

3.5 Cultural Resources and Tribal Cultural Resources

3.5.1 Introduction

This section evaluates the potential effects on cultural resources (archaeological and historic resources) and tribal cultural resources (as defined in Public Resources Code section 21074) that could result from development and operation of the Yosemite Avenue – Gardner Avenue to Hatch Road Annexation project (proposed project). The potential for prehistoric and historical resources to occur within or adjacent to the site is assessed; federal, state, and regional regulations pertaining to the protection of cultural resources are summarized; potential project-specific and cumulative impacts on cultural resources are evaluated; and mitigation measures to minimize impacts are identified.

As discussed in Chapter 1, Introduction, a Notice of Preparation (NOP) for this Environmental Impact Report (EIR) was initially published in December 2016 based on the original project applications. In 2019, the project applicant submitted revised applications and site plans, increasing the number of residential units from 330 to 540 and increasing the amount of onsite parking. The City issued a revised NOP in May 2020. The Native American Heritage Commission (NAHC) submitted a response to both NOPs summarizing regulatory requirements related to assessment of potential impacts to cultural resources. The NAHC comment letters did not identify any project-specific concerns. Both NOPs and comments received in response to them are provided in Appendix A.

The primary sources referenced to prepare this section include the Cultural Resources Letter Report prepared by Dudek (included in Appendix F) and the *Merced Vision 2030 General Plan* (City of Merced 2012a).

3.5.2 Environmental Setting

This section describes the historical and cultural background of the region and identifies the existing conditions on the project site and resources that could be affected by the proposed project. Please refer to the *Cultural Resources Letter Report* included in Appendix F for additional details.

Prehistory Background

Paleoindian Period (ca. 12,000 to 9000 BP)

There is evidence of human habitation in the region dating to approximately 12,000 years before present (BP). While few sites of Paleoindian age have been identified in this area, occupation is documented to date to at least 11,000 years ago. Most of the evidence for a Paleoindian presence in the valley has been limited to surface finds of fluted projectile points (see below), that are

typically regarded by archaeologists to be associated with populations occupying this area during the late Pleistocene and early Holocene.

As noted above, the evidence for a Paleoindian occupation in the San Joaquin Valley has been in the form of numerous fluted, concave base (Clovis or “Clovis-like”) projectile points, along with other artifacts presumed to be Paleoindian in age. Such artifacts have been collected from surface contexts in several locations, most notably from the southern shoreline of Tulare Lake southeast of Mendota. Unfortunately, many of these discoveries have been made by amateur collectors, many of whom were collecting illegally, so limited provenance is available for these artifacts. This has resulted in an enormous and irretrievable loss of data for understanding the Paleoindian Period in this region (Appendix F).

Early Period (ca. 9000 to 6000 BP)

Evidence for the Early Period in the San Joaquin Valley is limited. During this period, however, it is believed that human subsistence was based largely on the hunting of large game and fishing. Grinding implements, such as mortars, pestles, milling stones, and hand stones, appear infrequently during this time in the archaeological record. Other types of artifacts in these assemblages include hand-molded baked clay net weights, Olivella and Haliotis shell beads and ornaments, charm stones, and stemmed projectile points. Bone artifacts are uncommon. Burials are typically fully extended, oriented to the west, and generally have associated artifacts (e.g., quartz crystals). Cremations are rare (Appendix F).

Middle Period (ca. 6000 to 3000 BP)

After approximately 6,000 years BP the climate became generally warmer. This time period is characterized by a more generalized subsistence pattern. While hunting, fowling, and fishing continue to be the focus of subsistence activities, an increased emphasis on seed processing (particularly acorns) is evident. Artifacts include Olivella and Haliotis beads and other ornaments, distinctive spindle-shaped charm stones, cobble mortars, chisel-ended pestles, and large projectile points (inferring use of the atlatl). Bone tools, such as awls, fish spear tips, saws, and flakers may be evidence of generalized subsistence, but preservation bias (i.e., the lack of these perishable tools in earlier components) may have affected the archaeological record. Burials have few associated artifacts. At the same time, there is a slight increase in the number of cremations. Evidence of violent death appears in the burial assemblage, as indicated by disarticulated skeletons with embedded weapon points (Appendix F).

Late Period (ca. 3000 to 150 BP)

The Late Period has been postulated to represent the occupation of the ethnographic Yokuts, although this presumption is based on assemblage composition and must be conditioned by the

recognition that artifacts cannot be equated with culture. This is especially true since it is increasingly understood that the high diversity of identified tribes in California may have been a relatively late phenomenon associated with the development of an individualized currency economy.

During the Late Period in general, subsistence began to focus on the processing of acorns and other costly to process plant foods, with a proportionate decrease in the contribution of hunting, fowling, and fishing. Typical artifacts of this period include Olivella beads, Haliotis ornaments, stone beads and cylinders, clamshell disk beads, tubular smoking pipes of schist and steatite, arrow shaft straighteners, flat-bottomed mortars, cylindrical pestles, and small side-notched projectile points for use with the bow and arrow (Appendix F).

Ethnohistoric (post-AD 1750)

The region surrounding the project area would have been within Northern Valley Yokut tribal territory during the ethnohistoric period. This group inhabited the lower San Joaquin River watershed and its tributaries extending from Calaveras River in the north to approximately the large bend of the San Joaquin River eastward near Mendota. The lower San Joaquin River meanders through the territory making bends, sloughs, and marshes full of tule reeds as it meanders. Farther from the rivers and marshes, the valley floor would have been dry and sparsely vegetated.

Northern Valley Yokut habitation areas were most commonly situated in close proximity to rivers and tributaries, more often on the east side of the river. Yokut populations and habitation areas were generally concentrated near the San Joaquin River, and in the foothills to the east. This focus on waterways can also be seen in their dietary resources, which included various fish, waterfowl, antelope, elk, acorns, tule roots, and various seeds. In particular, salmon was an abundant food during the fall spawning and in springtime. A focus on fishing is also seen in the material culture consisting of net sinkers and harpoons, likely used from rafts constructed from tule reed bundles.

Traditional larger habitation areas were often situated upon mounds, on or near riverbanks. Northern Valley Yokut dwellings were constructed of tule reed woven mats placed over a pole frame oval or round structure. These structures were generally from 25-40 feet in diameter, and typically housed a single family. This is in contrast to the larger multi-family dwellings erected sometimes by the Southern Yokuts. In addition to dwellings, earth covered ceremonial sweat lodges were constructed. While there were permanent, or semi-permanent, habitation areas in association with riverine resources, peripheral camps used when gathering, hunting, and processing resources such as acorns and seeds were common.

The Northern Valley Yokuts saw sharp and devastating decline from disease and relocation to coastal missions nearly immediately after Spanish contact. This served to further increase with the large influx of cattle ranching, agriculture, and Anglos Americans after the gold rush (Appendix F).

Historic Period

Spanish Period (1769–1822)

The Spanish missions were initiated in San Diego in 1769. A total of 21 missions were constructed by the Dominican and Franciscan orders between 1769 and 1823 throughout California. Missions in the region included San Francisco de Asís (1776), Santa Clara de Asís (1776), San José de Guadalupe (1797 in Alameda County), San Rafael Arcángel (1817 in Marin County), and San Francisco Solano. The first Spanish arrived in the San Joaquin Valley in 1772, led by don Pedro Fages. Over the next few decades several other Spanish expeditions would make it to the Merced area of the Valley. During the first decade of the 19th Century, a trail was established from the Los Angeles Basin to San Francisco (El Camino Real).

Mexican Period (1822–1848)

Mexico's separation from the Spanish empire in 1821 and the secularization of the California missions in the 1830s caused further disruptions to Native American populations. Following the establishment of the Mexican republic, the government seized many of the lands belonging to Native Americans, providing them as parts of larger Land Grants to affluent Mexican citizens and rancheros. The 1833 Secularization Act passed by the Mexican Congress ordered half of all mission lands to be transferred to Native Americans, and the other half to remain in trust and managed by an appointed administrator. These orders were never implemented due to several factors that conspired to prevent Native Americans from regaining their patrimony. A Mexican land grant, Rancho Sanjon de Santa Rita, was issued in the vicinity to Francisco Maria Soberanes in 1841. This grant included more than 48,000 acres within present day Merced and Fresno counties. The grant was generally west of west of the San Joaquin River, including what is now Santa Rita Park and Dos Palos.

American Period (Post 1848)

California was officially ceded to the United States in 1848, which led to the continued appropriation of Native American territory by ranchers, prospectors, and an increasing number of settlers. The United States Government did little to dissuade these trespasses. By the mid-19th Century, Euro-Americans miners, having failed in the lodes to the east, began to move into the area to try their luck at agriculture and to work as farm hands. From 1850, with the passage of California's Indian Act, until legislative reforms in the late 1880s, state laws provided little

protections to the Native American population throughout California who often worked on these local ranches and farms.

Merced County was established in 1855 and named after the Merced Lake. Prior to 1855, Merced County was part of Mariposa County and was sparsely populated with the 1860 census reflecting a population of only 1,141. At the time of its founding Merced County was largely made up of farms and ranches. Large scale population growth started in Merced County in 1872, when the Southern Pacific Railroad established a stop in Merced and transformed the landscape and development pattern of the county. By 1900 the census showed a population of 9,215 (Appendix F).

As the area proved excellent for agriculture, populations continued to rise in Merced. By 1870, a post office was established. The success of farming in the region necessitated the need for more farm hands, steadily increasing the population of Merced. The town was incorporated as the City of Merced in 1889. Merced's position along a Southern Pacific Railroad line ballooned its population in the late 19th and earlier 20th centuries. The 1930s saw the appearance of large scale "agribusinesses" with the development of new water sources in the region and Merced's importance grew as an agricultural market city. During World War II, the Merced County fairgrounds became a temporary detainment center for Japanese Americans removed from their homes through President Roosevelt's Executive Order 9066. Post-War Merced saw steady, though not drastic population increase.

Agricultural development in Merced County is also an important pattern of development and continues to be a key element in the economic development of Merced County today. In 1873 the Farmers Canal Company was formed based on the work of civil engineer William Collier. While the Farmers Canal Company was successful in creating an extension to Canal Creek, they were unsuccessful in moving the canal further and sold their company to Charles Crocker and C.H. Huffman in 1882, which became Crocker-Huffman Land and Water Company in 1888. By 1919 the Merced Irrigation District was formed and projects like the Exchequer Dam were undertaken and irrigation was taken to the next level. The important developments in irrigation systems allowed Merced County to transition from dry farming of small grains and livestock ranching to irrigation-based farming. This transition allowed the farmers to switch from small grain farming and cattle ranching to tree and row crops. By the early decades of the 20th century, dairy farming also became popular in Merced County and by the 1920s livestock was the most profitable business in Merced County.

Land subdivision was also a key factor in the development of Merced County. Beginning with the development of irrigation companies and the establishment of the railroad in Merced, large portions of the county were subdivided into colonies. Although most of the development was closely tied to water rights and water development, the land development pattern created by large

landholding entities like the railroad and the Crocker-Huffman Land and Water Company continued to be part of the development pattern throughout the 20th century. The colony style subdivision of properties created large ranches, small farms, ranchette and eventually medium density suburban developments throughout the county (Appendix F).

Records Search

A records search was completed for the proposed project site and lands within a half-mile radius of the site by staff at the Central California Information Center (CCIC) at California State University Stanislaus on December 7, 2016.

CCIC records indicate that nine previous cultural resources technical investigations have been conducted within one-half mile of the proposed project site (see Table 3.5-1). Of these studies, one includes a portion of the project site (ME-04387). ME-04387 is an archaeological and built environment assessment for the University of Merced Development Project and associated local improvements. A portion of this prior study’s project area includes road improvements to East Yosemite Avenue, which is adjacent to the project site’s southern boundary. While the study discovered several previously unknown cultural resources, none were within one-half mile of the project site.

Dudek also requested a Native American Heritage Commission (NAHC) search of their Sacred Lands File (SLF) on December 7, 2016 for the proposed project area. The NAHC results failed to indicate the presence of Native American cultural resources within the project area or within one-half mile of the project area.

**Table 3.5-1
Previous Cultural Resource Studies**

Report ID	Date	Author	Title
Within the Project Area			
ME-04387	2001	URS Corporation	University of California, Merced, Cultural Resources (Archaeological and Historic Built Environment Resources), Technical Report.
Within the One-Half-Mile Search Area			
ME-00584	1991	Bissonette, Linda	Cultural Resources Survey for a Residential Subdivision Dunn Road and Cottonwood Avenue Merced County, California.

**Table 3.5-1
Previous Cultural Resource Studies**

Report ID	Date	Author	Title
ME-00646	1990	Napton, L. K.	Cultural Resource Investigation of the Proposed Black Rascal Estates 43.7 Acres in Merced County, California.
ME-04384	2001	URS Corporation	Archaeological Survey Report, Merced Campus Parkway (Draft Technical Report, Federal Aid Project #RPHP21L-0484[001]).
ME-04385	2001	URS Corporation	Archaeological Survey Report--Addendum 1, Merced Campus Parkway (Draft Technical Report, Federal Aid Project #RPHP21L-0484[001]).
ME-04698	2002	URS Corporation	Archaeological Survey Report--Addendum 2, Merced Campus Parkway (Draft Technical Report; Federal Aid Project #RPHP21L-0484[001]).
ME-05956	2005	Bowden, E.	Cultural Resources Fieldwork Results for Cottonwood Creek Bicycle Path Corridor, Merced County, California.
ME-06949	2002	Dexter, S.	Historic Property Survey Report, Addendum 1. Merced Campus Parkway, Federal Aid Project #RPHP21L-0484(001).
ME-06979	2002	Herbert, R. F.	Historic Architectural Survey Report University Community Plan Project Merced County, California.

Source: Appendix F

Archaeological Survey

Dudek archaeologist, William Burns, RPA, inspected all portions of the 28.4-acre portion of the site that is proposed to support The Crossings component of the project on December 9, 2016, using standard archaeological procedures and techniques that meet the Secretary of Interior's Standards and Guidelines for cultural resources inventory. The Crossings portion of the project site includes approximately 25.4 acres in tilled agricultural land and approximately 3 acres developed with a residence, barn, and various smaller sheds. Mr. Burns examined the ground surface for artifacts, undisturbed areas, or archaeological deposits. Subsurface exposures

and rodent burrows were opportunistically inspected for indications of soils with the potential to contain archaeological deposits. Ground visibility was excellent throughout most of the area (approximately 85%). However, areas surrounding the residence lacked ground visibility as a result of parked agricultural machinery and paved areas (approximately 10%). The entirety of The Crossings portion of the project site has been subject to substantial disturbances related to agricultural and residential use. All portions of The Crossings component were found to be heavily disturbed as a result of past and present agricultural activities, construction of the residence and associated structures, and paved areas around the residence. No archaeological resources were identified within The Crossings area during the field survey (Appendix F).

The remaining 40.2-acre portion of the project site, the Remainder Area, largely supports existing private development and was not surveyed for cultural uses because no development is currently proposed in this area. Specifically, the approximately 9.4 acres of the Remainder Area located in the northwest corner of the project site is developed with four rural residential/agricultural properties. The approximately 22 acres of the Remainder Area located in the eastern portion of the project site are developed with a church, a private school, and three single-family residences. The 9.7-acre parcel near the center of the project site that forms the western boundary of the eastern section of the Remainder Area project site supports one residence, several agricultural buildings, and agricultural production. It is unlikely that surface artifacts are present in the portions of the Remainder Area that support structures, hardscape, and landscape; however there is potential for surface artifacts to be present in the undeveloped portions and potential for subsurface artifacts to be present throughout the Remainder Area (Appendix F).

The project proposes to pre-zone the Remainder Area with approximately 19.4 acres of Urban Transition (U-T) and approximately 20.8 acres of Low Density Residential (R-1-10). No new development within the Remainder Area is proposed at this time, however the portion of the Remainder Area that is proposed to be zoned R-1-10 could support single-family residential lots with a minimum size of 10,000 square feet. The portion of the Remainder Area zoned U-T would only allow new agricultural development unless further rezoning is approved.

Historic Resources Review

Within The Crossings component portion of the project area there is an approximately 3-acre developed area that contains a residence, barn, and numerous sheds that were evaluated to determine if they meet the National Register of Historic Places (NRHP) and California Register of Historic Resources (CRHR) significance criteria and integrity requirements to be considered potentially eligible for listing as a historic building.

The survey was positive for one property that required recordation and evaluation for historical significance: the residence/farm located at 1897 East Yosemite Avenue (APN 060-570-010). The

property significance evaluation was prepared by Dudek architectural historian Sarah Corder, MFA, who meets the Secretary of the Interior's Professional Qualification Standards for architectural history. The subject property is an example of a vernacular bungalow-style (with nods to the Prairie style) residence and small family farm constructed in 1920. The history of the residence, dating back to its construction in 1920, is altogether lacking despite extensive archival and property record research. The building appears to retain much of its original simplistic vernacular style/design and workmanship, and its exterior materials appear to be largely intact. The property's feeling and association as a rural farming residence also remains intact. It appears that little has changed on the property, but the surrounding area to the west and south (in the City) shows dense suburban development and a clear departure from the early rural development patterns in the area.

While the property retains much of its integrity, it is a common type of a vernacular bungalow-style residence that lacks many of the more distinctive character-defining features of the style. Further, the property is not significant to local, regional or national patterns of development or significant people. As a result, the property is recommended not eligible under all NRHP and CRHR designation criteria, as described in detail in the *Cultural Resources Letter Report* prepared for the proposed project and included in Appendix F. Therefore, the property is not considered a historical resource for the purposes of CEQA.

In addition to this onsite residence, the MID canal along the northern boundary of the site was evaluated for historic significance. The canal is an extension of the Yosemite Lateral irrigation canal, from Lake Yosemite. The section of canal adjacent to the proposed development would be required to be piped and converted into an enclosed water line. The Yosemite Lateral irrigation canal has been previously evaluated and recorded. That prior evaluation found that the Yosemite Lateral canal is likely to have been originally constructed in 1888. The Yosemite Lateral flows to the Project area from approximately 3 miles north at Yosemite Lake, a manmade reservoir. Yosemite Lake and Yosemite Lateral are both part of the Merced Irrigation District. The extension of the main canal traverses the project site northern boundary, beginning at the northeast corner of the project area and extending west, then heads north before turning west again and passing under Gardner Avenue. The irrigation canal is an open air, earthen ditch approximately 16 feet wide and 5.8 feet deep.

The extension of the Yosemite Lateral that is adjacent to the project site is earthen, covered in grass, and trapezoidal in shape with a flat bottom that is earth/grass/river rock with low flat berms on each side of it. As described in Appendix F, there are seven particular features of the irrigation ditch that are present within the project area: a concrete dam, two concrete culverts with valve, two wood and concrete dams, and two small outlets with valves.

The DPR form for the Yosemite Canal, prepared in 2000 by JRP Historical Consulting Services, recommends that the canal is ineligible for listing in the NRHP/CRHR due to its very low degree of integrity. Dudek's architectural historians concur with this recommendation for the extension to the Yosemite Lateral bordering the project site on the north (Appendix F). Therefore, the canal and its extension are not considered historical resources for the purposes of CEQA.

Paleontological Setting

Fossils are, by definition, objects that are more than 10,000 years old. An individual vertebrate fossil specimen may be considered unique or significant if it is identifiable and well preserved. Marine invertebrates are generally common, well developed, and well documented and would generally not be considered a unique paleontological resource whereas identifiable vertebrate marine and terrestrial fossils are generally considered scientifically important because they are relatively rare. Surveys previously completed in northern California have found two major divisions of Pleistocene-age fossils: the Irvingtonian (older Pleistocene fauna) and the Rancholabrean (younger Pleistocene and Holocene fauna). Remains of land mammals have been found in the project region at various localities in alluvial deposits, including specimens of Rancholabrean-age horse, camel, deer, mammoth and camel.

3.5.3 Regulatory Setting

Cultural resources are defined as buildings, sites, structures, or objects each of which may have historical, architectural, archaeological, cultural, and/or scientific importance. Several laws and regulations at the state level govern archaeological and historic resources deemed to have scientific, historic, or cultural value. The pertinent regulatory framework, as it applies to the proposed project, is summarized below.

Federal Regulations

National Historical Preservation Act

The National Historic Preservation Act of 1996 established the NRHP as the official federal list of cultural resources that have been nominated by state offices for their historical significance at the local, state, or national level. Properties listed or eligible for listing in the NRHP must meet certain criteria for historical significance and possess integrity of form, location, and setting. Under Section 106, federal agencies are required to consider the effects of their actions, or those they fund or permit, on properties that are listed or may be eligible for listing. The regulations in 36 CFR 60.4 describe the criteria to evaluate cultural resources for inclusion in the NRHP. Properties may be listed in the NRHP if they possess integrity of location, design, setting, materials, workmanship, feeling, and association. No historic properties, buildings or resources eligible for

listing in the NRHP are known to exist on the project site or adjacent areas that would be disturbed during project construction.

The Department of the Interior has established Standards and Guidelines for Archaeology and Historic Preservation. These standards and guidelines are not regulatory and do not set or interpret agency policy. A project that follows the standards and guidelines generally shall be considered mitigated to a less-than-significant level, according to Section 15064.5(b)(3) of the California Environmental Quality Act (CEQA) Guidelines (14 CCR 15000 et seq.).

State Regulations

California Register of Historical Resources

The CRHR is established through California Public Resources Code (PRC) Section 5042.1. In California, the term "historical resource" includes but is not limited to "any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California." (PRC Section 5020.1(j)). The criteria for listing resources on the CRHR were expressly developed to be in accordance with previously established criteria developed for listing in the NRHP. According to PRC Section 5024.1(c)(1–4), a resource is considered historically significant if it (i) retains "substantial integrity," and (ii) meets at least one of the following criteria:

1. Is associated with events or patterns of events that have made a significant contribution to the broad patterns of the history and cultural heritage of California.
2. Is associated with the lives of persons important in our past.
3. It 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 value.
4. It has yielded, or may be likely to yield, information important to prehistory or history.

In addition to meeting one or more of the above criteria, a property must also retain integrity to be considered a significant historical resource. Properties eligible for listing in the CRHR must retain enough of their historic character to convey the reason(s) for their significance. Integrity is judged in relation to location, design, setting, materials, workmanship, feeling, and association.

Properties listed or formally designated as eligible for listing in the NRHP are automatically listed in the CRHR, as are the state landmarks and points of interest. The CRHR also includes properties designated under local ordinances or identified through local historical resource surveys.

No historic properties or resources eligible for listing in the CRHR are known to exist on the project site or adjacent areas that would be disturbed during project construction.

California Environmental Quality Act

CEQA requires public agencies to consider the effects of their actions on both “historical resources” and “unique archaeological resources.” Pursuant to PRC Section 21084.1, a “project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.” PRC 21083.2 requires agencies to determine whether proposed projects would have effects on “unique archaeological resources.”

“Historical resource” is a term of art with a defined statutory meaning (see PRC 21084.1 and CEQA Guidelines, Sections 15064.5(a) and 15064.5(b)). The term embraces any resource listed in or determined to be eligible for listing in the CRHR. The CRHR includes resources listed in or formally determined eligible for listing in the NRHP, as well as some California State Landmarks and Points of Historical Interest.

Properties of local significance that have been designated under a local preservation ordinance (local landmarks or landmark districts) or that have been identified in a local historical resources inventory may be eligible for listing in the CRHR and are presumed to be “historical resources” for purposes of CEQA unless a preponderance of evidence indicates otherwise (PRC 5024.1 and 14 CCR 4850). Unless a resource listed in a survey has been demolished or has lost substantial integrity, or there is a preponderance of evidence indicating that it is otherwise not eligible for listing, a lead agency should consider the resource potentially eligible for the CRHR.

In addition to assessing whether historical resources potentially impacted by a proposed project are listed or have been identified in a survey process, lead agencies have a responsibility to evaluate them against the CRHR criteria prior to making a finding as to a proposed project’s impacts to historical resources (PRC 21084.1 and CEQA Guidelines, Section 15064.5(a)(3)). In general, a historical resource, under this approach, is defined as any object, building, structure, site, area, place, record, or manuscript that “is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, education, social, political, or cultural annals of California” and meets at least one of the four CRHR eligibility criteria listed above.

These factors are known as “Criteria 1, 2, 3, and 4” and parallel Criteria A, B, C, and D under the National Historic Preservation Act. The fact that a resource is not listed or determined to be eligible for listing does not preclude a lead agency from determining that it may be a historical resource (PRC 21084.1 and CEQA Guidelines, Section 15064.5(a)(4)).

CEQA also distinguishes between two classes of archaeological resources: archaeological sites that meet the definition of a historical resource, as described above, and “unique archaeological resources.” Under CEQA, an archaeological resource is considered “unique” if it:

- Contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information;
- Has a special or particular quality such as being the oldest of its type or the best available example of its type; or
- Is directly associated with a scientifically recognized important prehistoric or historic event or person (PRC 21083.2(g)).

CEQA directs that a proposed project that would cause a substantial adverse change in the significance of a historical resource is considered to have a significant impact. A “substantial adverse change” in the significance of a historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired (CEQA Guidelines Section 15064.5(b)(1)). In turn, the significance of an historical resource is materially impaired when a project demolishes or alters the physical characteristics that convey a resources historical significance such that it would no longer be eligible for listing in the CRHR and/or a local register of historic resources.

CEQA Guidelines Section 15064.5(c) provides specific guidance on the treatment of archaeological resources, depending on whether they meet the definition of a historical resource or a unique archaeological resource. If the site meets the definition of a unique archaeological resource, it must be treated in accordance with the provisions of PRC Section 21083.2.

CEQA Guidelines Section 15064.5(e) requires that excavation activities be stopped whenever human remains are uncovered and that the county coroner be called in to assess the remains. If the county coroner determines that the remains are those of Native Americans, the Native American Heritage Commission must be contacted within 24 hours. At that time, the lead agency must consult with the appropriate Native Americans, if any, as identified in a timely manner by the Native American Heritage Commission. Section 15064.5 of the CEQA Guidelines directs the lead agency (or applicant), under certain circumstances, to develop an agreement with the Native Americans for the treatment and disposition of the remains.

Senate Bill 18

Senate Bill 18 (SB 18; Government Code Sections 65352.3, 65352.4) requires that, prior to the adoption or amendment of a general plan proposed on or after March 1, 2005, a city or county must consult with Native American tribes with respect to the possible preservation of, or the

mitigation of impacts to, specified Native American places, features, and objects located within that jurisdiction. The project requires an amendment to the City's General Plan and the City has complied with the requirements of SB 18.

On March 17, 2018, letters were sent out to the tribes identified on the Native American Heritage Commission's (NAHC) official SB 18 California Tribal Consultation List. No response was received from any of the tribes who were notified. The revised Notice of Preparation was also sent to these tribes in May 2020. The City has not received any responses to the SB 18 notifications or the NOPs.

Assembly Bill 52

Assembly Bill 52 (AB 52) went into effect July 1, 2015 and requires lead agencies to consult with all California Native American tribes that have requested formal consultation at the onset of a project, or when a NOP is released. AB 52 also establishes a new class of resources to be evaluated – Tribal Cultural Resources.

All tribes identified on the Native American Heritage Commission's (NAHC) official SB 18 California Tribal Consultation List were notified of this project. No tribes requested consultation. The revised Notice of Preparation was also sent to these tribes in May 2020. The City has not received any responses to the AB 52 notifications or the NOPs.

Health and Safety Code Section 7050.5

California law protects Native American burials, skeletal remains, and associated grave goods, regardless of their antiquity, and provides for the sensitive treatment and disposition of those remains. Health and Safety Code Section 7050.5 requires that if human remains are discovered in any place other than a dedicated cemetery, no further disturbance or excavation of the site or nearby area reasonably suspected to contain human remains shall occur until the County coroner has examined the remains. PRC Section 5097.98 also outlines the process to be followed in the event that remains are discovered. If the coroner determines or has reason to believe the remains are those of a Native American, the coroner must contact the California Native American Heritage Commission (NAHC) within 24 hours. The NAHC will notify the Most Likely Descendant. With the permission of the landowner, the Most Likely Descendant may inspect the site of discovery. The inspection must be completed within 48 hours of notification of the Most Likely Descendant by the NAHC. The Most Likely Descendant may recommend means of treating or disposing of, with appropriate dignity, the human remains and items associated with Native Americans.

Paleontological Resources

Consideration of paleontological resources is required by CEQA. Other state requirements for paleontological resource management are found in PRC Chapter 1.7, Section 5097.5, Archaeological, Paleontological, and Historical Sites. This statute specifies that state agencies may undertake surveys, excavations, or other operations as necessary on state lands to preserve or record paleontological resources. This statute does not apply to the proposed project because none of the property includes public lands.

No state or local agencies have specific jurisdiction over paleontological resources. No state or local agency requires a paleontological collecting permit to allow for the recovery of fossil remains discovered as a result of construction-related earth moving on state or private land in a project site.

Local Regulations

The project site is currently within the boundaries of Merced County and within the City of Merced Sphere of Influence. The project proposes to annex the site to the City thus the City of Merced regulations are relevant to this analysis of the project's potential effects on cultural resources.

Merced Vision 2030 General Plan

The City of Merced Vision 2030 General Plan (City of Merced 2012a) Sustainable Development Chapter (Chapter 8) provides guidance for new development and focuses on the protection of historic and archaeological resources. The following policies from the City's Sustainable Development Chapter are applicable to the proposed project:

Policy SD-2.1 Identify and preserve the City's archaeological resources.

Policy SD-2.2 Identify and preserve the City's historic and cultural resources.

Policy SD-2.3 Develop and promote financial incentive programs for historic preservation efforts.

Implementing Actions:

2.1.a Utilize the inventory of known archeological sites maintained by the Central California Information Center for the review of development proposals. The Archaeological Inventory shall be used to identify areas within the Merced Planning Area subject to preservation practices. For large scale development projects proposed in close proximity to a natural water course, or in an area which exhibits potential for containing cultural resource material, preliminary cultural resource inventories should be conducted by a qualified

archaeologist. Information from these site investigations shall be provided to the Central California Information Center for recordation.

- 2.1.b Utilize standard practices for preserving archeological materials that are unearthed during construction, as prescribed by the State Office of Historic Preservation. Cultural resource discoveries are subject to the rules and regulations in State law. The City should work closely with the building trades industry to facilitate compliance with these laws and to assist where necessary in minimizing the adverse impacts of the implementation of these laws on the City's construction industry.

Merced Municipal Code

Chapter 17.54, Historic Preservation of the Merced Municipal Code addresses historic preservation and includes language regarding the rehabilitation and preservation of structures or sites of special historical, architectural or aesthetic interest or value. The chapter identifies the City's intent to promote the health, safety, and general welfare of the citizens of the City of Merced through:

1. The protection, enhancement, perpetuation and use of structures, sites and areas that are reminders of past eras, events and persons important to local, state or national history, or which provide significant examples of architectural styles of the past or are elements in the history of architecture or which are unique and irreplaceable assets to the City of Merced and its neighborhoods, or which provide for this and future generations examples of the physical soundings in which past generations lived;
2. The development and maintenance of appropriate settings and environments for such structures, in such sites and areas;
3. The enhancement of property values, the stabilization of neighborhoods and areas of the city, and the increase of economic and financial benefits to the city and its inhabitants;
4. The preservation and encouragement of a city of varied architectural styles, reflecting the distinct phases of its history—cultural, social, economic, political and architectural;
5. The enrichment of human life in its educational and cultural dimensions in order to serve spiritual as well as material needs by fostering knowledge of the living heritage of the past.

Professional Paleontological Standards Standard profession standards have been established by SVP, a national scientific organization of professional vertebrate paleontologists. These standards outline acceptable professional practices in the conduct of paleontological resource assessments and surveys, monitoring and mitigation, data and fossil recovery, sampling procedures, specimen preparation, analysis, and curation. The value or importance of different fossil groups varies depending on the age and depositional environment of the rock unit that

contains the fossils, their rarity, the extent to which they have already been identified and documented, and the ability to recover similar materials under more controlled conditions. Marine invertebrates are generally common; the fossil record is well developed and well documented, and they would generally not be considered a unique paleontological resource. Identifiable vertebrate marine and terrestrial fossils are generally considered scientifically important because they are relatively rare.

3.5.4 Impacts

Methods of Analysis

A formal records search was conducted for the project area by Dudek through the CCIC (see Appendix F). The records search included the entire 70-acre project site and a half-mile radius. The CCIC included a review of their collection of mapped prehistoric, historical, and built-environment resources, Department of Parks and Recreation (DPR) Site Records, technical reports, historical maps, and local inventories. Additional consulted sources included the National Register of Historic Places (NRHP), California Inventory of Historical Resources/California Register of Historical Resources and listed Office of Historic Preservation Archaeological Determinations of Eligibility, California Points of Historical Interest, and California Historical Landmarks.

The archeological fieldwork was completed on December 9, 2016 and was documented using field notes, digital photography, iPad technology with close-scale field maps, and aerial photographs. Location-specific photographs were taken using an Apple 3rd Generation iPad equipped with 8-megapixel resolution and georeferenced PDF maps of the project site. Accuracy of this device ranged between 3 and 10 meters. The Crossings component of the project site was subject to an intensive pedestrian survey using parallel transects spaced 15 meters apart.

The building survey entailed walking all portions of the 28.4-acre The Crossings area and documenting each building with notes and photographs, specifically noting character-defining features, spatial relationships, and observed alterations.

Thresholds of Significance

Consistent with Appendix G of the CEQA Guidelines, the City's General Plan, and professional judgment, a significant impact would occur if development of the proposed project would do any of the following:

- Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5.

- Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5.
- Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources.
- Disturb any human remains, including those interred outside of dedicated cemeteries.
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature

Impacts and Mitigation Measures

Impact 3.5-1: Implementation of the proposed project may cause a substantial adverse change in the significance of a historical resource. This would be a potentially significant impact.

The Crossings

An evaluation of the existing buildings located on the project site that are proposed to be demolished was conducted by Dudek’s architectural historian Sarah Corder, MFA, who meets the Secretary of the Interior’s Professional Qualification Standards for architectural history. Based on the findings of the building evaluation (see Appendix F), only one of the buildings on the site, the residence/farmhouse located at 1897 East Yosemite Avenue constructed in 1920, was evaluated for historical significance. The remaining buildings and the integrity of the overall setting were all determined to not meet the eligibility requirements. The residence was evaluated under the NRHP and CRHR designation criteria and determined to lack many of the more distinctive character-defining features of the bungalow-style and was determined not to represent significant local, regional or national patterns of development or significant people.

In addition, the extension of the Yosemite Lateral irrigation canal that runs along the northern boundary of the project site was evaluated and found to be ineligible for listing in the NRHP due to very low degree of integrity. Specifically, as discussed in more detail in Appendix F, while there are several features of the original canal design and engineering present along the reach of the canal extension adjacent to the project site, many of those features are missing components, such as sluice gates, sluice gate boards, and outlet valved. Although the Yosemite Lateral canal was likely built in 1888 by the Crocker-Huffman Land and Water Company and thus contributed to regional land development patterns including agricultural production and the colony system of

land subdivision, the lack of integrity of features within the main canal and the extension impair the ability of both to convey their historical significance.

As a result, neither the residence nor the canal extension is considered eligible under NRHP and CRHR designation criteria and are not considered historical resources for the purposes of CEQA. The removal of the residence and the piping of the canal would not result in a substantial adverse change in the significance of a historical resources and the impact is **less than significant**.

Remainder Area

None of the buildings located in the Remainder Area were evaluated for historical significance because no development or building demolition is proposed in this portion of the project site at this time. However, there is the potential that historically significant buildings may be present and future development resulting in their removal could result in a potentially significant impact.

Mitigation Measures

The Crossings

No mitigation measures are required.

Remainder Area

- 3.5a** Prior to issuance of a discretionary permit or approval within the Remainder Area, the project applicant for that approval shall submit to the City of Merced a Cultural Resources Evaluation that includes an assessment of the historical significance and integrity of any buildings proposed to be demolished or that would be located within 300 feet of new structures. The Cultural Resources Evaluation shall be prepared by a qualified architectural historian that meets the Secretary of the Interior's Professional Qualification Standards for architectural history and shall include a determination of whether the affected buildings meet the significance and integrity requirements set forth in the National Register of Historic Places and the California Register of Historical Resources.

Impact 3.5-2: Implementation of the proposed project may cause a substantial adverse change in the significance of an archaeological resource. This would be a potentially significant impact.

The Crossings/Remainder Area

As discussed in the Environmental Setting above, the formal records search prepared for the proposed project did not identify any recorded archaeological resources within the project site.

There have been nine previous cultural resource studies within a half mile of the project site with one study that included a portion of the site adjacent to East Yosemite Avenue. However, no archaeological resources have been previously identified within the proposed project area, or within one-half mile of the project area (Appendix F). Thus, there are no known resources eligible for listing in the NRHP or CRHR that exist in the project area.

However, it is possible that previously unidentified subsurface archaeological resources are present within both portions of the project site. Ground-disturbing activities associated with construction of The Crossings component of the project as well as future development within the Remainder Area have the potential to encounter or disturb previously unidentified subsurface archaeological resources. If such resources are uncovered during construction and are eligible for listing in the NRHP or CRHR or otherwise meet the definitions and standards of significant archeological resources under CEQA, disturbance to those resources would result in a **potentially significant** impact.

Mitigation Measures

The City's General Plan contains Policy SD-2.1, which calls for identifying and preserving archaeological resources. This is supported by implementing action 2.1.b, which notes that standard practices for preserving archeological materials unearthed during construction, as set forth by the State Office of Historic Preservation, should be followed (City of Merced 2012a). In addition, in the event of a discovery resources are subject to the rules and regulations in State law. These actions would ensure that any potential impacts to previously unidentified subsurface archaeological resources are avoided or minimized, and/or that appropriate data recovery efforts are conducted. Specific protocols and standards that would ensure compliance with the General Plan policy and State law in the event of an inadvertent discovery of a resource during project construction are identified in Mitigation Measures 3.5b and 3.5c. These include requiring that construction crews are trained to recognize site and soil conditions that may indicate presence of an archeological resource and requiring work to stop in the event a resource is discovered, consultation be initiated with an archaeologist to determine the appropriate course of action, and Native American representatives be consulted for their input and concerns. Compliance with these measures would ensure that potential impacts to previously unidentified subsurface resources are mitigated to a less-than-significant level. Mitigation Measures 3.5b and 3.5c apply to both The Crossings area and the Remainder Area. In addition, Mitigation Measure 3.5d applies to the Remainder Area and requires that a site-specific cultural resources inventory and report is prepared prior to issuance of any discretionary approvals for development within that portion of the project site.

The Crossings/Remainder Area

3.5b Prior to issuance of any demolition or grading permits for activities within or adjacent to the project site, the City of Merced shall ensure that construction contracts and/or plans include a note requiring that all construction crews involved in demolition, grading, trenching, and/or excavation receive worker cultural resources awareness training prior to commencement of construction activities. Further, the City shall verify that a qualified archaeologist has been retained by the construction contractor to conduct the worker cultural resources awareness training, and all training materials shall be submitted to and reviewed by the City prior to issuance of grading permits. The training may be presented in-person or by videoconference. Training materials shall include:

- A worker cultural resources awareness brochure prepared by the same qualified archaeologist;
- Relevant information regarding sensitive tribal cultural resources, including applicable regulations, protocols for avoidance, and consequences of violating state laws and regulations;
- Appropriate avoidance and minimization measures for resources that have the potential to be located on the project site;
- Steps that must be taken to comply with Mitigation Measure 3.5c, including who to contact if any potential archaeological resources or artifacts are encountered;
- The requirement for confidentiality and culturally appropriate treatment of any kind of significance related to Native Americans and behaviors, consistent with Native American tribal values; and
- Instruction to construction workers for recognizing potential cultural resources, such as the presence of discolored or dark soil, fire-affected material, concentrations of lithic materials, or other characteristics observed to be atypical of the surrounding area; lithic or bone tools that appear to have been used for chopping, drilling, or grinding; projectile points; fired clay ceramics or non-functional items; non-local high-quality materials such as chert and obsidian; and historic artifacts such as glass bottles and shards, ceramic material, building or domestic refuse, ferrous metal, or old features such as concrete foundations or privies.

3.5c Prior to issuance of any demolition or grading permits for activities within or adjacent to the project site, the City of Merced shall ensure that construction

contracts and/or plans include the following note: “If any cultural resources, such as structural features, unusual amounts of bone or shell artifacts, or architectural remains, are encountered during any construction activities, the contractor shall suspend all work within 100 feet of the find, immediately notify the City’s Community Development Director, and retain a qualified archaeologist to assess the finds, consult with agencies and descendant communities (as appropriate), and make recommendations for the treatment of the discovery in compliance with Mitigation Measure 3.5c.” The qualified archaeologist shall determine if the discovered resources can be preserved in place. If preservation in place is not feasible, the archaeologist shall evaluate the deposit for its eligibility for listing in the California Register of Historical Resources. If the deposit is not eligible, mitigation is not necessary and work can continue. If the deposit is eligible, mitigation shall include excavation of the archaeological deposit in accordance with a data recovery plan (see CEQA Guidelines Section 15126.4(b)(3)(C)). The City of Merced shall ensure that descendant communities are consulted for their input and concerns during the development and implementation of any mitigation plan.

Upon completion of the evaluation and/or mitigation, the data recovery plan or report shall be submitted to the City of Merced, the applicant, the Central California Information Center, and, if appropriate, descendant communities. The data recovery plan shall be fully implemented prior to resumption of construction activities proximate to the resource(s).

Additional Mitigation Measure for the Remainder Area

- 3.5d** Prior to issuance of a discretionary permit or approval within the Remainder Area, the project applicant for that approval shall submit to the City of Merced a Cultural Resources Evaluation that includes a records search and site survey, as well as an inventory and evaluation of any resources identified within the area for which the discretionary permit of approval is requested. The Cultural Resources Evaluation shall be prepared by a qualified archaeologist and using standard archaeological procedures and techniques that meet the Secretary of Interior’s Standards and Guidelines for cultural resources inventory.

Impact 3.5-3: Implementation of the proposed project could disturb human remains, including those interred outside of dedicated cemeteries. Compliance with State law would ensure this impact remains less than significant.

The Crossings/Remainder Area

There is no evidence that human remains are present within the project site. However, it is possible for human remains to be discovered during earth disturbing activities within the Crossings component as well as future development within the Remainder Area. In the event that human remains are encountered, construction contractors would be required to comply with California Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98, which define required notification and evaluation procedures.

Compliance with Health and Safety Code Section 7050.5 would help reduce the potential impact to human remains because it would protect Native American burials, skeletal remains, and associated grave goods, and require sensitive treatment and disposition of those remains. Section 7050.5 requires that if human remains are discovered in any place other than a dedicated cemetery, no further disturbance or excavation of the site or nearby area reasonably suspected to contain human remains shall occur until the County coroner has examined the remains. PRC Section 5097.98 also outlines the process to be followed in the event that remains are discovered. Compliance with the Health and Safety Code and Public Resources Code would ensure potential impacts associated with an accidental discovery of human remains would be less than significant.

Mitigation Measures

No mitigation measures are required.

Impact 3.5-4: The proposed project could contribute to impacts to tribal cultural resources in the area. This would be a potentially significant impact.

The Crossings/Remainder Area

Preparation of the Cultural Resources Report (Appendix F) included a Sacred Lands File records search for the project site. This search failed to indicate the presence of Native American cultural resources within the project area or within one-half mile of the project area. Dudek sent information outreach letters to all NAHC-listed Native American tribal representatives on February 6, 2017 and no responses to these outreach efforts were received.

As discussed above, in compliance with AB 52, the City provided formal notification of the proposed project to all tribes listed on the NAHC official SB 18 California Tribal Consultation List that have requested notification of projects subject to CEQA review. The City provided notification

to these tribes in May 2020 and stated that tribes had 30 days to request consultation, in accordance with the timelines established in AB 52. No tribes requested participation in the consultation process, and no tribes identified any tribal cultural resources in the project site or vicinity. Portions of the site have supported agricultural and residential development since at least the early 1900s, and possibly since the late 1800s.

As discussed above, there are no known cultural resources within The Crossings area, and while the Remainder Area was not surveyed, the existing level of development throughout the Remainder Area reduces the potential for surface level cultural resources to occur. These conditions also reduce the potential for previously unidentified tribal cultural resources to be present. However, there is a potential for unknown tribal cultural resources to be affected during ground disturbance activities and this impact is potentially significant.

Mitigation Measures

The Crossings

Implementation of Mitigation Measures 3.5b and 3.5c would require that any potential tribal cultural resources encountered during project construction would be protected from further impacts until they have been evaluated by a qualified professional and a determination is made as to whether they can be preserved in place or must be excavated subject to a data recovery plan prior to continuance of construction activities in the vicinity of the resource. Mitigation Measures 3.5b and 3.5c would reduce the project's impacts to tribal cultural resources to a less-than-significant level.

Remainder Area

In addition to Mitigation Measures 3.5b and 3.5c as discussed above, completion of a site-specific cultural resources evaluation would be required under Mitigation Measure 3.5d would be required for any development within the Remainder Area. This would provide additional opportunity to identify any potential tribal cultural resources that could be present in the Remainder Area and in combination with Mitigation Measure 3.5b and 3.5c would ensure that project's impacts to tribal cultural resources remain less than significant.

Impact 3.5-5: The proposed project could destroy a unique paleontological resource or site. This would be a potentially significant impact.

The Crossings/Remainder Area

There is no evidence that paleontological resources are present within the project site. However, it is possible for paleontological resources to be discovered during earth disturbing activities within

the Crossings component as well as future development within the Remainder Area. In the event that paleontological resources are encountered, construction contractors would be required to federal, state and local regulations regarding the discovery of paleontological resources. In addition, Mitigation Measure 3.5e would require the education of construction personnel regarding the possibility of the accidental discovery of paleontological resources as well as the proper course of action in the event of accidental discovery. Therefore, the proposed project would result in a **less than significant** impact after implementation of Mitigation Measure 3.5e.

Mitigation Measures

The Crossings/Remainder Area

3.5e To minimize potential adverse impacts on unique, scientifically important paleontological resources, the project applicant shall do the following:

- Before the start of grading or excavation activities, construction personnel involved with earth-moving activities shall be informed of the possibility of encountering fossils, the appearance and types of fossils likely to be seen during construction activities, and proper notification procedures should fossils be encountered. This worker training shall be prepared and presented by a qualified paleontologist or archaeologist.
- If paleontological resources are discovered during earth-moving activities, the construction crew shall immediately cease work in the vicinity of the find and shall notify the City planning department. The project applicant shall retain a qualified paleontologist to evaluate the resource and prepare a proposed mitigation plan in accordance with SVP guidelines (1995). The proposed mitigation plan may include a field survey, construction monitoring, sampling and data recovery procedures, museum storage coordination for any specimen recovered, and a report of findings. Recommendations determined by the lead agency to be necessary and feasible shall be implemented before construction activities can resume at the site where the paleontological resources were discovered.

3.5.5 Cumulative Impacts

The geographic scope or cumulative context for evaluation of potential cumulative impacts on cultural resources is Merced County, which includes the cities of Merced, Atwater, Livingston, Gustine, Los Banos, and Dos Palos. While project specific impact analysis for cultural resources necessarily includes separate analyses for historical, archaeological and human remains, the cumulative analysis combines these resources into a single, non-renewable resource base and

considers the additive effect of project-specific impacts to significant regional impacts on cultural resources. Thus, this cumulative impact analysis for cultural resources relies on projected plans for development in the City of Merced and surrounding unincorporated Merced County areas, consistent with CEQA Guidelines Section 15130(b)(1)(B).

Impact 3.5-6: The proposed project could contribute to cumulative impacts to historical and archaeological resources in the area. This would be a less-than-significant impact.

Archaeological evidence suggests that Merced County has been inhabited dating to approximately 12,000 years before present (BP). Background research has identified a number of historical archaeological sites, prehistoric archaeological sites, and historic buildings and structures throughout the city and county. Urban development throughout the County has likely impacted a number of known and unknown historic and prehistoric sites. It is reasonable to assume that present and future development would continue to have an impact on known and unknown cultural, historical, and archaeological resources in the City and County. All significant and cultural resources and human remains are unique and non-renewable, all adverse effects or negative impacts erode a dwindling resource base. For example, the loss of any one archaeological site affects all others in a region because these resources are best understood in the context of the entirety of the cultural system of which they are a part. Proper planning and appropriate mitigation can help to capture and preserve knowledge of such resources and can provide opportunities for increasing our understanding of the past environmental conditions and cultures by recording data about sites discovered and preserving artifacts found. Federal, state, and local laws are also in place, as discussed above, that protect these resources in most instances. However, the cumulative loss of cultural, historic, and archaeological resources from present and future development within the County would be considered a potentially significant cumulative impact.

The Merced County General Plan EIR found that “implementation of the proposed 2030 General Plan would involve future population growth within the unincorporated county that could result in substantial changes to significant identified historical resources, or those resources considered eligible for National Register or California Register listing,” particularly resources that have not yet been identified. The County’s General Plan EIR also recognizes that “urbanized areas are unlikely to contain significant sub-surface historical resources due to previous development activity. However, redevelopment activities within existing urbanized areas that contain known historical resources, some that date between the late 1800s and the early 1900s,” including sites within the City of Merced. Further, the County’s General Plan EIR finds that development of agricultural lands is more likely to encounter archeological and historical resources noting that “studies indicate that significant, unique historic remains can exist below the plow zone in Merced County.” To address these potential effects, the County’s General Plan EIR required mitigation in the form

of adding policies to the General Plan that require property surveys to identify cultural resources and concluded that these measures would provide sufficient additional protection for historical and cultural resources to reduce the impact to less than significant (Merced County 2013).

The City of Merced General Plan EIR also recognized that implementation of the City's General Plan in combination with implementation of the General Plans of the County and other incorporated cities in the area "would increase the density of development throughout the County and could further threaten significant cultural resources within the County" because the increased human presence and activity could lead to increased vandalism and other actions that could destroy significant archaeological resources. The EIR also noted that land development in the City of Merced as well as county-wide has already converted hundreds of acres to urban uses and thousands of additional acres are planned for development under each jurisdiction's General Plan. For the City of Merced, this involves lands within the SUDP/SOI area, including the project site. The conditions within the SUDP/SOI are similar to lands planned for development elsewhere in the County, in that they support primarily rural residential and agricultural uses and thus have been subject to lower intensity levels of development compared to more urbanized areas. Under these conditions, while there are no known cultural resources within the project site and in many sites throughout the SUDP/SOI area and other lands planned for development in the region, there is a potential for cultural resources to be encountered and adversely affected during construction. Although the General Plan contains policies intended to minimize such effects, the General Plan EIR found that "the cumulative impacts of development in accordance with the proposed General Plan and other General Plans in the County are significant" and mitigation at the individual project level may not be sufficient to avoid or substantially reduce such impacts. Thus, the City's General Plan EIR concluded that the cumulative impacts to cultural resources would be significant and unavoidable (City of Merced 2012b).

As discussed in Appendix F, the project site does not contain any known cultural, tribal cultural, historic, or archaeological resources and construction on the project site is not likely to impact these resources. The site could support sub-surface cultural resources, however the existing and past levels of development and activity at the site reduce the potential for such resources to be encountered. While the County's General Plan EIR notes that such resources can exist below the plow zone, the proposed project does not involve excavation for below-grade building components or substantial depths of soil cuts other than for creation of the proposed detention basin. The project is required to comply with the City's General Plan implementation measures related to the preservation of cultural resources and the Health and Safety Code related to unearthing human remains as described in Mitigation Measures 3.5a and 3.5b. Under these requirements, any resources that may be uncovered during construction would be required to be evaluated and where a resource is significant, it must either be preserved in place or excavated subject to an approved data recovery plan. This would ensure that the project would not result in

any significant direct adverse effects to cultural resources because all of the important information that a resource can provide would be retained, and therefore the project would not make a cumulatively considerable contribution to the cumulative loss of cultural resources. Thus, this impact would be **less than significant**.

Mitigation Measures

The Crossings

Implementation of Mitigation Measures 3.5b, 3.5c, and 3.5e would ensure that the project's potential direct impacts to cultural resources would be reduced to a less than significant level and that the project's contribution to the cumulative impact would be less than cumulatively considerable.

Remainder Area

Implementation of Mitigation Measures 3.5b, 3.5c, 3.5d, and 3.5e as described above would ensure that the project's potential direct impacts to cultural resources would be reduced to a less than significant level and that the project's contribution to the cumulative impact would be less than cumulatively considerable.

3.5.6 References Cited

- City of Merced. 2012a. *City of Merced 2030 General Plan*. Adopted January 2012.
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