

APPENDIX C4

HISTORICAL, ARCHAEOLOGICAL, AND PALEONTOLOGICAL RESOURCES RECONNAISSANCE

**CRM TECH**

1016 E. Cooley Drive, Suite A/B
Colton, CA 92324

September 13, 2017

Stephanie Standerfer
Albert Webb and Associates
3788 McCray Street
Riverside, CA 92506

Re: Historical, Archaeological, and Paleontological Resources Reconnaissance
Grand Crossing Specific Plan/Taylor Street-Commerce Way Alignment Project
City of Grand Terrace, San Bernardino County, California
CRM TECH Contract No. 3241

Dear Ms. Standerfer:

At your request, CRM TECH has completed a historical, archaeological, and paleontological resources reconnaissance for the proposed Grand Crossing Specific Plan in the City of Grand Terrace, San Bernardino County, California (Fig. 1). The planning area consists of approximately 120.4 acres of partially developed semi-rural land on the southwestern edge of the city, located generally southeast of the Interstate 215 Freeway and north of Main Street, in the west half of Section 5 and the east half of Section 6, T2S R4W, San Bernardino Baseline and Meridian (Figs. 1, 2). As you know, nearly half of the planning area, totaling approximately 56 acres, was previously surveyed for historical and archaeological resources at an intensive level by CRM TECH earlier this year, between January and March (Tang et al. 2017a; 2017b; Fig. 2).

The City of Grand Terrace, as the lead agency under the California Environmental Quality Act (CEQA), required this study as part of the environmental review process for the specific plan. The purpose of the study is to identify and inventory all potential historical, archaeological, and paleontological resources within the planning area for future consideration in the planning process. In order to accomplish this objective, CRM TECH reviewed the previously completed historical/archaeological resources records search, conducted a paleontological records search and historical background research, and carried out a reconnaissance-level field survey. This letter presents a brief summary of the methods and results of these research procedures.

HISTORICAL/ARCHAEOLOGICAL RESOURCES RECORDS SEARCH

The historical/archaeological resources records search was originally completed on January 9 and 11, at the South Central Coastal Information Center (SCCIC) and the Eastern Information Center (EIC) of the California Historical Resources Information System, which are the official repositories of cultural resource records for the Counties of San Bernardino and Riverside, respectively. While the planning area lies entirely within San Bernardino County, the one-mile scope of the records search extended into Riverside County, necessitating record search at both information centers.

During the records search, CRM TECH archaeologist Nina Gallardo, B.A., examined maps and records on file at the SCCIC and the EIC for previously identified cultural resources and existing cultural resources studies in the project vicinity. Previously identified cultural resources include

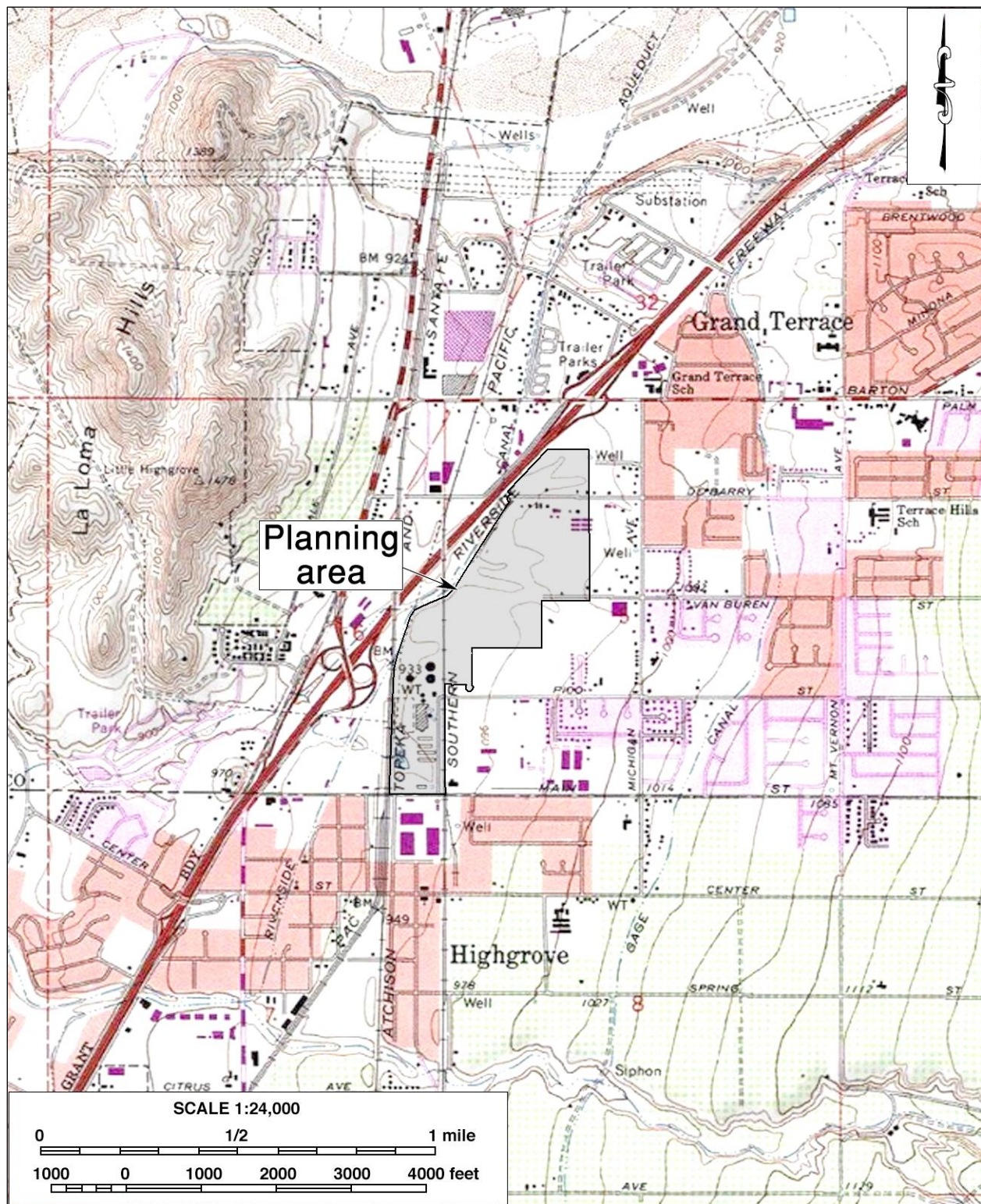


Figure 1. Project location. (Based on USGS San Bernardino South, Calif., 7.5' quadrangle, 1980 edition)

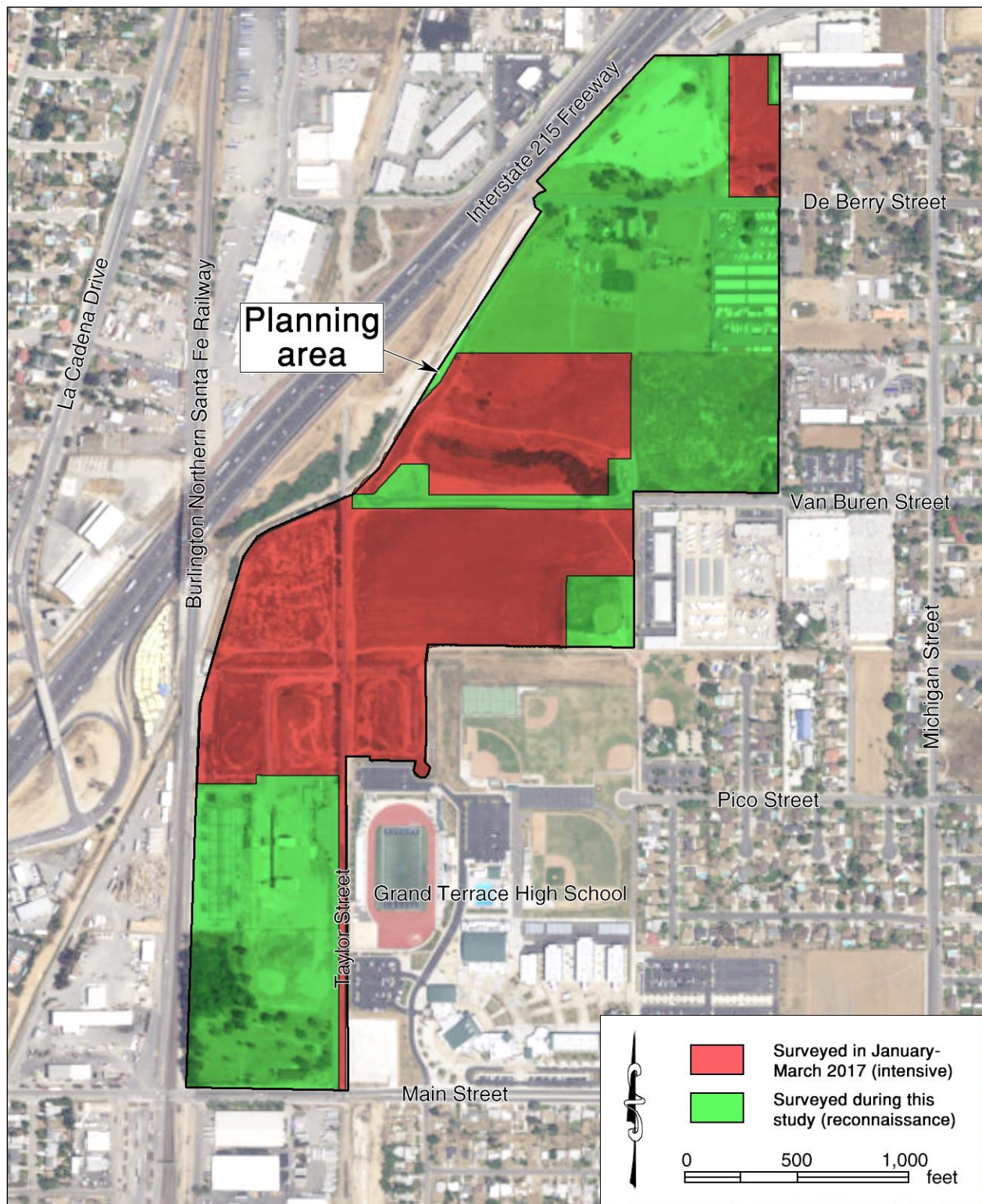


Figure 2. Survey coverage.

properties designated as California Historical Landmarks, Points of Historical Interest, or San Bernardino/Riverside County Landmarks, as well as those listed in the National Register of Historic Places, the California Register of Historical Resources, or the California Historical Resources Inventory.

According to SCCIC and EIC records, most of the planning area, lying to the east of Taylor Street, was covered by a large-scale archaeological resources survey completed in 1975, but no cultural resources were recorded within the planning area boundaries during that study (Portillo 1975:3). However, during other similar studies that have been completed in or near the planning area since then, six historic-period sites were recorded as lying within, partially within, or adjacent to the planning area, as listed below (Fig. 3; see App. 1 for record forms). No prehistoric—i.e., Native American—cultural resources were identified within or adjacent to the planning area. The nearest known prehistoric archaeological resources were found on the slopes of the La Loma Hills to the west, at least a half-mile from the planning area.

Riverside Upper Canal/Riverside-Warm Creek Canal (33-004495/36-007169)

In 1886, the Riverside Water Company constructed the Riverside-Warm Creek Canal (36-007169) along the northwestern edge of the planning area (Scott 1977:77). Some two miles to the southwest, the Riverside-Warm Creek Canal merged into the Riverside Upper Canal (33-004495), which was built in 1870 as the first water supply line for the Riverside colony (*ibid.*:67, 73). The combined course of the Riverside Upper Canal and the Riverside-Warm Creek Canal became known in later years as the Riverside Canal.

Despite the important role it played in the early development of the present-day City of Riverside, the entire Riverside Canal system, including the Riverside Upper Canal/Riverside-Warm Creek Canal, was determined not to be eligible for listing in the National Register of Historic Places during a systematic historic significance evaluation in 2001 (Gustafson and McGrath 2001:9, 12). The determination was based on the canal system's overall lack of historic integrity due to substantial alterations along its course, although the 2001 study further concluded that it might become eligible if the integrity was restored (*ibid.*:9).

Southern Pacific Railroad (36-006101)

The former course of the Southern Pacific Railroad (36-006101) crosses the central portion of the planning area. A branch line between San Bernardino and Riverside, it was constructed in 1888 and removed in this area in 2011-2012 (Tibbet 2009-2010a:2; Google Earth 2011-2012). Due to the loss of historic integrity, various segments of the Southern Pacific Railroad have been previously found not to be eligible for the National Register of Historic Places or the California Register of Historical Resources (Harper 2008a:1; Tibbet 2009-2010a:2).

During the CRM TECH studies earlier this year, it was observed that nearly all of the physical components of the Southern Pacific Railroad have been removed within that portion of the planning area, leaving little more than a gravel path marking its former alignment (Tang et al. 2017b:14). As a result, this segment of the Southern Pacific Railroad no longer retains any historical characteristics to contribute to the potential significance or integrity of Site 36-006101 as a whole, and thus does not constitute a potential “historical resource,” as defined by CEQA (*ibid.*:16).

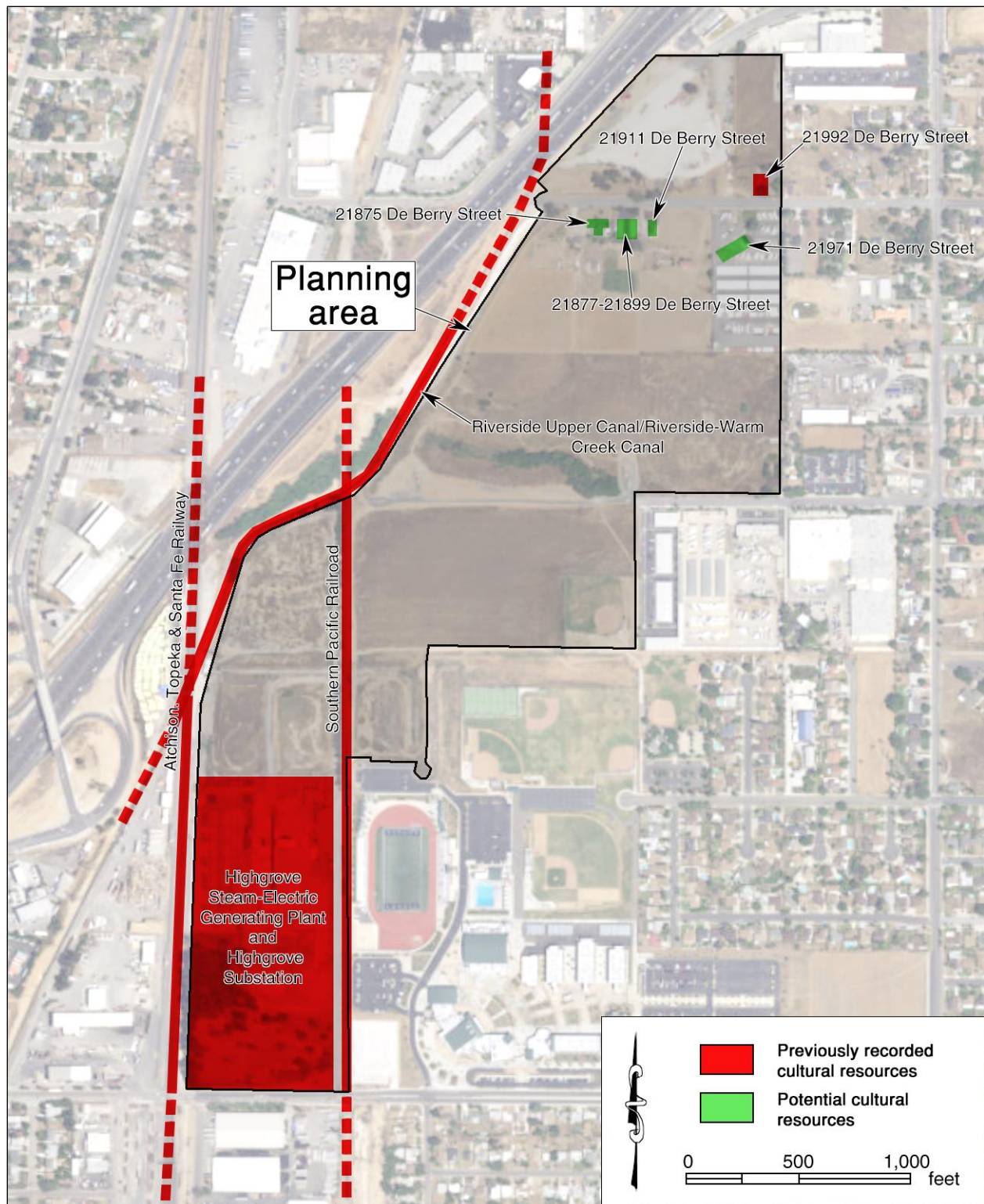


Figure 3. Locations of recorded and potential* historical/archaeological resources within or adjacent to the planning area.

* See further discussion below.

Atchison, Topeka, and Santa Fe Railway (36-006847)

Adjacent to portions of the western boundary of the planning area, the former Atchison, Topeka and Santa Fe Railway (36-006847; now the Burlington Northern Santa Fe Railway) was constructed in 1883 by the California Southern Railroad, the first Santa Fe subsidiary in California, as a part of its mainline from San Diego to San Bernardino (Bryant 1974:98-99; Serpico 1988:18-19). A momentous event in late 19th century California history, the completion of the California Southern Railroad marked the end of the Southern Pacific Railroad's virtual monopoly on modern transportation in the state, which in turn triggered a phenomenal land boom in southern California during the 1880s (Bryant 1974:98-101; Serpico 1988:18-22).

Although its historic significance can hardly be overstated, various segments of the Atchison, Topeka, and Santa Fe Railway that have been previously recorded and evaluated, including the segment adjacent to the planning area, were deemed ineligible for the National Register of Historic Places or the California Register of Historical Resources by various previous studies (OHP 1995; Horne 1998; Tang et al. 2007; 2009; Harper 2008b; Tibbet 2009-2010b). Again, these conclusions were based primarily on the lack of proper historic integrity to relate to the potential period of significance.

Highgrove Steam-Electric Generating Plant (36-021711) and Highgrove Substation (36-021712)

Recorded in 2006 as two separate but contiguous sites in the southwest portion of the planning area, the Highgrove Steam-Electric Generating Plant (36-021711) and the Highgrove Substation (36-021712) were both built in 1951-1955, along with an associated seven-acre private park known today as Cage Park (Herbert and Brookshcar 2006a; 2006b; Tibbet 2009-2010c). The California Electric Power Company, which built these facilities, was founded in 1904 and merged with Southern California Edison in 1964 (Herbert and Brookshcar 2006a:2, 13; 2006b:2, 4). Edison decommissioned the plant in 1996, but the substation was left in operation (*ibid.*). Both sites were determined to be ineligible for the National Register of Historic Places or the California Register of Historical Resources during previous studies (Herbert and Brookshcar 2006a; 2006b; Tibbet 2009-2010c; 2009-2010d; LSA 2010).

Single-Family Residence at 21992 De Berry Street

Recorded during one of the CRM TECH studies earlier this year, the single-family residence at 21992 De Berry Street is a modest Minimal Traditional-style building that evidently dates to the early post-World War II era, circa 1945 (Tang et al. 2017a:14). The building was found not to meet any of the criteria for listing in the California Register of Historical Resources as a result of that study (*ibid.*:15).

HISTORICAL BACKGROUND RESEARCH

The historical background research was conducted by CRM TECH historian Terri Jacquemain, M.A., on the basis of published literature in local and regional history, historic maps dated 1876-1967, and aerial photographs taken in 1938-2016. These sources indicate that other than the various

roads, railroads, and canals crisscrossing the landscape, the planning area was used mainly for agricultural purposes, including citrus cultivation, during the historic period. (GLO 1876; 1877; USGS 1901-1967; NETR Online 1938-1978; Figs. 4-7). Except for the agricultural fields, two apparent farmsteads that were present by the mid-1930s, one on the south side of De Berry Street and the other at the site of the Highgrove Steam-Electric Generating Plant, represented the first notable development activities within the planning area (NETR Online 1938; Fig. 6).

During the post-World War II era, two clusters of new development appeared within the planning area (Fig. 7). In the southwestern portion, the Highgrove Steam-Electric Generating Plant and the Highgrove Substation were constructed in the 1950s (NETR Online 1938-1959; wikimapia.org n.d.). In the northeastern portion, a number of buildings had sprung up by then along both sides of De Berry Street, evidently representing additional rural residences and agriculture-related structures (NETR Online 1938-1959). Elsewhere in the planning area, farming operations remained the dominant land use less than a decade ago, when most of the agricultural fields were eventually abandoned (NETR Online 1959-2012; Google Earth 1995-2016).

PALEONTOLOGICAL RESOURCES RECORDS SEARCH

Paleontological records search services for this study were provided by the San Bernardino County Museum (SBCM) in Redlands and the Natural History Museum of Los Angeles County (NHMLAC) in Los Angeles (see App. 2). These institutions maintain regional paleontological locality inventories as well as supporting maps and documents. The records search results were used to identify known paleontological localities in the vicinity of the planning area.

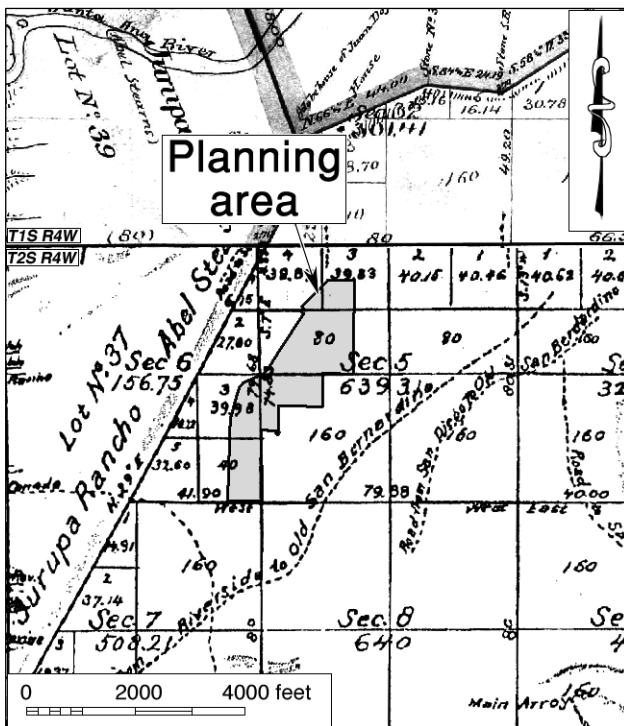


Figure 4. The planning area and vicinity in 1852-1877.
(Source: GLO 1876; 1877)



Figure 5. The planning area and vicinity in 1893-1894.
(Source: USGS 1901)

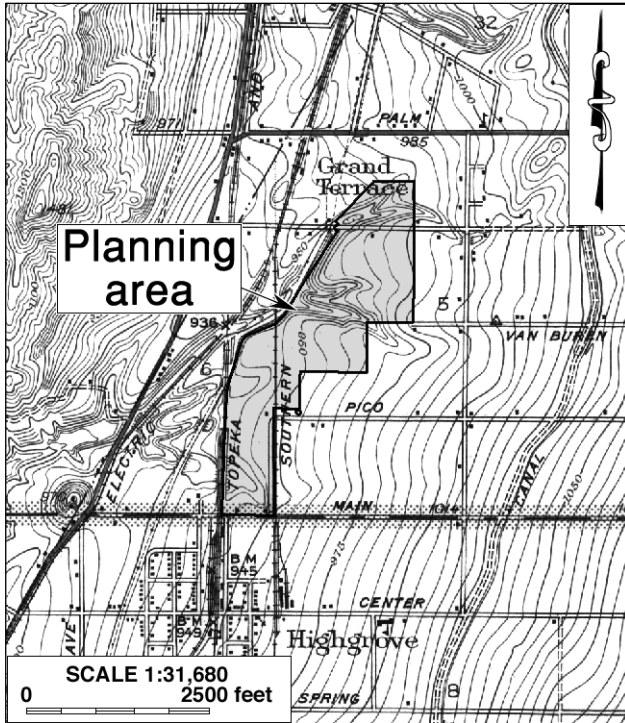


Figure 6. The planning area and vicinity in 1936-1938.
(Source: USGS 1943)

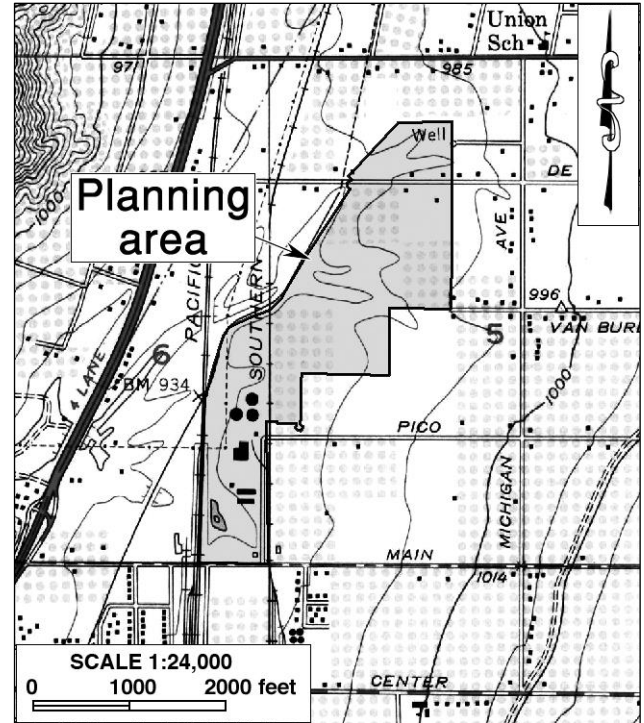


Figure 7. The planning area and vicinity in 1952-1954.
(Source: USGS 1954)

The SBCM and the NHMLAC identified no paleontological localities within the planning area or within a one-mile radius (Gilbert 2017; McLeod 2017; see App. 2). McLeod (2017) finds the planning area to be located on surface deposits of older Quaternary alluvium, and thus considers shallow excavations at this location unlikely to uncover significant fossil vertebrate remains. However, he concludes that deeper excavation may encounter such remains (*ibid.*). Gilbert (2017) shows the planning area to be situated mostly on middle to early Pleistocene-age alluvium (Q_{vof3}) and late to middle Pleistocene-age alluvium (Q_{of3} ; Fig. 8). He notes that the older alluvial fan deposits generally have a high potential to yield significant nonrenewable paleontological resources (Gilbert 2017).

FIELD SURVEY

On August 31, 2017, CRM TECH archaeologist Daniel Ballester, M.S., carried out the field reconnaissance by driving along each of the public roadways across the planning area and inspecting all built-environment features encountered and visible ground surface for any notable archaeological remains. Aided by the historical data summarized above, Ballester identified, in addition to the six previously recorded cultural resources, four buildings or groups of buildings that are evidently historical in origin (i.e., more than 45 years of age; Fig. 3). All of the buildings have been altered to some extent, most notably through replacement of windows, sidings, and roofs, but all of them retain at least a recognizable level of historical character (Fig. 9). These four properties are as follows:

- Single-family residence at 21875 De Berry Street;
- Two duplexes at 21877-21899 De Berry Street;

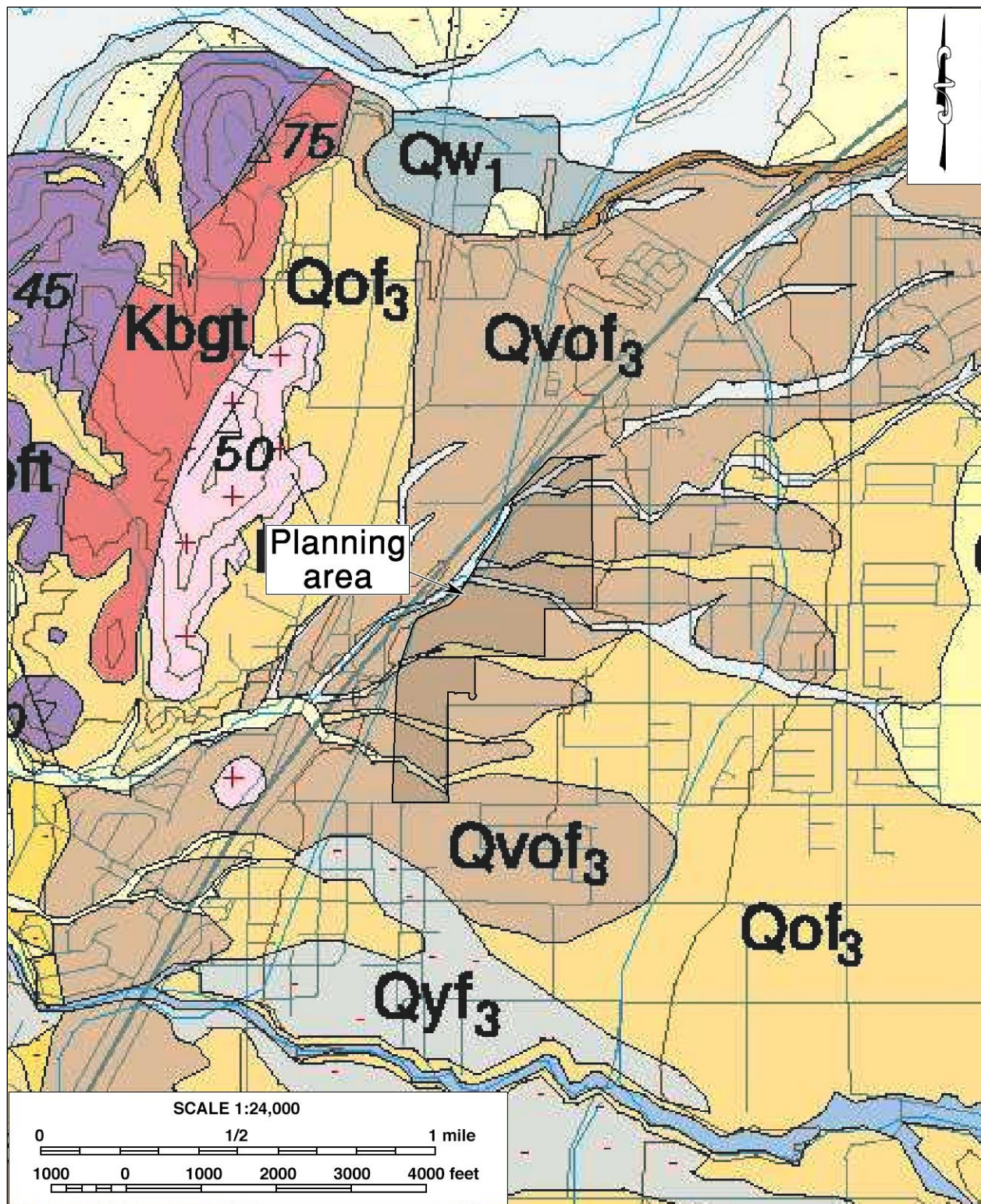


Figure 8. Geologic map of the planning area and vicinity. (Source: Morton and Miller 2006)



Figure 9. Potential historic buildings in the planning area: single-family residence at 21875 De Berry Street (*top*, view to the south), duplexes at 21877-21899 De Berry Street (*middle right*, view to the south), single-family residence with outbuilding at 21911 De Berry Street (*middle left*, view to the south), and former farm complex at 21971 De Berry Street (*bottom*, view to the southwest). (Photographs taken on August 31, 2017)

- Single-family residence with outbuilding at 21911 De Berry Street;
- Former farm complex at 21971 De Berry Street (now a part of A Storage Place).

As a part of the field survey, the previously recorded cultural resources within or adjacent to the planning area were visited to ascertain their current condition. Among them, the Highgrove Substation (36-021712) appears to be intact, but the adjacent Highgrove Steam-Electric Generating Plant (36-021711) was partially demolished around 2011 (Google Earth 2009-2012), leaving only three buildings standing at the site. The associated Cage Park remains extant, although it is apparently no longer in use and suffers from neglect. The Southern Pacific Railroad (36-006101), as observed earlier this year, has been dismantled across the entire planning area, and its former course is marked today by a gravel path with minor culverts over the various drainages. The Riverside Upper Canal/Riverside-Warm Creek Canal (33-004495/36-007169) and the Atchison, Topeka, and Santa Fe Railway (36-006847) remain extant just outside the planning area boundary.

As mentioned above, the planning area is semi-rural in character, and the existing land uses feature a mixture of residential, commercial, and light industrial development as well as large expanses of undeveloped open land. The ground surface has been extensively disturbed by past agricultural operations, nearby construction activities, and periodic disking. Additionally, the open areas bear evidence of other disturbances, such dirt roads, bike path with dirt jumps, and modified drainages. No undisturbed native land surface was noted during the survey.

CONCLUSION AND RECOMMENDATIONS

Historical and Archaeological Resources

In summary of the research results presented above, six historic-period sites have been recorded in the past as lying within, partially within, or adjacent to the planning area, as listed below (see Fig. 3 for locations):

- Riverside Upper Canal/Riverside-Warm Creek Canal (33-004495/36-007169);
- Southern Pacific Railroad (36-006101);
- Atchison, Topeka, and Santa Fe Railway (36-006847);
- Highgrove Steam-Electric Generating Plant (36-021711);
- Highgrove Substation (36-021712);
- Single-Family Residence at 21992 De Berry Street.

While most of these properties remain extant, all six of them were previously determined not to be eligible for listing in the National Register of Historic Places and/or the California Register of Historical Resources, and none of them is currently included in a local register of historical resources. As such, these six properties do not meet the statutory definition of “historical resources,” and require no further treatment under CEQA provisions on cultural resources.

Records indicate that all but the westernmost portion of the planning area was included in a large-scale archaeological resources survey in 1975 (Portillo 1975:3), but that survey is now more than 40 years old and is considered obsolete. Earlier this year, however, approximately 56 acres in the central and northeastern portions of the planning area were surveyed at an intensive level for CEQA-

compliance purposes, and no “historical resources” or “tribal cultural resource,” as defined by CEQA, were identified (Tang et al. 2017a; 2017b; Fig. 2). These areas do not require further cultural resources investigations in connection with the proposed specific plan. The remaining 64.4 acres will need to be covered with a standard Phase I historical/archaeological survey prior to any ground disturbances associated with future development projects.

During this study, four historic-period buildings or groups of buildings were identified at 21875, 21877-21899, 21911, and 21971 De Berry Street, within the 64.4-acre portion of the planning area that has yet to be surveyed at an intensive level (Fig. 3). Since formal recordation of the buildings and focused research to establish their historical background are beyond the scope of this reconnaissance, none of these properties was evaluated for historical significance under CEQA provisions. Therefore, they should be treated as potential “historical resources” in the planning process. If any future project will impact these buildings, further study will be needed to determine whether they constitute “historical resources.” If a federal agency is involved in project planning, permitting, licensing, or funding, the buildings will also need to be addressed as potential “historic properties” under Section 106 of the National Historic Preservation Act.

In addition to these specific recommendations, CRM TECH further recommends a general condition that all ground disturbances associated with future development projects be halted or diverted if buried archaeological materials are encountered until a qualified archaeologist can evaluate the nature and significance of the finds.

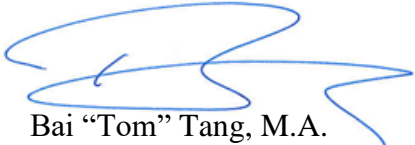
Paleontological Resources

For paleontological resources, the disturbed surface and near-surface soils in the planning area appear to be low in sensitivity, but the relatively undisturbed, fine-grained sediments underneath are considered sensitive for Pleistocene-age vertebrate fossil remains (Gilbert 2017; McLeod 2017). Prior to any ground disturbances in the planning area, CRM TECH recommends that a mitigation program be developed and implemented for the pertinent property in order to prevent potential impact on paleontological resources or reduce such impact to a level less than significant. The program should be developed in accordance with the provisions of CEQA as well as the proposed guidelines of the society of Vertebrate Paleontology (2010), and should include but not be limited to the following:

- All earth-moving operations reaching beyond the disturbed surface soils, generally below the depth of two feet, should be monitored for paleontological resources. The monitor should be prepared to quickly salvage fossil remains as they are unearthed to avoid construction delays, and should also collect samples of sediments that are likely to contain fossils of small invertebrates and vertebrates. However, the monitor must have the power to temporarily halt or divert grading equipment to allow for removal of abundant or large specimens.
- Collected samples of sediments should be processed to recover small invertebrate and vertebrate fossils, and the recovered specimens should be identified and prepared for curation at a repository with permanent retrievable storage.
- A report of findings, including an itemized inventory of recovered specimens, should be prepared upon completion of the steps outlined above. Approval of the report by the City of Grand Terrace would signify the completion of the mitigation program.

Thank you for this opportunity to be of service.

Sincerely,



Bai "Tom" Tang, M.A.
Principal Investigator, CRM TECH

REFERENCES CITED

Bryant, Keith L., Jr.

1974 *History of the Atchison, Topeka and Santa Fe Railway*. University of Nebraska Press, Lincoln.

Gilbert, Ian

2017 Paleontology Literature/Records Review, Taylor Street-Commerce Way Alignment Project (CRM TECH Contract No. 3241P). Records review letter report prepared by the San Bernardino County Museum, Division of Earth Sciences, Redlands.

GLO (General Land Office, U.S. Department of the Interior)

1876 Plat Map: Township No. 1 South Range No. 4 West, San Bernardino Meridian, surveyed in 1852-1875.

1877 Plat Map: Township No. 2 South Range No. 4 West, San Bernardino Meridian; surveyed in 1853-1877.

Google Earth

1995-2016 Aerial photographs of the project vicinity; taken in 1995, 2002-2007, 2009, 2011-2014, and 2016. Available through the Google Earth software.

Gustafson, Angie, and Mike McGrath

2001 California Historical Resource Information System record forms, 33-004495/33-004791/36-007172 (update). On file, Eastern Information Center, University of California, Riverside, and South Central Coastal Information Center, California State University, Fullerton.

Harper, Caprice D.

2008a California Historical Resource Information System record forms, 36-006101 (update). On file, South Central Coastal Information Center, California State University, Fullerton.

2008b California Historical Resource Information System record forms, 36-006847 (update). On file, South Central Coastal Information Center, California State University, Fullerton.

Herbert, Rand, and Cheryl Brookshcar

2006a California Historical Resource Information System record forms, 36-021711. On file, South Central Coastal Information Center, California State University, Fullerton.

2006b California Historical Resource Information System record forms, 36-021712. On file, South Central Coastal Information Center, California State University, Fullerton.

Horne, Melinda C.

1998 California Historical Resource Information System record forms, 36-006847 (update). On file, South Central Coastal Information Center, California State University, Fullerton.

LSA (LSA Associates, Inc.)

2010 Historical Resource Evaluation Report: Interstate 215 HOV Lane Gap Closure Project in San Bernardino and Riverside Counties. On file, Eastern Information Center, University of California, Riverside, and South Central Coastal Information Center, California State University, Fullerton.

McLeod, Samuel A.

2017 Paleontological Resources for the Proposed Taylor Street-Commerce Way Alignment Project, CRM TECH Contract No. 3241P, in the City of Grand Terrace, San Bernardino County. Records review letter report prepared by the Natural History Museum of Los Angeles County, Vertebrate Paleontology Section, Los Angeles.

NETR Online

1938-2012 Aerial photographs of the project vicinity; taken in 1938, 1948, 1959, 1966-1968, 1978, 1980, 1995, 2002, 2005, 2009, 2010, and 2012. <http://www.historicaerials.com>.

OHP (Office of Historic Preservation, State of California)

1995 Determination of Eligibility, Orange Show Road Extension, Arrowhead Avenue to Tippicanoe Avenue, San Bernardino, San Bernardino County. Letter from Cheryl Widell, State Historic Preservation Officer, to Fred J. Hempel, Division Manager, Federal Highway Administration, October 17.

Portillo, Garth

1975 Archaeological Impact Evaluation: Archaeology of Proposed Additions to the Grand Terrace Sanitary Sewer System, Grand Terrace, California. On file, South Central Coastal Information Center, California State University, Fullerton.

Reid, Hugo

1968 The Indians of Los Angeles County: Hugo Reid's Letters of 1852; edited by Robert F. Heizer. Southwest Museum Papers 21.

Scott, M.B.

1977 Development of Water Facilities in the Santa Ana River Basin, California, 1810-1968. On file, Eastern Information Center, University of California, Riverside, and South Central Coastal Information Center, California State University, Fullerton.

Serpico, Philip C.

1988 *Santa Fe Route to the Pacific*. Omni Publications, Palmdale, California.

Society of Vertebrate Paleontology

2010 Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. http://vertpaleo.org/Membership/Member-Resources/SVP_Impact_Mitigation_Guidelines.aspx.

Tang, Bai "Tom," Deirdre Encarnación, Terri Jacquemain, Daniel Ballester, and Josh Smallwood

2007 Historical/Archaeological Resources Survey Report: Mountain View Avenue Widening Project, Cities of Redlands and San Bernardino, San Bernardino County, California. On file, South Central Coastal Information Center, California State University, Fullerton.

2009 Identification and Evaluation of Historic Properties: Mountain View Avenue Widening Project, Cities of Redlands and San Bernardino, San Bernardino County, California. On file, South Central Coastal Information Center, California State University, Fullerton.

Tang, Bai "Tom," Terri Jacquemain, Ben Kerridge, Nina Gallardo, and Salvatore Boites

2017a Historical/Archaeological Resources Survey Report: Assessor's Parcel Numbers 1167-161-03 and -04, City of Grand Terrace, San Bernardino County, California. On file, South Central Coastal Information Center, California State University, Fullerton.

- Tang, Bai “Tom,” Terri Jacquemain, Nina Gallardo, and Salvadore Boites
2017b Historical/Archaeological Resources Survey Report: Grand Terrace Crossing Project, City of Grand Terrace, San Bernardino County, California. On file, South Central Coastal Information Center, California State University, Fullerton.
- Tibbet, Casey
2009-2010a California Historical Resource Information System record forms, 36-006101 (update). On file, South Central Coastal Information Center, California State University, Fullerton.
2009-2010b California Historical Resource Information System record forms, 36-006847 (update). On file, South Central Coastal Information Center, California State University, Fullerton.
2009-2010c California Historical Resource Information System record forms, 36-021711 (update). On file, South Central Coastal Information Center, California State University, Fullerton.
2009-2010d California Historical Resource Information System record forms, 36-021712 (update). On file, South Central Coastal Information Center, California State University, Fullerton.
- USGS (United States Geological Survey, U.S. Department of the Interior)
1901 Map: San Bernardino, Calif. (15', 1:62,500); surveyed in 1893-1894.
1943 Map: Colton, Calif. (1:31,680); surveyed in 1936-1938.
1954 Map: San Bernardino South, Calif. (7.5', 1:24,000); aerial photographs taken in 1952, field-checked in 1954.
1967 Map: San Bernardino South, Calif. (7.5', 1:24,000); aerial photographs taken in 1966, field-checked in 1967.