

Archaeological Survey Report for the Monterey Peninsula Light Rail Transit Project

By:
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December 2010

Submitted to:

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Contributions by:

Jack Meyer, Geoarchaeologist

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SUMMARY OF FINDINGS

The Transportation Agency for Monterey County (TAMC) is proposing to restore 15.2 miles of passenger rail service along the existing Monterey Branch Line rail right-of-way from Castroville to downtown Monterey in Monterey County for the Monterey Peninsula Light Rail Transit Project. The use of federal funds requires compliance with Section 106 of the National Historic Preservation Act; California Environmental Quality act guidelines are also followed.

A records search revealed that portions of four resources were in or likely to be in the project area: a prehistoric habitation and historic-period artifact scatter, a buried shipwreck, an historic narrow-gauge railroad spur between Salinas and Monterey, and the historic Monterey Branch Line rail. An additional 20 sites were previously recorded within one-quarter mile of the project area, mostly prehistoric shell middens, adobes, and historic-period buildings near the project's southern terminus in the city of Monterey.

Pedestrian survey located two of the previously recorded cultural resources within the project area. CA-MNT-1154 is the dual component site consisting of prehistoric midden, shellfish fragments, and debitage, along with historic-period debris. It has not been evaluated for listing to either the National Register of Historic Places or California Register of Historical Resources. The other resource consists of the historic Monterey Branch Line railway (P-27-2923) which is addressed as part of the Historic Properties Survey Report for this project (Allen 2010).

The project alignment crosses a variety of landforms that contain a diverse potential for buried prehistoric sites. Areas with stream or river crossings are considered highly sensitive, as are areas where estuaries or lagoons are or were present. That portion of the project alignment within the city of Monterey is especially sensitive for buried resources dating to both the prehistoric and historic periods due to modern and historic-period fill and beach deposits.

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CHAPTER 1: INTRODUCTION

The Transportation Agency for Monterey County (TAMC) is proposing to restore 15.2 miles of passenger rail service along the existing Monterey Branch Line rail right-of-way from Castroville to downtown Monterey in Monterey County for the Monterey Peninsula Light Rail Transit Project. TAMC contracted with Far Western Anthropological Research Group, Inc. (Far Western) as a subconsultant to Parsons Corporation to conduct a cultural resources study of the project area, including a records search, a geoarchaeological assessment, Native American consultation, and an intensive pedestrian survey. This report presents findings and recommendations for the project. This study was directed by Allika Ruby, M.A., who has 18 years of experience in cultural resource management projects in California. Pat Mikkelsen, M.A., ROPA, served as Principal Investigator. Jack Meyer, M.A., served as project geomorphologist.

The use of federal funds for the proposed project requires compliance with Section 106 of the National Historic Preservation Act. Although the project is exempt from California Environmental Quality Act (CEQA) review, per Section 21080(b)(11) of the Public Resources Code, the TAMC will comply with CEQA guidelines.

Most of the project area is owned by TAMC. The eastern portion of the line, beginning at Contra Costa Street, is owned by the cities of Seaside and Monterey.

PROJECT LOCATION AND DESCRIPTION

The Monterey Peninsula Light Rail Transit Project extends 15.2 miles between Castroville and downtown Monterey. The project assumes the completion of an extension of commuter rail service to Monterey County with a station in Castoville. Figure 1 and Figure 2 show the project location, which includes the cities of Monterey, Seaside, Sand City, and Marina, as well as the unincorporated community of Castroville. The Monterey Branch Line right-of-way is generally 100 feet wide. The original corridor right-of-way widens to about 400 feet near the project terminus at Custom House Plaza.

As part of the planning process, TAMC prepared a corridor-level analysis of light rail transit, enhanced bus, and bus rapid transit alternatives to provide adequate information for selection of a locally preferred alternative. On October 28, 2009, the TAMC Board of Directors selected the Light Rail Transit Alternative as its locally preferred alternative based on its ability to provide superior transportation in the long-term while best meeting the project's purpose and need.

In addition to the locally preferred alternative, the No-Action Alternative will be assessed in the Environmental Impact Report/Environmental Assessment. The environmental document will also contain an evaluation of other alternative that have been considered.

The project Area of Potential Effects (APE) includes the transit line, bridge replacements/reinforcements, stations, street/grade crossings, recreation trails, drainage improvements, utilities, and storage, as described below (Figure 3).

Light Rail Transit (LRT) Alternative

The light rail transit (LRT) alternative would provide light rail service to be located predominately within the existing Monterey Branch Line right-of-way. The proposed action would be implemented in two phases. In the first phase, Monterey Branch Line railroad track would be restored or constructed for a distance of ten miles between downtown Monterey and north Marina, with bus service continuing to Castroville on local roadways. Phase 1 service is anticipated to be operational by 2015. The second phase would extend light rail service an additional 5.2 miles to the Castroville rail station north of Blackie Road. Standard bus service would connect with the LRT stations, including between Marina and the intercity rail station at Salinas. Phase 2 is funding-dependent and could be built by 2030. Primary project features under the proposed LRT Alternative would include:



Figure 1. Project Vicinity.

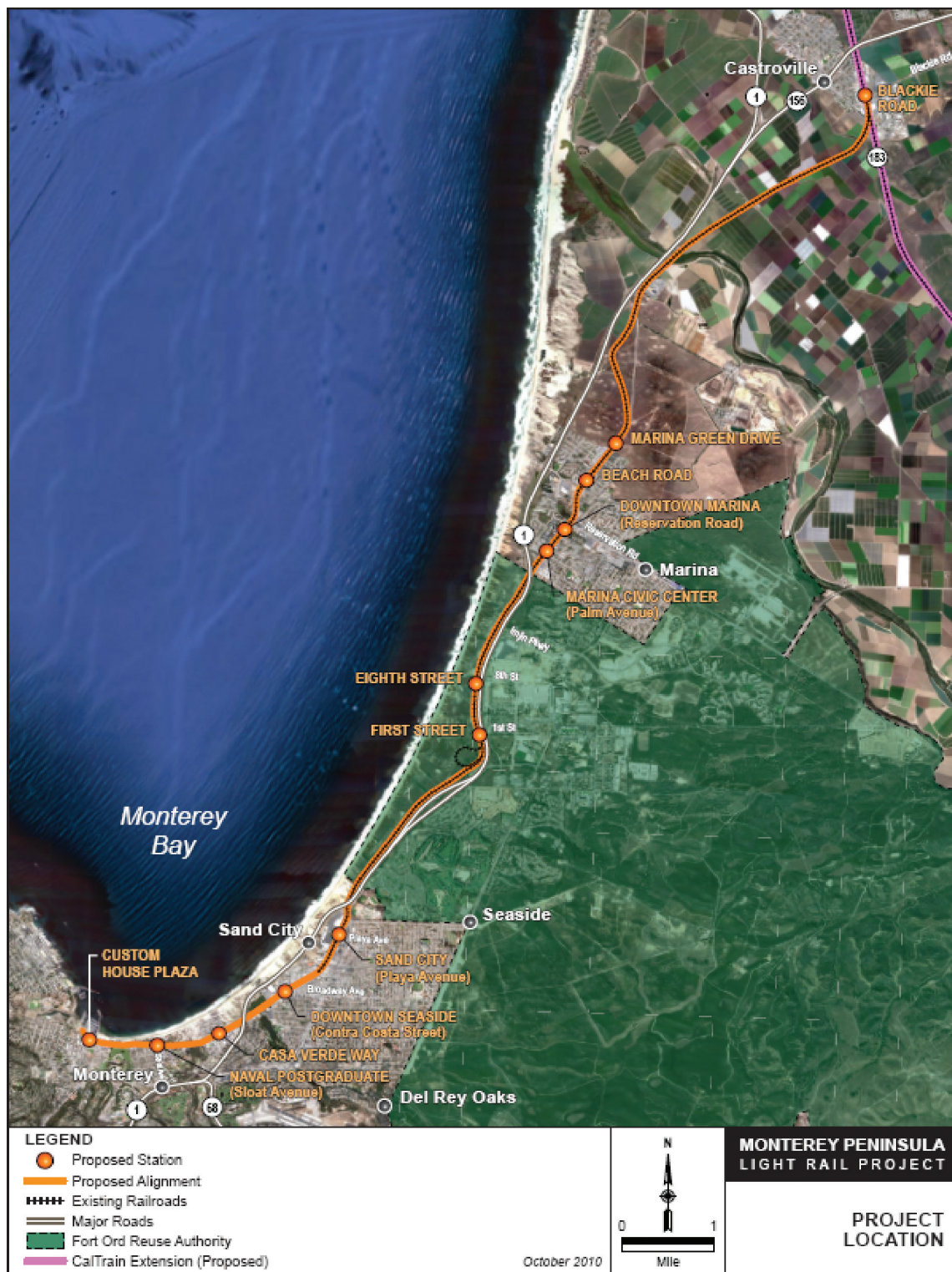


Figure 2. Project Location.



Figure 3. Project Area of Potential Effects (1 of 3).



Figure 3. Project Area of Potential Effects (2 of 3).



Figure 3. Project Area of Potential Effects (3 of 3).

Fixed Stock

Except for approximately two miles of track across the former Fort Ord area, the existing track is unusable and would be replaced. The Monterey Branch single-track rail line would be restored with new ties, ballast and 115 pound continuous welded rail. Based on field observations, it appears that where the new track is on the existing alignment, the existing ballast can be re-used as sub-ballast, with cleaning and some additional material added. Passing sidings would be built where needed to allow for two-way light rail train operations. Access to a new LRT maintenance facility would be provided through restoration of the railroad spur track connection from just north of the First Street station to the former Fort Ord quartermaster warehouses at Fifth Street, or just south of the First Street Station, adjacent to the Fort Ord “balloon spur” track. The asphalt overlay to the rail track would be removed.

Special trackwork (turnouts, diamond crossings, and derails) would be constructed along the route. Turnouts would be constructed at passing sidings and junctions of the Branch Line with the Main Line in Castroville (if provided). For unsignalized operation, turnouts at passing sidings would have spring switches. For turnouts where facing point movements to either track are required, such as at the turnout to the maintenance yard, a push-button operated switch machine is proposed.

Rolling Stock

TAMC would purchase and Monterey-Salinas Transit would operate hybrid diesel electric or diesel multiple unit, Federal Railroad Administration (FRA)-noncompliant light rail vehicles.

Stations/Stops

Stations would be constructed at the approximate locations shown on Figure 2. Light rail transit service would serve one Castroville station at Blackie Road. Five stops are proposed to serve Marina at Marina Green Drive, Beach Road, Reservation Road, Palm Avenue and Eighth Street. Three are proposed to serve Seaside and Sand City at First Street, Playa Avenue, and Contra Costa Street. In Monterey, three stops are proposed at Casa Verde Way, U.S. Naval Postgraduate School (Sloat Avenue), and Custom House Plaza. Modifications to the Castroville commuter rail station would be required during Phase 2 to accommodate a separate station track and platform for non-FRA-compliant vehicles.

Each station would consist of a low-level platform with passenger amenities. A 2-foot wide tactile strip would be installed along the guideway facing the platform edge. One stand alone (i.e., no communications connections) ticket vending machine would be installed on each platform. At the Eighth and First Street Stations within the former Fort Ord area, vertical access facilities (staircase and elevator) are assumed for connection with adjacent streets.

Bridge Structures

The rail alignment crosses several bridge structures: Salinas River Bridge; Tembladero Slough Bridge; four ballast deck trestle bridges; and a pre-stressed concrete trestle bridge at Roberts Lake. Bridge repair or replacement is recommended for all bridges except the span crossing Roberts Lake in Seaside. The 715-foot-long Salinas River Bridge would be repaired.

Streets and Traffic Signals

With a few exceptions, the existing street crossing surfaces are in poor condition and need to be replaced. Each crossing would typically be constructed with a high durability pre-cast concrete crossing surface. Signals at adjacent intersections would be preempted to prevent waiting traffic from blocking the tracks. In most cases this would involve adding preemption to existing traffic signals. New signals with pre-emption would be constructed at Roberts Avenue in Monterey. Track intersections with cross streets would be controlled by gates for safety. Except as noted, the grade crossing warning devices need to be replaced with new equipment due to obsolescence.

No grade separations are proposed as part of this project; all points where the proposed LRT alignment is proposed to intersect local roadways would be at-grade. Most roadway crossings would be constructed with a high durability pre-cast concrete crossing surface.

Operations

Light rail transit service would operate between the cities of Monterey and Marina initially, with connecting bus service to Castroville and Salinas. At project start-up, 15 to 30-minute headways would be offered from 5:00 a.m. to 7:00 p.m., with less frequent service running to midnight. All train equipment would be interchangeable, thereby minimizing requirements for spare vehicle.

The Phase 1 light rail service is planned to run without train signals. Trains would be diverted to passing sidings with spring switches as described above. Some signals would be needed at track junctions and crossings. The signals proposed would consist of wayside signal masts at specific locations. At motorized turnouts, the signals would display the orientation of the switch points as set by the operator using the wayside push buttons. Automatic block signaling is an optional item.

Maintenance

A new layover facility for inspection and maintenance of LRT facilities is included as part of the proposed action. This facility would be constructed on the south (east) side of Highway 1, on TAMC/MST lands formerly used for Fort Ord quartermaster housing. Alternatively, this facility may be constructed on TAMC-owned land located west of Highway 1 and adjacent to the “balloon-spur” track. This facility, to be accessed via the Fifth Street undercrossing of Highway 1, would be fenced to minimize visual impact. The maintenance building itself would be set back 100 or more feet from the highway, and building height would be 45 feet or less. Parking lot space would be designed to accommodate approximately 50 vehicles.

Property Acquisition

Some property would need to be acquired as part of the proposed action. Property would be leased or acquired for the local track adjacent to the Union Pacific Coast Main Line. Property is also proposed to be acquired in association with development of park-and-ride lots at Casa Verde Way, Playa Avenue, and the Naval Postgraduate School (Sloat Avenue); and for local street circulation improvements near the Highway 1/Fremont Boulevard interchange in Seaside and Sand City.

Construction Considerations

The proposed action would require redevelopment of the previously-used railroad corridor, including work within cross-streets, to accommodate the rail line restoration. New LRT stations, parking lots, as well as street and drainage improvements would be constructed as part of the project. Station construction would involve platform development, then installation of components such as canopies, ticket vending equipment, drinking fountains, railings, lighting, signage, and station furniture. Construction of park-and-ride lots would involve subgrade preparation of the parking area, paving, and striping. Curbs, lighting, driveways, and sidewalks would be reconstructed as necessary, as well as landscape planting.

Because the LPA would be mostly aligned along an existing railroad right-of-way, very little earthwork is anticipated for this project. Pedestrian facilities involving earthwork would include walkways and recreational trail reconstruction at various locations where its current location conflicts with the proposed railroad track alignment. Local street circulation improvements would be constructed at the Highway 1/Fremont Boulevard interchange to ease traffic congestion (Figure 4).

Very little drainage improvements other than the repair or replacement of the four timber trestles and the improvements to or repair of the Salinas River Bridge would be needed. No major utility relocations have been identified along the corridor.

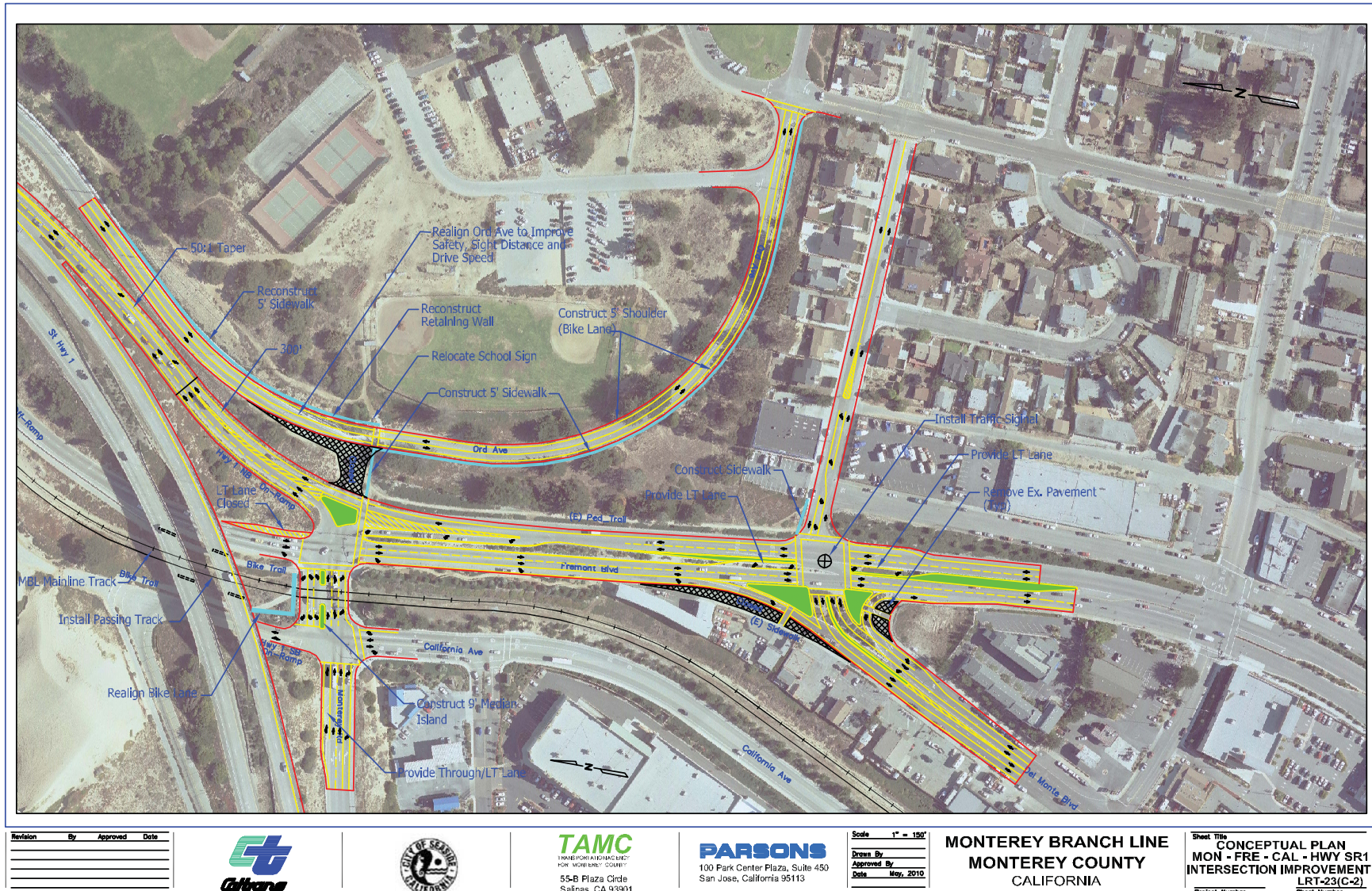


Figure 4. Street Improvements Planned for Highway 1/Fremont Boulevard Interchange.

The recreation trail would be reconstructed at various locations where its current location conflicts with the proposed railroad track alignment. The locations of the relocated segments of the recreation trail were selected to minimize grade crossings of the track.

It is estimated that the construction duration would be less than 12 months.

No-Build Alternative

With the No-Build Alternative it is assumed that rail service restoration would not occur within the study area. The No-Build Alternative would continue MST bus services as existing. This alternative includes Monterey-Salinas Transit (MST) Line 20 bus service from the Monterey Peninsula to Salinas. This service stops at the expanded Salinas Intermodal Transportation Center, where transfers can be made to the planned commuter rail service to the San Francisco Bay region, and/or to Amtrak's Coast Starlight and proposed Coast Daylight services. This alternative also includes a continuation of MST Line 55, Monterey-San Jose Express. Riders using this service can transfer to Caltrain commuter rail trains, Altamont Commuter Express trains, and Capitol Corridor intercity rail trains at the San Jose Diridon station.

CHAPTER 2: SOURCES CONSULTED

Prefield identification efforts for the proposed project included archival research, consultation with Native American groups and individuals, and an assessment of the potential for buried prehistoric sites.

INFORMATION CENTER RECORDS SEARCH

Prior to fieldwork, Far Western performed a search of materials on file at the Northwest Information Center of the California Historical Resources Information System at Sonoma State University in Rohnert Park for the area in and within a one-quarter-mile radius of the project area (research area; file numbers 09-0833 and 09-0861). Base maps were examined for archaeological sites and surveys within the project area, and the following sources were reviewed:

- National Register of Historic Places
- California Register of Historical Resources
- California Inventory of Historic Resources (1976 and updates)
- California State Historical Landmarks (1996 and updates)
- California State Points of Historical Interest (1992 and updates)
- Office of Historic Preservation's Historical Property Data File

Previously Recorded Cultural Resources

The western-most portion of the study corridor lies within an area rich in both prehistoric and historic-period resources. The historic Presidio of Monterey as well as several large prehistoric sites lie on the southern margin of the study area, including the National Register-listed site El Castillo (CA-MNT-101/H), and dual component site MNT-108/H, a large prehistoric habitation and the landing site of Spanish explorer Sebastian Vizcaino. The Monterey Custom House, first built in the early 1820s, is just east of the project alignment, and Spanish Plaza is situated at the project's south terminus.

The records search showed that 24 cultural resources have been recorded within the research area (Figure 5). Three are prehistoric, 16 are historic-period, and five have both prehistoric and historic-period components.

Portions of four of the previously recorded resources appear to be within the project area. One site, located just south of Castroville, contains prehistoric habitation debris and a scatter of historic-period ceramics and bottle glass. The three other sites date to the historic era. One is a nineteenth-century shipwreck buried under the parking lot of Fisherman's Wharf in Monterey. The other two are portions of historic railroad alignments within Monterey and Marina.

The other 20 sites are mostly prehistoric shell middens, adobes, and historic-period buildings near the project's southern terminus in the city of Monterey (Table 1; Appendix A).

P-27-1207 (CA-MNT-1154)

This site contains midden, chert flakes, shell fragments, and historic-period glass artifacts on the north side of Tembladero Slough. Prior documentation consists of a 1978 site record by Ron Melander, Archaeological Resource Service, which places the site within the project APE, and a 1984 topographic plot by Basin Research Associates which places it outside the APE. According to the 1978 site record, the site is most visible on the south side of a small knoll about 100 meters northeast of the confluence of Tembladero and Moro Cojo sloughs. The site also extends south to the bank of Tembladero Slough, where flakes, shell, and glass were eroding. No prehistoric features were noted, although Melander did not have direct access to the site and was not able to fully delineate boundaries. He indicated that Locus B of MNT-727, a nearby prehistoric habitation site, was immediately across the road to the east, along the north side of Tembladero Slough. The site may represent a related occupation that was artificially separated from MNT-1154 by road construction.

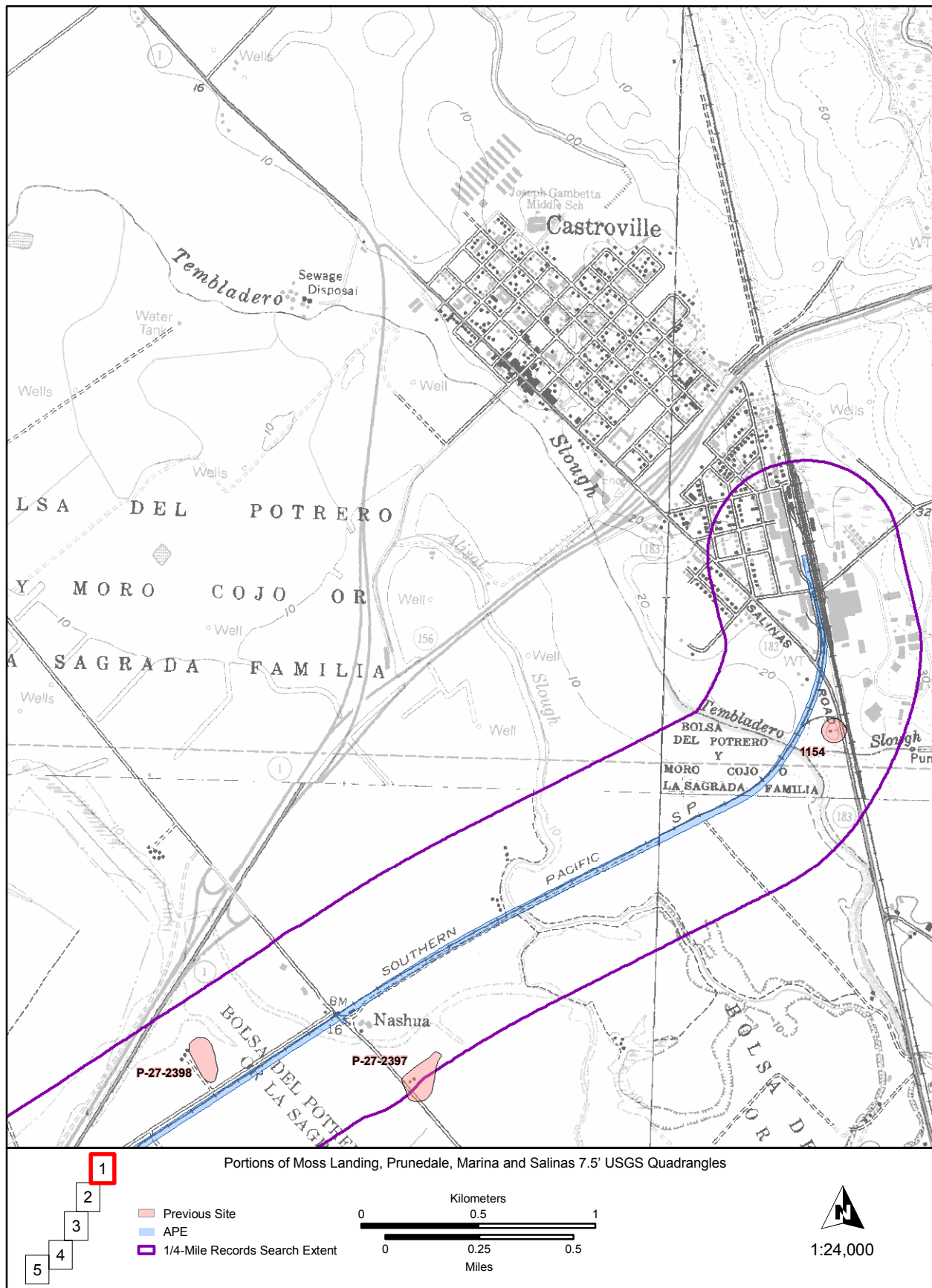


Figure 5. Record Search Results, Archaeological Sites (1 of 5).

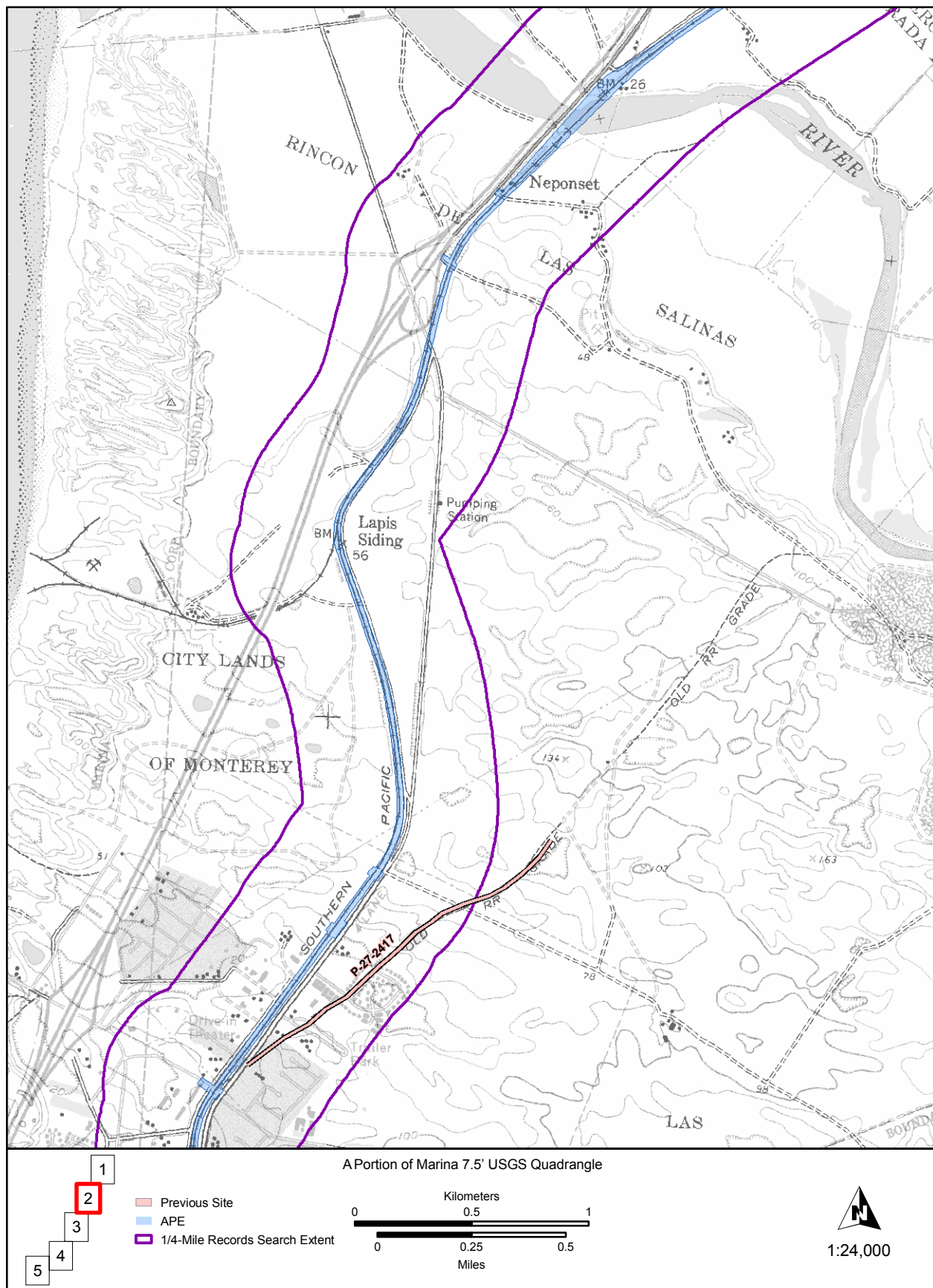


Figure 5. Record Search Results, Archaeological Sites (2 of 5).

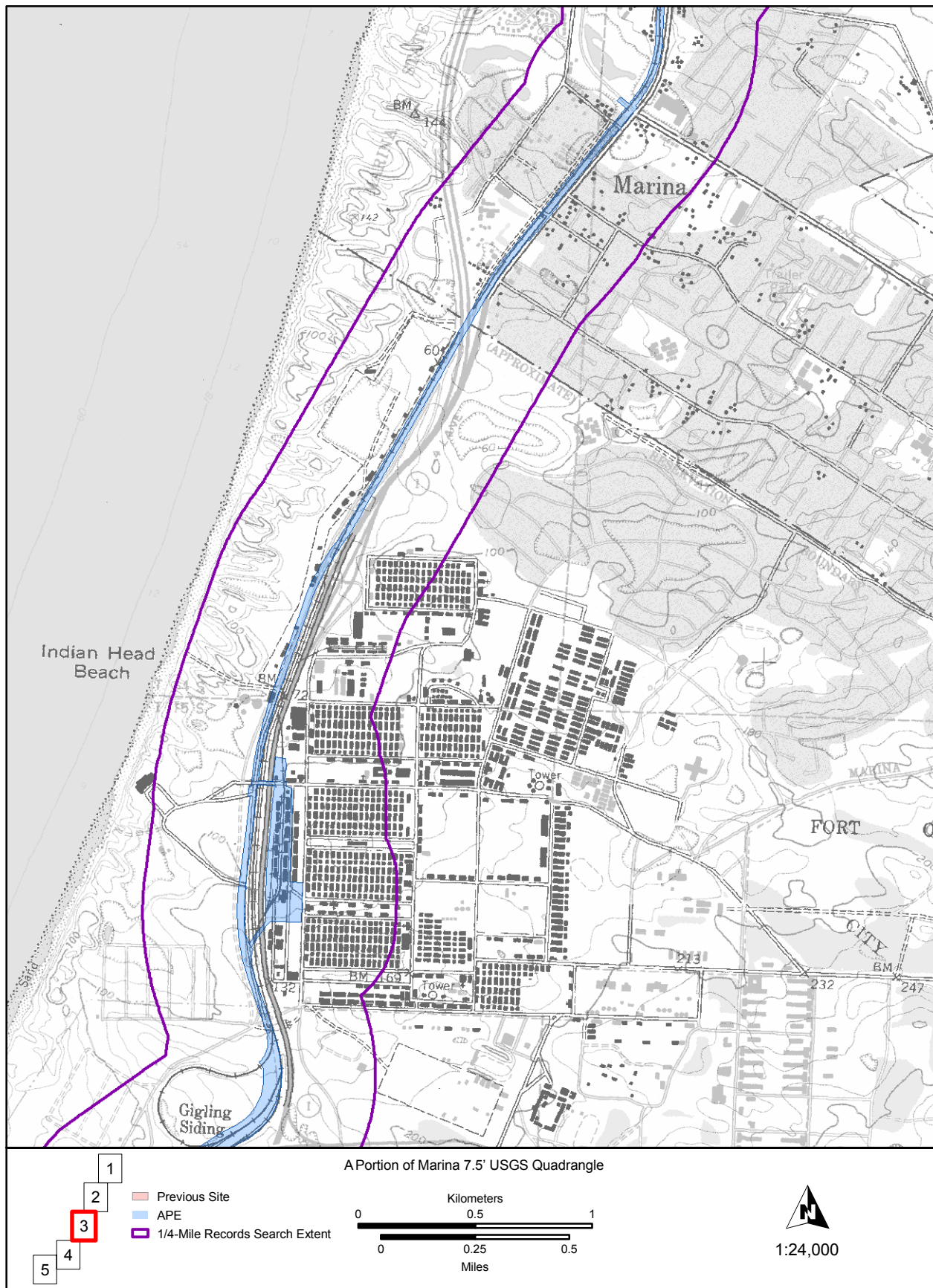


Figure 5. Record Search Results, Archaeological Sites (3 of 5).

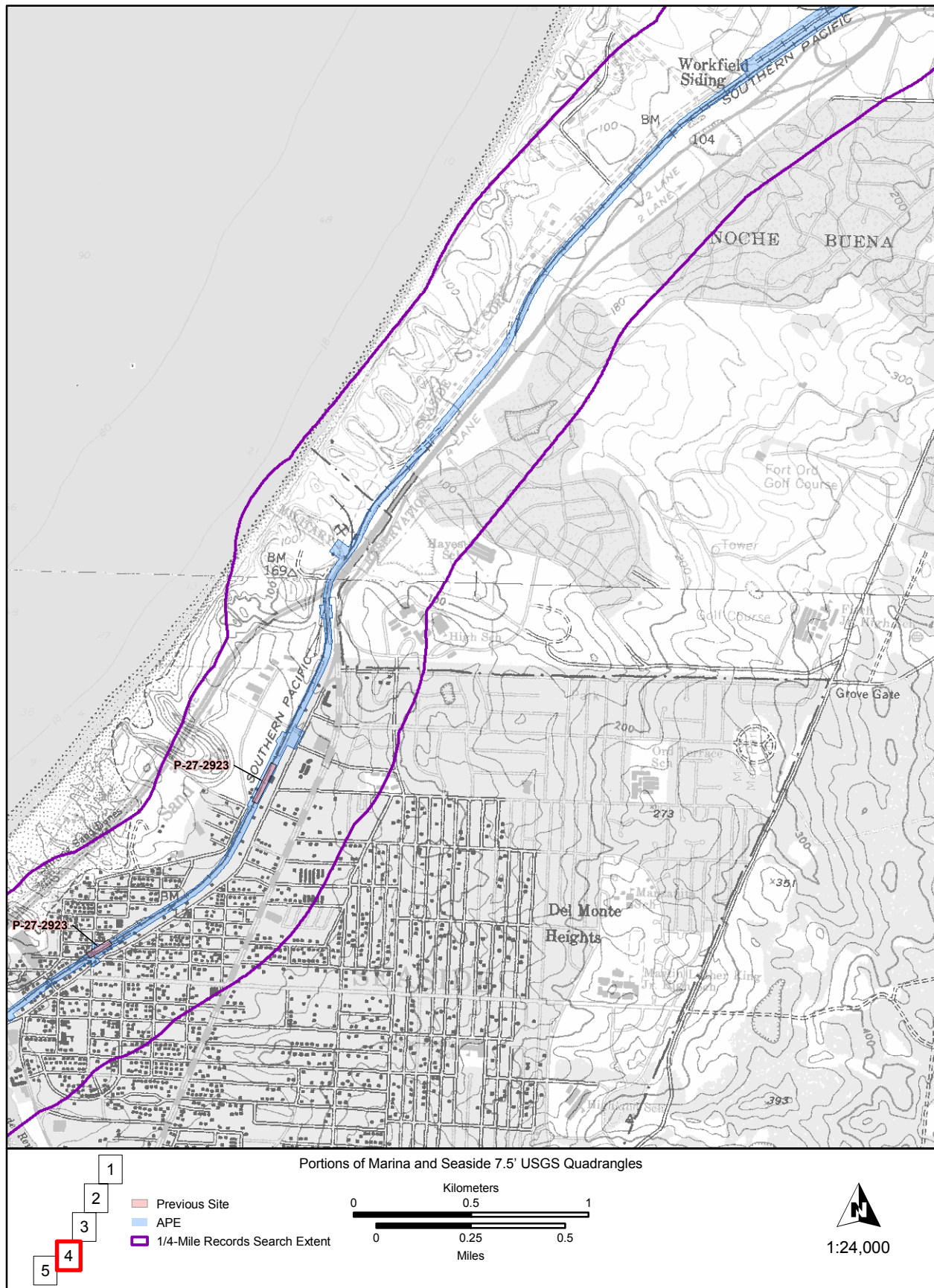


Figure 5. Record Search Results, Archaeological Sites (4 of 5).

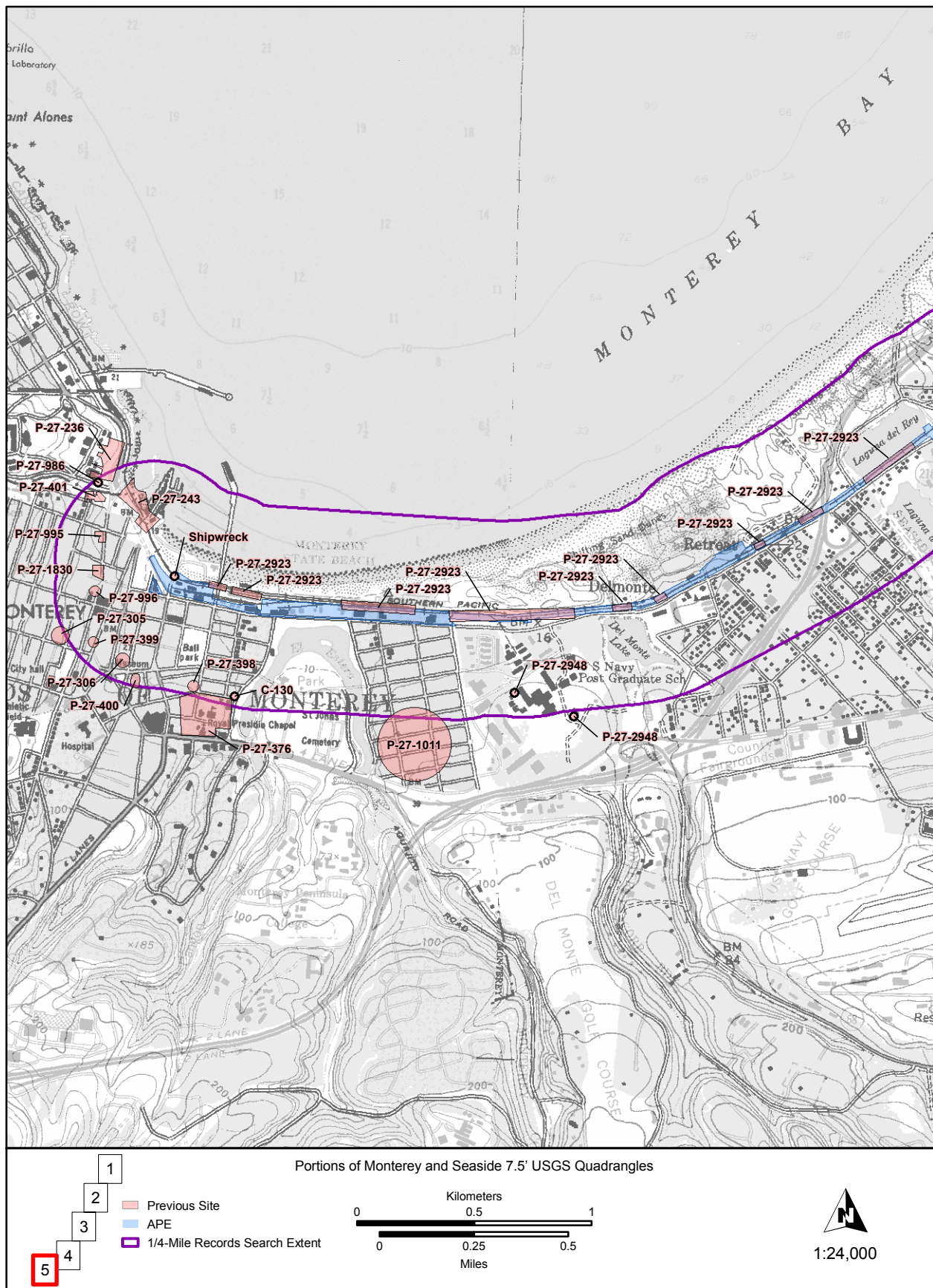


Figure 5. Record Search Results, Archaeological Sites (5 of 5).

Table 1. Previously Recorded Cultural Resources within the Records Search Area.

TRINOMIAL (CA-MNT-)	RESOURCE NUMBER	IN APE?	P/H	SITE TYPE	CONSTITUENTS	DATE RECORDED	ASSOCIATED STUDY	NRHP STATUS	AGE	COMMENTS	QUAD
-	C-1301	No	H	Building	Armed Forces YMCA	Jul-82	5211	-	-	Purported resource; UTM 599470E/4050520N, no map	Mo
101/H	P-27-000236	No	P/H	Habitation/ Cemetery/ Military	Large habitation, 9 feet deep. Beads, projectile points, bedrock mortars, burials. Also part of original Spanish Presidio: tile fragments, Mexican Pottery sherds.	Jan-49, May-06	5929	-	1020- 3870 BP. 1792- 1904	El Castillo; 1902-1904 home of 1st squadron of the 9th Cavalry." horse training grounds. Paperwork incl. Partial Nat Register nomination; contradictory mapping data; see below	Mo
15	P-27-000236	No	P/H	Habitation/ Military/ Building	45 cupules on ceremonial rock.	N/I	5929; 3633	-	1908	within El Castillo. Nat Register nomination; Fort Mervine was placed near MNT-15 with a 12' by 6' deep trench. Presidio Museum occupies small building (T113) used in 1908 as ammo storage, renovated in 1967.	Mo
108/H	P-27-000243	No	P/H	Habitation/ Ceremonial/ Defense/ Cemetery	3 separate occupations w/definite hiatus in between each, Ceremonial rocks and burial, shell beads and dark shell midden. Landing site of Sebastian Vizcaino, Antonio De La Ascencion, Fr. Junipero Serra and Capt. Juan Perez, First Catholic Mass held.	May-06	5929	-	Pre- Ohlone, 1792- 1904	Serra Vizcaino Landing Place. Historic Landmark #128. MNT-108. Excav. by Breschini 1989; barely in rec. search area on info center map but MNT-108 is mapped to the south; also mapped as MNT-298 by info center to south w/in site record; v. confusing; Pac Leg noted discrepancies in letter of 3/2009; NWIC response 12/2009 in MNT-298 record; burials present	Mo
198	P-27-000305	No	H	Building	Adobe, porcelain, and bottle glass debris.	Jan-49	-	-	Jan-49	Adobe destroyed in 1948; across the street from Myron Oliver Residence, map included	Mo
199	P-27-000306	No	H	Residence	Historic stone house and porcelain fragments	Feb-49	-	-	pre- 1949	Castro's Headquarters	Mo

Table 1. Previously Recorded Cultural Resources within the Records Search Area *continued.*

TRINOMIAL (CA-MNT-)	RESOURCE NUMBER	IN APE?	P/H	SITE TYPE	CONSTITUENTS	DATE RECORDED	ASSOCIATED STUDY	NRHP STATUS	AGE	COMMENTS	QUAD
271H	P-27-000376	No	H	Building Complex	3 adobe perimeter defense walls, Presidio chapel, glass shards, cut nails	Nov-92	Nat. Reg. nomination	-	1770-1840	Spanish Royal Presidio	Mo
295	P-27-000398	No	H	Residence	Likely Presidio wall remains unearthed in 1973; Canton ware sherds, musket balls, pottery, cattle bones	4/1/1953; 1973	-	-	N/I	corner of Webster and Figueroa streets; excavated in 1973 by D, Howard and reported in local news article	Mo
296	P-27-000399	No	H	Residence	Spanish adobe ca. 1830; Chinese sherds, iron spur	Apr-53	-	-	1830	Casa Gutierrez, no map; 590 Calle Principal	Mo
297	P-27-000400	No	H	Residence	Spanish adobe ca. 1830, possible sherds (although an antique shop was housed in the adobe)	4/1/1953; May 1979	E-291	-	1830's	Stevenson House State Historic Monument, on Houston St.; Nat. Reg. Nominated	Mo
298/H	P-27-000401	No	P/H	Habitation/ Building	Shell midden on small hill, intact from 20-70 cmbs. Cement foundation, of unknown age in deposit	1948; Nov-08	Jones and Holson 2008 – Cal-Am Coastal Water Project. Pac Leg; S-9661	-	-	near MNT-108; see Jones (Pac Leg) letter of 3/2009 in MNT-108 record and NWIC response 12/2009 in this record	Mo
929H	P-27-000986	No	H	Residence	Spanish adobe	Nov-09; ca. 1979	Jones and Holson 2008 – Cal-Am Coastal Water Project. Pac Leg; S-9661	-	pre-1942?	Site has been demolished and all traces removed acc. To 2009 update	Mo
938	P-27-000995	No	H	Building	Adobe and wood shingle building used as a theater, boarding house and whaling station	May-79	E-286	-	1846-1847	Monterey State Historical Monuments, California's First Theatre. Nom. To Nat. Reg. Not a useful map	Mo
939H	P-27-000996	No	H	Residence	Adobe built with New England architectural aesthetics	May-79	E-287	-	pre-1852	Josiah Merritt Adobe, not a useful map; nominated to Nat. Reg	Mo
955	P-27-001011	No	P	Habitation/ Cemetery	Shell midden visible throughout residential area with one portable mortar and one possible burial.	Oct-79	6104	-	-	Surface has been heavily disturbed by residential landscape but subsurface may be relatively intact; no original vegetation left.	Mo

Table 1. Previously Recorded Cultural Resources within the Records Search Area *continued.*

TRINOMIAL (CA-MNT-)	RESOURCE NUMBER	IN APE?	P/H	SITE TYPE	CONSTITUENTS	DATE RECORDED	ASSOCIATED STUDY	NRHP STATUS	AGE	COMMENTS	QUAD
1243H	P-27-001830	No	H	Residence	2 buildings - Soberanes Adobe is 2-story adobe built by Don Jose Estrada, flaked stone, bottles, and ceramics; Estada Adobe was to the north	1980, 1983, Nov 2008	Jones and Holson 2008 - Cal-Am Coastal Water Project. Pac Leg; S-9661; S-6269, S-6437, S-7570	-	ca. 1839	Casa Soberanes landmark #712; Historic Resources Inventory form; 2008 update notes the Estrada Adobe was destroyed while Soberanes still stands.	Mo
-	P-27-002923	Yes	H	Railroad tracks	Southern Pacific Railroad tracks in 7 segments; replaced Monterey-Salinas narrow-gauge.	Nov-08	Jones and Holson 2008 - Cal-Am Coastal Water Project. Pac Leg	-	1879	See map for segment locations; see record for previous work by LSA	Mo
280	-	?	P	Habitation	Occupation site, bulldozed in 1940	Aug-50		-	N/I	No map, on Fort Ord Military Reservation	ML
2060H	P-27-002397	No	H	Refuse	Sparse scatter of historic debris and shell. Surrounds old water tank.	Sep-00	Glover et al. 2001 - Russell Espinosa 6-Lane Parkway, Sac State	-	N/I	No map included.	Ma
2061H	P-27-002398	No	H	Refuse pit	Abalone shell and historic debris, ceramics, and glass.	Sep-00	Glover et al. 2001 - Russell Espinosa 6-Lane Parkway, Sac State	-	1914 to present	Approx. 40 m northwest of railroad; Mixed with modern refuse; in an artichoke field.	Ma
2080H	P-27-002417	Yes	H	Railroad	3 segments of the Monterey- Salinas line. "linear feature that consists of topographic evidence"	Nov-08	Jones and Holson 2008 - Cal-Am Coastal Water Project. Pac Leg	-	1874-1900	Update of 1998. no evidence of the actual feature is left. Only topographic.	Ma
1154/H	P-27-001207	Yes?	P/H	Habitation	Midden, CCS flakes, shell, and historic debris, glass.	May-78	1056 or 10564	-	N/I	Locus B of MNT-727 is across the railroad but was apparently destroyed (see below)	Pd

Table 1. Previously Recorded Cultural Resources within the Records Search Area *continued.*

TRINOMIAL (CA-MNT-)	RESOURCE NUMBER	IN APE?	P/H	SITE TYPE	CONSTITUENTS	DATE RECORDED	ASSOCIATED STUDY	NRHP STATUS	AGE	COMMENTS	QUAD
727/H	P-27-000802	Yes?	P	Habitation	Midden, shell, obsidian/CCS debitage. Loci A and B. Locus B was graded and paved. Possible shellfish processing area.	Aug-77, Feb-01, Aug-01, June 2008	13854 and 10561; Gleaton 2008 no report (ARS); Flynn 1977 no rpt (ARS); Bouey 1989; Glover et al. 2001 - Russell Espinosa 6- Lane Pkway, Sac State	-	N/I	Complicated and sometimes contradictory recordation; latest update 2008; poss. site of ethnohistoric camp Calendarruc; Bouey (1989) reported Locus B was destroyed for a parking area and corroborated by Glover 2001; Locus B touched APE? Suspect 2008 update is bogus.	Pd
-	-	Yes	H	Shipwreck	Timbers, iron, whale bones, some broken bottles, ceramics, "other debris" not analyzed	Jul-99	S-21995	NE	ca. 1850- 1890	unearthed during construction for storm water drainage at tracks and Washington St.; not formally recorded	Mo

Notes: A question mark (?) in "In APE?" indicates uncertain placement of resource; N/I – No information; NRHP – National Register of Historic Places status; (-) in NRHP indicates not evaluated or unknown, NE – Not eligible; P/H – Prehistoric and/or Historic; Quads: Ma – Marina; Mo – Monterey; ML – Moss Landing; Pd – Prunedale.

A residence and cultivated artichoke field covered the site area when it was recorded in 1978; it was also noted that railroad tracks were present within the site. The site record notes that a list of artifacts was attached but this was not included in the Information Center copy.

P-27-2417 (CA-MNT-2080H)

This site consists of portions of the abandoned Monterey-Salinas narrow-gauge rail line north of Marina. It was first recorded in 1998 by Chris Morgan and later updated by Kari Jones and F. Arellano of Pacific Legacy, Inc., as part of a water pipeline project. The alignment was reported to be visible only where the landform is altered for raised berms and cuts, with a maximum width of 25 feet along the berms and a maximum depth of ten feet at the cuts. No associated tracks, spikes, or other artifactual remains were observed. The rail line apparently intersected with the existing Monterey Branch rail in the project area in the city of Marina, based on the USGS topo information.

The rail line was built in 1874 between Salinas and Monterey but was only briefly used. This portion of the rail line was subsequently abandoned when Southern Pacific completed its Castroville to Monterey line in 1880.

P-27-2923

This resource consists of the abandoned Monterey Branch Line railroad tracks that comprise the current project area. The tracks were recorded in 13 segments between Monterey and Seaside by K. Jones and F. Arellano of Pacific Legacy, Inc. in 2008 for a proposed water project. Recordation was confined to those areas where the tracks were visible above ground, although it was noted that the tracks were likely buried in the intervening areas. Rails were standard-gauge, spaced 4 feet, 8-1/2 inches between rails, with a maximum bottom width of six to eight feet. The report associated with this record is not on file with the Information Center.

Washington Street Shipwreck

In the fall of 1998, construction crews excavating beneath Washington Street north of Del Monte in Monterey unearthed ship remains and artifacts that appeared to date between 1850 and 1890, along with large whale bones. A representative from the city of Monterey contacted Dr. Gary Breschini of Archaeological Consulting to assess the wreck and offer recommendations. Two historical consultants (Kent Seavey and Tim Thomas of the Knight Maritime Museum) reviewed the finds and conducted research and analysis. There is no formal site record and no primary number for this resource; consequently, it is absent on the base maps at the Information Center and is simply designated as “Shipwreck” on Figure 5. Information concerning the shipwreck was derived from a post-discovery report filed by Breschini and Haversat (1999). The remains were reported to lie at a depth of 12 feet (Seavey in Breschini and Haversat 1999); however, photographs supplied in the report seem to indicate the remains were present at a more shallow depth.

The ship was approximately 60 to 80 feet in length and its construction was consistent with coastal schooners built along the west coast during that time period. It was apparently not unusual for storms to push ships onshore along Monterey Bay, and there are at least four documented instances of this occurring during winter storms in 1915, 1919, 1942, and 1954 (Reinstedt in Breschini and Haversat 1999). An archival search by Seavey and Thomas (in Breschini and Haversat 1999) failed to locate any documents providing additional information concerning ownership, usage, or dates, so it was concluded that the debris had no historical value. Construction was allowed to proceed, although the authors cautioned that, “any future planned excavation projects [in the vicinity of the beach and wharf area of the city of Monterey] must include an on-site archaeologist and/or historical archaeologist from its inception,” (Breschini and Haversat 1999:6). The remains were apparently turned over to the City at the conclusion of the project; it is not clear from the report whether other, unexcavated, debris associated with the wreck could still be present at this locale.

Prior Studies within the Research Area

Approximately 125 cultural resources studies have been conducted within the research area, mostly within the city of Monterey. Twenty-five appear to have covered portions of the project area while the locations

of another 16 studies could not be firmly placed due to incomplete mapping submitted to the Information Center. Appendix A provides maps depicting the study locations, as well as a table summarizing previous studies.

Overall, the records search demonstrated that previous research along the study corridor has been concentrated along the southern end of study area along the waterfront. That portion of the study area within the city of Monterey has been the focus of intensive and sometimes overlapping cultural resource studies often related to development projects. The area has also long been the focus of scholarly research due to the relatively high density of prehistoric shell middens and Mexican-period adobes in the downtown area. By contrast, most previously conducted cultural resource studies along the study corridor to the north and east of Monterey have been for linear construction projects associated with wastewater, desalinization, and fiber optic developments, or for development projects of the former Fort Ord lands. Much of the project corridor between its intersection with Broadway Avenue in Sand City to Alisal Slough near Castroville was previously surveyed as part of the linear projects (S-3345, S-5439, S-10561, S-14001, S-16462). None of those surveys resulted in the identification of the historic-period railroad alignment P-27-2923, within the current project APE.

NATIVE AMERICAN CONSULTATION

In January 2010, Far Western contacted the Native American Heritage Commission by letter, informing them of the proposed project and requesting a review of their sacred lands files and list of people who might have information concerning cultural resources within the project area (Appendix B). In their reply, the Commission stated that the sacred lands file did not indicate any Native American cultural resources in the immediate project area, but cautioned that the lack of information did not indicate the absence of resources. A list of potentially interested Native individuals and organizations was provided by the Commission. Letters were then sent to all of these contacts, informing them of the location and scope of the project. Follow-up phone calls and/or emails were made to each individual; in most cases, messages were left informing them of the letters and requesting they contact Far Western if the letter did not arrive or if they had any concerns or questions. Four individuals were reached by phone; all voiced concerns about the project and provided recommendations concerning the treatment of cultural resources and two specifically requested they be updated as the project progressed, which was done. A letter dated February 15, 2010, was sent by one individual representing the Ohlone/Coastanoan-Esselen Nation to Far Western detailing the concerns voiced during the earlier phone conversation. All comments and correspondence are detailed in the Tracking Log provided in Appendix B.

CHAPTER 3: BACKGROUND

NATURAL ENVIRONMENT

Various vegetation communities are present along the project corridor. Resource diversity, density, and distribution influenced prehistoric settlement patterns and group size. A generalized discussion of the different environmental zones, primarily floristic, is presented here as a foundation for understanding the local prehistoric record. This discussion is excerpted from an overview by Bouey (1989) and summarizes data from Barbour and Major (1977), Bocek (1984), Dietz et al. (1988), Heizer and Elsasser (1980), and Küchler (1977).

Coastal Strand

Barbour and Johnson (1977) distinguish beach and dune variants of this community. Vegetation is neither diverse nor abundant in these zones; representative species include *Ambrosia*, *Abronia*, *Layia*, *Artemisia*, and *Eriophyllum*. Prehistoric economic uses were focused primarily on tide tips (*Layia platyglossa*). Faunal species were similarly restricted, with rabbits and mice the most prevalent. This community is limited to the coastal strip.

Coastal Sage

Key elements of the Coastal Sage environment include species of *Artemisia*, *Salvia*, and *Eriogonum*. In addition to deer and rabbits, birds and small mammals are commonly present.

Saltwater Marsh

Located in the upper intertidal zone of protected bays, estuaries, and lagoons, saltwater marshes are found at the lower ends of the Salinas River, Elkhorn Slough, and Moro Cojo Clough. Flora are dominated by *Salicornia pacifica*, but few of economic importance are present. Associated sloughs and mudflats provide abundant faunal resources, including mussels, oysters, clams, other shellfish; fish and waterfowl; otters and harbor seals; and sometimes elk on the marshlands.

Freshwater Marsh

Further upstream on rivers and sloughs, freshwater marshes form a community in low-lying areas adjacent to water corridors. Vegetation is dominated by sedge, tules, and cattails which provide economically important products and habitat for significant quantities of fauna. Important among the animal inventory are elk, rabbits, and waterfowl and other birds.

Riparian

Riparian communities are found along rivers, further inland from and on higher ground than Freshwater Marsh assemblages. Principal constituents include maple, alder, sycamore, and willow, most of which provided some useable resources. Faunal species are characterized by elk, rabbits, and numerous small mammals, waterfowl and other birds, and fish.

Prairie

Grasslands account for most of the Salinas Valley flatlands east of the project area. In the pre-contact period, perennial bunch-grasses (*Stipa* spp.) probably dominated the landscape. This region is highly productive with its diverse flora and with faunal species headed by elk, antelope, rabbits, squirrels, and numerous birds.

Oak Woodland

Located primarily on the relatively higher elevations of the hilly region to the northeast of the project area, Oak Woodland assemblages are comprised of oaks (primarily *Quercus agrifolia*), California bay laurel, and California buckeye. Manzanita and toyon contribute to the understory along with various grasses and forbs.

Acorns were likely the primary economic focus for prehistoric inhabitants. The area is also rich in fauna, with deer, rabbits, badgers, and abundant small mammals and birds.

Open Coast

The open coast contains few floristic components. Shellfish are limited to Pismo clams (*Tivela stultorum*) which require heavy surf, and birds are relatively abundant. Near-shore fish species would have been abundant, and the occasional sea mammal would have been available.

ETHNOGRAPHIC CONTEXT

At the time of Euro-American contact, the area was inhabited by speakers of the Costanoan (or Ohlone) language family. Although Costanoan/Ohlone people were first described during the Vizcaino expedition in 1602, very little was known of them until the arrival of overland explorers beginning in 1769. The present understanding of them relies on the records and diaries kept by these explorers and the missionaries who followed them, as well as knowledge shared by living Costanoan/Ohlone descendants. Milliken (1988; see also Milliken 1990, 1992, 1995) presents an overview of previous research and details their interactions with the military and missionary settlers at this pivotal point in history.

Rumsen speakers occupied most of the area covered by the project, and their territory extended from Point Sur northward to the lower Pajaro River, and included the present-day cities of Monterey, Seaside, Marina, and Carmel. Dialects of the Rumsen language were spoken by four independent local tribes, including *Rumsen* in Monterey, *Ensen* of the Salinas vicinity, *Calenda Ruc* of the central shoreline of Monterey Bay, and *Sargentaruc* of the Big Sur Coast. Five villages were present in their territory at the time of Spanish contact: *Achasta*, *Tucutnut*, *Soccorronda*, *Echilat* and *Ichxenta*. At least since the mission era, neighboring Esselen speakers claim close association with the Rumsen through Mission integration and intermarriage. And, as Milliken (1990) points out, multi-lingualism was a common skill in aboriginal California, and “wherever districts or tribelets of two different languages lay contiguous to one another, we may assume that most of the adult members of the two districts were bilingual,” (Milliken 1990:73).

Identification of the group or groups who held the area north of Salinas River in the Elkhorn Slough/Castroville area is less certain due to conflicting eighteenth-century documents as well as the historical migration of the Salinas River. Milliken provides a detailed discussion of the evidence in Jones et al. (1996:13-19) and concludes that one of two scenarios is likely: either there was one large tribelet, *Calenda Ruc*, that covered the central Monterey Bay north of the Rumsen, or another group, *Guachirron* (or *Wacharon*), occupied the area directly north of the Rumsen in the vicinity of Castroville and Salinas, and *Calenda Ruc* was to the north, centered on Elkhorn Slough.

These groups maintained both permanent villages and seasonal settlements from which they procured food. Such activities entailed gathering plants, fruits, bulbs, nuts, vegetables, and seeds, particularly acorn; fishing and hunting in both inland and coastal areas; harvesting of shellfish; and acquisition of raw materials to fashion into trade items such as shell beads. These, in turn, would be traded for locally absent resources such as obsidian or pinyon nuts (Levy 1978). In this way, they built up a sophisticated trade network with neighboring groups, although territorial boundary disputes involving Esselen, Salinan, and Northern Valley Yokuts groups are also mentioned in historical accounts. Family groups of between eight and 12 were sheltered in structures made from locally available materials (Kroeber 1925:468). Crespí (1927 in Levy 1978) describes conical houses made of redwood or redwood bark for the Rumsen and “spherical houses of poles and tule” for dwellings in the Watsonville-Castroville locale. Fages (in Milliken 1992) reported that the houses were poorly constructed of “a few boughs;” other sources report hemispherical structures of willow poles covered with grass or bulrush bundles.

Costanoan/Ohlone villages maintained close ties through inter-marriage, trade, and feasts. Internal disputes were moderated by the tribelet chief, who received the office through patrilineal inheritance contingent on community approval, and a council of elders, which functioned as advisors to the community. Excepting warfare, the chief guided rather than ruled the community in such matters as the timing and coordination of ceremonial and resource procurement activities.

As missions became established in the area (e.g., Mission of San Carlos Borromeo de Carmelo in 1770, Mission Santa Cruz in 1790, and Mission San Juan Bautista in 1797), the local population began to decline, due in large part to introduced diseases. Environmental changes were also a significant factor, as the Spanish altered the landscape into one more suitable for livestock grazing and farming. Traditional resources were increasingly curtailed; not only was wild game forced to compete with the great Spanish cattle herds, but the damage done by overgrazing had severe consequences for vegetal and freshwater resources (Milliken 1995). Local streams and creeks near missions were likely diverted and claimed for the ranches, farms, and orchards. Eventually, population decline and landscape alteration forced people into the mission system, and the survivors learned to adapt to the new economy.

ARCHAEOLOGICAL CONTEXT

Until the adoption of cultural resource management laws in the 1970s, the central coast of California was a relatively neglected area for archaeological research. Earlier theoretical frameworks were based on work conducted in the southern Santa Barbara region (Rogers 1929; Olson 1930; Orr 1943) followed by later refinements contributed by researchers working in the Sacramento and San Joaquin Delta (Lillard and Purves 1936; Lillard et al. 1939) and San Francisco Bay regions (Beardsley 1954). As more sites became excavated, researchers organized their findings into a framework more tailored to the Monterey Bay region.

By the 1980s, most researchers had accepted a model for settlement based on two economic strategies: an earlier, more mobile pattern employed by Hokan-speaking peoples and a later, more intensive settlement strategy used by incoming Penutian groups. The earlier pattern, dubbed the Sur Pattern, was marked by seasonal coastal and interior occupations, which were sometimes extensively re-used. In the later Monterey Pattern, post ca. 2000 BP, local economies became less reliant on coastal resources as terrestrial foods became more intensively exploited, particularly the acorn. Settlement bases were established on the interior and the coast became the setting for short-term resource collections.

Since then, the chronological ordering of California's central coast has undergone several revisions (e.g., Dietz et al. 1988; Hildebrandt and Mikkelsen 1993; Jones 1993; Jones and Hylkema 1988). The chronological sequence used in the following discussion is adapted from Jones et al.'s (1996) findings for the Castroville highway widening project. Five general time periods are recognized and consist of the Paleoindian Period (13,500-8500 BP), Millingstone Period (8500-5500 BP), Early Period (5500-3000 BP), Middle Period (3000-1000 BP), Middle/Late Transition (1000-700 BP), and the Late Period (post-700 BP).

The following presents a somewhat compressed discussion of the prehistory of Monterey Bay area, which is defined as the region extending north from Big Sur to the southern extent of San Francisco Bay (after Jones et al. 1996). For more detailed discussions of the history of archaeological research and theoretical issues refer to Breschini and Haversat (1992), Jones (1993), Jones et al. (1996), and Milliken et al. (1999).

Paleoindian Period (13500–8500 BP)

The cool and dry conditions of the Pleistocene began to warm during the Paleoindian period, producing rapidly increasing sea levels due to the world-wide glacier melt. Very little evidence has been found on the central coast for human occupation during this interval, but many researchers believe that the physical changes wrought on the coastline and interior valleys by rising sea water have buried or obliterated early sites (Bertrando 2002; Breschini and Haversat 1992; Jones 1991).

The Scotts Valley site (SCR-177), located some 25 miles north and inland of the project area, produced intriguing indications of such a Paleoindian occupation, with radiocarbon dates dating to 13,500 BP. (Cartier 1989, 1993). However, the mixed nature of the deposit did not provide for a clear single component assemblage.

Millingstone Period (8500–5500 BP)

Sea levels continued to rise during this period, but began slowing around 7000 BP and finally stabilized at about 5000 BP (Mikkelsen et al. 2000). The flooding of the more gently sloped portions of the coastline produced ideal habitats for intertidal resources, and it is not surprising that many Millingstone period sites are located near these ancient estuaries. The sites are characterized by shell middens which contain more abundant

ground and battered stone implements relative to flaked stone tools, indicating a diet focused on shellfish and seeds rather than large marine and terrestrial animals (although such remains are present). Diagnostic artifacts consist of eccentric crescents, long-stemmed points, and Thick Rectangular (L-series) *Olivella* beads (Mikkelsen et al. 2000). The estuaries were attractive locales, but Millingstone peoples also utilized interior resources. They were probably highly mobile and obtained resources directly from both coastal and interior areas during seasonal rounds (Mikkelsen et al. 2000).

Although sites dating to this interval have mostly been identified in southern California, Millingstone period components have been identified in the region at Elkhorn Slough (MNT-229 [Jones and Jones 1992]; MNT-234 [Milliken et al. 1999]), near Castroville (MNT-228 and MNT-1570 [Jones et al. 1996]), and at SCL-178 in the southern Santa Clara Valley (Hildebrandt 1983). Site MNT-1232/H to the south in Big Sur also produced three radiocarbon assays from this time period (Fitzgerald and Jones 1999). In contrast to its Paleoindian occupation, SCR-177 yielded more definitive chronometric data from its Millingstone Period component (Fitzgerald 1991; Jones et al. 1996).

Early Period (5500–3000 BP)

This period ushered in new land-use and social organization patterns, as well as new tool forms. Settlement continued at most estuaries, but also expanded into a variety of open coast locales, likely spurred by environmental fluctuations and population growth (Glassow et al. 1988). One exception to this rule was Elkhorn Slough, where Jones et al. (1996:194) think the closing of Elkhorn Slough and its subsequent decline in estuary resources led to abandonment of sites like MNT-229. Mikkelsen et al. (2000) also note that western Great Basin peoples were experiencing dramatically increased aridity at the onset of this period, and desert area population densities were consequently in decline. They propose that coastal peoples were under pressure as the effects of plunging resources in the Great Basin rippled westward, prompting western populations to increasingly restrict territorial boundaries. All these trends created greater reliance on trade networks (Hildebrandt and Mikkelsen 1993; Jones and Waugh 1997), and spurred increased use of locally available resources.

Greater proportions of hunting and fishing tools in Early Period artifact assemblages reflect the increasing importance of these activities, and mortars and pestles make their first appearance. Although some researchers have questioned the assumed link between these tool forms and acorn consumption so early in the archaeological record (Erlandson 1997; Glassow 1996, 1997), charred acorn remains recovered from an Early Period component of a site on Morro Bay seems to provide support for Jones and Waugh's (1997) proposal that mortars and pestles signal intensified acorn processing (Mikkelsen et al. 2000). Mikkelsen et al. (2000) speculate that intensive use of acorn arose to better balance a protein-rich marine-based diet.

The greater elaboration in all tool forms likely affected social organization by accelerating gender differentiation in work activities (Jones and Waugh 1997; McGuire and Hildebrandt 1994). Diagnostic beads of the period consist of thick rectangular (Class L), end-ground (Class B), and split (Class C) *Olivella* and square *Haliotis* forms (Jones et al. 1996; Milliken et al. 1999). Projectile point forms consist of contracting-stemmed, Rossi Square-stemmed, and side-notched types (Jones et al. 1996). Obsidian also makes its first appearance in these Early Period sites within the Big Sur and Monterey Bay areas.

Inland peoples of California appear to have been quite mobile during this interval, as indicated by the presence of coastal shell and seasonal floral remains in excavated sites within the southern Santa Clara Valley (Hildebrandt and Mikkelsen 1993). Jones et al. (1996), however, suggests that the movement of inland peoples became increasingly constrained during this interval (see also Hildebrandt 1997a, 1997b; Jones 1997).

Several sites with Early Period occupations are located along the Monterey Peninsula. Excavations at site MNT-108 yielded abundant obsidian and fish bone dating to this interval (Breschini and Haversat 1989), and the site appears to represent a major summer village based on the analysis of fish otoliths. Breschini and Haversat (1993) noted that the abundance of fish remains at this site may indicate that this resource was being traded to the interior. There are several other known Early Period sites located on the Monterey Peninsula (e.g., MNT-387, -391, -148, -170A, -170C, -17C, -95, and -116). Sites MNT-17C and -95 appear to represent small villages (Breschini and Haversat 1992). Other, less firmly dated peninsula sites with Early Period indicators include MNT-834, -17A, -438, and -112. Sites with Early Period components to the north consist of SCR-7,

on the coast north of Santa Cruz (Dietz et al. 1988; Jones and Hildebrandt 1990) and SCR-239 in Scotts Valley (Cartier 1992).

Middle Period (3000–1000 BP)

Adaptive strategies from the Early Period continued to intensify during the Middle Period on the Monterey coast, with a heavy reliance on acorns. Jones et al. (1996) also report that fish remains increase dramatically at Elkhorn Slough, signaling greater attention on this resource. The large size of sites dating to this period argues for significant population growth. Typical tools from Middle Period sites consist of mortars and pestles, handstones and millingsstones, and contracting-stemmed, square-stemmed, side-notched, and concave base projectile point forms. Shell bead morphology changes dramatically, with an emphasis on *Olivella* wall beads (F and G series; Bennyhoff and Hughes 1987; Milliken et al. 1999). Trade networks appear to have been quite robust, as indicated by high proportions of imported Casa Diablo obsidian (Jones and Waugh 1997); Jones (1995:205) also asserts that trade in sea otter pelts peaked in this period, evidenced by high frequencies of sea otter bones in Big Sur coastal sites. Over the mountains in the southern Santa Clara Valley, excavations of Middle Period sites show decreased amounts of marine shell, likely signaling increasing coastal access limitations (Hildebrandt 1997a; Hildebrandt and Mikkelsen 1993).

Locally, MNT-12 is the largest site known in the Monterey Peninsula area dating to this interval (Breschini and Haversat 1992). It appears to have been a residential base, with a diverse and dense artifact assemblage and human burials. Other sites on the peninsula with Middle Period components consist of MNT-17A, -101, -104, -114, -115, -149, -152, -156, -170C, -696, -834, and -1084.

Middle/Late Transition (1000–700 BP)

By 1000 BP, use of coastal areas appears to have reached peak intensity, after which central and southern California experienced several severe drought cycles (Graumlich 1993; Stine 1994), which coincided with the abandonment of large coastal sites in the Monterey Bay region. This Medieval Climatic Anomaly likely catalyzed the disruption of existing settlement and subsistence patterns, with far-reaching implications for lifeways and social organization.

Prior to identification of this climate anomaly, this widespread movement from large coastal settlements inward to the interior valleys was thought to herald intensification of terrestrial resources. In this scenario, people moved inland to villages which became bases from which people would make short collecting journeys. Such relatively sudden change in the resource base during the droughts caused breakdowns in the social fabric, catalyzing settlement shifts, population decline, and trade deterioration. Jones (1995) reports that fish and marine mammal remains essentially disappear from coastal sites by the end of this period, as do obsidian and otter remains.

There are many sites on the Monterey Peninsula with components dating to this interval (Breschini et al. 1996). The inland settlements of MNT-1485/H and -1486/H in Carmel Valley to the east yielded firm chronological data establishing occupation during this period, although obsidian hydration data also hint at a Middle Period component (Breschini and Haversat 1992). MNT-1942, further south along the Big Sur coast, also contains a component dating to this period. Notably, the Elkhorn Slough locality appears to have been abandoned, including MNT-44, -229, and -234 as well as MNT-228 and -1570 just north of Castroville. None appear to have been reoccupied, and Jones et al. (1996:196) speculate that Elkhorn Slough may have lost its outlet to the ocean during this time.

Late Period (post-700 BP)

Coastal settlement patterns never seemed to have fully recovered from the Medieval Drought. Local populations maintained an inland focus, concentrating on acorns and other terrestrial resources and living in villages in valley bottoms and beside lakes or rivers (Breschini and Haversat 1992; Hildebrandt and Mikkelsen 1993). Although coastal sites of this period demonstrate continuing use of marine resources, they appear to represent short-term processing camps used by inland residents due to the nearly pure presence of shell and low artifact representation. Within the inland sites, abundant ground stone tool assemblages and a high diversity of

plant remains attest to the continuing emphasis on plant processing, such as those recovered from the possible Rumsen ethnographic village Echilat in Carmel Valley recorded as MNT-1485/H and -1486/H (Breschini and Haversat 1992:103). Excavations of Late Period sites in the southern Santa Clara Valley demonstrate an almost completely inland focus, as coastal shell essentially disappears from the assemblages (Hildebrandt and Mikkelsen 1993). Diagnostic markers consist of Desert Side-notched projectile points and Classes E (lipped), K (callus), and M (thin rectangle) beads.

Most of the known coastal sites dating to this interval represent specialized shellfish processing stations. More than 15 sites on the Monterey Peninsula sites have produced radiocarbon dates attributable to the Late Period. Although two sites, MNT-17A and -438, may have also supported other activities or longer occupations, there has not been any large Late Period coastal villages or year-round occupations identified in the area to date. In the Elkhorn Slough locality, MNT-1765 was occupied beginning ca. AD 1450 on Moro Cojo Slough (Fitzgerald et al. 1995).

Site MNT-798, the Pfeiffer Beach site, produced calibrated radiocarbon dates from shell ranging from 1640 to 1805 AD, at the late prehistoric/early historic juncture (Edwards et al. 2000). Recovered floral remains, including those from a possible hearth, yielded a much greater diversity of plant material than would be expected from a task-specific coastal site. This would seem to indicate that settlement patterns and subsistence strategies were changing, possibly influenced by contact with the Euro-American newcomers, but they may be indicative of post-drought recovery of coastal settlement.

Archaeological investigations of MNT-1942, at Big Creek on the Big Sur coast, indicate persistence of some trends established during the preceding transitional phase, but hint at a resumption of other activities practiced prior to the drought. Marine shellfish procurement appears to have been the focus of activity; marine mammal remains are sparse relative to terrestrial mammal fauna, and exchange items are rare. However, Wohlgemuth et al. (2002) also found that fishing and seed processing activities strengthened relative to the preceding phase, as evidenced by more abundant fishing and milling gear. They also found indications of population rebound, as the numbers of burials and features in this period appear to increase. These data led them to speculate that, while coastal sites in the Late Period were not as well-developed as those prior to the drought, these occupations demonstrate a rebound in coastal occupation.

HISTORY

European contact with Native people began with the arrival of Spanish explorers in the sixteenth century, but was sporadic initially. Juan Rodriguez Cabrillo sailed into Monterey Bay in 1542 but did not land there due to rough seas. Some 60 years later, in 1602, Sebastian Vizcaino did disembark and remained onshore for about one month. It would be more than 150 years until the next Europeans entered the region. This was an overland group led by Gaspar de Portolá in 1769, who was looking for Monterey Bay based on Vizcaino's description but did not recognize it. As they traveled north they recorded names for the bodies of water they crossed, some of which retain those names to this day. They also described villages and people they encountered.

Portolá returned the following year to establish the Royal Presidio at Monterey, which eventually became the capital of Alta California. Padre Junipero Serra was part of this expedition and founded Mission San Carlos Borromeo at that time. Initially, the mission was established in Monterey at the Royal Presidio but Padre Serra moved it to Carmel the following year to avoid tensions between the Native neophytes and Spanish soldiers.

Other missions in the region were built later, including Santa Cruz in 1791 and San Juan Bautista in 1797. The Spanish government began making concessions of land to various people, permitting the accumulation of large parcels of land by a small group of individuals. These concessions became formalized as land grants once Mexico achieved its independence from Spain in 1821 and asserted its authority over Alta California. Many of these land grants were used for range livestock and became a substantial financial base for those owners. The project area extends across five of these landgrants: Bolsa del Potrero y Moro Cojo Or La Sagrado Familia, Bolsa Nueva Moro Cojo, Las Salinas, Noche Buena, and Rincon de las Salinas. Eventually, secularization of Church property resulted in more land being distributed to ranchers and Native neophytes and a dwindling of Church political power. The extensive ranchos were gradually broken up following the signing of the Treaty of Guadalupe Hidalgo in 1848 which ended the Mexican-American War and ceded control of a large part of what is now the

western states to the United States. The American occupation precipitated a complete reorientation of land and labor patterns in California. The grantees and their descendants were required to defend their titles before the United States Land Commission often paying their English-speaking attorneys in lands. The often lengthy confirmation process and new property taxes frequently forced land sales. As the ranchos were broken up, American-era communities took their place.

Cattle ranching continued to be the dominant economic activity in the region until the early 1860s, when cycles of drought and flooding destroyed the cattle industry. Agriculture became increasingly dominant, and is still prominent in the Salinas Valley. The economic success of the newly established communities hinged on their ability to access markets in the population centers to the north and south, and the railroads played an enormous role in determining the success or failure of farmers in these communities. In 1867, Southern Pacific Railroad built a rail line to Castroville from the Bay Area, later extending the line to Salinas in 1872. Salinas soon overtook Castroville in importance, although the freight charges levied on the shipped produce sparked discontent with the railroad company (Allen 2010). A narrow-gauge rail line was built just two years later from Salinas to Monterey and helped to stimulate Monterey's economy. However, the endeavor ultimately failed, and it was sold to a subsidiary company of Southern Pacific in 1878 (Allen 2010). Southern Pacific ultimately upgraded a portion of this track to standard-gauge as part of its grand plan to stimulate tourist travel to Monterey, where that same year it had purchased some 7,000 acres of prime coastal land including substantial swaths of the current cities of Monterey, Pacific Grove, Pebble Beach, as well as the Carmel Valley. In 1879, it began constructing a new line from Castroville to meet the newly acquired rail line just south of Salinas River at Bardin. The Hotel del Monte and its passenger depot were built in 1880 along this line. The influx of tourists spurred residential development of Monterey Peninsula and Seaside.

In 1917, the War Department acquired a 200-acre parcel from lands formerly designated part of the city of Monterey Tract No 1, and built Camp Clayton (Swernoff 1982:3-8; Waite 1995:24). In the same year, an additional 15,609 acres were acquired and became known as the Gigling Field Artillery Target Range. Camp Gigling was located near the East Garrison at the intersection of present-day Reservation and Inter-Garrison roads, about four miles east of the project area. In 1940, the Army began acquiring more land, including parcels that contain the current project area, and in the summer of the same year the installation became a permanent army facility and was renamed Fort Ord (Swernoff 1982:3-9; Waite 1995:24). The facility continued to expand between the 1940s and 1980s, and eventually covered more than 28,600 acres. It was closed under recommendation by Base Realignment and Closure Committee in 1994 as part of a wider movement to decommission military bases at the close of the Cold War. By 1994, the base was officially closed, and its land was transferred to the Fort Ord Reuse Authority. The area is currently being redeveloped for civilian use, including the campus of California State University Monterey Bay and the University Villages project. Figure 6 depicts the location of the proposed Eighth Street Station in the reuse area adjacent to Highway 1.



Figure 6. Proposed Eighth Street Station Location, facing South.

CHAPTER 4: BURIED ARCHAEOLOGICAL SITE ASSESSMENT (By Jack Meyer)

THE PROBLEM OF BURIED SITES

The potential for buried archaeological sites is a practical problem for resource managers who must make a reasonable effort to identify archaeological deposits in a three-dimensional project area, ensuring that potentially important resources are not affected by project activities. Early detection of buried archaeological deposits also avoids the potential for costly delays that may occur when unknown resources are discovered after project-related earth moving activities have begun and late discovery protocols are necessary. Before buried sites can be avoided, sampled, or otherwise “managed,” they must first be identified. Most buried sites are not found by conventional pedestrian surface surveys because they typically lack visible or obtrusive features that would indicate their presence to an observer in the field (Bettis 1992:120). Thus, locating sites that may be buried by natural deposition can be one of the most difficult issues faced by prehistorians, archaeologists, and cultural resource managers. This problem is further compounded in regions like the Monterey Bay Area where archaeological sites may have been submerged by sea-level rise or covered by urban development (i.e., artificial deposits).

Thus to help insure that project schedules (critical path) and budgets are not inadvertently affected by late archaeological discoveries, it is crucial that a sensitivity study be performed to determine where buried sites are most likely to be located, and that subsurface exploration is conducted in those areas whenever possible. When designed and conducted in an informed fashion, this type of geoarchaeological approach can help satisfy the requirements of Section 106 (800.4(b)(1)) that “a reasonable and good faith effort to carry out appropriate identification efforts” is made for undertakings that receive, or are attempting to receive, federal funds.

Buried Site Sensitivity Factors

This section provides a rationale for estimating the potential for buried archaeological resources in the project APE. At a general level, it is relatively easy to predict that buried archaeological sites will be found in Holocene-age depositional landforms. Predicting exactly where they are located, however, is a far more difficult task which some have likened to “looking for a needle in a haystack.” While the needle cannot be made larger, the size of the “Holocene haystack” can be reduced by dividing it into smaller zones that can be individually managed depending on their estimated potential to contain buried sites. This approach reduces the amount of area (i.e., volume of sediments) that may need to be searched for buried sites, and increases the likelihood that buried sites will be identified, if present.

Simply stated, there is generally an inverse relationship between landform-age and the potential for buried archaeological deposits. For example, archaeological deposits cannot be buried within landforms that developed prior to human colonization of North America (Rosenthal and Meyer 2004a, 2004b). Therefore, as a first step, landforms with the potential to contain buried sites must be distinguished from those that are too old to contain them, allowing older portions of the landscape to be confidently excluded from further consideration. While this basic distinction addresses the potential for buried sites, the relative probability of locating a buried site depends largely on a more fine-grained distinction between the ages of different Holocene-age landforms.

Furthermore, archaeological deposits are not distributed randomly throughout the landscape, but tend to occur in specific geo-environmental settings (Foster and Sandlelin 2003:4; Hansen et al. 2004:5; Pilgram 1987; Rosenthal and Meyer 2004a). It is well known that most prehistoric occupation sites are associated with level or nearly level landforms that occur near present or former water sources, particularly near perennial streams, rivers, and estuaries. This means that many sites are located in settings that were subject to periodic flooding and sediment deposition due to the combination of low-lying topography and active water sources. For this reason, the locations of present and former water sources play an important role in determining where buried sites are more likely to occur.

Thus, for the purposes of this study, buried site potential was determined using three main assumptions: (1) archaeological sites tend to be located near perennial water sources; (2) archaeological deposits from successive time periods are more common because the density of human populations increased over time; and (3) the longer a landform remained at the surface, the greater the probability that any one spot on that

landform was occupied. Thus, the potential for buried archaeological deposits is elevated when once stable landforms are buried late in time, particular near perennial water sources. Since these former land surfaces were available for human occupation, they are generally marked by laterally extensive buried soils (paleosols) in which most buried sites are found.

Geologic Deposits and Soil-Landform Ages

A review of geologic (Clark et al. 1997) and soil (National Resource Conservation Service 2010) maps show that five main landforms are found at the surface of the study area—artificial fill, dune deposits, various alluvial and estuarine deposits, and a series of uplifted marine terraces. Associated with these landforms are ten different soil types that allow the landforms to be placed in rough temporal order using the relative degree of soil development as a guide (i.e., soils on older landforms are better developed than those on younger ones). As shown in Figure 7, Pleistocene-age (>11,500 years old) marine terraces occur at the northern and southern ends of the project area, while the central portion is covered by a large expanse of Holocene age (<11,500 years old) alluvial and dune deposits. Mapped surface soils in the project area are summarized in Table 2 based on data provided by the National Resource Conservation Service (2010).

Table 2. Relationship of Surface Soils and Geologic Deposits in and near the Project APE.

<i>SOIL MAP UNIT</i>	<i>SOIL UNIT NAME</i>	<i>MAP UNIT</i>	<i>GEOLOGIC DEPOSIT</i>
Ac	Alviso silty clay loam	Qbef	Modern beach, estuary, and fill
Ad	Alviso silty clay loam, drained	Qbef	Modern beach, estuary, and fill
BbC	Baywood sand, 2 to 15 percent slopes	Qhds	Holocene dune sand
Cg	Clear Lake clay, moderately wet	Qbef	Modern beach, estuary, and fill
CnA	Cropley silty clay, 0 to 2 percent slopes	Qhal	Holocene basin and floodplain
DbD	Diablo clay, 9 to 15 percent slopes	pQbr	Pre-Quaternary bedrock upland
Mg	Metz complex	Qhal	Holocene basin and floodplain
Mf	Metz fine sandy loam	Qhal	Holocene basin and floodplain
OaD	Oceano loamy sand, 2 to 15 percent slopes	Qhds	Holocene dune sand
Pa	Pacheco clay loam	Qhal	Holocene basin and floodplain
Pf	Pico fine sandy loam	Qhal	Holocene basin and floodplain
Ps	Psamments and Fluvents, frequently flooded	Qhal	Holocene basin and floodplain
ShC	Santa Ynez fine sandy loam, 2 to 9 percent slopes	Qmt	Pleistocene marine terrace
ShD	Santa Ynez fine sandy loam, 9 to 15 percent slopes	Qmt	Pleistocene marine terrace
Xd	Xerorthents, dissected	Qhds	Holocene dune deposits

A comparison of the soils and geologic deposits mapped in the southern APE reveals that well-developed soils are closely associated with the older marine terraces (e.g., Santa Ynez fine sandy loam), while weakly developed soils generally occur on the younger dunes and alluvial landforms (i.e., Baywood and Oceano series). One clear exception to this is the weakly developed Baywood-series soils that are mapped at the surface of some older marine terraces. Since the Baywood soils are usually associated with younger dune deposits, it appears that Holocene dune deposits overlie Pleistocene terraces in some areas. Thus, some caution is needed if the landform ages of the geologic map are to be used to assess the potential for buried archaeological sites in the area.

Though the age of the Monterey dune field is poorly constrained, the majority is generally presumed to be less than about 5,000 years old (Arnal 1973; Cooper 1967), or middle Holocene in age. This estimate is consistent with findings of a recent dunes study at the mouth of the Santa Maria River to the south where encroaching dunes buried estuary deposits between about 5,000 and 3,800 years ago (Knott and Ely 2006). It also correlates well with the many middle and late Holocene radiocarbon dates from soils and cultural deposits buried within or below the dunes at the Moss Landing Hill site (MNT-234) to the north (Milliken et al. 1999), where soil of the Oceano series are mapped at the surface. While dunes of different ages are recognized within the Monterey dune field (Clark et al. 1997; Cooper 1967; Dupre et al. 1980), few have been directly



Figure 7. Distribution of Surface Geologic Deposits in and near the Project APE.

dated using radiocarbon or other dating techniques. Dates ranging between 1729 cal BP (CAMS-4807) and 2121 cal BP (CAMS-4806) were obtained by Johnson (1993) on charcoal from soils buried by dune deposits at Fort Ord (near former Stilwell Hall), which suggest many of the surface dunes are no more than late Holocene in age. This age estimate is further supported by a series of radiocarbon dates obtained from archaeological sites (e.g., MNT-149) located on similar dune deposits elsewhere on the Monterey Peninsula (Breschini and Haversat 2002).

There is even less information about the age of the alluvial deposits that occur near the small coastal stream/estuaries (i.e., El Estero, Del Monte Lake, and Laguna Del Rey), and Salinas River that are intersected by the project corridor. However, because these deposits occupy the lowest topographic positions and lie below (i.e., are inset within) most of the dune field, they were likely formed after the dunes were already in place. Given their low topographic positions and their weakly developed soil profiles, these landforms are probably latest Holocene in age (<2,000 years old), most likely no more than several hundred years old. If so, the floodplain deposition may have been initiated by the build up of beach and dune sand that periodically blocked the outlet of the Salinas River, as found at Elkhorn Slough (Jones 2002) and many other estuaries along the California coast. This evidence shows that most of the landscape in and around the project area was formed over relatively short time-scales (millennial, centennial) well after the region was first entered and occupied by prehistoric people.

Buried Site Assessment

This section summarizes the estimated buried site potential of the project APE based on the age and distribution of surface deposits combined with the position of freshwater estuaries and water sources where prehistoric settlements tend to be located.

As noted above, the project corridor intersects a variety of geologic deposits, the majority of which are depositional in nature and Holocene in age. The age, nature, and extent of the deposits are shown in Figure 8 and are summarized in Table 3, along with the relative potential for buried sites associated with deposit type.

Table 3. Age, Nature, Extent, and Buried Site Potential of Geological Deposits in the Project APE.

UNIT	DEPOSIT TYPE	AGE (CALIBRATED YEARS BEFORE PRESENT) ^a	BURIED SITE POTENTIAL	ACRES IN APE	% OF ACRES
H2O	Water	Modern	Low	2.45	1.1%
Qbef	Beach, estuary, and artificial fill	Historical to Modern (<150 cal BP)	Low	7.38	3.2%
Qal	Basin and floodplain	Holocene (11,500-150 cal BP, most <2000 cal BP)	Moderate	33.15	14.5%
Qhds	Dune sand	Holocene (11,500-150 cal BP, most <2000 cal BP)	Moderate	177.13	77.6%
Qct	Marine terrace (uplifted)	Older Pleistocene (1.8 million years-25,000 cal BP)	Very Low	5.15	2.3%
pQbr	Bedrock	Pre-Quaternary (>1.8 million years)	Very Low	3.02	1.3%
TOTAL				228.28	100.0%

Notes: ^a Present is 1950 AD; Spatial extent determined using geographic information system data.

A refinement of the above data can be made given the tendency for prehistoric sites to be located near channels, estuaries, and other water sources. Holocene-age landforms located within 200 meters of water are considered to have a greater potential for buried sites than adjoining portions of the same landform (Rosenthal and Meyer 2004a found the 200 meter distance of sites to water statistically significant). Near the south end of the project corridor, the APE crosses over or near three estuaries, each fed by small costal streams (El Estero, Del Monte Lake, Laguna Del Rey). Farther north near the city of Marina, the APE passes a series of natural ponds or vernal pools, formed within the dunes, which are considered to have a high potential for buried sites based on a previous study (Johnson 1993:52). Near the north end of the project corridor, the APE will cross the Salinas River and Tembladro Slough, which are probably the most important fresh water sources in or near the study area (see Figure 7). All High and Very High potential areas are directly associated with these channels or estuaries located in or near the project area Table 4.

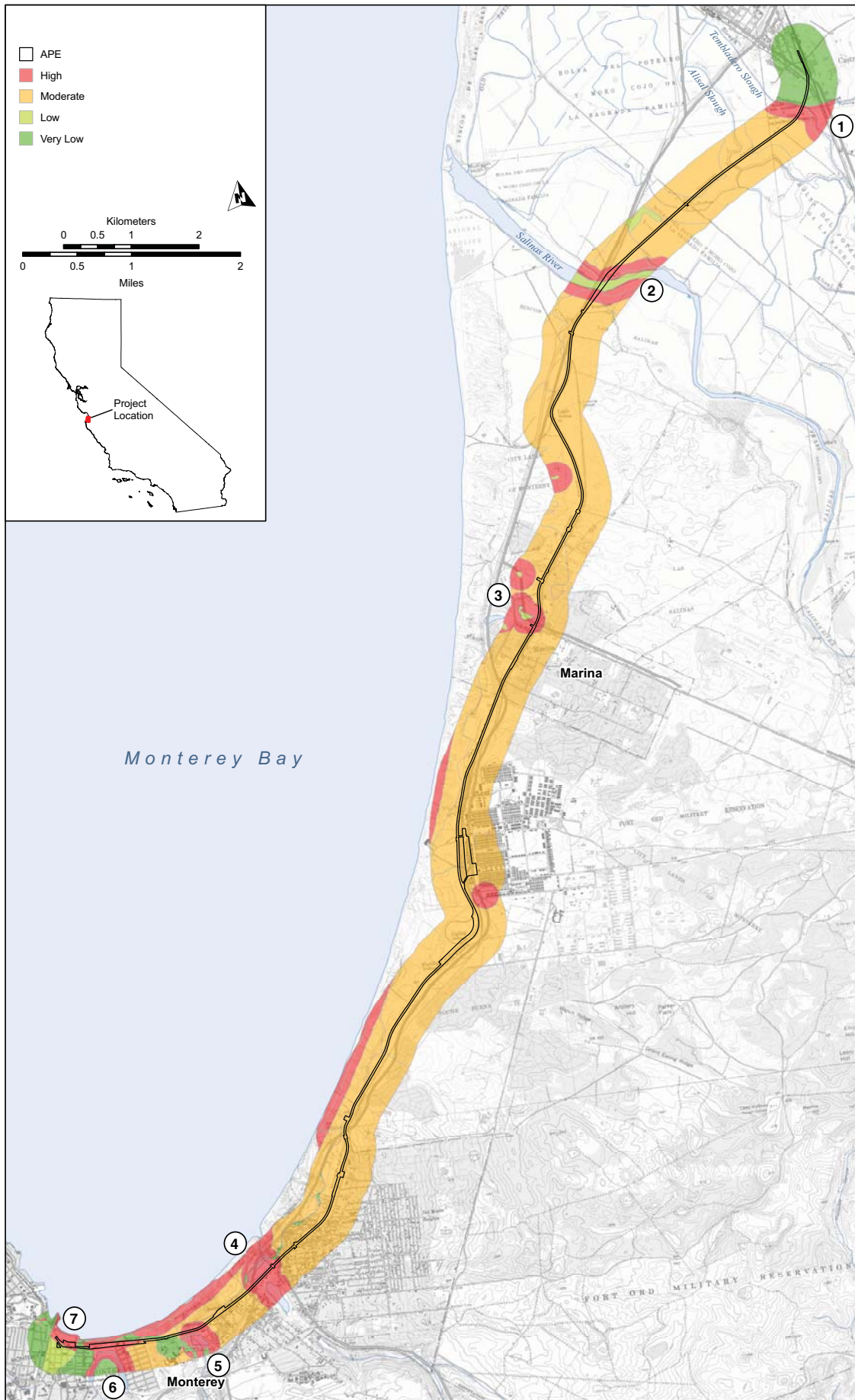


Figure 8. Sensitivity for Buried Sites in and near the Project APE.

Table 4. Estimated Area and Potential for Buried Sites in the Project APE.

	<i>ESTIMATED BURIED SITE POTENTIAL</i>				
	HIGH	MODERATE	LOW	VERY LOW	TOTAL
Total Acres	37.82	178.81	3.47	8.17	228.28
Percent of Total Acres	16.6%	78.3%	1.5%	3.6%	100.0%
Cumulative Percent (right to left)	100.0%	83.4%	5.1%	3.6%	-

Note: Spatial extent determined using geographic information system data.

CHAPTER 5: FIELD METHODS AND RESULTS

The project corridor was intensively surveyed February 18-20, 2010, by Far Western project personnel Allika Ruby, M.A, and Lindsay Hartman, M.A. Ms. Ruby also surveyed the street improvements planned for the Monterey Road/Fremont Boulevard intersection improvements on July 23, 2010 (see Figure 4). The crew was supplied with aerial photographs of the project area with the archaeological Area of Potential Effects depicted on them, and with copies of pertinent USGS 7.5-minute quadrangle maps depicting previously recorded archaeological sites and potential historic-period resources. Site records of previously recorded sites were also carried in the field. The survey area consisted of the approximately 30-meter-wide right-of-way, widening to include proposed stations and attendant facilities.

Given the narrowness of the survey corridor, transect spacing between the crew members averaged about seven meters. Where the survey area expanded (i.e., at proposed stations), the interval was no greater than 20 meters. As the crew progressed, they made careful inspection of exposed ground surfaces.

The crew examined all areas within the project corridor, including the proposed stations, with the exception of a short, approximately 600-meter-long portion that was fenced off as private property in the city of Seaside. This area extended just east of Contra Costa Street northeast to California Avenue and is partially covered by materials associated with a nearby landscaping retail store. This entire stretch appears to be paved, although the rails are visible underneath the pavement at both ends of the fence. Even with access, original ground surface visibility would have been zero.

Permission was granted by the city of Seaside Planning Department to access that portion of the project alignment owned by the city, extending from Contra Costa Street to Canyon del Rey Boulevard.

When cultural materials were encountered, the crew carefully inspected the ground and pin-flagged all visible artifacts. The resources were then formally recorded following the standards of the California State Office of Historic Preservation, Department of Parks and Recreation, California Archaeological Inventory. A map of the site was produced and attached to the site record, and its location was plotted on the aerial photographs and appropriate USGS 7.5-minute quadrangle sheet. Mapping data were recorded with a Garmin Global Positioning System unit.

Debris was commonly encountered along the project corridor. Most of it was clearly modern in age (i.e., postdating 1960) but some appeared to be older and consisted of glass and ceramic pieces. Although they were common across the alignment, they were highly fragmented and only thinly distributed. No diagnostic information was evident on these fragments and they were not recorded. The project alignment is itself an historic-period resource and has been used as a transportation corridor since 1880¹; none of the observed debris predates this use.

All structures and facilities associated with the Monterey Branch Railroad itself (P-27-2923) were documented by JRP Historical Consulting Services, LLC, for this project under a separate report (Allen 2010). Notes and photographs of certain intact features of the railroad were recorded to aid later consultation with JRP; these digital images are included in Appendix C.

SURVEY CONDITIONS

The project corridor winds across a variety of settings. From its northern terminus in Castroville (Figure 9), it runs southwest for a distance of about three miles through low-lying cultivated strawberry and artichokes fields extending to the Salinas River. From here, it continues south about 2.5 miles to the city of Marina across rolling hills used for cattle grazing (Figure 10). The approximately 2.0-mile-long portion of the alignment within Marina passes through residential housing tracts, parkland, and urban development to where Highway 1 crosses

¹ The alignment continues to be used for pedestrian traffic, which was commonly observed between Monterey and Seaside as well as within Marina.



Figure 9. Proposed Castroville Station Area facing North; Monterey Branch Line Rails End; Active Southern Pacific Railroad in Background.



Figure 10. Project Overview facing Southeast, North of Marina.

the project. From here, the alignment courses south about 4.5 miles on sand dunes through the former military where Highway 1 again crosses the project alignment at Fremont Boulevard in the city of Seaside. From here, the project corridor crosses through a developed commercial zone for about 1.5 miles (Figure 11). The remaining 1.5 miles of the project corridor is used as part of the Monterey Bay Coastal Trail, a partially paved and landscaped recreational corridor with separate cycling and jogging paths (Figure 12). The project terminates just past the Monterey railway depot within the paved parking lot of Fisherman's Wharf.

Visibility was poor along much of the project corridor as railroad ballast covered at least the width of the tracks in places where the rails were intact. The area available for inspection constricted where wider berms supported the railroad within the old Fort Ord lands, beginning just north of where Highway 1 crosses the corridor and extending to Marina. Dense vegetation, particularly ice plant, also obscured a large portion of the corridor along the sand dunes in this area. The Salinas River crossing was also thickly vegetated on both banks, particularly the southern bank, and was not accessible at all due to thick brush and poison oak. Some old piers were visible beneath the north bridge crossing (Figure 13). Visibility was nearly absent in the wide paved parking lot at Fisherman's Wharf; landscaping (lawns, mulch) also obscured a large area in the park adjacent. Visibility was fairly good in the cultivated fields extending north of Salinas River to Castroville.

RESOURCES IDENTIFIED

Of the previously recorded resources, the dual-component archaeological site was encountered, along with the Monterey Branch Line. No evidence of the historic Monterey-Salinas rail line, recorded as P-27-2417 (MNT-2080H), was found; road paving in the survey area has apparently obliterated it where it presumably joined the Monterey Branch Line. The area where the historical shipwreck was reported by Breschini and Haversat in 1999 is currently paved and is used as part of the parking lot for Fisherman's Wharf.

P-27-1207 (CA-MNT-1154)

Fragments of weathered clamshell, a couple of chert flakes, and some historic-period broken glass (including cobalt and solarized colors) and ceramics (white improved earthenware) were noted on the surface in the APE on the north side of Tembladero Slough (Figure 14). The debris extends along the APE from the slough bank northward for a distance of about 150 meters and is more visible on the west side of the tracks as the east side is thickly vegetated with hemlock, brush, and berry bushes (Figure 15 and Figure 16). Some of the shell and bottle glass is eroding out of the slough's north bank.

These materials probably represent a portion of MNT-1154, and its site boundaries have been accordingly expanded west to incorporate this debris (Appendix D). This expansion is tentative, however, as existing documentation for MNT-1154 provides vague and somewhat contradictory information concerning its location and extent. A map appended to the original site record by Basin Research Associates in 1984 indicates the site area is confined to a small knoll on the west side of Castroville Road, and the base map maintained at the Information Center reflects this. However, the written description provided in the 1978 record indicates the site extends to the bank of Tembladero Slough, and that railroad tracks are present. To complicate matters, the site sits within a "Y" formed by two railroad lines—the abandoned Southern Pacific (Monterey Branch) and the active Southern Pacific (Salinas Branch), so it is not clear which set of tracks was indicated. Given the very narrow site area that was available for inspection, boundary definition is thus highly speculative: it is even possible that the scatter of shell, flakes, and historic-period debris that was observed is part of a different site to the west that has not been documented.

During construction of the now abandoned Southern Pacific tracks between Castroville and Monterey in 1879, workers reportedly uncovered a human burial along Tembladero Slough. The description of the location indicates it was within the revised site boundary. As reported in an article titled "When the Southern Pacific Railroad Came to Monterey," in the September 23, 1979 edition of *The Monterey Peninsula Herald*:²

² This citation was provided by JRP Historical Consulting, LLC.

On another occasion graders unearthed a human skeleton. The men, making a cut 20 feet from the Tembladero Slough, encountered the bones at a depth of 3 or 4 feet. The remains were taken to town and examined by a doctor, who pronounced the bones to be probably those of an Indian woman. However, some town citizens were of the opinion the remains were those of a drunken transient who had disappeared 40 years before in the slough.



Figure 11. Project Overview facing North near Tioga Road, Seaside.



Figure 12. Project Area at Roberts Lake in Seaside; Paved Monterey Bay Coastal Trail to Right, Rails to Left.



Figure 13. Salinas River Bridge facing Northeast.

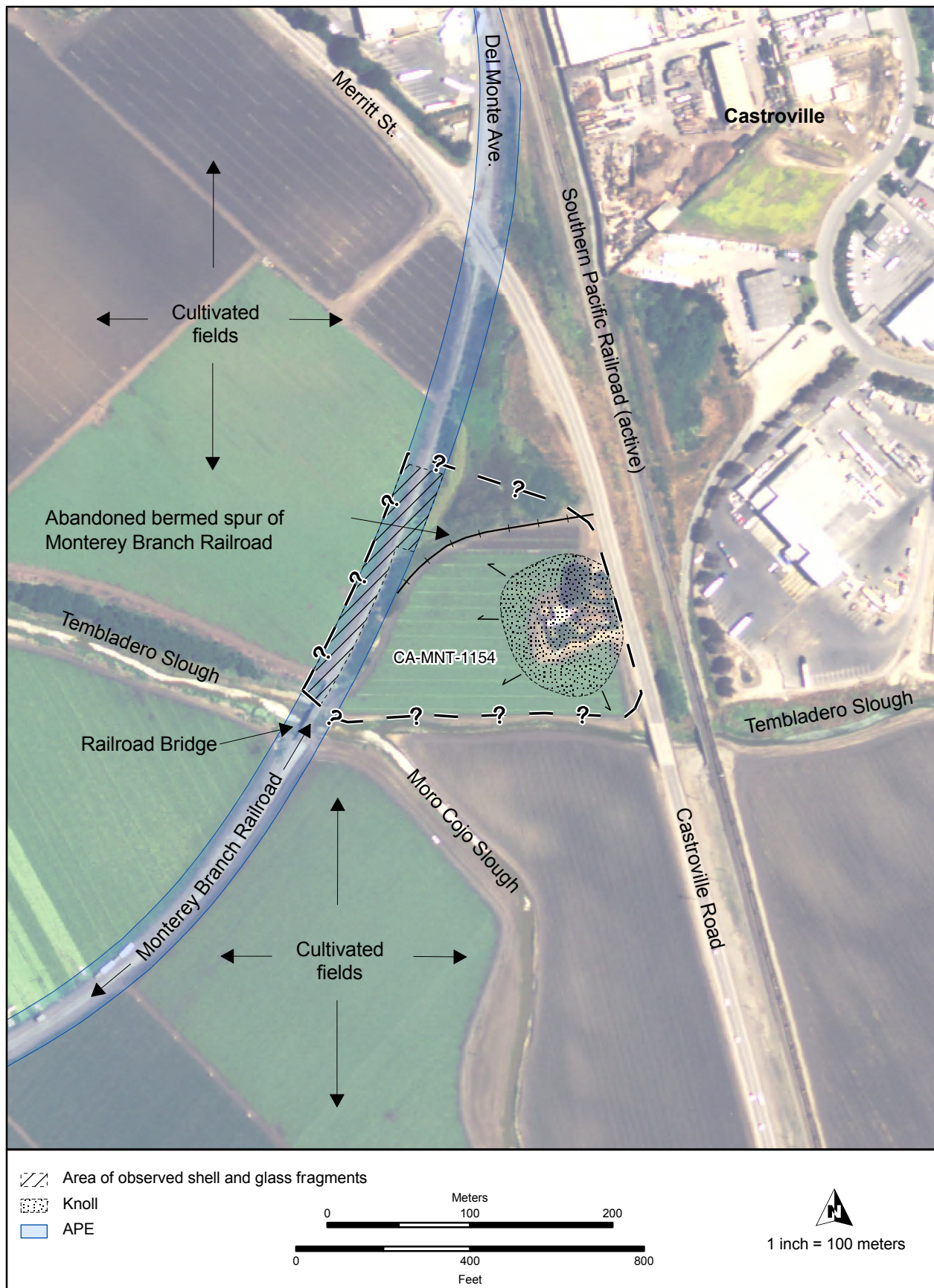


Figure 14. Revised Site Boundary of CA-MNT-1154.



Figure 15. View of Site CA-MNT-1154 facing South.



Figure 16. Tembladero South Bridge facing Northeast; Site CA-MNT-1154 is at North Abutment (Left).

CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS

Two resources were identified during the archaeological survey. The historic Monterey Branch Line rail (P-27-2923) was built in 1879-1880 and ran through the 1990s; many of its associated features are extant. This resource is being addressed in the project's Historic Properties Survey Report (Allen 2010). The other resource is dual component site P-27-1207 (MNT-1154) that has not been evaluated. Here we offer recommendations for that site, as well as for potentially buried resources.

It should be noted that if previously unidentified cultural materials are unearthed during construction, work should be halted in that area until a qualified archaeologist can assess the significance of the find. If human remains are identified or suspected, state law requires that work be halted immediately and that the County Coroner be notified. Additional archaeological survey will be needed if project limits are extended beyond the present survey limits.

RECOMMENDATIONS

P-27-1207 (CA-MNT-1154)

Site MNT-1154 reportedly contains midden and other debris consistent with a prehistoric habitation, although only fragmented clam shell and a couple chert flakes were noted on the surface within the project area. A human burial may have been removed from this site, within the project area, during construction of the Monterey Branch Line in 1879.

Subsurface excavation is not planned for the track replacement. However, given the potential for human remains, it is recommended that a qualified archaeologist be present during ballast removal and replacement within the site area.

According to the 2010 Bridge Strategy Report prepared for this project by Parsons, two options are being considered for the bridge crossing at Tembladero Slough, the north abutment of which is within the site. The first option, rehabilitation, would retain the existing bridge with minor improvements (see Figure 16). These improvements would entail: replacement of ballast guard timbers and selected bracing, caps, stringers, and pile extensions; construction of handrails; and minor repairs to the abutments. These minor improvements should not disturb native soil. This first option is the preferred alternative. No further recommendations are offered for this alternative.

The second option, replacement, would require excavation into the north bank within the site and has the potential to disturb native soil. Should this alternative be selected, it is recommended that additional work be carried out to confirm whether intact subsurface deposits are present in this location prior to any construction. It is also recommended that a member of the local Native American community be afforded the opportunity to monitor such excavations.

Salinas River Crossing

The truss bridge spanning Salinas River is located in an area identified as potentially containing buried archaeological sites, particularly the south crossing. The preferred option is to rehabilitate the bridge, which would not impact native soils. No further recommendations are thus offered for this alternative.

The other design option outlined in the 2010 Bridge Strategy Report calls for a replacement bridge to be built approximately 40 feet downstream of the existing structure, which will surely require excavation into native soil. Should this option be selected, it is recommended that a qualified archaeologist review design plans for the bridge structure as it becomes available. This is particularly important for the south crossing of the Salinas River bridge, as the potential for buried sites is greater.

RECOMMENDATIONS FOR IDENTIFYING BURIED SITES (By Jack Meyer)

When evaluating the need for additional archaeological studies or fieldwork, the crucial questions become: (1) what is the potential for buried sites within a project area? and (2) is there reason to think that proposed project activities could impact buried sites? As discussed in Chapter 4, starting on page 31, the potential for buried sites is estimated to be High in only about 16.6 percent of the proposed project APE. If significant vertical and/or horizontal earth disturbances (e.g., culverts, footings, pilings, retained cuts, underground utilities) are planned in the areas listed in Table 5, then some limited subsurface exploratory work should be conducted to determine if potentially buried sites may be impacted. Thus, the need and type of subsurface exploration will depend on the extent of the vertical APE and the actual dimensions of the area of direct impact. The following recommendations are provided to help insure that potentially buried sites are identified, avoided, and/or properly sampled, as needed.

At a minimum, it is recommended that the possibility for late archaeological discoveries is specified as part of the construction bid package, and that the construction contract requires the contractor(s) to: (1) inform all field personnel of this possibility; (2) halt excavations immediately within ten meters (~33 feet) of a potential archaeological find; and (3) allow a qualified professional archaeologist to examine and evaluate the find to determine if it warrants further treatment or not.

Table 5. Recommended Subsurface Exploration Areas in the Project APE based on High Potential for Buried Resources.

AREA NO.	SENSITIVE AREA, PROPOSED PROJECT COMPONENT (NORTH TO SOUTH IN APE)
1	Tembladaro Slough, bridge replacement
2	Salinas River, bridge replacement
3	Marina Lake/Pond, main rail line
4	Laguna Del Rey, Sand City Station
5	Del Monte Lake, main rail line
6	U.S. Naval Postgraduate Station
7	Custom House Plaza Station

Note: Areas of buried site potential shown in Figure 8.

Secondly, if sites are to be identified before construction, it is recommended that limited subsurface explorations be conducted in each of the high sensitivity areas where deep construction impacts are planned (see Figure 8 and Table 5). Since most of the known buried archaeological deposits in the region occur at depths of four meters (~13 feet) or less, it appears that subsurface exploration using a backhoe would be the most appropriate method for identifying potentially buried sites in most of the sensitive portions of the project area.

As a last resort and least preferred method, it is recommended that a qualified professional archaeologist be retained to actively monitor project-related ground disturbing activities in each of the high sensitivity areas (see Figure 8 and Table 5) if it is not possible or feasible to conduct exploratory studies prior to construction. The archaeological monitor(s) should be required to be present before and during any substantial earth disturbances (i.e., trenching) in these areas to: (1) help maximize the opportunity for archaeological discovery; (2) insure that potentially important cultural resources are not impacted; (3) conduct “real-time” preliminary assessments of any finds; and (4) facilitate and re-direct on-going construction activities by providing initial recommendations for the appropriate treatment of any finds. The archaeological monitor(s) should be required to keep detailed records that document their daily activities, observations, decisions, and the presence or absence of any archaeological materials.

At the same time, it may be possible to stop the archaeological monitoring, at least temporarily, if and when it is determined that no Holocene-age depositional landforms are present in a specified area (e.g., bedrock or pre-Holocene in age), and/or that none are present beyond a given depth. If archaeological materials are discovered in a particular segment, then it may be prudent to explore and/or monitor some of the adjoining areas of the APE, whether or not they were predicted to have the potential for buried sites.

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APPENDIX A
RECORDS SEARCH RESULTS

Appendix A - Records Search Results, Studies

Study S-	E-#	In APE	Title	Date	Author(s)	Comments	Study Size	Site(s)	Quad(s)	Notes
1234	-	-	-	-	-	-	-	-	Mo	-
3303	3	Out	Further Archaeological Testing at 4-Mnt-298, the Custom House Redevelopment Project, City of Monterey	1977	Roop, William and Flynn, Katherine	Prepared for the City of Monterey Urban Renewal Agency by Archaeological Resource Service.	-	4-Mnt-296 and 4-Mnt-298	Mo	-
3305	5	Out	Archaeological Test Excavations at 4-Mnt-298: Evaluations of Significance, Recommendation for Mitigation of Impacts	1976	Jackson, Thomas	Prepared for Urban Renewal Agency of the City of Monterey by Archaeological Consulting and Research Services	-	4-Mnt-296 or 4-Mnt-298	Mo	No map. Discrepancies in report/ correspondence between Mnt-296 or -298
3345	48	In	Monterey Peninsula Regional Wastewater treatment System Expansion Project	1976	Weber, Tony and Peak, Ann	Prepared by Ann S. Peak and Associates Consulting Archeology	-	JS-MP-1	Ss, Ma, Sa, ML	-
3348	51	?	Archaeological Reconnaissance Report Prepared For Monterey City Planning Department	1974	Carrell, Toni	Prepared for Monterey City Planning Department	3.6 acres	N/I	Mo	No map
3356	59	In	Report of Archaeological Reconnaissance for the Proposed Stage-1 Pacific Grove- Monterey Consolidation Project of the Regional Sewage System	1977	N/I	Prepared for Engineering-Science. Inc. by Archaeological Consulting and Research Services Inc.	-	-	Mo	-
3359	-	In	Outline. History of the Presidio of Monterey (In the Fort Ord Complex) and correspondance	1977	Adams, Margaret	Prepared for Chuck Smith, Arcaeological Regional Research Center, Cabrillo College. by Margaret Adams, curator, U.S. Army Museum Presidio of Monterey	-	CA-MNT-101	Mo	No map
3386	91	Out	Archaeological Test Excavations at CA-MNT- 727, Locus A and B, Near Tembladero Slough, Castroville, Monterey County, California	1978	Flynn, Katherine	Prepared for Andrew Ausonio, owner at the Request of the Planning Department, County of Monterey. Prepared by Archaeological Resource Service	-	CA-MNT-727	Pd	-
3395	102	Out	Application for Registration of Historical Landmark	1980	O'Neal James, Pepper	Prepared for National Register . U.S. Department of Interior. Prepared by Pepper O'Neal James, private restoration consultant.	-	N/I	Mo	Known as Trimmer Hall. No map
3400	107	In	Correspondance "Wastewater Reuse Alternative No. 11A" record search	1977	Dietz, Stephen	Prepared for Gerry Cole Engineering-Science, Inc.Prepared by Archaeological Consulting and Research Services, Inc.	-	97 total sites, not all listed in copy	Mo	Map is too general for use
3418	128	Out	Cultural Resource Assessment of the proposed Effluent Disposal System, Fort Ord, Monterey County, California	1978	Peak, Ann S. and Associates	Prepared by Ann S. Peak and Associates Consulting Archeology	-	None	Ma	Appears to be more than a mile from the study area
3427	-	Out	"Archaeological Reconnaissance of Two Parcels in Marina, California: (A) Drive-In Theatre, Cardoza Avenue, Abdy Way, Near Beach Road; (B) Sandhill Nursery, Beach Road Near Cardoza."	1978	Flynn, Katherine	Prepared for David Kmetovic, Terra-Sol Ltd. Prepared by Archaeological Resource Service	23 acres	None	Ss	-
3452	164	Out	A Reserve of Carmel ...?	N/I	Broadbent, Sylvia	Prepared by Sylvia Broadbent	-	CA-MNT-16, -17, and -285	Mo	No map, 1950's field notes?
3455	167	Out	Notes on Monterey Shell-Mound	N/I	N/I	N/I	-	N/I	Mo	No map, illegible author and date. In area of El Castillo?
3456	168	Out	Shell Deposits Of The Monterey Penninsula: Notes On Their Distribution And Fauna	1953	Fisher, Idra M.	UCAS Files, Ms. No. 17, Berkeley	-	P-27-236, P-27-243, P-27-376, P-27-400	Mo	Bad I.C. copy; No map
3488	220	Out	National Register of Historic Places Inventory- Nomination Form	1974	Messinger, Gary S.	Prepared for US Army, Hunter Liggett Military Reservation by Monterey County Parks Department	-	-	Mo	OUT - likely wrong no.?
3495	381	Out	Preliminary Archaeological Mitigation Plan for the Royal Presidio of Monterey	1979	Breschini, Gary and Haversat, Trudy	Prepared for Hugo Bianchini by Archaeological Consulting	-	CA-MNT-271	Mo	Poor location map
3499	385	Out	Monterey State Historic Park Interpretive Prospectus	1974	N/I	Prepared by Operations Division	-	CA-MNT-938H, -101, -108	Mo	No map.
3513	400	Out	National Register of Hisotric Places Inventory- Nomination Form	1967	N/I	Prepared for U.S. Department of the Interior National Park Services.	-	CA-MNT-101	Mo	No map

Appendix A - Records Search Results, Studies

Study S-	E-#	In APE	Title	Date	Author(s)	Comments	Study Size	Site(s)	Quad(s)	Notes
3525	-	Out	Unit record for CA-MNT-271 Excavation. Unit 1 (0-10 cm)	1979	N/I	N/I	-	CA-MNT-271	Mo	No map, poor copy; author designation and notes are illegible.
3577	472	Out	The History of El Castillo De Monterey and the 1967 Achaological Survey	1968	Reese, Robert	Prepared by Monterey State Historical Monument	-	CA-MNT-101	Mo	No map
3578	476	Out	National Register of Historic Places Inventory- Nomination Form	1976	Dillon, James	Prepared for U.S. Department of the Interior National Park Services by James Dillon, Architectural Historian, National Park Service.	-	N/I	Mo	Known as Royal Presidio Chapel.
3579	-	?	-	-	-	-	-	-	Mo	Missing from NWIC, Note says it may be S- 3578
3582	480	Out	Monterey State Historic Park A Unit of the California State Park System	N/I	N/I	Prepared by Department of Parks and Recreation	-	N/I	Mo	-
3633	-	Out	Intensive Cultural Resources Survey Report Presidio of Monterey, California	1980	Roberts, Lois; Stickel, Edwin; Zahniser, Jack; and Fisher, Janice;	Prepared for Department of the Army Sacramento District Corps of Engineers. Prepared by Environmental Research Archaeologists	-	N/I	Mo	No map, General area of the Presidio
3641	549	Out	Preliminary Archaeological Reconnaissance of a Parcel in the Del Monte Forest, near Carmel, Monterey County, California	1981	Breschini, Gary and Haversat, Trudy	Prepared for Jerrerson Stephens	-	CA-MNT-1084	Mo	-
3660	568	Out	Preliminary Archaeological Resources Evaluation for the Cannery Row Redevelopment Project, Monterey, California	1981	Chavez, David	Prepared for Earth Metrics, Inc. Prepared by David Chavez, Consulting Archaeologist	-	CA-MNT-15, -390, -391, -389, -388, -387, -386, -103, -102, -101	Mo	-
3671	579	?	Cultural Resources: Literature Search and Overview Fort Ord, California	N/I	Roberts, Lois; Stickel, Edwin; Zahniser, Jack; Fisher, Janice; and Douglas, John	Prepared for Department of the Army Sacramento Corps of Engineers. Prepared by Environmental Research Archaeologists	-	N/I	N/I	No Map
3677	585	In	Preliminary Archaeological Sensitivity Map for Sand City, East of Monterey, Monterey County, California	1981	Haversat, Trudy and Breschini, Gary	Prepared for Environmental Management consultants. Prepared by Archaeological Consulting	-	CA-MNT-699	Ss and Ma	Not mapped
3739	653	In	Archaeological Resources Review for the Naval Postgraduate School, Monterey, California	1981	Chavez, David	Prepared for Western Division Naval Facilities Engineering Command. Prepared by Davis Chavez Consulting Archaeologist	-	None	Mo and Ss	Portions also outside study area
5210	-	?	A Reconnaissance Cultural Resources Survey of Fort Ord, California	1982	Swernoff, Michael	Prepared for Department of the Army Sacramento District Corps of Engineers. Prepared by Professional Analysts	-	N/I	N/I	"Can't be mapped"
5211	-	Out	Intensive Cultural Resource Survey Armed Forces YMCA, Monterey, California	1982	Dole, Philip; Swernoff, Michael	Prepared for the Department of the Army Sacramento District Corps of Engineers by Professional Analysts, Eugene	-	C-1301	Mo	-
5439	224	In	Cultural Resource Assessment of the Selected Alternative of the Monterey Regional Wastewater Treatment System, Monterey county, California	1978	Peak, Ann S. and Associates	Prepared by Ann S. Peak and Associates Consulting Archeology	-	None	Ma, Sa, Ss,	-
5457	242	Out	Heritage on the Half-Shell Excavation at Mnt.-298	N/I	Roop, William and Flynn, Katherine	Prepared by Archaeological Resource Service	-	CA-MNT-298	Mo	No map
5475	261	Out	Correspondance "El Castillo Sites, or Dialects of Bureaucracy"	N/I	Edwards, Robert	Prepared for Society for California Archaeology.	59.5 acres	CA-MNT-101	Mo	No map.
5484	-	Out	-	-	-	-	-	-	Mo	-
5500	286	Out	National Register of Historic Places Inventory- Nomination Form, Monterey State Historic Monuments, California's First Theatre	1970	Wells, Allen W.	Prepared for and by Department of Parks and Recreation	-	CA-MNT-938H	Mo	-

Appendix A - Records Search Results, Studies

Study S-	E-#	In APE	Title	Date	Author(s)	Comments	Study Size	Site(s)	Quad(s)	Notes
5501	287	Out	National Register of Historic Places Inventory- Nomination Form, Josiah Merritt Adobe	1976	Seavey, Kent L.	Prepared by Monterey County Department of Parks	-	CA-MNT-939H	Mo	-
5505	291	Out	National Register of Historic Places Inventory- Nomination Form, Monterey State Historic Park, Stevenson House	1970	Welts, Allen W.	Prepared for and by Department of Parks and Recreation	-	CA-MNT-297H	Mo	No Map
5529	315	?	Preliminary Report to the Central Coast Regional Coastal Zone Conservation Commission	1974	Carrell, Toni	Prepared by Toni Carrell	-	CA-MNT-271	Mo	No map
5536	322	Out	Prehistoric Resources City of Monterey General Plan Technical Study	1977	Fazio, Mary Ann	Prepared for City of Monterey Planning Department by Bainbridge Behrens Moore Inc.	-	CA-MNT-12, -88, -190, -198, -199, -200, -271, -282, -295, -296, -297, -480	Mo	-
5544	330	Out	Archaeological Testing at the Future Site of the San Carlos Social Hall, Monterey, California	1979	Parckman, Breck	Prepared for Serafino Bianchini AIA. Prepared by Greenwood and Associates	-	None	Mo	General area within the Presidio.
5550	336	Out	Archaeological Investigations of the Monterey Big Sur Area	1968	Howard, Donald	Prepared by California Parks and Recr. Dept.	-	C33, E1, E2, E3, E4, E6, E7, E8, E8a, E9, E10, E11, E12, E13, E14, E15, S2, S4, S4a, S6, S10, S11, S12, S15	Mo	-
5556	342	Out	Memorandum of Agreement Mitigation/ Preservation Program CA-MNT-298	1978	Marquez, Ray	Prepared for Don Berry, developer by Ray Marquez Northwest Indian Cemetery Protective Assn. Santa Cruz Chapter	-	CA-MNT-298	Mo	Poor location map
5577	363	Out	Captain Cooper's House. Archaeological Explorations in 1974. Part I: Architectural Elements.	1974	Wallace, William J.	N/I	-	CA-MNT-969H	Mo	No map or address
5580	366	Out	Scope for the interim and master architectural site plans for the grounds of the San Carlos Cathedral in Monterey	1979	Breschini, Gary	Prepared for Serafino Bianchini, AIA by Archaeological Consulting	-	CA-MNT-271	Mo	No map
5583	369	Out	Archaeological Excavtions at the Custom House Monterey State Historic Park	1978	Bingham, Greta	Prepared for and by California Department of Parks and Recreation.	-	CA-MNT-108	Mo	-
5585	-	Out	Preliminary Archaeological Investigations at El Castillo, Presidio of Monterey, Monterey, California	1968	Pritchard, William	Prepared by Central California Archaeological Foundation	-	N/I	Mo	Map not detailed, general area, El Castillo.
5586	372	Out	Archaeological Investigation of the Royal Presidio of Monterey	1971	Howard, Donald	Monterey County Archaeological Society Quarterly Vol. I, Number 2	-	N/I	Mo	No map, general area is Royal Presidio
5587	373	Out	Analytical Report proposed State Historic Park on a Portion of Presidio of Monterey, California	1968	N/I	Prepared for Division of Beaches and Parks State of California by U.S. Army Engineer District Corps of Engineers Sacramento, CA.	-	CA-MNT-101	Mo	No map
5613	682	Out	Evaluation of Adverse Impacts to Archaeological Site CA-MNT-727, Locus B from Proposed Grading Plan, Veg-A-Mix Development Project	1982	Flynn, Katherine	Prepared for Andrew Ausonio, Ausonio Construction Company by Archaeological Resource Service	100 acres	CA-MNT-727	Pd	-
5630	-	In	Archaeological Survey Report for Category 4B and 5 Projects	1982	Smith, Chuck	Prepared for the Department of Transportation, Caltrans	1 acre	None	Ma	-
5709	-	Out	Preliminary Archaeological Reconnaissance of a Parcel at the Corner of Jackson and Pacific Streets, Monterey, Monterey County, California	1982	Haversat, Trudy; Ryan, Maryellen; Breschini, Gary	Prepared for Paul E. Davis, Architect by Archaeological Consulting	2 acres	None	Mo	-
5929	-	Out	Preliminary Archaeological Reconnaissance of the Southern Pacific Right-of-Way, Monterey and Pacific Grove, Monterey County, California	1983	Breschini, Gary S.; Whitlow, Jan	prepared for Mont. Pen. Rec. Trail Joint Powers Agreement by Archaeological Consulting	-	CA-MNT-101, -102, -105, -106, -107, -109, -386, -390, -392, -393, -998, -1060	Mo	-
5956	683	In	Preliminary Archaeological Reconnaissance of a Parcel at the South End of Castroville Monterey County, California	1982	Hampson, Paul and Breschini, Gary	Prepared for D'Arrigio Bros. Co. Prepared by Archaeological Consulting	1.5 acres	None	Pd	-

Appendix A - Records Search Results, Studies

Study S-	E-#	In APE	Title	Date	Author(s)	Comments	Study Size	Site(s)	Quad(s)	Notes
6104	-	Out	Preliminary Archaeological Reconnaissance at the Intersection of Second Street and Park Avenue Monterey, Monterey County, CA	1983	Breschini, Gary S.; Haversat, Trudy	Prepared for City of Monterey by Archaeological Consulting	.25 acre	CA-MNT-955	Mo	-
6269	-	Out	Preliminary Archaeological Reconnaissance for the Pacific Street Hotel Project at Jackson and Pacific Streets Monterey, Monterey County, California	1983	Breschini, Gary S.; Haversat, Trudy	Prepared by Archaeological Consulting	-	-	Mo	Same as S-6437
6274	-	Out	Custom House Redevelopment Project, Environmental Impact Report	1974	Jackson, Thomas	Prepared for Urban Renewal Agency of the City of Monterey and for Will Shaw and Associates. Prepared by Archaeological Consulting and Research Services	-	N/I	Mo	Poor location map
6275	-	Out	Custom House Redevelopment Project, Environmental Impact Report	1973	Van Dyke, Stanley	Prepared for Bill Fell Urban Renewal Agency City of Monterey and for Will Shaw and Associates. Prepared by The Adan e. Treganza Anthropology Museum, San Francisco State College	-	N/I	Mo	Poor location map
6437	-	Out	A Re-evaluation of the Cultural Resources Located within the Boundaries of the Pacific Street Hotel Project, Monterey, Monterey County, California	1984	Farnsworth, Paul; Rechtman, Robert	Prepared for Paul E. Davis, Architect, Davis, Jacobowsky, Hawkins, and Associates Inc. by Consulting Archaeologists	-	-	Mo	Same as S-6269
7570	-	Out	The Archaeological Investigations at CA-MNT-1243H The Estrada Adobe in Monterey, California	1985	Laffey, Glory Anne; Bente, Vance; Cartier, Robert; Kimbro, Edna; Detlefs, Charlene	Prepared for Davis Jacobowsky Hawkins Associates Inc. by Archaeological Resource Management	-	MNT-1243H	Mo	-
7606	-	In	Preliminary Cultural Resources Reconnaissance of a Portion of the Southern Pacific Right-of-Way, Monterey, Monterey County, California	1985	Hampson, Paul and Breschini, Gary	Prepared for Department of Planning, City of Monterey by Archaeological Consulting	3200 meters	None	Mo and Ss	-
7697	-	Out	Preliminary Archaeological Reconnaissance at 11241 Wood Street Castroville, Monterey County, California	1985	Breschini, Gary and Haversat, Trudy	Prepared for Mr. Javier Ruiz. Prepared by Archaeological Consulting.	1 acre	None	Pd	-
7740	-	Out	Archaeological Reconnaissance Report for Pacific Bell Projects NE1841T and NE1843T Located from Olmstead Road to Torero Drive on Highway 68 and from Jackson Street to Delmonte Avenue and Castroville to Boronda Road on highway 183, Monterey County, California	1985	Dietz, Stephen A.	Prepared for H.T. Whettam Design Engineer Pacific Bell Santa Clara, California by Archaeological Consulting and Research Services Inc.	-	CA-MNT-727, -1154, -1257/1202, -200, -1265, -841, -842, -9, -267, -4, -3, -10, -416, -954, -661	Pd, Sa, Sp, Ss	-
8275	18	Out	Hawthorne Van Buren Connecction Environmental Impact Report	1977	N/I	Prepared for Robert Cremer, Jr. Dept. of the Army, Office of the Director of the Facilities Engineering by Archaeological Regional Research Center, Cabrillo College	-	CA-MNT-15, -697, -296	Mo	-
8294	690		The Francis Doud Site- Mnt-298	N/I	Howard, Donald	N/I	-	CA-MNT-298	Mo	No map
9279	-	Out	Preliminary Cultural Resources Reconnaissance of Parcel A.P.N. 001-826-01, First Street and Park Avenue, Monterey, Monterey County, California	1987	Breschini, Gary and Smith, Charles	Prepared for Bill Fell, City of Monterey by Archaeological Consulting	1 acre	None	Mo	-
9489	-	In	Cultural Resource Evalutation of a Parcel on Beach Road in the City of Marina, County of Monterey	1987	Cartier, Robert	Prepared for Earth Metrics, Inc. by Archaeological Resource Management.	-	N/I	Mo	-

Appendix A - Records Search Results, Studies

Study S-	E-#	In APE	Title	Date	Author(s)	Comments	Study Size	Site(s)	Quad(s)	Notes
9661	-	Out	Archaeological Test Excavations CA-MNT-101, CA-MNT-298, CA-MNT-929 and El Castillo at the Presidio and City of Monterey, Monterey County, California	1987	Dietz, Stephen; Gobalet, Kenneth; Hager, Lori; Jackson, Thomas; Milliken, Randy; Jackson, Ray; Ryan, Mary Ellen; Simons, Dwight	Prepared for Jones and Stokes Associates, Inc. by Archaeological Consulting and Research Services, Inc.	-	CA-MNT-101, -298, -929, El Castillo	Mo	-
10323	-	Out	Preliminary Cultural Resources Reconnaissance of a Portion of the Naval Post- Graduate School, Monterey, Monterey County, CA	1988	Runnings, Anna and Haversat, Trudy	Prepared for Sheila Clark- Van Der Ahe by Archaeological Consulting	2 acres	None	Mo	-
10552	-	Out	"Caltrans Proposes to Digout and Replace the Structural Sections at the Jackson Street and Monterey Street Intersections of highway 183, in Castroville, Monterey County, California	1988	Waldron, Wendy	Prepared by Caltrans Dist. 5.	-	N/I	Pd	-
10561	-	In	Archaeological Reconnaissance of the Salinas Valley Seawater Intrusion Project, Monterey County, California	1989	Bouey, Paul	Prepared for CM2M Hill by Far Western Anthropological Research Group	-	None	ML?	-
11264	-	Out	Archaeological and Osteological Analyses of a Prehistoric Burial Recovered from the Naval Postgraduate School, Monterey, Monterey County, California	1989	Haversat, Trudy and Breschini, Gary	Prepared for Naval Postgraduate School. Prepared by Archaeological Consulting	1 acre	AC 1577-1	Mo	-
12218	-	Out	Archaeological Assessment for the RMC Lonestar Lapis Sand Plant Reclamation Project, Marina, Monterey County, California	1990	Hylkema, Mark; Orlins, Robert	Prepared for Thomas Reid Associates. Prepared by California Archaeological Consultants, Inc.	-	N/I	Ma?	-
12324	-	Out	Preliminary Cultural Resources Reconnaissance of Assessor's Parcel Numbers 001-567-10 and -11, Monterey, Monterey County, California	1990	Runnings, Anna and Haversat, Trudy	Prepared for James R. Wright Monterey History and Art Association. Prepared by Archaeological Consulting	1 acre	CA-MNT-108	Mo	-
12362	-	Out	Arcaeological Excavations at CA-MNT-108, at Fisherman's Wharf, Monterey, Monterey County, CA	N/I	Breschini, Gary and Haversat, Trudy	N/I	-	CA-MNT-108 and -391	Mo	Poor location map.
13333	-	Out	Cultural Resource Evaluation of a Parcel Located off Lighthouse Avenue in the City of Monterey	1991	N/I	Prepared for International Technology Corporation by Archaeological Resource Management, San Jose.	-	N/I	Mo	-
13396	-	In	Negative Archaeological Survey Report	1990	Grantham, Steven and Proctor, Martha	Prepared by Department of Transportation (Caltrans) District 5.	-	None	Mo	-
13855	-	Out	Archeaological Survey of Lot 39, 11240 Commercial Parkway, Castroville Industrial Park, Castroville, Monterey County	1987	Flynn, Katherine	Prepared for Andrew Ausonio, Ausonio Construction Company by Archaeological Resource Service	-	CA-MNT-727	Pd	-
13856	-	Out	Archeaological Survey of the Proposed Nottingham Ranch, Blackie Rd., Castroville, Monterey County	1987	Flynn, Katherine	Prepared for Andrew Ausonio, Ausonio Construction Company. Prepared by Archaeological Resource Service	-	-	Pd	-
14001	-	In	Preliminary Cultural Resources Reconnaissance for the MPWMD Desalinization Pipeline, Monterey County, California	1992	Runnings, Anna and Breschini, Gary	Prepared for David A. Friedland EIP Associates by Archaeological Consulting	-	AC-2004-1	ML, Ma, Ss	-
14013	-	Out	Preliminary Cultural Resources Reconnaissance for the Monterey Visitor's Center, Monterey, Monterey County, California	1992	Runnings, Anna and Breschini, Gary	Prepared for Bruce Kibby City of Monterey by Archaeological Consulting	1 acre	None	Mo	-
14343	-	?	Summaries of Burial Collections	1992	Woodward, Jim and Evans, Nancy	Prepared by California Department of Parks and Recreation Cultural Heritage Section	-	N/I	Mo	No map
15529	-	?	-	-	-	-	-	-	Mo	No map

Appendix A - Records Search Results, Studies

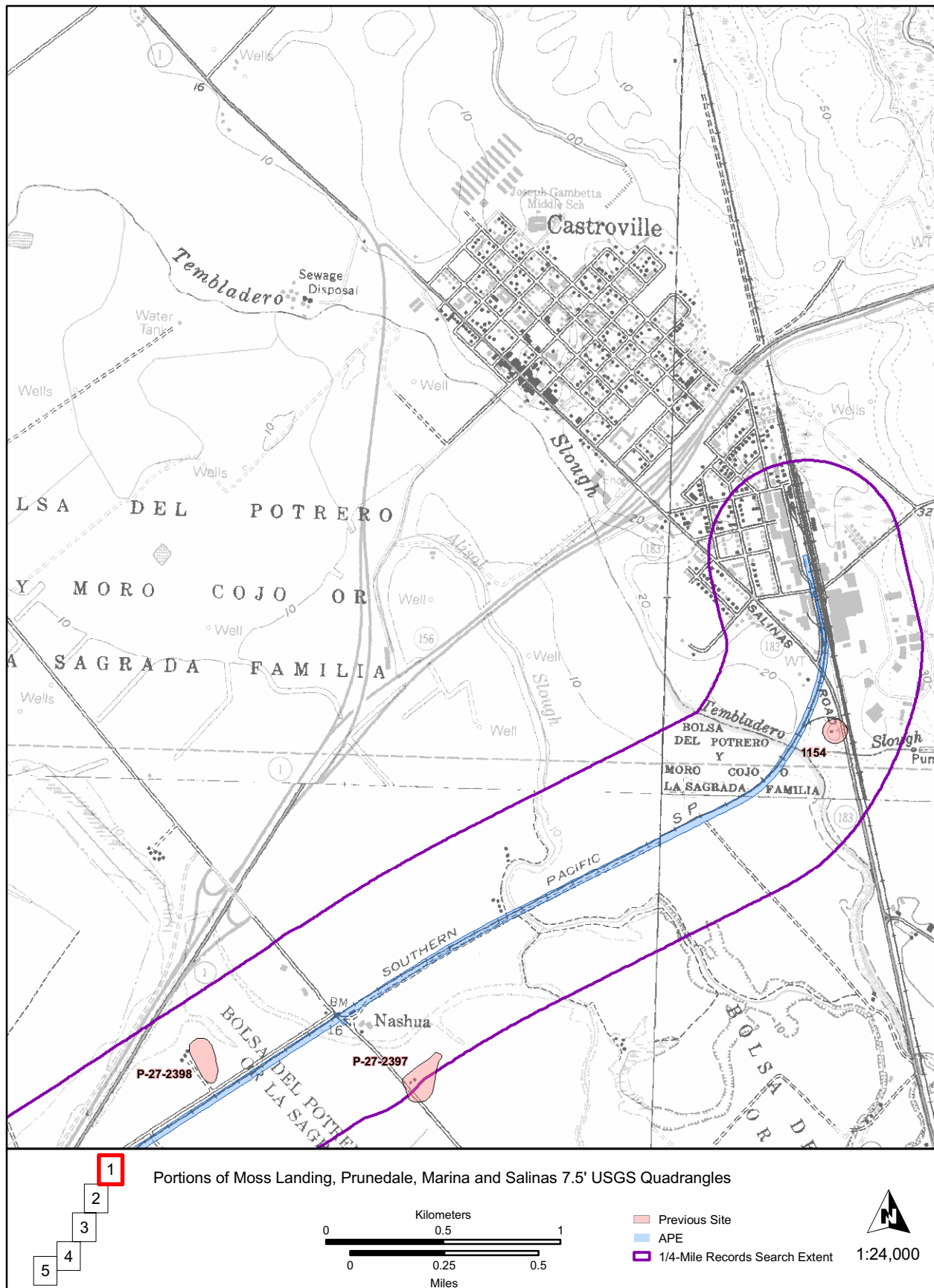
Study S-	E-#	In APE	Title	Date	Author(s)	Comments	Study Size	Site(s)	Quad(s)	Notes
15654	-	?	Monterey Circulation Element Environmental Impact Report.	1993	Breschini, Gary	Prepared for Cris Staedler, EMC Planning Group, Inc. by Archaeological Consulting	-	CA-MNT-390,-103/386/1060, -391, -662, -974	Mo	-
16280	-	Out	Preliminary Cultural Resources Reconnaissance of a Portion of the St. Johns Cemetery, Monterey, Monterey County, California	1994	Runnings, Anna and Haversat, Trudy	Prepared for Hugo Bianchini S.H. Bianchini, Architect and Associates by Arcaheological Consulting.	3 acres	None	Mo	-
16375	-	Out	The Profiling and Monitoring of a California American Water Company Trench Through a Portion of the Historic Spanish Presidio and Adjacent to the Thomas O. Larkin House in Monterey, California	1994	Edwards, Rob; Simpson-Smith, Charlotte; Lonnberg, Allan	Prepared for California American Water Company Monterey Division.	-	N/I	Mo	Poor location map
16462	-	In	Addendum 2 to the Archaeological Reconnaissance of the Salinas Valley Seawater Intrusion Project	1994	N/I	Prepared for Monterey County Water Resources Agency and Montgomery Watson. Prepared by Jones and Stokes Associates, Inc.	-	CA-MNT-1382/H, MSW-1, CA-MNT-1803, Isolate-1	ML, Pd, Ma, and Sa	-
16892	-	Out	Progress Report on the Archaeological Study of the Site of El Castillo, Presidio of Monterey, Monterey, California	1967	Pritchard, William	Prepared for Paul Schumacher U.S. Department of the Interior National Park Service. Prepared by William Pritchard Department of Anthropology Sacramento State College	-	El Castillo and the Presidio	Mo	Poor location map, See also S-5585
17103	-	Out	Archaeological Test Excavation Adjacent to the Eastern Exterior Foundation San Carlos Cathedral Royal Presidio Chapel, Monterey, California	1995	Simpson-Smith, Charlotte and Edwards, Rob	Prepared for City of Monterey Planning Department Historic Preservation Commission. Prepared by Arcaheological Associates of Central California	1 acre	Royal Presidio	Mo	-
17788	-	Out	Presidio of Monterey Cultural Resources Report	1985	Jackson, W. Turrentine and Hildebrandt, William	Prepared for US Army Corps of Engineers Sacramento District. Prepared by Jackson Research Projects	-	Monterey Presidio	Mo	-
18370	-	Out	Cultural Resources Overview, Presidio of Monterey, Monterey, California	1985	N/I	Prepared for Department of the Army Corps of Engineers Sacramento District by Jackson Research Projects, Far Western Anthropological Research Group, Inc. and Robert Mackensen, Consulting Architect	-	Monterey Presidio	Mo	No location map, See also S-17788
18372	-	?	A Cultural Resources Survey of 783 Hectares, Fort Ord, Monterey County, California	1995	Waite, Philip	Prepared for Tri-Services Cultural Resources Research Center Construction Engineering Research Laboratory. Prepared by Geo-Marine, Inc.	783 hectares	CA-MNT-3, -416, and -1731H	N/I	On Fort Ord
18822	-	Out	Secondary Archaeological Testing for the Proposed Lighthouse Curve Widening, Monterey, Monterey County, California	1996	Breschini, Gary and Haversat, Trudy	Prepared for City of Monterey, Public Works Department by Archaeological Consulting	-	CA-MNT-101	Mo	Poor location map
19616	-	Out	Correspondance about Lighthouse Curve Widening Project Environmental Impact Report	1997	Breschini, Gary	Prepared for Carole Samuelson, City of Monterey by Archaeological Consulting	-	CA-MNT-101, -101b	Mo	No map
20585	-	Out	Cultural Resource Assessment Pacific Bell Mobile Services Facility SF-813-02 Monterey, Monterey County, California	1998	Price, Barry A.	Prepared for Pacific Bell Mobile Services by Applied Earth Works Inc.	-	MNT-296H, -939H, -1243/H	Mo	-
20607	-	Out	Correspondance, "Cultural Resources Assessment, Pacific Bell Mobile Services Facility SF-883-02 Marina, Monterey County, California	1998	Price, Barry A.	Prepared for Heather Angelica, Pacific Bell Mobile Services by Applied Earth Works, Inc.	-	None	Ma	-
20626	-	Out	Review of Historic Resources for Site SF754-01, New Monopole at 1st Ave. and 2nd St., Fort Ord, Monterey County, CA	1998	Psota, Sunshine	Prepared for Ms. Kochian, Vertex Engineering Services, Inc. by Anthropological Studies Center Sonoma State University	-	N/I	N/I	No map
21995	-	In	Preliminary Archaeological Report for a Shipwreck Site on Monterey Beach, Monterey, Monterey County, California	1999	Breschini, Gary S; Haversat, Trudy; Seavey, Kent; Fordham, Tom	Prepared for Tracy Martin, City of Monterey by Archaeological Consulting	-	Shipwreck- not formally recorded	Mo	-

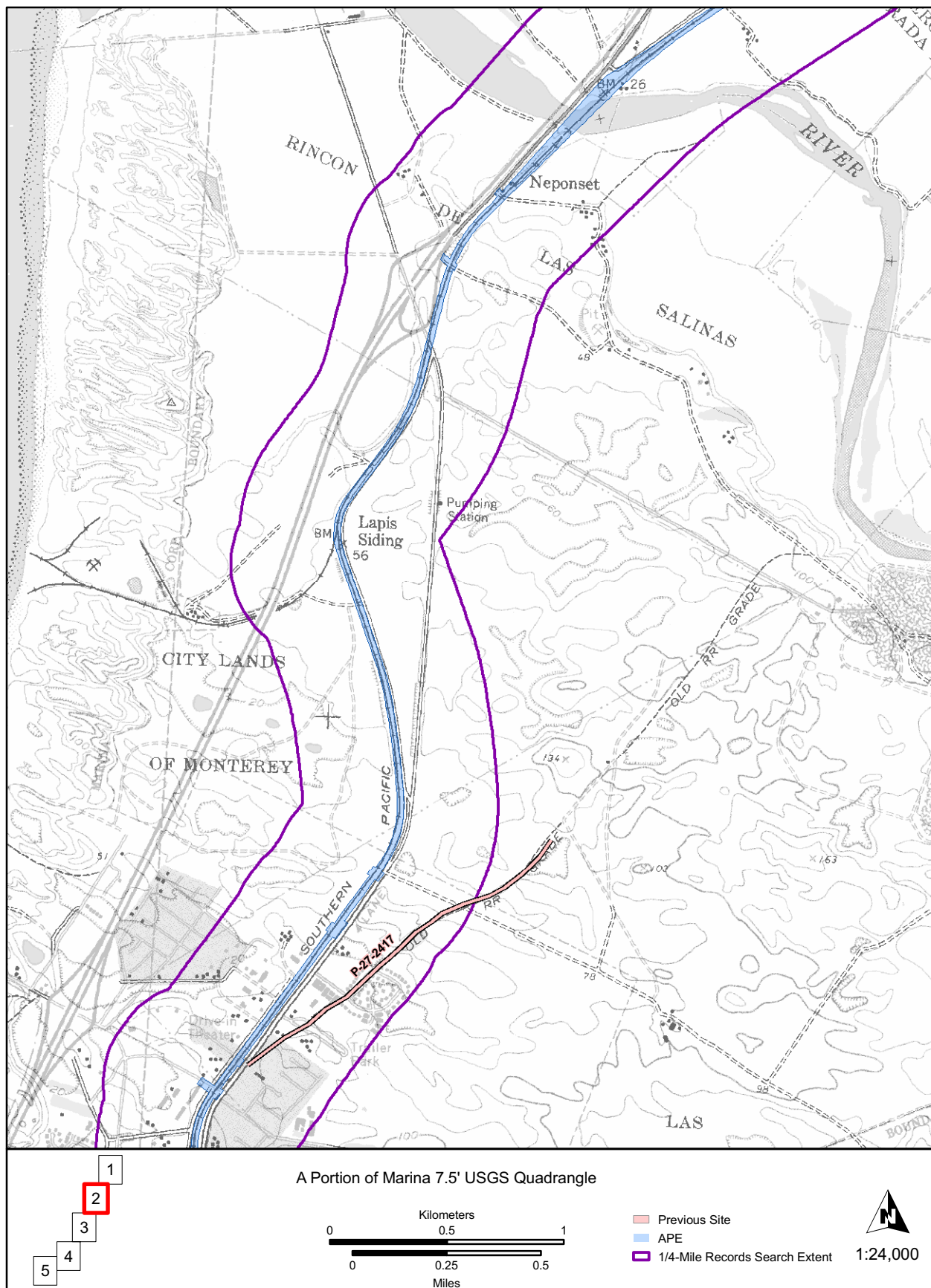
Appendix A - Records Search Results, Studies

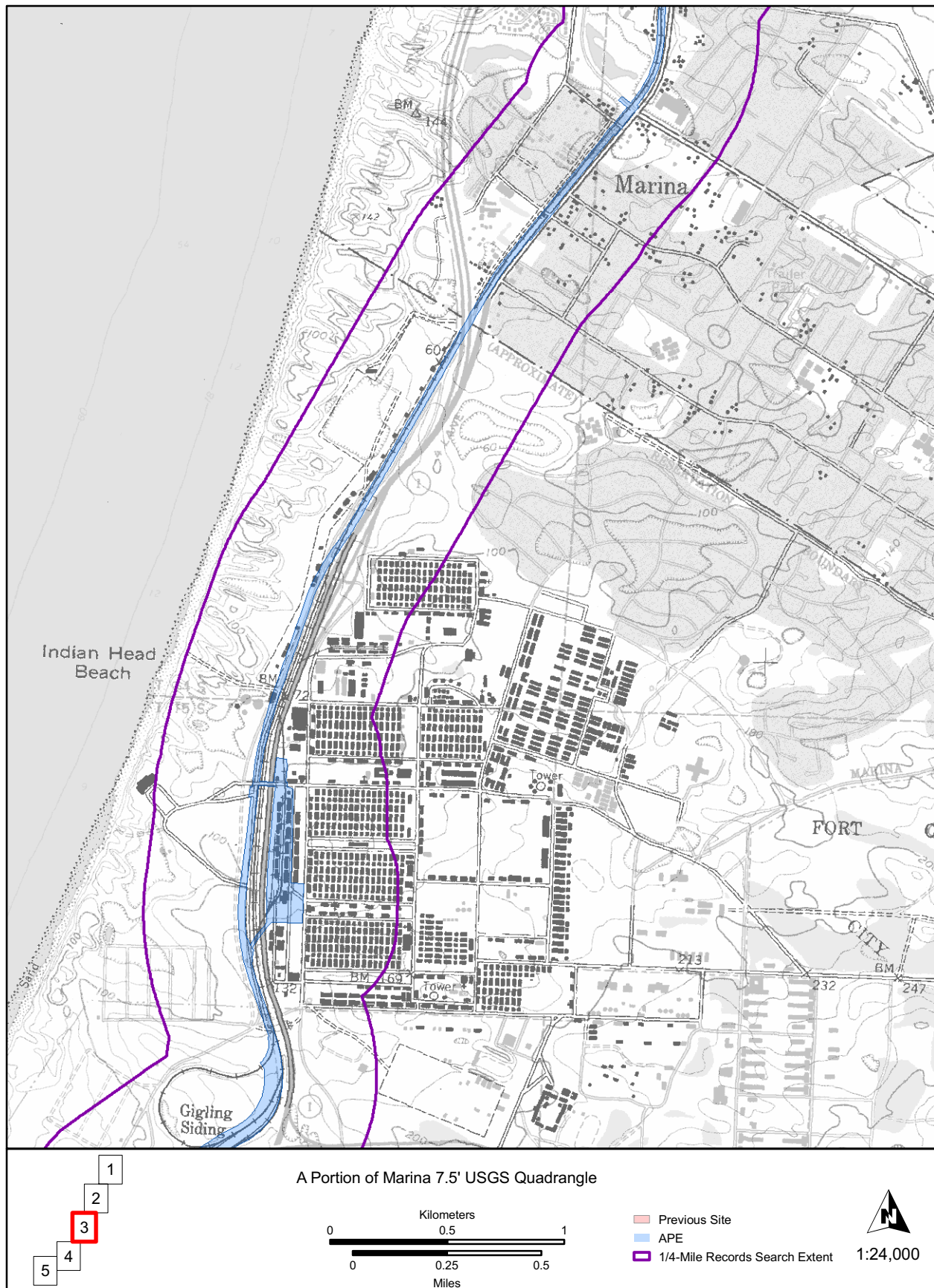
Study S-	E-#	In APE	Title	Date	Author(s)	Comments	Study Size	Site(s)	Quad(s)	Notes
22329	-	In	Negative Archaeological Survey Report " Caltrans in cooperation with the Federal Highway Administration proposes to replace portions of the Right of Way fence on State Route 1 in Seaside and Sand City	1999	Joslin, Terry and Wilson, Kelda	Prepared by Caltrans District 5.	-	None	Ss and Ma	-
22396	-	Out	Preliminary Archaeological Reconnaissance for Assessor's Parcel Number 030-255-020, Castroville, Monterey County, California	1999	Doane, Mary and Haversat, Trudy	Prepared for Ben Tiscareno, ADD Design by Archaeological Consulting	1acre	None	Pd	-
22537	-	In	Negative Archaeological Survey Reoprt " Caltrans in cooperation with the Federal Highway Administration proposes to place an asphalt concrete overlay on the Class 1 Bike Path on State Route 1 in Seaside and Marina, Monterey County	2000	Wilson, Kelda	Prepared by Caltrans District 5.	-	None	Ma	-
22657	-	?	Archaeological Survey Along Onshore Portions of the Global West Fiber Optic Cable Project	2000	Sawyer, Izaak; Pfeiffer, Laurie; Rasmussen, Karen; Berryman, Judy	Prepared by Science International Corporation	-	CA-MNT-228, -229, -731, -1365, -1382/H, -1462/H; CA-SCL-448/H; CA-SCR-153, -154, -172; P-41-000410	Ma	Report missing from NWIC
22764	-	In	Preliminary Archaeological Reconnaissance for Phase III of the Windows on the Bay Project, Assessor's Parcels 001-801-006, -13, -018, & -019, in Monterey, Monterey County, California	2000	Doanne, Mary; Haversat, Trudy	Prepared for City of Monterey Community Development	2 acres	none	Mo	-
24541	-	Out	Correspondance for Monitoring of 4 Well Instalations Church St. and San Carlos School yard. Project AC 3101	2001	Doane, Mary	Prepared for Sara Dwight Cambria Environmental. Prepared by Arcaeological Consulting	-	N/I	Mo	-
24589	-	In	Archaeological Literature Search and Survey for the Catellus Property Project, City of Monterey, Monterey County	2002	Sutch, Cordelia; Holson, John	Prepared for Monterey Planning Department by Pacific Legacy Inc.	-	-	Mo	-
25075	-	In	Archaeological Survey and Record Search Results for the Window on the Bay Project, City of Monterey, Monterey County, California	2002	Goodrich, Jonathan; Holson, John; Jackson, Thomas	Prepared for Monterey Planning Department by Pacific Legacy	-	-	Mo	-
25076	-	Out	Archaeological Lterature Search and Survey for the Lower Presidio Trail Project, City of Monterey, Monterey County	2001	Sutch, Cordelia; Holson, John	Prepared for Monterey Planning Department by Pacific Legacy Inc.	-	-	Mo	-
25440	-	?	Preliminary Archaeological Reconnaissance for the Assessor's Parcel 001-692-010, in Monterey, Monterey County, California	2002	Doane, Mary; Breschini, Gary S.	Prepared for Anthony Davi Jr. by Archaeological Consulting	1 acre	None	Mo	-
27285	-	Out	Request for SHPO Review of FCC Undertaking	2003	Billiat, Scott	Prepared for Blaine Wafford, Nextel of California. Prepared by Earth Tech Inc.	-	None	Ma	Within S-9489
28012	-	?	"Cultural Resources Assessment - Three Inundation Areas Fort Ord Reuse Authroity, Monterey County, California"	2002	N/I	Prepared for Tad Stern, Pacific Municipal Consultants by Basin Research Associates.	50 acres	N/I	Ma	No map
28066	-	Out	Correspondance for Monitoring of 4 Well Installations Church St. and San Carlos School yard. Project AC 3101	2001	Doane, Mary	Prepared for Sara Dwight Cambria Environmental. Prepared by Arcaeological Consulting	-	None	Mo	-
29340	-	Out	Environmental Assessment for the Investigation of the Former Motor Pool Presidio of Monterey, Monterey, California	1999	Mitchell, Glen	Prepared for U.S. Department of the Army, Commander, DLIFLC and POM by U.S. Army Corps of Engineers Sacramento District	-	N/I	Mo	No map, general area is the Presidio. See Also S-29341
29341	-	Out	Assessment of Potential Impacts to Cultural Resources, Presidio of Monterey Former Motor Pool Potential Soil Contamination	1997	Jackson, Thomas	Prepared for Harding Lawson Associates by Pacific Legacy, Inc.	-	CA-MNT-101	Mo	See also S-29340

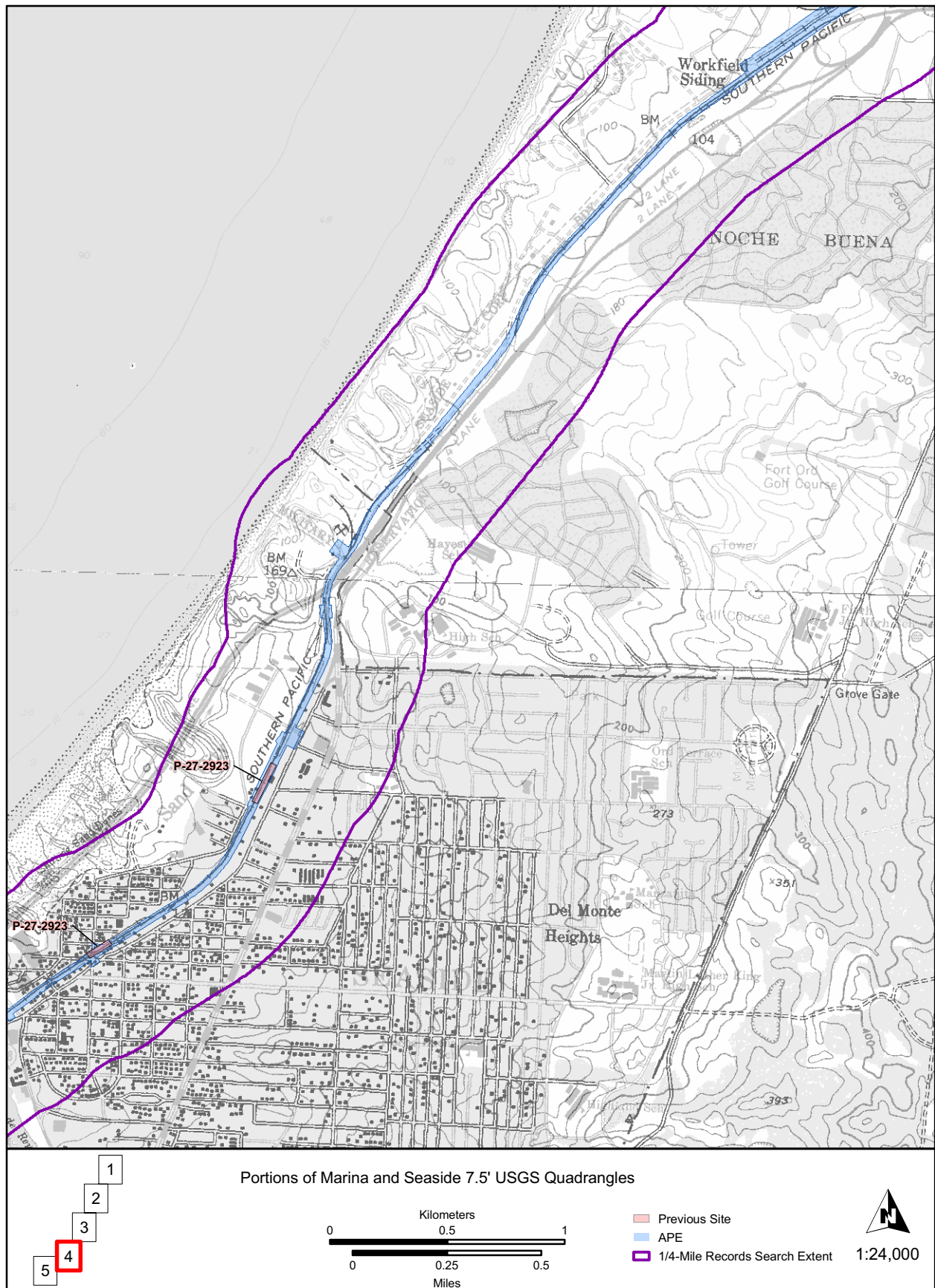
Appendix A - Records Search Results, Studies

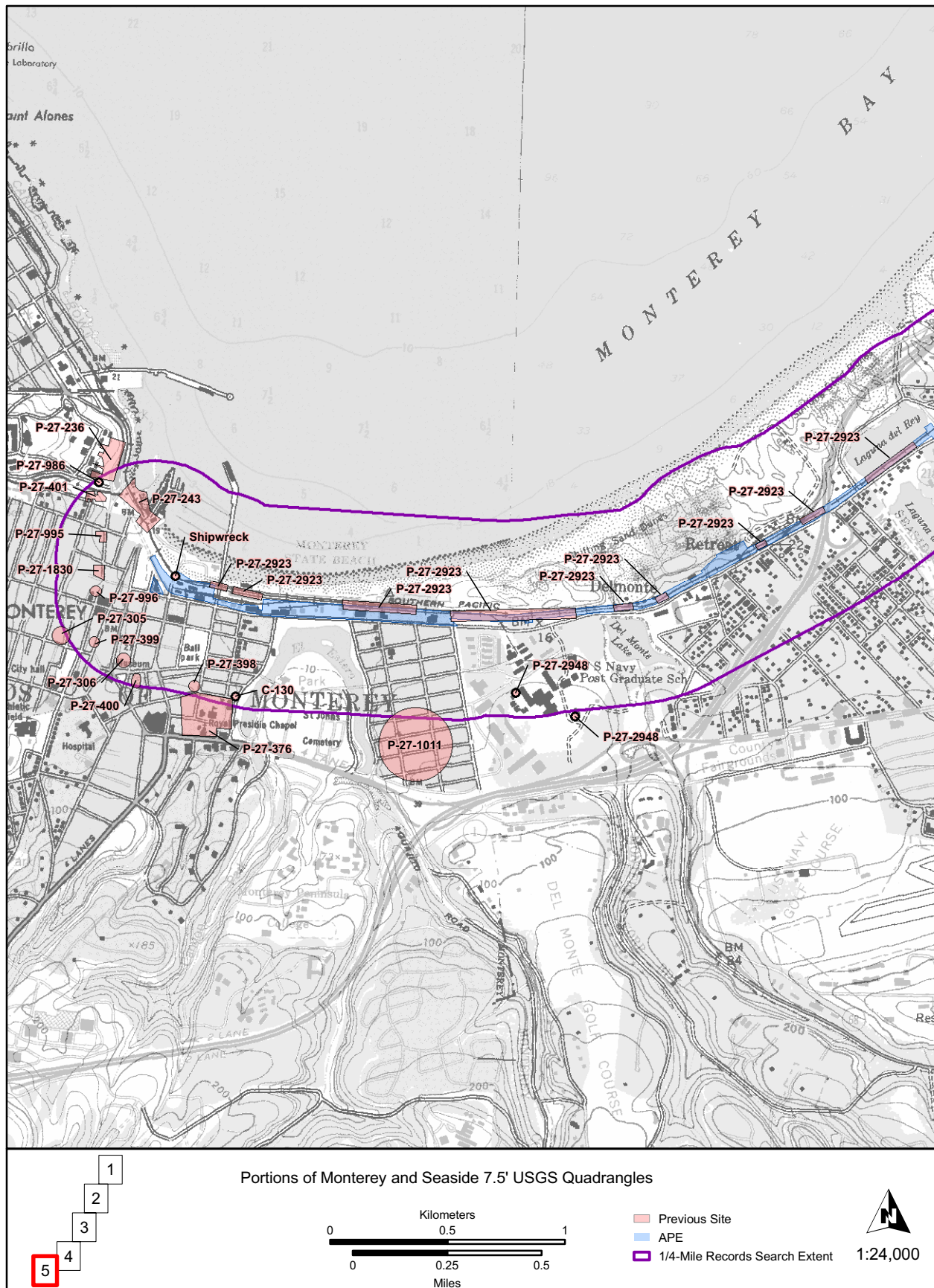
Study S-	E-#	In APE	Title	Date	Author(s)	Comments	Study Size	Site(s)	Quad(s)	Notes
29473	-	Out	Review of Historic Resources for Site SF-754-04, Pole Mount on Corregidor Road Behind Unit #156, Fort Ord, Monterey County, CA. (Vertex Project #2513, PO# 1131, ASC #50001 77/00)	2000	Newland, Michael	Prepared for Laurie Kochian, Vertex Engineering Services, Inc. by Anthropological Studies Center Sonoma State University	-	None	Ma	-
29932	-	In	Archaeological Survey Report on the University Villages Specific Plan, 390 Acre Project Area, at Former Fort Ord, Monterey County, California	2004	Darcangelo, Michael and Leach-Palm, Laura	Prepared for the City of Marina by Far Western Anthropological Research Group, Inc.	390 acres	None	Ma	-
30350	-	In	Preliminary Archaeological Reconnaissance for the Twin Bridges Cabin Owners Association Wastewater Treatment Project, Assessor's Parcel 229-011-012 in Rural Monterey County, California	2005	Doane, Mary; Breschini, Gary	Prepared for Twin Bridges Cabin Owners Association by Archaeological Consulting	2 acres	None	Ma	-
30517	-	Out	Correspondance for "Archaeological Monitoring of Construction Activities at Church Street, Monterey, California"	2005	Blind, Heather	Prepared for Elmira Morala- Comacho City of Monterey Department of Construction Management	-	N/I	Mo	Near the Presidio
30789	-	?	-	-	-	-	-	-	Mo	-
30832	-	In	Preliminary Archaeological Archival Research for the Marina Station Project, in Marina, Monterey County, California	2005	Doane, Mary and Breschini, Gary	Prepared for Denise Duffy and Associates and City of Marina by Archaeological Consulting	300 acres	CA-MNT-2080H	Ma	See also S-31328 and S-31346
31346	-	In	Preliminary Archaeological Reconnaissance for the Marina Station Project, in Marina, Monterey County, California	2006	Doane, Mary; Breschini, Gary	Prepared for Creekbridge Homes by Archaeological Consulting.	300 acres	CA-MNT-2080H	Ma	See also S-30832 and S-31328
32920	-	In	Correspondance, "Marina Station Cultural Resource P-27-2417 (CA-MNT-2080H)"	2006	Breschini, Gary	Prepared for Leianne Humble, Denise Duffy and Associates by Arcaeological Consulting	300 acres	CA-MNT-2080H	Ma	See also 30832, S-31328, and S-31346
70323(?)	-	?	-	-	-	-	-	-	Mo	-
10323(?)	-	?	-	-	-	-	-	-	Mo	-
Notes: A question mark (?) indicates the mapping was unclear on the base map and the maps provided in the reports were either vague or not present. Quads: Ma - Marina; ML - Moss Landing; Mo - Monterey; Pd - Prunedale; Sa- Salinas; Ss - Seaside										











APPENDIX B

NATIVE AMERICAN CONSULTATION

Sacred Lands File & Native American Contacts List Request

NATIVE AMERICAN HERITAGE COMMISSION

915 Capitol Mall, RM 364

Sacramento, CA 95814

(916) 653-4082

(916) 657-5390 – Fax

nahc@pacbell.net

Information Below is Required for a Sacred Lands File Search

Project: Monterey Peninsula Light Rail Transit Project

County Monterey

USGS Quadrangles:

Name Monterey, Seaside, Marina, Salinas, Prunedale

Township 13S Range 2E Section(s) 33, 34

Township 14S Range 1E Section(s) 24, 25, 35, and 36

Township 14S Range 2E Section(s) 4, 5, 7, 8, 18, and 19

Township 15S Range 1E Section(s) 1, 2, 10, 11, 15, 19, 21, 22, 28, 29, and 30

Company/Firm/Agency: Far Western Anthropological Research Group, Inc.

Contact Person: Allika Ruby

Street Address: 2727 Del Rio Place

City: Davis, CA Zip: 95618

Phone: 530-756-3941

Fax: 530-756-0811

Email: allika@farwestern.com

Project Description:

The Transportation Agency for Monterey County (TAMC) is proposing to restore 15.2 miles of passenger rail service along the existing Monterey Branch Line rail right-of-way from Castroville to downtown Monterey.



FAR WESTERN
ANTHROPOLOGICAL RESEARCH GROUP, INC.

January 25, 2010

Larry Myers
Executive Secretary
Native American Heritage Commission
915 Capitol Mall, Room 364
Sacramento, CA 95814
FAX: 916-657-5390 -- sent via fax and email

Re: Request for Sacred Land Inventory Search and Native American Contact Names and Addresses,
Monterey Peninsula Light Rail Transit Project

Dear Mr. Myers,

The Transportation Agency for Monterey County (TAMC) is proposing to restore 15.2 miles of passenger rail service along the existing Monterey Branch Line rail right-of-way from Castroville to downtown Monterey. The proposed project is financed with Local, State, and Federal funds and compliance is required with Section 106 of the National Historic Preservation Act; although the project is exempt from California Environmental Quality Act (CEQA) review per Section 21080(b)(11) of the Public Resources Code, TAMC has committed to undertake this analysis as well.

The project area is in Monterey County, and is outlined in blue on the enclosed copy of portions of Monterey, Seaside, Marina, Salinas, and Prunedale 7.5 minute U.S.G.S. quadrangles in California. The project area is within land grant areas of Bolsa del Potrero y Moro Cojo Or La Sagrada Familia, Bolsa Nueva Moro Cojo, Las Salinas, Noche Buena, and Rincon de las Salinas. The projected legal land description of the project area is:

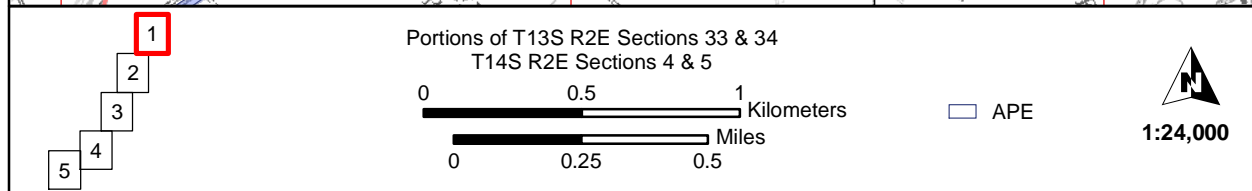
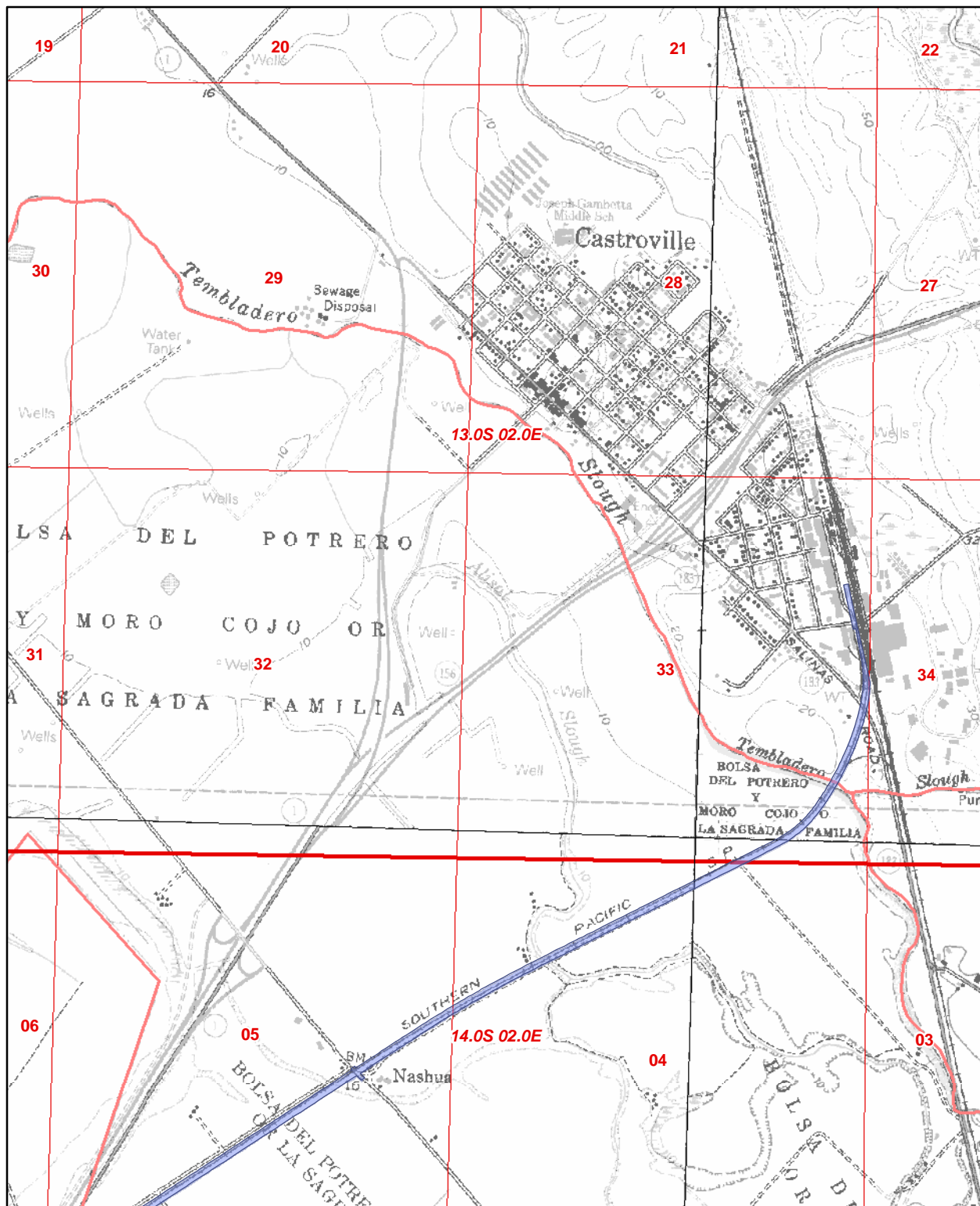
Mount Diablo Base Meridian
T13S, R2E, Sections 33 and 34
T14S, R1E, Sections 24, 25, 35 and 36
T14S, R2E, Sections 4, 5, 7, 8, 18, and 19
T15S, R1E, Sections 1, 2, 10, 11, 15, 19, 21, 22, 28, 29, and 30

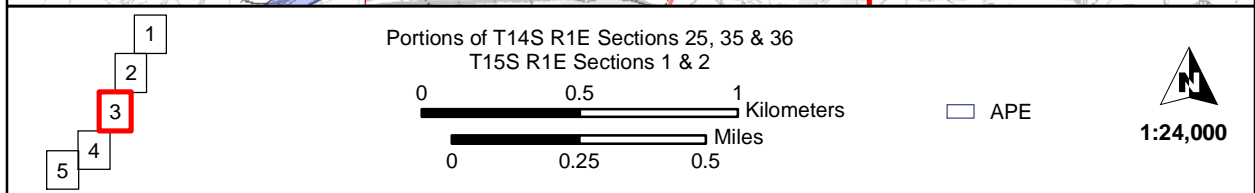
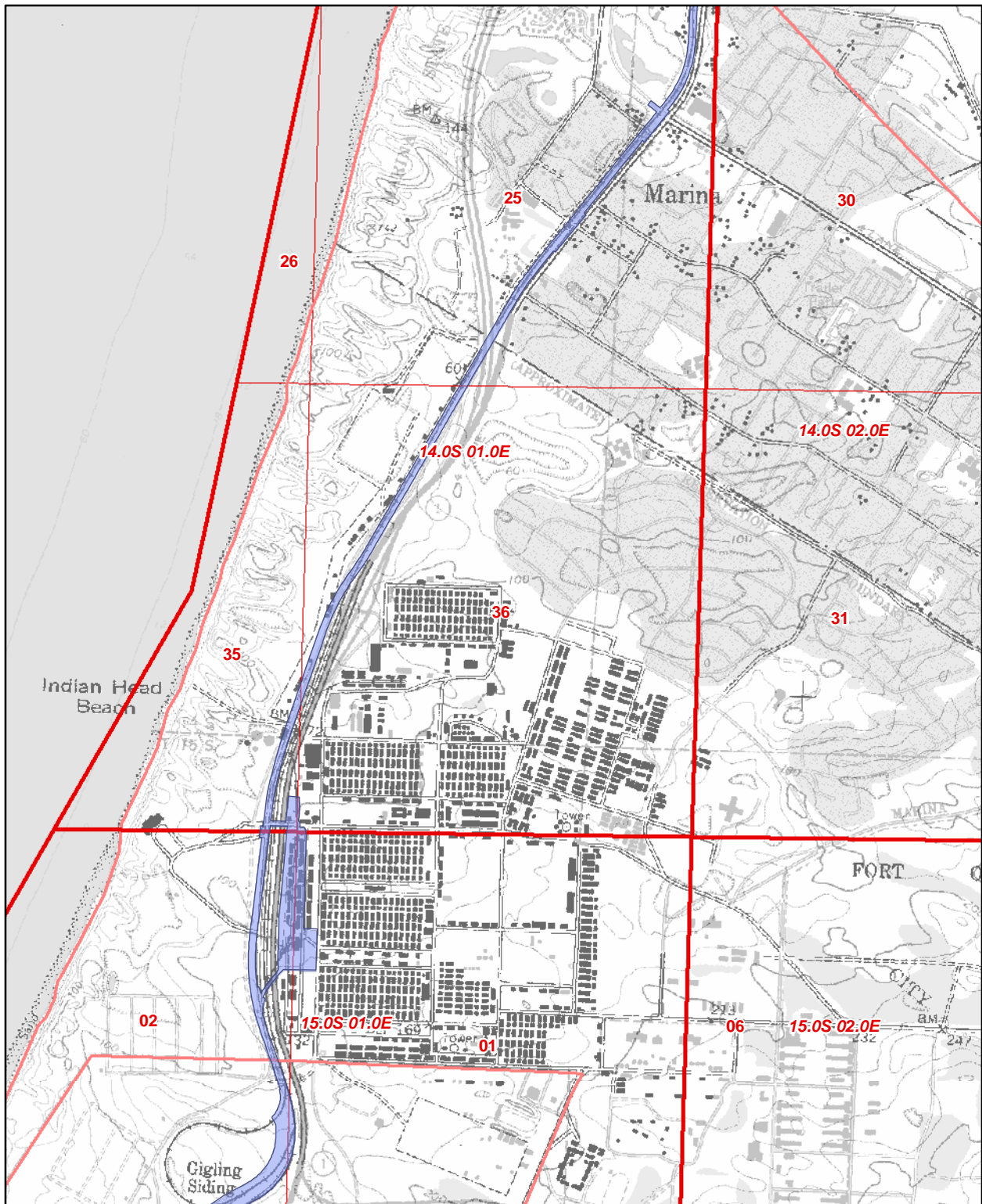
For the project, TAMC has contracted Parsons and Far Western Anthropological Research Group, Inc. to conduct consultations with the Native American community and complete a records search. To start our investigation, we are consulting with you to determine if there have been sites plotted on the Sacred Lands File or if there are any other sensitive areas about which you have knowledge. Please also provide a list of native people who may have information about the project locations.

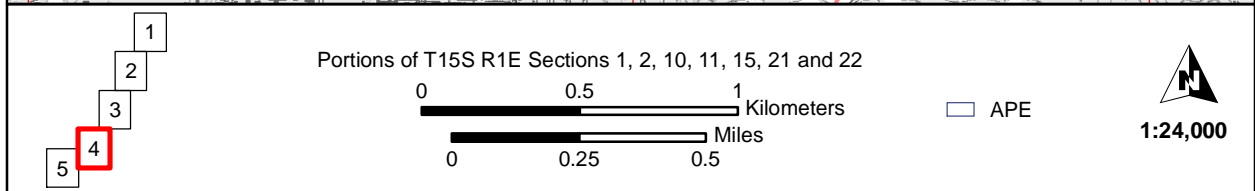
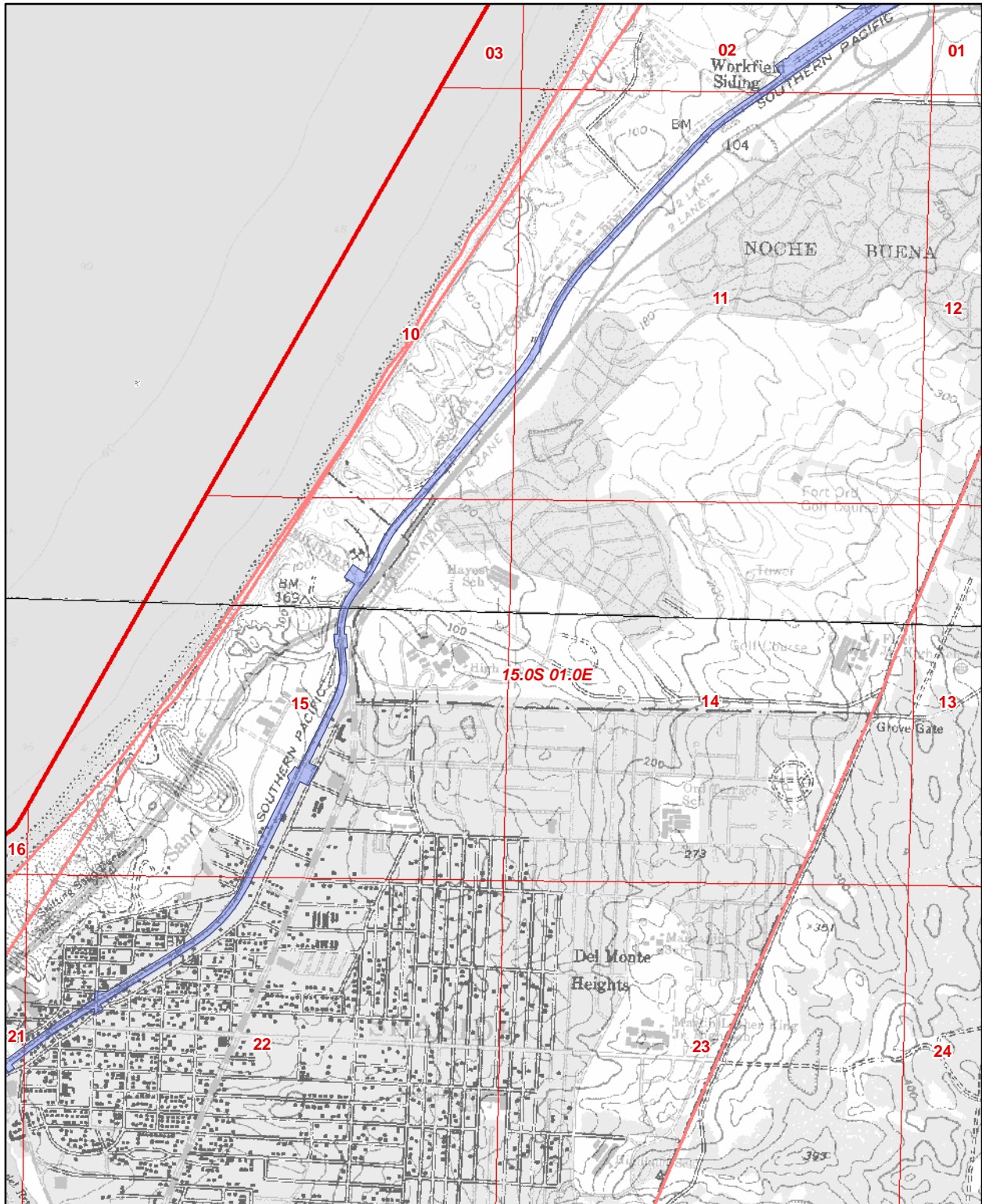
If you have any questions please do not hesitate to contact me at (530) 756-3941 or allika@farwestern.com. Thank you for your assistance.

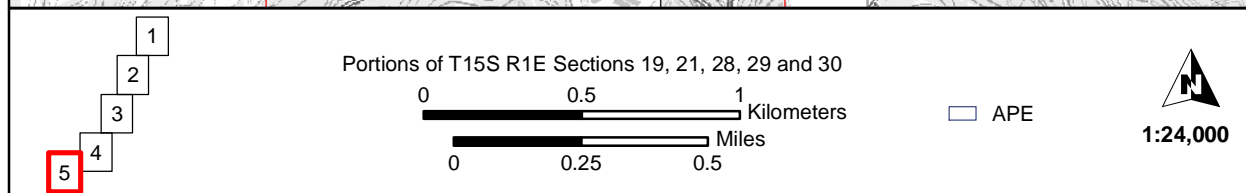
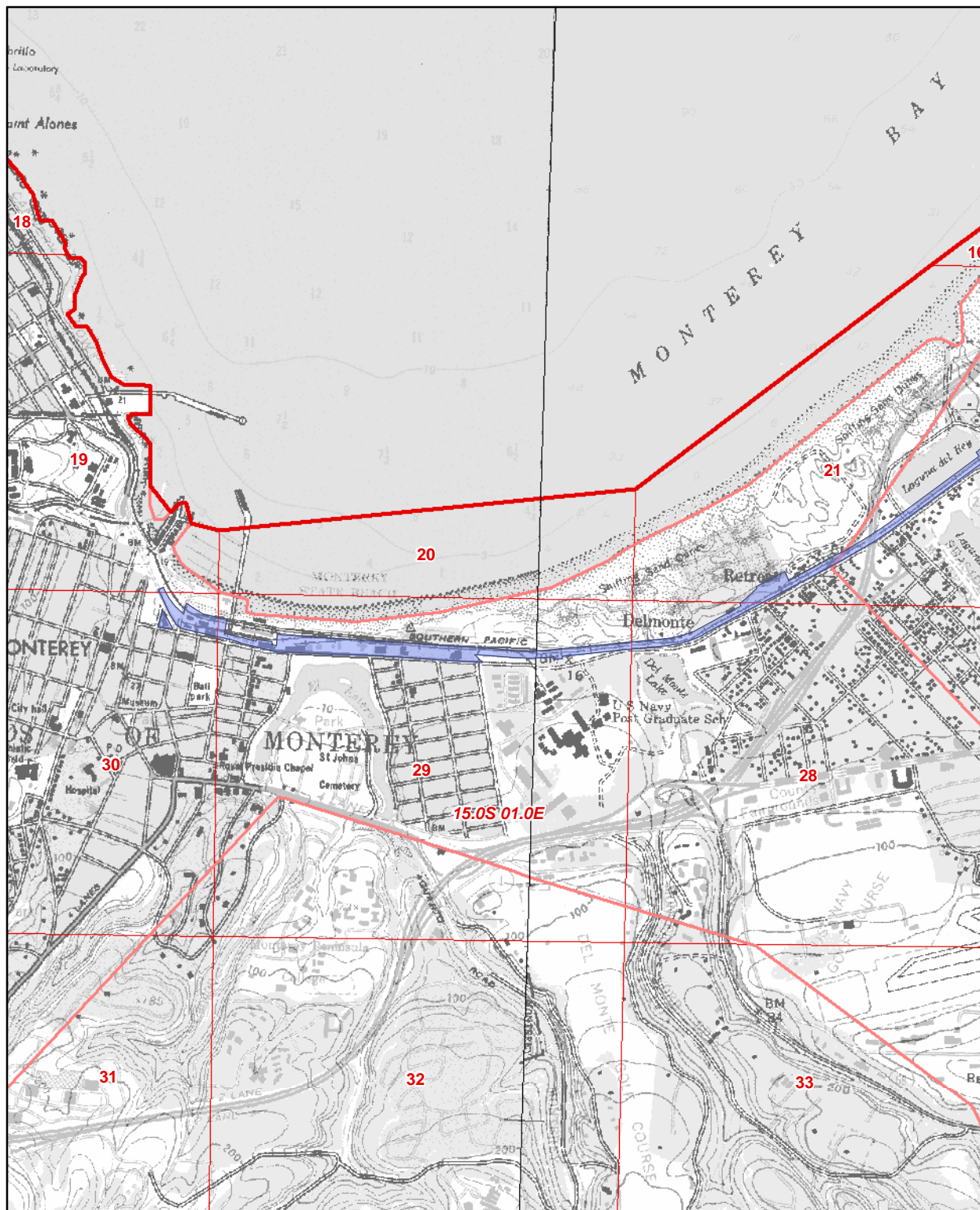
Sincerely,

Allika Ruby
Senior Archaeologist
Encl.: maps (n=5)









STATE OF CALIFORNIA

Arnold Schwarzenegger, Governor

**NATIVE AMERICAN HERITAGE
COMMISSION**

915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-4082
Fax (916) 657-5390



January 20, 2010

Allika Ruby
FAR WESTERN ANTHROPOLOGICAL RESEARCH GROUP, INC
2727 Del Rio Place
Davis, CA 95618

Sent by Fax: 530-756-0811
Number of Pages: 3

Re: Proposed Monterey Peninsula Light Rail Transit Project; Monterey County.

Dear Ms. Ruby:

A record search of the sacred lands 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. 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) 653-4040.

Sincerely,

Katy Sanchez
Program Analyst

Native American Contact
Monterey County
January 26, 2010

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

Ohlone/Costanoan
Northern Valley Yokuts

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

Ohlone/Costanoan

Amah/Mutsun Tribal Band
Joseph Mondragon, Tribal Administrator
882 Bay view Avenue
Pacific Grove, CA 94062
831-372-9015
831-372-7078 - fax

Ohlone/Costanoan

Amah/Mutsun Tribal Band
Melvin Ketchum III, Environmental Coordinator
7273 Rosanna Street
Gilroy , CA 95020
408-842-3220

Ohlone/Costanoan

Ohlone/Coastanoan-Esselen Nation
Pauline Martinez-Arias, Tribal Council woman
1116 Merlot Way
Gonzales , CA 93926
831-596-9897

Esselen
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 Monterey Peninsula Light Rail Transit Project; Monterey County.

Native American Contact
Monterey County
January 26, 2010

Indian Canyon Mutsun Band of Costanoan
Ann Marie Sayers, Chairperson
P.O. Box 28 Ohlone/Costanoan
Hollister , CA 95024
ams@garlic.com
831-637-4238

Trina Marine Ruano Family
Ramona Garibay, Representative
16010 Halmar Lane Ohlone/Costanoan
Lathrop , CA 95330
soaprootmo@msn.com Bay Miwok
209-629-8619 Plains Miwok
Patwin

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

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

Coastanoan Rumsen Carmel Tribe
Tony Cerda, Chairperson
3929 Riverside Drive Ohlone/Costanoan
Chino , CA 91710
(909) 622-1564
(909) 464-2074

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

Ohlone/Coastanoan-Esselen Nation
Louise Miranda-Ramirez, Chairperson
PO Box 1301 Esselen
Monterey , CA 93942 Ohlone/Costanoan
408-629-5189
408-205-7579 - cell

Ohlone/Coastanoan-Esselen Nation
Christianne Arias, Vice Chairperson
PO Box 552 Esselen
Soledad , CA 93960 Ohlone/Costanoan
831-235-4590

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 Monterey Peninsula Light Rail Transit Project; Monterey County.



FAR WESTERN

ANTHROPOLOGICAL RESEARCH GROUP, INC.

February 2, 2010

<ORGANIZATION>

<NAME>

<ADDRESS>

Re: Cultural Resources Inventory for the Monterey Peninsula Light Rail Transit Project.

Dear <NAME>

This letter is to let you know about an upcoming cultural resources project, and to ask you for any information or issues about the project area you believe should be considered. The Transportation Agency for Monterey County is proposing to restore 15.2 miles of passenger rail service along the existing Monterey Branch Line rail right-of-way from Castroville to downtown Monterey. The proposed project is funded with local, state, and federal funds and compliance is required with Section 106 of the National Historic Preservation Act. Although the project is exempt from California Environmental Quality Act (CEQA) review, per Section 21080(b)(11) of the Public Resources Code, the Transportation Agency for Monterey County will comply with CEQA guidelines.

The project area is in Monterey County and is marked on the enclosed map. The project corridor crosses through portions of five landgrants and can be located on the 7.5 minute USGS quadrangles of Monterey, Marina, Seaside, Salinas, and Prunedale, California. The projected legal land description for the project is: T13S, R2E Sections 33 and 34; T14S, R1E Sections 24, 25, 35, and 36; T14S, R2E Sections 4, 5, 7, 8, 18, and 19; T15S R1E Sections 1, 2, 10, 11, 15, 19, 22, 28, 29, and 30.

For the project, the Transportation Agency for Monterey County has contracted with Far Western Anthropological Research Group, Inc. (Far Western) as a subconsultant to Parsons, to conduct consultations with the Native American community, complete a records search, perform a pedestrian survey, and document the findings.

In response to our inquiry, the Native American Heritage Commission states that the Sacred Lands file does not indicate cultural resources in the immediate project area. The Commission cautions, however, that the lack of recorded resources does not mean they are absent in the project area.

Far Western requested a record search at the Northwest Information Center, Sonoma State University, Rohnert Park. It revealed that portions of four previously recorded archaeological sites may be within the project area. Two reportedly contain habitation debris (midden soil, shellfish, flaked stone debris) from the prehistoric era, both located just south of Castroville. The



other two recorded sites are both portions of a historic railroad alignment within Monterey and Marina.

There are at least five other prehistoric archaeological sites reported in the vicinity but outside the project area; all five are within the downtown Monterey area. These sites are prehistoric coastal occupations containing habitation debris; human remains have been reported from at least two of them.

The records search also indicates there are several historic buildings and monuments in the vicinity of the project area, including the National Register-listed El Castillo, part of the Spanish-era Presidio. There are also four Spanish- or Mexican-era adobes or adobe remains that were identified near the project area.

As part of this study, we would like to know if there is any information you think we should consider in our project planning. If you know of any cultural resource issues in or adjacent to the project area, please contact us at your earliest convenience. If we do not hear from you by March 3, we will assume that you have no concerns to communicate.

You can reach me at (530) 756-3941 or by email at allika@farwestern.com. We appreciate your attention and any information you wish to share.

Sincerely,

Allika Ruby
Senior Archaeologist

Encl. 3 maps





Map 2 of 3



Map 3 of 3

Ohlone/Costanoan Esselen Nation



*Previously acknowledged as
The San Carlos Band of
Mission Indians
The Monterey Band
And also known as
O.C.E.N. or Esselen Nation
P.O. Box 1301
Monterey, CA 93942*

www.ohlonecostanoanesselenation.org

February 15, 2010

Allika Ruby
Far Western
2727 Del Rio Place, Suite A
Davis, CA 95618

Re: Cultural Resources Inventory for the Monterey Peninsula Light Rail Transit Project

Saleki Atsa,

I am the Tribal Chairperson for the Ohlone Costanoan Esselen Nation. I also represent the tribe to the Native American Heritage Commission and I act as the Most Likely Descendant for OCEN. As Most Likely Descendant I represent the OCEN Tribal Council's decisions regarding the treatment of ancestral Native American human remains and/or cultural resources that are often disturbed or encountered. I am the legal spokesperson for the OCEN Tribe and the Tribal Council. I may also be contacted for information for consultation, and reviewing planned projects for potential adverse impacts and reviewing predictive models that might negatively impact our Tribe's ancestral cemeteries, villages, ceremonial and processing sites.

Included with this letter please find a territorial map by Taylor 1856; Levy 1973; and Milliken 1990, indentifying Tribal areas. Ohlone/Costanoan Esselen Nation is the legal tribal government representative for over 600 enrolled members of Esselen, Carmeleno, Monterey Band, Rumsen, Chalon, San Carlos Mission and/or Costanoan Mission Indian descent. Though other indigenous people may have lived in the area, the area is the indigenous homeland of our people.

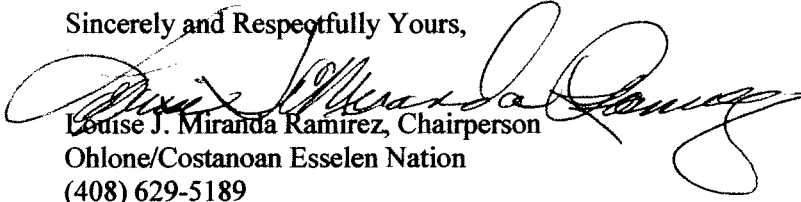
We ask that a sacred lands search with the Northwest Information Center, Sonoma State University. Ms. Leigh Jordan can be contacted at (707) 664-0880 or leigh.jordan@sonoma.edu and the Native American Heritage Commission in Sacramento, CA. At this time we are unable to provide you with cultural resource information but ask that OCEN be contacted upon any findings on this project.

Please be advised that it is our first priority that our ancestor's remains be protected and undisturbed. We desire that all cultural and sacred items be left with our ancestors on site or where they are discovered. We ask for the respect that is afforded all of our current day deceased, by no other word these burial sites are cemeteries, respect for our ancestors as you would expect respect for your deceased family members in today's cemeteries. **Our definition of respect is no disturbance.**

We request that Ohlone/Costanoan-Esselen Nation be consulted as to any planned projects that might adversely impact known or predicted cultural resources and sacred sites within our aboriginal territory. Furthermore, the Tribal leadership desires to be contacted about which archaeological consultants are selected to conduct: 1) surveys, 2) subsurface testing, 3) presence/absence testing, 4) mitigation and recovery programs, 5) reburial of any of our ancestral remains, 6) placement of all cultural items, and 7) that a Native American Monitor of OCEN, approved by the Tribal Council be used within our aboriginal territory.

We seek to be partners with your firm in the protection of our sacred sites. We look forward to hearing from you so we can set up a meeting to discuss how we may best do so.
Nimasianexelpasaleki. Thank you for your attention to this matter.

Sincerely and Respectfully Yours,



Louise J. Miranda Ramirez, Chairperson
Ohlone/Costanoan Esselen Nation
(408) 629-5189

Cc: OCEN Tribal Council
Far Western Anthropological Research
Group File

Distribution of Ohlone/Costanoan-Esselen Nation Tribal Rancherías, Districts, Landgrants and Historic Landmarks

OCEN DIRECT LINEAL DESCENT

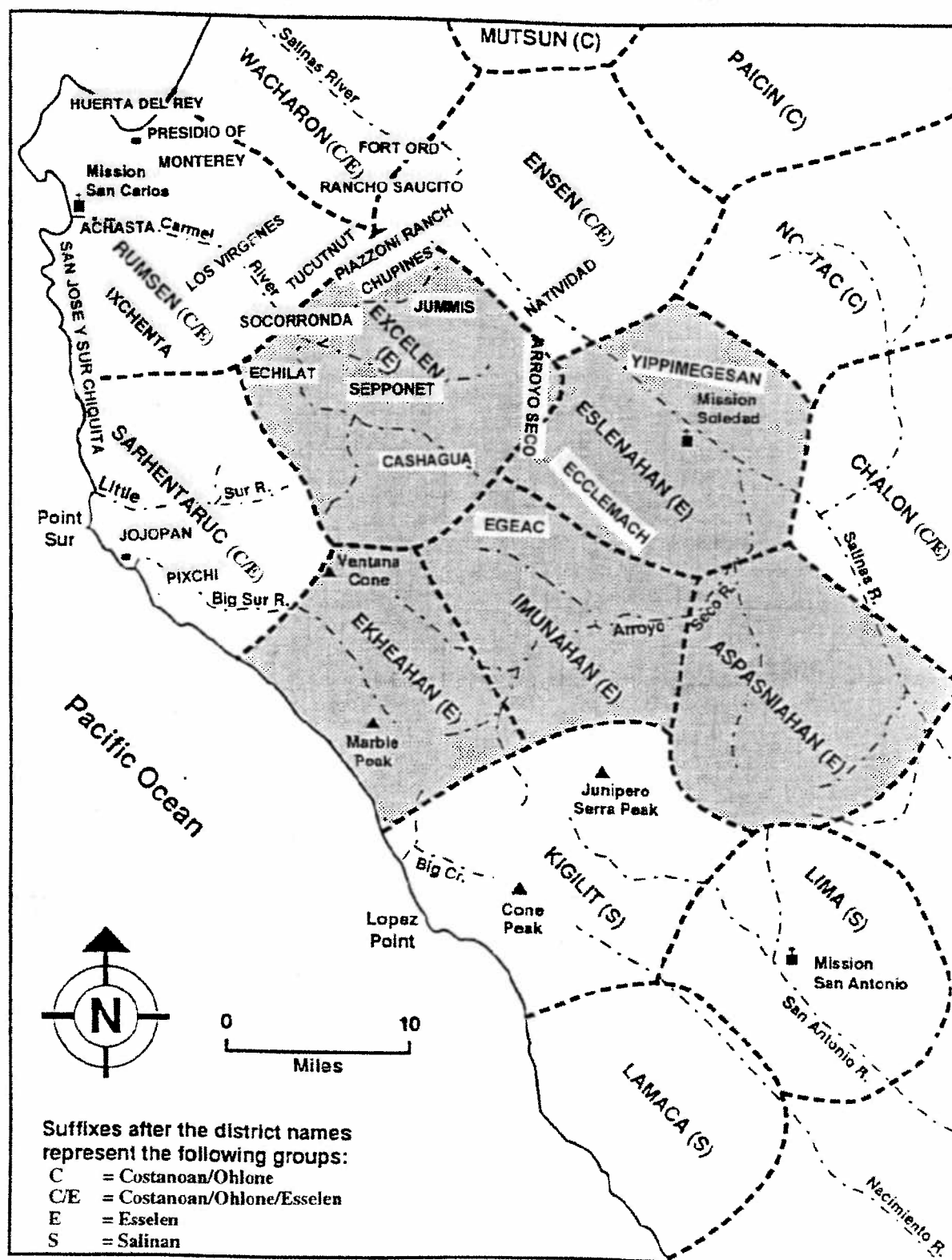


Figure 2:

Map after Taylor 1856; Levy 1973; Hester 1978; Milliken 1990

Native American Consultation Tracking Sheet

Individual Contact	Title	Group	Affiliation	Date of Letter	Date of Email	Date of Phone Call	Time	Action	Response
Edward Ketchum	-	Amah/Mutsun Tribal Band	Ohlone/Costanoan, Northern Valley Yokuts	2/2/2010	2/17/2010	n/a	-	-	no phone number
Joseph Mondragon	Tribal Administrator	Amah/Mutsun Tribal Band	Ohlone/Costanoan	2/2/2010	n/a	2/17/2010	1:19	-	number has been disconnected; no forwarding number provided
Melvin Ketchum III	Environmental Coordinator	Amah/Mutsun Tribal Band	Ohlone/Costanoan	2/2/2010	n/a	2/17/202	1:17	left voice message	
Pauline Martinez-Arias	Tribal Councilwoman	Ohlone/Coastanoan-Esselen Nation	Ohlone/Costanoan, Esselen	2/2/2010	n/a	2/17/2010	1:22	-	echoed concerns by Chairperson Ramirez (see below)
Jean-Marie Feyling	-	Amah/Mutsun Tribal Band	Ohlone/Costanoan	2/2/2010	-	2/17/2010	1:30	-	recommends monitoring in areas near Castroville where sloughs are located
Ann Marie Sayers	Chairperson	Indian Canyon Mutsun Band of Costanoan	Ohlone/Costanoan	2/2/2010	2/16/2010	2/16/2020	1:45	see sheet 2	Emailed requested information
Jakki Kehl	-	-	Ohlone/Costanoan	2/2/2010	2/16/2010	2/16/2020	4:10	-	phone rang without going to voicemail
Tony Cerda	Chairperson	Coastanoan Rumsen Carmel Tribe	Ohlone/Costanoan	2/2/2010	n/a	2/16/2020	4:13	-	letter returned as not deliverable, no forwarding address; phone rang without going to voicemail at 2nd no.; 1st no. was disconnected
Louise Miranda-Ramirez	Chairperson	Ohlone/Coastanoan-Esselen Nation	Ohlone/Costanoan, Esselen	2/2/2010	n/a	2/16/2020	4:58	left voice message	see sheet 2
Ramona Garibay	Representative	Trina Marine Ruano Family	Ohlone/Costanoan, Bay Miwok, Plains Miwok, Patwin	2/2/2010	2/17/2010	2/17/2010	1:05	-	was informed she was out
Valentin Lopez	Chairperson	Amah Mutsun Tribal Band	Ohlone/Costanoan	2/2/2010	2/17/2010	2/17/2010	1:08	left voice message	-

Individual Contact	Title	Group	Affiliation	Date of Letter	Date of Email	Date of Phone Call	Time	Action	Response
Irene Zvierlein	Chairperson	Amah Mutsun Tribal Band	Ohlone/Costanoan	2/2/2010	-	2/17/2010	1:12	-	requests that an archaeologist and a qualified Native American be present if "anything is hit"
Christianne Arias	Vice Chairperson	Ohlone/Coastanoan-Esselen Nation	Ohlone/Costanoan, Esselen	2/2/2010	n/a	2/17/2010	1:15	left voice message	-

Sheet 2 - Tracking Log

Notes on Phone Conversation with Ann-Marie Sayers 2/10/2010 (Allika Ruby):

Contacted Chairperson Sayers by phone; she stated she received the letter and had "significant" concerns about the project.

Specifically:

- she wanted information on the extent of subsurface disturbance
- requested information on the project timeline (when construction would take place)
- wants to know how burials, if encountered, will be treated and where reinterment would occur
- requests that a Native American monitor be present during all earth movement

She stated that she had heard of several burials being removed from the Castroville area, near the intersection of Highways 156 and 183, sometime in the 1950s.

She requested additional information concerning the recordation history of one of the sites that may lie within the APE (MNT-727); this was provided to her during the conversation.

She requested that I keep her informed as the project progresses.

I emailed her the link to the TAMC project webpage since it provided the projected timeline she requested.

Notes on Phone Conversation with Louise Miranda-Ramirez 2/17/2010: (Allika Ruby)

She contacted me by phone in response to my voicemail of 2/16.

She requested that a monitor trained by Ohlone/Coastanoan-Esselen Nation be present during work. She indicated she would send or email a formal request.

Informed me of site MNT-391 along Cannery Row that had been disturbed during construction of a restaurant parking lot, with burials unearthed.

Letter dated 2/15/2010 was received from Louise; it states that she is the Tribal Chairperson, the tribal representative to NAHC, acting tribal MLD, and legal tribal spokesperson.

In the letter, she requests:

- that a "sacred lands search" be conducted at the Northwest Information Center at SSU and lists Leigh Jordan as the contact

- that the tribe be contacted regarding the project's findings

- that ancestor remains and "all cultural and sacred items be left with our ancestors on site..."

- that burial sites be afforded the same protection as modern cemeteries; i.e., no disturbance

She included a territorial map based on Taylor (1856), Levy (1973), and Milliken (1990) with northern Monterey tribal groups highlighted

it appears to have been prepared by Milliken

NOTE: need to keep her updated



FAR WESTERN
ANTHROPOLOGICAL RESEARCH GROUP, INC.

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

March 15, 2010

Re: Update on the Monterey Peninsula Light Rail Transit Project.

Dear Chairperson Sayers,

I wanted to keep you updated on the progress of the above-mentioned project and provide additional details as you requested in our phone conversation of February 10. Regarding your request for more information concerning the extent of subsurface disturbance for the project - most of the construction activities will be confined to the surface of the existing railroad alignment. The plans call for replacement of the existing tracks with reuse of the underlying ballast; no excavation into native soil is indicated along these areas. For the proposed station platforms, excavation is planned to a maximum depth of three feet with excavation to four feet for related electrical and communication installations. The designs for planned bridge repairs and/or replacements have not been finalized, but they could intrude into native soil.

Your concerns regarding how burials, if encountered, will be treated and where reinterment would occur, as well as your request that a Native American monitor be present during all earth movement, have been forwarded to the Transportation Agency for Monterey County, the lead agency for the project.

I conducted the archaeological survey earlier this month and found evidence of one site identified during the records search. It is located south of Castroville near Tembladero Slough. The site was previously described as containing midden as well as flaked stone tools and debris; I encountered only weathered fragments of clamshell and a couple chert flakes within the project's narrow survey corridor and did not observe any features or bone. However, I do note in the report there is the potential for human burials to be present based on a newspaper article published in 1979 in the *Monterey Peninsula Herald* newspaper which stated that railroad workers in 1879 had unearthed a human burial in or near the site. I updated the site record and it will be filed with the Northwest Information Center at Sonoma State University along with our final report.

We did not see any other prehistoric materials within the surveyed area, although our report recommends additional exploratory study in areas where buried sites might be present. This assessment is based on our analysis of the soils and landforms in the project area.

You can reach me at (530) 756-3941 or by email at allika@farwestern.com. We appreciate your interest in this project.

Sincerely,

Allika Ruby, Senior Archaeologist



FAR WESTERN
ANTHROPOLOGICAL RESEARCH GROUP, INC.

Ohlone/Coastanoan-Esselen Nation
Louise Miranda-Ramirez, Chairperson
P.O. Box 1301
Monterey, CA 93942

March 15, 2010

Re: Update on the Monterey Peninsula Light Rail Transit Project.

Dear Chairperson Ramirez,

I wanted to keep you updated on the progress of the above-mentioned project and provide additional details as you requested in our phone conversation of February 17. You had requested that a sacred lands search be conducted at the Northwest Information Center at Sonoma State University in Rohnert Park. This was conducted prior to the survey and several prehistoric as well as historic-period sites were identified. A summary of these findings was provided in the February 2, 2010 letter I sent to you.

Your concerns regarding how burials (i.e., ancestral remains and associated sacred items), if encountered, will be treated, as well as your request that a monitor trained by Ohlone/Coastanoan-Esselen Nation be present during construction, have been forwarded to the Transportation Agency for Monterey County, the lead agency for the project. Our report notes that you requested that such burials be left in place if encountered.

I conducted the archaeological survey earlier this month and found evidence of one site identified during the records search. It is located south of Castroville near Tembladero Slough. The site was previously described as containing midden as well as flaked stone tools and debris; I encountered only weathered fragments of clamshell and a couple chert flakes within the project's narrow survey corridor and did not observe any features or bone. However, I do note in the report there is the potential for human burials to be present based on a newspaper article published in 1979 in the *Monterey Peninsula Herald* newspaper which stated that railroad workers in 1879 had unearthed a human burial in or near the site. I updated the site record and it will be filed with the Northwest Information Center along with our final report.

We did not see any other prehistoric materials within the surveyed area, although our report recommends additional exploratory study in areas where buried sites might be present. This assessment is based on our analysis of the soils and landforms in the project area.

You can reach me at (530) 756-3941 or by email at allika@farwestern.com. We appreciate your interest in this project.

Sincerely,

Allika Ruby
Senior Archaeologist

APPENDIX C

PROJECT PHOTOLOG AND DIGITAL IMAGES

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

Primary # _____
HRI # _____
Trinomial _____

Page 1 of 2

Project Name: Monterey Guideway #1004

Roll: Optio 7

Camera Format: Digital

Lens Size:

Film Type and Speed: Optio 7

Negatives Kept At: Far Western, 2727 Del Rio Pl., Suite A, Davis CA 95616

Date	Time	Exp/ Frame	Subject/Description	View Toward	Accession #	Site #
2/18/2010	15:00	1	View of Railroad and right-of-way near Tioga Road, Seaside.	NNW	-	-
2/18/2010	15:00	2	Close-up of switch.	-	-	-
2/18/2010	15:00	3	View of switch, rails on left.	S	-	-
2/19/2010	8:20	4	Railroad undercrossing to Fort Ord - now a bike path.	NNE	-	-
2/19/2010	8:30	5	View of railroad loop diverging SW on old Fort Ord land - line to left leads to loading ramp; right line is loop.	SW	-	-
2/19/2010	8:30	6	Overview of Fort Ord Loading Ramp, small building is in center behind the ramp.	WSW	-	-
2/19/2010	8:30	7	View of Fort Ord Loading Ramp. Eastern side of rail and ramp. Hwy 1 is at far left.	SW	-	-
2/19/2010	8:30	8	Fort Ord Loading Ramp. View of loading ramp with building on left.	NE	-	-
2/19/2010	8:30	9	Fort Ord Loading Ramp. View of small building on left, loading ramp and western rail in center.	ENE	-	-
2/19/2010	8:30	10	Fort Ord Loading Ramp. View of small building next to the ramp.	W	-	-
2/19/2010	8:30	11	Fort Ord Loading Ramp. View of top of ramp, rails run along left and right sides.	NE	-	-
2/19/2010	8:30	12	Fort Ord Loading Ramp. View of top of ramp, building on far right. Bike trail is in background just left of center.	SW	-	-
2/19/2010	8:30	13	Fort Ord Loading Ramp. Overview of ramp, rails, and building.	SSW	-	-
2/19/2010	10:00	14	Overview of Fort Ord Buildings at proposed station.	S	-	-
2/19/2010	10:00	15	Overview of Fort Ord Buildings at proposed station.	WNW	-	-
2/19/2010	10:00	16	Overview of Fort Ord Buildings on right, tracks in center and bike path on left.	S	-	-
2/19/2010	10:00	17	Overview of railroad tracks and right-of-way.	NNE	-	-
2/19/2010	10:00	18	Overview of tracks on left, bike trail on right, at Lake Roberts, Seaside.	NE	-	-
2/20/2010	8:30	19	View of railroad bridge over Tembladero Slough.	NE	-	-
2/20/2010	9:00	20	P-27-001207 extended boundaries. House on far right (lot 4), tracks in center; site is recorded under house, but extends right of the tracks.	SSE	-	P-27-001207
2/20/2010	9:00	21	Proposed Castroville Station; Monterey Branch rails end; active Southern Pacific railroad in background.	NNW	-	-
2/20/2010	9:10	22	End of tracks, Blackie Road in background.	SSE	-	-
2/20/2010	9:30	23	P-27-001207, view of shell scatter with in right-of-way.	S	-	P-27-001207
2/20/2010	10:30	24	Close-up of bridge date - 1909. Field rail bridge east of Salinas River Bridge.	-	-	-
2/20/2010	10:30	25	View of rail bridge in fields.	NNE	-	-
2/20/2010	10:30	26	View of sawed-off posts under 1909 field bridge.	NW	-	-
2/20/2010	10:40	27	Overview of a second rail bridge in the agricultural lands.	WSW	-	-
2/20/2010	11:00	28	Salinas River Bridge.	SSE	-	-
2/20/2010	11:30	29	View of third bridge in agricultural lands.	NE	-	-
2/20/2010	13:20	30	Rail alignment overview, north of Marina.	SE	-	-
2/20/2010	14:10	31	View of road cut in center and parallel to rail alignment on left.	S	-	-



IMGP0001.JPG



IMGP0002.JPG



IMGP0003.JPG



IMGP0004.JPG



IMGP0005.JPG



IMGP0006.JPG



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IMGP0036.JPG

APPENDIX D

SITE RECORD FOR CA-MNT-1154

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

Primary # P-27-001207 (UPDATE)
HRI # (UPDATE)
Trinomial CA-MNT-1154/H (UPDATE)
NRHP Status Code

Other Listings
Review Code Reviewer Date

Page 1 of 4

*Resource Name or #: (UPDATE)

P1. Other Identifier:

*P2. Location: ☒ Not for Publication ☐ Unrestricted *a. County: Monterey

*USGS Quad(s): Prunedale (1954)

SE ¼ of SE ¼ of Sec. 33, T13S R2E Bolsa del Potrero y Moro Cojo Or La Sagrada Famili

c. Address: Castroville Road, Castroville

d. UTM (NAD 83): Zone 10; 612200 mE 4068150 mN NAD 83

e. Other Locational Data:

This site is located just north of the confluence of Tembladero and Moro Cojo sloughs, on the west side of Castroville Road and east of the old Monterey Branch Railroad alignment within the town of Castroville. UTM coordinates represent the approximate center point of the knoll along Castroville Road, purportedly the densest portion of the site.

***P3a. Description:**

This site reportedly contains midden, chert flakes, shell fragments, and historic glass artifacts. The site was previously recorded as being centered on a small knoll about 100 meters northeast of the slough confluence. During the current project, fragments of weathered clamshell, a couple of chert flakes, and some broken glass and ceramics were noted to the west along the abandoned Monterey Branch Railroad tracks (formerly owned by Southern Pacific) on the north side of Tembladero Slough for a distance of about 150 meters extending north from the slough. The debris is more visible on the west side of the tracks as the east side is thickly vegetated with brush and berry bushes. Some of the shell and bottle glass is eroding out of the slough's north bank.

Given the very narrow site area that was available for inspection, this expanded boundary definition is highly speculative: it's even possible the scatter of shell, flakes, and historic-period debris that was observed is part of a different site to the west that has not been documented.

*P3b. Resource Attributes: AP15 (Habitation debris)

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



***P5b. Description of Photo:**

Site overview facing south-southeast;
house to left is on knoll within site.

***P6. Date Constructed/Age & Sources:**

☐ Historic ☐ Prehistoric ☒ Both

***P7. Owner and Address:**

see A14 Remarks

***P8. Recorded by:**

Allika Ruby, Far Western Anthropological
Research Inc., 2727 Del Rio Place Suite A,
Davis CA 95618

***P9. Date Recorded:** 3/10/2010

***P10. Survey Type:**

Surface reconnaissance

*P11. Citation: Archaeological Survey Report for the Monterey Peninsula Light Rail Transit Project by Allika Ruby, 2010.
Submitted to Parsons Corporation on behalf of the Transportation Agency for Monterey County.

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

ARCHAEOLOGICAL SITE RECORD

Page 2 of 4

*Resource Name or #: (UPDATE)

*A1. Dimensions: a. Length 225 m (E/W) x b. Width 170 m (N/S) Site Area: 30,025 m²

Method of Measurement: ☐ Paced ☐ Taped ☒ Visual estimate ☒ GPS ☐ Other:

Method of Determination: ☒ Artifacts ☐ Features ☐ Soil ☐ Vegetation ☐ Topography ☐ Cut bank ☐ Animal burrow
☐ Excavation ☐ Property boundary ☐ Other:

Reliability of determination: ☐ High ☐ Medium ☒ Low

Explain: Only a narrow, 30-meter-wide portion of the site area along Monterey Branch tracks was available for inspection

Limitations: ☒ Restricted access ☐ Paved/built over ☒ Site limits incompletely defined ☐ Disturbances
☐ Vegetation ☐ Other:

A2. Depth: ☐ None ☒ Unknown Method of determination:

*A3. Human Remains: ☐ Present ☐ Absent ☒ Possible ☐ Unknown see A14 Remarks below

*A4. Features:

None observed.

*A5. Cultural Constituents:

Fragments of weathered clamshell, a couple of chert flakes, and some broken glass and ceramics were noted in the APE on the north side of Tembladero Slough.

*A6. Were Specimens Collected? ☒ No ☐ Yes

*A7. Site Condition ☐ Good ☒ Fair ☐ Poor

Construction of a residence, two railroad alignments, and Castroville Road, as well as field cultivation have impacted the site.

*A8. Nearest Water: Tembladero Slough borders the site to the south.

*A9. Elevation: Between 10 and 30 feet amsl

A10. Environmental Setting:

The site sits on the north edge of the Salinas River floodplain and is bordered on the south by Tembladero Slough at its confluence with Moro Cojo Slough. A small but prominent knoll is present. Most of the site is a cultivated field that appears to be subject to periodic flooding. Thick berry bushes and coastal scrub grow along the abandoned railroad alignment and in low spots.

A11. Historical Information:

The abandoned railroad alignment through the site area was built in 1879 by Southern Pacific.

*A12. Age: ☒ Prehistoric ☐ Protohistoric ☐ 1542-1769 ☐ 1769-1848 ☐ 1848-1880 ☒ 1880-1914 ☐ 1914-1945
☐ Post-1945 ☐ Undetermined

Solarized bottle glass and 19th-century ceramics (white improved earthenware, flow-blue) are present.

A13. Interpretations:

Likely habitation site.

A14. Remarks:

During construction of the former Southern Pacific tracks (the Monterey Branch) between Castroville and Monterey in 1879, workers reportedly uncovered a human burial along Tembladero Slough. The description of the location indicates it was within the revised site boundary. As reported in an article titled "When the Southern Pacific Railroad Came to Monterey," in the September 23, 1979 edition of The Monterey Peninsula Herald :

"On another occasion graders unearthed a human skeleton. The men, making a cut 20 feet from the Tembladero Slough, encountered the bones at a depth of 3 or 4 feet. The remains were taken to town and examined by a doctor, who pronounced the bones to be probably those of an Indian woman. However, some town citizens were of the opinion the remains were those of a drunken transient who had disappeared 40 years before in the slough."

Site MNT-727 is located directly to east, on the east side of Castroville Road and north of Tembladero Slough. It was originally reported as a prehistoric habitation but was later found to be mostly destroyed by construction.

Monterey Branch Railroad right-of-way is owned by Transportation Agency of Monterey County; the name and address of the private landowner to the east is not known to the recorder.

A15. References:

A16. Photographs: Digital images 1004-1 through -36

Original Media/Negatives Kept At: Far Western and TAMC

*A17. Form Prepared By: Allika Ruby

Date: 3/10/2010

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

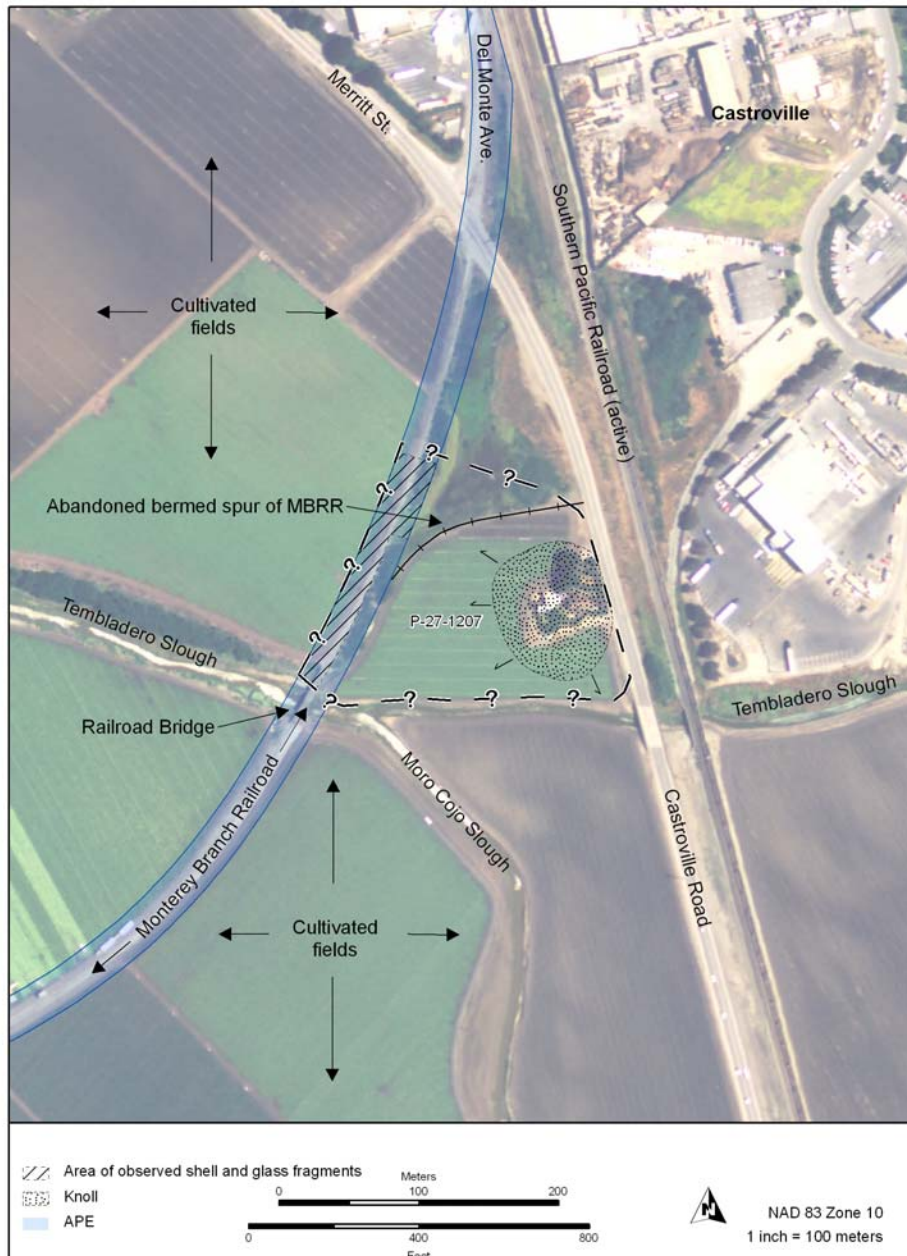
Primary # P-27-001207 (UPDATE)
HRI # (UPDATE)
Trinomial CA-MNT-1154/H (UPDATE)

Page 3 of 4

*Resource Name or #: (UPDATE)

*Drawn by:

*Date:



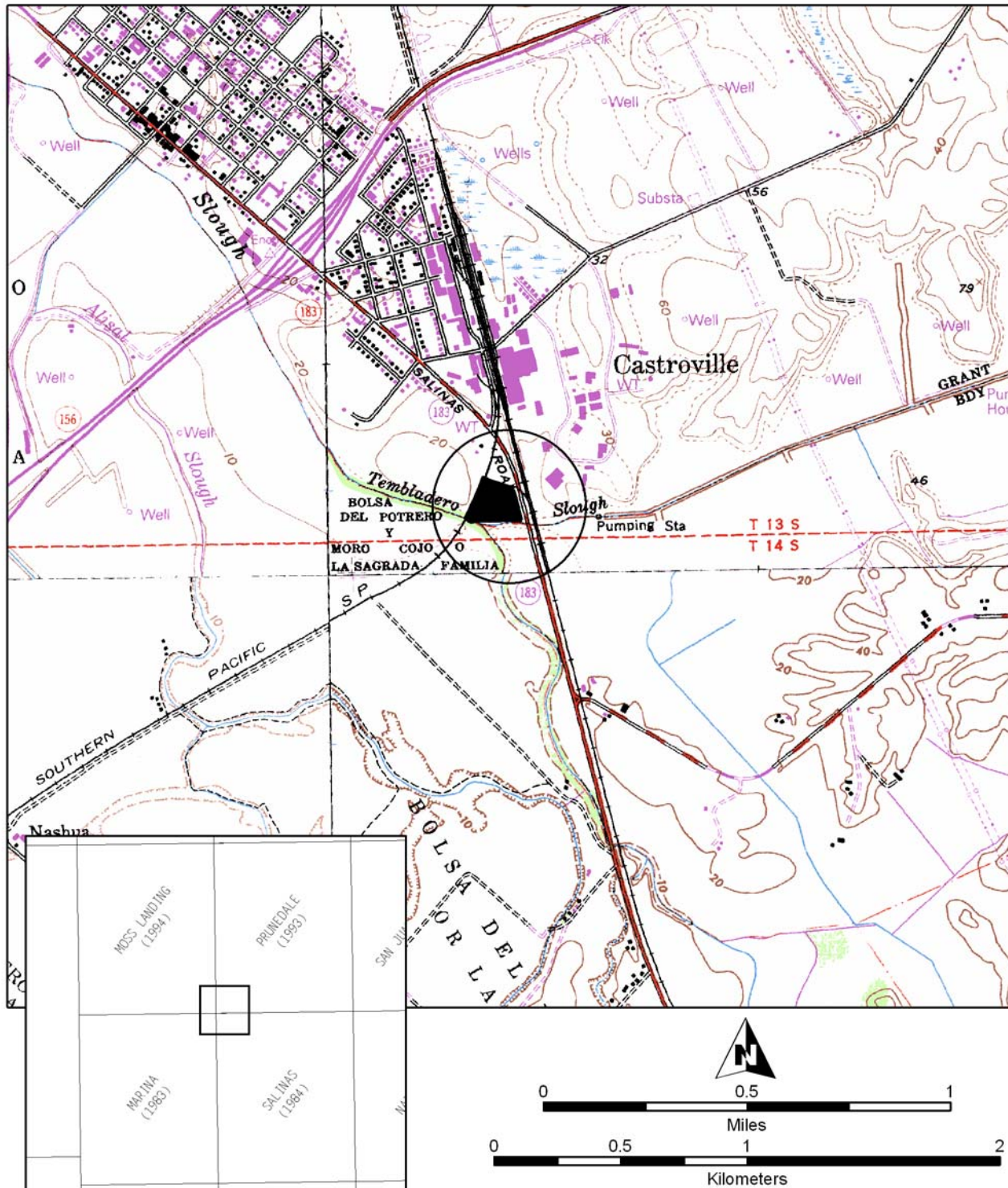
jill 3/16/2010 10:24:12 AM

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

Primary # P-27-001207 (UPDATE)
HRI # (UPDATE)
Trinomial CA-MNT-1154/H (UPDATE)

Page 4 of 4

*Resource Name or #: (UPDATE)



Key to USGS 7.5' quads depicted

SCALE 1:24,000

jill 3/16/2010 10:23:56 AM

RECORDED BY Ron Melander for ARS Date May 6, 1978 Status Disturbed by residence & cult.

P-27-1207

ARCHAEOLOGICAL SITE

SURVEY FORM

ARS-76

1154

(attach site map and/or photographs)

Site # CA-Mnt-~~727~~ Field # ARS 78-28-1 Map Prunedale 7.5'

County Monterey Contour 10-20 ft. Twp. 13S Range 2E Bolsa de Portre

1/4 of 1/4 of Section U.T.M.G. coord. 40678-6124

Location Directly west of Salinas Road and SPRR tracks from CA-Mnt-727, on a small knoll. A residence and a cultivated field cover the site, which is most visible on the south side of the knoll along Tembladero Slough.

Site Description (site typology specified) * Soil pH-7.33. Very stained soil (midden), Monterey chert flakes, shell fragments, and historic glass artifacts eroding onto bank of Tembladero Slough.

Previous designation (cite date recorded and recorder) not known to this recorder

Owner see attached parcel map A-223 Lot 4 Previous Owner Addresses

Attitude of Owner/Tenant to Survey survey was conducted without owner's knowledge

* Area unknown at present Observed Depth

Lithology Soil typology dark-stained midden (of site)

+ or - of Components Soil typology red sandy clays (off site)

Vegetation on Site Cultivated farm plants, grasslands to east

Vegetation off site grasslands; coastal scrub

Nearest Water (type and distance/direction) Tembladero Slough to south; confluence of Tembladero Slough and Mojo Cojo Slough immediately to south of knoll

Association with other sites CA-Mnt-727 Locus B immediately across Salinas Road to east

Presence or Absence of: Housepits Burials BRM's

Petroglyphs/Pictographs Workshops or special use areas shellfish process.

Buildings or roads farm residence, RR tracks Cultivation artichokes etc. Salinas Road

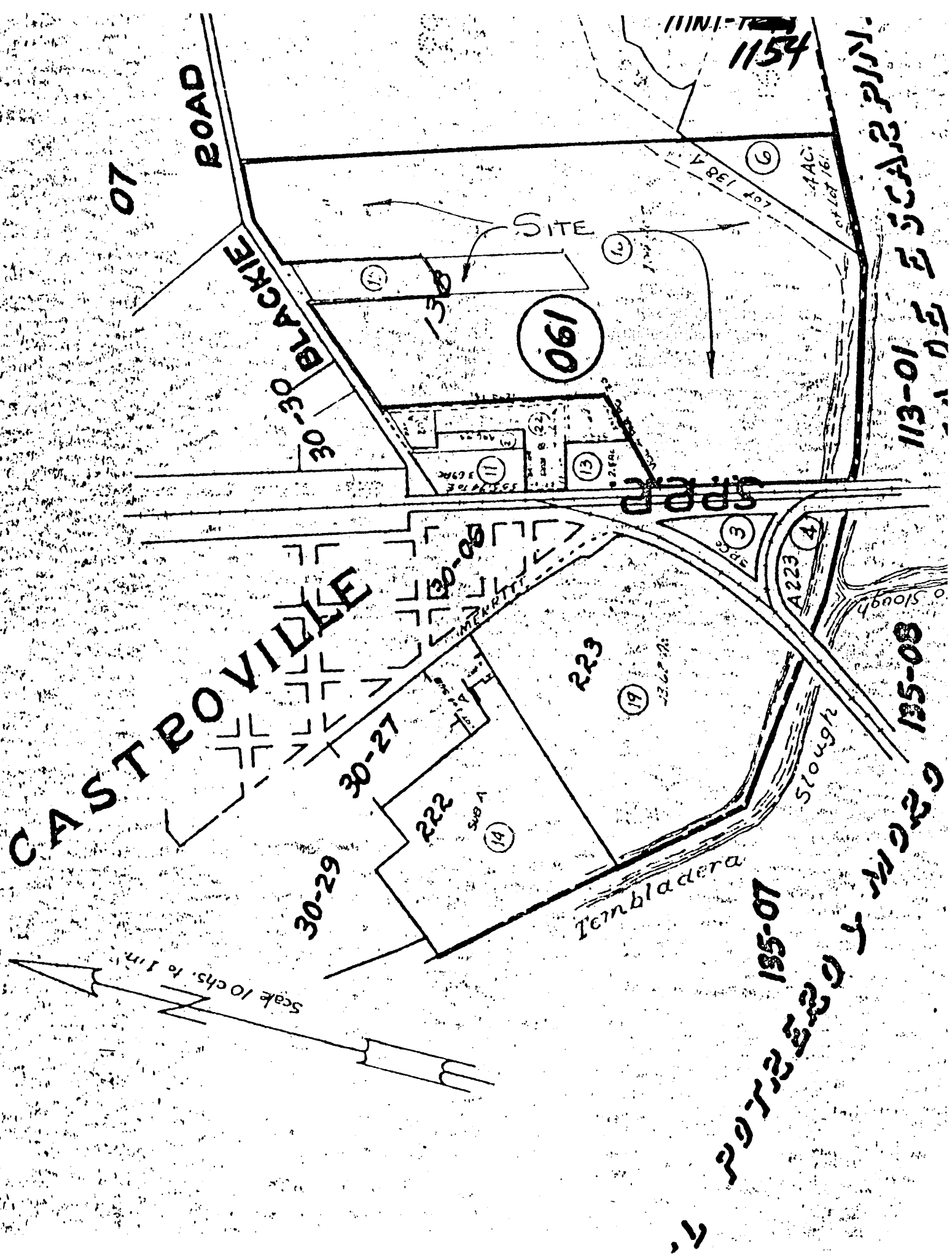
Previous Excavation or disturbance see above Erosion along slough

Artifacts (attach list) see list Features Obs. Add'l Remarks

mailed to ARRC 7-6-78

This is a detailed topographic map of the Castroville area in Monterey County, California. The map features contour lines indicating elevation, with labels such as 10, 20, 30, 40, 50, 60, 100, 125, and 200 feet. Key roads shown include Dolan Road, Elkhorn Road, and Highway 156. Landmarks include a water tank, several reservoirs, and a well. The map also shows the Pacific Coast Highway (Highway 1) and the Grant Boundary. The town of Castroville is marked with a benchmark (BM 23) at 30 feet. The map is oriented with North at the top, and the scale is indicated as 1 inch = 1 mile. The map is titled 'CASTROVILLE' in the upper right corner.

530 000
FEET





Mapped, edited, and published by the Geological Survey

Control by USGS and NOS/NOAA

Topography by photogrammetric methods from aerial photographs taken 1952 and planetable surveys 1954

Polyconic projection. 10,000-foot grid ticks based on California coordinate system, zone 3. 1000-meter Universal Transverse Mercator grid ticks, zone 10, shown in blue. 1927 North American Datum To place on the predicted North American Datum 1983 move the projection lines 12 meters north and 93 meters east as shown by dashed corner ticks

Dashed land lines indicate approximate locations

Revisions shown in purple and woodland compiled from aerial photographs taken 1978 and other sources. This information not field checked. Map edited 1981

PRUNEDALE, CALIF.

N3645-W12137.5/7.5

1954
PHOTOREVISED 1981
DMA 1657 I SW-SERIES V895

FOR SALE B
A I

APPENDIX E

RESUMES OF ALLIKA RUBY AND JACK MEYER

Allika Ruby

CURRENT POSITION

- 2005–Present *Senior Archaeologist.* Far Western Anthropological Research Group, Inc.
1997–2005 *Staff Archaeologist.* Far Western Anthropological Research Group, Inc.

EDUCATION

- 2005 M.A. in Anthropology, University of California, Davis.
1999 B.A. in Anthropology (with honors), University of California, Santa Cruz.

PROFESSIONAL EXPERIENCE

- 2009 *Field Director.* Archaeological test excavations at two sites (CA-SCR-2/H and CA-SCR-353/H), for the Caltrans Santa Cruz Guardrail Project, Santa Cruz County, California. Caltrans.
Field Director. Archaeological survey for the Rosedale Highway (SR-58) Widening Project, Kern County, California. BonTerra Consulting.
- 2007 *Field Director.* Archaeological test excavations at three sites (DNO-332, -334, and -XX13), Jedediah Smith Campground Project, Del Norte County, California. National Park Service.
Field Director. Archaeological survey for the Coso Target Infill Project (380 acres), Inyo County, Naval Air Weapons Station, China Lake, California.
- 2006 *Crew Chief.* Gold Butte Survey Project, Clark County, Nevada. BLM.
Field Director. Archaeological Survey of the Pinyon East Project (2067 acres), Inyo County, Naval Air Weapons Station, China Lake, California.
Crew Chief. Archaeological survey for the Tennessee Spring Project (5000 acres), Inyo County, Naval Air Weapons Station, China Lake, California.
Field Director. Archaeological survey for the Nevada Power Reid Gardner Facility Storage Yard and Ponds Expansion Project, Clark County, Nevada (560 acres)
Crew Chief. Archaeological survey for the Ely Four Parcels Project (1220 acres), Lincoln and White Pine Counties, Nevada. Bureau of Land Management, Ely Field Office.
- 2005 *Field Director.* Archaeological survey of Upper Centennial Flat (1080 acres), Inyo County, Naval Air Weapons Station, China Lake, California.
Field Director. Archaeological survey for the Rancheria Gulch Project (250 acres), Mono County, California. Bureau of Land Management, Bishop Field Office.
Field Director. Archaeological survey for the Mace Wildfire Damage Assessment Project (191 acres), Kern County, California. California Department of Forestry.
- 2003 *Crew Chief.* Archaeological survey of the Harry Allen to Lake Mead Power Corridor (48 linear miles). Clark County, Nevada. Nevada Power Company.
- 2002 *Co-Field Director.* Pinyon In-Fill Survey Project, Inyo County. Naval Air Weapons Station, China Lake, California.

- Crew Chief.* Archaeological survey for the Bulls Eye Project. Naval Air Weapons Station, China Lake, California.
- 2001 *Crew Chief.* Phase II excavations of CA-SLO-273/H and CA-SLO-274, two Middle Period shell midden sites, for the Caltrans Arroyo de Los Chinos culvert replacement project near Piedras Blancas, California.
- 2001 *Crew Chief.* Phase II excavations of 28 prehistoric sites at Airport Lake, Naval Air Weapons Station, China Lake, California.
- Crew Chief.* Phase II excavations of CA-MNT-437, a Middle Period shell midden, for Pacific Bell fiber-optic line installation project in Carmel Highlands, California.
- Crew Chief.* Phase II excavations of 14 prehistoric sites for the Pinyon-Coso Military Target project. Naval Air Weapons Station, China Lake, California.
- Crew Chief.* Survey of approximately 2,000 acres between Lake Tahoe and Marlette Lake for Lake Tahoe Nevada State Park. Historic and prehistoric site recordation. Washoe, Carson City, and Douglas counties, Nevada.
- Crew Chief.* Archaeological survey along the Western Area Power Administration transmission lines in Sacramento County, California.
- Crew Chief.* Archaeological survey of 200 acres for Fort Independence Indian Reservation, Inyo County, California.
- Crew Chief.* Archaeological survey for natural gas pipeline from Reno to Wadsworth, Nevada for Tuscarora Gas Transmission Company. Nevada.
- 2000 *Field Technician.* Phase II excavation of prehistoric sites for Hungry Valley project for the Tuscarora Wadsworth Lateral Pipeline, Nevada.
- Crew Chief.* Archaeological survey of 1,011 acres in the Chocolate Mountains, Riverside and Imperial Counties. Southwest Division, Naval Facilities Engineering Command, San Diego, California.
- Crew Chief.* Archaeological survey of 1,830 acres between Marlette and Spooner lakes for Lake Tahoe Nevada State Park. Historic and prehistoric site recordation. Washoe, Carson City, and Douglas counties, Nevada.
- Field Technician.* Archaeological survey at Silver Lake for El Dorado Irrigation District. Historic and prehistoric site recordation. Amador County, California.
- 1999 *Crew Chief.* Phase II excavation of CA-SBA-1152 (Arroyo Quemado site). Santa Barbara County, California. Caltrans, District 05.
- Field Technician.* Phase II excavation of CA-ALA-575 and -576 for Highway 680 Widening Project. Alameda County, California. Caltrans, District 04.
- Crew Chief.* Survey of rural highways in Santa Barbara, Santa Cruz, and San Luis Obispo Counties, California. Caltrans District 05.
- Field Technician.* Archaeological survey on MCB Camp Pendleton, San Diego County, California.
- Field Technician.* Phase II excavation of CA-SCR-313. Santa Cruz County, California. Caltrans District 05.
- Field Technician.* Archaeological survey of 288 acres for D3 Alternative Transmission Line in Modoc County, California. Cal Energy.

- 1997–1999 *Crew Chief and Field Technician*. Test and Data Recovery Excavations at CA-SBA-3404/H (ethnographic village of Jonjonata), California. Santa Barbara County Association of Governments.
- 1998 *Crew Chief and Field Technician*. Archaeological survey of 2564 acres (194 sites) for the Pinyon-Coso Military Target in the Coso Mountain Range, Inyo County, California. Naval Air Weapons Station, China Lake.
- 1998 *Field Technician*. Archaeological survey in Inyo County for the Stimulator Project. Naval Air Weapons Station, China Lake, California.
- Field Technician*. Phase II excavation of CA-INY-4339. Naval Air Weapons Station, China Lake, California.
- Field Technician*. Phase II excavation of five sites for the Manzanar Highway Widening Project, Inyo County, California. Caltrans.
- Field Technician*. Phase II excavations of 12 sites for the Burro Canyon Project, Inyo County. Naval Air Weapons Station, China Lake, California.
- 1997 *Field Technician*. Test and Data Recovery Excavations at SBA-3404/H, Jonjonata Ethnographic Village, Santa Barbara County, California.
- Field Technician (Albion Environmental, Santa Cruz)*. Survey and site recording for the Stemple Creek Rehabilitation Project, Sonoma and Marin Counties, California.
- Field Technician (Archaeological Research Center, Sacramento)*. Survey of Rainbow Canyon. Marine Corps Air Ground Combat Center, Twentynine Palms, California.
- Lead Monitor, Crew Chief (Albion Environmental, Santa Cruz)*. Santa Clara University Project. Responsibilities consisted of coordinating construction monitoring, including training and supervision of archaeological monitors. Supervised crew during excavation of historic privies at the Communications, Public Policy, and Ethics Building Site.
- Field Technician*. Volunteer assistant during excavation of Pajonal Alto, a multi-component village site located in southwest Peru.
- Crew Chief (Anthropological Studies Center, Sonoma)*. Supervised field crew in the excavation of CA-ALA-17, a prehistoric shell mound (Nelson Mound). Caltrans District 04.
- 1996 *Crew Chief (Anthropological Studies Center, Sonoma)*. Supervised field crew in the excavation of CA-MNT-179 and CA-MNT-267, prehistoric shell middens on the coast of Monterey County for the San Simeon Archaeological Project for Caltrans. Assisted laboratory director with artifact cleaning and sorting.
- Field Technician (BioSystems Analysis, Santa Cruz)*. Phase III excavations of prehistoric sites CA-SLO-1797, CA-SLO-1798, and CA-SLO-1799 in San Luis Obispo County for the Coastal Branch, Phase II, State Water Project.
- Field Technician (BioSystems Analysis, Santa Cruz)*. Survey and site recording of prehistoric sites within Fort Hunter Liggett Military Installation in Monterey County for Grazing Lease Permit Project.
- Field Technician (BioSystems Analysis, Santa Cruz)*. Excavation of CA-SCR-117, a prehistoric shell midden site in Santa Cruz County for the U.S. Abalone Project.
- Field Technician (Pacific Legacy, Inc., Albany)*. Phase II excavation of prehistoric site CA-INY-3458 in Inyo County for the South Lake Dam Project.

- Field Technician (Pacific Legacy, Inc., Albany).* Phase II excavation of prehistoric sites CA-PLA-606-612 in Placer County for the Twelve Bridges Development Project.
- Field Technician (Pacific Legacy, Inc., Albany).* Phase II excavation of prehistoric site JSA-1 in Santa Cruz County.
- 1995 *Field Technician (Pacific Legacy, Inc., Albany).* Excavation of prehistoric sites in Lake County for the Geysers Wastewater Facility Project.
- Field Technician (BioSystems Analysis, Tiburon).* Survey and site recording of prehistoric and historic sites in Nye County, Nevada for the Northumberland Land Exchange Project. BLM.
- 1995 *Field Technician (BioSystems Analysis, Santa Cruz).* Excavation of prehistoric sites CA-SLO-1384, CA-SLO-1552, CA-SLO-1756, CA-SLO-1763, and CA-SLO-1797 in San Luis Obispo County for the Coastal Branch, Phase II, State Water Project.
- Field Technician (BioSystems Analysis, Santa Cruz).* Phase III excavation of prehistoric sites CA-MNT-521 and CA-MNT-569 at Fort Hunter Liggett Military Installation, Monterey County.
- 1994 *Field Technician (BioSystems Analysis, Tiburon).* Survey and site recording of prehistoric sites CA-MNT-1807 and CA-MNT-1808, -1809, -1810, -1811, and -1812 at Fort Hunter Liggett, Monterey County.
- Field Technician (BioSystems Analysis, Tiburon).* Survey and site recording of prehistoric and historic sites for the Pendola Land Exchange Project, Nevada City and Truckee Ranger Districts, Tahoe National Forest.
- Field Technician (BioSystems Analysis, Tiburon).* Survey and Route 68 Corridor Study at Fort Ord and Route 68, Monterey County. Caltrans.
- Field Technician (BioSystems Analysis, Tiburon).* Survey and site recording of prehistoric and historic sites for the Larson Reforestation Project, Groveland Ranger District, Stanislaus National Forest.
- 1993 *Crew Chief.* Supervised field crew in the excavation at Mednikarovo, a Neolithic/Bronze Age tell site in southern Bulgaria. Assisted in the mapping and field survey of Podgorista, a Neolithic tell site in northeastern Bulgaria.
- 1992 *Crew Chief (Archaeological Resource Management, San Jose).* Supervised field crew in the Phase II excavation of CA-SCR-239, the Santa's Village Site, in Santa Cruz County.
- Field Technician (Archaeological Resource Management, San Jose).* Phase II excavation of CA-SCR-59, the Bonny Doon School Site, in Santa Cruz County.
- 1991–1992 *Excavation Monitor (Archaeological Resource Management, San Jose).* Borland Building Construction Project, Scotts Valley. Recovered materials associated with CA-SCR-239.
- 1991 *Excavation Monitor (Archaeological Resource Management, San Jose).* Convention Center Construction Project, downtown San Jose. Recovered remains from historic Chinatown settlement.
- 1990 *Field Assistant (University of Nevada, Reno).* Shermantown Excavation Project. Survey, site recordation, and excavation of a historic mining town site in northeastern Nevada.

EDUCATIONAL EXPERIENCE

- 2005 Recipient, James A. Bennyhoff Memorial Award. Received stipend to further analysis of the Santa Rita Village site (CA-ALA-413) in Pleasanton, specifically to refine chronological placement of the Meganos Culture in Bay Area prehistory.
- 2003–2005 *Teaching Assistant*. U.C. Davis. Led discussions and labs for introductory and upper-division anthropology classes. Read and critically evaluated essays and exams.
- 1991–1993 *Reading Assistant*. U.C. Santa Cruz. Read and critically evaluated essays for the upper division anthropology class “Origins of Farming” taught by Dr. Diane Gifford-Gonzales.
- 1991–1993 *Docent*. Santa Cruz Mission Adobe State Historic Park. Volunteer duties included conducting interpretive tours with an archaeological theme for park visitors through a restored adobe building as well as assisting with fund raising events and staffing gift shop.

PUBLICATIONS

- 2006 Prehistoric Pinyon Exploitation in the Southwestern Great Basin: A View from the Coso Range. *Journal of California and Great Basin Anthropology*. With W. R. Hildebrandt.
- 2005 Itinerant Industry: Nineteenth-Century Charcoal Production in the Coso Mountains. IN: *Proceedings of the Society for California Archaeology*, Vol. 18. Edited by S. A. Waechter, D. Laylander, and G.G. White. Society for California Archaeology. Chico, California.
- 2005 Archaeological Discovery of Two Wooden Bows from the Coso Range, Inyo County, California. *Journal of California and Great Basin Anthropology*. With W. R. Hildebrandt.

REPORTS

- 2009 *Cultural Resource Damage Assessment Report for the X3 Road Mobile Target Project, NAWS China Lake, Inyo County, California*. Environmental Planning and Management Office, Naval Air Weapons Station, China Lake, California.
- 2009 *Cultural Resource Damage Assessment Report for the G2 Cable Installation Project, NAWS China Lake, San Bernardino County, California*. Environmental Planning and Management Office, Naval Air Weapons Station, China Lake, California.
- 2009 *Cultural Resource Eligibility Report for the Fiber Optic Line Installation, Coso Peak to South Junction Ranch Communications Facility, Naval Air Weapons Station, China Lake, Inyo County, California*. Environmental Planning and Management Office, Naval Air Weapons Station, China Lake, California. With W. Hildebrandt.
- 2009 *Archaeological Survey and Extended Phase I Report for the Gibson Canyon Road Improvement Project, Solano County, California*. JRP Historical Consulting, Davis on behalf of Solano County Public Works.
- 2009 *Cultural Resources Technical Report for the Windsor Substation Project, Windsor, Sonoma County, California*. TRC, Half Moon Bay on behalf of PG&E.
- 2009 *National Register of Historic Places Evaluation of CA-INY-7117, Naval Air Weapons Station, China Lake, Inyo County, California*. Environmental Planning and Management Office, Naval Air Weapons Station, China Lake, California. With W. Hildebrandt.
- 2008 *Cultural Resources Inventory for the Denniston Reservoir Dredging Project, San Mateo County, California*. TRC, Half Moon Bay on behalf of Coastside County Water District.

- 2008 *Cultural Resources Survey of the Rio Oso to Lincoln 115 kV Transmission Line Project, Placer and Sutter Counties, California.* TRC, Half Moon Bay. With J. Berg.
- 2008 *Pinyon East: Archaeological Survey of 2,067 Acres within the Coso Target Range at Naval Air Weapons Station, China Lake, Inyo County.* Environmental Planning and Management Office, Naval Air Weapons Station, China Lake, California. With W. R. Hildebrandt.
- 2008 *Santa Clara Valley Transportation Authority (VTA) Silicon Valley Rapid Transit Corridor EIS/SEIR Revised Draft Technical Memorandum: Archaeological Survey and Sensitivity Report for SVRTC EIS/SEIR Alternative.* VTA, San Jose. Lead author.
- 2007 *A Section 110 Cultural Resources Inventory and Overview of 4,950 Acres West of the Argus Range and East of Darwin Wash, Naval Air Weapons Station, China Lake, Inyo County, California.* Environmental Planning and Management Office, Naval Air Weapons Station, China Lake, California.
- 2006 *Class III Inventory of the Nevada Power Storage Yard and Ponds Expansion Project at Reid Gardner Facility, Clark County, Nevada.* Bureau of Land Management, Las Vegas Field Office. With A. Gilreath.
- 2006 *Cultural Resources Inventory for the Reduction of Fuel within Four Parcels, Lincoln and White Pine Counties, Nevada.* Bureau of Land Management, Ely Field Office. With A. Gilreath.
- 2005 *Archaeological Report and Fire-Damage Assessment of 10 Sites in the Mace Fire Area, Kern County, California.* California Department of Forestry and Fire Protection, Southern Region, Fresno.
- 2005 *The Pinyon Infill Project: Archaeological Survey of 800 Acres within the Coso Target Range Naval Air Weapons Station, China Lake, Inyo County, California.* Environmental Project Office, Naval Air Weapons Station, China Lake, California. With W. R. Hildebrandt.
- 2005 *Cultural Resources Inventory for the Wetlands Reserve Program of 160 Acres at McAravy Farms, Yolo County, California.* USDA, Natural Resources Conservation Office, Davis.
- 2003 *Archaeological Testing of Fourteen Prehistoric Sites within the Coso Target Range at Naval Air Weapons Station, China Lake, California.* Environmental Project Office, Naval Air Weapons Station, China Lake, California. With W. R. Hildebrandt.
- 2003 *Test Excavations at a Portion of CA-MNT-437, Carmel Highlands, California. Prepared for Caltrans District 05, San Luis Obispo.* With W. R. Hildebrandt.
- 2003 *Archaeological Survey of 5,430 Acres of BLM Lands for the Sloan Canyon NCA/Tract A, West Henderson, and Red Rock Canyon NCA/Hughes Land Exchanges, Clark County, Nevada.* Bureau of Land Management, Las Vegas Field Office. With J. King and D. C. Young.
- 2002 *Archaeological Survey and Evaluation of the Bulls Eye Target Area, Coso Target Range, Naval Air Weapons Station, China Lake.* Environmental Project Office, Naval Air Weapons Station, China Lake, California. With W. R. Hildebrandt.
- 1999 *Archaeological Survey of the Coso Target Range: Evidence for Prehistoric and Early Historic Use of the Pinyon Zone at Naval Air Weapons Station, China Lake, Inyo County, California.* Environmental Project Office, Naval Air Weapons Station, China Lake, California. With W. R. Hildebrandt.

- 1999 *Phase II Archaeological Test Excavations at CA-SBA-1152, Highway 101, Santa Barbara County, California* by W. R. Hildebrandt and D. Jones. Prepared for Caltrans District 05, San Luis Obispo. (Contributor).
- 1997 *Archaeological Test Excavations at CA-SCR-117, the Davenport Landing Site for U.S. Abalone, Inc. Davenport, CA.* Prepared for U.S. Abalone, Inc., Davenport, California. With R. T. Fitzgerald.
- 1997 *Archaeological Survey for the Stemple Creek Rehabilitation Project.* Copy on file at the Northwest Information Center, Historical Resources File System, Rohnert Park, California. With C. Blount.
- 1997 *Archaeological Survey of Two Parcels of Land Located at 476 Blossom Hill Road and 700 Dado Street; San Jose, California.* Copy on file at the Northwest Information Center, Historical Resources File System, Rohnert Park, California.
- 1997 *Archaeological Survey of 650 Highland Avenue, Santa Cruz, California.* Copy on file at Northwest Information Center, Historical Resources File System, Rohnert Park, California.
- 1997 *Summary of Extended Survey Investigations, CA-SLO-1552 Coastal Branch, Phase II.* Prepared for California Department of Water Resources. With R. Fitzgerald.
- 1994 *Monterey County Water Resources Agency Salinas River Basin Management Plan Cultural Evaluation.* Submitted to EDAW, Inc., San Francisco. With J. Holson.
- 1992 *Evaluation of Archaeological Resources for the San Jose/Santa Clara Nonpotable Water Reclamation Project.* Copy on file at the Northwest Information Center, Historical Resources File System, Rohnert Park, California. With R. Cartier, J. Bass, and M. Kelley.

PAPERS PRESENTED

- 2008 “The Dynamic Social Landscape of the Coso Pinyon Zone” (Allika Ruby, William Hildebrandt, and Jay King). Paper presented at 31st Great Basin Anthropological Conference, Portland, Oregon.
- 2007 “Thirty Years After: New Research at Santa Rita Village.” Presented at Society for California Archaeology 41st Annual Meeting, San Jose.
- 2006 “Late Holocene Pinyon use in the Southwestern Great Basin.” Presented at 30th Annual Great Basin Anthropological Conference, Las Vegas, Nevada.
- 2004 “Itinerant Industry: 19th Century Charcoal Production in the Coso Mountains.” Presented at Society for California Archaeology 38th Annual Meeting, Riverside.
- 2001 “Basque-ing among the Aspens: Sheepherder Tree Carvings in Lake Tahoe Nevada State Park” (Amanda Cannon and Allika Ruby). Presented at Society for California Archaeology Annual Meeting, Modesto.
- 2000 “The Sheep and the Bow: The Effects of Technological Transition during the Haiwee Period in the Coso Range.” (Allika Ruby and William R. Hildebrandt). Presented at Society for California Archaeology Annual Meeting, Riverside.
- 1997 “Recent Research at CA-SCR-117; From B.P. to U.S. Abalone.” Presented at Society for California Archaeology Annual Meeting, Rohnert Park.

Jack Meyer

CURRENT POSITION

2006–Present *Principal Geoarchaeologist*, Far Western Anthropological Research Group, Inc.

EDUCATION

- 1996 M.A. in Cultural Resource Management, Sonoma State University, Rohnert Park, California.
- 1993–1994 Sonoma State University Presidential Scholar.
 - Thesis: Geoarchaeological Implications of Holocene Landscape Evolution in the Los Vaqueros Area of Eastern Contra Costa County, California.
- 1987 B.S. in Sociology and Anthropology (Double Major). Emporia State University, Emporia, Kansas
- Graduated with Distinction
 - 1987 National Deans List

SUMMARY OF EXPERIENCE

- More than 15 years of professional experience in California geoarchaeology, prehistoric archaeology, and cultural resources management, including archival research, project coordination, sensitivity assessments, surface survey, subsurface exploration, geochronology, landscape evolution, archaeological excavation and data recovery, artifact analysis, technical reports, and professional publications.
- Conducted studies in Alameda, Amador, Butte, Calaveras, Contra Costa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Inyo, Kern, Lake, Lassen, Los Angeles, Mendocino, Merced, Modoc, Mono, Nevada, Placer, Plumas, Sacramento, Santa Barbara, San Benito, San Bernardino, Santa Barbara, Santa Clara, Santa Cruz, San Francisco, San Joaquin, San Luis Obispo, San Mateo, Shasta, Sierra, Siskiyou, Solano, Sonoma, Tehama, Tulare, Tuolumne, Yolo and Yuba counties.

PROFESSIONAL MEMBERSHIPS

- Register of Professional Archaeologists (RPA #670999-00) since April 1998.
- Society for American Archaeology.
- Geological Society of America - Archaeological Geology Division.
- Society for California Archaeology.

PROFESSIONAL EXPERIENCE

- 2002–2006 *Geoarchaeology Program Manager* Anthropological Studies Center,
Sonoma State University
- Developed, implemented, and administered contracts and supervised personnel for the geoarchaeology program.
 - Tracked budgets, developed and drafted research designs, directed and conducted field investigations and laboratory analyses, and wrote and produced technical and management reports.
- 1997–2002 *Staff Geoarchaeologist and Prehistorian* Anthropological Studies Center,
Sonoma State University
- Planned, directed, and conducted archaeological fieldwork and laboratory analyses.
 - Wrote archaeological research designs, prehistoric overviews, technical, and management reports.
- 1995–1997 *Project Coordinator-Geoarchaeologist* Los Vaqueros Prehistoric Archaeological Project,
Contra Costa, California.
- Coordinated archaeological field investigations and geoarchaeological laboratory analysis.
 - Co-authored data recovery and management reports.
- 1992–1995 *Project Coordinator Trainee and Research Assistant* Anthropological Studies Center,
Sonoma State University
- Conducted archaeological research, field investigations, data recovery, laboratory analysis, and report writing for sites located throughout California.
- 1993–1994 *Researcher*. Northwest Information Center of the California Historical Resources
Information System, Sonoma State University
- Reviewed cultural resource records for project planning, development, and scientific research.

PROFESSIONAL PUBLICATIONS

Meyer, Jack

- 2004 *Featured Research: Recent Developments in California Geoarchaeology*. The Geological Society of America Newsletter of the Archaeological Geology Division, Volume 26(2):5).
- 2002 Sections for public interpretive document: *Life along the Guadalupe River - an Archaeological and Historical journey*, edited Rebecca Allen and Mark Hylkema.
- 2000 Soils and Stratigraphy sections. *In Cross Creek: An Early Holocene/Millingstone Site*, by Richard T. Fitzgerald, pp. 41-45. California State Water Project, Coastal Branch Series Paper Number 12, San Luis Obispo County Archaeological Society.

Rosenthal, Jeffrey S., and Jack Meyer

- 2004 *Landscape Evolution and the Archaeological Record: A Geoarchaeological Study of the Southern Santa Clara Valley and Surrounding Regions*. Center for Archaeological Research at Davis, Publication, Number 14. University of California, Davis.

TECHNICAL REPORTS (PARTIAL LIST)

Meyer, Jack

- 2008 *The Prehistory of the Sonora Region: Archaeological and Geoarchaeological Investigations for Stage 1 of the East Sonora Bypass Project, State Route 108, Tuolumne County, California* Anthropological Studies Center, Sonoma State University, Rohnert Park, California. Prepared for California Department of Transportation, District 10, Stockton.
- 2008 *The Potential for Buried Archaeological Resources along Part of State Route 99, Tehama County, California.* Prepared with Far Western Anthropological Research Group for the California Department of Transportation, District 2, Redding, California.
- 2008 *Geoarchaeological Assessment and Extended Phase I Investigations for the I-280/Winchester Boulevard and I-880/Stevens Creek Boulevard Improvement Project, Santa Clara County, California.* Prepared with Far Western Anthropological Research Group for David Powers & Associates, San Jose, California.
- 2008 *Extended Phase I Geoarchaeological Studies for the PG&E Line 108 Replacement Project, Sacramento and San Joaquin County, California.* Prepared with Far Western Anthropological Research Group for Pacific Gas & Electric Company, Sacramento California.
- 2008 *Extended Phase I Archaeological and Geoarchaeological Studies for Site CA-CCO-18/H for the PG&E Line 131 Replacement Project, Eastern Contra Costa County, California.* Prepared with Far Western Anthropological Research Group for Pacific Gas & Electric Company, Sacramento California.
- 2008 *A Geoarchaeological Overview and Assessment of Caltrans District 3—Cultural Resources Inventory of Caltrans District 3 Rural Conventional Highways.* Prepared with Far Western Anthropological Research Group for the California Department of Transportation, District 3, North Region, Marysville, California.
- 2007 *Subsurface Geoarchaeological Study for the Proposed Angels Camp Bypass Project Area, State Route 4, Calaveras County, California.* Prepared with Far Western Anthropological Research Group for the California Department of Transportation, District 6, Fresno, California.
- 2005 *Geoarchaeological Study of Big Lagoon, Lower Redwood Creek, Marin County, California.* Anthropological Studies Center, Sonoma State University, Rohnert Park, California. Prepared with Anthropological Studies Center for National Park Service, San Francisco, California.
- 2004 Chapters 2 and 3 (Geoarchaeology). In *SF-80 Bayshore Viaduct Seismic Retrofit Projects Report on Construction Monitoring, Geoarchaeology, and Technical and Interpretive Studies for Historical Archaeology*, edited by Mary Praetzellis, pp. 9-24. Prepared with Anthropological Studies Center for California Department of Transportation, District 4, Oakland, California.
- 2003 *Preliminary Findings of the Big Lagoon Geoarchaeological Coring Program, Lower Redwood Creek, Marin County, California.* Prepared with Anthropological Studies Center for National Park Service, San Francisco, California.
- 2003 *Savage Way Geoarchaeological Study, State Route 26, Calaveras County, California.* Prepared with Pacific Legacy, Inc. Cameron Park, California, for Caltrans District 10, Stockton, California.

TECHNICAL REPORTS (CONTINUED)

Meyer, Jack *continued*

- 2002 *Geoarchaeological Study for Portions of Lassen Volcanic National Park, Lassen and Shasta Counties, California*. Edited by Greg White, California State University at Chico.
- 2002 *Phase II Investigations at CA-AMA-56 and Phase I.5 Investigations at CA-AMA-160 for the Jackson Creek Bridge Project on State Route 88, Amador County*. Prepared with Far Western Research Group for the California Department of Transportation, Central Sierra Environmental Branch, Stockton, California. Eric Wohlgemuth co-author.
- 2002 *Regional Landscape Evolution, Little Lake Valley Landscape History, and Landscape Research Issues*. In *General Research design for Archaeological Studies in Little Lake Valley, Mendocino County, California for the Willits Bypass Project*. Prepared with Pacific Legacy for the California Department of Transportation, Marysville, California
- 2002 *Supplemental Archaeological Survey, Historical Study, and Extended Phase I Report, High Street Overhead Seismic Retrofit Project, in the City of Oakland, Alameda County, California*. Prepared with Anthropological Studies Center Report for the California Department of Transportation (District 4), Oakland, California. Co-authored with Jack McIlroy, Elaine-Maryse Solari, Heidi Koenig, and Maria Ribeiro
- 2001 *Broadway/Jackson Street Interchange Improvement Project: Archaeological Survey Report, in the Cities of Oakland and Alameda, Alameda County, California*. Prepared with Anthropological Studies Center Report for the California Department of Transportation (District 4), Oakland, California. Co-authored with Heidi Koenig and Jack Mc Ilroy
- 2001 *Geoarchaeological and Archaeological Investigations for the Central Freeway Seismic Retrofit Project*. Prepared with Anthropological Studies Center Report for the California Department of Transportation (District 4), Oakland, California. Co-authored with Jack Mc Ilroy and Adrian Praetzelis
- 2001 *A Geoarchaeological Study for the Proposed Alameda Highway 238 Widening Project, Alameda County, California*. In *Extended Phase I Assessment of Prehistoric Archaeological Site, CA-ALA-586, for the Highway 238 Widening Project*, by Shelly Tiley, Appendix A. Prepared by Archaeological Research Center, California State University, Sacramento for the California Department of Transportation (District 4), Oakland, California.
- 2001 *Historic Study Report/Phase II Archaeological Evaluation of the Breen Road Site (P-35-000293), San Benito County, California*. Prepared with Anthropological Studies Center Report for the California Department of Transportation (District 5), San Luis Obispo, California. Co-authored with Mark Selverston, Julia G. Costello, and Stephen R. Wee
- 2000 *A Geoarchaeological Study of the Guadalupe Parkway corridor, State Route 87, San Jose, Santa Clara County, California*. Report prepared for the California Department of Transportation, Oakland, California and KEA Environmental, Inc., San Diego, California.
- 2000 *An Archaeological Evaluation of CA-CCO-320/H, with Updates for CA-CCO-397 and CA-CCO-544, Los Vaqueros Area, Contra Costa County, California*. Anthropological Studies Center, Sonoma State University, Rohnert Park, California, Prepared for the Contra Costa Water District, Concord, California.

TECHNICAL REPORTS (CONTINUED)

Meyer, Jack *continued*

- 2000 Environmental History, Landscape Evolution, Prehistoric Site Reports, and NRHP Evaluation sections. In *Phase II Archaeological Investigation of CA-CAL-636H, -789, -1679/H, -1679 State Route 4, Calaveras County, California*. Co-authored with Michael D. Meyer, and Suzanne B. Stewart.
- 2000 Environmental Setting and Geoarchaeological Study sections. In *Phase II Archaeological Test Excavations at CA-SCR-313, Highway 17, Santa Cruz County, California*. Co-authored with Deborah A. Jones and Jeffrey S. Rosenthal of Far Western Research Group, Davis, CA.
- 2000 Portions of Theoretical and Methodological Context, Site Reports, Project Chronology and Components, and Synthesis sections. In *Final Report of the Anderson Flat Project, Lower Lake, Lake County, California: Volume I*. Prepared by Greg White for the California Department of Transportation, District 1, Eureka, California
- 1999 *Preliminary Geoarchaeological Study at Green Valley Creek, Solano County, California*. William Lettis and Associates, Walnut Creek, California. Co-authored with John N. Baldwin (Paleoseismology study)
- 1999 *Report on Phase II Geoarchaeological Investigation of CA-YUB-1157, Beak Air Force Base, California* (Preliminary Draft). Pacific Legacy, Aptos, California. Prepared for United States Air Force, Air Combat Command, Beak Air Force Base, California. Co-authored with Janet P. Eidsness.
- 1998 *Results of Archaeological Investigations for the Proposed Trancas Street Interchange Drainpipe Project, Napa County, California*. Anthropological Studies Center, Sonoma State University, Rohnert Park, California. Prepared for Caltrans District 4, Oakland, California. Co-authored with Todd Jaffke.
- 1998 Geoarchaeological Investigation of Portion of the Proposed Hayward Bypass Corridor, Alameda County, California. In *Results of Archaeological Test Excavations at CA-ALA-566 for the Proposed Route 238 Hayward Bypass Project*, edited by Glenn Gmoser, pp. 67-99. Anthropological Studies Center, Sonoma State University, Rohnert Park, California. Prepared for Caltrans District 4, Oakland, California.
- 1996 *Results of Subsurface Archaeological Survey of the Los Vaqueros and Transfer Pipeline Routes, Los Vaqueros Project, Contra Costa County, California*. Anthropological Studies Center, Sonoma State University, Rohnert Park, California. Prepared for the Contra Costa Water District, Concord, California.

Meyer, Jack, and Graham Dalldorf

- 2005 *The Potential for Buried Archaeological Resources in the Lake Oroville Facilities Relicensing Area, Butte County, California*. (DRAFT) Anthropological Studies Center, Sonoma State University, Rohnert Park, California. Prepared for California Department of Water Resources.
- 2004 *Geoarchaeological Investigation in the Parks Reserve Forces Training Area, Alameda and Contra Costa Counties, California*. Anthropological Studies Center, Sonoma State University, Rohnert Park, California. Prepared for U.S. Army West Coast Garrison.

TECHNICAL REPORTS (CONTINUED)

Meyer, Jack, and Graham Dalldorf *continued*

- 2004 *Geoarchaeological Investigations for Stage 2 of the East Sonora Bypass Project, State Route 108, Tuolumne County, California*. Anthropological Studies Center, Sonoma State University, Rohnert Park, California. Prepared for California Department of Transportation, District 10, Stockton.

Meyer, Jack, and Jeffrey S. Rosenthal

- 1997 *Archaeological and Geoarchaeological Investigations at Eight Prehistoric Sites in the Los Vaqueros Reservoir Area, Contra Costa County. In Los Vaqueros Project Final Report*, Prepared by the Anthropological Studies Center, Sonoma State University, Rohnert Park, California. Submitted to the Contra Costa Water District, Concord. Report on file, Northwest Information Center, Sonoma State University, Rohnert Park, California.
- 1998 *An Archaeological Investigation of Artifacts and Human Remains from CA-CCO-637, Los Vaqueros Project Area, Contra Costa County, California*. Anthropological Studies Center, Sonoma State Academic Foundation, Inc., Rohnert Park, California. Submitted to Contra Costa Water District, Concord, California, Rohnert Park, California.
- 2007 *A Geoarchaeological Overview for the Nine Bay Area Counties of Caltrans District 4. Far Western Anthropological Research Group, Davis, California*. Prepared for California Department of Transportation, District 4, Oakland, California.

Rosenthal, Jeffrey, and Jack Meyer

- 2004c Bodie Hills Obsidian Hydration Rates. In *Middle Holocene Adaptations in the Central Sierra Nevada Foothills: Data Recovery Excavations at the Black Creek Site, CA-CAL-789*. Far Western Anthropological Research Group, Inc., Davis, California. Submitted to California Department of Transportation, District 06, Fresno.
- 2004 *Cultural Resources Inventory of Caltrans District 10 Rural Conventional Highways, Volume III: Geoarchaeological Study, Landscape Evolution and the Archaeological Record of Central California*. Far Western Anthropological Research Group, Davis, California. Prepared for California Department of Transportation, District 10, Stockton.

Rosenthal, Jeffrey S., Jack Meyer, Jim Nelson, Denise Furlong, Tim Carpenter, and Eric Wohlgemuth

- 2006 *Results of Limited Geoarchaeological and Archaeological Study of CA-CCO-18/548, John Marsh Historic Park, Brentwood, California*. Far Western Anthropological Research Group, Inc., Davis, California. Prepared for California Department of Parks and Recreation.

PROFESSIONAL PRESENTATIONS

- 1993 Society for California Archaeology Annual Meeting, Asilomar, California.
- Paper title: *Geoarchaeological Investigations at Anderson Flat.*
- 1994 Society for California Archaeology Annual Meeting, Ventura, California.
- Paper title: *The Depositional History of Late Quaternary Alluvial Basins and the Visibility of the Archaeological Record*
- 1996 Society for California Archaeology Annual Meeting, Bakersfield, California.
- Paper title: Seeing is believing: The Problem and Promise of Subsurface Sites.
- 1997 Society for California Archaeology Annual Meeting, Rohnert Park, California.
- Organized Symposium title: *The Los Vaqueros Project: Prehistory and Ethnohistory in the Shadow of Diablo.*
 - Paper title: *Geoarchaeology in the Design and Construction of the Los Vaqueros Project.*
 - Paper title: *The Natural Evolution of Composite Cultural Landscapes.*
 - Paper title: *Archaeological Landscape Evolution in the Los Vaqueros Area.*
- 2000 Conference title: Beneath Our Feet: A 10,000 Year Human and Natural Legacy in the East Bay, at the Oakland Museum of California, 18 November 2001.
- Presentation title: *More Than 9,000 Years Ago.*
- 2001 Society for California Archaeology Annual Meeting, Modesto, California.
- Plenary Session title: *A Space Odyssey - Escaping the Gravity of Earth.*
 - Paper titled: *Needles, Haystacks, and Old Dirt: A Geoarchaeological View of Buried Archaeological Landscapes.*
- 2003 Joint Session of the Pacific Soil Scientists Association of California (PSSAC) and the Society for California Archaeology (SCA) Annual Meeting, Sacramento, California, March 2003.
- Session title: *PSSAC/SCA Soils and Archeology.*
 - Symposium Paper title: *Talking Dirt: Uses and Past Abuses of Soil and Geologic Studies in California Archaeology.*
- 2007 Society for California Archaeology (SCA) Annual Meeting, San Jose, California, March 2007.
- Plenary Session: *What Lies Beneath San Jose?*