Appendix E
Cultural Resources

ESA

E-1 Cultural Resources Assessment Report – Public Version

Public Version

CASTELLINA SPECIFIC PLAN PROJECT, COUNTY OF MADERA, CALIFORNIA

Cultural Resources Assessment Report

Prepared for
Madera County
200 West 4th Street, Suite 3100
Madera, CA 93637

April 2018

Public Version

CASTELLINA SPECIFIC PLAN PROJECT, COUNTY OF MADERA, CALIFORNIA

Cultural Resources Assessment Report

Prepared for:
Madera County
200 West 4th Street, Suite 3100
Madera, CA 93637

April 2018

Prepared by:
ESA
626 Wilshire Blvd. Suite 1100
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Report Author:
Michael Vader, B.A.

Project Location:
Madera and Kismet (CA) USGS 7.5-minute Topographic Quads
Sections 5 and 6 of Township 11 South, Range 18 East

Acreage: Approx. 794 acres

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EXECUTIVE SUMMARY

Castellina Specific Plan Project - Cultural Resources Assessment Report

The County of Madera (County) has retained Environmental Science Associates (ESA) to conduct a Cultural Resources Assessment for the Castellina Specific Plan Project (Project) in support of an Environmental Impact Report (EIR) being prepared pursuant to the California Environmental Quality Act (CEQA). The Castellina Specific Plan would regulate and provide development guidance for the development of up to 3,072 residential units, comprised of single- and multi-family, and mixed-use residential units along with commercial mixed-uses, an employment park, and recreational facilities. Development of the Specific Plan area would occur over phases depending on market demand and the ability to provide adequate infrastructure. The Project also includes an initial approval of the first phase of development (Phase I Project) that encompasses 92 acres within the northwestern portion of the Specific Plan area. Subsequent phases of development within the Specific Plan area will require additional approvals. The County is the lead agency pursuant to CEQA. The 794-acre Specific Plan area is located within the east-central San Joaquin Valley, approximately 1-mile north of the City of Madera.

A records search for the Project was conducted on March 8, 2018 at the California Historical Resources Information System (CHRIS) Southern San Joaquin Valley Information Center (SSJVIC) housed at California State University, Bakersfield. The records search included a review of all recorded cultural resources and previous studies within the Specific Plan area and a ¼-mile radius around the Specific Plan area. The SSJVIC records search indicates that no previous cultural resources studies overlap the Specific Plan area. However, a 2007 study not on file at the SSJVIC included the entirety of the Specific Plan area. The archival research and pedestrian survey conducted as part of the 2007 study failed to identify the presence of cultural resources within the Specific Plan area.

The records search results indicate that one historic-period built resource (P-20-002662) has been previously recorded within a ¼ mile radius of the Specific Plan area. The resource consists of the Burlington Northern and Santa Fe (BNSF) Railroad constructed between 1895 and 1898, which runs parallel to the Specific Plan area's southwestern boundary and is located within 50 feet of the Specific Plan area and the Phase 1 project area. Previous evaluations of the resource recommend it as not eligible for listing in the National Register of Historic Places (National Register) or California Register of Historical Resources (California Register) due to a lack of integrity resulting from routine maintenance and repairs which have modernized the railroad's right-of-way, diminishing its integrity of design, materials, workmanship, and feeling. No previously recorded resources are located directly within the 92-acre Phase 1 Project area or the Specific Plan area.

A Sacred Lands File (SLF) conducted by the California Native American Heritage Commission (NAHC) on February 27, 2018 indicated that Native American cultural resources are not known to be located within the Specific Plan area. The County is conducting consultation with appropriate Native American groups per requirements of Assembly Bill (AB) 52 and Senate Bill (SB) 18, and the results of this consultation will be included in the EIR.

A geoarchaeological review was conducted to predict the potential for subsurface archaeological deposits within the Specific Plan area. Geologic maps, geotechnical reports, and previous cultural resources studies were examined as part of the review. The mapped geological units within the Specific Plan area are older than 42,000 years, predating the presence of humans in the Americas by approximately 30,000 years. The age of these geological units is corroborated by the presence of soils with well-advanced pedogenesis, as well as geotechnical studies demonstrating widespread cementation of soils. These factors imply that that the Specific Plan area has experienced minimal (if any) natural deposition, which would bury archaeological sites, since the late Pleistocene and prior to human habitation in the region. If the Specific Plan area contains archaeological sites, such sites would not be expected to be deeply buried by natural sediments and would most likely occur at or near the surface.

A cultural resources survey of the Phase I Project area was conducted on April 4, 2018. The survey was aimed at identifying archaeological and historic-period built resources within or immediately adjacent to the Phase I Project area. The entirety of the Phase I Project area was subject to systematic pedestrian survey using transect intervals spaced no more than 15 meters (approximately 50 feet) apart. Overall, approximately 75 percent of the Phase I Project area had ground surface visibility of 90 – 100 percent, with the remaining 25 percent exhibiting 0 percent ground surface visibility. No cultural resources were identified within the Phase I Project area as a result of the survey. Previously recorded resources P-20-002662 (BNSF Railroad) was noted approximately 50 feet southwest of the Phase I Project's southwestern boundary and was found to match previous descriptions. Survey of the larger Specific Plan area was not conducted.

In summary, the archival research conducted in connection with the entire Specific Plan area did not identify cultural resources within the Specific Plan area. The assessment of the Specific Plan area outside of the Phase I Project area employed a programmatic approach which did not include a pedestrian cultural resources survey, and, therefore, additional work would be required for the portions of the Specific Plan area not subject to a project-level analysis. Additionally, given that the Specific Plan area will be developed in phases over a period of years, this analysis will likely exceed 5 years in age by the time approval for the additional phases will be needed, and, therefore, full cultural resources assessments for the remaining phases may be required. The archival research and survey conducted for the Phase 1 Project area did not identify cultural resources within the Phase I Project area. During the cultural resources survey, approximately 25 percent of the Phase I Project area's ground surface was obscured by seasonal grasses, which may have concealed the presence of surficial archaeological resources. Given these considerations, separate recommendations for each the Phase I Project and the Specific Plan area are provided in the Conclusions and Recommendations section at the close of this report.

CASTELLINA SPECIFIC PLAN PROJECT

Cultural Resources Assessment Report

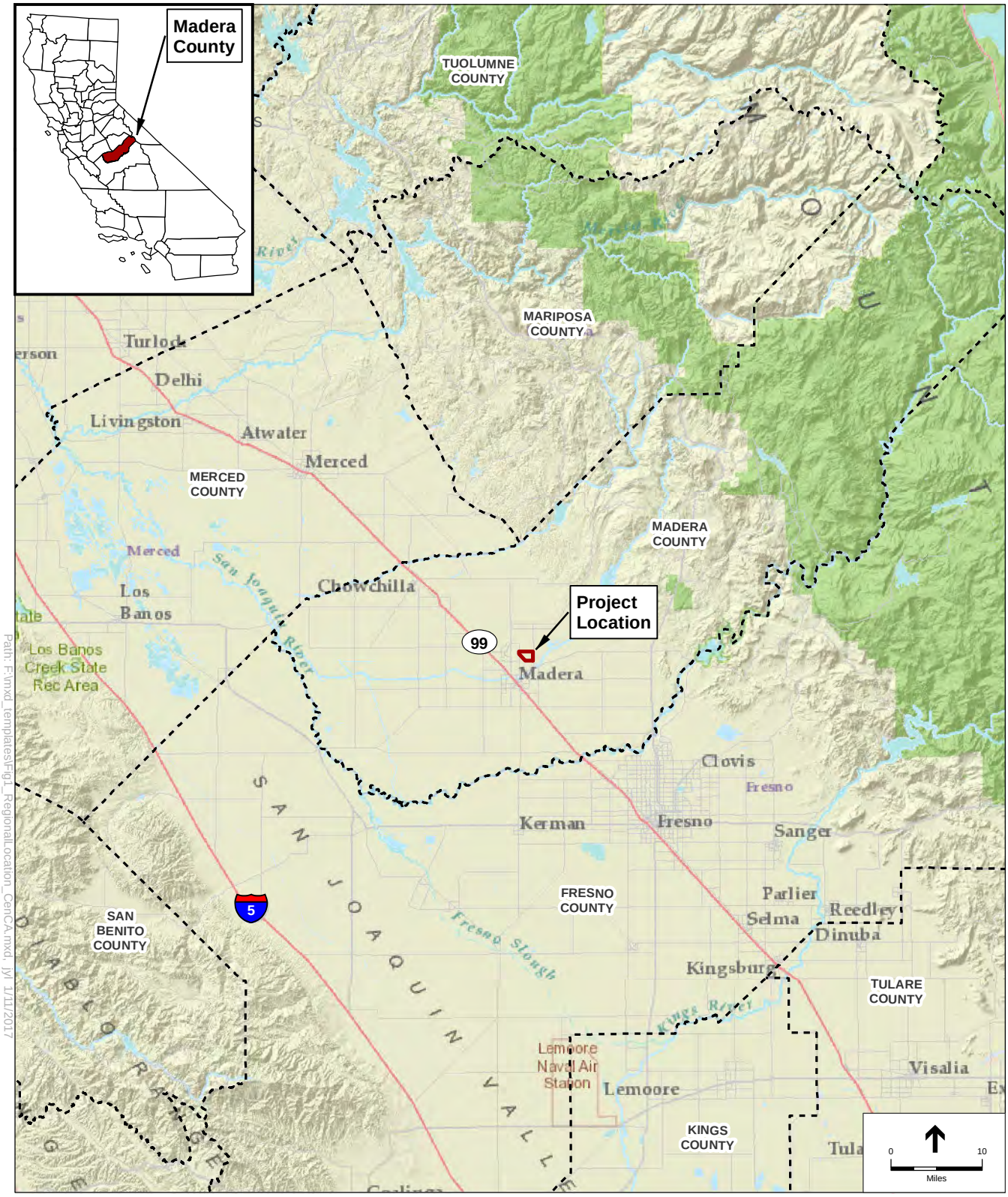
Introduction

The County of Madera (County) has retained Environmental Science Associates (ESA) to conduct a Cultural Resources Assessment for the Castellina Specific Plan Project (Project) in support of an Environmental Impact Report (EIR) being prepared pursuant to the California Environmental Quality Act (CEQA). The Castellina Specific Plan would regulate and provide development guidance for the development of up to 3,072 residential units, comprised of single- and multi-family, and mixed-use residential units along with commercial mixed-uses, an employment park, and recreational facilities, including parks, play fields, trails, plazas, community gardens, and other open space. Development of the Specific Plan area would occur over phases depending on market demand and the ability to provide adequate infrastructure. The Project includes an initial approval of the first phase of development (Phase I Project) that encompasses 92 acres within the northwestern portion of the Specific Plan area. Subsequent phases of development within the Specific Plan area will require additional approvals. The County is the lead agency pursuant to CEQA.

ESA personnel involved in the preparation of this report are as follows: Monica Strauss, M.A., R.P.A. Project Director and Principal Investigator; Michael Vader, B.A, report author; Mai Lee, B.A. and Blake Buford, B.A, surveyors; and Jason Nielson, GIS specialist. Resumes of key personnel are included in Appendix A.

Project Location

The approximately 794-acre Specific Plan area is located within the east-central San Joaquin Valley, approximately 1-mile north of the City of Madera and 3 miles east of Highway 99 (**Figure 1**). The Specific Plan area is comprised of existing fig and almond orchards and is bounded by Avenue 18 in the north, Road 28½ in the east, Avenue 17 in the south, and Road 27 and the Burling Northern Santa Fe (BNSF) Railroad to the west (**Figure 2**). Specifically, the Specific Plan area is located in Sections 5 and 6 of Township 11 South, Range 18 East on the Madera and Kismet USGS 7.5-minute topographic quadrangles (**Figure 3**).



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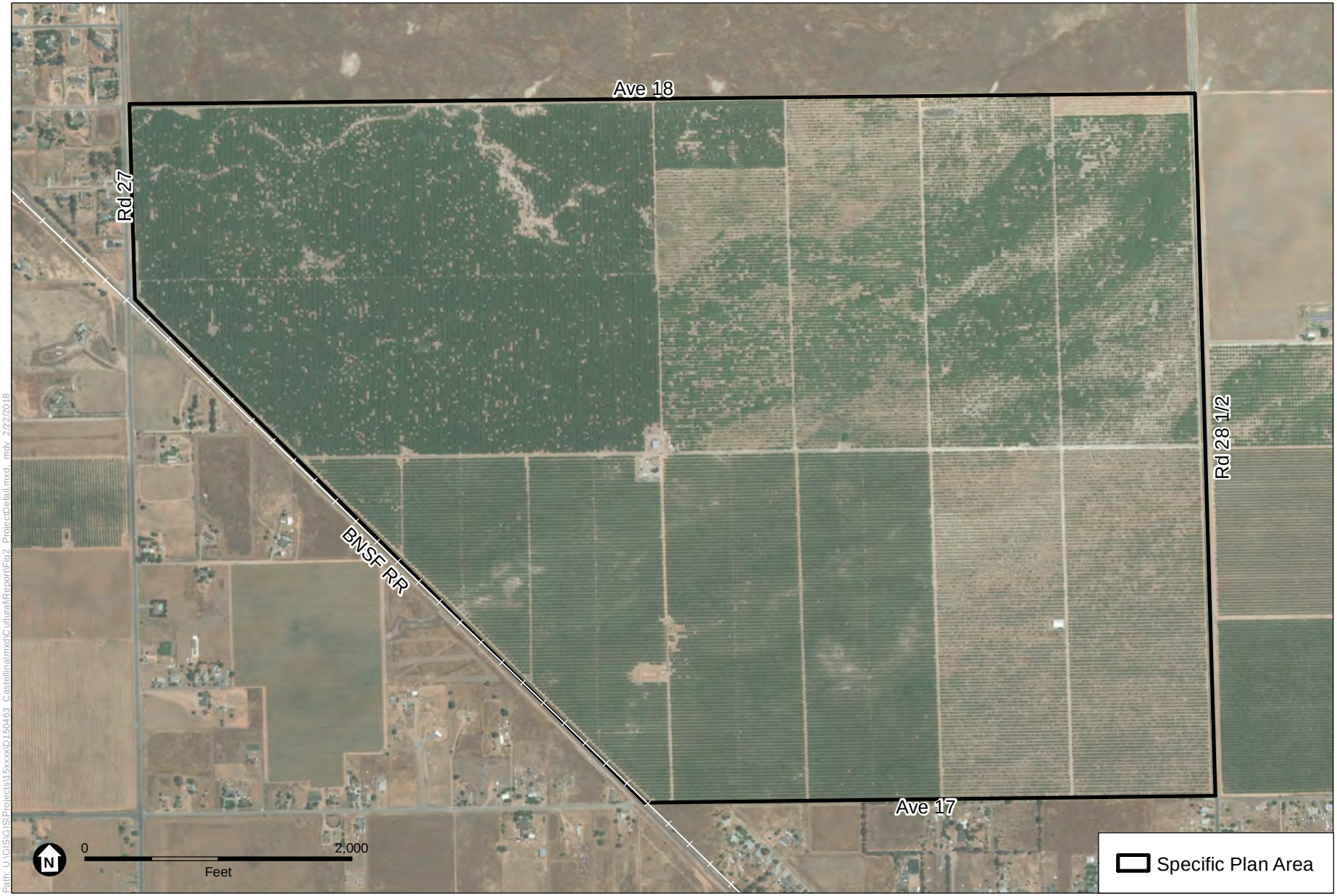
SOURCE: ESRI

Castellina Specific Plan Project . 150463

Figure 1

Regional Location



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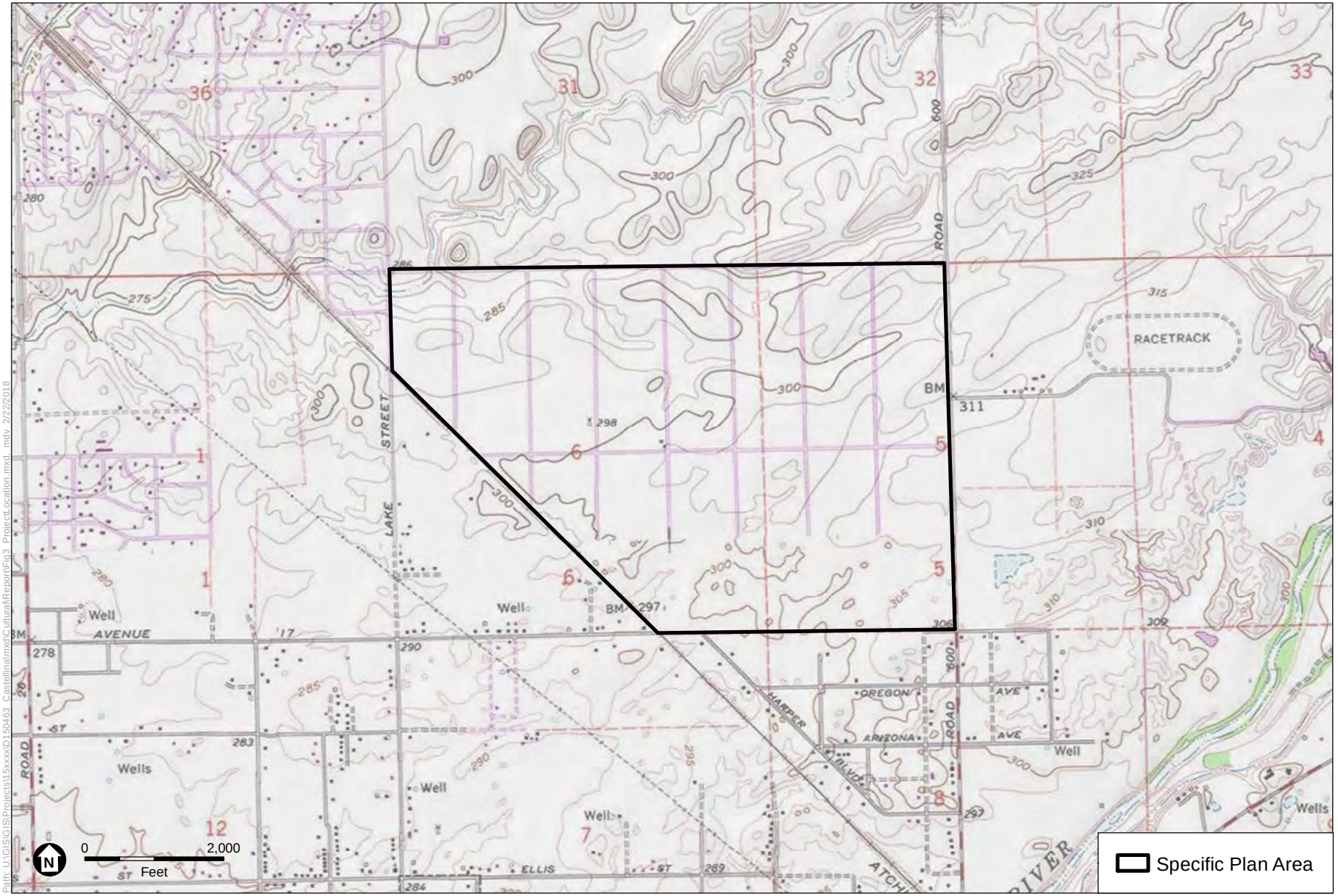
SOURCE: ESRI

Castellina Specific Plan Project

Figure 2
Project Detail

ESA



Topographic Quads: Madera and Kismet, CA 7.5-minute

Castellina Specific Plan Project

Figure 3
Project Location

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Project Description

The Project includes the preparation of a Specific Plan for the 794-acre Specific Plan area, as well as approval of the Phase I Project Tentative Map. The preparation of the Specific Plan is analyzed at the program level and the Phase I Project approval is analyzed at the project level. The Specific Plan's program level of analysis is cursory in order for the lead agency to evaluate the effects of a series of actions that are related geographically and as logical parts in a chain of contemplated actions. Additional environmental review at the project-level will be required for the Specific Plan area's subsequent phases as their locations and features are determined during the design process.

Specific Plan

The Specific Plan would guide the development of up to 3,072 residential units, approximately 21 acres of commercial mixed-use uses, and approximately 131 acres of parks, trails, plazas, community gardens, and other open space across the 794-acre Specific Plan area (**Figure 4**). Residential development would be divided across four neighborhoods with a centralized commercial mixed use Town Center. The residential neighborhoods would be designed around a framework of parks and recreation facilities to encourage a walkable community and active community interaction. Each neighborhood will be organized in a traditional modified grid roadway pattern, with a minimal number of cul-de-sacs. Due to the rural setting of the area, development under the Specific Plan would also require the construction of new utilities, such as a new wastewater treatment plant and storm drain system, and provide additional public services, including a proposed elementary school, to serve the new population.

Tentative Map for Phase I

The Phase I Project requires initial approval of the first phase of development which encompasses 92 acres within the Specific Plan area (**Figure 5**). Phase I includes two neighborhoods encompassing 108 residential lots, entry and collector roads encompassing, and a park and detention/retention area.

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SOURCE: Kimley Horn, 2016

Castellina Initial Study . 150463

Figure 4

Conceptual Land Plan

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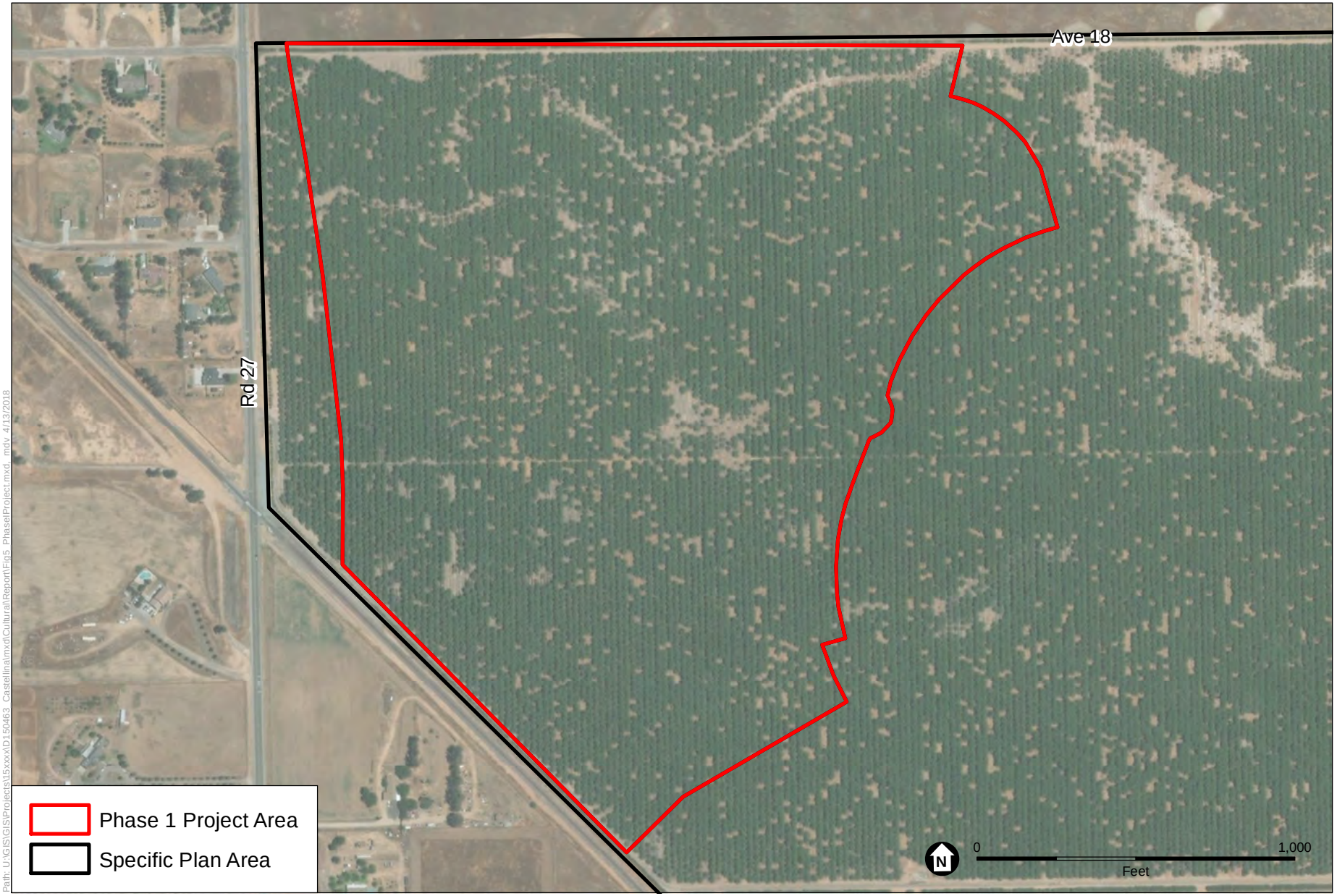

SOURCE: ESRI

Castellina Specific Plan

Figure 5

Phase I Project Area

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Setting

Natural Setting

The Specific Plan area falls within the east-central part of the San Joaquin Valley, which encompasses the southern portion of California's Central Valley. The valley is located approximately 21 miles east of the Sierra Nevadas, and is composed of active alluvial fans, alkali basins, and river floodplains. Historically, the valley supported a treeless plain with patches of alkali-tolerant annual forbs and grasses (Rosenthal et al. 2007). Wildlife included antelope, deer, and elk, which wintered on the plains, as well as jackrabbits, ground squirrels, and quail (Wallace 1978a). Currently, the Specific Plan area is used for agricultural production and contains almond and fig orchards, related agricultural support facilities (e.g., equipment storage), wells, and unimproved dirt roadways.

Prehistoric Setting

The Central Valley prehistoric record is divided into three basic periods: Paleo-Indian (11,550 to 8,550 cal B.C.), Archaic (8,550 cal B.C. to cal A.D. 1100), and Emergent (cal A.D. 1100 to Historic). The Archaic period is further divided into three sub-periods: Lower Archaic (8,550 to 5,550 cal B.C.), Middle Archaic (5,550 to 550 cal B.C.), and Upper Archaic (550 cal B.C. to cal A.D. 1100) (Rosenthal et al. 2007).

Paleo-Indian (11,550 to 8,550 cal B.C.)

Evidence of human occupation of the Central Valley during the Paleo-Indian period comes primarily from the San Joaquin Valley. Basally thinned and fluted concave base projectile points, similar to Clovis points, have been found in three San Joaquin Valley areas: Tracy Lake, the Woolfsen mound, and the Tulare Lake basin. The Witt site (CA-KIN-32), located on a Late Pleistocene shoreline of Tulare Lake, produced hundreds of these points (Rosenthal et al. 2007). Human and faunal bone recovered from this site dated to between 10,788 and 17,745 uncalibrated radiocarbon years before present; however, there is no direct association between the projectile points and the bone. Little other evidence of human occupation during the Paleo-Indian period is available for the Central Valley.

Lower Archaic (8,550 to 5,550 cal B.C.)

Lower Archaic occupation of the Central Valley is known mainly from isolated finds located along the ancient shorelines of lakes. Stemmed points, chipped stone crescents, and other flaked stone artifacts are frequently recovered from the ancient shorelines of Tulare Lake (Rosenthal et al. 2007). Archaeological evidence from the valley floor and adjacent foothill areas suggest two distinct cultural adaptations, though degree of variation and interaction between valley floor and foothill groups is presently unknown; these variations may not represent divergent adaptations, but rather seasonal expressions of the same group (Rosenthal et al. 2007).

Very little archaeological evidence exists for occupation of the valley floor during the Lower Archaic. One component from site CA-KER-116 was dated to between 7,175 and 6,450 cal B.C. based on radiocarbon assays obtained from freshwater mussels. This site is located on the ancient

shoreline of Buena Vista Lake, between Bakersfield and Taft (Rosenthal et al. 2007). The artifact assemblage from CA-KER-116 included chipped stone crescents, a stemmed projectile point fragment, a carved stone atlatl spur, and some flaked stone tools. Faunal bone included freshwater fish, waterfowl, freshwater mussel, and artiodactyl. No plant remains or milling tools were recovered (Rosenthal et al. 2007). While regional trade of marine shell beads and obsidian is well documented for other areas during this time, Lower Archaic deposits from CA-KER-116 do not contain beads or obsidian.

In contrast to the valley floor, ground stone tools indicative of plant processing, such as handstones and millingslabs, are common in adjacent foothill sites (Rosenthal et al. 2007). These sites appear to have been seasonally exploited, with nuts, such as acorn and pine, consumed more than small seeds. Artifact assemblages suggest a semi-permanent settlement system with rotating occupation of seasonal camps.

Middle Archaic (5,550 to 550 cal B.C.)

The Middle Archaic is characterized by a climatic shift to warmer, drier conditions, similar to present-day conditions. This change was likely the primary impetus for culture change throughout California. In the Central Valley, Tulare Lake receded as the Sacramento-San Joaquin Delta wetland habitat developed.

By the Middle Archaic, foothill and valley floor groups were distinct and separate adaptations. Early sites from the Middle Archaic period are more abundant in the foothill areas and are characterized by a large quantity of stone implements designed to exploit acorns and pine nuts. Projectile points are typically composed from locally available materials and include notched, stemmed, thick-leaf, and narrow concave base darts. There is a lack of bone and shell artifacts (Rosenthal et al. 2007).

Valley floor groups are better represented in sites dating from the later Middle Archaic period and reflect an increasing exploitation of river corridors in the Sacramento and San Joaquin valleys. Sites were occupied year round and technological assemblages suggest a growing reliance on fishing. Gorge hooks, composite bone hooks, and spears all appear in the archaeological record during the Middle Archaic. Tule elk, mule deer, pronghorn sheep, rabbits, and waterfowl are also represented in faunal assemblages and indicate exploitation of freshwater marshes, riparian forests, and grasslands. Mortars and pestles appear around 4,050 cal B.C.; however, acorn and pine nut remains are also commonly recovered from sites lacking mortars and pestles (Rosenthal et al. 2007).

Middle Archaic northern San Joaquin Valley and southern Sacramento Valley sites include artifacts more common to later time periods elsewhere, including fine-twisted cordage, twined basketry, basketry awls, simple pottery, and baked clay objects (Rosenthal et al. 2007). Items of personal adornment, such as stone plummets, bird bone tubes, and shell beads, are also present in Middle Archaic deposits (Rosenthal et al. 2007)

Regional trade was widespread during the Middle Archaic, as evidenced by obsidian and shell beads and ornaments commonly recovered from sites. The earliest appearance of Olivella

grooved-rectangle beads is in the southern San Joaquin Valley (at sites CA-KER-3166/H and CA-KER-5404) and generally date to 3,050 cal B.C. or earlier (Rosenthal et al. 2007). Settlement patterns reflect more stable, long-term occupation of resource-abundant areas.

The Middle Archaic period is typified by the Windmiller Pattern, first identified in the Sacramento-San Joaquin delta region. In the Central Valley, Windmiller sites generally date to between 1,850 and 750 cal B.C. These sites, found as far south as Buena Vista Lake in the San Joaquin Valley, are characterized by westerly oriented, ventrally and dorsally extended burials and complex grave offerings (Rosenthal et al. 2007). During this period, Windmiller cemeteries exhibit not only a distinct burial pattern, but evidence of resource depletion and increased interpersonal violence. Osteological studies reveal higher levels of malnutrition and skeletal trauma, such as fractures and embedded stone points (Fagan 2003).

Upper Archaic (550 cal B.C. to cal A.D. 1100)

Climatic changes at the start of the Upper Archaic resulted in a cooler, wetter, and more stable environment. During the Upper Archaic period, regional variations were more common and focused on resources that could be processed in bulk, such as acorns, salmon, shellfish, rabbits, and deer. Polished and ground stone plummets, sometimes recovered as caches, are commonly recovered from riparian environments and marshlands in the delta and southern San Joaquin Valley. Use of mortars and pestles for food processing was prevalent, except for the valley margins where handstones and millingslabs remained dominant (Rosenthal et al. 2007).

Shell bead trade and technological specialization increased. Shell bead types include saucer and saddle-shaped Olivella beads. Bone wands, tubes, and ornaments, as well as well-made ceremonial obsidian blades, appear in the archaeological record at this time. In San Joaquin Valley, obsidian biface blanks were imported via east-west travel corridors from eastern Sierra Nevada Mountains quarries, including Bodie Hills, Casa Diablo, and Coso. Lanceolate-shaped bifaces were produced by specialized craftsman located near northern obsidian sources, but are to the southern Sacramento Valley.

The delta region of the lower Sacramento Valley saw the rise of large mounded villages characterized by extensive habitation deposits with fire-cracked rock, hearths, ovens, house floors, and flexed burials. This adaptation is known as the Berkeley Pattern. However, descendants of the Windmiller Pattern remained in the San Joaquin Valley during this time period. Upper Archaic Windmiller sites in the San Joaquin Valley are generally located along the western and southern margins of the delta, as well as near streams and marshes (Rosenthal et al. 2007). Excavated cemeteries located along the western fringes of the San Joaquin Valley contained either flexed or extended burials, and may reflect alternating occupation of this area by valley and coastal range groups.

Sites around Buena Vista Lake in the southern San Joaquin Valley reflect year-round occupation of villages and include house floors and extensive middens. House floors appear in the archaeological record as large, round depressions ranging in diameter from 4 to 8 meters and 0.3 to 1 meter in depth. Other indicators of residential dwellings could include hearths, post holes, and underground storage pits (Chartkoff 1998).

Emergent (cal A.D. 1000 to Historic)

During the Emergent Period, many Archaic Period technologies and cultural traditions disappeared throughout the Central Valley. Practices very similar to those observed by later European explorers appeared at this time. Research on Emergent Period sites in the San Joaquin Valley has been limited and only one cultural pattern, the Panoche Complex, has been fully identified. The Panoche Complex (circa A.D. 1500 to 1850) is characterized by large circular structures, flexed burials and cremations, small side-notched projectile points, shell disk beads, and ground stone, such as mortars, pestles, and some metates (Moratto 1984).

The Emergent Period is often divided into the Lower Emergent (A.D. 500-1500) and Upper Emergent (A.D. 1500-1800). The Lower Emergent Period is characterized by banjo-type Haliotis ornaments, incised bird bone whistles and tubes, flanged soapstone pipes, and rectangular Olivella sequin beads. The bow and arrow replaced the dart and atlatl in hunting tool kits. Panoche side-notched points, a variation on the Desert side-notched point, have been recovered from Lower Emergent Period sites along the western side of the San Joaquin Valley. The Upper Emergent is characterized by small corner-notched and desert series projectile points, Olivella lipped and clam disk beads, bead drills, magnesite cylinders, and hopper mortars. While limited cremation was practiced during the Lower Emergent, it became widespread during the Upper Emergent. In general, increasingly complex burial practices developed, as indicated by grave goods and variation in burial type (Fredrickson 1974; Rosenthal et al. 2007).

By the end of the Emergent Period, village sites and territorial boundaries closely resembling those documented in ethnographic literature had been established. Manufacturing centers were decentralized and raw materials in the form of obsidian cobbles and shell bead blanks were transported from their sources to areas where the finished product would be completed. Trade relations were highly regularized and sophisticated, with increasing quantities of goods moving over greater distances. Clam disk beads became a monetary unit of trade. Individual and groups of specialized craftsman arose governing various aspects of production and exchange throughout California (Fredrickson 1974).

Central Valley sites during this time period exhibit faunal assemblages characterized by large quantities of fish bone and a diversity of bird and mammal bones, with some regional variations. Plant use is represented by the mortar and pestle, though the types of plants exploited in the San Joaquin Valley is not well documented. In the Sacramento Valley, small seeds became an increasingly important staple, as well as acorns, pine nuts, and manzanita. Diverse fishing equipment assemblages are common to the Sacramento Valley and include several types of harpoons, bone fish hooks, and gorge hooks. Twined and coiled basketry and netting have been recovered from several sites in the Central Valley, including CA-MER-3 (the Menjoulet Site) located near Los Banos Creek (Rosenthal et al. 2007).

In the southern San Joaquin Valley, pottery was not manufactured but was obtained by trade with groups from the foothills to the east. Consumnes pottery was produced in the Sacramento Valley and is represented in several artifact assemblages from Sacramento County sites. Other clay items recovered from Sacramento Valley sites include baked clay balls (possibly used for cooking), and human and animal effigies (Rosenthal et al. 2007).

House floors are common throughout the Central Valley during the Emergent Period. A very large house floor, probably representing a ceremonial structure, was documented during excavations at the Menjoulet Site in Merced County. The floor measured 28 meters in diameter with a mud wall around the perimeter. Thirty cremations and two inhumations were recovered from the house floor (Gamble 2012; Moratto 1984).

Ethnographic Setting

At the time of contact, the Central Valley was occupied by speakers of the California Penutian language family, specifically the Yokuts. The Yokuts entered the San Joaquin Valley sometime prior to A.D. 1400, perhaps by force, as indicated by skeletal remains with fatal wounds inflicted by projectile points. Historically, Yokuts have been divided into three cultural-geographical groupings: Northern Valley, Southern Valley, and Foothills (Arkush 1993; Fagan 2003).

The territory of the Northern Valley Yokuts is defined roughly by the crest of the Diablo Range on the west and the foothills of the Sierra Nevada on the east. The southern boundary is located approximately where the San Joaquin River bends northward and the northern boundary is roughly half way between the Calaveras and Mokelumne Rivers. Populations were concentrated along waterways and on the more hospitable east side of the San Joaquin River (Wallace 1978a). The Southern Valley Yokuts territory included Tulare, Buena Vista, and Kern lakes and the lower portions of the Kings, Kaweah, Tule, and Kern rivers (Wallace 1978b).

Yokuts were organized into distinct groups each of which had their own name, dialect, and territory. Each group averaged about 350 persons (Wallace 1978b). Yokuts were uniquely egalitarian in their political organization. Local groups were self-governing and all members received equal ownership and access to most resources (Arkush 1993). Both Northern Valley Yokuts and Southern Valley Yokuts established permanent settlements on high ground near larger bodies of water, above flood levels. Housing consisted of small round or oval-shaped structures framed by light wooden poles tied together and topped with tule mats.

Northern Valley Yokuts favored smaller milling tools, such as mortars and pestles, with larger milling implements, such as manos and metates, used less frequently. Flaked stone tools were manufactured primarily from locally available materials, including chert, jasper, and chalcedony. Tools made from imported obsidian were less common. Tribes traded for baskets, bows and arrows, and mussel and abalone shells (Wallace 1978a).

Southern Valley Yokuts relied heavily on tule reeds for basketry and making floor mats. Basketry tools, such as awls, were manufactured primarily from large mammal bones. Cordage was constructed from milkweed. Stone was less abundant in the Southern Valley Yokuts territory and lithic material and milling implements were generally obtained through trade. Other items acquired through trade with neighboring groups include Olivella and abalone shells, as well as clam disk monetary beads (Wallace 1978b). Both Northern Valley Yokuts and Southern Valley Yokuts used tule to construct watercraft.

Diets consisted mainly of fish, waterfowl, shellfish, roots, and seeds. Preferred fish included lake trout and, when available, steelhead, salmon and sturgeon. Chub, perch, and suckers were less

desirable and caught in smaller numbers. Northern Valley Yokuts also had access to salmon, which would spawn in the San Joaquin River and its primary feeder streams. Fish were caught by trolling with nets, diving with hand nets, spearing, or capturing fish via basketry traps, with bare hands, or with a bow and arrow. Available waterfowl included geese, ducks, and mud hens. Methods for capturing birds included snares, nets, bow and arrow, and throwing tule mats over their prey. Stuffed decoys were employed to assist in capture. The Yokuts also acquired eggs from nests (Wallace 1978a; Fagan 2003).

Other foodstuffs included freshwater mussels, turtles, wild seeds and roots, which were all consumed in large quantities. Grassnut roots were roasted whole or made into a paste. For the Southern Valley Yokuts, the absence of oak trees in the valley floor meant that acorns were only available by travel or trade, while Northern Valley Yokuts enjoyed greater access to this staple. Land mammals comprised an insignificant percentage of the Yokuts diet. On occasion, wild pigeons, jackrabbits, ground squirrels, and burrowing rodents were acquired. Larger game, such as antelope and elk, were rarely hunted (Wallace 1978a; 1978b).

Historic Setting

Widespread exploration of the Central Valley began in the early 1800s when Lieutenant Gabriel Moraga led a Spanish contingent over Pacheco Pass and into the valley. In the ensuing years, Moraga made several expeditions into the San Joaquin Valley to scout for potential mission sites and pursue runaway neophytes; however, no permanent Spanish settlements were established in the San Joaquin Valley (CAGenWeb 2013).

One of the earliest Spanish trails, known as El Camino Viejo (The Old Road), ran north-south through the San Joaquin Valley extending from San Pedro to San Antonio. The trail followed the path of a prehistoric trail and skirted the eastern slope of the Coast Range foothills (approximately 50 miles west of the Specific Plan area). El Camino Viejo was an alternative route to heavily traveled El Camino Real (The Royal Road) and was often the preferred route of those wishing to travel under the radar of the Spanish government. The trail, called “The Old Trace” by American settlers, became a stagecoach and mail route and also an important route for cattle ranchers. In the valley, the route largely corresponds to modern-day Interstate 5.

Mexico gained independence in 1821 and set about secularization of the missions and promoting settlement of Alta California through the issuance of land grants and liberal colonization laws, which did not prevent foreigners from settling in Mexican territory. This allowed for a significant number of Americans to gain a foothold in Alta California. In an attempt to prevent continued foreign incursion and promote a greater Mexican presence in the interior, Mexico issued the 1840 Law of Colonization and encouraged the establishment of cattle ranches in the Central Valley; however, few Mexican land grants were issued in the San Joaquin Valley.

In the mid-to-late-1820s, American trappers, including Jedediah Smith, Ewing Young, and Kit Carson, entered to the region in order to hunt fur-bearing animals inhabiting the valley. In 1848, gold was discovered at Sutter’s Mill resulting in a large influx of immigrants hoping to make their fortunes. After cessation of the Mexican-American War in the same year, California was ceded to the United States, officially becoming a state in 1850. Mexico’s public lands became United

States public lands and were surveyed, sectioned, and made available for sale/settlement (BLM 2013; Hoover et. al. 2002; Preston 1981; Shumway 2007; State Lands Commission 1982).

The federal government passed several pieces of legislation in the mid-1800s to promote settlement of the western United States and dispose of surplus public land. Under the Preemption Act of 1841, a settler could purchase up to 160 acres (a quarter-section) for $1.25 per acre. This law was extended to California in 1853 and was the primary source of cash sales. The Homestead Act of 1862 allowed settlement of public lands, requiring only residence, improvement, and cultivation of the land. A claim for a 160-acre parcel could be made by anyone who was over the age of 21, head of a household, and paid an $18 fee. The act allowed single women, former slaves, and new immigrants an opportunity to own a piece of land. They had to improve and live on the land for 5 years to receive deed to the property, which often proved difficult. The Timber Culture Act of 1873 provided 160 acres of land to applicants, provided they planted trees on at least 40 acres (later reduced to 10) within 8 years; settlement was not required under this law. Under the Desert Land Act of 1877, which targeted settlement of arid regions in the west, applicants could receive 640 acres (an entire section) for a fee of $0.25 per acre at filing and an additional $1.00 per acre within 3 years, provided they reclaimed the land through artificial irrigation. While these laws were designed to give individual settlers and families access to land ownership, many land speculators and farmers/ranchers manipulated them to obtain huge tracts of land for little cost, particularly in the San Joaquin Valley. The railroads also benefited from federal laws, which granted alternating odd-numbered sections within 20 miles of a projected rail line in order to facilitate rail expansion (Caltrans 2007; Orsi 2005).

With the waning of the mining industry in the mid-1860s, many turned to raising cattle and sheep in the valley, including many Basque and Portuguese immigrants who had been shepherds in their native land (Graves 2004; Miller 2013). The vast prairie grasslands readily supported large herds that required little maintenance. Sheep were primarily herded on the uninhabited west side, feeding on wild alfalfa or rented to stubble land. Sheep ranches often included a shearing barn or shed, feed barn, ranch house, lambing sheds, and corrals. Cattle generally roamed free until they were rounded up and driven to market where they were sold for their meat, hides, and other by-products. A severe drought in 1876-1877 crippled the cattle industry. Many cattle that would have been sold for their meat were slaughtered to save the hide. It was at this same time that dry farming experienced a boost due to mechanization of farm equipment, such as threshers (Caltrans 2007; Vandor 1919).

Dry farming had been practiced in the valley since the mid-1860s as well, but the Trespass Act of 1850 required famers to fence out roaming herds, hindering its growth. The passage of the “No-Fence Law” in 1872 reversed the responsibility of fencing to ranchers, who were then required to fence their large grazing tracts or sell off their cattle. Prior to the advent of barbed wire in the 1880s, this proved cost-prohibitive for many. After the decline of the cattle industry in the 1870s, the grain industry rose to prominence. In 1889, the San Joaquin Valley wheat crop topped 40 million bushels, the largest crop in the United States except that produced by the entire state of Minnesota. Over the ensuing years a failure to rotate crops depleted the soil and yields decreased. This, coupled with a drop in grain prices and the advancement of irrigation, opened up the

opportunity for viticulture and other horticultural pursuits to expand (Pisani 1985; Ryan and Breschini 2010; Vandor 1919).

In the mid-1930s, the Great Depression, drought, and poor economic and agricultural conditions in the southern and plains states led to a mass migration of "Dust Bowl refugees" to California. Approximately 300,000-400,000 migrants from Oklahoma, Texas, Arkansas, Missouri, and other states moved to California, drawn by the promise of employment and a better life (Gregory n.d.). Many ended up in the San Joaquin Valley to work as field hands; by 1950, as many as one in four residents of the San Joaquin Valley had emigrated from Oklahoma, Texas, Arkansas, or Missouri (Gregory 1989). The influx of migrants led to a shortage of jobs, dramatically decreased wages, and abysmal living conditions (Starr 2005). The migrants were pejoratively referred to as "Okies" and their plight was captured most famously by John Steinbeck in his 1939 book The Grapes of Wrath.

Today, a wide variety of agricultural enterprises exist in the San Joaquin Valley, with farms ranging from small to large industrial operations and producing crops such as fruits, nuts, barley, beans, corn, hay, beets, wheat, and cotton. Livestock, including cattle and poultry, is still raised in the San Joaquin Valley (Caltrans 2007).

History of the Specific Plan Area and Vicinity

Madera County, along with Fresno County, was once part of the larger Mariposa County. In 1893, Mariposa County was split in two, creating Madera and Fresno counties. The first settlement in what is now Madera County was associated with gold discoveries in the foothill region of the Fresno River approximately 16 miles east of the City of Madera (CAGenWeb 2012). James D. Savage established a trading post in the foothills and traded with the local tribal groups. Soon families began settling this foothill region, raising stock and crops (CAGenWeb 2012). In 1872, The Central Pacific Railroad established its right-of-way in San Joaquin Valley, and settlement of what is presently Madera County shifted from the foothills to the valley plains. Dry land grain farming became a major industry in the region, with the first large scale operation, known as the Alabama Settlement, beginning in 1868 (CAGenWeb 2012). The railroad facilitated the transport of large volumes of grain to markets outside of the region.

In addition to grain, the major industry in Madera County was timber harvested from the lower Sierras. In 1874, William H. Thurman established the California Lumber company, and constructed a 55-mile long wooden flume that transported lumber from the Sierras to the railroad in the valley. The original terminus of the flume was to be in the established in the community of Borden located along the railroad; however, concerns regarding the cost of land and the engineering challenges of running the flume to Borden negated it as an option (CAGenWeb 2012). Isaac Friedlander offered 40 acres of land in what is the present-day City of Madera, located approximately 1-mile south of the Specific Plan area, for the company to establish a lumber yard and mill for an undivided half interest in a plat for a new town. The California Lumber Company took the deal and ran their flume to what would soon become the community of Madera, the Spanish name for "lumber" (CAGenWeb 2012).

The California Lumber Company constructed a mill at the flume's terminus and began selling lots in October 1876 (Madera Chamber of Commerce n.d.). Within a short period, a town grew and several buildings were constructed including two hotels and saloons, and 20 residences (Madera Chamber of Commerce n.d.). In March 1877, the citizens of Madera established a schoolhouse on 2-acres of land within the town site. In 1878, the lumber operations within Madera passed from the California Lumber Company to the Madera Flume and Trading Company. In 1881, a fire destroyed the company's lumber yards in Madera and a nation-wide economic depression added financial strain on the company. In 1899, Madera's lumber operations passed hands once again from the Madera Flume and Trading Company to the Madera Sugar Pine Lumber Company. In 1896, Madera County was formed and Madera became the county seat. Later that same year construction of a new courthouse, jail, zoo and County Park began, and, in March of 1898 the first Chamber of Commerce was formed (Madera Chamber of Commerce n.d.). By 1907, the City of Madera was an incorporated town within the county.

Development of the Specific Plan area began in the mid to late-1970s when the fig and almonds orchards that presently occupy the Specific Plan area were planted (McClosky Consultants 2017). The orchards' support facilities include a shop building constructed in 1978 and five agricultural wells (McClosky Consultants 2017).

Regulatory Framework

Numerous laws and regulations require state, and local agencies to consider the effects a project may have on cultural resources. These laws and regulations stipulate a process for compliance, define the responsibilities of the various agencies proposing the action, and prescribe the relationship among other involved agencies.

State

California Environmental Quality Act

CEQA is the principal statute governing environmental review of projects occurring in the state and is codified at *Public Resources Code (PRC) Section 21000 et seq.* CEQA requires lead agencies to determine if a proposed project would have a significant effect on the environment, including significant effects on historical or unique archaeological resources. Under CEQA (Section 21084.1), a project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.

The *CEQA Guidelines* (Title 14 California Code of Regulations [CCR] Section 15064.5) recognize that historical resources include: (1) a resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (California Register); (2) a resource included in a local register of historical resources, as defined in PRC Section 5020.1(k) or identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g); and (3) any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California by the lead agency, provided the lead agency's

determination is supported by substantial evidence in light of the whole record. The fact that a resource does not meet the three criteria outlined above does not preclude the lead agency from determining that the resource may be an historical resource as defined in PRC Sections 5020.1(j) or 5024.1.

If a lead agency determines that an archaeological site is a historical resource, the provisions of Section 21084.1 of CEQA and Section 15064.5 of the *CEQA Guidelines* apply. If an archaeological site does not meet the criteria for a historical resource contained in the *CEQA Guidelines*, then the site may be treated in accordance with the provisions of Section 21083, which is as a unique archaeological resource. As defined in Section 21083.2 of CEQA a "unique" archaeological resource is an archaeological artifact, object, or site, about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- Contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information;
- Has a special and particular quality such as being the oldest of its type or the best available example of its type; or,
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

If an archaeological site meets the criteria for a unique archaeological resource as defined in Section 21083.2, then the site is to be treated in accordance with the provisions of Section 21083.2, which state that if the lead agency determines that a project would have a significant effect on unique archaeological resources, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place (Section 21083.1(a)). If preservation in place is not feasible, mitigation measures shall be required. The *CEQA Guidelines* note that if an archaeological resource is neither a unique archaeological nor a historical resource, the effects of the project on those resources shall not be considered a significant effect on the environment (*CEQA Guidelines* Section 15064.5(c)(4)).

A significant effect under CEQA would occur if a project results in a substantial adverse change in the significance of a historical resource as defined in *CEQA Guidelines* Section 15064.5(a). Substantial adverse change is defined as "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired" (*CEQA Guidelines* Section 15064.5(b)(1)). According to *CEQA Guidelines* Section 15064.5(b)(2), the significance of a historical resource is materially impaired when a project demolishes or materially alters in an adverse manner those physical characteristics that:

A. Convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register; or
B. Account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the Public Resources Code or its identification in a historical resources survey meeting the requirements of section 5024.1(g) of the Public Resources Code, unless the

public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or

C. Convey its historical significance and that justify its eligibility for inclusion in the California Register as determined by a Lead Agency for purposes of CEQA.

In general, a project that complies with the *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* (Standards) (Weeks and Grimer, 1995) is considered to have mitigated its impacts to historical resources to a less-than-significant level (*CEQA Guidelines* Section 15064.5(b)(3)).

California Register of Historical Resources

The California Register is "an authoritative listing and guide to be used by State and local agencies, private groups, and citizens in identifying the existing historical resources of the State and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change" (PRC Section 5024.1[a]). The criteria for eligibility for the California Register are based upon National Register criteria (PRC Section 5024.1[b]). Certain resources are determined by the statute to be automatically included in the California Register, including California properties formally determined eligible for, or listed in, the National Register.

To be eligible for the California Register, a prehistoric or historic-period property must be significant at the local, state, and/or federal level under one or more of the following four criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
4. Has yielded, or may be likely to yield, information important in prehistory or history.

A resource eligible for the California Register must meet one of the criteria of significance described above, and retain enough of its historic character or appearance (integrity) to be recognizable as a historical resource and to convey the reason for its significance. It is possible that a historic resource may not retain sufficient integrity to meet the criteria for listing in the National Register, but it may still be eligible for listing in the California Register.

Additionally, the California Register consists of resources that are listed automatically and those that must be nominated through an application and public hearing process. The California Register automatically includes the following:

- California properties listed on the National Register and those formally determined eligible for the National Register;
- California Registered Historical Landmarks from No. 770 onward; and,

- Those California Points of Historical Interest that have been evaluated by the OHP and have been recommended to the State Historical Commission for inclusion on the California Register.

Other resources that may be nominated to the California Register include:

- Historical resources with a significance rating of Category 3 through 5 (those properties identified as eligible for listing in the National Register, the California Register, and/or a local jurisdiction register);
- Individual historical resources;
- Historical resources contributing to historic districts; and,
- Historical resources designated or listed as local landmarks, or designated under any local ordinance, such as an historic preservation overlay zone.

California Health and Safety Code Section 7050.5

California Health and Safety Code Section 7050.5 requires that in the event human remains are discovered, the County Coroner be contacted to determine the nature of the remains. In the event the remains are determined to be Native American in origin, the Coroner is required to contact the California Native American Heritage Commission (NAHC) within 24 hours to relinquish jurisdiction.

California Public Resources Code Section 5097.98

California PRC Section 5097.98, as amended by Assembly Bill 2641, provides procedures in the event human remains of Native American origin are discovered during project implementation. PRC Section 5097.98 requires that no further disturbances occur in the immediate vicinity of the discovery, that the discovery is adequately protected according to generally accepted cultural and archaeological standards, and that further activities take into account the possibility of multiple burials. PRC Section 5097.98 further requires the NAHC, upon notification by a County Coroner, designate and notify a Most Likely Descendant (MLD) regarding the discovery of Native American human remains. Once the MLD has been granted access to the site by the landowner and inspected the discovery, the MLD then has 48 hours to provide recommendations to the landowner for the treatment of the human remains and any associated grave goods.

In the event that no descendant is identified, or the descendant fails to make a recommendation for disposition, or if the land owner rejects the recommendation of the descendant, the landowner may, with appropriate dignity, reinter the remains and burial items on the property in a location that will not be subject to further disturbance.

Assembly Bill 52 and Related Public Resources Code Sections

Assembly Bill (AB) 52 was approved by California State Governor Edmund Gerry "Jerry" Brown, Jr. on September 25, 2014. The act amended California PRC Section 5097.94, and added PRC Sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3. AB 52 applies specifically to projects for which a Notice of Preparation (NOP) or a Notice of Intent to Adopt a Negative Declaration or Mitigated Negative Declaration (MND) will be filed on

or after July 1, 2015. The primary intent of AB 52 was to include California Native American Tribes early in the environmental review process and to establish a new category of resources related to Native Americans that require consideration under CEQA, known as tribal cultural resources. PRC Section 21074(a)(1) and (2) defines tribal cultural resources as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe" that are either included or determined to be eligible for inclusion in the California Register or included in a local register of historical resources, or a resource that is determined to be a tribal cultural resource by a lead agency, in its discretion and supported by substantial evidence. On July 30, 2016, the California Natural Resources Agency adopted the final text for tribal cultural resources update to Appendix G of the CEQA Guidelines, which was approved by the Office of Administrative Law on September 27, 2016.

PRC Section 21080.3.1 requires that within 14 days of a lead agency determining that an application for a project is complete, or a decision by a public agency to undertake a project, the lead agency provide formal notification to the designated contact, or a tribal representative, of California Native American Tribes that are traditionally and culturally affiliated with the geographic area of the project (as defined in PRC Section 21073) and who have requested in writing to be informed by the lead agency (PRC Section 21080.3.1(b)). Tribes interested in consultation must respond in writing within 30 days from receipt of the lead agency's formal notification and the lead agency must begin consultation within 30 days of receiving the tribe's request for consultation (PRC Sections 21080.3.1(d) and 21080.3.1(e)).

PRC Section 21080.3.2(a) identifies the following as potential consultation discussion topics: the type of environmental review necessary; the significance of tribal cultural resources; the significance of the project's impacts on the tribal cultural resources; project alternatives or appropriate measures for preservation; and mitigation measures. Consultation is considered concluded when either: (1) the parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or (2) a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached (PRC Section 21080.3.2(b)).

If a California Native American tribe has requested consultation pursuant to Section 21080.3.1 and has failed to provide comments to the lead agency, or otherwise failed to engage in the consultation process, or if the lead agency has complied with Section 21080.3.1(d) and the California Native American tribe has failed to request consultation within 30 days, the lead agency may certify an EIR or adopt an MND (PRC Section 21082.3(d)(2) and (3)).

PRC Section 21082.3(c)(1) states that any information, including, but not limited to, the location, description, and use of the tribal cultural resources, that is submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public without the prior consent of the tribe that provided the information. If the lead agency publishes any information submitted by a California Native American tribe during the consultation or environmental review process, that information shall be published in a

confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public.

Senate Bill 18

Senate Bill 18 (SB 18) (Statutes of 2004, Chapter 905), which went into effect January 1, 2005, requires local governments (city and county) to consult with Native American tribes before making certain planning decisions and to provide notice to tribes at certain key points in the planning process. The intent is to "provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places" (Governor's Office of Planning and Research, 2005).

The purpose of involving tribes at these early planning stages is to allow consideration of cultural places in the context of broad local land use policy, before individual site-specific, project-level, land use designations are made by a local government. The consultation requirements of SB 18 apply to general plan or specific plan processes proposed on or after March 1, 2005.

According to the Tribal Consultation Guidelines: Supplement to General Plan Guidelines (Governor's Office of Planning and Research, 2005), the following are the contact and notification responsibilities of local governments:

- Prior to the adoption or any amendment of a general plan or specific plan, a local government must notify the appropriate tribes (on the contact list maintained by the NAHC) of the opportunity to conduct consultations for the purpose of preserving, or mitigating impacts to, cultural places located on land within the local government's jurisdiction that is affected by the proposed plan adoption or amendment. Tribes have 90 days from the date on which they receive notification to request consultation, unless a shorter timeframe has been agreed to by the tribe (Government Code Section 65352.3).
- Prior to the adoption or substantial amendment of a general plan or specific plan, a local government must refer the proposed action to those tribes that are on the NAHC contact list and have traditional lands located within the city or county's jurisdiction. The referral must allow a 45-day comment period (Government Code Section 65352). Notice must be sent regardless of whether prior consultation has taken place. Such notice does not initiate a new consultation process.
- Local government must send a notice of a public hearing, at least 10 days prior to the hearing, to tribes who have filed a written request for such notice (Government Code Section 65092).

Local

Madera County General Plan

Madera County's General Plan, Recreation and Cultural Resources Section (1995), contains the following cultural resources goals, policies, and implementation programs relevant to the Project:

> **Goal 4.D:** To identify, protect, and enhance Madera County's important historical, archaeological, paleontological, and cultural sites and their contributing environment.

Policies

4.D.1. The County shall solicit the views of the local Native American community in cases where development may result in disturbance to sites containing evidence of Native American activity and/or to sites of cultural importance.

4.D.2. The County shall coordinate with the cities and advisory councils in the county to promote the preservation and maintenance of Madera County's paleontological, archaeological, and historical resources.

4.D.3. The County shall require that discretionary development projects identify and protect from damage, destruction, and abuse, important historical, archaeological, paleontological, and cultural sites and their contributing environment.

4.D.4. The County shall, within its power, maintain confidentiality regarding the locations of archaeological sites in order to preserve and protect these resources from vandalism and the unauthorized removal of artifacts. If significant archaeological and cultural resources are open to the public, the County shall control public access to prevent damage or vandalism.

4.D.5. The County shall provide for the placement of historical markers or signs on adjacent county roadways and major thoroughfares to attract and inform visitors of important historic resource sites.

4.D.6. The County shall encourage the preservation of the original architectural character of significant historic structures and districts. To this end, the County shall use the State *Historic Building Code*.

4.D.7. The County will use existing legislation and propose local legislation for the identification and protection of cultural resources and their contributing environment.

4.D.8. The County shall support the registration of cultural resources in appropriate landmark designations (i.e., National Register of Historic Places, California Historical Landmarks, Points of Historical Interest, or Local Landmark). The County shall assist private citizens seeking these designations for their property.

Implementation Programs

4.4. The County shall prepare, adopt, and implement procedures for review and approval of all County-permitted projects involving ground disturbance and all building and/or demolition permits that will affect buildings, structures, or objects 45 years of age or older.

4.5. The County shall develop preservation incentive programs for owners of important cultural and paleontological resources, using such mechanisms as the Mills Act, the Historic Preservation Easement program, the Certified Local Government program, and the Heritage Tourism program.

4.6. The County shall appoint a County Landmarks Commission to establish archival standards, prepare an inventory of all historic, cultural, and archaeological resources in the county, and promote their preservation.

4.7. The County shall adopt a historic district overlay zone to apply to areas containing significant historic structures.

Archival Research

SSJVIC Records Search

A records search for the Project was conducted on March 8, 2018 at the California Historical Resources Information System (CHRIS) Southern San Joaquin Valley Information Center (SSJVIC) housed at California State University, Bakersfield. The records search included a review of all recorded cultural resources and previous studies within the Specific Plan area and a ¼-mile radius around the Specific Plan area.

Previous Cultural Resources Investigations

The records search results indicate that one cultural resources study (MA-00739) has been conducted within a ¼-mile radius of the Specific Plan area. Approximately 5 percent of the ¼mile records search radius has been included in previous cultural resources surveys. The SSJVIC records search indicates that no previous cultural resources studies overlap the Specific Plan area.

Although not on file at the SSVIC, a 2007 study conducted by Sierra Valley Cultural Planning included the entirety of the approximately 794-acre Specific Plan area (Roper 2007). The archival research and pedestrian survey conducted as part of the 2007 study failed to identify the presence of cultural resources within the Specific Plan area.

Previously Recorded Cultural Resources

The records search results indicate that one historic-period built resource (P-20-002662) has been previously recorded within a ¼ mile radius of the Specific Plan area. The resource consists of the BNSF Railroad (formerly Atchison Topeka and Santa Fe) constructed between 1895 and 1898. The northwest-southeast trending railroad runs parallel to the Specific Plan area's southwestern boundary and is located within 50 feet of the Specific Plan area and the Phase I Project area. Previous evaluations of the resource recommend it as not eligible for listing in the National Register of Historic Places (National Register) or California Register due to a lack of integrity resulting from routine maintenance and repairs which have modernized the railroad, diminishing the its integrity of design, materials, workmanship, and feeling (Tang and Smallwood 2009; Connolly 2016).

Sacred Lands File Search

The NAHC maintains a confidential Sacred Lands File (SLF) which contains sites of traditional, cultural, or religious value to the Native American community. The NAHC was contacted on February 21, 2018 to request a search of the SLF. The NAHC responded to the request in a letter dated February 27, 2018. The results of the SLF search conducted by the NAHC indicate that Native American cultural resources are not known to be located within the Specific Plan area (**Appendix B**). The County is conducting consultation with appropriate Native American groups per requirements of AB 52 and SB 18, and the results of this consultation will be included in the EIR.

Historic Maps and Aerial Photographs

Historic maps and aerial photographs were examined to provide historical information about land uses of the Specific Plan area. Available maps include the 1920, 1948, and 1961 Kismet 7.5-minute topographic quadrangles, and the 1922 and 1947 Madera 7.5-minute topographic quadrangles. Historic aerial photographs were available for the years 1940, 1959, 1998, and 2014 (historicaerials.com, 2018).

The 1920, 1922, 1947, 1948, and 1961 topographic maps show the Specific Plan area and its immediate vicinity remained undeveloped an undisturbed throughout much of the 20th century. The Atchison Topeka and Santa Fe Railroad right-of-way is depicted immediately southwest of the Specific Plan area's southwestern boundary. The topographic maps also show a seasonal tributary of Schmidt Creek bisecting the northwestern corner of the Specific Plan area. The historic aerial photographs reflect what is indicated by the topographic maps: that the Specific Plan area remained undeveloped throughout much of the 20th century. The 1940 and 1959 photographs show no development, but the 1998 and 2014 aerial photographs depict the orchards that presently occupy the Specific Plan area. The 1998 and 2014 aerial photographs also show a housing development located immediately northwest of the Specific Plan area, as well as sparse residential development located immediately south of the Specific Plan area.

In sum, the historic map and aerial review indicates the Specific Plan area remained undeveloped until the mid to late 1970s when the fig and almond orchards that now occupy Specific Plan area were planted. The only features present a prior to the orchard's establishment are the Atchison Topeka and Santa Fe Railroad right-of-way (now the BNSF right-of-way) located approximately 50 feet southwest of the Specific Plan area and Phase I Project area, and a seasonal tributary of Schmidt Creek located within the northwest corner of the Phase I Project area.

Geoarchaeological Review

A geoarchaeological review for the Specific Plan area was conducted by ESA's geoarchaeologist, Chris Lockwood, Ph.D., in order to predict the potential for subsurface archaeological deposits. Geologic maps, geotechnical reports, and previous cultural resources studies were reviewed as part of the review.

Surface deposits within the Specific Plan area are mapped as Pleistocene-aged, non-marine sediments (Marchand 1976a, b; Meyer et al. 2010). The majority of the Specific Plan area is underlain by Turlock Lake Formation alluvial granitic sand dating to the Middle Pleistocene (123,000 – 781,000 years ago) (Marchand 1976a, b). A large portion of the Specific Plan area is mapped as Riverbank Formation arkosic alluvial sand deposited on fans and floodplains (Marchand 1976a, b). The Riverbank Formation, which is widespread within the valley, is commonly attributed the late Middle Pleistocene (60,000 – 80,000 years ago) (Meyer et al. 2010). The Specific Plan area also contains small areas of windblown (eolian) sand attributed to the lower member of the Modesto Formation (Marchand 1976a, b). In Madera County, the lower Modesto formation has been correlated to a portion of the late Pleistocene approximately dating to 42,000 – 50,000 years ago (Marchand 1977a, b).

Soils within the Specific Plan area are mapped primarily as Cometa and San Joaquin series sandy loams (NRCS, 2018). These soils possess extremely well-developed profiles including strong Bt (accumulation of silicate clay) and/or Bqm (accumulation of silica and cementation) horizons. Within this region, soils with such characteristics have been found to be associated with older Pleistocene surfaces (greater than 25,000 years ago) (Meyer et al. 2010). A series of 12 geotechnical borings within the Specific Plan area revealed alluvial soils to depths of 30 feet below surface, consisting of silty sands and poorly graded sands with interbedded silt layers (TRC Lowney 2007). Sands, which were medium dense to very dense, were commonly cemented at depths ranging from 0 – 12 feet below surface, a result consistent with the expected soils types.

The mapped geological units within the Specific Plan area are over 42,000 years old, predating the presence of humans in the Americas by approximately 30,000 years. The age of these geological units is corroborated by the presence of soils with well-advanced pedogenesis, as well as geotechnical studies demonstrating widespread cementation of soils. These factors imply that that the Specific Plan area has experienced minimal (if any) natural deposition, which would bury archaeological sites, since the late Pleistocene and prior to human habitation in the region. In the absence of aggradation (vertical accretion of sediments), cultural remains would tend to remain unburied at the ground surface or to be relatively shallowly incorporated (i.e., several inches) into the soil A-horizon. If the Specific Plan area contains archaeological sites, such sites would not be expected to be deeply buried by natural sediments and would most likely occur at or near the surface.

Cultural Resources Survey

Methods

A cultural resources survey of the Phase I Project area was conducted on April 4, 2018 by ESA staff Mai Lee, B.A., and Blake Buford, B.A. The survey was aimed at identifying archaeological and historic-period built resources within or immediately adjacent to the Phase I Project area. The entirety of the Phase I Project area was subject to systematic pedestrian survey using transect intervals spaced no more than 15 meters (approximately 50 feet) apart. Survey of the entire Specific Plan area was not conducted.

Results

The Phase 1 Project area is comprised of an almond orchard with tree rows spaced at approximately 15-foot intervals and dirt roads. The rows between the trees were covered in ankle to knee-high grasses which reduced ground surface to 0 percent visibility; however, the areas immediately adjacent to the trees had very little vegetation and had 90 percent ground surface visibility (**Figure 6**). The dirt roads bisecting the orchard were bare of vegetation and had 100 percent ground surface visibility (Figure 6). Overall, approximately 75 percent of the Phase I Project area had ground surface visibility of 90 – 100 percent, with the remaining 25 percent exhibiting 0 percent ground surface visibility. No cultural resources were identified within the Phase I Project area as a result of the survey. Previously recorded resources P-20-002662 (BNSF Railroad) was noted approximately 50 feet southwest of the Phase I Project's southwestern boundary and was found to match previous descriptions.

Overview of almond orchard within the Phase I Project area (view to south)

Overview of dirt road within Phase I Project area (view to west)

SOURCE: ESA, 2018

Castellina Specific Plan Project

Figure 6
Survey Photos

Conclusions and Recommendations

Phase I Project Area

As a result of the archival research and pedestrian survey, no cultural resources were identified within the Phase I Project area. The geoarchaeological review indicates that the geologic units underlying the Phase I Project area, and the larger Specific Plan area, predate the presence of human habitation in the Americas. As such, the potential for the Phase I Project area to contain deeply buried archaeological deposits is low. If archaeological resources are present, they would likely be found at or near the surface. During the cultural resources survey, approximately 25 percent of the Phase I Project area's ground surface was obscured by seasonal grasses, which may have concealed the presence of surficial archaeological resources. Therefore, ESA recommends the following measures be implemented in the case of inadvertent discoveries of archaeological resources during implementation of the Phase I Project.

> **Phase I Project Recommendation #1:** In the event of the unanticipated discovery of archaeological materials, all work should immediately cease in the area (within approximately 100 feet) of the discovery until it can be evaluated by a qualified archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (U.S. Department of the Interior 2008). Construction should not resume until the qualified archaeologist has conferred with Madera County on the significance of the resource.
>
> If it is determined that the discovered archaeological resource constitutes a historical resource or a unique archaeological resource under CEQA, avoidance and preservation in place is the preferred manner of mitigation. Preservation in place may be accomplished by, but is not limited to, avoidance, incorporating the resource into open space, capping, or deeding the site into a permanent conservation easement. In the event that preservation in place is demonstrated to be infeasible and data recovery through excavation is the only feasible mitigation available, a Cultural Resources Treatment Plan will be prepared and implemented by the qualified archaeologist in consultation with the Madera County that provides for the adequate recovery of the scientifically consequential information contained in the archaeological resource. The qualified archaeologist and County will consult with appropriate Native American representatives in determining treatment for prehistoric or Native American resources to ensure cultural values ascribed to the resource, beyond that which is scientifically important, are considered.
>
> If human remains are encountered, all work will halt work in the vicinity (within 100 feet) of the discovery and the Madera County Coroner will be contacted in accordance with PRC Section 5097.98 and Health and Safety Code Section 7050.5. The County of Madera will also be notified. If the County Coroner determines that the remains are Native American, the California Native American Heritage Commission (NAHC) will be notified in accordance with Health and Safety Code Section 7050.5, subdivision (c), and PRC Section 5097.98 (as amended by AB 2641). The NAHC will designate an Most Likely Descendant (MLD) for the remains per PRC Section 5097.98. Until the landowner has conferred with

the MLD, the County of Madera will ensure that the immediate vicinity where the discovery occurred is not disturbed by further activity, is adequately protected according to generally accepted cultural or archaeological standards or practices, and that further activities take into account the possibility of multiple burials.

Specific Plan Area

The assessment of the Specific Plan area outside of the Phase I Project area employed a programmatic approach which did not include a pedestrian cultural resources survey, and, therefore, additional work would be required for the portions of the Specific Plan area not subject to a project-level analysis. Additionally, given that the Specific Plan area will be developed in phases over a period of years, this analysis will likely exceed 5 years in age by the time approval for the additional phases will be needed, and, therefore, full cultural resources assessments for the remaining phases may be required. As such, ESA recommends the following policies be included in the Specific Plan to ensure appropriate cultural resources analyses are completed for future phases of development:

Specific Plan Recommendation #1: The Specific Plan shall include a policy which requires that all areas slated for development or other ground disturbing activities shall be subject to a Phase I cultural resources inventory on a project-specific basis prior to the County's approval of project plans. The study shall be carried out by a qualified archaeologist, defined as one meeting the Secretary of the Interior's Standards for professional archaeology (U.S. Department of Interior 2012). The cultural resources inventory would consist of: a cultural resources records search to be conducted at the Southern San Joaquin Valley Information Center; a Sacred Lands File search conducted by the California Native American Heritage Commission; a pedestrian cultural resources survey where deemed appropriate by the archaeologist; and recordation of all identified archaeological resources on California Department of Parks and Recreation 523 forms. If potentially significant cultural resources are encountered during survey, the County shall require that the resources are evaluated for their eligibility for listing in the California Register of Historical Resources and for significance as a historical resource or unique archaeological resource per CEQA *Guidelines* Section 15064.5, and that recommendations are made for treatment of these resources if found to be significant, in consultation with the County and the appropriate Native American groups. Per CEQA *Guidelines* Section 15126.4(b)(3), project redesign and preservation in place shall be the preferred means of mitigation to avoid impacts to significant cultural resources, including prehistoric and historic-period archaeological sites, locations of importance to Native Americans, human remains, historical buildings, structures and landscapes. Methods of avoidance may include, but shall not be limited to, project re-route or re-design, project cancellation, or identification of protection measures such as capping or fencing. Consistent with CEQA *Guidelines* Section 15126.4(b)(3)(C), if it is demonstrated that resources cannot be avoided, the qualified archaeologist shall develop additional treatment measures in consultation with the County, which may include data recovery or other appropriate measures.

Specific Plan Recommendation #2: Although the geoarchaeological review indicates the Specific Plan area has low potential for the presence of deeply buried archaeological deposits, there exists the potential that surface or near surface resources may be present. Therefore, the Specific Plan shall include a new policy which requires that during construction, should prehistoric or historic-period subsurface cultural resources be discovered, all activity in the vicinity of the find shall stop and a qualified archaeologist will be contacted to assess the significance of the find according to *CEQA Guidelines* Section 15064.5. If any find is determined to be significant, the project proponent and the archaeologist shall determine, in consultation with the City and local Native American groups expressing interest, appropriate avoidance measures or other appropriate mitigation. Per CEQA *Guidelines* Section 15126.4(b)(3), project redesign and preservation in place shall be the preferred means to avoid impacts to significant cultural resources. Methods of avoidance may include, but shall not be limited to, project re-route or re-design, project cancellation, or identification of protection measures such as capping or fencing. Consistent with CEQA *Guidelines* Section 15126.4(b)(3)(C), if it is demonstrated that resources cannot be avoided, the qualified archaeologist shall develop additional treatment measures in consultation with the City, which may include data recovery or other appropriate measures. All significant cultural materials recovered will be, as necessary and at the discretion of the consulting archaeologist and in consultation with local Native American groups, subject to scientific analysis, professional museum curation, and documentation according to current professional standards.

Specific Plan Recommendation #3: Currently, structures associated with the orchards occupying the Specific Plan area have not yet reached the California Office of Historic Preservation's (OHP) 45-year age threshold to be considered potential historical resources. However, the phased development of the Specific Plan area will occur over a number of years, in which time the structures presently located in the Specific Plan area may have reached the 45-year old threshold and will require documentation. As such, the Specific Plan shall include a new policy which states that, for all areas slated for development or other ground disturbing activities in the Specific Plan area which contain structures 45 years old or older, shall be subject to a historic built environment survey, and potentially historic structures shall be evaluated for their potential historic significance, prior to the County's approval of project plans. The survey shall be carried out by a qualified historian or architectural historian meeting the Secretary of the Interior's Standards for Architectural History (U.S. Department of Interior 2012). If potentially significant resources are encountered during the survey, demolition or substantial alteration of such resources identified shall be avoided. If avoidance of identified historic resources is deemed infeasible the City shall prepare a treatment plan to include, but not limited to, photo-documentation and public interpretation of the resource.

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Appendix A
Personnel

Monica Strauss, RPA

Director, Southern California Cultural Resources Group

Monica has successfully completed dozens of cultural resources projects throughout California and the greater southwest, where she assists clients in navigating cultural resources compliance issues in the context of CEQA, NEPA, and Section 106. Monica has extensive experience with archaeological resources, historic buildings and infrastructure, landscapes, and Tribal resources, including Traditional Cultural Properties. Monica manages a staff of cultural resources specialists throughout the region who conduct Phase 1 archaeological/ paleontological and historic architectural surveys, construction monitoring, Native American consultation, archaeological testing and treatment, historic resource significance evaluations, and large-scale data recovery programs. She maintains excellent relationships with agency staff and Tribal representatives. Additionally, Monica manages a general compliance monitoring team who support clients and agencies in ensuring the daily in-field compliance of overall project mitigation measures.

EDUCATION

M.A., Archaeology, California State University, Northridge

B.A., Anthropology, California State University, Northridge

AA, Humanities, Los Angeles Pierce College

19 YEARS EXPERIENCE

SPECIALIZED EXPERIENCE

Treatment of Historic and Prehistoric Human Remains

Archaeological Monitoring

Complex Shell Midden Sites

Groundstone Analysis

PROFESSIONAL AFFILIATIONS

Register of Professional Archaeologists (RPA), #12805

Society for California Archaeology (SCA)

Society for American Archaeology (SAA)

QUALIFICATIONS

Exceeds Secretary of Interior Standards

CA State BLM Permitted

Relevant Experience

Los Angeles Department of Water and Power (LADWP) Foothill Trunk Line Project. City of Los Angeles, CA. *Cultural Resources Senior Reviewer.* ESA archaeologists have prepared a Phase I cultural resources study and EIR cultural resources section for the Los Angeles Department of Water and Power (LADWP) Trunk Line Project, located in the City of Los Angeles, CA. The proposed project includes the replacement of 16,600 feet of existing 24-inch-, 26-inch-, and 36-inch-diameter welded steel pipe and 30-inch-diameter riveted steel pipe with a 54-inch-diameter welded steel pipe along Foothill Boulevard within the districts of Pacoima and Sylmar. Monica served as the Senior Reviewer for the Phase I cultural resources study and EIR section.

Mission Creek Lagoon and Laguna Channel Restoration Project, Santa Barbara County, CA. *Cultural Resources Project Director.* Monica provided senior oversight of the cultural resources study, which identified several cultural resources that could pose a regulatory constraint on the project, including 18 historic built resources. The area was also identified as sensitive for archaeological resources. ESA is currently assisting the City of Santa Barbara to identify a design alternative within the project area that is economically feasible and meets the multiple objectives of flood control, water quality improvement, public safety and access, and habitat restoration.

Los Angeles County Waterworks District 40 (LACWWD40) Regional Recycled Water Project, Phase 2, Palmdale, CA. *Cultural Resources Project Director.* ESA was retained by LACWWD40 in 2009 to prepare an Initial Study/Environmental Assessment and cultural resources technical study for Phase 2 of the Regional Recycled Water Project. In 2010 and 2011, Monica directed a team of ESA archaeologists who performed a pedestrian survey of the 5.25 linear mile project area and documented archaeological sites encountered. Nine cultural resources

were documented during the survey; however, because the project APE was narrowed after the survey, only four are located within the current project area.

California Department of Water Resources (DWR), Warm Creek Project, San Bernardino County, CA. *Cultural Resources Project Director*. Monica managed the preparation of a cultural resource assessment for the DWR Warm Creek Project which included repairs to the Santa Anna Pipeline. As part of the cultural resources assessment, archival research and a field survey were conducted. One potential historic resource, a linear alignment of granite boulders possibly related the 19th-century Coburn Swamp Ditch, was identified in the project area.

Western Hills Water District, West Hills Water Treatment Plant Project. San Benito County, CA. *Cultural Resources Senior Reviewer.* ESA prepared a Phase I cultural resources survey report for the proposed West Hills Water Treatment Plant Project located just southwest of the City of Hollister in San Benito County, CA. The proposed project would improve drinking water quality, water supply reliability, and would serve to balance regional water resources in the Hollister Urban Area and includes the construction of the West Hills Water Treatment plant and associated facilities, a raw water pump station, a raw water pipeline, and a treated water pipeline. Monica served as the Senior Reviewer for the Phase I cultural resources survey report.

California Department of Water Resources (DWR), Perris Dam Remediation Program, Riverside County, CA. *Cultural Resources Project Director*. Monica managed the preparation of a Historic Resource Evaluation Report for the DWR Perris Remediation Project. The Project would provide greater seismic stability for Perris Dam and its associated outlet works, as well as adding a new emergency outlet extension channel, thereby increasing public safety in the event of a high-magnitude earthquake. The project involved the U.S. Army Corps of Engineers, requiring compliance with Section 106 of the NHPA The study concluded that the dam is not individually eligible for the National Register or California Register, but is considered a contributing element of the California Aqueduct. The project would not affect the eligibility or integrity of the California Aqueduct and a finding of no adverse effect were recommended.

Sweetwater Reservoir, Water Main Replacement, San Diego County, CA. *Cultural Resources Principal Investigator.* ESA was retained by Sweetwater Authority to prepare an IS/MND for the replacement of a 36-inch pipeline leading from Sweetwater Dam. Sweetwater Dam was originally constructed in the late 19th century and was subject to upgrades in 1917. ESA conducted a Phase 1 Cultural Resources Assessment including archival research, pedestrian, survey, historical research, Native American outreach, and the preparation of a technical report documenting archaeological and historic-architectural resources that might be impacted by the project. The study concluded that features that would be altered by the project that were contributing elements to the historic dam would need to be replaced in kind. Monica directed the team of researchers which conducted this work, assisted in evaluating project impacts to the dam, and facilitated in the development of appropriate mitigation.

Michael Vader

Senior Associate

EDUCATION

B.A., Physical Anthropology, University of California, Santa Barbara

12 YEARS EXPERIENCE

PROFESSIONAL AFFILIATIONS

Society for California Archaeology (SCA)

Society for American Archaeology (SAA)

Pacific Coast Archaeological Society (PCAS)

SPECIALIZED EXPERIENCE

Analysis of faunal remains including fish and shellfish species

Archaeological Monitoring

Paleontological Monitoring

Environmental Compliance Monitoring

Human osteology and bioarchaeology

Michael is cultural resources specialist with experience working on survey, data recovery, and monitoring projects. Michael has experience with project management, has led crews on multiple surveys and excavations, and is familiar with environmental compliance documents. He has worked on a variety of energy and water infrastructure projects throughout California, including projects in Riverside, San Diego, Imperial, San Bernardino, Los Angeles, Orange, Santa Barbara, San Luis Obispo, Kern, Fresno, Madera, and Inyo Counties, as well as in Clark County Nevada. Michael regularly works as part of a team, coordinating with field staff and agency leads.

Relevant Experience

Cogswell Reservoir Sedmiment Removal Project, Los Angeles National Forest, Los Angeles County, CA. *Archaeologist.* ESA retained by the County of Los Angeles Department of Public Works, Water Resources Division to prepare a Cultural Resources Assessment in support of the Cogswell Reservoir Sediment Removal Project. The purpose of the project is to remove debris and sediment from Cogswell Reservoir associated with the August 26, 2009 Station Fire in the Angeles National Forest . Michael prepared the coordinated with United States Forest Service, prepared the work plan, led the survey, and prepared the Cultural Resources Assessment Report for the project.

DWR Pyramid Lake Maintenance Projects, Angeles National Forest, Los Angeles County, CA. *Archaeologist*. ESA was retained by the California Department of Water Resources to conduct a cultural resources study for improvements and repairs at three locations within the Pyramid Lake area in the Angeles National Forest. The Project includes the installation of a warning siren north of Frenchman's Flat Day Use Area, repairs to an existing bathroom at the Emigrant Landing swim beach, and revegetation at Los Alamos Campground Loops 3 and 4. Michael coordinated the cultural resources survey and prepared the archaeological resources report.

San Jacinto Valley Enhanced Recharge and Recovery Program, Riverside County, CA. *Archaeologist*. ESA was retained by the Eastern Municipal Water District to prepare a Cultural Resources Study in support of an Environmental Impact Report for the proposed San Jacinto Valley Enhanced Recharge and Recovery Program. The Project would aid in supplementing current and future water supplies by recharging imported water and local supplies in the local groundwater basin. The Project would include development of recharge facilities, storm water capture facilities, production and monitoring wells, potable and raw water pipelines, and other conveyance facilities and appurtenances. Michael led the cultural resources survey and prepared the Phase I cultural resources study report.

Sorrento Valley Channel Restoration Project, San Diego, CA. *Archaeologist.* ESA has been retained by the City of San Diego to prepare an EIR for the Sorrento/Los Peñasquitos Restoration Program. The Project consists of the restoration of the historic coastal salt marsh habitat within the Los Peñasquitos Lagoon to be completed in two phases. Michael assisted with the cultural resources survey and prepared the Phase I cultural resources assessment in support of the EIR.

Crystal Springs/El Cerrito Phase II Sewer Improvements Project. Hillsborough, San Mateo County, CA. *Archaeologist.* The City of Hillsborough has retained ESA to conduct construction monitoring and data recovery within two sites impacted by the Crystal Springs/El Cerrito Phase II Sewer Improvements Project. The project includes the replacement of existing wastewater collection pipelines with improved and enlarged pipelines to provide increased capacity and improved reliability. Michael assisted in the data recovery aspect of the project, and helped to recover human remains identified during construction monitoring.

Sterling Natural Resource Center Project. Highland, CA. *Archaeologist*. The San Bernardino Valley Municipal Water District retained ESA to prepare a Phase I Cultural Resources Study in support of an Environmental Impact Report for the proposed Sterling Natural Resource Center Project. The project includes the construction a new treatment facility in the City of Highland to treat locally generated wastewater for beneficial reuse in the upper Santa Ana River watershed. Michael led the Phase I survey of the project area and assisted in the preparation of the cultural resources study.

City of Escondido MFRO Facility for Agriculture Project. Escondido, CA. *Archaeologist.* The City of Escondido retained ESA to prepare an ISMND for the proposed Micro Filtration Reverse Osmosis Facility (MFRO Facility) for Agriculture Project .The Project includes the construction of an MFRO Facility, to provide advanced treatment for Title 22 quality reuse water. In support of the ISMND, ESA conducted a Phase I cultural resources study that complied with CEQA-Plus guidelines. Michael conducted the Phase I survey of the project area, and prepared the Phase I cultural resources study and IS/MND.

IEUA Prado Basin Habitat Sustainability Program, Riverside County, CA. *Archaeologist*. The Inland Empire Utilities Agency (IEUA) implemented elements of the Optimum Basin Management Plan (OBMP) within the Chino Basin. The OBMP included the formation of the Prado Basin Habitat Sustainability Program (PBHSP) to ensure that riparian habitat within the Prado Basin, including habitat along Chino Creek and Mill Creek, is not adversely affected by the OBMP. A key component of the PBHSP is the installation of 16 groundwater monitoring wells at nine locations. ESA was retained by IEUA to conduct archaeological monitoring of the well installation. Michael conducted archaeological monitoring and prepared the monitoring letter report presenting the results of the monitoring.

Appendix B
Sacred Lands File Search

ESA

550 West C Street
Suite 750
San Diego, CA 92101
619.719.4200 phone
619.719.4201 fax

www.esassoc.com

February 21, 2018

Native American Heritage Commission
1550 Harbor Boulevard, Suite 100
West Sacramento, CA 95691
FAX- 916-373-5471

Subject: **SLF search request for the Castellina Specific Plan Project (D150463.00)**

To whom it may concern:

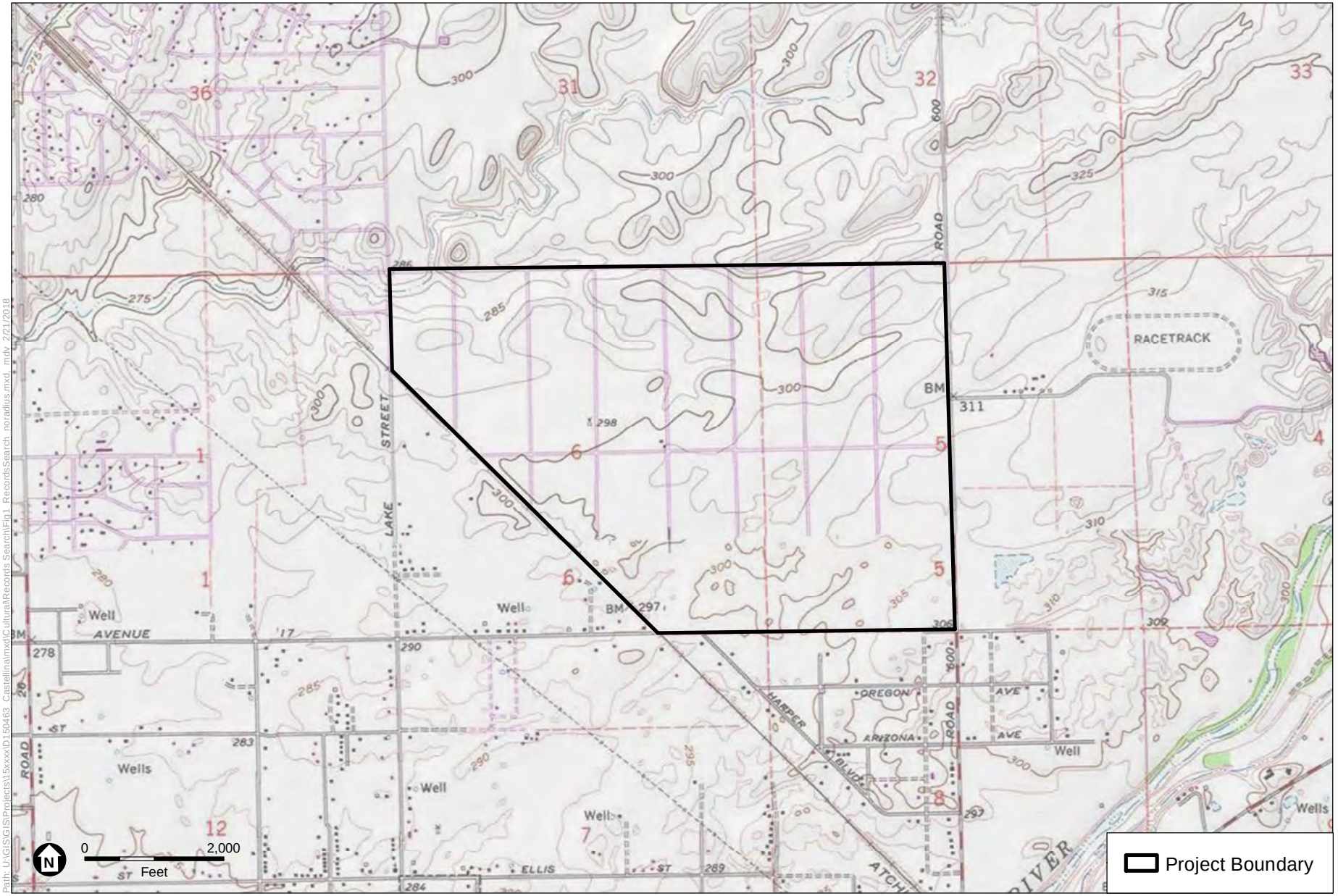
Environmental Science Associates (ESA) has been retained by the City of Madera to prepare an Environmental Impact Report for the Castellina Specific Plan Project (Project) pursuant California Environmental Quality Act. The Project includes the preparation of a Specific Plan for a 739-acre master planned community that will include up to 2,984 single-family, multifamily, and mixed-use residential units; approximately 21 acres of commercial mixed-use; an approximately 20-acre employment park; and approximately 137 acres of parks, play fields, trails, plazas, community gardens, and other open space. Project construction would occur in separate phases over a period of approximately 20 years. The Project is located approximately 1 mile north of the City of Madera. The enclosed map shows the Project located within Sections 5 and 6 of Township 11 South, Range 18 East on the Madera and Kismet, CA 7.5-minute USGS topographic maps.

In an effort to provide an adequate appraisal of all potential impacts that may result from the Project, ESA is requesting that a Sacred Lands File search be conducted for sacred lands or traditional cultural properties that may exist within the Project area.

Thank you for your time and cooperation regarding this matter. To expedite the delivery of search results, please e-mail them to mvader@esassoc.com, or fax them to 619.719.4201. Please contact me at 619.241.9238 or e-mail me at mvader@esassoc.com if you have any questions.

Sincerely,

Michael Vader
Cultural Resources



Topographic Quads: Madera and Kismet, CA 7.5-minute

Castellina Specific Plan EIR Project

Figure 1

Records Search Map

ESA

Path: U:\GIS\G!S\Projects\15xxxx\D150463_Castellina\mxd\Cultural\Records Search\Fig1_RecordsSearch_noradius.mxd_mdv_2/21/2018

NATIVE AMERICAN HERITAGE COMMISSION
Cultural and Environmental Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
(916) 373-3710

February 27, 2018

Michael Vader
ESA Associates

Sent by Email: mvader@esassoc.com
Number of Pages: 2

RE: Castellina Specific Plan Project, Madera County

Dear Mr. Vader:

A record search of the Native American Heritage Commission (NAHC) *Sacred Lands File* was completed for the area of potential project effect (APE) referenced above with negative results. **Please note that the absence of specific site information in the *Sacred Lands File* does not indicate the absence of Native American cultural resources in any APE.**

I suggest you contact all of those listed, if they cannot supply information, they might recommend others with specific knowledge. The list should provide a starting place to locate areas of potential adverse impact within the APE. **By contacting all those on the list, your organization will be better able to respond to claims of failure to consult.** If a response has not been received within two weeks of notification, the NAHC 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 via email: Sharaya.souza@nahc.ca.gov.

Sincerely,

Sharaya Souza
Staff Services Analyst
(916) 573-0168

Native American Heritage Commission
Native American Contacts
2/27/2018

California Valley Miwok Tribe
4620 Shippee Lane
Stockton , CA 95212
CalaverasMiwukPreservation
(209) 931-4567 Office

(209) 931-4333 Fax

Miwok

Picayune Rancheria of Chukchansi Indians
Jennifer Ruiz, Chairperson
P.O. Box 2226
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This list is current only as of the date of this document and is based on the information available to the Commission on the date it was produce d.

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 Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native American Tribes for the proposed:
Castellina Specific Plan Project, Madera County.

E-2 Cultural Resources Survey Evaluation

SIERRA VALLEY CULTURAL PLANNING

A CULTURAL RESOURCES SURVEY FOR THE 793.45-ACRE HERMAN PARCEL, APN 031-221-001 AND 031-222-019, AVENUE 17 AT ROAD 28½, MADERA COUNTY, CALIFORNIA

Prepared by:

C. Kristina Roper, M.A., RPA
Sierra Valley Cultural Planning
Three Rivers, California

January 2007

SIERRA VALLEY CULTURAL PLANNING

A CULTURAL RESOURCES SURVEY FOR THE 793.45-ACRE HERMAN PARCEL, APN 031-221-001 AND 031-222-019, MADERA COUNTY, CALIFORNIA

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Contract No. HERSVCP033

10 January 2007

Topographic Quadrangle: Kismet, Calif., 7.5' (1987); Madera, Calif., 7.5' (1978/1981);
Area: 793.45 acres (321.09 hectares)

(Keywords: *Madera, Township 11S, Range 18E, Heuche Yokuts,)*

(Cover Photo: Looking west along access road from east/central parcel boundary. Mature fig trees are at right, with newly planted fig rootstock at left.)

MANAGEMENT SUMMARY

On January 9, 2007, a cultural resources survey was performed of 793.45 acres (321.09 hectares), located west of Road 28½ and east of the Santa Fe Railroad corridor in central Madera County, California (Township 11S Range 18E, Sections 5 and 6, MDB&M; see Figure 1). Wellington Corporation of Northern California, a real estate development corporation, is investigating the potential for residential development of the Herman Parcel. The present study was performed as part of a due diligence investigation to identify any significant cultural resources (historic properties) that may be present within the Herman Parcel, and thus anticipates provisions set forth in state and federal historic preservation law. Depending on the development action, identification of historic properties is required pursuant to provisions and implementing regulations of Section 106 of the National Historic Preservation Act. A cultural resources survey is also required in such contexts pursuant to guidelines set forth in the California Environmental Quality Act.

No historic properties were identified as a result of surface inspection of the Project Study Area; thus, it is unlikely that development of the Herman Parcel will have an effect on important archaeological, historical, or other cultural resources. No further cultural resources investigation is therefore recommended. In the unlikely event that buried archaeological deposits are encountered during development-related activities, work in the immediate vicinity of the discovery must cease until the finds have been evaluated by a qualified archaeologist. Should human remains be encountered during development, the County Coroner must be contacted immediately; if the remains are determined to be Native American, then the Native American Heritage Commission must be contacted as well.

1.0 INTRODUCTION

This report presents the findings of a cultural resources survey of 793.45 acres (321.09 hectares (Project Study Area) located immediately east of and adjacent to the Santa Fe Railroad corridor in a rural agricultural area approximately two miles northeast of the City of Madera in central Madera County, California. The parcel is bounded by Avenue 17 (extension) on the south, Road 28½ on the east, the Santa Fe Railroad corridor and Lake Street on the west, and Avenue 18 (extension) on the north. The survey area lies in Township11S, Range 18E, and includes portions of Sections 5 and 6 (MDB&M), as depicted on the USGS Madera (1978, 1981) and Kismet (1987) Calif., 7.5' series topographic quadrangle maps (see Figure 1).

Wellington Corporation of Northern California, a real estate development corporation, is investigating the potential for residential development of the Herman Parcel. The present study was performed as part of a due diligence investigation to identify any significant cultural resources (historic properties) that may be present within the Herman Parcel, and thus anticipates provisions set forth in state and federal historic preservation law. Identification of historic properties is required pursuant to provisions and implementing regulations of Section 106 of the National Historic Preservation Act when the proposed action has the potential for causing disturbance to or destruction of significant cultural resources (historic properties). A cultural resources survey is also required in such contexts pursuant to guidelines set forth in the California Environmental Quality Act. No previous cultural resources have been recorded within the Project Study Area.

The author and two assistants conducted a cultural resources survey of the project area on January 9, 2007. No significant cultural resources were identified as a result of surface inspection of the study area.

A brief description of the natural and cultural setting of the project area follows this introduction. Survey methods and findings are presented in the subsequent section.

2.0 SETTING

The Project Study Area is located in a rural agricultural zone approximately two miles northeast of the City of Madera in central Madera County, California. The project area is situated on a gently undulating plain approximately one mile north of the Fresno River. Twentieth century modifications within and immediately surrounding the study area include fig and almond orchards and associated agricultural facilities including a packing house and several water pumping facilities, and arterial access roads. Scattered single-family residences are located to the south and west of the parcel. Figures 2a-d provide a pictorial overview of the Project Study Area.

2.1 Natural Environment

The Project Study Area is situated on the floor of the San Joaquin Valley one mile north of the Fresno River at an elevation ranging from 295 to 312 ft (90 to 95 m) above sea level. Topography is generally level with a gradual downward slope to the west. . Native vegetation most likely consisted of climax stands of perennial bunchgrasses, such as purple needlegrass, and scattered oaks, with mixed riparian habitat along perennial waterways, and annual species on drier alluvial terraces above the floodplain. Other than the planted fig and almond orchards, present vegetation along the boundaries of the Project Study Area includes non-native grasses

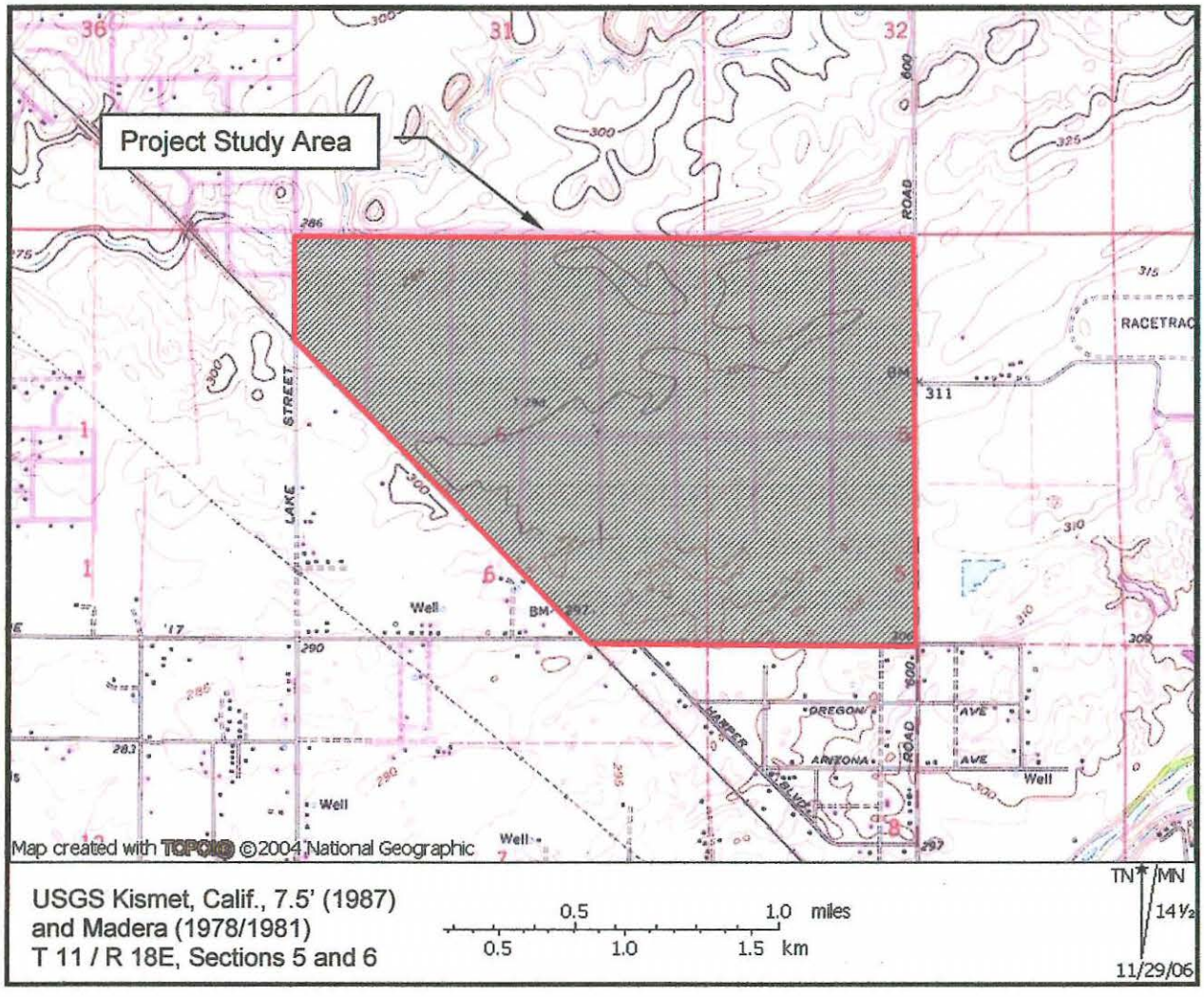

Figure 1. Herman Property Project Study Area, Avenue 17, Madera County, California.

and forbes. Soils within the study area grade between light brown to red-brown sandy alluvium with few rounded gravels.

Prior to EuroAmerican exploration and settlement in the region, the central San Joaquin Valley was extensive grassland covered with spring-flowering herbs. Stands of trees -- sycamore, cottonwoods, box elders and willows -- lined the stream and river courses with groves of valley oaks in well-watered localities with rich soil. Rivers yielded fish, mussels, and pond turtles; migratory waterfowl nested in the dense tules along the river sloughs downstream. Tule elk, sometimes referred to by early Spanish explorers as wild horses, found ample forage. Smaller mammals and birds, including jackrabbits, ground squirrels, and quail were abundant. Native Americans occupants of the region describe abundant sedge beds, along with rich areas of deer grass, plants that figure prominently in the construction of Native American basketry items.

Figure 2a. View east along northern parcel boundary; almond orchards at right.

Figure 2b. View north at west-central parcel boundary; SP tracks at left, almond orchards at right.

Figure 2c. Packing shed located in central portion of parcel.

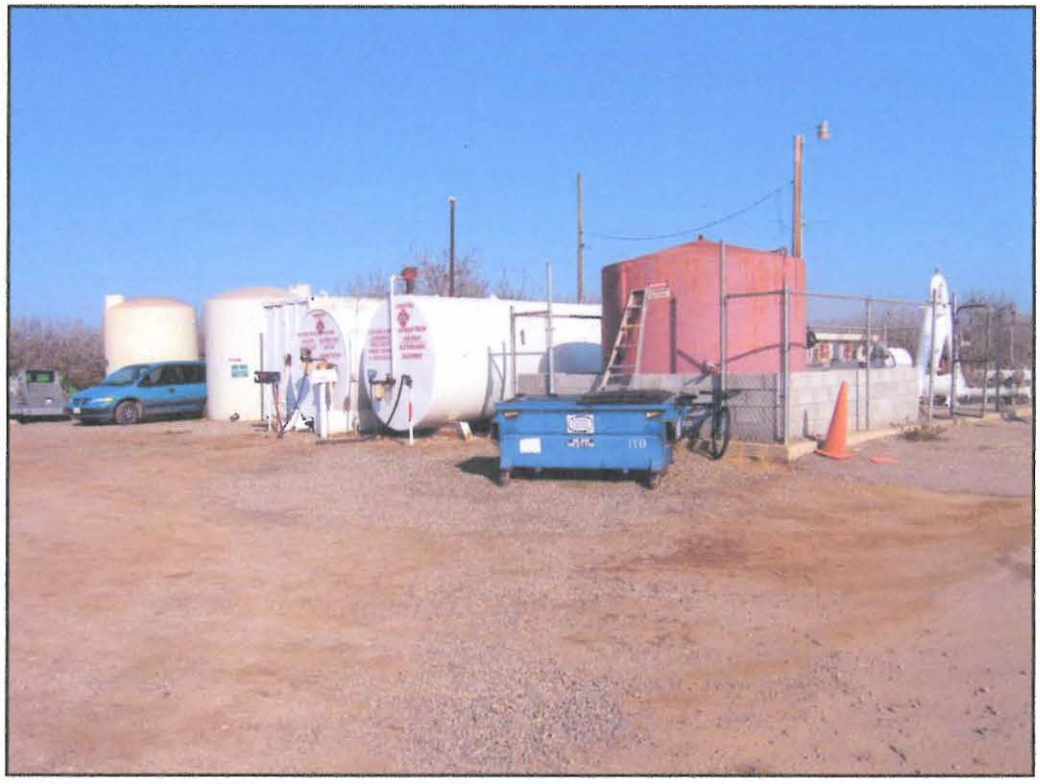

Figure 2d. Water pumping facility adjacent to packing shed on the east.

2.2 Prehistoric Period Summary

The San Joaquin Valley and adjacent Sierran foothills and Coast Range have a long and complex cultural history with distinct regional patterns that extend back more than 11,000 years (McGuire 1995). The first generally agreed-upon evidence for the presence of prehistoric peoples in the region is represented by the distinctive fluted spear points, termed Clovis points, found on the margins of extinct lakes in the San Joaquin Valley. The Clovis points are found on the same surface with the bones of extinct animals such as mammoths, sloths, and camels. Based on evidence from elsewhere, the ancient hunters who used these spear points existed during a narrow time range of 10,900 BP to 11,200 BP.

The next cultural period represented, the Western Pluvial Lakes tradition, thought by most to be after the Clovis period, is another widespread complex that is characterized by stemmed spear points. This poorly defined early cultural tradition is regionally known from a small number of sites in the Central Coast Range, San Joaquin Valley lake margins, and Sierra Nevada foothills. The cultural tradition is dated to between 8,000 and 10,000 years ago and its practitioners may be the precursors to the subsequent cultural pattern.

About 8,000 years ago, many California cultures shifted the main focus of their subsistence strategies from hunting to seed gathering, as evidenced by the increase in food-grinding implements found in archeological sites dating to this period. This cultural pattern is best known for southern California, where it has been termed the Milling Stone Horizon (Wallace 1954, 1978a), but recent studies suggest that the horizon may be more widespread than originally described and is found throughout the region. Radiocarbon dates associated with this period vary between 8,000 and 2,000 BP, although most cluster in the 6,000 to 4,000 BP range (Basgall and True 1985).

Cultural patterns as reflected in the archeological record, particularly specialized subsistence practices became codified within the last 3,000 years. The archeological record becomes more complex, as specialized adaptations to locally available resources were developed and populations expanded. Many sites dating to this time period contain mortars and pestles and/or are associated with bedrock mortars, implying the intense exploitation of the acorn. The range of subsistence resources utilized and exchange systems expanded significantly from the previous period. In the Central Valley, archaeological evidence of social stratification and craft specialization is indicated by well-made artifacts such as charmstones and beads, often found as mortuary items. Ethnographic lifeways serve as good analogs for this period.

2.3 Ethnographic Summary

Prior to EuroAmerican settlement, most of the San Joaquin Valley and the bordering foothills of the Sierra Nevada and Diablo Range were inhabited by speakers of Yokutsan languages. The bulk of the Valley Yokuts people lived on the eastern side of the San Joaquin Valley. The Project Study Area falls within *Heuche* Yokuts territory. Kroeber (1925) and Latta (1999) identify the *Heuche* Yokuts as occupying the area on both the south and the north sides of the Fresno River. Kroeber (1925:484) notes the *Heuche* village of *Che'kayu* as located on the Fresno River four miles below Madera; see Figure 3.

Numerous accounts of Valley Yokuts lifeways offer details of pre-European land use in the San Joaquin Valley. The reader is referred to Gayton (1948), Kroeber (1925), Latta (1999), and Wallace (1978b) for additional information on pre-contact Yokuts subsistence and culture.

2.4 Historic Period Summary

The San Joaquin Valley was visited in the early 1800s by Spanish expeditions exploring the interior in search of potential mission sites. The Moraga (1806) expedition may have passed through *Heuche* territory (Cook 1960). In 1832-33 Colonel Jose J. Warner, a member of the Ewing-Young trapping expedition, passed through the San Joaquin Valley. Warner described Native villages densely packed along the valley waterways, from the foothills down into the slough area. The next year he revisited the area following a devastating malaria epidemic. Whereas the previous year the region had been densely occupied by Native peoples, during this trip not more than five Indians were observed between the head of the Sacramento Valley and the Kings River (Cook 1955).

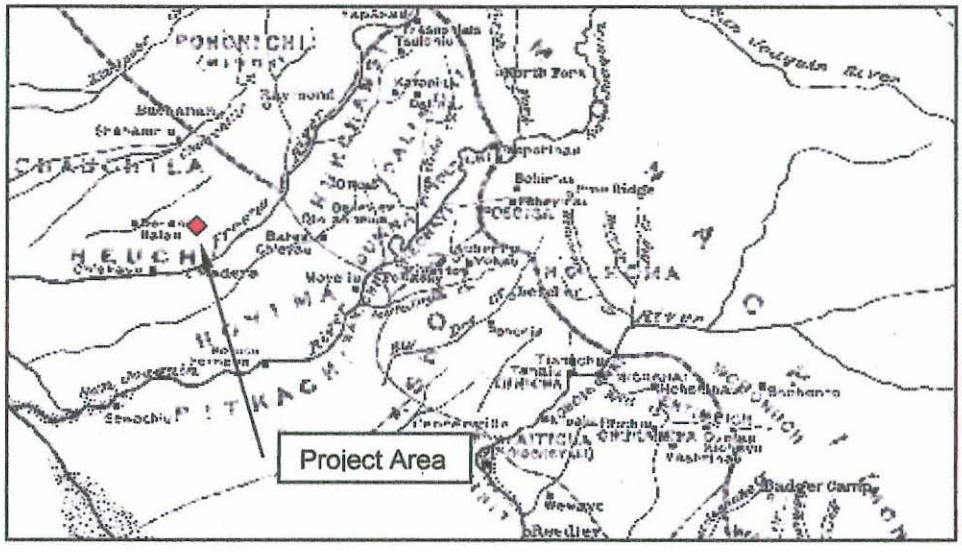

Figure 3. Northern Valley Yokuts Village Locations (from Kroeber 1925: Plate 47).

EuroAmerican settlement of the region began in 1851 with the establishment of Fort Miller on the San Joaquin River. Hostilities between Native inhabitants and American settlers initially prevented widespread settlement of the region; however, by 1860 such threats had been reduced and settlers began taking up large tracts in the region.

Madera County was founded in 1893. It developed as the residents of the region became disenchanted with the county's government seated in Fresno. Much of what became the county was represented in Fresno by one supervisor who was often ignored when it came to any concern above the San Joaquin River. Area residents won the right to secede from Fresno County with a successful vote in Fresno in 1893. The city of Madera is located about 2 miles south of the present study area.

The earliest economic development of the area focused on cattle. Miller and Lux, the cattle kings, claimed ownership to over 150,000 acres in Madera County. Agriculture, particularly winter wheat cultivation, gained importance following passage of the "No Fence" law of 1874 (Clough 1996:29). Expansion of agriculture as an economic focus did not occur until after introduction of irrigation into the region. Miller and Lux were the first to provide for irrigation in Madera County. They took water from the Fresno and San Joaquin rivers and spread it through canals over their grasslands in western Madera County (Footman 1956).

Isaac Friedlander is credited as being the first to initiate irrigation on his holdings in east-central Madera County by about 1871 (Clough 1996:37). The Madera Canal and Irrigation Company was formed soon after and delivered water from the Fresno River south to the early colony developments such as the Alabama Colony located north of the study area centering around Borden (Clough 1996:37). Following construction of Friant Dam (completed in 1944) and the Madera Canal (completed 1950), irrigation ditches were constructed to distribute water through the county (JRP Historical Consulting Services and California Department of Transportation 2000:79).

Figure 4 depicts land ownership and improvements in 1914. Figure 5 presents the same information for 1891. No structures, roads, or other improvements within the present study area are depicted on these maps.

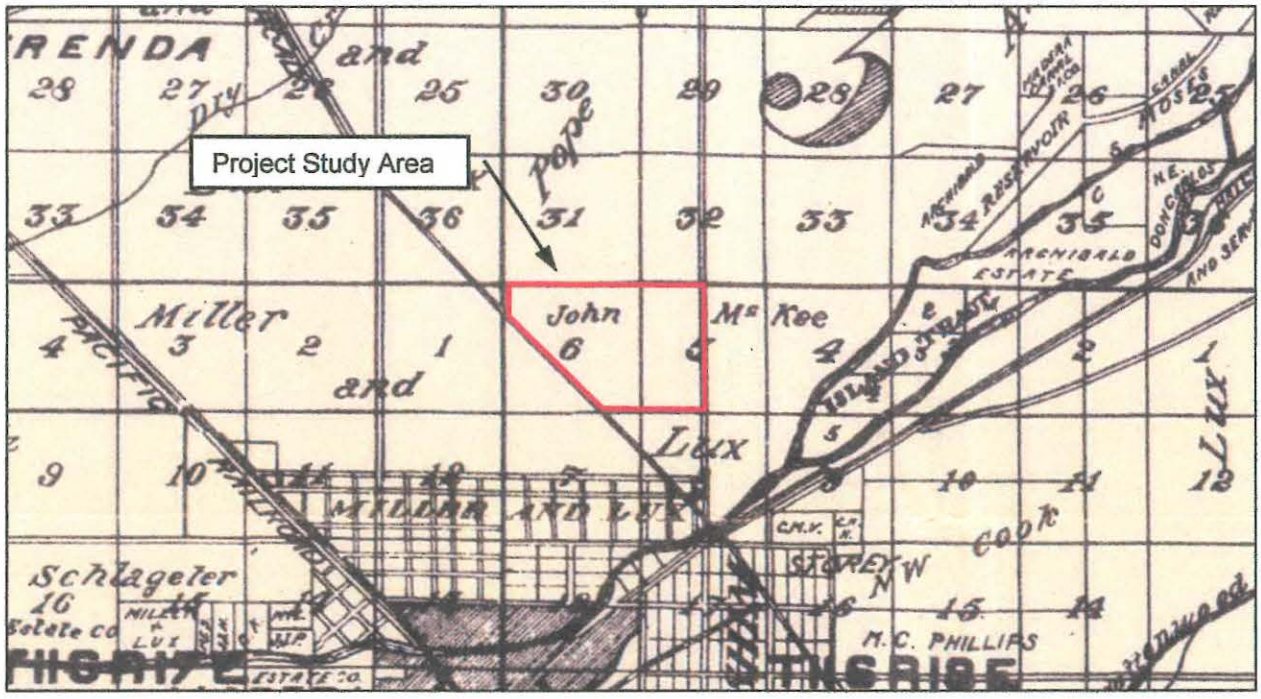

Figure 4. 1914 Map depicting parcel ownership and development within the Project Area (F. E. Smith Survey Company 1914).

2.5 Record Search Results

Prior to field inspection, the author reviewed records on file with the Southern San Joaquin Valley Information Center of the California Historical Resources Information System to identify areas previously surveyed and identify known cultural resources present within or in close proximity to the Project Study Area. No recorded cultural resources have been identified either within or in one mile radius of the surveyed area. No surveys have been conducted within the study area. One survey has been conducted adjacent to the study area along the Santa Fee Railroad corridor (Nelson 2000). An additional study was completed within ¾ mile south of the study area (Jensen & Associates 1996). No cultural resources were identified and documented as a result of these studies (see Attachment 1).

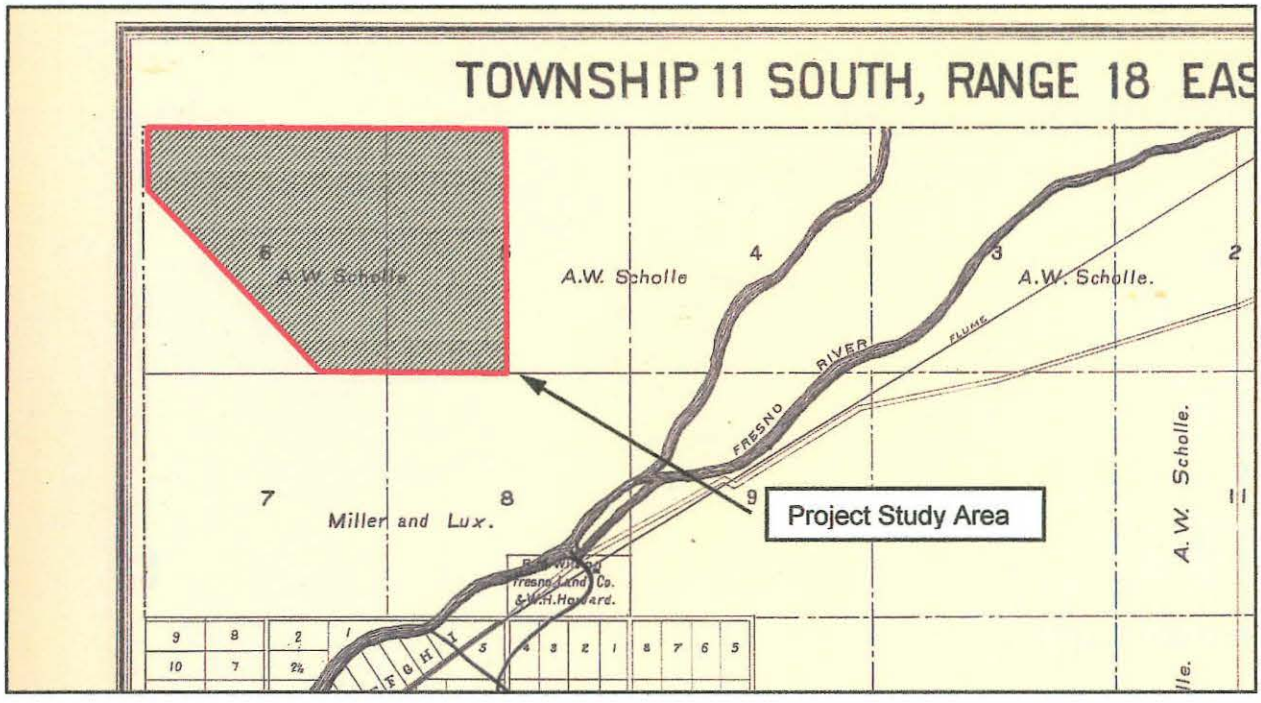

Figure 5. 1891 Map depicting parcel ownership and development within the Project Area (Thompson 1891).

3.0 METHODS AND FINDINGS

On January 9, 2007, the author and two assistants conducted a cultural resources survey of the Project Study Area. Surface visibility was excellent. The study area was inspected using 50 meter spaced transects. Other than the packing shed and several water pumping facilities (which are less than 50 years of age), no structures or features were noted within or immediately adjacent to the study area.

No artifacts or concentrations of prehistoric debris suggesting intensive use or occupation were identified. No plant resources of potential value for Native Americans such as sedge or deer grass, which are of importance in the traditional methods of basketry construction, were observed in the Project Study Area. Due to the extensive disturbance as a result of land leveling and agricultural use, archaeological deposits may have been removed or destroyed; periodic fluvial deposition may have buried older living surfaces, obscuring surface evidence of archaeological remains.

No historic properties were identified as a result of surface inspection of the Project Study Area. Based on the lack of surface evidence of cultural resources within the project area, it is unlikely that residential development of the project area will have an effect on significant archaeological or other cultural resources. Therefore, no further cultural resource investigation is recommended at this time. In the unlikely event that unanticipated buried archaeological deposits are encountered during project-related activities, work in the immediate vicinity of the discovery must cease until the finds can be evaluated by a qualified archaeologist. Should

human remains be encountered within the project area, the County Coroner must be contacted immediately; if the remains are determined to be Native American, then the Native American Heritage Commission must be contacted as well.

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E-3 Paleontological Resources Survey

SIERRA VALLEY CULTURAL PLANNING

PALEONTOLOGICAL RESOURCES SURVEY FOR THE 793.45-ACRE HERMAN PARCEL, APN 031-221-001 AND 031-222-019, AVENUE 17 AT ROAD 28 ½, MADERA COUNTY, CALIFORNIA

Prepared by:

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October 2016

PALEONTOLOGICAL RESOURCES SURVEY FOR THE 793.45-ACRE HERMAN PARCEL, APN 031-221-001 AND 031-222-019, AVENUE 17 AT ROAD 28 ½, MADERA COUNTY, CALIFORNIA

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Prepared for:

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For applicant

Pembrook Development, LLC
175 E. Main Avenue, Suite 110
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October 2016

Topographic Quadrangle: *Kismet (1987)* and *Madera*, 7.5' (1978/1981)
Area: 793.45 acres
(Keywords: *Madera County, Fossils, Quaternary Turlock Lake and Riverbank Formations)*

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MANAGEMENT SUMMARY

On July 8, 2016, a paleontological resources survey was performed of 793.45 acres (321.09 hectares), located west of Road 28½ and east of the Santa Fe Railroad corridor in central Madera County, California (Township 11S Range 18E, Sections 5 and 6, MDB&M; see Figure 1). Pembrook Development, LLC of Morgan Hill, California, a real estate development corporation, is investigating the potential for residential development of the Herman Parcel. The present study was performed as part of a due diligence investigation to identify any significant paleontological resources (fossils) that may be present within the Herman Parcel and, thus, anticipates provisions set forth in local, state, and federal preservation laws required pursuant to provisions and implementing regulations required in such contexts pursuant to guidelines set forth in the California Environmental Quality Act and the Madera County General Plan.

Because the property was in agriculture and no geological formations were present at the surface, no paleontological resources were identified as a result of surface inspection of the Project Study Area; but, there is a potential that development of the Herman Parcel (earthmoving activities) will have an effect on important paleontological resources that may be buried on the property. It is recommended that a paleontological resource mitigation plan be developed involving paleontological monitoring of the property during earthmoving, retreatment of possible paleontological resources recovered, a paleontological report detailing fossil finds, and the transfer of the fossil resources and field data to a suitable repository.

1. INTRODUCTION

This report presents the findings of a paleontological resources survey of 793.45 acres (321.09 hectares (Project Study Area) located immediately east of and adjacent to the Santa Fe Railroad corridor in a rural agricultural area approximately 2 miles northeast of the City of Madera in central Madera County, California. The parcel is bounded by Avenue 17 (extension) on the south, Road 28½ on the east, the Santa Fe Railroad corridor and Lake Street on the west, and Avenue 18 (extension) on the north. The survey area lies in Township 11S, Range 18E and includes portions of Sections 5 and 6 (MDB&M), as depicted on the United States (U.S.) Geological Survey (USGS) *Madera* (1978, 1981) and *Kismet* (1987) California, 7.5-minute series topographic quadrangle maps (see Figure 1).

Pembrook Development, LCC of Morgan Hill, a real estate development corporation, is investigating the potential for development of the Herman Parcel. The present study was performed as part of a due diligence investigation to identify any significant paleontological resources (fossils) that may be present within the Herman Parcel. A paleontological resources survey is also required in such contexts pursuant to guidelines set forth in the California Environmental Quality Act and the Madera County General Plan. No paleontological resources were identified as a result of surface inspection of the study area.

A brief description of the natural and cultural setting of the project area follows this introduction. Survey methods and findings are presented in the subsequent section.

This Paleontologic Resource Assessment describes the paleontological resources investigation undertaken for the proposed Herman Property project, near Madera, Madera County, California, and addresses the identification of paleontological resources that may exist in the proposed project area.. This report contains an assessment of the project's potential during ground-disturbing activities (construction) to adversely impact paleontological resources and recommendations for mitigating any adverse impacts to a less than significant level.

1.1. Setting

The Project Study Area is located in a rural agricultural zone approximately 2 miles northeast of the City of Madera in central Madera County, California. The project area is situated on a gently undulating plain approximately 1 mile north of the Fresno River. Twentieth-century modifications within and immediately surrounding the study area include fig and almond orchards and associated agricultural facilities including a packing house and several water-pumping facilities and arterial access roads. Scattered single-family residences are located to the south and west of the parcel (Figure 1).

1.2. Natural Environment

The Project Study Area is situated on the floor of the San Joaquin Valley 1 mile north of the Fresno River at an elevation ranging from 295 to 312 feet (90 to 95 meters) above sea level. Topography is generally level with a gradual downward slope to the west. Native vegetation most likely consisted of climax stands of perennial bunchgrasses, such as purple needlegrass, and scattered oaks, with mixed riparian habitat along perennial waterways and annual species on drier alluvial terraces above the floodplain. Other than the planted fig and almond orchards, present vegetation along the boundaries of the Project Study Area includes non-native grasses.

1.3. Geological Setting

The proposed project lies within the Great Valley geomorphic province (Norris and Webb 1994). The San Joaquin Valley is the southern half of the Great Valley, which fills a northwest-trending

structural depression bounded by the Sacramento Valley on the north, the Coast Ranges on the west, the Sierra Nevada on the east, and the Tehachapi Mountains on the south. Most of the surface of the San Joaquin Valley and lower foothill regions west of the Sierra Nevada are covered with alluvium of Holocene and Pleistocene age; and, in the Madera area, these sediments were eroded from the Sierra Nevadas and were carried by rivers and deposited as broad alluvial fans. The project area is underlain by Late Pleistocene sediments of the Riverbank Formation referred to as "Qrb" by Davis and Hall (1959) and at deeper depths, the older sediments of the middle Pleistocene Turlock Lake Formation. Both are mapped as "Qc" in Matthews and Burnett (1966).

2. REGULATORY SETTING

This section contains a discussion of the applicable laws, ordinances, regulations, and standards that govern cultural resources and must be adhered to both prior to and during project implementation. The report is intended to satisfy the requirements of the California Environmental Quality Act (CEQA) regulations (*California Public Resources Code* [PRC] §21083.2) and the State CEQA Guidelines (14 *California Code of Regulations* [CCR] §15064.5).

CEQA requires a lead agency to determine whether a project would have a significant effect on paleontological resources.

The proposed project will comply with all applicable governmental regulations, as discussed below. The analysis in this report takes into account that compliance with the applicable regulations will be required and, thus, is essentially a part of the proposed project. Standard compliance with existing regulations pertinent to the proposed project cannot be considered mitigation for significant impacts under CEQA but may be identified in the impact analysis below as regulatory requirements.

2.1. State

This section discusses State regulations applicable to paleontological resources on the project site.

2.1.1. California Environmental Quality Act and Guidelines

CEQA (as codified in §§21000 et seq. of the PRC) and the State CEQA Guidelines (as codified in 14 CCR §§15000 et seq.) establish a process by which various resources, including cultural and paleontological resources, may be assessed and considered for the purposes of proposed projects under State oversight. The nature of the resources themselves and the potential impacts to those resources are evaluated as part of the CEQA compliance review process.

The *California Code of Regulations* states that, "No person shall destroy, disturb, mutilate, or remove earth, sand, gravel, oil, minerals, rocks, paleontological features or features of caves" (14 CCR 4307). The code also states that, "No person shall remove, injure, disfigure, deface, or destroy any object of archaeological or historical interest or value" (14 CCR 4308).

2.1.2. Native American Historic Resource Protection Act

The Native American Historic Resource Protection Act (*California Public Resources Code* §§5097–5097.9993) protects cultural resources on California public lands and was amended by Senate Bill 1034 in 2010. It states that a person shall not knowingly and willfully excavate upon, or remove, destroy, injure, or deface, a vertebrate paleontological site or any paleontological feature, situated on public lands, except with the express permission of the public agency having jurisdiction over the lands.

2.1.3. California Penal Code

Section 6221.2 of the *California Penal Code* states that "every person, not the owner thereof, who willfully injures, disfigures, defaces, or destroys any object or thing of archeological or historical interest or value, whether situated on private lands or within any public park or place, is guilty of a misdemeanor."

2.2. Regional and Local

2.2.1. County of Madera General Plan-Recreation and Cultural Resources (1995)

The County of Madera General Plan's Recreation and Cultural Resources section states the following:

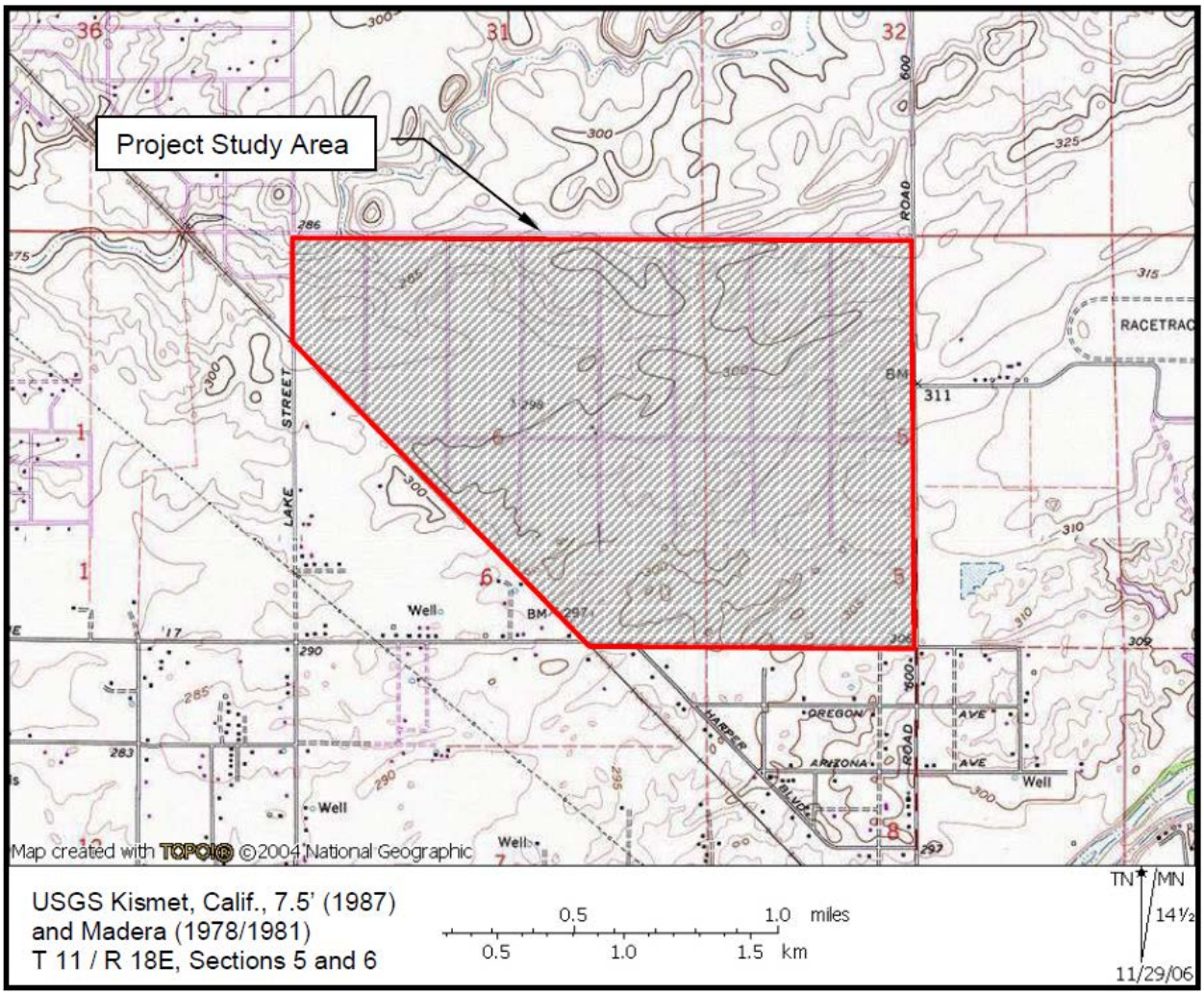
> **Goal D:** To identify, protect, and enhance Madera County's important historical, archaeological, paleontological, and cultural sites and their contributing environment.
>
> **Policy 4.D.2**: The County shall coordinate with the cities and advisory councils in the county to promote the preservation and maintenance of Madera County's paleontological, archaeological, and historical resources.
>
> **Policy 4.D.3**: The County shall require that discretionary development projects identify and protect from damage, destruction, and abuse, important historical, archaeological, paleontological, and cultural sites and their contributing environment.
>
> **Implement Program 4.5** The County shall develop preservation incentive programs for owners of important cultural and paleontological resources, using such mechanisms as the Mills Act, the Historic Preservation Easement program, the Certified Local Government program, and the Heritage Tourism program. Funding shall come from grants and the General Fund.

3. METHODS

This paleontological resources study consisted of (1) a paleontological records search undertaken at the Natural History Museum of Los Angeles County (NHMLAC) and other sources; (2) a literature search of pertinent reports, formal published articles, and geological maps of the area; (3) a windshield and pedestrian survey of the project area; and (4) this technical report.

All data collected during this study are maintained on file at author's residence.

Figure 1: Project Location



Herman Property Study Area, Avenue 17, Madera County, California

4. PALEONTOLOGICAL RESOURCES RECORDS SEARCH

4.1. Previously Recorded Paleontological Sites

A paleontological records search was requested of Dr. Sam McLeod at Vertebrate Paleontology Section of the NHMLAC. Dr. McLeod responded on June 16, 2016. The records search revealed that, although no fossil localities are recorded within the current project area, the NHMLAC does have fossil localities from similar-aged sedimentary formations in this portion of Madera County (McLeod 2016).

"We do not have any vertebrate fossil localities that lie directly within the project boundaries, but we do have localities somewhat nearby from the same or similar sedimentary deposits as occur in the proposed project area. Surface deposits in the proposed project area consist of soil on top of Pleistocene and possibly younger Quaternary deposits, predominately derived from the Fresno River that currently flows just to the south and east. The Pleistocene deposits in the proposed project area primarily consist of the early Pleistocene Turlock Formation and the middle or late Pleistocene Riverbank Formation with smaller exposures of the younger and sometimes overlying Modesto Formation. None of the vertebrate fossil localities in this part of the San Joaquin Valley distinguish between these sedimentary deposits. The closest vertebrate fossil locality to the proposed project areas from these deposits though is LACM 7254, northwest of the proposed project area immediately northeast of Chowchilla on the south side of Ash Slough, that produced a fossil specimen of elephantoid, Proboscidea.

Very shallow excavations in the soil layers exposed throughout the proposed project area are unlikely to produce significant fossil vertebrate remains. Any deeper excavations in the proposed project area that extend down into any of the Pleistocene deposits, however, may well encounter significant vertebrate fossils. Any substantial excavations in the proposed project area, therefore, should be monitored closely to quickly and professionally recover any fossil remains discovered while not impeding development. Sediment samples should also be collected and processed to determine the small fossil potential in the proposed project area. Any fossils recovered during mitigation should be deposited in an accredited and permanent scientific institution for the benefit of current and future generations. This records search covers only the vertebrate paleontology records of the Natural History Museum of Los Angeles County. It is not intended to be a thorough paleontological survey of the proposed project area covering other institutional records, a literature survey, or any potential on site" (MacLeod 2016).

4.1.1. Riverbank Formation

A search of the database of Late Pleistocene vertebrate localities for California (Jefferson 1991a, 1991b, 2008, 2014), which includes institutional records and published references, indicated that no previously recorded fossil vertebrate localities are within a mile of the proposed project area, but three previously recorded vertebrate localities were recorded in Madera County. The search does not designate the Late Pleistocene formations, Riverbank Formation and Modesto Formation, in which the vertebrate localities were found. At Ash Slough, fossil proboscidea (elephant) remains were found (LACM 7254). Near Chowchilla, bones and teeth of *Mammuthus* (mammoth) were recovered; and, at Millerton near Madera, remains of *Mammuthus* (mammoth), *Mammut* (mastodon), and *Bison latifrons* (long-horned extinct bison) were collected. In nearby Fresno County, 6 Late Pleistocene vertebrate sites and in Tulare County 11 sites were recorded.

4.1.2. Turlock Lake Formation

Probably one of the most important fossil localities in the San Joaquin Valley is at the Fairmead Landfill near Chowchilla, which is in sediments of the middle Pleistocene Turlock Lake Formation.

The first discovery was in 1993, when heavy equipment unearthed a Columbian mammoth tusk 32 feet below the surface. Since that time, several thousand fossils from 67 different taxa have been identified including the Columbian mammoth, camel, horse, saber-tooth cat, scimitar cat, dire wolf, and giant ground sloth, as well as reptiles, amphibians, fish, and 16 different diatoms.

The Fossil Discovery Center of Madera County (California) first opened its doors on October 13, 2010, the inaugural National Fossil Day. Now open for just over a year, it is a popular destination for thousands of visitors, including over 2,000 grade school students. The Fossil Discovery Center sits directly across the road from the Fairmead Landfill, which is the 40-acre site of one of the largest Middle Pleistocene fossil deposits in California. The fossils are from 550,000 to 700,000 years old.

The Fossil Discovery Center is dedicated to the scientific study and educational presentation of these fossils to the public, with displays and a popular activity for children, the Mock Dig area featuring 19 different replica fossils buried in sand. After a brief demonstration, children can spend time excavating any number of fossils. The new Columbian mammoth exhibit is the centerpiece of the Fossil Discovery Center and occupies the entire front area of the center.

This particular area of the San Joaquin Valley is composed of distal alluvial fan deposits of the Chowchilla River. Fossils are buried in stream sediments including sand, silt, and clay from overbank and sheet flooding during glacial periods, as well as some marsh/lacustrine environments. Many of the bones show breakage from trampling as well as predation. Columbian mammoths could have stood 14 feet in height and weighed as much as 20,000 pounds. Much of this breakage could be from them.

5. FIELD SURVEY

On July 8, 2015, paleontologist Mark A. Roeder, with the assistance of Melissa Macias, conducted a field survey which consisted of a windshield survey of the proposed project area. The entire property was in agriculture (orchards). Although the Turlock Lake and Riverbank Formations underlie the proposed project, the property was under agriculture and had no areas where this rock unit could be observed.

No paleontological resources were noted during the survey.

6. DISCUSSION

The following section presents a discussion of the geology and paleontology in the proposed project area. The area is underlain by two geologic units (Matthew and Burnett 1965; McLeod 2016): Qtl, sediments of the Quaternary Turlock Lake Formation, and Qrb, sediments of the Quaternary Riverbank Formation (see Table A below). The records and literature search revealed no previously recorded paleontological sites within the study area (McLeod 2016). See Table A for a summary of geologic units within the project area and Table B for their paleontological sensitivity.

6.1. Qtl – Quaternary Turlock Lake Formation

Originally recognized by Arkley (1954), the Quaternary Turlock Lake Formation (Qtl), named by Davis and Hall (1959), and underlies the Riverbank Formation. This sedimentary formation consists primarily of arkosic alluvium, mostly fine sand, silt, and, in places, clay at the base grading upward into coarse sand and occasional coarse pebbly sand or gravel (Marchand and Allwardt 1981). These sediments were derived from fluvial channels and overbank deposits along the eastern Sacramento and San Joaquin valleys. These sediments are middle Pleistocene in age and have been dated at 450,000 to 1 million years old (Dundas et al. 2009). The Turlock Lake

Formation varies widely in thickness but is the thickest in the middle portion of the Central Valley (Marchand and Allwardt 1981) and thinnest in the foothills of the Sierras. Elsewhere in Madera County, large extinct vertebrate fossils are known from natural outcrops; but new discoveries have been recovered from excavations for roads, housing projects, and quarries in Turlock Lake Formation. Remains of extinct Ice Age animals such as mastodons, mammoths, horses, bison, dire wolf, camels, and ground sloth have been found in Pleistocene sediments from at least 14 localities in nearby Tulare County (Jefferson 1991b, 2008; Scott and Gust 2008). In Madera County, during the construction of a new cell for the nearby Fairmead Landfill, a large number of Late Pleistocene fossils were recovered during excavation.

TRC Lowney (2007) conducted a geotechnical investigation of the property with borings. The investigations and borings were not able to separate the Turlock from the overlying Riverbank Formation. In the Fresno area, the Turlock Lake Formation is 4.8 meters thick (Dundas et al. 2009).

6.2. Qrb – Quaternary Riverbank Formation

The Quaternary Riverbank Formation (Qrb), named by Davis and Hall (1959), is thought to be 200 feet thick and is present in an outcrop belt from 50 miles north and 150 miles south of Sacramento along the eastern San Joaquin and Sacramento valleys (Scott and Gust 2008). This mid- to late Pleistocene-age river terrace deposit consists of two members (Marchand and Allwardt 1981). Although both members (upper and lower) consist of fluvial clays, sands, and gravels, the upper member is more widespread (Blake et al. 1999). The older lower member consists of red semi-consolidated gravel, sand, and silt (Helley and Harwood 1985). The Quaternary Riverbank Formation is mapped and present in the subsurface over the entire project area (Matthews and Burnett 1966). These sediments consist of reddish arkosic sand, silt, and clay and Sierran-derived sediment accumulated in fluvial channels and overbank deposits on the eastern San Joaquin Basin alluvial fans during aggradational events associated with Quaternary glacial episodes (Dundas et al. 2009). These sediments are late Pleistocene in age and have been dated at 130,000 to 450,000 years old (Dundas et al. 2009). Elsewhere in Tulare County, fossils are known from natural outcrops, excavations for roads, housing projects, and quarries in Riverbank Formation and similar deposits. Remains of extinct Ice Age animals such as mastodons, mammoths, horses, bison, dire wolf, camels, and ground sloth have been found in Pleistocene sediments from at least 11 localities in Tulare County (Jefferson 1991b, 2008; Scott and Gust 2008). The geotechnical investigations and borings were not able to separate the Riverbank from the underlying Turlock Formation (TRC Lowney 2007). In the Fresno area, the Riverbank Formation is 4.4 meters thick (Dundas et al. 2009).

Table A. Summary of Geologic Units underlying the Proposed Herman Property Project, near Madera, Madera County, California.

Map Symbol Formation	Age	Description
Qrb **Riverbank Formation**	Late Pleistocene (130,000-450,000 years ago)	Quaternary Riverbank Formation consists of reddish sands, silts, clay, and gravel deposited in the Madera and surrounding areas. Sierran-derived sediment accumulated in fluvial channels and as overbank deposits on the eastern San Joaquin Basin alluvial fans during aggradational events associated with late Pleistocene glacial episodes. Extinct large mammals such as mammoth, mastodon, camel, and horse have been recovered from recent earthmoving activities of State Route 180.
Qtl **Turlock Lake Formation**	Middle Pleistocene (600,000-1,000,000 years ago)	The Turlock Lake Formation consists primarily of arkosic alluvium, mostly fine sand, silt, and, in places, clay at the base grading upward into coarse sand and occasional coarse pebbly sand or gravel. These sediments consisting fluvial channels and overbank deposits from the erosion of the Sierra Nevada and was deposited along the eastern Sacramento and San Joaquin valleys during middle Pleistocene glacial events. These sediments are middle Pleistocene in age and have been dated at 600,000 to 1 million years old. The Turlock Lake Formation varies widely in thickness but is thickest in the middle portion of the Central Valley and thinnest in the foothills of the Sierras. Extinct large mammals such as mammoth, mastodon, horse, camel, sloths, coyote, saber-tooth cats, llama, antelope, and dwarf antelope, as well as deer, jack rabbit, kangaroo rat, and gopher.
Dundas et al. 2006; McLeod 2016		

7. PROJECT SENSITIVITY FOR FOSSIL RESOURCES

Paleontological resources (fossils) are important scientific and educational resources because of their use in (1) documenting the presence and evolutionary history of particular groups of now extinct organisms; (2) reconstructing the environments in which these organisms lived; and (3) in determining the relative ages of the strata in which they occur. Fossils are also important in determining the geologic events that resulted in the deposition of the sediments in which they were buried.

Paleontological resources are recognized as nonrenewable scientific resources and are afforded protection by state and local statutes and policies for the management of paleontology resources.

High Potential: Rock units which, based on previous studies, contain or are likely to contain significant vertebrate, significant invertebrate, or significant plant fossils. These units include, but are not limited to, sedimentary formations that contain significant nonrenewable paleontological resources anywhere within their geographical extent and sedimentary rock units temporally or lithologically suitable for the preservation of fossils. These units may also include some

volcanic and low-grade metamorphic rock units. Fossiliferous deposits with very limited geographic extent or an uncommon origin (e.g., tar pits and caves) are given special consideration and ranked as highly sensitive. High sensitivity includes the potential for containing: (1) abundant vertebrate fossils; (2) a few significant fossils (large or small vertebrate, invertebrate, or plant fossils) that may provide new and significant taxonomic, phylogenetic, ecologic, and/or stratigraphic data; (3) areas that may contain datable organic remains older than Recent, including *Neotoma* (sp.) middens; or (4) areas that may contain unique new vertebrate deposits, traces, and/or trackways. Areas with a high potential for containing significant paleontological resources require monitoring and mitigation.

Low Potential: This category includes sedimentary rock units that: (1) are potentially fossiliferous but have not yielded significant fossils in the past; (2) have not yet yielded fossils but possess a potential for containing fossil remains; or (3) contain common and/or widespread invertebrate fossils if the taxonomy, phylogeny, and ecology of the species contained in the rock are well understood. Sedimentary rocks expected to contain vertebrate fossils are not placed in this category because vertebrates are generally rare and are found in more localized stratum. Rock units designated as low potential generally require little (spot checking) or no monitoring and mitigation; however, as excavation for construction gets underway, it is possible that new and unanticipated paleontological resources might be encountered. If this occurs, a Construction Change Order (CCO) must be prepared in order to have a qualified Principal Paleontologist evaluate the resource. If the resource is determined to be significant, monitoring and mitigation is required.

No Potential: Rock units of intrusive igneous origin, most extrusive igneous rocks, and moderately to highly metamorphosed rocks are classified as having no potential for containing significant paleontological resources. For projects encountering only these types of rock units, paleontological resources can generally be eliminated as a concern and no further action taken.

Table B rates the potential of the underlying rock units to yield fossils during earthmoving on the proposed project.

Table B. Paleontological Potential of the Geologic Formations underlying the Proposed Herman Property Project, near Madera, Madera County, California.

Stratigraphic Unit**	Paleontological Potential	Comments
(Qrb) - Riverbank Formation	High	Present in the subsurface as viewed in road cuts along State Route 145 just northeast of the NE corner of the parcel may as shallow as 2 feet. Near Fresno, this rock unit is 4.4 meters thick. These sediments as observed in the geotechnical boring consist of sands, silty sands, and sandy silts at depths of 5 feet or more and have high potential to yield significant nonrenewable paleontological resources during earthmoving activities.
(Qtk) – Turlock Lake Formation	High	Underlying the Riverbank Formation, this rock unit may be at depths of 15 feet or more. These sediments have a high potential to yield significant nonrenewable paleontological resources during earthmoving activities, especially during placement of storm drains and excavation of retention basins.

8. MANAGEMENT RECOMMENDATIONS

No previously recorded paleontological resources are within the study area, nor are any known paleontological resources within a 1-mile radius of the project (McLeod 2016; Jefferson 1991a, 1991b, 2008, 2014). Because the paleontological potential for yielding significant fossils for the Quaternary Turlock Lake and Riverbank Formation is high, fossils have a high likelihood to be found during grading operation (5 feet or more in depth) for house pads, roads, and other improvements (Dundas 2016; McLeod 2016).

Monitoring is required during project construction when grading impacts the Quaternary Riverbank Formation typically found at depths of 5 feet or more. Deeper excavations such as storm drains and retention basins may reach the upper portions of the Turlock Lake Formation Because these paleontologically sensitive sediments at depth are recorded over all the proposed project area, paleontological resources monitoring must be required in those areas. Below are required mitigation measures:

1. A nonstandard special provision for paleontology mitigation will be included in the construction contract with a special provisions section to advise the construction contractor of the requirement to cooperate with potential paleontological salvages.

2. A qualified Principal Paleontologist will prepare a detailed Paleontological Mitigation Plan prior to the start of construction. All geologic work will be performed under the supervision of a California Professional Geologist.

3. The Principal Paleontologist will be present at pre-grading meetings to consult with grading and excavation contractors.

4. Near the beginning of excavations, the Principal Paleontologist will conduct an employee environmental awareness training session for all persons involved in earthmoving for the project.

5. A qualified paleontology monitor under the direction of the Principal Paleontologist will be on site to inspect cuts for fossils at all times during original grading involving sensitive geologic formations.

6. When fossils are discovered, the paleontology monitor will recover them and contact a Principal Paleontologist for assistance. Construction work in these areas will be halted or diverted to allow recovery of fossil remains in a timely manner.

7. Bulk sediment samples will be recovered from fossiliferous horizons and processed for microvertebrate (rodents, rabbits, and other small vertebrates) remains as determined necessary by the Principal Paleontologist.

8. Fossil remains collected during the monitoring and salvage portion of the mitigation program will be cleaned, repaired, sorted, identified, and cataloged.

9. Prepared fossils, along with copies of all pertinent field notes, photos, and maps, will then be deposited in a suitable scientific institution with paleontological collections.

10. A final report will be completed that outlines the results of the mitigation program and will be signed by the Principal Paleontologist and Professional Geologist.

9. REFERENCES CITED

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11. PREPARER'S QUALIFICATIONS

Mark A. Roeder has more than 35 years of extensive paleontologic resource management experience in conducting and managing paleontologic resource/impact assessments and impact mitigation programs for large construction projects in California. Projects include freeways and other roadways, subways, municipal solid waste landfills, aggregate quarries, flood control facilities, oil refineries, natural gas pipelines, wastewater treatment facilities, housing developments, planned communities, office buildings and complexes, shopping centers, hospitals and medical centers, industrial complexes, parking lots/structures, land exchanges, and conditional use permit and specific plan revisions. Clients include private industry; public utilities; conservancies; and federal, state, county, city, and regional agencies.

He specializes in paleontologic resource assessments which entail data searches (literature reviews, archival searches, field surveys, consultation with other paleontologists) to develop baseline inventories, evaluation of scientific importance of resources and potential for disturbance by adverse project-related impacts, and formulation of mitigation measures to reduce these impacts to an acceptable level. Mr. Roeder has 35 years of experience as a paleontologist and paleontologic consultant involved in NEPA and CEQA compliance. He has extensive paleontologic research background in fish faunas of Cenozoic marine and lacustrine formations of southern California.

His experience also includes writing paleontologic resource impact mitigation programs and monitoring earthmoving activities, recovering fossil remains, supervising field personnel, and preparing progress and final reports. Services involve extensive coordination and consultation with project proponents, other consulting firms, and permitting agencies; adherence to strict delivery schedules; and completion within specified budget limits.

E-4 Assembly Bill 52 and Senate Bill 18 Native American Consultation Notification

NATIVE AMERICAN HERITAGE COMMISSION
Cultural and Environmental Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
(916) 373-3710

February 27, 2018

Michael Vader
ESA Associates

Sent by Email: mvader@esassoc.com
Number of Pages: 2

RE: Castellina Specific Plan Project, Madera County

Dear Mr. Vader:

A record search of the Native American Heritage Commission (NAHC) *Sacred Lands File* was completed for the area of potential project effect (APE) referenced above with negative results. **Please note that the absence of specific site information in the *Sacred Lands File* does not indicate the absence of Native American cultural resources in any APE.**

I suggest you contact all of those listed, if they cannot supply information, they might recommend others with specific knowledge. The list should provide a starting place to locate areas of potential adverse impact within the APE. **By contacting all those on the list, your organization will be better able to respond to claims of failure to consult.** If a response has not been received within two weeks of notification, the NAHC 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 via email: Sharaya.souza@nahc.ca.gov.

Sincerely,

Sharaya Souza
Staff Services Analyst
(916) 573-0168

February 11, 2019

Chowchilla Yokuts Tribe
Fleak, Joetta
Advocate, North Fork Mono Tribe
433 South L Street
Madera, CA 93637

RE: Tribal Cultural Resources under the California Environmental Quality Act, AB 52 (Gatto, 2014). Formal Notification of determination that a Project Application is Complete or Decision to Undertake a Project, and Notification of Consultation Opportunity, pursuant to Public Resources Code § 21080.3.1 (hereafter PRC)

Dear Sir/Madam:

The Madera County Planning Division has determined that a project application is complete for Castellina, LLC – Preliminary Subdivision Map #2019-001 – (031-221-003-000) and (031-222-001).

Below please find a description of the proposed project, a map showing the project location, and the name of our project point of contact, pursuant to PCR §21080.3.1(d).

The proposed Castellina project is a master-planned community that includes the development of up to 3,072 residential units, comprised of single- and multi-family, and mixed-use residential units along with commercial mixed-uses, a proposed elementary school site, and recreational facilities, including parks, play fields, trails, plazas, community gardens, and other open space. The project also includes the construction of public facilities and services to serve the land uses proposed on the project site including: water, wastewater, storm drainage, dry utilities, and solid waste disposal, vehicular circulation and non-vehicular mobility system. Development of Castellina would occur in phases depending on market demand and the ability to provide adequate infrastructure. Preliminary Subdivision Map to allow 117 parcels. The project is located on 788 acres and is bordered by the Avenue 18 alignment to the north, Road 28½ to the east, the alignment of Avenue 17 to the south, Road 27 to the west, and the BNSF railroad line to the southwest (no situs), Madera. Jamie Bax will be the contact person for this project.

Pursuant to PRC §21080.3.1(b), you have 30 days from the receipt of this letter to request consultation, in writing, with the Madera County Planning Division.

Very Respectfully,

JAMIE BAX
Deputy Director

February 11, 2019

Table Mountain Rancheria
Walker-Grant, Leanne
Tribal Chairperson
P. O. Box 410
Friant, CA 93626

RE: Tribal Cultural Resources under the California Environmental Quality Act, AB 52 (Gatto, 2014). Formal Notification of determination that a Project Application is Complete or Decision to Undertake a Project, and Notification of Consultation Opportunity, pursuant to Public Resources Code § 21080.3.1 (hereafter PRC)

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February 11, 2019

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Pennell, Robert
Tribal Cultural Resources Director
P. O. Box 410
Friant, CA 93626

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Very Respectfully,

JAMIE BAX
Deputy Director

February 11, 2019

Picayune Rancheria of the Chuckchansi Indians
Harter-Estes, Tara
THPO/Cultural Resource Director
PO Box 2226
Oakhurst, CA 93644

RE: Tribal Cultural Resources under the California Environmental Quality Act, AB 52 (Gatto, 2014). Formal Notification of determination that a Project Application is Complete or Decision to Undertake a Project, and Notification of Consultation Opportunity, pursuant to Public Resources Code § 21080.3.1 (hereafter PRC)

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February 11, 2019

Dumna Wo Wah Tribal Government Smith, Eric
Cutural Resources Manager
2191 W. Pico Ave.
Fresno, CA 93705

RE: Tribal Cultural Resources under the California Environmental Quality Act, AB 52 (Gatto, 2014). Formal Notification of determination that a Project Application is Complete or Decision to Undertake a Project, and Notification of Consultation Opportunity, pursuant to Public Resources Code § 21080.3.1 (hereafter PRC)

Dear Sir/Madam:

The Madera County Planning Division has determined that a project application is complete for Castellina, LLC – Preliminary Subdivision Map #2019-001 – (031-221-003-000) and (031-222-001).

Below please find a description of the proposed project, a map showing the project location, and the name of our project point of contact, pursuant to PCR §21080.3.1(d).

The proposed Castellina project is a master-planned community that includes the development of up to 3,072 residential units, comprised of single- and multi-family, and mixed-use residential units along with commercial mixed-uses, a proposed elementary school site, and recreational facilities, including parks, play fields, trails, plazas, community gardens, and other open space. The project also includes the construction of public facilities and services to serve the land uses proposed on the project site including: water, wastewater, storm drainage, dry utilities, and solid waste disposal, vehicular circulation and non-vehicular mobility system. Development of Castellina would occur in phases depending on market demand and the ability to provide adequate infrastructure. Preliminary Subdivision Map to allow 117 parcels. The project is located on 788 acres and is bordered by the Avenue 18 alignment to the north, Road 28½ to the east, the alignment of Avenue 17 to the south, Road 27 to the west, and the BNSF railroad line to the southwest (no situs), Madera. Jamie Bax will be the contact person for this project.

Pursuant to PRC §21080.3.1(b), you have 30 days from the receipt of this letter to request consultation, in writing, with the Madera County Planning Division.

Very Respectfully,

JAMIE BAX
Deputy Director

February 11, 2019

Dumna Wo Wah Tribal Government
Ledger, John
Assistant Cultural Resc. Mngr.
2191 W. Pico Ave.
Fresno, CA 93705

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JAMIE BAX
Deputy Director

February 11, 2019

Dumna Wo Wah Tribal Government
Acree, Chris
Cultural Resources Analyst
2191 W. Pico Ave
Fresno, CA 93705

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Very Respectfully,

JAMIE BAX
Deputy Director

NATIVE AMERICAN HERITAGE COMMISSION
Cultural and Environmental Department 1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
Phone: (916) 373-3710
Email: nahc@nahc.ca.gov
Website: http://www.nahc.ca.gov
Twitter: @CA_NAHC

May 2, 2019

Jamie Bax
Madera County, Planning Division

VIA Email to: Jamie.bax@maderacounty.com

RE: Native American Consultation, Pursuant to Senate Bill 18, Government Code §65352.3 and §65352.4, Castellina Specific Plan/Area Plan, Madera County.

Dear Mr. Bax:

Attached is a consultation list of tribes with traditional lands or cultural places located within the boundaries of the above referenced counties.

Government Code §65352.3 and §65362.4 require local governments to consult with California Native American tribes identified by the Native American Heritage Commission (NAHC) for the purpose of avoiding, protecting, and/or mitigating impacts to cultural places when creating or amending General Plans, Specific Plans and Community Plans.

The law does not preclude initiating consultation with the tribes that are culturally and traditionally affiliated within your jurisdiction. The NAHC believes that this is the best practice to ensure that tribes are consulted commensurate with the intent of the law.

The NAHC also believes that agencies should also include with their notification letters, information regarding any cultural resources assessment that has been completed on the area of potential effect (APE), such as:

1. The results of any record search that may have been conducted at an Information Center of the California Historical Resources Information System (CHRIS), including, but not limited to:

   - A listing of any and all known cultural resources that have already been recorded or are adjacent to the APE, such as known archaeological sites;

   - Copies of any and all cultural resource records and study reports that may have been provided by the Information Center as part of the records search response;

   - Whether the records search indicates a low, moderate or high probability that unrecorded cultural resources are located in the APE; and

   - If a survey is recommended by the Information Center to determine whether previously unrecorded cultural resources are present.

2. The results of any archaeological inventory survey that was conducted, including:

   - Any report that may contain site forms, site significance, and suggested mitigation measures.

     All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure in accordance with Government Code §6254.10.

3. The result of any Sacred Lands File (SLF) check conducted through the Native American Heritage Commission. The request form can be found at http://nahc.ca.gov/wp-content/uploads/2015/08/LocalGovernment-Tribal-Consultation-List-Request-Form-update.pdf.
4. Any ethnographic studies conducted for any area including all or part of the potential APE; and

5. Any geotechnical reports regarding all or part of the potential APE.

Lead agencies should be aware that records maintained by the NAHC and CHRIS are not exhaustive. A negative response to these searches does not preclude the existence of a cultural place. A tribe may be the only source of information regarding the existence of a tribal cultural resource.

This information will aid tribes in determining whether to request formal consultation. In the case that they do, having the information beforehand will help to facilitate the consultation process.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we are able to assure that our consultation list remains current.

If you have any questions or need additional information, please contact me at my email address: katy.sanchez@nahc.ca.gov .

Sincerely,

Katy Sanchez

KATY SANCHEZ
Associate Environmental Planner

Attachment

Native American Heritage Commission
Tribal Consultation List
May 2, 2019

Dumna Wo-Wah Tribal Goverment
Robert Ledger Sr., Chairperson
2191 West Pico Ave.
Fresno , CA 93705
ledgerrobert@ymail.com
(559) 540-6346

Dumna/Foothill Yokut
Mono

North Valley Yokuts Tribe
Katherine Erolinda Perez, Chairperson
P.O. Box 717
Linden , CA 95236
canutes@verizon.net
(209) 887-3415

Ohlone/Costanoan
Northern Valley Yokuts
Bay Miwok

Southern Sierra Miwuk Nation
William Leonard, Chairperson
P.O. Box 186
Mariposa , CA 95338
(209) 628-8603 Office

Miwok
Paiute
Northern Valley Yokut

Wuksache Indian Tribe/Eshom Valley Band
Kenneth Woodrow, Chairperson
1179 Rock Haven Ct.
Salinas , CA 93906
kwood8934@aol.com
(831) 443-9702

Foothill Yokuts
Mono
Wuksache

This list is current only as of the date of this document and is based on the information available to the Commission on the date it was produced.

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 applicable only for consultation with Native American tribes under Government Code Sections 65352.3 and 65362.4 et seq for the proposed :
Castellina Specific Plan/Area Plan, Madera County.

June 27, 2019

Dumna Wo-Wah Tribal Goverment
Robert Ledger Sr., Chairperson
2191 West Pico Ave.
Fresno, CA 93705

Subject: SB 18 Project Notification and Request to Consult Letter for the Proposed Castellina Project in Madera, CA.

Dear Mr. Ledger:

This letter is to inform you that the County of Madera Community and Economic Development Department is preparing environmental documentation for the proposed Castellina Project in Madera, CA. The proposed project, Castellina, is a master-planned community located on approximately 794 acres, about one mile north of the City of Madera in Madera County (the Specific Plan Area). The Castellina Specific Plan would allow for the development of up to 3,072 market-rate and active adult single-family, multi-family, and mixed-use residential units; approximately 21 acres of commercial mixed-use; and approximately 131 acres of parks, play fields, trails, plazas, community gardens, and other open space. The project also includes a 12-acre elementary school, a wastewater treatment plant and various utilities to serve the proposed project. The Project area is bordered by the Avenue 18 alignment to the north, Road 28½ (Raymond Road) to the east, the alignment of Avenue 17 to the south, Road 27 (Lake Street) to the west, and the Burlington Northern Santa Fe (BNSF) railroad line to the southwest. The proposed project encompasses Assessor Parcel Numbers 031-221-001 and 031-222-001. The proposed project will require the following initial approvals from the County of Madera: (1) General Plan Amendment, (2) Area Plan, (3) Specific Plan, (4) County Code, Zoning Text and Zoning Map Amendments, (5) Large Lot Tentative Map, (6) Development Agreement, and (7) Tentative Map for Phase 1. Additional County of Madera approvals include: (8) Tentative Tract Maps, (9) Water Supply Assessment, (10) Grading Permits, (11) Final Map(s), (12) Infrastructure Master Plan, (13) Building Permits, (14) Tree Removal Permits, (15) Well Construction Permit(s), (16) Water System Design, (17) Recycled Water Use and Wastewater Treatment System. Additional approvals may be required from other agencies.

In accordance with Senate Bill 18, you have the right to consult on the proposed Project prior to the approval of the General Plan Text Amendment. We are requesting that you notify us within 30 calendar days of receipt of this letter as to whether you wish to consult on this Project. Please let us

know whether you agree to this timeframe to request consultation. Please provide your contact information and mail your request to:

Madera County, Planning Division
ATTN: Jamie Bax, Deputy Director
200 W 4th Street, Suite 3100
Madera, CA 93637
Email: Jamie.bax@maderacounty.com
Phone No: (559) 675-7821

Thank you for your assistance with our efforts to address tribal cultural places that may be affected by the proposed Project.

Sincerely,

Jamie Bax
Deputy Director

June 27, 2019

North Valley Yokuts Tribe
Katherine Erolinda Perez, Chairperson
P.O. Box 717
Linden, CA 95236

Subject: SB 18 Project Notification and Request to Consult Letter for the Proposed Castellina Project in Madera, CA.

Dear Ms. Perez:

This letter is to inform you that the County of Madera Community and Economic Development Department is preparing environmental documentation for the proposed Castellina Project in Madera, CA. The proposed project, Castellina, is a master-planned community located on approximately 794 acres, about one mile north of the City of Madera in Madera County (the Specific Plan Area). The Castellina Specific Plan would allow for the development of up to 3,072 market-rate and active adult single-family, multi-family, and mixed-use residential units; approximately 21 acres of commercial mixed-use; and approximately 131 acres of parks, play fields, trails, plazas, community gardens, and other open space. The project also includes a 12-acre elementary school, a wastewater treatment plant and various utilities to serve the proposed project. The Project area is bordered by the Avenue 18 alignment to the north, Road 28½ (Raymond Road) to the east, the alignment of Avenue 17 to the south, Road 27 (Lake Street) to the west, and the Burlington Northern Santa Fe (BNSF) railroad line to the southwest. The proposed project encompasses Assessor Parcel Numbers 031-221-001 and 031-222-001. The proposed project will require the following initial approvals from the County of Madera: (1) General Plan Amendment, (2) Area Plan, (3) Specific Plan, (4) County Code, Zoning Text and Zoning Map Amendments, (5) Large Lot Tentative Map, (6) Development Agreement, and (7) Tentative Map for Phase 1. Additional County of Madera approvals include: (8) Tentative Tract Maps, (9) Water Supply Assessment, (10) Grading Permits, (11) Final Map(s), (12) Infrastructure Master Plan, (13) Building Permits, (14) Tree Removal Permits, (15) Well Construction Permit(s), (16) Water System Design, (17) Recycled Water Use and Wastewater Treatment System. Additional approvals may be required from other agencies.

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Phone No: (559) 675-7821

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Sincerely,

Jamie Bax
Deputy Director

June 27, 2019

Southern Sierra Miwuk Nation
William Leonard, Chairperson
P.O. Box 186
Mariposa, CA 95338

Subject: SB 18 Project Notification and Request to Consult Letter for the Proposed Castellina Project in Madera, CA.

Dear Mr. Leonard:

This letter is to inform you that the County of Madera Community and Economic Development Department is preparing environmental documentation for the proposed Castellina Project in Madera, CA. The proposed project, Castellina, is a master-planned community located on approximately 794 acres, about one mile north of the City of Madera in Madera County (the Specific Plan Area). The Castellina Specific Plan would allow for the development of up to 3,072 market-rate and active adult single-family, multi-family, and mixed-use residential units; approximately 21 acres of commercial mixed-use; and approximately 131 acres of parks, play fields, trails, plazas, community gardens, and other open space. The project also includes a 12-acre elementary school, a wastewater treatment plant and various utilities to serve the proposed project. The Project area is bordered by the Avenue 18 alignment to the north, Road 28½ (Raymond Road) to the east, the alignment of Avenue 17 to the south, Road 27 (Lake Street) to the west, and the Burlington Northern Santa Fe (BNSF) railroad line to the southwest. The proposed project encompasses Assessor Parcel Numbers 031-221-001 and 031-222-001. The proposed project will require the following initial approvals from the County of Madera: (1) General Plan Amendment, (2) Area Plan, (3) Specific Plan, (4) County Code, Zoning Text and Zoning Map Amendments, (5) Large Lot Tentative Map, (6) Development Agreement, and (7) Tentative Map for Phase 1. Additional County of Madera approvals include: (8) Tentative Tract Maps, (9) Water Supply Assessment, (10) Grading Permits, (11) Final Map(s), (12) Infrastructure Master Plan, (13) Building Permits, (14) Tree Removal Permits, (15) Well Construction Permit(s), (16) Water System Design, (17) Recycled Water Use and Wastewater Treatment System. Additional approvals may be required from other agencies.

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Sincerely,

Jamie Bax
Deputy Director

June 27, 2019

Wuksache Indian Tribe/Eshom Valley Band
Kenneth Woodrow, Chairperson
1179 Rock Haven Ct.
Salinas, CA 93906

Subject: SB 18 Project Notification and Request to Consult Letter for the Proposed Castellina Project in Madera, CA.

Dear Mr. Woodrow:

This letter is to inform you that the County of Madera Community and Economic Development Department is preparing environmental documentation for the proposed Castellina Project in Madera, CA. The proposed project, Castellina, is a master-planned community located on approximately 794 acres, about one mile north of the City of Madera in Madera County (the Specific Plan Area). The Castellina Specific Plan would allow for the development of up to 3,072 market-rate and active adult single-family, multi-family, and mixed-use residential units; approximately 21 acres of commercial mixed-use; and approximately 131 acres of parks, play fields, trails, plazas, community gardens, and other open space. The project also includes a 12-acre elementary school, a wastewater treatment plant and various utilities to serve the proposed project. The Project area is bordered by the Avenue 18 alignment to the north, Road 28½ (Raymond Road) to the east, the alignment of Avenue 17 to the south, Road 27 (Lake Street) to the west, and the Burlington Northern Santa Fe (BNSF) railroad line to the southwest. The proposed project encompasses Assessor Parcel Numbers 031-221-001 and 031-222-001. The proposed project will require the following initial approvals from the County of Madera: (1) General Plan Amendment, (2) Area Plan, (3) Specific Plan, (4) County Code, Zoning Text and Zoning Map Amendments, (5) Large Lot Tentative Map, (6) Development Agreement, and (7) Tentative Map for Phase 1. Additional County of Madera approvals include: (8) Tentative Tract Maps, (9) Water Supply Assessment, (10) Grading Permits, (11) Final Map(s), (12) Infrastructure Master Plan, (13) Building Permits, (14) Tree Removal Permits, (15) Well Construction Permit(s), (16) Water System Design, (17) Recycled Water Use and Wastewater Treatment System. Additional approvals may be required from other agencies.

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