsibilities of cultural resource monitors, monitoring methods, inadvertent discovery protocol; protocol for the treatment of human remains; and protocol for consultation with SHPO and Consulting Parties. Finally, the plan defines the methods of post-field reporting and curation of any archaeological materials recovered as a result of the Project.

Chapter 2

Background and Research Design/Themes for Site CA-LAN-2681

The purpose of this section of the document is to present the approach for the Phased Identification, Evaluation, and Treatment of site CA-LAN-2681, which was previously recorded and identified as located within the APE during the environmental analysis conducted for the Project (ICF 2018). Given the fact that the site is located in the active railroad ROW and located within active utility alignments, a phased identification approach is necessary per the Project PA. The Project APE, proposed Project elements, and CA-LAN-2681 boundary are illustrated on Figure 2-1.

2.1 CA-LAN-2681

This site was identified by Albert Knight during archaeological monitoring of the construction of the Pacific Pipeline project in 2001 (Knight 2001). The site is described as “Resource 35” in the archaeological monitoring report for the project (Berryman and Woodman 2001 23-24), which included cultural materials found between Stations 4070 +58 and 4074 +50 consisting of a diffuse scatter of historic and prehistoric artifacts located immediately southwest of the Metrolink railroad ROW at the Truman Street/San Fernando Road intersection.

Much of this area had been affected by alluvial flow in the East Channel drainage and by historical development at Mission Wells and along the axis of historic U.S. Highway 99 (San Fernando Road).

The area identified during Pacific Pipeline Systems monitoring measured approximately 60 meters northwest-southeast by 2 meters southwest-northeast. Overall depth of the deposit was not determined. The exposed area was described as being very disturbed. Prehistoric artifacts were observed within the back-dirt piles only, although the monitoring report suggested that there is increased sensitivity for potential intact prehistoric deposits could be present at a depth of 4 or deeper at other less disturbed parts of the site. The four foot depth range was identified as the maximum depth of pipeline trenching in the immediate vicinity of the fid areas

A "concentration of historic artifacts" was recorded at Station 4074+50 to a depth of 2 feet. Samples were recovered from the back-dirt piles and from portions of the upper trench walls. Approximately 100 pieces of historic glass were found during trenching in the back-dirt piles and in a portion of the southeastern upper end of the trench. Identified glass included cork-stopper bottlenecks (straight or choke necked) and screw cap bottles. Both whiskey/liquor and medicinal bottles were found. All of the artifacts were discovered during and/or following trenching and during back-filling activities.

Thirteen prehistoric or possible prehistoric artifacts were found in trenching backdirt between Stations 4071 + 00 and 4074 + 55. These items were described as "a semi-portable rock work station (possible anvil), possible groundstone, small hammer or pecking stone, bifacial mano, scraper, secondary flake, a modified cobble, chopper, and a metate fragment." All of the artifacts were returned by the monitor to the general trench area (Berryman and Woodman 2001).

The area that yielded prehistoric artifacts is within the general boundaries given for the ethnohistoric village of Pasknga, a possible village location based on general ethnographic descriptions; however, no conclusive ethnohistoric period artifacts have been found and no intact village or residential deposit has been identified. The proposed site of Pasknga is thought to have been located between Stations 3942

+10 and 4081 + 71. There is no evidence, either archaeologically or from archival documents, that the artifacts associated with Resource 35 are related to the village of Pasknga, or any other village.

Because of the disturbed nature of the site context, and the lack of other physical evidence of an ethnohistoric village deposit, artifacts from the ROW would have limited significance. Additional evaluations outside the Project area would be required to determine the exact boundaries and content of Resource 35 and its possible relationship to ethnohistoric resources. The California Department of Parks and Recreation (DPR) site form for the site (Knight 2001) includes additional details about the site location, contents and context and is provided in Appendix A.

ICF Senior Archaeologist Stephen Bryne met with Albert Knight at the site's location on March 4, 2019. Mr. Knight pointed out the general location of the archaeological site. However, he noted that the area of the site had been re-graded and re-contoured since the time of the site's recording in 2001. There was no surface evidence of the archaeological site. Mr. Knight stated that in order to re-locate the recorded site deposits, one would need to locate the Pacific Pipeline, since the site was discovered during monitoring of the installation of the pipeline. The present Undertaking proposes to relocate the existing oil pipeline outside of the railroad ROW.

SHPO reviewed the site and project in a reply letter to the FTA dated February 14, 2020 (FTA No. FTA_2013_0311_00) and provided a detailed review of the site deposits, stratigraphy and context as described in both the Pacific Pipeline Report (2001) and the site DPR form (Knight 2001) and concluded that given the disturbed nature of the encountered site deposits, that "site CA-LAN-26181 does not represent a contextually cohesive mufti-component site with definable horizontal and vertical boundaries and does not possess any intact stratigraphy or feature associations that would relate the disparate elements to each other (Polanco 2014)." Additionally, the letter also detailed that the partially intact bottle deposit noted in the trench does not have clear association with any datable features and the thirteen prehistoric artifacts are isolated finds since they were all found in spoil piles and have no clear association with each other or a specific area within the site. The presence of the prehistoric artifacts indicates an increased level of archaeological sensitivity in the locale for the potential for other prehistoric materials and deposits (Polanco 2020).

As a result of the detailed review of the site deposits and context, FTA is making the Determination of Eligibility with SHPO concurrence that the site CA-LAN-002681 is not NRHP- eligible and not a historic property for the purposes of Section 106.

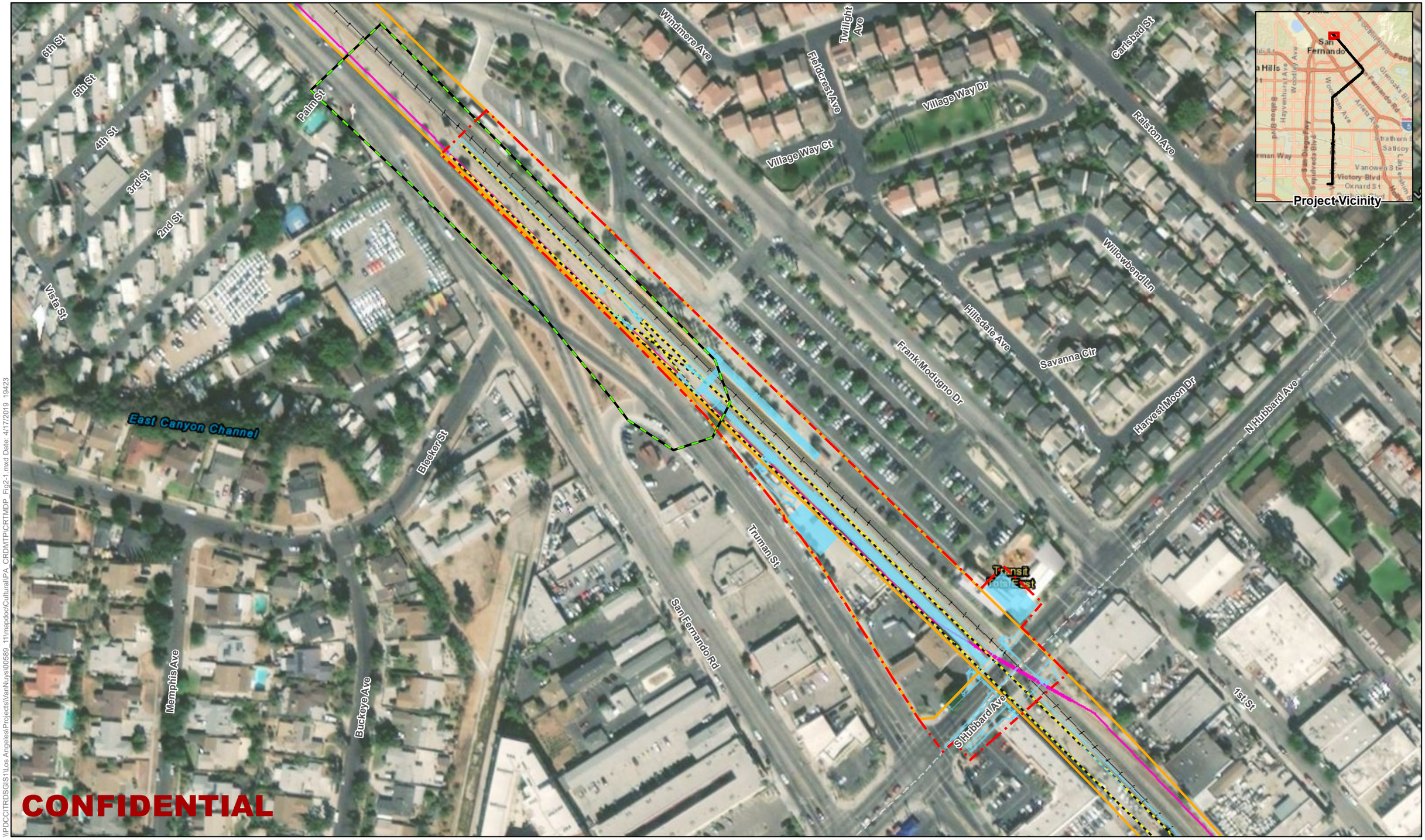
2.2 Natural and Cultural Context

2.2.1 Local Environment

The following section is summarized from the Project's Ecosystems/Biological Resources Existing Conditions Report East San Fernando Valley Transit Corridor Draft Environmental Impact Statement/Draft Environmental Impact Report (ICF International 2013).

2.2.1.1 Vegetation

Vegetation communities in the Project area include developed and ruderal/disturbed areas. Developed areas dominate the Project area and include impervious surfaces and ornamental landscaping. Within the Project area, developed areas consist of roadways, sidewalks, driveways and parking areas, loading docks, restaurants, retail businesses, equipment and supply storage facilities (e.g., for landscaping and building material suppliers), residences, and transit stations. Ornamental vegetation is present along much of the corridor and in the residential areas. In addition, a number of mature western sycamores are



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Source: ESRI Imagery, 2019; STV, 2019.

- Area of Potential Effects
- Archaeological Site - CA-LAN-2681
- Proposed ESFV Project Component
- Proposed ESFV Rail Alignment
- Exiting Utility Conflicts
- Existing Rail Alignment
- Existing Rail Right-of-Way

Figure 2-1. Proposed Project Elements at CA-LAN-2681 Proposed Sylmar Station and CA-LAN-2681 Location East San Fernando Valley Transit Corridor Project

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planted as street trees at various locations along the Project corridor, and young coast live oak (*Quercus agrifolia*) plantings are at Tobias Avenue Park, just north of Nordhoff Avenue. Ruderal/disturbed areas are dirt areas (e.g., abandoned parkways, railroad rights-of-way) that have been or are currently subject to intensive disturbance; these areas preclude any natural community. Open areas in the Project area exhibit fairly high to very high degrees of past disturbance. The most extensive areas in the Project area are the vacant lots along the alignment; these areas are largely bare dirt or overgrown. Plant species found in these areas include a moderate variety of disturbance-adapted species.

2.2.1.2 Geology

When defined as the watershed of the Los Angeles River, the San Fernando Valley includes 500 square miles (Jorgensen 1982). The valley extends 24 miles east to west and 12 to 13 miles north to south. Essentially flat, the elevation of the valley slopes from a high of 1,500 feet above sea level on the north side, 800 to 1,000 feet along the west side, down to 450 feet above sea level at the southeast corner (Jorgensen 1982).

The San Gabriel Mountains, a massive outpouring of the earth's crust from 100 million years ago, separates the San Fernando Valley from the Mojave Desert to the north. The Santa Monica Mountains mark the southern edge of the Valley and act as a low barrier to the Los Angeles Basin (Jorgensen 1982). Over the long years of weathering and successive uplift events, the mountains have slowly eroded, sending their materials down their slopes to gradually raise up the Valley's floor to its present elevation. Thus, there are hundreds of feet of silt and alluvia on the Valley floor.

2.2.1.3 Soils

Soils within the Project area are compacted throughout, except in landscaped areas, and nearly devoid of vegetation, except for planted street trees and shrubbery. Several soil types are mapped within the Project area. Soil phases within the Project area include Hanford fine sandy loam, Hanford gravelly sandy loam, Hanford silt loam, Ramona loam, Tujunga sandy loam, Yolo fine sandy loam, Yolo sandy loam, and Yolo loam (U.S. Department of Agriculture 2013).

2.2.1.4 Hydrology

The Los Angeles River intersects the Project area twice at the southern end of Van Nuys Boulevard and Sepulveda Boulevard, paralleling U.S. 101. The river is contained in a channel, a concrete open box culvert that measures approximately 50 feet wide from top of banks. Trace amounts of vegetation cover the area within the river bottom and portions of the channel's upper terraces are tree lined above and outside the channel banks. The Los Angeles River serves as a major drainage feature in this part of the county.

The Pacoima stream originates some 15 to 20 miles from the Project area in the San Gabriel Mountains. The Pacoima Wash, a concrete open box culvert with a flat bottom, intersects the Project area at the approximate midway point, just south of Saticoy Street. At this point, the wash ceases to be a surface water feature and transitions to become part of the city's underground stormwater system. There are trace amounts of vegetation within the wash bottom. The Pacoima Wash is again intersected at San Fernando.

2.2.2 Prehistory and Ethnography

This section presents an overview of the cultural history of the Project area and provides a context for understanding the types, nature, and significance of prehistoric or ethnohistoric sites that may be encountered in the Project APE. In this discussion of the prehistoric setting, emphasis is placed on

chronologies developed for coastal southern California; brief mention is also made of southern California desert chronologies, as appropriate.

2.2.2.1 Prehistoric Setting

Two formative regional chronologies are widely cited in the archaeological literature for the prehistory of the coastal regions of southern California (Wallace 1955, 1978; Warren 1968). These chronologies are generalized temporal schemes based on the presence or absence of certain artifact types. A more recent chronological synthesis for coastal southern California has been provided by Koerper and Drover (1983). This synthesis employs Wallace's (1955) horizon terminology but uses radiometric data to identify the sequence of stylistic change observed in the artifact assemblages, which are interpreted as temporal indications of cultural change. Sutton (2010) has proposed the most recent cultural sequence for southern California and the Los Angeles Basin. This sequence is largely a revision of the chronology initially proposed by Wallace (1955) in light of efforts by Erlandson et al. (2007) and Sutton and Gardner (2010). The following discussion is divided into five major cultural intervals occurring over the following timespans: >12,000 B.P.; 12,000–7500 B.P.; 7500–5000 B.P.; 5000–1500 B.P.; and Post 1500 B.P.

The >12,000 B.P Interval (Pleistocene)

Evidence of ancient human activity is widespread in the midwestern and far western U.S., including: localities where mammoths were killed and butchered by humans 18,500–14,000 years ago (Joyce 2013); the Paisley Five Mile Point Caves in Oregon, inhabited not less than 14,600 years ago (Jenkins et al. 2013); the Debra L. Friedkin site in Texas, which yielded thousands of pre-Clovis artifacts dated 16,200–14,400 years before the present (B.P.) (Jennings and Waters 2014); and the Manis site in Washington, where hunters dispatched a mastodon with a bone-tipped projectile some 13,800 years ago (Waters et al. 2011). While it seems probable that people occupied California more than 13,500 years ago, and possibly as early as 18,000–20,000 B.P., no definite and reliably datable evidence of such early human activity in the state has been reported.

A few archaeological sites have been purported to be of great antiquity and offer evidence of human occupation in southern California during the Pleistocene. These cultures have been designated, depending on geography, as Paleoindian or Paleocoastal Traditions (Sutton 2010, 2011). These sites are centered in the Mojave and Colorado deserts, or along the coast of southern California. Human femora from the Arlington Spring site on Santa Rosa Island have been dated to approximately 13,000 ± 200 years B.P., and midden from the Daisy Cave site on San Miguel Island dates to approximately 11,500 ± 200 years B.P. (Erlandson et al. 2011). Perhaps the most widely publicized of these sites is the highly dubious Calico Early Man Site in the desert of San Bernardino County (Schuiling 1979; Simpson 1980). However, no sites of great antiquity have been identified near downtown Los Angeles, and many archaeologists remain skeptical about the existence of such sites in southern California.

The 12,000–7500 B.P. Interval (Terminal Pleistocene/Early Holocene Period)

Warren's (1968, 1980) earliest interval for southern California prehistory is the "San Dieguito Tradition," beginning about 10,000 B.P. and best defined in the coastal San Diego area (True 1958). Wallace (1978) calls this interval "Period I: Hunting" and considers it to begin about 12,000 B.P. In Sutton's more recent proposed cultural sequence for the Los Angeles region of Southern California (Sutton 2010) this interval includes both terminal Paleocoastal, and later, San Dieguito "phases" of an undefined tradition.

This interval is characterized by a long period of human adaptation to environmental changes brought about by the transition from the late Pleistocene to the early Holocene geologic epochs. Between 13,000 and 10,000 B.P., climatic conditions became warmer and more arid and Pleistocene megafauna gradually disappeared. The early occupants of southern California were initially believed to have been nomadic

large-game hunters who avoided the Los Angeles Basin. Tool assemblages included percussion-flaked scrapers and knives; large, well-made stemmed, fluted, or leaf-shaped projectile points (e.g., Lake Mojave, Silver Lake); crescentics; heavy core/cobble tools; hammerstones; bifacial cores; and choppers and scraper planes.

Although intact stratified sites dating to this period are scarce, the limited data do suggest that the prehistoric populations of this period moved about the region in small, highly mobile groups, with a wetland-focused subsistence strategy based on hunting and foraging. Perhaps the earliest evidence of human occupation in the Los Angeles region is represented at the tar pits of Rancho La Brea (CA-LAN-159). The La Brea Skeleton yielded a date of 10,300 B.P. (Erlandson et al. 2007: Table 4.1). In Orange County further south, the Irvine site (CA-ORA-64) was occupied around 9,400 B.P. (Drover et al. 1983; Erlandson et al. 2005: Table 1). The Malaga Cove site, infamous for its contentious stratigraphy (Wallace 1955, 1978; Warren 1968), has been proposed as the earliest site of continued human habitation in the Los Angeles Basin. Malaga Cove, in combination with the Irvine site and the inland Lake Elsinore site (CA-RIV-2798) (Grenda 1997), demonstrate that the Los Angeles Basin was occupied during the San Dieguito phase; constituents of which have been dated to earlier than 9,000 B.P. (Fitzgerald et al. 2005:Table 2).

During the Interval between the Terminal Pleistocene/Early Holocene is the Encinitas Tradition, which spans the years 8,500 to 2,600 B.P. Its initial phase, Topanga I, dates to no earlier than 8,500 B.P. (e.g., CA-LAN-958 [Porcasi and Porcasi 2002:24] and CA-LAN-64 [Douglass et al. 2005]). Assemblages of this phase typically include abundant manos and metates, many core tools and scraper planes/scrapers, charmstones, cogged stones, early discoidals, but few large points, and few faunal remains (Sutton and Gardner 2010). Secondary inhumation placed under cairns was a common mortuary practice (Johnson 1966:19), but southerly-oriented extended inhumations are also present.

The 7500 to 5000 B.P. Interval (Middle Holocene Period)

In the coastal regions of southern California during this period, the Topanga I Phase of the Encinitas cultural tradition continued. Overall, the general settlement-subsistence patterns of the Middle Holocene Period were exemplified by a greater emphasis on seed gathering. Adaptation to various ecological niches, further population growth, and an increase in sedentism typify the subsequent periods of cultural history in southern California. This subsistence orientation, characterized by a heavy dependence on both hunting and plant gathering, continued into historic times resulting in greater local dependency. The artifact assemblage of this period is similar to that of the previous period, but was augmented to include specialized tools including crude hammerstones, scraper planes, choppers, large drills, crescents, and large flake tools. This assemblage also includes large leaf-shaped points and knives, manos and milling stones used for grinding hard seeds, and nonutilitarian artifacts, such as beads, pendants, charmstones, discoidals, and cogged stones (Kowta 1969; True 1958; Warren et al. 1961).

The Topanga I Phase is perhaps the best-known component of the so-called Milling Stone Horizon near the Project region. Sites assignable to the Milling Stone Horizon have been reviewed by Goldberg and Arnold (1988: 12-13, 46–50). In their discussion, the presence of a single artifact class (the milling stone and mano) to define a temporally meaningful analytic unit of cultural development is seen to be problematic and does not explain the variability in site assemblages and dates of this period. They argue that to assign all sites that contain milling stones and manos to the period from 8000 to 2000 B.P. implies a "cultural unity" among the peoples who deposited these artifacts. However, decades of research have documented significant variability in subsistence emphasis, mortuary practices, and non-utilitarian artifacts (e.g., cogged stones, discoidals, beads), notwithstanding great similarities in one element of the tool kit-the milling stone and the mano. Aside from the sites in Topanga Canyon, the only evidence of prehistoric occupation of the Los Angeles Basin dating to this interval is an occasional discoidal or cogged stone recovered from sites dating to more recent periods of prehistory. None of these sites have been found in or near the Project APE.

The 5000–1500 B.P. Interval (Middle to Late Holocene)

In general, cultural patterns remained similar in character to those of the preceding horizon. However, the cultural material at many coastal sites became more elaborate, reflecting an increase in sociopolitical complexity and efficiency in subsistence strategies (e.g., the introduction of the bow and arrow for hunting). The components at site CA-LAN-2 in Topanga Canyon are dated to this period. In addition, several sites south of Ballona Lagoon on the Del Rey bluffs contain a well-developed Intermediate Horizon, defined by Wallace and others as a period of diversified subsistence (Van Horn 1987; Van Horn and Murray 1985; Wallace 1978). Projectile points from the Ballona Bluffs sites are, in some cases, similar to those found at sites in the southeastern California deserts, specifically in the Pinto Basin and at Gypsum Cave. This suggests that the coastal occupants of this period were in close contact with cultures occupying the eastern deserts.

The Post 1500 B.P. Interval (Late Holocene)

Reliance on the bow and arrow during the Late Holocene for hunting along with the use of bedrock mortars and milling slicks mark the beginning of the subtradition referred to as the “Late Prehistoric Horizon” by Wallace (1955) and the “Shoshonean Tradition” by Warren (1968), dating from about 1500 B.P. (A.D. 500) to the time of Spanish contact (approximately A.D. 1769). Late prehistoric coastal sites are numerous. Diagnostic artifacts include small triangular projectile points, mortars and pestles, steatite ornaments and containers, perforated stones, circular shell fishhooks, and numerous and varied bone tools, as well as bone and shell ornamentation. Elaborate mortuary customs along with generous use of asphaltum and the development of extensive trade networks also characterize this period. Populations during the Late Prehistoric Horizon experienced increases in population size, economic and social complexity, and the appearance of social ranking.

2.2.2.2 Ethnohistory

Gabrielino

During the prehistoric period, the San Fernando Valley was inhabited by the Gabrielino people. Gabrielino, as used in this report, includes the Fernandeño. The terms "Fernandeño" and "Gabrielino" are direct references to the associations between the Native American population of the San Fernando and San Gabriel valleys and the Mission San Fernando and Mission San Gabriel de Archangel, respectively.

The Fernandeño are associated with the Mission San Fernando and are culturally related to the Gabrielino. The ethnographic boundaries for the Fernandeño/Gabrielino are described by Bean and Smith (1978:538) and refined by McCawley (1996).

The Gabrielino are associated with the San Gabriel Mission. The Gabrielino consist of a number of small bands, some of whom refer to themselves as “Tongva,” and others who refer to themselves as “Kizh.” Gabrielino speaker Mrs. James Rosemyre told anthropologist C. Hart Merriam that Gabrielino speakers referred to themselves as Tongva, and Merriam recorded the name (Heizer 1968; King 2011:5). McCawley (1996:9) states that Tongva was the term used by the Gabrielino living near Tejon; however, it also referred to a ranchería in the San Gabriel area. Today, some Gabrielino have chosen to be known as Tongva (McCawley 1996:10). Yet another name that has been reported for the Gabrielino is *Kizh* or *Kij*, perhaps derived from the word meaning “houses” (McCawley 1996:10; Stickel 2016). The latter term may refer specifically to Gabrielino living in the Whittier Narrows (McCawley 1996:10).

The Gabrielino are characterized as one of the most complex societies in native southern California. This complexity derives from their overall economic, ritual, and social organization (Bean and Smith 1978; Kroeber 1925). The Gabrielino language was one of a group of Californian Uto-Aztecan languages designated as Takic (Bean and Smith 1978:538).

Two theories prevail on how and when the Gabrielino may have entered the Los Angeles Basin: that they arrived from the southern Great Basin or interior California deserts as recently as 2500 B.P.; or that they migrated into the region in successive waves over a lengthy period of time beginning as early as 4000 B.P. (Kroeber 1925).

In early protohistoric times, the Gabrielino occupied a large territory including the coast from Malibu to Aliso Creek, parts of the Santa Monica Mountains, the San Fernando Valley, and the San Gabriel Valley (McCawley 1996). They also occupied the islands of Santa Catalina, San Clemente, and San Nicolas. Within this large territory were more than 50 residential communities with populations ranging from 50 to 150 individuals. From this broad and diverse resource base, the Gabrielino developed an effective subsistence technology, a well-developed trade network, and a ritual system, such that they were among the most materially wealthy and culturally sophisticated cultural native groups in California at the time of European contact.

Gabrielino culture was characterized by an active and elaborate system of rituals and ceremonies. Rituals included individual rites of passage, village rites, seasonal ceremonies, and participation in the widespread *Chinigchinich* cult. The cult of the culture hero *Chinigchinich* was observed and recorded by Franciscan Friar Gerónimo Boscana during his residences at Missions San Juan Capistrano and San Luis Rey (Harrington 1933; Boscana 1978).

Tataviam

The Tataviam lived primarily on the upper reaches of the Santa Clara River drainage system, east of Piru Creek, but they also marginally inhabited the upper San Fernando Valley, including the present-day city of San Fernando and neighborhood of Sylmar (which they shared with their inland Gabrielino neighbors). Their territory also may have extended over the Sawmill Mountains to include at least the southwestern fringes of the Antelope Valley (King and Blackburn 1978).

The Tataviam lived in small villages and were semi-nomadic when food was scarce. They were hunter-gatherers who were organized into a series of clans throughout the region. Jimsonweed, native tobacco, and other plants found along the local rivers and streams provided raw materials for baskets, cordage, and netting. Larger game was generally hunted with the bow and arrow, while snares, traps, and pits were used for capturing smaller game.

At certain times of the year, communal hunting and gathering expeditions were held. Faunal resources available to the desert-dwelling Tataviam included deer, mountain sheep, antelope, rabbit, small rodents, and several species of birds. Meat was generally prepared by cooking in earthen ovens, boiling, or sun-drying. Cooking and food preparation utensils consisted primarily of lithic (stone) knives and scrapers, mortars and metates, pottery, and bone or horn utensils. Resources available to the desert-dwelling Tataviam included honey mesquite, piñon nuts, yucca roots, mesquite, and cacti fruits (Solis 2008). These resources were supplemented with roots, bulbs, shoots, and seeds that, if not available locally, were obtained in trade with other groups.

Labor was divided between the sexes. Men carried out most of the heavy but short-term labor, such as hunting and fishing, conducted most trading ventures, and had as their central concerns the well-being of the village and the family. Women were involved in collecting and processing most of the plant materials and basket production. The elderly of both sexes taught children and cared for the young (Solis 2008). Like their Chumash neighbors, the Tataviam practiced an annual mourning ceremony in late summer or early fall, which would have been conducted in a circular structure made of reeds or branches.

At first contact with the Spanish in the late 18th century, the population of this group was estimated at less than 1,000 persons. By 1810 nearly all of the Tataviam population had been baptized at San Fernando Mission (King and Blackburn 1978).

2.2.2.3 Tribal Histories

Gabrieleno-Kizh

The Kizh Tribe (aka "Gabrieleno," or "Gabrielino"), had a developed and rich hunting and gathering culture that sustained them in the area for probably 9,000 years. The name Kizh is derived from their name for their dome-shaped willow and thatched lodges or homes. The name of "Gabrieleno" was given to them by their Spanish conquerors after San Gabriel Mission—the dominant mission the Spanish established in their territory (Salas-Teutimez et al. 2013; Stickel 2016).

The Kizh had a vibrant broad-based culture and economy. The prestige and political strength of the Gabrielino were enhanced by impressive achievements in pre-industrial technology and economics, as well as religion and oral literature (Kroeber 1925:621; McCawley 1996:3).

Chief Ernest Salas and the Tribal Chairman Andrew Salas continue that tradition today with the oral literature and information handed down to them. That situation has recently changed with the recent presentation of the Tribe's first publication in its own press, The Kizh Tribal Press, of the first book about their "Joan of Arc"- like heroine Toypurina, a woman Shaman, who led a revolt of the Kizh against their brutal Spanish conquerors in 1785. Toypurina is the only Native American woman who ever lead a revolt in American history.

The Kizh had at least three different dialects of their language. One of them was spoken in the San Fernando Valley (McCawley 1996:90). The current official tribal map shows villages for the San Fernando Valley that have been noted by ethnographers. Some of those villages include *Pasheekwnga* (which was located at San Fernando Mission), *Pakooynga* (after which the City of Pacoima is named), and to the southwest of Burbank was the village of *Cahuengna* (located near the north entrance to the Cahuenga Pass and near Mount Cahuenga in the Hollywood Hills, both named after the Kizh Village. The valley derives its name from the Spanish established San Fernando Mission.

At what is now downtown Los Angeles, and noted at Olivera Street, was the major village of *Yangna*. *Yangna* is a good example to explain how each major village had a settlement pattern or service area around it; an area within which the exploitation of flora and fauna and other ceremonial activities took place (cf. King and Blackburn 1978:536). Such service areas could include other sites or hamlets that were occupied for economic or religious purposes. Therefore, each service area cold contain, for example, a number of such small habitation sites consisting of a few kizhes (lodges or houses), oak groves for the acorn crop and other plant utilization areas, quarries for chert for stone tool manufacture, cemeteries, and shrines and sacred places like springs that were associated with a guardian deity *Paavavut*.

Fernandeño Tataviam Band of Mission Indians

The Fernandeño Tataviam Band of Mission Indians is the historic tribe of the northern Los Angeles County with ancestral villages in San Fernando Valley, Santa Clarita Valley, eastern Simi Valley, and the Antelope Valley. The distinct community of the present-day Fernandeño Tataviam Band of Mission Indians (“the Tribe”) originated in the lineages, villages and cultures of the period preceding the establishment of Mission San Fernando, from which the natives received the name Fernandeño (Fernandeño Tataviam Band of Mission Indians 2019a).

Mission San Fernando was established on September 8, 1797 at the village of *Achoicominga*. The Spanish period marks the beginning of recruitment and enslavement of Indians to the San Fernando Mission.

During the 60-year-period following the establishment of the mission, the Indian population in California decreased by more than 80 percent. This was due to traumatic change to lifeways, harsh conditions, and introduced diseases.

The San Fernando Mission community of was aligned to Mission rules and goals, which were to detribalize the Indians and turn them into Spanish subjects and later into citizens under Mexican rule. However, native families, lineages, and ceremonies persisted through to the end of the mission period (Fernandeno Tataviam Band of Mission Indians 2019b).

Rogério Rocha was born in 1801 at or near San Fernando. He was trained by the Franciscan missionaries as a blacksmith (Heizer 1977; Rust 1977). By the 1860s, Rocha was the *Capitán* of the Fernandeño Tataviam people (Fernandeño Tataviam Band of Mission Indians 2019c).

For some 60 years, Rocha lived on a 10-acre plot near San Fernando. On this plot, he built an adobe house and two wood-framed buildings and two or three tule (traditional reed) structures. Rocha also had a natural spring on his property. Rocha's land encompassed what was later the northeast corner of Hubbard and Fourth Street in San Fernando (Fernandeño Tataviam Band of Mission Indians 2019c). This plot of land is two blocks northeast of the present project area.

In 1878, the white landowners of the land grant that encompassed Rocha's plot brought suit to evict him. Rocha, then over 80 years old, his wife, and three other old women were later evicted. The spring on Rocha's land was to be used to furnish water for the town lots, the proceeds of the water use were to be used to establish a theological school (Heizer 1977; Rust 1977).

Later, Rocha moved into an inaccessible ravine, known as Lopez Canyon. For the next 20 years, he and other evicted tribal members found shelter in parts of the valley that were unsuitable for development or on ranches where they worked (Fernandeño Tataviam Band of Mission Indians 2019c). In his old age, Rocha survived on the crops he was able to cultivate and with assistance from the Indian agents who offered support for him and the tribe. Rocha died on March 8, 1904 and was buried in an unmarked grave at Mission San Fernando.

Today, the Tribe consists of a voluntary coalition of those lineages bound together by a Tribal constitution. The Tribe represents the continuity of the regional pattern of politically independent lineages related through selected intermarriage and regional ceremonial participation (Fernandeño Tataviam Band of Mission Indians 2019a). This coalition consists of three principle lineages traditionally known as *Siutcabit*, *Tujubit*, and *Kavwevit*. As the lineage members were forced to speak English in the late 19th Century, they adopted the surname of their lineage leader. Today, these three lineages are known as the Ortega lineage (representing ancestor Maria Rita Alipas Ortega), the Garcia lineage (representing ancestor Josephine Leyvas Garcia), and the Ortiz lineage (representing ancestor Joseph Ortiz) (Fernandeño Tataviam Band of Mission Indians 2019a).

2.2.2.4 History

Spanish and Mexican Periods

The early history of the San Fernando Valley was characterized by Native American settlement, Spanish, and Mexican colonization during the late eighteenth century and first part of the nineteenth century, and agricultural development under U.S. governance in the late nineteenth century.

The San Fernando Valley was mentioned under various names by the Portolá and Anza expeditions (Gudde 1998). In 1769, Juan Crespí, the spiritual advisor to the Portolá expedition, referred to the San Fernando Valley as de Valle de Santa Catalina de Bonónia de los Encinos (Jorgensen 1982). The Spanish recorded the Native American name of the valley as *Achois Comihabit* (Jorgensen 1982).

In 1769, the San Fernando Valley had a native population of 3,500-5,000 people, making it one of the more densely populated in California (Jorgensen 1982).

In the 1770s, the Catholic Church and Junipero Serra, began the process of establishing a series of missions throughout Alta California, as California was then known.

Mission San Fernando Rey

The mission San Fernando Rey de España was founded on Sept. 8, 1797, and it was named in honor of Ferdinand III, king of Castile and Leon (1200-1252) (Gudde 1998:334). It was the 17th mission founded in the chain of 21 missions.

The San Fernando Rey mission (California Historical Landmark No. 157; CA-LAN-169) was sited approximately halfway between the San Buenaventura Mission in Ventura and the San Gabriel mission on the *rancho* of Francisco Reyes. Reyes had been *alcalde* (mayor) of the Pueblo of Los Angeles from 1793 to 1795 (Bearchell and Fried 1988). San Fernando Rey laid claim to its valley and several others to the north and west, covering some 130 native settlements (Roderick 2001:22).

The aims of the mission priests were to civilize the Indians, to baptize them as Christians, and to put them to work producing goods (Roderick 2001:22). Some 147 baptisms and 13 marriages took place in the first year.

The mission's main church, built between 1804 and 1806, was erected with walls five feet thick at the base tapering to three feet at the top. The nearby *convento* (monastery), at 243 feet in length, is the largest adobe structure ever built in Spanish California. The *convento* is a long, low rectangular adobe with a tiled gabled roof. The *convento* is listed on the National Register of Historic Places (Listing No. 71000157).

The *convento* provided quarters for the priests and soldiers, and included the chapel, rectory, winery, kitchen, and guest rooms (Roderick 2001:24). A small dam was constructed to store water from the nearby *cienegas* (springs), and numerous support buildings were erected to house the harvests, mission workers, and its many visitors (Bearchell and Fried 1988).

Water for the mission originated from a natural artesian well, now known as the Mission Wells and Settling Basin (now recognized as Los Angeles Historic-Cultural Monument No. 50) and owned and operated by the Los Angeles Department of Water and Power. An intake structure at the Mission Wells, made of mission bricks and floor tiles, provided the water intake for the drinking water line that ran approximately 1.5 miles from the Mission Wells to Cienega Lake and the Mission dam and then to the San Fernando Mission. Water from the dam also flowed through smaller pipelines or *zanjas* (ditches or trenches) in order to irrigate the mission's olive groves, grape vineyards, and orchards. Subsidiary pipelines ran from the dam and supplied two fountains in front of the *convento*, several circular water reservoirs, and a mill.

At the end of the 18th century, 541 Indians (neophytes) lived at San Fernando Rey and they performed the bulk of the heavy labor including making adobe bricks, planting figs, grapes, and olives, and tending the crops and livestock (Roderick 2001:22). By 1811, the population of neophytes exceeded 1,000 (Bean and Rawls 2003:30–32, 44–45; City of Los Angeles 2000:14–15; Kimbro et al. 2009:234). Once baptized, the neophytes could not leave without permission. Those who fled were hunted down by soldiers, returned to the mission, and whipped or locked in chains (Roderick 2001:22).

Mexican Period

Mexico's independence from Spain in 1821, communicated to and accepted by California in 1822, brought individuals to power who were less sympathetic to the Franciscan missions that the Spanish

government had been. The ultimate result was the "secularization" of the San Fernando and other missions in 1835, thus stripping the missions of their statuses (Roderick 2001:24).

By 1833-34, the majority of mission lands were taken from the Catholic Church and reissued to individuals who had served as either Spanish or Mexican soldiers, settlers, financiers, etc. The Mexican government hoped to initiate a pattern of settlement in Alta California by relocating populations from other Mexican settlements to recently established Alta California settlements.

The project alignment is within the Ex-Mission San Fernando Rancho, the largest Mexican-Period land grant in California. The territorial government appointed Don Pedro Lopez majordomo of the secularized Mission San Fernando lands in 1837. At that time, a thousand Native Americans continued to inhabit missions' lands and nearby foothills and mountains.

In 1845 Andrés Pico, Governor Pío Pico's brother, leased the rancho. In 1846, with the coming of the Mexican-American War, Governor Pico sold the rancho to Eugenio de Celís to raise funds for *Californio* defenses, and Andrés Pico subsequently purchased a 50 percent interest in the rancho, where he continued to reside and graze cattle (Robinson 1956:225; Roderick 2001; Hoover et al. 2002:160).

American Period

Mexico ceded California to the United States on February 2, 1848, with the signing of the Treaty of Guadalupe Hidalgo, and California became a state on September 9, 1850. Cattle, sheep, and horse ranching dominated economic activity across the ex-Mission San Fernando Rancho throughout the 1850s.

The first American settlers in the San Fernando Valley were Alexander Bell and David Alexander, who arrived in 1851. The horse path through Cahuenga pass also opened in that year, and the old El Camino Real trail west past Las Encinas was declared a public highway, Camino de las Virgenes. Butterfield Overland Mail began stage service across the Valley from Los Angeles three times a week in 1858. The stages climbed up Newhall Pass and followed a circuitous route to San Francisco via Elizabeth Lake and Fort Tejon. At the north end of the valley, Lopez Station hosted the first public school in the Valley, with classes taught for the first time in English.

After Eulogio De Celís died in 1869, his son, Eulogio F. de Celís, returned from Spain to Los Angeles. In 1874, the heirs of Eulogio de Celís sold their northern half of Rancho Ex-Mission San Fernando to northern Californians, California State Senator Charles Maclay and his partners George K. Porter, a San Francisco shoe manufacturer, and his brother Benjamin F. Porter. The Porters' land was west of present-day Sepulveda Boulevard, and the Maclay land was east of Sepulveda Boulevard.

Former California governor and railroad baron Leland Stanford was eager to extend his Southern Pacific line to new towns (Roderick 2001:34). In 1872, when Stanford learned that the northern half of the San Fernando Valley was for sale, he contacted a state senator from the San Francisco Bay area who he knew was looking to purchase land. Stanford made Senator Charles Maclay a pledge: If he would erect a town, Stanford would lay a railroad across the San Fernando Valley. Maclay, who already had founded the Bay Area town of Saratoga, vowed to name his new town's widest and longest street after his benefactor; then he traveled south to negotiate a price. He paid $117,500 for 56,000 acres, just over $2 an acre. Maclay picked a flat spot about a mile northeast of the crumbling mission to lay out his town. He considered giving it the name Pico, after the area's most famous family, but he opted for San Fernando (Roderick 2001).

Maclay founded the town of San Fernando in 1874—he sold town lots as well as agricultural land (Pitt and Pitt 1997; Roderick 2001; Bearchell and Fried 1988). Maclay recorded his map of the "City of San Fernando" at the county recorder's office in Los Angeles on September 15, 1874 (Bearchell and Fried 1988:35). In a short time, two hotels, seven saloons, stores, warehouses, and Remi Nadeau's Cerro

Gordo mule train headquarters were established (Bearchell and Fried 1988). Maclay built a two-story home for his family on the corner of Celis and Workman streets (Bearchell and Fried 1988).

In 1880, the San Fernando Valley had no streetlights, electricity, or indoor running water. A few hundred homesteaders, Native Americans, and ranch hands were scattered across the plain and in the canyons. The lone township, San Fernando, counted just 1,305 inhabitants.

The City of San Fernando, which incorporated in 1911, remained a separate city and refused annexation by Los Angeles. The city possessed its own deep-water wells, which allowed it to maintain its independence and retain a reliable source of water.

From the 1910s onward, the separate agricultural communities of the San Fernando Valley grew and merged into residential communities that were increasingly served and designed for automobile use. These communities remained largely agricultural and disparate until after World War II (Roderick 2001113). In the five years following the end of the war, the population of the San Fernando Valley more than doubled from 176,000 to 402,538 (Roderick 2001113, 123). The landscape of the San Fernando Valley changed rapidly. Residential neighborhoods replaced agricultural land, and home construction could not keep up with demand.

In addition to increased consumer demand after World War II, the country was entering the Cold War. Governments were investing hundreds of millions of dollars into research, development, and manufacture of new aircraft and aerospace technologies, such as navigation, propulsion, and missiles. The most significant postwar industrial development in the San Fernando Valley was in the aerospace and defense industries. The field was so prevalent that by the 1960s, it comprised more than half of the jobs in Los Angeles. The majority of these jobs were concentrated in the San Fernando Valley at firms such as Rocketdyne, Northrop Grumman, and Lockheed Corporation (LSA Associates et al. 2011).

The unprecedented growth of the San Fernando Valley—the population again doubled in the 1950s—caused congestion of its now outdated streets. In the late 1950s and 1960s, the construction of freeways through the San Fernando Valley helped alleviate traffic congestion. During this period, a shift toward the development of multiple-family housing resulted.

The Southern Pacific began service to San Fernando in 1874, "after Chinese track layers scribed a nearly straight line across the virgin grassland at the foot of the Verdugo Mountains" (Roderick 2001:37). The January 21, 1874 arrival of the Southern Pacific from Los Angeles allowed San Fernando to become the first town settled in the San Fernando Valley (Roderick 2001:38). Roderick (2001:37–38) stated,

> Any male adult could ride the SP [Southern Pacific] 22 miles from Los Angeles to San Fernando for half price—the railroad figured a man curious enough to visit the remote, upstart town must be a live prospect. Sales agents met every train and offered free barbeque lunches and a pitch. Town lots sold for $50 to $100 each, farmland for $5 to $40 an acre.
>
> Since at first the Southern Pacific went no farther than San Fernando, the town of San Fernando took on a roughshod character of a place at the "end of the line" (Roderick 2001:38–40)

2.3 Research Focus/Research Domains

A number of historic trends, events, industries, and people have been identified as associated with the Project APE based on the historic context outlined in Chapter 2, *Phased Identification, Evaluation, and Treatment of Site CA-LAN-2681*. A better understanding of prior disturbance within the APE is also critical to a consideration of site sensitivity, site formation, and subsequent disturbance and/or destruction of such deposits.

In addition to the industries and residences detailed in the historic context, the original site record indicates prehistoric usage of the area and subsequent historic site development and expansion. Any archaeological deposits present that retain integrity and contain associated artifacts have the potential to contribute to a better understanding of site history and can yield valuable data about trends, events, and people involved in local development. In broader terms, these research themes are:

- Prehistoric and Protohistoric site usage and cultural chronology (period of occupation);
- The influence of Spanish missionaries, Mexican ranchers, and American traders on local land use and site development;
- Urban expansion late in the nineteenth and early twentieth centuries.

According to the National Park Service, the information such deposits contain must also be shown to contain important data. To be effective, an archaeological research design should link archaeological deposits with historically documented events and processes so that significant archaeological research questions may be identified (Costello et al. 1996:52).

The research questions below are designed to evaluate the importance of archaeological discoveries made during testing and data recovery within the APE and their ability to contribute to a deeper understanding of the prehistory of the San Fernando Valley and the people who once lived and worked there.

2.3.1 Site CA-LAN-2681 Prehistoric Utilization and Its Chronological Implications

It will be critical to determine the extent and integrity of prehistoric/protohistoric deposits and to collect data suitable to explore ways in which early Native American populations adapted to their physical environments. Four aspects of prehistoric/protohistoric human adaptation include: (1) chronology; (2) technology; (3) subsistence; and (4) settlement.

The research focus for site investigation within CA-LAN-2681 is adapted from *Prehistoric Sites in the Prado Basin, California: Regional Context and Significance Evaluation* (Goldberg and Arnold 1988: Chapter 3), *Headquarters Facility Project: Archaeological Investigations at CA-LAN-1575/H* (Goldberg et al. 1999), and from the nearby *Alameda Corridor Project Treatment Plan For Historic Properties Discovered During Project Implementation* (Horne et al. 1999: Appendix C). Because the goal of the current investigation at CA-LAN-2681 is to identify and evaluate all components of the site, both prehistoric and historic-era archaeological remains and deposits, if present, the research questions posed below, by necessity, are generalized. Questions as outlined below will be refined as evidence becomes available for prehistoric, protohistoric and historic site usage during testing. Any new evidence collected will direct subsequent data recovery efforts.

2.3.1.1 Chronology

Prehistoric archaeological assemblages are best understood in relation to the particular time period(s) and cultural context in which they formed.

- **Question**: Is prehistoric/protohistoric occupation of the region represented in the archaeological assemblages recovered from the APE? Are multiple cultural sequences represented by these cultural deposits?
- **Question:** Do the assemblages reflect established cultural sequences for the region?
- **Data Needs**: Datable materials and diagnostic artifacts are needed (e.g., prehistoric features containing high status items; features yielding temporally diagnostic lithic tool, beads, ceramics,

milling implements, etc.). Datable materials might include organic residues such as charred plant remains, shell, bone, etc. The presence of obsidian tools would provide source materials for obsidian hydration studies.

2.3.1.2 Technology

Technology offers one of the best avenues to understand the prehistory of southern California. Not only is technology one of the most direct links between populations and their environment, reflecting systems for extracting and processing resources, but technology also may reflect exchange of materials and ideas among geographically diverse populations (Goldberg and Arnold 1988:56–57). This topic is particularly worthy of study because the physical remains of technologies are generally the most durable manifestations of human habitation. Within the topic of prehistoric and protohistoric technology, there are a number of research questions that may be pursued at the testing level and expanded upon during data recovery if archaeological remains are identified in the Project APE and those deposits retain integrity:

- **Question:** What ground stone and flaked stone tool technologies were used on site and what time period(s) might they reflect?
- **Question:** Are there temporally diagnostic artifacts (projectile points, steatite artifacts, cogged stones, discoidals, stone balls, or ornamental items such as beads and pendants) present in the recovered assemblage(s) that may be useful for chronological placement of the site/feature?
- **Question**: Are ground stone and flaked stone tool technologies represented in the assemblage that can reveal information about local technologies, cultural interaction, or population migration/displacement?
- **Data Needs**: Prehistoric artifacts or features (e.g., temporally diagnostic lithic tools, a diverse range of artifact tools, milling implements, stone or ceramic bowls, etc.). Lithic debitage and tools identifiable to local and non-local sources.

2.3.1.3 Subsistence

It is in the realm of subsistence procurement that a society articulates most directly and effectively interacts with the environment (Goldberg and Arnold 1988:62). In order to understand exploitation of available resources by the prehistoric/protohistoric populations of the study area, it is essential to evaluate their subsistence strategies and changes in those strategies over time. As detailed in Section 2.2.2, *Prehistory and Ethnography*, the following traditions and/or cultural phases have been proposed for the Project area. What is known about subsistence strategies during each phase is outlined below.

- 12,000 B.P. to 7500 B.P. (Terminal Pleistocene/Early Holocene Period)
- Subsistence based on nomadic, highly mobile large-game hunters augmented by foraging; population was largely mobile, limiting sites to seasonal camps and special collection areas.
- 7500 B.P. to 5000 B.P. (Middle Holocene)
- Greater emphasis on seed gathering augmented by hunting; increased sedentism lead to addition of base camps to seasonal camps and collection areas settlement strategy.
- 5000 B.P. to 1500 B.P. (Middle to Late Holocene)
- Increase in sociopolitical complexity of society, efficiency in subsistence, increased diversification of resource procurement resulting in larger permanent villages.

- Post 1500 B.P. to Spanish Contact (late Holocene/Late Prehistoric Horizon)
  Reliance on bow and arrow, fishing, and milling technology; elaborate mortuary customs; extended subsistence tool kits, extensive use of asphaltum, and establishment of large village complexes.
- **Question:** Are floral and faunal remains preserved in archaeological deposits with which to evaluate the diets of Native peoples through different periods of regional prehistory/protohistory?
- **Question:** What resources are being exploited? And are they available locally? How did they change over time?
- **Question:** What specialized tools would be needed to exploit the local environment/resources? Are changes in tool types reflected in local assemblages? And do tool types vary over time?
- **Data Needs**: Subsistence-related tools, artifacts, and features (e.g., temporally and functionally diagnostic tools); subsistence remains like flora and fauna, and C^{14} suitable for radiocarbon dating.

2.3.1.4 Settlement Patterns

Settlement patterning, defined as the distribution of human activities (i.e., sites) in relation to various geographic variables, is closely linked to the study of subsistence patterns and chronology as well as population movements, social interactions, and historical site usage. The ultimate goals in settlement pattern analysis are to describe site distribution, define the determinants of settlement, and explain the patterns that are presumed to be causally related to economic and social factors (Goldberg and Arnold 1988:67; Horne et al. 1999: Appendix C). Variation in settlement strategy is outlined above under subsistence.

While the Project area represents just one potential settlement location, its contribution to overall settlement modeling in the greater San Fernando Valley area is important. Because urban expansion occurred rapidly, little is known about localized prehistoric and protohistoric settlement strategies among Native people. However, ethnographical data provide some insight.

If present, prehistoric archaeological deposits offer the opportunity to explore local settlement preferences and test the assumptions outlined by other researchers.

- **Question**: If present, what site types are represented in this area and how do they relate to the exploitation of resources found in this portion of the San Fernando Valley?
- **Question**: Is it possible to identify what ethnic group(s) occupied the area? Who was the dominant local group and is there evidence of trade with non-local groups?
- **Question**: If occupied prehistorically, was the site utilized permanently, on a seasonal basis, or as a meeting/trading location?
- **Question:** How has long-term, intensive, historical land use of the Project area affected (obscured or reflect) prehistoric/protohistoric settlement patterns?
- **Data Needs**: In situ prehistoric/protohistoric deposits, features, or artifacts linked with specific geographic or topographic features. Temporally and functionally diagnostic artifacts reflecting mortuary and cultural identify (e.g., tool, beads, ceramics, milling implements); datable deposits (diagnostic artifacts or datable C^{14}). Artifacts representing cultural affiliation (projectile points, beads, ceramics, raw materials attributable to specific groups or specific regions of the country).

2.3.2 Site CA-LAN-2681 Historic-Period Research Themes - which include the influence of Spanish missionaries, Mexican ranchers, and American traders on local land use and site development

The research themes and questions presented below have been developed from the Historic Context presented in Section 2.2.2.3 and from historical and research designs developed for historic-period resources in California (ASM Affiliates 2010, Caltrans 2007) and adapted from *SDG&E Sunrise Historic Properties Management* (ASM Affiliates, Inc. 2010). The historic materials observed at CA-LAN-2681 are not considered intact and exists as disparate materials of refuse scatter adjacent to the existing rail alignment, therefore, the research questions will mainly be focused on these types of refuse scatter resources.

The historic context for the Project outlines the historical trends, events, industries, and people known to have worked and settled in the Project APE, which includes the Mission, related properties, rural to commercial development and rail infrastructure in the larger APE vicinity. The research domains offered below will be explored more thoroughly in the event that deposits are encountered and additional archival, and evaluative work needs to be conducted.

2.3.2.1 Refuse Scatters

The earliest forms of refuse scatters accumulated according to households and were the result of individuals, institutions and families disposing of their own trash. Prior to the automobile, trash was disposed of on the householder's property, usually at some distance from the main residence or on an adjacent vacant piece of property. The methods for disposal included burying in a pit or multiple pits, co-opting old privy pits, and then covering or burning in place.

Before the automobile and in more rural settings, wagons were used to transport debris to a nearby vacant property. As transportation infrastructure developed and road and automobiles were in use, trash could be transported further away to more rural vacant properties. Even though greater distances were traveled, less work was required to dump debris on the surface, than digging, burning and burying in multiple pits.

Historic archaeological sites are generally evaluated for their potential to address important regional research issues. Trash deposits associated with a known household have understandably greater research potential than those with no associated historical context or household.

The research questions address four main research domains: consumer behavior, chronology, technology, subsistence and settlement organization, and structure and integrity of the cultural deposits.

2.3.2.2 Consumer Behavior/Preference

Consumer behavior analysis, one of the most demonstrative data sources available to historical archaeologists, is based on material remains retrieved from primary and secondary refuse deposits. Artifacts, collected from the proper context, can reflect daily patterns of work relations; domestic and leisure activities; diet, status, ethnic, gender, and personal preferences; and aspects of social interaction and expression. The material debris recovered from domestic-related deposits might include food preparation and consumption debris (ceramics, bottles, food waste, eating and cooking utensils), household goods (broken, spent, or unwanted household refuse), and personal objects (loose or discarded personal items, remnants of clothing, toys, recreational items), to name a few. Alternatively, commercial deposits yield a different variety and composition of waste debris. While personal objects

and clothing may still be represented, this debris type will be outweighed by the sheer quantity of the commercial refuse (waste packaging material, discarded paper work, unmarketable or broken items reflective of the type of commercial operation). Industrial sites also represent broad patterns of community consumption, such as the exploitation of natural or fabricated resources employed in the manufacture of other products or goods. Again workers' daily contribution to the waste stream would be limited (broken, lost, or discarded items) while waste by-products (operational materials, business-related records, machinery maintenance and repair items, packaging and distribution waste) would far exceed the volume of personal items.

- **Question:** How do features, deposits, or artifacts reflect consumer practices and disposal behavior of a household or business at a specific period of time? How does that behavior change over time? What do they tell us about social, occupational, economic, and/or ethnic behavior of the site occupants?
- **Question:** What do features, deposits, or artifacts add to our knowledge of the availability of various classes of consumer goods at a specific place and point in time? How does this reflect changes in consumer preferences and how do manufacturers respond to those preferences?
- **Question:** How do features, deposits, or artifacts reflect adaptive behavior in urban settings associated with the acquisition and consumption of foodstuffs, other commodities, or the organization and use of space?
- **Question 4.** How do features, deposits, or artifacts, in combination with other classes of data, contribute to an understanding of landscape alteration, water and waste management, outbuilding construction, and dwelling renovation as these relate to changes in household consumption and over time?
- **Data Needs:** Features and/or layer interfaces. Functionally and temporally diagnostic artifacts (ceramic and glass vessel). Explicit social, economic, and status artifacts. Clear association with specific household/business. Economic scaling and ranking indications (e.g., floral and faunal remains; high status items). Household demography: size, composition, life-course. Documentary evidence (e.g., mail-order catalogs, advertisements, commercial inventories, merchants' and householders' accounts).

2.3.2.3 Chronology

- **Question**: Can the chronological placement of trash deposit be determined?
- **Question:** What kinds of chronometric data are available? How well do the different kinds of chronometric data correlate?
- **Question:** Are there data indicating the presence of multiple dumping episodes in the site area?
- **Data Needs**: Date ranges for individual historic deposits are best derived from glass maker's marks, maker's marks on ceramics, technological and diagnostic features of both cans, bottles and chronological markers such as glass color. These kinds of chronological data generally provide a narrow data range for the manufacture of the artifact. A date range for the deposition requires correlation of all of the dates from individual artifacts and posited that the date of deposition is sometime after the latest manufacture date. There is an assumed time lag between date of manufacture and discard depending on the type and life cycle of the specific artifact. Where multiple dumping episodes are identified, a date range of deposition is estimated for each deposit.

2.3.2.4 Technology, Subsistence and Settlement Organization

- **Question**: What is the nature of refuse at the historic site? Is it possible to determine the original activities that resulted in the historic deposit?
- **Question:** For trash deposits is it possible to determine the origin of the deposits?
- **Question:** Is there any evidence present of archaeological features related to the nearby Mission Wells and Settling Basin (Los Angeles Historic-Cultural Monument No. 50)? The Mission Wells and Settling Basin is located approximately 0.3 mile to the northwest of the project site. Such evidence could consist of adobe bricks, floor tiles, or other architectural features. *Zanjas*, or agricultural ditches, from the historical era may be present in the general area; however, none have been identified to date.
- **Data Needs**: It needs to be determined whether the refuse was associated with a direct household deposit, subsequent vacant area deposition or isolated dumping episode in a vacant lot/parcel or transportation corridor. Cross-matching artifacts from an adjacent, known household could be useful for associating a deposit or portion of a deposit with a nearby household refuse deposits, but is often difficult, if the adjacent data is unavailable.

2.3.2.5 Structure and Integrity of Cultural Deposits

- **Question**: Do inclusive chronometric data from the sites permit the identification and definition of temporally and/or spatially discrete historic dumps?
- **Question:** Are the definitions of discrete components supported by multiple, independent chronological controls and if so how similar are their age estimates?
- **Question:** Is there substantial evidence of occupational 'overprinting'? How has this affected the temporal integrity of the refuse deposits?
- **Data Needs**: Need to identify and determine if any mixing of historic and modern deposits have occurred. Spatial analysis and identification of surface versus buried deposits will assist with differentiation of historic and later deposits. Identification of level of previous disturbance needs to be assessed. Has the utility and rail development resulted in the burial and mixing of previous surface historic deposits? Or has the excavation resulting in the mixing of discrete deposits resulting in reduced research potential.

Chapter 3
Monitoring and Discovery Plan

3.1 Introduction

The archaeological monitoring and discovery protocol section of this document presents the purpose, methods and protocol for the construction monitoring, discovery, treatment, evaluation and data recovery procedures for the two previously recorded archaeological resources located in the Projects' APE. Archaeological monitoring is proposed for all site areas of CA-LAN-1124 and CA-LAN-2681 which are located within the Project's APE and have not been demonstrated through previous investigations to consist entirely of artificial fill or contain deposits that have reduced archaeological sensitivity (e.g., disturbed sediments and deposits that pre-date human occupation in the region) (Figures 3-1 and 3-2). CA-LAN-1124 has not been evaluated for the NRHP and even though the features that constitute the original site deposits do not extend into the current APE, the site vicinity is considered archaeologically sensitive. Site CA-LAN-2681 has been determined not eligible for NRHP listing, but still maintains elevated sensitivity for undisturbed and buried archaeological deposits.

3.1.1 Proposed Construction Activities

Construction is not anticipated to begin on the Project until 2022. Typical construction equipment used for the Project includes, but is not limited to, cranes, pile drivers, drill rigs, loaders, excavators, backhoes, support vehicles, concrete trucks, water trucks, and trucks for material loading and off-loading.

The draft Project design includes the following ground disturbing activities to be conducted within the boundary of site CA-LAN-2681 and CA-LAN-1124:

- Grading and minimal excavation for new track alignments (Both sites).
- Grading and minimal excavation for TPSS foundation and utility connections (CA-LAN-1124).
- Excavation for the removal of existing rail facilities, including culverts and drainage infrastructure (Both sites).
- Excavation for the removal and relocation of existing Pacific Oil Pipeline. The current alignment is located on the western ROW edge at a depth of 10 to 15 feet below surface (CA-LAN-2681).
- Excavation for installation of proposed pedestrian underpass structure which could extend to a depth of 15 to 17 feet below surface (CA-LAN-2681).
- Excavation and drilling for OCS poles to be located at regular intervals between the double track prisms. Planned dimensions for the OCS excavations are 3 feet wide by 10 feet deep (CA-LAN-2681).
- Excavation for a retaining wall (CA-LAN-2681).

3.1.2 Archaeological Sensitivity

The previously recorded site area located within the APE for CA-LA-1124 has reduced sensitivity as the result of previous commercial development of site areas and the extensive amount of subsurface disturbance, which has occurred in the existing rail ROW due to rail operations and utility installations. No previously recorded features associated with the site are located in the APE or existing rail ROW and the majority of the work planned in the site areas in the APE will be grading of surface deposits or

excavation of existing disturbed utility alignments to relocate utilities which conflict with proposed Project elements.

The previously recorded site area (CA-LAN-2681) has elevated sensitivity due the documentation of prehistoric lithic artifacts, even though they were located in a disturbed context. The original site form (Knight 2001), survey report (Berryman and Woodman 2001) and subsequent SHPO review (Polaco 2020) described the site deposits as disturbed, however, it is possible that other deposits across the site could be less disturbed and potentially encountered during construction. The APE in the site vicinity has undergone extensive development over the past century due to rail development and maintenance as well as industrial development adjacent to the rail alignment and then surrounding urban development in the San Fernando/Sylmar vicinity.

3.1.3 Previous Disturbances

The APE and site areas of both CA-LAN-1124 and CA-LAN-2681 have undergone intense development and disturbance over the past century. The rail ROW has been graded, excavated to unknown depths, and rail lines and facilities installed on numerous occasions, which caused disturbance to the surface and subsurface deposits in the APE. Another extensive disturbance in the APE and ROW was caused by the excavation for buried utilities. Four or five separate utilities currently occupy the APE alignment.

The features recorded at CA-LAN-1124 are located outside and west of the current APE and rail ROW. The features are portions of foundation elements related to the previous extant rail turntable and elements, which were present on the surface of the site parcel in 1982 prior to the construction of new commercial buildings, parking lots, and infrastructure.

As noted previously, site CA-LAN-2681 was recording during monitoring for the installation of a large oil pipeline alignment. The artifacts recorded were described as being situated in a disturbed context, likely indicating disturbances in the APE in this area prior to the excavation for the pipeline.

3.2 Monitoring Procedures

3.2.1 Personnel and Organization

Monitoring for both prehistoric and historic period archaeological materials and human remains will be conducted by archaeological monitors and consulting Native American tribes. At this time, two tribes, the Gabrieleno Band of Mission Indians–Kizh Nation and the Fernandeño-Tataviam Band of Mission Indians have responded with interest concerning the Project and will be contacted concerning monitoring interest for the future when construction is planned. The archaeological monitors and Native American monitors will be contracted by LACMTA's archaeological consultant to provide monitoring during ground disturbing activities during the construction phase of the Project and must abide by this Plan.

Table 3-1 provides the names, titles, and contact information of individuals, as presently known, who are involved in the field monitoring tasks and participate in decision-making actions.

LACMTA is responsible for managing construction monitoring operations. LACMTA will provide FTA with weekly and monthly updates of the progress of the construction monitoring. FTA, as the federal lead agency responsible for Section 106 compliance, provides input regarding the process at their discretion.

50 25 0 Feet
15 7.5 0 Meters

N

1:900

Source: ESRI Imagery, 2019; STV, 2019.

APE
Archaeological Site - CA-LAN-1124
Monitoring Area
Proposed ESFV Project Component
Proposed ESFV Rail Alignment
Existing Utilities - Potential for Relocation
Rail Right-of-Way

Figure 3-1. Site CA-LAN 1124 Monitoring Area
East San Fernando Valley Transit Corridor Project

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50 25 0 Feet
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1:1,100

Source: ESRI Imagery, 2019; STV, 2019.

- APE
- Archaeological Site - CA-LAN-2681
- Monitoring Area
- Proposed ESFV Project Component
- Proposed ESFV Rail Alignment
- Existing Oil Pipeline Alignment (To to relocated within the ROW)
- Rail Right-of-Way

Figure 3-2. Site CA-LAN-2681 Monitoriing Area
East San Fernando Valley Transit Corridor Project

Table 3-1. Monitoring Personnel

Title/Role	Name	Organization
Senior Environmental Specialist	TBD	LACMTA Environmental Compliance and Sustainability
Transportation Program Specialist	TBD	Federal Transit Administration
Environmental Protection Specialist (If needed)	TBD	Federal Transit Administration
Project Manager	TBD	LACMTA
LACMTA Construction Manager	TBD	LACMTA
LACMTA Environmental Specialist	TBD	LACMTA
Contractor Project Foreman	TBD	TBD
Project Archaeologist and Monitoring Coordinator	TBD	LACMTA's Archaeological Consultant Team
Lead Archaeological Monitor	TBD	LACMTA's Archaeological Consultant Team
Native American Monitor	TBD	Gabrieleno Band of Mission Indians-Kizh Nation
Native American Monitor	TBD	Fernandeño Tataviam Band of Mission Indians

Ground disturbing activities conducted in the identified monitoring areas will be monitored by an archaeological and Native American monitor. The Contractor Project Superintendent or the LACMTA Environmental Specialist will communicate construction schedule and other information to the Project Monitoring Coordinator, on Fridays for the following work week. The same day (Fridays) the Project Monitoring Coordinator will then provide this information to the archaeological monitors and the Native American monitors, and will coordinate activities with the monitors as needed. The Native American tribes that monitor construction activities will do so on an alternating weekly rotation basis. It is the responsibility of the monitors in the field to proactively communicate with the Project Monitoring Coordinator, LACMTA Environmental Compliance and Sustainability, the LACMTA Construction Manager; the Project Archaeologist, and contractor management and staff.

The archaeological and Native American monitors are also required to complete the construction contractor's Project-specific training. Archaeological monitors are expected to be knowledgeable of artifact identification for materials such as faunal bone, prehistoric and historic period artifacts and features sufficient to avoid repeated halts of construction for false identification of geological materials as artifacts or features. Archaeological and Native American monitors must report each morning to the Project Monitoring Coordinator and sign in at the construction trailer. Archaeological and Native American monitors will prepare daily written monitoring logs and photo logs of their activities and observations. All archaeological and Native American monitors will also participate in regularly scheduled Project safety meetings.

3.2.2 Monitoring Field Methods

Within the designated monitoring areas, an Archaeological monitor and a Native American monitor will examine all sediments disturbed during earth moving activities, including geotechnical drilling and environmental borings, if being conducted, prior to construction. Construction related ground disturbance includes grading, excavation, trenching, and drilling. Table 3-2 indicates actions that may occur during the monitoring process, and persons responsible for providing information, decisions, and oversight. The table clearly illustrates in detail the specific roles and responsibilities of personnel during the monitoring process.

Table 3-2. Monitoring Actions

Monitoring Activity	Responsible Individual	LACMTA Oversight	Subsequent Actions*
Inform Monitors of Schedule	Project Monitoring Coordinator	LACMTA Construction Manager	Transmit schedule to archaeological monitors, Native American Monitors on Fridays, prior to start of construction on Mondays. Schedule is transmitted by phone call, email and hard copy if needed.
Conduct Monitoring	Archaeological Monitor, Native American Monitor	LACMTA Environmental Specialist	Complete daily Monitoring and Photo log, transmit to Project Monitoring Coordinator
Discovery of isolated find	Archaeological Monitor	LACMTA Construction Manager	Archaeological monitor temporarily halts construction in 50-foot radius for expedited documentation. Documents item via photo, GPS, and records descriptive information in daily monitoring log
Request by Monitor to screen fill sample	Archaeological Monitor, Native American Monitor, Project Monitoring Coordinator, Project Archaeologist	LACMTA Construction Manager	Archaeological or Native American Monitor screens sample. Depending on results, Project Monitoring Coordinator or Project Archaeologist may be contacted.
Discovery of Human Remains	Archaeological Monitor, Native American Monitor, Project Monitoring Coordinator, Project Archaeologist	LACMTA Construction Manager, LACMTA Environmental Specialist	Archaeological monitor halts construction in 50-foot radius around discovery, contacts LACMTA Project Manager, LACMTA Environmental Specialist, Project Archaeologist; LACMTA Environmental Specialist contacts County Coroner. LACMTA Environmental Specialist contacts FTA on day of discovery. FTA will notify SHPO and Consulting Parties within 48 hours of discovery.
Treatment of Native American Human Remains	LACMTA, Most Likely Descendant (MLD)	LACMTA Project Manager, LACMTA Environmental Specialist	Treat in accordance with PRC Section 5097.98(a)-(d). Plan Treatment of Human Remains and obtain FTA approval. Temporarily store remains and transfer to MLD for final disposition. Treatment and temporary storage location will be identified in consultation with the MLD.
Discovery, Evaluation and Treatment of Features	Archaeological Monitor, Project Monitoring Coordinator, Project Archeologist	LACMTA Environmental Specialist, LACMTA Construction Manager	Archaeological monitor halts construction in 50-foot radius around discovery, contacts LACMTA Project Manager, LACMTA Environmental Specialist, Project Archaeologist and follows Section 2.3.2 of this plan. LACMTA Environmental Specialist contacts FTA on day of discovery. FTA will notify SHPO and Consulting Parties within 48 hours of discovery. Notification to consist of: Description of the nature and location of the find; Action(s) taken to protect the find; National Register status; Avoidance or minimization efforts, if feasible; and/or Measures for resolving adverse effects if property cannot be avoided.
Disputes	FTA Project Manager	LACMTA Environmental Specialist	FTA notifies other parties, works toward resolution with the disputing party. FTA produces a written response outlining the dispute and the resolution of the dispute.

Final Monitoring Report	Project Archaeologist	LACMTA Environmental Specialist	Draft Report to LACMTA Environmental Specialist. LACMTA Environmental Specialist transmits to FTA. FTA circulates to Consulting Parties for review and comment; The review period is 30 calendar days in length. FTA considers comments, prepares revised Final Report, and submits to SHPO for 30-day review period. Upon SHPO concurrence FTA distributes final report to consulting and interested parties. LACMTA submits a copy to the South Central Coastal Information Center.

3.2.2.1 Monitoring

Standard methods of excavation such as grading and trenching will be monitored by observation of the excavations as they occur. LACMTA determines safety procedures during construction. Archaeological and Native American monitors, as well as the Project Monitoring Coordinator and the Project Archaeologist when they are on site, must follow these safety procedures.

Drilling of Project features such as OCS result in earthen materials being delivered to the ground surface as loosened spoils. Materials to be examined by the Archaeological and Native American monitors are spoils removed from the drill holes while the drilling occurs. The monitors must be provided a safe location and opportunity to view spoils as they are being stored prior to being hauled away from the work area. Access of the monitors to the spoils material may be limited by safety concerns or by hazardous materials contamination.

If requested by an Archaeological or Native American monitor, opportunities will be provided for the monitor, as part of their daily shift activities, to screen or rake spoils to determine if the spoils contain cultural materials. The area in which this activity may take place will be coordinated with the LACMTA Construction Manager and if needed, the Project Monitoring Coordinator and Project Archaeologist.

Information from Site CA-LAN-2680 indicates that the site has the potential to be less disturbed below 4-feet from the existing ground surface. As construction activities approach this depth, monitors need to communicate with construction operators and supervisors to proceed more carefully with shallower excavation lifts to allow for archaeological monitors to observe the deposits, whether archaeological materials are present and to what extent they are intact and unaffected by previous construction and development of the vicinity. Due to the developed nature of the rail alignment and site vicinity, modern infrastructure (including utility alignments) may be encountered during monitoring and if encountered, will be noted on monitoring logs. Any monitoring disputes will be addressed by the LACMTA Construction Manager, the LACMTA Environmental Specialist, and coordinated with the FTA Project Manager per the procedures outlined in Section 3.2.2.5 *Disputes* below. FTA will make all final monitoring dispute resolution decisions.

3.2.2.2 Halt of Construction

Archaeological monitors are empowered to briefly halt construction if a discovery is made during standard excavation, such as grading and trenching, in the area of that discovery and a 50-foot buffer zone. If a Native American monitor wishes to halt construction, the monitor will consult with the Archaeological monitor, who may then briefly halt construction. A request to halt activities by the Archaeological monitor should have no effect on ground disturbing activities outside the 50-foor buffer zone, however, spoil piles may not be removed until the monitor can examine them.

3.2.2.3 Isolated Finds

All artifacts observed and recorded during archaeological monitoring of CA-LAN-2681 will be recorded as part of the site. Concentrations of artifacts and specific structural items could be recorded as features within the site. Sparsely distributed artifacts will be recorded as isolated finds. For this Project, isolated finds are less than three artifacts (where any artifact broken into pieces is counted as a single item) within a 25-square-meter area, redeposited material without human remains, and artifact scatters without temporally diagnostic items/materials that can be dated through radiometric techniques.

If an Archaeological or Native American monitor observes an isolated find, the Archaeological monitor will temporarily halt construction in order to document the find. Documentation will be completed by collecting a GPS point, photography, and recording information onto the daily monitoring log. All isolated prehistoric artifacts will be collected. Diagnostic historic-era items will be collected. Once an isolated item is documented, construction may resume.

All other observations of archaeological artifacts that do not meet the definition of an isolated find, and all observations of archaeological features, will follow the process to address new discoveries of ,cultural resources, described below under the “Unanticipated Discoveries” section.

3.2.2.4 Non-Compliance

Any incident of non-compliance with monitoring procedures by construction personnel, such as continuing work when requested to halt, will be immediately reported to the LACMTA Construction Manager and the LACMTA Environmental Specialist. LACMTA and FTA will determine with the Consulting Parties if any further actions regarding non-compliance are required.

3.2.2.5 Disputes

The Archaeological and Native American monitors or construction personnel shall not unilaterally disregard the decision of LACMTA Construction Manager or LACMTA Project Supervisor. If an Archaeological or Native American monitor objects to a decision made by the LACMTA Construction Manager or Project archaeologist, the matter will be brought to the LACMTA Environmental Specialist who will notify FTA. FTA and LACMTA will discuss the issue with the disputing party as well as SHPO or other Consulting Parties, as appropriate. FTA will make final decisions about all dispute resolutions. FTA will prepare a report outlining the dispute and resolution of the dispute. After resolution of the dispute is completed, failure of an Archaeological or Native American monitor or other personnel to abide by the decision of the LACMTA Construction Manager or LACMTA Senior Environmental Specialist and FTA may be grounds for removal and replacement. Removal and replacement actions shall be at the discretion of LACMTA and the FTA, with final personnel replacement actions directed by FTA.

3.2.3 Documentation

3.2.3.1 Daily Monitoring Logs and Weekly/Monthly Reports

Each Archaeological and Native American monitor must complete a Daily Monitoring Log form, documenting the location of monitoring activities throughout the day and the type, location of, and any action taken in regard to identified cultural resources (e.g., temporary halt of work, etc.). The monitoring forms should also document any incidents of non-compliance. Reports of non-compliance will identify the responsible party or parties, indicate to whom the incident was reported, and describe resolution of the situation, if any.

A brief description of any identified cultural resources shall be included in the Daily Monitoring Log, as well as a description of contacts made and actions taken. Photographs of activities and resources may be taken where appropriate. The Daily Monitoring Logs will be submitted to the Project Monitoring Coordinator within 24 hours, and these documents will be maintained in secure Project files and as PDF scans. Copies of monitoring logs are to be submitted weekly to LACMTA.

The Daily Monitoring Logs are the basis for weekly and monthly cultural resource monitoring progress reports submitted by the Project archaeologist to LACMTA. Copies of the Daily Monitoring Logs will be included as an attachment to the weekly report. The monthly reports will summarize the monitoring activities of the previous period, discoveries made and actions taken. Any non-compliance issues shall be discussed and, resolutions presented. LACMTA will provide copies of the weekly and monthly reports to FTA.

3.2.3.2 Site Records

All cultural resources discovered during monitoring shall be documented as part of the California DPR Form 523 that will be prepared as needed for sites CA-LAN-2681 and CA-LAN1124. Additional forms within the DPR 523 series shall be completed as necessary. Photographic documentation of the cultural resources discovered, as well as their context, shall take place. Documentation will strive to combine discoveries as much as possible and to place discovered materials into the context of each site, if appropriate, rather than create numerous site update forms. This DPR 523 form will be completed as part of the final monitoring report and submitted to the SCCIC.

3.2.3.3 Final Report

At the conclusion of all Project ground disturbing activities within the identified monitoring areas, Archaeological and Native American monitoring will cease. Within 3 months, the Project Archaeologist will prepare a Cultural Resources Monitoring Report, which will be submitted to LACMTA and FTA. The Cultural Resources Monitoring Report (Monitoring Report) will be based on monitoring logs and weekly monthly reports, and will summarize all monitoring efforts within the APE over the course of the Project. The Monitoring Report will include relevant regulatory background, Project description, and monitoring activities performed. Issues of non-compliance dispute and their resolutions will also be described. The Monitoring Report will follow the Secretary of the Interior's Standards for Archaeological Documentation (National Park Service 1983) and will be consistent with Archaeological Resources Management Reports: Recommended Contents and Format Guidelines (California Office of Historic Preservation 1990).

Review of the Monitoring Report will be conducted by FTA and LACMTA. A final version of this Monitoring Report will be provided to LACMTA, FTA, Consulting Parties, and the SCCIC for its permanent records. A version of the Monitoring Report, with any confidential information removed, will be prepared for access by the general public and provided to LACMTA. The public version copy of the Monitoring Report will be permanently retained by the LACMTA library.

3.3 Unanticipated Discoveries

3.3.1 Discovered Cultural Materials

If an archaeological monitor identifies cultural materials during construction monitoring, or if buried cultural materials are encountered in areas not actively being monitored during construction, the Contractor Project Foreman will halt construction in a 50-foot radius around the discovery and will immediately contact the LACMTA Project Manager, LACMTA Environmental Specialist, and Project

Archaeologist. The LACMTA Environmental Specialist will contact the FTA Project Manager on the day of discovery. The LACMTA Construction Manager will halt all construction work involving ground disturbance in the area of the discovery and surrounding 50-foot buffer around the area where resources might reasonably be expected to be discovered and will establish an Environmentally Sensitive Area until necessary cultural resources fieldwork is completed. Construction work, including ground disturbance activities, may continue outside of this area in accordance with this Plan.

For any discovery of an archaeological feature, regardless of eligibility, the LACMTA Environmental Specialist will notify FTA on the day of discovery, and FTA will notify SHPO and all other Consulting Parties within 48 hours of the discovery. SHPO and Consulting Parties have 48 hours to comment on the eligibility determination and proposed treatment of any unanticipated resource that is assumed or determined to be eligible.

The procedures described in this plan will be adhered to if archaeological discoveries are made during construction monitoring for the Project. The Project Archaeologist will make a preliminary assessment of significance and eligibility. The preliminary assessment will be submitted to the LACMTA Environmental Specialist and FTA. If the assessment recommendation indicates that the resource is not significant, FTA will make a determination of "not eligible" in consultation with LACMTA, FTA, SHPO, and other Consulting Parties. Notification procedures will follow Table 3-2 of this Plan.

If the assessment indicates that the resource is significant but can be avoided by Project construction activities, FTA will assume eligibility to the NRHP and avoidance will be recommended in consultation with LACMTA, FTA, SHPO, and other Consulting Parties as outlined in Table 3-2 of this Plan.

3.3.2 Cultural Materials Awareness and Sensitivity Training

Prior to initiating ground-disturbing activities, all construction workers and supervisory personnel engaged in ground-disturbing activities shall complete a Cultural Materials Awareness and Sensitivity Training. The training will be conducted by a qualified archaeologist. The training will also provide an overview of archaeological resources that may be potentially found within the APE and visual representations of artifact types that may be found. Each worker will learn the proper procedures to follow in the event cultural resources or human remains are uncovered during ground-disturbing activities. The training also will be required of any personnel newly assigned to work on the project through-out ground disturbing activities. Documentation of attendance and completion of the training will be obtained and kept for LACMTA and FTA records.

3.3.3 Identification, Evaluation and Treatment of NRHP-Eligible Features

The following procedures will be followed if FTA determines that the Project will affect a previously unidentified NRHP-eligible feature of CA-LAN-2681 or CA-LAN-1124. The initial discovery procedures and contacts will occur, the find will be secured and the deposits will be assessed for integrity and potential for NRHP-eligibility. The additional archaeological investigations required to properly identify the spatial extents of any buried features and deposits will be conducted through close monitoring of construction excavation through controlled shallow removals for the purposes of reducing risk of disturbance and increasing efficiency and extents of discovery after a visual identified occurs. Per the previous site information, it is anticipated that the vicinity of site CA-LAN-2681 is less disturbed below 4 feet from the existing ground surface. Therefore, monitoring and evaluative excavations at or near this depth needs to take the 4-foot depth into consideration. Once a feature, deposit, or feature vicinity is exposed, then archaeological excavation units will be used to expose and evaluate the feature while work occurs elsewhere.

Units of excavation to be used during testing will include, but may not be limited to, 1 by 2 square meters, 1 by 1 square meters, 1 by 0.50 square meters, or 50 by 50 square centimeters. Each excavation unit will be dug in arbitrary 10 centimeter levels and documented on standard test unit forms. Sediments will be screened through wire mesh ranging from ¼ to 1/8- inch, depending on professional judgement. As soon as it is determined that a potential intact archaeological deposit is present and treatment is necessary, testing will cease and recommendations will be made to FTA and LACMTA to proceed with consultation.

3.3.3.1 Framework for Evaluation

Recommendations for further excavation will focus on those archaeological deposits (prehistoric or historical) considered to have data potential to contribute to broader patterns in prehistory or history. All discovered archaeological deposits will be evaluated according to NRHP/CRHR criteria (36 Code of Federal Regulations [CFR] 60.4). To make this determination in the field several values will be considered.

To be considered significant, features or deposits must contain a sufficient quantity and variety of artifacts and possess integrity and demonstrable historical association. The values of quantity, integrity, variety, and association are described below. In assessing prehistoric remains, the first three values are relevant. In addition, the presences of clearly prehistoric artifacts (flaked stone debris, tools, pottery, human remains) will qualify the deposits for further investigation and recommendations will be made.

Quantity refers to the absolute number and frequency of artifacts within a deposit. Sufficient numbers of artifacts are needed to yield valid interpretations of the behaviors they represent. The actual quantity is not a set variable because the overall quantity will vary depending on the date of the deposit, the availability of consumer goods, and the social mechanisms influencing reuse and disposal.

Variety refers to the diversity of artifact classes within a deposit. A lack of variety does not necessarily mean a deposit is not significant. A feature containing a singular deposit of unusual artifacts or unique but uniform information on underrepresented social groups can make a significant contribution to an understanding of history.

Integrity not only refers to a physically intact deposit (i.e., with undisturbed stratigraphy), but also what James Deetz (1977) termed “focus.” By focus, Deetz refers to the level of clarity with which archaeological remains can be seen to represent a particular deposit, episode, or event. Archaeological remains that represent several activities, events, or themes that cannot be separated from one another are said to lack focus (such as mixed fill). Where focus is lacking as the result of disturbance, the deposit also lacks integrity.

Association Vital to this interpretation of integrity is the aspect of historic context and association. A deposit must have strong associations with a specific activity, an individual household, commercial establishment, neighborhood, ethnic or socioeconomic group, specific property use, or significant event in the community to possess context and associative value. As needed, archival research will be undertaken to confirm association of any deposits identified.

If a deposit is determined to be unimportant using these criteria, further excavation will not be recommended and the cut or feature will be abandoned. Resources will be evaluated by the Project Archaeologist, in consultation with the Principal Archaeologist. If the resource is determined to be significant it will be recovered during data recovery. Field methods for testing significance and final data recovery are detailed further, in Section 2.6.

3.3.3.2 Streamlined Approach—From Testing to Data Recovery

Treatment will immediately follow Phase II testing once a determination of significance has been agreed upon by FTA, LACMTA, Consulting Parties and the SHPO. Findings from testing will be summarized in a memo prepared by the Project archaeological team and submitted immediately to FTA and LACMTA by email, who will then circulate the agreed upon treatment to the Consulting Parties within 48 hours. The Consulting Parties will review and respond within 48 hours of receipt of the determination of significance memo per the timeframes outlined in 36 CFR 800.13. Their comments will be reviewed, recommendations revised, as necessary, and FTA will submit the findings to the SHPO to review and respond. If there is a disagreement with the findings and recommendation, SHPO (and ACHP, if participating) will notify FTA so that arbitration can occur. Following a determination that the discovery is significant and treatment is required, further action will ensue the following work day. This sequence will ensure that Project effects have been considered and non-adverse effects with conditions have been mitigated with the Cultural Resources Mitigation and Data Recovery Plan in an expedited and efficient manner.

3.3.3.3 Data Recovery Goals

The goal of treatment is to fully excavate all significant archaeological deposits that will potentially be damaged or destroyed within the APE as a result of construction. If FTA and LACMTA determine that significant deposits can be protected in place and/or avoided, methods of protection in place will be recommended. Such methods of protection will require consultation with the Consulting Parties and the SHPO and a final determination will be made by the FTA.

3.3.3.4 Feature Excavation and Documentation

If the site deposit or feature is determined to be significant, and cannot be avoided or protected in place, data recovery procedures will be employed to ensure resolution of Project effects. Prehistoric and historic features appearing to possess significance will then be excavated manually according to standard stratigraphic techniques, that is, according to physical layers of deposition. Full recordation of the excavations will occur and will include, but not be limited to, mapping, photographing, the completion of standard excavation forms, (feature form, unit, bag and photograph logs, plan and profile drawings, etc.), and the preparation of a site stratigraphy based on standard geoarchaeological methods.

Excavations of test units and features will be undertaken using standard hand excavation techniques and the sediments will be passed through hardware mesh. Where a feature or deposit is determined or suspected to be prehistoric in origin, 1/8-inch or 1/16-inch screen mesh will be used. Where the deposit is found to be historical in origin, a larger screen size (1/4-inch) may be selected. All temporally or functionally diagnostic artifacts found in the screen of historical archaeological deposits will be collected; however, certain ubiquitous building materials (milled lumber, broken brick, and concrete) may not be retained for further analysis. Nonetheless, discarded items will be recorded on discard logs. Artifacts will be bagged according to the test unit level from which they were recovered, and the bags marked with the complete provenience, excavators' names, and date of recovery. Each completed feature will be drawn in plan and cross-section and photographed to illustrate the stratigraphic relationships of the various contexts. The Project Archaeologist, the Principal Archaeologist, FTA and LACMTA will all be involved in a continuous assessment program that facilitates streamlined feature evaluation, excavation, and recordation. FTA will consult with Consulting Parties and will advise Consulting Parties of determination of significance.

Excavated materials from significant deposits will then be taken to the LACMTA's archaeological consultant team laboratory for cleaning, processing, analysis, and final significance evaluation. Some

historical artifact types recovered during excavations will be determined in the field to contain little or no data potential. In an effort to reduce the material requiring decontamination, further analysis, and curation, these materials will be discarded. The identification of such items is based on the lack of long-term research values, excessive quantity, and redundancy in data, poor condition, and/or a health and safety risk. Such items are discarded after they have been identified, counted, weighed, photographed, and recorded. They include, but may not be limited to, window glass post-dating the 1870s, non-diagnostic bottle fragments, nails, leather and textiles, unidentifiable metal scraps, sheets, strips and wire, corroded metal, non-temporally diagnostic slag, and amorphous, non-diagnostic metal and glass, rail related metal materials, rail spikes, deposits of coal clinker, and rail ballast.

3.3.3.5 Laboratory Processing and Analysis - Prehistoric Artifact Analysis

Chipped-stone implements and manufacturing debris (lithic flakes) are expected to comprise the largest artifact categories in a prehistoric assemblage. Lithic analysis, therefore, constitutes a major focus of the proposed research. The specific data collected for the lithic materials analysis will include both nominal and metrical data from complete flaked specimens including recordation of lithic reduction category (primary, secondary, or tertiary), number of negative flake removals on dorsal surface, percent cortex, raw material type, weathering rind presence, weight, and artifact dimensions (length, width, thickness).

These data will be recorded into a Microsoft Office Access database to enable it for use in statistical software and geographic information systems (GISs). Statistical tests (i.e., chi-square, bivariate and discriminant analyses) deemed appropriate for determining the quantitative significance of material distribution across the assemblage population will be performed with the lithic data. These tests will provide statistical data useful for addressing and identifying the types and modes of lithic reduction strategies that occurred across the site.

Stylistic analysis focusing on the temporal placement of certain artifact forms (e.g., projectile points, groundstone implements) will be undertaken as appropriate. Both stylistic and technological attributes will be examined as potential indicators of stages of manufacture and/or use. It is anticipated that most analyses will be oriented toward chipped-stone samples but may also include ground-stone samples, if available for study.

3.3.3.6 Historic-era Artifact Analysis—Functional Classification

Historic-era artifacts will be sorted under the group headings that reflect broad historical themes of study (e.g., commercial, domestic, industrial, recreation and leisure, personal, structural, and transportation). Each broad group will then be subdivided into categories reflecting specific activities. For example, domestic-related artifacts will be sorted according to household activity. Assemblages generated by domestic use will then be classified as reflecting subsistence activities and will be divided into object function (such as container, drinking vessel, serving ware, tableware/flatware, utilitarian item, kitchen item, etc.). Structural debris will be sorted into separate material types but placed under the broad heading of building materials. The final tier in this descriptive classification is intended to describe the artifact itself (i.e., plate, bowl, jar, tableware, bottle, etc.).

3.3.3.7 Specialized Analysis

Artifacts requiring specialized analysis will be separated from the overall collection and sent to the appropriate analyst for identification, evaluation, and interpretation. Specialized analysis will include but not be limited to floral and faunal identification to the level of species and genus as well as identification of minimal number of individuals (MNI). Shell bead analysis and historic-era personal items, such as jewelry and buttons, will be analyzed in house by a specialist. Native American artifacts will be evaluated

by specialists in the appropriate artifact types and suitable C14 samples will be submitted to Beta Analytic. Obsidian hydration analysis will be conducted on appropriate obsidian artifacts recovered during data recovery excavations.

Following full analysis, all data collected will be entered into a relational database for use in interpretation. The database will also be used to generate a final curation catalog.

3.3.3.8 Report Preparation

A final technical report of the archaeological studies will be prepared for distribution to all Consulting Parties within 3 months of the completion of field work. The report will present the results of the site identification, evaluation, determination of eligibility for the NRHP or CRHR, assessment of effects, and treatment. A draft report will be reviewed by FTA and LACMTA. Upon revision it will be provided to the Consulting Parties who will have 30 days for review and comment. All comments will be considered by FTA and a revised report will be prepared and submitted to SHPO for a 30-day review period. Upon concurrence by SHPO, FTA will issue the final report to all Consulting Parties. The final report also will be submitted to the South Central Coastal Information Center (SCCIC).

A map of the location of each excavation unit and feature or deposit will be included in the technical report. A DPR 523 site record update will be completed and included in the report as a confidential appendix. The artifact catalog and inventory of historic-age human remains, if any, will also be included as a confidential appendix.

3.3.3.9 Curation

Today's standards recommend that significant archaeological collections be housed at a qualified curation facility. All recovered archaeological materials will be cataloged and prepared for curation according to standards set forth at "Curation of Federally-owned and Administered Archaeological Collections" (36 CFR §79, September 12, 1990). The selected facility should be consistent with the State Historical Resources Commission Guidelines for the Curation of Archaeological Collections. LACMTA's archaeological consultant team will inventory, accession, label, and catalog the collections according to the standards set by the receiving curatorial facility. The final collection will contain artifacts, special samples, photographs, field notes, and other relevant site documentation. LACMTA will be responsible for paying curation fees.

3.3.4 Discovered Human Remains

In the event that human remains are encountered during construction, potentially destructive activities in the vicinity of the discovery will be stopped and the provisions of California PRC § 5097.98 and HSC § 7050.5 will be followed. The Archaeological monitor will halt construction, establish a 50-foot buffer around the discovery, and will contact the LACMTA Project Manager, LACMTA Environmental Specialist, and Project Archaeologist. The LACMTA Environmental Specialist will notify the Los Angeles County Coroner and FTA on the same day of the discovery. If the Coroner determines the remains are those of a Native American, it will notify the NAHC, who will identify a Most Likely Descendent (MLD). FTA will notify SHPO and other Consulting Parties within 48 hours of discovery. Treatment of the remains and all subsequent actions will be completed per this CRMDRP as outlined in Table 3-2 of this Plan.

3.3.5 Release of Environmentally Sensitive Areas for Construction

The FTA, after appropriate consultation with Consulting Parties, will ensure that the identified cultural resource has been appropriately investigated and that any effects to assumed or determined eligible resources have been mitigated per developed mitigation measures. Once all parties have been consulted on the completion of treatment, the recommendation for construction to resume will be made. FTA will notify LACMTA, and LACMTA will authorize the Project Archaeologist to release the area of avoidance to construction activity. Construction, including ground-disturbing activities, can then immediately resume. Post field analysis will continue off-site and a full investigative report will be prepared.

3.3.6 Artifact Curation

All recovered archaeological materials collected during monitoring will be cataloged and prepared as part of the associated site artifact collection. Preparation and curation of the collection will be completed according to standards set forth at “Curation of Federally-Owned and Administered Archaeological Collections” (36 CFR §79, September 12, 1990).

Chapter 4
References Cited

ASM Affiliates, Inc.
2010 SDG&E Sunrise Historic Properties Management Plan. Prepared for San Diego Gas & Electric, San Diego, California.

Bean, Walton, and James J. Rawls
2003 California: An Interpretive History, Eighth Edition. McGraw-Hill, New York, New York.

Bean, Lowell J., and C. R. Smith
1978 Gabrielino. In *California*, edited by R. F. Heizer, pp. 538–549. Handbook of North American Indians, Vol. 8, W.C. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.

Bearchell, Charles A. and Larry D. Fried
1988 *The San Fernando Valley: Then and Now.* Windsor Publications, Northridge, California.

Berryman, Judy and Craig Woodman
2001 Draft Final Archaeological Monitoring Along the Pacific Pipeline. Report prepared for Pacific Pipeline Systems LLC, Long Beach, California. Report prepared by Science Applications International Corporation, Santa Barbara, California.

Boscana, Gerónimo
1978 Chinigchinich: A Revised and Annotated Version of Alfred Robinson's Translation of Father Geronimo Boscana's Historical Account of the Beliefs, Usages, Customs and Extravagancies of the Indians of this Mission San Juan Capistrano Called the Acagchemen Tribe [1846]. Edited by P. T. Hanna. Reprinted Annotations by John P. Harrington. Foreword by Frederick Webb Hodge. Illustrations by Jean Goodwin. Malki Museum Press, Banning, California. Originally published 1933, Originally written by Father Boscana in the 1820s, and translated and first published by Alfred Robinson in 1846. Fine Arts Press, Santa Ana, California.

California Office of Historic Preservation
1990 Archaeological Resources Management Reports (ARMR) Guidelines. Department of Parks and Recreation, State of California, Sacramento.

California Department of Transportation (Caltrans)
2007 A Historical Context and Archaeological Research Design for Agricultural Properties in California. California Department of Transportation, State of California, Sacramento.

City of Los Angeles
2000 Los Angeles Cultural Heritage Master Plan. Office of Historic Resources, Department of City Planning. Available: http://preservation.lacity.org/resources/cultural-heritage-master-plan. Accessed May 3, 2016.

Costello, Julia G., Judith Marvin, Susan K. Goldberg, Melinda C. Home, Adrian Praetzellis, Mary Praetzellis, and Grace H. Ziesing
1996 Final Report, Archeological Research Design and Treatment Plan, The Metropolitan Water District of Southern California Headquarters Facility Project. Foothill Resources, Ltd., Applied Earthworks, Inc., and Anthropological Studies Center. Submitted to Union Station Partners, Altadena, California on behalf of The Metropolitan Water District of Southern California, Los Angeles, California.

Deetz, James
1977 In Small Things Forgotten: The Archaeology of Early American Life. Doubleday, New York.

Douglass, Jon G., Jeffrey H. Altschul, and Richard Ciolek-Torrello (editors)
2005 Overlooking the Wetlands: Archaeological Investigations at the West Bluffs Project CA-LAN-63, CA-LAN-64, and CA-LAN-206A, Playa del Rey, California. Technical Report 05-93, Statistical Research, Inc., Tucson, Arizona.

Drover, Chris E., Henry C. Koerper, and Paul Langenwalter II
1983 Early Holocene Human Adaptation on the Southern California Coast: A Summary Report of Investigations at the Irvine Site (CA-ORA-64), Newport bay, Orange County, California. *Pacific Coast Archaeological Society Quarterly* 19(3 & 4):1–84.

Erlandson, Jon M., Todd J. Braje, Torben C. Rick, and Jenna Peterson
2005 Beads, Bifaces, and Boats: An Early Maritime Adaptation on the South Coast of San Miguel Island, California. *American Anthropologist* 107(4):677–683.

Erlandson, J. M., M. H. Graham, B. J. Bourque, D. Corbett, J. A. Estes, and R. S. Steneck
2007 The Kelp Highway Hypothesis: Marine Ecology, the Coastal Migration Theory, and the Peopling of the Americas. *Journal of Island and Coastal Archaeology* 2:161–74.

Erlandson, Jon M., Torben C. Rick, Todd J. Braje, Molly Casperson, Brendan Culleton, Brian Fulfrost, Tracy Garcia, Daniel A. Guthrie, Nicolas Jew, Douglas J. Kennett, Madonna L. Moss, Leslie Reeder, Craig Skinner, Jack Watts, and Lauren Willis
2011 Paleoindian Seafaring, Maritime Technologies, and Coastal Foraging on California's Channel Islands. *Science* 331:1181–1185.

Fernandeño Tataviam Band of Mission Indians
2019a Tribal Ethnography.
2019b Historical Timeline. Website: https://www.tataviam-nsn.us/heritage/history/historical-timeline/. Accessed December 12, 2019.
2019c Captain Rogerio Rocha: Life and Land Dispossession from 1824-1904.

Fitzgerald, Richard T., Terry L. Jones, and Adella Schroth
2005 Ancient Long-Distance Trade in Western North America: New AMS Radiocarbon Dates from Southern California. *Journal of Archaeological Science* 32:423–434.

Goldberg, S. K., and J. E. Arnold
1988 *Prehistoric Sites in the Prado Basin, California: Regional Context and Significance Evaluation*. INFOTEC Research, Inc., Sonora, California. Submitted to the U.S. Army Corps of Engineers, Los Angeles District.

Goldberg, S. K., B. J. Adams, C. Denardo, S. A. Williams, M. J. Wyss, M. C. Robinson, J.A. Onken, C. M. Inoway, M. C. Horne, K. Moslak, S. Griset, V. S. Popper, S. L. Martin, M. S. Shackley, T. M. Origer, J. L. McVickar, and Beta Analytic Inc.
1999 People of Yaanga?: Archaeological Investigations at CA-LAN-1575/H, Metropolitan Water District of Southern California Headquarters Facilities Project. Prepared by Applied EarthWorks, Inc. Hemet, California. Submitted to Metropolitan Water District of Southern California, Los Angeles.

GPA Consulting
2015 Figure 1-1. Project Location and Area of Potential Effects Overview Map for the Project Description Chapter of the East San Fernando Valley Transit Corridor Draft/Final Environmental Impact Statement/Draft-Final Environmental Impact Report. Report prepared for the Los Angeles County Metropolitan Transportation Authority, Los Angeles, California.

Grenda, Donn R.
1997 *Continuity & Change: 8,500 Years of Lacustrine Adaptation on the Shores of Lake Elsinore*. Technical Series 59, Statistical Research, Inc., Tucson, Arizona. Submitted to the U. S. Army Corps of Engineers, Los Angeles District, Los Angeles, California.

Gudde, Erwin G.
1998 California Place Names: the Origin and Etymology of Current Geographical Names. University of California Press, Berkeley, California.

Hamilton, M. Colleen
2002 The Changing Urban Landscape: A View from Santa Barbara Historical Museum. Presented at: California Council for the Promotion of Public History on the Central Coast. San Luis Obispo, California.

Hamilton, M. Colleen, Kholood Abdo-Hintzman, and Keith Warren
2008 Archaeological Monitoring and Data Recovery for the Phase III Remediation at the Former Santa Barbara I Manufactured Gas Plant. Prepared by Applied EarthWorks, Inc. Hemet Office. Prepared for URS Corporation.

Harrington, John P.
1933 "A New Original Version of Boscana's Historical Account of the San Juan Capistrano Indians of Southwest California." Smithsonian Miscellaneous Collections 92 (4):1–62. Smithsonian Institution, Washington, D.C.

Heizer, Robert E. (editor)
1968 The Indians of Los Angeles County Hugo Reid's Letters of 1852. Southwest Museum Papers 21. Edited and annotated by Robert F. Heizer. Southwest Museum, Los Angeles, California.
1977 A Collection of Ethnographical Articles on the California Indians. Ballena Press, Ramona, California.

Hoover, Mildred B., Hero E. Rensch, Ethel G. Rensch, and William M. Abeloe
2002 Historic Spots in California. Fifth edition revised by Douglas E. Kyle. Stanford University Press, Stanford, California.

Horne, Melinda C., M. Colleen Hamilton, and Susan K. Goldberg

1999 Alameda Corridor Project Treatment Plan For Historic Properties Discovered During Project Implementation. Addendum to Finding of Effect. (February 21, 1995; October 27, 1998). Applied EarthWorks Inc., Hemet, California. Prepared for the Alameda Corridor Transportation Authority, Carson, California. Submitted to the Federal Highway Administration, Sacramento, California.ICF International
2013 Ecosystems/Biological Resources Existing Conditions Report East San Fernando Valley Transit Corridor Draft Environmental Impact Statement/Draft Environmental Impact Report. Report prepared for the Los Angeles County Metropolitan Transportation Authority, Los Angeles, California.

ICF International
2018 Historic, Archaeological, and Paleontological Resources Existing Conditions Report East San Fernando Valley Transit Corridor Final Environmental Impact Statement/Final Environmental Impact Report. Report prepared for the Los Angeles County Metropolitan Transportation Authority, Los Angeles, California.

Jackson, Thomas L., Michael Kay, Mark C. Robinson, and Mitch Marken
2018 National Register of Historic Places Eligibility Evaluation for Archaeological Site CA-LAN-1575/H, the Link Union Station Project, City of Los Angeles, California. Paleo Solutions, Inc., Monrovia, California. Submitted to Federal Railroad Administration, U.S. Department of Transportation, Washington D.C., and Los Angeles County Metropolitan Transportation Authority, Los Angeles, California.

Jenkins, Dennis L., Loren G. Davis, Thomas W. Stafford, Jr., Paula F. Campos, Thomas J. Connolly, Linda Scott Cummings, Michael Hofreiter, Brian Hockett, Katelyn MacDonough, Mark E. Swisher, Frances White, Bonnie Yates, Robert M. Yohe II, Chad Yost, and Eske Willerslev
2013 Geochronology, Archaeological Context, and DNA at the Paisley Caves. In *Paleoamerican Odyssey*, edited by Kelley E. Graff, Carolyn V. Ketron, and Michael R. Waters, pp. 485–510. Center for the Study of the First Americans, College Station.

Jennings, Thomas A., and Michael R. Waters
2014 Pre-Clovis Lithic Technology at the Debra L. Friedkin Site, Texas: Comparisons to Clovis through Site-Level Behavior, Technological Trait-List, and Cladistic Analyses. *American Antiquity* 79(1):25–44.

Johnson, J. J.
1966 A Preliminary Survey of the Archaeological Resources of Lower Mill Creek. Ms. on file, Department of Anthropology, University of California, Davis, California.

Jorgensen, Lawrence C.
1982 *The San Fernando Valley: Past and Present*. Pacific Rim Research, Los Angeles.

Joyce, Daniel J.
2013 Pre-Clovis Megafauna Butchery Sites in the Western Great Lakes Region, USA. In *Paleoamerican Odyssey*, edited by Kelly E. Graff, Carolyn V. Ketron, and Michael R. Waters, pp. 467–484. Center for the Study of the First Americans, College Station.

Kimbro, Edna E, Julia G. Costello, and Tevvy Ball
2009 The California Missions: History, Art, and Preservation. Getty Conservation Institute, Los Angeles, California.

King, C. D.
2011 *Overview of the History of American Indians in the Santa Monica Mountains*. Report prepared for the National Park Service Pacific West Region and Santa Monica Mountains National Recreation Area. Topanga Anthropological Consultants, Topanga, California.

King, Chester and Thomas Blackburn.
1978 Tataviam. In Handbook of North American Indians, Vol. 8, California, R.F. Heizer (ed.), pp. 535–537. Washington: Smithsonian Institution.

Knight, Albert
2001 Primary Record for 19-002681. On file, South Central Coastal Information Center, California State University, Fullerton.

KOA Consulting
2014 Figure 1-2. Architectural Rendering for LRT Alternative for the Project Description Chapter of the East San Fernando Valley Transit Corridor Draft/Final Environmental Impact Statement/Draft-Final Environmental Impact Report. Report prepared for the Los Angeles County Metropolitan Transportation Authority, Los Angeles, California.
2018 Figure 1-5. Build Alternative 4—Location of Proposed MSF Site B for the Project Description Chapter of the East San Fernando Valley Transit Corridor Draft/Final Environmental Impact Statement/Draft-Final Environmental Impact Report. Report prepared for the Los Angeles County Metropolitan Transportation Authority, Los Angeles, California.

KOA and ICF International
2014 Figure 1-3. Build Alternative 4—LRT Alternative for the Project Description Chapter of the East San Fernando Valley Transit Corridor Draft/Final Environmental Impact Statement/Draft-Final Environmental Impact Report. Report prepared for the Los Angeles County Metropolitan Transportation Authority, Los Angeles, California.

KOA and John Kaliski Architects
2014 Figure 1-4. Illustrative Section and Elevation of Streetscape and Platform for LRT Alternative for the Project Description Chapter of the East San Fernando Valley Transit Corridor Draft/Final Environmental Impact Statement/Draft-Final Environmental Impact Report. Report prepared for the Los Angeles County Metropolitan Transportation Authority, Los Angeles, California.

Koerper, Henry C., and Chris E. Drover
1983 Chronology Building for Coastal Orange County, the Case from CA-ORA-119A. *Pacific Coast Archaeological Society Quarterly*, 19(2):1–34.

Kowta, M.
1969 The Sayles Complex: A Late Milling Stone Assemblage from Cajon Pass and the Ecological Implications of its Scraper Planes. *University of California Publications in Archaeology*, Vol. 6.

Kroeber, A. L.
1925 *Handbook of the Indians of California*. Bureau of American Ethnology Bulletin 78. Washington, D.C.

LSA Associates, et al.
2011 Draft Historic Context Statement: Survey of LA Industrial Development, City of Los Angeles, Los Angeles County, California. August 2011.

Livingstone, David M., Dennis McDougall, Susan K. Goldberg, and Wendy M. Nettles
2006 Trails to Rails: Transformation of a Landscape. History and Historical Archaeology of the Alameda Corridor, Volume 1 of Treatment of Historic Properties Discovered during the Alameda Corridor Project, with contributions by Pamela Easter, Joan George, Sherri Gust, Kevin B. Hallaran, M. Colleen Hamilton, Rebecca Harro, Heather R. Puckett, and Keith Warren. Applied EarthWorks, Inc., Hemet, California. Submitted to Alameda Corridor Transportation Authority, Carson, California.

McCawley, W.
1996 *The First Angelinos*. Malki Museum Press/Ballena Press Cooperative Publication.

National Park Service
1983 *Secretary of the Interior's Standards for Archaeological Documentation.* Available: http://www.nps.gov/history/local-law/arch_stnds_7.htm. Accessed: June 21,

Painter, C.C.
1888 The Condition of Affairs in Indian Territory. Office of the Indian Rights Association, Philadelphia.

Pitt, Leonard and Dale Pitt
1997 Los Angeles A to Z: An Encyclopedia of the City and County. University of California Press, Berkeley.

Polanco, Julianne
2020 RE: Section 106 Continuing Consultation: East San Fernando Valley Transit Corridor Project, Cites of Los Angeles and San Fernando, Los Angeles, CA. Reply Letter from the Department of Parks and Recreation, Office of Historic Preservation, California. FTA Letter reference, FTA_2013_0311_001. 2018.

Porcasi, Judith F., and Paul Porcasi
2002 New Dates and Data from Archaic Malibu With Some Regional Considerations. *Pacific Coast Archaeological Society Quarterly* 38(4):21–43.

Robinson, W.W.
1956 The Rancho Story of San Fernando Valley. *Historical Society of Southern California Quarterly* 38, 3: 225–234.

Roderick, Kevin
2001 *The San Fernando Valley: America's Suburb*. Los Angeles Times Books, Los Angeles.

Rust, H.N.
1977 Rogerio's Theological School. In A Collection of Ethnographical Articles on the California Indians, edited by Robert F. Heizer, pp. 63-68. Ballena Press, Ramona, California.

Salas-Teutimez, Andrew, Christina Swindall-Martinez and Gary Stickel
2013 Toypurina, The Joan of Arc of California. Kizh Tribal Press, San Gabriel, California.

Schuiling, W.C. (editor)
1979 *Pleistocene Man at Calico*. (2nd Edition). San Bernardino County Museum Association, Redlands.

Simpson, R.D.
1980 The Calico Mountains Site (Oldest Known Early Man Site in America). *ASA Journal* 4(2):8-25. Archaeological Survey Association of Southern California, Redlands.

Solis, Laurie
2008 *People Who Face the Sun*. Xlibris Publishing.

Stickel, Gary
2016 Why the Original Tribe of the Greater Los Angeles Area is Called Kizh Nation Not Tongva. Kizh Tribal Press, San Gabriel, California.

Sutton, Mark Q
2010 A Reevaluation of Early Northern Uto-Aztecan Prehistory in Alta California. *California Archaeology* 2:1, 3–30.
2011 The Palomar Tradition and Its Place in the Prehistory of Southern California. *Pacific Coast Archaeological Society Quarterly* 44(4):1–74.

Sutton, Mark Q., and Jill K. Gardner
2010 Reconceptualizing the Encinitas Tradition of Southern California. *Pacific Coast Archaeological Society Quarterly* 42(4):1–64.

True, D. L.
1958 An Early Gathering Complex in San Diego County, California. *American Antiquity* 23:255–263.

U.S. Department of Agriculture
2013 *Web Soil Survey*. Natural Resources Conservation Service. Available: http://websoilsurvey.nrcs.usda.gov/app/. Accessed: February 22, 2013.

Van Horn, D. M.
1987 Excavations at the Del Rey Site (LAN-63) & Bluff Site (LAN-64), City of Los Angeles. Archaeological Associates, Inc., Sun City.

Van Horn, D. M., and J. R. Murray
1985 The Loyola Marymount Archaeological Project: Salvage Excavations at LAN-61A-C. Environmental Impact Report, July 30, 1985.

Wallace, W. J.
1955 A Suggested Chronology for Southern California Coastal Archaeology. *Southwestern Journal of Anthropology* 11:214–230.
1978 Post Pleistocene Archaeology, 9000 to 2000 B.C. In *California*, edited by R. F. Heizer, pp. 25–36. Handbook of North American Indians, Vol. 8, W. C. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.

Warren, C. N.
1968 Cultural Tradition and Ecological Adaptation on the Southern California Coast. *Eastern New Mexico University Contributions in Anthropology* 1(3):1–15.
1980 Part I: The Archaeology and Archaeological Resources of the Amargosa-Mojave Basin Planning Units. In *A Cultural Resource Overview for the Amargosa-Mojave Basin Planning Units*, by C. N. Warren, M. Knack, and E. T. Warren. Bureau of Land Management, Desert Planning Program, Riverside.

Warren, C. N., D. L. True, and A. A. Eudey
1961 Early Gathering Complexes of Western San Diego County: Results of Interpretation of an Archaeological Survey. *Archaeological Survey Annual Report* 1960–1961:1–106. Institute of Archaeology, University of California, Los Angeles.

Waters, Michael R., Steven L. Forman, Thomas A. Jennings, Lee C. Nordt, Steven G. Driese, Joshua M. Feinberg, Joshua L. Keene, Jessi Halligan, Anna Lindquist, James Pierson, Charles T. Hallmark, Michael B. Collings, and James E. Wiederhold
2011 The Buttermilk Creek Complex and the Origins of Clovis at the Debra L. Friedkin Site, Texas. *Science* 331:1599–1603.

Appendix A
DPR Forms—CA-LAN-2881 and CA-LAN-1124

Science Applications International Corporation
An Employee-Owned Company

February 16, 2001

19-002681
looks like PPSI is already a part of the

Ms. Margaret Lopez
South Central Coastal Information Center
Department of Anthropology
California State University, Fullerton
800 North State College
P.O. Box 6846
Fullerton, California 92834-6846

Subject: *Site Forms for Archaeological Resources Along Pacific Pipeline*

Dear Ms. Lopez:

We are pleased to submit to you 15 site forms for archaeological resources located along the portion of the Pacific Pipeline that runs through Los Angeles County. Fourteen forms are updates of previously recorded resources (CA-LAN-991/H, -992/H, -1305, -1834/H, -2058, -2119, -2372, -2373, -2480, -2578, -2579, -2580, -2581, and –2582). The last form is for a newly recorded resource, PPSI Resource 35, needing a primary number. Two copies of each site form have been enclosed.

We would be pleased to address any questions you have on the site form.

Sincerely,
SCIENCE APPLICATIONS INTERNATIONAL CORPORATION

Craig Woodman
Project Manager

Ken Victorino
Senior Archaeologist

K:work/archsite/pacpipe/transltrLAN

816 State Street, Suite 500, Santa Barbara, California 93101 • (805) 966-0811 • FAX: (805) 965-6944
Other SAIC Offices: Albuquerque, Colorado Springs, Dayton, Falls Church, Huntsville, Las Vegas, Los Altos, Los Angeles, McLean, Oak Ridge, Orlando, San Diego, Seattle, Tucson

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

PRIMARY RECORD

Primary # 19-002681
HRI #
Trinomial
NRHP Status Code
Other Listings
Review Code Reviewer Date / /

Page 1 of 3 *Resource Identifier(Assigned by recorder): PPSI RESOURCE 35

P1. Other Identifier:

*P2. Location: ☒ Not for Publication ☐ Unrestricted *a. County Los Angeles County
and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad San Fernando Date 1966 (1988) T 2N ; R 15W ; 1/4 of 1/4 of 1/4 of Sec. ; SB B.M.

c. Address City Zip

d. UTM: (Give more than one for large and/or linear resources) Zone 11 , 366 482 mE/ 3 795 575 mN NAD 83
Zone 11 , 366 493 mE/ 3 795 564 mN NAD 83

e. Other Locational Data (e.g., parcel #, directions to resource, elevation, etc., as appropriate): Cultural materials were found between Station 4070+58 and 4074+50, immediately southwest of the Metrolink Railroad ROW at the intersection of Truman and San Fernando.

*P3a. Description (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries): A diffuse scatter of historic and prehistoric artifacts were found between Stations 4070+58 and 4074+50. A concentration of historic artifacts (including approx. 100 pieces of historic glass) was recorded at Station 4074+50. Remnants of two brick features of unknown function were discovered near Station 4070. Thirteen prehistoric, or possibly prehistoric, artifacts were found between Station 4071+00 and 4074+55.

*P3b. Resources Attributes: (list attributes and codes) AH2. Foundations, AH4. Trash Scatters, AP15. Habitation Debris

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

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

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

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

*P7. Owner and Address:

*P8. Recorded by (Name, affiliation, and address):
Albert Knight
Lanny Reed Consultants, Inc.
516 Spring Court Canyon
Fort Collins, CO. 80525

*P9. Date Recorded:

*P10. Type of Survey: Describe:
monitoring of construction of the Pacific Pipeline

*P11. Report Citation (Cite survey report and other sources, or enter "none."): Archaeological Monitoring Along the Pacific Pipeline (SAIC 2001).

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

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

Primary # 19-002681
Trinomial

ARCHAEOLOGICAL SITE RECORD

*Resource Name or # (Assigned by recorder): PPSI RESOURCE 35

*A1. Dimensions: a. Length 60 meters (northwest-southeast) × b. Width 2 meters (southwest-northeast)
Method of Measurement: ☐ Paced ☐ Taped ☐ Visual estimate ☐ Other:
Method of Determination (Check any that apply.): ☒ Artifacts ☒ Features ☐ Soil ☐ Vegetation ☐ Topography
☐ Cut bank ☐ Animal burrow ☒ Excavation ☐ Property boundary ☐ Other (Explain):
Reliability of Determination: ☐ High ☐ Medium ☐ Low Explain:
Limitations (Check any that apply): ☐ Restricted access ☐ Paved/built over ☐ Site limits incompletely defined
☒ Disturbances ☐ Vegetation ☐ Other (Explain): much of the area has been impacted by alluvial flow in the East Channel drainage and by historical development at Mission Wells and along the axis of historic U.S. Highway 99

A2. Depth: ☐ None ☒ Unknown Method of Determination: overall depth of the deposit was not determined

*A3. Human Remains: ☐ Present ☐ Absent ☐ Possible ☐ Unknown (Explain): none observed

*A4. Features (Number, briefly describe, indicate size, list associated cultural constituents, and show location of each feature on sketch map.): Remnants of two brick features of unknown function were discovered near Station 4070. These include the remains of a brick and mortar foundation, containing approx. 250 whole and fragmented bricks at Station 4070+80, and a lens containing granitic rock, a brick feature, and burned ashy soil at Station 4070+58. The second feature continued for at least 100 feet.

*A5. Cultural Constituents (Describe and quantify artifacts, ecofacts, cultural residues, etc., not associated with features.):
A concentration of historic artifacts was recorded at Station 4074+50. Approx. 100 pieces of historic glass were found in the back-dirt piles and in the upper trench walls of the southeastern portion of the trench. Identified glass included cork-stopped bottlenecks, screw cap bottles, whiskey/liquor bottles, and medicine bottles.

Thirteen prehistoric, or possibly prehistoric, artifacts were found in trenching back-dirt between Station 4071+00 and 4074+55. These items are described as a semi-portable rock work station (possible anvil), possible groundstone, small hammer or pecking stone, bifacial mano, scraper, secondary flake, a modified cobble, chopper, and a metate fragment.

*A6. Were Specimens Collected? ☒ No ☐ Yes (If yes, attach Artifact Record or catalog and identify where curated.)

*A7. Site Condition: ☐ Good ☐ Fair ☐ Poor (Describe disturbances.): much of this area has been impacted by alluvial flow in the East Channel drainage and by historical development at Mission Wells and along the axis of historic U.S. Highway 99 (San Fernando Road).

*A8. Nearest Fresh Water (Type, distance, and direction.):

*A9. Elevation:

A10. Environmental Setting (Describe culturally relevant variables such as vegetation, fauna, soils, geology, landform, slope, aspect, exposure, etc.):

A11. Historical Information:

*A12. Age: ☐ Prehistoric ☐ Protohistoric ☐ 1542-1769 ☐ 1769-1848 ☐ 1848-1880 ☐ 1880-1914 ☐ 1914-1945 ☐ Post-1945 ☒ Undetermined Describe position in regional prehistoric chronology or factual historic dates if known:

A13. Interpretations (Discuss scientific, interpretive, ethnic, and other values of site, if known.):
The area that yielded prehistoric artifacts is within the general boundaries given for the ethnohistoric village of *Pasknga* (possible village location is based on general ethnographic descriptions only – no ethnohistoric period artifacts have been found and no intact village/residential deposit has been located). The proposed site of *Pasknga* is thought to have been located between Station 3942+10 and 4081+71. There is no evidence, either archaeologically or from archival documents, that the artifacts associated with Resource 35 are related to the ethnohistoric village of *Pasknga*.

A14. Remarks: Because of the disturbed nature of the site context, and the lack of other physical evidence of an ethnohistoric village deposit, this impacted area would likely be considered ineligible for listing in the National Register. Additional evaluations would be required to determine the exact boundaries and content of Resource 35 and its possible relationship to ethnohistoric resources.

A15. References (Documents, informants, maps, and other references):

A16. Photographs (List subjects, direction of view, and accession numbers or attach a Photograph Record.):
Original Media/Negatives Kept at:

*A17. Form Prepared by: Date: February 13, 2001
Affiliation and Address: Science Applications International Corporation
816 State Street, Suite 500; Santa Barbara, CA 93101

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

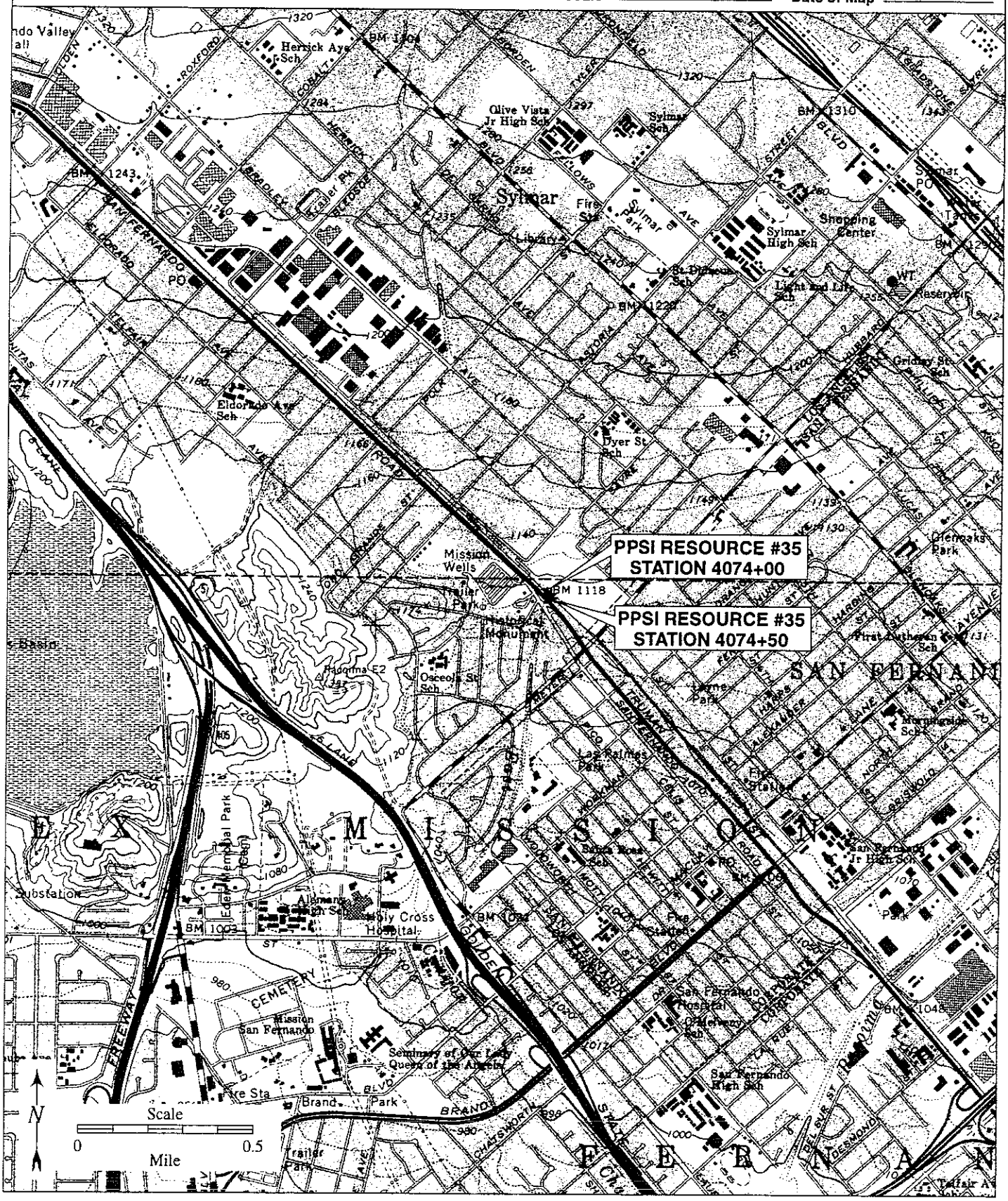
Primary # HRI # 19-002681
Trinomial:

LOCATION MAP

Page 3 of 3

PPSI Resource 35

*Map Name: USGS 7.5 min. quadrangle, San Fernando, Calif. *Scale 1:24,000 *Date of Map 1966, 1988



DPR 523J (1/95)

*Required Information

SUPPLEMENT FOR P-19-002681 (CA-LAN-2681)....aka CA-LAN-2681/H
December, 1998 - by Albert Knight

P2a The area described is in Los Angeles County.

P2b USGS San Fernando, California, 1:24,000 Quadrangle-Photorevised 1972; T 2N; R 15W. The area where the site is located is not sectioned, but is part of the Ex Mission San Fernando Land Grant; San Bernardino Base Meridian.

P2c The exact address is unknown. The owner's address is:
METROLINK
700 South Flower Street - 26th Floor
Los Angeles, California 90017.

P2d UTMs: Center point of area described is @ 3795500 North, and 366600 East. The area described here is oriented NW-SE.

P2e Other Locational Data:
The objects described here were found in an area which is immediately southwest of the METROLINK RR ROW. A new METROLINK platform/station is located immediately northeast of these same tracks. The site/area described here is north of the place where Truman Street (west) meets San Fernando Road, and it is northwest from the intersection of San Fernando Road (east) and Bleeker Street. Bench Mark 1118 is located a short distance SE of the center point of the area described here.

P3b Resource Attributes (attributes and codes):
AH16 100s small broken pieces of historic glass.
AP16 13 prehistoric artifacts, or possible prehistoric artifacts, including unworked manuports). The prehistoric artifacts are undoubtedly associated in some way with the old village area centered on the (San Fernando) Mission Wells. The only previously recorded portion of this village area is CA-LAN-409. Los Angeles Historical-Cultural Monument No. 50 is the extant surface manifestation of the early historic use of the springs/wells. The most famous resident of the well area was Rogerio Rocha. See Reference, below.

P8 Recorded By: Albert Knight, for
Pacific Pipeline Systems, Inc., and
Lanny W. Reed Consultants, Inc.
516 Spring Canyon Court
Fort Collins, Colorado 80525

P9 November 1998

P10 The prehistoric and historic artifacts described here were discovered during and/or following trenching, and later, during back-filling activities.

DPR 523C- ARCHAEOLOGICAL SITE RECORD PAGE

A1 The dimension of the area described here is +60m NW-SE x ca. 2m SW-NE. This represents only the relatively small area which was accessable to PPSI project personal, and which is located between the METROLINK RR ROW and San Fernando Road/Truman Street. Prehistoric and historic use areas certainly exist and/or existed outside of this very restricted area.

A2 Depth. Unknown. Much of this area is very disturbed, and none of the prehistoric items described here were found *in situ*.. Prehistoric artifacts were observed ON back-dirt piles only. It appears that at least minor intact (?) prehistoric archaeological deposits are present, possibly at a depth of 4 or more feet, in this area. Historic glass to 2ft. in depth.

A3 No human remains were observed in the area described here.

A5 Cultural Constitutents:

HISTORIC ARTIFACTS (main concentration @ ca. station 4074+50):

#1- 3 dozen pieces of historic glass (from at least 200 observed pieces) were recovered from the back-dirt piles (11-98) and later (12-98) from a portion of the upper trench walls. The historic glass was found beginning immediately SE of the area where the prehistoric materials were recovered. However, the largest deposit of histoic glass was at the SE end of the area recorded. Very little of this glass appears to be recent in origin, and many pieces appear to be 50 to +75 years old. A representative selection of the older looking pieces were collected from the back dirt pile as a non-random sample for examination. Most of the surviving bottlenecks are of the cork-stopper (straight or choke necked) type, although a few screw cap bottlenecks are also present. Many small bottle bases appear to to be from 1/2 pint whiskey bottles.

#2- 5 small (to 5") unbroken clear glass "medicine bottles" were observed. These include cork stopper, pop-off top, and screw on/off top types. 3 of these small unbroken bottles were collected as specimens. These from ca. station 4073+83 (i. e. at or adjacent to the East Channel drainage).

#3- 200-300 whole and broken, mostly red bricks were observed, especially at and around station #4070+80, where what little that remains of a small brick and mortar foundation could be seen in both trench side-walls. Many of the intact and some of the displaced bricks are still at least partially cemented together. Only one loose brick had a partially visible makers mark (too covered in concrete to read). Only a few of these bricks looked particularily old- although they all undoubtedly do exceed 50-75 years in age. Almost all of the bricks were a standard "red brick" color, but a few were much lighter in color. There is a considerable amount of non-local rounded granitic rock and burnt ashy soil within the remains of this structure (as seen in the trench walls). This rock/dark ash/debris field continues to the SE for at least 100 feet.

#4- A recent, but no longer used, double walled rebar reinforced concrete drainage channel (@ ca. station 4074+00), which has been filled in with dirt, and some rock(s). This is one of the recent drainages of East Channel. The old gravel bedded creek bottom could be seen in the PPSI trench side wall, especially on the east side of the concrete channel. The new Metrolink station (and associated etc.) probably required the installiation of an even newer drainage system.

PREHISTORIC ARTIFACTS:

#1- A semi-portable rock work station. This rock is 42 x 19 x 16cm, and is shaped generally like the upper part of an anvil. The top face is semi-smooth and is very grezzy, but the sides and bottom are not (grezzy). The rock is quite heavy, even for its size. One side edge looks as if it may have been intentionally trimmed/shaped. From PPSI ca. station #4071+00.

#2- 1 pc. of possible groundstone, whole. The piece is 11.5 x 7.5 x 6cm. The material is mostly dark brown, but also includes perhaps 10% white quartz. It is a metamorphic rock, probably a granitic. This rock fits into the hand (with a power grip) quite well. Two edges appear to have been ground. Recovered PPSI ca. station #4074+00. This rock may have been pushed to the southeast somewhat during clearing and/or trenching.

#3- A small hammer or pecking stone. The stone is a little less than 6cm (proximital to distal ends) x a little more than 6cm wide x +4cm in thickness. The material appear to be a mixture of a gray granitic rock and white quartz. From PPSI station #4070+55.

#4- A 10.5 x 7.5 x 4.5cm bifacial mano. From PPSI ca. station # 4071+58.

(artifacts #5, #6, and #7 were all found at PPSI ca. station # 4070+00).

#5 A scrapper made of black quartzite.

#6 A secondary flake, derived from the cobble that became artifact #5.

#7 A flake, derived from the cobble that became artifact #5.

#8 A cobble/manuport. The material appears to be quartzite. This rock has 2 ADJACENT "nicks" on one edge, as if someone had tried to split it in half, but gave up (at least for awhile) after a couple of whacks. From PPSI station # 4070+00. Possibly an artifact, certainly a manuport.

#9 A cobble/manuport. The material is a gray quartzite- of a material commonly found in sites in the northwest San Fernando Valley. This piece is very close in size and composition, as compared to the source rock which was used for the manufacture of artifact #5. Possibly an artifact. From PPSI ca. station #4071+00.

#10 A cobble which has been modified into a hammer/pestle. The piece is an elongate triangular cobble 14cm long x 7 x 6.5 x 6cm, and is very battered on one end. The material apears to be quartzite. From PPSI station #4070+50.

#11 A simple chopper, 14cm long x 12cm wide x 7cm at the thickest point. The material is quartzite. The proximital end fits into the hand quite well. From PPSI station #4070+50.

#12 A metate fragment ca. 25 x 15 x 5cm was observed at PPSI ca. station # 4071+00. This item was not collected.

#13 An unmodified reddish non-local quartzite cobble was observed at PPSI ca. station #4071+00. Size 12 x 7 x 6cm. Another manupost which probably would have eventually been modified into a scrapper. This item was not collected.

A6 Of historic specimens only a small selection of broken pieces of glass, and three small bottles were collected. 11 of the 13 prehistoric (and possible prehistoric) artifacts were collected.

A7 Site Condition: Unknown. Much of this area has obviously been disturbed by: 1) alluvial flow in the East Channel drainage, and: 2) by historical development, at first in the area of the Mission Wells, and later along the axis of historic U. S. Highway 99- locally San Fernando Road. Although much of the area is disturbed, it is possible that localized buried/intact deposits may still exist close-by the areas impacted by historic activity. If intact deposits do still exist, they are probably present at a depth of more than four feet.

A8 Nearest water: The area described here straddles the East Channel drainage at the point where it turns (from flowing) southeast, to flowing generally south. This drainage was historically the main source of water for the "Mission Wells", which supplied Mission San Fernando (etc.) with water (see References).

A9 Elevation: Approximately 1120 feet.

A10 Enviromental Setting: The area described here is immediately south amd west of the place where East Channel turns from southeast to south. A site, or a portion of a site, probably sat on a small knoll, adjacent to the bend in East Channel. A moist vale, with a stand of trees at and around the springs (probably with Oaks, Sycamores, and/or Fremont Cottomwood) may have existed at and around the springs, and along East Channel. There was probably also an elderberry and mixed shrub understory. At times and in localized places, especially at and down hill from the springs, there would have been enough water for tules, sedges. and etc. The soil is very sandy in this area, and can be described as very fine. Much of it is undoubtedly aeolian in origin. This is to be expected, since the site vicinity is south of the East Channel drainage, and the prevailing winds blow from the north. Except for in the area of the brick/rock/ashy soil debris field found SE from ca. station 4070+58, only a few rocks- all of these grapefruit sized or smaller- were observed in this area. Almost all of the small rocks observed were an almost glossy grayish-silver granitic rock type. Even the more angular rocks have smoothed edges. These native rocks were probably semi-polished, by the alluvial action of being tumbled gradually down the East Channel drainage, in/through the fine sand. These local granitic rocks are quite distinct, as compared to the imported quartzites, that most of the artifacts (i. e. #s 2, 3, 5, 6, 7, 8, 9, 10, 12) are made from.

A12 The area described here has evidence of prehistoric and historic activities. The historic materials are mostly 1930s-1940s vintage.

A15 References:

Engelhardt, Fr. Zephyrin, O. F. M.
1927 San Fernando Rey: The Mission of the Valley. Franciscan Herald Press, Chicago. See page 21. East Channel was (is) the main source of water for the Mission Wells, which once supplied Mission San Fernando with water.

Heizer, Robert F., editor
1976 A Collection of Ethnographic Articles on the California Indians. See Pp. 63-68: "Rogerio's Theological School", by H. N. Rust (1904). Rogerio was a well known Fernandeno Indian resident of the Mission Wells area.

King, Tom
1970 Archaeological Site Survey Record for CA-LAN-409.

Knight, Albert
1998 Site Record for CA-LAN-2681/H

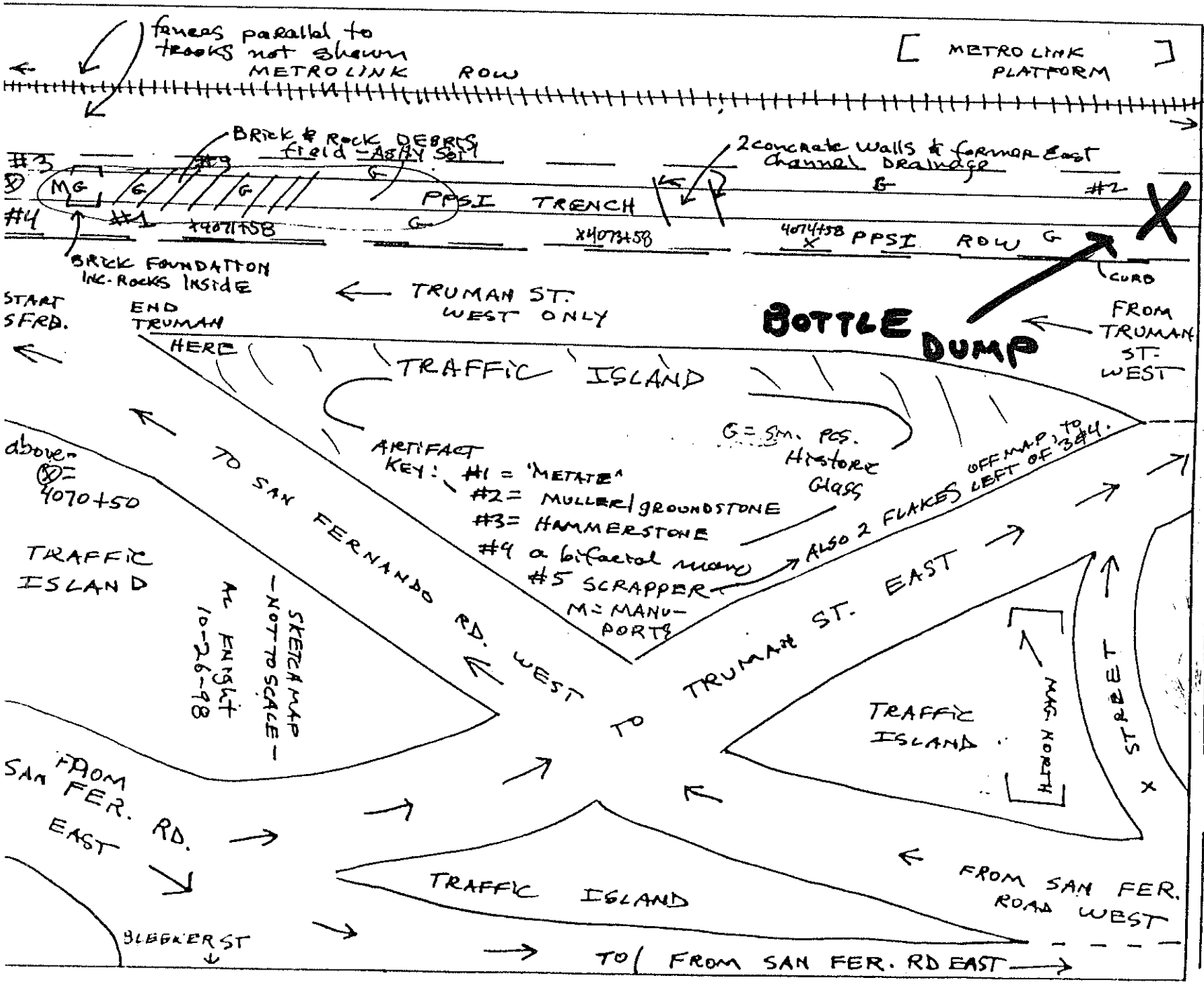
McCawley, William
1996 The First Angelinos - The Gabrielino Indians of Los Angeles. A Malki Museum Press/ Ballena Press Cooperative Publication. Page 39 briefly mentions the San Fernando Mission Wells and the Mission San Fernando aquaduct system.

Sutton, Mark Q.
1989 Archaeological Site Record for CA-LAN-409.

United States, Geological Survey
1972 San Fernando, California 7.5 Quadrangle Map. The general site area is located along the line which divides T2N from T3N, just to the left of the words "Mission Wells", and "Historical Monument," and just NW of and SE of the point "BM 1118."

Walker, Edwin Francis
1952 Five Prehistoric Archaeological Sites in Los Angeles County, California. See "A Metate Site at San Fernando", pp 15-26, in Publications of the Frederick Webb Hodge Anniversary Publication Fund, Volume VI. Los Angeles, California, Southwest Museum, Administrator of the Fund. George Rice & Sons, Los Angeles. Describes the excavations at LAN-409.

Webb, Edith Buckland
1952 Indian Life at The Old Missions. University of Nebraska Press: Lincoln and London. Page 77 mentions the San Fernando Mission Wells and Mission San Fernando aquaduct system.



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

SKETCH MAP

Page 2 of 9

Primary # P-19-002681/H
HRI#
Trinomial CA-LAN-2681/H

*Drawn By: ALBERT KNIGHT

*Resource Name or # (Assigned by recorder) SYLMAR SITE

*Date: 12-98

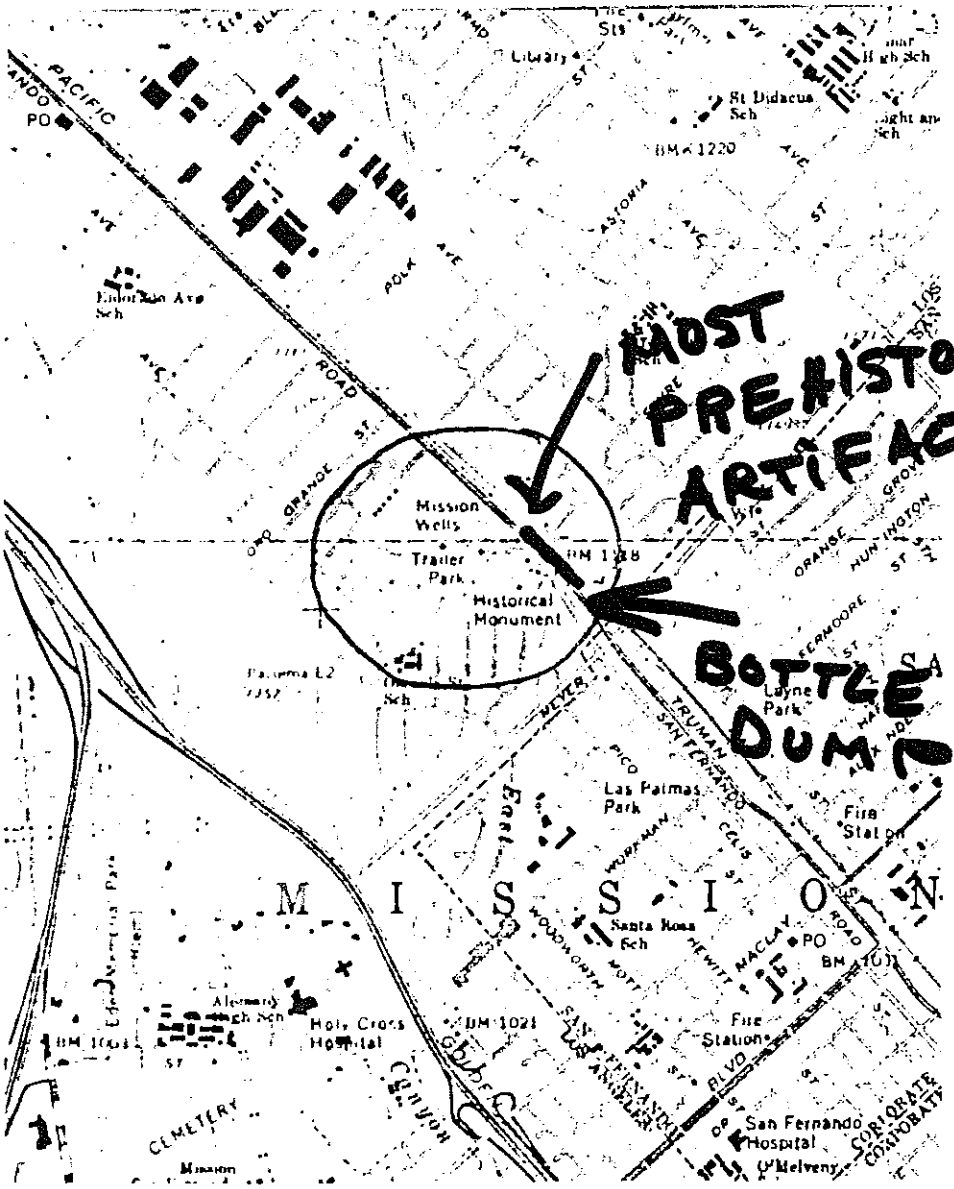
State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary # P-19-002681/H
HRI# _____
Trinomial CA-LAN-2681/H

Page 9 of 9 *Resource Name or # (Assigned by recorder) SYLMAR SITE

*Map Name: SAN FERNANDO *Scale: 1:24,000 *Date of Map: 1972



TO CA-LAN-2681
ADD Historic BOTTLE Dump
to become CA-LAN-2681/H

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

PRIMARY RECORD

Primary # 19-002681
HRI #
Trinomial
NRHP Status Code
Other Listings
Review Code ____ Reviewer ____ Date ____/____/____

Page 1 of 3 *Resource Identifier(Assigned by recorder): PPSI RESOURCE 35

P1. Other Identifier:

*P2. Location: ☒ Not for Publication ☐ Unrestricted *a. County Los Angeles County
and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad San Fernando Date 1966 (1988) T 2N ; R 15W ; __ 1/4 of __ 1/4 of __ 1/4 of Sec. __ ; SB B.M.

c. Address ____ City ____ Zip ____

d. UTM: (Give more than one for large and/or linear resources) Zone 11 , 366 482 mE/ 3 795 575 mN NAD 83
Zone 11 , 366 493 mE/ 3 795 564 mN NAD 83

e. Other Locational Data (e.g., parcel #, directions to resource, elevation, etc., as appropriate): Cultural materials were found between Station 4070+58 and 4074+50, immediately southwest of the Metrolink Railroad ROW at the intersection of Truman and San Fernando.

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*P3b. Resources Attributes: (list attributes and codes) AH2. Foundations, AH4. Trash Scatters, AP15. Habitation Debris

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

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

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

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

*P7. Owner and Address:

*P8. Recorded by (Name, affiliation, and address):
Albert Knight
Lanny Reed Consultants, Inc.
516 Spring Court Canyon
Fort Collins, CO. 80525

*P9. Date Recorded:

*P10. Type of Survey: Describe:
monitoring of construction of the Pacific Pipeline

*P11. Report Citation (Cite survey report and other sources, or enter "none."): Archaeological Monitoring Along the Pacific Pipeline (SAIC 2001).

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

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

Primary # 19-002681
Trinomial

ARCHAEOLOGICAL SITE RECORD

Page 2 of 3 *Resource Name or # (Assigned by recorder): PPSI RESOURCE 35

*A1. Dimensions: a. Length 60 meters (northwest-southeast) × b. Width 2 meters (southwest-northeast)
Method of Measurement: ☐ Paced ☐ Taped ☐ Visual estimate ☐ Other:
Method of Determination (Check any that apply.): ☒ Artifacts ☒ Features ☐ Soil ☐ Vegetation ☐ Topography
☐ Cut bank ☐ Animal burrow ☒ Excavation ☐ Property boundary ☐ Other (Explain):
Reliability of Determination: ☐ High ☐ Medium ☐ Low Explain:
Limitations (Check any that apply): ☐ Restricted access ☐ Paved/built over ☐ Site limits incompletely defined
☒ Disturbances ☐ Vegetation ☐ Other (Explain): much of the area has been impacted by alluvial flow in the East Channel drainage and by historical development at Mission Wells and along the axis of historic U.S. Highway 99

A2. Depth: ☐ None ☒ Unknown Method of Determination: overall depth of the deposit was not determined

*A3. Human Remains: ☐ Present ☐ Absent ☐ Possible ☐ Unknown (Explain): none observed

*A4. Features (Number, briefly describe, indicate size, list associated cultural constituents, and show location of each feature on sketch map.): Remnants of two brick features of unknown function were discovered near Station 4070. These include the remains of a brick and mortar foundation, containing approx. 250 whole and fragmented bricks at Station 4070+80, and a lens containing granitic rock, a brick feature, and burned ashy soil at Station 4070+58. The second feature continued for at least 100 feet.

*A5. Cultural Constituents (Describe and quantify artifacts, ecofacts, cultural residues, etc., not associated with features.):
A concentration of historic artifacts was recorded at Station 4074+50. Approx. 100 pieces of historic glass were found in the back-dirt piles and in the upper trench walls of the southeastern portion of the trench. Identified glass included cork-stopped bottlenecks, screw cap bottles, whiskey/liquor bottles, and medicine bottles.

Thirteen prehistoric, or possibly prehistoric, artifacts were found in trenching back-dirt between Station 4071+00 and 4074+55. These items are described as a semi-portable rock work station (possible anvil), possible groundstone, small hammer or pecking stone, bifacial mano, scraper, secondary flake, a modified cobble, chopper, and a metate fragment.

*A6. Were Specimens Collected? ☒ No ☐ Yes (If yes, attach Artifact Record or catalog and identify where curated.)

*A7. Site Condition: ☐ Good ☐ Fair ☐ Poor (Describe disturbances.): much of this area has been impacted by alluvial flow in the East Channel drainage and by historical development at Mission Wells and along the axis of historic U.S. Highway 99 (San Fernando Road).

*A8. Nearest Fresh Water (Type, distance, and direction.):

*A9. Elevation:

A10. Environmental Setting (Describe culturally relevant variables such as vegetation, fauna, soils, geology, landform, slope, aspect, exposure, etc.):

A11. Historical Information:

*A12. Age: ☐ Prehistoric ☐ Protohistoric ☐ 1542-1769 ☐ 1769-1848 ☐ 1848-1880 ☐ 1880-1914 ☐ 1914-1945 ☐ Post-1945 ☒ Undetermined Describe position in regional prehistoric chronology or factual historic dates if known:

A13. Interpretations (Discuss scientific, interpretive, ethnic, and other values of site, if known.):
The area that yielded prehistoric artifacts is within the general boundaries given for the ethnohistoric village of *Pasknga* (possible village location is based on general ethnographic descriptions only – no ethnohistoric period artifacts have been found and no intact village/residential deposit has been located). The proposed site of *Pasknga* is thought to have been located between Station 3942+10 and 4081+71. There is no evidence, either archaeologically or from archival documents, that the artifacts associated with Resource 35 are related to the ethnohistoric village of *Pasknga*.

A14. Remarks: Because of the disturbed nature of the site context, and the lack of other physical evidence of an ethnohistoric village deposit, this impacted area would likely be considered ineligible for listing in the National Register. Additional evaluations would be required to determine the exact boundaries and content of Resource 35 and its possible relationship to ethnohistoric resources.

A15. References (Documents, informants, maps, and other references):

A16. Photographs (List subjects, direction of view, and accession numbers or attach a Photograph Record.):
Original Media/Negatives Kept at:

*A17. Form Prepared by: Date: February 13, 2001
Affiliation and Address: Science Applications International Corporation
816 State Street, Suite 500; Santa Barbara, CA 93101

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

Primary #
HRI # 19-002681
Trinomial:

LOCATION MAP

Page 3 of 3

PPSI Resource 35

*Map Name: USGS 7.5 min. quadrangle, San Fernando, Calif. *Scale 1:24,000 *Date of Map 1966, 1988

DPR 523J (1/95)

*Required Information

Notes on "Sylmar Site" - November, 1998 - by Albert Knight

P2a The area described is in Los Angeles County.

P2b USGS San Fernando, California, 1:24,000 Quadrangle-Photorevised 1972; T 2N; R 15W. The area where the site is located is not sectioned, but is part of the Ex Mission San Fernando Land Grant; San Bernardino Base Meridian.

P2c The exact address is unknown. The owner's address is:
METROLINK
700 South Flower Street - 26th Floor
Los Angeles, California 90017.

P2d UTMs: Center point of area described is @ 3795500 North, and 366600 East. The area described here is oriented NW-SE.

P2e Other Locational Data:
The objects described here were found in an area which is immediately southwest of the METROLINK RR ROW. A new METROLINK platform/station is located immediately northeast of these same tracks. The site/area described here is north of the place where Truman Street (west) meets San Fernando Road, and it is northwest from the intersection of San Fernando Road (east) and Bleeker Street. Bench Mark 1118 is located a short distance SE of the center point of the area described here.

P3b Resource Attributes (attributes and codes):
AH16 15-20 small pieces of historic glass.
AP16 13 prehistoric artifacts, or possible prehistoric artifacts, including unworked manuports). The prehistoric artifacts are undoubtedly associated in some way with the old village area centered on the (San Fernando) Mission Wells. The only previously recorded portion of this village area is CA-LAN-409. Los Angeles Historical-Cultural Monument No. 50 is the extant surface manifestation of the early historic use of the springs/wells. The most famous resident of the well area was Rogerio Rocha. See Reference, below.

P8 Recorded By: Albert Knight, for
Pacific Pipeline Systems, Inc., and
Lanny W. Reed Consultants, Inc.
516 Spring Canyon Court
Fort Collins, Colorado 80525

P9 November 1998

P10 The prehistoric and historic artifacts described here were discovered during and/or following trenching, and later, during back-filling activities.

DPR 523C- ARCHAEOLOGICAL SITE RECORD PAGE

A1 The dimension of the area described here is +50m NW-SE x ca. 2m SW-NE. This represents only the relatively small area which was accessable to PPSI project personal, and which is located between the METROLINK RR ROW and San Fernando Road/Truman Street. Prehistoric and historic use areas certainly exist and/or existed outside of this very restricted area.

A2 Depth. Unknown. Much of this area is very disturbed, and none of the items described here were found *in situ*.. Prehistoric artifacts were observed ON (not IN) back-dirt piles only. It appears that at least minor intact (?) archaeological deposits are present, possibly at a depth of 4 or more feet, in this area.

A3 No human remains were observed in the area described here. Only 4 pieces of relatively large (as compared to human) bone was observed. All 4 pieces of bone appeared to be bovine (or other large mammal, such as a horse). None of the pieces was burnt, and only one showed butchering marks. All pieces were stained a light to medium brown, from long exposure to the local soils.

A5 Cultural Constitutents:

HISTORIC ARTIFACTS (concentrated between station #s 4071+75 to 4074):

#1- Some two dozen pieces of historic glass were recovered from the post-trenching back-dirt. This beginning immediately SE of the area where the prehistoric materials were recovered. Very little of this glass appears to be recent in origin, and at least some pieces appear to be 50 to +75 years old. A representative selection of the older looking pieces were collected from the back dirt pile as a non-random sample. NOte that there was some recent to very recent glass, and other trash, in this same area, but that all of the obviously recent material was superficial, and was NOT present in the soil deeper that ca. 20cm.

#2- 5 small (to 5") unbroken clear glass "medicine bottles" were observed. These include cork stopper, pop-off top, and screw on/off top types. 3 of these small unbroken bottles were collected as specimens. These from ca. station 4073+83 (i. e. at or adjacent to the East Channel drainage).

#3- 200-300 whole and broken, mostly red bricks were observed, especially at and around station #4070+80, where what little that remains of a small brick and mortar foundation could be seen in both trench side-walls. Many of the intact and some of the displaced bricks are still at least partially cemented together. Only one loose brick had a partially visible makers mark (too covered in concrete to read). Only a few of these bricks looked particularily old- although they all undoubtedly do exceed 50-75 years in age. Almost all of the bricks were a standard "red brick" color, but a few were much lighter in color. There is a considerable amount of non-local rounded granitic rock and burnt ashy soil within the remains of this structure (as seen in the trench walls). This rock/dark ash/debris field continues to the SE for at least 100 feet.

#4- A recent, but no longer used, double walled rebar reinforced concrete drainage channel (@ ca. station 4074+00), which has been filled in with dirt, and some rock(s). This is one of the recent drainages of East Channel. The old gravel bedded creek bottom could be seen in the PPSI trench side wall, especially on the east side of the concrete channel. The new Metrolink station (and associated etc.) probably required the installiation of an even newer drainage system.

PREHISTORIC ARTIFACTS:

#1- A semi-portable rock work station. This rock is 42 x 19 x 16cm, and is shaped generally like the upper part of an anvil. The top face is semi-smooth and is very grezzy, but the sides and bottom are not (grezzy). The rock is quite heavy, even for its size. One side edge looks as if it may have been intentionally trimmed/shaped. From PPSI ca. station #4071+00.

#2- 1 pc. of possible groundstone, whole. The piece is 11.5 x 7.5 x 6cm. The material is mostly dark brown, but also includes perhaps 10% white quartz. It is a metamorphic rock, probably a granitic. This rock fits into the hand (with a power grip) quite well. Two edges appear to have been ground. Recovered PPSI ca. station #4074+00. This rock may have been pushed to the southeast somewhat during clearing and/or trenching.

#3- A small hammer or pecking stone. The stone is a little less than 6cm (proximital to distal ends) x a little more than 6cm wide x +4cm in thickness. The material appear to be a mixture of a gray granitic rock and white quartz. From PPSI station #4070+55.

#4- A 10.5 x 7.5 x 4.5cm bifacial mano. From PPSI ca. station # 4071+58.

(artifacts #5, #6, and #7 were all found at PPSI ca. station # 4070+00).

#5 A scrapper made of black quartzite.

#6 A secondary flake, derived from the cobble that became artifact #5.

#7 A flake, derived from the cobble that became artifact #5.

#8 A cobble/manuport. The material appears to be quartzite. This rock has 2 ADJACENT "nicks" on one edge, as if someone had tried to split it in half, but gave up (at least for awhile) after a couple of whacks. From PPSI station # 4070+00. Possibly an artifact, certainly a manuport.

#9 A cobble/manuport. The material is a gray quartzite- of a material commonly found in sites in the northwest San Fernando Valley. This piece is very close in size and composition, as compared to the source rock which was used for the manufacture of artifact #5. Possibly an artifact. From PPSI ca. station #4071+00.

#10 A cobble which has been modified into a hammer/pestle. The piece is an elongate triangular cobble 14cm long x 7 x 6.5 x 6cm, and is very battered on one end. The material apears to be quartzite. From PPSI station #4070+50.

#11 A simple chopper, 14cm long x 12cm wide x 7cm at the thickest point. The material is quartzite. The proximital end fits into the hand quite well. From PPSI station #4070+50.

#12 A metate fragment ca. 25 x 15 x 5cm was observed at PPSI ca. station # 4071+00. This item was not collected.

#13 An unmodified reddish non-local quartzite cobble was observed at PPSI ca. station #4071+00. Size 12 x 7 x 6cm. Another manupost which probably would have eventually been modified into a scrapper. This item was not collected.

A6 Of historic specimens only a small selection of broken pieces of glass, and three small bottles were collected. 11 of the 13 prehistoric (and possible prehistoric) artifacts were collected.

A7 Site Condition: Unknown. Much of this area has obviously been disturbed by: 1) alluvial flow in the East Channel drainage, and: 2) by historical development, at first in the area of the Mission Wells, and later along the axis of historic U. S. Highway 99- locally San Fernando Road. Although much of the area is disturbed, it is possible that localized buried/intact deposits may still exist close-by the areas impacted by historic activity. If intact deposits do still exist, they are probably present at a depth of more than four feet.

A8 Nearest water: The area described here straddles the East Channel drainage at the point where it turns (from flowing) southeast, to flowing generally south. This drainage was historically the main source of water for the "Mission Wells", which supplied Mission San Fernando (etc.) with water (see References).

A9 Elevation: Approximately 1120 feet.

A10 Enviromental Setting: The area described here is immediately south amd west of the place where East Channel turns from southeast to south. A site, or a portion of a site, probably sat on a small knoll, adjacent to the bend in East Channel. A moist vale, with a stand of trees at and around the springs (probably with Oaks, Sycamores, and/or Fremont Cottomwood) may have existed at and around the springs, and along East Channel. There was probably also an elderberry and mixed shrub understory. At times and in localized places, especially at and down hill from the springs, there would have been enough water for tules, sedges. and etc. The soil is very sandy in this area, and can be described as very fine. Much of it is undoubtedly aeolian in origin. This is to be expected, since the site vicinity is south of the East Channel drainage, and the prevailing winds blow from the north. Except for in the area of the brick/rock/ashy soil debris field found SE from ca. station 4070+58, only a few rocks- all of these grapefruit sized or smaller- were observed in this area. Almost all of the small rocks observed were an almost glossy grayish-silver granitic rock type. Even the more angular rocks have smoothed edges. These native rocks were probably semi-polished, by the alluvial action of being tumbled gradually down the East Channel drainage, in/through the fine sand. These local granitic rocks are quite distinct, as compared to the imported quartzites, that most of the artifacts (i. e. #s 2, 3, 5, 6, 7, 8, 9, 10, 12) are made from.

A12 The area described here has evidence of prehistoric and historic activities.

A15 References:

Engelhardt, Fr. Zephyrin, O. F. M.
1927 San Fernando Rey: The Mission of the Valley. Franciscan Herald Press, Chicago. See page 21. East Channel was (is) the main source of water for the Mission Wells, which once supplied Mission San Fernando with water.

Heizer, Robert F., editor
1976 A Collection of Ethnographic Articles on the California Indians. See Pp. 63-68: "Rogerio's Theological School", by H. N. Rust (1904). Rogerio was a well known Fernandeno Indian resident of the Mission Wells area.

King, Tom
1970 Archaeological Site Survey Record for CA-LAN-409.

McCawley, William
1996 The First Angelinos - The Gabrielino Indians of Los Angeles. A Malki Museum Press/ Ballena Press Cooperative Publication. Page 39 briefly mentions the San Fernando Mission Wells and the Mission San Fernando aquaduct system.

Sutton, Mark Q.
1989 Archaeological Site Record for CA-LAN-409.

United States, Geological Survey
1972 San Fernando, California 7.5 Quadrangle Map. The general site area is located along the line which divides T2N from T3N, just to the left of the words "Mission Wells", and "Historical Monument," and just NW of and SE of the point "BM 1118."

Walker, Edwin Francis
1952 Five Prehistoric Archaeological Sites in Los Angeles County, California. See "A Metate Site at San Fernando", pp 15-26, in Publications of the Frederick Webb Hodge Anniversary Publication Fund, Volume VI. Los Angeles, California, Southwest Museum, Administrator of the Fund. George Rice & Sons, Los Angeles. Describes the excavations at LAN-409.

Webb, Edith Buckland
1952 Indian Life at The Old Missions. University of Nebraska Press: Lincoln and London. Page 77 mentions the San Fernando Mission Wells and Mission San Fernando aquaduct system.

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

SKETCH MAP

Primary # _____
HRI# _____
Trinomial _____

Page 8 of 9 *Resource Name or # (Assigned by recorder) _____

*Drawn By: ALBERT KNIGHT *Date: 11-98

NOTE: Include bar scale and north arrow.

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

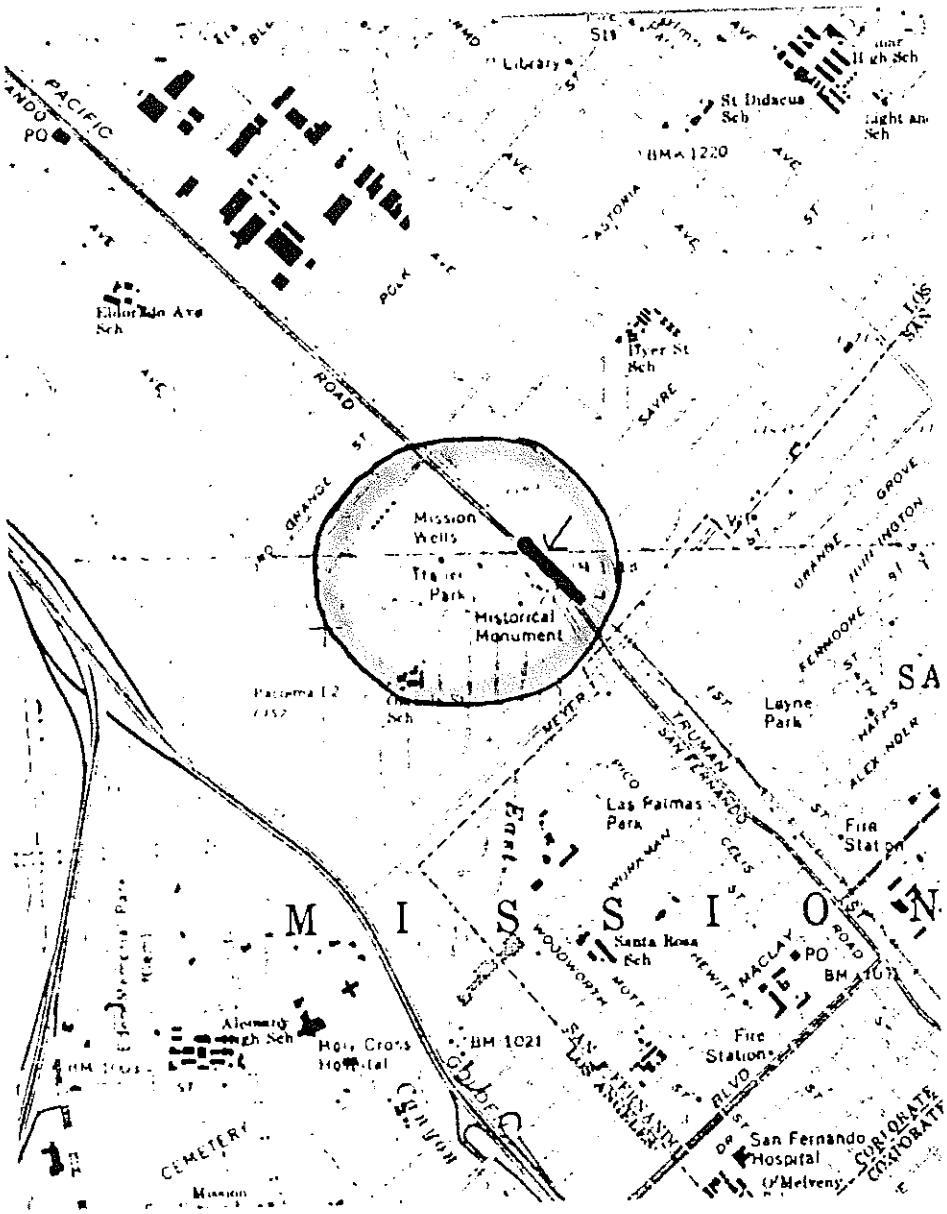
LOCATION MAP

Primary # _____
HRI# _____
Trinomial _____

Page 9 of 9 *Resource Name or # (Assigned by recorder) _____

*Map Name: SAN FERNANDO 7.5 *Scale: CA *Date of Map: 1972

LINEAR AREA V =
LITHICS & HISTORIC GLASS FOUND
DURING PPSI PROJECT



YELLOW / CIRCLE =
ACTIVITY AREA AROUND MISSION WELLS ?
PREHISTORIC AND MISSION PERIOD TO
MID 1850S

DPR 523J (1/95)

19-002681

*Required information

19-002681

Albert Knight
11236 Sheldon Street
Sun Valley CA 91352-1116
818-252-3466

Attn: Margaret Lopez
California State University Fullerton

3 October 2001

Dear Margaret:

I worked as a monitor on the Pacific Pipeline project a couple of years ago. On the enclosed map you will see an area near the old San Fernando Mission Wells that I have highlighted. I located at least 12 artifacts (mostly completed and unfinished choppers) in the area NORTH of San Fernando Road. Even though a considerable amount of time has passed, I am told that the final report for the project is still incomplete. I would like to make sure that the site area is known to other researchers. If not already recorded, will you please note the presence of the site on/in your records? If anyone wants to contact me about more details, please feel free to put them in contact with me.

Thanks!

Albert Knight

19-002681

area highlighted is in SW 1/4 of San Fernando

19-002681

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

19 - 001124

ARCHEOLOGICAL SITE SURVEY RECORD

University of California, Los Angeles Regional Office

SITE NO. CA-LAn -000 - 1124 (H)

County Los Angeles

1. Previous Site Designation _____ 2. Temporary Field No C..HOW. SAN.FER. 1
3. USGS Quad San Fernando 7½' X 15' ___ Year 1966 PR 1972
4. UTM Coordinates 3794350--3794475mN ; 367350-367500mE ✓
5. Twp. 2N Range 15W ; -- ¼ of -- ¼ of Sec. 3
6. Location Within the city of San Fernando, and bounded by San Fernando Mission Blvd. on the N.W.- Maclay Ave. on the S.E. Southern Pacific railroad tracks on the N.E.- and Truman St. on S.W.
7. Contour 1070 feet 8. Owner & Address Southern Pacific Transportation Co. 610 S Main Los Angeles
9. Prehistoric ___ Ethnographic ___ Historic X 10. Site Description
This is the site of the Southern Pacific enginehouse, turntable, and San Fernando station, built ca. 1874, the site is a barren. (cont)
11. Area 200 x 60 meters, 12,000 square meters. 12. Depth of Midden unknown
13. Site Vegetation Two pepper trees Surrounding Vegetation none
14. Location & Proximity of Water Mission wells (artesian) one mile N.W.
15. Site Soil * Surrounding Soil Sandy- Loam
16. Previous Excavation None
17. Site Disturbance Site has been leveled of original buildings.
18. Destruction Possibility Shopping center to be built within year.
19. Features *
20. Burials None
21. Artifacts High quality fired bricks (4½"X2 5/8"X8"), (3¾"X2½"X5") 1" bolts, nuts, and other small parts..
22. Faunal Remains None observed
23. Comments Very little historical information has been found on the station and featurs, so that the archeological data should add (cont
24. Accession No. -- 25. Sketch Map X by C.H. where Attached
26. Date Recorded 15 May 82 27. Recorded By Craig Howell 10557 Danube ave. Granada Hills Cal..
28. Photo Roll No. 1 Frame No. 1-10 Film Type(s) Color Taken By Craig W.Howell

DPR 422 (Rev. 9/76)

9. vacant lot with foundation features visible on the surface..

15. Sandy loam with lots of gravel, slag, and other rocky debris on the surface.

17. Also, there used to be a gas/filling station on the S.E. portion of the lot, about where the station is supected to have stood..The installation of subsurface tanks and subsequent razing of the station may have destroyed any foundations..

19. The only features extant are visible remnants of the foundations of the engine house and turntable pit ring.There are undoutedly extensive subsurface foundations features associated with these two structures..

Features A and B appear to be associated with the engine house.. Feature A consists of two paralled, linearfoundations. One is cement (13"wide X)while the other is a double course of mortared fire brick (wide X long). Feature B is also a foundatipn feature consisting of a single brick coursing and cement (wide X long).

Both features are partly exposed on the surfece, but undoubtedly extend subsurface N.E. to the pepper trees.

Feature C consists of a large (73'6"O.D.) circular cement foundation which served as the support for the circular rail of the turntable.

there is a double pattern of one inch bolts set in the cement at regular intervals (feet).

We can expect a substantail center post to exist subsurface in the center of this feature.

23. sigificantly to our understanding of the history and use of this railway facility.

SITE STATUS: unknown

19 - 001124 Site No. LAn-1124

% Destroyed _____ How _____ Test Excavated None %, if known. C. HOW. -SanFER.

National Register Status; Listed _____ Potential _____ No Determination _____ Nominated _____ Ineligible _____

State Historical Landmark (No.) _____ Point of Historical Interest _____

SPECIAL ATTRIBUTES (Place an X in only those spaces which pertain to the site)

Midden/Habitation Debris _____, Lithic and/or Ceramic Scatter _____

Bedrock Mortars/Milling Surfaces _____, Petroglyphs/Pictographs _____, Stone Features X

Burials _____, Caches _____, Hearths/Roasting Pits _____, Housepits _____, Structure Remains X,

Underwater _____, Open Air _____, Rockshelter _____, Cave _____, Quarry _____, Trails _____

REMARKS This is the first recording of its type as I understand, and I hope it will start more work by others in railway history..

Published References _____

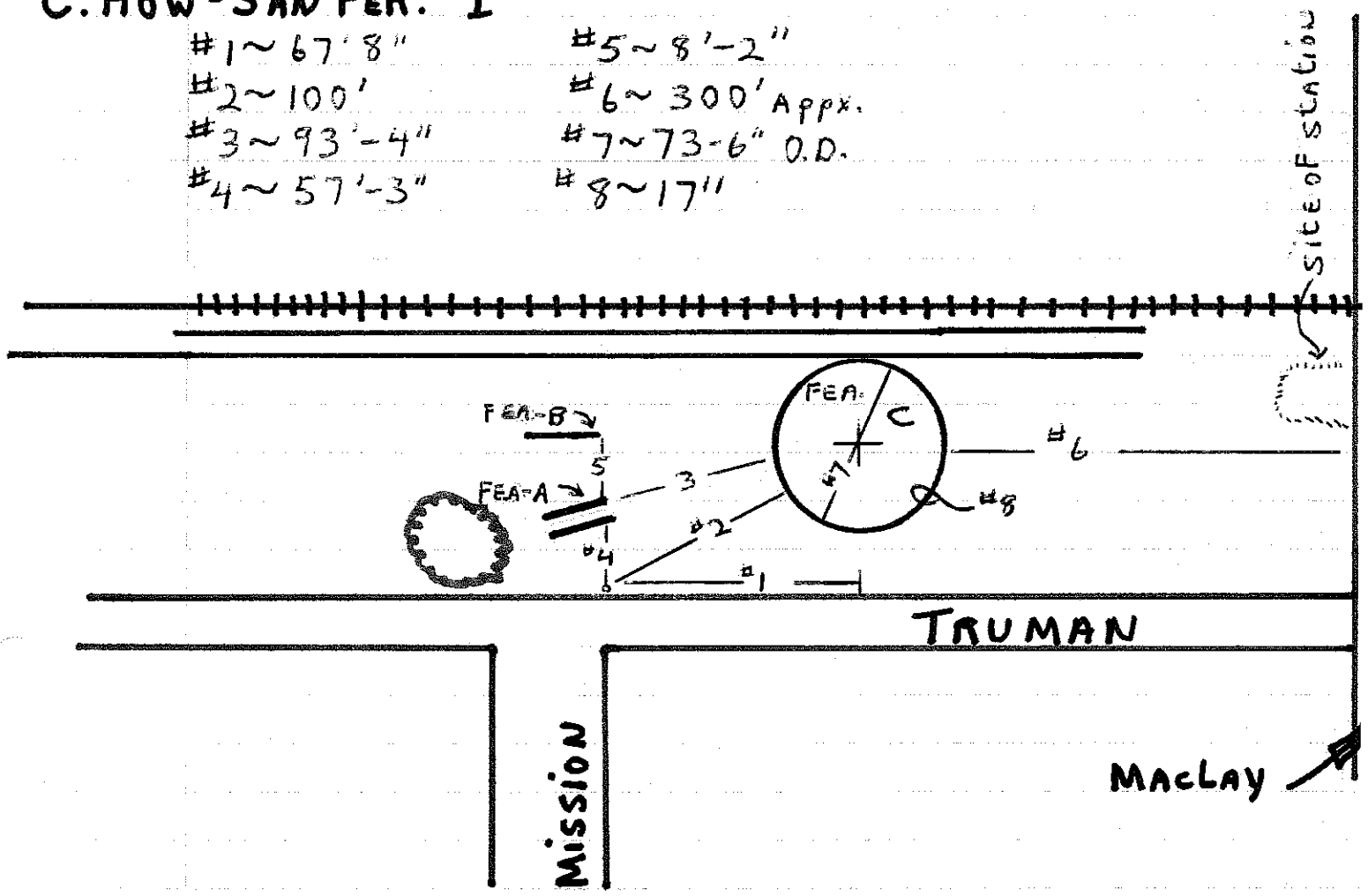
SKETCH LOCATION MAP (Include permanent reference markers, North Arrow, and Scale)
(sketch details from U.S.G.S. map or provide copy of topo)

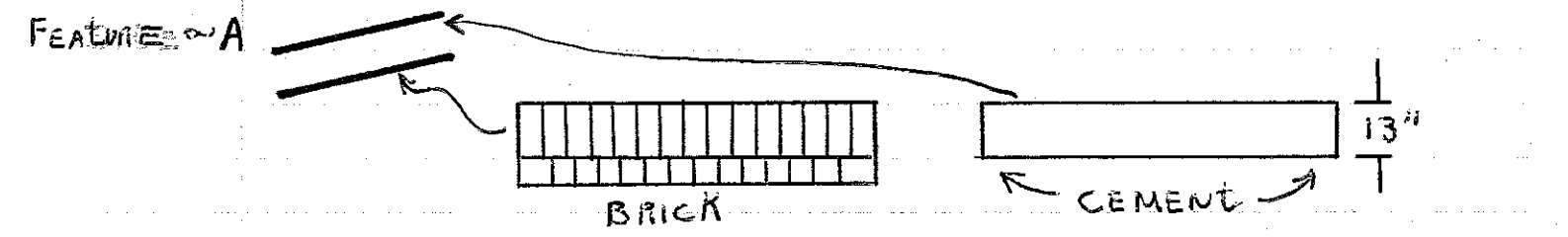
SKETCH SITE MAP (Same criteria as above)

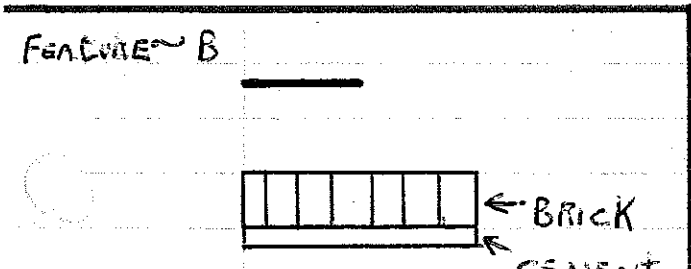
19 - 001124

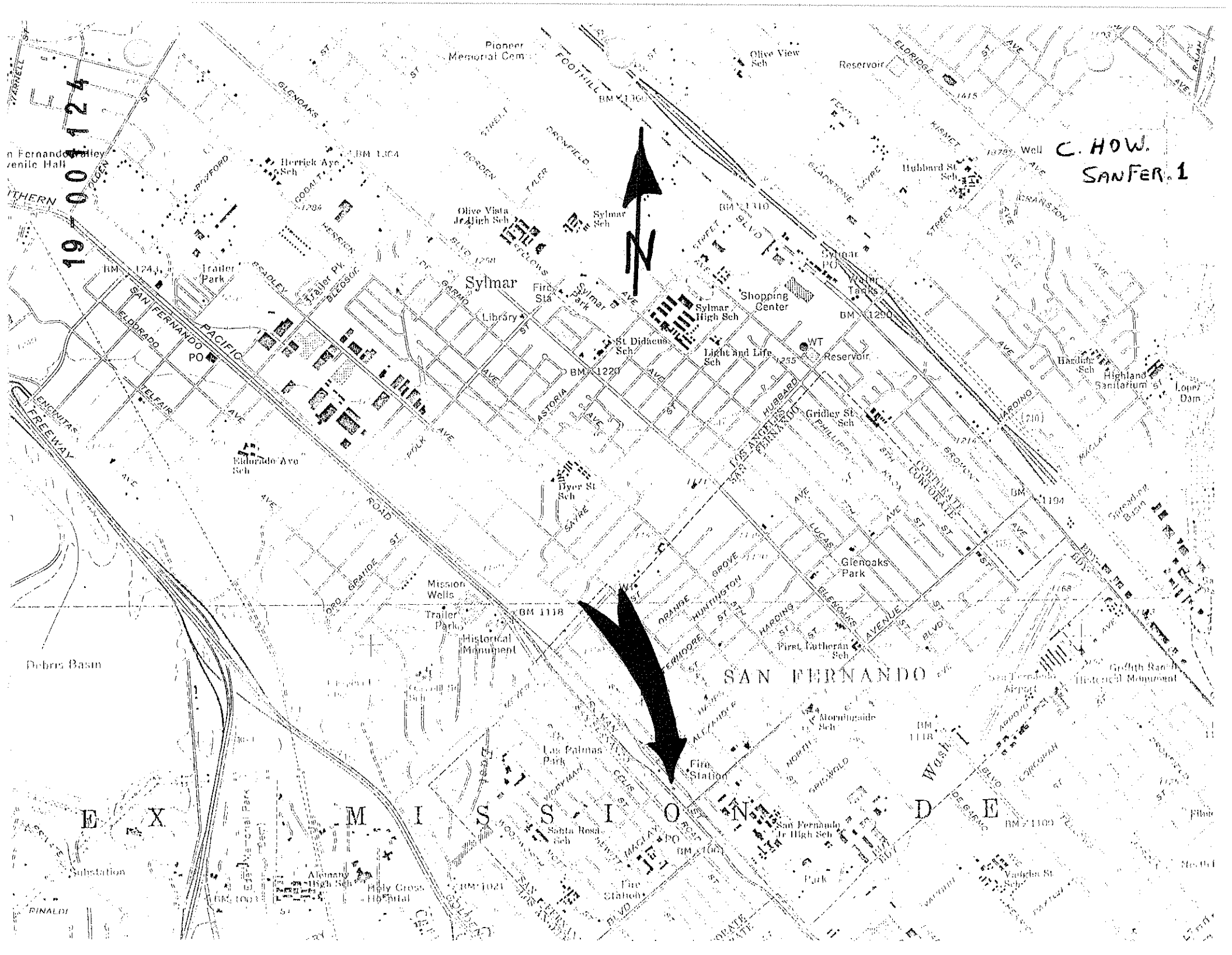
C. How-San Fer. #1

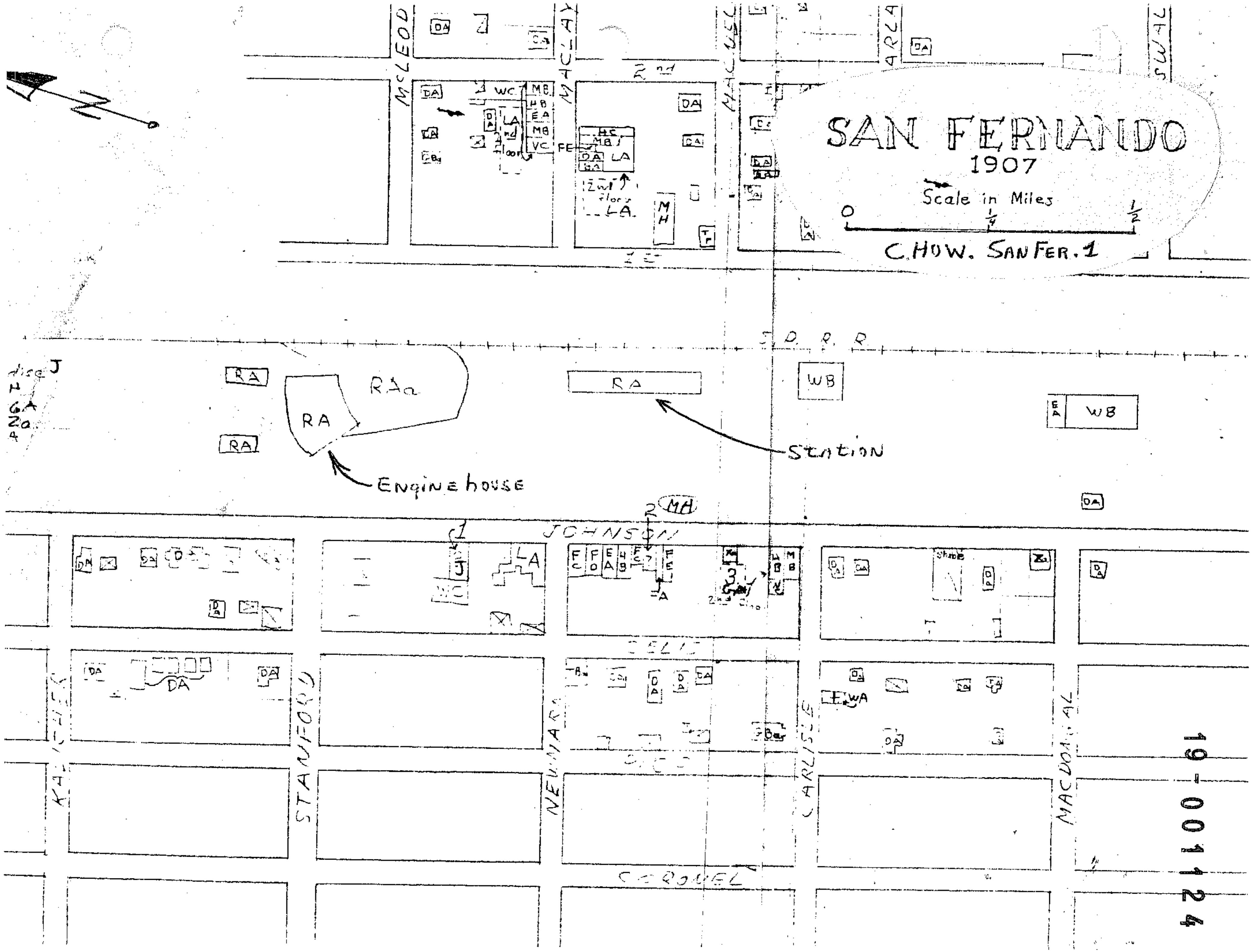
#1 ~ 67'8"
#2 ~ 100'
#3 ~ 93'-4"
#4 ~ 57'-3"
#5 ~ 8'-2"
#6 ~ 300' Appx.
#7 ~ 73-6" O.D.
#8 ~ 17"








19004124
C. HOW.
SANFER. 1
Sylmar
SAN FERNANDO
EXPOSITION
Pioneer Memorial Cem
Olive View Sch
Reservoir
Herrick Ave Sch
Olive Vista Jr High Sch
Sylmar Sch
Trailer Park
Trailer Pk
Fire Sta
Sylmar Park
Library
Sylmar High Sch
Shopping Center
Water Tanks
St Didacus Sch
Light and Life Sch
Reservoir
Gridley St Sch
Highland Sanitarium
Lopez Dam
Eldorado Ave Sch
Dyer St Sch
Mission Wells
Trailer Park
Historical Monument
Glenoaks Park
First Lutheran Sch
Griffith Race Historical Monument
Debris Basin
Las Palmas Park
Fire Station
Morningside Sch
Substation
Alemany High Sch
Holy Cross Hospital
Sahta Rosa Sch
Fire Station
San Fernando Jr High Sch
Park
Vaughn St Sch
Well
Hubbard St Sch
Harding Sch
BM 1304
BM 1310
BM 1290
BM 1255
BM 1220
BM 1244
BM 1118
BM 1104
BM 1109
BM 1021
BM 1003
SAN FERNANDO ROAD
FOOTHILL BLVD
SAN FERNANDO ROAD
PACIFIC ELECTRIC R.R.
ENCINITAS FREEWAY
LOS ANGELES AQUEDUCT
CONTINENTAL CONCRETE
Wash
DE GARMO
GLENOAKS BLVD
HARDING AVE
ELDORADO
TELFAIR
ASTORIA
PHILLIPPI
BROADWAY
HUNTINGTON DR
ORANGE GROVE
FERMOORE ST
LUCAS AVE
ORO GRANDE ST
SAYRE
PAXTON
KISMET
GLADSTONE
BRANSTON
HUBBARD
MACLAY
RINALDI
VAUGHN
PACOIMA
SAN FERNANDO
Sylmar
Mission Wells
Debris Basin
Historical Monument
Glenoaks Park
First Lutheran Sch
Griffith Race Historical Monument
Las Palmas Park
Fire Station
Morningside Sch
Substation
Alemany High Sch
Holy Cross Hospital
Sahta Rosa Sch
Fire Station
San Fernando Jr High Sch
Park
Vaughn St Sch
Well
Hubbard St Sch
Harding Sch
Olive View Sch
Reservoir
Pioneer Memorial Cem
Olive Vista Jr High Sch
Sylmar Sch
Trailer Park
Trailer Pk
Fire Sta
Sylmar Park
Library
Sylmar High Sch
Shopping Center
Water Tanks
St Didacus Sch
Light and Life Sch
Reservoir
Gridley St Sch
Highland Sanitarium
Lopez Dam
Eldorado Ave Sch
Dyer St Sch
Herrick Ave Sch
Olive Vista Jr High Sch
Sylmar Sch
Trailer Park
Trailer Pk
Fire Sta
Sylmar Park
Library
Sylmar High Sch
Shopping Center
Water Tanks
St Didacus Sch
Light and Life Sch
Reservoir
Gridley St Sch
Highland Sanitarium
Lopez Dam
Eldorado Ave Sch
Dyer St Sch
Mission Wells
Trailer Park
Historical Monument
Glenoaks Park
First Lutheran Sch
Griffith Race Historical Monument
Debris Basin
Las Palmas Park
Fire Station
Morningside Sch
Substation
Alemany High Sch
Holy Cross Hospital
Sahta Rosa Sch
Fire Station
San Fernando Jr High Sch
Park
Vaughn St Sch
Well
Hubbard St Sch
Harding Sch
Olive View Sch
Reservoir
Pioneer Memorial Cem



SAN FERNANDO
1907
Scale in Miles
0
1/4
1/2
C.HOW. SAN FER. 1
S. P. R. R.
Station
Engine house
JOHNSON
McLEOD
MACLAY
2nd
1st
STANFORD
NEWMARK
CARLISLE
MACDOUGAL
CORONEL

19-001124

19 - 001124

ARCHAEOLOGICAL SITE RECORD

Permanent Trinomial: CA-LAN-1124H
UPDATE

1. County: Los Angeles
2. USGS Quad: San Fernando 7.5'
3. UTM Coordinates: Zone 11: 367350-367500 mE 3794350-3794475 mN
4. Twp. 2N Rng. 15W; SE 1/4 of NE 1/4 of SW 1/4 of Section 3 (projected)
5. Map Coordinates: mmS; mmE 6. Elevation: 1040'
7. Location: on the east side of Truman Street, just north of Maclay Ave.
8. Prehistoric: Historic: XX Protohistoric:
9. Site Description: The Southern Pacific Enginehouse, turntable, and San Fernando Station, built ca. 1874
10. Area: unknown; Method of Determination:
11. Depth: unknown
12. Features: historic structure foundations reported
13. Artifacts: unknown
14. Non-artifactual Constituents: unknown
15. Date Updated: 4-23-89
16. Recorder: MQ Sutton
17. Affiliation and Address: Cultural Resource Facility, California State University, Bakersfield
18. Human Remains: none
19. Site Integrity: unknown, may be destroyed by shopping center construction
20. Nearest Water:
21. Vegetation Community (site vicinity): original is unknown
22. Vegetation (on site): original is unknown
23. Soil: 24. Surrounding Soil:
25. Geology: 26. Landform:
27. Slope: 28. Exposure:
29. Landowner and Address:
30. Remarks:
31. References:
32. Name of Project: WTG fiber-optic line
33. Type of Investigation: survey
34. Site Accession Number: Stored at:
35. Photos: no Taken by:
36. Photo Accession #: On File at:

ARCHAEOLOGICAL SITE LOCATION MAP

19 - 001124

Permanent Trinomial: CA-LAN-1124H
UPDATE

U.S.G.S. Map: San Fernando 7.5
Recorder: MQ Sutton