

Appendix C

Garcia & Associates Cultural Resources Investigation, April 2010

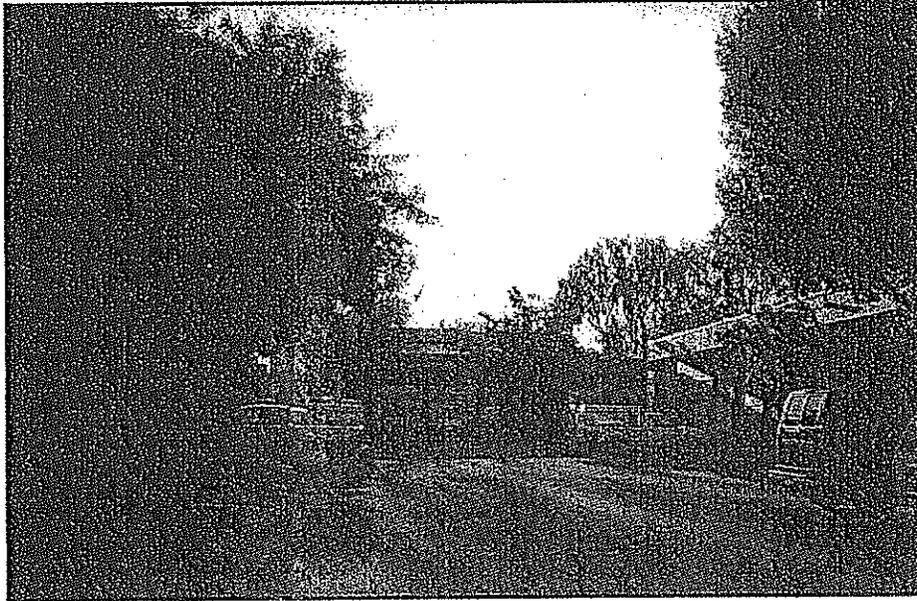
With partial redaction to protect the
named cultural resource sites.



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CONFIDENTIAL ATTORNEY-CLIENT PRIVILEGE

**CULTURAL RESOURCES INVESTIGATION FOR THE CITY OF
SUNNYVALE'S MORSE PARK PROJECT, SANTA CLARA
COUNTY, CALIFORNIA**



Prepared For:
Erler & Kalinowski, Inc.
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Burlingame, CA 94010-5306



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STATEMENT OF CONFIDENTIALITY

This report identifies the locations of cultural resources, which are confidential. As nonrenewable resources, archaeological sites can be significantly impacted by disturbances that can affect their cultural, scientific, and artistic values. Disclosure of this information to the public may be in violation of both federal and state laws. To discourage damage due to vandalism and artifact looting, cultural resources locations should be kept confidential and report distribution restricted. Applicable U.S. laws include, but are not limited to, Section 304 of the National Historic Preservation Act (16 USC 470w-3) and California state laws that apply include, but are not limited to, Government Code Sections 6250 *et seq.* and 6254 *et seq.*

MANAGEMENT SUMMARY

Erler & Kalinowski, Inc. contracted with Garcia and Associates to conduct a cultural resources investigation for the City of Sunnyvale's Morse Park Project in Santa Clara County, California. The City of Sunnyvale plans to develop a public park on 5.33 acres of land which is currently an industrial complex. Garcia and Associates conducted this investigation to comply with the California Environmental Quality Act. The purpose of this investigation is to locate, identify, and document cultural resources within the Project's Area of Direct Impacts.

Findings for the report are based on the following:

- an archaeological records search and historic map review at the Northwest Information Center of the California Historic Resource Inventory System at Sonoma State University;
- consultation with the Native American Heritage Commission and Native American groups and individuals;
- review of existing documentation regarding the proposed project;
- a geoarchaeological analysis; and
- a pedestrian survey of the Area of Direct Impacts.

The record search resulted in the identification of no previously recorded cultural resources within the Area of Direct Impacts. One previously recorded prehistoric resource was identified 0.25-miles north of the Area of Direct Impacts. In addition, archaeological records indicate that there are multiple prehistoric sites documented within one to two miles of the Area of Direct Impacts, which are briefly discussed in this report. Native American consultation resulted in no specific information regarding prehistoric or ethnographic use of the Project location. A geoarchaeological analysis of the ages and depositional nature of landforms underlying the Area of Direct Impacts, the nature and proximity of previously recorded buried archaeological sites in Santa Clara Valley, and the environmental setting and borehole logs gathered for the Project, suggest that the Area of Direct Impacts is sensitive for the presence of buried prehistoric surfaces.

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1.0 INTRODUCTION

The City of Sunnyvale plans to develop a public park for the Morse Park Project (Project) in Santa Clara County, California (Figures 1 and 2). The purpose of this Project is to demolish the existing structures (i.e., industrial complex) and redevelop the property into a public park that will service the surrounding residential neighborhoods.

This cultural resources investigation was conducted to comply with the California Environmental Quality Act (CEQA). This report documents the methods and results of the investigation to identify cultural resources within the Area of Direct Impacts (ADI), which are eligible, or potentially eligible, for listing in the California Register of Historical Resources (CRHR). This report provides a description of the ADI, regulatory, environmental, geoarchaeology, prehistoric, ethnographic, and historic contexts, results of consultation with Native American tribes, and conclusions of the investigation.

Background research was conducted at the Northwest Information Center (NWIC) of the California Historic Resource Inventory System (CHRIS), located at Sonoma State University in Rohnert Park. In addition, archaeologists consulted with the Native American Heritage Commission (NAHC) and interested Native American representatives of local tribes (Appendix A), conducted a pedestrian survey to identify cultural resources within the ADI, performed geoarchaeological research, observed boring activities, and examined soil samples in order to identify cultural resources and to assess the sensitivity for potential buried prehistoric resources within the ADI.

Project Location

The Project area is located at 1010-1024 Morse Avenue between United States (U.S.) Highway 101 and State Route 237 in the City of Sunnyvale. The Project site is an industrial complex and is comprised of five one-story buildings, built in the 1970s. The buildings are surrounded by asphalt-covered parking lots, mature trees, small strips of grass and concrete planter box landscaping, and is bounded to the north, east, and west by residential developments. Underneath the sidewalk and the parking area at the southern end of the ADI, the California Aqueduct lies adjacent to and outside of the ADI.

Area of Direct Impacts

The ADI is the area where direct impacts from the proposed Project may occur (Figure 3). In the ADI there will be ground disturbing activities including the demolition of the existing facilities, the placement of utilities, and newly landscaped areas. Based on communication with engineers at the City of Sunnyvale, the maximum depth of disturbance is expected to extend up to six feet beneath the ground surface.

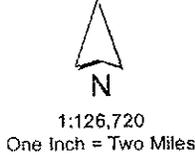
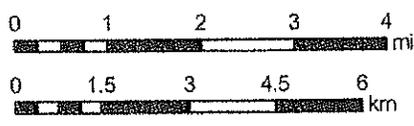
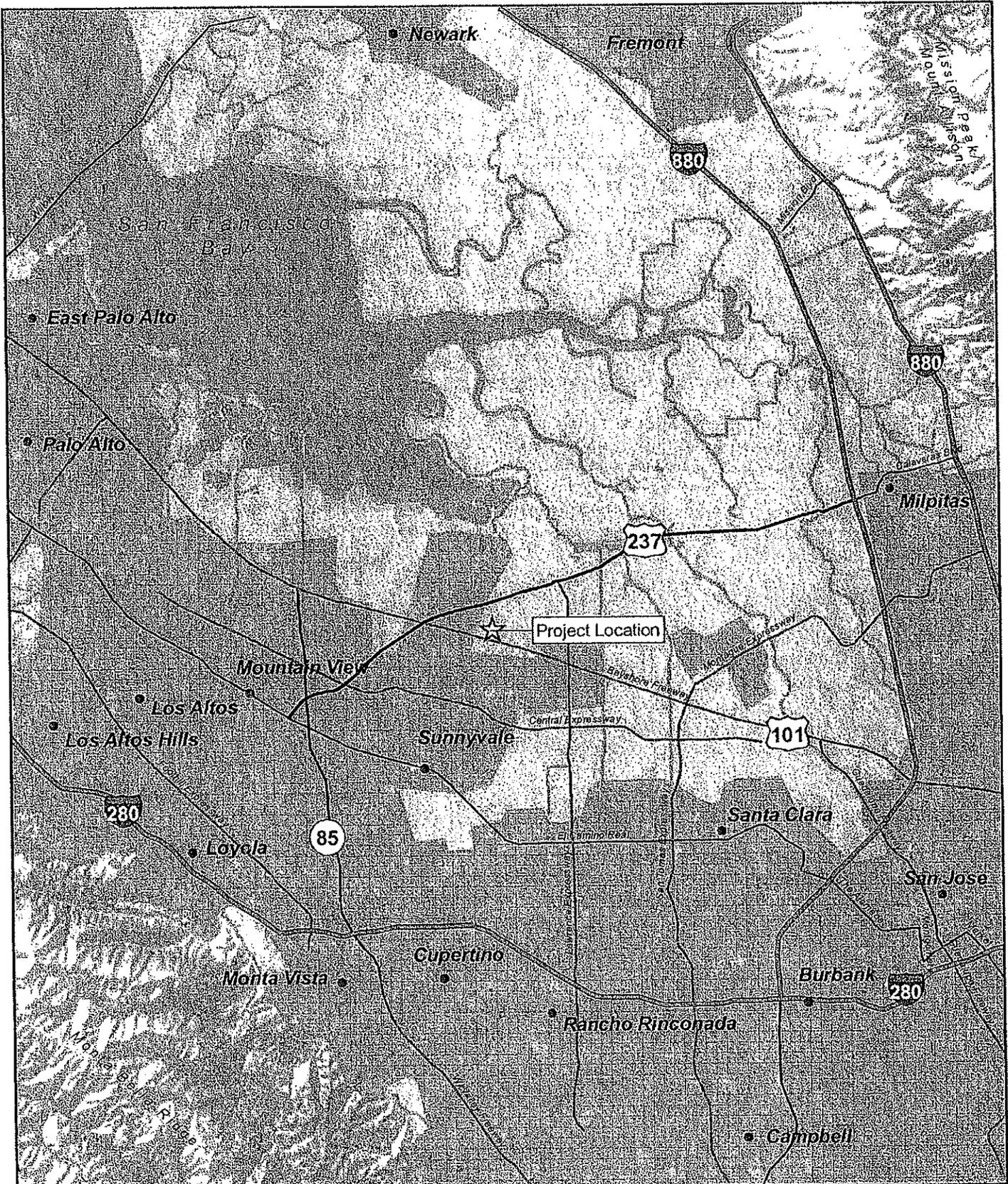
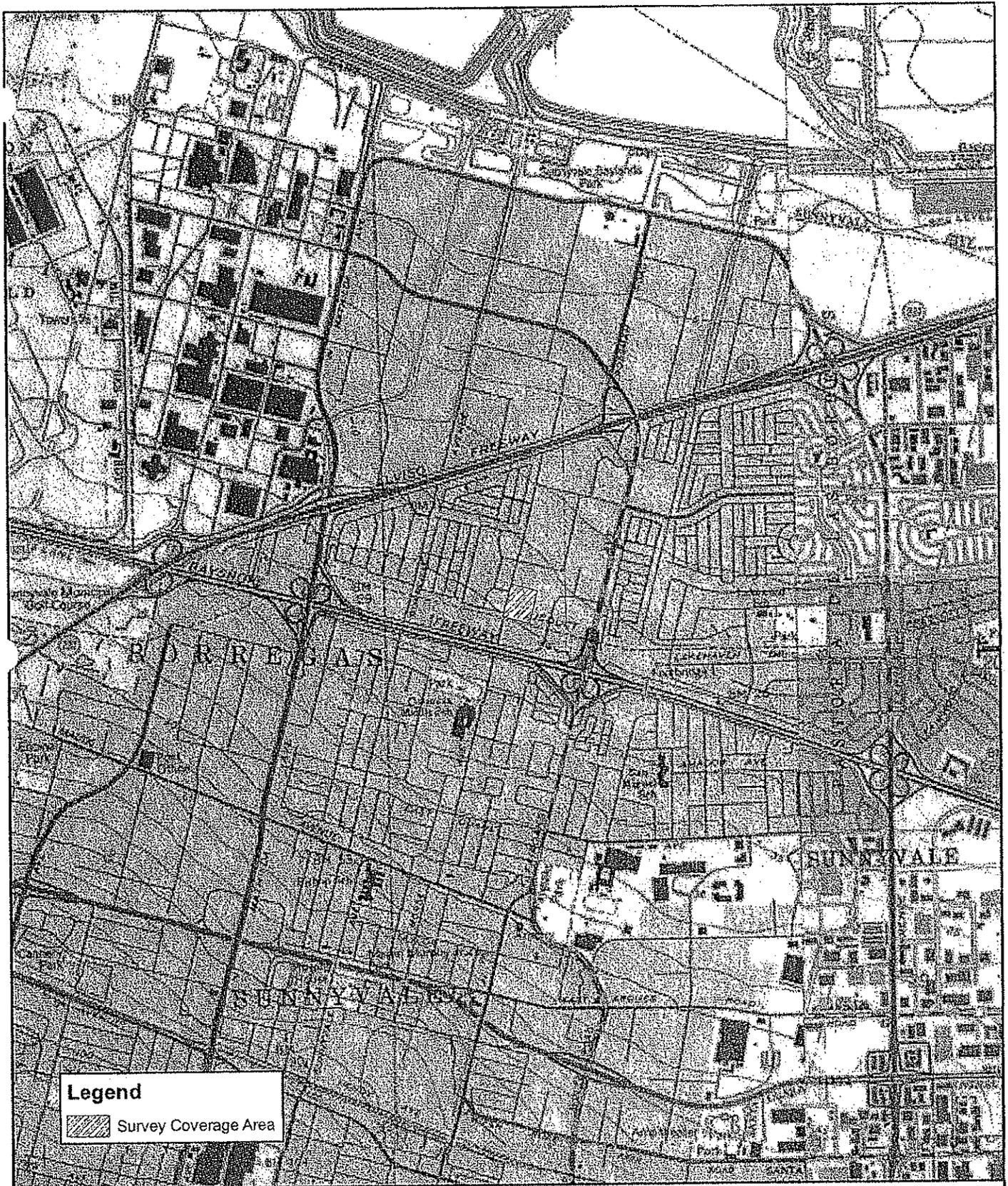
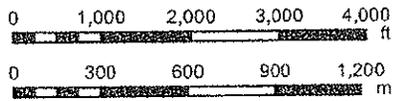


Figure 1.
Project Vicinity
Morse Avenue Project

Santa Clara County,
California



Legend
 Survey Coverage Area

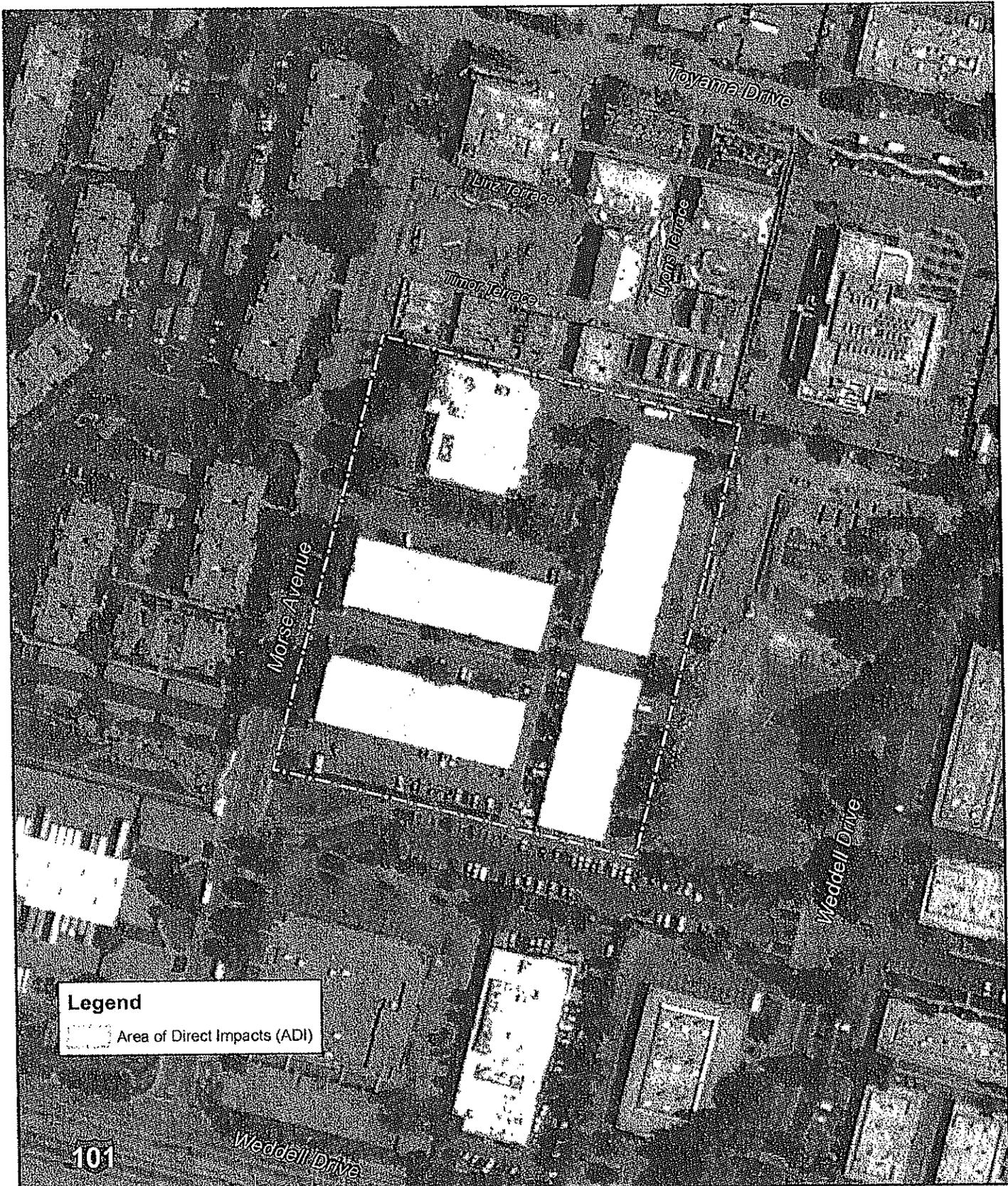


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 One in = 2,000 ft

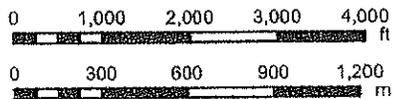
USGS 7.5' Quad: MOUNTAINVIEW (1991)
 PASTORIA DE LAS BORREGAS Land Grant

Figure 2.
Project Location and
Survey Coverage Area
Morse Avenue Project

Santa Clara County,
 California



Legend
 [Dashed white line symbol] Area of Direct Impacts (ADI)



USGS 7.5' Quad: MOUNTAINVIEW (1991)
 PASTORIA DE LAS BORREGAS Land Grant



1:1,800
 One in = 150 ft

Figure 3.
Area of Direct Impacts
Morse Avenue Project

Santa Clara County,
 California

2.0 REGULATORY CONTEXT

CALIFORNIA ENVIRONMENT QUALITY ACT (CEQA)

The CEQA Statute and Guidelines include procedures for identifying, analyzing, and disclosing potential adverse impacts to historical resources. CEQA further defines a "historical resource" as:

- A resource listed in, or determined to be eligible for listing in, the National Register of Historic Places (NRHP) or California Register of Historical Resources (CRHR).
- A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the Public Resources Code, unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
- A resource identified as significant (rating 1 to 5) in a historical resource survey meeting the requirements of Public Resource Code Section 5024.1(g) (Department of Parks and Recreation Form 523), unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
- Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, provided the determination is supported by substantial evidence in light of the whole record.

CALIFORNIA REGISTER OF HISTORICAL RESOURCES (CRHR)

CRHR Criteria of Evaluation

All resources listed in or formally determined eligible for listing in the National Register of Historic Places (NRHP) are eligible for listing in the CRHR. The CRHR is a listing of State of California resources that are significant within the context of California's history. Additionally, properties designated under municipal or county ordinances are also eligible for listing in the CRHR. For listing, a historic resource must be significant at the local, state, or national level under one or more of the following criteria that are defined in the California Code of Regulations Title 14, Chapter 11.5, Section 4850:

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

Regulations Concerning Discovery of Human Remains

California Public Resources Code §5097.98 (Notification of Native American human remains, descendants; disposition of human remains and associated grave goods) mandates that the lead agency adhere to the following regulations when a project results in the identification or disturbance of Native American human remains:

- (a) Whenever the commission receives notification of a discovery of Native American human remains from a county coroner pursuant to subdivision (c) of Section 7050.5 of the Health and Safety Code, it shall immediately notify those persons it believes to be most likely descended from the deceased Native American. The descendants may, with the permission of the owner of the land, or his or her authorized representative, inspect the site of the discovery of the Native American remains and may recommend to the owner or the person responsible for the excavation work means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods. The descendants shall complete their inspection and make their recommendation within 48 hours of their notification by the Native American Heritage Commission. The recommendation may include the scientific removal and nondestructive analysis of human remains and items associated with Native American burials.
- (b) Whenever the commission is unable to identify a descendent, or the descendent identified fails to make a recommendation, or the landowner or his or her authorized representative rejects the recommendation of the descendent and the mediation provided for in subdivision (k) of Section 5097.94 fails to provide measures acceptable to the landowner, the landowner or his or her authorized representative shall reinter the human remains and items associated with Native American burials with appropriate dignity on the property in a location not subject to further subsurface disturbance.
- (c) Notwithstanding the provisions of Section 5097.9, the provisions of this section, including those actions taken by the landowner or his or her authorized representative to implement this section and any action taken to implement an agreement developed pursuant to subdivision (l) of Section 5097.94, shall be exempt from the requirements of the California Environmental Quality Act (Division 13 (commencing with Section 21000)).
- (d) Notwithstanding the provisions of Section 30244, the provisions of this section, including those actions taken by the landowner or his or her authorized representative to implement this section, and any action taken to implement an agreement developed pursuant to subdivision (1) of Section 5097.94 shall be exempt from the requirements of the California Coastal Act of 1976 (Division 20 (commencing with Section 30000)).

3.0 BACKGROUND CONTEXT

The following is a summary of the environmental, geoarchaeology, prehistoric, ethnographic, and historic background pertaining to Santa Clara County, the City of Sunnyvale, and the San Francisco Bay Area region of California. This section also presents the existing setting of the ADI and the context against which the Project was assessed for sensitivity to prehistoric and historic cultural resources.

ENVIRONMENTAL CONTEXT

Existing Setting

The Project area is in the heart of the "Silicon Valley" which encompasses a conglomeration of high-tech businesses interspersed with residential neighborhoods and small recreational parks. The ADI is less than 2.5-miles from the Lockheed Martin Corporation complex, Moffett Federal Field, and numerous other industrial complexes and offices. The ADI is bounded to the south by a segment of the California Aqueduct, three churches, and the U.S. Highway 101; and to the north, east, and west by residential and industrial complexes. The ADI encompasses five one-story buildings which were constructed in the 1970s surrounded by asphalt parking lots. The ADI is landscaped with concrete planter boxes, hedgerows of trees, and a small strip of manicured grass to the south. The landscaped areas contain various California native and non-native plants, grasses, and trees such as ivy (*Hedera*), African lily (*Agapanthus*), daylilies (*Heemerocallis*), *Pittosporum*, and pine (*Pinus*), oak (*Quercus*), *Magnolia*, and *Eucalyptus* trees (Little 2002; Brenzel 2010).

Geoarchaeological Approach and Background

Because buried sites often lack visible and/or obtrusive features that would indicate their presence to an observer, pedestrian survey methods are often inefficient or completely ineffective for locating subsurface deposits (Bettis 1992:120). This problem can be addressed in the survey and research design phase by assessing the relative probability of discovering buried sites in different parts of a Project area (McManamon 1984; Nance 1983:349). The ability to locate buried sites ultimately depends on whether or not sensitive (i.e., depositional) landforms are accurately identified and adequately explored using appropriate subsurface methods (e.g., backhoe or coring device) (from Meyer 2008 in Siskin 2008).

Landscapes that formed prior to the arrival of humans in North America (i.e., latest Pleistocene or >13,500 calibrated [cal] Before Present [BP]) have little or no potential to contain buried archaeological remains. Conversely, most Holocene-age landforms (~10,000 years cal BP to present) have some potential to contain buried remains because they either formed during or after the time people first occupied the region. As noted above, recent geoarchaeological studies demonstrate a strong correlation between Holocene-age landforms, buried soils, and buried archaeological remains at diverse locations in central California, including portions of the Santa Clara Valley (Martin and Meyer 2005; Meyer 1996, 1998, 1999, 2000, 2001, 2003, 2004, 2005; Meyer and Dalldorf 2004; Meyer and Rosenthal 1997; Rosenthal and Meyer 2004a, 2004b; as cited in Siskin 2008).

The soils in the Project area consist of Holocene alluvial deposits (11,800 years to present) and the Project area is underlain by Holocene- to historic-aged landforms (11,800 to 500 years cal BP) (Meyer and Rosenthal 2007) (Figures 4 and 5). These facts are strong indicators for potential buried prehistoric landforms, or stable "A" horizons that would have been available to the prehistoric population as stable land surfaces. In addition, the Project area is 1.5-miles from the most southern point of San Francisco Bay, and is located between San Thomas Aquino and Steven Creeks (which were major water sources) and close to several smaller drainages that are no longer obvious on maps due to the heavy urban development. The Project area would have been an abundant natural resource base for many subsistence uses. Thus, indications regarding the age of the landforms and deposition of the landforms within the Project area, proximity to abundant resource bases of the San Francisco Bay and nearby fresh water sources, suggest the likely presence of buried

prehistoric living surfaces (paleosols) within the ADI.

PREHISTORIC CONTEXT

As early as 1907 to 1910, Nels Nelson (1909) recorded Native American shellmound sites and J.L. Kroeber (1925) documented Native American villages and culture in Northern California. By the 1970's, researchers began to record numerous prehistoric sites throughout the southern Bay Area, most of which were identified from subsurface investigations spurred by development (Jones et al. 2007). The archaeological record of this region shows high levels of human occupation well before European explorers arrived in the eighteenth century. Located one-mile from the ADI, CA-SCL-12/H, the Yñigo Mound site, was occupied for portions of the Early, Middle, and Late Periods (Bryne and Byrd 2009:84). Southeast of the ADI, near the Santa Clara Mission, is the Tamien Station site (CA-SCL-690) with artifacts such as beads, mortars/pestles, handstones/millingslabs, quartz crystals, and human burials dating between the Middle and Late Periods (Hylkema 2007). Dated to the Early Period is CA-SCL-832, approximately two-miles from the ADI and consists of a human burial, red ochre, and *Haliotis* (abalone) beads. All three of these sites contained Native American human remains.

Early Holocene (9950 to 5450 cal BP)

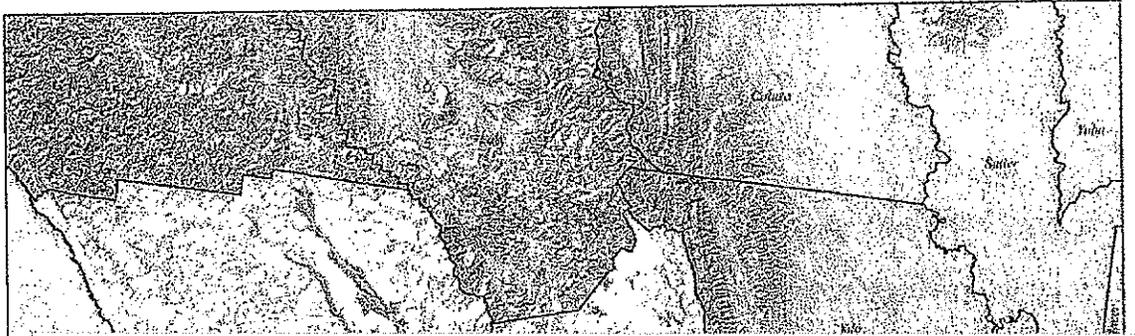
The Early Holocene is sparsely represented in the archaeological record. Sites formed during this period were typically situated near shorelines, marshes, or pluvial lakeshores. The Early Holocene in the South Bay is characterized by the Millingstone Pattern. The artifact assemblage reflects a mobile tradition with a main focus on gathering and processing plant food resources; represented by the predominance of milling slabs and handstones compared to few projectile points. Large wide-stemmed and leaf-shaped projectile points made from locally available chert are sometimes found (Jones and Klar 2007).

Early Period (5450 to 3000 cal BP)

The Early Period is represented in the archaeological record by an artifact assemblage and site/mortuary patterns indicating increased sedentism, trade and "regional symbolic integration" (Milliken et al. 2007:114-115). During this period, mortars and pestles began to replace handstones and millingslabs in all regions of the San Francisco Bay Area, except the San Mateo Coast. Although the earliest examples of beads are double-perforated abalone beads from the "Red Burial" in Sunnyvale (CA-SCL-832), grooved rectangle *Olivella* beads came into wide use (Cartier 2000). During the transition between the Early and Middle Periods, there were marked increases in rates of warfare and interpersonal violence, as illustrated at sites such as CA-SCL-478 and CA-SCL-674, approximately four and ten-miles south of the Project area. Sharp force trauma, projectile point wounds, and trophy taking are found at archeological sites (Jones and Klar 2007).

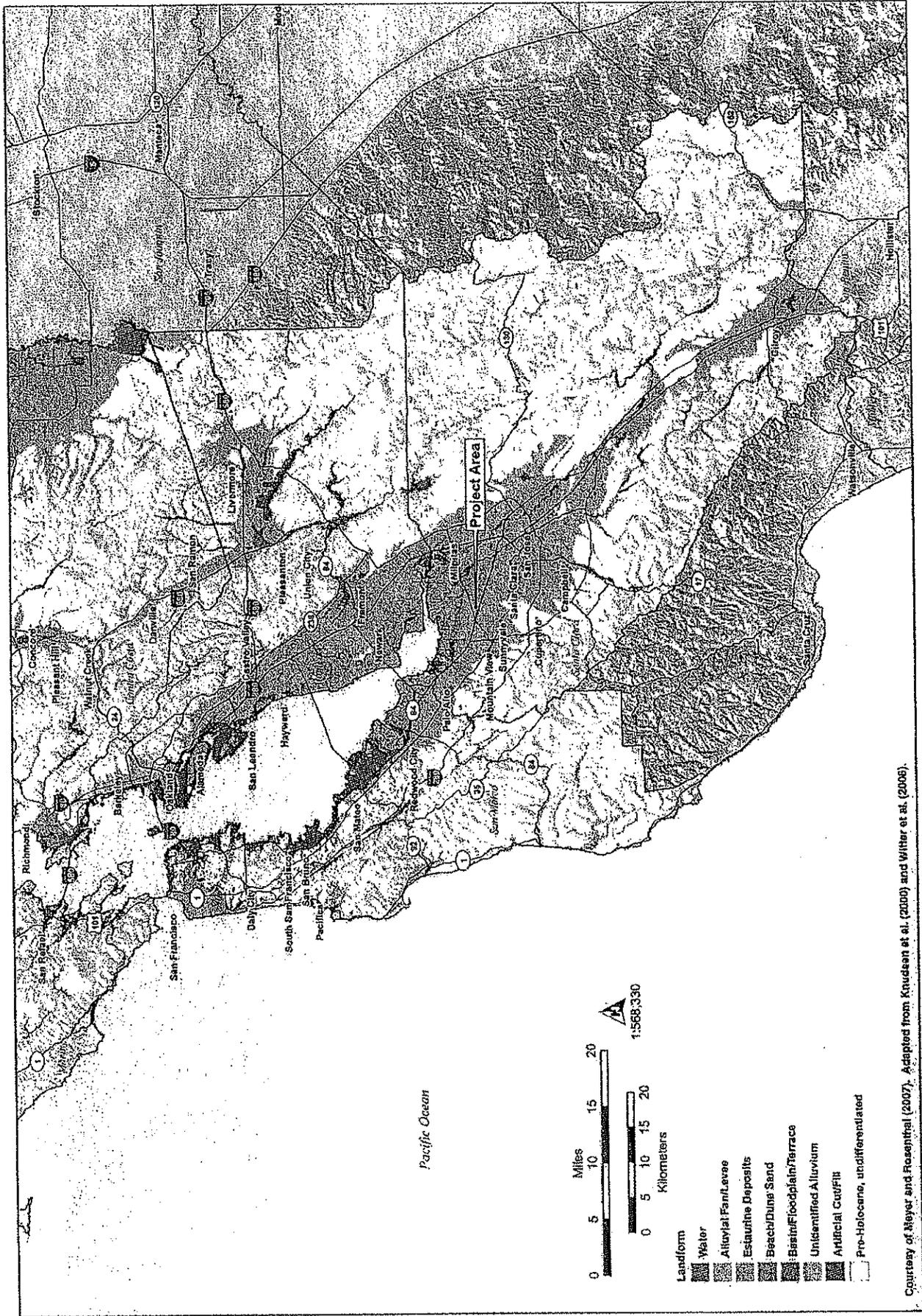
Middle Period (2450 to 3000 cal BP)

In the southern Bay Area in particular, by the start of the Middle Period, the Early Period forager settlement and subsistence patterns transition to a more sedentary model of adaptation, in which the population numbers increase and focus on collected resources. The Middle Period collector adaptation had shifted to a culture demonstrating increased ceremonialism and social complexity in the southern Bay Area, while populations on the coast did not move to a collector strategy until the Late Period (Hylkema 2002, in Exlandson and Jones 2002).



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Figure 4: Distribution of Selected Buried Archaeological Sites and General Age of Depositional Landforms in the Project Area



Courtesy of Meyer and Rosenthal (2007). Adapted from Knudsen et al. (2000) and Wilber et al. (2006).

Figure 5: Major Depositional Landforms in the Project Area

The prehistoric population that inhabited the Santa Clara Valley and the southern Bay Area during the Middle Period created extensive shellmounds, in which the dominant species of shellfish were homsnail, oyster, clam, and bay mussel. Sites close to the bay demonstrate subsistence based on tidal marsh resources, while the interior valley sites emphasize terrestrial resources. Within the southern Bay Area, the archaeological record demonstrates a heavy reliance on the bay-shore environment, while showing a low frequency of projectile points. The most commonly found point types in sites that date to this period include contracting stemmed and lanceolate points. Middle Period assemblages also contain an abundance of bone implements, including the particularly diagnostic double-pronged fish spears, serrated mammal scapulae, and beveled elk antler wedges (Hylkema 2002, in Erlandson and Jones 2002).

Late Period (3000 cal BP to 1776 AD)

The Middle Period is defined by “collectors who buried their dead with diverse, numerous but fairly simple ornaments” whereas the Late Period concerns “collectors who invested large amounts of time in the creation of finely wrought wealth objects” (Milliken et al. 2007:116). This transition suggests a shift in people’s use of time, and the likely increasingly sedentary nature of the prehistoric settlements during the late period. Ceremonialism and the idea of wealth distribution gain important amongst the people.

The Middle to the Late Period in the southern Bay Area are characterized by evidence of elaborate social organization and the formation of small, autonomous socio-political groups called tribelets. The adaptive pattern exhibits an increase in ceremonialism, social organization, and stratification. An economic relationship was maintained among the many small groups, and trade was frequent between the coastal groups and the valley and bayshore groups. Trade was clearly an important element of this adaptation and is evident in the various types of obsidian and shell beads from other regions (Hylkema 2002, in Erlandson and Jones 2002).

Late Period archaeological sites are characterized by a general increase in population size and number of settlements, a more regularized exchange system, and more evidence of ceremonialism. A widespread series of droughts, known as the Medieval Climatic Anomaly, from Anno Domini (AD) 800 to 1300, may have affected the San Francisco Bay Area and surrounding region (Fagan 2003, Lightfoot and Luby 2002). Ritualized violent activity continues to be represented in the archaeological record at sites such as CA-SCL-674, as demonstrated by evidence in burials of trophy taking, sharp force trauma, and embedded projectile points (Andrushko et al. 2005). Distinctive artifacts in this pattern include small notched and serrated projectile points that are indicative of the introduction and spread of the bow-and-arrow usage, bone awls used in basketry, clay effigies, bone whistles, stone pipes, and occasional pottery. Cremation and flexed burial remains are also prevalent. An increase in ornamental artifacts, *Ohvella* beads and abalone ornaments, are a common occurrence throughout burials that date to this time period, suggesting an increase in the importance of social status and ranking (Hylkema 2002, in Erlandson and Jones 2002).

ETHNOGRAPHIC CONTEXT

The Native Americans, who inhabited the general Project area prior to the Spanish entry in 1769, are referred to as Costanoans, or Ohlone, as the Native American community refers to themselves. The term “Costanoan” derives from the Spanish word *Costaños* or “coast people” and refers to an ethnolinguistic group of people that lived along the San Francisco peninsula before contact with European Americans (Gudde 1998). Ethnographic and ethnohistoric information about the Ohlone derives primarily from the accounts of early explorers and missionaries. When detailed ethnographic information began to be collected on their lifeways, the people and their culture had already undergone drastic changes due to European American, Spanish and Mexican contact. The Tamien-speaking Ohlone Indians were the first documented inhabitants of the Santa Clara

Valley region. J.P. Harrington, who collected linguistic and ethnographic notes on Native American languages during the first half of the twentieth century, worked in Ohlone region from of Santa Clara Valley 1921-1939 (Golla 1991; National Parks Service 2010).

The Ohlone spoke a language considered to be one of the eight major subdivisions of Miwok-Costanoan, which belonged to the Utian family within the Penutian language stock (Shipley 1978:82-84). According to Levy (1978), Tamyen, was spoken in the southern end of the San Francisco Bay and the lower Santa Clara Valley along with Clarenos (National Parks Services 2010). Chochenyo was spoken along the eastern borders of the Bay. According to Cambra and Leventhal (2010) of the Muwekma Ohlone Indian Tribe, the Chochenyo speakers intermarried with the Clarenos. The Ohlone were politically organized by tribelets, each having a designated territory. A tribelet consisted of one or more villages and camps in a territory designated by physiographic features. Tribelets generally had 100 to 250 members (Kroeber 1925).

The acorn was among the most important of the food resources for Ohlone, who preferred acorns from the tanbark oak, valley oak, and the California black oak, all trees abundant in the area. The acorns were ground into meal and leached to remove tannins, and the large stands of oak trees created a readily accessible staple. Acorns could be stored in granaries and used throughout the winter months. Other important food resources were buckeye nuts (which were leached and made into a mush) and the seeds of dock, gray pine, and tarweed, all of which were roasted in baskets with hot coals before being eaten. The Ohlone gathered various berries and fruits including gooseberries, blackberries, madrone berries, and wild grapes, along with root resources such as wild onion, cattail, and wild carrot (Levy 1978).

Midden deposits found throughout the southern Bay Area attest to the importance of shellfish in the Ohlone diet. Primary shellfish resources of importance included mussels, abalone, and various clam, oyster, and scallop species. In addition, marine mammals were important resources in the Ohlone diet, particularly for coastal populations, including deer, Tule elk, and pronghorn. Rabbits were hunted in communal rabbit drives and caught with snares. Migratory waterfowl, particularly geese, ducks, and coots were the most important avian resources and were captured with nets; while local quail were caught in traps. The Ohlone fished for salmon, sturgeon, and lampreys, and built Tule balsa rafts to move about the water. The Ohlone traded with the people of the Plains Miwok, Sierra Miwok, and the Yokuts tribes. Mussels, abalone shells, dried abalone, and salt were exchanged for piñon nuts with the Yokuts. *Olivella* shells were traded with the Sierra Miwok and bow wood with the Plains Miwok (Levy 1978).

It has been estimated that in 1770, when the first mission was established in Ohlone territory, the Native American population numbered around 10,000 (Kroeber 1925). Based on mission records, Milliken (1995) estimates that there were 2.5 people per square mile. As a result of the introduction of European diseases, the loss of their traditional lifeways (including settlement and subsistence practices), reduced birth rates, and the poor working and living conditions that they were forced to endure, the Ohlone population rapidly declined to fewer than 2,000 by 1832 (Milliken 1995; Goerke 2006). For native peoples who lived in tribelets, the loss of many members destabilized what little remained of their traditional social structure. By the time of secularization in 1834, there were no traditionally functioning tribal groups left within the Project area. Since the 1980s, the modern Ohlone community has undergone a period of revitalization based on familial ties and former rancheria affiliations. Although they have yet to receive formal recognition from the federal government, the Ohlone are becoming increasingly organized as a political unit and have developed an active interest in preserving their ancestral heritage.

HISTORIC CONTEXT

Contact Period (1542 to 1769 AD)

In 1542, Juan Sebastian Cabrillo was the first European explorer to sail along the California coast. During the next 125 years, the indigenous California population had sporadic contact with European explorers who arrived by sea. In 1662, Sebastián Vizcaíno traveled through the southern San Francisco Bay region and was the first Spanish explorer to venture into Ohlone territory. Approximately 100 years later, the members of the Portolá expedition left San Diego on July 14, 1769, and became the first Europeans to conduct an overland expedition to explore what is now California (Browning 1992:xxx). The goal of the Portolá expedition was to explore the new territory and to find worthy locations for establishing Franciscan missions. There are several accounts of this expedition, including those of Fray Juan Crespi (Bolton 1927), Miguel Costansó (Browning 1992), and Pedro Fages (Priestley 1937).

Spanish and Mexican Periods (1769 to 1846 AD)

Juan Bautista de Anza led two expeditions from Mexico into Alta California to explore and colonize the area for Spain. His first expedition took place in 1774 and 1775. His second expedition with Fray Pedro Font in 1775 and 1776, led him as far north as modern day San Francisco. During this expedition, while on their way to explore more of the San Francisco Bay, he and his party camped for a night in what is now the City of Santa Clara.

Seven Spanish missions were founded in Ohlone territory between 1769 and 1822. In 1822, California became a Mexican Territory and the mission lands became private ranchos as a result of the new Mexican land grant system. Lope Yñigo, a prominent Ohlone Native American, gained his liberty from the Mission Santa Clara in 1839 and returned to his ancestral territory, which lies within the vicinity of the Project area. In 1844, he was granted title to the land, *Rancho Posolmi*, which contains the NRHP nominated site, the Yñigo Mound (CA-SCL-12/H). There he built a farm complex including an adobe house, and cultivated crops, raised cattle, sheep, and horses.

The Project area is adjacent to *Rancho Posolmi*, on the lands of the Mexican Land Grant *Rancho Pastoria de las Borregas*, also called *Rancho Refugio*. In 1849 James Murphy, Jr. acquired 5000-acres of the *Rancho Pastoria de las Borregas* from Mariano Castro. Mariano Castro was a member of a prominent family who owned a number of other California ranchos. James Murphy, who was also a descendant of a long line of land owners in northern California, established cherry, fig, and apricot orchards. The ADI is located within this former rancho land of Castro and Murphy and the ancestral territory of the Ohlone.

American Period Occupation (1846 A.D. to Present)

By 1846, the United States was looking toward the west, consistent with continental expansion fueled by the ideology of "Manifest Destiny" and later the discovery of California gold in 1848. Mexico struggled to maintain control over the vast lands of California and other parts of the western region it inherited from Spain following the Mexican War of Independence (1810 to 1821). In 1848, California became a U.S. territory when Mexico ceded California after the Californios (of Mexican, Indian and Spanish descent) were defeated in the relatively short and brutal Mexican-American War (1846 to 1848) (Singletary 1960). American conquest of California in 1846-1848, forced the surviving Muwekma Ohlone people of the Santa Clara Valley to seek refuge on their ancestral homelands to the Sunol area and to the northeast of San Francisco Bay in the Pleasanton area. (Cambra and Leventhal 2010).

A number of events during the twentieth century changed Santa Clara County and in particular the City of Sunnyvale's urban environment. During and after World War II, the economy changed from fruit production to the high-tech industry, dramatically changing the landscape as more people moved to the area to work and live. The area has been coined the "Silicon Valley" where high-tech businesses dominate the economy. Since the early twentieth century, Silicon Valley has had a growing electronics industry. Lockheed Martin Corporation and National Aeronautics and Space Administration (NASA) are now major employers of Santa Clara County.

4.0 METHODS AND RESULTS

This section presents the methods used in conducting the records search, the Native American consultation, the geoarchaeological analysis, and the pedestrian survey, as well as the results of those efforts.

RECORDS SEARCH METHODS

A GANDA archaeologist conducted a records search on March 9, 2010 at the NWIC, to examine archaeological site records within 1.0 mile of the ADI, and previously conducted cultural resources investigations within a 0.25 mile of the ADI. This search also included historic map research, and archival search of history books, published and unpublished articles and manuscripts, and specific resource directories provided by the California State government agencies and library internet sites which are listed in detail below.

The following sources were consulted in this records search:

- NWIC base maps: United States Geographical Survey (USGS) 7.5-minute series topographic quadrangle of Mountain View, California, 1991.
- Survey reports from previous cultural resources investigations and archaeological site records (examined to identify recorded archaeological sites and historic-period built environmental resources and architectural resources [buildings, structures, and objects] within or immediately adjacent to the ADI).
- General Land Office (GLO) Rancho Map of Pastoria de las Borregas also known as Rancho del Refugio, Township 6 South and Range 1 West, 1853.
- USGS Topographical Map of Santa Clara County (McMillan 1876 and 1902).
- The California Department of Parks and Recreation's (CDPR) *California Inventory of Historic Resources* (1976a), and the Office of Historic Preservation's (OHP) *Historic Properties Directories*, October 23, 2009 and February 8, 2010 which combines cultural resources listed in the *California Historical Landmarks* (1996), *California Points of Historic Interest* (1976b), California Archaeological Determinations of Eligibility, and those that are listed in or determined eligible for listing in the NRHP or the CRHR for Santa Clara County.
- *California Place Names* (Gudde 1998); *Historic Spots of California* (Kyle 1990); *Historical Atlas of California* (Beck and Hasse 1988); *California: A Guide to the Golden State, Federal Writers' Project* (1942); *Handbook of North American Indians, Volume 8* (1978); *California Indians and Their Environment* (Lightfoot and Parrish 2009); *Five Views: An Ethnic Historic Site Survey for California* (CDPR/OHP 1988); and *Shellmounds of the San Francisco Bay Region* (Nelson 1909).

RECORDS SEARCH RESULTS

Two cultural resources investigations have been completed within a 0.25-mile radius of the ADI (Holson et al. 2002; Holman & Associates 2008), resulting in the identification of one prehistoric site (P-43-002241) located [REDACTED]. In addition, archaeological records indicate that there are multiple prehistoric sites (CA-SCL-12/H, CA-SCL-416/H, CA-SCL-832, CA-SCL-9-28) documented within one to two miles of the ADI, which along with P-43-002241 are briefly discussed below. There are no previously recorded cultural resources within the ADI.

Cultural Resources outside the ADI

P-43-002241 is documented as "a deposit of small flecks of shell", located [REDACTED] [REDACTED]. This prehistoric resource was recorded on the ground surface in 2008 by Holman and Associates (Psota 2008).

Previously recorded prehistoric archaeological sites are also situated within a one- to two-mile radius of the ADI and include, CA-SCL-12/H, CA-SCL-416/H, CA-SCL-832. These archaeological sites consist of occupation sites, Native American burials, and a shellmound.

CA-SCL-12/H, the Yñigo Mound, is less than one mile from the ADI, given the estimated boundaries of the site. CA-SCL-12/H, site boundaries has been expanded as a result of subsequent archaeological investigations, and it now includes a historic component (Saltzman and Chavez 1984 in: Bryne and Byrd 2009). The Yñigo Mound is one of the few remaining shellmound sites that Nelson originally recorded at the beginning of the 20th century. This site has yielded a vast and diverse assemblage of cultural materials and multiple burials. The Yñigo Mound is located [REDACTED]

[REDACTED] These ancestral lands of the Ohlone Indians were part of the Mexican Land Grant, *Rancho Posohn* that was granted to the Ohlone Indian Lope Yñigo in 1844. The shellmound is several hundred feet in diameter and more than five feet deep. A series of archaeological investigations were undertaken during the last century, and contribute to the understanding of the site (Bryne 2005; Byrd 2006; Saltzman and Chavez 1984; Kelly 1987; Chavez and Illic 1983; Hylkema 1995; Samuelson and Self 1995; Estes et al. 2006). Currently, the entire site, encompassing cultural features and burials, is estimated to be 70.5-acres and is centered at the intersection of [REDACTED]. Based on Marcia Kelly's subsurface tests in 1987 (Kelly as cited in Bryne and Byrd 2009), the site was determined eligible for listing in the NRHP in 1990 (Cal-OHP 2010; Bryne and Byrd 2009).

Also within a two-mile radius is CA-SCL-416/H, recorded by Robert Cartier in 1979; a multi-component prehistoric and historic archaeological site that includes fire-cracked rock, shellfish and faunal remains, remnants of an early 1900,s farmhouse and iron ware.

Additionally, Cartier recorded CA-SCL-832 (2000), a prehistoric archaeological site, with human remains at 10 to 12 feet below the ground surface. This site is also located within approximately two-miles of the ADI. This site is significant in that it is the known buried archaeological deposit within closest proximity to the ADI.

Other previously recorded prehistoric archaeological sites are situated approximately two-miles northwest of the ADI and consist of occupation sites and Native American burials recorded by Llewellen Loud in 1912 (CA-SCL-9-28). Most of the sites recorded by Loud have not since been relocated (NASA Ames Research Center 2002). This is most likely due to the total redevelopment of the area.

NATIVE AMERICAN CONSULTATION

As part of the consultation process with Native American organizations and individuals, a GANDA archaeologist contacted the NAHC on March 12, 2010 with a request for information about sacred lands that may be located within the ADI, and a request for a list of interested Native American groups and individuals (Appendix A). A search of the Sacred Lands file housed at the NAHC did not result in the identification of any sacred lands within the ADI.

On March 13, 2010 letters and associated Project maps were sent to interested individuals and Native American groups. Included in the correspondence was a request that the archaeologist be notified if the

recipients could provide any information or had concerns about the proposed ADI. Follow-up calls were made on March 30, 2010, April 8, 2010 and April 9, 2010 to individuals on the NAHC list. GANDA received three responses: 1) Ann Marie Sayers, Chairperson of the Indian Canyon Mutsun Band of Costanoan, expressed concern regarding the sensitivity of the Project area for prehistoric archaeological resources and requested that monitors be on site during ground disturbing activities. In addition, she would like to be kept informed as the project progresses; 2) Andrew Galvan, of the Ohlone Indian Tribe, also expressed concern based on the sensitivity of the area. Mr. Galvan asked to be contacted regarding the geoarchaeological implications and sensitivity for the presence of buried archaeological deposits; and 3) Ed Ketchum, of the Amah Mutsun Tribal Band contacted GANDA to make research suggestions for historic and sites information.

GEOARCHAEOLOGY METHODS AND RESULTS

GANDA archaeologists, understanding the highly sensitive nature of the ADI with its potential for buried prehistoric land surfaces (based on the number of buried resources found throughout Santa Clara Valley and due to the nature of the alluvial deposition and age of landform underlying the ADI) conducted a geoarchaeological study. This study was conducted in order to confirm that the ADI is sensitive for archaeological resources. The purpose of geoarchaeological analysis is not to actually identify such resources, but to characterize the subsurface geomorphology of an area in order to accurately assess the potential for identifying prehistoric living surfaces or paleosols. This analysis included an examination of the underlying age of the landform (Rosenthal and Meyer 2004), and examination of comparative data for buried prehistoric sites located near the ADI (Hylkema 2007; Meyer and Rosenthal 2004). The analysis also included an examination of the borehole logs from sampling that EKI conducted within the ADI on March 17, 2010.

The results of the geoarchaeological analysis are summarized as follows:

- 1) Based on the Quaternary Geology Maps (Beaudette and O'Geen 2005) for the Bay Area and on Meyer and Rosenthal (2004), it appears that the ADI is underlain by Holocene-aged alluvial deposits, and the regional subsurface soil is primarily Quaternary alluvium silts and clays, which are sensitive for the presence of prehistoric land surfaces (paleosols).
- 2) Data from sites in the vicinity show there are numerous buried archaeological sites within a couple of miles of the project area, and these sites are located within similar geomorphological and environmental settings (Meyer and Rosenthal 2007)
- 3) Borehole logs reveal there are soils present that due to color, consistency, and depth have the potential to be stable "A" horizons (prehistoric land surfaces that would have been available for human habitation).
- 4) Based on the URS Phase I study of the ADI (URS 2009), depth to groundwater in the ADI is approximately 29 feet.

On March 17, 2010, GANDA archaeologists observed and examined soil from the boring activities within the ADI. The samples depths were from one to twenty feet at five locations within the ADI. The borehole samples were gathered as continuous samples, which are more useful for geoarchaeological analysis than skip samples. Skip sampling can skip three to five feet of subsurface materials at a time, making them less useful for geoarchaeological analysis.

While no archaeological deposits were identified, the purpose of the geoarchaeological analysis was not to actually identify archaeological resources, but to characterize the subsurface geomorphology of the ADI in order to accurately assess the potential for identifying prehistoric living surfaces. Results of the borehole sampling indicate there are at least two observable occurrences that suggest the possibility of a stable "A" horizon, which would have been available to the prehistoric population as stable land surfaces (Appendix B).

This conclusion is based on the soil color, consistency, and context in relationship to the soil types above and below the soil layers of interest.

SURVEY METHODS AND RESULTS

On March 17, 2010, GANDA archaeologists Cassidy DeBaker, B.A. and Beatrice Cox, M.A. conducted a cultural resources pedestrian survey of the ADI (Figure 2 and 3). Survey methods were based on the topography and ground visibility throughout the ADI. Ground visibility was limited to approximately 10 percent of exposed surfaces. The archaeologists conducted small periodic surface scrapes with a trowel in open areas beneath plants, grasses, and trees. A linear strip of manicured grass was surveyed at the south end of the ADI. No cultural resources were identified on the ground surface within the ADI.

5.0 CONCLUSIONS AND RECOMMENDATIONS

No previously recorded cultural resources have been recorded within the ADI. The pedestrian survey did not result in the identification of cultural resources within the ADI. One previously documented prehistoric resource, "a deposit of small flecks of shell" (P-43-002241) (Psota 2008), was identified at [REDACTED] ADI, and numerous previously recorded prehistoric archaeological sites (CA-SCL-12/H, CA-SCL-416/H, CA-SCL-832) located within one- to two-miles of the ADI. Native American consultation resulted in no specific information regarding prehistoric or ethnographic use of the Project location. However, the Ohlone community expressed concern regarding the sensitivity of the ADI for prehistoric archaeological resources, including human remains.

The ADI is sensitive for the presence of paleosols based on the age and deposition of the underlying Holocene-age alluvial deposits, presence of buried sites discovered in similar settings within Santa Clara Valley, the general proximity of the Project area to an abundant natural resource base (including fresh water), and the borehole logs further suggest that subsurface soils within the ADI have the potential to contain paleosols. Based on this investigation, the ADI is found to be in an area sensitive for the potential discovery of buried archaeological resources.

However, while geoarchaeological research clearly indicates that the ADI is sensitive for the presence of buried prehistoric living surfaces, the horizontal footprint of Project-related excavation within the ADI (to the depth of six feet) is quite limited. It is recommended that after final design of the utility locations and related ground disturbance, that a limited Extended Phase I geoarchaeological test excavation be conducted. This test excavation should be conducted within the areas of the ADI that will be disturbed to a depth of six feet during project implementation. Methods used for this Extended Phase I excavation should be based on the level and precise location of actual proposed Project impacts.

Unanticipated Archaeological Sites

During Project implementation, construction crews will stop all work within the immediate vicinity if there is an accidental discovery of cultural resources, until a qualified archaeologist can evaluate the discovery and provide recommendations. Resources found could include buried historic features such as artifact-filled privies, wells, and refuse pits; artifact deposits; concentrations of adobe, stone, or concrete walls or foundations; and concentrations of ceramic, glass, or metal materials. Native American archaeological materials could include obsidian- and chert-flaked stone tools (such as projectile points and knives), middens (darken soil created culturally from use and containing heat-affected rock, artifacts, animal bones, or shellfish remains), and/or groundstone implements (such as mortars and pestles).

Encountering Human Remains

While it is highly unlikely that such resources will be identified during Project implementation, should construction crews encounter human remains either in association with prehistoric occupation sites or separately, they shall comply with relevant regulations. These regulations include Section 7050.5 of the California Health and Safety Code which states that it is a misdemeanor to knowingly disturb a human burial, and Section 5097.99 of the Public Resources Code which defines the obtaining or possession of Native American remains or grave goods as a felony. If human remains are encountered as a result of construction activities, any work in the vicinity shall stop and the County Coroner shall be contacted immediately. In addition, a qualified archaeologist shall be contacted immediately to evaluate the discovery, if a cultural resources monitor is not already present. If the human remains are Native American, then the Coroner must notify the Native American Heritage Commission within 24 hours of this identification.

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1876 and 1902 USGS Topographical Map of Santa Clara County, California. McMillan.

URS

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**Appendix A
Correspondence**

GARCIA AND ASSOCIATES

1 SAUNDERS AVENUE
SAN ANSELMO, CA 94960

PHONE 415.458.5803

FAX 415 458 5829

Enclosure(s) Per your request For your review For your information/use
 Other Total Pages Faxed: 2

To: <u>Debbie Pilas-Treadway</u>	Date: <u>March 12, 2010</u>
<u>Native American Heritage Commission</u>	Client: <u>Erier & Kalinowski, Inc.</u>
<u>915 Capitol Mall, #364</u>	Project: <u>Morse Avenue Project</u>
<u>Sacramento, CA 95814</u>	Project #: <u>560</u>
<u>(916) 657-5390</u>	

Subject: Morse Avenue Project

Garcia and Associates (GANDA) is providing cultural resource consulting to Erier & Kalinowski, Inc. for the Morse Avenue Project. The project area lies within Santa Clara County on the USGS 7.5 minute USGS Quadrangle: Mountainview, California; Township 6 S; Range 1 W; within the Pastoria De Las Borregas Land Grant (see attachment).

The City of Sunnyvale is proposing to convert a site on Morse Avenue to a neighborhood park.

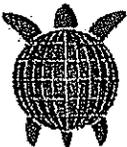
We are requesting a list of representatives from the Native American community to contact regarding cultural resources on this project. In addition, we request that you check your inventory of sacred lands for properties that may be affected by the project in the ¼ mile radius. We have included a map showing the approximate project location.

Please contact me at the number below if you have any questions regarding this project or require any additional information. (415) 458-5803 ext. 23.

Kindly,

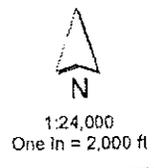
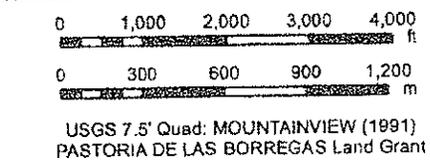
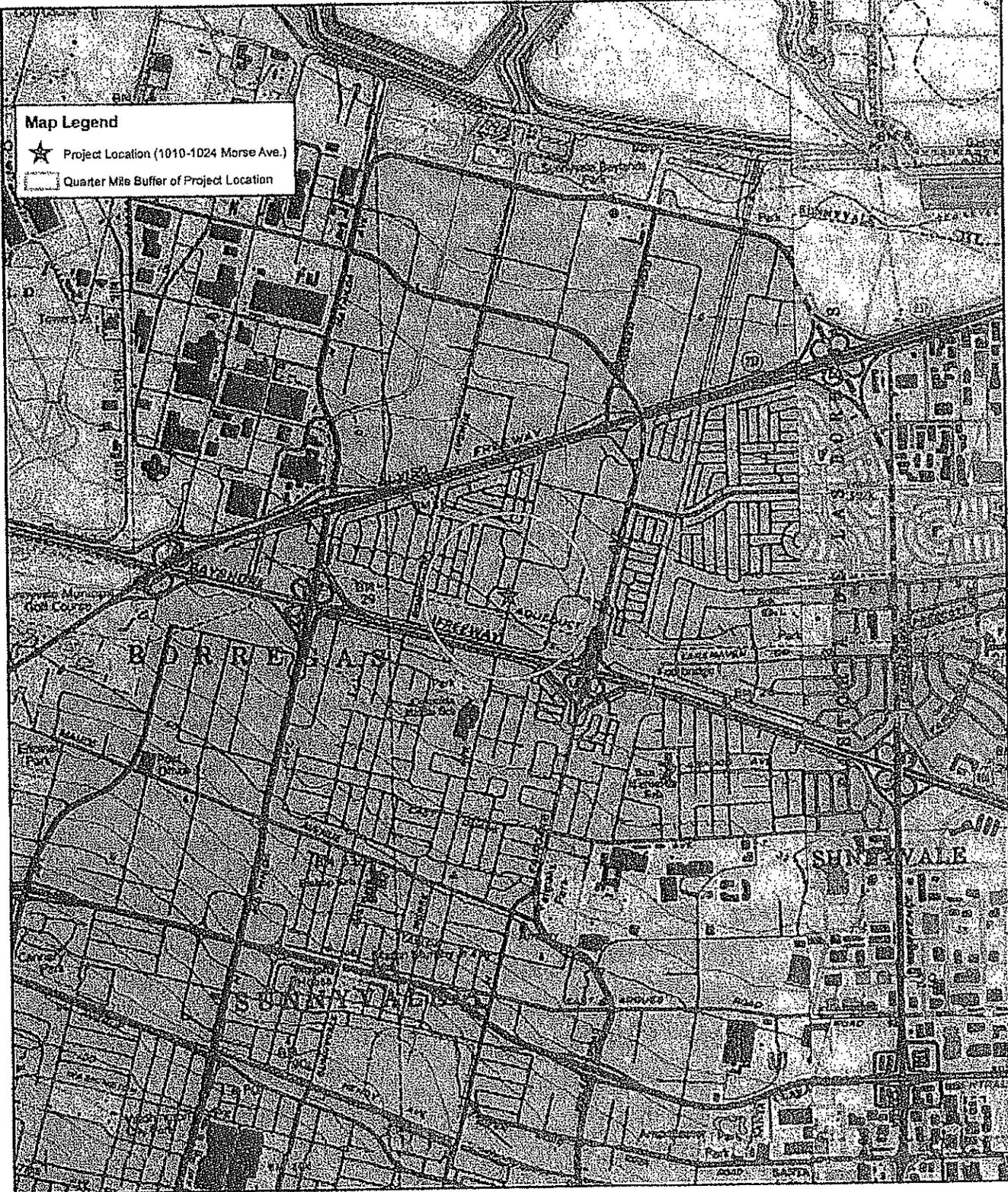


Beatrice Cox, Archaeologist



Map Legend

- ★ Project Location (1010-1024 Morse Ave.)
- Quarter Mile Buffer of Project Location



RecordsSearch Map
1010-1024 Morse Avenue
Sunnyvale, CA

Santa Clara County,
California

STATE OF CALIFORNIA

Arnold Schwarzenegger Governor

NATIVE AMERICAN HERITAGE COMMISSION

915 CAPITOL MALL, ROOM 384
SACRAMENTO, CA 95814
(916) 653-6251
Fax (916) 657-5390



March 30, 2010

Beatrice Cox
Garcia and Associates
1 Saunders Avenue
San Anselmo, CA 94611

Sent by Fax: 415-458-5829
Number of Pages: 2

Re: Morse Avenue Project, Santa Clara County

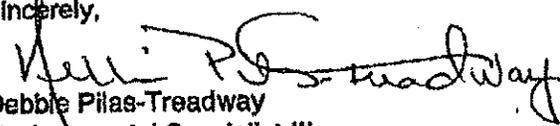
Dear Ms. Cox:

A record search of the sacred land file has failed to indicate the presence of Native American cultural resources in the immediate project area. The absence of specific site information in the sacred lands file does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Enclosed is a list of Native Americans individuals/organizations who may have knowledge of cultural resources in the project area. The Commission makes no recommendation or preference of a single individual, or group over another. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated, if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe or group. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at (916) 653-4038.

Sincerely,


Debbie Pitas-Treadway
Environmental Specialist III

**Native American Contacts
Santa Clara County
March 30, 2010**

Jakki Kehl
720 North 2nd Street
Patterson, CA 95363
jakki@bigvalley.net
(209) 892-1060

Ohlone/Costanoan

Indian Canyon Mutsun Band of Costanoan
Ann Marie Sayers, Chairperson ✓
P.O. Box 28
Hollister, CA 95024
ams@indiaqn.canyon.org
831-637-4238

Ohlone/Costanoan

Amah Mutsun Tribal Band
Valentin Lopez, Chairperson ✓
3015 Eastern Ave, #40
Sacramento, CA 95821
vlopez@amahmutsun.org
(916) 481-5785

Ohlone/Costanoan

Muwekma Ohlone Indian Tribe of the SF Bay Area
Rosemary Cambra, Chairperson
PO Box 360791
Milpitas, CA 95036
muwekma@muwekma.org
408-434-1668
408-434-1673

Ohlone / Costanoan

Amah Mutsun Tribal Band
Edward Ketchum
35867 Yosemite Ave
Davis, CA 95616
arieways@aol.com

Ohlone/Costanoan
Northern Valley Yokuts

The Ohlone Indian Tribe
Andrew Galvan
PO Box 3152
Fremont, CA 94539
chochenyo@AOL.com
(510) 882-0527 - Cell
(510) 687-9393 - Fax

Ohlone/Costanoan
Bay Miwok
Plains Miwok
Patwin

Amah/Mutsun Tribal Band
Irene Zwielerlein, Chairperson
789 Canada Road
Woodside, CA 94062
amah_mutsun@yahoo.com
(650) 851-7747 - Home
(650) 851-7489 - Fax

Ohlone/Costanoan

Trina Marine Ruano Family
Ramona Garibay, Representative ✓
16010 Halmar Lane
Lathrop, CA 95330
soaprootmo@msn.com
209-629-8619

Ohlone/Costanoan
Bay Miwok
Plains Miwok
Patwin

Amah/Mutsun Tribal Band
Jean-Marie Feyling
19350 Hunter Court
Redding, CA 96003
amah_mutsun@yahoo.com
530-243-1633

Ohlone/Costanoan

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

Distribution of this list does not relieve any person of 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 Moore Avenue project, Santa Clara County

GARCIA AND ASSOCIATES

1 SAUNDERS AVENUE
SAN ANSELMO, CA 94960

PHONE 415.458.5803

FAX 415.458.5829

March 12, 2010

Amah Mutsun Tribal Band
Valentin Lopez, Chairperson
3015 Eastern Avenue, Apt. 40
Sacramento, CA 95821

RE: Morse Avenue Project

To Valentin Lopez:

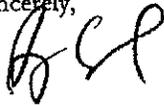
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The City of Sunnyvale is proposing to convert a site on Morse Avenue to a neighborhood park.

GANDA has contacted the California Native American Heritage Commission (NAHC). An important element of our investigation is to identify sites, resources, or locations of cultural importance to the local Native American community. We would appreciate receiving any information you have concerning any resources in the project area. If you cannot supply information but know of others who can, we would appreciate it if you would contact us with the names of these individuals.

We encourage you to participate in this process. Feel free to contact me with any information, questions or concerns you may have.

Sincerely,



Beatrice Cox,
Archaeologist
(415) 458-5803 ext.23.

GARCIA AND ASSOCIATES

1 SAUNDERS AVENUE
SAN ANSELMO, CA 94960

PHONE 415.458.5803

FAX 415.458.5829

March 12, 2010

The Ohlone Indian Tribe
Andy A. Galvan
P.O. Box 3152
Fremont, CA 94539

RE: Morse Avenue Project

Dear Mr. Galvan:

Garcia and Associates (GANDA) is providing cultural resource consulting to Erier & Kalinowski, Inc. for the Morse Avenue Project. The project area lies within Santa Clara County on the USGS 7.5 minute USGS Quadrangle: Mountainview, California; Township 6 S; Range 1 W; within the Pastoria De Las Borregas Land Grant (see attachment).

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Sincerely



Beatrice Cox,
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GARCIA AND ASSOCIATES

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SAN ANSELMO, CA 94960

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FAX 415.458.5829

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Andy A. Galvan
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RE: Morse Avenue Project

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Archaeologist
(415) 458-5803 ext.23.

GARCIA AND ASSOCIATES

1 SAUNDERS AVENUE

PHONE 415.458.5803

SAN ANSELMO, CA 94960

FAX 415.458.5829

March 12, 2010

Trina Marine Ruano Family
Ramona Garibay, Representative
16010 Halmar Lane
Lathrop, CA 95330

RE: **Morse Avenue Project**

Dear Ms. Garibay:

Garcia and Associates (GANDA) is providing cultural resource consulting to Erier & Kalinowski, Inc. for the Morse Avenue Project. The project area lies within Santa Clara County on the USGS 7.5 minute USGS Quadrangle: **Mountainview, California; Township 6 S; Range 1 W; within the Pastoria De Las Borregas Land Grant** (see attachment).

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Sincerely,



Beatrice Cox,
Archaeologist
(415) 458-5803 ext.23.

GARCIA AND ASSOCIATES

1 SAUNDERS AVENUE
SAN ANSELMO, CA 94960

PHONE 415.458.5803
FAX 415.458.5829

March 12, 2010

Indian Canyon Mutsun Band of Costanoan
Ann Marie Sayers, Chairperson
P.O. Box 28
Hollister, CA 95024

RE: Morse Avenue Project

Dear Ms. Sayers:

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GARCIA AND ASSOCIATES

1 SAUNDERS AVENUE

PHONE 415.458.5803

SAN ANSELMO, CA 94960

FAX 415.458.5829

March 30, 2010

Rosemary Cambra, Chairperson
PO Box 360791
Milpitas, CA 95036

RE: Morse Avenue Project

To Ms. Cambra:

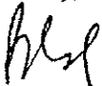
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