**PROACTIVE**
ENGINEERING CONSULTANTS

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May 31, 2019

Ms. Dionne Harris, M. Arch
Urban Regional Planner II
County of Riverside Department of Planning
4080 Lemon Street, 12th Floor
Riverside, CA

RE: Response to 5/30/19 Letter from Justin Roberts (Letter received 5/30/19) "June 4, 2019 Public Hearing. Comments Objecting to: Change of Zone No. 7937, Tentative Tract Map No. 37294 and Plot Plan No. 26249 – Intent to Adopt a Mitigated Negative Declaration – EA43021 Third Supervisorial District"

Dear Ms. Harris:

We have reviewed the above noted letter. As previously indicated, my firm, Proactive Engineering, is the engineering consultant of record for the project. As stated in my previous response letters regarding hydrology and drainage, the project drainage studies include the existing and proposed impacts of drainage tributary to and including the project site. This project has already completed a hydrology study to determine existing and developed condition drainage flows for the project site, and a Flood Plain (HECRAS) study to analyze potential impacts of the project to the adjacent natural drainage course. Both studies have been reviewed and approved by RCFCWCD.

Again, please have Mr. Robert's hydrology consultant contact me to go over any questions regarding these responses, past responses or the project's various hydrology studies.

Sincerely,

Tom Braun, MS, PE
Principal

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Corona CA 92882
T: 951/280-3300
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www.proactiveengineering.net

**Date:** May 31, 2019

**Attention:** Rafik Albert
EPD Solutions, Inc.

MATERIAL CULTURE
CONSULTING

**Submitted via email to: rafik@epdsolutions.com**

**Re:** **Response to Initial Study and Mitigated Negative Declaration/EA 43201 Comments provided by Rita Gentry, Professional Archaeologist and Local Resident**

**Los Olivos Residential Project – Riverside County, California**

Dear Mr. Albert,

In accordance with your request, Material Culture Consulting, Inc. (MCC) provides the following responses to Initial Study and Mitigated Negative Declaration/EA 43201 comments by Rita Gentry, Professional Archaeologist and local resident, regarding the proposed Los Olivos Residential Project, in Riverside County, California (Project). This letter provides comments and recommendations by Ms. Gentry, and responses by MCC, the firm who conducted the cultural resources assessment of the Project.

In a letter dated May 28, 2019, sent to the Riverside County Supervisors, Ms. Gentry provided the following comments. These comments purport that the finding of "no impact on historic resources" is inadequate due to the presence of Los Alamos Road along the southern boundary of the Project. MCC responses follow each of the comments:

**Ms. Gentry's Comment**

1.) The archaeologist conducting the analysis and survey failed to identify historic Los Alamos Road, an important site from the early settlement of Murrieta and French Valley in Riverside County.

**MCC Response:**

MCC was provided records search results of the California Historical Resources Information System (CHRIS) that was conducted on MCC's behalf by the staff at the Eastern Information Center (EIC), located at the University of California, Riverside campus. The record search conducted by the EIC staff did not identify Los Alamos Road as a resource. MCC conducted additional research after this comment was received, and the site record for Los Alamos Road was obtained from EIC and examined by MCC staff.

**Ms. Gentry's Comment**

2.) Rural Los Alamos Road was included in the California State Historic Resources Inventory on January 18, 1995 and was designated by the Riverside County Historical Commission as a County Historic Route on March 18, 1992.

**MCC Response:**

The Department of Parks and Recreation Form 523 series (DPR forms) for this resource is on file at EIC under P-33-023953, Los Alamos Road (see attachments). The DPR forms for the resource include a thorough recordation and formal significance evaluation for both the National Register of Historic Places (NRHP) and the California Register of Historical Resources (CRHR). The evaluation was completed by Mr. J. Smallwood, Architectural Historian with Applied Earthworks. Mr. Smallwood meets the Secretary of Interior Professional Qualifications Standards (36 CFR Part 61) as an Architectural Historian.

This site record and formal resource evaluation was completed in 2014 in conjunction with the *Phase I Cultural Resources Assessment for the Clinton Keith Road Extension Project, Riverside County, California* report (Eddy 2013). According to the site record (Smallwood 2014), "Despite the studies that occurred in the early-1990s to record, evaluate, and designate Los Alamos Road as a historical resource, Los Alamos Road was never included into the California Historical Resources Inventory or the Riverside County Historical Resources Survey". Although Govean et al. (1995) claim that the road was approved as a California Point of Historical Interest and/or given

historic designation status by the City of Murrieta, it was determined that while forms were filled out for inclusion in the California Historical Resources Inventory and California Point of Interest, these forms were either never received by the appropriate agencies (EIC or the State of California Office of Historic Preservation) or never signed and approved (State Historical Resources Commission and Riverside County Board of Supervisors) (Smallwood 2014). In addition, a formal evaluation of Los Alamos Road following all criteria for the National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), and City of Murrieta Municipal Code § 16.26.050 was never carried out (Smallwood 2014).

Additional research conducted by MCC on behalf of the Project with the Clerk of the Riverside County Board of Supervisors did not yield any recordation of Los Alamos being designated as a historical route within Riverside County. Only referral to Los Alamos Road's proposed designation was found from the Parks Department to Historical Commissions recommendation for further deliberation (see attachments). The current listing for California Historical Resources does not list Los Alamos Road as a historical resource.

**Ms. Gentry's Comment**

4.) The Los Olivos Project will be the first urban project along Los Alamos Road between the land grant boundary at Via Santee in Murrieta and Briggs Road.

**MCC Response:**
Currently, The Los Olivos Project is not the only proposed urban project to intersect with Los Alamos Road. The Clinton Keith Extension Project, Phase 3 is proposed to intersect Los Alamos Road along Briggs Road as the extension heads towards Winchester Road/ California State Route 79 (see attachments). In addition, several planned residential communities have also been constructed in the immediate vicinity of the Los Olivos project, to the north and to the east of the project, which have already changed the overall setting of the area along Los Olivos road between Liberty Road and Briggs Road, which is where the proposed Los Olivos Project is located. The imminent extension of Clinton Keith will cross Los Alamos Road in very close proximity to Los Olivos. Therefore, the cumulative impact of prior development has already changed the setting of this portion of Los Alamos, and the proposed Los Olivos Project will not present a significant impact to the setting of this resource.

**Ms. Gentry's Comment/Recommendation**

3.) Following CEQA, the site' importance needs to be identified, an evaluation of the impact of the Project on the site, which includes its contributing features, needs to be carried out, and mitigations developed before project approval, so that historic significance of the road is not adversely impacted.

**MCC Response:**

Evaluation for Los Alamos Road conducted by Smallwood (2014) determined that Los Alamos did not meet the following criteria for inclusions on the following designation listings:

*National Register of Historic Places (NRHP)*

- Los Alamos Road has not been officially recognized as one of the more important alignments or thoroughfares within the history of the Murrieta/French Valley/Auld Valley or Los Alamos Valley region compared to other predecessors' roads, including Murrieta Hot Springs Road and Winchester Road. Thus, Los Alamos Road does not meet NRHP Criterion A.
- Los Alamos Road is not directly associated with the productive life of an important individual and does not best represent any single individual's contribution to the region's history. Therefore, Los Alamos Road does not meet NRHP Criterion B.
- Presently, Los Alamos Road is modern and standard in its appearance, design, and construction, and it does not exhibit any architectural, engineering, or landscaping merits. The few minor elements that showcased the area's past agricultural role (tree rows) are not sufficient or historically significant enough to determine eligibility. Thus, Los Alamos Road does not meet NRHP Criterion C.
- Los Alamos Road does not have the potential to yield any important archaeological data about late nineteenth or early twentieth century road-building techniques, or other subjects of local, state, or national history that is not already known or that cannot be gained from traditional avenues of research. Therefore, Los Alamos Road does not meet NRHP Criterion D.

*California Register of Historical Resources (CRHR)*

- Los Alamos Road has not been officially recognized as one of the more important alignments or thoroughfares within the history of the Murrieta/French Valley/Auld Valley or Los Alamos Valley region compared to other predecessors' roads, including Murrieta Hot Springs Road and Winchester Road. Thus, Los Alamos Road does not meet CRHR Criterion 1.
- Los Alamos Road is not directly associated with the productive life of an important individual and does not best represent any single individual's contribution to the region's history. Therefore, Los Alamos Road does not meet CRHR Criterion 2.
- Presently, Los Alamos Road is modern and standard in its appearance, design, and construction, and it does not exhibit any architectural, engineering, or landscaping merits. The few minor elements that showcased the area's past agricultural role (tree rows) are not sufficient or historically significant enough to determine eligibility. Thus, Los Alamos Road does not meet CRHR Criterion 3.
- Los Alamos Road does not have the potential to yield any important archaeological data about late nineteenth or early twentieth century subjects of local, state, or national history that is not already known or that cannot be gained from traditional avenues of research. Therefore, Los Alamos Road does not meet CRHR Criterion 4.

**Concluding Remarks**

We recognize that the rural, pastoral setting of Los Alamos Road and the surrounding community provides tangible and intangible heritage to communities such as Murrieta. Of note, Los Alamos Road is not identified as a resource in the City of Murrieta. While portions of the road and setting are still intact and retain integrity of setting, location, and feeling, this resource has nevertheless been determined ineligible for inclusion on the NRHP or CRHR, and furthermore does not qualify as a "unique archaeological resource" under CEQA PRC Section 21083. Therefore, the resource is viewed as not significant under CEQA, and "A non-unique archaeological resource need be given no further consideration, other than the simple recording of its existence by the lead agency if it so elects" [PRC Section 21083.2(h)].

The resource has already been recorded and formally evaluated by a Qualified Architectural Historian. Unless an update or re-evaluation is required by the lead agency, no further recordation or mitigation measures are necessary at this time.

A copy of Ms. Gentry's comment letter and these responses will be included as an appendix to the final cultural resources assessment for this project, to ensure that the additional information gleaned and prompted by Ms. Gentry's comments become part of the administrative record for this project. We will also include the DPR forms for Los Alamos Road as part of the cultural resources assessment.

Respectfully submitted,

Tria Belcourt, M.A., RPA
President and Principal Archaeologist
Material Culture Consulting
tria@materialcultureconsulting
626-205-8279

Attachments:

Attached Item No 8.3
1991 Referral for further deliberation for historic site designation for Los Alamos Road

Eddy, J.J.
2013 *Phase I Cultural Resources Assessment for the Clinton Keith Road Extension Project, Riverside County, California*. RI-09204.

Govean, F., P. Jertberg, and B. Padon
1995 *Cultural and Paleontological Resources Review Alignment Study of the Southwest Area Road and Bridge benefit District and Project Analysis for Clinton Keith Road Alignment*. Prepared by Petra Resources, Inc. RI-03916.

Smallwood, J.
2014 Primary Record for P-33-023953/Los Alamos Road

FROM: General Manager DATE: CALL-BACK ITEM August 14, 1991

SUBJECT: Los Alamos Road - Historic Site Designation

RECOMMENDED MOTION: That the Board of Directors refer the proposed historic site designation for Los Alamos Road to the Historical Commission for further deliberation.

INFORMATION: After discussion with the Director of Transportation and the city council of Murrieta, I recommend that this item be referred back to the Historical Commission for further discussion. Additional information is needed in the area of historic route definition, appropriate location of historic markers, and evaluation and prioritization of other historically significant routes in Riverside County.

Paul D. Romero, General Manager

PDR/0113J

c: Administrative Office

REVIEWED BY ADMINISTRATIVE OFFICE
DATE: 8/20/91 @

MINUTES OF THE REGIONAL PARK AND OPEN SPACE DISTRICT

On motion of Supervisor Larson, seconded by Supervisor Ceniceros and duly carried by unanimous vote, IT WAS ORDERED that the above matter is approved as recommended.

Ayes: Younglove, Ceniceros, Dunlap, Larson and Abraham
Noes: None
Absent: None
Date: September 3, 1991

Gerald A. Maloney
Clerk of the Board
By: Deputy

Form 11B
Prev. Agn. Ref.: 8.2, July 30, 1991
Dept. Comments: none
Dist.: 3
8.3
xc: Regional Park & Open-Space District

RI-09024

# PHASE I CULTURAL RESOURCES ASSESSMENT FOR THE CLINTON KEITH ROAD EXTENSION PROJECT, RIVERSIDE COUNTY, CALIFORNIA

USGS Murrieta and Bachelor Mountain 7.5' Quadrangle; Township 6S, Range 2W, Section 31, Township 6S, Range 3W, Sections 35 and 36, Township 7S, Range 2W, Section 6, and Township 7S, Range 3W, Sections 1 and 2

Prepared for:
**U.S. Army Corp of Engineers**
Los Angeles District
915 Wilshire Blvd.
Los Angeles, CA 90017

and

**Riverside County Transportation Department**
3525 14th St
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Prepared by:
John J. Eddy, M.A., RPA
**Applied EarthWorks, Inc.**
3550 East Florida Avenue, Suite H
Hemet, California 92544-4937
(951) 766-2000

Applied EARTHWORKS Inc.

September 2013

Keywords: ~105 acres surveyed; six previously-recorded resources (CA-RIV-10890 [33-021025], 33-013268, 33-013871, 33-016989, CA-RIV-11585 [33-016990], and 33-021031); seven newly-identified cultural resources (33-023477, CA-RIV-11571/H [33-023478], CA-RIV-15572 [33-023479], CA-RIV-15573 [33-023480], CA-RIV-15574/H [33-23481], CA-RIV-15575 [33-023482], and CA-RIV-15576 [33-023483]); Stacked rock structure; Mid-twentieth century refuse deposit; State Route 79/Winchester Road; Warm Springs Creek; Riversidian sage scrub; Slicks; Basin metates; mortars; Lithic scatter; Minimal to moderate use bedrock milling sites (MMBRMs); Intensive use bedrock milling sites (IBRMs); Centralized resource processing location; Satellite resource processing location; potential Adobe Springs (CA-RIV-716) village complex

# CONTENTS


**MANAGEMENT SUMMARY** ..... v

**1 INTRODUCTION** ..... **1**
- 1.1 Project Location and Description ..... 1
- 1.2 2013 Project Survey Area ..... 4
- 1.3 Regulatory Context ..... 8
  - 1.3.1 National Historic Preservation Act (NHPA) ..... 8
  - 1.3.2 California Environmental Quality Act (CEQA) ..... 8
- 1.4 Report Organization ..... 9

**2 SETTING** ..... **10**
- 2.1 Environmental Setting ..... 10
  - 2.1.1 Geology and Hydrology ..... 10
  - 2.1.2 Climate ..... 11
  - 2.1.3 Vegetation ..... 11
- 2.2 Prehistoric Setting ..... 13
  - 2.2.1 Early Archaic Period (ca. 9500–7000 B.P.) ..... 14
  - 2.2.2 Middle Archaic Period (ca. 7000–4000 B.P.) ..... 15
  - 2.2.3 Late Archaic Period (ca. 4000–1500 B.P.) ..... 18
  - 2.2.4 Saratoga Springs Period (ca. 1500–750 B.P.) ..... 20
  - 2.2.5 Late Prehistoric Period (ca. 750–410 B.P.) ..... 23
  - 2.2.6 Protohistoric Period (ca. 410–180 B.P.) ..... 24
- 2.3 Ethnographic Setting ..... 26
  - 2.3.1 Luiseño ..... 26
- 2.4 Historical Setting ..... 29
  - 2.4.1 The Spanish Period, 1769–1822 ..... 29
  - 2.4.2 Mexican Rancho Period, 1822–1848 ..... 30
  - 2.4.3 American Period, 1848–Present ..... 30
  - 2.4.4 French Valley/Warm Springs Creek Region ..... 31

**3 ARCHAEOLOGICAL LITERATURE AND RECORDS SEARCH** ..... **36**
- 3.1 Prehistoric Archaeological Resources ..... 38
  - 3.1.1 Isolated Artifacts ..... 38
  - 3.1.2 Lithic Scatters ..... 39
  - 3.1.3 Complex Lithic Scatters ..... 39
  - 3.1.4 Bedrock Milling Sites ..... 39
  - 3.1.5 Village Sites ..... 39
- 3.2 Historical Archaeological Built-Environment Resources ..... 40
- 3.3 Previously Recorded Resources within the Survey Area ..... 40
  - 3.3.1 33-013268 ..... 40
  - 3.3.2 33-013871 ..... 41
  - 3.3.3 33-016989 ..... 41
  - 3.3.4 33-016990 ..... 41
  - 3.3.5 CA-RIV-10890 (33-021025) ..... 41
  - 3.3.6 33-021031 ..... 42

**4 NATIVE AMERICAN COMMUNICATION ..... 43**

**5 FIELD METHODS ..... 44**
5.1 Bedrock Milling Feature Recordation ..... 45

**6 PHASE I CULTURAL RESOURCES SURVEY RESULTS ..... 46**
6.1 Previously Recorded Resources ..... 46
6.1.1 CA-RIV-10890H (33-021025) ..... 46
6.1.2 33-013871 ..... 46
6.1.3 CA-RIV-11585 (33-016990) ..... 46
6.1.4 33-021031 ..... 47
6.1.5 33-013268 ..... 47
6.1.6 33-016989 ..... 49
6.2 Newly Discovered Resources ..... 49
6.2.1 33-023477 ..... 49
6.2.2 CA-RIV-11571/H (33-02348) ..... 50
6.2.3 CA-RIV-11572 (33-023479) ..... 52
6.2.4 CA-RIV-11573 (33-023480) ..... 54
6.2.5 CA-RIV-11574/H (33-023481) ..... 55
6.2.6 CA-RIV-11575 (33-023482) ..... 55
6.2.7 CA-RIV-11576 (33-023483) ..... 61

**7 SUMMARY AND PRELIMINARY INTERPRETATIONS ..... 63**
7.1 Preliminary Interpretations ..... 63
7.1.1 Minimal to Moderate Use Bedrock Milling Sites ..... 64
7.1.2 Intensive Use Bedrock Milling Sites ..... 65
7.1.3 Adobe Springs Village Complex ..... 66

**8 MANAGEMENT RECOMMENDATIONS ..... 68**

**9 REFERENCES ..... 70**

**APPENDIX A: NATIVE AMERICAN COORDINATION**
**APPENDIX B: CONFIDENTIAL SITE RECORDS**

## List of Figures

1 Project vicinity ..... 2
2 Project location ..... 3
3a Project Survey Area map (Map 1 of 3) ..... 5
3b Project Survey Area map (Map 2 of 3) ..... 6
3c Project Survey Area map (Map 3 of 3) ..... 7
4 Project overview showing Riversidian sage scrub characterized by dense stands of California buckwheat in the foreground ..... 12
5 Nicolas family members harvesting grain in Los Alamos/Auld Valley, circa 1910 ..... 33
6 Mulholland family house in Los Alamos/Auld Valley region, circa 1900 ..... 34
7 State Route 79 south of Benton Road. View to the northeast ..... 47
8 OC 1 at 33-016690. View to the east ..... 48

9 OC 2 at 33-016690. View to the south ....48
10 Overview of 33-016690 showing extent of previous disturbances. View to the south ....49
11 Close-up of metate fragment isolate 33-023477 ....50
12 Overview of stacked rock wall feature at CA-RIV-11571/H. Feature is in foreground, Feature 1b in background. View to the west ....51
13 Overview of OC 5 at CA-RIV-11571/H showing MS 7 (left) and MS 8 (right). MS 9 is not pictured. View to the southwest ....51
14 Close-up of BM 1 at CA-RIV-11572 ....53
15 Overview of OC 3 at CA-RIV-11572 showing MS 3. View to the west ....53
16 Overview of CA-RIV-11573 showing alluvial terrace and Warm Springs Creek. View to the south ....54
17 Overview of OC at CA-RIV-11574/H. Seven of eight milling slicks visible. View to the west ....56
18 Overview of CA-RIV-11575 from southern portion of site across rock knoll and toward tributary of Warm Springs Creek. View to the north ....56
19 OCs 1 and 2 at CA-RIV-11575 showing diversity of plants including yucca, California buckwheat, and red berry buckthorn ....57
20 Close-up of OC 6 containing A-1. Further investigation revealed A-1 was resting atop a bedrock mortar (M 1), within a basin metate (BM 4), and was surrounded by a milling slick skirt (MS 11) ....60
21 Overview of CA-RIV-11576 showing prefabricated steel building, utility pole, and eucalyptus and pepper trees, as well as native plant species. View to the northwest ....61
22 OC 2 at CA-RIV-11576 showing MS 2 and 3. View to the southwest. ....62

## List of Tables

1 Previous Cultural Studies within the Survey Area ....36
2 Cultural Resources within One-Mile of the Survey Area ....40
3 Milling Elements Recorded at Site CA-RIV-11575 ....58
4 Recommendations for Cultural Resources within the Clinton Keith Road Extension Survey Area ....69

# MANAGEMENT SUMMARY

The Riverside County Transportation Department (RCTD), in cooperation with the City of Murrieta, proposes to construct a six-lane urban arterial in the City of Murrieta and unincorporated Riverside County that would extend the existing Clinton Keith Road between Antelope Road and State Route 79 (SR 79). Applied EarthWorks, Inc. (Æ) was retained to conduct a cultural resources investigation of the RCTD's Clinton Keith Road Extension Project (Project) area. The Project is subject to the regulations and guidelines of the California Environmental Quality Act (CEQA). In addition, the Project will require Section 404 permitting from the U.S. Army Corps of Engineers (Corps). Issuance of the Permit is considered an "undertaking" under Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended.

As part of the Phase I study, Æ completed a records search at the Eastern Information Center (EIC), coordinated with the Native American Heritage Commission (NAHC) and local Native American groups, and completed a pedestrian survey of the 2013 Project survey area. A search of the Sacred Land files by the NAHC did not indicate the presence of known cultural resources or sacred sites in the Survey Area. However, results of the records search indicated that 59 prehistoric archaeological resources (47 sites and 12 isolated artifacts), 14 historical archaeological resources (12 sites and two isolated artifact), and six built-environment resources were recorded previously within a one-mile radius.

An intensive archaeological pedestrian survey of the 2013 Project survey area was performed by a two-person crew under the direction of John J. Eddy, M.A., RPA on June 13 and 14, 2013. The field survey was supervised by Robert J. Lichtenstein, M.A., RPA, with Ken Moslak serving as field technician. Archaeological site recordation occurred between June 27 and July 3, 2013, and was directed by Mr. Eddy with Mark King and Carley Smith, M.S., serving as field technicians. The Phase I survey resulted in the identification of 11 cultural resources including one built-environment resource, two isolated artifacts, and eight archaeological sites.

The previously recorded built-environment resource (33-013871) consists of a segment of State Route 79/Winchester Road. This and other segments of Winchester Road have been previously recorded and evaluated as *not eligible* for the California Register of Historical Resources (CRHR). This particular segment is completely modern in appearance, design, and construction, and lacks sufficient historical integrity to be considered eligible for the CRHR, or the National Register of Historic Places (NRHP).

The two isolated artifacts consist of a metate fragment (33-023477) found in a previously excavated ditch situated between State Route 79 and a commercial property to the north and a historical-period metal gas can (33-021031). The two isolated artifacts are not considered eligible for the NRHP or CRHR individually or as contributors to the significance of a potential cultural landscape/archaeological district as they either lack integrity (i.e., 33-023477) or evidence of direct historical association (i.e., 33-021031).

The eight archaeological sites identified within the 2013 survey area consist of two multicomponent sites (CA-RIV-11571/H [33-023478] and CA-RIV-11574/H [33-023481]) containing both historical-period and prehistoric components, and six prehistoric sites (33-

016689, CA-RIV-11585 [33-016690], CA-RIV-11572 [33-023479], CA-RIV-11573 [33-023480], CA-RIV-11575 [33-023482], and CA-RIV-11576 [33-023483]).

CA-RIV-11571/H is a multicomponent site containing a historical-period multiroom stacked rock structure of unknown age and function and a prehistoric minimal to moderate use (MMBRM) bedrock milling site with a sparse quartz lithic scatter. CA-RIV-11574/H is also a multicomponent site that contains a mid-twentieth-century historical archaeological refuse deposit and prehistoric MMBRM. Of the six prehistoric sites identified, four are MMBRMs (33-016690, CA-RIV-11572, CA-RIV-11573, and CA-RIV-11576), one is an intensive-use bedrock milling site (IBRM; CA-RIV-11575), and one is a complex lithic scatter (33-016689) containing lithic debitage and ground stone artifacts.

Evidence of 33-016989 was not identified on the surface of the 2013 Project survey area and the site appears to be located beyond the area of direct impact. However, it is unclear if the site contains subsurface cultural deposits and whether or not deposits extend into the Survey Area. Efforts will be made to determine the presence or absence of subsurface cultural deposits associated with 33-016689 within the 2013 Project survey area during Phase II investigations.

The eight archaeological sites are considered potential historic properties/potential historical resources that must be evaluated against the criteria set forth in the NRHP and CRHR. Prehistoric sites/components may also be part of a resource gathering and processing taskscape associated with the Adobe Springs habitation site (CA-RIV-716) and broader village complex, and may provide important information regarding settlement and subsistence practices in the French Valley area during the Late Prehistoric/Ethnohistoric periods, or earlier. Therefore, Phase II testing and evaluation is recommended for the eight archaeological sites identified within the 2013 Project survey area. Phase II investigations will include excavation and/or non-excavation strategies such as archival research, ethnographic research, landscape analysis, and more intensive site documentation. Æ recommends that a Phase II testing and evaluation plan be prepared to evaluate each site individually and, when necessary, as contributors to a potential cultural landscape or archaeological district.

Field notes documenting the current investigation are on file at Æ's Hemet office. A copy of this report will be placed on file at the Eastern Information Center (EIC) of the California Historical Resources Information System (CHRIS), housed at the University of California, Riverside.

# 1
# INTRODUCTION

The Riverside County Transportation Department (RCTD), in cooperation with the City of Murrieta, proposes to construct a six-lane urban arterial in the City of Murrieta and unincorporated Riverside County that would extend the existing Clinton Keith Road between Antelope Road and State Route 79 (SR 79). This alignment is consistent with County General Plan Amendment 409 (CGPA 409). A *Supplemental Environmental Impact Report (SEIR)* for the Clinton Keith Road Extension Project (Project) was certified in January 2006 (CH2M Hill 2006). The SEIR analyzed changes associated with the design of the Project that had occurred since the original EIR was approved in 2000 (SCH Number 1995062022). The County is preparing an addendum to the SEIR because construction of the Project will be phased due to financial constraints and as a result of changes to existing biological conditions, land ownership, and CEQA guidelines related to greenhouse gas emissions since the approval of the SEIR. This report, prepared by Applied EarthWorks, Inc. (Æ), summarizes the methods and results of a cultural resources investigation in support of the addendum for the Project.

The Project is subject to the regulations and guidelines of the California Environmental Quality Act (CEQA). In addition, the Project will require Section 404 permitting from the U.S. Army Corps of Engineers (Corps). Issuance of the Permit is considered an "undertaking" under Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended. Æ developed the scope of work in consultation with Russell Williams, RCTD Environmental manager, and R.J. Van Sant of the Corps, which included background research, coordination with the Native American Heritage Commission (NAHC) and local Native American tribes, and a cultural resources survey. John J. Eddy, M.A., RPA, served as Æ's Principal Investigator and Project Manager. The field efforts were completed by Mr. Eddy and Æ archaeologists Bob Lichtenstein, M.A., RPA, Josh Smallwood M.A., RPA, Carley Smith, M.S., Ken Moslak, B.S., and Mark King.

## 1.1 PROJECT LOCATION AND DESCRIPTION

The Project is located in western Riverside County along the northern jurisdiction of the City of Murrieta and within unincorporated Riverside County (Figure 1). Specifically, the Project is located in Township 6S, Range 2W, Section 31, Township 6S, Range 3W, Sections 35 and 36, Township 7S, Range 2W, Section 6, and Township 7S, Range 3W, Sections 1 and 2; San Bernardino Baseline and Meridian [S.B.B.M.]) as depicted on the Murrieta (1955, PR1979) and Bachelor Mountain, CA (1953, PR1978) 7.5' USGS quadrangles (Figure 2).

The Project is generally located between I-215 and SR 79 on existing Clinton Keith Road, and the alignment extension included in CGPA 409. The limits of the proposed Project described in the SEIR extend between Antelope Road (600 feet [ft] east of the I-215 interchange) and SR 79 at Benton Road. The proposed Project is being built in four segments. Since the approval of the SEIR, two segments of the Project have been constructed as part of the City of Murrieta's local road improvement project for access to a new hospital, and as part of Tract 29484, respectively. There are two segments remaining to be built. The four segments are as follows:

Important species in the valley grassland community, prior to extensive farming and grazing by domestic livestock, may have included rye grass (*Leymus condensatus*), blue grass (*Poa secunda*), bent grass (*Agrostis* spp.), needlegrass (*Stipa* spp.), and three-awn (*Aristida divaricata*). Pollen samples recovered from prehistoric valley sediments indicate that members of the sunflower family (Asteraceae) also were important components of the vegetation. The Project region has been dry-farmed for wheat and alfalfa, which has led to the deterioration of the native floral communities that once inhabited the valley floor areas. At present, in areas not utilized for agriculture, the valley grassland community is dominated by exotic species although wild California rose (*Rosa californica*) stands were noted along sections of Warm Springs Creek.

The southern arroyo willow riparian (previously southern willow scrub) plant community was identified by Holland (1986:151) as a variant of the southern riparian forest but was not described. The U.S. Fish and Wildlife Service (2013) describes southern arroyo willow riparian as consisting of a "winter-deciduous riparian forests with closed or nearly-closed canopies that are dominated by moderately tall broad-leafed trees, primarily arroyo willow." The habitat is typically found in frequently flooded areas along creeks and rivers with an understory composed of mulefat (*Baccharis salicifolia)*, western ragweed (*Ambrosia psilostachya)*, mugwort (*Artemisia douglasiana)*, spiny rush (*Juncus acutus*), and shrubby willows (e.g., sandbar willow [*Salix interior*] and Gooding's black willow [*Salix gooddingii*]).

Other species found in several of the plant communities mentioned above that may be within the general Project area include elderberry (*Sambucus mexicana*), goosefoot (*Chenopodium* spp.), blue dicks (*Dichelostemma capitatum*), Parry's larkspur (*Dephinium parryi*), chia (*Salvia columbariae*), coastal paintbrush (*Castilleja affinis*), common lomatium (*Lomatium utriculatum*), finger-leaved morning glory (*Calystegia macrostegia*), wild onion (*Allium* spp.), night shade (*Solanum xanti*), miniature lupine (*Lupinus bicolor*), silver buckwheat (*Eriogonum elongatum*), wild celery (*Apiastrum angustifolium*), legumes (Fabaceae), golden yarrow (*Eriophyllum confertiflorum*), Mariposa lily (*Calochortus* spp.), and amaranth (*Amaranthus blitoides*).

## 2.2 PREHISTORIC SETTING

The prehistory of inland southern California has been less thoroughly understood than that of the adjacent desert and coastal regions where for over 50 years various cultural chronologies based on time-sensitive artifact types have been proposed which were later refined using radiocarbon data (cf., Basgall and Hall 1993; Koerper and Drover 1983; True 1958; Wallace 1955, 1978; Warren 1968, 1980, 1984; Warren and Crabtree 1972). In the absence of absolute chronological indicators for inland sites, researchers generally employed typological cross-dating from either coastal or desert sequences, often as the sole means for assigning age to archaeological sites within the inland areas of southern California (Goldberg and Arnold 1988).

Two large reservoir projects, Perris Reservoir (O'Connell et al. 1974) and the Eastside Reservoir Project (ESRP) (Goldberg et al. 2001), generated large data sets to provide a basis for resolving some of these regional problems. It is difficult to extrapolate the geographic extent of the prehistoric cultural patterns discerned from excavations at these two reservoirs, which are located 19 km (12 mi) apart in central western Riverside County. However, the ESRP is located immediately east and adjacent to the northern end of the Project area, and it is almost certain that prehistoric patterns in the general Project area are similar to those discerned for the ESRP.

Therefore, this discussion of the prehistoric cultural setting for the Project study area and the adjacent region is drawn from the cultural sequence developed from results of the ESRP. This chronology was based first on artifact cross dating, and then refined with radiocarbon and obsidian hydration dates (Onken and Horne 2001; Robinson 1998, 2001); however, the ESRP chronology draws heavily on a cultural sequence defined by Warren (1984) for southern California, which is based largely on archaeological work conducted in the Colorado and Mojave deserts. Because Warren's chronology used temporal period names that suggest links to the Mojave, these were replaced in the ESRP chronology by value neutral terms. Because no prehistoric sites dating to the Paleoindian Period (ca. 12,000–9500 B.P.) have been documented within the Project region, the discussion below begins with the Early Archaic Period.

### 2.2.1 Early Archaic Period (ca. 9500–7000 B.P.)

The Early Archaic period saw a continuation of the weather patterns of the latest Pleistocene/Early Holocene period, with the desert interior apparently much more favorable for human occupation than the cismontane valleys of southern California. It has been postulated that small, highly mobile groups still traveled over a wide home range utilizing highly portable tool kits to procure and process critical resources, with brief and anticipated intervals of seasonal sedentism. However, because of the arid conditions within the interior valley areas, prehistoric use of the Project study area would have been negligible and populations would still have favored the coastal or interior desert regions. Nonetheless, those populations exploiting the interior valleys would have been tethered to the few reliable, drought-resistant water sources such as Lake Elsinore, Mystic Lake, and possibly the Cajalco Basin (Goldberg et al. 2001; Horne and McDougall 2008).

Archaeological sites documented within the Project region dating to the Early Archaic or containing meager evidence suggestive of sporadic use during this time period are rare, supporting the hypothesis of negligible prehistoric use of the inland valley areas during this period. Within the ESRP study area, two site components are firmly dated to the Early Archaic: a single human burial at CA-RIV-5786 (which is located within the Salt Creek Channel immediately northwest of the Survey Area, and within the current Project study area) dating to 7380 ± 300 B.P., and the lower component (Analytic Unit 2) at CA-RIV-5086, a small temporary camp relatively dated with obsidian hydration data and stratigraphic information to the Early Archaic. The latter site contained a relatively sparse scatter of flaked and ground stone artifacts and faunal remains, but no features. The data suggest that CA-RIV-5086 was utilized as a resource extraction locale, possibly situated adjacent to a wetlands environment. Four other localities identified within the ESRP study area (CA-RIV4627/H, Locus B; CA-RIV-4629/H, Locus B; CA-RIV-4930, Locus J; and CA-RIV-5086, Analytic Unit 2) contained possible evidence of Early Archaic use in the form of Coso obsidian rinds exceeding 15 microns (Onken and Horne 2001). Hydration rind measurements from these sites measuring 17.2, 15.6, 16.5, and 17.5 microns, respectively, convert to age ranges of 10,300 years, 8,500 years, 9,500 years, and 10,700 years (Onken and Horne 2001:121–130).

Although much of the data gathered during the ESRP studies seem to corroborate the notion of sporadic use of the study region by small, highly mobile bands utilizing highly portable tool kits during the Early Archaic, the data from CA-RIV-5786 seem to contradict this theory. The single human burial identified at CA-RIV-5786, which was discovered during construction monitoring efforts associated with the Salt Creek Channel Project, was capped with a burial cairn composed of three large, well-shaped basin metates (McDougall 1995). As was noted above, this burial has been firmly dated to 7380 ± 300 B.P., well within the postglacial thermal maximum. Given their

size and weight, these metates were certainly not part of a portable tool kit. It is more likely that this isolated burial was associated with a larger residential community based at a permanent inland water source. Conceivably, Salt Creek may have been a drought-resistant environment prior to the massive agricultural pursuits and channelization efforts that occurred during the Historical Period.

In summary, few sites dating to the Early Archaic Period have been documented within or adjacent to the Project study area, supporting the theory of negligible use of the inland areas at this time because of arid conditions. Many of these sites contain only scant evidence of Early Archaic Period use in the form of obsidian hydration rind measurements, suggesting ephemeral site use by small, highly mobile groups. However, some sites dating to this period contain evidence of fairly sedentary residential occupations and evidence that site reuse was anticipated, suggesting a predictable availability of water and other critical resources, and that these sites may have been destination points on a scheduled, seasonal round (Goldberg et al. 2001).

### 2.2.2 Middle Archaic Period (ca. 7000–4000 B.P.)

The Middle Archaic saw a reversal of the weather patterns that had prevailed throughout much of cismontane southern California for several millennia. By about 6000 B.P., local environmental conditions ameliorated while conditions in the deserts deteriorated, reaching maximum aridity of the postglacial period (Antevs 1955; Hall 1985; Haynes 1967; Mehringer and Warren 1976; Spaulding 1991, 1995). Spaulding (2001) proposes that a westerly air flow pattern returned to southern California, while the monsoonal weather patterns in the deserts retreated. As a result, the inland areas may have seen increased effective moisture, while the interior deserts, no longer receiving moist monsoonal flow and now in the rainshadow of the Transverse and Peninsular Ranges, became quite arid. This suggests that cismontane southern California, including the Project study region, may have been a relatively more hospitable environment than the interior deserts during the middle Holocene.

Due to both the amelioration of the local environmental conditions and the deterioration of the conditions in the interior deserts, it was postulated that the inland areas of cismontane southern California would see an increase in prehistoric use and occupation after about 6000 B.P. as compared to the earlier periods (Goldberg et al. 2001). This hypothesis appears to have been validated by the ESRP studies, where at least 19 archaeological localities were dated to the Middle Archaic. These Middle Archaic components include several intensively used residential bases and/or temporary camps containing abundant cultural debris including temporally diagnostic artifacts (Pinto and Silver Lake projectile points, crescents), at least nine complex lithic scatters that appear to have functioned as resource extraction and processing sites, and one human burial covered with large rocks and ground stone artifacts. In addition, evidence of ephemeral Middle Archaic use is present at several sites in the form of isolated radiocarbon-dated features and/or sparse scatters of obsidian debitage dated by obsidian hydration methods. The more intensively used residential locations occur along alluvial fan margins, while less intensively used areas tend to be situated on arroyo bottoms or upland benches (Goldberg et al. 2001).

In coastal southern California, the early traditions gave way to what Warren refers to as the "Encinitas Tradition" by about 7000 to 8000 B.P.; Wallace's "Period II: Food Collecting" also would be subsumed under this tradition. Inland San Diego County sites dating to this period have been assigned to the "La Jolla/Pauma Complex" by True (1958). This interval has been described frequently as the "Milling Stone Horizon" because of the preponderance of milling

tools in the archaeological assemblages of sites dated to this era (Basgall and True 1985; Kowta 1969; Wallace 1955).

In the coastal and inland regions of southern California, this period of cultural development is marked by the technological advancements of seed grinding for flour and possibly the first use of marine resources, such as shellfish and marine mammals. The artifact inventory of this period is similar to that of the previous period and includes crude hammerstones, scraper planes, choppers, large drills, crescents, and large flake tools. This assemblage also includes large leaf-shaped projectile points and knives; manos and milling stones used for hard-seed grinding; and likely non-utilitarian artifacts, such as beads, pendants, charmstones, discoidals, spherical stones, and cogged stones (Kowta 1969; True 1958; Warren et al. 1961).

Although sites assigned to this stage of cultural development are similar in many respects, their content, structure, and age can vary. This variability is largely due to geographical differences between the coast and interior; the primary difference between the archaeological assemblages of coastal and inland sites appears to be related to subsistence. Coastal occupants gathered fish and plant resources, while it is assumed that hunting was generally less important based on the dearth of stone projectile points, although it is possible that bone or wood tip projectiles were utilized. The inland occupants primarily collected hard seeds and hunted small mammals and stone projectile points are more common in inland assemblages. King (1967:66–67) suggests that the coastal sites probably represent more permanent occupations than are found in the interior, since coastal inhabitants were sustained by more reliable and abundant food resources. A more mobile subsistence round was likely necessary for inland inhabitants. It is possible, too, that inland and coastal sites of this period represent seasonal movement by the same groups of people.

These inconsistencies in content, structure, and age of 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 technology (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.

In the desert regions of southern California, the "Pinto Period" succeeded the "Lake Mojave Period," beginning at approximately 7000 B.P. and lasting to 4000 or 3500 B.P. Relatively recent paleoecological and paleohydrological evidence suggests maximum aridity in the desert regions between ca. 7000 and 5000 B.P., with amelioration beginning at approximately 5500 B.P. and continuing through 4000 B.P. (Spaulding 1991, 1995). As an adaptive response to these changing climatic conditions, the Pinto Period is characterized by necessary shifts in prehistoric subsistence practices and adaptations, with greater emphasis placed on the exploitation of plants and small animals than the preceding Lake Mojave Period, as well as a continued focus on artiodactyls (Warren 1980, 1984).

The distinctive characteristics of the "Pinto Basin Complex" as defined by Campbell and Campbell (1935) are projectile points of the Pinto series, described by Amsden (1935) as weakly shouldered, indented-base projectile points that are coarse in manufacture as well as form. Other

diagnostic artifact types of this period include: large and small leaf-shaped bifaces; domed and heavy-keeled scrapers; numerous core/cobble tools; large blocky metates evincing minimal wear and small, thin, extensively used milling slabs; and shaped and unshaped manos. Throughout most of the California desert region, sites containing elements of the Pinto Basin Complex (e.g., those in the Pinto Basin, Tiefort Basin, Salt Springs, and Death Valley) are small and usually limited to surface deposits suggestive of temporary and perhaps seasonal occupation by small groups of people (Warren 1984:413).

Interestingly, one site discovered during the ESRP studies evinces purely Lake Mojave and Pinto period materials. This site, CA-RIV-5045, also known as the Diamond Valley Pinto Site, is very unique in that Pinto and Lake Mojave materials are found within well-stratified, radiometrically defined cultural deposits. In addition to the numerous dart projectile points recovered indicative of the Pinto period (i.e., Pinto-series and Silver Lake-series), these deposits contain abundant and diverse faunal assemblages, an extensive array of flaked stone tools and ground stone implements, as well as intact cultural features ascribable to specific periods of occupation. Radiometric data, feature types, and artifact/ecofact assemblage characteristics indicate that CA-RIV-5045 was occupied most intensively between 6200–5600 B.P., and functioned as a winter-time residential base during this period (McDougall 2001).

As noted earlier, it was posited that cismontane southern California would see an increase in human activity after about 6000 B.P. in response to changing environmental conditions. At this time, local environmental conditions ameliorated and conditions in the interior deserts reached the maximum aridity of the postglacial period. The number of sites dating to the Middle Archaic documented at the ESRP certainly increased during this period, and it is plausible that the apparent increase in human use and occupation of the ESRP study area during the Middle Archaic is related to both the amelioration of the local environment and the deterioration of the desert interior (Goldberg et al. 2001).

The distribution of sites and variety of site types (i.e., residential bases, temporary camps, and a variety of ephemeral resource extraction and processing sites) dating to the Middle Archaic at the ESRP suggest that overall use of the Project region likely conformed to a rest-rotation collecting strategy involving relatively brief intervals of sedentism during the midwinter ebb of yearly productivity, followed by warm-season residential movements through a series of resource procurement camps in a seasonal round (Goldberg and Horne 2001). A key feature of rest-rotation collecting is a reliance on stored foods during the interval of winter sedentism. Logistic mobility, or the collection and transport of critical resources to the home residential base, also played an important role in resource procurement, especially during the interval of seasonal sedentism and consumption of stored foods. Another key feature of this strategy is the regular rotation of settlements on a yearly or multi-yearly basis to new areas to avoid the declining rates of return associated with continuous exploitation of the same areas.

It is of interest that although the indices used to measure residential mobility for the Early and Middle Archaic components documented at the ESRP indicate that these early components evince a more mobile land-use strategy than later periods, and that the Middle Archaic strategy registers more mobile than the Early Archaic strategy, most data convincingly show that neither of these early periods can be characterized as fully mobile. The fragmentation of bottom grinding stones (i.e., metates, milling slabs), ranging between 80 and 100 percent for nearly all ESRP components throughout prehistory, clearly indicates that occupations were fairly sedentary or that sites were consistently reused, with ground stone being cached and reused until it was no

longer functional (Klink 2001a). In addition, the occurrence of artifact and tool stone caches at several Middle Archaic sites suggests that site reuse was anticipated (Horne 2001).

While most chronometric data from the ESRP Middle Archaic components are too gross to confirm whether intensified use of the ESRP began after the posited ca. 6000 B.P. termination of the postglacial thermal maximum, some reliable radiocarbon assays support that proposition. Dates from three separate residential components, CA-RIV-4628/H Locus A, CA-RIV-4629/H Locus B, and CA-RIV-5045 Locus B, all postdate 6000 B.P. when tree-ring calibrations are taken into account. No reliable radiocarbon samples date Middle Archaic occupation to the postglacial thermal maximum in the ESRP study area (Goldberg 2001:570).

### 2.2.3 Late Archaic Period (ca. 4000–1500 B.P.)

The Late Archaic Period was one of cultural intensification in southern California. The beginning of the Late Archaic coincides with the Little Pluvial, a period of increased moisture in the region. Effective moisture continued to increase in the desert interior by approximately 3600 B.P., and lasted throughout most of the Lake Archaic. This ameliorated climate allowed for more extensive occupation of the region. By approximately 2100 B.P., however, drying and warming increased, perhaps causing resource intensification.

At the ESRP, 23 archaeological localities show evidence that their primary use was during the Late Archaic, while eight others yielded evidence of some activity during the period. Late Archaic site types documented within the ESRP include residential bases with large, diverse artifact assemblages, abundant faunal remains, and cultural features, as well as temporary bases, temporary camps, and task-specific activity areas. In general, sites showing evidence of the most intensive use tend to be on range-front benches adjacent to permanent water sources such as perennial springs or larger streams, while less intensively used locales occur either on upland benches or on the margins of active alluvial fans (Goldberg 2001).

Evidence from the ESRP also suggests increased sedentism during this period, with a change to a semi-sedentary land-use and collection strategy. The profusion of features, and especially refuse deposits in Late Archaic components, suggests that seasonal encampments saw longer use and more frequent reuse than during the latter part of the Middle Archaic, with increasing moisture improving the conditions of southern California after ca. 3100 B.P. (Horne 2001). Drying and warming after ca. 2100 B.P. likely exacted a toll on expanding populations, influencing changes in resource procurement strategies, promoting economic diversification and resource intensification, and perhaps resulting in a permanent shift towards greater sedentism (Goldberg 2001).

Technologically, the artifact assemblage of this period was similar to that of the preceding Middle Archaic; new tools were added either as innovations or as "borrowed" cultural items. Diagnostic projectile points of this period are still fairly large (dart point size), but also include more refined notched (Elko), concave base (Humboldt), and small stemmed (Gypsum) forms (Warren 1984). Late in the period, Rose Spring arrow points appeared in the archaeological record in the deserts, reflecting the spread of the bow and arrow technology from the Great Basin and the Colorado River region. However, this projectile point type was not found at the ESRP study area, and there is no evidence suggesting that the bow and arrow had come into use at this time in the inland regions of southern California.

Concerning the cultural sequences for Late Archaic coastal sites, for the period after about 5000 B.P., Warren (1968) and Wallace (1978) diverge in their chronological sequences for the coastal regions of southern California. Warren's "Encinitas Tradition" includes all areas outside the Chumash territory of the Santa Barbara coastal zone and continues until approximately 1250 B.P. Wallace, on the other hand, identifies a transition beginning approximately 5000 B.P., marking the onset of "Period III: Diversified Subsistence." In his original 1955 sequence, Wallace said this period, generally referred to as the "Intermediate Horizon," was largely based on changes in the archaeological assemblages of sites from the Santa Barbara coastal region. This horizon is characterized by a greater variety of artifacts, suggesting a greater variety of utilized food resources. Although this interval of human occupation in coastal southern California is poorly defined and dated because of the paucity of representative sites, many researchers in southern California have retained Wallace's original "Intermediate Horizon" as a classification for sites dating between 5000 and 1500 B.P.

The subsistence base during this period broadened. The technological advancement of the mortar and pestle may indicate the use of acorns, an important storable subsistence resource. Hunting presumably also gained in importance. An abundance of broad, leaf-shaped blades and heavy, often stemmed or notched projectile points have been found in association with large, numbers of terrestrial and aquatic mammal bones. Other characteristic features of this period include the appearance of bone and antler implements and the occasional use of asphaltum and steatite. Most chronological sequences for southern California recognize the introduction of the bow and arrow by 1500 B.P., marked by the appearance of small arrow points and arrow shaft straighteners.

Some archaeologists have suggested that the changes in the coastal artifact assemblages dating to this period were the result of an influx or incursion of "Shoshonean" people from interior desert areas to the coastal regions (Rogers 1929; Wallace 1978). However, there is virtually no agreement among researchers as to the timing of the initial Shoshonean incursion into the study region; estimates generally range from 1,000 to more than 6,000 years ago, and few researchers acknowledge or question the assumption that Shoshoneans arrived to the study region and replaced some other cultural group (Goldberg and Arnold 1988:50–56). Other archaeologists suggest that cultural transition from the earlier "Milling Stone Horizon" to the succeeding "Intermediate Horizon" coastal and inland assemblages reflects progressive economic changes (e.g., trade) rather than population replacement (King 1982; Koerper 1981; Moratto 1984:164).

In general, cultural patterns remained similar in character to those of the preceding horizon. However, the material culture at many coastal sites became more elaborate, reflecting an increase in sociopolitical complexity and increased efficiency in subsistence strategies (e.g., the introduction of the bow and arrow for hunting). The settlement-subsistence patterns and cultural development during this period are not well understood because of a lack of data; however, the limited data do suggest that the duration and intensity of occupation at the base camps increased, especially toward the latter part of this period.

In the eastern desert regions of southern California, the "Gypsum Period" (ca. 4000 to 1500 B.P.) is generally coeval with Wallace's "Intermediate Horizon." A trend toward increasing effective moisture, which began in the late middle Holocene, culminated in a pronounced pluvial episode between approximately 3700 and 3500 B.P. At that time, a number of basins in the Mojave and Owens rivers drainages supported perennial lakes (Enzel et al. 1992). No comparable events are evident earlier in the paleohydrological record, developed largely since Warren's (1984) work,

that date to 5000 to 4500 B.P., the dates that encompass Warren's so-called "Little Pluvial." After the end of pluvial conditions (ca. 3500 B.P.), conditions typified by greater effective moisture appear to have persisted until approximately 3,000 years ago. An episode of aridity exceeding that of the present may have occurred about 2500 B.P., but there is evidence for increased effective moisture again between approximately 2000 and 1400 years B.P. (Spaulding 1991, 1995).

In addition to diagnostic projectile points, Gypsum Period sites include leaf-shaped points, rectangular-based knives, flake scrapers, T-shaped drills and, occasionally, large scraper planes, choppers, and hammerstones (Warren 1984:416). Manos and milling stones are also common. A technological innovation introduced during this period was the mortar and pestle, used for processing acorns and hard seeds, such as those derived from the hollyleaf cherry and mesquite pod. This correlates with a warming and drying trend that began around 2100 B.P., which appears to have resulted in resource intensification. In addition, the frequencies of grinding tools show increasing importance of plant foods throughout the Late Archaic, with a substantially greater emphasis after 2000 B.P. (Goldberg 2001). Other artifacts include arrow shaft smoothers, incised slate and sandstone tablets and pendants, bone awls, *Olivella* shell beads, and *Haliotis* beads and ornaments. A wide range of perishable items dating to this period was recovered from Newberry Cave, including atlatl hooks, dart shafts and fore-shafts, sandals and S-twist cordage, tortoise-shell bowls, and split-twig animal figurines. The presence of both *Haliotis* and *Olivella* shell beads and ornaments and split-twig animal figurines indicates that the California desert occupants were in contact with populations from the southern California coast, as well as the southern Great Basin (e.g., Arizona, Utah, and Nevada).

Technologically, the artifact assemblage of this period is similar to that of the preceding Pinto Period; new tools also were added either as innovations or as "borrowed" cultural items. Included are the mortar and pestle, used for processing hard seeds (e.g., mesquite pods), and the bow and arrow, as evidenced by the presence of Rose Spring projectile points late in this period. Ritual activities became important, as evidenced by split-twig figurines (likely originating from northern Arizona) and petroglyphs depicting hunting scenes. Finally, increased contact with neighboring groups likely provided the desert occupants important storable foodstuffs during less productive seasons or years, in exchange for valuable lithic materials such as obsidian, chalcedonies, and cherts. The increased carrying capacity and intensification of resources suggests higher populations in the desert with a greater ability to adapt to arid conditions (Warren 1984:420).

### 2.2.4 Saratoga Springs Period (ca. 1500–750 B.P.)

Paleoenvironmental conditions changed little from the preceding period; cultural trends in the early portion of the Saratoga Springs Period were, in large part, a continuation of the developments begun during the end of the Late Archaic Period. However, the Medieval Warm, a period of even more persistent drought, began by 1060 B.P., and conditions became significantly warmer and drier. These climatic changes were experienced throughout the western United States (Jones et al. 1999; Kennett and Kennett 2000), although the inland areas of cismontane southern California may have been less affected than the desert interior. The Medieval Warm continued through the first 200 years of the Late Prehistoric Period until approximately 550 B.P. (Spaulding 2001).

Firm evidence of Saratoga Springs Period occupation was documented at seven site components within the ESRP, while three other sites exhibit evidence of ephemeral use at this time. Six other

localities within the ESRP yielded either obsidian with hydration bands suggesting Saratoga Springs age or Saratoga Springs projectile points (a large triangular form associated with use of the bow and arrow which began to appear in the ESRP at this time) but without evidence of sustained site use during this period. The focal shift of prehistoric activity from alluvial fan margins to mountain-front benches adjacent to permanent water sources, which was initiated during the Late Archaic, is also evidenced in the Saratoga Springs site locations (Goldberg 2001).

Within the ESRP, the Saratoga Springs Period is seemingly marked by a reduction in the number of refuse deposits and, to a slightly lesser extent, hearths. Interestingly, when accounting for sample size, the frequency of artifact and tool stone caches was more than doubled during the Saratoga Springs Period from the preceding Late Archaic, while the frequency of human remains reached the highest point of any time in the archaeological record. Midden-altered sediments also appear for the first time during this period (Horne 2001).

However, it is of interest that most Saratoga Springs components identified within the ESRP actually date to the Medieval Warm Interval; only one component did not. When components dating to the Medieval Warm segment of the Saratoga Springs Period are segregated and combined with Medieval Warm components from the Late Prehistoric Period, it reveals that the frequency of refuse deposits and artifact and tool stone caches during the Medieval Warm is slightly higher than during the Late Archaic and much higher than during the latter portion of the Late Prehistoric Period. The frequency of human remains (all of which are unburned) during the Medieval Warm is also much higher than during the Late Archaic and Protohistoric Period; no human remains were found in components of the Late Prehistoric Period after the Medieval Warm Interval (Horne 2001).

During the ESRP studies, it was anticipated that intensive use of the inland areas of cismontane southern California during the Medieval Warm may have been curtailed altogether owing to inhospitable climate and concomitant decline in water and food sources. However, while land-use and procurement strategies experienced profound changes at this time, the response to deteriorating conditions was not abandonment of the inland areas, but rather intensification. Apparently, climatic conditions of warming and drying that may have begun ca. 2100 B.P., toward the end of the Late Archaic, had already triggered an intensification process that established productive strategies for dealing with resource stress. With the onset of the Medieval Warm, those strategies were further refined and intensified (Goldberg 2001).

Not only did the data indicate that the ESRP was used on at least a semi-permanent basis during the Medieval Warm Interval, but that residential bases show evidence (e.g., refuse deposits, midden development) that activities intensified at those settlements. People were also intentionally caching tool stone and ground stone tools, suggesting that they anticipated returning to the same locations. Characteristics of the ESRP ground stone assemblages from the Medieval Warm demonstrate that plant foods were more important than in any other period; plant processing intensified and acorns apparently became an important staple (Klink 2001a). The faunal assemblages also show that resource stress was accommodated with similar strategies by intensifying the use of lagomorphs and by further expanding diet breadth, adding animals (i.e., medium-sized carnivores) to the diet that were rarely consumed during other periods (McKim 2001). The most abundant evidence of trade also occurs in the Medieval Warm components identified at the ESRP, suggesting that this was another mechanism for dealing with resource stress (Goldberg 2001).

However, two factors identified during the ESRP studies indicate that these adaptation strategies may not have been completely successful in dealing with the resource stress brought about by the Medieval Warm. First, the indices which differentiate degrees between planned and actual mobility indicate that occupations were considerably shorter than had been anticipated during the Saratoga Springs Period. Substantially long-term occupation at any given location may have been difficult given the presumably low levels of environmental productivity at this time. This suggests that not only were conditions harsh, they may also have been unpredictable. This may account for a larger number of residential locations than had been anticipated, a pattern in response to arid conditions that has also been identified on the central California coast (Lebow 2000). Second, while the burial population discovered throughout the ESRP study area was surprisingly small, the relative proportion of those from the Medieval Warm Interval is higher than any other time period (Horne 2001).

Throughout much of the California desert regions to the east, the Saratoga Springs Period saw essentially a continuation of the Gypsum Period subsistence adaptation. Unlike the preceding period, however, the Saratoga Springs Period is marked by strong regional cultural developments, especially in the southern California desert regions, which were heavily influenced by the Hakataya (Patayan) culture of the lower Colorado River area (Warren 1984:421–422). Specifically, turquoise mining and long distance trade networks appear to have attracted both the Anasazi and Hakataya peoples into the California deserts from the east and southeast, respectively, as evidenced by the introduction of Buff and Brown Ware pottery and Cottonwood and Desert Side-notched projectile points. The initial date for the first Hakataya influence on the southern Mojave Desert remains unknown; however, it does appear that by about 1000 to 1100 B.P. the Mojave Sink was heavily influenced, if not occupied by, lower Colorado River peoples.

Lake Cahuilla is believed to have refilled the Coachella Valley around 1450 B.P., and was the focus of cultural activities such as exploitation of fish, water fowl, and wetland resources during this period. Desert people, speaking Shoshonean languages, may have moved into southern California at this time; the so-called "Shoshonean Intrusion." Brown and Buff Ware pottery first appeared on the lower Colorado River at about 1200 B.P., and started to diffuse across the California deserts by about 1100 B.P. (Moratto 1984:425). Associated with the diffusion of this pottery were Desert Side-notched and Cottonwood Triangular arrow projectile points dating to about 800 to 850 B.P., suggesting a continued spread of Hakataya influences.

However, about 1060 B.P., environmental conditions became notably warmer and drier. This period of intense drought, the Medieval Warm, extended throughout the Southwest, and led to the withdrawal of Native American populations from marginal desert areas to more reliable, drought-resistant water sources such as the Colorado River and Lake Cahuilla, the episodic presence of which was not climatically controlled but dependent upon natural discharges from the Colorado River, and which experienced two, if not three, high stands during the Medieval Warm Interval (Waters 1983).

Along the southern California coastal regions, reliance on the bow and arrow for hunting, along with the use of bedrock mortars and milling slicks, mark the beginning of the tradition denoted as the "Late Prehistoric Horizon" by Wallace (1955) and the "Shoshonean Tradition" by Warren (1968), dating from about 1500 B.P. to the time of Spanish settlement (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, as well as generous use of asphaltum and the development of extensive trade networks, are also characteristic of this period.

In the Santa Barbara coastal region, the Late Prehistoric Horizon appears to represent increases in population size, economic complexity, social complexity, and the appearance of social ranking. King (1990) posits that the mortuary practices of the Intermediate and Late Horizons throughout Chumash territories evince social ranking and that beads were used to confer status. Similarly, craft specialization on the northern Channel Islands has been linked to expanding economic capacities and emerging social ranking during the Late Period (Arnold 1987). Although the motivating forces for such trends have yet to be identified with certainty, some researchers have suggested that economies controlled by social elites spurred increasing economic productivity and resultant population growth (Clewlow et al. 1978; King 1990). More recently, archaeologists have linked past changes in subsistence, population, exchange, health, and violence to periods of drought and resource stress that occurred during the Medieval Warm Interval (Arnold 1992a, 1992b; Arnold et al. 1997; Jones et al. 1999; Larson 1987; Moratto et al. 1978).

### 2.2.5 Late Prehistoric Period (ca. 750–410 B.P.)

The Medieval Warm extended into the Late Prehistoric Period, ending about 550 B.P. The cultural trends and patterns of land-use which characterized the Medieval Warm Interval, including that portion which extends into the earlier part of the Late Prehistoric Period, were discussed above. At the end of the Medieval Warm, however, and lasting throughout the ensuing Protohistoric Period (410–150 B.P.), a period of cooler temperatures and greater precipitation ushered in the Little Ice Age during which time ecosystem productivity greatly increased along with the availability and predictability of water (Spaulding 2001).

Also during this period, Lake Cahuilla began to recede (Waters 1983), and the large Patayan populations occupying its shores began moving eastward to the Colorado River basin or westward into areas such as Anza Borrego, Coyote Canyon, the Upper Coachella Valley, the Little San Bernardino Mountains, and the San Jacinto Plain (Wilke 1976: 172–183). The final desiccation of Lake Cahuilla, which had occurred by approximately 370 B.P. (A.D. 1580), resulted in a population shift away from the lakebed into the Peninsular Ranges and inland valleys to the west, and the Colorado River regions to the east.

With the return of more mesic conditions after approximately 550 B.P., resulting in less resource stress, the ESRP studies show that people returned to a less intensive, semi-sedentary land-use strategy similar to that identified for the Late Archaic Period. Within the ESRP, evidence of intensive occupation dating to the Late Prehistoric Period occurs at five residential sites comprising 16 separate components; all of these coincide with sites that were occupied during earlier periods, and all are situated on elevated bedrock benches near active springs and overlook the valley floor (Goldberg 2001).

By segregating those components dating to the Medieval Warm Interval from other Late Prehistoric components, the differences between land-use strategies for these periods can be demonstrated. The ESRP studies show that after the Medieval Warm Interval there was a quite unexpected reduction in the number and frequency of refuse deposits, as well as fire-altered rock weight and midden development. The number and frequency of artifact and tool stone caches were also reduced, while hearth features were slightly more common. Rock art also first

appeared in association with Late Prehistoric components which post-date the Medieval Warm Interval. The decrease in the number of artifact and tool stone caches and the first appearance of rock art during this period suggests that residential sites may have been occupied year-round (Horne 2001).

Mortars and pestles and other grinding tools also declined in importance after the Medieval Warm in the ESRP site components, suggesting that the intensive procurement and processing of acorns and other plant foods was no longer as critical as previously; this pattern is further supported by a decline in the effort expended in shaping grinding tools (Klink 2001a). A reduction in emphasis on plant foods, and especially acorns, which require intensive preparation, likely accounts for the reduction in refuse deposits, fire-altered rock weights, and midden development at the end of the Late Prehistoric. It is possible that the portable milling toolkit was supplemented substantially by bedrock milling features; however, bedrock features cannot be dated, and so cannot be assigned to any particular time period(s). Percentages of projectile points also increased somewhat after the Medieval Warm (Cottonwood Triangular points began to appear in inland assemblages at this time, and Obsidian Butte obsidian became much more common), suggesting increased focus on large mammals, but the lower ratio of late-stage bifaces indicates that hunting methods returned to random-encounter strategies, rather than the logistical forays of the preceding period (Klink 2001b). Of particular note, faunal assemblages produced an anomalously high lagomorph index after the Medieval Warm, suggesting a very wet climatic regime with dense undergrowth well suited to cottontails (McKim 2001). Finally, the percentage of non-utilitarian artifacts declined considerably, suggesting that trade was no longer critical for assuring food supplies (Klink 2001c).

### 2.2.6 Protohistoric Period (ca. 410–180 B.P.)

The ameliorated, productive conditions of the Little Ice Age continued throughout the Protohistoric Period. Generally speaking, sedentism intensified during the Protohistoric Period, with small, but apparently fully sedentary villages forming. Increased hunting efficiency (through use of the bow and arrow) and widespread exploitation of acorns and other hard nuts and berries (indicated by the abundance of mortars and pestles) provided reliable and storable food resources. This, in turn, promoted greater sedentism. Related to this increase in resource utilization and sedentism are sites with deeper middens, suggesting central-based wandering or permanent habitation. These would have been the villages, or rancherias, noted by the early non-native explorers (True 1966, 1970).

Within the ESRP, the most striking change in material cultural in this period was the local manufacture of ceramic vessels and ceramic smoking pipes. Although pottery was known in the Colorado Desert as long ago as 800 B.P., ceramic technology in the project region appears to date to around 350 B.P. Also during this interval, abundant amounts of obsidian were imported into the region from the Obsidian Butte source which was exposed by the desiccation of Lake Cahuilla. In addition, Cottonwood Triangular points were supplemented by Desert Side-notched points during this period. Late in this period, some European trade goods (i.e., glass trade beads) were added to the previous cultural assemblages (Meighan 1954).

Based on work in the San Luis Rey River Basin in northern San Diego County, Meighan (1954), True (1970), and True et al. (1974, 1991) have defined two Late Prehistoric/Protohistoric Period complexes that are worthy of mention. The "San Luis Rey I Complex" existed from approximately 600 to 250 B.P., and is typified by grinding implements, small triangular projectile points with concave bases, stone pendants, *Olivella* shell beads, quartz crystals, and

bone tools. The "San Luis Rey II Complex," lasting from about 250 to 150 B.P., is very similar, but with the addition of ceramic vessels (including cremation urns), red and black pictographs, glass beads, metal knives, and steatite arrow straighteners. True et al. (1974) believe that the San Luis Rey complexes developed out of the earlier La Jolla/Pauma cultural substratum, and are the prehistoric antecedents to the historically known Luiseño Indians.

The Hakataya influence in coastal and inland southern California regions appears to have diminished during the late Protohistoric Period when the extensive trade networks along the Mojave River and in Antelope Valley appear to have broken down and the large village sites were abandoned (Warren 1984:427). Warren (1984:428) suggests that the apparent disruption in trade networks may have been caused by the movement of the Colorado River basin Chemehuevi populations southward across the trade routes during late Protohistoric Period.

Within the ESRP, all five village clusters located on elevated bedrock surfaces near active springs and overlooking the valley floor that were occupied during the Late Prehistoric Period saw continued occupation in the Protohistoric Period. Most archaeological data from the ESRP site components dating to the Protohistoric Period indicate that a fully sedentary land-use strategy was adopted during this period. Given the spatial coincidence of the Protohistoric villages with residential sites of the Late Prehistoric Period, this sedentism appears to have been a further intensification of patterns established in the earlier period. At that time, resource stress did not appear to have been an issue; resource niche widths were expanded, and intensive resource processing that had been required during the Medieval Warm Interval appeared not to have been necessary. However, even though the climatic conditions of the Little Ice Age afforded a very productive environment during both the Late Prehistoric and Protohistoric periods, land-use strategies intensified during the later period. The use of plant food increased, as did the intensity of the processing effort. The Protohistoric Period exhibited the highest ranks for fire-altered rock and midden development, as well as rock ring foundations for brush dwellings, storage facilities, and ceremonial areas with rock art and rock enclosures; overall, there was a fluorescence of feature types and numbers at this time (Horne 2001). The faunal data for this period indicate a decrease in faunal diversity, and signify a reduction in diet breadth as well as greater intensification (McKim 2001).

The intensification in land use during the Protohistoric Period seen in the ESRP assemblages mirrors changes that occurred at the end of the Late Archaic when it is hypothesized that the collecting strategy evolved from rest-rotation to semi-sedentary. Climatic degradation causing resource stress beginning about 2100 B.P. is thought to have triggered that shift. If the environment during the Protohistoric Period was just as productive as during the earlier portion of the Little Ice Age (Late Prehistoric Period), what then accounts for land-use intensification at this time? Apparently resources were stressed again, but not by deteriorating productivity of the environment. Rather, population growth probably led to competition for food, and possibly water and fuel resources. While preceding periods of stress could have been relieved by expansion of territory and diet breadth, increasing populations would have precluded the opportunity for territory expansion. Therefore, it is hypothesized that the shift to a fully sedentary strategy was brought about by population stress, which itself was initiated during the Late Prehistoric Period when the environment was productive and populations were very successful at exploiting that productivity (Goldberg 2001).

Other archaeological patterns exhibited by the ESRP Protohistoric components were likely a result of sedentism and protection of territories. As it is today, logistical mobility would have

become essential for provisioning fully sedentary communities. With lower temperatures during the Little Ice Age but no source of fuel wood in or near the ESRP, procurement of fuel may have become an increasingly important element of logistical provisioning. Although there was a fluorescence of feature types and numbers at the ESRP sites dating to the Protohistoric Period, the number of artifact and tool stone caches reached an all-time low; tool stone and artifact caches would no longer have been required because there were year-round occupants at residential bases. Due to increased territoriality, resource intensification would have been required because territorial and resource niche-width expansion was no longer a viable option. Likewise, along with increasing territorial circumscription would have come the inevitable fact that residential bases were occupied longer than the inhabitants had originally anticipated; moving the residential base may no longer have been an option. As well, trade and ceremonial gatherings with other groups would have helped maintain social relationships and ensure food resources. Finally, sedentism and the need to protect critical resources from competitors may have eventually led to conflict. Protohistoric patterns of raw material procurement indicate that desert materials (obsidian and chert) gained prominence, while other relatively closer sources of exotic raw materials from the west (basalt, andesite, rhyolite, metavolcanic rock, and Piedra de Lumbre "chert") were little used, suggesting that territorial boundaries, at least to the west, had become established. While there was no direct evidence of physical conflict at any of the ESRP sites, the locations of villages on elevated bedrock surfaces overlooking the valley may have been designed to afford views of intruders; an increase in projectile points may reflect a need for defensive weapons (Goldberg et al. 2001).

## 2.3 ETHNOGRAPHIC SETTING

Based on information passed down from Tribal elders, published academic works in the areas of anthropology, history, and ethnohistory, and through recorded ethnographic and linguistic accounts (cf., Bean 1978; Freers and Smith 1994; Kroeber 1925; Strong 1929; Vane 2000), the Survey Area lies near the periphery of the ancestral cultural territories of the Luiseño, Cahuilla, and Serrano Native American groups. The following discussions of Luiseño, Cahuilla, and Serrano traditional culture are derived primarily from Bean (1978), Bean and Shipek (1978), and Bean and Smith (1978).

### 2.3.1 Luiseño

**Territory.** The term Luiseño originated as a description of the native peoples associated with Mission San Luis Rey near Oceanside. Luiseño territory in ethnographic times encompassed a stretch of the California coast and included most of the drainage of the San Luis Rey and Santa Margarita rivers. Inland, Luiseño territory extended south from Santiago Peak, including the Elsinore and Temecula valleys, and extended farther south to Mount Palomar and the Lake Henshaw area, then west to the coast at Agua Hedionda Creek. The coastal territory of the Luiseño extended north to near San Mateo Creek in Orange County (Bean 1978). Their territory included every ecological zone from the coastline to the mountains. Elders of the Pechanga Band of Luiseño Indians add that the Temecula/Pechanga people had usage/gathering rights to an area extending from Rawson Canyon on the east, over to Lake Mathews on the northwest, down to Temescal Canyon to Temecula, eastward to Aguanga, and then along the crest of the Cahuilla Range back to Rawson Canyon.

**Social and Political Organization.** The traces of any Luiseño moiety system that may have existed are indistinct, but suggest a division into easterners (inland groups) and westerners (coastal groups) (Bean and Shipek 1978:550). The social structure of the Luiseños was severely disrupted by the mission system as early as the 1770s. Their population density is thought to have been greater than that of the Cahuilla, probably because they occupied a more favorable environment. Each village was occupied by a "clan tribelet—a group of people patrilineally related who owned an area in common and who were politically and economically autonomous from neighboring groups" (Bean and Shipek 1978:555). The clan tribelets, by the time anthropologists studied them, were composed of one major lineage that had a ceremonial head, a ceremonial house or enclosure, and a ceremonial bundle, and the remnants of other lineages. Settlements, occupied by one or more familial groups, were sometimes politically autonomous, but sometimes several villages were allied under one chief. The hereditary chiefs had religious, economic, and military power, and were role models for their people. They were assisted in their duties by one or more assistants. The chiefs and their families were the elites of the society, along with the very wealthy. The acquisition of wealth was important, but the acquisition of extreme wealth was prevented by the custom of burning or burying the possessions of the deceased.

**Subsistence and Material Culture.** The Luiseño were, for the most part, hunters, collectors, and harvesters. Their subsistence patterns can be attributed mostly to their environments. Clans were apt to own land in valley, foothill, and mountain areas, providing them with the resources of many different ecological niches. Villages were usually located in coves or canyons that offered some shelter from the sun and wind, featured a reliable water supply, and that was defensible. Settlement areas were surrounded by named places associated with food products, raw materials, or sacred beings. Hunting and gathering places were owned by individuals, families, the chief, or by the collective community (Bean and Shipek 1978:551). Certain clusters or groves of tobacco, eagle nests, cactus, oaks, or other sources of food and medicine were guarded and owned by individuals. Collecting outside of one's area could only be done with permission of the owner, and failure to do so could result in physical combat or sorcery against one another. Most food resources were gathered within close proximity to the village, but during certain seasons the family group would move to the coast for marine resources or into the mountains for acorns and deer.

Game animals included deer, cottontail rabbit, jackrabbit, woodrat, mice, ground squirrels, antelope, quail, doves, ducks, and other birds. Tree squirrels, most reptiles, and predators were avoided as food resources, except possibly during lean times. As in most of California, acorns were a major staple, but the roots, leaves, seeds, and fruit of many other plants also were used. Insects were also available as food resources. Roots and shoots of various types were gathered from marshes and wetlands. Seeds from various grasses and scrub plants also played an important role in the aboriginal diet and were available for harvest from summer through fall. Certain mushrooms and tree fungi supplemented the diet and were considered delicacies. Teas were made from a variety of floral resources and were used for medicinal cures as well as for beverages. Tobacco and datura were sacred plants used for rituals and medicine. Fire was used as a crop-management technique and for communal rabbit drives (Bean and Shipek 1978:552).

To gather these food resources and to prepare them for eating, the Luiseño had an extensive inventory of equipment. The throwing stick and bow and arrow were the most important hunting tools for killing game, but snares, traps, slings, decoys, disguises, and hunting blinds also were part of the hunting technology. Many villages had access to creeks and rivers, and nets, traps,

spears, hooks and lines, and poisons were used to catch fish. Gathering required few tools: poles for shaking pine nuts and acorns from the trees, cactus pickers, chia hooks, seed beaters, digging sticks and weights for digging sticks, and pry bars (Bean and Shipek 1978:552–553).

Food was usually stored in large storage baskets. Pottery ollas and baskets treated with asphaltum also were used to store and carry water and seeds. Wood, clay, and steatite were used to make jars, bowls, and trays. Skin and woven grass were used to make bags. Food processing required hammers and anvils for cracking nuts; mortars and pestles for grinding acorns and other hard nuts and berries; manos and metates for grinding seeds and berries; winnowing baskets; strainers; leaching baskets and bowls; cutting implements made of stone, bone, and wood. Basket mortars, made by using asphaltum to attach an open-bottomed basket to a mortar, were important for food processing. Food was served in wooden and gourd dishes and cups and in basket bowls that were sometimes tarred. Wood, shell, and horn were used for spoons (Bean and Shipek 1978:553).

Most Luiseño houses were conical and partially subterranean; however, during the nineteenth century some Luiseño had rectangular houses. The dwellings were made of locally available material, such as reeds, brush, or bark. Occupants entered using a door at the side of the shelter, which was sometimes accessed through a short tunnel. Smoke from a central fireplace rose through a hole in the center of the roof. Domestic chores, such as cooking, eating, and social interaction, often occurred under a brush-covered ramada that stood near the house. Earth-covered sweat houses for purification and curing rituals, ceremonial houses with fenced areas, and granaries for food storage were found in most villages (Bean and Shipek 1978:553; Bean and Vane 2001:VI.D-5).

**Religion, Ceremony, and World View.** The various life cycles of the Luiseño, including birth, puberty, marriage, and death were celebrated in ritual. At birth, the child was confirmed to the group and the patrilineage (Bean and Shipek 1978:556). Girls and boys were initiated in puberty rituals, which taught them about supernatural beings, the rules of behavior, and explained how their actions would be governed through adulthood. The boys' ceremony included the drinking of toloache, which induced visions, followed by dancing, and the teaching of songs and rituals. The girls' ceremony included instruction for maintaining a household and preparation for marriage, rock paintings, and a "roasting ceremony" that included placing the young girl in a bed of warm sand to prepare her for child bearing. Girls were married shortly after their puberty ceremony. Marriages were arranged by the parents to ensure that the two were not closely related, and to form alliances between groups. Marriage ceremonies included a bride-price, after which the couple resided with the husband's lineage. Death rituals were surrounded by purification, from washing one's clothes to smoking and incense. The mourning ritual was attended by close relatives as well as related clans. An image-burning ceremony was held to commemorate the death of an individual, and was considered the last of the rites, ending formal mourning after a period of time. During the ceremony, an image of the person was burned to signify their passing, followed by a feast and presentation of gifts to guests. To commemorate the death of a chief, an eagle was killed (Bean and Shipek 1978:556).

Among the Luiseño, rituals played a role in governing hunting, harvest, warfare, and all other major activities of village life. Many rituals were connected with the *Chinigchinich* cult among the Luiseño. A great deal is known about this religion because Father Boscana of Mission San Juan Capistrano recorded what he knew of it in 1828 (Boscana 1978). The *Chinigchinich* religion may have originated as recently as the late eighteenth century. It spread southward to

striking, as well, that of 29 households in the area whose 1930 census data were reviewed, there were only two working adult men listed in the 1930 census as farm laborers, and one as a ranch truck driver, while all other adult men claimed to operate their own farms. Of these farm operators, a significant percentage leased or rented farm property. For southern California at this time, this is a very high percentage of farm operators and low percentage of farm laborers. Rural residence with non-agricultural employment was not yet a factor, as it was for some other southern California rural communities at that time. Only one farm was identified as dedicated to poultry raising. Beekeeping was also reported in the area in the 1930s by Viola Carlson.

The crisis in agriculture during the Depression was particularly difficult for southern California farmers who had to pay to pump water to irrigate their crops. Those who obtained their water from irrigation districts often lost their land to water lien sales. However, winter rainfall conditions, beginning in 1934–1935, were quite favorable through 1943–1944, and very helpful to those who were involved in the dry-farming of grain. Thus, after 1934, the dry-farmers who had survived the early Depression years were given an opportunity to stabilize their situation.

Turnover in land ownership during the 1930s and the eventual recovery of agricultural prices by the eve of World War II was followed by the disruptions of the exodus of younger people into military service or leaving to work in urban areas. However, the favorable average rainfall conditions of the years from 1934 through 1944 were followed by a prolonged period of lower than average years of winter rainfall lasting until 1965. The portion of this drought cycle from 1944 through 1951 was particularly severe, with rainfall in Los Angeles, for example, totaling only little more than half of normal in the years 1947–1951. Water from the Colorado River Aqueduct was piped to the region beginning in the early 1940s. Alfalfa, potatoes, watermelons, and sugar beets soon after became the mainstay of farming in many parts of the region.

The post-WWII era ushered in a boom in commercial, industrial, and residential development in and near the region's urban centers, followed by the construction of several freeways linking urban areas to one another. As urban areas were spread outward by development, once-rural areas took on a more semi-rural character, dotted by small, 2.5- and 5-ac "ranch" subdivisions. In more recent years, housing and urban development have spread outward from urban areas and swallowed up former agricultural land at an exponential rate, forever changing the character of the region. During the last decade, inexpensive land and housing transformed many of the towns in southwestern Riverside County into "bedroom" communities for those working in Los Angeles and San Diego counties. Substantial growth over the last few decades has necessitated the construction of numerous artificial lakes, reservoirs, and other forms of municipal water storage, such as nearby Lake Perris, Lake Skinner, and the Eastside Reservoir (now, Diamond Valley Lake). Increased population and automobile traffic has resulted in the need for construction of new roads, as well as expansion and improved safety of many of the pre-existing roads throughout the region. The over-expansion of the housing market, and ultimate crash in 2007, led to a shift in the region's development trend in recent years to increase infrastructure projects to support the population growth. Recently, new residential development has been spurred by a low inventory of homes and a slowly reviving market economy.

# 3
# ARCHAEOLOGICAL LITERATURE AND RECORDS SEARCH

Prior to the Phase I archaeological survey of the Survey Area, an archaeological literature and records search was conducted at the EIC, housed at the University of California, Riverside, on April 26, 2013 (EIC-RIV-ST-2144). Sources consulted during the archaeological literature and records search include DPR 523 Forms and cultural resource location maps, the National Register of Historic Places, the Office of Historic Preservation Archaeological Determinations of Eligibility, the Office of Historic Preservation Directory of Properties in the Historic Property Data File, and the Elsinore, CA (1901) 30' USGS quadrangle.

The objective of this records search was to determine whether any prehistoric or historical resources had been recorded previously in, or within a one-mile radius of, the Survey Area. The results of this search indicate that no fewer than 129 prior cultural resources studies have been conducted within a one-mile radius of the Survey Area; 25 of these studies involved portions of the Survey Area (Table 1).

**Table 1**
**Previous Cultural Studies within the Survey Area**

| Author(s) | Date | EIC Reference # | Title | Summary of Work |
|---|---|---|---|---|
| James Baldwin | 1978 | RI-00294 | Environmental Impact Evaluation: Archaeological Assessment of Tentative parcel Map 11830, Near Rancho California, Riverside County, California | 19.80 acres surveyed, no resources |
| Christopher E. Drover | 1978 | RI-00383 | Environmental Impact Evaluation: Archaeological Assessment of Tentative Parcel Map 12030, Near Murrieta, Riverside County, California | 19.86 acres surveyed, no resources |
| Renee Giansanti | 1979 | RI-00627 | Environmental Impact Evaluation: An Archaeological Assessment of Tentative Parcels 15142, 15203, 15096, and Tentative Tract 14851, Paloma Valley Area of Riverside County, California | 85.75 acres surveyed, no resources |
| Renee Giansanti | 1979 | RI-00638 | Environmental Impact Evaluation: An Archaeological Assessment of 60 Acres of Land in the Paloma Valley Area of Riverside. The Exact Location Being the SW 1/4 of Section 35, T6S, R3W, SBBM, Murrieta 4.5' Series USGS, Quadrangle | 60 acres surveyed, no resources |
| Stephen Bouscaren | 1982 | RI-01387 | An Archaeological Assessment of the Old Dutch Village Property, Wesy of Lake Skinner in Riverside County, California | 64 acres surveyed, 1 resources identified |
| Christopher E. Drover | 1988 | RI-02217 | An Archaeological Assessment of Vesting Tentative Tract 23342, Near Murrieta Hot Springs, Riverside County, California | 263 acres surveyed, no resources |
| Jean S. Keller | 1988 | RI-02305 | An Archaeological Assessment of TPM # 23199, Riverside County, California | 36.79 acres surveyed, 1 resource identified |

**Table 1 (continued)**

| Author(s) | Date | EIC Reference # | Title | Summary of Work |
|---|---|---|---|---|
| Bruce Love, Bai "Tom" Tang, Daniel Ballester, and Mariam Dahdul | 2001 | RI-02936 | Historical/Archaeological Resources Survey Report: APN 958-230-022, Southeast Corner of Benton Road and Winchester Road, Riverside County, CA | 4.27 acres surveyed, 1 resource identified |
| Christopher E. Drover | 1993 | RI-03371 | A Cultural Resource Addendum: Airport Business Park, French Valley, Riverside County, California | 50 acres surveyed, 2 resources identified |
| T.A. Freeman and D.M. Van Horn | 1988 | RI-03385 | Archaeological Survey Report: Cultural Resource Assessment of 95+ Acres in French Valley, Riverside County, California | 95 acres surveyed, no resources |
| Jerry Schaeffer | 1993 | RI-03719 | The Thompson-Cummins Farmstead: Archaeological and Historical Investigations of an Early 20th Century Farm in French Valley, Riverside County, California | 2.43 acres surveyed, 1 resource evaluated |
| Daniel Landis | 1993 | RI-03739 | A Cultural Resources Survey for the Gas Pipeline No. 6900 Project, Riverside County, California | 323 acres surveyed, 4 resources identified |
| Brian F. Smith and Johnna L. Buysse | 2000 | RI-04150 | An Archaeological/Historical Study for the French Valley Specific Plan/EIR, French Valley, County of Riverside, Specific plan No. 312/EIR No. 411m General Plan Amendment No. 472 | 600 acres surveyed, 5 resources identified |
| Michael E. Macko | 1989 | RI-04463 | Archaeological Survey Report of Amcor Properties, inc., 600-Acre French Valley Specific Land Use Plan, Riverside County, California | 600 acres surveyed, 1 resource identified |
| John Elliot Jones and Michael K. Lerch | 2006 | RI-06876 | Archaeological Survey of the Auld Subsurvey Transmission Lines, Murrieta, Riverside County, California | 115.2 acres surveyed, 6 resources identified |
| Stacey Jordan | 2007 | RI-07041 | Archaeological Survey Report for Southern California Edison Company Relocation of the Garboni 12KV and Leon 12KV Circuits Project Riverside County, California | 27.69 acres surveyed, no resources |
| Mark C. Robinson | 2007 | RI-07049 | Historical Property Survey Report (08-RIV-215, PM 11.9-13.7 [KP 19.30-21.03] EA 32780 | 45.8 acres surveyed, no resources |
| Michael W. Tuma and Joan Brown | 2007 | RI-07447 | Archaeological monitoring for the Spencer's Crossing Phase I Project, Near the City of Murrieta, Riverside County, California | 46 acres monitored, 2 resources identified |
| Nora Collins and Brian F. Smith | 2006 | RI-07588 | An Archaeological Survey for the Lake Skinner MWD Electrical Line Corridor Project | 2.03 acres surveyed, no resources |
| Theodore Cooley and Joshua Patterson | 2008 | RI-07692 | Archaeological Survey Report for the Southern California Edison MWD-33kV Striper Circuit, Rule 15 Project, Riverside County, California | 114 acres surveyed, 5 resources identified |
| Josh Smallwood, Daniel Ballester, and John J. Eddy | 2008 | RI-07705 | Phase II Cultural Resources Testing and Evaluation: Site 33-011121 (CA-RIV-6687), Tentative Parcel Map No. 30474, French Valley Area, Riverside County, California | 1 resource tested |

Table 1 (continued)

| Author(s) | Date | EIC Reference # | Title | Summary of Work |
|---|---|---|---|---|
| Josh Smallwood, Daniel Ballester, and Laura H. Shaker | 2008 | RI-07841 | Historical/Archaeological Resources Survey Report: Assessor's Parcel No. 900-040-008, City of Murrieta, Riverside County, California | 37 acres surveyed, no resources |
| Mark Robinson, Noelle Storey, and Richard Starzak | 2008 | RI-08456 | Historic Property Survey Report: State Route (SR) 79 Widening between Thompson Road and Domenigoni Parkway in the County of Riverside, California | 95 acres surveyed, 2 resources identified. |
| Mark Robinson | 2010 | RI-08602 | Supplemental Archaeological Survey Report State Route 79 Widening Between Thompson Road and Domenigoni Parkway, Riverside County, California | 7.80 acres surveyed, no resources |
| Jean A. Keller | 2011 | RI-08673 | A Phase IV Cultural Resources Monitoring Report | Monitoring report |

The records search also indicated that 79 cultural resources were recorded previously within a one-mile radius of the proposed Project including 59 prehistoric archaeological resources (47 sites and 12 isolated artifacts), 14 historical archaeological resources (12 sites and two isolated artifact), and six built-environment resources. Six of these resources (see Section 3.3 below) are reported within or adjacent to the Survey Area. In addition, historical maps consulted during the study show a number of roads crossing through the Survey Area and one historic structure was plotted in the far southwest corner of Section 36, T 6S, R 3W, in close proximity to the Survey Area. The following sections describe the type and character of previously recorded cultural resources within the scope of the records search.

## 3.1 PREHISTORIC ARCHAEOLOGICAL RESOURCES

As a result of the records search, 59 previously recorded prehistoric archaeological resources, consisting 47 sites and 12 isolated artifacts, were identified within a one-mile radius of the Survey Area. These resources are associated with Native American settlement and subsistence practices as well as resource procurement activities most likely associated with the Saratoga Springs, Late Prehistoric and Protohistoric periods. Relatively few of these archaeological resources were excavated and chronological data from these sites is limited, so the possibility of an earlier Archaic period association cannot be completely dismissed. Prehistoric resources within the scope of the records search may be classified as isolated artifacts, lithic scatters, complex lithic scatters containing both lithic debitage and tools and ground stone tools, bedrock milling sites, and habitation sites.

### 3.1.1 Isolated Artifacts

Isolated artifacts consist of at least one and no more than three artifacts within a 30–50 m radius. Isolates are at times found in situ, but are more likely to be in secondary or even tertiary depositional context. Isolated artifacts identified within a one-mile radius of the Survey Area include ground stone tools and fragments, chipped stone lithic debitage and tools, hammerstones, and scrapers. Twelve isolated artifacts (CA-RIV-1360, 33-011089, -012250, -012251, -012772, -012773, -012774, -013363, -013397, -013398, -013976, and -014358) were identified within a one-mile radius of the Survey Area.

### 3.1.2 Lithic Scatters

Lithic scatter sites in the scope of the records search contain sparse to dense concentrations of chipped stone lithic debitage and tools and lack all other types of artifacts (e.g., ground stone, ceramics, fire-altered rock, etc.) and features (e.g., bedrock milling, fire hearth, rock art, etc.). These sites exhibit no evidence of cultural midden and rarely contain intact subsurface cultural deposits. Five lithic scatter sites (CA-RIV-637, -1002, -10098, -10892, and 33-11239) were identified within a one-mile radius of the Survey Area.

### 3.1.3 Complex Lithic Scatters

Complex lithic scatter sites in the scope of the records search contain sparse to dense concentrations of chipped stone debitage and tools as well as ground stone tools. These sites lack all other types of artifacts and features, may contain midden, and occasionally exhibit intact subsurface cultural deposits. Six complex lithic scatter sites (CA-RIV-856, -2190, -3841, -4104, -5327, and 33-016989) were identified within a one-mile radius of the Survey Area.

### 3.1.4 Bedrock Milling Sites

Bedrock milling sites (BRMs) in the scope of the records search exhibit a wide range of variability. These sites are defined by the presence of culturally modified bedrock outcrops most commonly associated with processing of foodstuffs. Processing or milling activities carried out on bedrock outcrops resulted in the creation of slicks, basin metates, and mortars, of which slicks are the most commonly identified milling element in western Riverside County. BRMs may contain as few as one bedrock milling outcrop with a single slick to more than 20 outcrops with a multitude and variety of milling elements. Artifact deposits and other features, such as quarries lithic deposits and fire hearths, are sometimes found in association with BRMs. Thirty-five BRMs (CA-RIV-629, -1001, -1269, -1361, -1362, -1364, -1375, -1376, -1377, -1379, -2225, -2257, -2933, -2970, -3056, -3840, -6469, -6470, -6471, -6468, -6649, -7405, -7410, -7424, -7425, -7426, -7427, -8055, -8083, -8220, -8221, -8749, -10075, and 33-11238 and -016990) were identified within a one-mile radius of the Survey Area.

### 3.1.5 Village Sites

One village site (CA-RIV-716) was identified within a one-mile radius of the Survey Area. A second village site (CA-RIV-1074/2210/2220) is recorded just beyond the scope of the records search north of the Survey Area.

The Adobe Springs village site (CA-RIV-716) is situated along a segment of French Valley Creek east of its confluence with Warm Springs Creek. The village site contains at least seven loci spread over 35 ac of land. The densest concentration of features and artifacts are recorded in the southern portion of the site where Loci 5, 6, and 7 were recorded. Combined, these loci contain more than 20 slicks, 45 mortars, and two rock-shelters, one of which contains rock art, surrounded by dense concentrations of artifacts that include ceramics, chipped stone lithic debitage and tools, and ground stone fragments. Unfortunately, the site has been extensively excavated by pothunters, although pockets of intact deposits may still remain. An early site record prepared by James A. Morrow (1968) indicates that he excavated some of the site, and that collections were also made by the Domenigoni brothers and the Garbani brothers. Collections made from the Adobe Springs village site may be curated in the Garbani collection currently housed at the Western Science Center in Hemet, as well as the San Bernardino County Museum under accession number SBCM-842.

## 3.2 HISTORICAL ARCHAEOLOGICAL AND BUILT-ENVIRONMENT RESOURCES

Fourteen previously recorded historical archaeological resources and six built-environment resources were identified within a one-mile radius of the Survey Area. These include five twentieth-century refuse deposits (CA-RIV-4905H, -4906H, -8082H, -8089H, -10890H, and 33-021025), a trash pit (33-013268), three homesteads (CA-RIV-5133H, -5326H, and 33-001760), a collapsed wooden structure with associated refuse (33-011240), and a linear rock alignment (33-013268) believed to be a pasture fence, or part of a livestock holding area. Two previously recorded isolated artifacts consist of a horseshoe (33-017363) and a metal gas can (33-021031).

Previously recorded built-environment resources included roads and residential buildings. A segment of Leon Road (33-020732) was recorded adjacent to SR 79 east of the Survey Area, while a segment of SR 79 (formally Winchester Road; 33-013871) on either side of its intersection with Benton Road was also recorded. Four single-family residential buildings were recorded, all of which date to the early to mid-twentieth century.

## 3.3 PREVIOUSLY RECORDED RESOURCES WITHIN THE SURVEY AREA

Of the 79 previously recorded cultural resources identified within a one-mile radius of the Survey Area, only six were reported within or adjacent to the Survey Area (Table 2). These include two prehistoric archaeological sites, one historical archaeological refuse deposit, a stacked rock wall, and a segment of SR 79 (Winchester Road). None of these resources are listed historic properties (NRHP), historical resources (CRHR), or historic landmarks (CEQA). The previously plotted locations of each of these resources were field checked during the cultural resources survey and the results are provided in Chapter 6. A more detailed description of each resource is provided below.

**Table 2**
**Cultural Resources within One-Mile of the Survey Area**

| Primary | Trinomial | Age | Type | Description |
|---|---|---|---|---|
| 33-013268 | | Historic | Site | Linear rock wall alignment 75 ft in length and 24-45 inches high believed to be part of a former livestock holding area. |
| 33-013871 | | Historic | Built-Environment | Segment of Winchester Road |
| 33-016989 | | Prehistoric | Site | Complex lithic scatter including metate fragment, scraper, and flakes in disked field along south side of French Valley Creek |
| 33-016990 | | Prehistoric | Site | BRM consisting of one milling slick in heavily disturbed area |
| 33-021025 | CA-RIV-10890 | Historic | Site | Low-density refuse scatter containing glass fragments, ceramic whiteware, metal debris, and an old metal sign |
| 33-021031 | | Historic | Isolate | Artifact consisting of rectangular metal gas can. |

### 3.3.1 33-013268

Originally recorded as an isolate by James J. Sharpe in 2003, the site consists of a linear rock alignment that extends north of a large bedrock outcrop cluster between Thompson and Benton roads, north of Winchester Road (SR 79). The rock alignment is believed to be a wall, possibly part of a pasture fence or former livestock holding area. It measures 75 ft in length (NW-SE)

and is approximately 24–45 in. high. No artifacts or other cultural features were identified. The site is reported within the northern limits of the Survey Area as it parallels SR 79, near its northeastern terminus.

### 3.3.2 33-013871

This built-environment resource consists of a segment of SR 79/Winchester Road constructed in the 1930s. This segment was originally recorded by Riordan Goodwin in 2003. Other segments of the road were recorded/updated by Goodwin (2002), Cooley and Patterson (2008), and Wilson and Gibson (2012). A portion of this segment crosses through the Survey Area.

This segment of SR 79/Winchester Road was described in 2002 as a two-lane blacktop highway that connected Temecula to Hemet. The first transportation corridor across the French Valley region was provided by Washington Road, which predated Winchester Road. This route is depicted on the 1901 Elsinore 30' and 1942 Murrieta 15' USGS maps. Unlike the present route, however, in 1901, Washington Road veered to the east just north of Scott Road, and then continued south to Auld Road (USGS 1901). Washington Road functioned as the main thoroughfare within a network of roads connecting the communities of Winchester, Leon, Auld, and Murrieta in the latter part of the nineteenth century (Bursan 2008 [see AECOM 2012]). Residents in Winchester, Pleasant Valley, and Domenigoni Valley used Washington Road to transport local agricultural products to the Winchester station for delivery to Riverside via San Jacinto (Rasson 2005 [see Robinson et al. 2008]). Around 1949, the current Winchester Road alignment was constructed between Temecula and Winchester, bypassing the longer circuitous route of Washington Road. Winchester Road was designated as State Route 79 in the 1960s. Wilson and Gibson (2012) report that SR 79/Winchester Road has been subjected to numerous alterations and was previously recommended as ineligible for inclusion in the CRHR by Goodwin and Reynolds (2003), Cooley and Patterson (2008), and Bursan (2008).

### 3.3.3 33-016989

This archaeological site was originally recorded by Cooley and Patterson in 2007 as a sparse complex lithic scatter that includes a granitic metate fragment, quartz scraper, and chipped stone lithic debitage. The site is situated within a disked field on a small rill just east of Briggs Road and adjacent to a power line. As currently plotted, the site extends into the western limits of the Project Survey Area where the proposed construction of Clinton Keith will intersect SR 79. The majority of the site is plotted outside the boundaries of the Survey Area.

### 3.3.4 33-016990

This archaeological site was originally recorded by Cooley and Patterson in 2007 as a bedrock milling feature containing a single milling slick. The feature was identified on a granitic (gabbro) or metamorphic (gneiss) boulder outcrop measuring 2.5 x 1.5 m. The slick measured 30 x 15 centimeters (cm) and was described as exhibiting moderate to heavy use. No artifacts or other cultural features were recorded. The site area was described as heavily disturbed by modern development. The site is plotted completely within the limits of the Survey Area where the proposed construction of Clinton Keith Road crosses the northwest corner of Los Alamos Road and Briggs Road.

### 3.3.5 CA-RIV-10890 (33-021025)

This archaeological site was originally recorded by AECOM in 2012 as a sparse post-1945 historical refuse scatter containing approximately 34 artifacts. These included fragments of glass windows and bottles, ceramic whiteware, metal debris and a belt buckle scattered over an area

measuring 63 x 25 ft (SW-NE x NW-SE). A concentration of broken glass (Locus 1) that included cobalt and aqua glass was identified. In addition, a metal sign measuring 117 x 81 in. was recorded. The sign was void of any writing or decorations. The site is plotted almost completely within the Survey Area where the proposed construction of Clinton Keith Road follows the existing alignment of Clinton Keith Road (i.e., dirt road) approximately 0.3 mi west of its intersection with Los Alamos Road.

### 3.3.6 33-021031

This isolated artifact was originally recorded by AECOM in 2012 as a rectangular metal gas can. The can measures 13.5 in. tall by 10 in. wide, with a depth of 10 in. A punctured vent hole and small spout hole were visible on its top side. The can is embossed with "STANDARD/OIL/PEARL/OIL/CO." The isolate is within the Survey Area where the proposed construction of Clinton Keith Road follows the existing alignment of Clinton Keith Road (i.e., dirt road) approximately 0.3 mi west of its intersection with Los Alamos Road.

# 4
# NATIVE AMERICAN COMMUNICATION

Æ contacted the NAHC on August 15, 2013 for a review of the Sacred Lands File (SLF) to determine if any known Native American cultural properties (e.g., traditional use or gathering areas, places of religious or sacred activity, etc.) are present within or adjacent to the Project area. The NAHC responded on August 16, 2013, stating that the SLF search did not identify any Native American cultural resources sites within the Project area; the NAHC requested that Native American individuals and organizations be contacted to elicit information and/or concerns regarding cultural resource issues related to the proposed Project. These individuals and organizations were contacted by letter on September 16, 2013. An example of this letter is included in Appendix A.

In total, 13 groups and/or individuals were contacted. Three responses were received from the Rincon Band of Luiseño Indians, the Soboba Band of Luiseño Indians, and the Pechanga Band of Luiseño Indians. In a letter dated October 1, 2013 (see Appendix A), Rincon Culture Committee Chairman Rose Duro, stated that the Project area was within Luiseno territory but outside Rincon's historic boundaries and referred to the Pechanga Band or Soboba Band. In addition, The Rincon Band recommended Native American monitoring during all ground disturbing activities.

Joseph Ontiveros, Cultural Resource Director for the Soboba Band, responded in writing in a letter dated November 4, 2013 (see Appendix A), stating that the Project area falls within the tribes Traditional Use Area in is culturally sensitive. The Soboba Band requests: 1) to initiate consultation with the Project developer and land owner and continue consultation for the duration of the Project; 2) to receive updates on project developments as soon as they occur; 3) A Native American monitor from the Soboba Band of Luiseno Indians Cultural Resources Department be present during all ground disturbing activities; and 4) that proper procedures be taken and requests of the tribe be honored as it relates to the disposition of artifacts and discovery and treatment of any human remains.

Anna Hoover, Cultural Analyst for the Pechanga Band, responded in writing on November 13, 2013 (see Appendix A), stating that the Project area was within the tribes' ancestral territory and had potential to impact cultural resources. The Pechanga Band requests continued consultation with RCTD but does not recognize the scoping letter as initiating government-to-government consultation under Section 106. The tribe requests participation in the environmental review process, including government-to-government consultation with the Lead Agency, and to be included in all correspondence regarding the Project. Additionally, the Pechanga Band requests: 1) copies of all archaeological reports, site records, proposed grading pans and environmental documents; 2) participation in all archaeological studies; 3) monitoring of all ground disturbing activities by a Riverside County qualified archaeologist and professional Pechanga Tribe monitor; 4) the right to make additional comments and recommendations following review of the environmental documents; and 5) further consultation in the event that subsurface cultural resources are identified. As of the date of this report, no response has been received from the ten remaining groups/individuals contacted.

# 5
# FIELD METHODS

An intensive archaeological resources survey of the Survey Area was completed on June 13 and 14, 2013, by a two-person crew under the direction of John J. Eddy, M.A. RPA. The field survey was supervised by Robert J. Lichtenstein, M.A., RPA, with Ken Moslak serving as field technician. Archaeological site recordation occurred between June 27 and July 3, 2013, and was directed by Mr. Eddy with Mark King and Carley Smith, M.S., serving as field technicians.

The Survey Area was surveyed by walking transects spaced 10–15 m (33–50 ft) apart, providing 100 percent survey coverage. Bedrock outcroppings and any unusual landforms, contours, soil and vegetation changes, features (e.g., road cuts, drainages), and other potential cultural site markers were also carefully inspected. Ground surface visibility throughout the areas surveyed was fair (50%) as a result of dense ground cover, although discrete areas of excellent visibility (100%) were encountered, most notably on hilltops.

For the purposes of the Project, one or more cultural features or three or more artifacts greater than 45 years of age within a 30 m (100 ft) radius were recorded as a site during the survey effort. Cultural features or clusters of artifacts separated by 30 m or more from the nearest known cultural resource were considered separate site areas, unless sufficient evidence existed to suggest the features or materials were components of a larger site complex, such as a documented historical homestead or bedrock milling features scattered over a resource gathering area connected to one another topographically (e.g., covering a hillside slope).

When encountered, all potentially significant cultural resources were recorded on State of California Department of Parks and Recreation Primary Records and Archaeological Site Forms (DPR 523 [1995]), as necessary. Systematic efforts were made to characterize and define the areal extent of each cultural resource, as well as the specific location of each resource within the Survey Area. Site locations were plotted on the appropriate 1:24,000 scale USGS topographic map using Trimble GeoXH 2005 Series handheld Global Positioning System (GPS) units with sub-meter accuracy. The GPS units were also used to determine and document the locations and UTM coordinates of all prehistoric and/or historical cultural features identified within the site areas; the site maps of each resource were generated using the same GPS units. Digital photographs were taken of each site, as well as of any extant cultural features. All cultural features were documented, photographed, and mapped by UTM coordinates. Datums for each site were established by the survey crew and plotted appropriately on their respective site maps by UTM coordinates. No artifacts were collected during the Phase I field survey.

Surveyors also revisited the reported locations of previously recorded cultural resources identified during the records and literature search as falling within or adjacent to the Survey Area. When encountered, surveyors evaluated the current status of each resource against the most recent existing site record. The site records for these resources were then updated on the appropriate DPR 523 (1995) forms incorporating any new observations regarding site location, boundaries, constituents, integrity, etc., and, if necessary, the sites were mapped and documented as described above for newly discovered archaeological resources.

## 5.1 BEDROCK MILLING FEATURE RECORDATION

Efforts were made to thoroughly document bedrock milling outcrops and milling elements encountered during the Phase I field survey. Each bedrock milling outcrop was measured to record the length, width, and height. Descriptive characteristics of the bedrock outcrops surface were also noted, with particular attention to the disposition of the surface (e.g., relatively flat with multiple areas for milling slicks or undulating with few areas for slicks but areas for basin metates and mortars), the presence or absence of lichen, large cracks, exfoliation, natural pitting or abrasiveness, and general slope and aspect. The type of stone was also identified by geologic map units described in the preliminary geologic map for the Murrieta 7.5' quadrangle (Kennedy and Morton 2003). Soil composition, color, and evidence of cultural modification were also noted and efforts were made to ascertain the likely depth of soils to bedrock or other restrictive layers based on information provided in the Web Soil Survey (Soil Survey Staff 2013).

Milling elements were also measured to record the maximum length and width as well as depth. The degree of polish was assessed for each element and was described as either low, moderate, or high. In some cases, it was necessary to record the degree of polish on several portions of a single milling element. Surface characteristics were also noted and included the presence or absence of lichen, large cracks, exfoliation, and natural pitting or abrasiveness. The degree of slope and aspect of each milling element was also recorded and was used to help identify the most likely seating location.

# 6
# PHASE I CULTURAL RESOURCES SURVEY RESULTS

The cultural resources survey of the Survey Area employed two main strategies: (1) to field check the plotted locations of six previously recorded cultural resources (CA-RIV-10890, and 33-013268, -013871, -016989, -016990, and -021031) identified within or adjacent to the Project area during the records and literature search; and (2) to identify other potential historic properties/historical resources within the Survey Area.

Consideration was also given to the presence of potential cultural landscapes or prehistoric archaeological districts that may encompass the Project area. Specifically, efforts were made to determine if prehistoric sites in the Survey Area could be linked to a potential, as yet undefined, cultural landscape or archaeological district associated with nearby Adobe Springs village site (CA-RIV-716). As discussed in Chapter 3, the Survey Area is located within one-mile of the Adobe Springs village site, which is connected to the Project area by a series of creeks and tributaries, including French Valley Creek and Warm Springs Creek.

## 6.1 PREVIOUSLY RECORDED RESOURCES

Field checks carried out at the six previously recorded resources verified the presence of four resources on the surface of the Survey Area (CA-RIV-10890, and 33-013871, -016990, and -021031). No evidence of the stacked rock wall (33-013268) or the sparse prehistoric complex lithic scatter (33-016989) was identified. Site records for each of these resources are provided in Appendix B.

### 6.1.1 CA-RIV-10890H (33-021025)

This site was originally recorded as a post-1945 refuse scatter containing window glass, cobalt and aqua glass fragments, and a metal sign, among other miscellaneous metal artifacts (e.g., belt buckle). The site was revisited during the current study and artifacts were examined for diagnostic evidence of age and manufacture. The previously recorded aqua and cobalt glass fragments actually consist of fragments from a modern Coca Cola bottle and modern blue glass, while the large metal sign was found to be aluminum clad modular wall section from a prefabricated home. None of the artifacts identified on site were diagnostic of the historic period and the site is considered a concentration of miscellaneous modern refuse that lacks association.

### 6.1.2 33-013871

This built-environment resource consists of a segment of SR 79/Winchester Road constructed sometime during the early 1930s. The segment extends approximately from post mile 7.25 to post mile 8.4, and has been modified from a two-lane blacktop highway to a modern four-lane paved road with graded shoulders (Figure 7).

### 6.1.3 CA-RIV-11585 (33-016990)

This site was originally recorded as a bedrock milling site with one slick situated on a small, heavily disturbed inselberg dominated by granitic or metamorphic outcrops. The site was revisited during the current study and the previously recorded bedrock milling feature (OC 1;

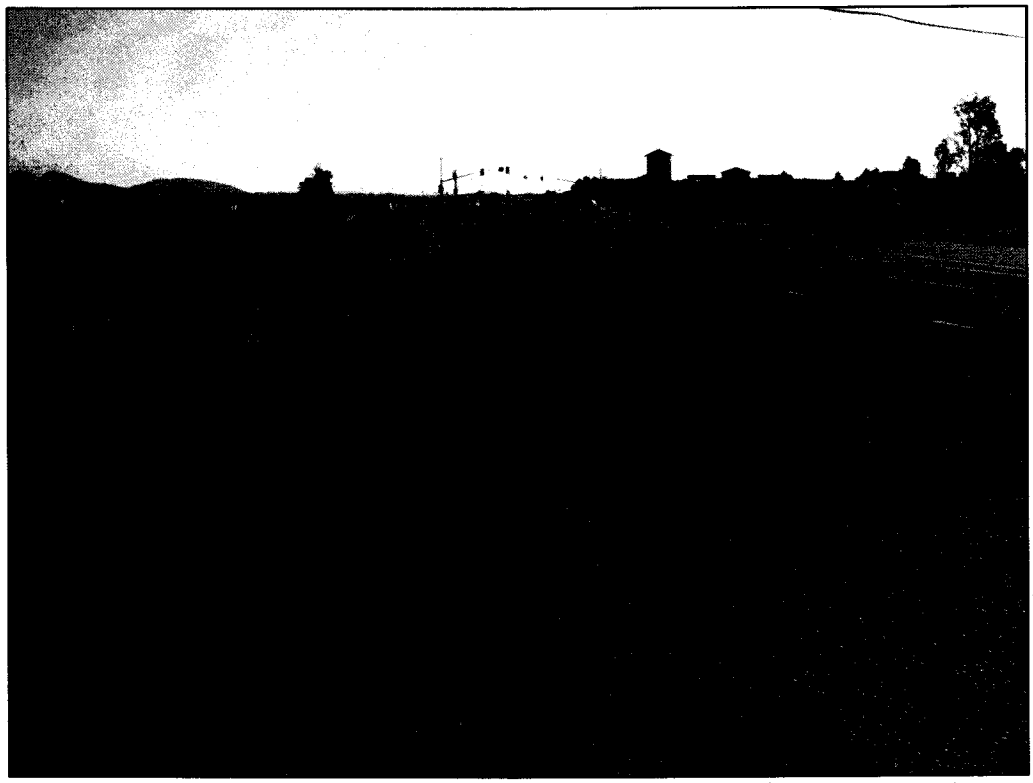

**Figure 7 State Route 79 south of Benton Road. View to the northeast.**

Figure 8) was located along with one additional bedrock milling outcrop (OC 2; Figure 9) containing a slick. MS 1 on OC 1 exhibited high polish indicative of intensive use while MS 2 exhibited moderate polish. The site likely functioned as a satellite resource processing station.

Soils consist of a thin veneer of silty sand (5–15 cm) overlying bedrock and there appears to be little to no potential for subsurface cultural deposits. The site area is heavily disturbed by modern development including bulldozer activity, dumping of imported rock and soil, and above ground utility lines (Figure 10); several outcrops exhibited graffiti.

### 6.1.4 33-021031

This isolated artifact consisting of a rectangular metal gas can was revisited during the current study. The isolate was found in its previously plotted location within the Survey Area and was accurately described.

### 6.1.5 33-013268

No evidence of the stacked rock wall previously recorded as 33-013268 was identified in the Survey Area. The site was likely misplottled and was located north of the Project limits within the current Murrieta Market Place construction site. Access to the construction site was restricted by a covered chain link fence; however, aerial photos indicate that the site was likely destroyed during grading activities associated with that project.

**Figure 8 OC 1 at 33-016690. View to the east.**

**Figure 9 OC 2 at 33-016690. View to the south.**

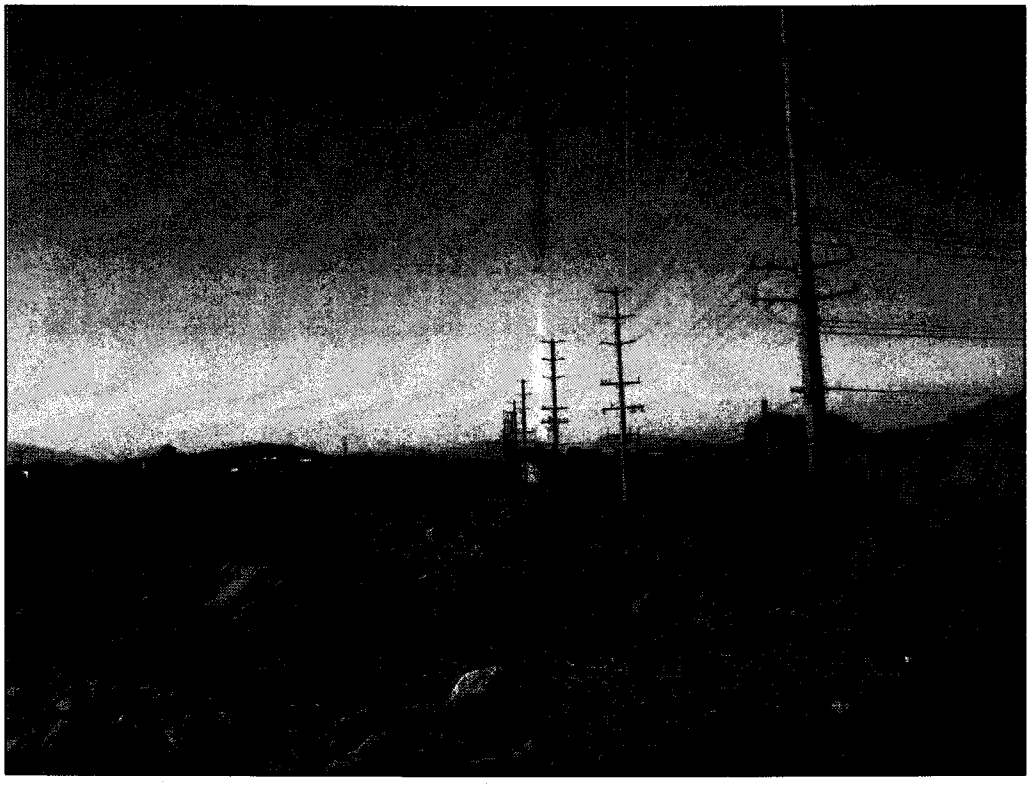

**Figure 10 Overview of 33-016690 showing extent of previous disturbances. View to the south.**

### 6.1.6 33-016989

An intensive survey of the location where the sparse complex lithic scatter reportedly extended into the Survey Area failed to identify any evidence of the site. Survey was not conducted beyond the limits of the Project Survey Area and the site may still exist on the surface of the disked field outside Project limits. It is not known if the site contains a subsurface component. Although surface artifacts were lacking within the limits of the Survey Area, the possibility that a subsurface archaeological deposits associated with the site may extend into the Project Survey Area cannot be ruled out.

## 6.2 NEWLY DISCOVERED RESOURCES

The Phase I investigation of the Survey Area also resulted in the identification of seven new cultural resources including four prehistoric archaeological sites (CA-RIV-11572, CA-RIV-11573, CA-RIV-15575, and CA-RIV-15576), two multicomponent sites (CA-RIV-11571/H and CA-RIV-11574/H) containing prehistoric and historical archaeological remains, and one prehistoric isolated artifact (33-023477). Site records for each of these resources are provided in Appendix B.

### 6.2.1 33-023477

The isolated artifact consists of a metasedimentary ground stone (metate) fragment (Figure 11). The artifact was found in a previously excavated ditch situated between State Route 79 and the Murrieta Marketplace construction site to the north.

**Figure 11 Close-up of metate fragment isolate 33-023477.**

### 6.2.2 CA-RIV-11571/H (33-023478)

This multicomponent site is on the eastern slopes of a northeast-southwest trending hill situated near the confluence of Warm Springs Creek and an unnamed tributary. The hill, which parallels the tributary to the south, contains sites CA-RIV-11571/H, CA-RIV-11572, and CA-RIV-11575.

The historical-archaeological component contains the remains of two stacked rock structures (Features 1a and 1b; see Figure 12) of unknown age and function situated on an alluvial terrace at the toe of the northern hillside slope. The structures are constructed of dry laid and uncoursed irregularly shaped granite (tonalite) stone. Feature 1a contains three rooms separated by interior walls and the eastern room appears to be fully enclosed, although an entrance from the center room may be obscured by a collapsed rock wall. The center room has a small 2 ft opening on the north wall facing the tributary, which presumably served as a door or entryway. The western room is completely open to the north.

The eastern wall of Feature 1b is situated approximately 8 ft west of Feature 1a. This structure contains two rooms. The eastern room has a small 3 ft opening to the north facing the tributary, while the western room is completely open. Three wood posts wrapped with barbed wire form a collapsed A-frame rest that rests on the southern exterior wall of the western room. Barbed wire continues along the low portion of rock wall between the western and eastern rooms.

The prehistoric component consists of a bedrock milling site containing six bedrock milling outcrops (OCs 1–6; see Figure 13) exhibiting 10 milling slicks (MS 1–10) and a sparse crystalline and milky quartz lithic scatter that includes three tools. Artifact 1 [A-1] is a unifacial mano [A-1]; Artifact 2 [A-2] is a utilized crystalline quartz flake; and Artifact 3 [A-3] is a milky quartz unidirectional core.

**Figure 12 Overview of stacked rock wall feature at CA-RIV-11571/H. Feature 1a in foreground, Feature 1b in background. View to the west.**

**Figure 13 Overview of OC 5 at CA-RIV-11571/H showing MS 7 (left) and MS 8 (right). MS 9 is not pictured. View to the southwest.**

Bedrock milling outcrops at CA-RIV-11571/H are found in pairs separated by no more than 5 meters (m) (i.e., OCs 2 and 3 and OCs 4 and 5) and as single features (OCs 1 and 6). OC 1 was within 10 m of a paired feature grouping, whereas OC 6 was situated more than 50 m from the next closest feature. Four of the six bedrock milling outcrops (OCs 1–3, and 6) exhibited a single milling slick with moderate polish, while the other two features (OC 4 and 5) exhibited three milling slicks each, one of which was highly polished. Overall, the polish noted on milling elements at CA-RIV-11571/H is indicative of minimal to moderate use and the site likely functioned as a satellite resource processing station.

Soils in and around bedrock milling outcrops consist of rocky sandy loam with a maximum depth of 36 cm to restrictive layer (Soil Survey Staff 2013). This, coupled with the apparent minimal to moderate use of the bedrock milling outcrops, suggests a low potential for intact subsurface archaeological deposits. There is moderate potential for encountering subsurface archaeological deposits near the top of the hill where the lithic scatter is recorded. Terrace sediments surrounding Feature 1 consist of sandy loam with depths exceeding 2 m (Soil Survey Staff 2013) and these sediments are conducive to the preservation of subsurface deposits. Potential for encountering archaeological deposits associated with the historical component are considered moderate to high, whereas the potential for encountering prehistoric deposits is considered low.

The site retains a high degree of physical integrity. Several pieces of modern trash were scattered throughout the site and a two-track dirt road that skirts the toe of slope near Feature 1 but does not appear to have affected any of the features. The site also retains integrity of prehistoric setting, although viewsheds to the south toward Los Alamos Road are impacted by modern development.

### 6.2.3 CA-RIV-11572 (33-023479)

This bedrock milling site is on top of a northeast-southwest trending hill situated near the confluence of Warm Springs Creek and an unnamed tributary. The hill, which parallels the tributary to the south, contains sites CA-RIV-11571/H, CA-RIV-11572, and CA-RIV-11575.

The site contains four bedrock milling outcrops (OCs 1–4) exhibiting four milling slicks and one basin metate (Figure 14). Bedrock milling outcrops are found in paired groupings with OCs 1 and 4 (Figure 15) in the western portion and OCs 2 and 3 in the eastern portion. The two sets of paired groupings are separated by approximately 45 m. The site also contains three crystalline quartz flakes and one possible quartz core. The potential core is near an area previously disturbed by heavy machinery and the flake scars may be recent.

Outcrops 1 and 4 are situated within a large granitic outcrop cluster surrounded by dark ash-laden soils consisting of rocky sandy loam with a maximum depth of 36 cm to restrictive layer (Soil Survey Staff 2013). It is unclear whether the ash is the result of a modern burn or prehistoric cultural activities. The milling slicks exhibit areas of high polish suggesting prolonged, repetitive, and intensive use. This, coupled with the presence of ash-laden soils around OCs 1 and 4, indicates a low to moderate sensitivity for subsurface archaeological deposits. Conversely, milling elements on OCs 2 and 3 exhibit low to moderate polish more indicative of minimal to moderate use and sediments surrounding the features are not distinguishable from areas outside the site. As a result the eastern portion of the site has low potential for encountering intact subsurface archaeological deposits.

**Figure 14 Close-up of BM 1 at CA-RIV-11572.**

**Figure 15 Overview of OC 3 at CA-RIV-11572 showing MS 3. View to the west.**

The physical integrity of the site area is impaired due to modern development, although the features appear to be intact. A bulldozer cut and barbed wire fence divide the site and additional mechanical disturbances are noted in the surrounding area. The prehistoric setting is also impaired by modern developments, which includes a prefabricated steel building situated less than 100 m to the west. The viewshed to the south is also impacted as a result of Los Alamos Road and residential developments.

### 6.2.4 CA-RIV-11573 (33-023480)

This bedrock milling site is situated on a relatively flat bench near the southwest toe of a hillside slope that rises east of Warm Springs Creek and continues to the northeast (Figure 16). The hill forms a contact between metasedimentary rock to the north and granitic (tonalite) rock to the south. It is elevated approximately 3 m above an alluvial terrace that lies adjacent to the creek. A small creek, which empties into Warm Springs Creek, flows intermittently in a drainage east to west along the toe of the south-facing hillside slope.

**Figure 16 Overview of CA-RIV-11573 showing alluvial terrace and Warm Springs Creek. View to the south.**

The site contains two bedrock milling outcrops (OC 1 and OC 2) separated by approximately 10 m with each exhibiting a single milling slick. Both bedrock milling outcrops are composed of granitic (tonalite) materials although the majority of exposed bedrock is metasedimentary, suggesting granitic rock was preferred over other locally available materials for bedrock milling activities. Both milling slicks exhibit moderate polish indicative of minimal to moderate use and the site likely functioned as a satellite resource processing station.

Soils in and around bedrock milling outcrops consist of rocky sandy loam with a maximum depth of 36 cm to restrictive layer (Soil Survey Staff 2013). This, coupled with the apparent

minimal to moderate use of the bedrock milling outcrops, suggests a low potential for encountering intact subsurface archaeological deposits. Although the alluvial terrace adjacent to the site is conducive to the preservation of subsurface deposits, the potential for encountering buried archaeological deposits associated with this minimal to moderate use bedrock milling site is considered low.

The site retains a high degree of physical integrity. Two-track dirt roads skirt the toe of slope but do not appear to have affected the site. The prehistoric setting is also retained. Viewsheds to the north and east are intact, while views to the south and west are partially impacted by Los Alamos Road and residential developments (see Figure 16).

### 6.2.5 CA-RIV-11574/H (33-023481)

This multicomponent site is on the eastern end of a small north-northeast by south-southwest trending rill situated within a narrow strip of land between Los Alamos Road and Clinton Keith Road. The site contains a historical-archaeological refuse deposit and bedrock milling site.

The historical-archaeological component consists of a discrete mid-twentieth-century historical refuse dump (Feature 1). The feature contains two Type 12 matchstick filler condensed milk cans (IMACS 1931–1948); one meat can; three machine-molded screw top beverage bottles; a metal clock; and other partially buried bottles and cans. An additional Type 12 condensed milk can was recorded approximately 10 ft north of the feature. No clear historical association could be determined from surface recordation of the refuse. The deposit retains a high degree of depositional integrity based on presence of whole cans and bottles along with partially buried artifacts.

The bedrock milling site contains two bedrock milling outcrops (OCs 1 and 2) separated by more than 10 m that exhibit a total of nine milling slicks. Both outcrops are on the south-facing slope of the rill and are visible from Los Alamos Road. Eight of the nine milling slicks are on OC 1 (Figure 17) and all milling slicks exhibit moderate polish indicative of minimal to moderate use. The site likely functioned as a satellite resource processing station.

Soils in and around bedrock milling outcrops consist of rocky sandy loam with a maximum depth of 36 cm to restrictive layer (Soil Survey Staff 2013). This, coupled with the apparent minimal to moderate use of the bedrock milling outcrops, suggests low potential for encountering intact subsurface archaeological deposits associated with bedrock milling activities. The potential for encountering subsurface historical-archaeological deposits in the immediate area of Feature 1, on the other hand, is high.

The physical integrity of the site is impaired by modern disturbances that include construction of Los Alamos Road, Clinton Keith Road, and residential developments. The integrity of the sites prehistoric setting is lacking due to the alteration of site viewsheds.

### 6.2.6 CA-RIV-11575 (33-023482)

This bedrock milling site is situated at the western end of a northeast-southwest trending hill near the confluence of Warm Springs Creek and an unnamed tributary. The hill, which parallels the tributary to the south, contains sites CA-RIV-11571/H, CA-RIV-11572, and CA-RIV-11575. The site extends from the north-face hillside slope to an adjacent rocky knoll (Figure 18), which is separated from the hill by a small saddle. The site abuts a creek-side terrace to the north.

**Figure 17 Overview of OC at CA-RIV-11574/H. Seven of eight milling slicks visible. View to the west.**

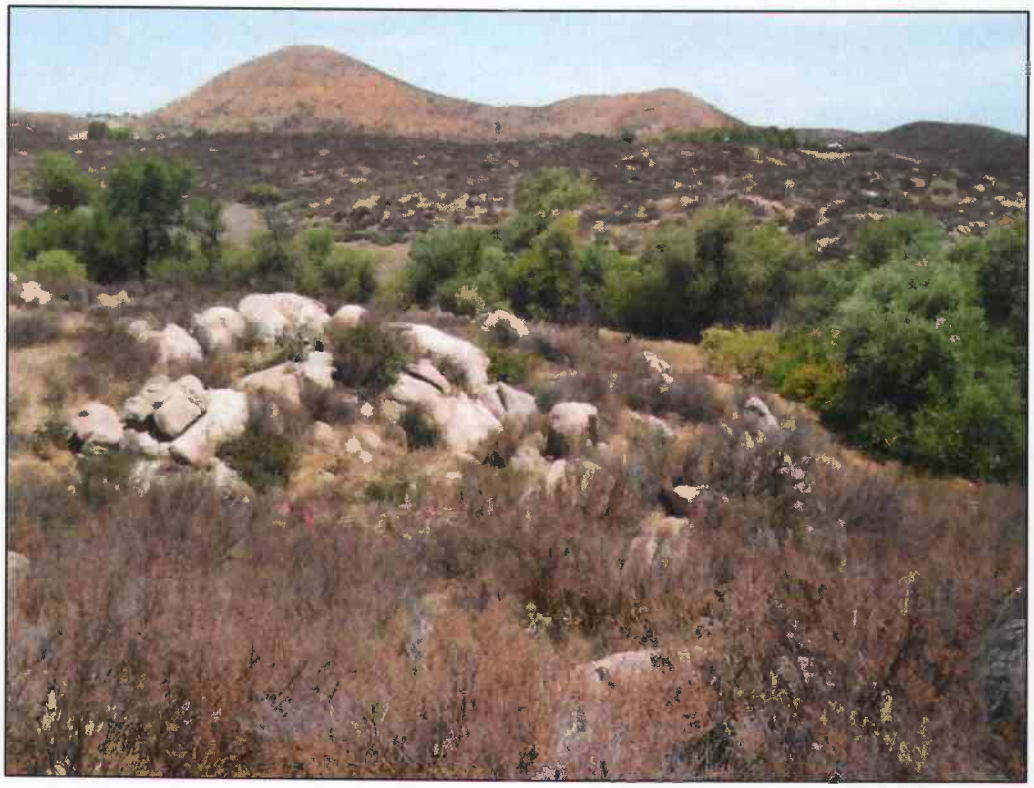

**Figure 18 Overview of CA-RIV-11575 from southern portion of site across rocky knoll and toward tributary of Warm Springs Creek. View toward the north.**

CA-RIV-11575 is within an ecotone composed of Riversidian sage scrub and southern arroyo willow riparian (Figure 19). The site contains 11 bedrock milling outcrops (OCs 1–11) exhibiting 28 milling elements (18 milling slicks, five basin metates, and five mortars). Each milling element is described in detail in Table 3. The site also contains two artifacts. Artifact 1 [A-1] consists of a triangular-shaped pestle (A-1) and Artifact 2 [A-2] consists of an irregular-shaped mano/pestle (A-2).

Bedrock milling outcrops at CA-RIV-11575 are found in pairs separated by no more than 5 m (i.e., OCs 1 and 2 and OCs 10 and 11), in clusters of three (i.e., OCs 4–6, and OCs 7–9), and as single features (i.e., OC 3). Seven of the 11 bedrock milling outcrops (OCs 4–11) are spread tightly over the north-facing hillside slope while the remaining three (OCs 1–3) are situated on the rocky knoll.

OCs 1 and 2 (Figure 19) are adjacent to the small saddle within view of OCs 4–11 and consist of large granitic outcrops containing multiple milling elements that include eight milling slicks and two basin metates. OC 3 is a small outcrop with one large milling slick situated on the northern edge of the knoll separated physically and visually from all other bedrock milling features on site. All but one of the milling elements recorded on OCs 1–3 exhibit high polish.

**Figure 19 OCs 1 and 2 at CA-RIV-11575 showing diversity of plants including yucca, California buckwheat, and red berry buckthorn.**

**Table 3**
**Milling Elements Recorded at Site CA-RIV-11575**

| OC # | Type | # | Location | Shape | Size (cm) | Depth (cm) | Polish | Condition |
|---|---|---|---|---|---|---|---|---|
| 1 | MS | 1 | SE portion | C | 48 x 35 (N-S x E-W) | 0 | High in center; moderate along edges; natural pitting | Good – minimal lichen growth r |
| 1 | MS | 2 | E portion | O | 49 x 32 (NW-SE x NE-SW) | 0 | Moderate on northern end; low along edges; natural pitting | Fair – moderate lichen growth a |
| 1 | MS | 3 | NE portion | O | 60 x 25 (N-S x E-W) | 0 | High in center; low to moderate along the edges | Fair – lichen covered |
| 1 | MS | 4 | NW portion | C | 30 x 24 (NE-SW x E-W) | 0 | High in center; low to moderate along the edges | Poor – heavy exfoliation and lic |
| 1 | MS | 5 | NW portion | C | 30 x 21 (NW-SE x NE-SW) | 0 | Moderate | Poor – heavy exfoliation and lic covered; present only on high sp |
| 2 | MS | 6 | SE portion | O | 95 x 36 (NW-SE x E-W) | 1 | Moderate to high in center; low to moderate over remainder | Poor – heavy exfoliation |
| 2 | MS | 7 | Center E portion | O | 81 x 55 (NW-SE x E-W) | 0 | High in center and northwest portion; moderate over remainder where exfoliation has occurred | Moderate - exfoliated |
| 2 | MS (SS) | 8 | North-Central E portion | C | 118 x 115 (N-S x E-W) | 0 | Moderate to high surrounding BM 2; low to moderate in northern and western portions | Moderate – heavy to light exfol |
| 2 | BM | 1 | SE portion | O | 46 x 32 (NW-SE x E-W) | 2 | High in center; moderate on western and southern edges; low on northern and eastern edges | Good – light to moderate exfoli lichen growth |
| 2 | BM | 2 | North-Central E portion | O | 30 x 22 (N-S x E-W) | 2 | High throughout | Good – lightly exfoliated along |
| 3 | MS | 9 | Covers 80 % of surface | C | 39 x 31 (NW-SE x NE-SW) | 0 | High on northeastern and northwestern portions; moderate in northern and eastern portions where exfoliation has occurred | Good to moderate – heavy exfo northern and eastern portions |
| 4 | BM | 3 | S portion | C | 20 x 17 (N-S x E-W) | 2.5 | Moderate to high in center; moderate along edges; natural pitting | Good |
| 5 | MS | 10 | N portion | O | 35 x 20 (NW-SE x NE-SW) | 0 | High in center; moderate along edges | Good – some lichen growth in r pitting |
| 6 | MS (SS) | 11 | SE portion | C | 55 x 53 (ENE-WSW x E-W) | | Moderate throughout with natural pitting | |
| 6 | BM | 4 | SE portion | O | 33 x 25 (NE-SW x NW-SE) | 7 | Moderate to high in northeastern portion; moderate in southern and western portions; low in eastern portion with heavy natural pitting | Good |

**Table 3**
**Milling Elements Recorded at Site CA-RIV-11575**

| OC # | Type | # | Location | Shape | Size (cm) | Depth (cm) | Polish | Condition |
|---|---|---|---|---|---|---|---|---|
| 6 | M | 1 | SE portion | S | 15 x 13 (NE-SW x NW-SE) | 7 | High with minimal pitting | Good |
| 6 | MS | 12 | SE portion | O | 36 x 21 (E-W x NW-SE) | 1 | Moderate in center; low along edges | Good to moderate – lichen grov natural pitting; crack through m |
| 6 | MS (SS) | 13 | NE portion | O | 32 x 16 (ENE-WSW x WNW-ESE) | 0 | Moderate throughout | Good – lichen growth in northe |
| 6 | M | 2 | NE portion | S | 9 x 9 | 3 | High throughout | Good |
| 7 | MS | 14 | Center | C | 68 x 52 (N-S x E-W) | 0 | Moderate to high in southeastern portion nearest M 3; moderate on dogleg extending to north; low on all remaining portions with heavy exfoliation | |
| 7 | MS (SS) | 15 | SE portion | O | 92 x 43 (NW-SE x NE-SW) | 0 | Low throughout slick skirt; moderate to high along dogleg that extends west | Good – crack runs through mid |
| 7 | M | 3 | SE portion | S | 16 x 15 (NW-SE x NE-SW) | 2 | Low to moderate in bottom; moderate along sides; low to moderate along edges | Good – crack runs through mid |
| 8 | MS | 16 | Covers 50% of surface | O | 53 x 39 (N-S x E-W) | 0 | High in east-central portion; moderate in northern portion; low to moderate in southern portion | Good |
| 9 | M | 4 | W portion | O | 13 x 11 (N-S x E-W) | 3 | Moderate throughout | Good |
| 10 | MS | 17 | Center | C | 38 x 36 (SE-NW x NE-SW) | 0 | High in center; moderate in northeast and southeast portions; low in southwest | Good |
| 10 | MS | 18 | NW portion | O | 39 x 30 (E-W x N-W) | | Moderate in center and west where it contacts lichen; low to moderate in southern and northern portions; low along eastern edge | Fair – may continue west under growth |
| 11 | BM | 5 | S central portion | O | 31 x 24 (N-S x E-W) | 5 | Moderate in northern, eastern and western portions; low in southern portion | Good – crack runs through mid |
| 11 | M | 5 | S central portion | S | 13 x 13 | 3 | Moderate to high throughout | Good – crack runs through mid |

OCs 4–6 contain four milling slicks, two basin metates, and two mortars, all of which exhibit moderate or high polish. The triangular-shaped mano/pestle identified as Artifact 1 (A-1) was discovered on top of OC 6 (Figure 20). Further examination of OC 6 revealed that A-1 was placed over a bedrock mortar (M 1), which was found within a basin metate (BM 4) surrounded by a milling slick skirt (MS 11).

OCs 7–9 contain three milling slicks and two mortars, which range from low to high polish suggesting some elements were used more intensively than others. Artifact 2 (A-2), also identified as a triangular-shaped mano/pestle, was discovered 43 cm south of OC 8.

OCs 10 and 11 contain two milling slicks, a basin metate, and a mortar, which exhibit moderate to high polish. The western portion of OC 10 was covered in thick lichen and additional milling elements may exist underneath the growth.

The number of tightly clustered bedrock milling outcrops and milling elements and the variety of milling element types that exhibit moderate to high degrees of polish are indicative of intensive site use. CA-RIV-11575 was likely utilized as a centralized resource processing site for the efficient exploitation of an ecotone.

**Figure 20 Close-up of OC 6 containing A-1. Further investigation revealed A-1 was resting atop a bedrock mortar (M 1), within a basin metate (BM 4), and was surrounded by a milling slick skirt (MS 11).**

Although soils in and around bedrock milling outcrops consist of rocky sandy loam with a maximum depth of 36 cm to restrictive layer (Soil Survey Staff 2013), the intensity of site use and presence of surface artifacts suggest a moderate to high potential for encountering intact subsurface archaeological deposits. Terrace sediments, which consist of sandy loam with depths

exceeding 2 m (Soil Survey Staff 2013), are also considered highly sensitive for buried archaeological deposits.

The site retains a high degree of physical integrity. The terrace and saddle may have been used as a trail or road at one time but the ground surface is currently covered in vegetation and no visible road or trail was noted. The prehistoric setting is slightly impaired as a result of previous construction that leveled the top of the hill to the south and residential developments to the west, but viewsheds to the north and east are retained.

### 6.2.7 CA-RIV-11576 (33-023483)

This bedrock milling site is on a landscaped rocky knoll just north of Clinton Keith Road within a previously developed residential parcel. Modern buildings, landscape and irrigation features, such as rock walls, flumes, and ornamental trees are found throughout the site area (Figure 21). The site contains two bedrock milling features (OCs 1 and 2; Figure 22) with three milling slicks (MS 1–3), which exhibit low to moderate polish indicative of minimal to moderate use. The site likely functioned as a satellite resource processing station.

Soils in and around bedrock milling outcrops consist of rocky sandy loam with a maximum depth of 36 cm to restrictive layer (Soil Survey Staff 2013). This, coupled with the apparent minimal to moderate use of the bedrock milling outcrops, suggests a low potential for intact subsurface cultural deposits.

**Figure 21 Overview of CA-RIV-11576 showing prefabricated steel building, utility pole, and eucalyptus and pepper trees, as well as native plant species. View to the northwest.**

**Figure 22 OC 2 at CA-RIV-11576 showing MS 2 and 3. View to the southwest.**

The physical integrity of the site is impaired by modern development of the parcel. Further, the prehistoric setting is lacking due to the presence of steel buildings, landscape and irrigation features, and ornamental trees.

# 7
# SUMMARY AND PRELIMINARY INTERPRETATIONS

During the Phase I cultural resources survey, Æ revisited the location of six cultural resources previously reported within the Survey Area by the EIC. One of these resources (CA-RIV-10890) consists of a concentration of miscellaneous modern refuse that lacks historical association and is not considered a cultural resource subject to CEQA or Section 106 evaluation. An additional resource (33-013268), consisting of a stacked rock wall, was located north of the Survey Area and was apparently destroyed during grading operations associated with the Murrieta Market Place development.

Evidence of three previously recorded cultural resources was identified on the surface within the Survey Area. These included one built-environment resource (33-013871), and two archaeological resources (33-016990 and -021031). Evidence of one additional previously recorded archaeological resource (33-016989), consisting of a complex lithic scatter east of Briggs Road, could not be found on the surface of the Survey Area. Although surface artifacts associated with 33-016989 were not identified within the Project limits the possibility that intact subsurface cultural deposits extend into the Survey Area cannot be dismissed.

Æ also identified seven new archaeological resources within the Survey Area. These resources consist of one prehistoric isolate (33-023477), two multicomponent sites (CA-RIV-11571/H and -11574/H), and four prehistoric sites (CA-RIV-11572, -11573, -11575, and -11576).

As a result of these efforts, the Survey Area is known to contain 11 cultural resources that must be evaluated against the criteria of eligibility for listing in the NRHP and CRHR. These potential historic properties/historical resources consist of two isolated artifacts (33-021031 and -23477), one built-environment resource (33-013871), and eight archaeological sites (CA-RIV-11571/H, -11572, -11573, -11574/H, -11575, -11576, -11585, and 33-016689). In addition, the prehistoric resources may be components of cultural landscape(s) or archaeological district(s). These concepts are discussed in the following section.

## 7.1 PRELIMINARY INTERPRETATIONS

The features and artifacts recorded at prehistoric archaeological sites/components identified within and adjacent to the Project Survey Area are consistent with use in subsistence-related activities, more specifically the processing of plants and animals. Evidence of these activities is more commonly found in areas with bedrock outcrops, which provided Native inhabitants an ample supply of stationary workstations and milling/grinding surfaces. Less common in the Survey Area are concentrations of ground stone tools and lithic debitage void of bedrock milling outcrops. These *portable* tools were either transported between village sites and resource procurement areas, or were stashed on site for seasonal use. Both resource processing techniques (i.e., fixed location bedrock milling and portable ground stone tool) were likely utilized concurrently dependent on the presence/absence of suitable bedrock exposures and the seasonal availability of plant/animal resources.

Bedrock milling sites in western Riverside County are generally treated as a single resource class or site type characterized by the presence of bedrock milling features and few if any surface

artifacts or other feature types. While variability among bedrock milling sites is recognized, little effort is made to compare, contrast, or categorize variability. Intensive recordation and preliminary analysis of bedrock milling sites identified within the Project Survey Area (i.e., CA-RIV-11571/H, -11572, -11573, -11574/H, -11575, -11576, and -11585) provides new insight into the organization of subsistence-related activities. As a result, two distinct types of bedrock milling sites were identified during the Phase I investigation and are described as minimal to moderate use bedrock milling sites (MMBRMs) and intensive use bedrock milling sites (IBRMs).

### 7.1.1 Minimal to Moderate Use Bedrock Milling Sites

The most common group or type in the Survey Area is classified as MMBRMs. Six of the eight sites/components (33-016990, CA-RIV-11571/H, CA-RIV-11572, CA-RIV-11573, CA-RIV-11574/H, and CA-RIV-11576) identified in the Survey Area fall within this category. MMBRMs are distinguished from CA-RIV-11575, which is classified as an intensive use bedrock milling site (IBRM). Descriptions of these site types based on the results of the Clinton Keith Road Extension project cultural resources survey are provided below.

The six MMBRMs identified in the Survey Area exhibit variability in the number and spatial distribution of bedrock milling outcrops identified on site as well as the number of milling elements, and type of milling elements recorded. For instance, MMBRMs in the Project Survey Area contain as few as two bedrock milling outcrops exhibiting one slick each to as many as six outcrops exhibiting10 milling slicks. While the variability among these sites may be significant and is worthy of additional study, the focus of this exercise is to identify the similarities or shared traits that distinguish MMBRMs from IBRMs.

Milling slicks were the most dominant type of milling element recorded in the MMBRMs and only one site (CA-RIV-11572) contained a milling element other than a slick. This element consisted of a basin metate worked into a natural concavity on the bedrock's surface. Of the 29 milling elements recorded at these six sites, all but two exhibited moderate to low polish indicative of minimal to moderate use. The remaining two both exhibited high polish on portions of the slick indicative of more intensive use. Another indication of minimal to moderate site use intensity was derived from the abundance of single milling element bedrock outcrops compared to multi-element outcrops. Only five bedrock outcrops contained more than one milling element and only one of these (OC 1 at CA-RIV-11574/H) contained more than three elements. All bedrock milling outcrops containing three or more slicks consisted of large, low-lying bedrock exposures with ample surface areas.

It is possible that this pattern reflects efforts to utilize the naturally abrasive outcrop surface for initial processing of foodstuffs, a technique that allowed resources to be broken down and easily transported to more intensive processing sites such as CA-RIV-11575. Once the initial processing was completed and the processed material was temporarily stored, workers could travel to the next gathering area, locate another suitable outcrop for milling/grinding, and repeat the process.

Another intriguing pattern identified in the MMBRMs was the spatial relationships of bedrock milling outcrops to one another. Of the 16 bedrock milling outcrops recorded, eight were found in paired groupings separated by approximately 5 m or less, six were found in paired groupings greater than 5 m but less than 15 m apart, and only one was segregated from all other features by more than 30 m. One additional outcrop was identified less than 10 m from a paired grouping.

The tendency toward paired groupings and the close spatial relationship between the pairs may directly relate to the size or organization of the labor party and importance of social interaction. One possibility that must be considered is that labor parties splintered into smaller work groups of as few as two people. This would explain the tendency toward paired groupings, with each bedrock milling outcrop containing a single milling slick. Working in this type of setting would allow for more intimate and personal communication compared to the type of interaction that would occur among the larger labor group. Alternatively, paired groupings may represent the workspace of a single laborer. One would expect to find a higher ratio of highly polished versus moderately polished slicks if this were the case but the majority of slicks identified as MMBRMs retained the bedrocks naturally abrasive surface and were still capable of processing foodstuffs.

It is important to distinguish that the intensity of processing activities at MMBRMs as evidenced at bedrock milling outcrops does not directly correlate to the intensity of resource gathering activities, which may leave no material evidence. It would appear that the intensity of resource procurement activities (i.e., gathering) in the Project Survey Area, and more specifically surrounding MMBRMs, was much greater than the intensity of resource processing activities demonstrated at these minimal to moderate use satellite sites. The bulk of processing activities would likely have occurred at an intensive use bedrock milling site either within the footprint of a nearby village or within the traditional resource gathering area. This interpretation is supported by the identification of one IBRM within the Project Survey Area.

### 7.1.2 Intensive Use Bedrock Milling Sites

CA-RIV-11575 is distinct from all other bedrock milling sites identified in the Survey Area. The site contains 11 bedrock milling outcrops exhibiting 28 milling slicks, basin metates, and mortars, most of which exhibit a high degree of polish. The number of bedrock milling outcrops and milling elements is more than double that of the next site (CA-RIV-11571/H) and the spatial relationship among features and its likely association with the organization of labor and social interaction contrasts with patterns at MMBRMs described above.

It is hypothesized that CA-RIV-11575 was a focal point on the landscape utilized by a large labor group and acted as a central hub connected to resource gathering areas (or spokes) with the occasional MMBRM. Splinter work parties of two or more people likely broke off from the larger labor group and traveled to resource gathering areas and would conduct initial resource processing activities at MMBRMs before rejoining the larger group at the IBRM to conduct the more intensive processing activities, which necessitated the use of basin metates and mortars.

The IBRM likely provided a special venue for social interaction and cultural transmission of knowledge related to plants and animals, the landscape, and perhaps territorial boundaries, gathering and processing techniques, basket weaving and tool manufacture, and stories of their creation and history. Social interaction at MMBRMs on the other hand, which contained paired or segregated bedrock milling outcrops, likely fostered more personal, intimate one-on-one social interaction, or allowed an individual private or personal space.

Another intriguing pattern that should be explored further is the relationship between the composition of IBRMs and their intensity of use compared to bedrock milling loci found within the footprint of village sites such as at Loci 5–7 at Adobe Springs (CA-RIV-716). True et al. (1974:43), based on testimony from Luiseño consultants, argued that larger bedrock outcrops within village sites were communal milling areas, and each family or other social group (e.g., lineage, clan) had its own outcrop area, with each woman owning her own mortar or set of

milling elements. The concept of communal use areas is encapsulated in the Luiseño land classification concept of *tch'o'num* (White 1963:123), whereas the term *tungva* describes properties owned by a specific family or individual (White 1963:125, 165). These concepts were echoed by Oxendine (1983:57) in her discussion of the Luiseño village.

Luiseño concepts of land classification extend beyond the immediate village footprint and onto the broader landscape, which Oxendine (1983:57) identified as *tchon tcho'mi* or *village territory* that "...may have consisted of several discontinuous units called tchon tcho'mi...subdivided into familial or individual plots called tungva." The term used by Oxendine is likely synonymous with *tch'o'num tcho'mi*, which White (1963:123, 165) used in reference to the communal ownership of the entire village territory or landscape. It is therefore expected that both communal use and family/social groups/individual use areas exist outside the village footprint in association with resource gathering and processing locations.

CA-RIV-11575 and associated MMBRMs identified in the Survey Area may document the processing activities of a family or social group who had rights (*tongva*) to gather from the area. Further, CA-RIV-11575 and associated MMBRMs may provide a direct link between the social organization of labor related to resource processing activities within the village footprint and the organization of labor on the broader village complex.

### 7.1.3 Adobe Springs Village Complex

As discussed above, Luiseño concepts of land classification did not stop at the limits of a village site's archaeological footprint. Rather, the concept of village extended onto the broader cultural landscape and included resource gathering and processing locations, trails, ceremonial locations, sacred spots, quarries, water sources, and other elements that made up the *village complex* or *Tch'o'num tcho'mi*. As previously discussed, the Project Survey Area lies one mile north of the Adobe Springs village site (CA-RIV-716) and is directly linked to the site by Warm Springs Creek, which likely provided a natural travel corridor between the village site and resource gathering/processing area.

Evidence of Native American use of the Survey Area is most apparent at bedrock milling sites that were likely utilized by a family or social group with rights to gather resources from the area (i.e., *tongva*). The IBRM (CA-RIV-11575) would have provided a suitable location for the larger group to gather and conduct the more intensive processing activities, while MMBRMs in the vicinity were utilized by small splinter parties that broke off from the main group to gather from nearby locations. In addition to the bedrock milling sites, the family/social group gathering area includes elements that exhibited no material evidence of cultural activity, such as the natural terrain (i.e., hills and terraces); native stands of vegetation utilized for food, crafts, and other activities; water sources (i.e., Warm Springs Creek and tributaries); and travel corridors and trails.

The potential family or social group gathering area is likely a component of the broader resource gathering and processing *taskscape* associated with the potential Adobe Springs Village Complex. Taskscapes are places created and modified through repetitious activities "mapped onto" the landscape (Ingold 1993; Perry and Delaney-Rivera 2011:106) and connected physically to other places through a patchwork of trails and relationally by the social and economic meanings associated with the specific task. In other words, tasks are socially embedded within the landscape (Chadwick 2004:265; Robinson 2010).

Archaeological sites and cultural features provide clues to the type of tasks performed on or near sites, while the physiographic landscape provides the setting (Robinson 2010:804). Each task derives its meaning from its position within an ensemble of tasks performed in a series or parallel, generally by groups working together (Ingold 1993; Robinson 2010). Taskscapes are, therefore, conceptualized as the entire ensemble of tasks and are "both the physical and temporal setting for these knowledgeable and unknowledgeable acts, and are also networks or weaves of practices, skills, traditions and social relations" (Chadwick 2004:265). As such, individual tasks or activities represented at or near sites cannot be considered in isolation from the ensemble, an idea that resonates in western Riverside County and supports Native American claims that there is no such thing as an isolated bedrock milling site (Pechanga 2011:18).

Some of the tasks that likely occurred in association with resource gathering and processing taskscapes in the Project Survey Area include gathering of small seeds, grasses, berries, and other edibles as well as non-subsistence related materials (i.e., plants, fibers, toolstone) for craft production and other uses; basket-making; hunting of small and large game; tool production and maintenance; processing of resources on the bedrock outcrops and ground stone metates using hand stones; packaging of processed and unprocessed materials for transport back to the Adobe Springs village site; group and interpersonal social interaction; and the cultural transmission of traditional knowledge, songs, stories, and history, among other unidentified tasks. All of these tasks likely occurred in the family or social group gathering area within the Project Survey Area.

Information leading to a greater understanding of village complexes, taskscapes, and family/social group gathering areas in the greater Project region is limited and assistance from the local Native American community and additional archaeological research is needed to unravel the complexities of human-landscape interactions, to identify the full ensemble of tasks that make up taskscapes, and to develop a deeper phenomenological understanding of the broader cultural landscape.

At this time, we are unable to delineate the boundary of the potential Adobe Springs Village Complex, its associated taskscapes and family/social groups' resource gathering areas. A cooperative effort between the Native American community and cultural resource managers to properly identify, record, and evaluate the potential Adobe Springs Village Complex for the CRHR and NRHP is needed; and a letter requesting such a cooperative effort has been sent to local Native American groups. Regardless, the potential Adobe Springs Village Complex will be taken into consideration in current Project planning and decision-making processes.

# 8
# MANAGEMENT RECOMMENDATIONS

As proposed, the Clinton Keith Road Extension Project is subject to compliance with Section 106 of the NHPA and CEQA, as amended. Eleven cultural recorded resources (33-013871, 33-016689, 33-016690, 33-021031, 33-023477, CA-RIV-11571/H, CA-RIV-11572, CA-RIV-11573, CA-RIV-11574/H, CA-RIV-11575, and CA-RIV-11576) requiring evaluation against the criteria set forth in the NRHP and CRHR were identified within the Survey Area. Site records for all 11 resources are included in Appendix A. Management recommendations for each cultural resource are discussed below and summarized in Table 4.

The previously recorded built-environment resource (33-013871) consists of a segment of State Route 79/Winchester Road. This and other segments of Winchester Road have been previously recorded and evaluated as *not eligible* for the California Register of Historical Resources (Cooley and Patterson 2007; George and Mirro 2010; Goodwin and Reynolds 2003). This particular segment is completely modern in appearance, design, and construction, and lacks sufficient historical integrity to be considered eligible for the CRHR, or the National Register of Historic Places (NRHP).

The two isolated artifacts, identified as a prehistoric metate fragment (33-023477) and a metal gas can (33-021031), are not considered eligible for the NRHP or CRHR individually or as contributors to the significance of a potential district as they either lack integrity (i.e., 33-023477) or evidence of direct historical association (i.e., 33-021031). As a result, these two isolated artifacts require no further management.

All eight archaeological sites identified within the Survey Area (33-016689, 33-016690, CA-RIV-11571/H, CA-RIV-11572, CA-RIV-11573, CA-RIV-11574/H, CA-RIV-11575, and CA-RIV-11576) are considered potential historic properties/historical resources and must be evaluated against the criteria set forth in the NRHP and CRHR. Phase II testing and evaluation that includes archival research is also recommended to evaluate the historical components of CA-RIV-11571/H and CA-RIV-11574/H.

A Phase II testing and evaluation program is also recommended for all eight prehistoric sites/components. These sites may be part of a family or social group resource gathering area that is a component of a broader resource gathering and processing taskscape associated with the potential Adobe Springs Village Complex. As a result, significance evaluations must consider eligibility of these sites individually and as contributors to potential cultural landscape(s) and archaeological district(s).

To properly evaluate these eight resources under all four criteria of the NRHP and CRHR individually and as contributors, the Phase II investigation will directly engage the Native American community and will include excavation and/or non-excavation strategies such as archival research, ethnographic research, landscape analysis, and more intensive site documentation. One of the overarching goals of the investigation will be to identify and investigate cultural landscape(s)/archaeological districts that may encompass the Project Survey Area and develop a cultural landscape context and research design for evaluating resources.

**Table 4**
**Recommendations for Cultural Resources within the Clinton Keith Road Extension Survey Area**

| Site Number or Resource Name | Site Description | OHP Status Code | Potential for Buried Deposits | Recommendations |
|---|---|---|---|---|
| 33-013871 | Segment of SR 79/Winchester Road | 6Z | N/A | Not eligible for NRHP or CRHR. No further management |
| 33-016989 | Complex lithic scatter, likely associated with potential Adobe Springs village (CA-RIV-716) landscape | 7 | Yes | Phase II Testing and Evaluation to determine presence/absence of subsurface deposit within Survey Area and evaluate NRHP/CRHR eligibility |
| 33-016990 | MMBRM, likely associated with Adobe Springs village (CA-RIV-716) landscape | 7 | Low | Phase II Testing and Evaluation; landscape analysis |
| 33-021031 | Isolated artifact – metal gas can | 6Z | None | No further management |
| 33-023477 | Isolated artifact – metate fragment | 6Z | None | No further management |
| CA-RIV-11571/H | Multicomponent site; stacked rock structure (Feature 1) and MMBRM, likely associated with potential Adobe Springs village (CA-RIV-716) landscape | 7 | Historical component Moderate to High<br><br>Prehistoric component Low to Moderate | Historical component:<br>Phase II Testing and Evaluation; archival research<br>Prehistoric component:<br>Phase II Testing and Evaluation; landscape analysis |
| CA-RIV-11572 | MMBRM, likely associated with potential Adobe Springs village (CA-RIV-716) landscape | 7 | Low | Phase II Testing and Evaluation; landscape analysis |
| CA-RIV-11573 | MMBRM, likely associated with potential Adobe Springs village (CA-RIV-716) landscape | 7 | Low | Phase II Testing and Evaluation; landscape analysis |
| CA-RIV-11574/H | Multicomponent site; historical refuse dump (Feature 1) and MMBRM, likely associated with potential Adobe Springs village (CA-RIV-716) landscape | 7 | Prehistoric – Low<br>Historic – High | Phase II Testing and Evaluation; landscape analysis |
| CA-RIV-11575 | IBMR with groundstone artifacts, likely associated with potential Adobe Springs village (CA-RIV-716) landscape | 7 | Moderate to High | Phase II Testing and Evaluation; landscape analysis |
| CA-RIV-11576 | MMBRM, likely associated with potential Adobe Springs village (CA-RIV-716) landscape | 7 | Low | Phase II Testing and Evaluation; landscape analysis |

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# APPENDIX A

# NATIVE AMERICAN COORDINATION

## Sacred Lands File & Native American Contacts List Request

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(916) 657-5390 – Fax
nahc@pacbell.net

*Information Below is Required for a Sacred Lands File Search*

Project: Clinton Keith Road Extension Project

County Riverside

USGS Quadrangle

Name Murrieta and Bachelor Mountain, CA 7.5'USGS Quadrangles

Township 6S Range 2W Section 31

Township 6S Range 3W Section(s) 35-36

Township 7S Range 2W Section 6

Township 7S Range 3W Section(s) 1-2

Company/Firm/Agency:
Applied EarthWorks Inc.

Contact Person: John J. Eddy

Street Address: 3550 E. Florida Ave., Ste. H

City: Hemet Zip: 92544

Phone: (951)766-2000 ext 11

Fax: (951)766-0020

Email: JEddy@AppliedEarthWorks.com

Project Description: The Project proposes a six-lane urban arterial that would extend Clinton Keith Road between Antelope Road and State Route 79 (SR 79).

STATE OF CALIFORNIA Edmund G. Brown, Jr. Governor

**NATIVE AMERICAN HERITAGE COMMISSION**
1550 Harbor Boulevard, Suite 100
West Sacramento, CA 95691
(916) 373-3715
Fax (916) 373-5471
www.nahc.ca.gov
e-mail: ds_nahc@pacbell.net

August 16, 2013

Mr. John J. Eddy, RPA
**Applied EarthWorks, Inc.**
3550 E. Florida Avenue, Suite H
Hemet, CA 92544

Sent by FAX to: 951-766-0020
No. of Pages. 4

Re: Request for Sacred Lands File Search and Native American Contacts list for the "**Clinton Keith Road Extension Project**" located in the Murrieta area; Riverside County, California

Dear Mr Eddy:

A record search of the NAHC Sacred Lands File **failed to indicate** the presence of Native American traditional cultural place(s) in the project sites submitted, based on the USGS coordinates submitted as part of the 'Area of Potential Effect. (APE). Also, note that the NAHC SLF Inventory is not exhaustive; therefore, the absence of archaeological or Native American sacred places does not preclude their existence. Other data sources for Native American sacred places/sites should also be contacted. A Native American tribe of individual may be the only sources of presence of traditional cultural places or sites.

In the 1985 Appellate Court decision (170 Cal App 3rd 604; *EPIC v. Johnson*), the Court held that the NAHC has jurisdiction and special expertise, as a state agency, over affected Native American resources impacted by proposed projects, including archaeological places of religious significance to Native Americans, and to Native American burial sites.

Attached is a list of Native American tribes, individuals/organization who may have knowledge of cultural resources in or near the project area. As part of the consultation process, the NAHC recommends that local governments and project developers contact the tribal governments and individuals to determine if any cultural places might be impacted by the proposed action. If a response is not received in two weeks of notification the NAHC requests that a follow telephone call be made to ensure that the project information has been received.

If you have any questions or need additional information, please contact me at (916) 373-3715.

Sincerely,

Dave Singleton
Program Analyst

Attachments

**Native American Contacts**
**Riverside County**
**August 16, 2013**

Pala Band of Mission Indians
Historic Preservation Office/Shasta Gaughen
35008 Pala Temecula Road, PMB Luiseno
Pala , CA 92059 Cupeno
PMB 50
(760) 891-3515
sgaughen@palatribe.com
(760) 742-3189 Fax

Pauma & Yuima Reservation
Randall Majel, Chairperson
P.O. Box 369 Luiseno
Pauma Valley CA 92061
paumareservation@aol.com
(760) 742-1289
(760) 742-3422 Fax

Pechanga Band of Mission Indians
Paul Macarro, Cultural Resources Manager
P.O. Box 1477 Luiseno
Temecula , CA 92593
**(951) 770-8100**
pmacarro@pechanga-nsn.
gov
(951) 506-9491 Fax

Ramona Band of Cahuilla Mission Indians
Joseph Hamilton, Chairman
P.O. Box 391670 Cahuilla
Anza , CA 92539
admin@ramonatribe.com
(951) 763-4105
(951) 763-4325 Fax

Rincon Band of Mission Indians
Vincent Whipple, Tribal Historic Preabonv. Officer
1 West Tribal Road Luiseno
Valley Center, CA 92082
jmurphy@rincontribe.org
(760) 297-2635
(760) 297-2639 Fax

Santa Rosa Band of Mission Indians
John Marcus, Chairman
P.O. Box 391820 Cahuilla
Anza , CA 92539
(951) 659-2700
(951) 659-2228 Fax

Morongo Band of Mission Indians
William Madrigal, Jr.,Cultural Resources Manager
12700 Pumarra Road Cahuilla
Banning , CA 92220 Serrano
**(951) 201-1866 - cell**
wmadrigal@morongo-nsn.
gov
(951) 572-6004 Fax

Rincon Band of Mission Indians
Bo Mazzetti, Chairperson
1 West Tribal Road Luiseno
Valley Center, CA 92082
bomazzetti@aol.com
(760) 749-1051
(760) 749-8901 Fax

**This list is current only as of the date of this document.**

**Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.**

**This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed Clinton Keith Road Extension Project; located in the Murrieta area southwestern Riverside County, California for which a Sacred Lands File search and Native American Contacts list were requested.**

**Native American Contacts**
**Riverside County**
**August 16, 2013**

Pechanga Band of Mission Indians
Mark Macarro, Chairperson
P O. Box 1477 Luiseno
Temecula , CA 92593
(951) 770-6100
hlaibach@pechanga-nsn.gov
(951) 695-1778 FAX

SOBOBA BAND OF LUISENO INDIANS
Joseph Ontiveros, Cultural Resource Department
P.O. BOX 487 Luiseno
San Jacinto , CA 92581
jontiveros@soboba-nsn.gov
(951) 663-5279
(951) 654-5544, ext 4137

William J Pink
48310 Pechanga Road Luiseno
Temecula , CA 92592
wjpink@hotmail.com
(909) 936-1216
Prefers e-mail contact

Cahuilla Band of Indians
Luther Salgado, Chairperson
PO Box 391760 Cahuilla
Anza , CA 92539
Chairman@cahuilla.net
760-763-5549
760-763-2631 - Tribal EPA

Pechanga Cultural Resources Department
Anna Hoover, Cultural Analyst
P O. Box 2183 Luiseño
Temecula , CA 92593
ahoover@pechanga-nsn.gov
951-770-8104
(951) 694-0446 - FAX

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Applied EARTHWORKS Inc.

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Hemet, CA 92544
O: (951) 766-2000 | F: (951) 766-0020

September 19, 2013

Luther Salgado
Chairperson
Cahuilla Band of Indians
P.O. Box 391760
Anza, CA 92539

Clinton Keith Road Extension Project
Riverside County, California

Re: Cultural Resources Investigation for the Clinton Keith Road Extension Project, Riverside County, California

Dear Mr. Salgado:

Applied Earthworks, Inc. (Æ) is contacting you on behalf of the Riverside County Transportation Department (RCTD) regarding environmental studies for the Clinton Keith Road Extension Project ("Project") in and near the City of Murrieta, Riverside County, California. The Project Survey Area is depicted on the Murrieta and Bachelor Mountain 7.5' USGS quadrangles, Township 6S, Range 2W, Section 31; Township 6S, Range 3W, Sections 35 and 36; Township 7S, Range 2W, Section 6; and Township 7S, Range 3W, Sections 1 and 2 of the San Bernardino Baseline and Meridian [S.B.B.M.]) (see attached Project Location Map).

The Project proposes to extend the existing Clinton Keith Road between Antelope Road and State Route 79 (SR 79). Since the approval of the Supplemental Environmental Impact Report (SEIR) in 2006, two segments of the Project have been constructed as part of the City of Murrieta's local road improvement project for access to a new hospital, and as part of Tract 29484, respectively. There are two segments remaining to be built. The four segments are as follows:

- Segment 1 - between Antelope Road and Whitewood Road (Station [Sta] 210+00 - 237+00) [*already constructed*]
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Æ is in the process of completing a Phase I cultural resources survey of the Project Survey Area, which includes a records search at the Eastern Information Center (EIC), consultation with the Native American Heritage Commission (NAHC), and a pedestrian survey of the Project APE. A search of the Sacred Land files by the NAHC did not indicate the presence of known cultural resources or sacred sites in the Project Survey Area. However, results of the records search indicate that 59 prehistoric archaeological resources (47 sites and 12 isolated artifacts), 14 historical archaeological resources (12 sites and two isolated artifacts), and six built-environment resource were recorded previously within a one-mile radius of the proposed Project.

During the Phase I survey effort, 11 cultural resources were identified within the Project Survey Area that must be evaluated against the criteria of eligibility for listing in the National Register of Historic Places (NRHP) and California Register of Historical Resources (CRHR). These resources consist of two isolated artifacts (33-021031 and 33-023477), one built-environment resource (33-013871), and eight archaeological sites. The eight archaeological sites include two multicomponent sites (CA-RIV-11571/H and CA-RIV-11574/H) that contain both

historical and prehistoric components and six prehistoric sites (CA-RIV-11572, CA-RIV-11573, CA-RIV -11575, CA-RIV-11576, CA-RIV-11585, and 33-016689). Site locations are shown on the confidential Project Location Map attached to this document.

Historical archaeological components consist of a multi-room stacked rock structure of unknown age and a mid-twentieth century historical archaeological refuse deposit. Seven of the eight prehistoric sites/components consist of bedrock milling sites.

Evidence of one prehistoric site (33-016689), consisting of a complex lithic scatter with both lithic debitage and groundstone artifacts, was not identified on the surface of during the survey and the site appears to be located outside the boundary of the Project Survey Area. However, it is unclear if the site contains a subsurface cultural deposits and whether or not subsurface deposits would extend into the Project limits. As a result, the Project Survey Area in the vicinity of 33-016689 will be investigated for intact subsurface cultural deposits associated with the site during Phase II testing and evaluation.

All eight prehistoric sites/components may be part of a traditional family or social group resource gathering area and a component of a resource procurement and processing *taskscape* associated with a potential Adobe Springs village (CA-RIV-716) landscape. Taskscapes are considered an important element of cultural landscapes as places created and modified through repetitious activities "mapped onto" the landscape (Ingold 1993; Perry and Delaney-Rivera 2011:106) and connected physically to other places through a patchwork of trails and relationally by the social and economic meanings associated with the specific task. Archaeological sites and cultural features provide clues to the type of tasks performed on or near sites, while the physiographic landscape provides the setting (Robinson 2010:804). In other words, tasks are socially embedded within the landscape (Chadwick 2004:265; Robinson 2010). Each task derives its meaning from its position within an ensemble of tasks performed in a series or parallel, generally by groups working together (Ingold 1993; Robinson 2010). Taskscapes are, therefore, conceptualized as the entire ensemble of tasks and are "both the physical and temporal setting for these knowledgeable and unknowledgeable acts, and are also networks or weaves of practices, skills, traditions and social relations" (Chadwick 2004:265).

We are interested in working with the Native American community to better understand cultural landscapes, taskscapes, and family/social group resource gathering areas from a Native perspective and we are requesting oral historical, ethnographic, ethnohistorical and other sources of information to assist us in National Register of Historic Places (NRHP) and California Register of Historical Resources (CRHR) evaluations of these archaeological resources.

More specifically we need information on the Adobe Springs village site (CA-RIV-716), located approximately one-mile south of the Project Survey Area, and its associated village landscape. Some of the important questions we hope to explore are:

- Is there a Native American name for the Adobe Springs Village site or clans/families that lived there?
- What were the boundaries of the Adobe Springs village landscape and how were village landscape boundaries defined and maintained?
- Several Luiseño concepts of land classification are reported in White (1963) and Oxendine (1983). *Tchon tcho'mi* (Oxendine 1983:57) or *tch'o'num tcho'mi* (White 1963:123, 165) relates to the communal ownership of the village territory or village landscape; *tch'o'num* (White 1963:123) refers to the communal use of an area such milling areas within a village (True et al. 1974:43); and *tungva* describes properties owned by a specific family or individual (White 1963:125, 165). Are these interpretations

Applied
EARTHWORKS Inc.

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Hemet, CA 92544
O: (951) 766-2000 | F: (951) 766-0020

accurate, can you elaborate on these and other land classification concepts and how they relate to gathering areas in a village landscape?

- How did the resources within the Project Survey Area relate to one another and to potential village landscape(s) or cultural landscape(s)?
- Do the physical differences (e.g., composition and spatial patterning) among bedrock milling sites relate to social/cultural differences in site use, and if so, how?
- How did the organization of labor at bedrock milling stations within a village footprint (e.g., CA-RIV-716) differ from, or were similar to, the organization of labor at bedrock milling sites beyond the village footprint as represented by sites in the Project Survey Area?

Æ is recommending Phase II testing and evaluation for the eight archaeological sites identified within or adjacent to the Project Survey Area. Phase II investigations will include excavation and/or non-excavation strategies that may include archival research, ethnographic research, landscape analysis, and more intensive site documentation. Evaluations will consider the eligibility of each resource under all four NRHP and CRHR criteria, and will assess whether sites are contributors to a potential cultural landscape or archaeological district. The information you provide will greatly assist our efforts in developing a prehistoric context and research design to evaluate these important sites. Information will also be used to assess potential Project effects/impacts, should any of the resources be found eligible for listing on the NRHP and/or CRHR.

Finally, please inform us immediately if you or any member of your organization has information on additional areas of cultural significance that should be taken into consideration for the purpose of this Project.

Æ recognizes that time is needed to discuss the contents of this letter with your organization and prepare a written response to our request. We would appreciate responses on or before October 25, 2013. Written responses can be sent through standard mail at the address provided, or by emailing me at jeddy@appliedearthworks.com. If you need to request a time extension to prepare a written response, or would prefer to provide your comments verbally, please notify me by phone at (951) 766-2000.

In return correspondence please refer to this Project as the Clinton Keith Road Extension Project. I sincerely thank you for your time and consideration and look forward to collaborating with you on this effort.

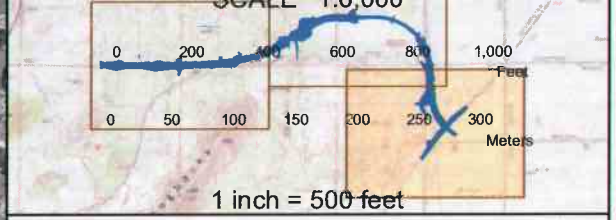
Respectfully,

John J. Eddy, RPA
Associate Archaeologist
Applied Earthworks, Inc.

Enclosure: Project Location Map


Greenberg Rd
Whitewood Rd
Clinton Keith Rd
Meadow Park Rd
Avenida Mariana
Los Alamos Rd
CA-RIV-11576
33-021031
bing


CA-RIV-11573
CA-RIV-11571/H
Trois Valley St
Savoie St
Terrain St
Maureux Ct
Vercors St
Clinton Keith Rd
Los Alamos Rd
Los Alamos Rd
33-016990
Alta Loma Dr
bing


Map 3 of 3

**Legend**

- Cultural Resource
- Project Survey Area

Applied EARTHWORKS Inc.

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September 19, 2013

William Madrigal, Jr.
Cultural Resources Manager
Morongo Band of Mission Indians
12700 Pumarra Road
Banning, CA 92220

Clinton Keith Road Extension Project
Riverside County, California

Re: Cultural Resources Investigation for the Clinton Keith Road Extension Project, Riverside County, California

Dear Mr. Madrigal:

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Respectfully,

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Associate Archaeologist
Applied Earthworks, Inc.

Enclosure: Project Location Map

Applied EARTHWORKS Inc.

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September 19, 2013

Shasta Gaughen
Historic Preservation Office
Pala Band of Mission Indians
35008 Pala Temecula Road, PMB 50
Pala, CA 92059

Clinton Keith Road Extension Project
Riverside County, California

Re: Cultural Resources Investigation for the Clinton Keith Road Extension Project, Riverside County, California

Dear Ms. Gaughen:

Applied Earthworks, Inc. (Æ) is contacting you on behalf of the Riverside County Transportation Department (RCTD) regarding environmental studies for the Clinton Keith Road Extension Project ("Project") in and near the City of Murrieta, Riverside County, California. The Project Survey Area is depicted on the Murrieta and Bachelor Mountain 7.5' USGS quadrangles, Township 6S, Range 2W, Section 31; Township 6S, Range 3W, Sections 35 and 36; Township 7S, Range 2W, Section 6; and Township 7S, Range 3W, Sections 1 and 2 of the San Bernardino Baseline and Meridian [S.B.B.M.]) (see attached Project Location Map).

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- What were the boundaries of the Adobe Springs village landscape and how were village landscape boundaries defined and maintained?
- Several Luiseño concepts of land classification are reported in White (1963) and Oxendine (1983). *Tchon tcho'mi* (Oxendine 1983:57) or *tch'o'num tcho'mi* (White 1963:123, 165) relates to the communal ownership of the village territory or village landscape; *tch'o'num* (White 1963:123) refers to the communal use of an area such milling areas within a village (True et al. 1974:43); and *tungva* describes properties owned by a specific family or individual (White 1963:125, 165). Are these interpretations

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accurate, can you elaborate on these and other land classification concepts and how they relate to gathering areas in a village landscape?

- How did the resources within the Project Survey Area relate to one another and to potential village landscape(s) or cultural landscape(s)?
- Do the physical differences (e.g., composition and spatial patterning) among bedrock milling sites relate to social/cultural differences in site use, and if so, how?
- How did the organization of labor at bedrock milling stations within a village footprint (e.g., CA-RIV-716) differ from, or were similar to, the organization of labor at bedrock milling sites beyond the village footprint as represented by sites in the Project Survey Area?

Æ is recommending Phase II testing and evaluation for the eight archaeological sites identified within or adjacent to the Project Survey Area. Phase II investigations will include excavation and/or non-excavation strategies that may include archival research, ethnographic research, landscape analysis, and more intensive site documentation. Evaluations will consider the eligibility of each resource under all four NRHP and CRHR criteria, and will assess whether sites are contributors to a potential cultural landscape or archaeological district. The information you provide will greatly assist our efforts in developing a prehistoric context and research design to evaluate these important sites. Information will also be used to assess potential Project effects/impacts, should any of the resources be found eligible for listing on the NRHP and/or CRHR.

Finally, please inform us immediately if you or any member of your organization has information on additional areas of cultural significance that should be taken into consideration for the purpose of this Project.

Æ recognizes that time is needed to discuss the contents of this letter with your organization and prepare a written response to our request. We would appreciate responses on or before October 25, 2013. Written responses can be sent through standard mail at the address provided, or by emailing me at jeddy@appliedearthworks.com. If you need to request a time extension to prepare a written response, or would prefer to provide your comments verbally, please notify me by phone at (951) 766-2000.

In return correspondence please refer to this Project as the Clinton Keith Road Extension Project. I sincerely thank you for your time and consideration and look forward to collaborating with you on this effort.

Respectfully,

John J. Eddy, RPA
Associate Archaeologist
Applied Earthworks, Inc.

Enclosure: Project Location Map

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September 19, 2013

Randall Majel
Chairperson
Pauma & Yuima Reservation
P.O. Box 369
Pauma Valley, CA 92061

Clinton Keith Road Extension Project
Riverside County, California

Re: Cultural Resources Investigation for the Clinton Keith Road Extension Project, Riverside County, California

Dear Mr. Majel:

Applied Earthworks, Inc. (Æ) is contacting you on behalf of the Riverside County Transportation Department (RCTD) regarding environmental studies for the Clinton Keith Road Extension Project ("Project") in and near the City of Murrieta, Riverside County, California. The Project Survey Area is depicted on the Murrieta and Bachelor Mountain 7.5' USGS quadrangles, Township 6S, Range 2W, Section 31; Township 6S, Range 3W, Sections 35 and 36; Township 7S, Range 2W, Section 6; and Township 7S, Range 3W, Sections 1 and 2 of the San Bernardino Baseline and Meridian [S.B.B.M.]) (see attached Project Location Map).

The Project proposes to extend the existing Clinton Keith Road between Antelope Road and State Route 79 (SR 79). Since the approval of the Supplemental Environmental Impact Report (SEIR) in 2006, two segments of the Project have been constructed as part of the City of Murrieta's local road improvement project for access to a new hospital, and as part of Tract 29484, respectively. There are two segments remaining to be built. The four segments are as follows:

- Segment 1 - between Antelope Road and Whitewood Road (Station [Sta] 210+00 - 237+00) [*already constructed*]
- Segment 2 – between Whitewood Road and Trois Valley Street (Sta 237+00 - 329+00) [not yet constructed]
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Æ is in the process of completing a Phase I cultural resources survey of the Project Survey Area, which includes a records search at the Eastern Information Center (EIC), consultation with the Native American Heritage Commission (NAHC), and a pedestrian survey of the Project APE. A search of the Sacred Land files by the NAHC did not indicate the presence of known cultural resources or sacred sites in the Project Survey Area. However, results of the records search indicate that 59 prehistoric archaeological resources (47 sites and 12 isolated artifacts), 14 historical archaeological resources (12 sites and two isolated artifacts), and six built-environment resource were recorded previously within a one-mile radius of the proposed Project.

During the Phase I survey effort, 11 cultural resources were identified within the Project Survey Area that must be evaluated against the criteria of eligibility for listing in the National Register of Historic Places (NRHP) and California Register of Historical Resources (CRHR). These resources consist of two isolated artifacts (33-021031 and 33-023477), one built-environment resource (33-013871), and eight archaeological sites. The eight archaeological sites include two multicomponent sites (CA-RIV-11571/H and CA-RIV-11574/H) that contain both

historical and prehistoric components and six prehistoric sites (CA-RIV-11572, CA-RIV-11573, CA-RIV -11575, CA-RIV-11576, CA-RIV-11585, and 33-016689). Site locations are shown on the confidential Project Location Map attached to this document.

Historical archaeological components consist of a multi-room stacked rock structure of unknown age and a mid-twentieth century historical archaeological refuse deposit. Seven of the eight prehistoric sites/components consist of bedrock milling sites.

Evidence of one prehistoric site (33-016689), consisting of a complex lithic scatter with both lithic debitage and groundstone artifacts, was not identified on the surface of during the survey and the site appears to be located outside the boundary of the Project Survey Area. However, it is unclear if the site contains a subsurface cultural deposits and whether or not subsurface deposits would extend into the Project limits. As a result, the Project Survey Area in the vicinity of 33-016689 will be investigated for intact subsurface cultural deposits associated with the site during Phase II testing and evaluation.

All eight prehistoric sites/components may be part of a traditional family or social group resource gathering area and a component of a resource procurement and processing *taskscape* associated with a potential Adobe Springs village (CA-RIV-716) landscape. Taskscapes are considered an important element of cultural landscapes as places created and modified through repetitious activities "mapped onto" the landscape (Ingold 1993; Perry and Delaney-Rivera 2011:106) and connected physically to other places through a patchwork of trails and relationally by the social and economic meanings associated with the specific task. Archaeological sites and cultural features provide clues to the type of tasks performed on or near sites, while the physiographic landscape provides the setting (Robinson 2010:804). In other words, tasks are socially embedded within the landscape (Chadwick 2004:265; Robinson 2010). Each task derives its meaning from its position within an ensemble of tasks performed in a series or parallel, generally by groups working together (Ingold 1993; Robinson 2010). Taskscapes are, therefore, conceptualized as the entire ensemble of tasks and are "both the physical and temporal setting for these knowledgeable and unknowledgeable acts, and are also networks or weaves of practices, skills, traditions and social relations" (Chadwick 2004:265).

We are interested in working with the Native American community to better understand cultural landscapes, taskscapes, and family/social group resource gathering areas from a Native perspective and we are requesting oral historical, ethnographic, ethnohistorical and other sources of information to assist us in National Register of Historic Places (NRHP) and California Register of Historical Resources (CRHR) evaluations of these archaeological resources.

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Æ recognizes that time is needed to discuss the contents of this letter with your organization and prepare a written response to our request. We would appreciate responses on or before October 25, 2013. Written responses can be sent through standard mail at the address provided, or by emailing me at jeddy@appliedearthworks.com. If you need to request a time extension to prepare a written response, or would prefer to provide your comments verbally, please notify me by phone at (951) 766-2000.

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September 19, 2013

Mark Macarro
Chairperson
Pechanga Band of Mission Indians
P.O. Box 1477
Temecula, CA 92593

Clinton Keith Road Extension Project
Riverside County, California

Re: Cultural Resources Investigation for the Clinton Keith Road Extension Project, Riverside County, California

Dear Mr. Macarro:

Applied Earthworks, Inc. (Æ) is contacting you on behalf of the Riverside County Transportation Department (RCTD) regarding environmental studies for the Clinton Keith Road Extension Project ("Project") in and near the City of Murrieta, Riverside County, California. The Project Survey Area is depicted on the Murrieta and Bachelor Mountain 7.5' USGS quadrangles, Township 6S, Range 2W, Section 31; Township 6S, Range 3W, Sections 35 and 36; Township 7S, Range 2W, Section 6; and Township 7S, Range 3W, Sections 1 and 2 of the San Bernardino Baseline and Meridian [S.B.B.M.]) (see attached Project Location Map).

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the Luiseño, and then to some of the Hokan-speaking peoples of present-day San Diego County. It did not reach the Cahuilla. This religion originated among the Gabrieliño to the north in the appearance of a second deity at the village of *Puvu*, the birthplace of *Wiyot*, one of the first creations who established the order of the world in Luiseño cosmology. This second deity gave the Gabrieliño instructions for proper living. *Chinigchinich* was an avenging god, whose animal helpers, such as eagles, hawks, ravens, and rattlesnakes, kept watch to see that people obeyed *Chinigchinich*'s rules, and avenged transgressions. Shamans and boys undergoing puberty rites drank infusions of toloache made from the datura plant in order to gain supernatural power. Sand paintings were a significant component of the *Chinigchinich* religion, and although utilized by several southern California groups, they are best documented among the Luiseño. They were made at boys' and girls' initiations, and at the death of cult members. The sand paintings were constructed to include various elements used in the ritual to which it pertained, and once the ritual was completed, the sand painting was destroyed (Bean and Shipek 1978:556).

## 2.4 HISTORICAL SETTING

Relevant historical information for the Project region is based on Brackett (1939), Gunther (1984), Hemet-San Jacinto Genealogical Society (2011), Rawls and Bean (1998), Robinson (1957), Rolle (1978), and University of Oregon (2000).

### 2.4.1 The Spanish Period, 1769–1822

The Historical Period in California formally began in 1769 with the Spanish occupation of Alta California and the founding of the *San Diego de Alcala* mission in San Diego when written records began to be compiled. The years 1769 to 1822 represent the Spanish Period in California.

Exploration of the California coastline by ship during the sixteenth and seventeenth centuries was the basis for the Spanish claim to most of Alta and Baja California at that time. While a number of explorers and their men came ashore periodically, they did not venture a great distance inland. In the eighteenth century, Spain recognized that to strengthen its claim to the region, it would have to establish settlements along the northern coastline of Alta California to preclude encroachment by the Russian and British fur-traders entering the region from the north. Therefore, in the latter half of the eighteenth century, Spain and the Franciscan Order founded a series of presidios, or military camps, and missions along the California coast, beginning with the founding of Mission San Diego de Alcala in 1769. They proceeded to establish a military presidio at Monte Rey (present-day Monterey) in northern California in 1770, their fourth mission at San Gabriel in 1771, and a fifth mission at San Luis Obispo by 1772. However, providing supplies, animals, and colonists to the Spanish missions and presidios by way of ship was difficult, time-consuming, expensive, and dangerous. Thus, an overland route was necessary to initiate a strong colonizing effort in Alta California.

In 1774, Captain Juan Bautista de Anza crossed the San Jacinto plains with a small party of soldiers and servants. Anza's expeditionary force crossed the Cahuilla Valley, skirted the Santa Rosa Mountains, made their way up through Coyote Canyon, descended into the San Jacinto Valley via Bautista Creek, and trekked northwest across the San Jacinto Valley into Moreno Valley.

The Riverside and San Bernardino County areas lacked a mission proper, but remained connected to the California presidio and mission system through Franciscan outposts known as

ranchos and *asistencias*. The Riverside area was considered to be a part of the San Diego District, a military designation associated with the San Diego presidio; most of the territory fell under the authority of the Mission San Luis Rey. Founded in 1798, Mission San Luis Rey was the eighteenth of California's 21 missions. During much of the Spanish Period, European settlement in Riverside County was slow and sporadic. By the end of the Spanish Period, few Europeans had settled permanently within the San Jacinto and Moreno Valleys. At Rancho San Jacinto Viejo, one of the most remote ranchos associated with Mission San Luis Rey, livestock ranching was the principal pursuit. Although not officially part of the Rancho, the broad grasslands of the San Jacinto Valley were used to graze the Rancho's cattle. La Casa de la Loma, the headquarters for Mission San Luis Rey's San Jacinto cattle ranch, was established in 1820 on a small hill in the San Jacinto Valley near the present-day intersection of Warren Road and Ramona Expressway.

### 2.4.2 Mexican Rancho Period, 1822–1848

In 1821, after 10 years of intermittent rebellion and warfare, Mexico and the territory of California won independence from Spain. On December 15 of that same year, the Mexican *Cortes* (the legislative body of the Mexican government) ended the older regime's strict isolationist policies that were designed to protect the traditional Spanish monopoly on trade, and decreed that California ports (namely San Diego and Monterey) be open to foreign merchants (Dallas 1955:14).

Following the Secularization Act of 1833, which called for the immediate privatization of Franciscan lands, the Mexican government secularized all of the California missions. During the two-year period of 1834–1836, this radical process quickly and effectively reduced the missions to parish churches. Although the original secularization schemes called for redistribution of mission lands to those Native Americans who were responsible for the physical construction of the mission empire, the vast mission land and livestock holdings were redistributed by the Mexican government into several hundred land grants to private, non-Native American ranchers (Langum 1987:15–18). These private Mexican citizens subsequently released their neophyte Native American "workers" to fend for themselves. During the resultant Rancho Period (1834–1848), ranchos were predominantly devoted to the cattle industry and large tracts of land were devoted to grazing.

Until the Gold Rush of 1849, livestock and horticulture dominated the economics of California. Through the years, settlement continued to develop across the inland valleys of what would eventually become western Riverside County. With the influx of new settlers, some of the larger ranchos were subsequently subdivided into smaller parcels.

### 2.4.3 American Period, 1848–Present

With the signing of the Treaty of Guadalupe Hidalgo in 1848, ending the Mexican-American War, California entered into the American Period and, in 1850, became a recognized state in the United States. During the late 1840s, there began the decline of old California's cattle ranching industry, which for over half a century represented the currency and staple of the rancho system. By the 1850s to 1860s, cattle ranching in the general region had greatly declined, and ranchos changed ownership regularly. In 1852, San Diego organized into a county; in 1853, San Bernardino followed suit. Riverside County would be formed in 1893, carved out of portions of San Bernardino and San Diego counties.

The completion of the transcontinental railroad in 1869 opened California to agricultural settlement and brought the previous era of large-scale ranching to a close. The arrival of the Southern Pacific Railway into nearby Colton resulted in a dramatic influx of new settlers into what is now western Riverside County. The Riverside Colony was founded in 1870, and agricultural lands in the region quickly began to be settled by homesteaders. The Riverside Land and Irrigating Company soon established a series of canal systems, tapping water from the Santa Ana River. With this much-needed water supply, the settlers could focus on irrigation and agriculture. Perhaps one of the most influential early settlers in western Riverside County during this period was Eliza Tibbets who planted the first two navel orange trees, acquired from Brazil, in the Riverside Colony. Mrs. Tibbets' oranges flourished and provided the bud grafts for the Washington Navel Orange, setting the foundation for western Riverside County's highly successful citrus industry.

During the 1880s and 1890s, and similar to the phenomena occurring in the area surrounding the Riverside Colony, irrigation canals were built and the regional citrus industry took root in the greater San Jacinto Valley and surrounding areas. The arrival of reliable water sources coincided with the arrival of a second transcontinental railroad. In 1882, construction of a competing rail line into southern California was underway, financed by the Atchison, Topeka, and Santa Fe Railway Company. The line of a Santa Fe subsidiary, the California Southern, was built from San Diego to the site of Perris and on to Riverside and San Bernardino in 1882. A second Santa Fe subsidiary, the Atlantic and Pacific Railroad, extended a line west from Albuquerque, then connected San Bernardino and Los Angeles; this connection was opened as of May 1887. The eastern United States was now readily accessible via Los Angeles. The establishment of a second competing railway line from the Midwest to Los Angeles in 1886 triggered a land boom in southern California during the late 1880s, which finally brought substantial settlement to the region.

### 2.4.4 French Valley/Warm Springs Creek Region

The French Valley/Warm Springs Creek region was open to settlement as early as the 1880s. The region fell within 20 mi of a railroad right-of-way privileged with a federal land grant (the California Southern route); therefore, odd-numbered sections of surveyed public land were granted to this railroad for resale to settlers. In Township 6 South, Ranges 2 and 3 West, SBBM, major transfers of public land to railroad control were made during the 1880s–1890s (BLM n.d.).

Even-numbered sections of public land in the area were open to homesteading and certain other forms of public land entry. Homesteading required, among other things, five years of residence on the claimed landholding and construction of a habitable dwelling. The maximum land area that an individual was allowed to homestead was 160 ac, or one-quarter of a Township section. Pioneer families in the area in the 1880s included those of Auguste, Alexandre, and Calixte Vail, Auguste Cantarini, Jean Nicolas, Pierre Pourroy, and Joseph Sauvie in French Valley, and Henry Thompson, and Charles, Henry, and William Auld in Los Alamos (Auld) Valley (Garrison 1963:165). The farmsteads of the Auld families were the nucleus of the Auld community and district in what was called either the Auld Valley or Los Alamos Valley (United States Bureau of the Census 1900). Approximately 2.5 mi west of the crossroads at Auld was another crossroads hamlet called Los Alamos. This was the site of the Los Alamos school, established in 1889.

Potential settlers became interested in the French Valley and adjacent areas in the early and mid-1880s. Two important developments helped to spur this interest. First, the establishment of competing transcontinental rail service between the East and southern California brought a

substantial increase in tourists and emigrants by the mid-1880s, as railroad fares were reduced. This influx was accompanied by a frenzy of real estate promotion, as well as the development of organized cooperative or colony settlement schemes.

A second, more local factor encouraging settlement was the penetration of the railway network to within a few miles of the French Valley region. The towns of Murrieta, 6 mi to the southwest, and Temecula, 8 mi to the south-southwest, were reached by the California Southern line, being built to San Diego, in September of 1883 (A. A. Bynon and Son 1992:104–105,109; Garrison 1963:11–21). Temecula had existed as a small settlement since the 1850s, with its first post office service commencing in 1859, but the railroad brought growth to the town. Murrieta, on the other hand, was brought into existence by the arrival of railroad service. In 1884, the town site of Murrieta was laid out by the Temecula Land and Water Company on lands formerly a part of the Rancho Temecula. Winchester, located seven miles to the north, was founded in 1886–1887, and was reached by a branch railroad line in the latter year (Gustafson and Serpico 1992:163–175; Tapper and Lolmaugh 1990). It was originally settled in the late 1870s by Robert Kirkpatrick and Swiss immigrant farmers Gaudenzio Garboni and Angelo Domenigoni.

These developments made the export of local grain and other farm products economically more feasible. The availability of railroad transport coincided with a decade of relatively wet winters in the late 1880s and early 1890s. This also encouraged local agricultural settlement by newcomers.

The colony schemes were based on the cooperative approach to funding and building gravity-flow irrigation improvements that would permit villages and farm settlements to grow orchard crops such as citrus, other fruits, and nuts for developing world markets. Irrigation would allow such settlements to escape the limitations of dry farming. The passage by the California state legislature of the Wright Act in 1877, permitting local communities to establish irrigation districts with the powers of taxation, was intended to facilitate this local community irrigation development. Gravity-flow irrigation infrastructure was expensive, and in southern California it was difficult for individual property owners to build their own systems, as water usually had to be conveyed to a particular property from a considerable distance away. For settlers of the era of the 1880s, the alternatives to participation in gravity-flow irrigation systems were the digging of an artesian-flow well or rejection of irrigation in favor of dry-land farming. Before about 1905–1910, pumps and associated power plants that could be used on farms in an economical fashion for large-scale irrigation were not available in southern California. Expensive steam-powered pumps or limited-capacity windmills, introduced in the 1880s, were the only options available (Earle 1998:100–101).

In some parts of the region, artesian well type water flow was not favored by local geological conditions. In the Winchester region, some six miles to the north, major efforts were made in the early 1890s to bring gravity-flow irrigation, using water from the San Jacinto Mountains, to that area (Tapper and Lolmaugh 1990). Meanwhile, in the Diamond, Domenigoni, French, and Auld valleys, hopes for the development of fruit culture were mixed with the reality of a dependence on dry-land farming and stock grazing. On some farms in that region, small deciduous fruit orchards were maintained, and beekeeping and honey production was also common.

In the Greater French Valley region, grain production was the predominant agricultural activity in the early 1890s, with some stock grazing also carried out (Figure 5). As early as 1889, more than 100 railroad carloads of grain were reported shipped from Murrieta station (Garrison

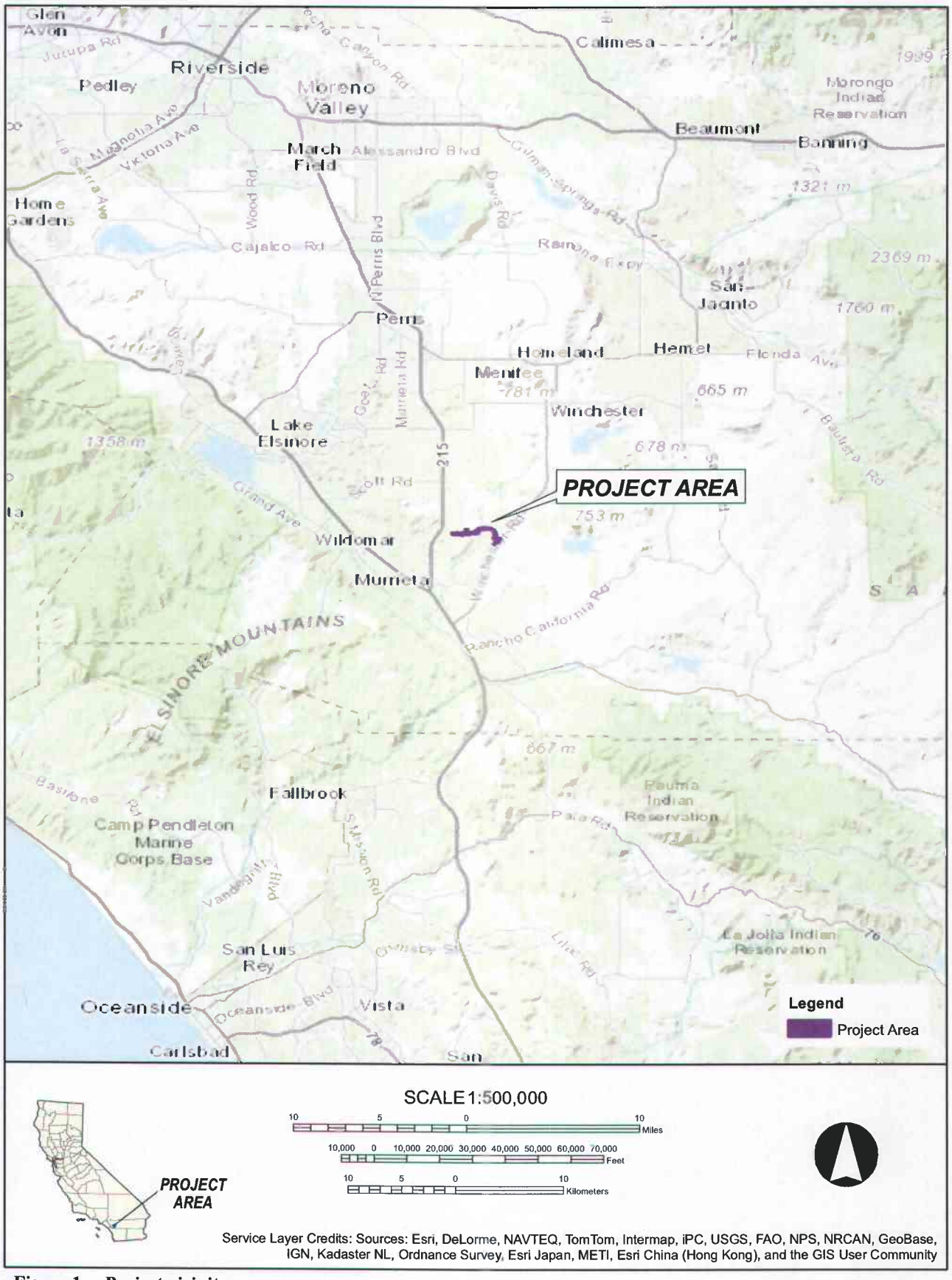
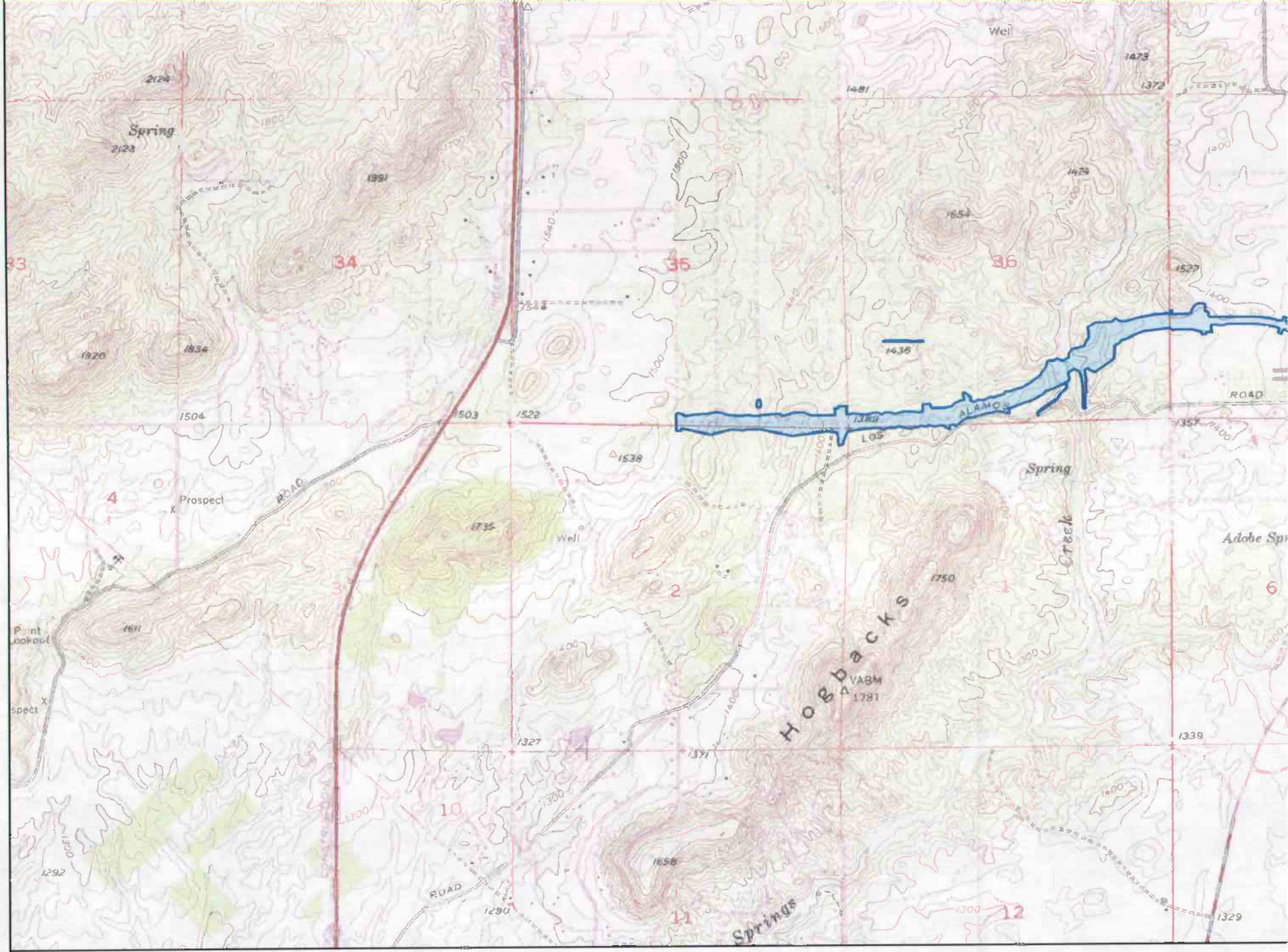



**Figure 1 Project vicinity.**




SCALE 1:24,000

1 0.5 0

1,000 0 1,000 2,000 3,000 4,000 5,000 6,000 7,000 Feet

1 0.5 0 1 Kilometers


Meadowlark Ln
Whitewood Rd
Greenberg Rd
Greenberg Rd
Avenida Maraca
Clinton Keith Rd
Clinton Keith Rd
Clinton Keith Rd
Clinton Keith Rd
Leicester Way
Leicester Way
CA-RIV-11576
33-021031
CA-RIV-
Los Alamos Rd
Los Alamos Rd
Gentle Breeze Ln
bing


CA-RIV-11573
CA-RIV-11571/H
Trois Valley St
Savoie St
Mauroux Ct
Vercors St
Clinton Keith Rd
Los Alamos Rd
33-016990
bing


33-023477
33-016989
33-013871 (SR79)
Briggs Rd
Penafield Ln
bing

## 1.3 REGULATORY CONTEXT

The Project is subject to both state (i.e., CEQA) and federal (NHPA) regulations concerning cultural resources. RCTD is the CEQA lead agency and Corps is Section 106 lead agency for the Project.

### 1.3.1 National Historic Preservation Act (NHPA)

The Project is considered a federally licensed "undertaking" per 36 CFR § 800.2 (o) and subject to compliance with Section 106 of the NHPA of 1966, as amended. Under these guidelines, federal agencies are required to identify cultural resources that may be affected by project actions, assess the significance of these resources and their eligibility for inclusion on the NRHP as per 16 USC 470w (5), and consult with the Advisory Council on Historic Preservation (Council) regarding project effects on significant resources. Eligibility is based on criteria defined by the Department of the Interior. Generally, districts, archaeological sites, buildings, structures, and objects that possess integrity are potentially eligible for inclusion on the NRHP under the following criteria:

A) that are associated with events that have made a significant contribution to the broad patterns of our history; or

B) that are associated with the lives of persons significant in our past; or

C) that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

D) that have yielded, or may be likely to yield, information important in prehistory or history. (36 CFR § 60.4)

If a cultural resource is determined to be an eligible historic property under 36 CFR § 60.4, then Section 106 requires that the effects of the proposed undertaking be assessed and considered in planning the undertaking.

### 1.3.2 California Environmental Quality Act (CEQA)

The proposed Project is subject to compliance with the CEQA, as amended through 2010. Therefore, cultural resources management work conducted as part of the proposed Project complied with the *CEQA Statutes and Guidelines* (California 2010), which directs lead agencies to first determine whether cultural resources are "historically significant" resources. A project with an effect that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment (California 2010).

Historical resources include those resources currently listed in, or determined eligible for, listing in the California Register of Historic Resources (CRHR) (Title 14 CCR, § 15064.5(a)(1)); resources included in a local register of historical resources or identified as significant in a historical survey (Title 14 CCR, § 15064.5(a)(2)); or resources determined to be "historically significant" by a lead agency if the resource is 45 years old or older and meets the requirements for listing on the CRHR by qualifying under at least one of four criteria:

1) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

2) Is associated with the lives of persons important in our past;

3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or,

4) Has yielded, or may be likely to yield, information important in prehistory or history. (Title 14 CCR, § 15064.5; Title 14 CCR, § 452(b))

The lead agency may also determine that a resource is a potential historical resource in cases where the resource was not listed in or determined eligible for the CRHR, was not included in a local register, or was not identified in a historical survey as meeting the criteria of significance and integrity (Title 14 CCR, § 15064.5(a)(4)).

These criteria, by which CRHR eligibility is judged, are essential for identifying and managing historical resources because a project "with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment" (Title 14 CCR § 15064.5(b)). In pragmatic terms, a substantial adverse change in the significance of a historical resource must be avoided or mitigated by feasible measures enforced by the Lead Agency through permit conditions, agreements, or other measures (Title 14 CCR § 15064.5(b)(4)).

The cited statutes and guidelines specify how cultural resources are to be managed in the context of projects, such as the proposed Clinton Keith Road Extension Project. Briefly, archival and field surveys must be conducted, and identified cultural resources must be inventoried and evaluated in prescribed ways. Prehistoric and historical archaeological resources, as well as historical resources such as standing structures and other built-environment features, deemed "historically significant" must be considered in project planning and development. As well, any proposed project that may affect "historically significant" cultural resources must be submitted to the SHPO for review and comment prior to project approval by the responsible agency and prior to construction.

## 1.4 REPORT ORGANIZATION

This report documents the results of a Phase I cultural resources investigation of the proposed undertaking. Chapter 1 has introduced the scope of the work and stated regulatory context. Chapter 2 synthesizes the natural and cultural setting of the Project region. Chapter 3 presents the results of the archaeological literature and records search conducted at the Eastern Information Center (EIC) of the California Historical Resource Information System (CHRIS), housed at the University of California, Riverside. Chapter 4 summarizes the *Sacred Lands File* (SLF) search with the NAHC and Native American communications. The archaeological survey methods employed during this investigation are outlined in Chapter 5. Chapter 6 provides the results of the Phase I investigation. Recommendations are included in Chapter 7, and bibliographic references are cited in Chapter 8. Archaeological site records and the results of the SLF search and correspondence with Native American groups are included in the appendices.

# 2
# SETTING

This chapter describes the environmental and cultural setting of the general Project region to provide a context for understanding the types, nature, and significance of the cultural resources identified within the Project region. Environmental data is derived from field observations, background research, and from numerous cultural resources studies conducted in the area. Information regarding the prehistoric setting is also adapted from cultural resources studies, as well as summaries for the inland valley area. The Project encompasses an area that lies within lands traditionally used by the Luiseño Native American group and the ethnographic cultural setting focuses on this group.

## 2.1 ENVIRONMENTAL SETTING

The current environmental setting of the Project area is discussed in terms of the local geology, climate, and vegetation, with reference to the prehistoric environment. For a thorough discussion of paleo-environmental conditions in the surrounding region please refer to Spaulding (2001).

### 2.1.1 Geology and Hydrology

The Project is generally situated near the northern end of the Peninsular Ranges physiographic province within the Perris Block, the Project region is bound to the southwest by the Elsinore fault zone and on the northeast by the San Jacinto fault zone. The Perris Block is a portion of the southern California batholiths, a massive geological intrusion of granite rock that was formed in the late Cretaceous Period and uplifted in the early Tertiary Period. Cretaceous-age rocks of the Peninsular Range batholiths, and older metasedimentary and metavolcanic rocks of probable Mesozoic-age, underlie the region.

Granitic bedrock is very much exposed on the hill slopes and inselbergs throughout the Project region, and also occurs as small to large isolated outcrops on the valley floor areas. Many of the granitic bedrock exposures and outcrops scattered throughout the region were utilized prehistorically by Native American groups as bedrock milling areas for the processing of local biotic resources. Local granitic materials were also regularly used during prehistoric times for the production of ground stone implements. Metasedimentary rocks with qualities necessary to produce flaked stone artifacts, such as fine-grained quartzite, are available within the Bedford Canyon Formation, which can be found in the hills surrounding French Valley. Other lithic materials locally available for the production of flaked, ground, or shaped stone implements include massive (i.e., white, milky, or vein) quartz, crystalline quartz, schist, and low-grade steatite; these materials can also be found in the hill ranges surrounding French Valley (Goldberg et al. 2001).

More specifically, the Project lies within a series of unnamed hills to the north of the Hogbacks Hills on the edge of the French Valley, which lies just to the east. The Project area is characterized by low-lying hills with occasional outcroppings of tonalite (Kpvt; Kennedy and Morton 2003), monzogranite to granodiorite (Kpvg; Kennedy and Morton 2003), and undifferentiated metasedimentary rocks (MzU; Kennedy and Morton 2003) separated by previously plowed fields and cut by intermittent streams and creeks, most notably Warm Springs Creek and French Valley Creek. A major west to east tributary of Warm Springs Creek skirts the northern boundary of the Survey Area while a smaller tributary extends east along the toe of

hillside slopes before heading south outside the limits of the Survey Area. These creeks and tributaries contain dense stands of willow and cottonwood trees, with an understory of plants adapted to mesic conditions. A series of smaller intermittent streams cross through the Project, one at the intersection of Clinton Keith and Menifee Road, and another at the intersection of Avenida Manana and Clinton Keith Road. Recent housing development between Trois Valley Street and Leon Road has also resulted in the creation of new wetlands and water crossing at the intersection of Clinton Keith Road and Leon Road.

### 2.1.2 Climate

The Project area is in an inland region separated from the Pacific Coast by the Santa Ana Mountains to the west while the lofty San Jacinto and Santa Rosa mountains separate the Project region from the hyper-arid Colorado Desert to the east. Based on values from Elsinore, Sun City, and Hemet (Western Regional Climate Center n.d.), mean annual precipitation in the study area is about 9.9–10.9 inches (in.) (252–276 millimeters [mm]), with 85–92 percent of that amount falling between November through April. Based on values from Vista 1 NE (near Oceanside), Laguna Beach, and Newport Beach (Western Regional Climate Center n.d.), mean annual precipitation on the coast, which is west of the Santa Ana Mountains, ranges from 11.7 to 13.6 in. (298–345 mm), suggesting a modest rain shadow effect on the lee of these mountains. However, coastal meteorological stations are near sea level, while elevation on the valley floor in the Project region ranges from 1,485 to 1,812 ft (450–549 m) elevation. Therefore, considering that precipitation increases with elevation, the rain shadow to the east of the Santa Ana Mountains is more pronounced than may first be apparent.

The absence of the moderating influence of Pacific Ocean air, which is blocked by the Santa Ana Mountains, is particularly noticeable in the summer. In the interior, average maximum temperatures during the three summer months, June through August, vary from 90.4° to 98.3°F (32.4°–36.8°C), while on the coast average summer maxima range from 69.2° to 83.3°F (20.7°–28.5°C) (Western Regional Climate Center n.d.). High summer temperatures, relative to the coast, no doubt contribute to the effective aridity of the Project region during the summer. Contrasts between temperatures on the coast and closer to the Project area also exist during the winter due to the Project's interior location, but are not as pronounced. The Project region is colder, with average minima during the three winter months (December through February) ranging from 34.6° to 39.0°F (1.4°–3.9°C), compared to coastal stations with a range of average minima between 42.9° and 47.9°F (6.1° and 8.8°C).

### 2.1.3 Vegetation

Prehistorically, the vegetation within the Project region likely included representative species of four major plant communities: Riversidian sage scrub (the interior variant of the coastal sage scrub community) valley grasslands, southern arroyo willow riparian, and chamise chaparral (Holland 1986; California Department of Fish and Game 2003; U.S. Fish and Wildlife Service 2013). Depending upon elevation and climate, various species from these communities were available for harvest from early spring until winter, and the leaves, stems, seeds, fruits, roots, and tubers from many of these plant species formed an important subsistence base for the Native American inhabitants of the region (Bean and Saubel 1972; Hyde and Elliot 1994), while also contributing important raw materials for baskets, cordage, and other crafted items.

The Survey Area is dominated by the Riversidian sage scrub community (Figure 4). According to Holland (1986:11), Riversidian sage scrub is the driest expression of coastal sage scrub that extends along the Transverse and Peninsular mountain ranges from Los Angeles to Mexico. It

typically occurs on "steep slopes, severely drained soils, or clays that release stored soil moisture only slowly," and grades into chaparral at slightly higher elevations (Holland 1986:11). Typical stands of Riversidian Sage Scrub are relatively open and dominated by California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), and red brome (*Bromus rubens*), each of which attain at least 20 percent cover. Other characteristic species of Riversidian Sage Scrub include fourwing saltbush (*Atrioplex canescens*), brittlebush (*Encelia farinosa*), pinebush (*Ericameria pinifolia*), thickleaf yerba santa (*Eriodictyon crassifolium)*, San Joaquin snakeweed (*Gutierrezia californica*), narrowleaf goldenbush (*Ericameria linearfolia)*, bladderpod (*Isomeris arboreus)*, deerweed (*Lotus scoparius)*, Mendocino bushmallow (*Malacothamnus fasciculatus)*, white sage (*Salvia apiana*), black sage (*Salvia mellifera*), and chaparral yucca (*Yucca whipplei parishii*).

**Figure 4 Project overview showing Riversidian sage scrub characterized by dense stands of California buckwheat in the foreground.**

Within the Survey Area, Riversidian sage scrub occurs on hillside slopes and extends locally to adjacent terraces overlooking tributaries of Warm Springs Creek. The vegetation was likely present in the Survey Area and surrounding area during Late Prehistoric times. The most dominant plant in the Survey Area is California buckwheat (*Eriogonum fasciculatum*), followed by red brome (*Bromus rubens*), and California sagebrush (*Artemisia californica*). Scattered populations of other important perennials identified during the survey include redberry buckthorn (*Rhamnus crocea*), California sagebrush (*Artemisia californica*), black sage (*Salvia melifera*), white sage (*S. apiana*), chaparral yucca (*Yucca whipplei parishii*), and brittlebush (*Encelia farinosa*).