

4.6

CULTURAL RESOURCES

INTRODUCTION

This section of the EIR describes cultural (prehistoric and historic) resources known to be located on the project site. Prehistoric resources are those sites and artifacts associated with indigenous, non-Euroamerican population, generally prior to contact with people of European descent. Historical resources include structures, features, artifacts and sites that date from Euroamerican settlement of the region. The extent to which development of the proposed project could remove, damage, or destroy existing historic or prehistoric resources is evaluated.

Information presented in this section is taken from the City of Davis General Plan¹, the *Draft Program EIR for the City of Davis General Plan Update and Project EIR for Establishment of a New Junior High School (General Plan Update EIR)*², as well as the November 2005 *Cultural Resources Assessment of the Proposed Target Store in the City of Davis, Yolo County, California*, prepared by Peak & Associates, Inc³.

ENVIRONMENTAL SETTING

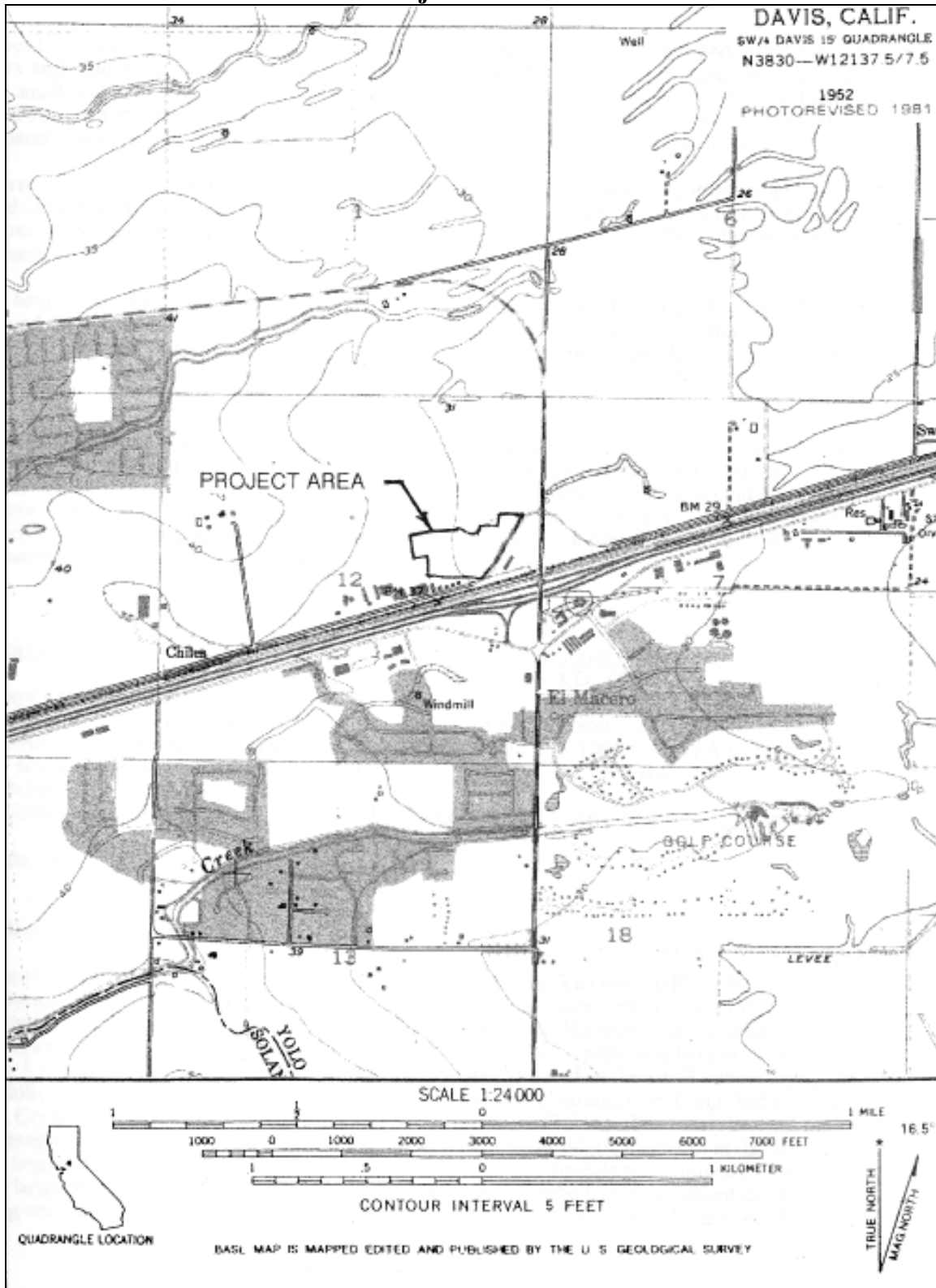
Project Location

The 19.06-acre Second Street Crossing project site is located in the eastern portion of Davis, west of Mace Boulevard, and north of Interstate 80 and the Union Pacific Railroad tracks that parallel the Interstate in this area. Surrounding land uses include existing single-family and multi-family housing and a community park to the north of the site. A drainage channel and bike path run along the northwestern portion of the site. Second Street, a Southern Pacific Railroad rail line, and Interstate 80 are located south of the site. Recently constructed light industrial and office buildings exist to the east of the site. The property to the west is vacant. The project lies in the south half of the northeast quarter of section 12, Township 8 north, Range 2 east, and is mapped on the Davis 7.5' USGS topographic quadrangle (Figure 4.6-1).

Archaeological Background

In the early decades of the 1900s, E. J. Dawson explored numerous sites near Stockton and Lodi, later collaborating with W. E. Schenck (Schenck and Dawson 1929). Excavation data, in particular, from the stratified Windmiller Site (CA-Sac-107) suggested two temporally distinct cultural traditions. Later work at other mounds by Sacramento Junior College and the University of California enabled the investigators to identify a third cultural tradition intermediate between the previously postulated early and late horizons. This sequence was later refined by Beardsley (1954), with an expanded

**Figure 4.6-1
Project Location**



definition of artifacts diagnostic of each time period and was extended to parts of the central California coast. Traits held in common allow the application of this system within certain limits of time and space to other areas of prehistoric central California.

The Windmill Culture (Early Horizon) is characterized by ventrally-extended burials (some dorsal extensions are known), with westerly orientation of heads, a high percentage of burials with grave goods, frequent presence of red ocher in graves, large projectile points, of which 60 percent are of materials other than obsidian; rectangular *Haliotis* beads; *Olivella* shell beads (types Ala and L); rare use of bone; some use of baked clay objects; and well-fashioned charmstones, usually perforated.

The Cosumnes Culture (Middle Horizon) displays considerable changes from the preceding cultural expression. The burial mode is predominately flexed, with variable cardinal orientation and some cremations present. A lower percentage of burials with grave goods occur, and ocher staining is common in graves. *Olivella* beads of types C1, F, and G predominate, and there is abundant use of green *Haliotis sp.* rather than red *Haliotis sp.* Other characteristic artifacts include perforated canid teeth, asymmetrical and "fishtail" charmstones, usually unperforated; cobble mortars and evidence of wooden mortars; extensive use of bone for tools and ornaments; large projectile points, with considerable use of rock other than obsidian; and use of baked-clay.

Hotchkiss Culture (Late Horizon) -- The burial pattern retains the use of the flexed mode, and there is widespread evidence of cremation, lesser use of red ocher, heavy use of baked clay, *Olivella* beads of Types E and M, extensive use of *Haliotis* ornaments of many elaborate shapes and forms, shaped mortars and cylindrical pestles, bird-bone tubes with elaborate geometric designs, clamshell disc beads, small projectile points indicative of the introduction of the bow and arrow, flanged tubular pipes of steatite and schist, and use of magnetite. (The above adapted from Moratto 1984:181-183). The characteristics noted above are not all-inclusive, but cover the more important traits.

More recently, Bennyhoff and Hughes (1984) have presented alternative dating schemes for the Central California Archeological Sequence. The primary emphasis is a more elaborate division of the Horizons to reflect what is seen as cultural/temporal changes within the three horizons and a compression of the temporal span.

Other chronologies have been proposed for this general region. Fredrickson (1973) has correlated his research with Bennyhoff's (1977) work, and has defined, based upon the work of Bennyhoff, patterns, phases, and aspects. Fredrickson also proposed periods of time associated heavily with economic modes, which provides a temporal term for comparing contemporary cultural entities.

Various modifications have been proposed for the dates given in Table 4.6-1 below, but it provides a basic temporal correlation for the two main chronologies in the general project vicinity. It is important to note that this is a framework only and that the identification of regional and local variations from the pattern is a major goal of current archeological

research. Nevertheless, the succession of major cultural changes at approximately the same time period is characteristic over a large part of California.

Fredrickson	Bennyhoff, Heizer, and Schulz
	Historic -- post-A.D. 1850
Emergent Period -- A.D. 500 to 1800	Phase 2, Late Horizon -- A.D. 1500 to 1850
	Phase 1, Late Horizon -- A.D. 500 to 1500
Upper Archaic -- 1000 B.C. to A.D. 500	Middle Horizon -- 1000 B.C. to A.D. 500
Middle Archaic -- 3000 to 1000 B.C.	Early Horizon -- 2500 B.C. to 1000 B.C.
Lower Archaic -- 6000 to 3000 B.C.	
Paleo Indian -- 10,000 to 6000 B.C.	
Early Lithic -- ? to 10,000 B.C.	
(Fredrickson 1973)	(Bennyhoff and Heizer 1958; Schulz 1981)
<i>Source:</i> Peak & Associates 2005	

Ethnological Background

The Patwin occupied the southern Sacramento Valley west of the Sacramento River from the town of Princeton, north of Colusa, south to San Pablo and Suisun bays. Patwin territory extended approximately 90 miles north to south and 40 miles east to west. Distinction is made between the River Patwin, who resided in large villages near the Sacramento River, especially between Colusa and Knights Landing, and the Hill Patwin, whose villages were situated in the small valleys along the lower hills of the Vaca Mountains and Coast Range, with concentrations in Long, Indian, Bear, Capay, Cortina and Napa valleys (Johnson 1978:350; Powers 1877:218). The term "Patwin" refers to the people belonging to the many small contiguous independent political entities in this area who shared linguistic and cultural similarities. Hill and River Patwin dialects are grouped into a North Patwin language, separate from South Patwin, spoken by people who live near present-day Knight's Landing and Suisun. Together, these are classified as southern Wintuan and belong to the Penutian language family as do the languages of the Miwok and Costanoan peoples in the study corridor (Johnson 1978:350, 359; Kroeber 1925:351-354).

Politically, the Patwin were organized in small tribes or tribelets, each consisting of a primary village with satellite villages. Tribelets were autonomous and differed from other such units in minor cultural variations. Dialects might encompass several tribelets. Territories were vaguely defined, but included fishing and gathering areas used by the group. In each village, a leader or chief administered subsistence ventures, such as hunting or gathering, and presided over ceremonies. Social and economic activities were divided among families within a village, with certain families responsible for different specialties such as trapping ducks, collecting salt, making foot drums, or performing particular dances or shamanistic rituals (Johnson 1978:354-355).

Patwin territory includes the riverine environment of tule marshes, vines and brush near the Sacramento River, the flat grasslands dotted with oak groves, and the hills and small valley of the Coast Ranges. The villages situated on low bluffs near the river were often very large; in 1848, General Bidwell estimated at least 1000 residents at *Koru*, near Colusa (Powers 1877:219). In the hills, the Patwin settled in the small valleys, particularly along Cache and Putah creeks, where large populations were reported. The plains were least hospitable; there, villages were sparse because of the seasonal flooding in winter and lack of reliable water sources during the dry months. As Powers described:

In winter there was too much water on them, in summer none at all, and aborigines had no means of procuring an artificial supply. Besides there was no wood on them, and the overflowed portions in early summer breed millions of accursed gnats, which render human life a burden and weariness. Hence they were compelled to live beside water-sources, except during certain limited periods in the winter, when they established hunting-camps out on the plains (Powers 1877:219).

Kroeber noted that the Patwin responded to these seasonal changes by shifting their habitation sites:

The valley people evidently had their permanent villages on the river itself -- that is, in the marsh belt -- but appear to have left this during the dry half of the year to live on the adjacent plains, mostly by the side of tributaries. The upland people built their winter homes where the streams issue on these creeks, and in summer moved away from the main watercourses into the hills or mountains (Kroeber 1925:354).

Within a village, the Patwin constructed earth-covered semi-subterranean structures. The Hill Patwin used a circular floor plan while the River Patwin favored an elliptical shape. Four types of building occurred in a predictable pattern: the ceremonial dance house was placed a short distance to the north or south of the village, the sudatory or sweat house was positioned to the east or west of the dance house, and the menstrual hut was built on the edge of the village, farthest from the dance house. Family dwellings could be erected anywhere within the community. Family lodges were built by one's paternal relatives while the other structures were the product of a communal effort. They used readily available materials, forming a framework of saplings, and covering the walls and roof with mud and brush (Johnson 1978:357-358; Powers 1877:220-221).

Natural resources flourished in Patwin territory. They gathered seeds and plant foods and hunted game animals on the plains, shot or netted ducks and other migratory waterfowl in the thick tule marshes, and netted salmon and other fish in the rivers and streams. Some of these activities were conducted by groups or families assigned to particular resource areas by a village chief. Acorns were a staple in the Patwin diet. Two types of Valley oak and, rarely, live oak acorns were gathered at communally-owned groves (Johnson

1978:355). Common practice was to store abundant quantities of acorns in tall granaries to assure against hunger in years of poor harvest.

Pre-contact population is difficult to estimate, but a survey of various sources seems to indicate that the Patwin may have numbered 4,000 before their first encounter with non-Indians. Missionization, punitive military expeditions and fatal confrontations with ranchers took their toll on the populace. John Work's party of trappers from the Hudson's Bay Company came down the Sacramento River in 1832, returning up the river in 1833. They unintentionally introduced a deadly disease to native California and, in their wake, a malaria epidemic swept through the Sacramento Valley. Just four years later, in 1837, smallpox raged through the villages and, as a result of these diseases, up to 75 percent of the Patwin died (Cook 1955). Those who survived these tragedies eventually settled on small reservations or worked as ranch laborers. Throughout the 1800s and 1900s, the population decreased; in 1972, the Bureau of Indian Affairs counted only 11 Patwin in the entire territory. Three reservations -- Colusa, Cortina and Rumsey -- remain active in former Patwin territory; they are occupied primarily by descendants of Wintun and other groups (Bureau of Indian Affairs 1983; Johnson 1978:352).

Historical Background

The first settler in the Davis vicinity, Jerome Davis, settled on his land in the early 1850s. By 1856, Davis had 8,000 acres of land, 1,000 of which were enclosed. Davis irrigated portions of his land by pumping water from Putah Creek with a steam engine. Davis raised livestock, peaches, grapes, wheat, and barley. By 1864, his ranch totaled about 13,000 acres, with 8,000 acres fenced.

In 1867, William Dresbach leased the Davis home, using it as a hotel, the "Yolo House." A settlement grew up in the vicinity, and Dresbach named it Davisville. This name persisted until 1907 when the University was established and the post office name was shortened to Davis.

In 1905, the State Legislature established the University Farm and the first buildings for the University were built in 1907. In 1922, the school was officially organized as a branch of the College of Agriculture of the University of California at Berkeley. More classes were added, and a College of Letters and Science organized in 1951. In 1959, Davis was authorized as a general campus of the University of California (Kyle ed. 1990:537).

The rich agricultural lands surrounding Davis continued to be developed and the railroad siding at Chiles, just west of the project area, became a busy shipping point. The mainline in this area was first constructed by the Central Pacific Railroad just after the Civil War. The line was acquired by the Southern Pacific in 1884 and was their mainline from the Bay Area until the Union Pacific acquired the Southern Pacific in 1996.

At the end of Second Street, a road extended from town to parallel the siding, was the Frontier Fertilizer operation. The fertilizer plant is defunct, but the site is now an EPA

superfund site bordering portions of the western and southern boundaries of the project area. Second Street has since been extended through to Mace Boulevard.

REGULATORY CONTEXT

Federal, State, and local governments have developed laws and regulations designed to protect significant cultural resources that may be affected by actions that they undertake or regulate. The National Environmental Policy Act (NEPA), National Historic Preservation Act (NHPA), and the California Environmental Quality Act (CEQA) are the basic federal and state laws governing preservation of historic and archaeological resources of national, regional, State and local significance.

Federal Regulations

Federal regulations for cultural resources are governed primarily by Section 106 of the NHPA of 1966. Section 106 of NHPA requires Federal agencies to take into account the effects of their undertakings on historic properties and affords the Advisory Council on Historic Preservation a reasonable opportunity to comment on such undertakings. The Council's implementing regulations, "Protection of Historic Properties" are found in 36 Code of Federal Regulations (CFR) Part 800. The goal of the Section 106 review process is to offer a measure of protection to sites, which are determined eligible for listing on the National Register of Historic Places. The criteria for determining National Register eligibility are found in 36 CFR Part 60. Amendments to the Act (1986 and 1992) and subsequent revisions to the implementing regulations have, among other things, strengthened the provisions for Native American consultation and participation in the Section 106 review process. While federal agencies must follow federal regulations, most projects by private developers and landowners do not require this level of compliance. Federal regulations only come into play in the private sector if a project requires a federal permit or if it uses federal money.

State Regulations

State historic preservation regulations affecting this project include the statutes and guidelines contained in the California Environmental Quality Act (CEQA; Public Resources Code sections 20183.2 and 21084.1 and section 15064.5 of the CEQA Guidelines). CEQA requires lead agencies to carefully consider the potential effects of a project on historical resources. An "historical resource" includes, but is not limited to, any object, building, structure, site, area, place, record or manuscript, which is historically or archaeologically significant (Public Resources Code section 5020.1). Section 15064.5 of the CEQA Guidelines specifies criteria for evaluating the importance of cultural resources, including:

1. The resource is associated with events that have made a contribution to the broad patterns of California history;
2. The resource is associated with the lives of important persons from our past;

3. The resource embodies the distinctive characteristics of a type, period, region or method of construction, or represents the work of an important individual or possesses high artistic values; or
4. The resource has yielded, or may be likely to yield, important information in prehistory or history.

Advice on procedures to identify such resources, evaluate their importance, and estimate potential effects is given in several agency publications such as the series produced by the Governor's Office of Planning and Research (OPR). The technical advice series produced by OPR strongly recommends that Native American concerns and the concerns of other interested persons and corporate entities, including, but not limited to, museums, historical commissions, associates and societies be solicited as part of the process of cultural resources inventory. In addition, California law protects Native American burials, skeletal remains and associated grave goods regardless of the antiquity and provides for the sensitive treatment and disposition of those remains⁴.

California Historic Register

The State Historic Preservation Office (SHPO) also maintains the California State Register of Historic Resources (CRHR). Properties that are listed on the National Register of Historic Properties (NRHP) are automatically listed on the CRHR, along with State Landmark and Points of Interest. The CRHR can also include properties designated under local ordinances or identified through local historical resource surveys.

Local Regulations

Local Surveys

Both the City of Davis and Yolo County have prepared historic resource surveys to identify and document those historic properties including structures, roads, bridges, signs, and trees that are considered historically representative of the area.

City of Davis General Plan

The City of Davis General Plan contains the following guiding principles to preserve historic and cultural resources:

Historic Preservation

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|----------------|--|
| Goal HIS 1. | Designate, preserve, and protect the archaeological and historic resources within the Davis community. |
| Policy HIS 1.1 | Maintain an inventory of archaeological and historic resources. |
| Policy HIS 1.2 | Incorporate measures to protect and preserve historic and archaeological resources into all planning and development. |
| Policy HIS 1.3 | Assist and encourage property owners and tenants to maintain the integrity and character of historic resources, and to restore and |

reuse historic resources in a manner compatible with their historic character.

Goal HIS 2. Promote public awareness of the prehistoric and historic past of the Davis area.

Policy HIS 2.1 Add to the knowledge and understanding of Davis' past.

IMPACTS AND MITIGATION MEASURES

Standards of Significance

A project could have a significant effect on the environment if it would cause a substantial adverse change in the significance of an archaeological resource or disturb any human remains. Pursuant to Section 15064.5 of the CEQA Guidelines, archaeological resources, not otherwise determined to be historical resources, may be significant if they are unique. Pursuant to Public Resources Code (PRC) Section 21083.2, a unique archaeological resource is defined 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 of the following criteria:

- Contain information needed to answer important scientific questions and there is a demonstrable public interest in that information.
- Have a special and particular quality, such as being the oldest of its type or the best available example of its type.
- Be directly associated with a scientifically recognized, important prehistoric or historic event or person.
- Create a substantial adverse change in the significance of a listed historic resource or resource eligible for listing at the State level;
- Allow development that would be inconsistent with other City plans, policies, or ordinances.
- Create a substantial adverse change in the significance of an archaeological resource or disturb a unique paleontological resource.
- Disturb any human remains.

According to Section 15064.5 of the CEQA Guidelines, all human remains are significant.

A non-unique archaeological resource is defined as an archaeological artifact, object, or site that does not meet the above criteria. Non-unique archaeological resources do not receive further consideration under CEQA.

Method of Analysis

Records Search/NAHC

As part of the Cultural Resources Assessment by Peak & Associates, a records search to identify previously recorded cultural resources and cultural resource investigations was performed by the Northwest Information Center (NWIC) of the California Historical Resources Information Center. In addition, both Peak Associates and the City of Davis sent a letter to the Native American Heritage Commission (NAHC) in Sacramento requesting a list of contacts that might supply information regarding Native American concerns regarding the project. Peak Associates then sent letters to the individuals on the list of contacts. Peak & Associates also requested that the NAHC check their sacred lands file to further determine the potential for cultural resources on the site.

Historic maps of the area were also consulted to determine whether any previous historic activities had taken place on the parcel. The 1865 General Land Office plat of the township shows I.S. Chiles as a prominent landowner in the vicinity, hence the name of the railroad siding, but the land around the project area was owned by “Mrs. Henderson.” A road from Davis turns north near the western edge of the project area and continues into Section 1 to intercept another early road running roughly on the modern route of Cowell Avenue.

The only recorded resource near the project area is the railroad, which has been assigned the primary numbers P-48-000549 and P-57-000400. Because the railroad is on the other side of Second Street from the proposed project, the railroad would not be impacted by the development. Other than this, historic maps did not indicate any previous use of the land other than agriculture.

Field Survey

The project area was inspected on October 16, 2005, by a team led by Robert Gerry of Peak & Associates. Linear transects were walked with a spacing of no more than 15 meters between transects, to insure adequate ground coverage. Ground visibility was poor over much of the project area due to dense high weeds. Regular probing by trowel was necessary to insure that no features were overlooked. However, in several areas the ground cover has been mown almost to ground level, providing a check on survey results.

The project area is flat and without surface water sources, which makes the project area a relatively unlikely area for prehistoric camps or villages, particularly given that Putah Creek is only about one half mile to the south, with much more desirable areas for occupation. Evidence of prehistoric cultural resources was not discovered during the course of the survey.

Standing structures do not exist on the property and no foundations were discovered during the survey. Some modern amenities have already been installed. Faraday Avenue, a new local access route, has been installed running from Second Street near the

southeast end of the project area across the project area to terminate at a circle just west of the property boundary. Faraday has no buildings along it as yet, but streetlights, fire hydrants and underground utilities are all in place.

Project Impacts and Mitigation Measures

4.6-1 Impacts to archaeological resources on the project site.

The NWIC search conducted at Peak & Associates' request determined that significant archaeological resources have not been recorded on or adjacent to the project site. In addition, the Peak & Associates' October 16, 2005 field survey did not reveal any evidence of prehistoric resources. Therefore, Peak & Associates concludes that identified prehistoric cultural resources do not exist on the project site, and impacts to any identified prehistoric resources would not result from implementation of the proposed project.

However, the project site has been subject to impacts from agricultural operations for decades, and may still contain undiscovered cultural deposits, which have been scattered or obscured by these agricultural operations. Furthermore, the area has never been systematically surveyed. Therefore, the possibility remains that such resources could be present, though buried, within the Second Street Crossing (Target Store) project area. Because excavation and grading during project construction could damage such resources, the impact of the proposed project would be considered *significant*.

Mitigation Measures(s)

Implementation of the following mitigation measures would reduce the above impact to a *less-than-significant* level.

- 4.6-1(a) *Prior to the issuance of grading permits, an archeological monitor shall be hired by the applicant and approved by the City to train the construction grading crew prior to commencement of earth-grading activity in regard to the types of artifacts, rock, bone, or shell that they are likely to find, and when work shall be stopped for further evaluation. One trained crew member shall be on-site during all earth moving activities, with the assigned responsibility of "monitor". If any earth-moving activities uncover artifacts, exotic rock, or unusual amounts of bone or shell, work shall be halted in the immediate area of the find and shall not be resumed until after the archeological monitor has inspected and evaluated the deposit and determined the appropriate means of curation. The appropriate mitigation measures may include as little as recording the resource with the California Archaeological Inventory database or as much as excavation, recordation, and preservation of the sites that have outstanding cultural or historic significance.*

- 4.6-1(b) *Prior to the approval of building permit plans, the plans shall state that during construction, if bone is uncovered that may be human; the Native American Heritage Commission in Sacramento and the Yolo County Coroner shall be notified. Should human remains be found, the Coroner's office shall be immediately contacted and all work halted until final disposition by the Coroner. Should the remains be determined to be of Native American descent, the Native American Heritage Commission shall be consulted to determine the appropriate disposition of such remains.*

Implementation of these mitigation measures would ensure that any subsurface cultural resources uncovered during project construction would be preserved, recorded, and disposed of in an appropriate fashion.

Cumulative Impacts and Mitigation Measures

4.6-2 Long-term impacts to cultural resources from the proposed project in combination with existing and future developments in the Davis area.

Cultural resources are unique and non-renewable resources, and development activities continue to damage and destroy both prehistoric and historic sites and features in many cases before the information inherent in them can be reviewed, recorded, and interpreted.

As noted in impact 4.6-1 above, though unlikely, the potential exists for subsurface prehistoric or cultural resources to be unearthed during site excavation and grading. The proposed project along with other development in Davis could damage or destroy cultural resources particular to that area. The documentation of prehistoric and historic resources in their original context is crucial in developing an understanding of the social, economic, and technological character.

The loss of any one archaeological site can affect others in a region because these other properties are best understood completely in the context of the cultural system of which they were a part. While culturally significant resources have not been detected on the project site, subsurface resources could be present. Therefore, the proposed project could have a *significant* cumulative impact to cultural and/or prehistoric resources.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above impact to a *less-than-significant* level.

- 4.6-2 *Implement Mitigation Measures 4.6-1(a) and 4.6-1(b).*

Endnotes

¹ City of Davis, *City of Davis General Plan*. May 2001.

² City of Davis, *Draft Program EIR for the City of Davis General Plan Update and Project EIR for Establishment of a New Junior High School*. January 2000.

³ Peak & Associates, *Cultural Resources Assessment of the Proposed Target Store in the City of Davis, Yolo County, California*. November 2005.

⁴ California Health and Safety Code Section 7050.5, California Public Resources Code Sections 5097.94 *et seq.*