Appendix E:
Cultural Resources Supporting Information

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E.1 - City of Patterson Zacharias Phase I Cultural Resources Assessment

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Phase I Cultural Resources Assessment
Zacharias Master Plan Project
City of Patterson, Stanislaus County, California

USGS Patterson and Westley 7.5 Minute Quadrangle
Section 24, Township 5S, Range 7E

Assessor's Parcel Number(s) 021-023-001, -002, -009, -011, -012, -013, -014, -015, -016, -017, -018, -019, -020, -021, -022, -023, -024, -025, -026, -027, -028, -029, -030, -031, -032

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MANAGEMENT SUMMARY

The approximately 1,200-acre Zacharias Master Plan Project area is located in unincorporated Stanislaus County adjacent to the northern portion of the Patterson city limits. The only structures of potential historic significance within the planning area are the barn, water tower, and large residence located immediately south of the intersection of Baldwin Road and Zacharias Road in the southeast corner of Assessor's Parcel Number (APN) 021-023-016. These buildings appear to be over 100 years in age, are in good condition, and according to the property owners, are associated with the locally significant Zacharias family for whom the adjacent road is named.

On June 25, 2018, personnel at the Central Coast Information Center (CCIC) conducted a records search for the project area. The search area included the project area and a 0.50-mile radius. Results from the records search indicate that there have been eight cultural resources recorded within a 0.50-mile radius of the project area, three of which border the property. There have been 36 cultural resources studies conducted within a 0.50-mile radius of the project area, seven of which included small portions of the project.

The Native American Heritage Commission (NAHC) was contacted and asked to search their Sacred Lands Files for any relevant data connecting local tribes to the project. The search was negative; however, the NAHC provided a list of tribes affiliated with the project area and advised FirstCarbon Solutions (FCS) to contact each tribe and request any information they may have regarding cultural resources in the area. FCS contacted the tribes by mail, and as of the date of this report, no responses have been received.

A pedestrian survey was conducted for the property by two FCS archaeologists. The survey was negative for archaeological resources. It was noted that large portions of APNs 021-023-026,-027,-011,-012, -028, -029, -032, and -033 were completely obscured by ground cover. Those parcels will require a survey after the vegetation has been cleared.

A paleontological records search and sensitivity assessment was conducted for the property. The property has low sensitivity for the presence of fossiliferous materials.

Archaeological and paleontological monitoring is not recommended for the project area. Recommendations are included herein in the event of an accidental archaeological discovery.

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SECTION 1: INTRODUCTION

1.1 - Project Location and Description

The proposed project consists of two geographical areas: the Northwest Patterson Master Plan area and the South Area. The approximately 1,200-acre Northwest Patterson Master Plan area is located in unincorporated Stanislaus County adjacent to the northern portion of the Patterson city limits (Exhibit 1). The Northwest Patterson Master Plan area is bounded by Rogers Road (west), Zacharias Road (north), the existing Patterson Sphere of Influence (east), and residential and the Keystone Pacific Business Park within the Patterson city limits (south)(Exhibit 2). The site contains agricultural land uses for orchards and row crops. Several of the properties contain structures including single-family residences and agricultural buildings. A portion of the project site is mapped as situated within a 100-year flood plain of Del Puerto Creek.

The South Area is located in unincorporated Stanislaus County adjacent to the southwestern portion of the Patterson city limits and is approximately 50 to 60 acres (Exhibit 3). The South Area is bounded by the Delta-Mendota Canal (west) and agricultural land (north, east, and south). It should be noted that an agricultural commercial use is surrounded on three sides by the project site, but is not a part of the South Area. The project site contains orchards, a single-family residence, and several outbuildings. Vehicular access is via Baldwin Road.

1.2 - Natural Setting

The proposed project site consists largely of agricultural fields, both row crops and orchards, as well as fallow fields. There are several small pockets of developed areas containing residential buildings and associated structures. No undisturbed habitat or natural lands exist within the immediate two separate project areas. The variety of crop types varies in structure, offering a range of densities and canopy covers.

1.3 - Assessment Team

From March 18 to March 22, 2019, FCS Senior Archaeologists, Dana DePietro, PhD, RPA, and Eric Prins, MA, conducted a series of pedestrian surveys for unrecorded cultural resources within the Zacharias Master Plan Area. FCS Project Manager/Archaeologist, David Smith, authored this technical report.

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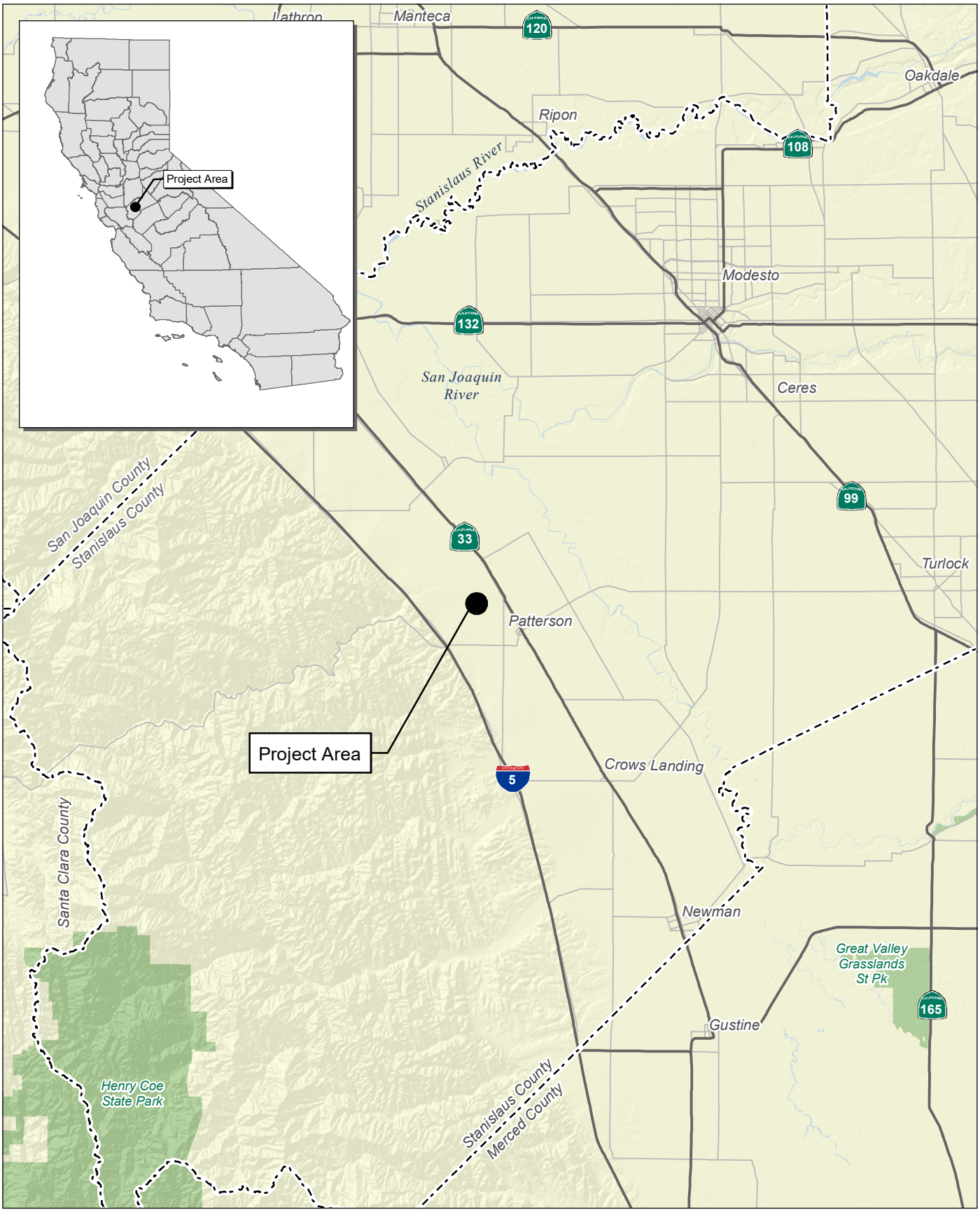

Source: Census 2000 Data, The CaSIL.

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5 2.5 0 5 Miles

Exhibit 1
Regional Location Map

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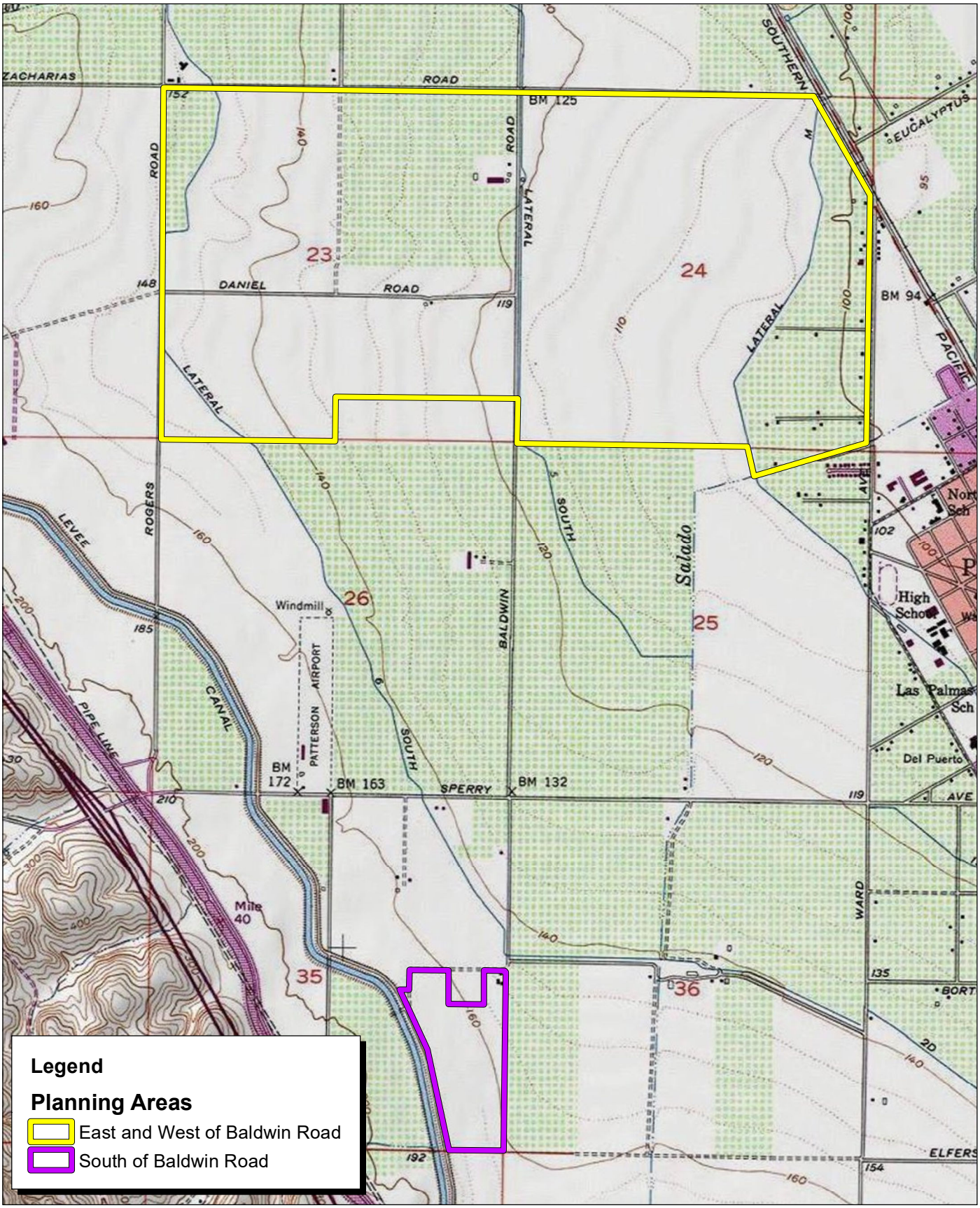

Source: USGS Patterson 7.5' Quadrangle / T5S,R7E,sectons 23, 24, 25, 35

FIRSTCARBON SOLUTIONS™

2,000 1,000 0 2,000 Feet

Exhibit 2
Local Vicinity Map
Topographic Base

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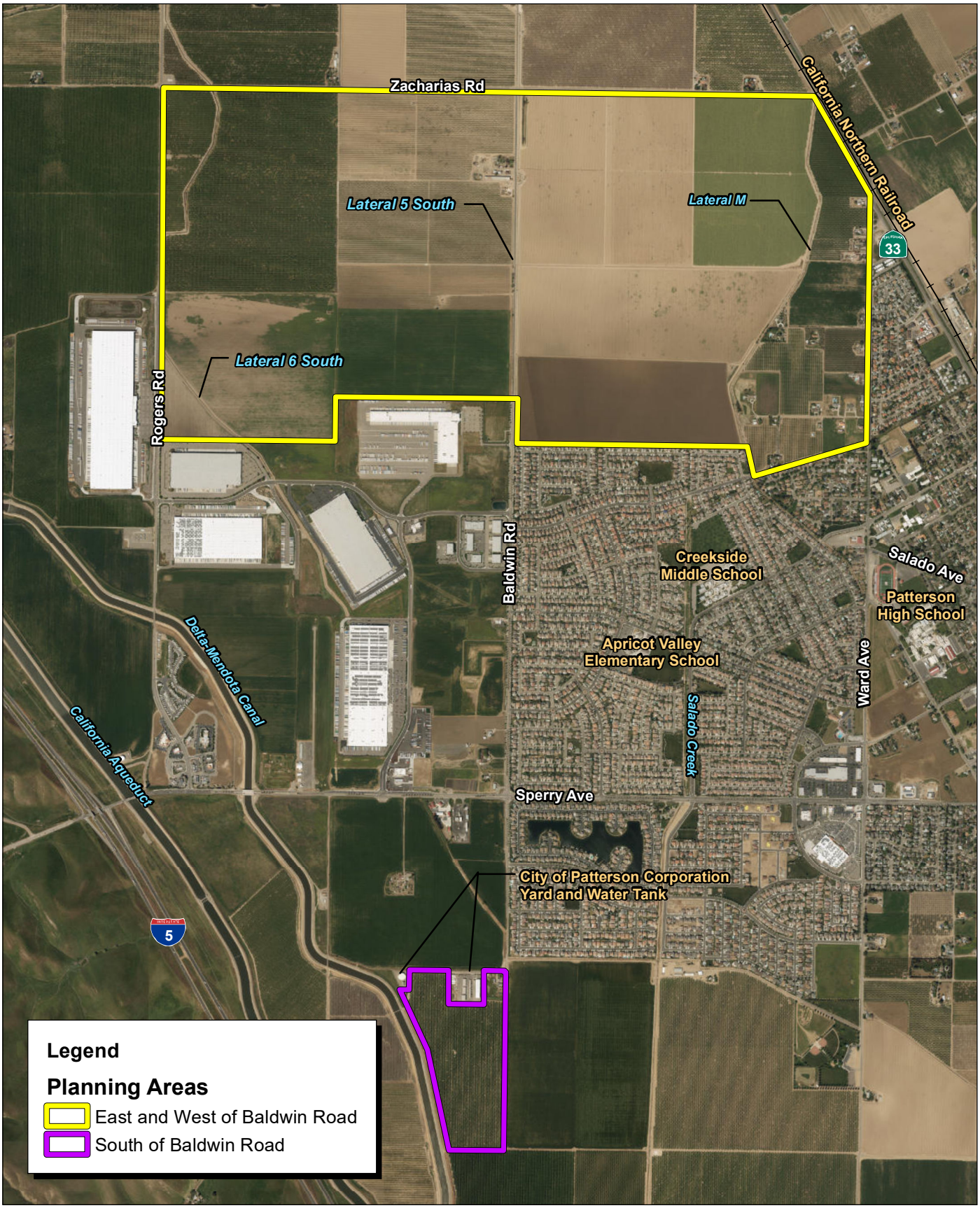

Source: ESRI Aerial Imagery.

FIRSTCARBON SOLUTIONS™

2,000 1,000 0 2,000 Feet

Exhibit 3
Local Vicinity Map
Aerial Base

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SECTION 2: CULTURAL SETTING

Following is a brief overview of the prehistory, ethnography, and historic background, providing a context in which to understand the background and relevance of sites found in the general project area. This section is not intended to be a comprehensive review of the current resources available; rather, it serves as a general overview.

Further details can be found in ethnographic studies, mission records, and major published sources, including Beardsley (1948), Bennyhoff (1950), Fredrickson (1973 and 1974), Kroeber (1925), Chartkoff and Chartkoff (1984), and Moratto (1984).

2.1 - Prehistoric Background

Early archaeological investigations in the San Joaquin Valley of California have primarily been conducted at sites located in the Buena Vista and Tulare Lakes regions. These investigations of the artifacts of the San Joaquin Valley's prehistoric cultural groups have revealed a complex history of cultural change that has occurred over time. Through these studies, a cultural chronological framework encompassing three basic periods has been developed. These patterns include:

- Early Period (12000 Before Present [BP] to 8000 BP)
- Middle Period (8000 BP to 2500 BP)
- Late Period (2500 BP to Ethnohistoric Present)

Brief descriptions of these temporal ranges and their unique characteristics follow.

2.1.1 - Early Period (12000 BP to 8000 BP)

Archaeological sites from the Early Period are not very well represented in the southern San Joaquin Valley, partially due to periodic episodes of erosion and deposition that have removed or buried large segments of the early period landscape. Currently, the earliest evidence of human occupation in the region comes from fluted and basally thinned projectile points in the Tulare Lake basin at the Witt site (KIN-32). Hundreds of Late Pleistocene concave base points have been discovered from human occupation along the remnant shoreline of Tulare Lake in southern Kings County. Artifacts from this site include Clovis-like projectile points made of chert, chipped crescents, various scrapers, and other stone tools associated with the Fluted Point and/or Western Pluvial Lakes tradition. The Witt Site also contained faunal bones from horse, bison, ground sloth, and the tusk of a mammoth or mastodon (Greenwood and Associates 2012). The bones, including some human bone, has been radiocarbon dated to 11000 to 13000 BP (Rosenthal et al. 2007).

2.1.2 - Middle Period (8000 BP to 2500 BP)

The Middle Horizon is characterized by an increase in groundstone tools, including metates and manos. Middle Horizon site deposits include an abundance of expedient cobble-based pounding, chopping, scraping, and mulling tools, which reflect an increased dependence on vegetative foods that require processing. Archaeobotanical assemblages from foothill sites confirm that acorn and

pine nuts were targeted food plants (Jones and Klar 2007; Rosenthal et al. 2007). However, the lithic technology remained relatively unchanged from the Early Period, in which stone tools were very similar to the Western Pluvial Lakes Tradition (Greenwood and Associates 2012).

2.1.3 - Late Period (2500 BP to Ethnohistoric Present)

The beginning of the Late Period corresponds with the onset of the Late Holocene environmental conditions, marked by an abrupt turn to cooler, wetter, and a more stable climate. Lakes that had dried or diminished during the later parts of the Middle Period returned to higher levels. Cultural diversity was more pronounced marked by artifact styles, contrasting burial positions, and other elements of material culture. People were buried in flexed positions more frequently, and burial goods were more numerous than those from the Middle Period (Rosenthal et al. 2007). Both the *Olivell*a shell bead and bow-and-arrow technology made their first appearance in the area. There was also a greater reliance on groundstone tools, indicating an increased dependence on nuts, seeds, and acorns. Villages and smaller residential communities developed along the many streams of the foothills and along the river channels and sloughs of the valley bottom. Occupation sites were also larger, reflecting semi-sedentism (Greenwood and Associates 2012).

2.2 - Native American Background

2.2.1 - Northern Valley Yokuts

At the time of European contact, most of the San Joaquin Valley and the foothills of the western slope of the Sierra Nevada were occupied by the Yokuts, who are generally recognized as having three major subgroups: the Northern Valley, the Foothill, and the Southern Valley. Each of these ethnolinguistic groups was made up of autonomous, culturally and linguistically related tribes or tribelets. Native American territories have fluid boundaries; however, the project area appears to be within the Northern Valley Yokuts territory.

The Fresno area was habituated by the Northern Valley Yokuts, near their terrestrial boundary with the Southern Valley Yokuts. The Northern Valley Yokuts occupied an environment rich with abundant water resources from the nearby sloughs, lake basins, and river systems. Swamps and tule marshes surrounded the waterways and teemed with wildlife including aquatic mammals, fish, and abundant waterfowl. Adjacent grasslands provided food for herds of elk, antelope, and deer. Important vegetal resources included cattail roots, grasses, nuts, seeds, tule, and bulbs (Wallace 1978). The resource-rich environment allowed for permanent village sites, which typically were occupied throughout the year.

The Northern Valley Yokuts material culture included structures, watercraft, basketry, weapons, and tools fashioned primarily from local resources. The ubiquitous tule was the primary component utilized for house construction and other fiber crafts, such as basketry, mats, and cradles. Sweathouses were common; villages often had more than one, and they were typically earth-covered (Wallace 1978).

Villages typically consisted of approximately 300 people with a headman guiding each tribe. The chief's duties included decisions that affected the well-being of the entire tribelet: sanctioning trade, entertaining guests, and arbitrating intra-tribal disputes (Greenwood and Associates 2012). Marriage

typically was informal, and patrilocality was the accepted practice following marriage. Thus, if a family had numerous sons, a circle of extended family members would inhabit the area immediately adjacent to the patriarch's home (Wallace 1978).

Trade was conducted with neighboring groups, transporting goods on tule watercraft along the San Joaquin River and its tributaries. Overland trails that headed west to the Salinan and Costanoan tribes of the Central California coast were also utilized. Trade items included domesticated dogs, which used in trade with the Miwok in exchange for baskets, bows, and arrows. In addition, the Costanoans supplied the Yokuts with mussels and abalone shells (Greenwood and Associates 2012).

The population of the Yokuts declined precipitously after European contact. Spanish explorers and missionaries brought disease that decimated the Yokut population. European contact also eroded cultural traditions and caused displacement of the natives from their lands. With the influx of American settlers and ranchers, relationships with native groups further degraded as natives began stealing livestock and horses out of desperation. The incorporation of California as a State in 1846, and the ensuing California Gold Rush of 1849 also hastened the decline of the Native peoples. By the time the United States government set aside land in the Fresno and Tule River Reserves, the Yokuts and other native peoples had nearly disappeared. Few descendants of the Northern Valley Yokut survive today (Greenwood and Associates 2012).

2.3 - Historical Background

2.3.1 - Spanish and Mexican California

Spanish exploration into the Central Valley dates back to the late 1700s. Spanish mission records indicate that by 1800, Costanoan speaking peoples and other villages were being taken to Mission Dolores, and Mission Sonoma, built in 1823, was baptizing tribal members until secularization of the missions in 1833. Many Native Americans were not willing converts: there are numerous accounts of neophytes fleeing the missions, and a series of "Indian Wars" broke out when the Spanish tried to return them to the missions. During this period, Native American populations were declining rapidly because of an influx of Euro-American diseases. In 1832, a party of trappers from the Hudson's Bay Company, led by John Work, traveled down the Sacramento River, unintentionally spreading a malaria epidemic to Native Californians. Four years later, a smallpox epidemic decimated local populations.

The Mexican Period, 1821 to 1848, was marked by secularization and division of mission lands among the *Californios* as land grants, termed ranchos. During this period, Mariano G. Vallejo assumed authority of Sonoma Mission and established a friendly relationship with the Native Americans who were living there. In particular, Vallejo worked closely with Chief Solano, a Patwin who served as Vallejo's spokesperson when problems with Native American tribes arose. The large rancho lands often were worked by Native Americans who were used as forced labor.

2.3.2 - The Gold Rush and American Expansion

In 1848, James W. Marshall discovered gold at Coloma in modern-day El Dorado County, which started the gold rush into the region that forever altered the course of California's history. The arrival of thousands of gold seekers in the territory contributed to the exploration and settlement of the

entire state. By late 1848, approximately four out of five men in California were gold miners. The gold rush originated along the reaches of the American River and other tributaries to the Sacramento River, and Hangtown, present-day Placerville, became the closest town offering mining supplies and other necessities for the miners in El Dorado County. Gold subsequently was found in the tributaries to the San Joaquin River, which flowed north to join the Sacramento River in the great delta east of San Francisco Bay.

As mining spread, mining techniques changed. Initially, miners relied on gold panning in a shallow pan until the heavier, gold-bearing materials fell to the bottom while the water and lighter sand spilled out over the rim. This technique was displaced by simple mining machines like the wooden "rocker" into which pails of water were emptied and processed at one time. The gold in and around stream beds was soon exhausted, and hard-rock mining took over, digging shafts up to 40 feet deep with horizontal tunnels radiating from these shafts in search of subterranean veins of gold-bearing quartz.

By 1864, California's gold rush had essentially ended. The rich surface and river placers were largely exhausted and the miners either returned to their homelands or stayed to start new lives in California. After the gold rush, people in towns such as Jackson, Placerville, and Sonora turned to other means of commerce, such as ranching, agriculture, and timber production. With the decline of gold mining, agriculture and ranching came to the forefront in the State's economy. California's natural resources and moderate climate proved well suited for cultivation of a variety of fruits, nuts, vegetables, and grains (Beck and Haase 1974).

2.3.3 - Local History

A group of Spanish explorers, led by Lieutenant Gabriel Moraga, entered the San Joaquin Valley in 1806 to locate new lands for missions, find and return runaway Indians, and relocate stolen livestock (Clough and Secrest 1984: 25-27). Gabriel Moraga named the San Joaquin and Kings rivers during the journey. Following Mexico's independence from Spain during the early 1820s, the mission expansion ceased (Clough and Secrest 1984: 26). The American occupation of Alta California during the early 1820s and the subsequent influx of gold seekers beginning in 1849 spelled the end for the Northern Valley Yokuts, as well as the rest of the Central Valley people (Moratto 1984: 174).

The Sierra goldfields attracted thousands of miners to Stanislaus County and many prospered from the resultant business growth. The land was ideally suited for raising cattle and farming most notably wheat. After fire, drought, and flood ravaged the earliest settlers, the wheat boom of 1867-1870 signaled a revitalization for the town (Gooch 1988:99).

Following the wheat boom, John W. Mitchell founded the town of Turlock in 1873. Mitchell had been buying land in the area since 1867, and by 1871 he owned 100,000 acres. A large portion of land, known as the "Turlock District" had originally been given to veterans of the Mexican War as military warrants. Many of these veterans sold their warrants at a discount for ready cash. Mitchell founded his new town on the main line of the Central and Southern Pacific Railroad. By 1880, Turlock had grown modestly, having then 192 permanent inhabitants and five grain warehouses and other businesses as well. Turlock was a major agricultural hub, until competition and crop failure new rail lines and crop failure resulted in its decline (Gooch 1988: 53-56).

As it spread throughout California, new irrigation technology brought growth to the region. One early irrigation project began in the Town of Patterson. The Town, located on the west side of the valley, was named for the family of John D. Patterson who bought the land in 1864 and was one of the communities to benefit from the new rail lines. John Patterson's heirs established a company to build an irrigation system in 1910 and by 1921 was supplying water to 19,000 acres (Gooch 1988: 62-63).

The Town of Westley began life as a railroad stop on the west side of the valley just north and west of Patterson. The Town of Hilmar, the site of another substation, was founded in 1902 and was marketed to Swedish settlers. Portuguese, Armenian, Japanese, Assyrian, and others all came to the area seeking their futures (Gooch 1988: 56-57). These agricultural traditions continue to the present.

The history of Patterson begins with the measuring of the Rancho Del Puerto and the subsequent grant of the land to Mariano and Pedro Hernandez on January 30, 1844, by Manuel Micheltoreno, then Governor of California (City of Patterson History).

This Mexican Land Grant was for acreage stretching east of the present day Highway 33 to the San Joaquin River. The northern boundary was Del Puerto Creek and the southern boundary was just south of present day Marshall Road.

Samuel G. Reed and Ruben S. Wade made claim to the land on January 7, 1855. A patent encompassing the land grant was signed by President Abraham Lincoln. Reed and Wade received title to 13,340 acres on August 15, 1864. Reed and Wade then sold the grant to J. O. Eldredge on June 18, 1866 for $5,000. Mr. Eldredge held title for only 2 months before selling it to John D. Patterson on August 14, 1866 for $5,400.

John D. Patterson purchased additional land, and upon his death on March 7, 1902, a total of 18,462 acres were willed to Thomas W. Patterson and William W. Patterson, his estate executors, and other heirs. The land was sold to the Patterson Ranch Company on May 16, 1908 for the sum of $540,000 cash gold coin.

Thomas W. Patterson subdivided the land into ranches of various sizes and plotted the design of the Town of Patterson. Determined to make Patterson different from most, he modeled his town after the Cities of Washington D.C. and Paris, France, using a series of circles and radiating streets. Major streets were planted with palms, eucalyptus and sycamore trees.

The Patterson Colony map was filed with the Stanislaus County Recorder's office on December 13, 1909. Sales of the ranch properties and city lots commenced. Patterson was the third city in Stanislaus County to incorporate on December 22, 1919.

With a current population of 20,875, Patterson is a rural, small town surrounded by agricultural land. With agriculture as its primary economic base, orchards of apricots, almonds, and walnuts, as well as row crops of dry beans, tomatoes, broccoli, spinach, peas, and melons play an important role in Patterson's history. Patterson is the apricot capital of the world (City of Patterson History).

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SECTION 3: RESULTS

3.1 - Record Search

3.1.1 - Information Center Search

On June 25, 2018, personnel at the CCIC conducted a records search for the project area. The search area included the project area and a 0.50-mile radius (Appendix F). Results from the records search indicate that there have been eight cultural resources recorded within a 0.50-mile radius of the project area, none of which are located on the project site, although three border the project site (Table 1).

Table 1: Known Cultural Resources within a 0.50-mile Radius of the Project Area

Site Number	Historic/Prehistoric	Resource Description
50-000001	Historic	Other—Southern Pacific Railroad San Joaquin Valley Mainline; Stockton & Visalia Railroad; Stockton & Tulare Railroad; Southern Pacific Railroad West Side Line; Southern Pacific Railroad, Tracy Branch; San Joaquin Valley Railroad; Southern Pacific Railroad Line
50-001903	Historic	California Aqueduct
50-001904	Historic	Delta Mendota Canal
50-001924	Historic	Patterson Irrigation District North Lateral No. 4
50-001965	Historic	Del Puerto Forest Fire Station
50-002094	Historic	ARRA-50-1H
50-002179	Historic	Patterson Lift Irrigation System; Segment 3-South; Lateral J; Segment 4-South
50-002208	Historic	Patterson Irrigation District Lateral M

Results from the records search indicate that there have been 36 cultural resources studies conducted within a 0.50-mile radius of the project area, seven of which included a small portion of the property. In summary, the project area has never been the subject of a cultural resources assessment in its entirety (Table 2).

Table 2: Cultural Resources Reports within a 0.50-mile Radius of the Project Area

Report Number	Author/Date	Additional Details
ST-00621	Moratto, M. et al. 1990	Cultural Resources Assessment Report PGT-PG&E Pipeline Expansion Project in Idaho, Washington, Oregon and California; Phase 1: Survey Inventory, and Preliminary Evaluation of Cultural Resources [CCIC has only a partial copy of report].

Table 2 (cont.): Cultural Resources Reports within a 0.50-mile Radius of the Project Area

Report Number	Author/Date	Additional Details
ST-00896	Napton, L.K. 1984	Cultural Resource Investigation of the Proposed Patterson Apartments, Stanislaus County, California.
ST-00927	Pope, J.L 1978	Cultural Resources Assessment for the City of Patterson Facility Improvements Stanislaus County, California.
ST-01846	Canaday, T., Ostrogorsky, M., and Hess, M. 1992	Archaeological Survey Right-of-Way Corridor and Extra Work Spaces Construction Spread 5B, California; PGT-PG&E Pipeline Expansion Project, California.
ST-01973	Peak & Associates, Inc.	Cultural Resource Assessment of the Proposed Creekside Development, Located Near Patterson, Stanislaus County, California.
ST-02753	Moratto, M., Pettigrew, R., Price, B., Ross, L., and Schalk, R. 1994	Archaeological Investigations PGT-PG&E Pipeline Expansion Project, Idaho, Oregon, and California, Volumes 1-V (1994-1995). [Only Vol. I and IV are unbound and available at CCIC; Vol. I = Project Overview, Research Design and Archaeological Inventory; Vol. IV = Synthesis of Findings].
ST-02789	Napton, L.K. 1996	Cultural Resources Investigations of a Proposed Two-Mile Pipeline Along Sperry Avenue, Between Rogers Road and Ward Avenue in Patterson, Stanislaus County, California.
ST-03622	Wachtel, David. 1999	CDF Project Review Report for Archaeological and Historical Resources; Project: Del Puerto Apparatus Room.
ST-03630	Nave, T. 1999	Cultural Resources Survey for the Turlock Irrigation District Westside Transmission Line Project, Stanislaus and Merced Counties, California.
ST-04175	Flint, Sandra. 2000	Addendum Phase 1 Archaeological Survey for the Turlock Irrigation District Westside 115-kV Transmission Line Project.
ST-04262	David-King, Shelly. 2001	Department of Transportation Negative Archaeological Survey Report, 10-STA-33, Ivy road at State Highway 33, Stanislaus Count.
ST-05498	Leach-Palm, L., Mikkelsen, P., Hatch, J., and Larson, B. 2004	Cultural Resources Inventory of Caltrans District 10 Rural Conventional Highways; Volume I: Summary of Methods and Findings.
ST-05501	Rosenthal, J.S., and Meyer, J. 2004	Cultural Resources Inventory of Caltrans District 10 Rural Conventional Highways; Volume III: Geoarchaeological Study.
ST-05502	Leach-Palm, L., King, J., Hatch, J., and Larson, B. 2004	Cultural Resources Inventory of Caltrans District 10 Rural Conventional Highways; Volume II G: Stanislaus County.

Table 2 (cont.): Cultural Resources Reports within a 0.50-mile Radius of the Project Area

Report Number	Author/Date	Additional Details
ST-06133	Sikes, N., Holmes, E., and Cervantes, J. 2006	Cultural Resources Inventory for the Westley-Marshall Substation and Transmission Line Project, Stanislaus County, California.
ST-06134	Davis-King, S., and Mavin, J. 2006	Historic Properties Survey Report for the M Street/State 33 Intersection Improvements Project, City of Patterson, Stanislaus County, California.
ST-06384	Sikes, N.E., and Arrington, C.J. 2006	Cultural Resources Inventory of Alternative substations and Transmission Lines of the Westley-Marshall Project, Stanislaus County, California.
ST-06409	Davis-King, S. 007	California Department of Transportation Historic Property Report for the Proposed Class I and II Bicycle/Pedestrian Path, City of Patterson, Stanislaus County, CA (Includes Archaeological Survey Report, Davis-King 2007 and Hist Res Prop Rep).
ST-06443	Whartford, J.C. 2007	A Historical Resources Survey Report for the Del Puerto Reconstruction Project, Del Puerto Forest Fire Station, Patterson, Stanislaus County, California.
ST-07387	Wohlgemuth, E., and Costello, J. 2010	Patterson General Plan Update: Archaeological Resources Sensitivity.
ST-07595	ICF International. 2010	Final: Cultural Resources Inventory Report for the Drought Relief Program, ARRA Groundwater Wells Project, San Joaquin, Stanislaus, Merced, and Fresno Counties, CA ARRA #10-SCAO-021.
ST-07779	Bailey, J., Ph.D. 2009	California's Central Valley Project: Historic Engineering Features to 1956: A Multiple Property Documentation Form, April 2009 (National Register of Historic Places Nomination).
ST-07779A	Bailey, J., Ph.D. 2009	Reclamation, Managing Water in the West: California's Central Valley Project: Historic Engineering Features to 1956.
ST-07779B	Palmer, L. 2018	Central Valley Project (CVP), National Register of Historic Places Determinations of Eligibility, Multiple Counties, California. Bureau of Reclamation, Mid-Pacific Region Division of Environmental Affairs, Cultural Resources Branch, Sacramento.
ST-07849	Truman, E. 2010	Field Office Report of Cultural Resources Ground Survey Findings, Negative Findings, 799104105P7, Micro Sprinklers.
ST-08055	Pierce, W. 2013	Department of Water Resources Archaeological Survey Report Salado Creek Channel Maintenance Project, Stanislaus County, California.

Table 2 (cont.): Cultural Resources Reports within a 0.50-mile Radius of the Project Area

Report Number	Author/Date	Additional Details
ST-08056	Pierce, W. 2013	Department of Water Resources Archaeological Survey Report, Del Puerto Creek Sediment Removal Project, Stanislaus County, CA.
ST-08057	Pierce, W. 2014	Office Memo to L. Hamamoto, DWR from W. Pierce, Supplement to the Archaeological Survey Report for the Salado Creek Channel Maintenance Project, Stanislaus County, CA.
ST-08058	Pierce, W. 2014	Office Memo to S. Fredericks, DWR, from W. Pierce, Supplement to the Archaeological Survey Report for the Del Puerto Creek Sediment Removal Project, Stanislaus County, CA.
ST-08250	Supernowicz, D. 2014	Submission Packet, FCC Form 620, for Proposed New Tower Project Baldwin Road, Patterson, Stanislaus County, CA Floragold/Ensite # 21839 (281353) EBI Project Number: 61148115.
ST-08250A	Davis, J.L. 2015	Addendum to FCC Form 620 Ensite #21839 (281353)/Floragold, Baldwin Road, Patterson, Stanislaus County, CA 95363, EBI Project #61140081417; CA SHPO FCC_2014_1218_033
ST-08252	Wills, C. and Cohen, D. 2011	Phase 1 Cultural Resources Assessment West Patterson Business Park Expansion Project, City of Patterson, Stanislaus County, California.
ST-08257	Saunders, J. 2015	San Luis and Delta-Mendota Water Authority (SLDMWA) 2015 Delta-Mendota Canal (DMC) Expanded Temporary Reverse Flow Project, Stanislaus County, California (15-SCAO-184)
ST-08341	Basin Research Associates. 2014	Historic Property Survey Report North Valley Regional Recycled Water Program (NVRRWP) Vicinity of Patterson, Stanislaus County
ST-08638	Jordan, N. 2015	Letter Report: South County Corridor Feasibility Study—Cultural Resources Constraints Analysis
ST-08794	Leigh, Anastasia T., Regional Environmental Officer. 2015	Letter Report Re: National Historic Preservation Act (NHPA) Section 106 Consultation for the City of Patterson Sewer Main under the Delta-Mendota Canal (DMC), Stanislaus County, California (15-SCAO-099).

3.1.2 - Historic Aerials

A review of historic aerials was conducted to determine the nature of the land use prior to its existing condition. Historic aerials as early as 1953 indicate that the property located south of Baldwin Road was used for agricultural purposes. A 1998 historic aerial shows a structure at the

northeast corner of the site. In 2005, the City of Patterson Water Tank is visible at the northwest corner of the site.

3.1.3 - Paleontology Records Search

Paleontological records searches were conducted for each parcel at the University of California Museum of Paleontology (UCMP) in June of 2017 (Appendix D). The results of the records search for the North Patterson northern site indicate that the entire project site is located solely on Holocene alluvium (Qf). The surrounding half-mile search area (dashed black line) also includes Los Banos alluvium (Qlb) extending from the west. Holocene deposits are too young to contain fossils, while Pleistocene alluvium has a high paleontological sensitivity. Tertiary formations are within 1 mile southwest of the project site and probably extend into the subsurface of the project site. Records search performed on the UCMP database revealed 17 late Pleistocene vertebrate localities in Stanislaus County. Slightly less than 1 mile from the site are two late Pleistocene localities: V6808 (Patterson Ranch West) to the southeast and V3107 (Del Puerto Creek) to the northwest, both of which yielded late Pleistocene horse (*Equus*). The composite fauna recovered from the County comprises 31 specimens representing the Rancholabrean North American Land Mammal Stage, including yesterday's camel (*Camelops hesternus*), Columbian mammoth (*Mammuthus columbi*), Harlan's ground sloth (*Glossotherium harlandi*), Sheperd's ground sloth (*Glossotherium sheperdi*), Jefferson's ground sloth (*Megalonyx jeffersoni*), and long-horned bison (*Bison latifrons*).

The results of the records search for the North Patterson southern site revealed five Miocene plant localities in the Valley Springs Formation, but none are in Stanislaus County. The Tesla Formation is represented by four plant localities, including one (loc. 195, 'Salado Creek Flora') 1.5 miles to the southeast, but none of the specimens collected have been entered into the database. There are no vertebrate localities listed for either formation.

It is unlikely that earth-disturbing project activities on either the Northwest Patterson Master Plan area or South Area sites will impact significant paleontological resources because the entire site area is mapped as Holocene and older deposits probably lie at a depth well below the deepest project-related excavations. It is therefore not recommended to complete preconstruction paleontological surveys of the terrain or paleontological monitoring of construction activities. In accordance with California Environmental Quality Act (CEQA) Guidelines, no further paleontological mitigation should be needed for this project. Although highly unlikely, should any vertebrate fossils (i.e., bones, teeth) be unearthed, the construction crew should divert operations from the find until a paleontologist examines it and, if deemed significant, salvages it in a timely manner for deposition in an accredited repository such as the UCMP.

3.1.4 - Native American Heritage Commission Record Search

On June 14, 2018, FCS sent a letter to the NAHC in an effort to determine whether any sacred sites are listed on its Sacred Lands File for the project area. The response from the NAHC was received on June 26, 2018, and noted that a search of the Sacred Lands File was negative for cultural resources on or near the subject property. A list of five Native American tribal members who may have additional knowledge of the project area was included with the results. These tribal members were

sent letters on April 22, 2019, asking for any additional information they might have concerning the project area. As of the date of this report, no responses had been received.

3.2 - Pedestrian Survey

From March 18 to March 22, 2019 FCS Senior Archaeologists, Dana DePietro, PhD, RPA, and Eric Prins, MA, conducted a series of pedestrian surveys for unrecorded cultural resources within the Zacharias Master Plan area. Surveys were conducted by parcel, and began in APN 021-023-019 located in the northeast corner of the planning area. Both surveyors employed a combination of diagonal, vertical, and horizontal transects across each parcel to ensure complete coverage at a resolution of 15-meter intervals. After completing a parcel, the survey team moved south, surveying each successive parcel until reaching the planning area's southern boundary. At that point, the team would move one parcel to the east, and continue to survey a column of parcels from south to north. In this way, the survey team was able to cover the planning area in its entirety, over the course of 5 days, and in the following order: Survey orientation and preparatory overview was conducted on March 18, 2019. APNs 021-023-19, -020, -025, -026, -027, -024, -021, -018, -017, -022, and -023 were surveyed on March 19, 2019. APNs 021-023-016, -013, -028, -029, -014, -011, -012, -009, and -015 were surveyed on March 20, 2019. APNs 021-023-033, -001, -032, -030, -031, and -002 were surveyed on March 21, 2019. Additional spot-checking and targeted survey work was carried out across the site on March 22.

The planning area consists almost entirely of agricultural land and orchards in various stages of cultivation. As a result, soil visibility varied from parcel to parcel, but was either high (80-100 percent) in areas of recent cultivation, or low (0-10 percent) in parcels left fallow. Soil composition remained remarkably consistent across the planning area from parcel to parcel, and consisted entirely of Holocene Alluvium, as recorded on the geologic maps of Dibblee and Minch (2007) and Sowers et al. (1993). Soils were light tan/brown in color (Muncell 10YR 5/3.5), sandy to silty in consistency, and interspersed with small (3-5 centimeter) quartz, schist, basalt, serpentine and Franciscan chert stones. None of the chert stones exhibited any signs of knapping or utilization; however, many stones appeared water-worn, attesting to their alluvial deposition over the course of the Holocene.

Over the course of the surveys, it was noted that large portions of APNs 021-023-026,-027,-011,-012, -028,-029,-032, and -033 were completely obscured by ground cover. In these areas, the survey team intermittently inspected soils in accessible sections using a hand trowel; however, a complete visual assessment was not possible.

Survey conditions were documented using digital photographs and field notes. During the survey, Dr. DePietro and Mr. Prins examined all areas of the exposed ground surface for prehistoric artifacts (e.g., fire-affected rock, milling tools, flaked stone tools, tool-making debris, ceramics), soil discoloration and depressions that might indicate the presence of a cultural midden, faunal and human osteological remains, and features indicative of the former presence of structures or buildings (e.g., postholes, standing exterior walls, foundations) or historic debris (e.g., glass, metal, ceramics). Particular attention was paid to eastern halves of APNs 021-023-017,-022,-023, and -027, which run north to south in the middle of the project area, as concentrations of water worn rock

were greater in the area attesting to ancient alluvial deposition and potential water resources that may have been utilized in antiquity.

The only structures of potential historic significance within the planning area are the barn, water tower, and large residence located immediately south of the intersection of Baldwin Road and Zacharias Road in the southeast corner of APN 021-023-016. These buildings appear to be over 100 years in age, are in good condition, and according to the property owners, are associated with the locally significant Zacharias family for whom the adjacent road is named.

All areas of the project site were closely inspected for culturally modified soils or other indicators of potential historic or prehistoric resources. Aside from the Zacharias property, none were observed within the planning area. Survey photographs arranged by parcel in the order surveyed, can be found in Appendix A.

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SECTION 4: SUMMARY AND RECOMMENDATIONS

4.1 - Summary

On June 25, 2018, personnel at the CCIC conducted a records search for the project area. The search area included the project area and a 0.50-mile radius (Appendix A). Results from the records search indicate that there have been eight cultural resources recorded within a 0.50-mile radius of the project area, none of which are located on the project site, although three border the project site. There have been 36 cultural resources studies conducted within a 0.50-mile radius of the project area, seven of which included small portions of the project.

The only structures of potential historic significance within the planning area are the barn, water tower, and large residence located immediately south of the intersection of Baldwin Road and Zacharias Road in the southeast corner of APN 021-023-016. These buildings appear to be over 100 years in age, are in good condition, and according to the property owners, are associated with the locally significant Zacharias family for whom the adjacent road is named.

4.2 - Recommendations

A small portion of the subject property has undergone seven cultural resource investigations. No resources were recorded on the property during any of these investigations. The lack of recorded archaeological sites in proximity to the project area suggests limited use by prehistoric or early historic inhabitants; therefore, archaeological monitoring is not recommended. See section 4.3.1, Accidental Discovery of Cultural of Paleontological Resources for procedures to be followed in the event cultural resources are discovered during construction.

Paleontological monitoring of construction-related excavations is not recommended because the site is not located on a paleontologically sensitive geological unit. See section 4.3.1, Accidental Discovery of Cultural or Paleontological Resources, for procedures to be followed in the event resources are discovered during construction.

Over the course of the surveys, it was noted that large portions of APNs 021-023-026,-027,-011,-012, -028,-029,-032, and -033 were completely obscured by ground cover. In these areas, the survey team intermittently inspected soils in accessible sections using a hand trowel; however, a complete visual assessment was not possible. These parcels will need to be re-surveyed when the vegetation has been removed.

The barn, water tower, and large residence located immediately south of the intersection of Baldwin Road and Zacharias Road in the southeast corner of APN 021-023-016 appear to be over 100 years in age, and according to the property owners, are associated with the locally significant Zacharias family for whom the adjacent road is named. Prior to the commencement of any construction activities on the property, a qualified architectural historian should be retained to evaluate the property to determine if it is eligible for listing on the California Register of Historical Resources (CRHR).

4.3 - Inadvertent Discovery Procedures

4.3.1 - Accidental Discovery of Cultural or Paleontological Resources

It is always possible that ground-disturbing activities during construction will uncover previously unknown, buried cultural resources. In the event that buried cultural resources are discovered during construction, operations shall stop in the immediate vicinity of the find and a qualified archaeologist shall be consulted to determine whether the resource requires further study. The qualified archaeologist shall make recommendations to the Lead Agency on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines. Potentially significant cultural resources consist of but are not limited to stone, bone, fossils, wood, or shell artifacts or features, including hearths, structural remains, or historic dumpsites. Any previously undiscovered resources found during construction within the Project Area should be recorded on appropriate Department of Parks and Recreation (DPR) forms and evaluated for significance in terms of CEQA criteria.

4.3.2 - Accidental Discovery of Human Remains

There is always the small possibility that ground-disturbing activities during construction may uncover previously unknown buried human remains. Should this occur, federal laws and standards apply, including the Native American Graves Protection and Repatriation Act and its regulations found in 43 Code of Federal Regulations Part 10.

In the event of an accidental discovery or recognition of any human remains, California State Health and Safety Code Section 7050.5 dictates that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to CEQA regulations and Public Resources Code Section 5097.98.

SECTION 5: REFERENCES

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Appendix A:
Project Area Photographs

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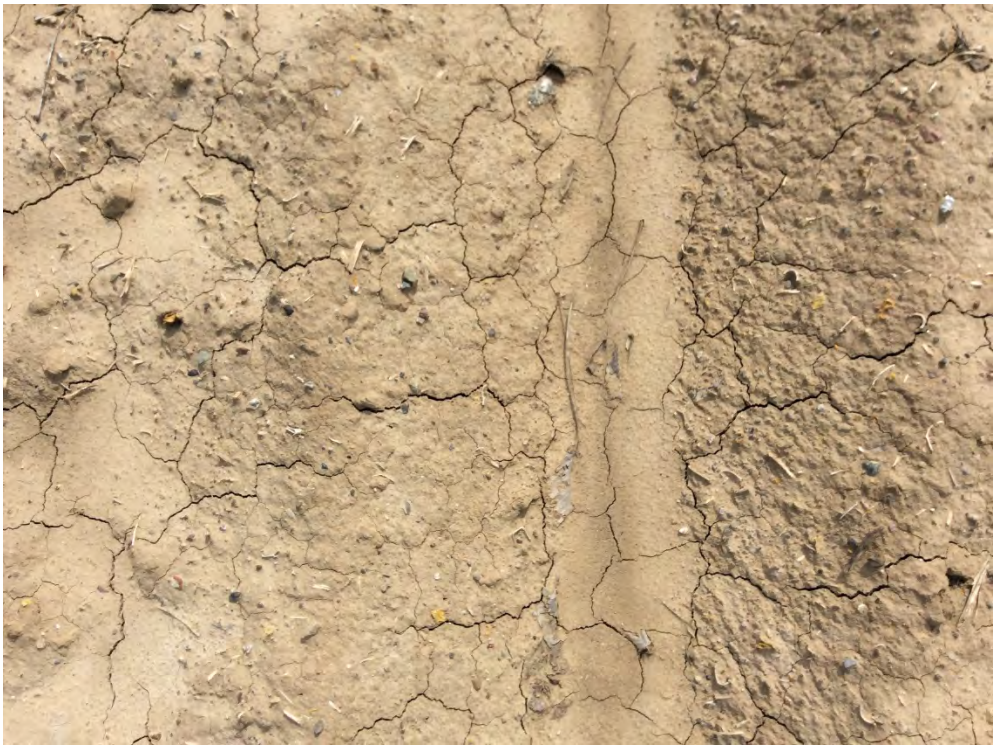
APN 021-023-019

Photograph 1: View of APN 021-023-19 from the northwest; facing southeast.



Photograph 2: Detail of representative soil composition and visibility within APN 021-023-19.

APN 021-023-019

Photograph 3: View of APN 021-023-19 from the southeast; facing northwest.

APN 021-023-020

Photograph 1: View of APN 021-023-020 from the northeast; facing southwest.

Photograph 2: Detail of representative soil composition and visibility within APN 021-023-020. Soil is consistent across the parcel.

APN 021-023-020

Photograph 3: View of APN 021-023-020 from the southwest; facing northeast.

Photograph 4: View of metal drainage pipe in the corner of parcels APN 021-023-025, -024, -020, and -021; facing southwest.

APN 021-023-025

Photograph 1: View of APN 021-023-025 from the northwest; facing southeast.

Photograph 2: Detail view of soil composition and visibility within APN 021-023-025. Soil color to the southeast is dark brown.

APN 021-023-025

Photograph 3: View of APN 021-023-025 from the southeast; facing northwest.

APN 021-023-026 and 021-023-027

Photograph 1: Parcel APN 021-023-026; View of the project site from the northeast; facing southwest. Overview of unsurveyed parcel as a result of poor ground visibility.

Photograph 2: Parcel APN 021-023-026; Detail view of poor soil composition and visibility

APN 021-023-026 and 021-023-027

Photograph 3: Parcel APN 021-023-027; View of the project site from the northeast; facing southwest.

Photograph 4: Parcel APN 021-023-027; Detail view of poor soil composition and visibility

APN 021-023-024

Photograph 1: View of APN 021-023-024 from the southwest; facing northeast.

Photograph 2: Detail view of soil composition and visibility within APN 021-023-024. Higher volume of various stone types and slightly darker soil.

APN 021-023-024

Photograph 3: View of APN 021-023-024 from the northeast; facing southwest.

APN 021-023-021

Photograph 1: View of APN 021-023-021 from the northwest; facing southeast.

Photograph 2: View of APN 021-023-021 from the southeast; facing northwest.

APN 021-023-021

Photograph 3: Detail view of soil composition and visibility within APN 021-023-021. Moderate distribution of stones and lighter soil color in the northern portion of the parcel.

APN 021-023-018

Photograph 1: View of APN 021-023-018 from the northeast; facing southwest.

Photograph 2: View of APN 021-023-018 from the southwest; facing northeast.

APN 021-023-018

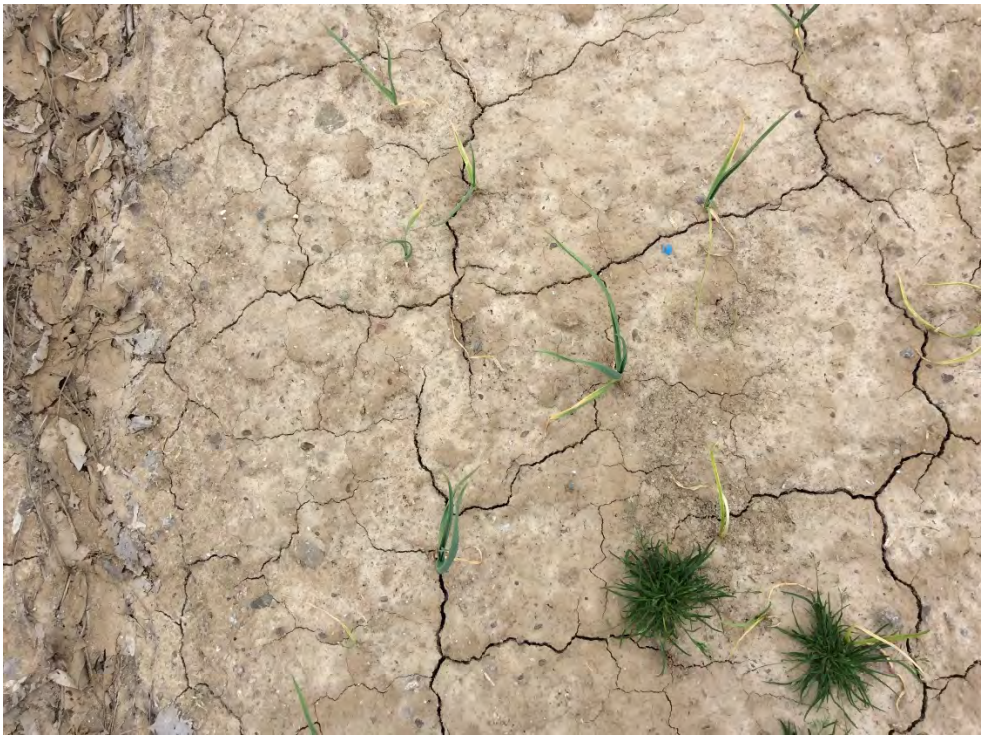
Photograph 3: Detail view of soil composition and visibility within APN 021-023-018.

APN 021-023-017

Photograph 1: View of APN 021-023-017 from the northwest; facing southeast.

Photograph 2: View of APN 021-023-017 from the southeast; facing northwest.

APN 021-023-017



Photograph 3: Detail view of soil composition and visibility within APN 021-023-017.

APN 021-023-022

Photograph 1: View of APN 021-023-022 from the southwest; facing northeast.

Photograph 2: View of APN 021-023-022 from the northeast; facing southwest.

APN 021-023-022

Photograph 3: Detail view of soil composition and visibility within APN 021-023-022.

APN 021-023-023

Photograph 1: view APN 021-023-023 from the southeast; facing northwest.

Photograph 2: View of APN 021-023-023 from the northwest; facing southeast.

APN 021-023-023

Photograph 3: Detail view of soil composition and visibility within APN 021-023-023.

APN 021-023-016

Photograph 1: View of barn, garage, tank house, and farming equipment in APN 021-023-016.

Photograph 2: View of barn in APN 021-023-016.

APN 021-023-016

Photograph 3: View of the Zacharias home in APN 021-023-016.

Photograph 4: View of the Zacharias home in APN 021-023-016.

APN 021-023-016

Photograph 5: Detail view of soil composition and visibility within APN 021-023-016. Soil contains clay with fewer stones.

Photograph 6: View of orchard facing west, soil composition is consistent throughout APN 021-023-016.

APN 021-023-016

Photograph 7: View of orchard in APN 021-023-016 from the southwest; facing northeast

APN 021-023-013

Photograph 1: View of APN 021-023-013 from the southeast; facing northwest.

Photograph 2: Detail view of soil composition and visibility within APN 021-023-013. Silty brown soil with light distribution of stones.

APN 021-023-013

Photograph 3: View of APN 021-023-013 and orchard

Photograph 4: View of APN 021-023-013 from the southwest; facing northeast.

APN 021-023-028 and 021-023-029

Photograph 1: Parcel APN 021-023-0028; View of the project site from the northeast; facing southwest. Overview of unsurveyed parcel as a result of poor ground visibility.

Photograph 2: Parcel APN 021-023-028; Detail view of poor soil composition and visibility.

APN 021-023-028 and 021-023-029

Photograph 3: Parcel APN 021-023-029; View of the project site from the northeast; facing southwest. Overview of unsurveyed parcel as a result of poor ground visibility.

Photograph 4: Parcel APN 021-023-029; Detail view of poor soil composition and visibility.

APN 021-023-014

Photograph 1: View of APN 021-023-014 from the northwest; facing southeast. Visibility across parcel was poor (50%) with lots of gravel of various sizes.

Photograph 2: Detail view of soil composition and visibility within APN 021-023-014.

APN 021-023-014

Photograph 3: View of the orchard in APN 021-023-014 facing east.

Photograph 4: View of APN 021-023-014 from the southwest; facing northeast.

APN 021-023-011, APN 021-023-012, and APN 021-023-009

Photograph 1: Parcel APN 021-023-011; View of the project site from the northwest; facing southeast.

Photograph 2: Parcel APN 021-023-011; Detail view of soil composition and visibility within the parcel. Ground coverage was at 100% and parcel was unsurveyable.

APN 021-023-011, APN 021-023-012, and APN 021-023-009

Photograph 3: Parcel APN 021-023-011; View of the orchard within the parcel facing east.

Photograph 4: Parcel APN 021-023-012;View of the project site from the northwest; facing southeast.

APN 021-023-011, APN 021-023-012, and APN 021-023-009

Photograph 5: Parcel APN 021-023-012; Detail view of soil composition and visibility within the parcel. Ground coverage was at 100% and parcel was unsurveyable.

Photograph 6: Parcel APN 021-023-009; View of the project site from the northwest; facing southeast.

APN 021-023-011, APN 021-023-012, and APN 021-023-009

Photograph 7: Parcel APN 021-023-009; Detail view of soil composition and visibility within the parcel. Ground coverage was at 100% and parcel was unsurveyable.

APN 021-023-015

Photograph 1: View of APN 021-023-015 from the southwest; facing northeast.

Photograph 2: Detail view of soil composition and visibility within APN 021-023-015.

APN 021-023-015

Photograph 3: View of APN 021-023-015 from the southwest; facing northeast.

Photograph 4: Detail view of soil composition and visibility within APN 021-023-015. Shotgun shells in the center of photo.

APN 021-023-015

Photograph 5: View of APN 021-023-015 from the northwest; facing southeast

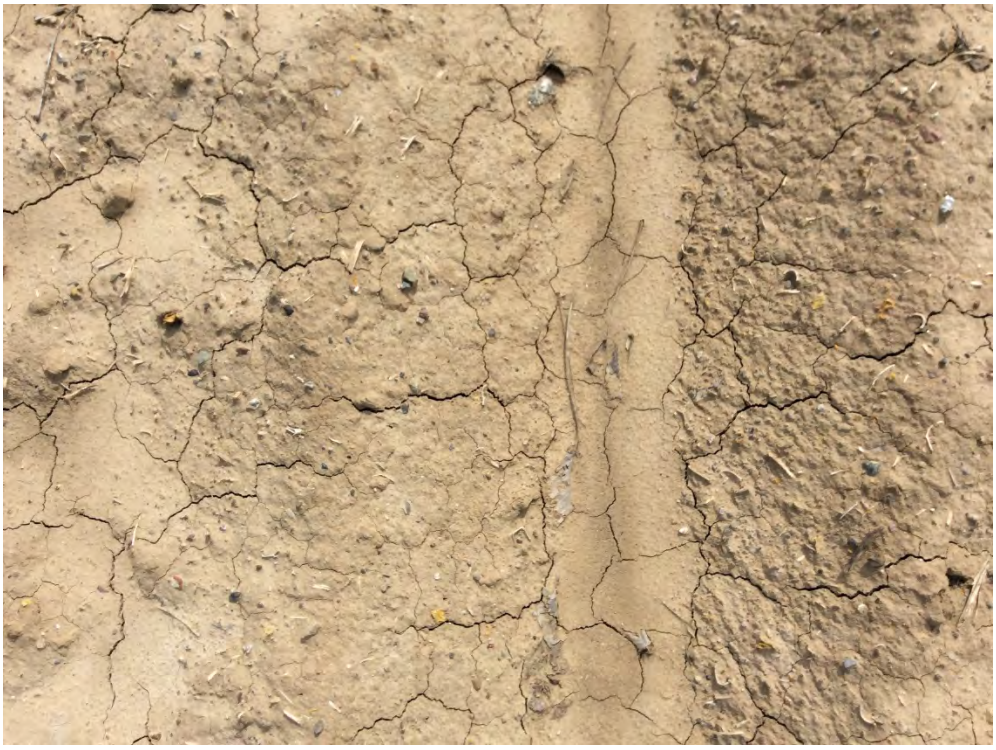
Photograph 6: View of the orchard within APN 021-023-015 facing south.

APN 021-023-015

Photograph 7: View of APN 021-023-015 from the northeast; facing southwest

APN 021-023-019

Photograph 1: View of APN 021-023-019 from the northwest; facing southeast.



Photograph 2: Detail of representative soil composition and visibility within APN 021-023-019.

APN 021-023-019

Photograph 3: View of APN 021-023-019 from the southeast; facing northwest.

APN 021-023-033 and 021-023-001

Photograph 1: Parcel APN 021-023-033; View of the project site from the northwest; facing southeast.

Photograph 2: Parcel APN 021-023-033; Detail view of soil composition and visibility within the parcel. Ground coverage is at 100% and was not surveyed.

APN 021-023-033 and 021-023-001

Photograph 3: Parcel APN 021-023-001; View of the project site from the northeast; facing southwest.

Photograph 4: Parcel APN 021-023-001; Detail view of soil composition and visibility within the parcel. Medium brown soil interspersed with various stone types.

APN 021-023-033 and 021-023-001

Photograph 5: Parcel APN 021-023-001; View of orchard facing west, visibility at 20% ground was covered with branches and twigs.

Photograph 6: Parcel APN 021-023-001; View of the project site from the southeast; facing northwest.

APN 021-023-032 and 021-023-030

Photograph 1: Parcel APN 021-023-032; View of the project site from the northwest; facing southeast.

Photograph 2: Parcel APN 021-023-032 Detail view of soil composition and visibility within the parcel.

APN 021-023-032 and 021-023-030

Photograph 3: Parcel APN 021-023-032 View of the orchard facing east; poor visibility across the parcel.

Photograph 4: Parcel APN 021-023-030 View of the project site from the northwest; facing southeast.

APN 021-023-032 and 021-023-030

Photograph 5: Parcel APN 021-023-030; Detail view of soil composition and visibility within the parcel.

Photograph 6: Parcel APN 021-023-030 View of the project site from the northeast; facing southwest.

APN 021-023-032 and 021-023-030

Photograph 7: Parcel APN 021-023-030 View of the project site from the southeast; facing northwest.

APN 021-023-031

Photograph 1: View of APN 021-023-031 from the northeast; facing southwest.

Photograph 2: View of APN 021-023-031 from the southwest; facing northeast.

APN 021-023-031

Photograph 3: View of APN 021-023-031 from the northwest; facing southeast.

Photograph 4: Detail view of soil composition and visibility within APN 021-023-031. The soil is darker with fewer stones.

APN 021-023-031

Photograph 5: View of APN 021-023-031 from the southeast; facing northwest.

Photograph 6: View of southern portion of aqueduct in APN 021-023-031; facing north.

Canal, Farm Equipment, and Shed

Photograph 1: View of the project site from the east; facing northwest.

Photograph 2: View of the project site from the northeast; facing southwest.

Canal, Farm Equipment, and Shed

Photograph 3: View of the project site from the southwest; facing northeast.

Photograph 4: View of the canal in the northwest portion of the project site facing south.

Canal, Farm Equipment, and Shed

Photograph 5: Canal in the western of the project site with a view from the south; Facing north

Photograph 6: View of canal facing west

Canal, Farm Equipment, and Shed

Photograph 7: View of the canal from the north; facing south.

Appendix B:
Cultural Resources Correspondence

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B.1 - Native American Heritage Commission Sacred Lands File Search

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Local Government Tribal Consultation List Request

Native American Heritage Commission
1550 Harbor Blvd, Suite 100
West Sacramento, CA 95691
916-373-3710
916-373-5471 – Fax
nahc@nahc.ca.gov

Type of List Requested

☑ **CEQA Tribal Consultation List (AB 52)** – ***Per Public Resources Code § 21080.3.1, subs. (b), (d), (e) and 21080.3.2***

☐ **General Plan (SB 18)** - ***Per Government Code § 65352.3.***

Local Action Type:

___ General Plan ___ General Plan Element ___ General Plan Amendment

___ Specific Plan ___ Specific Plan Amendment ___ Pre-planning Outreach Activity

Required Information

Project Title: Northwest Patterson Master Plan

Local Government/Lead Agency: City of Patterson

Contact Person: Dr. Dana DePietro, Spencer Pignotti

Street Address: 1350 Treat Boulevard, Ste. 380

City: Walnut Creek **Zip:** 94597

Phone: 530-219-1432 **Fax:**

Email: ddepietro@fcs-intl.com, spignotti@fcs-intl.com

Specific Area Subject to Proposed Action

County: Stanislaus **City/Community:** City of Patterson

Project Description:

The City of Patterson is proposing the Zacharias Annexation Area Master Plan which would annex areas to the north and south of the City of Patterson.

Additional Request

☑ **Sacred Lands File Search** - ***Required Information:***

USGS Quadrangle Name(s): Patterson and Westly 7.5', Patterson 7.5'

Township: 5S, 5S **Range:** 7E, 7E

Section(s): 24, 36

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

June 26, 2018

Dana DePietro
FCS Intl

Sent by Email: ddepietro@fcs-int.com
Number of Pages: 2

RE: Northwestern Patterson Master Plan, Stanislaus County

Dear Mr. DePietro:

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 Consultation List
6/25/2018

Calaveras Band of Mi-Wuk Indians
Debra Grimes, Cultural Res. Specialist
P.O. Box 899
West Point , CA 95255
calaverasmiwukpreservation@gmail.com
(209) 470-8688

Mi-Wuk
Miwok

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
Bill Leonard, Chairperson
P.O. Box 186
Mariposa , CA 95338
(209) 628-8603 Office

Miwok
Pauite
Northern Valley Yokut

Tule River Indian Tribe
Neil Peyron, Chairperson
P.O. Box 589
Porterville , CA 93258
neal.peyron@tulerivertribe-nsn.gov
(559) 781-4271
(559) 781-4610 Fax

Yokuts

Tuolumne Band of Me-Wuk Indians
Kevin Day, Chairperson
P.O. Box 699
Tuolumne , CA 95379
receptionist@mewuk.com
(209) 928-5300 Office
(209) 928-1677 Fax

Me-Wuk - Miwok

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 Resource Code, or Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native American Tribes for the proposed: Northwestern Patterson Master Plan, Stanislaus County.

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B.2 - Native American Information Request Letters

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April 22, 2019

Kevin Day
Tuolumne Band of Me-Wuk Indians
P.O. Box 699
Tuolumne, CA 95379

Subject: Proposed Northwest Patterson Master Plan Project

Dear Kevin Day:

FirstCarbon Solutions (FCS) is preparing an Environmental Impact Report (EIR) for the proposed Revel Windsor Project on the behalf of the City of Patterson. As part of the environmental review process, we are conducting a cultural resources assessment.

The proposed project consists of the annexation of the project site into the City of Patterson and the development of residential, mixed use, commercial, industrial, school, parks, and open space uses guided by a Master Plan. The buildout potential of the Master Plan is 5,481 dwelling units and 7,765,000 square feet of non-residential uses. The Master Plan process is being led by five property ownership groups (Zacharias Ranch, TFP Development, Lakeside Hills, Keystone Ranch, and Baldwin Ranch) that control 1,160 acres. The main portion of the project site encompasses approximately 1,226.9 acres and is bounded by Rogers Road (west), Zacharias Road (north), the California Northern Railroad tracks and Ward Avenue (east), and existing residential and business park uses (south). A non-contiguous 68.7-acre portion of the project site is located at the southern terminus of Baldwin Road and is bounded by the Delta-Mendota Canal (west), the City of Patterson Corporation Yard (north), and agricultural uses (east and south).

A Records Search map with a 0.5 mile buffer around the site is enclosed for your reference. The surrounding area is characterized by a mix of agricultural and residential uses.

As part of the cultural resources assessment, FCS conducted a Sacred Lands File search and a California Historical Resources Information System (CHRIS) search, neither of which produced results. FCS contacted the Native American Heritage Commission (NAHC), and they suggested you might be able to provide further information. If you have any additional information regarding potential historic or cultural resources in proximity or relation to the proposed project area, we would greatly appreciate your input.

Please note that this letter is a request for information pertaining to a cultural resources assessment and is not notification of a project under Senate Bill (SB) 18, Assembly Bill (AB) 52 or Section 106 of the National Historic Preservation Act. Project notification and consultation requirements are being handled by designated lead agencies under CEQA and NEPA. Please feel free to contact me at 925.357.2562 or via email at ddepietro@fcs-intl.com and thank you for your valuable assistance.

Sincerely,

Dana Douglas DePietro, Ph.D.
Senior Scientist, Archaeology
FirstCarbon Solutions
1350 Treat Boulevard, Suite 380
Walnut Creek, CA 94597

Enc: Attachment A: Project record search map for the northern portion of the project

Attachment B: Project record search map for the southern portion of the project

April 22, 2019

Debra Grimes
Calaveras Band of Mi-Wuk Indians
P.O. Box 889
West Point, CA 95255

Subject: Proposed Northwest Patterson Master Plan Project

Dear Debra Grimes:

FirstCarbon Solutions (FCS) is preparing an Environmental Impact Report (EIR) for the proposed Revel Windsor Project on the behalf of the City of Patterson. As part of the environmental review process, we are conducting a cultural resources assessment.

The proposed project consists of the annexation of the project site into the City of Patterson and the development of residential, mixed use, commercial, industrial, school, parks, and open space uses guided by a Master Plan. The buildout potential of the Master Plan is 5,481 dwelling units and 7,765,000 square feet of non-residential uses. The Master Plan process is being led by five property ownership groups (Zacharias Ranch, TFP Development, Lakeside Hills, Keystone Ranch, and Baldwin Ranch) that control 1,160 acres. The main portion of the project site encompasses approximately 1,226.9 acres and is bounded by Rogers Road (west), Zacharias Road (north), the California Northern Railroad tracks and Ward Avenue (east), and existing residential and business park uses (south). A non-contiguous 68.7-acre portion of the project site is located at the southern terminus of Baldwin Road and is bounded by the Delta-Mendota Canal (west), the City of Patterson Corporation Yard (north), and agricultural uses (east and south).

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Sincerely,

Dana Douglas DePietro, Ph.D.
Senior Scientist, Archaeology
FirstCarbon Solutions
1350 Treat Boulevard, Suite 380
Walnut Creek, CA 94597

Enc: Attachment A: Project record search map for the northern portion of the project

Attachment B: Project record search map for the southern portion of the project

April 22, 2019

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

Subject: Proposed Northwest Patterson Master Plan Project

Dear Bill Leonard:

FirstCarbon Solutions (FCS) is preparing an Environmental Impact Report (EIR) for the proposed Revel Windsor Project on the behalf of the City of Patterson. As part of the environmental review process, we are conducting a cultural resources assessment.

The proposed project consists of the annexation of the project site into the City of Patterson and the development of residential, mixed use, commercial, industrial, school, parks, and open space uses guided by a Master Plan. The buildout potential of the Master Plan is 5,481 dwelling units and 7,765,000 square feet of non-residential uses. The Master Plan process is being led by five property ownership groups (Zacharias Ranch, TFP Development, Lakeside Hills, Keystone Ranch, and Baldwin Ranch) that control 1,160 acres. The main portion of the project site encompasses approximately 1,226.9 acres and is bounded by Rogers Road (west), Zacharias Road (north), the California Northern Railroad tracks and Ward Avenue (east), and existing residential and business park uses (south). A non-contiguous 68.7-acre portion of the project site is located at the southern terminus of Baldwin Road and is bounded by the Delta-Mendota Canal (west), the City of Patterson Corporation Yard (north), and agricultural uses (east and south).

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Sincerely,

Dana Douglas DePietro, Ph.D.
Senior Scientist, Archaeology
FirstCarbon Solutions
1350 Treat Boulevard, Suite 380
Walnut Creek, CA 94597

Enc: Attachment A: Project record search map for the northern portion of the project

Attachment B: Project record search map for the southern portion of the project

April 22, 2019

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

Subject: Proposed Northwest Patterson Master Plan Project

Dear Katherine Erolinda Perez:

FirstCarbon Solutions (FCS) is preparing an Environmental Impact Report (EIR) for the proposed Revel Windsor Project on the behalf of the City of Patterson. As part of the environmental review process, we are conducting a cultural resources assessment.

The proposed project consists of the annexation of the project site into the City of Patterson and the development of residential, mixed use, commercial, industrial, school, parks, and open space uses guided by a Master Plan. The buildout potential of the Master Plan is 5,481 dwelling units and 7,765,000 square feet of non-residential uses. The Master Plan process is being led by five property ownership groups (Zacharias Ranch, TFP Development, Lakeside Hills, Keystone Ranch, and Baldwin Ranch) that control 1,160 acres. The main portion of the project site encompasses approximately 1,226.9 acres and is bounded by Rogers Road (west), Zacharias Road (north), the California Northern Railroad tracks and Ward Avenue (east), and existing residential and business park uses (south). A non-contiguous 68.7-acre portion of the project site is located at the southern terminus of Baldwin Road and is bounded by the Delta-Mendota Canal (west), the City of Patterson Corporation Yard (north), and agricultural uses (east and south).

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Sincerely,

Dana Douglas DePietro, Ph.D.
Senior Scientist, Archaeology
FirstCarbon Solutions
1350 Treat Boulevard, Suite 380
Walnut Creek, CA 94597

Enc: Attachment A: Project record search map for the northern portion of the project

Attachment B: Project record search map for the southern portion of the project

April 22, 2019

Neil Peyron
Tule River Indian Tribe
P.O. Box 589
Porterville, CA 93258

Subject: Proposed Northwest Patterson Master Plan Project

Dear Neil Peyron:

FirstCarbon Solutions (FCS) is preparing an Environmental Impact Report (EIR) for the proposed Revel Windsor Project on the behalf of the City of Patterson. As part of the environmental review process, we are conducting a cultural resources assessment.

The proposed project consists of the annexation of the project site into the City of Patterson and the development of residential, mixed use, commercial, industrial, school, parks, and open space uses guided by a Master Plan. The buildout potential of the Master Plan is 5,481 dwelling units and 7,765,000 square feet of non-residential uses. The Master Plan process is being led by five property ownership groups (Zacharias Ranch, TFP Development, Lakeside Hills, Keystone Ranch, and Baldwin Ranch) that control 1,160 acres. The main portion of the project site encompasses approximately 1,226.9 acres and is bounded by Rogers Road (west), Zacharias Road (north), the California Northern Railroad tracks and Ward Avenue (east), and existing residential and business park uses (south). A non-contiguous 68.7-acre portion of the project site is located at the southern terminus of Baldwin Road and is bounded by the Delta-Mendota Canal (west), the City of Patterson Corporation Yard (north), and agricultural uses (east and south).

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Senior Scientist, Archaeology
FirstCarbon Solutions
1350 Treat Boulevard, Suite 380
Walnut Creek, CA 94597

Enc: Attachment A: Project record search map for the northern portion of the project

Attachment B: Project record search map for the southern portion of the project

Appendix C:
Personnel Qualifications

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FIRSTCARBON SOLUTIONS™

DAVID SMITH—ARCHAEOLOGIST/PROJECT MANAGER

OVERVIEW

- More than 28 years of experience

Education

- Bachelor of Science, Anthropology (Archaeology Emphasis), University Of California, Riverside, CA, 1991
- Associate of Arts, General Studies (Archaeology Emphasis) Golden West College, Huntington Beach, CA, 1989

Training, Permits, and Certifications

- Certified Archaeologist, Riverside County, No. 218, 2007-present
- Certified Archaeologist, Orange County Environmental Management Agency, 2003-present
- Annual HAZWOPER 8-Hour Refresher Training Course, Compliance Services, Inc. (one-year certification), 2008–2016
- Psomas Project Management Training, Kyle V. Davy Consulting, September and October 2015
- Chevron Safety Training Certification, 2012
- MEDIC First Aid Basic Plus Training Program, Garcia and Associates, 2012–2015
- Riverside County Cultural Resource Training Course, Register No. 228, 2009
- Union Pacific Railroad Safety Training Certification, 2008
- Bureau of Land Management Field Director Certification, Psomas, 2004 and 2008
- Accelerated 2-Day CGI Project Management Training, Chambers Group, Inc., 2007
- Arizona Antiquities Act Blanket Permit No. 2005-075bl, Authorized as a Project Director to conduct archaeological surveys in Arizona, 2006
- Nevada Antiquities Permit No. 508, Authorized as Principal Investigator and Field Director to work on Federal and State lands in Nevada, 2005
- MOLYCORP Hazard Training Certificate, Lanthanide Group, Mountain Pass Plant, 2005
- HAZWOPER 40-Hour Certification Training, Joshua Casey Corporate Training, 2004

David Smith is a Riverside County Certified Archaeologist (No. 218) with more than 28 years of experience as a principal investigator, field director, project archaeologist, and project manager. He has expertise in California Environmental Quality Act/National Environmental Policy Act (CEQA/NEPA) compliance and the provision of CEQA- and NEPA-compliant surveys, inventories, monitoring, testing and data recovery, and Native American consultation services. He has worked extensively with federal agencies such as the U.S. Bureau of Land Management (BLM), U.S. Bureau of Reclamation (BOR), National Forest Service (NFS), National Park Service (NPS), the Department of Defense, and the U.S. Army Corps of Engineers (USACE), as well as dozens of municipal and State of California agencies. Mr. Smith has managed projects involving property development, pipelines, transmission lines, mines, and parks and has conducted archaeological surveys in California, Nevada, and Arizona on more than 40,000 acres of private and public lands, including the Prescott National Forest, the San Bernardino National Forest, the Cleveland National Forest, the Angeles National Forest, the Inyo National Forest, and the Coconino National Forest. Mr. Smith has extensive experience in conducting agency, client, Native American, and subcontractor coordination; archival research; field reconnaissance; site testing; data recovery excavation; construction monitoring; site recordation; site protection/preservation; mapping; laboratory analysis; and report production. He has the practical experience necessary to staff, train, and manage field crews effectively to produce an accurate, high-quality product for the client. Mr. Smith's field experience includes all aspects of safety training, education, and implementation to ensure compliance under the most rigid agency regulations.

DAVID SMITH—ARCHAEOLOGIST/PROJECT MANAGER

RELATED EXPERIENCE AND CLIENT SUMMARY

Proposed I-10/Avenue 50 Interchange, Caltrans District 8, Riverside County, CA

As the Senior Archaeologist for the proposed I-10/Avenue 50 Interchange Project located 3 miles east of Coachella, California, Mr. Smith prepared an Archaeological Survey Report (ASR) and a Historic Properties Survey Report (HPSR). Numerous cultural resources had been previously recorded within the project Area of Potential Effects (APE). Following a field survey of the APE, all resources were recorded and updated as necessary. Mr. Smith worked with an Architectural Historian who provided a Historic Resources Evaluation Report (HRER) for the historic section of Hwy 60/70 located within the APE. Mr. Smith coordinated consultations with Native American groups affiliated with the general area and consulted with various archaeological and historical societies. The ASR, HPSR, and HRER were ultimately approved by the California Department of Transportation (Caltrans).

Improvements to the State Route 14/Highway 138 Interchange, Caltrans District 7, City of Palmdale, CA

As the Senior Archaeologist for the State Route 14/Highway 138 Interchange Improvements Project located on the 14 Freeway in Palmdale, Mr. Smith conducted a records search, surveyed the APE, coordinated consultations with Native American groups affiliated with the general area, consulted with various archaeological and historical societies, and prepared an ASR and an HPSR. The ASR and HPSR were approved by Caltrans.

Glassell Street Crossings, Caltrans District 12, City of Orange, CA

Mr. Smith was the Senior Archaeologist for the Glassell Street Crossings Project in the City of Orange, which proposed to install numerous crosswalks along Glassell Street. Mr. Smith prepared an ASR and an HPSR for the project. In support of the ASR and HPSR, Mr. Smith conducted a records search, surveyed the APE, and coordinated consultations with Native American groups affiliated with the general area. The ASR and HPSR were approved by Caltrans.

I-405 North Widening, Caltrans District 12, Orange County, CA

Mr. Smith was the Senior Archaeologist for the I-405 North Widening Project located in Orange County, California. The project proposed to widen a section of the I-405 Freeway. Mr. Smith prepared an ASR and HPSR for the project. In support of the ASR and HPSR, Mr. Smith conducted a records search, surveyed the APE, and coordinated consultations with Native American groups affiliated with the general area. The ASR and HPSR were approved by Caltrans.

Edinger Avenue Improvements, Caltrans District 12, City of Huntington Beach, CA

Mr. Smith was the Senior Archaeologist for the Edinger Avenue Improvements Project in Huntington Beach, California. He conducted a records search, surveyed the APE, prepared an ASR for the project, and coordinated consultations with Native American groups affiliated with the general area. The ASR was approved by Caltrans.

DAVID SMITH—ARCHAEOLOGIST/PROJECT MANAGER

NorthLake Specific Plan Supplemental Environmental Impact Report, City of Hawthorne, CA

Mr. Smith was the Senior Archaeologist who supported the preparation of a Supplemental Environmental Impact Report (EIR) for the NorthLake Specific Plan Project. The project proposed to develop an approximately 1,330-acre project site in unincorporated northwest Los Angeles County in accordance with the previously approved NorthLake Specific Plan. The project would construct and operate a mix of single-family units, multi-family units, commercial uses, industrial uses, recreational uses and open space, and school and park facilities within the Specific Plan Area. Mr. Smith directed the field survey for cultural resources and the production of the final cultural resources report for the project.

Summerly Development Cultural Resources Monitoring Project, City of Lake Elsinore, CA

Mr. Smith was the Senior Archaeologist/Archaeological Monitor for the Summerly Development Project, which included grading for a drainage channel, a large sewer line, and subsequent residential development. At the conclusion of the monitoring program, Mr. Smith prepared a technical summary report that documented the results of the monitoring and provided management recommendations for further work.

Matrix Oil Field Redevelopment Project, City of La Habra Heights, CA

Mr. Smith was the Senior Archaeologist for the Matrix Oil Field Redevelopment Project, which included the redevelopment of existing oil wells, the drilling of new oil wells, and the construction of a Central Processing Facility, a truck loading facility, a small office with a restroom, and ancillary facilities. In addition, an off-site crude oil pipeline and a natural gas pipeline would be installed underground, extending from the project site to El Cajonita Drive, Las Palmas Drive, West Road, Hacienda Road, Whittier Boulevard, and Beach Boulevard, to connect with existing oil and gas pipelines located beneath La Habra Boulevard and the Union Pacific Railroad right-of-way. Mr. Smith completed a records search and field survey of the project site. This included accessing the South Central Coastal Information Center at California State University, Fullerton, to determine if known archaeological sites exist on or near the project site, and subsequently conducting a pedestrian survey of the project site to determine if previously unknown resources exist there. Mr. Smith also authored the final cultural resources report for the project.

Joshua Basin Water District Groundwater Recharge Basin and Pipeline Project, San Bernardino County, CA

Mr. Smith was the Senior Archaeologist for the Joshua Basin Water District's Groundwater Recharge Basin and Pipeline Project, which included the construction of approximately 24,000 linear feet of 16-inch diameter pipe, as an extension to the existing Mojave Water Agency pipeline, and the construction of an approximate 32.5-acre recharge facility to accommodate replenishment of the local groundwater aquifer. A previous cultural resources survey performed to support the Project EIR located several resources on and near the project site. BonTerra Psomas prepared an education and awareness program on the historic and prehistoric cultural resources in the area; the potential of construction activities to disturb known or unknown cultural resources and human remains; and the actions to be taken in the events of accidental discovery. The area has the potential for buried resources; therefore, a qualified Archaeologist monitored ground disturbing activities related to the pipeline construction; completed a pedestrian survey of the planned recharge basin; and monitored grading for construction of the basin itself. Mr. Smith produced the final cultural resources monitoring report for the project.

FIRSTCARBON SOLUTIONS™

DAVID SMITH—ARCHAEOLOGIST/PROJECT MANAGER

Baker Ranch Development Project Archaeological and Paleontological Investigations, City of Lake Forest, CA

Mr. Smith was the Senior Archaeologist for the Baker Ranch Development Project. Beginning in late 2012, BonTerra Psomas implemented the Mitigation Monitoring and Reporting Program adopted as a part of the EIR for Phase I of the Project, an approximately 386-acre proposed master-planned community that will include 2,379 residential units and 25,000 square feet of commercial development along the newly built section of Alton Parkway. The project included Archaeological, Native American, and Paleontological monitoring programs during grading activities for project construction. Results of the Phase I grading monitoring efforts included the recovery of many significant fossil resources, identified and evaluated by the San Diego Museum of Natural History, from the Oso Sand member of the late Miocene to early Pliocene Epoch Capistrano Formation.

Cultural Resource Inventory Management

- Phase I Cultural Resources Inventory For Two Rancho Guejito Projects, City of Escondido, San Diego County, CA
- Phase I Cultural Resources Assessment for a 4.5-acre Residential Project at Foothill Boulevard and Hermosa Avenue in Rancho Cucamonga (APNs 1077-601-13 and 1077-601-14), Fore Property Company, San Bernardino County, CA
- Cultural Resources Assessment, Lido Equities Group: Grandview Apartments, Lot 109, East Ocean Park Tract, 4025 Grandview Avenue, City of Culver City, CA
- El Centro 2,000 Acre Survey, Bureau of Land Management, City of El Centro, CA
- Phase I Cultural And Paleontological Resources Inventory, Tustin Pacific Center East Project, City of Tustin, CA
- Phase I Cultural Resources Inventory for the Union Pacific Railroad Yuma Subdivision Capacity Project, Mileposts 724 To 725.80, Bureau of Land Management, Imperial County, CA
- Phase I Cultural Resources Inventory: VTTM 7080 and 7081, 80 Acres, Rosamond, Kern County, CA
- Phase I Cultural Resources Inventory for Parcels APN 04365-181-01 and APN 0437-063-19, City of Apple Valley, CA
- Archaeological Survey Report, Harbor Boulevard North Off-Ramp Project, Caltrans District 12, City of Costa Mesa, CA
- Transwestern Survey and Site Recording, Ashfork to Casa Grande, Arizona, United States Forest Service, Bureau of Land Management, Arizona State Lands Department, AZ
- Class III Cultural Resources Inventory: Cajon Pass Washouts, United States Forest Service, Army Corps of Engineers, San Bernardino County, CA
- Class III Cultural Resources Inventory: LS 111 Washouts, United States Army Corps of Engineers, San Gorgonio Pass, Riverside County, CA
- Field Surveys, Target Zone Disturbance Zone Analysis of Indian Springs Valley and Cactus Flats Playas, U.S. Army Corps of Engineers, Nellis Air Force Base, NV
- Archaeological Survey of the Presidio West Development, Flagstaff, Arizona (100 acres), Arizona State Museum, Flagstaff, AZ
- Class III Cultural Resources Inventory For Eight Pipeline Repair Excavations On The Calnev Pipeline, Colton To Las Vegas (2 acres), Bureau of Land Management, Barstow Resource Area, CA, to Las Vegas, NV
- Class III Cultural Resources Inventory for Three Pipeline Repair Excavations on the Calnev Pipeline, Colton To Las Vegas (2 acres), Bureau of Land Management, Barstow Resource Area, CA, to Las Vegas, NV

DAVID SMITH—ARCHAEOLOGIST/PROJECT MANAGER

- Class III Cultural Resources Inventory for Two Pipeline Repair Excavations on the Calnev Pipeline, Colton To Las Vegas (2 acres), Bureau of Land Management, Barstow Resource Area, CA, to Las Vegas, NV
- Class III Inventory for Mile Post 140 and 145 on the Calnev Pipeline (5 acres), Bureau of Land Management, Barstow Resource Area, CA, to Las Vegas, NV
- Class III Inventory for the Chemehuevi Casino (50 acres), Bureau of Land Management, Barstow Resource Area, City of Barstow, CA
- Cathode Protection Station No. 1930 (2.75 acres), Bureau of Land Management, North Palm Springs, Riverside County, CA
- P and V Enterprises Land Exchange (records search for 13,000 acres), Bureau of Land Management, Barstow Resource Area, San Bernardino County, CA
- Class III Cultural Resources Inventory, Coral Mountain Regional Park (123 acres), Bureau of Reclamation, City of Coachella Valley, CA
- Phase I Cultural Resource Inventory, Quail Ranch (200 acres), City of Moreno Valley, CA
- Tract #30725, (10.22 acres), City of Riverside, CA
- Phase I Cultural Resources Survey, The Quarry (70 acres), City of La Quinta, CA
- Phase I Cultural Resources Survey, Planning Area 17 (800 acres), City of Irvine, CA
- Phase I Cultural Resources Survey, Planning Area 18 (800 acres), City of Irvine, CA
- Phase I Cultural Resources Survey, Desert Shores Motor Coach Resort (160 acres), City of Indio, CA
- Phase I Cultural Resources Survey, Planning Area 27 (800 acres), City of Irvine, CA
- Phase I Cultural Resources Survey, Civic Plaza (5 acres), City of Newport Beach, CA
- Saddleback Valley Christian School (20 acres), City of San Juan Capistrano, CA
- Big Rock Creek Mining Plan (80 acres), Town of Pearblossom, Los Angeles County, CA
- Phase I Cultural Resources Survey, CA-Riv-237, City of Temecula, CA
- Phase I Cultural Resources Survey, CA-Riv-366, Riverside County, CA
- Potrero Ranch Archaeological Survey (9,600 acres), Lockheed Development, Riverside County, CA
- Industry Trade Center Specific Plan (400 acres), City of Palmdale, CA
- Cultural Resource Element, East Benton Road Project, Webb Engineering, Road Department, Riverside County, CA
- Keene Ranch (13,000 acres), The Bedford Group, City of Tehachapi, Kern County, CA
- Cultural Resource Element, Winchester Assessment District, RanPac Engineering Corporation, Road Department, Riverside County, CA
- Archaeological Assessment of Vesting Tentative Tract 4366, Rancho Conejo/MGM Ranch, Shapell Industries, City of Thousand Oaks, CA
- Cultural Resource Element, Rancho Villages Assessment District, RanPac Engineering Corporation, Road Department, Riverside County, CA

Evaluation/Data Recovery Project Management

- Phase II Test and Evaluation for Cultural Resources, Union Pacific Railroad, Yuma Subdivision Capacity Project, Bureau of Land Management, Riverside and Imperial Counties, CA
- Paleontological Data Recovery of Pauba Formation Mammoths, Camels, etc., The Keith Companies Cultural Resources Department, City of Temecula, CA
- Testing and Data Recovery at 25 Sites, Shady Canyon Archaeological Project, City of Irvine, CA
- Paleontological Data Recovery of Paularino Formation Fossil Whale Bed, City of Newport Beach, CA
- Data Recovery at 7 Sites, Bonita Mesa Archaeological Project, The Irvine Company, The Keith Companies Cultural Resources Department, City of Irvine, CA

DAVID SMITH—ARCHAEOLOGIST/PROJECT MANAGER

- Data Recovery at CA-RIV-237, The Chambers Group, City of Temecula, CA
- Lake Arrowhead Community Services Pipeline Archaeological Survey and Test, City of Lake Arrowhead, CA
- Archaeological Assessment of CFD 88-8; 8.4 Mg Water Tank, Riverside County Transportation Department, Woodcrest, Riverside County, CA
- Phase II Testing and Evaluation, CA-Riv-237, City of Temecula, CA
- Cultural Resource Assessment, Diamond Valley Golf Course, Riverside County, CA
- Phase II Evaluation of a Portion of Archaeological Site CA-SCI-12093, Chollas Creek Bicycle Trail Project, City of San Diego, CA
- Phase II Test and Evaluation, Archaeological Site CP-1 on VTTM 7081, Kern County, CA

Other Relevant Projects

- Field Technician (Survey), Various 10-Day Rotations, Owens Lake, BonTerra Consulting for Garcia and Associates, Inyo County, CA
- Field Technician (Survey), Coachella Valley (1000 acres), RMW Paleo Associates, City of Coachella, CA
- Field Technician (Survey), Survey of Pisgah Crater Lava Beds (80 Prehistoric Sites recorded), Lavic Lake/Pisgah Crater, Mooney and Associates, United States Department of Defense, Twenty-Nine Palms Military Base, City of San Diego, CA
- Field Technician (Data Recovery), Data Recovery for One Archaeological Site, RMW Paleo Associates, Rose Canyon, La Jolla, City of San Diego, CA
- Field Technician (Data Recovery), Survey, Excavations, Mapping for Archaeological Site, San Bernardino Mountains, The Chambers Group, County of San Bernardino, CA
- Field Technician (Data Recovery), Archaeological Data Collection, Apis Adobe, City of Temecula, CA
- Field Technician (Data Recovery), Archaeological Data Collection, Magee Store Adobe, City of Temecula, CA
- Field Technician (Data Recovery), Irvine Coast Archaeological Project, The Keith Companies, City of Newport Beach, CA
- Field Technician (Data Recovery), Newport Coast Archaeological Project, The Keith Companies, City of Newport Beach, CA

Additional Trainings and Seminars

- HAZWOPER 8-Hour Refresher, Joshua Casey Corporate Training, 2005
- MEDIC First Aid Training Program, Joshua Casey Corporate Training and Education, 2005
- Liability IQ for Architects and Engineers, Professional Liability Education Program, DPIC Companies. Instructor: Kenneth Wittman of Dealey, Benton, and Associates, 2001
- Cesium Magnetometry, Mark L. Peterson, M.A., Peterson and Associates, 1996
- Emergency Teaching Credential, California Basic Educational Skills Test (CBEST), 1992
- Archaeological Field School, Christ College Site, Dr. Henry Koerper, Cypress College, 1989
- Archaeological Field School, Newport Coast Archaeological Project, Dr. Constance Cameron, CSF, 1989

DAVID SMITH—ARCHAEOLOGIST/PROJECT MANAGER

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Appendix D:
Paleontological Records Search

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Kenneth L. Finger, Ph.D.
Consulting Paleontologist

18208 Judy St., Castro Valley, CA 94546-2306 510.305.1080 klfpaleo@comcast.net

June 21, 2017

Dana DePietro
FirstCarbon Solutions
1350 Treat Boulevard, Suite 380
Walnut Creek, CA 94597

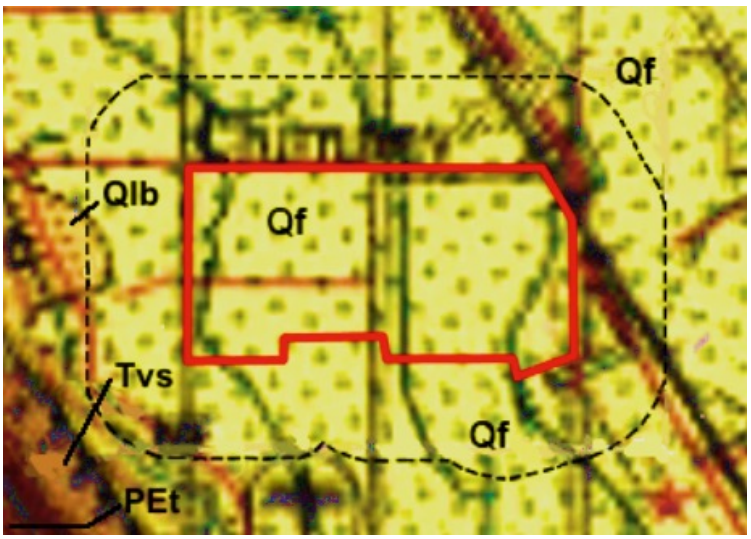
Re: Paleontological Records Search: Northern Site of NW Patterson Master Plan Project (1790.0003), Stanislaus County, California

Dear Dr. DePietro:

As per your request, I have performed a records search on the University of California Museum of Paleontology (UCMP) database for the northern site of the NW Patterson Master Plan project in Stanislaus County. This project site comprises two square miles between Baldwin Road (W) and Highway 33 (E), on the south side of Zacharias Road. Its PRS location is Sec. 23, 24, 25, T5S, R7E, Pat terson quadrangle (USGS 7.5-series topographic map). Google Earth imagery shows that this terrain, which slopes gently to the east, has been tilled for agriculture.

Geologic Units

According to the geologic maps of Dibblee and Minch (2007) and Sowers et al. (1993), and that part of the Wagner et al. (1991) map shown here, the entire project site (red outline) is located solely on Holocene alluvium (Qf). The surrounding half-mile search area (dashed black line) also includes Los Banos alluvium (Qlb) extending from the west. Holocene deposits are too young to contain fossils, while Pleistocene alluvium has a high paleontological sensitivity. Tertiary formations are within one mile southwest of the project site and probably extend into the subsurface of the project site.



Key to mapped units

Qf	Alluvial fan deposits (Holocene)
Qlb	Los Banos alluvium (Pleistocene)
Tvs	Valley Springs Formation (Oligocene)
PEt	Tesla Formation (Eocene-Paleocene)

Records Search

A records search performed on the UCMP (University of California Museum of Paleontology) database revealed 17 late Pleistocene vertebrate localities in Stanislaus County. Slightly less than one mile from the site are two late Pleistocene localities: V6808 (Patterson Ranch West) to the southeast and V3107 (Del Puerto Creek) to the northwest, both of which yielded late Pleistocene *Equus* (horse). The composite fauna recovered from the County comprises 31 specimens representing the Rancholabrean North American Land Mammal Stage, including *Camelops hesternus* (yesterday's camel), *Mammuthus columbi* (Columbian mammoth), *Glossotherium harlandi* (Harlan's ground sloth), *Glossotherium sheperdi* (Sheperd's ground sloth), *Megalonyx jeffersoni* (Jefferson's ground sloth), and *Bison latifrons* (long-horned bison).

Remarks and Recommendations

It is unlikely that earth-disturbing project activities on NW Patterson's northern site will impact significant paleontological resources because the entire site area is mapped as Holocene, and older deposits probably lie well below the deepest project-related excavations. I therefore do not recommend a preconstruction paleontological survey of the terrain or paleontological monitoring of construction activities. In accordance with CEQA guidelines, no further paleontological mitigation should be needed for this project. Although highly unlikely, should any vertebrate fossils (i.e., bones, teeth) be unearthed, the construction crew should divert operations from the find until a paleontologist examines it and, if deemed significant, salvages it in a timely manner for deposition in an accredited repository such as the UCMP.

Sincerely,

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June 22, 2017

Dana DePietro
FirstCarbon Solutions
1350 Treat Boulevard, Suite 380
Walnut Creek, CA 94597

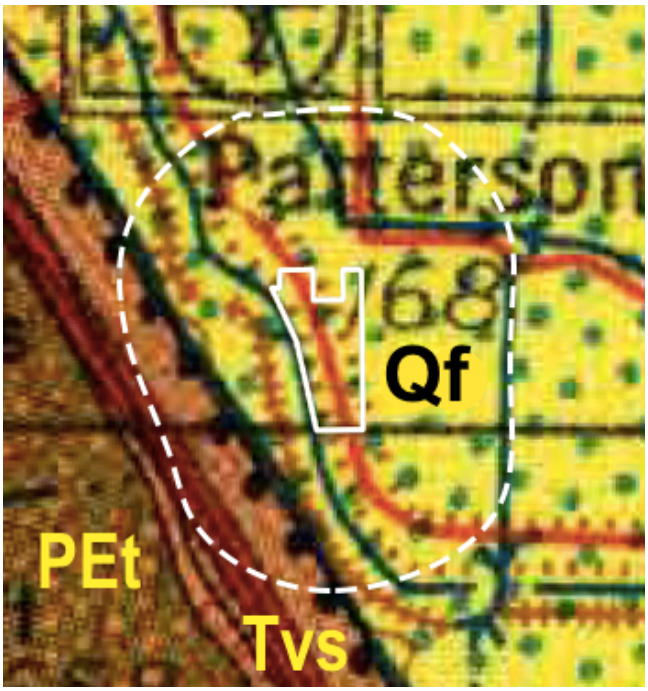
Re: Paleontological Records Search: Southern Site of NW Patterson Master Plan Project (1790.0003), Stanislaus County, California

Dear Dr. DePietro:

As per your request, I have performed a records search on the University of California Museum of Paleontology (UCMP) database for the southern site of the NW Patterson Master Plan project in Stanislaus County. This project site flanks the east side of the California Aquaduct. Its PRS location is E½, SE ¼, Sec. 35, T5S, R7E, Patterson quadrangle (USGS 7.5-series topographic map). Google Earth imagery shows that this terrain, which slopes gently to the east, has been tilled for agriculture.

Geologic Units

According to the geologic maps of Dibblee and Minch (2007) and Sowers et al. (1993), and that part of the Wagner et al. (1991) map shown here, the entire project site (solid outline) is located solely on Holocene alluvium (Qf), which is too young to contain fossils. The western part of the surrounding half-mile search area (dashed outline) also includes the Oligocene Valley Springs Formation. Farther west, adjacent to and underlying the Valley Springs Formation is the Eocene–Oligocene Tesla Formation. Both of these Tertiary units have paleontological potential.



Key to mapped units

Qf	Alluvial fan deposits (Holocene)
Qlb	Los Banos alluvium (Pleistocene)
Tvs	Valley Springs Formation (Miocene–Oligocene)
PEt	Tesla Formation (Eocene–Paleocene)

Records Search

The records search was performed on the UCMP (University of California Museum of Paleontology) database and focused on the two Tertiary units. It revealed five Miocene plant localities in the Valley Springs Formation, but none are in Stanislaus County. The Tesla Formation is represented by four plant localities, including one (loc. 195, 'Salado Creek Flora') 1.5 miles to the southeast, but none of the specimens collected have been entered into the database. There are no vertebrate localities listed for either formation.

Remarks and Recommendations

It is unlikely that earth-disturbing project activities on NW Patterson's northern site will impact significant paleontological resources because the entire site area is mapped as Holocene and older deposits probably lie at a depth well below the deepest project-related excavations. . I therefore do not recommend a preconstruction paleontological survey of the terrain or paleontological monitoring of construction activities. In accordance with CEQA guidelines, no further paleontological mitigation should be needed for this project. Although highly unlikely, should any vertebrate fossils (i.e., bones, teeth) be unearthed, the construction crew should divert operations from the find until a paleontologist examines it and, if deemed significant, salvages it in a timely manner for deposition in an accredited repository such as the UCMP.

Sincerely,

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Appendix E:
Regulatory Framework

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REGULATORY FRAMEWORK

Local, state, and federal government agencies have developed laws and regulations designed to protect significant cultural resources that may be affected by projects regulated, funded, or undertaken by the agency. Federal and state laws that govern the preservation of historic and archaeological resources of national, state, regional, and local significance include the National Environmental Policy Act (NEPA), the National Historic Preservation Act (NHPA), and California Environmental Quality Act (CEQA). In addition, laws specific to work conducted on federal lands include the Archaeological Resources Protection Act, the American Antiquities Act, and the Native American Graves Protection and Repatriation Act.

The following federal or CEQA criteria were used to evaluate the significance of potential impacts on cultural resources for the proposed project. An impact is considered significant if it would affect a resource eligible for listing in the National Register of Historic Places (NRHP) or the California Register of Historical Resources (CRHR), or if it is identified as a unique archaeological resource.

Federal-Level Evaluations

Federal agencies are required to consider the effects of their actions on historic properties and afford the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment on such undertakings under Section 106 of the NHPA regulations (36 CFR 800). Additionally, federal agencies are responsible for initiating NHPA Section 106 review and completing the steps outlined in these regulations. They must determine if NHPA Section 106 applies to a given project and, if so, initiate review in consultation with the State Historic Preservation Officer (SHPO) and/or the Tribal Historic Preservation Officer (THPO). Federal agencies are also responsible for involving the public and other interested parties. Furthermore, NHPA Section 106 requires that any federal or federally assisted undertaking, or any undertaking requiring federal licensing or permitting, consider the effect of the action on historic properties listed in or eligible for the NRHP. Under the Code of Federal Regulations (CFR), 36 CFR Part 800.8, federal agencies are specifically encouraged to coordinate compliance with NHPA Section 106 and the NEPA process. The implementing regulations "Protection of Historic Properties" are found in 36 CFR Part 800. Resource eligibility for listing on the NRHP is detailed in 36 CFR Part 63 and the criteria for resource evaluation are found in 36 CFR Part 60.4 [a–d].

The NHPA established the NRHP as the official federal list for cultural resources that are considered important for their historical significance at the local, state, or national level. To be determined eligible for listing in the NRHP, properties must meet specific criteria for historic significance and possess certain levels of integrity of form, location, and setting. The criteria for listing on the NRHP include—significance in American history, architecture, archaeology, engineering, and culture as present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

a.) That are associated with events that have made significant contributions to the broad patterns of our history; or

b.) That are associated with the lives of persons significant in our past; or

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

d.) That have yielded, or may be likely to yield, information important in prehistory or history.

Criterion D is usually reserved for archaeological resources. Eligible properties must meet at least one of the criteria and exhibit integrity, measured by the degree to which the resource retains its historical properties and conveys its historical character.

Criteria Considerations

Ordinarily, cemeteries, birthplaces, graves of historical figures, properties owned by religious institutions or used for religious purposes, buildings that have been moved from their original locations, reconstructed historic buildings, properties primarily commemorative in nature, and properties that have achieved significance within the past 50 years shall not be considered eligible for the NRHP. However, such properties will qualify if they are integral parts of districts that do meet the criteria or if they fall within the following categories:

a.) A religious property deriving primary significance from architectural or artistic distinction or historical importance.

b.) A building or structure removed from its original location but which is primarily significant for architectural value, or which is the surviving structure most importantly associated with a historic person or event.

c.) A birthplace or grave of a historical figure of outstanding importance if there is no appropriate site or building associated with his or her productive life.

d.) A cemetery that derives its primary importance from graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events.

e.) A reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived.

f.) A property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own exceptional significance.

g.) A property achieving significance within the past 50 years if it is of exceptional importance.

Thresholds of Significance

In consultation with the SHPO/THPO and other entities that attach religious and cultural significance to identified historic properties, the agency shall apply the criteria of adverse effect to historic

properties within the Area of Potential Effect (APE). The agency official shall consider the views of consulting parties and the public when considering adverse effects.

Federal Criteria of Adverse Effects

Under federal regulations, 36 CFR Part 800.5, an adverse effect is found when an undertaking alters, directly or indirectly, any of the characteristics of a historic property that qualifies the property for inclusion in the NRHP in a manner that diminishes the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration will be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for listing in the NRHP. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance, or be cumulative.

According to 36 CFR Part 800.5, adverse effects on historic properties include, but are not limited to:

- Physical destruction of or damage to all or part of the property.
- Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation, and provision of handicapped access, that is not consistent with the U.S. Secretary of the Interior's Standards for the Treatment of Historic Properties per 36 CFR Part 68 and applicable guidelines.
- Removal of the property from its historic location.
- Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance.
- Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features.
- Neglect of a property that causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization.
- Transfer, lease, or sale of property out of federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long term preservation of the property's historic significance.

If Adverse Effects Are Found

If adverse effects are found, the agency official shall continue consultation as stipulated in 36 CFR Part 800.6. The agency official shall consult with the SHPO/THPO and other consulting parties to develop alternatives to the undertaking that could avoid, minimize, or mitigate adverse effects to historic resources. According to 36 CFR Part 800.14(d), if adverse effects cannot be avoided then standard treatments established by the ACHP may be used as a basis for a Memorandum of Agreement (MOA).

According to 36 CFR Part 800.11(e), the filing of an approved MOA, and appropriate documentation, concludes the NHPA Section 106 process. The MOA must be signed by all consulting parties and approved by the ACHP prior to construction activities. If no adverse effects are found and the SHPO/THPO or the ACHP do not object within 30 days of receipt, the agencies' responsibilities under NHPA Section 106 will be satisfied upon completion of report and documentation as stipulated in 36 CFR Part 800.11. The information must be made available for public review upon request, excluding information covered by confidentiality provisions.

State-Level Evaluation Processes

An archaeological site may be considered a historical resource if it is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California per Public Resources Code (PRC) Section 5020.1(j) or, if it meets the criteria for listing on the CRHR per the California Code of Regulations (CCR) at Title 14 CCR Section 4850.

The most recent amendments to the CEQA Guidelines direct lead agencies to first evaluate an archaeological site to determine if it meets the criteria for listing in the CRHR. If an archaeological site is a historical resource, in that it is listed or eligible for listing in the CRHR, potential adverse impacts to it must be considered as stated in PRC Sections 21084.1 and 21083.2(l). If an archaeological site is considered not to be a historical resource, but meets the definition of a "unique archeological resource" as defined in PRC Section 21083.2, then it would be treated in accordance with the provisions of that section.

With reference to PRC Section 21083.2, each site found within a project area will be evaluated to determine if it is a unique archaeological resource. A unique archaeological resource is described as 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 one or more of the following criteria:

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

As used in this report, a "non-unique archaeological resource" means an archaeological artifact, object, or site that does not meet the criteria for eligibility for listing on the CRHR, as noted in subdivision (g) of PRC Section 21083.2. A non-unique archaeological resource requires no further consideration, other than the simple recording of its components and features. Isolated artifacts are typically considered non-unique archaeological resources. Historic structures that have had their superstructures demolished or removed can be considered historic archaeological sites and are evaluated following the processes used for prehistoric sites. Finally, the California State Office of

Historic Preservation recognizes an age threshold of 45 years. Cultural resources built less than 45 years ago may qualify for consideration, but only under the most extraordinary circumstances.

Title 14 of the CCR, Chapter 3, Section 15064.5, is associated with determining the significance of impacts to archaeological and historical resources. Here, the term historical resource includes the following:

1. A resource listed in, or determined eligible by the State Historical Resources Commission, for listing in the CRHR (PRC § 5024.1; Title 14 CCR § 4850, et seq.).
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 PRC Section 5024.1(g) requirements, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
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 may be considered a historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be historically significant if the resource meets the criteria for listing on the CRHR (PRC § 5024.1; Title 14 CCR § 4852) including the following:
   A. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
   B. Is associated with the lives of persons important in our past.
   C. 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.
   D. Has yielded, or may be likely to yield, information important in prehistory or history.

Typically, archaeological sites exhibiting significant features qualify for the CRHR under Criterion D because such features have information important to the prehistory of California. A lead agency may determine that a resource may be a historical resource as defined in PRC Sections 5020.1(j) or 5024.1, even if it is:

- Not listed in or determined to be eligible for listing in the CRHR.
- Not included in a local register of historical resources pursuant to PRC Section 5020.1(k).
- Identified in a historical resources survey per PRC Section 5024.1(g).

Threshold of Significance

If a project will have a significant impact on a cultural resource, several steps must be taken to determine if the cultural resource is a "unique archaeological resource" under CEQA. If analysis and/or testing determine that the resource is a unique archaeological resource and therefore subject to

mitigation prior to development, a threshold of significance should be developed. The threshold of significance is a point where the qualities of significance are defined and the resource is determined to be unique under CEQA. A significant impact is regarded as the physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the resource will be reduced to a point that it no longer meets the significance criteria. Should analysis indicate that project development will destroy the unique elements of a resource; CEQA regulations require that the project implement appropriate and feasible mitigation measures. The preferred form of mitigation is to preserve the resource in place, in an undisturbed state. However, as that is not always possible or feasible, appropriate mitigation measures may include, but are not limited to:

1. Planning construction to avoid the resource.
2. Deeding conservation easements.
3. Capping the site prior to construction.

If a resource is determined to be a "non-unique archaeological resource," no further consideration of the resource by the lead agency is necessary.

Tribal Consultation

The following serves as an overview of the procedures and timeframes for the Tribal Consultation process. For the complete Tribal Consultation Guidelines, please refer to the State of California Office of Planning and Research website.

Prior to the amendment or adoption of general or specific plans, local governments must notify the appropriate tribes of the opportunity to conduct consultation 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 plan adoption or amendment. The tribal contacts for this list are maintained by the NAHC and are distinct from the Most Likely Descendent (MLD) list. It is suggested that local governments send written notice by certified mail with return receipt requested. The tribes have 90 days from the date they receive notification to request consultation. In addition, prior to adoption or amendment of a general or specific plan, local government must refer the proposed action to tribes on the NAHC list that have traditional lands located within the city or county's jurisdiction. Notice must be sent regardless of prior consultation. The referral must allow a 45-day comment period.

In brief, notices from the local government to the tribes should include:

- A clear statement of purpose.
- A description of the proposed general or specific plan, the reason for the proposal, and the specific geographic areas affected.
- Detailed maps to accompany the description.
- Deadline date for the tribes to respond.
- Government representative(s) contact information.
- Contact information for project proponent/applicant, if applicable.

The basic schedule for this process is:

- **30 days:** time the NAHC has to provide tribal contact information to the local government; this is recommended, not mandatory.
- **90 days:** time the tribe has to respond indicating whether or not they want to consult. Note: tribes can agree to a shorter timeframe. In addition, consultation does not begin until/unless requested by the tribe within 90 days of receiving notice of the opportunity to consult. The consultation period, if requested, is open-ended. The tribes and local governments can discuss issues for as long as necessary or productive, and need not result in agreement.
- **45 days:** time the local government has to refer proposed action, such as adoption or amendment to a general or specific plan, to agencies, including the tribes. Referral is required even if there has been prior consultation. This opens the 45-day comment period.
- **10 days:** time the local government has to provide the tribes with notice of a public hearing.

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Appendix F:
CCIC Records Search

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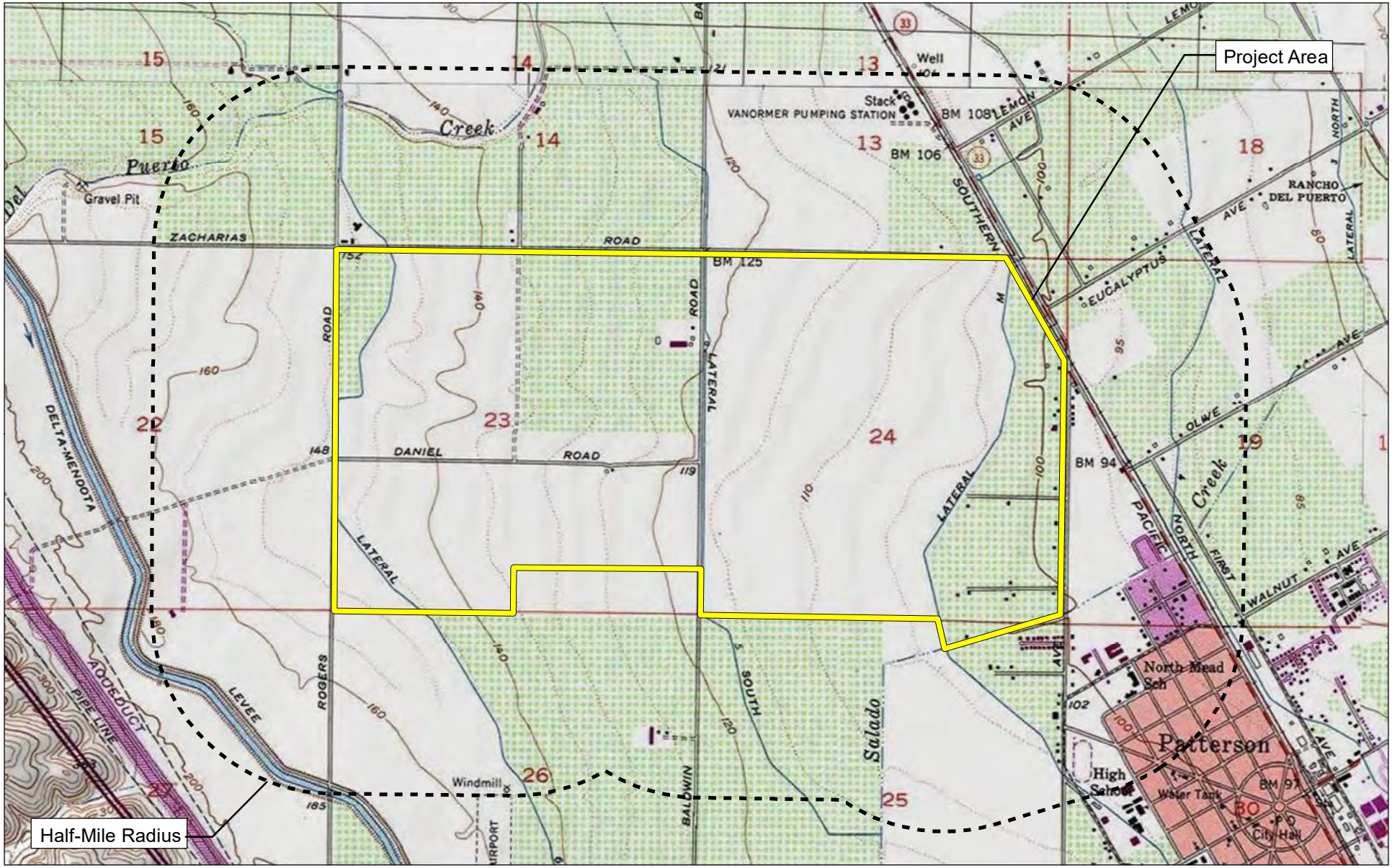
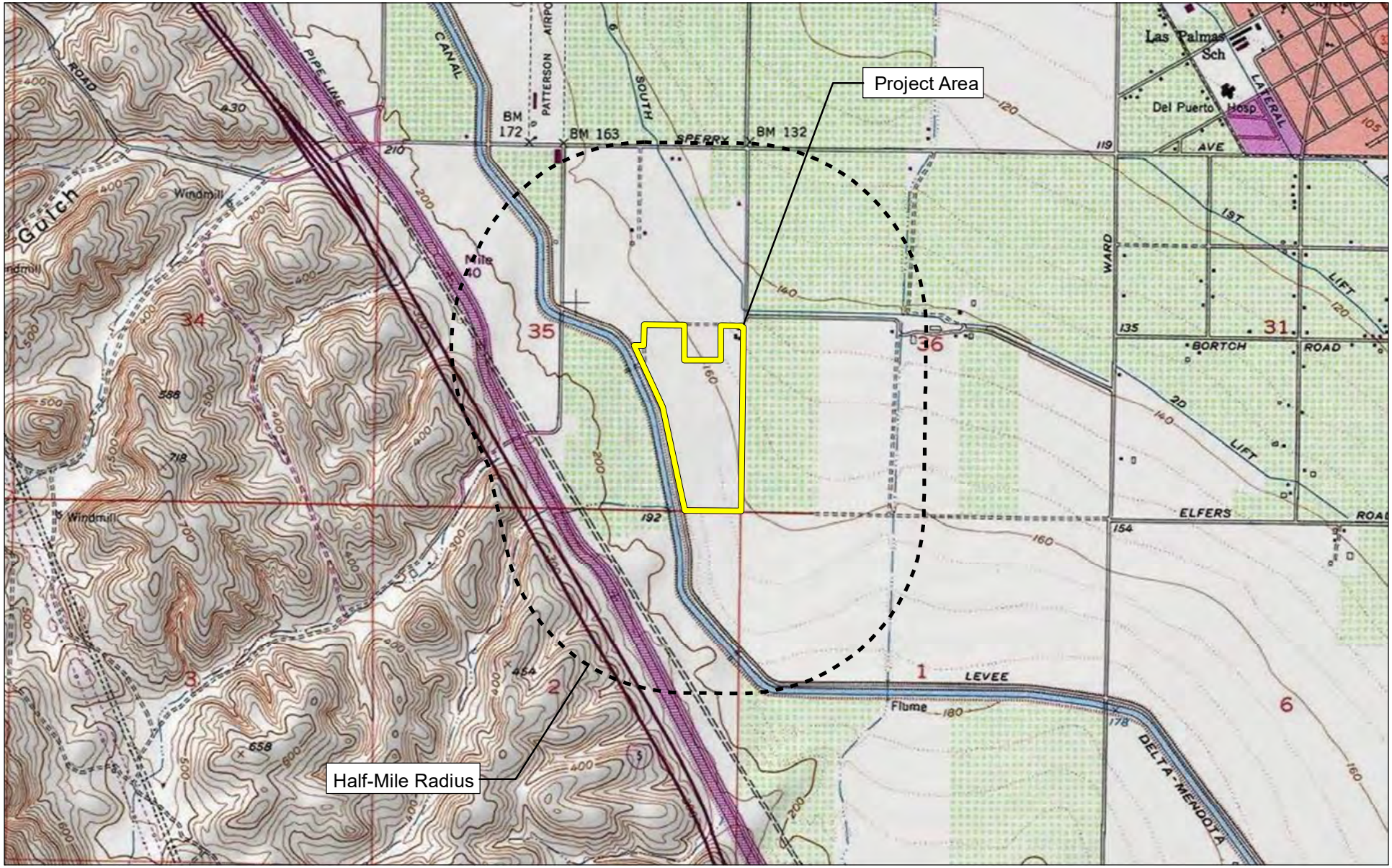


Source: USGS Patterson and Westley 7.5' Quadrangle / T5S,R7E,sec24

FIRSTCARBON SOLUTIONS™

2,000 1,000 0 2,000 Feet

Record Search Map



Source: USGS Patterson 7.5' Quadrangle / T5S,R7E,sec36

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Record Search Map

All studies in search area

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
ST-00621	NADB-R - 1366258	1990	Moratto, M. et al.	Cultural Resources Assessment Report PGT-PG&E Pipeline Expansion Project in Idaho, Washington, Oregon and California; Phase 1: Survey, Inventory, and Preliminary Evaluation of Cultural Resources [CCIC has only a partial copy of report].	INFOTECH Research, Inc. and BioSystems Analysis, Inc.	24-000002, 24-000161, 24-000172, 24-000181, 24-000393, 50-000111, 50-000128, 50-000300
ST-00896	NADB-R - 1361734	1984	Napton, L. K.	Cultural Resource Investigation of the Proposed Patterson Apartments, Stanislaus County, California.	CSU Stanislaus	
ST-00927	NADB-R - 1361762	1978	Pope, J. L.	Cultural Resource Assessment for the City of Patterson Facility Improvments Stanislaus County, California.	State Water Resouce Control Board	
ST-01846	NADB-R - 1366053; Other - 20822-SC-41	1992	Canaday, T., M. Ostrogorsky, and M. Hess	Archaeological Survey of Right-of-Way Corridor and Extra Work Spaces Construction Spread 5B, California; PGT-PG&E Pipeline Expansion Project, California.	Infotec Research, Inc.	50-000012, 50-000104, 50-000300, 50-000368
ST-01973	NADB-R - 1360607	1993	Peak & Associates, Inc.	Cultural Resource Assessment of the Proposed Creekside Development, Located Near Patterson, Stanislaus County, California.	Peak & Associates, Inc.	
ST-02753	NADB-R - 1366242	1994	Moratto, M., R. Pettigrew, B. Price, L. Ross, and R. Schalk	Archaeological Investigations PGT-PG&E Pipeline Expansion Project, Idaho, Oregon, and California, Volumes 1-V (1994-1995). [Only Vol. I and IV are unbound and available at CCIC; Vol. I = Project Overview, Research Design and Archaeological Inventory; Vol. IV = Synthesis of Findings].	Michael Moratto	24-000002, 24-000019, 24-000035, 24-000036, 24-000037, 24-000143, 24-000161, 24-000172, 24-000181, 24-000393, 39-000048, 50-000012, 50-000111, 50-000300
ST-02789	NADB-R - 1362341	1996	Napton, L. K.	Cultural Resources Investigations of a Proposed Two-Mile Pipeline Along Sperry Avenue, Between Rogers Road and Ward Avenue in Patterson, Stanislaus County, California.	CSU Stanislaus; Institue for Archaeological Research	
ST-03622	NADB-R - 1363697	1999	Wachtel, David	CDF Project Review Report for Archaeological and Historical Resources; Project: Del Puerto Apparatus Room.	David Wachtel for CDF	
ST-03630	NADB-R - 1363545	1999	Nave, T.	Cultural Resources Survey for the Turlock Irrigation District Westside Transmission Line Project, Stanislaus and Merced Counties, California	Applied Earthworks, Inc.	
ST-04175	NADB-R - 1364048	2000	Flint, Sandra	Addendum Phase 1 Archaeological Survey for the Turlock Irrigation District Westside 115-kV Transmission Line Project.	Applied Earthworks, Fresno, California	50-000007, 50-000300

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
ST-04262	NADB-R - 1364176	2001	Davis-King, Shelly	Department of Transportation Negative Archaeological Survey Report, 10-STA-33, Ivy Road at State Highway 33, Stanislaus County.	Shelly Davis-King	
ST-05498	NADB-R - 1366180	2004	Leach-Palm, L., P. Mikkelsen, J. King, J. Hatch, and B. Larson	Cultural Resources Inventory of Caltrans District 10 Rural Conventional Highways; Volume I: Summary of Methods and Findings.	Far Western Anthropological Research Group, Inc.; for Caltrans District 10	50-000001, 50-000061, 50-000083, 50-000531, 50-000619, 50-001887, 50-001890, 50-001895, 50-001899
ST-05501	NADB-R - 1366196	2004	Rosenthal, J. S. and J. Meyer	Cultural Resources Inventory of Caltrans District 10 Rural Conventional Highways; Volume III: Geoarchaeological Study	Far Western Anthropological Research Group, Inc.; for Caltrans District 10	50-000001, 50-000061, 50-000083, 50-000531, 50-000532, 50-000619, 50-001887, 50-001890, 50-001895, 50-001899
ST-05502	NADB-R - 1365427	2004	Leach-Palm, L., J. King, J. Hatch, and B. Larson	Cultural Resources Inventory of Caltrans District 10 Rural Conventional Highways; Volume II G: Stanislaus County.	Far Western Anthropological Group, Inc. et al.; for Caltrans District 10	24-000568, 24-000569, 50-000001, 50-000061, 50-000083, 50-000531, 50-000532, 50-000619, 50-001887, 50-001890, 50-001895, 50-001899
ST-06133	NADB-R - 1366152	2006	Sikes, N., E. Holmes, and J. Cervantes	Cultural Resources Inventory for the Westley-Marshall Substation and Transmission Line Project, Stanislaus County, California	SWCA Environmental Consultants	50-001903, 50-001904
ST-06134	NADB-R - 1366153	2006	Davis-King, S. and J. Marvin	Historic Properties Survey Report for the M Street/State 33 Intersection Improvements Project, City of Patterson, Stanislaus County, California	Davis-King & Associates	50-001924
ST-06384	NADB-R - 1366616	2006	Sikes, N. E. and C. J. Arrington	Cultural Resources Inventory of Alternative Substations and Transmission Linesof the Westley-Marshall Project, Stanislaus County, California.	SWCA Environmental Consultants	50-001903, 50-001904
ST-06409	NADB-R - 1366637	2007	Davis-King, S.	California Department of Transpotration Historic Property Report for the Proposed Class I and II Bicycle/Pedestrian Path, City of Patterson, Stanislaus County CA. (Includes Archaeological Survey Report, Davis-King 2007 and Hist Res Prop Rep)	Davis-King and Associates with Foothill Resources, Ltd.	50-001964
ST-06443	NADB-R - 1366700	2007	Whatford, J. C.	An Historical Resources Survey Report for the Del Puerto Reconstruction Project, Del Puerto Forest Fire Station, Patterson, Stanislaus County, California.	California Department of Forestry and Fire Protection	50-001965

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
ST-07387	NADB-R - 1367738	2010	Wohlgemuth, E. and J. Costello	Patterson General Plan Update: Archaeological Resources Sensitivity	Far Western and Foothill Resources	50-000001, 50-000007, 50-000128, 50-000256, 50-000300, 50-000370, 50-000540, 50-001718, 50-001722, 50-001723, 50-001724, 50-001878, 50-001879, 50-001880, 50-001881, 50-001882, 50-001903, 50-001904, 50-001924, 50-001964, 50-001965
ST-07595	NADB-R - 1367959	2010	ICF International	Final: Cultural Resources Inventory Report for the Drought Relief Program, ARRA Groundwater Wells Project, San Joaquin, Stanislaus, Merced, and Fresno Counties, CA, ARRA #10-SCAO-021	ICF International	50-000501, 50-001904, 50-002094, 50-002095, 50-002096, 50-002097, 50-002099, 50-002100, 50-002101, 50-002102
ST-07779		2009	Bailey, J., Ph.D.	California's Central Valley Project: Historic Engineering Features to 1956: A Multiple Property Documentation Form, April 2009 (National Register of Historic Places Nomination).	Bureau of Reclamation	50-001904
ST-07779A		2009	Bailey, Jim,. Ph.D.	Reclamation, Managing Water in the West: California's Central Valley Project: Historic Engineering Features to 1956	Bureau of Reclamation	
ST-07779B		2018	Palmer, L.	Central Valley Project (CVP), National Register of Historic Places Determinations of Eligibility, Multiple Counties, California. Bureau of Reclamation, Mid-Pacific Region Division of Environmental Affairs, Cultural Resources Branch, Sacramento. Central Valley Project (CVP), National Register of Historic Places Determinations of Eligibility, Multiple Counties, California. Bureau of Reclamation, Mid-Pacific Region Division of Environmental Affairs, Cultural Resources Branch, Sacramento.	Bureau of Reclamation	
ST-07849		2010	Truman, E.	Field Office Report of Cultural Resources Ground Survey Findings, Negative Findings, 799104105P7, Micro Sprinklers	NRCS	
ST-08055		2013	Pierce, W.	Department of Water Resources Archaeological Survey Report Salado Creek Channel Maintenance Project, Stanislaus County, CA	Department of Water Resources	50-001903

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
ST-08056		2013	Pierce, W.	Department of Water Resources Archaeological Survey Report, Del Puerto Creek Sediment Removal Project, Stanislaus County, CA	Department of Water Resources	50-001903
ST-08057		2014	Pierce, W.	Office Memo to L. Hamamoto, DWR from W. Pierce, Supplement to the Archaeological Survey Report for the Salado Creek Channel Maintenance Project, Stanislaus County, CA	Department of Water Resources	50-001903
ST-08058		2014	Pierce, W.	Office Memo to S. Fredericks, DWR, from W. Pierce, Supplement to the Archaeological Survey Report for the Del Puerto Creek Sedimnt Removal Project, Stanislaus County, CA	Department of Water Resources	50-001903
ST-08250		2014	Supernowicz, D.	Submission Packet, FCC Form 620, for Proposed New Tower Project Baldwin Road, Patterson, Stanislaus County, CA Floragold/ Ensite # 21839 (281353) EBI Project Number: 61148115	EnviroBusiness, Inc. for Version Wireless Patterson	
ST-08250A		2015	Davis, J. L.	Addendum to FCC Form 620 Ensite #21839 (281353)/Floragold, Baldwin Road, Patterson, Stanislaus County, CA 95363, EBI Project #61140081417; CA SHPO FCC_2014_1218_033	EBI Consulting	
ST-08252		2011	Wills, C. and D. Cohen	Phase 1 Cultural Resouces Assessment West Patterson Business Park Expansion Project, City of Patterson, Stanislaus County, California.	Michael Brandman Associates	50-001903, 50-001904
ST-08257		2015	Saunders, J.	San Luis and Delta-Mendota Water Authority (SLDMWA) 2015 Delta-Mendota Canal (DMC) Expanded Temporary Reverse Flow Project, Stanislaus County, California (15-SCAO-184)	Bureau of Reclamation	50-001904
ST-08341		2014	Basin Research Associates	Historic Property Survey Report North Valley Regional Recycled Water Program (NVRRWP) Vicinity of Patterson, Stanislaus County	Basin Research Associates for U.S. Department of the Interior Bureau Reclamation and RMC Water and Environment	50-000001, 50-001904
ST-08638		2015	Jordan, N.	Letter Report: South County Corridor Feaslibility Study - Cultural Resources Constraints Analysis	LSA	

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
ST-08794		2015	Leigh, Anastasia T., Regional Environmental Officer	Letter Report Re: National Historic Preservation Act (NHPA) Section 106 Consultation for the City of Patterson Sewer Main under the Delta-Mendota Canal (DMC), Stanislaus County, California (15-SCAO-099).	USDI Bureau of Reclamation, letter report submitted to SHPO	50-001904

All resources in search area

Resource List

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-50-000001	CA-STA-000350H	Other - Southern Pacific Railroad San Joaquin Valley Mainline; Other - Stockton & Visalia Railroad; Other - Stockton & Tulare Railroad; Other - Southern Pacific Railroad West Side Line; Other - Southern Pacific Railroad, Tracy Branch; Other - San Joaquin Valley Railroad; Resource Name - Southern Pacific Railroad line	Structure	Historic	AH07; HP39	1993 (J. Costello and J. Marvin, Foothill Resources, Ltd.); 1999 (C. M. Francis, Francis Heritage Services); 2003 (B. Larson and E. Johnson, JRP Historical Consulting Services); 2006 (K. Haley, Jones & Stokes); 2007 (Carey & Co., Carey & Co.); 2008 (N. Hosseinion, Dokken Engineering); 2009 (P. Daly, Cultural Research Associates); 2014 (Vallaire and Rose, LSA Associates, Inc.)	AP-05501, CA-05498, ME-03995, SJ-03995, SJ-06625, SJ-06878, SJ-07527, ST-03382, ST-03390, ST-03393, ST-03639, ST-03995, ST-05498, ST-05501, ST-05502, ST-06446, ST-06477, ST-06625, ST-06878, ST-06977, ST-07244, ST-07387, ST-07527, ST-07586, ST-08341, TO-06878, TO-07527
P-50-001903		Resource Name - California Aqueduct	Structure	Historic	HP20	2004 (Richard Deis, EDAW, Inc.); 2006 (Cindy J. Arrington, SWCA Environmental Consultants); 2007 (Carey & Co.); 2011 (P. Ambacher, AECOM)	ST-05482, ST-06133, ST-06384, ST-07387, ST-07527, ST-08055, ST-08056, ST-08057, ST-08058, ST-08252, ST-08592
P-50-001904		Resource Name - Delta-Mendota Canal	Structure	Historic	HP20	2003 (B. Larson, E. Johnson, JRP historical Consulting Services); 2004 (R. Deis, EDAW, Inc.); 2006 (Cindy J. Arrington, SWCA Environmental Consultants); 2006 (Cindy J. Arrington, SWCA Environmental Consultants); 2006 (James Bailey, Historian, US Bureau of Reclamation); 2007 (Carey & Co., Carey & Co.); 2010 (P. Ambacher & D. Lemon, ICF International); 2016 (Asselin, K., Applied EarthWorks, Inc.)	SJ-07779, ST-05482, ST-06133, ST-06384, ST-07260, ST-07387, ST-07527, ST-07595, ST-07779, ST-07826, ST-07967, ST-07968, ST-08251, ST-08252, ST-08255, ST-08257, ST-08265, ST-08341, ST-08594, ST-08794
P-50-001924		Resource Name - Patterson Irrigation District North Lateral No. 4	Structure	Historic	HP20	2006 (Judith Marvin, Foothill Resources, Ltd.)	ST-06134, ST-07387

Resource List

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-50-001965		Resource Name - Del Puerto Forest Fire Station; Other -	Building, Structure	Historic	HP09	2007 (J. Charles "Chuck" Whatford, CDF Associate State Archaeologist)	ST-06443, ST-07387
P-50-002094		Resource Name - ARRA-50-1H	Structure	Historic	AH06	2010 (P. Ambacher & S. Ashkar, ICF International)	ST-07595
P-50-002179		Resource Name - Patterson Lift Irrigation System; Resource Name - Lateral G; Resource Name - Segment 2-South; Resource Name - Lateral H; Other - Segment 3-South; Other - Lateral J; Other - Segment 4-South	Structure	Historic	HP20	2014 (R. Baloian, Applied EarthWorks, Inc.)	ST-08169, ST-08639
P-50-002208		Resource Name - Patterson Irrigation District Lateral M	Structure	Historic	HP20	2016 (Brookshear & Skow, JRP Historical Consulting, LLC)	ST-08639

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E.2 - Report of Historic Archival Research and Field Inspection of West Patterson Master Development Plan Holman and Associates (June 2002)

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Holman + Associates
June, 2002

REPORT OF HISTORIC ARCHIVAL RESEARCH AND A FIELD INSPECTION OF THE WEST PATTERSON MASTER DEVELOPMENT PLAN AND PATTERSON GARDENS PROJECTS, PATTERSON, STANISLAUS COUNTY, CALIFORNIA

by

RICHARD AMBRO, PhD
SCOTT CRULL, PhD
MATTHEW R. CLARK, M.A.

June 2002

Report Prepared For

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INTRODUCTION

During the month of June, 2002, Holman & Associates Archaeological Consultants completed historical archival research and a field inspection of the West Patterson Master Development Plan and Patterson Gardens Project Areas located in Patterson, Stanislaus County. The goal of this research was to identify and provide a preliminary evaluation of potential cultural resources (prehistoric archaeological sites and historic features, structures, or archaeological sites). A total of 11 possible historic cultural resource loci were noted by archival research or the field inspection that warrant additional research to evaluate the resources for significance under CEQA criteria, which may lead to efforts to mitigate adverse project impacts. This report contains two sections: historical archival research and results of the field reconnaissance. Dr. Scott Crull conducted archival research in advance of the field inspection and also inspected the Project Area for historic landscape features and structures noted during archival research. Results of Crull's preliminary research were turned over to Dr. Richard Ambro for field verification and recording of more detailed descriptions of the resources. Dr. Ambro also surveyed the entire Project Area for evidence of prehistoric cultural resources.

The second section is Dr. Ambro's summary of the field inspection, with brief descriptions and mapped locations of potential historic resource areas, either identified by archival research and located by field inspection, or identified solely by the field inspection. All the resource areas noted by Dr. Ambro (see maps 1 and 2) were located inside the Project Area based on maps provided by Turnstone Consulting.

Scope of Services

In a letter of authorization from Turnstone Consulting dated June 10, 2002, Ms. Barbara Sahm summarized the proposal letter from Holman & Associates dated May 24, 2002 to include the following scope:

> The scope of work will include identification of any potentially historic resources, review of existing documentation, an archaeological field survey, and identification of appropriate mitigation measures if there is a potential for significant environmental impacts.

Following the archival and field inspection sections is a summary of the historic cultural resources noted during either the archival research or field inspection, with recommendations for further research as warranted to meet CEQA guidelines.

A Summary of Historical Archival Research for the West Patterson Master Development Plan and Patterson Gardens Projects, by Scott Crull, Ph.D.

Survey Area

This 900 acre site combined two project areas, in Township 5S/Range 7E no the Patterson (1978) 7.5 minute USGS quadrangle. The Patterson Gardens Project Site covers the northern half of Section #36 and the northeast portion of the southeast portion of Section #36. It is located within the borders of Sperry Avenue (north); Ward Avenue (east); and fields to the south and west. There is also a regional park just off the southeast boundary. The Keystone Pacific Business Park Site is within the West Patterson Master Development Plan Area, located within all of Section 26, the northern half of Section 35, to the California Aqueduct, and the southern third of the southeast portion of Section 23.

Previous Surveys

A records search was conducted at the Central California Information Center of the California Historical Resources Information System (CHRIS) at CSU Stanislaus. There have been several surveys conducted on or adjacent to the Project Areas; all previous surveys yielded negative results for cultural resources. Moratto, et al. (1990, 1995) completed a swath through Sections #26 and #35, along I-5. Napton (1996) completed a linear survey of Sperry Avenue, from Ward Avenue to just past Baldwin Road. Wachtel (1999) surveyed a structure next to Lateral 6 South, just south of Sperry Avenue. Nave (1999) completed a linear survey of Baldwin Road, from Daniel Road to the northwest tip of Section 1.

Survey and Research Questions

1. What historic structures are located within the Project Area?
2. What history is available for the construction of Lateral 6 South?
3. What was the natural course of Salado Creek before being channeled?
4. What is the history of the Patterson area?
5. Are there any visible signs of the 1855-era road?
6. What is the history for the Patterson and Western Railroad?
7. What evidence is there for parcel ownership within the Project Area?

Methods

The Project Area was generally surveyed and photographed to detect any possible historical resources. Research was conducted at the Stanislaus County Library - Patterson Branch; Patterson Historical Society Museum; Central California Information Center, CSU Stanislaus; and through online and in-house resources.

Prehistoric Patterson Area

The area comprising the greater Patterson area was home to the Northern Valley Yokuts. The word *Yokut* means "person" or "people" (Swanton 1969:523). While little is known ethnographically, Yokuts tribal territory extended from the mid-San Joaquin Delta to the Mendota Hills and was bordered by the interior coastal range and the lower foothills. Their main water source was the lower San Joaquin River and its eastern tributaries. This area consisted of wetlands, which included tule marshes and marsh grasslands (Wallace 1978:462).

The Northern Valley Yokuts lived along the San Joaquin River and its tributaries. Artifactual evidence, from four sites in the northernmost part of the tribal area (but not in the greater Patterson area), are attributed to the Late Horizon Phase II. This indicated an occupation after AD 1500. There is also a mixture of Late Horizon Phase I (pre-AD 1500) within some of the assemblages. This influence may be Miwok in origin (Bennyhoff 1961:83; Wallace 1978:463).

Northern Valley Yokuts Settlements

There were about 18,000 Yokuts total in 1770. This number is reduced to 600 by the 1910 census. In the 1930 census more than 1100 are mentioned (Kroeber 1932). There are no specific detailed records after 1930.

There is no indication that the Northern Valley Yokuts lived in or around the immediate Patterson area. The closest approximate location was in the Merced area, to the southeast. The records are sketchy at best and only available as notations in records from the Spanish-Mexican period. Most of the settlements–some actually hamlets of two or three houses, while others numbered 200-250+ (Cook 1955:51 & 1960:253-254)–occupied the tops of small mounds. These mounds were close to a major waterway and afforded protection from seasonal flooding (Schenck 1926:132; Schenck and Dawson 1929:308; Cook 1960:242, 259, 285).

Historical Contact

Initial European contact appears to have been made as early as 1800, when the Spanish began to explore the interior valleys. This, predictably, led to the destruction of Yokuts culture and progressive reduction of their population (Wallace 1978:468).

In the beginning, the Northern Valley Yokuts greeted the Spanish missionaries and soldiers openly. This changed when they were removed to the missions. This radical change to their home base only aided in their demise. When the Mexican Period began in 1822, life did not improve for those that remained. However, the Indians did manage to hold off Mexican settlements on their lands by hostile acts–at least until the 1840s. Traditionally, the Yokuts were non-aggressive–the change took effect after European contact. The death toll mounted after contact with European diseases, mainly malaria (Cook 1955a:303-308). Most diseases were transmitted by Columbia River traders and trappers to the area (Wallace 1978:469). Most likely, these Columbia River fur trappers worked for either the Hudson's Bay Company or the Northwestern Fur Company (Crull 1997).

The total Yokuts destruction takes place after the American Gold Rush of 1849. While Yokuts territory was not a gold-producing area. the miners crossed it to reach the gold fields. In the name of westward expansion, the Yokuts were initially just driven off their lands. If they resisted, they were killed. The military chose not to intervene. After 1850, the Northern Valley Yokuts received some government land, but far from their native territory (Leonard 1928; Wallace 1978:469).

Patterson Area History

Nearly fifty years before Patterson was established in California's Central Valley, the area was an old Spanish Land Grant known as Rancho Del Puerto. On January 30, 1844, the Mexican California Governor, Manuel Micheltoreno, made the rancho land grant in the names of Mariano and Pedro Hernandez. The Hernandez Land Grant extended from present-day Highway 33 to the San Joaquin River (west to east) and between Del Puerto Creek and Marshall Road (north to south). The rancho area lies approximately one mile east of the Project Area.

After the area became part of the United States, Samuel Reed and Ruben Wade claimed the land on January 7, 1855. President Abraham Lincoln issued a patent to the land on August 15, 1864, giving Reed and Wade 13,340 acres. That land patent is on display at the Patterson Historical Society Museum.

On June 18, 1866, Reed and Wade sold their grant to J. O. Eldredge for $5,000. Eldredge kept the land for two months before to selling it to John D. Patterson for $5,400. Patterson had come to California in 1854, by sailing around Cape Horn. He brought Spanish Merino sheep, longhorn cattle, and racing horses to the Central Valley. He was one of the first men to serve on the Stanislaus County Election Board (Loewen 2002:16).

Patterson established the Patterson Ranch Company and bought an additional 5,122 acres. This new acreage was west of the Ranch Company headquarters, extending to the southwest corner of Section 30, or at the corner of Sperry and Ward Avenues, just northeast of the Patterson Gardens Project Area. After his death on March 7, 1902, ownership transferred to his brothers, Thomas and William Patterson. Thomas Patterson had moved to California from New York in 1888. He had been a Fresno banker prior to inheriting John D. Patterson's estate. Thomas and William sold their inheritance to the Ranch Company on May 16, 1908, for $540,000 in gold coin. There is no mention of what happened to William Patterson, and Thomas begins the development of the Patterson Colony.

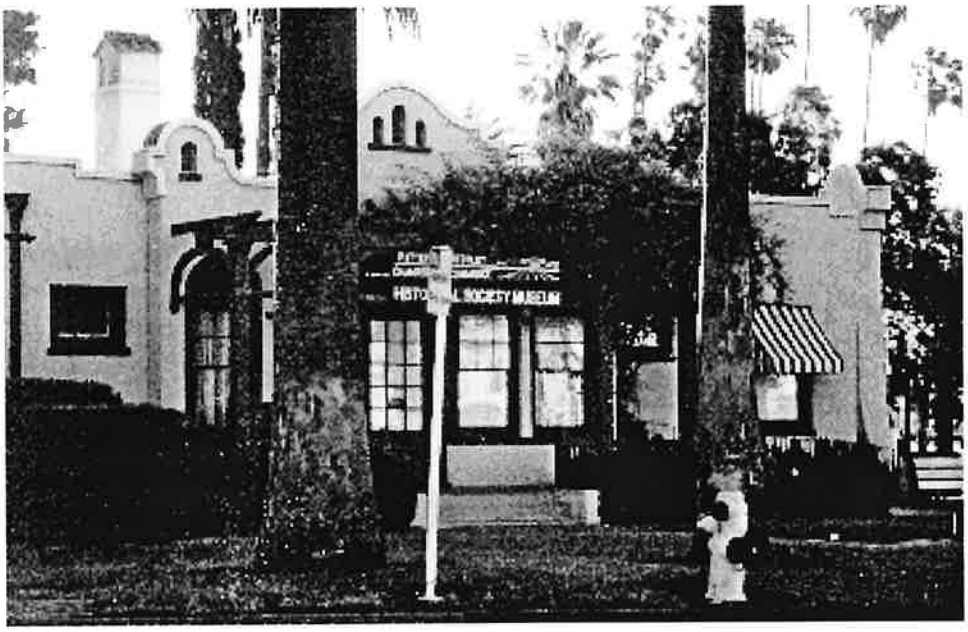
The town was plotted by subdividing the land into ranches. Thomas wanted to make the town different from all other western towns. He decided to pattern the Colony after Washington, D. C. and Paris. This unique approach used a series of circles with streets radiating outward. The major streets were lined with palm, eucalyptus and sycamore trees. Only the palm trees survive.

Patterson Colony was officially recorded with the Stanislaus County Recorder on December 13, 1909. It sprang to life as a tent city, in early 1910, when the first settlers arrived from Sweden. In 1914, its founder Thomas Patterson died. Thomas' uncle–another John D. Patterson–moved to

the area from Toronto, Canada. He became the Colony's manager, continuing Thomas' vision. Thomas' son, John D. "Jack" Patterson still owned much of the land in 1980.

Early Buildings and Roads

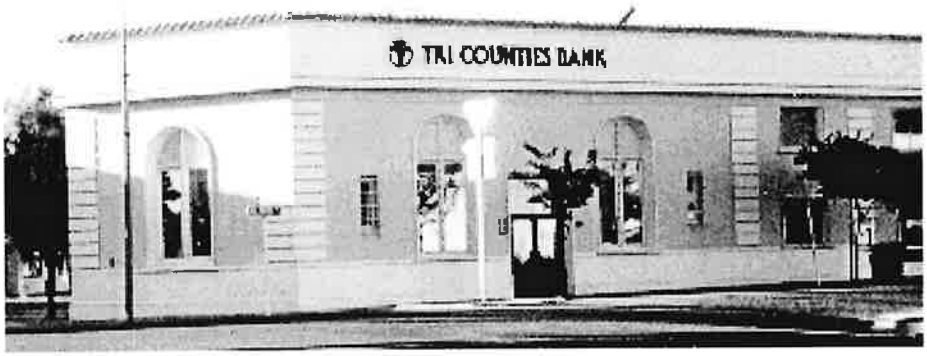
The first building built in Patterson Colony was the Patterson Ranch Company headquarters, which was also used as the Colony's first post office. Later, it was used by Thomas Patterson to sell his land to newly arriving settlers. It was initially built to be the central point of the town and resides on a circular piece of land, from where are the original streets radiate outward. It was constructed between late 1909 and early 1910. Today it is called the "Center Building" and houses the Patterson Historical Society Museum and the Patterson-Westley Chamber of Commerce. The building is also listed as a California State Historical Landmark. The view below is pointed towards the business part of town. Actually, based on the building plans, it was to be the back entrance. The other entrance is a copy of this side, but was meant to be the front of the building, because it faced Thomas Patterson's Colony acreage.



The Patterson Mercantile, below, was also built in 1910. Today, it is the Century 21 Real Estate office.

On the eastern side of the central town circle are two small parks. These were initially the beginning of the ranchette lands. Thomas's vision was to extend the business section of town westward from his central building and for the ranchettes to extend to the east. It is unclear how or if this vision was ever formalized, due to how the town is laid out today. However, the Central Building does have front doors facing both east and west. Both parks appear to be only vestiges of their original design. South Park is designated as the "Veteran's Memorial Park."

The Bank of Patterson building was built in 1911. It is the Tri Counties Bank today.



The Patterson Water Company was formed on February 9, 1911. Thomas Patterson held most, if not all, of the water rights, since he owned the land. In order to entice settlers to the Colony, he gave one share of the water company for every acre of land purchased. Initially, the only crop that would grow was barley. Construction of the irrigation system also began in 1911. Over the course of the next 18 years, hand-dug canals eventually brought water from the San Joaquin River. The initial canals ended at present-day Highway 33, except for the water used by the Colony. It is unknown when the western side of Patterson received irrigation, or when the various lateral channels were constructed.

Another of the earliest buildings constructed was the Hotel Del Puerto. Unfortunately, it was destroyed in the late 1950s. The site is listed as a California State Historical Landmark.

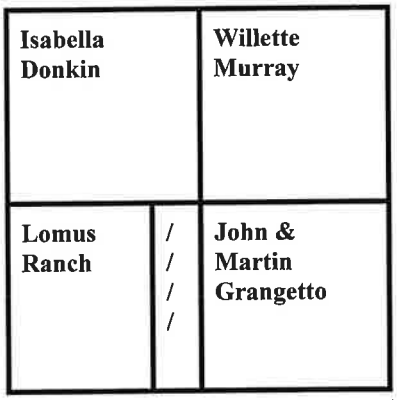
The 1930s-era Carnegie-designed library is now an office building.

Most of the early streets in the Colony were named after either trees and bushes, or numbered. Only on the outskirts of the Colony were men's names connected to various routes. One of these original streets was "Sperry Avenue." Sperry was the superintendent of the old Rancho Del Puerto. Sperry Avenue connects Highway 33 with Interstate 5 and becomes Del Puerto Canyon Road to the west of the interstate.

Parcel Ownership in the Project Area

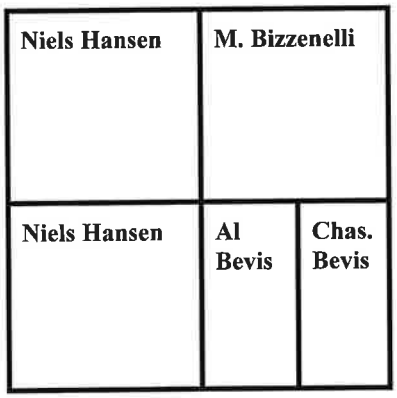
Based on the 1954 parcel ownership map, located at the Patterson Historical Society Museum, the following section parcels are recorded.

Section 23 was solely owned by the Rogers family.
Section 26 was owned as indicated below (north at the top):



Note: the area marked by slashes indicates where the Patterson Airport is located. This is a private airport for crop dusters and some private pilots. The service has been in business since the 1930s. As of 1954, that parcel was owned by John Delphia.

Section 35 was owned as indicated below (north at the top):



Section 36 was solely owned by Grace A. Covell.

Modern Patterson

Patterson has retained its small, rural atmosphere, with a population just under 10,000. It is surrounded by lush California agricultural land. The major economic base includes apricots, almonds, walnuts, dry beans, tomatoes, broccoli, spinach, peas, Bing cherries and melons. Patterson has earned the title of the "Apricot Capital of the World." Apricots have nearly a 4000 year history of cultivation since they were first discovered in China. They were brought to the New World by the Spanish and the first orchards are recorded in 1792. Today, much of the agricultural land, west of town, is being destroyed for new home and shopping area construction.

RESULTS OF ARCHAEOLOGICAL SURFACE RECONNAISSANCE OF THE WEST PATTERSON INDUSTRIAL PARK MASTER PLAN PROJECT, PATTERSON, STANISLAUS COUNTY, CALIFORNIA by Richard Ambro, Ph.D.

Introduction

Between June 14 and 18, Dr. Richard Ambro and two archaeological technicians, Michael Thompson and Josie Salas, conducted archaeological surface reconnaissance of the proposed West Patterson Industrial Park Master Plan. A records search for previously identified prehistoric or historical properties revealed none had been previously identified within Project boundaries (Greathouse 2002). However, several areas of potential resources were listed.

Surface reconnaissance was conducted within designated parcels, using transects averaging 100 feet (30 m) apart. The surface was carefully examined for evidence of prehistoric occupation or use (dark soils, fire effected rock [FCR], lithics, ground stone, bones etc., or historic period resources (trash scatters or dumps, foundations, features such as roads, walls, extant structures, etc.). All parcels were accessible to the surveyors although surface visibility varied according to vegetation and tilling. Plowed fields afforded 100 percent visibility, orchards varied from 50 to 90 percent depending on vegetation cover below the trees, unharvested grain crops varied from as low as 0-5 percent to 40 percent, while harvested grain fields generally afforded 20-40 percent visibility. Row crops where present afforded 50 to nearly 100 percent visibility. Although there was some confusion as to whether the parcels were in or out of the Project boundaries, the parcels covered by the Patterson Airport, CALTRANS, and California Department of Forestry were surveyed as well. These compounds tended to be heavily modified and surfaced with either gravel or pavement. Where present, extant buildings were briefly examined to look for structures older than 50 years, and any such were briefly described. Identified or potential prehistoric and historic resources encountered in the reconnaissance are briefly described and commented on below.

Prehistoric Resources

No prehistoric resources were identified during surface reconnaissance. While historic maps prior to 1909 indicate that Salado Creek did not flow through the Project Area, the possibility that past meanders of the creek actually flowed through the Project Area can not be precluded (Carlton 1906, Government Land Office 1855-70). Salado Creek was rerouted and channelized through the Project Area before 1912 (Niven 1912, United States Geologic Survey 1916). The US Geologic Survey Map of 1916 also indicates that Black Gulch once ran from the hills to the west northeasterly through Section 26 of the Project Area. Today, this channel has either been rerouted or buried in a pipe, and only slightly more abundant surface gravels visible today in the area reflect its former course.

Scatters of whole, thick freshwater "clam" shells along the Lateral 6 canal included many still fresh appearing and articulated. These scatters are restricted to the edges and berms along the canal and result from periodic dredging of the irrigation canal. These scatters do not represent evidence of prehistoric occupation.

Scatters of hard baked red clay soils measuring up to 25 feet wide or more were recognized in several groves of fruit or nut trees, and cultivated fields that were formerly groves of such trees. These scatters at times included fragments of charcoal and at times fire effected rocks or pebbles. However, they were not accompanied by dark, ashy soils, chert or obsidian lithic debitage (flakes or waste) or artifacts, ground stone, calcined bone or shell. These baked clay scatters reflect the common modern practice of agricultural burning of tree trimmings or truck removal. Several such recent burned piles and at least one yet to be burned were also observed at various locations in the Project Area. These recently burned piles left heavily fired red clay soils, charcoal, and occasional fire effected rocks. None of these areas represent evidence of prehistoric occupation. However, negative findings during surface reconnaissance do not preclude the possibility that buried prehistoric resources may be present within the Project Area.

Historic Period Resources

Ranches/Residential

Three ranch/residential complexes merit further attention and research. These are all over 50 years old and exhibit surviving structures and/or the potential for buried archaeological resources such as trash pits, privies, etc. Each is briefly discussed below with commentary.

#1 This is a large historic ranch complex located on the at 2300 Sperry Avenue on the south side, nearly in the middle of the northwest quarter of Section 35. Today, this is the property of the Bizzanelli family and the residence of Mr. and Mrs. David Bizzanelli.

The complex measures approximately 400' by 400' (120 by 120 m) and on the east side stands on a pad of earth approximately 2' (0.6 m) above the grade of the surrounding fields. The compound is heavily graveled in many areas. A modern cement brick residence is located in the northwest quarter of the compound and another older residence of wood located in the northeast quarter. This structure is L-shaped and is sided in vertical board and batten painted Hunter's Green, with a wood shingle roof. A tall, weathered wooden barn is located on the south side of the compound, which sits on a poured concrete foundation. It was not possible to enter the barn, but exterior boards exhibited only round nails. Other structures include a small corrugated metal-sided and -roofed structure whose interior wooden supports exhibit round nails, and what may be square nail holes, suggestive of an older structure or reuse from another source. An old redwood possible wagon shed, several sheds, and a collapsed structure are also present. In addition the compound includes four modern metal "silos" with conical roofs apparently converted to other uses. Various kinds of modern and older farm equipment lies scattered about.

Of particular interest is a possible historic trash scatter in the southwest corner of the compound where turn-of-the nineteenth to twentieth century electrical porcelain, and sparse glass and ceramics are present. A line or cluster of fig trees nearby suggests the possible presence of buried privy holes and/trash pits.

This ranch was spotted at this location on the USGS map of 1916 when the property was owned by J.F. Donkin (1912) and later E. Donkin (1924) (Hoskins 1924; Niven 1912; Sloan 1906). The access road and the ranch complex itself was located on what then was the eastern edge of the parcel, and may have been the residence of the Donkin family. The age of construction is uncertain, although it certainly predated the 1906 map. As no square nails were observed anywhere in the surviving buildings and ground surface, construction post-dated 1890. Likely date of construction would be post-1890 to pre-1906 or circa 1900. However, a detailed examination, backed by archival research and oral history will be required to identify all those structures older than 49 years and therefore potentially historic.

#2 This is a large ranch complex in the southwest corner of the northeast Quarter of Section 36, at the southern edge of the southeast corner of the Project Area. This large compound measures approximately 400' (120 m) north/south by 600' (180 m) east/west and is reached by use of an old, decayed access road off South Ward Avenue to the east. The channel of Lateral 6S runs along the southern border of the area. The land is now the apparent property of "Patterson Gardens" although several offices are maintained in a modern concrete block building.

The main compound measures approximately 400' by 400' (120 by 120 m) in area, where most of the structures and features are located. A recently abandoned "modern" (possibly 1950s-1960s) ranch style house is located in the southeast corner of the compound and it has several large trees around it. There is a large redwood barn located in the northeast portion of the compound, which was constructed entirely with round nails. The barn is very weathered although it bears remains of "barn red" paint on the exterior. The barn was apparently upgraded circa 1960 as it rests on and is surrounded by a poured concrete slab. This slab was inscribed at the southwest corner of the barm exterior with the words "WARD CAMPBELL 1960". Several modern-appearing sheds are also present.

A large intensely burned area approximately 25' by 25' (7.5 by 7.5 m) is located in the southwest corner of the compound proper, where a sparse scatter of historic ceramic and glass is present. The native soils have been baked hard and rocks present resemble prehistoric fire-cracked rock (FCR). Of interest is the presence of a rectangular hole approximately 3' by 2' in this hard baked fired soil. This may suggest the presence of a privy or other feature. This burned area may represent the location of prunings or fallen trees, but just as likely represents the location of an older structure such as a residence destroyed or demolished in the past.

Farther west there is an assortment of farm equipment, other materials, and both fuel tanks and now-empty tank supports. At least four buried fuel tanks are also present as indicated by numbered metal lids. In the area is a sparse scatter of white china, and glass including at least one fragment of amethyst glass (indicative of manufacture prior to 1915), several wrought iron objects, a fragment of a black-glazed redware doorknob, charcoal, etc. This may represent the location of former trash dumps.

A structure and the access road were spotted on the USGS map of 1916, with the structure probably a now removed residence. Both the residence and the barn were spotted on the map of

1953 and 1971. The existing barn appears to be older than 49 years. Apparently, the historic residence was removed subsequent to 1971 and replaced with the present modern ranch style house. Detailed examination of all structures present backed by archival and oral history would be required to determine the age of the barn and other identified potential resources. In 1906, all of section 36 was the property of R. B. Morton, while maps of 1912 and 1924 reveal that the property was then held by Blanch B. Morton (Carlton 1906; Niven 1912; Hoskins 1924). It is presumed that the compound was the residence of the Morton family at that time, although this would need to be confirmed and documented by archival research.

#3 This is the location of an older, circa 1916 or older ranch complex now occupied by a modern agricultural facility at 15019 Baldwin Road. The location falls in the southwest quarter of the northwest quarter of Section 26. The facility formerly belonged to the Turlock Fruit Company as designated on the mailbox. The compound today is accessed by a driveway from Baldwin Road, heavily graveled, and measures approximately 400' by 400' (120 by 120 m). It consists of a large modern open metal roofed box or hay storage structure, two small utility sheds (one of which is wood), a modern and presumably occupied trailer, piles of large fruit picking crates and piles of hay bales. Several trees are present as well. It retains the appearance of a fruit collecting and transfer facility, but today, it is used to store bales of hay.

Two structures were spotted north and south of the western end of the access road at this location on the USGS map of 1916. The map of 1953 shows that the southern structure had disappeared and that two additional structures were present north and west of this road. By 1971, the USGS map reveals that the western structure had been replaced by the long storage structure now present. About 1906, the property was held by John Outhet, and later maps reveal that he continued to hold it at least until 1924 (Carlton 1906; Niven 1912; Hoskins 1924). Buried remnants of the earlier twentieth century and possibly older ranch occupation may well lie below the ground and graveled surface of the compound.

Possible Dumps

Two locations were identified where surface scatters of historic artifacts suggest the location of possible trash dumps. These are:

#4 This location lies on the eastern edge of the northwest quarter of Section 36. It consists of a sparse scatter of historic trash approximately 150 feet long on and along the berm on the west bank of Salado Creek. Included are fragments of white china and glass including at least one fragment of amethyst glass. The scatter may extend to the east bank as suggested by a single fragment of white china observed there.

#5 This is an area of burned ashy soil and historic and modern trash located in Section 36. The scatter is located on the west bank of Salado Creek behind the residential compound approximately 200 feet south of 1524 Sperry Road. Although that residential compound is not in the Project Area, the location of the possible dump does fall within the Project boundaries. Trash observed covered an area that measures at least 25'by X 25" (7.5 by 7.5 m) and included rusted metal, white china, one

painted Japanese ceramic fragment (circa 1900-1920), broken glass including amethyst glass, and much modern trash and debris. This scatter may represent an early twentieth century dump.

#6 This is a concentration of heavily burned earth, charcoal, burned trash and house debris located in Section 36. The deposit is located on the west bank of Salado Creek at the southern boundary of the Project Area. It lies at the turn of the road running from the ranch to the east (#3) and the road along the west side of the creek to Sperry Road. The area measures approximately 50' by 50' (15 by 15 m) and includes rusted metal, charcoal, melted glass, burned tiles, sanitary porcelain, etc. This may well represent relatively recent trash or the remains of the residence at Location #3 which were burned or dumped here.

Other Potential Resources

#7 Lateral 6S

E. Greathouse at CHRIS' Central California Information Center raised the issue that the presence of the canal labeled Lateral 6 South on the USGS map of 1953 might represent a previously unrecorded historical resource (Greathouse 2002:2). The canal runs diagonally southeast from the northwest corner of Section 26 through the northwest quarter of Section 35 and turns eastward to run along the southern edge of the Project Area to Ward Avenue. It measures approximately 15 feet wide at the edge, has a "V" shaped cross section and is edged by an earthen berm on both sides. In is unlined for most of its length, with the exception of the portion running through the north half of Section 26, where it is lined with poured and smoothed (and now crumpling) concrete slabs.

The lateral is not spotted on the USGS map of 1916, but is spotted in its present configuration on the Maps of 1953 and 1971, thereby qualifying as a potential resource by virtue of age.

#8 Salado Creek

Greathouse (2002:2) observed that the course of modern Salado Creek runs through the Project Area in the middle of the north half of Section 36. Today it carries swiftly running water in a relatively straight channel some 20-25 feet wide and at least 10 feet deep. In is unlined, and has vertical to sloping sides with the watercourse exhibiting only slight meandering at its bottom. The last 200 feet of the watercourse at the north end of Section 36 has rip-rap of broken, relocated cement slabs dumped haphazardly.

Although Greathouse correctly states that Salado Creek is a natural watercourse, it appears that this section may well represent a man-made realignment of the watercourse northward in historic times. The GLO map of 1855-1870 does not indicate that the creek flowed northward through Section 36, but instead then flowed northeasterly through Section 1 half a mile to the south (Government Land Office 1855-1870). The same condition was recorded on Carlton's map of 1906. However, by 1912, Niven's map shows the modern alignment through the Project Area northward to the northern portion of Section 25, where it turns northeast toward the northern edge of Patterson (Niven 1912). Obviously, some time between 1906 and 1912, a major effort was made

to change the course of the creek, channelize it, and probably to make it available for irrigation and flood control.

#9 The Patterson and Western Railroad (1915-1920)

Crull reports that circa 1915-1920, a private railroad spur ran along the northern edge of Section 26 from the San Pedro and Tulare Railroad toward the lower end of Del Puerto Canyon Road to the west (Crull 2002:16, 17; Walker 1997). This was a private railroad built on narrow gauge (36") tracks which connected Patterson with the now-defunct town of Jones. Crull notes that the tracks are gone but the route fell between Sections 23 and 26 of the Project Area.

A slight berm of soil is observable on the northern edge of Section 26 in the Project Area that today serves as a ranch dirt road. The berm is approximately 25 feet wide and is gently raised between ¾ and 1½ feet or more above the adjacent fields. Slightly more gravel appears on the surface. No evidence of tracks or railroad ties were observed. The location of this track is not spotted on the USGS map of 1916, suggesting that preparation of the map predated construction of the railroad.

#10 1855-1870s Road

Greathouse observes that the GLO Plat of 1855-1870 of the Project Area region indicates that a road ran northward through Section 36 just west of the centerline (Greathouse 2002:1; Government Land Office 1855-1870). Despite careful searching, no evidence of this road was identified in the surface reconnaissance. It is possible that it was obliterated when Salado Creek was channelized through the area, fields were leveled and tilled nearby, or is represented by greatly changed ranch roads along the east and west banks of Salado Creek.

#11 The Patterson Airport

This small airport is at least 50 years old as indicated by its presence on the USGS map of 1953. It is in the Project Area, but no changes are proposed as part of the project. The airport merits further attention if any changes are ever proposed, in light of its buildings which may date to the 1940s or earlier (Crull 2002:15).

SUMMARY AND RECOMMENDATIONS

The combined archival research and field inspection of the West Patterson Project Area revealed 11 cultural resources that have potential for being found significant under current CEQA guidelines. In the following discussion, it is assumed that all these recorded resource areas will be impacted by the proposed project, and that those found to be potentially eligible for inclusion on the California Register of Historic Resources will require some form of mitigation of impacts.

To date the mapped resource areas (see Map 1) have been given brief descriptions and their locations mapped. Each resource will require some form of additional research evaluation for significance under CEQA guidelines. In many cases, the research suggested may be all that is required to both evaluate the resource and to mitigate possible impacts–that is, recording is all some of these resources may merit. The following discussion of resources 1 through 11 will note where further research or field work may be needed to evaluate resources for potential eligibility for inclusion on the California Register.

Prehistoric sites

No prehistoric sites or artifacts were identified by the records search, archival research, or surface survey. However, these negative findings do not preclude the possibility that buried prehistoric resources are present in the Project Area.

1. The historic ranch complex

This ranch complex may qualify as significant based upon its age or association with people and/or events of historical importance, and may contain buried archaeological deposits whose contents could contribute to our understanding of the history of habitation and farming at this location. Specific buildings inside the complex may also have architectural significance.

Recommendation:

This location should be the subject of expanded archival research and oral interviews to better document the age, periods of use, owners and residents who were associated with the resource. An architectural historian should inspect the structures to determine if any qualify as significant under CEQA guidelines on the basis of their state of preservation, unique design qualities, or as examples of historically important structures typical of this portion of California. Appropriate DPR site forms should be prepared for the complex and should be submitted to the regional office of the CHRIS.

Discussion:

This ranch complex could prove to be significant based upon potential historical archaeological deposits associated with it, and based upon the architectural significance of the buildings themselves. Mitigation may require a program of presence/absence testing for buried archaeological resources. If such deposits are discovered, an archaeological salvage program would be required to remove archaeological deposits for analysis and reporting to complete impacts mitigation for these resources.

If any of the structures are found to be significant, mitigation of impacts may take one of the following forms:

- preservation in place of significant structures, and/or rehabilitation for re-use appropriate for the proposed development.

- removal of significant structures to locations outside of the project area, and/or renovation for re-use.

- complete photo documentation and architectural recording for archival purposes, salvage of elements of the structures for re-use elsewhere or for display at local historical venues prior to destruction.

2. Historic Ranch and **3. Historic Ranch location**

See recommendations and discussion for Ranch location #1.

4. Possible dump

This resource area may contain historical archaeological materials which could aid in understanding historic economic uses of the area and its former inhabitants. To date the resource has only been noted; no attempt was made in the field to determine if there is anything more to the resource than what was seen on the surface.

Recommendation:

At a minimum this site location should be recorded on appropriate DPR forms. At the time of recording, probing with a steel rod or hand augering should be done to accurately map the areal extent of the resource and its possible depth below the surface.

Discussion:

Depending on future impacts, recording this resource may be all that is needed at this location. In the event that the resource area will be impacted by development plans, a program of evaluation of the resource through hand excavation will be needed to evaluate the research potential of the deposit. If it is demonstrated that the deposit is capable of yielding significant historical information, a program of archaeological salvage of a portion of the resource should be completed along with analysis of the materials and information for preparation of a report of findings to complete mitigation of impacts.

5. Possible Dump and **6. Possible Dump**

See recommendations and discussion listed above for #4.

7. Lateral 6S:

Recommendation:

This resource is a landscape feature, and should be recorded as such on appropriate DPR forms.

Discussion:

Historical archival research done for this report does not suggest that this resource is eligible for the California Register of Historic Resources. Recording of this resource and photodocumentation should serve to mitigate impacts to it which may be caused by the proposed development.

8. Arroyo Salado and **9. Patterson and Western Railroad**

These are additional landscape features. See the recommendation and discussion sections for Lateral 6S above.

General prehistoric archaeological sensitivity

In closing, it should be noted that although a thorough visual inspection of the Project Area for prehistoric cultural deposits and materials, no evidence of a prehistoric site was identified. There remains, however, a moderate potential that the Project Area may in fact contain buried prehistoric deposits associated with the former un-channelized Salado Creek, or the vicinity of Black Gulch.

Archival research for this project failed to uncover any nineteenth century maps displaying the possible original course of Salado Creek through the Project Area. It is very likely that the creek actually meandered through the property in prehistoric times, changing channels during periods of flooding. It has been demonstrated elsewhere in Central California that prehistoric settlements shifted locations when the creeks did, resulting in a pattern of contiguous village or camp sites over a large area within range of productive riparian environments. As late as 1916, Black Gulch ran northeastward from the hills to the west through Section 26 of the Project Area, and might have attracted seasonal prehistoric occupation as well.

Future project developers should be made aware of the potential for the discovery of archaeological sites buried under the silts deposited by Salado Creek over the past several thousand years and/or by historic farming activities, which have resulted in the massive observable changes in contours throughout the Project Area. Excavation permits should be conditioned to allow for the discovery, evaluation and mitigation of any buried archaeological resource area discovered during actual construction activities.

Recommendation

Although no archaeological resources were found on the West Patterson Project Area, it is possible that subsurface deposits may exist or that evidence of such resources has been obscured by more recent natural or cultural factors. Archaeological resources and human remains are protected from unauthorized disturbance by State law, so permitting authorities, development, supervisory, and construction personnel should therefore be made aware of the possibility of encountering archaeological materials in this moderately sensitive zone. In this area, the most common and recognizable evidence of prehistoric archaeological resources are deposits of shells and bone, usually in fragments, usually but not necessarily in a darker fine-grained soil (midden); obsidian and

other stone (chert, basalt, etc.) flakes left from manufacturing stone tools, or the tools themselves (mortars, pestles, arrowheads and spearpoints), and human burials, often as dislocated bones. Historic materials older than 49 years–bottles, artifacts, structural remains, etc.–may also have scientific and cultural significance and should be more readily identified. If during the proposed construction project any such evidence is uncovered or encountered, all excavations within 10 meters/30 feet should be halted long enough to call in a qualified archaeologist to assess the situation and propose appropriate measures.