APPENDIX 4

CULTURAL RESOURCES REPORT

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

June 30, 2024

Tom Dodson, President
Tom Dodson & Associates
2150 N. Arrowhead Avenue
San Bernardino, CA 92405

Re: Update to Cultural Resources Survey
Inland Valley Infrastructure Corridor Project
Cities of San Bernardino and Highland, San Bernardino County, California
CRM TECH Contract No. 4116

Dear Mr. Dodson:

At your request, CRM TECH has completed a cultural resources survey on approximately 14.5 linear miles of public infrastructure alignments in the Cities of San Bernardino and Highland, San Bernardino County, California. The project routes coincide with segments of rights-of-way for various roadways and the City Creek Channel, located generally north of the San Bernardino International Airport, east of the Warm Creek Channel, south of Nineth Street, and west of State Route 210 (Figs. 1, 2). The entire project area lies within Sections 4, 5, and 8 of Township 1 South, Range 3 West, San Bernardino Baseline and Meridian, and a portion of the Rancho San Bernardino land grant, as depicted in the United States Geological Survey (USGS) Redlands and San Bernardino South, Calif. 7.5' quadrangles (Fig. 1).

The study is part of the environmental review process for proposed infrastructure improvements to the existing water, sewer, and circulation systems and to stormwater drainage to resolve longstanding flooding and hydrology issues. The Inland Valley Development Agency (IVDA), as the lead agency for the project, required the study in compliance with the California Environmental Quality Act (CEQA; PRC §21000 et seq.). The purpose of the study is to provide the IVDA with the necessary information and analysis to determine whether the proposed project would cause substantial adverse changes to any "historical resources," as defined by CEQA, that may exist in the project area.

Background

As you know, most of the project area was covered by a 2017 cultural resources survey that CRM TECH conducted for the IVDA's Fifth and Third Street Corridor Specific Plan (Tang 2017; see Attachment A). The purpose of that study was to identify and inventory all potential "historical resources" within the planning area, which encompassed approximately 675 acres of urban land along and surrounding the current project routes, for future statutory/regulatory compliance considerations. The scope of the study included a historical/archaeological resources records search, historical background research, Native American outreach, and a systematic field survey of the planning area.

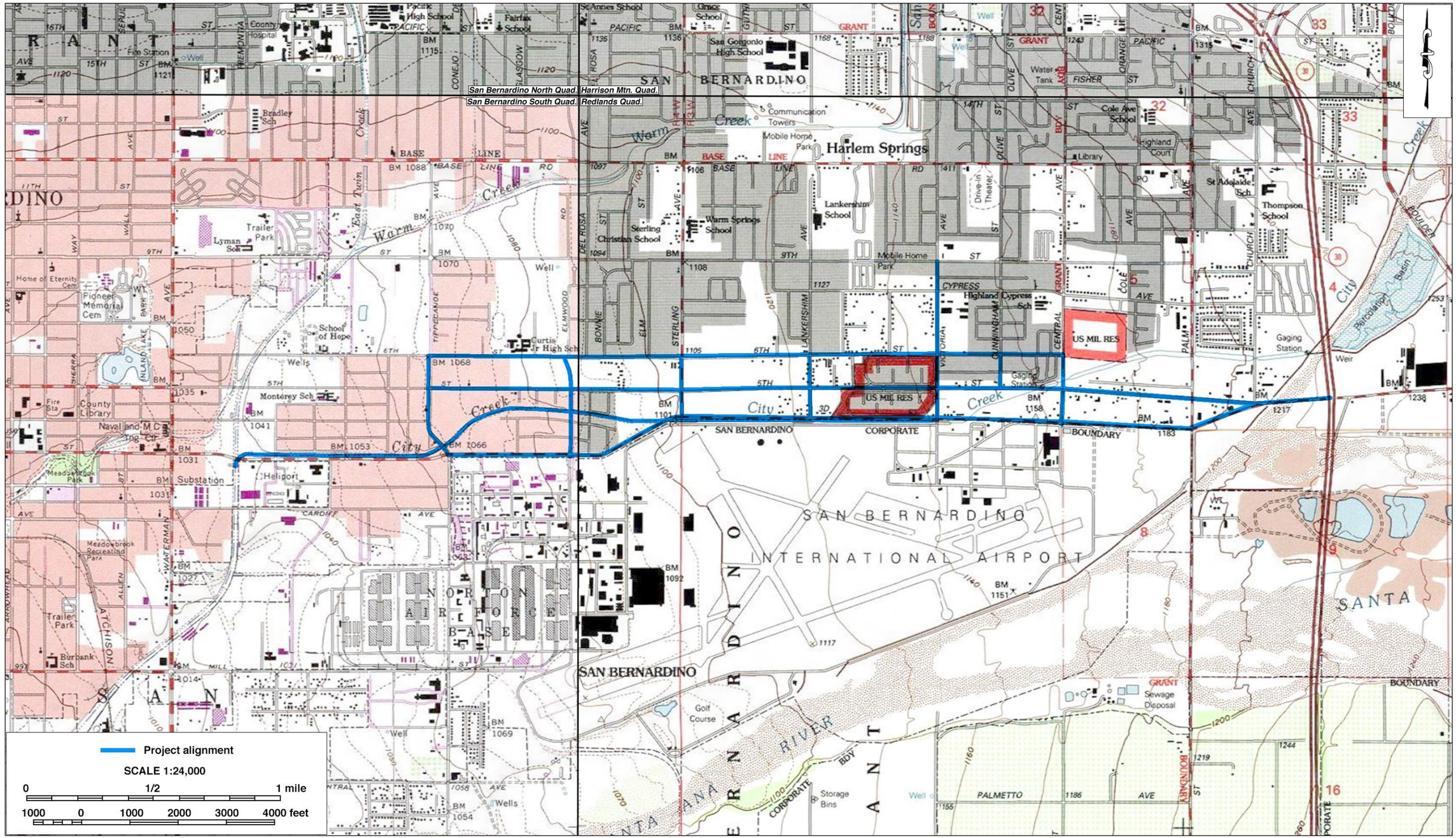


Figure 1. Project location. (Based on USGS Harrison Mtn., Redlands, San Bernardino North, and San Bernardino South, Calif., 7.5' quadrangles)

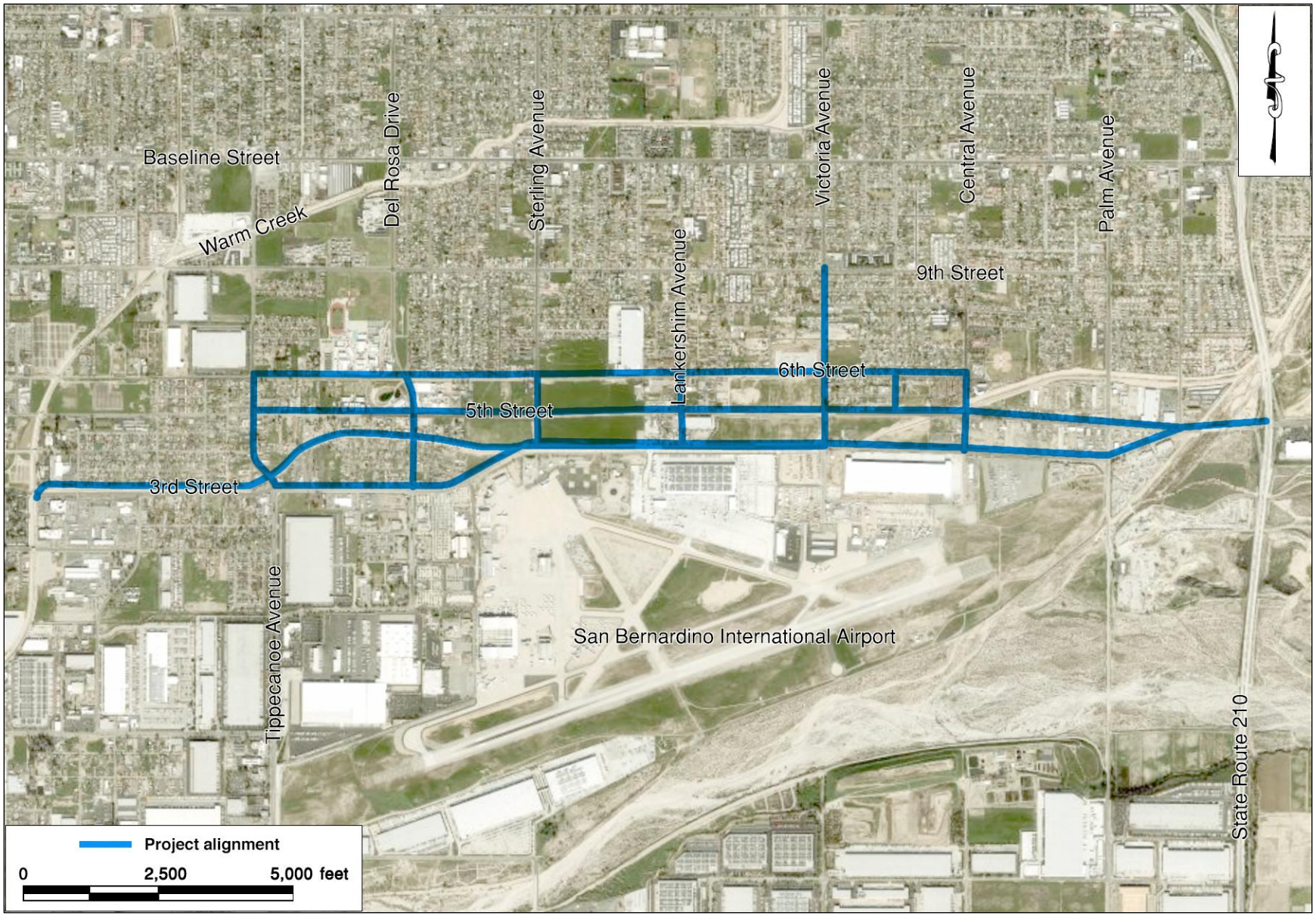


Figure 2. Recent satellite image of the project area.

As a result of these research procedures, more than 400 historic-period buildings and an archaeological site of historical origin were found to be present within the planning area at the time (Tang 2017:9). However, all of these localities were situated on properties adjacent to the public rights-of-way, and none of them overlapped with the current project alignments. Additionally, seven linear features from the historic period had been noted previously as crossing the planning area for that study (and the current project alignments), including six mid-19th century irrigation ditches and the 1888 San Bernardino, Arrowhead and Waterman Railroad, but all of these features had been removed or obliterated by later development, and no physical remains were found of any of them during the 2017 study (*ibid.*:3).

As it is now seven years old, the 2017 study is considered to be out-of-date for statutory compliance purposes today. Furthermore, portions of the current project alignments extend beyond the coverage of that study, particularly along Third Street to the west and along Victoria Avenue to the north (Figs. 1, 2; cf. Tang 2017:2). Therefore, the present study was designed and implemented as an update and an addendum to reexamine the findings for this project. Research procedures completed during this study include an update to the historical/archaeological resources records search, a Native American Sacred Lands File search, correspondence with representatives of the nearest Native American tribes, supplemental historical background research, and a field inspection of the entire project area. A summary of the methods and results of these procedures is presented below, along with the final conclusion of the study.

Historical/Archaeological Resources within the Project Boundaries

On March 27, 2024, CRM TECH archaeologist Nina Gallardo, B.A., updated the 2017 records search results at the South Central Coastal Information Center (SCCIC), California State University, Fullerton. The results of the records search establish that at the present time the California Historical Resources Inventory identifies four recorded historical/archaeological sites as lying partially across the project alignments, all of them linear features of historical origin.

Three of these were among the seven linear features noted in the 2017 study, namely the San Bernardino, Arrowhead and Waterman Railroad (Site 36-010820), the Cram and Van Leuven Ditch (36-006848), and the North Fork Ditch (formerly designated Pending Site PSBR-27H; now a part of Site 36-006544; see Attachment B). As mentioned above, none of these features remains extant in the project vicinity today. The other four linear features noted in the 2017 study, namely McKenzie Ditch, Stewarts Ditch, Whitlock Ditch, and Feudge Ditch, were all designated as pending sites at that time and are no longer listed in the California Historical Resources Inventory.

Historical sources indicate that the Cram and Van Leuven Ditch and the North Fork Ditch were both constructed in the project vicinity in the 1850s, the former originally terminating well to the east of this location (Scott 1977:12-17). After catastrophic flood damages along the Santa Ana River in 1862, the two ditches were merged into one to restore service to irrigators in both enterprises, and the combined new ditch, which inherited the North Fork name, crossed the southwestern portion of the project area (*ibid.*). In 1882, a new North Fork Canal was built at higher elevation along the base of the San Bernardino Mountains to maximize the potential acreage of land irrigated by North Fork water (*ibid.*). After that, the 1860s North Fork Ditch was largely abandoned.

The San Bernardino, Arrowhead and Waterman Railroad, also known as the Harlem Motor Road or the Highlands Motor Line, was constructed in 1888 as a narrow-gauge motor line from San Bernardino to the Harlem Springs settlement in Highland (Swett 1967:23; ERHA n.d.). Extending east-west across the project area along the south side of Sixth Street before turning north towards Harlem Springs along Victoria Avenue, the rail line operated for 20 years before being acquired by the Pacific Electric Railway Company and eventually dismantled sometime around the 1940s (*ibid.*; NETR Online 1938; Figs. 3, 4).

The fourth linear feature identified in the project area by the California Historical Resources Inventory is the City Creek Channel (Site 36-033079), which was built across the project area in the 1940s-1950s, when the creek was rerouted following the construction of Norton Air Force Base across its former course (Tang 2018:12-13). The channel was originally recorded along the south side of Third Street in 2018, and the site record was updated in 2019 and 2020 to include the three-mile segment of the channel from Victoria Avenue to the confluence with Warm Springs (see Attachment B). In a series of studies that CRM TECH conducted along its course in 2018-2020, the City Creek Channel was repeatedly evaluated against the criteria for listing in the National Register of Historic Places and/or the California Register of Historical Resources and was found not to be eligible each time (Tang et al. 2018:16; 2019:16; 2020:15; Gallardo 2018:2).

Historical Overview

As a part of this study, CRM TECH archaeologist Deirdre Encarnación, M.A., pursued additional historical background research on the project area using historical maps from the 1901-1954 era and

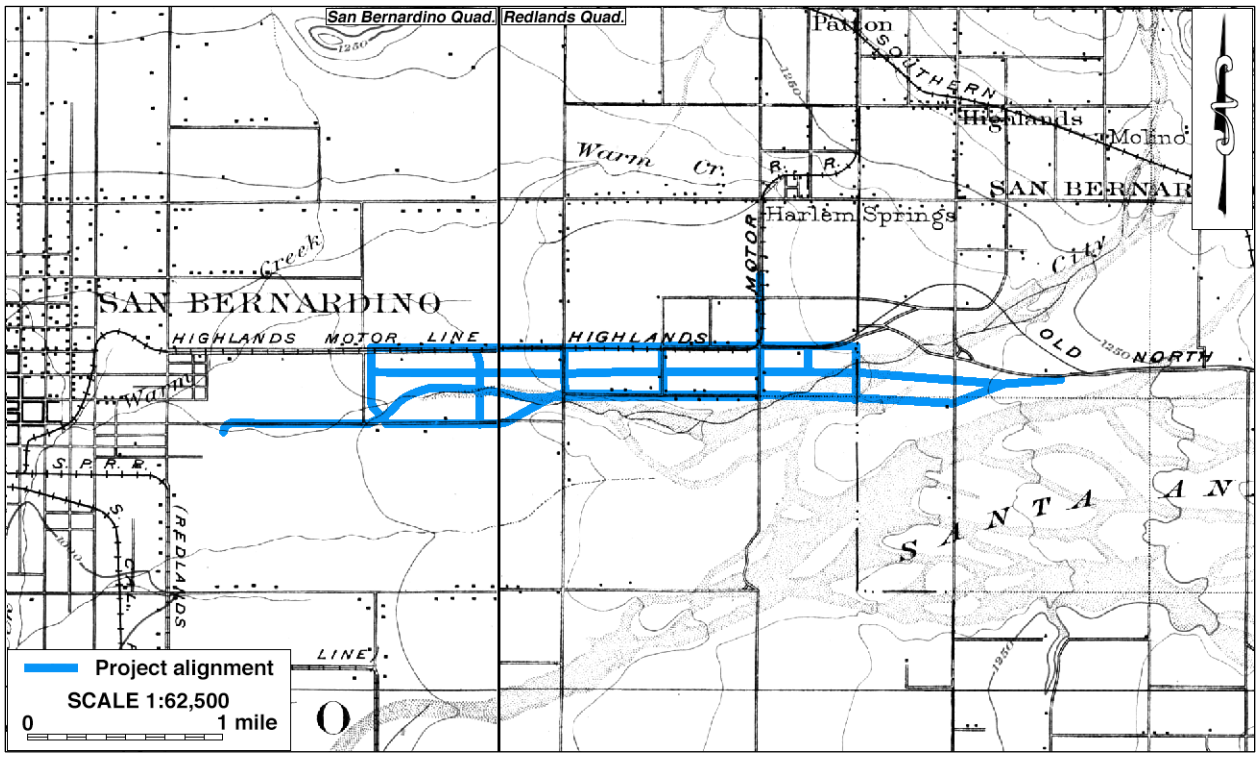


Figure 3. The project area and vicinity in 1893-1899. (Source: USGS 1901a; 1901b)

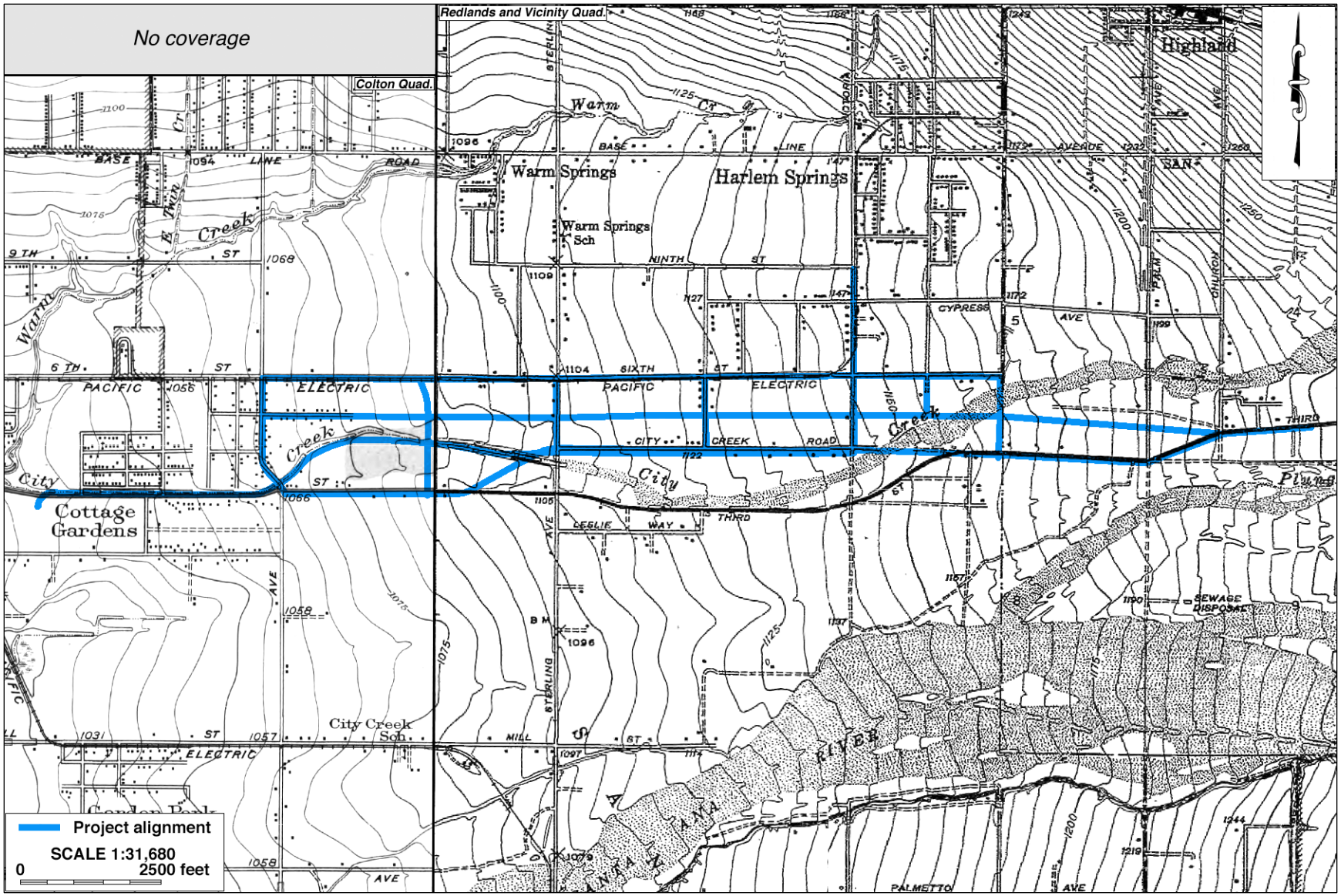


Figure 4. The project area and vicinity in 1936-1939. (Source: USGS 1943a; 1943b)

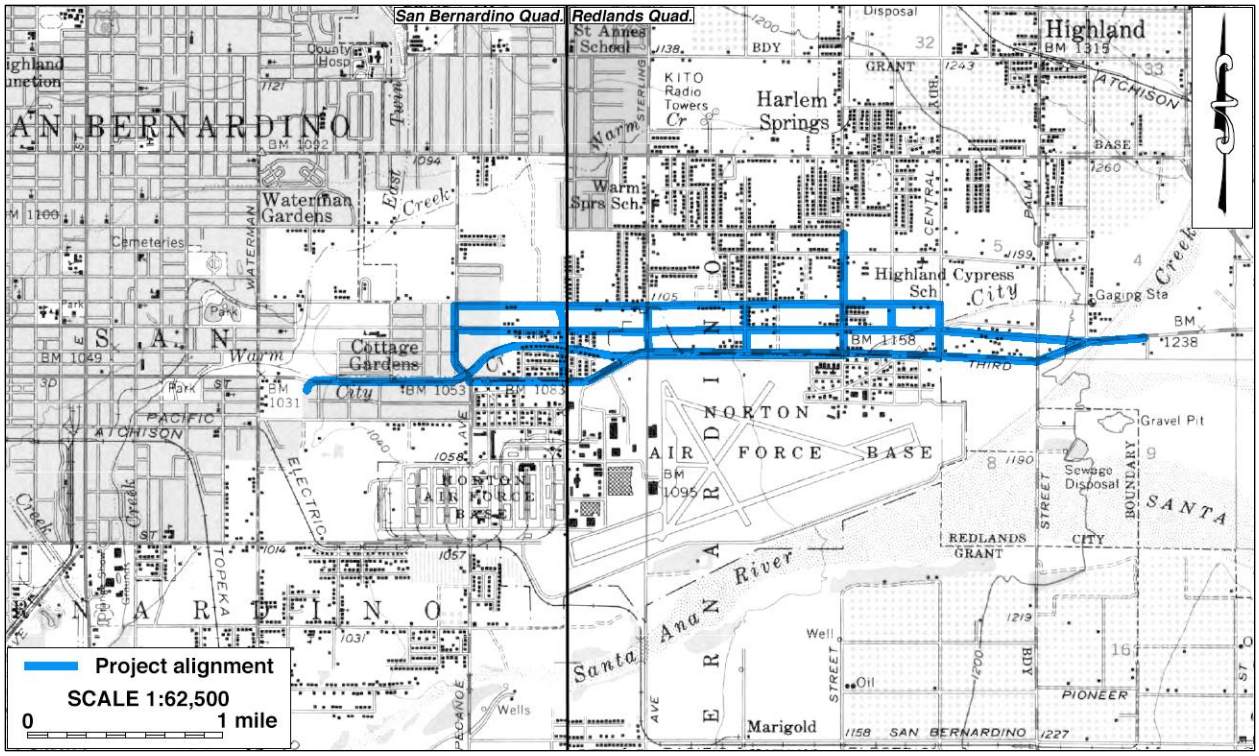


Figure 5. The project area and vicinity in 1952-1954. (Source: USGS 1954a; 1954b)

aerial/satellite photographs taken between 1938 and 2023. According to these sources, the project vicinity remained rural in character and sparsely settled until the mid-20th century, after Norton Air Force Base came into being on adjacent land to the south (Figs. 3-5; NETR Online 1938; 1959). Historical maps from the 1890s show the presence of the Highlands Motor Line and a few roads across the project area, along with some scattered buildings nearby (Fig. 3). Prior to the 1940s, much of the project area, especially on the eastern end, was occupied by the wide, unregulated City Creek wash (Figs. 3, 4; NETR Online 1938). In the 1930s, most of the land along the project routes was used as agricultural fields (NETR Online 1938).

The establishment of Norton Air Force Base in 1941-1942 and, associated with it, the channelization of City Creek completely transformed the landscape in and around the project area in terms of both the natural landscape and the cultural environment. By the 1950s, the surrounding area had been largely suburbanized, featuring an increasing number of densely populated residential neighborhoods, and most of the streets containing the project alignments were in place (Fig. 5; NETR Online 1959). Over the ensuing decades, suburban development in the area grew steadily, and all agricultural activities had ceased at least by 1980 (NETR Online 1959-1980). Since then, the overall character of land use in the project vicinity has remained unchanged to the present time (NETR Online 1980-2020; Google Earth 2019-2023).

Native American Input

On March 27, 2024, CRM TECH submitted a written request to the State of California Native American Heritage Commission (NAHC) for an update to the Sacred Lands File search completed

during the 2017 study. In response, the NAHC stated in a letter dated April 15 that the Sacred Lands File identified unspecified Native American cultural resources in the general vicinity of the project area (see Attachment C). The NAHC recommended that the San Manuel Band of Mission Indians and other local Native American groups be consulted for further information and provided a referral list of potential contacts for that purpose.

Upon receiving the NAHC's reply, CRM TECH sent written requests for comments to the San Manuel Band as well as the Morongo Band of Mission Indians, another local tribe of Serrano heritage, on April 15, 2024. While the Morongo Band has not responded to the inquiry, Raylene Borrego, Cultural Resources Technician for the San Manuel Band, replied by e-mail on the same day and stated that "there are multiple sections [of the project alignments] that are near known culturally significant areas." Therefore, the San Manuel Band requested further consultation regarding this project. The responses from the NAHC and the San Manuel Band are attached to this report in Attachment C for reference by the IVDA in future government-to-government consultations with the pertinent tribal groups.

Field Observations

On May 31, 2024, CRM TECH archaeologist/crew chief Hunter O'Donnell, B.A., and archaeologist Noah Powell, B.A., carried out the field inspection of the project area. Most of the survey was conducted at a reconnaissance level by driving along all segments of the project alignments and visually inspecting the surrounding area for any indications of the cultural resources from the prehistoric or historic period (i.e., 50 years or older). Native ground surface was visible in the project area only along the City Creek Channel, where the soil is fully exposed and visibility was excellent (95-100%). The remainder of the project area was almost entirely covered by road pavement (Figs. 6, 7). Considering the extent of past ground disturbance in the project area, however, the ground visibility was deemed not to be a major hindrance to the survey efforts.

The field inspection confirmed the City Creek Channel (Site 36-033079) to be the only potential "historical resource" present within the project boundaries, as defined by the extent of the public rights-of-way along the various streets and the channel. The physical condition and overall appearance of the channel remain unchanged from past observations in 2018-2020 (Fig. 7). While



Figure 6. Typical landscapes along the project alignments. *Left*: view to the north along Tippecanoe Avenue, at the Fifth Street intersection; *right*: view to the east along Third Street, with the City Creek Channel to the right. (Photographs taken on May 31, 2024)



Figure 7. Site 36-033079 (City Creek Channel). *Left*: view to the east from the confluence with Warm Creek; *right*: view to the southwest from the Tippecanoe Avenue overpass. (Photographs taken on May 31, 2024)

the vast majority of the streets containing the project alignments also date to the historic period, their current configuration and appearance are largely the result of upgrading and maintenance in recent decades, and none of them demonstrates any distinctively historical character (Fig. 6). As working components of the modern transportation infrastructure, the existing streets in the project area do not constitute potential "historical resources" and require no further consideration in the CEQA-compliance process.

Conclusion and Recommendations

In summary of the research results presented above, among the four linear features previously recorded as lying across the project area, only the City Creek Channel (Site 36-033079) remains extant today. The channel was previously determined not to be eligible for listing in the National Register of Historic Places or the California Register of Historical Resources due to the lack of any important historical association, of any distinguished qualities in design, construction, engineering, or aesthetics, and of the necessary historic integrity (Tang et al. 2018:16; 2019:16; 2020:15; Gallardo 2018:2), and the current study has not encountered any new data to warrant a revisit of that evaluation. Therefore, Site 36-033079 does not appear to meet CEQA definition of a "historical resource," as outlined in PRC §5020.1(j) and Title 14 CCR §15064.5(a)(1)-(3).

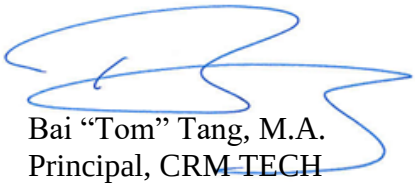
Based on these findings, CRM TECH concludes that no "historical resources" are known to be present within the project area. However, the NAHC reported the presence of unspecified Native American cultural resource(s) in the project vicinity and referred further inquiry to the San Manuel Band of Mission Indians, and the San Manuel Band requested further consultation regarding such resources when contacted during this study. According to CEQA guidelines, the identification of potential "tribal cultural resources," as defined by PRC §21074, is beyond the scope of this study and needs to be addressed through government-to-government consultations between the IVDA and the pertinent Native American groups pursuant to Assembly Bill (AB) 52.

In the final analysis of CEQA compliance for the proposed project, CRM TECH recommends to the IVDA a tentative determination of *No Impact* on cultural resources, pending completion of the AB

52 consultation process. No additional cultural resources investigation is recommended for this project unless construction plans undergo such changes as to include areas not covered by this study. However, if buried cultural materials are encountered during any earth-moving operations associated with the project, all work within 50 feet of the discovery should be halted or diverted until a qualified archaeologist can evaluate the nature and significance of the finds.

Thank you for this opportunity to be of service. Should you have any questions or need additional information, please feel free to contact our office.

Sincerely,



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

References Cited

ERHA (Electric Railway Historical Association of Southern California)
n.d. Pacific Electric: Highland Line. http://www.erha.org/peeh.htm.

Gallardo, Nina
2018 California Historical Resources Inventory record forms, Site 36-033079. On file, South Central Coastal Information Center, California State University, Fullerton.

Google Earth
2019-2023 Aerial photographs of the project vicinity; taken in 2019-2021 and 2023. Available through the Google Earth software.

NETR (Nationwide Environmental Title Research) Online
1938-2020 Aerial photographs of the project vicinity; taken in 1938, 1959, 1966, 1968, 1980, 1984, 1985, 1994, 2002, 2005, 2009, 2010, 2012, 2014, 2016, 2018, and 2020. http://www.historicaerials.com.

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

Swett, Ira L.
1967 *Tractions of the Orange Empire.* Interurbans Special No. 41. *Interurbans* Magazine, Los Angeles.

Tang, Bai "Tom"
2017 Historical/Archaeological Resources Reconnaissance: Fifth and Third Street Corridor Specific Plan, Cities of San Bernardino and Highland, San Bernardino County, California. On file, South Central Coastal Information Center, California State University, Fullerton. (See Attachment A)

Tang, Bai "Tom," Michael Hogan, Ben Kerridge, and Daniel Ballester
2018 Identification and Evaluation of Historic Properties: SBD Eastgate Air Cargo Facility Project, City of San Bernardino, San Bernardino County, California. On file, South Central Coastal Information Center, California State University, Fullerton.

Tang, Bai "Tom," Daniel Ballester, Terri Jacquemain, and Ben Kerridge
2019 Identification and Evaluation of Historic Properties: San Bernardino International Airport Land Exchange Project, City of San Bernardino, San Bernardino County, California. On file, South Central Coastal Information Center, California State University, Fullerton.

Tang, Bai "Tom," Deirdre Encarnación, Daniel Ballester, Nina Gallardo, and Ben Kerridge
2020 Historical/Archaeological Resources Survey Report: City Creek Channel Project, Cities of San Bernardino and Highland, San Bernardino County, California. On file, South Central Coastal Information Center, California State University, Fullerton.

USGS (United States Geological Survey, U.S. Department of the Interior)
1901a Map: Redlands, Calif. (15', 1:62,500); surveyed in 1898-1899.
1901b Map: San Bernardino, Calif. (15', 1:62,500); surveyed in 1893-1894.
1943a Map: Colton, Calif. (1:31,680); surveyed in 1936-1938.
1943b Map: Redlands and Vicinity, Calif. (1:31,680); surveyed in 1939.
1954a Map: Redlands, Calif. (15', 1:62,500); aerial photographs taken in 1952.
1954b Map: San Bernardino, Calif. (15', 1:62,500); aerial photos taken in 1952, field-checked in 1953-1954.

ATTACHMENT A

2017 CULTURAL RESOURCES STUDY

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

December 8, 2017

Tom Dodson, President
Tom Dodson and Associates
2150 North Arrowhead Avenue
San Bernardino, CA 92405

Re: Historical/Archaeological Resources Reconnaissance
Fifth and Third Street Corridor Specific Plan
Cities of San Bernardino and Highland, San Bernardino County, California
CRM TECH Contract No. 3176

Dear Mr. Dodson:

At your request, CRM TECH has completed a historical/archaeological resources reconnaissance for the Fifth and Third Street Corridor Specific Plan proposed by the Inland Valley Development Agency (IVDA). The specific plan covers approximately 675 acres of urban land in an area of mixed residential and commercial uses, which lies across the boundary between the Cities of San Bernardino and Highland, San Bernardino County, California (Figure 1). The planning area extends between Third Street and Sixth Street from Tippecanoe Avenue on the west to State Route 210 on the east, within Sections 4, 5, 8, and 9, T1S R3W, San Bernardino Baseline and Meridian, and a portion of the Rancho San Bernardino land grant (Figure 1).

The study is a part of the environmental review process for the Fifth and Third Street Corridor Specific Plan. As the lead agency for the specific plan, the IVDA required the study in compliance with the California Environmental Quality Act (CEQA; PRC §21000, et seq.). The purpose of the study is to identify and inventory all potential "historical resources" or "tribal cultural resources," as defined by CEQA, that are located within the planning area for future statutory/regulatory compliance considerations. In order to accomplish this objective, CRM TECH conducted a historical/archaeological resources records search, pursued general historical background research, contacted Native American representatives, and carried out a systematic field survey. This letter presents a summary of the methods and results of these research procedures.

PREVIOUS CULTURAL RESOURCES STUDIES

On February 14, 2017, CRM TECH archaeologist Nina Gallardo, B.A., conducted the historical/archaeological resources records search at the South Central Coastal Information Center (SCCIC), California State University, Fullerton. During the records search, Gallardo examined maps and records on file at the SCCIC for previously identified cultural resources in or near the planning area and existing cultural resources reports pertaining to the vicinity. Previously identified cultural resources include properties designated as California Historical Landmarks, Points of Historical Interest, or San Bernardino 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.

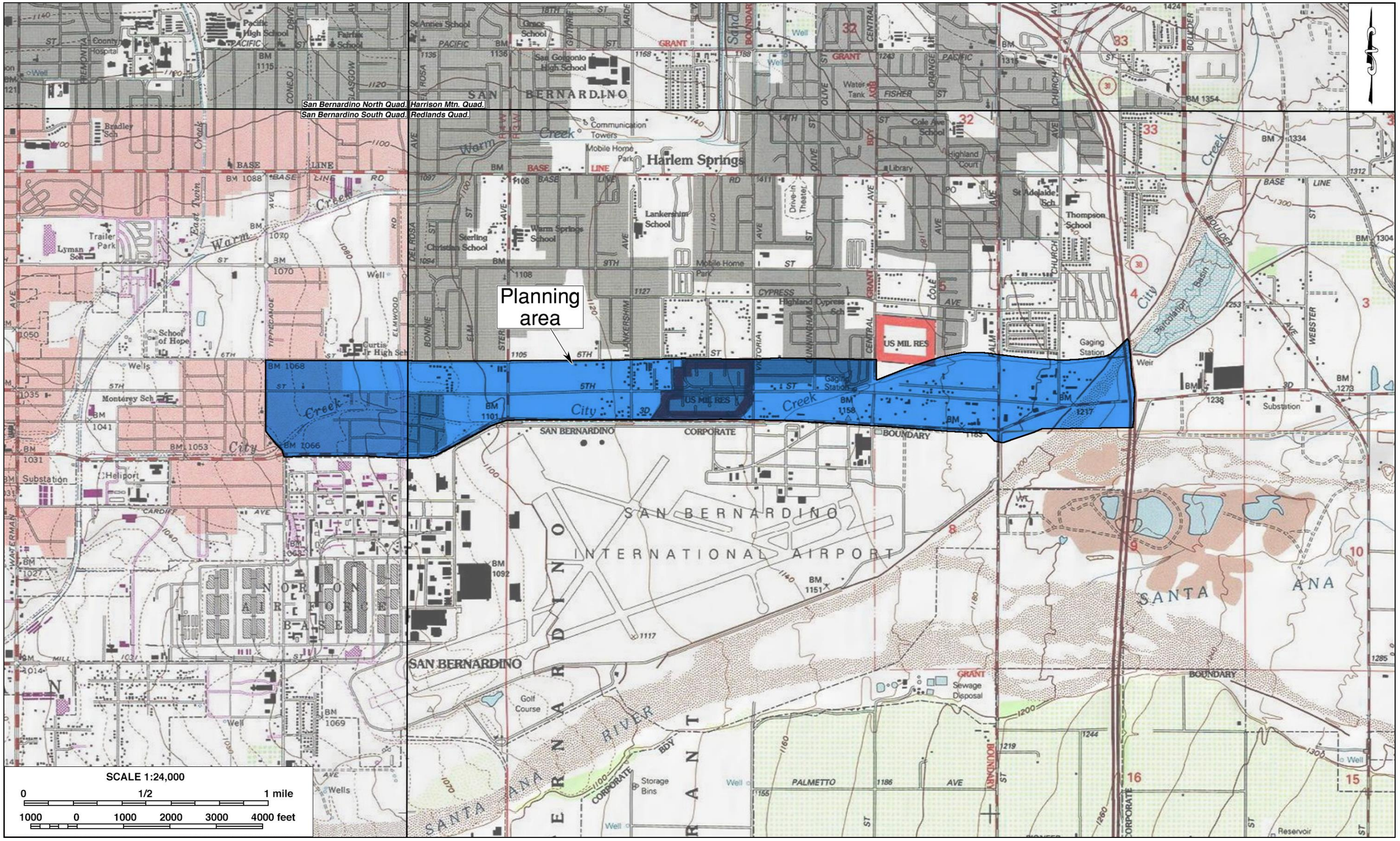


Figure 1. Project location. (Based on USGS Harrison Mountain, Redlands, San Bernardino North, and San Bernardino South, Calif., 1:24,000 quadrangles [USGS 1980; 1988; 1996a; 1996b])

According to SCCIC records, more than 30 previous cultural resource studies completed between 1973 and 2015 covered portions of the planning area, including significant stretches of Third, Fifth, and Sixth Streets, but the planning area as a whole had not been surveyed systematically prior to this study (Figure 2). As a result of the past studies, 103 cultural resources were previously identified as lying within, partially within, or adjacent to the boundaries of the planning area, including eight archaeological sites (Table 1) and 95 buildings or groups of buildings (Table 2).

Table 1. Previously Identified Archaeological Sites in the Planning Area

Site Number	Name
36-006848	Cram and Van Leuven Ditch
36-029563	Remains of mid-20th century irrigation system
36-010820	San Bernardino, Arrowhead and Waterman Railroad
P1074-97H	McKenzie Ditch
P1074-98H	Stewarts Ditch
P1074-99H	Whitlock Ditch
P1074-100H	Feudge Ditch
PSBR-27H	North Fork Ditch

As Table 1 shows, all eight of the known archaeological sites in the planning area dated to the historic period, and no prehistoric—i.e., Native American—sites have been identified within the planning area. One the sites, 36-010820, represents the former alignment of the San Bernardino, Arrowhead and Waterman Railroad, also known as the Harlem Motor Road or the Highlands Motor Line. Although originally recorded well outside the planning area, this rail line once traversed within the Sixth Street right-of-way along the northern project boundary (USGS 1901; 1943a; 1943b; NETR Online 1938). Constructed in 1888 as a narrow-gauge motor line from San Bernardino to Harlem Hot Springs, the San Bernardino, Arrowhead and Waterman Railroad operated for 20 years before being acquired by the Pacific Electric Railway Company and eventually dismantled sometime around the 1940s (Swett 1967:23; ERHA n.d.).

The other seven sites all consisted of irrigation features, and six of them represented the former courses of various ditches dating to the mid- or late-19th century. A closer examination of the existing records indicates that the delineation of these long-abandoned early ditches across the planning area was based solely on historical accounts, and no physical remains have been recorded of any of them within the planning area boundaries. A review of previous studies on irrigation works in the San Bernardino Valley indicates that one of them, the Cram and Van Leuven Ditch (36-006848), in fact terminated before reaching the planning area, where it merged into the North Fork Ditch (PSBR-27H; Scott 1977:14-15).

The only archaeological site that was actually observed in the planning area was 36-029563, which was recorded in 2015 as the remnants of a localized irrigation system, such as concrete junction boxes and a pump, that was installed sometime between 1943 and 1959 (Vader et al. 2015:2-3). The existing site record forms offer no evidence that the site was evaluated for historic significance at the time of recordation, and the cultural resources survey report cited in the site record (Ehringer et al. 2015) could not be located at the SCCIC despite diligent search efforts.

Of the 95 buildings or groups of building identified within, partially within, or adjacent to the planning area, all but two were recorded, or had their documentation updated, during two past studies completed by CRM TECH in 2011 and 2013, and all of them were determined not to meet the criteria for listing in the National Register of Historic Places or the California Register of

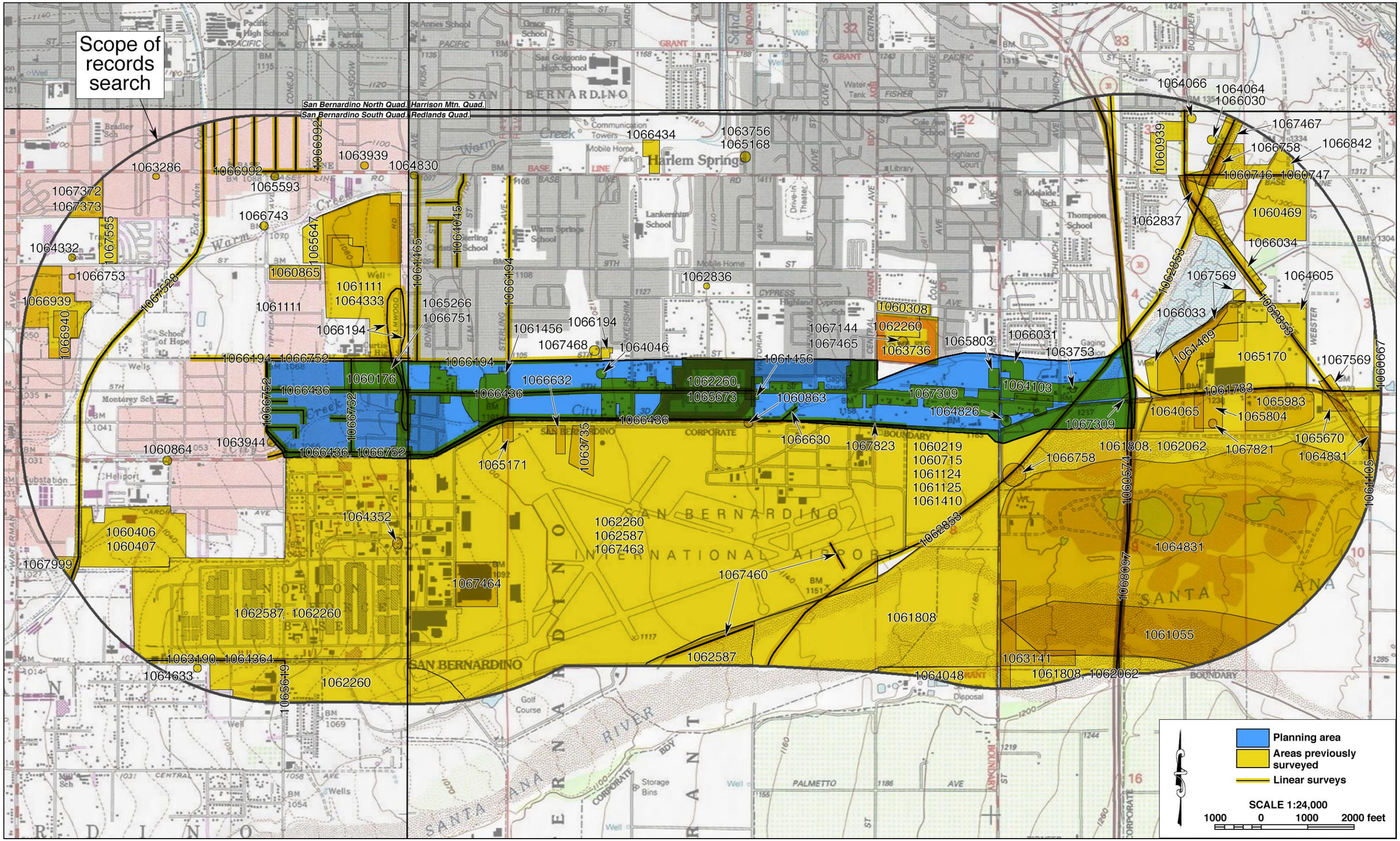


Figure 2. Previous cultural resources studies in the vicinity of the planning area, listed by SCCIC file number. (See Appendix 3 for locations of known archaeological sites)

Table 2. Previously Recorded Historic-Period Buildings in the Planning Area			
Site Number	**APN**	**Street Address**	**City**
36-013750	1192-621-22	27262 Meines Street	Highland
36-020001	0279-211-13	25502 5th Street	San Bernardino
36-025789	0279-181-05	8044 Del Rosa Drive	San Bernardino
36-025790	0279-182-11	8043 Del Rosa Drive	San Bernardino
36-025791	0279-182-12	8033 Del Rosa Drive	San Bernardino
36-025792	0279-184-02	25473 5th Street	San Bernardino
36-025793	0279-185-06	25364 4th Street	San Bernardino
36-025794	0279-191-05	25361 4th Street	San Bernardino
36-025795	0279-191-14	25360 Court Street	San Bernardino
36-025796	0279-191-17	25340 Court Street	San Bernardino
36-025797	1192-221-10	7982 Lankershim Avenue	Highland
36-025798	1192-241-07	26072 3rd Street	San Bernardino
36-025799	1192-241-09	316 Lankershim Avenue	San Bernardino
36-025800	1192-291-17	7987 Lankershim Avenue	Highland
36-025801	1192-291-18	2426 5th Street	Highland
36-025802	1192-291-31	26186 5th Street	Highland
36-025803	1192-531-02	26552 5th Street	Highland
36-025804	1192-531-04	26578 5th Street	Highland
36-025805	1192-531-06	26596 5th Street	Highland
36-025806	1192-531-32	7957 Victoria Avenue	Highland
36-025807	1192-531-33	7977 Victoria Avenue	Highland
36-025808	1192-611-11	27072 5th Street	Highland
36-025809	1192-611-12	27060 5th Street	Highland
36-025810	1192-621-16	27140 5th Street	Highland
36-025811	1192-621-17	27136 5th Street	Highland
36-025812	1192-621-18	27124 5th Street	Highland
36-025813	1192-621-19	27112 5th Street	Highland
36-025814	1192-631-13	27075 5th Street	Highland
36-025815	1192-641-02	8048 Palm Avenue	Highland
36-025816	1192-641-11	27111 5th Street	Highland
36-025817	1201-301-16	27356 5th Street	Highland
36-025818	1201-311-22	27409 5th Street	Highland
36-025819	1201-311-24	27381 5th Street	Highland
36-026641	0279-192-11	1690 3rd Street	Highland
36-026642	1192-241-03	2310 3rd Street	San Bernardino
36-026643	1192-241-05	2358 3rd Street	San Bernardino
36-026644	1192-241-03	2418 3rd Street	San Bernardino
36-026645	1192-311-03	2420-2422 3rd Street	San Bernardino
36-026646	1192-311-03	2424 3rd Street	San Bernardino
36-026647	0279-123-19	24936 3rd Street	San Bernardino
36-026648	0279-151-40	25046 3rd Street	San Bernardino
36-026649	0279-151-19	25064 3rd Street	San Bernardino
36-026650	0279-151-45	25088 3rd Street	San Bernardino
36-026651	0279-151-15	25096 3rd Street	San Bernardino
36-026652	0279-171-13	25190 3rd Street	San Bernardino
36-026653	0279-173-31	25214 3rd Street	San Bernardino

36-026654	0279-173-27	25222 3rd Street	San Bernardino
36-026655	0279-173-24	25248 3rd Street	San Bernardino
36-026656	0279-173-21	25280 3rd Street	San Bernardino
36-026657	0279-192-13	25376 3rd Street	San Bernardino
36-026658	0279-193-08	25444 3rd Street	San Bernardino
36-026659	1192-241-09	26086 3rd Street	San Bernardino
36-026660	0279-141-72	24901 5th Street	San Bernardino
36-026661	0279-131-22	24914 5th Street	San Bernardino
36-026662	0279-141-73	24927 5th Street	San Bernardino
36-026663	0279-131-21	24932 5th Street	San Bernardino
36-026664	0279-141-01	24939 5th Street	San Bernardino
36-026665	0279-131-20	24948 5th Street	Highland
36-026666	0279-141-03	24953 5th Street	Highland
36-026667	0279-131-36	24964 5th Street	San Bernardino
36-026668	0279-131-17	24974 5th Street	San Bernardino
36-026669	0279-141-05	24977 5th Street	San Bernardino
36-026670	0279-131-16	24982 5th Street	San Bernardino
36-026671	0279-131-15	24992 5th Street	San Bernardino
36-026672	0279-141-06	25003 5th Street	San Bernardino
36-026673	0279-151-27	25037 5th Street	San Bernardino
36-026674	0279-131-12	25038 5th Street	San Bernardino
36-026675	0279-141-07	25051 5th Street	San Bernardino
36-026676	0279-201-15	25084 5th Street	San Bernardino
36-026677	0279-151-44	25089 5th Street	San Bernardino
36-026678	0279-201-13	25112 5th Street	San Bernardino
36-026679	0279-151-38	25127 5th Street	Highland
36-026680	0279-201-12	25128 5th Street	San Bernardino
36-026681	0279-151-39	25141 5th Street	San Bernardino
36-026682	0279-201-11	25142 5th Street	Highland
36-026683	0279-161-02	25157 5th Street	San Bernardino
36-026684	0279-162-06	25233 5th Street	San Bernardino
36-026685	0279-163-03	25257 5th Street	San Bernardino
36-026686	1192-291-23	? 5th Street (at Roberts Street)	San Bernardino
36-026688	0279-141-72	8033 Tippecanoe Avenue	Highland
36-026689	0279-141-56	8035 Tippecanoe Avenue	Highland
36-026690	0279-141-46	8037 Tippecanoe Avenue	Highland
36-026693	0279-141-45	8055 Tippecanoe Avenue	Highland
36-026694	0279-141-44	8057 Tippecanoe Avenue	Highland
36-026695	0279-141-43	8069 Tippecanoe Avenue	Highland
36-026696	0279-141-70	8071 Tippecanoe Avenue	Highland
36-026697	0279-141-69	8079 Tippecanoe Avenue	Highland
36-026699	0279-141-32	8099 Tippecanoe Avenue	Highland
36-026700	0279-141-54	8107 Tippecanoe Avenue	Highland
36-026701	0279-141-19	8115 Tippecanoe Avenue	Highland
36-026704	0279-141-18	8125 Tippecanoe Avenue	Highland
36-026706	0279-141-17	8137 Tippecanoe Avenue	Highland
36-026708	0279-192-02	25347 Court Street	San Bernardino
36-026709	0279-151-42	25091 5th Street	San Bernardino
36-029562	0279-211-01	25457 6th Street	Highland

Historical Resources (Tang and Jacquemain 2011:7-8; 2013:14-15). Of the other two properties, 36-029562 represented a circa 1916 residence recorded in 2015, which was also found not to be eligible for the National Register or the California Register (McDonald and Anderson 2015:2). The other, 36-013750, was recorded in 2007 as a shed and a garage that survived from a former residential property of unknown age, but was not evaluated at the time (Alexandrowicz 2007a; 2007b:76).

Outside of the planning area but within a one-mile radius, SCCIC records show some 80 additional studies covering various tracts of land and linear features, many of the them on the former Norton Air Force Base, now the San Bernardino International Airport (Figure 2). As a result, 98 additional historical/archaeological sites, including 88 recorded sites and 10 pending sites, and four isolates—i.e., localities with fewer than three artifacts—were identified within the one-mile scope of the records search.

Among these 102 known cultural resources, only two sites and two isolates were of Native American origin. Both of the sites were recorded in the early 1960s as Native American habitation areas occupied in historic times. One of them, 36-002794, yielded buried mortars and metates during construction work, while the other, 36-002313, was simply described as being "completely gone" (Smith 1961; 1962). The two isolates were recorded as a painted sandstone concretion and a white chert flake.

The vast majority of the 102 cultural resources outside the planning area dated to the historic period, and included 74 buildings and structures, most of them located on the former Norton Air Force Base, along with additional irrigation features, roads, and scattered refuse items. None of these 102 cultural resources was found in the immediate vicinity of the planning area. Therefore, none of them requires further consideration in the proposed specific plan.

NATIVE AMERICAN INPUT

On February 9, 2017, CRM TECH submitted a written request to the State of California's Native American Heritage Commission for a records search in the commission's sacred lands file. In response, the commission reported that the records search identified no Native American cultural resources within the planning area but recommended that local Native American groups be contacted for further information. For that purpose, the commission provided a list of potential contacts in the region (Appendix 1).

Following the commission's recommendation, on February 23 CRM TECH sent written requests for comments to all five individuals on the referral list and the organizations they represent (Appendix 1). In addition, as previously directed by the Morongo Band of Mission Indians, Raymond Huaute, the tribe's Cultural Resources Specialist, was also contacted.

As of this time, only two of the tribal representatives have responded to the inquiry. Goldie Walker, Chairperson of the Serrano Nation of Indians, stated in a telephone conversation on March 8, 2017, that the general area is sensitive for Native American cultural resources. She requested that a monitor from the Serrano Nation be present during all ground-disturbances in the planning area, notification of any archaeological findings, and copies of all cultural resources documentation for tribal review.

On April 8, 2017, Joan Schneider, Consulting Archaeologist for the San Manuel Band of Mission Indians, replied by e-mail and identified the planning area as a part of the Serrano ancestral territory and an area that the tribe considers to be culturally sensitive. She requested additional information regarding the specific plan in order to facilitate further, government-to-government consultations, and that a standard Phase I cultural resources survey be completed on the entire planning area (Appendix 1).

POTENTIAL "HISTORICAL RESOURCES" IN THE PLANNING AREA

Prior to the field survey, historic maps dated 1858-1967 and aerial photographs taken in 1938-1968 were reviewed systematically to establish past land use and development patterns in the project vicinity, and to identify potential historic-period features within the planning area (GLO 1858; 1876; USGS 1901-1967; NETR Online 1938-1968). Buildings or structures that postdate 1968 are less than 50 years old at this time and generally do not meet the requirement for potential "historical resources" unless they demonstrate extraordinary merits in architecture, construction, or aesthetics. Therefore, they were excluded from further consideration in this study in the absence of such merits.

Based on these criteria, a total of 315 buildings or group of buildings in the planning area that have not been previously recorded or evaluated for CEQA-compliance purposes, most of them residential properties, are considered to be potential "historical resources." These properties, listed in Appendix 2, will require proper evaluation under CEQA provisions when involved in future projects, along with the property that was previously recorded as 36-013750 but not evaluated.

Using the list in Appendix 2 as a guide, on May 8 and 9, 2017, CRM TECH field director Daniel Ballester, M.S., and project archaeologist Nina Gallardo, B.A, carried out the field reconnaissance by driving along each street in the planning area and visually inspecting all built-environment features encountered. In addition, areas where archaeological resources were previously identified in the planning area were intuitively inspected on foot as warranted. The results of the survey efforts indicate that the planning area lies in a mixed-use area where the streets are lined with residential and commercial properties interspersed with stretches of vacant land. Most of the developed lots are 50-100 feet in width, but several exceed 300 feet in width. The larger parcels are sometimes occupied by several buildings of various vintage.

Two older single-family residential neighborhoods dating to the 1959-1968 era (NETR Online 1959; 1968) were found to be relatively intact, one occupying three blocks on either side of Del Rosa Drive between Third and Fifth Streets, and one located between Victoria and Central Avenues and between Fifth and Sixth Street. Of these, the former consists of some 120 residential properties while the latter comprises some 50-60.

The vast majority of the 315 properties listed in Appendix 2 evidently date to the post-WWII boom period of circa 1945 to the late 1960s, and their overall appearance is consistent to the prevailing architectural trend and building practices of the time, while three of the properties may predate WWII (NETR Online 1938-1968). Although these buildings appear to retain at least a minimally recognizable level of historical character, nearly all of them have been altered to varying degrees, with replacement windows, new sidings and roofs, and horizontal or vertical additions the most common modifications.

The ground surface in most of the planning area has been extensively disturbed by past development activities, most notably the construction of the buildings, roads, and other infrastructure features,

which significantly reduces the sensitivity of the planning area for archaeological resources from the prehistoric or early historic period. No physical remnants were observed of any of the six early ditches listed in Table 1, nor were any features or artifacts associated with Site 36-010820, the San Bernardino, Arrowhead and Waterman Railroad, found along its former alignment. At Site 36-029563, however, the fragmented irrigation features recorded in 2015 remain extant in a vacant field between Fifth Street and Sixth Street, to the east of Del Rosa Drive (Appendix 3).

CONCLUSION AND RECOMMENDATIONS

In summary, seven of the eight archaeological sites previously identified as lying within, partially within, or adjacent to the planning area (Table 1), representing six 19th century irrigation ditches and the San Bernardino, Arrowhead and Waterman Railroad, have evidently been obliterated by past development. However, in light of their potential local historic interest, it is recommended that, prior to the commencement of any proposed project in the immediate vicinity of any of these sites (Appendix 3), further historical research be completed to establish their precise locations in relation to the project area, and an intensive-level archaeological field survey and, if necessary, an extended Phase I survey be conducted in the vicinity to ascertain the presence or absence of any surface or subsurface remains that may be impacted by future development.

The last remaining known archaeological site in the planning area, 36-029563, consists of a group of abandoned irrigation features from the late historic period. Generally speaking, such minor, fragmented irrigation features of similar age, virtually ubiquitous on agricultural land or former agricultural land in southern California, are unlikely to qualify as "historical resources" under CEQA guidelines. Nevertheless, since SCCIC records contain no indication that it has been formally evaluated for statutory compliance purposes, Site 36-029563 will need to be considered a potential "historical resource" that requires proper evaluation unless the 2015 survey report cited in the existing site record (Ehringer et al. 2015) becomes available for review and proves to contain an adequate evaluation.

The results of the records search indicate that 95 buildings or groups of building were previously recorded within the planning area (Table 2), and 94 of them have been evaluated as not being eligible for listing in the National Register of Historic Places or the California Register of Historical Resources. As such, these 94 properties do not meet CEQA's definition of "historical resources," leaving only one, 36-013750, consisting of a shed and a garage from a former residential property at 27262 Meines Street, to be evaluated under CEQA provisions in the future. However, the present study identified a total of 315 additional buildings or groups of buildings within the planning area that appear to be of historical origin but remain to be recorded and evaluated (Appendix 2).

Pursuant to CEQA guidelines, the 316 properties in the planning area with historic-period buildings that have not been evaluated should be treated as potential "historical resources" in the planning process, along with the irrigation features at Site 36-029563. If a proposed project will impact any of these properties, further study will be needed to determine whether the affected buildings or features meet the statutory definition as a "historical resource." If federal funding, permit, or license is required for the project, they will also need to be addressed as potential "historic properties" under Section 106 of the National Historic Preservation Act.

In general, CEQA guidelines require that the specific area designated for a proposed project be surveyed at an intensive level for both archaeological and built-environment features in a standard

Phase I study in order to ensure the proper identification of "historical resources" and "tribal cultural resources." A program-level study for a general plan or large-scale specific plan, such as this one, cannot be used as a substitute. For projects to be proposed under the Fifth and Third Street Corridor Specific Plan, CEQA's requirement for Phase I cultural resources surveys remains valid, since this study did not entail an intensive-level archaeological survey of the entire planning area, unless an adequate Phase I study was completed on the property within the past five years. Meanwhile, the approval of all future projects in the planning area should incorporate the standard condition that all buried cultural materials discovered during earth-moving operations be examined and evaluated by a qualified archaeologist before any further ground disturbances.

Thank you for this opportunity to be of service.

Sincerely,

Bai "Tom" Tang, Principal Investigator
CRM TECH

REFERENCES CITED

Alexandrowicz, John Stephen
2007a California Historical Resource Inventory record forms, 36-013750. On file, South Central Coastal Information Center, California State University, Fullerton.
2007b An Historical Resources Identification Investigation of the Light Industrial Shop Building Project, 27262 Meines Street, City of Highland, San Bernardo County California. On file, South Central Coastal Information Center, California State University, Fullerton.

Ehringer, Candace, Katherine Anderson, Matthew Gonzalez, and Michael Vader
2015 East Valley Water District Del Rosa Recycled Water Center Project Phase I Cultural Resources Study. Prepared for the East Valley Water District, Highland, California, by Environmental Science Associates, Los Angeles.

ERHA (Electric Railway Historical Association of Southern California)
n.d. Pacific Electric: Highland Line. http://www.erha.org/peeh.htm.

GLO (General Land Office, U.S. Department of the Interior)
1858 Plat Map: Township No. 1 South Range No. 3 West, SBBM, surveyed in 1853-1857.
1876 Plat Map: Township No. 1 South Range No. 4 West, SBBM, surveyed in 1852-1875.

McDonald, Laura, and Kathy Anderson
2015 California Historical Resource Inventory record forms, 36-029562. On file, South Central Coastal Information Center, California State University, Fullerton.

NETR Online
1938-1968 Aerial photographs of the project vicinity, taken in 1938, 1959, 1966, and 1968. http://www.historicaerials.com.

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

Smith, Gerald A.
1961 California Historical Resource Inventory record forms, 36-002794. On file, South Central Coastal Information Center, California State University, Fullerton.

1962 California Historical Resource Inventory record forms, 36-002313. On file, South Central Coastal Information Center, California State University, Fullerton.

Swett, Ira L.
1967 *Tractions of the Orange Empire*. Interurbans Special No. 41. *Interurbans* Magazine, Los Angeles.

Tang, Bai "Tom," and Terri Jacquemain
2011 Historical Resources Evaluation Report: Tiger II 5th Street Improvement Project, Cities of Highland and San Bernardino, San Bernardino County, California. On file, South Central Coastal Information Center, California State University, Fullerton.
2013 Historical/Archaeological Resources Survey Report: Third and Fifth Street Improvement Project Phases 1, 2, and 3, in and near the Cities of San Bernardino and Highland, San Bernardino County, California. On file, South Central Coastal Information Center, California State University, Fullerton.

USGS (United States Geological Survey, U.S. Department of the Interior)
1901a Map: Redlands, Calif. (15', 1:62,500); surveyed in 1898-1899.
1901b Map: San Bernardino, Calif. (15', 1:62,500); surveyed in 1893-1894.
1943a Map: Colton, Calif. (1:31,680); surveyed in 1936-1938.
1943b Map: Redlands and Vicinity, Calif. (1:31,680); surveyed in 1939.
1954a Map: Redlands, Calif. (15', 1:62,500); aerial photographs taken in 1952.
1954b Map: San Bernardino, Calif. (15', 1:62,500); aerial photos taken in 1952, field-checked in 1953-1954.
1967a Map: Redlands, Calif. (7.5', 1:24,000); aerial photos taken in 1966, field-checked in 1967.
1967b Map: San Bernardino South, Calif. (7.5', 1:24,000); aerial photos taken in 1966, field-checked in 1967.
1980 Map: San Bernardino South, Calif. (7.5', 1:24,000); 1967 edition photorevised in 1979.
1988 Map: Harrison Mtn., Calif. (7.5', 1:24,000); 1967 edition photorevised in 1985.
1996a Map: Redlands, Calif. (7.5', 1:24,000); 1967 edition photorevised in 1994.
1996b Map: San Bernardino North, Calif. (7.5', 1:24,000); 1967 edition photorevised in 1994.

Vader, M., L. MacDonald, and S. Pacheco
2015 California Historical Resource Information System site record, 36-029563. On file, South Central Coastal Information Center, California State University, Fullerton.

APPENDIX 1

CORRESPONDENCE WITH NATIVE AMERICAN REPRESENTATIVES*

* Six local Native American representatives were contacted; a sample letter is included.

SACRED LANDS FILE RECORDS SEARCH & NATIVE AMERICAN

CONTACTS LIST REQUEST

NATIVE AMERICAN HERITAGE COMMISSION

1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
(916)373-3710
(916)373-5471 Fax
nahc@pacbell.net

Project: Inland Valley Development Agency's Specific Plan; Third to Sixth, Tippecanoe to I-210 (CRM TECH Contract No. 3176)

County: San Bernardino

USGS Quadrangle Name: Redlands and San Bernardino South, Calif.

Township 1 South **Range** 3 West SB **BM; Section(s)** 4, 5, 8, and 9

Township 1 South **Range** 3 & 4 West SB **BM; Section(s)** San Bernardino land grant

Company/Firm/Agency: CRM TECH

Contact Person: Nina Gallardo

Street Address: 1016 E. Cooley Drive, Suite A/B

City: Colton, CA **Zip:** 92324

Phone: (909) 824-6400 **Fax:** (909) 824-6405

Email: ngallardo@crmtech.us

Project Description: The study addresses a proposed specific plan on 675 acres of land located between 3rd Street and 6th Street and east from Tippecanoe Avenue to the I-210 Freeway, in the Cities of San Bernardino and Highland, San Bernardino County, California.

February 7, 2017

STATE OF CALIFORNIA Edmund G. Brown, Jr., Governor

NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
(916) 373-3710
Fax (916) 373-5471

February 9, 2017

Nina Gallardo
CRM Tech

Sent by Email: ngallardo@crmtech.us

RE: Proposed Inland Valley Development Agency's Specific Plan; Third to Sixth, Tippecanoe to I-215 Project, Cities of San Bernardino and Highland; San Bernardino County, California

Dear Ms. Gallardo:

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

Attached is a list of tribes culturally affiliated to the project area. I suggest you contact all of the listed Tribes. If they cannot supply information, they might recommend others with specific knowledge. The list should provide a starting place to locate areas of potential adverse impact within the APE. By contacting all those on the list, your organization will be better able to respond to claims of failure to consult. If a response has not been received within two weeks of notification, the NAHC requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact via email: gayle.totton@nahc.ca.gov.

Sincerely,

Gayle Totton, M.A., PhD.
for Associate Governmental Program Analyst

Native American Heritage Commission
Tribal Contact List
San Bernardino County
2/8/2017

Morongo Band of Mission Indians
Denisa Torres, Cultural Resources Manager
12700 Pumarra Rroad — Cahuilla
Banning, CA, 92220 — Serrano
Phone: (951) 849 - 8807
Fax: (951) 922-8146
dtorres@morongo-nsn.gov

Morongo Band of Mission Indians
Robert Martin, Chairperson
12700 Pumarra Rroad — Cahuilla
Banning, CA, 92220 — Serrano
Phone: (951)849-8807
Fax: (951)922-8146

San Fernando Band of Mission Indians
John Valenzuela, Chairperson
P.O. Box 221838 — Kitanemuk
Newhall, CA, 91322 — Serrano
Phone: (760)885-0955 — Tataviam
tsen2u@hotmail.com

San Manuel Band of Mission Indians
Lee Clauss, Director of Cultural Resources
26569 Community Center Drive — Serrano
Highland, CA, 92346
Phone: (909) 864 - 8933
Fax: (909) 864-3370
lclauss@sanmanuel-nsn.gov

Serrano Nation of Mission Indians
Goldie Walker, Chairperson
P.O. Box 343 — Serrano
Patton, CA, 92369
Phone: (909)528-9027

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Inland Valley Development Agency's Specific Plan Project, San Bernardino County.

February 23, 2017

Raymond Huaute, Cultural Resource Specialist
Morongo Band of Mission Indians
12700 Pumarra Road
Banning, CA 92220

RE: Inland Valley Development Agency's Specific Plan
675 Acres in the Cities of Highland and San Bernardino
San Bernardino County, California
CRM TECH Contract #3176

Dear Mr. Huaute:

I am writing to bring your attention to an ongoing CEQA-compliance study for the proposed project referenced above. The focus of the project is the development of a new specific plan for an approximately 675-acre mixed -use corridor between Third Street and Sixth Street and between Tippecanoe Avenue and the Interstate 210 Freeway, in the Cities of Highland and San Bernardino. The accompanying map, based on the USGS Redlands and San Bernardino South, Calif., 7.5' quadrangles, depict the location of the study area in T1S R3W and T1S R4W, SBBM, mostly within the Rancho San Bernardino land grant.

According to records on file at the South Central Coastal Information Center (SCCIC), there are 110 known historical/archaeological sites, including 101 historic-period buildings, within the boundaries of the project area. Outside the project boundaries but within a one-mile radius, SCCIC records show that 81 historical/archaeological sites, 10 "pending" sites, and four isolates—i.e., localities with fewer than three artifacts—were previously recorded. Two of the known sites and two of the isolates were of prehistoric–i.e., Native American—origin, described as a campsite and a collection of groundstone artifacts such as metates and mortars, all located a half-mile or more from the project area. The other 79 sites, 10 pending sites, and other two isolates dated to the historic period and included at least 66 buildings, canals/creeks/ditches, roads, refuse scatters, and a historical railroad.

In a letter dated February 9, 2017, the Native American Heritage Commission reports that the sacred lands record search identified no Native American cultural resources within the project area, but recommends that local Native American groups be contacted for further information (see attached). Therefore, as part of the cultural resources study for this project, I am writing to request your input on potential Native American cultural resources in or near the project area.

Please respond at your earliest convenience if you have any specific knowledge of sacred/ religious sites or other sites of Native American traditional cultural value in or near the project area, or any other information to consider during the cultural resources investigations. Any information or concerns may be forwarded to CRM TECH by telephone, e-mail, facsimile, or standard mail. Requests for documentation or information we cannot provide will be forwarded to our client and/or the lead agency, namely the Inland Valley Development Agency.

We would also like to clarify that, as the cultural resources consultant for the project, CRM TECH is not involved in the AB 52-compliance process or in government-to-government consultations. The purpose of this letter is to seek any information that you may have to help us determine if there are

cultural resources in or near the project area that we should be aware of. Thank you for your time and effort in addressing this important matter.

Respectfully,

Nina Gallardo
Project Archaeologist/Native American liaison
CRM TECH
Email: ngallardo@crmtech.us

From: Joan Schneider <JSchneider@sanmanuel-nsn.gov>
Sent: Sunday, April 9, 2017 9:52 AM
Cc: ngallardo@crmtech.us
Subject: Inland Valley Development Agency Specific Plan Project

April 8, 2017

Re: Inland Valley Development Agency Specific Plan Project within the cities of Highland and San Bernardino

Dear Ms. Gallardo

Thank you for contacting the San Manuel Band of Mission Indians (SMBMI) regarding the above referenced project(s). SMBMI appreciates the opportunity to review the project documentation, which was received by our Cultural Resources Management Department on February 24, 2017. Although SMBMI's response is somewhat beyond the 30-day response time as legislated, we are hoping that you will consider the Tribe's comments for the initial study. By this e-mail, SMBMI will be requesting to consult with the Inland Valley Development Agency as the Lead Agency on this project pursuant to CEQA (as amended, 2015) and CA PRC 21080.3.1. The proposed project area exists within Serrano ancestral territory and, therefore, is of interest to the Tribe. As you are no doubt aware, the City Creek area is especially culturally sensitive for the Serrano people and that sensitivity is not limited to the prehistoric time frame. You may wish to alert your client that SMBMI will be requesting both archaeological and Tribal monitoring (from a list of SMBMI-approved Tribal monitors) for this project. SMBMI will also ask that specific language be included in any permitting for this project.

Due to the nature and location of the proposed project, SMBMI respectfully requests that the Cultural Resources Assessment that CRM Tech is preparing include:

_X__. A records search of the Sacred Lands Files managed by the CA Native American Heritage Commission and a site file and associated literature search at the appropriate California Historical Resources Information System Information Center to identify any and all recorded cultural resources within a 1-mile radius of the proposed project location(s), as well as general background research using GLO maps, Sanborn maps, historical atlases, city and state records, and other historical documents;
_X__. Additional maps/illustrations be provided, specifically including:
_X__ an aerial map;
_X__a USGS quadrangle map;

_X__a map indicating the search radius of the background research, as well as the locations where previous studies were conducted and where known historic resources are located;

_X__photographs of the proposed project area;

_X__engineering/design plans for the proposed project, especially plans indicating where ground-disturbing activities will occur and to what horizontal and vertical extent.

X___. A Phase I archaeological investigation of the totality (100%) of the proposed project's area of potential effect (APE) via the employ of a number of methods, including pedestrian survey that employs a transect interval of no more than 10 meters, shovel test probes, remote sensing, and/or deep testing via controlled units or trenching of appropriate landscapes. The use of specific field methods and techniques must be justifiable and dependent upon the type and amount of ground cover present (visibility), the topographic setting (degree of slope, proximity to water, etc.), past land use (degree of prior disturbance), and probability for encountering previously undocumented resources during the proposed project (low, moderate, high probability). We strongly recommend that visibility must equal 50% or greater of the ground surface area to use pedestrian survey/reconnaissance only. Areas that have not been disturbed in the past and/or high probability areas must be explored using sub-surface testing methods in addition to pedestrian survey. Additionally, we ask that there be no collection of artifacts or excavation of features during any Phase I archaeological survey.

The provision of this information will assist San Manuel Band of Mission Indians in ascertaining whether or not the Tribe will assume consulting party status under CEQA and participate, moving forward, in project review and implementation. Please note, however, that if this information cannot be provided within the Tribe's 30-day response window, the Tribe automatically elects to be a consulting party under CEQA, as stipulated in AB52. Additionally, the CRM Department asks that the requested information be disseminated digitally via e-mail,
FTP site, or some other similar technology.

Once again, the San Manuel Band of Mission Indians appreciates the opportunity to comment on this proposed project at this stage and looks forward to seeing the Assessment that CRM Tech is preparing.

Respectfully,

San Manuel Band of Mission Indians
Cultural Resource Management Department
Consulting Archaeologist
jschneider@sanmanuel-nsn.gov
26569 Community Center Drive
Highland, CA 92346

APPENDIX 2

HISTORIC-PERIOD BUILDINGS TO BE RECORDED AND EVALUATED IN THE PLANNING AREA

APN	Street Address	City	Construction Date*
027913101	7917 Tippecanoe Avenue	Highland	Pre-1968
027913102	24939 6th Street	San Bernardino	Pre-1968
027913104	24963 6th Street	San Bernardino	Pre-1968
027913105	24971 6th Street	San Bernardino	Pre-1968
027913106	24985 6th Street	San Bernardino	Pre-1968
027913107	25003 6th Street	San Bernardino	Pre-1968
027913109	25029 6th Street	San Bernardino	Pre-1968
027913110	25039 6th Street	San Bernardino	Pre-1968
027913119	24954 5th Street	Highland	Pre-1968
027913123	7981 Tippecanoe Avenue	Highland	Pre-1968
027913124	7973 Tippecanoe Avenue	Highland	Pre-1968
027913125	7965 Tippecanoe Avenue	Highland	Pre-1968
027913127	7945 Tippecanoe Avenue	Highland	Pre-1968
027913130	25013 6th Street	San Bernardino	Pre-1968
027913132	25014 5th Street	San Bernardino	Pre-1968
027913138	7955 Tippecanoe Avenue	Highland	Pre-1968
027914104	24969 5th Street	San Bernardino	Pre-1959
027914108	8087 Tippecanoe Avenue	Highland	Pre-1959
027914120	8113 Tippecanoe Avenue	Highland	Pre-1966
027914121	8125 Tippecanoe Avenue	Highland	Pre-1966
027914128	24991 5th Street	San Bernardino	Pre-1959
027914130	8079 Tippecanoe Avenue	Highland	Pre-1966
027914155	8035 Tippecanoe Avenue	Highland	Pre-1966
027914159	8089 Tippecanoe Avenue	Highland	Pre-1966
027914166	24993 5th Street	San Bernardino	Pre-1959
027914174	25019 5th Street	Highland	Pre-1959
027915110	25162 3rd Street	San Bernardino	Pre-1959
027915114	25112 3rd Street	San Bernardino	Pre-1959
027915116	25094 3rd Street	San Bernardino	Pre-1959
027915123	25062 3rd Street	San Bernardino	Pre-1959
027915126	25138 3rd Street	San Bernardino	Pre-1959
027915130	25075 5th Street	San Bernardino	Pre-1959
027915133	25187 4th Street	San Bernardino	Pre-1959
027915134	25126 4th Street	San Bernardino	Pre-1959
027915135	25124 4th Street	San Bernardino	Pre-1959
027915136	25060 3rd Street	San Bernardino	Pre-1959
027915137	25070 3rd Street	San Bernardino	Pre-1959
027915146	25051 5th Street	Highland	Pre-1959
027916103	25167 5th Street	San Bernardino	Pre-1966
027916104	8036 Marilyn Avenue	San Bernardino	Pre-1966
027916105	8046 Marilyn Avenue	San Bernardino	Pre-1966
027916204	25191 5th Street	San Bernardino	Pre-1959
027916205	25215 5th Street	San Bernardino	Pre-1959
027916207	8036 Donna Drive	San Bernardino	Pre-1966
027916208	8044 Donna Drive	San Bernardino	Pre-1966
027916209	8047 Marilyn Avenue	San Bernardino	Pre-1966
027916210	8035 Marilyn Avenue	San Bernardino	Pre-1966
027916302	25249 5th Street	San Bernardino	Pre-1966

027916304	25269 5th Street	San Bernardino	Pre-1966
027916307	8036 Michael Drive	San Bernardino	Pre-1966
027916308	8044 Michael Drive	San Bernardino	Pre-1966
027916309	8054 Michael Drive	San Bernardino	Pre-1966
027916310	8043 Donna Drive	San Bernardino	Pre-1966
027916311	8035 Donna Drive	San Bernardino	Pre-1966
027916313	8021 Donna Drive	San Bernardino	Pre-1966
027916405	8043 Michael Drive	San Bernardino	Pre-1966
027916406	8055 Michael Drive	San Bernardino	Pre-1966
027916501	25206 4th Street	Highland	Pre-1959
027916502	25154 4th Street	Highland	Pre-1959
027916503	25210 4th Street	San Bernardino	Pre-1959
027916504	25218 4th Street	San Bernardino	Pre-1959
027916505	25226 4th Street	San Bernardino	Pre-1959
027916506	25232 4th Street	San Bernardino	Pre-1959
027916507	25240 4th Street	San Bernardino	Pre-1959
027916508	25248 4th Street	San Bernardino	Pre-1959
027916509	25258 4th Street	San Bernardino	Pre-1959
027916510	25268 4th Street	San Bernardino	Pre-1959
027916511	25270 4th Street	San Bernardino	Pre-1959
027916512	25276 4th Street	San Bernardino	Pre-1959
027916513	25280 4th Street	Highland	Pre-1959
027916514	25288 4th Street	San Bernardino	Pre-1959
027916515	25294 4th Street	San Bernardino	Pre-1959
027916516	25300 4th Street	San Bernardino	Pre-1959
027916517	25308 4th Street	San Bernardino	Pre-1959
027916518	25310 4th Street	San Bernardino	Pre-1959
027916519	25324 4th Street	San Bernardino	Pre-1959
027917101	8110 Marilyn Avenue	San Bernardino	Pre-1959
027917102	8124 Marilyn Avenue	Highland	Pre-1959
027917103	8126 Marilyn Avenue	San Bernardino	Pre-1959
027917104	8132 Marilyn Avenue	San Bernardino	Pre-1959
027917105	8144 Marilyn Avenue	San Bernardino	Pre-1959
027917106	8154 Marilyn Avenue	San Bernardino	Pre-1959
027917107	8162 Marilyn Avenue	Highland	Pre-1959
027917108	8170 Marilyn Avenue	San Bernardino	Pre-1959
027917201	8125 Marilyn Avenue	San Bernardino	Pre-1959
027917202	25227 4th Street	San Bernardino	Pre-1959
027917203	25231 4th Street	Highland	Pre-1959
027917204	25239 4th Street	San Bernardino	Pre-1959
027917205	25247 4th Street	San Bernardino	Pre-1959
027917206	25253 4th Street	San Bernardino	Pre-1959
027917207	25259 4th Street	San Bernardino	Pre-1959
027917208	25267 4th Street	San Bernardino	Pre-1959
027917209	25275 4th Street	San Bernardino	Pre-1959
027917210	25281 4th Street	San Bernardino	Pre-1959
027917211	25287 4th Street	San Bernardino	Pre-1959
027917212	25293 4th Street	San Bernardino	Pre-1959
027917213	25299 4th Street	San Bernardino	Pre-1959
027917214	25305 4th Street	San Bernardino	Pre-1959

027917215	25313 4th Street	San Bernardino	Pre-1959
027917216	25319 4th Street	San Bernardino	Pre-1959
027917217	25325 4th Street	Highland	Pre-1959
027917218	25326 Court Street	San Bernardino	Pre-1959
027917219	25318 Court Street	San Bernardino	Pre-1959
027917220	25310 Court Street	San Bernardino	Pre-1959
027917221	25304 Court Street	San Bernardino	Pre-1959
027917222	25296 Court Street	San Bernardino	Pre-1959
027917223	25290 Court Street	Highland	Pre-1959
027917224	25284 Court Street	San Bernardino	Pre-1959
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027917226	25268 Court Street	San Bernardino	Pre-1959
027917227	25264 Court Street	San Bernardino	Pre-1959
027917228	25256 Court Street	San Bernardino	Pre-1959
027917229	25246 Court Street	San Bernardino	Pre-1959
027917231	25234 Court Street	San Bernardino	Pre-1959
027917232	25226 Court Street	San Bernardino	Pre-1959
027917233	25218 Court Street	San Bernardino	Pre-1959
027917234	8147 Marilyn Avenue	San Bernardino	Pre-1959
027917301	8177 Marilyn Avenue	San Bernardino	Pre-1959
027917302	25227 Court Street	San Bernardino	Pre-1959
027917303	25233 Court Street	San Bernardino	Pre-1959
027917307	25236 3rd Street	San Bernardino	Pre-1959
027917308	25236 3rd Street	San Bernardino	Pre-1959
027917311	25289 Court Street	San Bernardino	Pre-1959
027917312	25295 Court Street	San Bernardino	Pre-1959
027917316	25321 Court Street	San Bernardino	Pre-1959
027917325	25236 3rd Street	San Bernardino	Pre-1959
027918106	8056 Del Rosa Drive	San Bernardino	Pre-1966
027918201	8023 Del Rosa Drive	San Bernardino	Pre-1966
027918206	8036 Del Rosa Avenue	San Bernardino	Pre-1966
027918207	8042 Del Rosa Avenue	San Bernardino	Pre-1966
027918208	8050 Del Rosa Avenue	San Bernardino	Pre-1966
027918209	8058 Del Rosa Avenue	San Bernardino	Pre-1966
027918307	8034 Shirley Avenue	San Bernardino	Pre-1966
027918308	8044 Shirley Avenue	San Bernardino	Pre-1966
027918309	8052 Shirley Avenue	San Bernardino	Pre-1966
027918310	8070 Shirley Avenue	San Bernardino	Pre-1966
027918311	8059 Del Rosa Avenue	San Bernardino	Pre-1966
027918312	8049 Del Rosa Avenue	San Bernardino	Pre-1966
027918313	8041 Del Rosa Avenue	San Bernardino	Pre-1966
027918314	8035 Del Rosa Avenue	San Bernardino	Pre-1966
027918401	8025 Shirley Avenue	San Bernardino	Pre-1966
027918404	8033 Shirley Avenue	San Bernardino	Pre-1966
027918405	8043 Shirley Avenue	San Bernardino	Pre-1966
027918406	8051 Shirley Avenue	San Bernardino	Pre-1966
027918407	8061 Shirley Avenue	San Bernardino	Pre-1966
027918409	8067 Shirley Avenue	San Bernardino	Pre-1966
027918410	8071 Shirley Avenue	San Bernardino	Pre-1966
027918502	25330 4th Street	San Bernardino	Pre-1959

027918507	25372 4th Street	San Bernardino	Pre-1959
027918508	25378 4th Street	Highland	Pre-1959
027918509	25384 4th Street	San Bernardino	Pre-1959
027918511	25414 4th Street	San Bernardino	Pre-1959
027918512	25424 4th Street	San Bernardino	Pre-1959
027918513	25430 4th Street	San Bernardino	Pre-1959
027918514	25440 4th Street	San Bernardino	Pre-1959
027918515	25450 4th Street	San Bernardino	Pre-1959
027918516	25462 4th Street	San Bernardino	Pre-1959
027918517	25466 4th Street	San Bernardino	Pre-1959
027918519	25486 4th Street	San Bernardino	Pre-1959
027918520	25394 4th Street	San Bernardino	Pre-1959
027918521	8092 Del Rosa Avenue	San Bernardino	Pre-1966
027918530	25480 4th Street	San Bernardino	Pre-1959
027919101	25331 4th Street	San Bernardino	Pre-1959
027919102	25337 4th Street	San Bernardino	Pre-1959
027919106	25367 4th Street	Highland	Pre-1966
027919107	25373 4th Street	San Bernardino	Pre-1966
027919108	25383 4th Street	San Bernardino	Pre-1966
027919109	25393 4th Street	San Bernardino	Pre-1966
027919110	8130 Del Rosa Avenue	San Bernardino	Pre-1966
027919111	25384 Court Street	San Bernardino	Pre-1966
027919112	25374 Court Street	San Bernardino	Pre-1966
027919113	25368 Court Street	San Bernardino	Pre-1966
027919118	25334 Court Street	San Bernardino	Pre-1959
027919201	25331 Court Street	San Bernardino	Pre-1959
027919210	8158 Del Rosa Avenue	Highland	Pre-1966
027919212	25382 3rd Street	San Bernardino	Pre-1966
027919302	8118 Shirley Avenue	San Bernardino	Pre-1966
027919304	8156 Shirley Avenue	San Bernardino	Pre-1966
027919305	8160 Shirley Avenue	San Bernardino	Pre-1966
027919306	8170 Shirley Avenue	San Bernardino	Pre-1966
027919307	25454 3rd Street	San Bernardino	Pre-1966
027919309	25436 3rd Street	San Bernardino	Pre-1966
027919312	8175 Del Rosa Avenue	San Bernardino	Pre-1966
027919313	8163 Del Rosa Avenue	San Bernardino	Pre-1966
027919314	8157 Del Rosa Avenue	San Bernardino	Pre-1966
027919315	8147 Del Rosa Avenue	San Bernardino	Pre-1966
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027919318	8119 Del Rosa Avenue	San Bernardino	Pre-1966
027919319	8113 Del Rosa Avenue	Highland	Pre-1966
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027919403	8127 Shirley Avenue	San Bernardino	Pre-1966
027919404	8151 Shirley Avenue	San Bernardino	Pre-1966
027920101	25067 6th Street	San Bernardino	Pre-1968
027920103	25079 6th Street	San Bernardino	Pre-1968
027920105	25105 6th Street	San Bernardino	Pre-1968
027920106	25117 6th Street	San Bernardino	Pre-1968
027920119	25125 6th Street	San Bernardino	Pre-1968

027920120	25137 6th Street	San Bernardino	Pre-1968
027921101	25457 6th Street	San Bernardino	Pre-1966
027921109	25511 6th Street	San Bernardino	Pre-1966
027921122	25499 6th Street	San Bernardino	Pre-1966
027921127	25476 5th Street	San Bernardino	Pre-1966
027921130	25509 6th Street	Highland	Pre-1966
027921131	25471 6th Street	San Bernardino	Pre-1966
027921132	25481 6th Street	San Bernardino	Pre-1966
027922102	25639 6th Street	San Bernardino	Pre-1966
027922110	7920 Sterling Avenue	San Bernardino	Pre-1966
027922111	25685 6th Street	San Bernardino	Pre-1966
027922112	7926 Sterling Avenue	San Bernardino	Pre-1966
119222101	26009 6th Street	Highland	Pre-1959
119222103	7936 Lankershim Avenue	Highland	Pre-1959
119222104	7942 Lankershim Avenue	Highland	Pre-1959
119222105	7960 Lankershim Avenue	San Bernardino	Pre-1959
119222109	7974 Lankershim Avenue	San Bernardino	Pre-1959
119224104	2325 5th Street	San Bernardino	Pre-1959
119229101	26111 6th Street	Highland	Pre-1966
119229102	26127 6th Street	San Bernardino	Pre-1966
119229103	26129 6th Street	Highland	Pre-1966
119229106	26179 6th Street	Highland	Pre-1966
119229107	26181 6th Street	Highland	Pre-1966
119229108	7904 Roberts Street	Highland	Pre-1966
119229112	7922 Roberts Street	Highland	Pre-1968
119229113	7945 Lankershim Avenue	Highland	Pre-1968
119229115	7961 Lankershim Avenue	Highland	Pre-1966
119229116	7973 Lankershim Avenue	Highland	Pre-1966
119229128	7961 Leslie Street	Highland	Pre-1966
119229129	7971 Leslie Street	Highland	Pre-1966
119229132	7944 Leslie Street	Highland	Pre-1968
119229133	7952 Leslie Street	Highland	Pre-1968
119253107	26577 6th Street	Highland	Pre-1966
119253109	26569 6th Street	Highland	Pre-1966
119253112	26543 6th Street	Highland	Pre-1968
119253113	26531 6th Street	Highland	Pre-1968
119253114	7911 6th Street	Highland	Pre-1968
119253115	7923 Victoria Avenue	Highland	Pre-1968
119253116	7933 Victoria Avenue	Highland	Pre-1968
119253118	26534 Ward Street	Highland	Pre-1968
119253119	26544 Ward Street	Highland	Pre-1968
119253120	26556 Ward Street	Highland	Pre-1968
119253122	26576 Ward Street	Highland	Pre-1968
119253123	26590 Ward Street	Highland	Pre-1968
119253124	26598 Ward Street	Highland	Pre-1968
119253125	26595 Ward Street	Highland	Pre-1959
119253126	26589 Ward Street	Highland	Pre-1959
119253127	26577 Ward Street	Highland	Pre-1959
119253128	26565 Ward Street	Highland	Pre-1959
119253129	26553 Ward Street	Highland	Pre-1959

119253130	26545 Ward Street	Highland	Pre-1959
119253131	26531 Ward Street	Highland	Pre-1959
119253132	7957 Victoria Avenue	Highland	Pre-1959
119253133	7977 Victoria Avenue	Highland	Pre-1959
119253134	26607 6th Street	Highland	Pre-1968
119253135	26627 6th Street	Highland	Pre-1968
119253136	26637 6th Street	Highland	Pre-1968
119253137	26647 6th Street	Highland	Pre-1968
119253138	26657 6th Street	Highland	Pre-1968
119253139	26651 6th Street	Highland	Pre-1968
119253140	26659 6th Street	Highland	Pre-1968
119253141	26669 6th Street	Highland	Pre-1968
119253142	26677 6th Street	Highland	Pre-1968
119253143	26687 6th Street	Highland	Pre-1968
119253144	26694 Ward Street	Highland	Pre-1968
119253145	26674 Ward Street	Highland	Pre-1966
119253146	26654 Ward Street	Highland	Pre-1966
119253147	26644 Ward Street	Highland	Pre-1966
119253149	26624 Ward Street	Highland	Pre-1966
119253151	26604 Ward Street	Highland	Pre-1966
119253152	26605 Ward Street	Highland	Pre-1966
119253157	26665 Ward Street	Highland	Pre-1966
119253158	26675 Ward Street	Highland	Pre-1966
119253160	7968 Cunningham Street	Highland	Pre-1966
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119254103	26797 6th Street	Highland	Pre-1966
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119254202	26727 6th Street	Highland	Pre-1966
119254203	26737 6th Street	Highland	Pre-1966
119254204	26747 6th Street	Highland	Pre-1966
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119254206	26767 6th Street	Highland	Pre-1966
119254207	26777 6th Street	Highland	Pre-1966
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119254215	26730 Ward Street	Highland	Pre-1966
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119254226	26789 Ward Street	Highland	Pre-1966
119254227	26789 Ward Street	Highland	Pre-1966
119254228	26789 Ward Street	Highland	Pre-1966
119254229	26789 Ward Street	Highland	Pre-1966
119254238	26710 5th Street	Highland	Pre-1968
119255104	26530 3rd Street	Highland	Pre-1966
119255105	265403rd Street	Highland	Pre-1966
119255106	26552 3rd Street	Highland	Pre-1966
119255107	26562 3rd Street	Highland	Pre-1966
119256104	26811 5th Street	Highland	Pre-1968
119256109	8046 Central Avenue	Highland	Pre-1959
119256113	26875 4th Street	Highland	Pre-1966
119261101	27002 Meines Street	Highland	Pre-1959
119261102	26970 Meines Street	Highland	Pre-1959

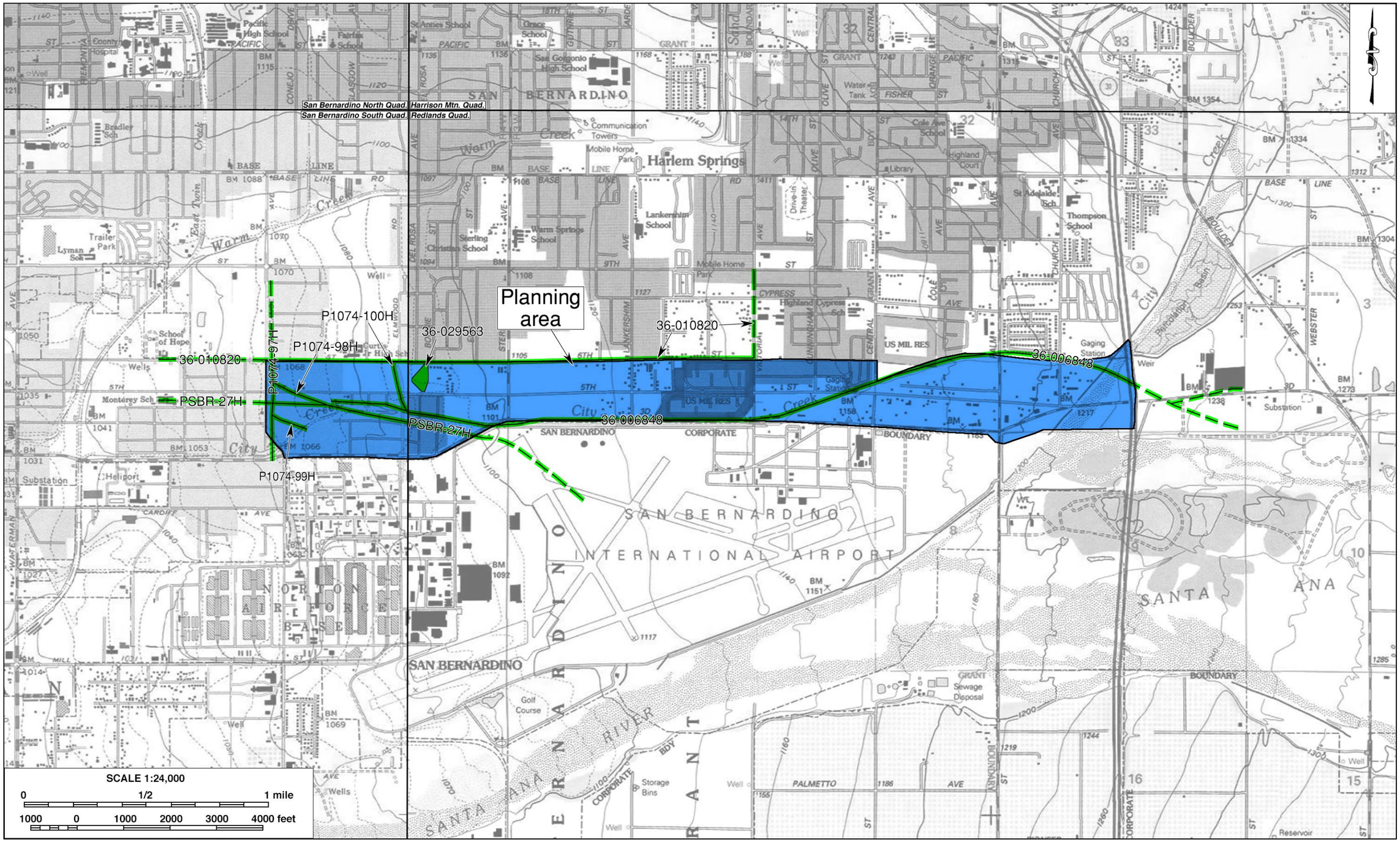
119261104	27000 Meines Street	Highland	Pre-1966
119262103	27220 Meines Street	Highland	Pre-1959
119262105	27184 Meines Street	Highland	Pre-1968
119262109	27124 Meines Street	Highland	Pre-1968
119263111	27059 5th Street	Highland	Pre-1959
119263121	26998 3rd Street	Highland	Pre-1938
119264107	8068 Palm Avenue	Highland	Pre-1966
119264118	27110 3rd Street	Highland	Pre-1966
119264120	27134 3rd Street	Highland	Pre-1966
119264121	27132 3rd Street	Highland	Pre-1966
119264123	27136 3rd Street	Highland	Pre-1966
119264125	27178 3rd Street	Highland	Pre-1966
120131116	27541 5th Street	Highland	Pre-1968
120131125	27371 5th Street	Highland	Pre-1968
120132125	8009 Church Avenue	Highland	Pre-1959
120132128	8009 Church Avenue	Highland	Pre-1938
120132156	7957 Church Avenue	Highland	Pre-1938 (altered)

* Based on NETR Online 1938-1968.

APPENDIX 3

LOCATION OF PREVIOUSLY IDENTIFIED ARCHAEOLOGICAL SITES IN THE PLANNING AREA

(Confidential)


San Bernardino North Quad.
San Bernardino South Quad.
Harrison Mtn. Quad.
Redlands Quad.
Planning area
P1074-100H
P1074-98H
P1074-97H
P1074-99H
36-029563
36-010820
36-010820
36-006848
36-006848
PSBR-27H
PSBR-27H
SCALE 1:24,000
0 1/2 1 mile
1000 0 1000 2000 3000 4000 feet

ATTACHMENT B

CULTURAL RESOURCES IN THE PROJECT AREA

Update 10/11

State of California--The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary # 36-006544 (Update)
HRI #
Trinomial CA-SBR-6544H (Update)

Page 1 of 7 Resource name or # (Assigned by recorder)

Recorded by R. Porter and M. Hogan Date March 31, 2011 ___Continuation √ Update
Affiliation: CRM TECH, Colton Project No: CRM TECH 2523

USGS HARRISON MTN.

On March 31, 2011, CRM TECH conducted detailed recordation procedures on an approximately 10-foot segment of the North Fork Canal running along the northeastern side of Highland Avenue between its intersections with Summertrail Place and Orchard Road, just outside the northern boundary of the City of Highland. The location lies in the northeast quarter of the northwest quarter of Section 34, T1N R3W, San Bernardino Baseline and Meridian. The UTM coordinates are as follows: 482,980 mE and 3,776,840 mN (NAD 1927, see attached map for location). The surrounding area was once mostly used for agriculture. Now, however, the area to the south is predominantly occupied by single-family residences, while the area to the north/northeast of the location of the canal segment recorded here is still vacant.

At this location, the canal runs from the southeast to the northwest, passing under an unpaved driveway/culvert just to the northwest of portion being recorded. The recordation took place to mitigate impacts to the resource that would occur at this location as a result of the East Valley Water District making improvements to/ repairing a line that already runs under the canal. Some damage to the Canal has occurred as a result of the existing pipeline. In order to make their repairs, the District would have to cut through part of the North Fork Canal at this location.

Canal Description at this location:
The sidewalls and the bottom of the open ditch are lined with medium-sized local granitic rocks embedded in coarse concrete, and the culvert is built of the same materials. The concrete is slowly decomposing and cracking with age, exposing rocks that were once concealed at the bottom of the ditch, especially at the location of the existing buried pipeline. The faces of the rocks on the sidewalls of the canal, however, were not covered with concrete. The sidewalls measure two feet tall at the southeastern end of the portion of the ditch being recorded and they gradually rise to three feet at the northeastern end, near the headwall of the culvert. The walls of the ditch are basically perpendicular at this location, with the ditch being four feet wide. However, at the ground surface, there is a one-foot wide concrete slab running along both sides of the ditch. Refer to the accompanying drawings and photographs.

This detailed recordation of the North Fork Canal at this location serves as mitigation through data recovery of the impacts to this portion of the canal as a result of the project to repair an existing water line. The rest of the Canal will not be impacted.

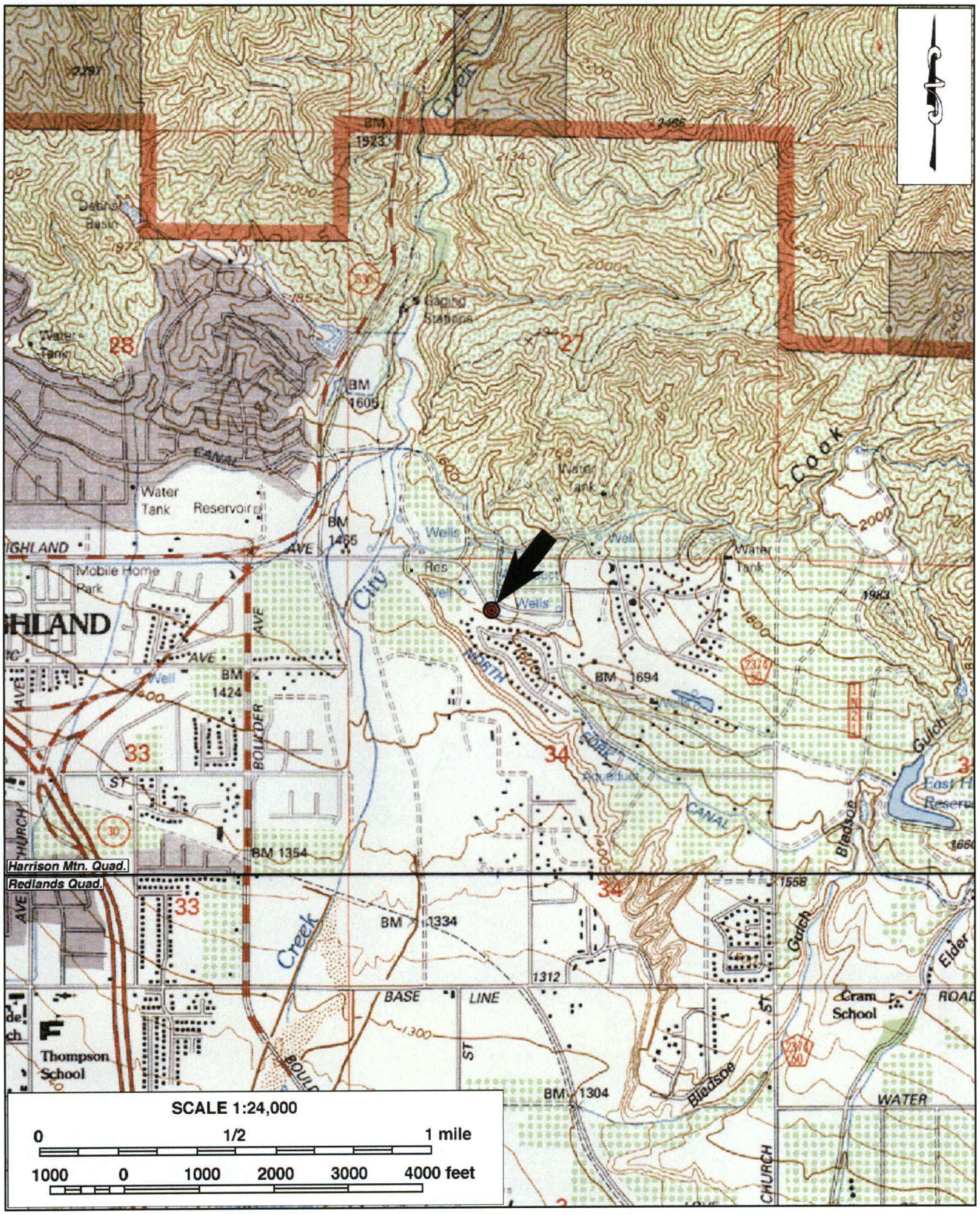
State of California--The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary # 36-006544 (Update)
HRI #
Trinomial CA-SBR-6544H (Update)

*Resource Name or # (Assigned by recorder)

*Map Name: Harrison Mtn. and Redlands *Scale: 1:24,000 *Date of Map: 1996



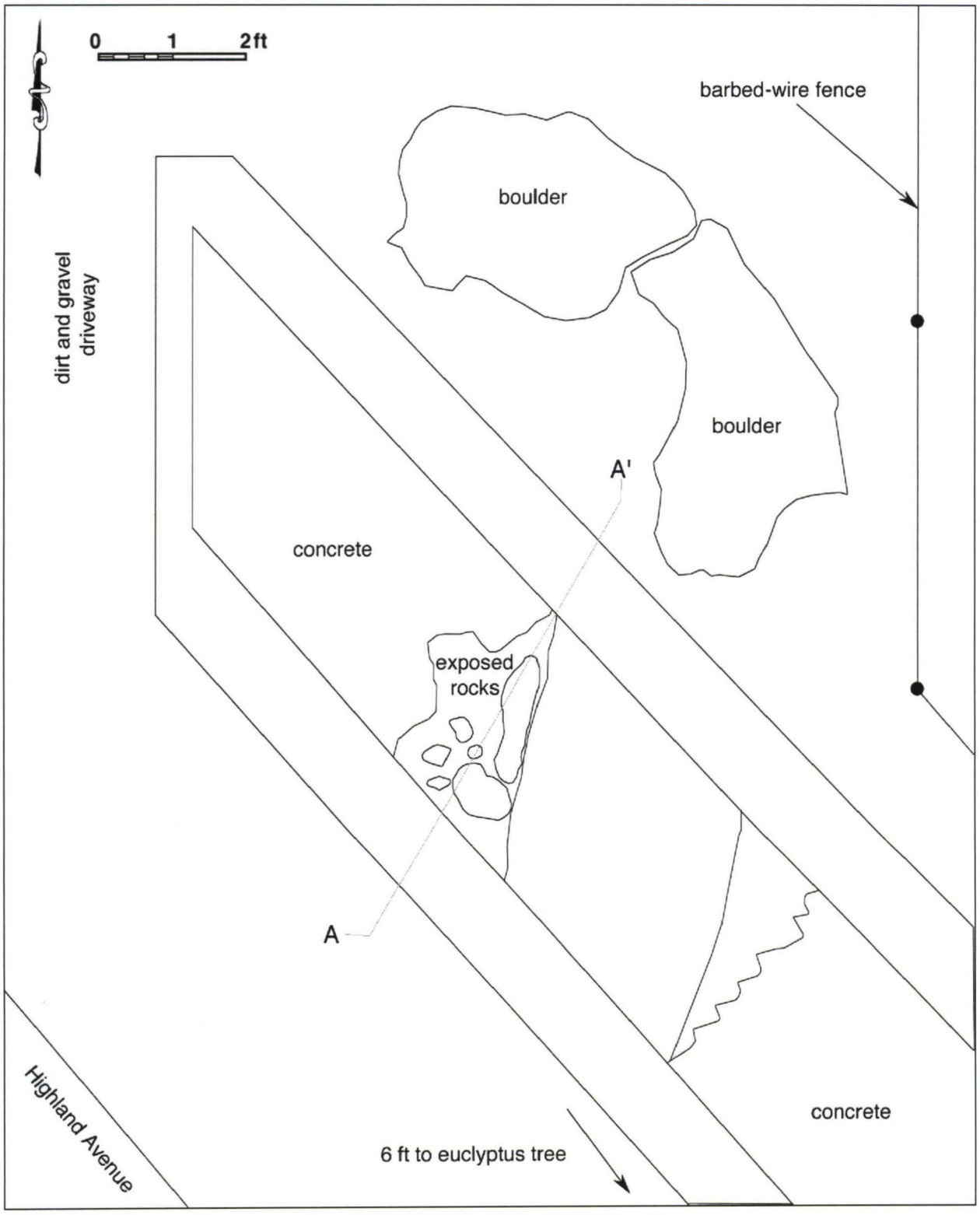
*Required information

State of California--The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
SKETCH MAP (plan view)

Primary # 36-006544 (Update)
HRI #
Trinomial CA-SBR-6544H (Update)

Page 3 of 7 *Resource Name or # (Assigned by recorder)

*Drawn by: Robert Porter *Date: March 31, 2011



DPR 523K (1/95)

*Required information

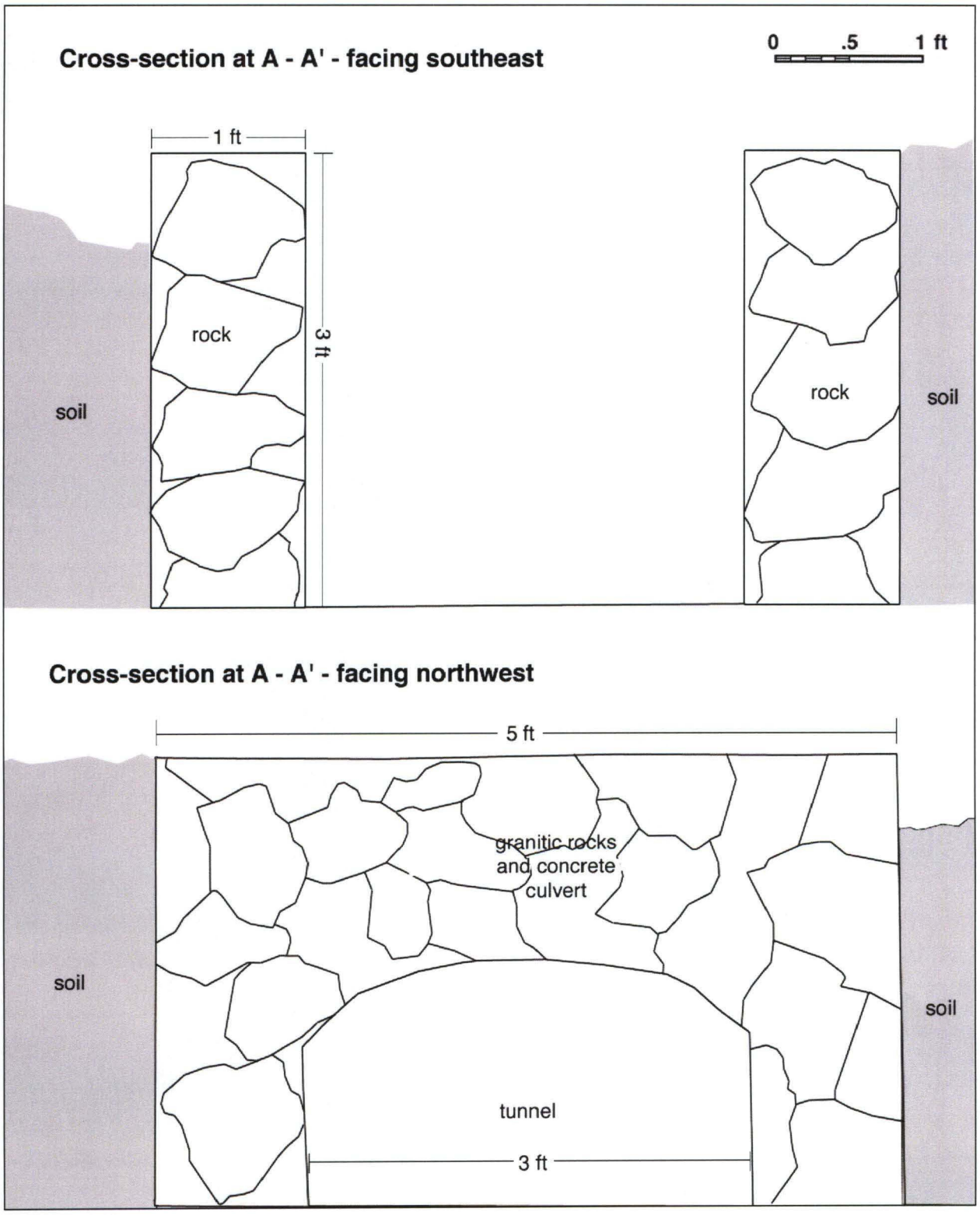
State of California--The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
SKETCH MAP

Primary # 36-006544 (Update)
HRI #
Trinomial CA-SBR-6544H (Update)

*Resource Name or # (Assigned by recorder)

*Drawn by: Robert Porter

*Date: March 31, 2011



*Required information

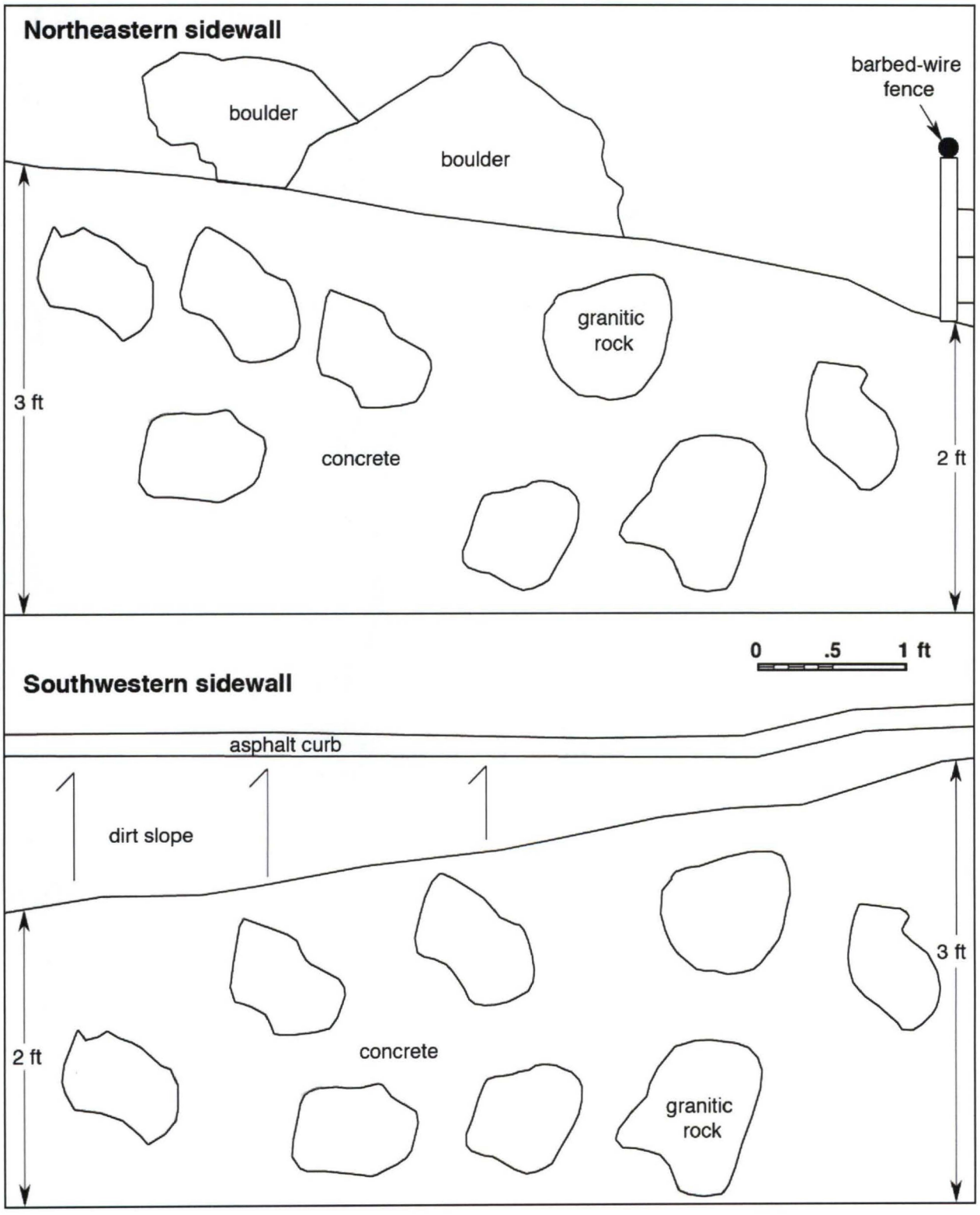
State of California--The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

SKETCH MAP

Primary # 36-006544 (Update)
HRI #
Trinomial CA-SBR-6544H (Update)

Page 5 of 7 *Resource Name or # (Assigned by recorder)

*Drawn by: Robert Porter *Date: March 31, 2011



*Required information



Overview to the northwest



Overview to the southeast



Culvert under driveway; view to the northwest



Sidewall detail of the south sidewall at culvert

P36-006544

1062

ARCHAEOLOGICAL SITE SURVEY RECORD
(McKenna et al., Whittier CA)

PERMANENT TRINOMIAL: CA-SBR-6544H
TEMPORARY SITE NO.: PSBR-11-H
AGENCY DESIGNATION: _____

Page 1 of 17

1. County: San Bernardino

2. USGS Quadrangle: Harrison Mountain(7.5)XXX(15)____(Year) 1988

3. Zone: 11 /_____(Easting)/_____(Northing)

4. Township 1N Range 3W /____1/4/___1/4/ S 1/2/ SW1/4/Section 27
Township 1N Range 3W / E 1/2/ NW1/4/ NE1/4/ NW1/4/Section 34

5. Map Coordinates:_____mmS_____mmE;

6. Elevation: 1520 to 1560 feet above mean sea level

7. Location: North of Highland Ave. and east of City Creek; at base of hills and across small pasture land - portions buried across pasture; connects to lateral on Highland Ave.; also includes earlier canals along north side of Highland Avenue.

8. Prehistoric_____HistoricXXXXXXXXXProtohistoric_____

9. Site Description: Portion of the historic North Fork Canal - running from City Creek to East Highlands (and further east) along the foothills of the local mountains (ca. 1858 to 1916) and currently used for water transportation (see continuation forms)

10. Area: 2 m X 1000 m = 2000 m2 Meth./Deter.: map data

11. Depth: 100-150 cm Method of Determination: field measurements

12. Features: canal with rock and mortar construction; irrigation valves; associated earthen dam; pipes; and diversion facility areas. Portions of canal are buried. Site includes three different canal alignments (1882, 1884, and 1916)

13. Artifacts: one large irrigation valve placed in wall of canal (MARTIN IRON WORKS LOS ANGELES, CALIFORNIA). Pipes and valves noted along canal at diversion station in pasture.

14. Non-Artifactual Constituents: N.A.

15. Date Recorded: January 16, 1993
16. Recorded By: Jeanette A. McKenna

17. Affiliation and Address: McKenna et al., 6008 Friends Ave., Whittier CA 90601 (310) 696-3852

P36-000544

ARCHAEOLOGICAL SITE SURVEY RECORD
(McKenna et al., Whittier CA)

PERNAMENT TRINOMIAL: CA-SBR-6544H
TEMPORARY SITE NO.: PSBR-11-H
AGENCY DESIGNATION:

18. Human Remains: None observed

19: Site Integrity: Portions here intact - some alterations

20. Nearest Water (distance/direction): City Creek - due west

21. Largest Body of Water within 1km (distance/direction): N.A.

22. Vegetation (site vicinity): Sage Scrub and grasses

23. Vegetation (on site): Sage Scrub and grasses

24. Site Soil: Sandy Loam

25. Surrounding Soil: Sandy Loam

26. Geology: Alluvial Fan at base of hills

27. Landform: Alluvial fan

28. Slope: slight to south/southeast

29. Exposure: Open

30. Landowners: East Valley Water District and State of CA. Portions of canal across private lands; diversion channel in CALTRANS/Highland Ave. R-O-W.

31. Remarks: Portions of canal will be impacted by proposed re-alignment of Highland Ave. and [redacted] pipeline route.

32. References: McKenna 1992 and 1993

33. Name of Project: East Valley Water District - City Creek Water Facility and Associated Pipelines, Highland Ave.

34. Type of Investigation: Phase I Survey and Preliminary Eval. of resources.

35. Site Accession No.: N.A. Curated At: N.A.

36. Photographs: on file Taken By: Jeanette A. McKenna

37: Photo Accession No.: N.A. On File At: McKenna et al.

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ARCHAEOLOGICAL SITE SURVEY RECORD
(McKenna et al., Whittier CA)

PERNAMENT TRINOMIAL: CA-SBR-6544H
TEMPORARY SITE NO.: PSBR-11-H
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Investigations of the Pipeline Alignment

In an attempt to adequately cover the recently proposed pipeline alignment along Highland Avenue, McKenna et al. successfully conducted an intensive survey of a 100 foot wide corridor north of the Highland Avenue roadside. To complete this level of investigation, McKenna et al. also studied portions of the private land holdings along Highland Ave. In particular was the Rancho San Andreas North property located east of the existing plant facility and encompassing portions of the North Fork Canal system.

The 100 foot wide corridor was equivalent to an approximated 33 meter wide linear survey - which was also approximately 1/4 mile long. The field survey was completed on Wednesday, January 13, 1993, by Jeanette A. McKenna, Principal Investigator for McKenna et al. Ms. McKenna walked the project area by completing three transects: 1) once from the existing facility and walking east/southeast along Highland Avenue (but inside the fenceline); 2) once from southeast to northwest, again inside the fenceline; and 3) once outside the fenceline, along Highland Avenue, while walking the entire length of the North Fork Canal System from the northern diversion box to the Highland Avenue connection - and then back to the Highland Avenue facility.

In surveying these areas, McKenna et al. found and identified the physical remains of three periods of construction: 1) the 1916 canal located between Highland Avenue and the diversion box; 2) remains of the ca. 1882 canal; and 3) the remains of the ca. 1884 canal (as depicted in Figure 5).

The 1916 Canal System:

As noted earlier in this report, the ca. 1916 canal alignment - that alignment currently identified on the 1988 Harrison Mountain U.S.G.S. Quadrangle, was constructed by the Bear Valley and North Fork Ditch companies (co-owners) after flooding destroyed the earlier alignment. It was the decision of these companies to relocate the canal to the north, on a higher elevation; to protect the feature from future flooding episodes.

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McKenna et al. traced this canal from the diversion box on City Creek to the intersection with Highland Avenue. Illustrated in Figure 9 (also see photographs in Appendix C), this canal was excavated into the rocky hillsides of the foothills and measured fifty four inches across at the top and varied in depth from 28 inches on the north side to 34 inches on the south side. The base of the canal was flat - the depths being measured from the surface. Therefore, the height of the canal on the northern side was actually lower than the wall of the south side.

The canal was constructed of a series of rock cobbles (acquired locally) and placed along the base and walls of the feature.

Illustrated in photographs in Appendix C, this canal was cement lines, though many areas along the canal lacked evidence of cement. McKenna et al. attributed the lack of cement to erosion and decomposition of the cement, not a failure to place the cement.

There were obvious areas of maintenance where the cement was replaced or sporadic broken areas along the canal were patched with cement or concrete. In one instance, the addition of an irrigation gate was identified. This cast iron gate (see Photographs 20 and 21) was placed within the south/southwestern wall of the canal and cemented in with the identification of "A.C. Castro" and " ... P.S. Feria ... " etched in the cement. The iron gate was manufactured by Martin Iron Works of Los Angeles, California (as marked on the plate).

McKenna et al. found no evidence for a direct relationship of the nearby lands to anyone named "Castro". Therefore, McKenna et al. has tentatively concluded that "Castro" is the name of the contractor who placed the gate, rather than a local property owner.

The ca. 1916 canal runs as an open feature from the diversion box to a point where the canal turns due south towards Highland Avenue. From this point, the canal is buried under a cement capping and accessed by a series (four) of rectangular caps located between the 90 degree turn and Highland Avenue. While the first three caps have been cemented over, the southern-most cap is still open, exhibiting the piping, valves, and flow mechanisms indicative of a diversion system. This system appears to represent the pumping

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station necessary to move water from the southern extent of the canal to the northern (more recent) addition to the system. Once the water reached the major turn north of Cook Creek, gravity carried the water to the crossing at City Creek.

In assessing the significance of this feature/site, McKenna et al. took the four major criteria for significance into account: a) association with an event; 2) association with recognized individuals; 3) association with an specific architectural/construction design; and 4) potential to yield scientific data.

McKenna et al. has concluded that this feature (the ca. 1916 canal) is a feature representing a small portion of a large irrigation system in San Bernardino County. As such, it could be considered indicative of a significant event. However, since this is a relatively late addition to the overall system, the level of significance is lessened by the temporal distance between the initial establishment of the irrigation system and the ca. 1916 extensions of the system.

With respect to noted individuals, this particular reach of the irrigation system was constructed by the North Fork Company and the Bear Valley Water Company, not individuals as indicated by the earlier records (where local homesteaders or property owners formed a local agency). Therefore, this particular reach is not directly associated with "an individual", but a group(s). The North Fork Company, as noted above, may be associated with noted individuals, but as a whole, the application of this criterion is dubious. McKenna et al. would not emphasize the association with noted individuals as a means of establishing significance.

The 1916 canal is a feature exhibiting a form of construction indicative of the times - as illustrated for other areas of San Bernardino County (e.g. Fontana and East Highlands). The construction is not unique, but the burying of a portion of this feature is relatively unique - as is the presence of the pump stations, diversion boxes, and irrigation gates. Therefore, McKenna et al. would conclude that this feature is a significant feature and, therefore, potentially eligible to the National Register of Historic Places.

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Likewise, McKenna et al. would conclude that there is a potential for the recovery of additional and, as yet, unrecorded aspects of this system in the area of Highland Avenue. For this reason, McKenna et al. would conclude that this feature is significant and potentially eligible to the National Register of Historic Places because of its potential to yield additional data.

In summary, the 1916 canal is a significant feature under Criteria c) and d), as defined by the National register. Therefore, any impacts to this feature would be considered adverse, unless proven to be otherwise.

The proposed project will not impact the majority of this system. As designed, the current project will impact only that small portion of this canal in the area nearest Highland Avenue, where the Water District proposes to divert the water from this canal system to the facility on Highland Avenue by placing a new pipeline along Highland Avenue. McKenna et al. believes that this area has already been impacted by the alterations of the canal system between 1882 and 1916. The extent of these alterations, however, are unknown, as this portion of the canal system is buried.

McKenna et al., in assessing the impacts to this system, recommends that the excavations near Highland Avenue (for the construction of the associated pipeline) be monitored to record and/or report any additional components/elements of this canal system which are currently buried in this area.

McKenna et al. would recommend full-time monitoring of this area by a qualified historic archaeologist.

The 1884 Canal System:

In 1883, the North Fork Canal Company decided to extend the existing system to a small community on the western side of City Creek. To facilitate this expansion, the North Fork Canal Company constructed a diversion just east of City Creek and brought water northwest and then east, across City Creek, in the vicinity of Atlantic and Highland Avenues (see Figure 5). Though this 1884 canal appears to be in the area of the ca. 1916 canal, it is actually located between the 1916 diversion box (on City Creek) and Highland Avenue - just north of the existing water treatment facility (see Figure 7).

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The 1884 canal was utilized until ca. 1916, when flooding destroyed the canal (and resulted in the construction of the 1916 alignment). McKenna et al. noted fragments of concrete and debris within the City Creek Water Treatment Plant project area, but found no evidence of an intact or identifiable canal. Believed to be completely destroyed in the area of the treatment plant, McKenna et al. recommended monitoring of excavations, but did not require any additional studies at the time of the initial investigations (a consulsion similar to that reached by Sutton in 1990, that the canal was destroyed or significantly damaged).

Although destroyed within the initial treatment plant project area, McKenna et al. identified what is believed to be an active remnant of the 1884 canal in the area east of the treatment plant - north of Highland Avenue. Illustrated in Figure 10, this canal was basically squared - with the side walls perfectly vertical and the base measured as 32 inches across. The northern wall measured 22 inches from the base of the canal. The southern wall measured 30 inches from the base of the canal. Built in a fashion similar to that of the 1916 canal, the northern wall was shorter than the southern wall. Although this design does not prevent the accumulation of silt within the canal, it does allow for the catchment of run-off waters and prevents overflow to the south - along the associated roads or via the loss of needed water flow.

The walls and base of this canal are cement lines (as in the case of the 1916 canal), but more evenly and will less erosion. This may be due to the lessening amounts of water in this canal since the construction of the 1916 canal.

The portion of the canal identified as the 1884 canal is located in the eastern-most portion of the proposed Highland Avenue pipeline. This canal begins at the location of the mailbox for 28251 Highland Avenue and runs to the east. The entire alignment is not more than a few hundred feet long. At the present time, the canal is located between the trees lining Highland Avenue and the fence line for the private property to the north of Highland Avenue.

In assessing the significance of this feature (the 1884 canal alignment), McKenna et al. used the same four criteria for significance presented above. In this case, however, McKenna et al. found that the 1884 canal is a significant resource for different reasons.

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The 1884 North Fork Canal Extension is more directly associated with the initial period of irrigation/canal development in the eastern San Bernardino Valley. It is directly associated with the North Fork Company and was specifically constructed to supply a relatively new community with irrigation waters. Therefore, this canal is indicative of a major event in the area/region.

The North Fork Canal Extension(1884) is also associated with the early development of the North Fork Canal Company, its principals, and associated smaller companies. Between ca. 1865 and 1920, this Company was associated with the Highland region and the names of the Highland Well Company, the Highland Mill Company, and the Highland Lumber Company are all known for this area and the activities on or near City Creek. The individuals of the North Fork Canal Company represent this groups and, therefore, the individuals associated with this initial use of the area are basically significant individuals with extreme foresight for the potential for this area.

The design of the 1884 canal is different from the other canals identified in this general area. It is built relatively square and not with the slanted sidewalls indicative of most canals recorded for San Bernardino County. The dimensions do not necessarily permit a higher quantity of water (from earlier canals), but the design does appear to permit more unincumbered flow. McKenna et al. has determined, therefore, that this particular portion of canal is relatively unique and, therefore, significant. More can be learned form this portion of the canal once the connection in the area of the 1916 canal can be examined.

With this in mind, the 1884 canal has the potential to yield additional data and, therefore, is a significant feature. With all four major criteria being applicable here, McKenna et al. has concluded that this feature is potentially eligible for the National Register of Historic Places. As such, any disturbances to this feature would be considered an adverse impact requiring mitigation measures (see later discussion).

The 1882 Canal System:

The 1882 canal system on North Fork was initiated by the North Fork Canal Company to serve the settlements along Baseline Road - via the Plunge Creek to City Creek routes (see Figure 5). This alignment was initially diverted off the historic Cram & Van Leuven

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Ditch (ca. 1858) from an area east of Plunge Creek, but connected to the Cram & Van Leuven Ditch by a lateral (southwest to northeast) connecting line constructed in 1882-83 (at the Cram Divide). From the point of this connecting line, the canal ran to the northwest - to a point east of City Creek, then turned west/southwest to Baseline Road (west of City Creek).

The 1882 canal was a predecessor to the 1884 ditch, which did not negated the use of the 1882 ditch. Illustrated in Figure 6, Beattie (1951) shows the earlier alignment just south of the 1884 alignment (including a lateral on Highland Avenue. The diversion of these two canals appears to be in the general area east of City Creek and just north of Highland Avenue - in the area of the proposed pipeline.

In investigating this alignment, McKenna et al. identified a segment of a canal which differed form the identified 1884 canal and which was not associated with the 1916 canal. Adjoining the western extent of the 1884 canal, McKenna et al. interpreted these remains as the remains of the original 1882 canal, also damaged in the flooding of ca. 1916, and non-existent in the more western portions of the eastern side of City Creek. Illustrated in Appendix C (Photographs 3 and 4) and in Figure 11, the mode of construction within this feature is significantly different than those noted for either the 1884 or the 1916 canals.

The identified portion of the 1882 canal began slightly west of the defined 1884 canal (at the 28251 Highland Avenue mailbox) and ran west along the northern side of Highland Avenue until it became less well defined and eventually became an unlined and more natural drainage. In this area of construction (approximately 350 feet in length), the side wall of the canal consist of large rocks (boulders) laid on end and forming a sloping side wall. The base of the canal is approximately 26 inches wide (though it varies slightly), with the top of the canal spanning 36 inches (interior dimensions). The canal is 24 inches deep with the north and south walls being generally equal in height. The base of the canal is constructed of numerous smaller rocks/cobbles collected from the local area.

There is no evidence of mortar in this canal. There is no evidence of concrete or cement on the rocks in this canal and no suggestion that all traces of concrete were eroded away. As illustrated in Photograph 3 (Appendix C), this lack of concrete attributed to the overall erosion of the canal - portions having been dislodged during flooding or other forms of disturbance.

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Using the same discussion presented above for the 1884 canal, McKenna et al. has determined that portions of the 1882 canal are present within the proposed project area and this feature has a potential for significance under all four major criteria for significance: a) association with the development of irrigation in this area; b) association with the early developers of this area; c) presentation of a construction mode different from others in the area; and 4) the ability to yield additional data regarding the canal for the area.

As a significant feature, this feature/site is potentially eligible to the National register of Historic Places. Any disturbance to this feature must be considered an adverse impact requiring a level of mitigation of adverse impacts.

General Summary

In summary, the proposed tank locations will not impact any known significant resources. Therefore, McKenna et al. is not recommending any additional studies at this time, but will recommend that an archaeological monitor be on site during any construction excavations.

With respect to the proposed pipeline, the construction of the pipeline will impact at least three major episodes of canal construction: 1882; 1884; and 1916. The fact that these three construction episodes meet at a point within the project area is another point of significance for this area. Therefore, some level of mitigation of adverse impacts is necessary.

To date, McKenna et al. has completed a survey of the areas to be impacted, drawn sketches of the various canal segments, photographed the area, and completed a level of historic research. The mitigate the adverse impacts to these sites, McKenna et al. recommends that the research completed to date be supplemented by archaeological monitoring of the pipeline project area to keep records and report on the buried deposits known for the area and to be present should any as yet unidentified components of cultural elements be unearthed. McKenna et al. also recommends monitoring of the area to record data on the construction techniques for these three features (e.g. trench lines, construction materials not evident from the surface, etc.).

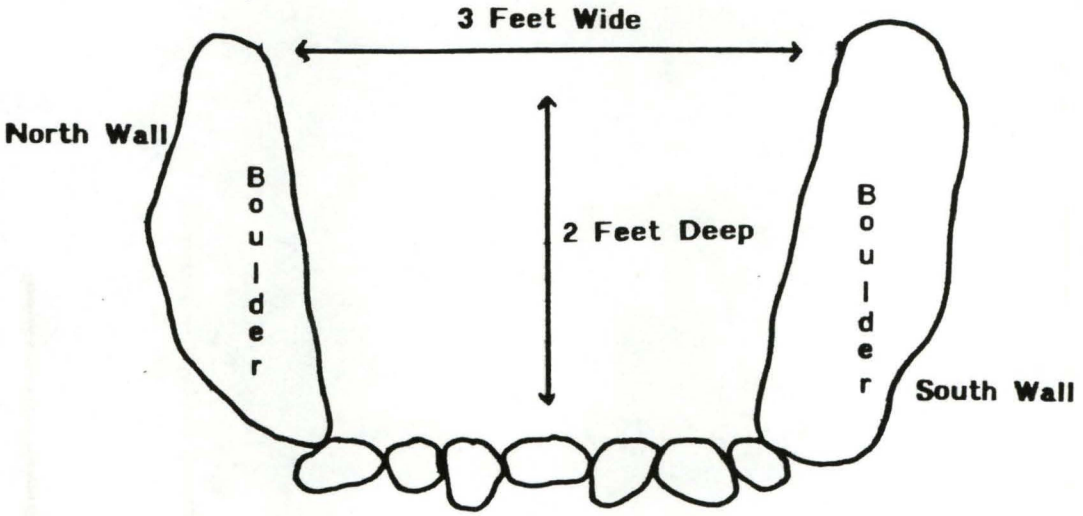
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Example of Canal North of Highland Ave.

(1 inch:1 foot)

Example of the ca. 1882 Canal Cross-section (viewed from the west).

Flow Runs from East to West

See Photographs 3 & 4, Appendix C

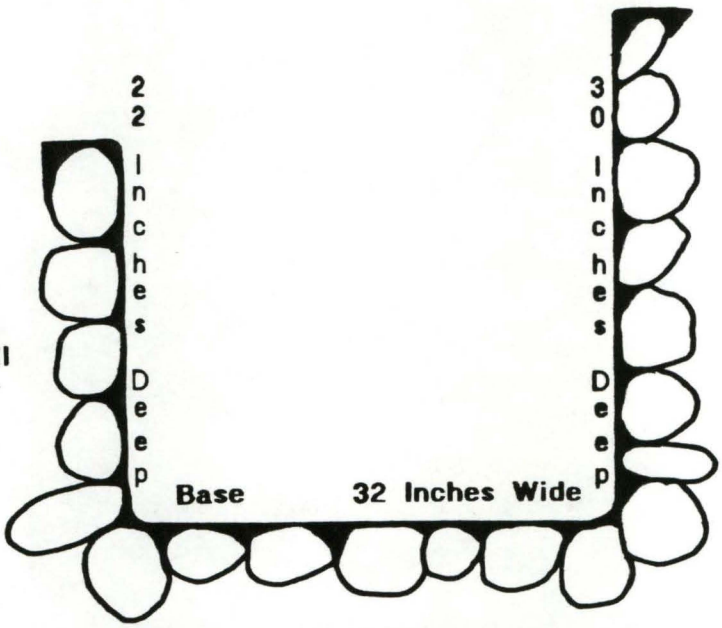
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Cement Lined Base, Sides, and Caps

EXAMPLE OF CANAL NORTH OF HIGHLAND AVE.

(1 inch: 1 foot)

Example of ca. 1884 Canal Cross-section (viewed from the west).

Flow Runs from East to West

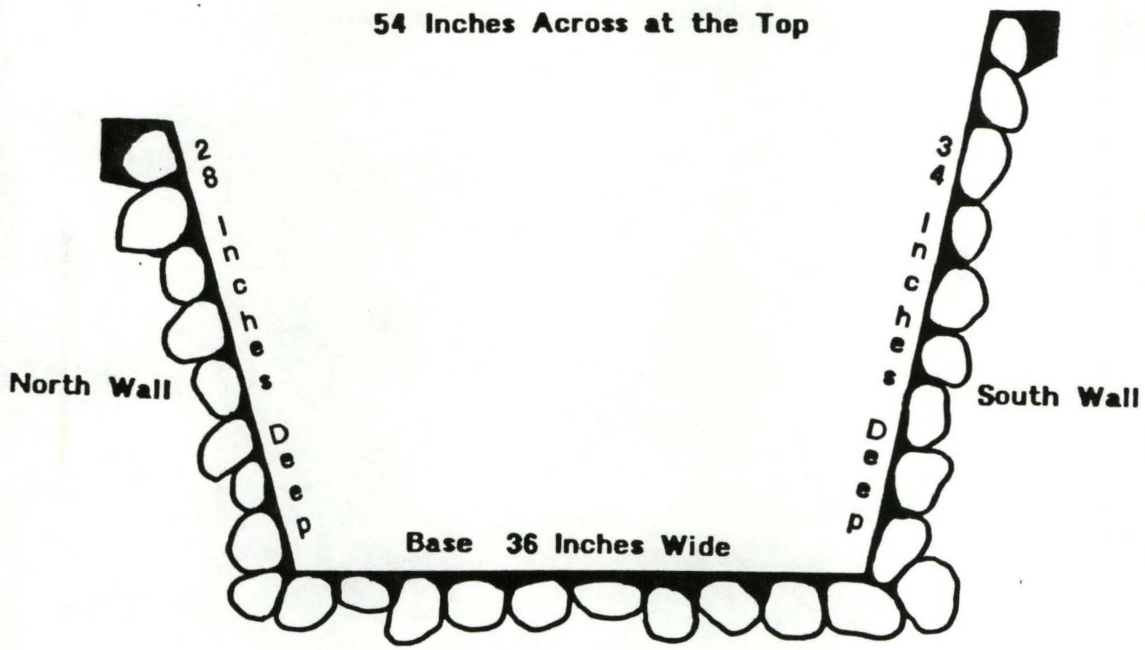
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EXAMPLE OF CA. 1916 CANAL

(1 inch: 1 foot)

Flow Runs from East to West

Example of the ca. 1916 Canal Cross-section (viewed from the west).

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CONCLUSIONS AND RECOMMENDATIONS

McKenna et al. found no evidence of significant resources in the areas of the proposed tanks. Therefore, no additional studies are required here. McKenna et al. would, however, recommend an archaeological monitor for the excavations in this area, as buried deposits are likely/possible, especially in the area of Tank No. 2.

As noted above, McKenna et al. has determined that the canals located within the area of the proposed project area significant and, therefore, potentially eligible for the National Register of Historic Places. With the evaluation process completed (during this study), McKenna et al. recommends a level of mitigation for the adverse impacts which will be realized by the construction of the proposed pipeline.

At this time, the level of mitigation includes:

1. A full-time archaeological monitor for any and all excavations conducted along the Highland Avenue pipeline right-of-way;

2. The full-time monitor must be qualified in historic archaeology and prepared to halt any activities of the proponent which are adversely impacting significant portions of the canal(s);

3. The monitor shall have the authority to record, photograph, and otherwise document any and all portions of the canals which appear to be of additional significance and yielding data not available in other areas;

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4. Should the recordation of the canals require more time than permitted by the construction schedule, the proponent will be responsible for the costs of this additional time;

5. Should remains be uncovered which are dissociated from the canals but which represent significant historic or prehistoric resources, an amendment to the monitoring schedule will be necessary and at the expense of the proponent.

Any changes to the contents or context of this report will require the written permission of the author, Jeanette A. McKenna, Principal Investigator for McKenna et al., Whittier, California (310-696-3852).

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PERNAMENT TRINOMIAL: CA-SBR-6544H
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Archaeological Site Map

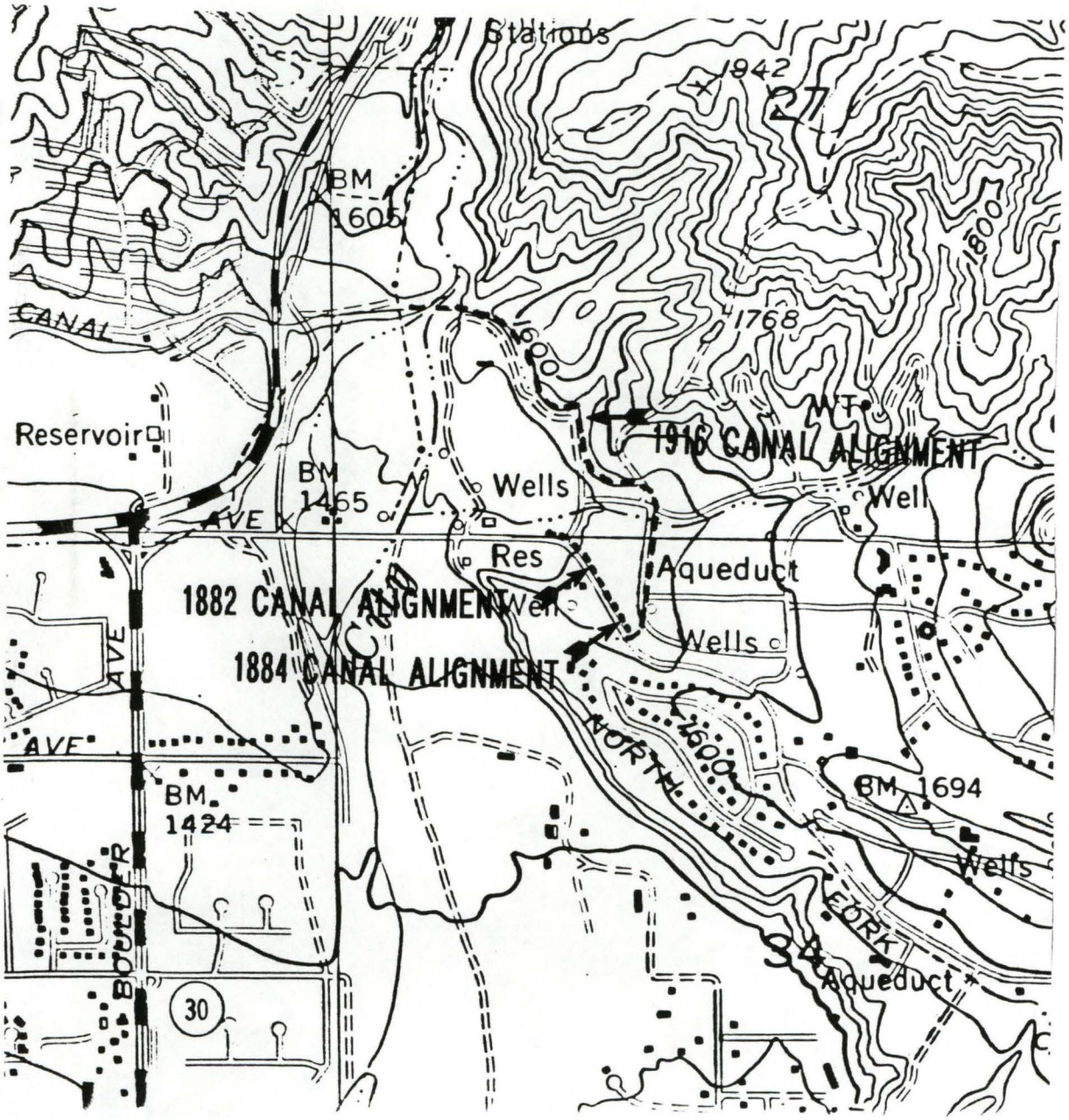
SEE ATTACHED DRAWINGS (pages 11-13)

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Archaeological Site Location Map



P36000634

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

Permanent Trinomial: CA-SBR-6544/H Supplement [ ]

ARCHEOLOGICAL SITE RECORD

Other Designation: SBd30/330-HA-01
Pending Site No. PSBR-11-H

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1. **County:** San Bernardino

2. **USGS Quad:** HARRISON MTN., CALIF. 1967 (7.5') X (15') Photorevised 1988
REDLANDS, CALIF. 1967 (7.5') X (15') Photorevised 1988
YUCAIPA, CALIF. 1967 (7.5') X (15') Photorevised 1988

3. **UTM Coordinates:** Zone 11 / Map Reference No. 1: 496490 m Easting / 3771840 m Northing
UTM Coordinates: Zone 11 / Map Reference No. 2: 480820 m Easting / 3777010 m Northing

4. **Township** 1S **Range** 2W; Portions of **Sections** 4,8,5,6 **Base (Mer.)** SBM
Township 1S **Range** 3W; Portions of **Sections** 1,2 **Base (Mer.)** SBM
Township 1N **Range** 3W; Portions of **Sections** 35,34,27,28,33 **Base (Mer.)** SBM

5. **Map Coordinates (from NW corner of map)**
Map: YUCAIPA, CALIF.: Reference No. 1: 167 mmS 332 mmE
Map: HARRISON MTN., CALIF. Reference No. 2: 528 mmS 162 mmE

6. **Elevation** 1400 to 2960 feet above MSL

7. **Location:** The site (the North Fork Canal) is located along the base of the San Bernardino Mountains in San Bernardino County, CA. A suggested access route follows: from the intersection of Highland and Boulder Avenues in Highland, CA, travel approximately 0.15 mile (850 feet) east on Highland Avenue. Turn left (north) on Old City Creek Road via a locked gate maintained by East Valley Water District in San Bernardino. Head north approximately 0.22 mile (1150 feet) to where the road crosses over the canal.

NOTE REGARDING LOCATIONAL DESCRIPTION: THE AREA BETWEEN CITY CREEK AND EXISTING SR 330 WAS FIELD-CHECKED. OTHER LOCATIONAL INFORMATION IS BASED ON REFERENCE MATERIALS (HALL 1888, BEATTIE 1951, SCOTT 1976, HORNBECK AND BOTTS 1988, MIKESELL 1989).

8. **Prehistoric** **Historic** X **Protohistoric**

9. **Site Description:** LATE NINETEENTH CENTURY TO TWENTIETH CENTURY RUBBLE MASONRY IRRIGATION CANAL: THE NORTHFORK CANAL (also known as the High-line Ditch or the High-grade Bench-land Canal). Originally built as an earthen ditch 1858, the North Fork canal was relocated and improved in the 1880's in order to irrigate land near the base of the San Bernardino Mountains. William H. Randall, who owned property along City Creek designed the branch of the canal that extended north of Highland Avenue. He also served as the construction foreman for the segment crossing City Creek. The canal was built by 50 Chinese, 25 Anglo, and a few Mexican laborers (Beattie 1951:21). Although originally used for irrigation purposes, the canal is used presently for water treatment and artificial recharge of ground water (Mikesell 1989:6).

Location: The intake to the ditch is at the mouth of the Santa Ana River Canyon. The canal diverts water from the afterbay of the SCE Santa Ana River No. 3 Powerhouse. A diversion system dating to 1946, though replaced in 1971, serves several different canals. The canal heads northwest, crossing Plunge Creek and City Creek, crossing to the south side of Highland Avenue, and terminating at Palm Avenue in Highland, CA. ---- The High-grade Bench-land portion was constructed in 1881 and 1882 (Hall 1888:134-135, 148) to serve property owners along Baseline Avenue. Then in 1884, the canal was extended to the north in order to meet the irrigation needs of property owners north of

3/90
SUTTON

P36-006542

Highland Avenue. The crossing at City Creek washed out during the flood of 1916, and a portion of the canal was realigned further north where it merged with and superseded the Highland Canal.

Dimensions: approximately 8 miles long, trapezoidal cross-section with basal width = @ 2.5 to 6 feet, top width = @ 4.5 to 8 feet, depth = @ 2 to 3.5 feet (Hall 1888:142).

Construction: Rubble masonry conduit consisting of an excavated depression, paved with small, partially rounded granitic boulders (locally available, especially in creek channels) laid in lime mortar, with a concrete lining forming an even-planed face. According to Hall (1888:142), the canal had two timbered tunnels (a 1200 foot stretch near its origin, and a 500 foot length further west), and redwood trestles and flumes that crossed creeks and ravines. See ITEM 12 for an itemization of features, or design elements of the canal within the Area of Potential Effects (APE).

10. Area: @ 12512 m x 2 m = @ 25024 m^2. [@ 41050 ft x @ 6 ft = @ 246300 ft^2] **Method of Determination:** partial foot survey, historic maps, Hall 1888:142

11. Depth: @ 60 to 120 cm. (@ 2 to 3 ft) **Method of Determination:** Engineer's report (Hall 1888:142); folding rule.

12. Features: The North Fork Canal has six major features, or design elements within or near the SR 30/330 APE (west of City Creek and east of existing SR 330:

1) 1884 Channel: An abandoned remnant of the rubble masonry conduit constructed in 1884, and abandoned after the flood in 1916, crosses City Creek wash approximately 700 feet south of the current alignment.

2) 1916 Channel: The rubble masonry conduit of the 1916 alignment was constructed after the North Fork Canal merged with and superseded the Highland Canal. North Fork Canal water was carried across City Creek by means of The Highland Canal redwood flume.

3) Division Box: A concrete division box with three openings (an inlet gate, a gate to the North Fork Canal connector ditch, and a gate to the Highland Canal) was built in 1916, and modified in 1949 after installation of the siphon. A concrete block barrier was added to raise the division wall that encases the gate for the Highland Canal.

4) 1916 Connector Ditch: A 1916 connector ditch leads from the division box to the 1884 North Fork Canal alignment.

5) Siphon: A concrete pipe, inverted siphon that replaced the Highland Canal trestle/flume at City Creek in the late 1940's (Scott [1976:34] indicates 1947; Hinckley [1983] indicates 1949).

6) Weir 39: Concrete weir box "39", is southeast of existing SR 330, and north of Highland Avenue. It was probably improved in 1949 when SR 330 was constructed.

13. Artifacts: None noted

14. Non-artifactual Constituents and Faunal Remains: None noted

15. Date Recorded: 1-90 **16. Recorded By:** Paula Sutton

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State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

Permanent Trinomial: CA-SBR-6544/H 3 / 90
Mo. Yr.

ARCHEOLOGICAL SITE RECORD

Other Designation: SBd30/330-HA-01
Pending Site No. PSBR-11-H

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17. **Affiliation and Address:** CALTRANS, District 08, 247 W. 3rd St. San Bernardino, CA 92402

18. **Human Remains:** N/A

19. **Site Disturbances:** Integrity of the canal within and near the SR 30/330 APE is poor. In 1916, a major flood destroyed the redwood trestle/flume section spanning City Creek and the crossing was moved 1/8 mile upstream, where it merged with and superseded the Highland Canal. In 1946, the redwood trestle/flume shared by the Highland Canal and the North Fork Canal was replaced with a 36 inch, concrete pipe, inverted siphon. Modifications were made at either end of the siphon, as well as at the division box. In 1949, North Fork water was rerouted into concrete pipes and existing SR 330 was constructed over nearly 700 feet of the rubble masonry channel.

20. **Nearest Water (type, distance and direction):** The canal crosses City Creek via a concrete pipe, inverted siphon.

21. **Vegetation Community (site vicinity):** Area of interest: north of Highland Ave, between existing SR 330 and City Creek.

Community at City Creek: Southern Sycamore-Alder Riparian Woodland. Species observed: Sycamore, (Platanus rhombifolia), White Alder (Alnus rhombifolia), Sagebrush (Artemisia douglasiana), Elderberry (Sambucus mexicana), Poison Oak (Toxicodendron diversilobum).

Community on benches and area west of City Creek: Riversidean Sage Scrub. Species observed: Sagebrush (Artemisia californica), Saltbrush (Atriplex canescens), Foxtail (Bromus rubens), Brittle Bush (Encelia farinosa), California Buckwheat (Eriogonum fasciculatum), White Sage, (Salvia apiana), Black Sage (Salvia mellifera), Our Lord's Candle (Yucca whipplei parishii), and Prickly Pear (Opuntia littoralis).

The natural vegetation on the benches and area west of City Creek has been disrupted by agricultural activities. Citrus trees no longer exist, however, a few Palms (Arecaceae), Pepper trees (Schinus) and a grove of Eucalyptus (Eucalyptus) remain as part of the historic landscape. The vegetation is mostly ruderal, i.e., invaded by exotic weeds and grasses, although remnant or regenerated patches of the Riversidean Sage Scrub community also exist.

22. **Vegetation Community (on site):** Same as ITEM 21.

23. **Site Soil:** Silty loam/alluvium

24. **Surrounding Soil:** Silty loam/alluvium

25. **Geology:** Granitic cobbles and boulders eroded from the San Bernardino Mountains.

26. **Landform:** alluvial fan/valley edge (northwestern side of the San Bernardino Valley). Mouth of City Creek Canyon.

27. **Slope:** Grade of canal varies between 2% to 16% (Hall 1888:142) 28. **Exposure:** Open

29. **Landowner(s) (and/or tenants) and Address:** East Valley Water District, 1155 Del Rosa Ave, San Bernardino, CA 92410
Previous Owners: Bear Valley Mutual Water Company, North Fork Water Company.

30. **Remarks:** The North Fork Canal represents a capital-intensive project that occurred during the economic boom of the 1880's. Other nearby irrigation canals include the Highland Canal and the City Creek Ditch.

31. **References:**

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1895 to 1950 On file, Central Microfilming and Records Storage, General Services Agency, San Bernardino, CA.

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1937 Black and White Aerial Photo showing the City Creek area in San Bernardino County, CA. Scale: 1" = 800'-1200'Job # 4646, Index # 50. Fairchild Aerial Surveys, Inc., Los Angeles. On file, District 08 Office, California Department of Transportation, San Bernardino, CA.

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Hammond, Stephen R. and Lois M. Webb
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1986 Preliminary Descriptions of the Terrestrial Natural Communities of California. California Department of Fish and Game, Sacramento, CA.

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Lerch, Michael K.
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Lunt, Jerry
1990 Proposed State Route 30/330 Design Map SHEETS 6 and 8 of 10. On file, Environmental Branch, District 08 Office, California Department of Transportation, San Bernardino, CA.

P36006544

Mikesell, Stephen D.
* 1989 Historical Resources Evaluation Report-Historic, North Fork Canal, Highlands Canal and City Creek Ditch, 8-SBd-330, P.M. 28.7/30.2. Ms. on file, Environmental Branch, District 08 Office, California Department of Transportation, San Bernardino, CA.

Scott, M. B.
1976 Development of Water Facilities in the Santa Ana River Basin, California, 1810-1968. U.S. Geological Survey Administrative Report, Open-File Report 77-398.

Sullivan, E. Q.
1945 SBd 207 Design Map, Sheet 4 of 25. On file, Environmental Branch, District 08 Office, California Department of Transportation, San Bernardino, CA.

Sutton, Paula A.
1990 First Addendum Archaeological Survey Report and First Supplemental Historic Resources Evaluation Report for the Construction of State Route 30 from and Highland Arden Avenues to Fifth Street (3.6 Miles), and Construction of State Route 330 from the Proposed 30/330 Interchange to 0.7 Miles North of Highland Avenue (1.6 miles): (08-SBd-30, 330-R26.7/30.2; 08-SBd-330 28.7/30.2, 08201-157901). Ms. on file, Environmental Branch, District 08 Office, California Department of Transportation, San Bernardino, CA.

U.S. Department of Agriculture
1949 Black and White Aerial Photo showing the City Creek area in San Bernardino County, CA. approximate scale: 1" = 600'. # AXL-6F-100. USDA Production and Marketing Administration, Western Region Laboratory, Salt Lake City, UT. On file, District 08 Office, California Department of Transportation, San Bernardino, CA.

32. **Name of Project:** Archaeological Survey of the Proposed SR 30/330 Connector, Bernardino County, CA (E.A.# 08201-157901).

33. **Type of Investigation:** Cultural Resource Survey **34. Site Accession Number:** No collections made **Curated At:** N/A

35. **Photos:** Roll # B & W / 4, Frames 2, 3, 8, 10, 11, 12, 25 **Taken By:** Paula Sutton
Roll # B & W / 5, Frames 22

* This report is attached.

P36-006544

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

Permanent Trinomial: CA-SBR-6544 H 3 / 90 (Mo. Yr.)

ARCHEOLOGICAL SITE RECORD
PHOTOGRAPH RECORD

Other Designation: SBd30/330-HA-01
Pending Site No. PSBR-11-H

Camera and Lens Types: Fuji Autofocus 34 and 53 mm

Film Type and Speed: Black and White Plus-x-pan 125 PX 135-24

Roll Number: B & W / 04

On File at: CALTRANS, Dist. 08
Environmental Branch
247 W. 3rd St.
San Bernardino, CA 92402

Mo.	Day	Time	Frame	Subject/Description	View Toward	Accession No.	Photographer
12/	14/89	2:10 PM	2	North Fork Canal where it goes under existing SR 330.	SSW		Paula Sutton
12/	14/89	2:10 PM	3	North Fork Canal near Palm trees, just east of existing SR 330.	NNE		Paula Sutton
12/	14/89	2:35 PM	10	Division box for North Fork Canal and Highland Canal.	E		Paula Sutton
12/	14/89	2:35 PM	11	Division box for North Fork Canal and Highland Canal.	NW		Paula Sutton
12/	14/89	2:35 PM	12	Division box for North Fork Canal and Highland Canal.	S		Paula Sutton
12/	14/89	3:30 PM	25	Section of the 1884 alignment of the North Fork Canal.	E		Paula Sutton

---

Film Type and Speed: Black and White Plus-x-pan 125 PX 135-24

Roll Number: B & W / 05

Mo.	Day	Time	Frame	Subject/Description	View Toward	Accession No.	Photographer
1/	11/90	AM	22	Weir box 39 of the North Fork Canal, southeast of the existing SR 330 alignment.	SW		Paula Sutton



Roll Number: B & W / 04
Frame Number: 2
View Toward: South-southwest
Subject:

North Fork Canal where it goes under existing SR 330.



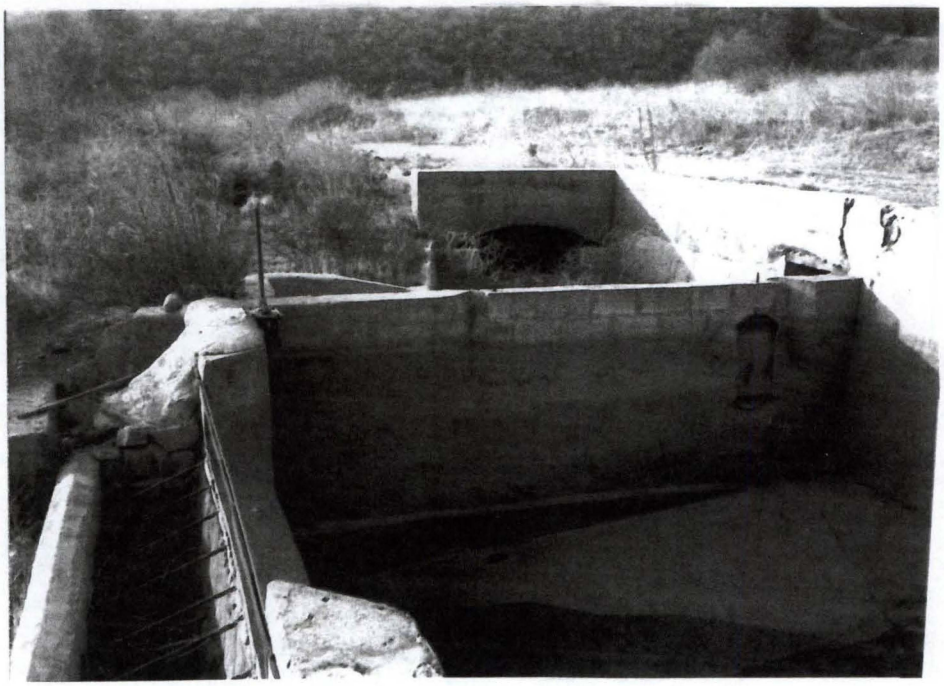
Roll Number: B & W / 04
Frame Number: 3
View Toward: North-northeast
Subject:

North Fork Canal near Palm trees, just east of existing SR 330.



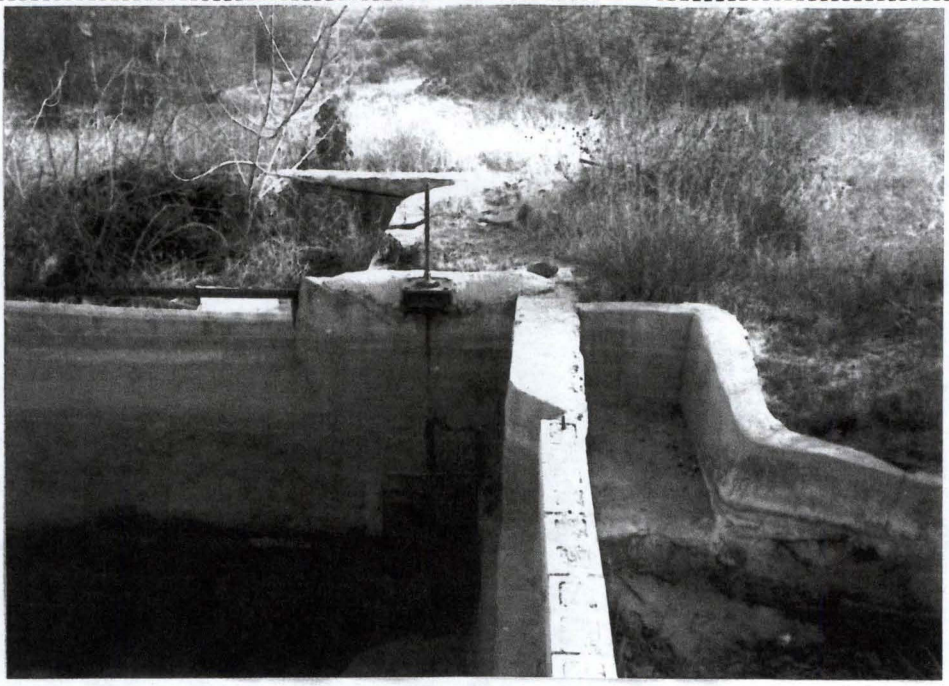
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Frame Number: 10
View Toward: East
Subject:

Division box for the North Fork Canal and the Highland Canal.



Roll Number: B & W / 04
Frame Number: 11
View Toward: Northwest
Subject:

Division box for the North Fork Canal and the Highland Canal.



Roll Number: B & W / 04
Frame Number: 11
View Toward: South
Subject:

Division box for the North Fork Canal and the Highland Canal.



Roll Number: B & W / 04
Frame Number: 25
View Toward: East
Subject:

Section of the 1884 alignment of the North Fork Canal.

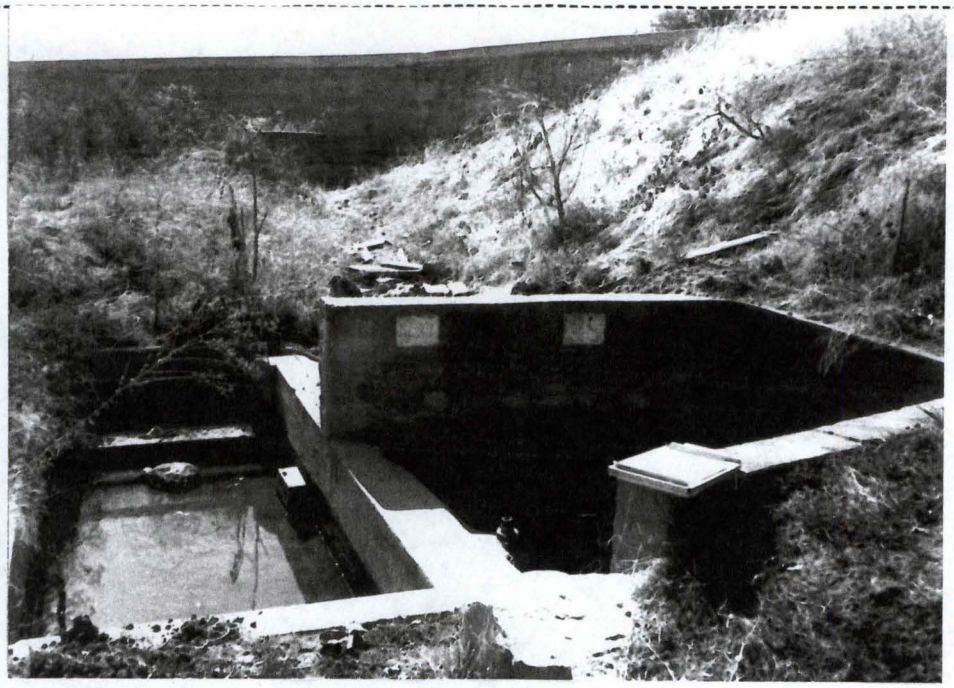
State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

Permanent Trinomial: CA-SBR-6544 H

3 / 90
Mo. Yr.

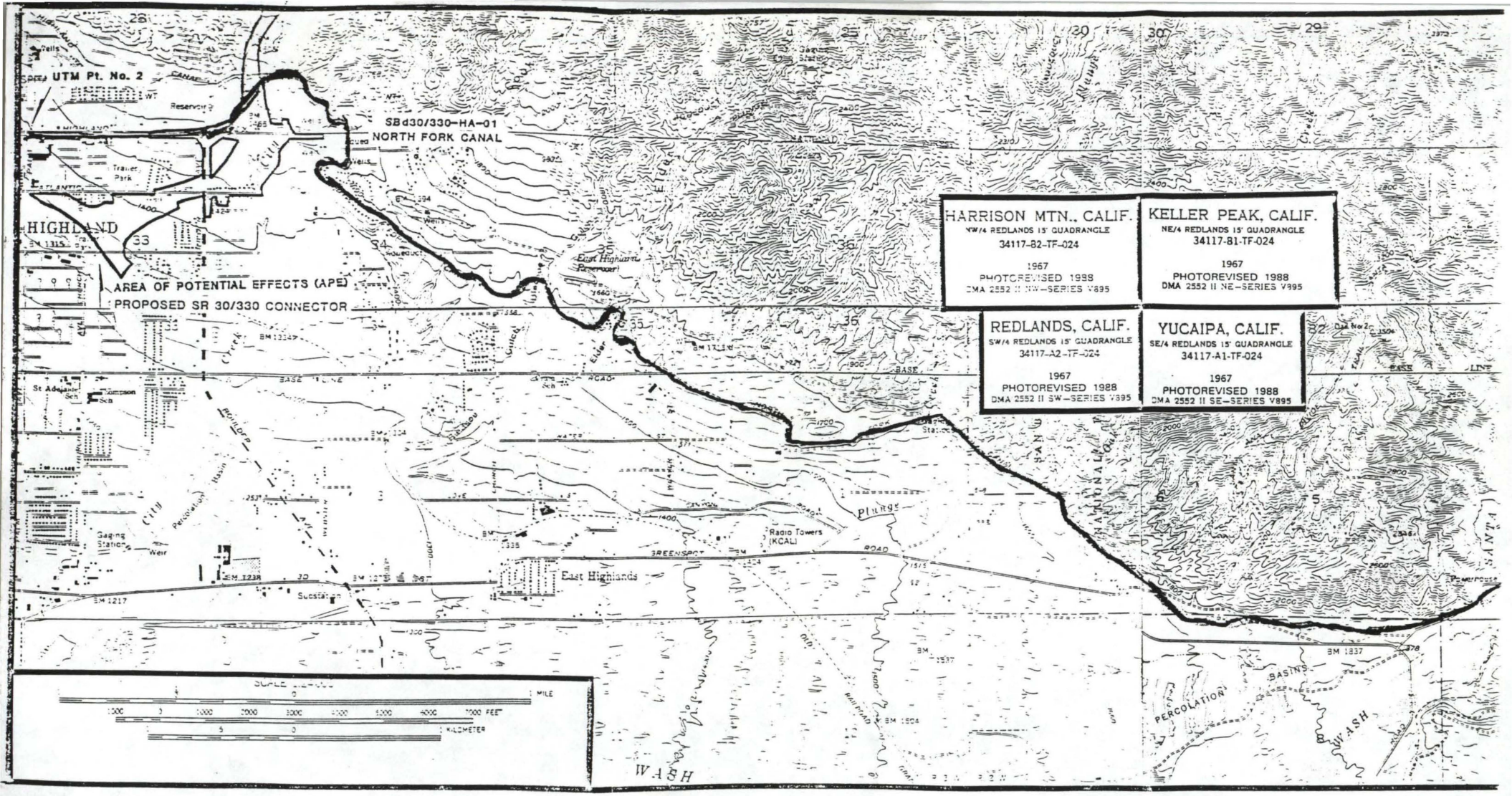
ARCHEOLOGICAL SITE RECORD
PHOTOGRAPHS

Other Designation: SBd30/330-HA-01
Pending Site No. PSBR-11-H



Roll Number: B & W / 05
Frame Number: 22
View Toward: Southwest
Subject:

Weir box 39 of the North Fork Canal, southeast of existing SR 330.



State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

Permanent Trinomial: CA-SBR-6544 H

3 / 90
Mo. Yr.

ARCHEOLOGICAL SITE RECORD
ARCHAEOLOGICAL SITE LOCATION MAP

Other Designation: SBd30/330-HA-01
Pending Site No. PSBR-11-H

Page 11 of 22.

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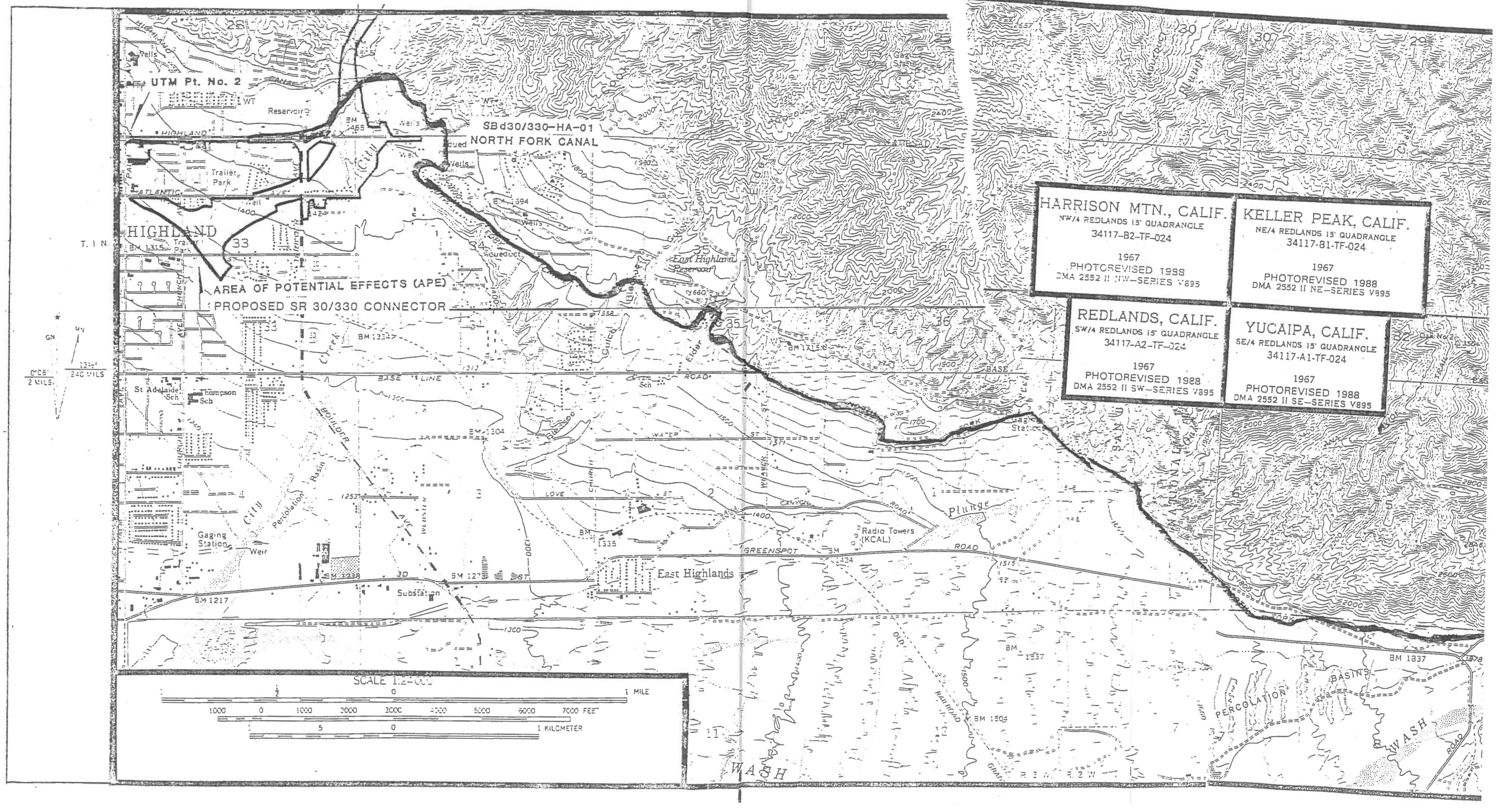
P3600654H

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

Permanent Trinomial: CA-SBR-6544H 3 / 90 (Mo. / Yr.)

ARCHEOLOGICAL SITE RECORD
ARCHAEOLOGICAL SITE LOCATION MAP

Other Designation: SBd30/330-HA-01
Pending Site No. PSBR-11-H



HARRISON MTN., CALIF.
NW/4 REDLANDS 15' QUADRANGLE
34117-B2-TF-024
1967
PHOTOREVISED 1988
DMA 2552 II NW—SERIES V895

KELLER PEAK, CALIF.
NE/4 REDLANDS 15' QUADRANGLE
34117-B1-TF-024
1967
PHOTOREVISED 1988
DMA 2552 II NE—SERIES V895

REDLANDS, CALIF.
SW/4 REDLANDS 15' QUADRANGLE
34117-A2-TF-024
1967
PHOTOREVISED 1988
DMA 2552 II SW—SERIES V895

YUCAIPA, CALIF.
SE/4 REDLANDS 15' QUADRANGLE
34117-A1-TF-024
1967
PHOTOREVISED 1988
DMA 2552 II SE—SERIES V895

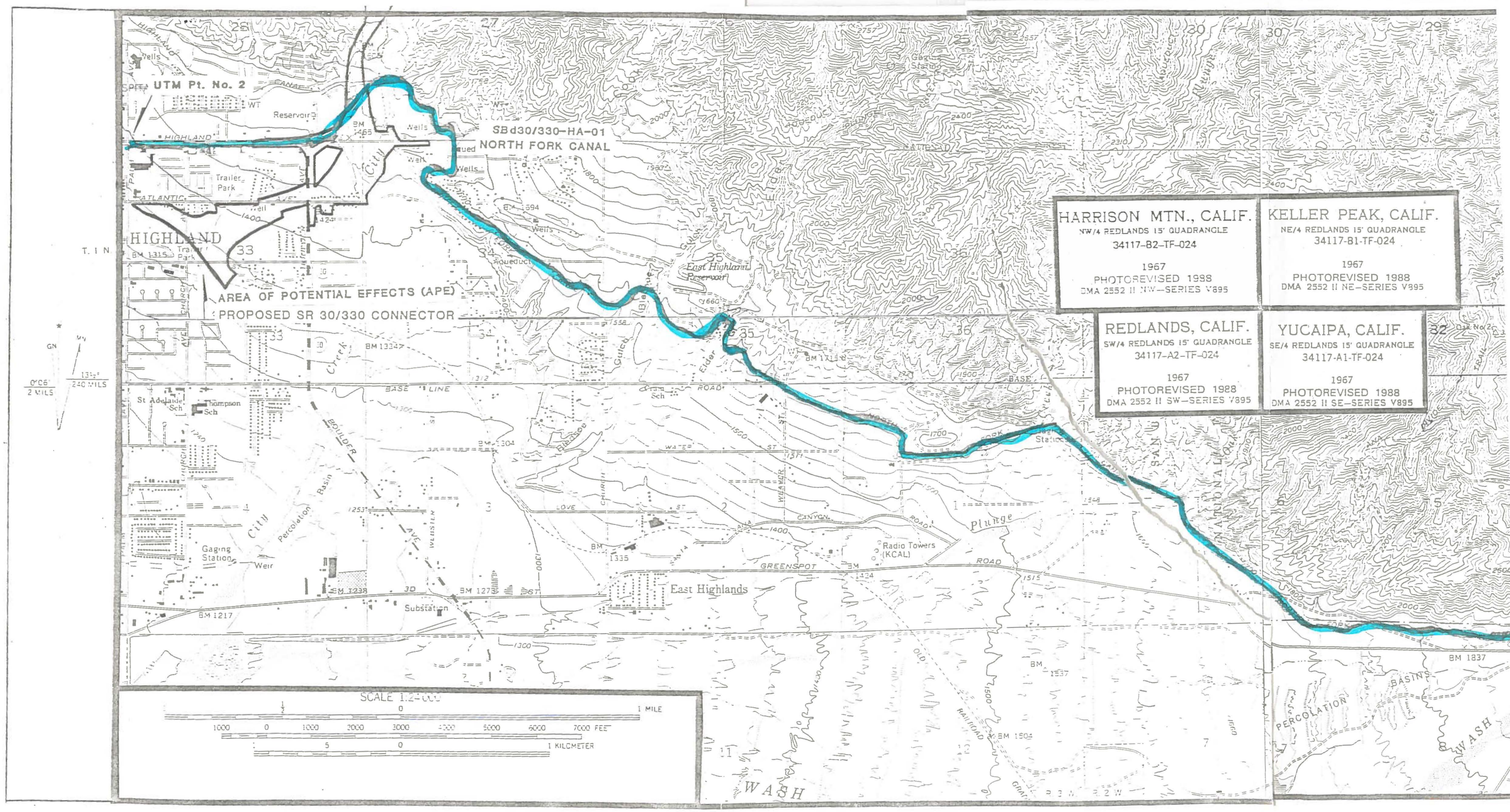
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State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

Permanent Trinomial: CA-SBR-6544 H 3 / 90 (Mo. / Yr.)

ARCHEOLOGICAL SITE RECORD
ARCHAEOLOGICAL SITE LOCATION MAP

Other Designation: SBd30/330-HA-01
Pending Site No. PSBR-11-H



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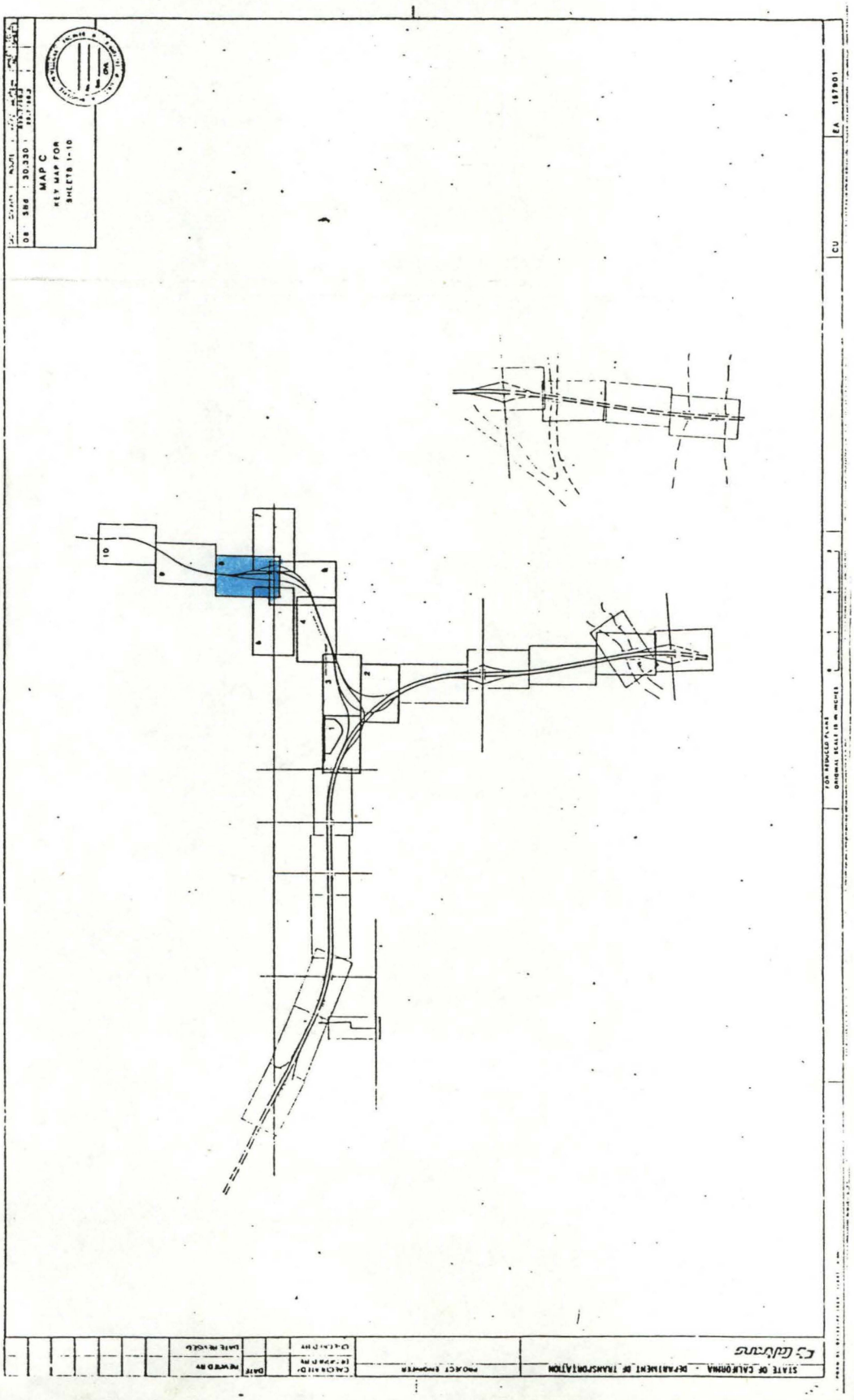
State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

Permanent Trinomial: CA-SBR-6544/H

3 / 90
Mo. Yr.

ARCHEOLOGICAL SITE RECORD
SITE MAP

Other Designation: SBd30/330-HA-01
Pending Site No. PSBR-11-H



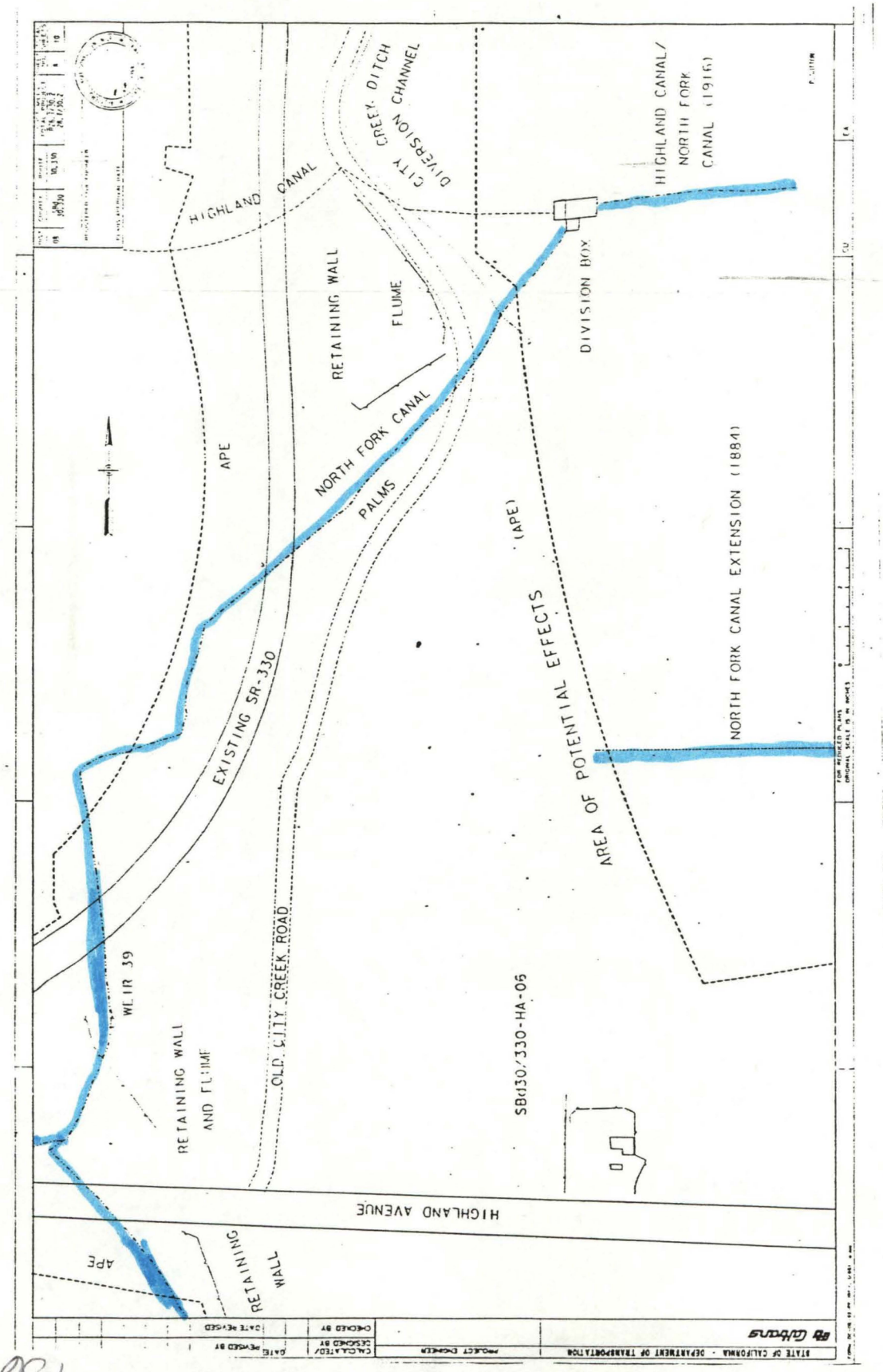
State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

Permanent Trinomial: CA-SBR-694 H

3 / 90
Mo. Yr.

ARCHEOLOGICAL SITE RECORD
SITE MAP

Other Designation: SBd30/330-HA-01
Pending Site No. PSBR-11-H



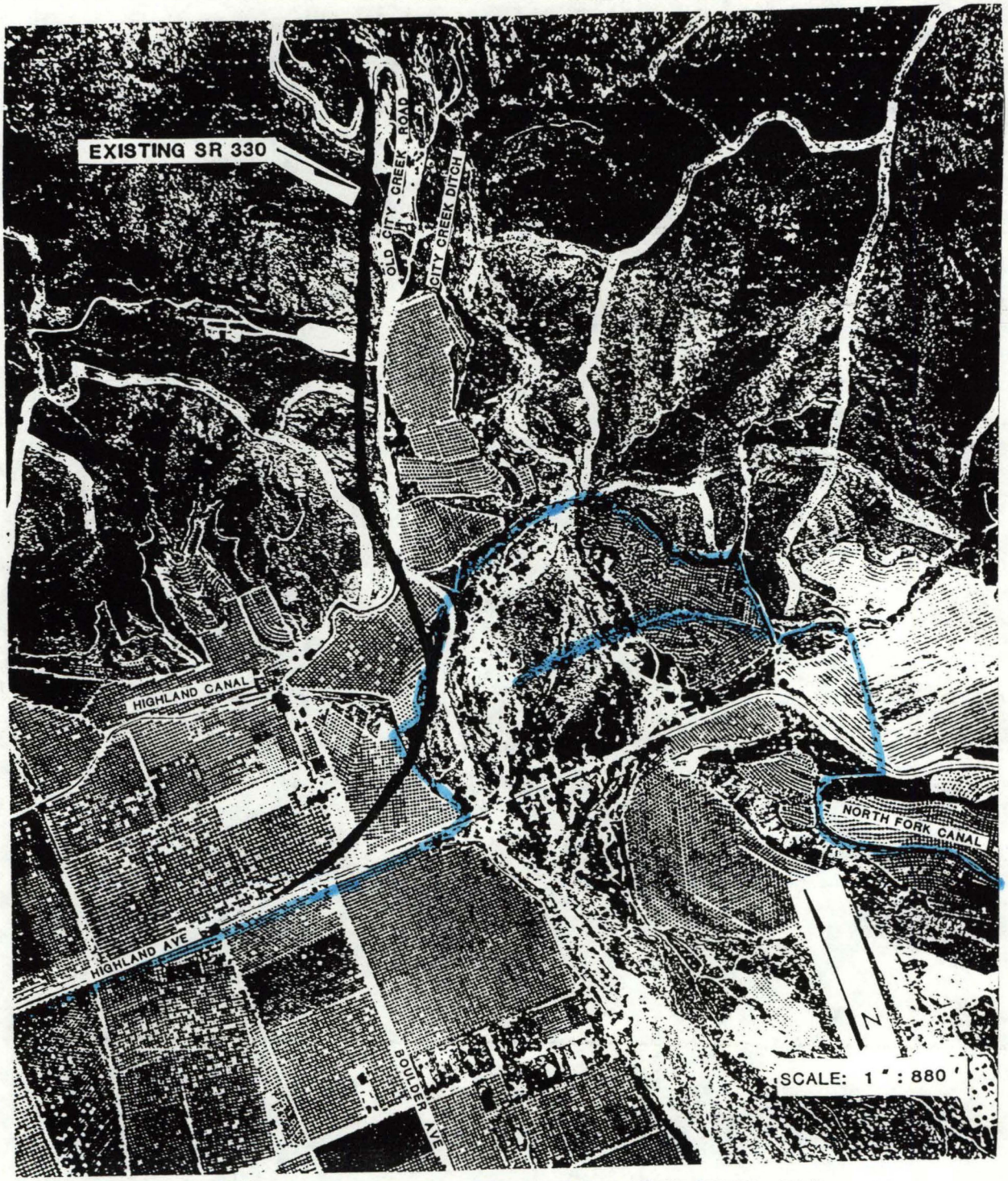
P36-006544

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DEPARTMENT OF PARKS AND RECREATION

Permanent Trinomial: CA-SBR-6544/H 3 / 90
Mo. Yr.

ARCHEOLOGICAL SITE RECORD
AERIAL PHOTO

Other Designation: SBd30/330-HA-01
Pending Site No. PSBR-11-H



1937 BLACK AND WHITE AERIAL PHOTO (FAIRCHILD AERIAL SURVEYS, INC.)

P3600654H

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DEPARTMENT OF PARKS AND RECREATION

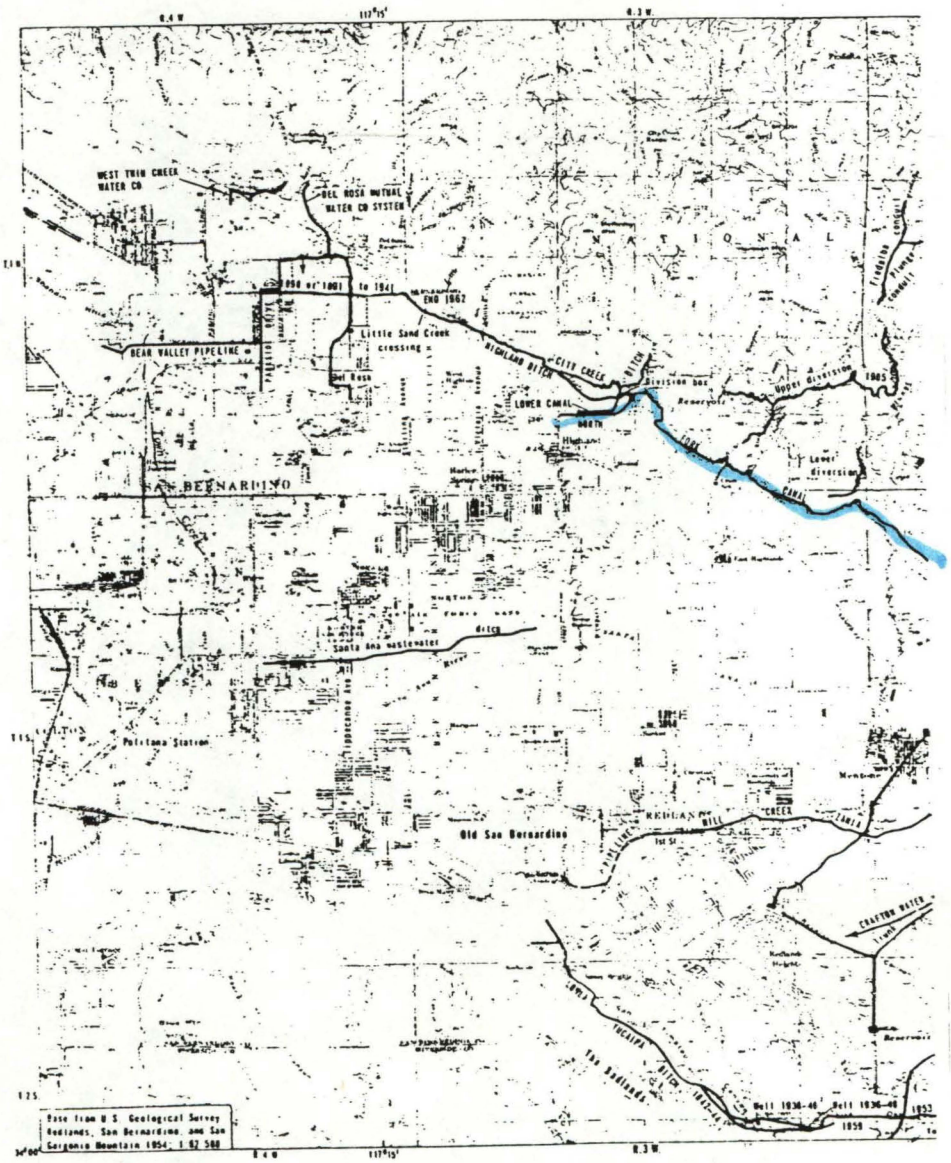
Permanent Trinomial: CA-SBR-6544H

3 / 90
Mo. Yr.

ARCHEOLOGICAL SITE RECORD
MAP

Other Designation: SBd30/330-HA-01
Pending Site No. PSBR-11-H

FIGURE 11.--Diversions in the eastern part of San Bernardino Valley.



SOURCE: Scott 1976

P36-006344

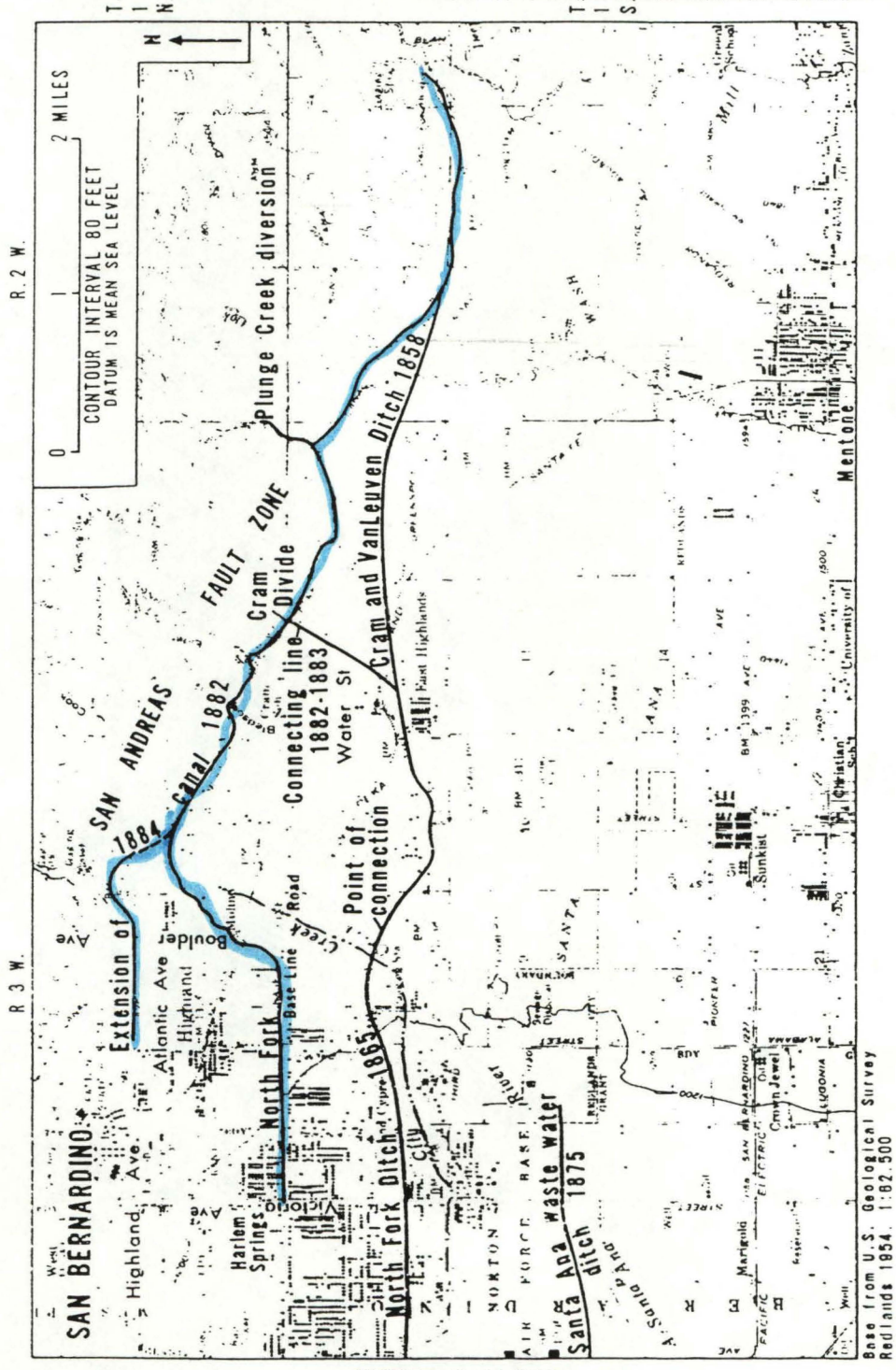
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ARCHEOLOGICAL SITE RECORD
MAP

Permanent Trinomial: CA-SBR-6344/H

Other Designation: SBd30/330-HA-01
Pending Site No. PSBR-11-H

3 / 90
Mo. Yr.



SOURCE: Scott 1976

FIGURE 6.--Cram and Van Leuven ditch and North Fork Canal.

P36006544

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Permanent Trinomial: CA-SBR-694H 3 / 90
Mo. Yr.

ARCHEOLOGICAL SITE RECORD
MAP

Other Designation: SBd30/330-HA-01
Pending Site No. PSBR-11-H

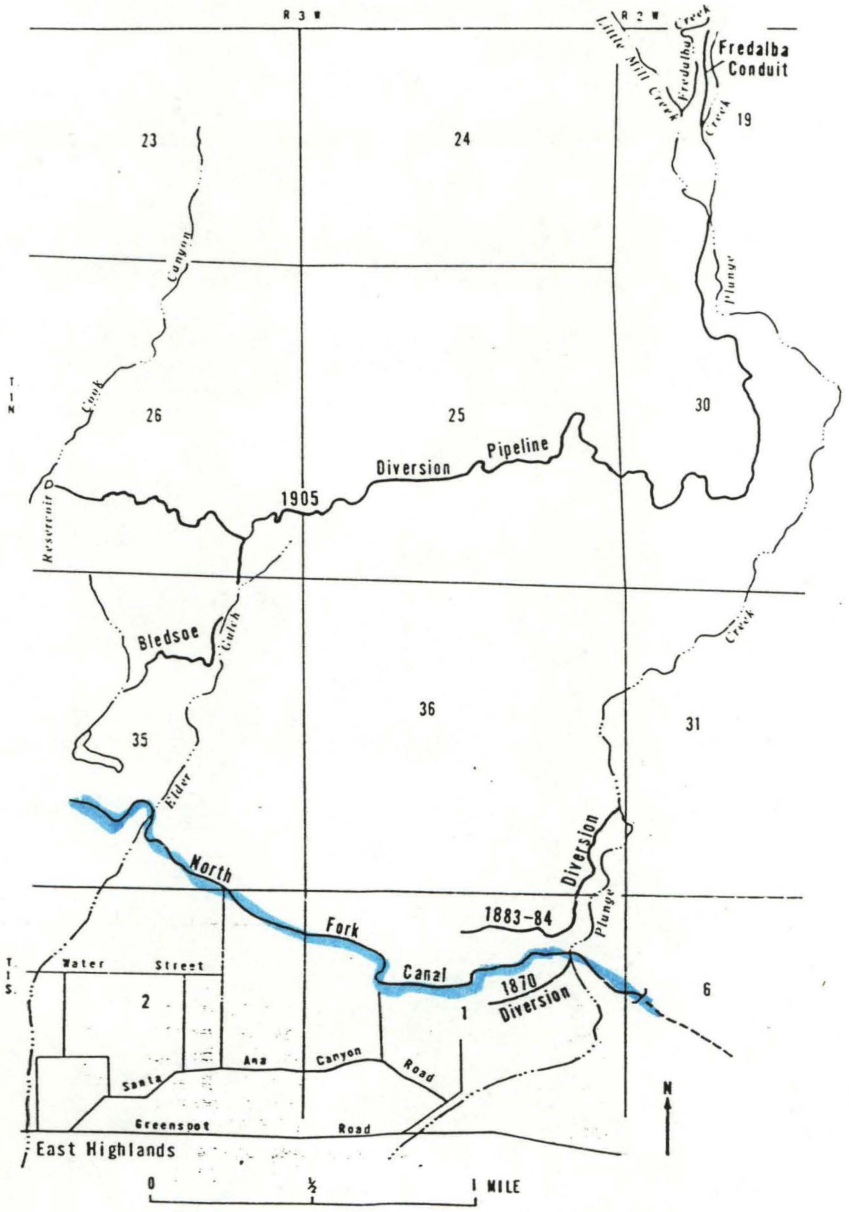


FIGURE 39.--Diversions from Plunge Creek.

SOURCE: SCOTT 1976

P3600R544

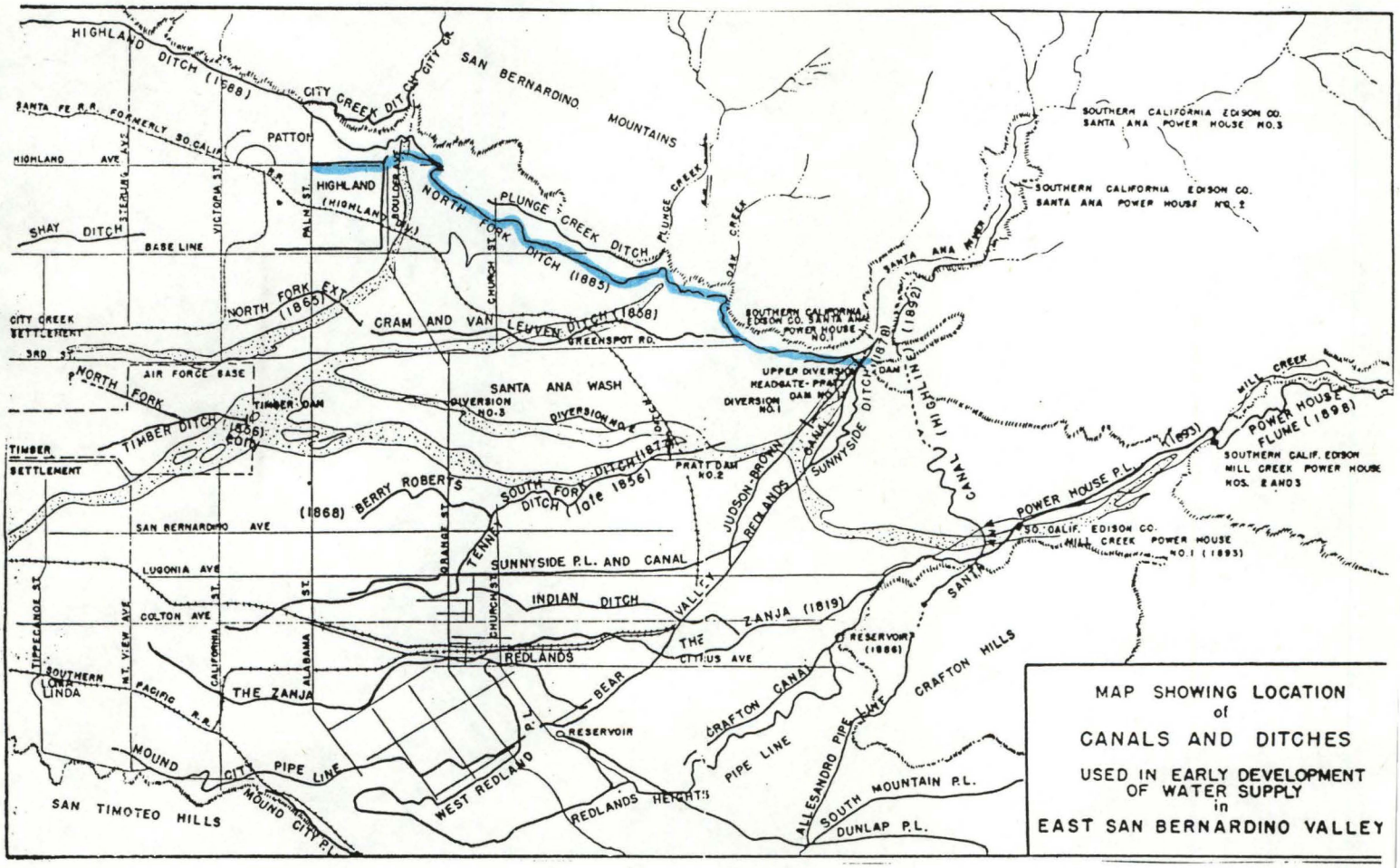
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DEPARTMENT OF PARKS AND RECREATION

ARCHEOLOGICAL SITE RECORD
MAP

Permanent Trinomial: CA-SBR-6544/H

3 / 90
Mo. Yr.

Other Designation: SBd30/330-HA-01
Pending Site No. PSBR-11-H



SOURCE: BEATTIE 1951

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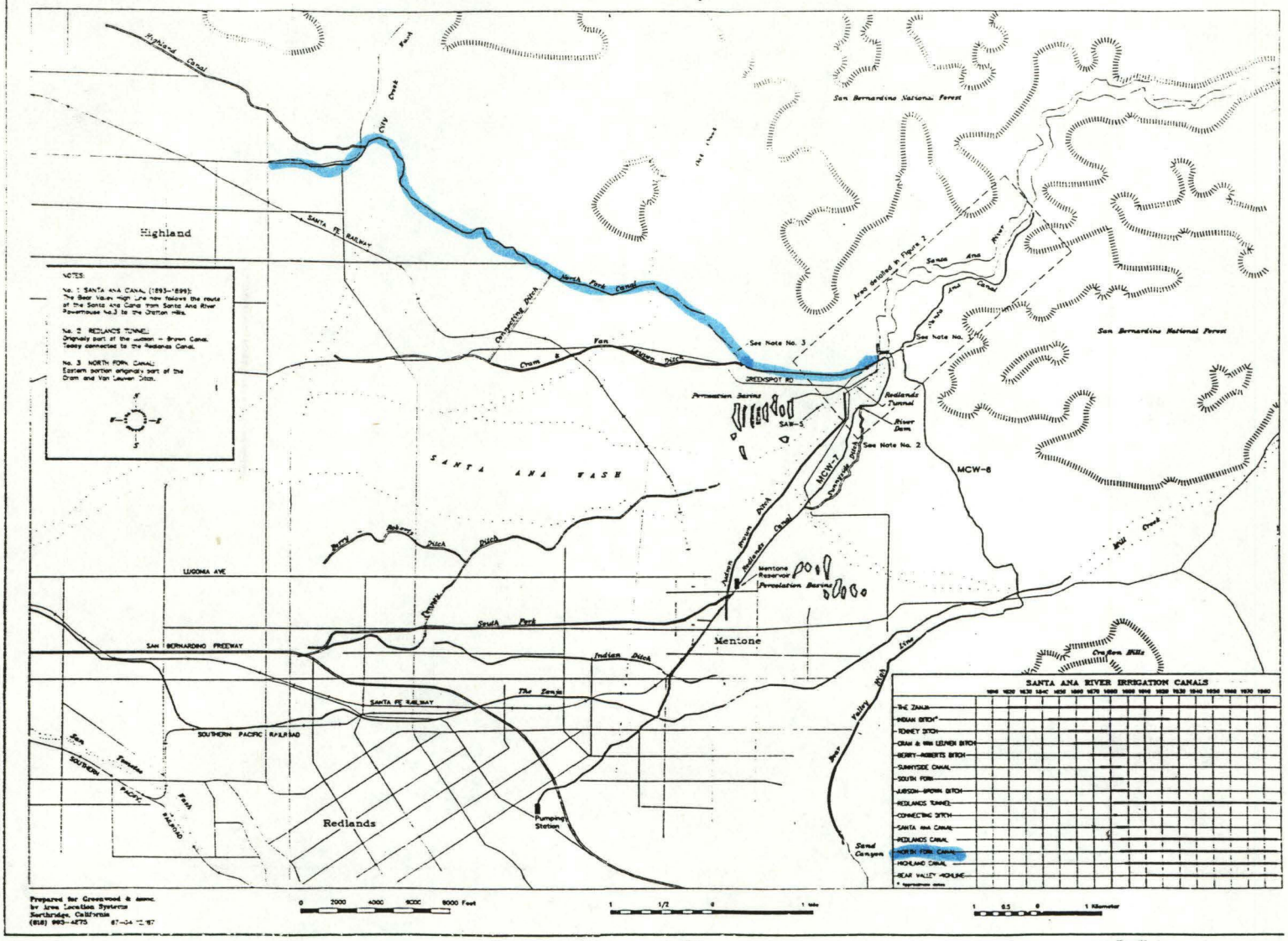
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3 / 90
Mo. Yr.

ARCHEOLOGICAL SITE RECORD
MAP

Other Designation: SBd30/330-HA-01
Pending Site No. PSBR-11-H

Figure 1
Historical Development of
SANTA ANA CANYON IRRIGATION PROJECTS
San Bernardino County, California



SOURCE: HORNBECK AND BOTTS 1988:6 (FIGURE 1)

P36000544

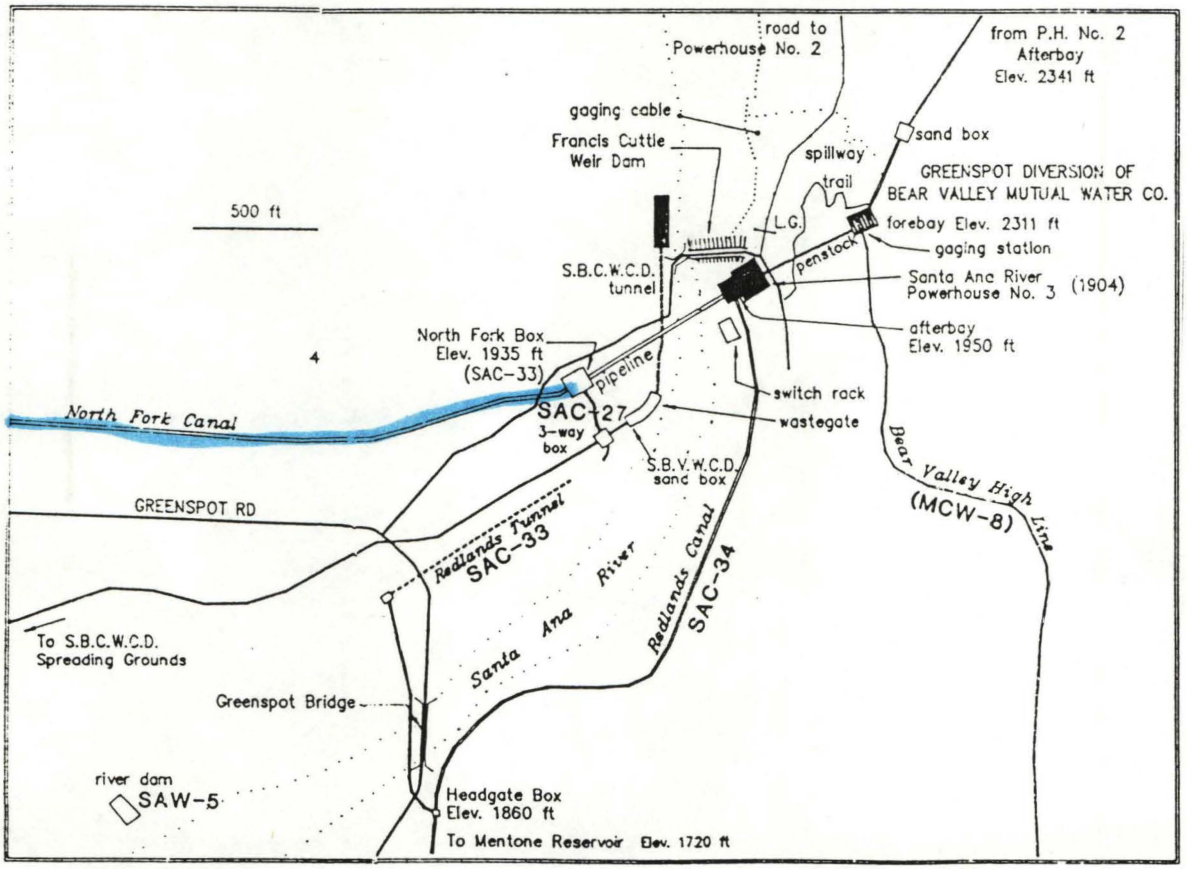
State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

Permanent Trinomial: CA-SBR-654/H

3 / 90
Mo. Yr.

ARCHEOLOGICAL SITE RECORD
MAP

Other Designation: SBd30/330-HA-01
Pending Site No. PSBR-11-H



SOURCE: HORNBECK AND BOTTS 1988:14 (FIGURE 2)

P36-006544

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

Permanent Trinomial: CA-SBR-6544H 3 / 90
Mo. Yr.

ARCHEOLOGICAL SITE RECORD
ARCHITECTURE INVENTORY/EVALUATION FORM

Other Designation: SBd30/330-HA-01
Pending Site No. PSBR-11-H

PSBR-11-H

ARCHITECTURAL INVENTORY/EVALUATION FORM

SAC-33 NORTH FORK CANAL/WEIR

___LISTED ___DETERMINED ELIGIBLE
___APPEARS ELIGIBLE ___APPEARS INELIGIBLE

IDENTIFICATION

1. Common name: NORTH FORK CANAL/WEIR
2. Historic name: SAME
3. Street or rural address: _____
   City _____ Zip _____ County San Bernardino
4. Parcel number: _____
5. Present Owner: ? Address: _____
   City _____ Zip _____ Ownership is: Public _____ Private _____
6. Present Use: Irrigation Original use: Same

DESCRIPTION

7a. Architectural style:
7b. Briefly describe the present *physical description* of the site or structure and describe any major alterations from its original condition:

This site consists of a weir box (33a) and a canal (33b) and is located at an elevation of 1,920 ft. amsl. The weir is situated along the east side of the road as it enters Santa Ana Canyon approximately 100 m southwest of the bridge (SAC-28). The canal is eight miles long and extends from the weir located on the west side of the mouth of Santa Ana Canyon. Originally, portions of the ditch were simply lined with boulders while other sections were cemented. Currently, the ditch remains in use and has been entirely channelized with concrete.

Attach Photo(s) Here

8. Construction date: Estimated _____ Factual 1925
9. Architect _____
10. Builder _____
11. Approx. property size (in feet) Frontage _____ Depth _____ or approx. acreage _____
12. Date(s) of enclosed photograph(s) _____

P86-006544

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

Permanent Trinomial: CA-SBR-6544/H

3 / 90
Mo. Yr.

ARCHEOLOGICAL SITE RECORD
ARCHITECTURE INVENTORY/EVALUATION FORM

Other Designation: SBd30/330-HA-01
Pending Site No. PSBR-11-H

---

13. Condition: Excellent ___ Good X Fair ___ Deteriorated ___ No longer in existence ___

14. Alterations: General maintenance

15. Surroundings: (Check more than one if necessary) Open land ___ Scattered buildings ___ Densely built-up ___
Residential ___ Industrial ___ Commercial ___ Other: ___

16. Threats to site: None known X Private development ___ Zoning ___ Vandalism ___
Public Works project ___ Other: ___

17. Is the structure: On its original site? X Moved? ___ Unknown? ___

18. Related features: Santa Ana Powerhouse No. 3 (SAC-26)

SIGNIFICANCE

19. Briefly state historical and/or architectural importance (include dates, events, and persons associated with the site.)

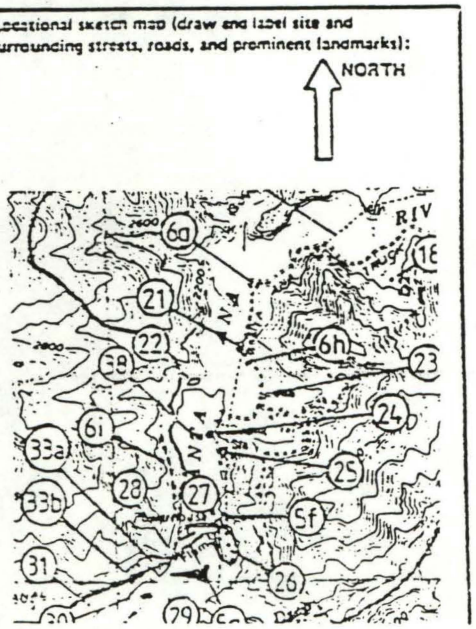
The North Fork Ditch was originally built in the 1860s. A new canal, built on higher ground, was completed by the North Fork Ditch Company in 1885. The company was formed by Frank Brown in 1883. George W. Beattie supervised the construction (1883-1885), employing a crew made up of 50 overseas Chinese, a number of miners from Holcomb Valley, and a few Mexicans. The ditch was designed to distribute part of the Santa Ana River flow among citrus ranchers in the Highland area. The weir box was originally built of redwood but was washed-out in the flood of 1916. The present weir was built after the flood and has remained essentially the same since the 1916 construction.

20. Main theme of the historic resource: (If more than one is checked, number in order of importance.)
Architecture ___ Arts & Leisure ___
Economic/Industrial X Exploration/Settlement ___
Government ___ Military ___
Religion ___ Social/Education ___

21. Sources (List books, documents, surveys, personal interviews and their dates).
Beattie 1951
Hinckley 1985

22. Date form prepared January 8, 1986
By (name) John E. Elliott
Organization ECOS
Address: 5300 Orange Ave., Suite 220
City Cypress, CA Zip 90630
Phone: 714/527-1130

Locational sketch map (draw and label site and surrounding streets, roads, and prominent landmarks):



SBR-6544H
P36-006544

ARCHITECTURAL INVENTORY/EVALUATION FORM

SAC-33 NORTH FORK CANAL/WEIR

___LISTED ___DETERMINED ELIGIBLE
___APPEARS ELIGIBLE ___APPEARS INELIGIBLE

IDENTIFICATION

1. Common name: NORTH FORK CANAL/WEIR
2. Historic name: SAME
3. Street or rural address: _____
   City _____ Zip _____ County San Bernardino
4. Parcel number: _____
5. Present Owner: ? . Address: _____
   City _____ Zip _____ Ownership is: Public _____ Private _____
6. Present Use: Irrigation Original use: Same

DESCRIPTION

7a. Architectural style:

7b. Briefly describe the present *physical description* of the site or structure and describe any major alterations from its original condition:

This site consists of a weir box (33a) and a canal (33b) and is located at an elevation of 1,920 ft. amsl. The weir is situated along the east side of the road as it enters Santa Ana Canyon approximately 100 m southwest of the bridge (SAC-28). The canal is eight miles long and extends from the weir located on the west side of the mouth of Santa Ana Canyon. Originally, portions of the ditch were simply lined with boulders while other sections were cemented. Currently, the ditch remains in use and has been entirely channelized with concrete.

Attach Photo(s) Here

8. Construction date:
   Estimated _____ Factual 1885
9. Architect _____
10. Builder _____
11. Approx. property size (in feet)
    Frontage _____ Depth _____
    or approx. acreage _____
12. Date(s) of enclosed photograph(s)

1/8/86
ELLIOTT

P36 006314
SBR-6544-H

13. Condition: Excellent ___ Good X Fair ___ Deteriorated ___ No longer in existence ___

14. Alterations: General maintenance

15. Surroundings: (Check more than one if necessary) Open land ___ Scattered buildings X Densely built-up ___
Residential ___ Industrial ___ Commercial ___ Other: ___

16. Threats to site: None known X Private development ___ Zoning ___ Vandalism ___
Public Works project ___ Other: ___

17. Is the structure: On its original site? X Moved? ___ Unknown? ___

18. Related features: Santa Ana Powerhouse No. 3 (SAC-26)

SIGNIFICANCE

19. Briefly state historical and/or architectural importance (include dates, events, and persons associated with the site.)

The North Fork Ditch was originally built in the 1860s. A new canal, built on higher ground, was completed by the North Fork Ditch Company in 1885. The company was formed by Frank Brown in 1883. George W. Beattie supervised the construction (1883-1885), employing a crew made up of 50 overseas Chinese, a number of exminers from Holcomb Valley, and a few Mexicans. The ditch was designed to distribute part of the Santa Ana River flow among citrus ranchers in the Highland area. The weir box was originally built of redwood but was washed-out in the flood of 1916. The present weir was built after the flood and has remained essentially the same since the 1916 construction.

20. Main theme of the historic resource: (If more than one is checked, number in order of importance.)
Architecture ___ Arts & Leisure ___
Economic/Industrial X Exploration/Settlement ___
Government ___ Military ___
Religion ___ Social/Education ___

21. Sources (List books, documents, surveys, personal interviews and their dates).
Beattie 1951
Hinckley 1985

22. Date form prepared January 8, 1986
By (name) John F. Elliott
Organization ECOS
Address: 5300 Orange Ave., Suite 220
City Cypress, CA Zip 90630
Phone: 714/827-1180

Locational sketch map (draw and label site and surrounding streets, roads, and prominent landmarks):

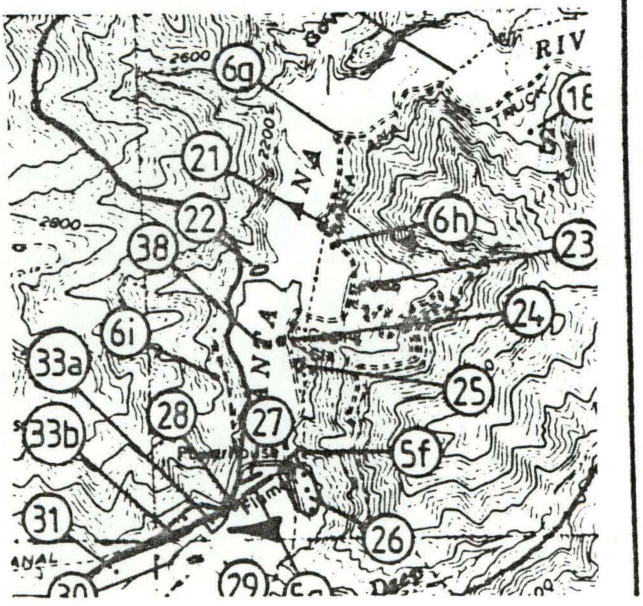
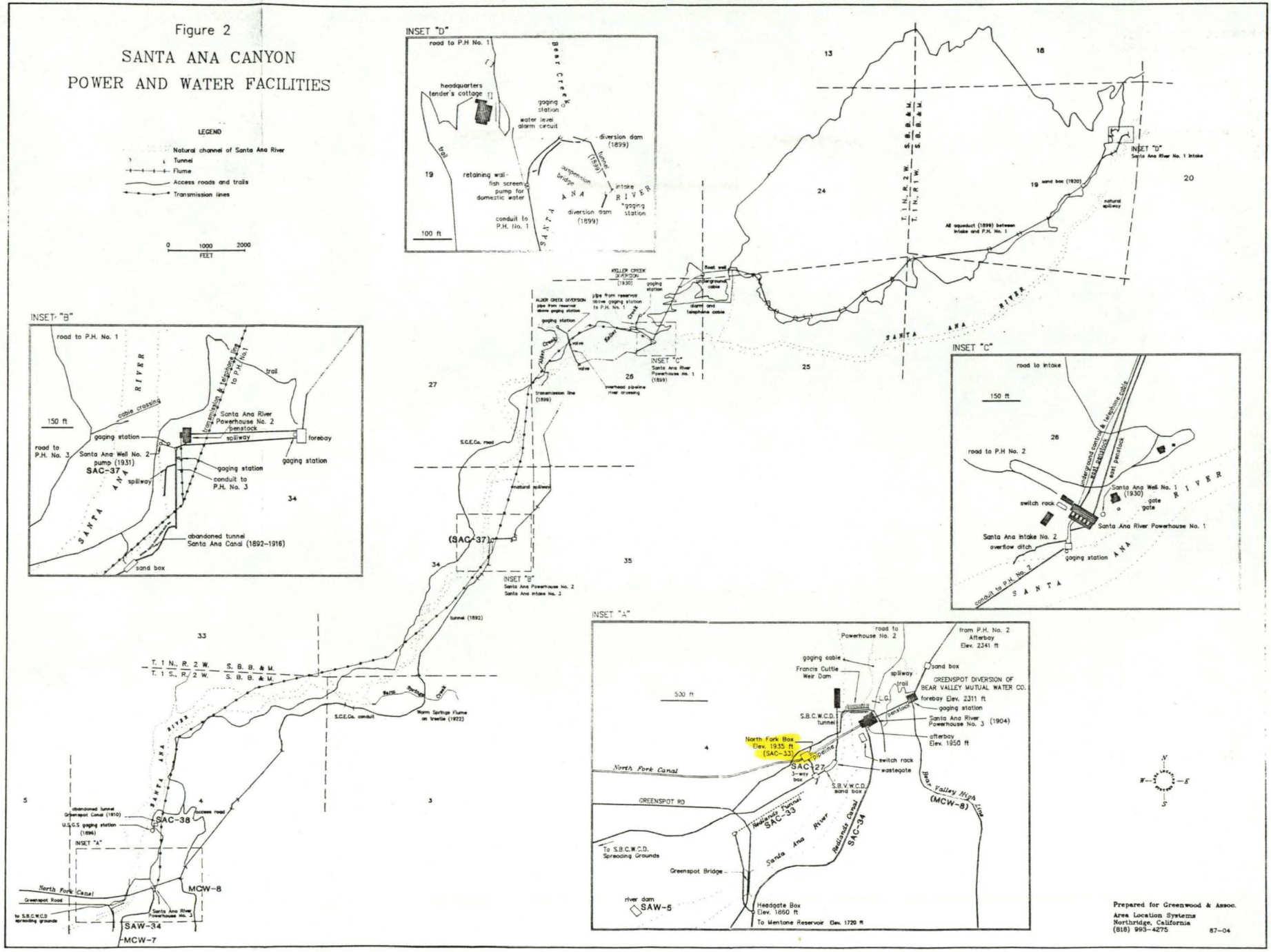
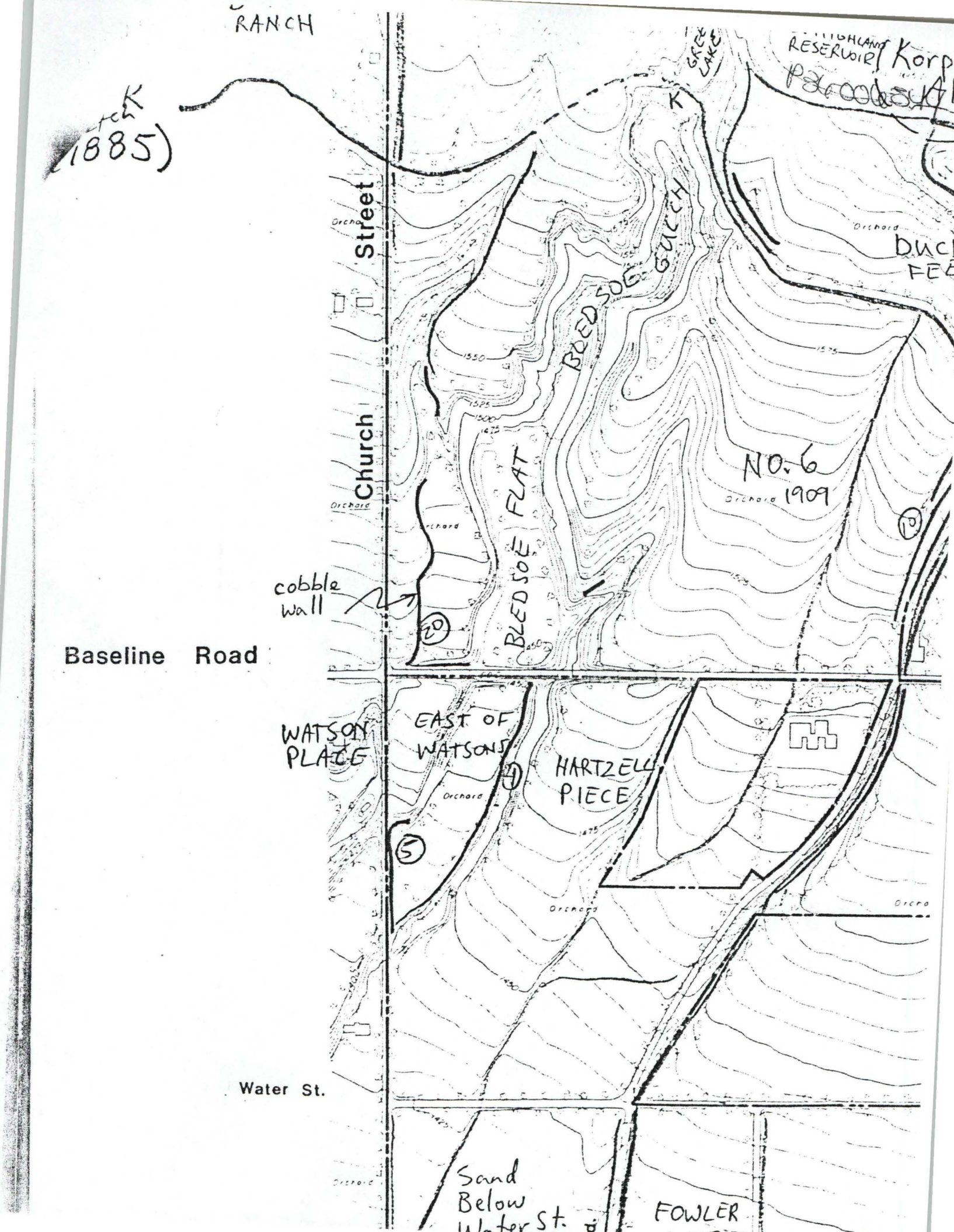


Figure 2

SANTA ANA CANYON
POWER AND WATER FACILITIES



P86-006824


RANCH
(1885)
Street
Church
Baseline Road
Water St.
BLEDSOE GULCH
BLEDSOE FLAT
NO. 6
1909
cobble wall
WATSON PLACE
EAST OF WATSONS
HARTZELL PIECE
Sand
Below
Water St.
FOWLER
RESERVOIR
GREEN LAKE
Orchard

P36-000544

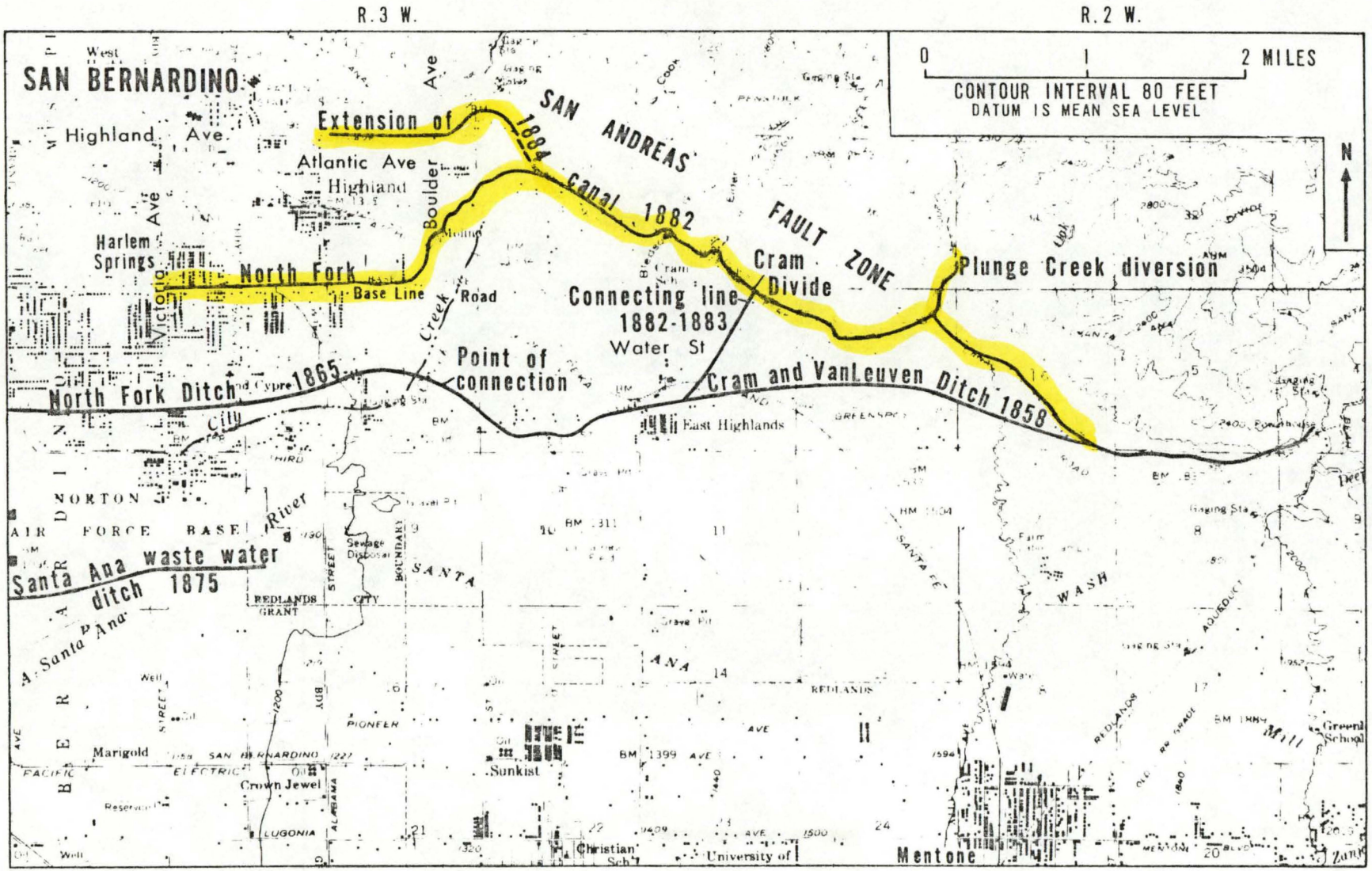


FIGURE 6.--Cram and Van Leuven ditch and North Fork Canal.

Report 76-11.16
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NORTH FORK WATER CO. AND BEAR VALLEY MUTUAL WATER CO.
15

P36-006544

The owners of the North Fork ditch were dissatisfied with the commission's order; they claimed that the combined entitlement of the North Fork and Timber ditches should be divided equally between the two ditches. Furthermore, they were interested in maintaining their rights to use of the water, whereas the owners of Timber ditch were gradually selling their water rights to landowners on the south side of the Santa Ana River. The North Fork ditch owners pressed their case and on June 12, 1879, the two groups agreed to an equal division of water between the two ditches (Beattie, 1951, p. 4). That agreement was approved by the water commissioners. By this time, however, all Timber ditch water rights had been transferred to the Berry Roberts ditch (p. 22-25) and the Timber ditch was abandoned--probably about 1878 (Hall, 1888, p. 162-163).

With each passing year additional agricultural development took place in the San Bernardino Valley. In 1880 R. J. Cunningham, representing a number of Riverside investors, purchased a considerable acreage and North Fork water rights along City Creek, south of Harlem Springs (Beattie, 1951, p. 19). John Stone, one of Cunningham's clients, purchased rights to 43 hours of North Fork water through Cunningham and became the principal owner of the North Fork ditch. The land between Base Line Road and City Creek was planted to deciduous fruits and other crops, and by the second year most of the land was under cultivation.

A year earlier, in 1879, E. G. Judson and Frank E. Brown had become interested in the potential of the benchland above the Cram and Van Leuven and North Fork ditches for raising oranges, a crop with more value than the vegetables grown on the lowland (Beattie, 1951, p. 16). They purchased the claims of settlers living near Plunge Creek in sec. 35, T. 1 N., R. 3 W., and secured options on other parcels of land in the vicinity of sec. 35. To bring water to the benchland, Judson and Brown met several times with owners of the two ditches and offered to build a new high-line ditch for $1,000. The North Fork ditch owners opposed the plan, but by 1880, several owners of land on the bench had purchased lowland water rights and requested transfer of those rights to the benchland (Hall, 1888, p. 148). Judson and Brown and the owners of North Fork ditch rights signed an agreement, in the spring of 1881, for the construction of a high-line ditch to serve the benchlands.

North Fork Canal

Construction of the high-line ditch, known as the North Fork Canal, began in the autumn of 1881, and it was completed and in operation in April of the following year (Hall, 1888, p. 148). The North Fork Canal left the original Cram and Van Leuven ditch a short distance west of the east line of sec. 6, T. 1 S., R. 2 W., and followed the course shown in figure 6 to City Creek. To reach the area along Base Line Road, the canal crossed City Creek in a flume, then turned south, probably following along the route of the old City Creek-Base Line ditch of 1865. This route followed along Boulder Avenue to Base Line Road, then west to Victoria Avenue, as described later in the section of this report titled, "City Creek Water Company" (p. 107). Part of this route may be that followed by the present-day Snake ditch (fig. 41) that is

P36-006544

currently used by the North Fork Water Co. After the completion of the North Fork Canal, the owners of the Cram and Van Leuven ditch built a connecting ditch in 1882-83 from their ditch to the North Fork Canal (Hall, 1888, p. 149). The approximate location of that connecting ditch is shown in figure 6.

The North Fork Canal was excavated through highly permeable material and was subject to considerable seepage loss and breaks throughout most of its length. To reduce water losses, Cunningham (p. 17) contracted to have the canal paved from the heading to about half a mile east of Plunge Creek--probably in 1882 (Beattie, 1951, p. 19). Many of the owners objected, but the work was completed and each owner paid his share. At about this time additional land was being purchased for agriculture north of Base Line Road and north of Highland Avenue. To meet the demand for more water it was necessary to enlarge and further pave part of the canal (figs. 7 and 8); to serve the area north of Highland Avenue it was necessary to build a new extension of the canal. (The route of the proposed extension is designated "Extension of 1884" in figure 6). After considerable discussion, the ditch owners agreed in the autumn of 1883 that the canal capacity should be increased to 1,500 miner's inches, and that the canal should tunnel through the San Andreas fault ridge east of City Creek. The canal would then cross City Creek (fig. 9) and continue west, on the south side of Highland Avenue, to its end at present-day Palm Avenue. The construction of a ditch to service the area north of Highland Avenue was to be left to the owners of that land. (See the section of this report titled, "West Highlands Water Co.," p. 33-34.)

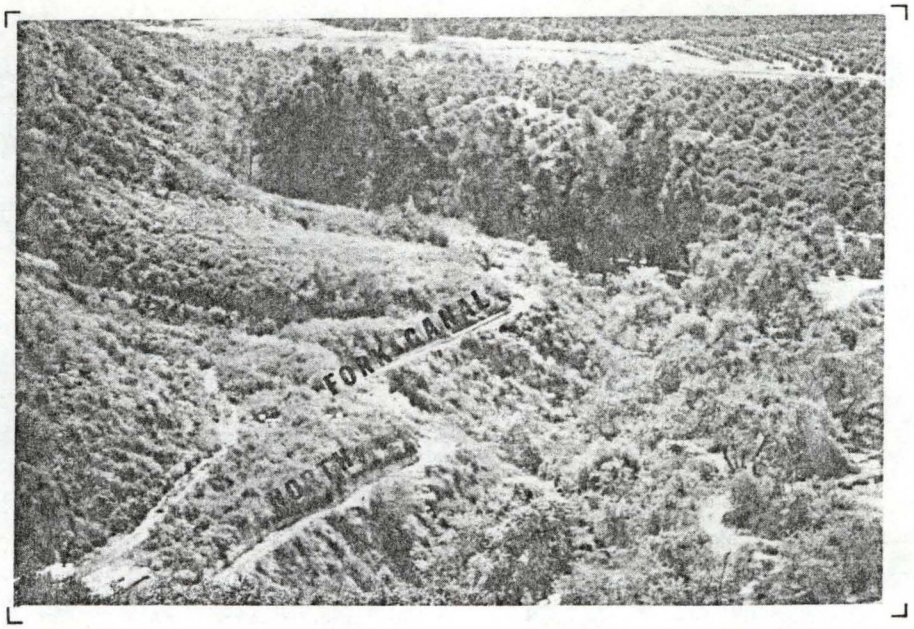


FIGURE 7.--North Fork Canal east of Plunge Creek; enlarged and paved in 1883-84.

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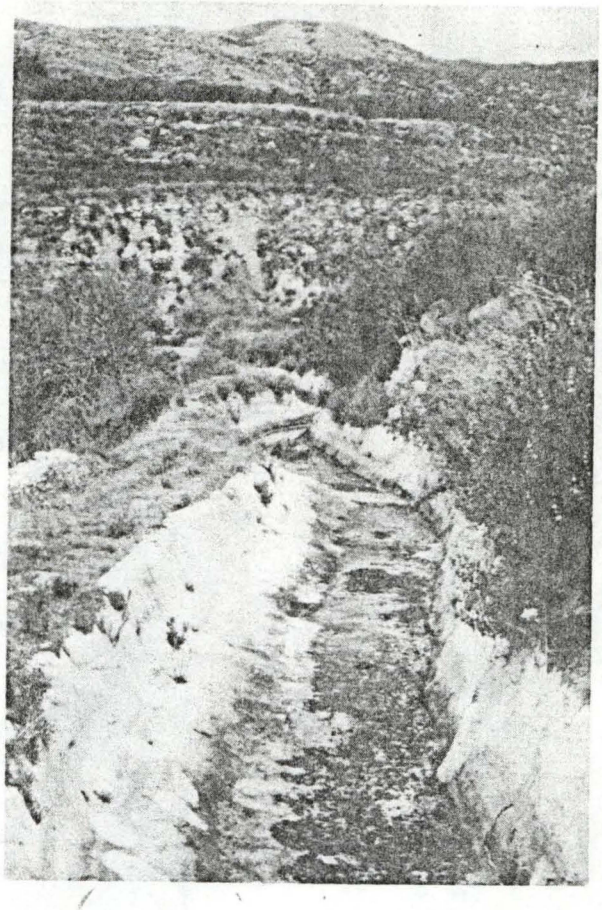


FIGURE 8.--North Fork Canal east of Plunge Creek crossing.

The first part of the construction that was completed was the tunnel and the extension of the canal along Highland Avenue. That completion date was January 1884 (Beattie, 1951, p. 21). By August 1885 all improvements had been completed with the help of the Bear Valley Land and Water Co., as described below.

On January 13, 1885, the owners of North Fork water rights incorporated under the name of North Fork Water Co. The owners of the Cram and Van Leuven ditch water rights were not included in the new company, but they continued their affiliation with the new company as joint owners of the upstream part of the North Fork Canal. An unusual feature of the incorporation of the North Fork Water Co. was that the individual owners granted their water rights to the company by a trust deed limiting their possession to a period of 12 years. Another provision required that the deed be signed by owners of three-fourths of the 240 hours or shares in the ditch before the incorporation could become effective.

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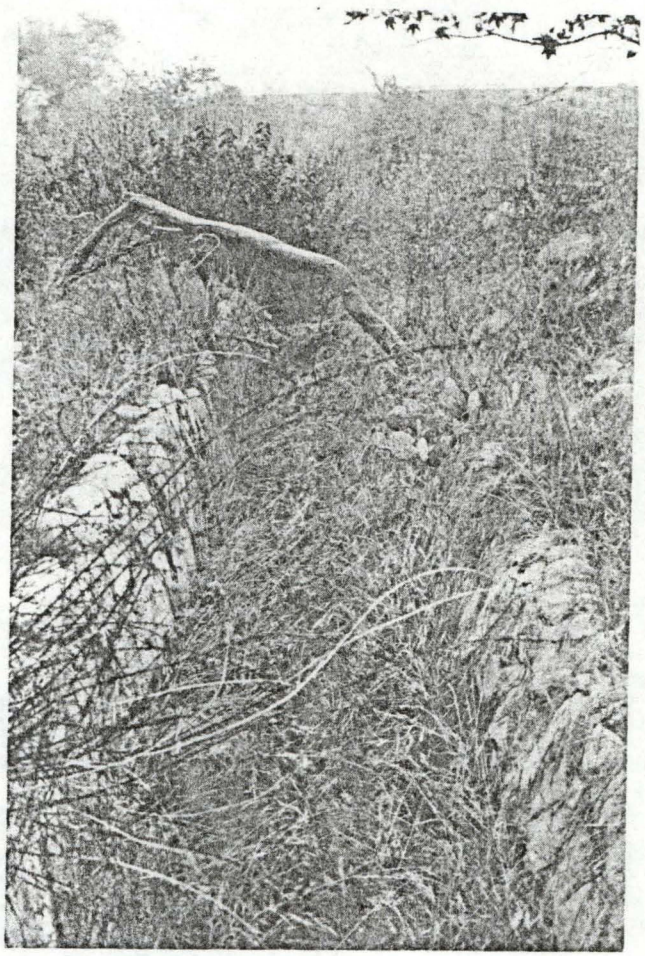


FIGURE 9.--North Fork Canal across City Creek; used 1884-1916.

The Bear Valley Land and Water Co.--an organization that developed about this time and one that is discussed later in this report--was given control of all the Santa Ana River water by the terms of an agreement, signed May 5, 1885, with the North Fork Water Co. and the owners of Cram and Van Leuven water rights. The North Fork Water Co. relinquished all rights to flow in excess of the following discharge rates: 500 miner's inches in June; 450 miner's inches in October; 400 miner's inches in November; 600 miner's inches in any of the first four months of the year, provided the sum of the four monthly deliveries did not exceed 2,250 miner's inches. During the remaining 5 months of the year, one-fourth of the supply at the diversion point, exclusive of additional supply contributed by a new reservoir on Bear Creek, was to be delivered to the owners of North Fork and Cram and Van Leuven water rights. (The disposition of the Cram and Van Leuven water rights is discussed in later paragraphs.)

P36-0006814

The Bear Valley Land and Water Co. purchased a half-interest in the North Fork Canal and joined with the North Fork Water Co. in enlarging and paving the canal, making it capable of conveying 1,500 miner's inches of water. Each company paid half the cost, and each agreed to pay half of future maintenance costs.

Both companies benefited from the agreement. The North Fork Water Co. secured a water supply of 500-600 miner's inches during two or three months of heavy demand in each year, regardless of the total flow in the stream, although they might receive less water than before in some of the other months. In addition, the reduction of water losses brought about by the improvement of the canal, insured increased water deliveries, so that nearly 50 percent more acreage could be irrigated. The Bear Valley Land and Water Co., by obtaining control of the surplus flow in the canal for supplying its customers, reduced its dependence on water stored in the new reservoir on Bear Creek. By having control of the operation of the entire system, the company eliminated many possible conflicts among the water users. Furthermore, the company had the cooperation of the North Fork Water Co. in enlarging and maintaining one of the principal canals for the delivery of its water.

The owners of Cram and Van Leuven water rights incorporated as a separate company in February 1890 (Beattie, 1951, p. 28) and continued to operate as a separate company for the next 35 years. As mentioned on page 19, the Cram and Van Leuven people owned an interest in the upstream part of the North Fork Canal--that part upstream from Cram Divide (fig. 6)--but their water could not be carried in the canal beyond Cram Divide. That meant that owners of Cram and Van Leuven water rights who had purchased land on the bench beyond the divide could not deliver water to their property. As early as 1884 one of those property owners had requested permission to deliver water to his property, but it was 1891 before the first of such requests was granted for a fee (Beattie, 1951, p. 28).

Owners of Cram and Van Leuven water rights merged their interests with the North Fork Water Co. in March 1925 (Beattie, 1951, p. 29). Cram and Van Leuven stock was transferred to the North Fork Water Co., and in exchange, the owners of that stock received North Fork Water Co. certificates giving them the right to a quantity of water equivalent to the value of their certificates.

Since 1891 water has been conveyed from the downstream end of the North Fork Canal to Highland ditch (fig. 11), to serve the area of West Highlands. (Highland ditch is discussed in a later section of this report on pages 33-34.) In recent years there have been many changes in land use in the North Fork Canal-Highland ditch service area. Some of the land formerly irrigated for agriculture has now been urbanized, and land that was previously undeveloped has been placed under irrigation. The net result, however, has been that the acreage irrigated has changed only slightly in the last 30 years (oral commun., North Fork Water Co., 1967).

The use of ground water has been ever-increasing in the San Bernardino Valley, and during dry years the diversion from the Santa Ana River is supplemented by water from wells. In addition, water is diverted from the mouth of Plunge Creek and released to the North Fork Canal (fig. 6).

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From Report 88-3.5
SBR-6544H

2:

IRRIGATION SYSTEMS FOR AGRICULTURAL LAND ON THE NORTH SIDE OF THE SANTA ANA RIVER

Cram and Van Leuven Ditch (1858)

The earliest of the irrigation systems emerging from Santa Ana Canyon was the Cram and Van Leuven Ditch. Prior to the digging of this ditch by Lewis Cram and his brothers and Frederick Van Leuven and his sons, all other ditches had their intake in the Santa Ana River, well below the mouth of the Upper Santa Ana River, outside the scope of this study (Figure 1). This was the first ditch to begin at the Santa Ana Canyon mouth, thereby reducing water lost across the alluvial fan due to percolation and evaporation. The ditch led from the canyon to Cram and Van Leuven lands at the base of East Highlands Mesa and continued west to City Creek wash in San Bernardino (Beattie 1951:3). Conflicts over water rights developed in August 1860 with a lawsuit being filed by Timber and North Fork Ditch owners (irrigation ditches located eight miles below Upper Santa Ana Canyon mouth). The case was settled in 1861 with the recognition of the right of Cram and Van Leuven to one-sixth of the flow of the river at the canyon mouth. This decision represented the first water rights dispute in the Upper Santa Ana River to be adjudicated by the courts (Beattie 1951:4).

The flood of 1862 reworked the river channel to such an extent that both downstream ditches, especially North Fork, were left largely useless. In 1865, the North Fork shareholders petitioned the owners of the Cram and Van Leuven ditch for permission to enlarge the Cram and Van Leuven ditch to carry the North Fork water (Beattie 1951:6). Consent was given for this arrangement as it was distinctly advantageous to both groups. The North Fork users would lose less water through riverbed seepage and Cram and Van Leuven water right holders would gain from the greater water flow through the joint canal. The ditch was enlarged and lengthened to reach North Fork lands. Nothing of the ditch remains today.

North Fork Ditch (1885-Present): SAC-33

By the early 1880s, water shareholders in the Cram and Van Leuven and North Fork ditches were limited to irrigating relatively low quality land on the edge of the Santa Ana River. The construction of a new canal at a higher elevation (highline) along the rugged base of the San Bernardino Mountains would maximize the potential acres which could receive irrigation water. A new canal would allow water to be carried onto the "benchlands" or mesas where oranges, a high value crop, could be grown. The North Fork Ditch represents the capital-intensive projects which were undertaken during the real estate boom of the 1880s.

P36000534

In 1881, construction began on the new ditch. For about the first 10,000 feet beyond the regulator gate, the canal followed the Cram and Van Leuven ditch of 1859 with a slope of 150 to 200 feet per mile. "The channel is excavated in the gravel and bowlder [sic] bed of the canyon, and then paved with small bowlders on sides and bottom and cemented" (Hall 1888:135). This portion of the canal was later reexcavated, enlarged, and relocated where necessary in the winter of 1887-1888 (Hall 1888). The new portion began at a point on the Cram and Van Leuven North Fork Ditch just above Oak Canyon. At the Cram and Van Leuven Divide a connecting ditch was constructed to carry water into the old ditch (Beattie 1951:18). Proceeding from this point the new highline ditch was constructed along the contours of the mountain slope with flumes constructed over the gullies.

The California State Engineer, when describing the project in his 1888 report, noted that the canal construction consisted of an excavated depression with canal lining consisting of granite boulders with interstices filled and chinked, and the surfaces smoothed with cement. Flumes were constructed of redwood planking, usually in two-inch thicknesses (Hall 1888:137). Little provision had been made for cross drainage as it was considered cheaper to pay laborers to repair or clean the ditch (Hall 1888).

The North Fork Ditch as originally conceived was to end at the Highlands settlement. By 1883, many individuals wished to have the North Fork extended farther west. In the fall of 1883 work began to expand the canal to 1500 miner's inches and extend the ditch across City Creek to a terminus at Highland and Palm Avenues (Beattie 1951:20). To complete the lower end of the canal, W. H. Randall, who had experience in rock construction gained in the silver mines of Virginia City, Nevada, was hired as foreman and paid five dollars a day. His section of the ditch was completed in January 1894. Mr. Beattie supervised 50 Chinese laborers, 25 Anglo workers, and a few Mexican laborers, who completed the work on the upper section by August 1894 (Beattie 1951). The canal spanned a total of eight miles from the mouth of Santa Ana Canyon to its terminus in San Bernardino. Canal maintenance and zanjero expenses by agreement between Bear Valley Company and the North Fork Water Company were to be shared equally. The agreement signed on May 23, 1885 remains in effect today (H. Hinckley 1983:38-39).

Several significant changes have occurred in the North Fork Ditch since its initial completion and continue to the present (H. Hinckley 1983).

1. In 1916, the trestle section of the North Fork Ditch crossing City Creek was moved 1/4 mile north. In 1946, this trestle was replaced by a 30-inch concrete siphon.

2. In 1931, a 1/2-mile section of the canal near Oak Creek was first routed through a tunnel (now abandoned) and later replaced by a 30-inch pipe. This previously open section of canal had been plagued by mud and debris slides.

P36-006544

3. Until the 1938 flood, all North Fork and San Bernardino County Water Conservation District spreading ground water was carried across the Santa Ana River in a wooden flume on a trestle. The water flowed into an open pool where water specified for the North Fork Ditch was transported by a tunnel to the North Fork Weir. After the flood this flume was replaced by a 55-inch pipe. In 1946, a 30-inch pipe was connected to the larger pipe to carry the water directly to the North Fork Weir. The 30-inch pipe was replaced in 1971 with 34-inch pipe.

4. In 1954, other troublesome sections totaling 1450 feet were replaced with 27-inch and a 30-inch concrete pipe.

5. In 1977, the State Water Project was tied into the North Fork Ditch 3/4 of a mile downstream from the North Fork Weir via the San Bernardino Valley Municipal Water District Foothill Feeder.

Highland Canal (1888)

In 1888, land owners located west of the North Fork Ditch along the base of the mountains formed the Highland Ditch Corporation to build a canal to irrigate the lands above Highland Avenue (Beattie 1951:28). A 2 1/8-mile long canal was constructed connecting into the North Fork Ditch in East Highlands. The Highland Canal crosses City Creek and several other channels on flumes and flows through two tunnels, one 1200 feet in length and the other 500 feet long (Hall 1888:142-143). Later, a 20-inch steel pipeline carried water another four miles to the west side of San Bernardino but this pipeline was abandoned in 1941 (E. Hinckley 1951:41). Sections of the ditch vacated in 1965 and 1978 are visible (E. Hinckley 1951). Today, only a single stockholder of Bear Valley Mutual Water Company gets water delivered through remaining parts of the system (H. Hinckley 1983).

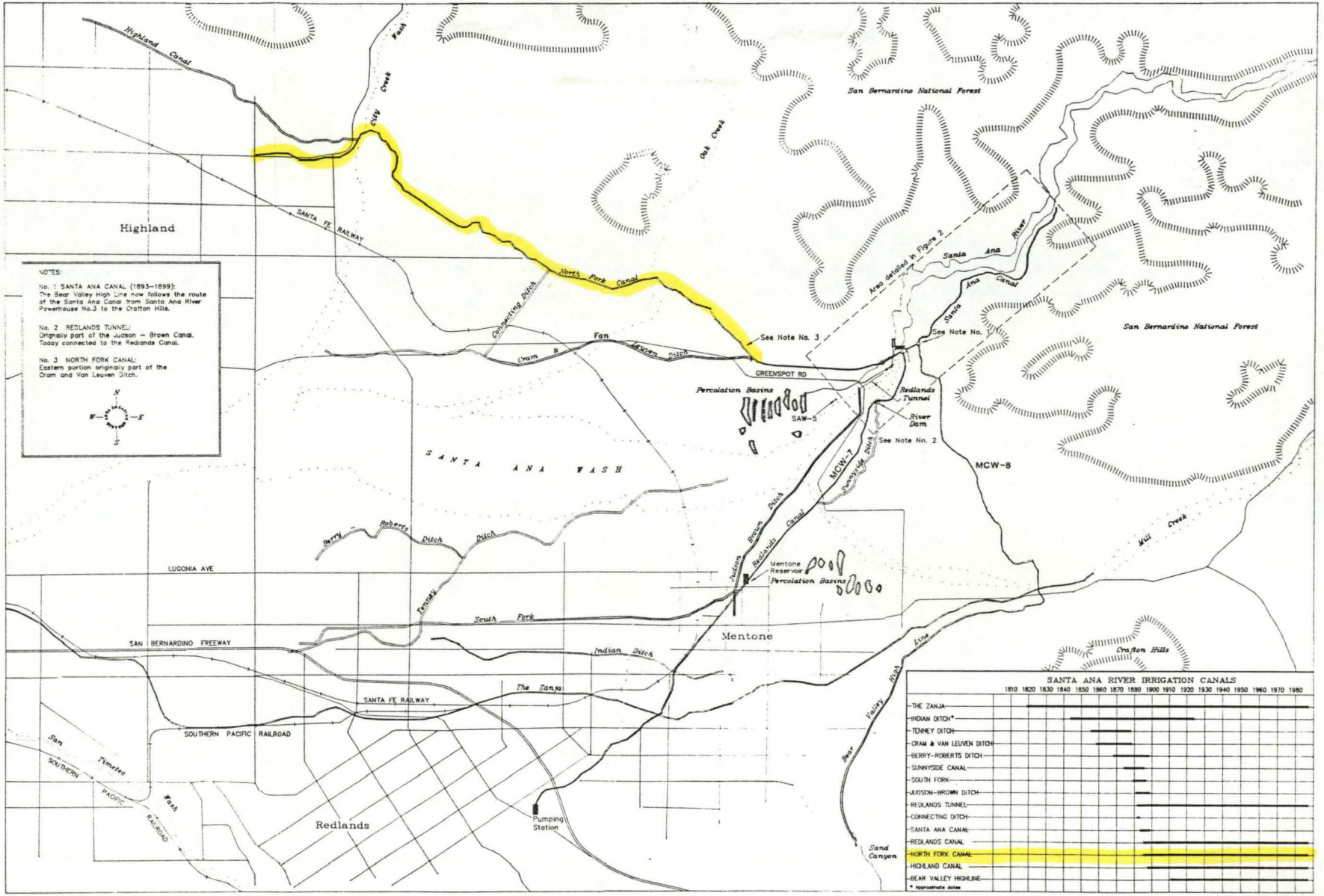
From Report 88-3.5

Figure 1

Historical Development of

SANTA ANA CANYON IRRIGATION PROJECTS

San Bernardino County, California



Prepared for Greenwood & Assoc.
by Area Location Systems
Northridge, California
(818) 993-4275 87-04 12/87

From Report 88-3.5
SBR-6544-H
P360-00634

remains at this site is a cobble-lined ditch, concrete footing and a nearby concrete tank. This structure was probably typical of many diversion works constructed between 1909 and 1930, prior to the building of the permanent Francis Cuttle Weir. Diversion dams and culverts were built to direct the flood and surplus river water to the spreading grounds. Utilizing local material and cheap labor these structures were not designed to be permanent. A berm and two tunnels were located in the area. The berm is a levy constructed in 1969 as an emergency measure following heavy floods that year. The two tunnels are old diversion headgates used in conjunction with the spreading grounds. No dates were available for when the tunnels were built or used (Hiltgen, personal communication 1987).

North Fork Weir: SAC-33

The weir was described by Hall in 1880 as a low rock dam which extended out into the river channel. Its purpose was to hold water an even elevation against the headgate of the North Fork Ditch entrance tunnel, with surplus water allowed to flow over the weir and back into the river channel (Hall 1888:134-135). Today the site consists of a weir box and canal located about one-half mile above the canyon mouth at an elevation of 1920' AMSL (Figure 2). The present weir box was built after the flood of 1916, replacing the original redwood box (Brock et al. 1986:83).

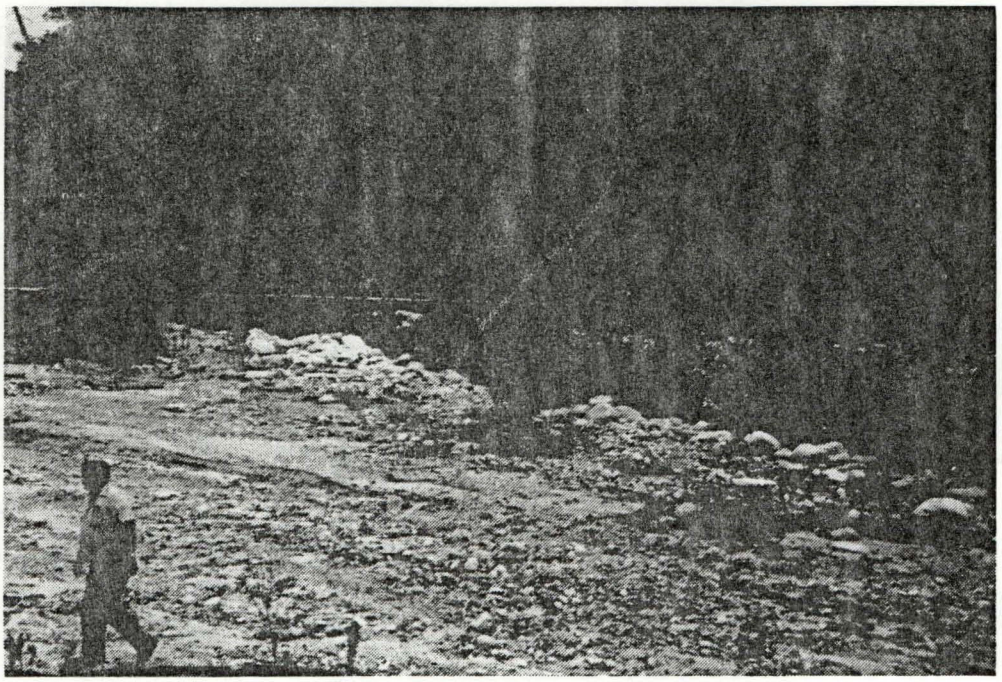


Figure 5. Alder Creek Pipeline across the Santa Ana River. Connected into the tunnel between SAR 1 and SAR 2. (Photograph by H. Botts.)

From Report 81-5.7
P36-00635 14
~~P1062-3~~
~~(P1063-2)~~
~~(P1064-11)~~
SBR-6544H

aboriginal society had been disrupted by missionization and the resultant changes in land tenure to such an extent that it never really returned to its former state. Following a period of Mexican cattle ranches in the 1840's and the development of the valley by the Mormons in the 1850's, the beginnings of American agricultural development came, including the citrus industry and the development of irrigation systems, two areas of historical interest which are directly tied to the cultural resources of the East Highland Ranch area.

The first irrigation ditch to be built through the study area was known as the Cram-Van Leuven Ditch, since it was built by members of those two pioneer families to bring water to their lands from the Santa Ana River. This ditch was first dug in 1858, and ran from the mouth of the Santa Ana Canyon to their lands at the base of what is today known as the East Highlands bench (Beattie 1951:3). The Cram-Van Leuven Ditch crossed the southwestern portion of the project site, following a route south of the Santa Ana Canyon Road and passing through the present townsite of East Highlands before ending east of the City Creek Wash, approximately on what is now East Third Street.

There had earlier, in 1856, been a ditch called the North Fork Ditch which was downstream 8 miles from the Cram-Van Leuven Ditch, and which directed water from the river to a community called the City Creek Settlement, since it was located on the bank of City Creek, approximately on today's Sixth Street between Waterman and Sterling Avenues. When the river flooded in 1862, it ruined the intake of that ditch and so the people of the City Creek Settlement asked the Crams and Van Leuvens for permission to enlarge their ditch and extend it to serve City Creek area (Beattie 1951:6, Wright 1981).

In 1879, Redlands developers Judson and Brown became interested in the

P36-0006544

undeveloped lands north of the river on the East Highlands Bench. They saw opportunities for profit by moving the Cram-Van Leuven/North Fork Ditch from the base of the bench to a line higher up on the bench, and then developing the resultant acres which could then be watered. They secured possessory rights in Section 35, which was later to be the center of the East Highlands Ranch, and secured options on other lands in the region. Then they contracted to build the new high-line ditch for $1,000. The Beatties also bought in for 1/3 and so paid $333. This new ditch would open up an area which would be suitable for growing oranges, and all were enthusiastic about the possibilities. In the following years, there were many problems in constructing the ditch, but it was finally finished in its present location by 1885. It now forms the southern boundary for a large portion of the project site, and passes through the project site in the Southwest Quarter of Section 35. Originally it was a mere dirt ditch with redwood flumes where necessary, but by the time it was finished, it had been paved with rock and concrete, utilizing Chinese labor. The new high-line ditch became known and is today still known as the North Fork Ditch or Canal. The North Fork Water Company was incorporated in February of 1885 and the ditch was completed in time for the August irrigation (Beattie 1951:16-23).

It was during this period that J. S. Edwards came on the scene in East HIghlands. He was ~~apparently involved in surveying the route of the North Fork Ditch, and~~ was one of the first buyers in the new town of Redlands, which had been laid out by Judson and Brown. When they decided to turn all their interests into developing Redlands, Edwards moved to buy Section 35 in East Highlands, which was Railroad land owned by Southern Pacific. The sale was made in two parcels, and occurred in 1887. This sale was the beginning of the East Highlands

P36-006314

Orange Company. Less than a month later, Edwards (and a financial partner named Mr. Chamblin) bought 206 acres in the West Half of Section 2 from members of the Van Leuven family. This parcel was probably the first planted to orange trees and most likely has some of the oldest rock work on the ranch. The first reference to the Plunge Creek Ditch also comes in 1887, apparently developed by the seller of the property in the NE 1/4 of the NE 1/4 of Section 2, a Mr. William McCombie. From the beginning of his development of the East Highland Ranch, J. S. Edwards continued to move to acquire Plunge Creek water rights and devise more ways of watering the higher lands he had bought. He devised miles of pipelines and tunnels to bring water from small streams to central points, from where it was distributed through the groves by means of an elaborate system of flumes and drains.

From the 1890's through 1933 when he died, the story of the East Highland Ranch is one of continual acquisition and development of water rights and ditches, terracing and planting of orange groves, and borrowing money to finance the operations (Jennings 1967).

Description of Resources:

Prehistoric Cultural Resources

Because of ethnographic references to an Indian rancheria named Korputat Aki which was formerly located where the East Highland Reservoir is now, and some scattered finds of isolated artifacts in the general area, there is reason to believe that prehistoric cultural resources are present on the project site. However, nearly a century of major disturbance from agricutural practices leave little hope that there is anything in the way of an intact cultural deposit yet

From Report 81-5.7

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(P1064-11)

Feature J may be of similiar age. It is an open well with a stone lined casing which is at least 100 feet deep.

K. North Fork Ditch Trestle over Bledsoe Gulch. A trestle to carry the North Fork Ditch over Bledsoe Gulch was first built as early as 1881 by Judson, Brown, and the Beattie family. The first trestle was made of wood and was located farther downstream than the present one. This first trestle was 125 feet high and had just been built with yet no guy lineswhen a strong November north wind blew it down and broke it to pieces. Judson and Brown salvaged what they could and moved it to the present location where it didn't require so high a crossing. The trestle gains historical mention again in 1902 when the North Fork Water Company grew concerned that the dam which the East Highland Orange Company was building directly under the wooden trestle would weaken it. The Water Company brought a suit which was settled by the Orange Company agreeing to pay $1,000 so the the trestle could be strengthened with steel. The Orange Company agreed that the dirt at the top of the dam, which formed what is known as "Green Lake," would not come closer than five feet to the trestle.

L. The Hamilton House. This house is said to be built using the same load of wood used to build the first Cram School in 1919. An earlier structure was here during the 1890's and early 1900's which was torn down but part may have been salvaged for other uses. An interesting feature of the Hamilton house is that an irrigation flume is built right into the west wall of the rock foundation.

M. This house was probably built about 1920 and was the home of B. F. Edwards, the father of J. S. Edwards.

N. This house was built in 1922 and was the home of Russell Edwards, the son of J. S. Edwards.

NORTH FORK CANAL PHOTODOCUMENTATION
BY SURESH DODDIAH
SEPTEMBER 1987

SBR-654H

PHOTOGRAPH EXPLANATIONS:

1. LOOKING EAST UPSTREAM OF THE NORTH FORK DITCH WHERE THE DITCH ENTERS THE PROPERTY.

2. LOOKING WEST DOWNSTREAM OF THE DITCH. NOTICE THE CONCRETE (GUNITE) AND RUBBLE SURFACE OF THE DITCH.

3. ANOTHER VIEW OF THE DITCH LOOKING WEST. THE RUBBLE SIDE SURFACE IS MORE NOTICEABLE. AN OLD IRRIGATION TURNOUT COULD BE SEEN IN THE FOREGROUND.

4. A VIEW OF THE DITCH LOOKING WEST AROUND THE BEND.

5. ANOTHER VIEW OF THE DITCH LOOKING WEST DOWNSTREAM. THE POWER POLES ON THE FAR RIGHT ARE ON HIGHLAND AVENUE.

6. ANOTHER VIEW OF THE DITCH LOOKING WEST DOWNSTREAM, THE CONCRETE STRUCTURE ON THE FAR LEFT IS S.B.V.M.W.D. MANHOLE.

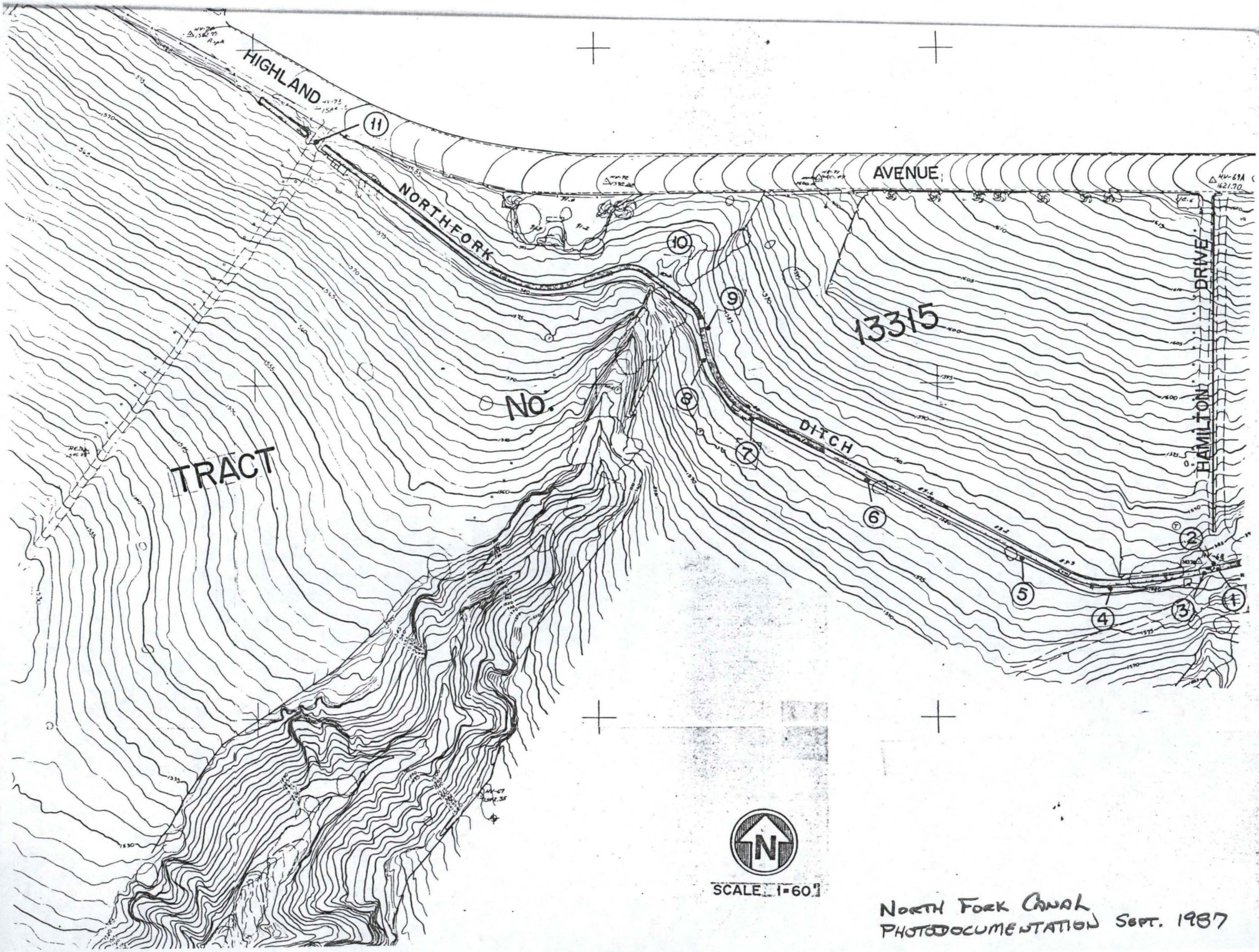
7. A VIEW OF THE DITCH LOOKING WEST DOWNSTREAM.

8. A VIEW OF THE DITCH LOOKING WEST DOWNSTREAM. NOTICE THE CHANNEL CROSSING.

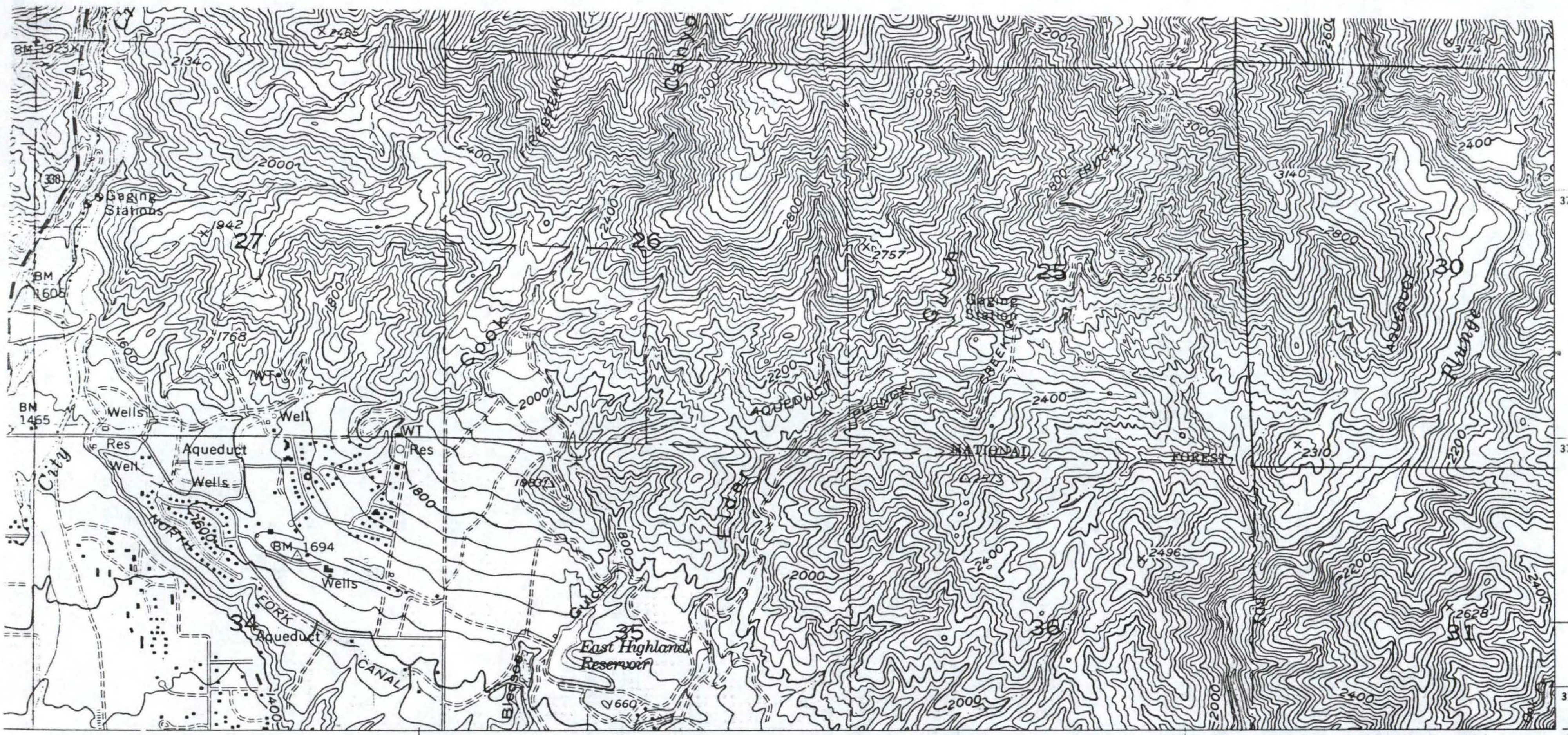
9. ANOTHER VIEW OF THE DITCH LOOKING EAST DOWNSTREAM.

10. A VIEW OF THE CHANNEL AROUND THE CURVE LOOKING WEST DOWNSTREAM.

11. A VIEW OF THE CHANNEL LOOKING WEST DOWNSTREAM WHERE THE DITCH ENTERS A 36" CORRUGATED METAL PIPE WHICH IS BURIED UNDER HIGHLAND AVENUE. THE HEAD WALL AND A TRASH RACK AT THE MOUTH OF THE PIPE COULD BE NOTICED.



NORTH FORK CANAL
PHOTODOCUMENTATION SEPT. 1987



INTERIOR—GEOLOGICAL SURVEY, RESTON, VIRGINIA—1985

SCALE 1:24 000

0 1 MILE

2000 3000 4000 5000 6000 7000 FEET

0 1 KILOMETER

TOUR INTERVAL 40 FEET
IES REPRESENT 20-FOOT CONTOURS
GEODETIC VERTICAL DATUM OF 1929

S WITH NATIONAL MAP ACCURACY STANDARDS
VEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092
GRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

CALIF

QUADRANGLE LOCATION

Purple tint indicates extension of urban areas

ROAD CLASSIFICATION

Heavy-duty .... Light-duty ....

Medium-duty .... Unimproved dirt ========

State Route

HARRISON MTN., CALIF.

NW/4 REDLANDS 15′ QUADRANGLE

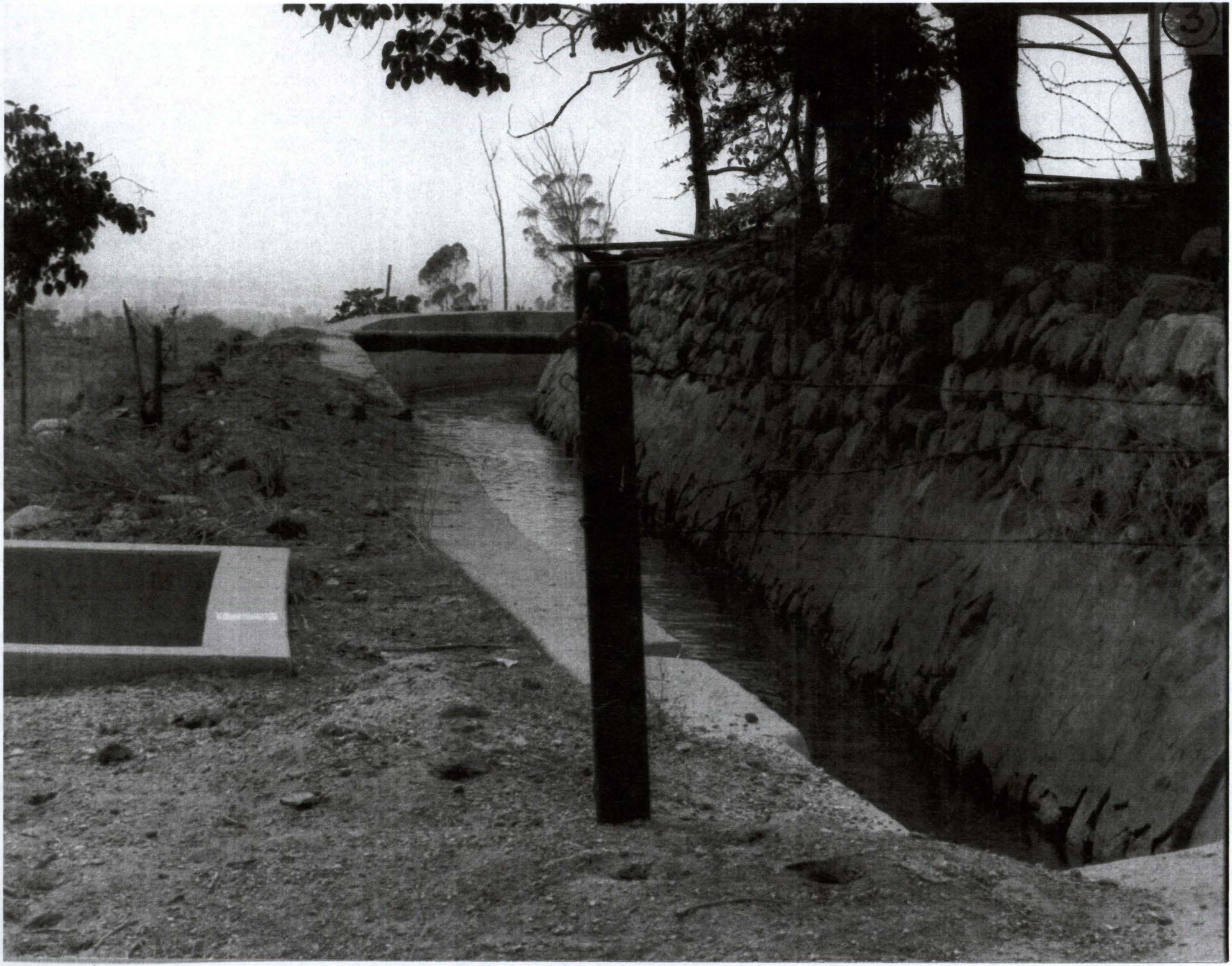
34117–B2–TF–024

1967

PHOTOREVISED 1980

DMA 2552 II NW—SERIES V895

NORTH FORK CANAL
PHOTODOCUMENTATION
SEPT, 1987



4

5

6

7

(6)

P36-006544

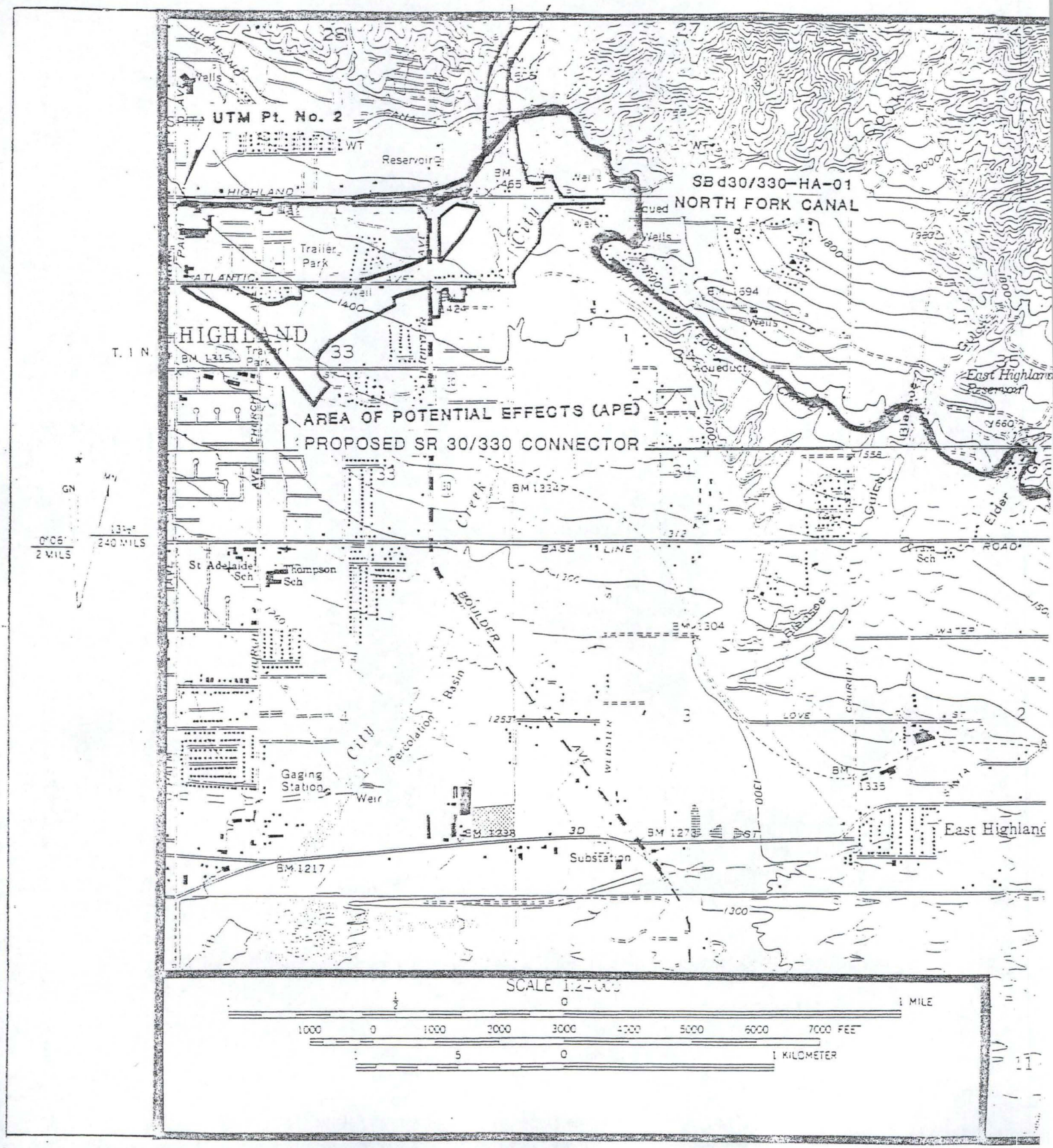
State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

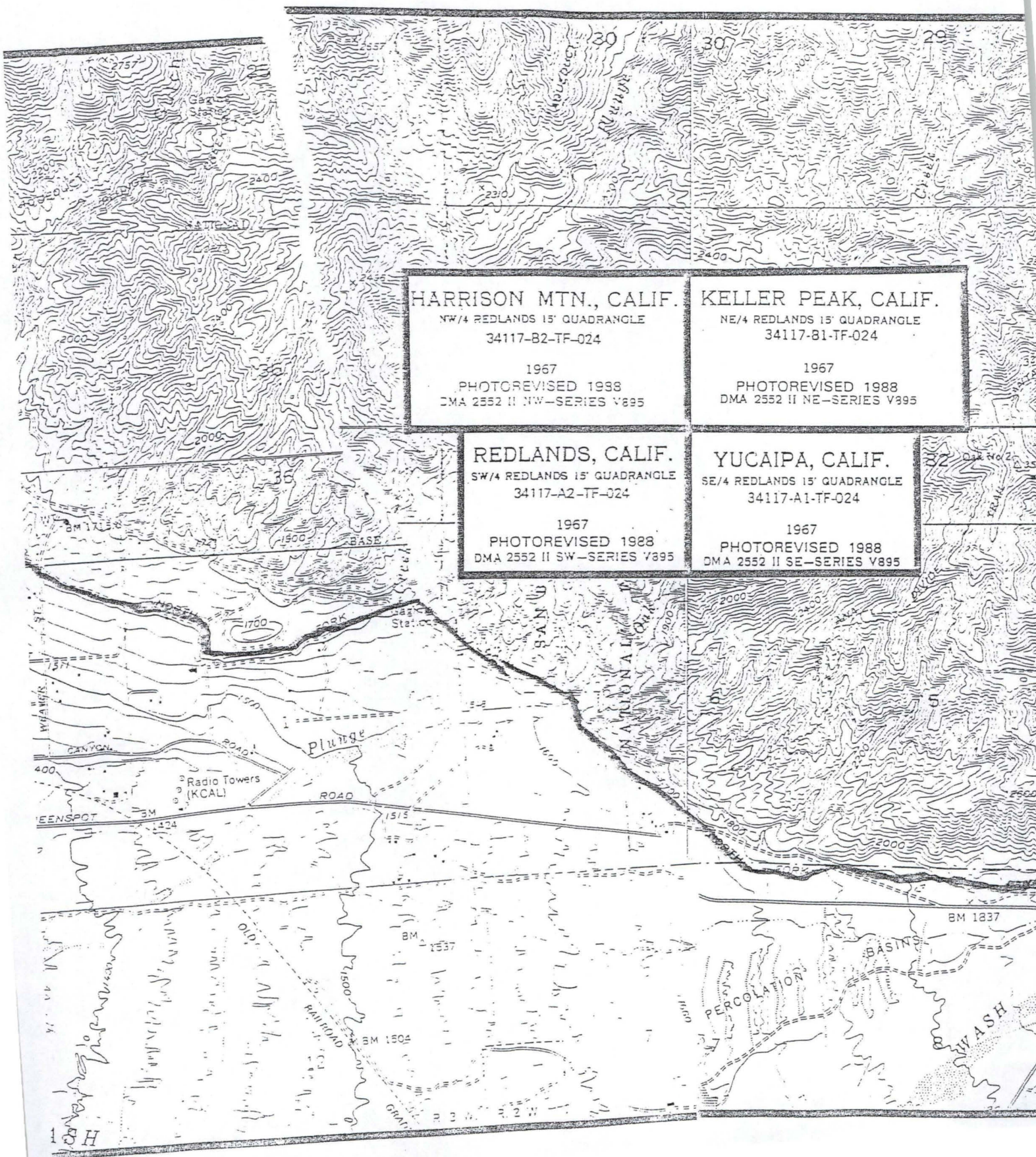
Permanent Trinomial: CA-SBR-6544 H

3 / 90
Mo. Yr.

ARCHEOLOGICAL SITE RECORD
ARCHAEOLOGICAL SITE LOCATION MAP

Other Designation: SBd30/330-HA-01
Pending Site No. PSBR-11-H




HARRISON MTN., CALIF.
NW/4 REDLANDS 15' QUADRANGLE
34117-B2-TF-024
1967
PHOTOREVISED 1988
DMA 2552 II NW-SERIES V895
KELLER PEAK, CALIF.
NE/4 REDLANDS 15' QUADRANGLE
34117-B1-TF-024
1967
PHOTOREVISED 1988
DMA 2552 II NE-SERIES V895
REDLANDS, CALIF.
SW/4 REDLANDS 15' QUADRANGLE
34117-A2-TF-024
1967
PHOTOREVISED 1988
DMA 2552 II SW-SERIES V895
YUCAIPA, CALIF.
SE/4 REDLANDS 15' QUADRANGLE
34117-A1-TF-024
1967
PHOTOREVISED 1988
DMA 2552 II SE-SERIES V895
Radio Towers (KCAL)
BM 1837
BM 1504
R 3 W
R 2 W
18 H

State of California — The Resources Agency **Primary #** 36-6848
DEPARTMENT OF PARKS AND RECREATION **HRI #**
PRIMARY RECORD
Trinomial CA-SBR-6848H
NRHP Status Code

Other Listings
Review Code **Reviewer** **Date**

Page 1 of 11 ***Resource Name or #:** 36-6848/CA-SBR-6848H
P1. Other Identifier: Segment of the Cram-Van Leuven Ditch
***P2. Location:** ☐ **Not for Publication** ☑ **Unrestricted**
***a. County** San Bernardino **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad** Redlands, CA **Date** 1988 **T** 1S; **R** 3W; S ½ **of Sec** 2; S.B.**B. M.**
c. Address Greenspot Road Vicinity City Highland Zip 92346
d. UTM: (Give more than one for large and/or linear resources) Zone 11S, 0485060 mE/ 3774239 mN (Eastern end of segment) and 0484475 mE/ 3774152 mN (Western end of segment) (NAD83)
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, decimal degrees, etc., as appropriate) Elevation: 1390 feet above mean sea level (AMSL) at the eastern end of the segment and 1350 AMSL at the western end of the segment. Directions to Resource: From the 210/Foothill Freeway, exit at 5th Street (Exit 83). Note that this exit leads to West 5th Street for westbound traffic, while leading to Greenspot Road for eastbound traffic. Travel east on Greenspot Road for about 2.00 miles. 36-6848/CA-SBR-6848H generally parallels Greenspot Road at this point and it is situated between 300 and 600 feet to the south of the road.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
36-6848/CA-SBR-6848H consists of the mapped location of the Cram-Van Leuven Ditch, which is an irrigation ditch constructed in 1858 by members of the Cram and the Van Leuven families. This ditch was one of the first irrigation systems emerging from the Santa Ana Canyon and it connected the mouth of the canyon with the Cram and Van Leuven lands located at the base of the East Highlands bench. When originally constructed, the ditch measured several miles in total length. This resource was originally recorded in December of 1990 by Greenwood and Associates as a segment located to the west of Church Street (Romani, et al. 1990). An update was completed in May of 1992 that addresses a possible portion of the ditch located to the east of the segment addressed in this update (McKenna 1992). The segment of the ditch addressed by this DPR 523 Form was recorded in updates completed in 1993 and 2006 (Eighmey, et al. 1993; ECORP 2006b).
The resource segment identified in 1993 and 2006 was relocated and evaluated by L&L during a pedestrian survey and site visits conducted in 2017. See Continuation Sheet.

***P3b. Resource Attributes:** (List attributes and codes) AH6. Water conveyance system
***P4. Resources Present:** ☐Building ☑ Structure (Ditch) ☐Object ☑Site ☐District ☐Element of District ☐Other (Isolates, etc.)

P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)



P5b. Description of Photo: (view, date, accession #) Overview of 36-6848/CA-SBR-6848H taken from the eastern end of the segment addressed in this update. View to the west. July 11, 2017.
***P6. Date Constructed/Age and Source:**
☑ Historic ☐ Prehistoric ☐ Both
1858 (Hall 1888; Beattie 1951; Eighmey, et al. 1993; Gallegos & Associates 1993; Highland 2006; San Bernardino 2017)
***P7. Owner and Address:**
_____
***P8. Recorded by:** (Name, affiliation, and address)
W.R. Gillean and J.M. Sanka
L&L Environmental, Inc.
721 Nevada St., Suite 307
Redlands, CA 92373
***P9. Date Recorded:** July 11, 2017

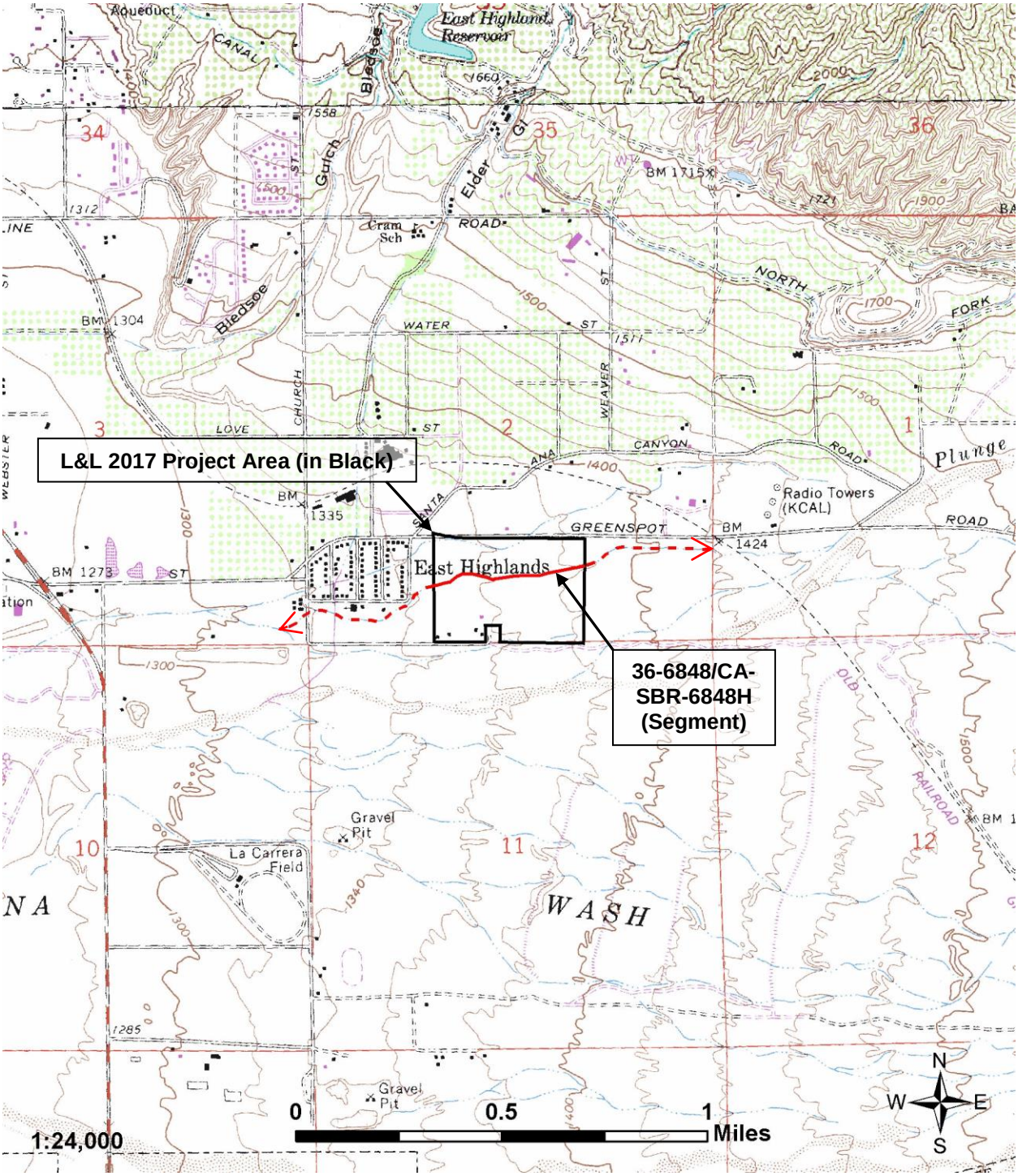
***P10. Survey Type:** (Describe) Intensive Pedestrian
***P11. Report Citation**: (Cite survey report and other sources, or enter "none.") L&L Environmental, Inc. (J.M. Sanka and W.R. Gillean). 2017. Phase 1 Cultural Resources Assessment for the HeatherGlen/Tract 17604 Project, ±60 Acres in the City of Highland, San Bernardino County, California.
***Attachments:** ☐ NONE ☑ Location Map ☑ Continuation Sheet ☑ Building, Structure, and Object Record ☐ Archaeological Record ☐ District Record ☑ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record☐ Artifact Record ☐ Photograph Record ☐ Other (List): _____

DPR 523A (9/2013) ***Required information**

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

Primary # 36-6848
HRI#
Trinomial CA-SBR-6848H

Page 2 of 11 ***Resource Name or #** (Assigned by recorder) Segment of the Cram-Van Leuven Ditch
***Map Name:** Redlands, CA ***Scale:** 1:24,000 ***Date of map:** 1988



DPR 523J (9/2013) *** Required information**

State of California — The Resources Agency **Primary #** 36-6848
DEPARTMENT OF PARKS AND RECREATION **HRI #** _____

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 3 of 11 ***NRHP Status Code** 6Y

***Resource Name or #** (Assigned by recorder) 36-6848/CA-SBR-6848H

B1. Historic Name: The Cram-Van Leuven Ditch (also known as the Old North Fork Ditch after 1865)

B2. Common Name: The Cram-Van Leuven Ditch

B3. Original Use: To provide water to the East Highlands area and to lands owned by the Cram and Van Leuven families (Eighmey, et al. 1993; Gallegos & Associates 1993).

B4. Present Use: Currently, the segment is void of water and it does not convey flows either to or from the portion addressed in this update. The western end of the segment terminates near two dirt roads while the eastern end terminates at a modern north-south trending flood control channel.

***B5. Architectural Style:** N/A

***B6. Construction History:** (Construction date, alterations, and date of alterations)

The Cram-Van Leuven Ditch was originally constructed in 1858 and is one of the first irrigation systems emerging from the Santa Ana Canyon. This ditch connected the mouth of the canyon with the Cram and Van Leuven lands located at the base of the East Highlands bench. When originally constructed, the ditch measured several miles in total length. Over the ensuing decades, the Cram-Van Leuven Ditch was continually altered and modified. It was impacted by a disastrous flooding event in 1862 and it was enlarged and connected to the existing (Old) North Fork Ditch in 1865 (Scott 1977). See Continuation Sheet.

***B7. Moved?** X **No** ___ **Yes** ___ **Unknown** **Date:** N/A **Original Location:** No (See L7. Integrity Considerations)

***B8. Related Features:** None

B9a. Architect: None b. Builder: Lewis F. Cram (and his brothers John and Henry Cram) and Frederick Van Leuven

***B10. Significance: Theme** Community Water System Development (JRP and Caltrans 2000) **Area** Highland
Period of Significance 1858-1881 **Property Type** Ditch **Applicable Criteria** 1 (CRHR); A (City of Highland)
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

This resource consists of a mapped segment of the Cram-Van Leuven Ditch measuring approximately 1,900 feet in length. The ditch was originally constructed in 1858 and was the first irrigation ditch to be constructed at the mouth of the Santa Ana River. The ditch conveyed water from the Santa Ana River to lands that the Cram and Van Leuven families had acquired in the vicinity of the East Highlands mesa (Beattie 1951; Romani, et al. 1990). See Continuation Sheet.

B11. Additional Resource Attributes: (List attributes and codes) None

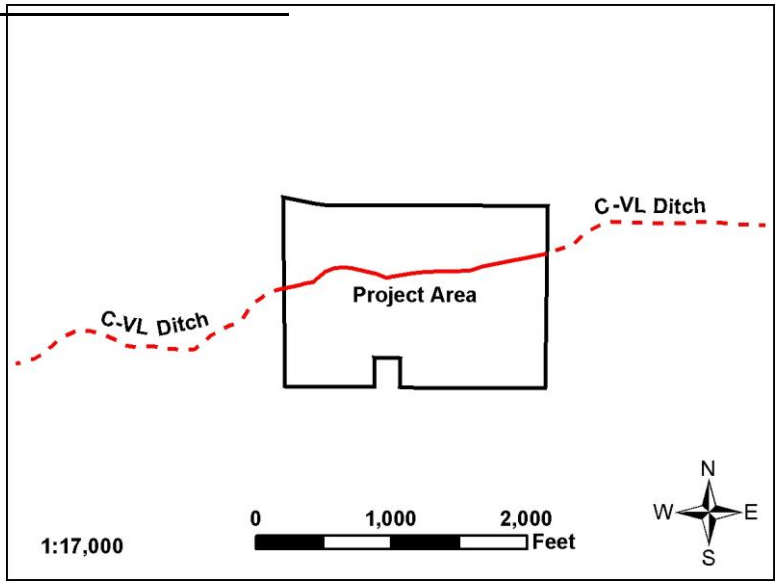
***B12. References:** See Continuation Sheet.

B13. Remarks: This evaluation is limited to a project area examined by L&L in 2017 and considers a segment of the Cram-Van Leuven Ditch measuring 1,900 feet in length (L&L 2017). The project area is shown in relation to the ditch in the sketch map below. See Continuation Sheet.

***B14. Evaluator:** J.M. Sanka

***Date of Evaluation:** November 21, 2017

(This space reserved for official comments.)



DPR 523B (9/2013) ***Required information**

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LINEAR FEATURE RECORD

Primary # 36-6848
HRI#
Trinomial CA-SBR-6848H

Page 4 of 11 ***Resource Name or #:** Segment of the Cram-Van Leuven Ditch

L1. Historic and/or Common Name: The Cram-Van Leuven Ditch (also known as the Old North Fork Ditch after 1865)

L2a. Portion Described: ☐ Entire Resource ☑ Segment ☐ Point Observation **Designation:**

b. Location of point or segment: (Provide UTM coordinates, decimal degrees, legal description, and any other useful locational data. Show the area that has been field inspected on a Location Map.) Zone 11S, 0485060 mE/ 3774239 mN (Eastern end of segment) and 0484475 mE/ 3774152 mN (Western end of segment) (NAD83). See Location Map.

L3. Description: (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.) This resource consists of a 1,900 foot segment of a water feature that has been mapped as the Cram-Van Leuven Ditch. The segment does not appear to have been mechanically altered and its measurements are variable (See L4a. and L4c.).

L4. Dimensions: (In feet for historic features and meters for prehistoric features)

a. Top Width Variable. The width is not observable along the entirety of the ditch segment, but it generally ranges from about 30 feet (nearer the western extent of the segment) to 75 feet (nearer the eastern extent of the segment).

b. Bottom Width N/A

c. Height or Depth Variable. The depth is not observable along the entirety of the ditch segment, but it generally ranges from about 5 feet (nearer the western extent of the segment) to 10 feet (nearer the eastern extent of the segment).

d. Length of Segment 1,900 feet

L4e. Sketch of Cross-Section (include scale) Facing:

See Eighmey, et al. 1993.

L5. Associated Resources:
The Cram-Van Leuven Divide or the connecting line of 1882-1883 (36-6850/CA-SBR-6850H).

L6. Setting: (Describe natural features, landscape characteristics, slope, etc., as appropriate.): This resource segment is located in an area that is primarily flat with low-relief rolling hills and shallow depressions. Elevation ranges from about 1,350 feet to 1,390 above mean sea level. A portion of the Santa Ana Wash is located approximately 0.20 mile to the south.

L7. Integrity Considerations: This segment of the Cram-Van Leuven Ditch was evaluated against the seven aspects of integrity as outlined by the National Parks Service in National Register Bulletin 15, including location, design, setting, workmanship, materials, feeling, and association (NPS 1991). See Continuation Sheet.

L8b. Description of Photo, Map, or Drawing (View, scale, etc.): Overview of 36-6848/CA-SBR-6848H taken from the western end of the segment addressed in this update. View to the east. July 11, 2017.

L8a. Photograph, Map or Drawing



L9. Remarks: The segment of the Cram-Van Leuven Ditch addressed in this DPR 523 Form is recommended not eligible for the California Register of Historical Resources (CRHR) and not eligible as a City of Highland cultural resource based on a lack of integrity (See L7. Integrity Considerations).

L10. Form Prepared by: (Name, affiliation, and address)
J.M. Sanka
L&L Environmental, Inc.
721 Nevada Street, Suite 307
Redlands, CA 92373

L11. Date: November 21, 2017

DPR 523E (9/2013)

State of California — The Resources Agency **Primary #** 36-6848
DEPARTMENT OF PARKS AND RECREATION **HRI#**
CONTINUATION SHEET **Trinomial** CA-SBR-6848H

Property Name: Segment of the Cram-Van Leuven Ditch
Page 5 of 11

***P3a. Description:**
In 1993, the segment addressed by this update was described as considerably damaged by numerous flooding episodes. Nonetheless, it was recommended for avoidance during future development, if feasible. If avoidance was not possible, then recordation was considered sufficient to mitigate impacts and no further work was recommended (Gallegos & Associates 1993). This resource was relocated in the project area in 2006 by ECORP Consulting, Inc. (ECORP) (ECORP 2006a; ECORP 2006b). ECORP noted that the ditch was likely eligible for the CRHR under Criteria 1 and 2, but that it may no longer possess integrity. They recommended that the portions of the ditch located outside of the project area be assessed in order to more accurately address the integrity of the segment (ECORP 2006a).

As of 2010, the Cram-Van Leuven Ditch has been found ineligible for the National Register of Historic Places (NRHP); but, it has not been formally evaluated for the CRHR or for any local registers. It is listed in the Historic Property Data File (HPDF) with a status code of 6Y, indicating that it has been determined ineligible for the NRHP by consensus through the Section 106 process. In addition, this resource has not been evaluated for the CRHR or for local listing.

L&L detected a water feature at the resource segment location in 2017. However, the water feature could not be verified as a segment of the Cram-Van Leuven Ditch during its period of significance (1858-1881) (See B10. Significance and L7. Integrity Considerations).

***B6. Construction History:**

History of the Cram-Van Leuven Ditch
Following the initial settlement of the East Highlands area and in an effort to irrigate crops and procure drinking water, Lewis F. Cram, Henry Cram, John Cram, and Frederick Van Leuven built an irrigation ditch in May of 1858 (DeWitt, et al. vs Van Leuven, et al. 1860; Beattie 1951; Atchley 2017; Quales n.d.). This ditch was initially called the Mesa Ditch, but it was later known as the Cram-Van Leuven Ditch (Atchley 2017). The head of the ditch was located at the mouth of the Santa Ana River canyon and it extended to City Creek (Beattie 1951). The initial construction likely included some digging at the mouth of the canyon for a diversion, but then it followed a natural overflow of the river to the lands located to the east of modern Merris Street. Thereafter, more digging was likely, following the contour of the land situated below the mesa (Atchley 2017).

The beginning of the Cram-Van Leuven Ditch was located upstream from the original headworks of the existing North Fork Ditch and the Timber Ditch. The diversion of water to the Cram-Van Leuven Ditch reduced the river flow to the other ditches and at times, there was an insufficient flow of water to satisfy the needs of the North Fork and Timber Ditches (Beattie 1951; Scott 1977). By August of 1860, the competition for water from the Santa Ana River amongst the existing ditches elicited a lawsuit. This suit was filed by the majority owners of the Timber Ditch against the owners of the Cram-Van Leuven Ditch (DeWitt, et al. vs Van Leuven, et al. 1860; Beattie 1951). The suit did not go to trial; rather, it was settled by a compromise court judgment on June 18, 1861. This judgment gave the owners of the Cram-Van Leuven Ditch a right to one-sixth of the river flow at the mouth of the canyon (Hall 1888; Beattie 1951; Atchley 2017; Quales n.d.). This suit was the first water right in the Santa Ana River basin to be adjudicated by a court (Beattie 1951).

A disastrous flood occurred in 1862 and this event had a significant effect on the San Bernardino Valley and the Santa Ana River. Prior to the flood, the river was a well-defined and narrow channel and it was lined with alder, cottonwood, sycamore, and willow trees. The flood uprooted and washed away the trees and deposited sand, gravel, and boulders in the riverbed and on adjacent lands (Beattie 1951). Following the flood, the river failed to follow a well-defined course and it flowed through several channels below the mouth of the canyon. This area was located upstream from the common point of diversion for the North Fork and Timber Ditches and the new river channels resulted in a significant water deficiency for the ditches (Scott 1977; Quales n.d.).

State of California — The Resources Agency **Primary #** 36-6848
DEPARTMENT OF PARKS AND RECREATION **HRI#**
CONTINUATION SHEET **Trinomial** CA-SBR-6848H

Property Name: Segment of the Cram-Van Leuven Ditch
Page 6 of 11

***B6. Construction History (Continued):**
As a result of the water deficiency after the flood of 1862, the North Fork Ditch owners decided to extend the ditch to a new heading nearer the mouth of the canyon. They decided that the most economical manner to accomplish this task would be to use the existing Cram-Van Leuven Ditch. In 1865, they requested permission from the owners of the Cram-Van Leuven Ditch for a connection to be constructed between the two ditches. As part of the agreement, the North Fork Ditch offered to enlarge the Cram-Van Leuven Ditch and share operating expenses (Beattie 1951; Scott 1977; Quales n.d.). Thus, the ditch was enlarged, a connection was completed to the east of the City Creek Wash, and from this time the North Fork Ditch and the Cram-Van Leuven Ditch diverted water via a common point at the mouth of the canyon (Scott 1977). As a result of this development, the Cram-Van Leuven Ditch located upstream from the connection with North Fork Ditch also became known as North Fork Ditch (Hall 1888; Scott 1977). During the ensuing years, the ditches were extended and new distributaries were built as irrigation needs increased and water-rights were divided and sold (Hall 1888).

Throughout the late 1860s and 1870s, agricultural development continued to occur in the San Bernardino Valley. The lands between Base Line Road and City Creek were planted in deciduous fruits and other crops, such that the majority of the land in this area was under cultivation during the early 1880s (Scott 1977). In 1879, E. G. Judson and Frank E. Brown became interested in the potential of the land above the Cram-Van Leuven Ditch and the North Fork Ditch for growing oranges. They also built a fruit dryer near the Cram Homestead (36-4220/CA-SBR-4220H/CPHI-31) and began working with peaches, apricots, and some apples (Beattie 1951; Quales n.d.). Judson and Brown then purchased the claims of settlers living near Plunge Creek and secured options on other parcels of land in the vicinity. To bring water to the benchland, Judson and Brown met several times with owners of the North Fork and Cram-Van Leuven Ditches and offered to build a new high-line ditch at a cost of $1,000. The North Fork Ditch owners opposed the plan, but by 1880, several benchland area owners had purchased lowland water rights and requested the transfer of those rights to the benchland. In the spring of 1881, Judson and Brown and the owners of North Fork Ditch rights signed an agreement, exclusive of the Cram-Van Leuven owners (Hall 1888; Scott 1977). This agreement allowed for the construction of a high-line ditch to serve the benchlands, which would become known as the North Fork Canal (Scott 1977; Quales n.d.).

Construction of the North Fork Canal commenced in 1881 and it was completed in early 1882. The canal departed from the original Cram-Van Leuven Ditch approximately four miles to the east of the segment addressed in this update (Scott 1977; Quales n.d.). After this point, the Cram-Van Leuven Ditch owners ran their water in the new high-line canal built by Judson and Brown to a point called the Cram and Van Leuven Divide. The divide was located about four miles below the mouth of the canyon and from this point, they built a connecting ditch to their old ditch located below the bench (Beattie 1951). The Cram-Van Leuven Divide or the connecting line of 1882-1883 (36-6850/CA-SBR-6850H) is located to the west of the segment. The advent of the high-line ditch rendered a portion of the Cram-Van Leuven Ditch unnecessary for watering lands in the area. Specifically, the segment located between the North Fork Canal departure in the east and the Cram-Van Leuven Divide in the west became unnecessary. Thus, once the North Fork Canal was built and after about 1881, only the Cram-Van Leuven Divide was needed to bring water to the East 3rd Street lands (Atchley 2017).

In the following years, numerous changes occurred with regard to the owners of the Santa Ana River water-rights and the control of the water flows. In 1885, the North Fork owners chose to incorporate their water rights and they established the North Fork Water Company (Beattie 1951). The Cram-Van Leuven Ditch owners were not included in this deal and they instead remained affiliated with the portion located upstream from the North Fork Canal (Quales n.d.). In September of 1883, the Bear Valley Land and Water Company was established and they gained control of the Santa Ana River water. The Big Bear Dam was constructed in 1884 and this affected those with water-rights in the North and South Fork due to the availability of water distribution. Thereafter, an agreement was signed between the North Fork Water Company, the Cram-Van Leuven owners, and the Bear Valley Land and Water Company on May 5, 1885. In this agreement, the amount of water received for the entire year was set and it provided the first definite schedule for water users measured in inches of water (Beattie 1951). In this manner, the North Fork was able to secure their water supply in relatively dry months and 50 percent more land was able to be irrigated than before the agreement (Quales n.d.).

DPR 523L (9/2013)

State of California — The Resources Agency	**Primary #** 36-6848
DEPARTMENT OF PARKS AND RECREATION	**HRI#**
CONTINUATION SHEET	**Trinomial** CA-SBR-6848H

Property Name: Segment of the Cram-Van Leuven Ditch
Page 7 of 11

***B6. Construction History (Continued):**
Eventually, the Cram and Van Leuven interests incorporated into a separate company in 1890 and they continued to operate for the next 35 years. In March of 1925, the Cram-Van Leuven owners moved to completely merge with the North Fork Water Company and all Cram-Van Leuven stock was transferred to the North Fork (Beattie 1951; Quales n.d.). Thus, while the necessity waned for the central portion of the Cram-Van Leuven Ditch in about 1881, its construction allowed for the importation of water to the Cramville/East Highlands area and directly affected the development patterns through an increase in water availability and reliability.

***B10. Significance:**
This update addresses a segment of the larger Cram-Van Leuven Ditch measuring approximately 1,900 feet in length. The entirety of the ditch measured several miles in length when originally constructed in 1858. The ditch connected the mouth of the Santa Ana Canyon with the Cram and Van Leuven family lands located at the base of the East Highlands bench and it was one of the first irrigation systems emerging from the canyon (Gallegos & Associates 1993; ECORP 2006). The ditch allowed for the water supply needed to support agriculture and domestic life in the burgeoning Community of Cramville, which was later renamed East Highlands and incorporated as part of the City of Highland (ECORP 2006a; Highland 2006).

This segment of the Cram-Van Leuven Ditch could not be verified as segment of the Cram-Van Leuven Ditch constructed in 1858; rather, it may be a mapping error or a segment of a later iteration of the Cram-Van Leuven/Old North Fork Ditch (See L7: Integrity Considerations). If this segment is part of a later iteration of the ditch, then it shares the potential significance and historic context of the entire ditch alignment as a contributor to the development of agricultural and domestic life in Highland. The theme of significance is Community Water System Development (JRP and Caltrans 2000). The period of significance is 1858 to 1881, which represents the time between the initial date of construction for the ditch and the date when the central portion of the ditch becomes unnecessary and is effectively replaced by the high-line North Fork Canal (Beattie 1951; Scott 1977; Atchley 2017; Quales n.d.).

This resource segment was evaluated for its potential contribution to the significance of the entire Cram-Van Leuven Ditch at the local level for its association with Community Water System Development in the Cramville/East Highland area of modern Highland between the years of 1858 and 1881. Following is a discussion of the application of the CRHR criteria (See L7: Integrity Considerations for a detailed analysis of integrity).

California Register of Historical Resources (CRHR) Eligibility Evaluation
The segment of 36-6848/CA-SBR-6848H addressed in this DPR 523 Update Form was evaluated for historical significance against the four criteria for inclusion in the CRHR as part of a study conducted by L&L in 2017 (L&L 2017). Because the segment within the 2017 L&L project area represents only a portion of a much larger linear resource, the segment was evaluated within its proper historic context as a potential contributor to the significance of the larger resource. Following is a discussion of the application of the CRHR criteria:

Criterion 1: This resource segment was assessed under CRHR Criterion 1 for its potential significance as part of historic events that have made a significant contribution to the broad patterns of California's history and cultural heritage (Event). Water conveyance systems are often found eligible under this type of criterion, as they are indispensable to the communities they serve and they provide the infrastructure needed for agricultural and community development (JRP and Caltrans 2000). Water supply is particularly important in the state of California and the Highland area as the arid lands require a reliable water source to irrigate crops. The Cram Van-Leuven Ditch was constructed in 1858 as the first major water diversion project in the area. It was implemented to bring water from the Santa Ana Canyon to the East Highlands bench and it provided a reliable source of water for the burgeoning community. The ditch represents the advent of the agricultural history and success of the East Highlands area, which has a rich tradition of agricultural pursuits extending from the late 1850s into the modern era. Therefore, this resource segment appears to qualify for the CRHR under Criterion 1.

State of California — The Resources Agency **Primary #** 36-6848
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CONTINUATION SHEET **Trinomial** CA-SBR-6848H

Property Name: Segment of the Cram-Van Leuven Ditch
Page 8 of 11

***B10. Significance (Continued):**
Criterion 2: This resource segment was considered under Criterion 2 for its association with the lives of persons important in our past (Person). While the ditch is associated with members of the Cram and Van Leuven families and both families played a significant role in the settlement of East Highland, the ditch must be associated with their productive life and must be the property that is most closely associated with each person. Water conveyance systems are rarely found eligible under this type of criterion, as there are typically other more suitable criterion (see Criterion 1 above) and they are typically not the most closely associated properties (JRP and Caltrans 2000). For example, a property that may be better associated with the Cram family could be the site of the original Cram homestead located in nearby Section 3. Though the home is no longer extant, the homestead location has been recorded as 36-4220/CA-SBR-4220H and is listed as CPHI-31 (Teal 1980). Therefore, while this resource segment is associated with the lives of persons important to the past of Highland, it is arguably better classified eligible as a contributor to the broad patterns of local history (Criterion 1/Event) and does not appear to qualify for the CRHR under Criterion 2.

Criterion 3: This resource segment was evaluated for Criterion 3 for embodying the distinctive characteristics of a type, period, region, or method of construction; as representing the work of an important creative individual; or possessing high artistic values (Construction/Architecture). Under this type of criterion, water conveyance systems have been found eligible for their engineering or design values (JRP and Caltrans 2000). In this case, the resource consists of a segment of a hand-hewn earthen ditch and it does not represent a design innovation or an example of an evolutionary trend in engineering. As such, this resource segment does not appear to qualify for the CRHR under Criterion 3.

Criterion 4: This segment was also considered for Criterion 4 for the potential to yield or likelihood to yield information important to prehistory or history (Information Potential). This resource does not have the potential to provide information about history that is not available through historic research. Therefore, this segment does not appear to qualify for the CRHR under Criterion 4.

In summary, this resource segment represents the agricultural history of the East Highlands area and is directly associated with the success of the early East Highlands Community. As such, it appears to meet the significance criteria of the CRHR under Criterion 1 (Event). However, this segment does not appear to reflect the location of the ditch during its period of significance (1858-1881). Instead, it may represent a mapping error or a later and more southerly extension of the ditch (See L7: Integrity Considerations). In addition, the existing water feature is in very poor condition, as it has been adversely affected by erosion over time, is overgrown with vegetation, and is filled with cobbles and boulders. As such, this ditch segment possesses low integrity in general and low integrity for its period of significance (1858-1881). Thus, the segment of 36-6848/CA-SBR-6848H (Cram-Van Leuven Ditch) addressed in this update is recommended not eligible for inclusion in the CRHR.

City of Highland Cultural Resource Eligibility Evaluation
This resource segment was also evaluated for eligibility as a cultural resource pursuant to Section 16.32.060 of the City of Highland Municipal Code. For the same reasons outlined above in the CRHR eligibility assessment under Criterion 1 (Event), this resource segment appears eligible as a City of Highland cultural resource under Criterion A. However, in order to be considered eligible as a cultural resource by the City, a resource must generally meet the criteria for listing on the NRHP and/or qualify under additional criteria identified by the City (A-J).

In order to be listed on the NRHP, a resource must meet at least one of the significance criteria (A-D) and the resource must also demonstrate a sufficient degree of integrity so that it is capable of conveying such significance. In the case of the water feature segment, this feature does not appear to reflect the location of the Cram-Van Leuven Ditch during its period of significance (1858-1881). Rather, it may represent a mapping error or a later and more southerly extension of the ditch as outlined above in the CRHR eligibility assessment (see also L7: Integrity Considerations). Thus, this segment of 36-6848/CA-SBR-6848H (Cram-Van Leuven Ditch) is recommended not eligible as a City of Highland cultural resource.

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State of California — The Resources Agency **Primary #** 36-6848
DEPARTMENT OF PARKS AND RECREATION **HRI#**
CONTINUATION SHEET **Trinomial** CA-SBR-6848H

Property Name: Segment of the Cram-Van Leuven Ditch
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DPR 523L (9/2013)

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CONTINUATION SHEET **Trinomial** CA-SBR-6848H

Property Name: Segment of the Cram-Van Leuven Ditch
Page 10 of 11

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Scott, M. B. 1977. Development of Water Facilities in the Santa Ana River Basin, California, 1810-1968: A Compilation of Historical Notes Derived from Many Sources Describing Ditch and Canal Companies, Diversions, and Water Rights. Report #77-398. On-file at the Feldhym Library California Room, San Bernardino, California.

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L7. Integrity Considerations:

Location: The ditch segment addressed by this update was first identified as a portion of the Cram-Van Leuven Ditch by Gallegos & Associates in 1993 (Gallegos & Associates 1993). This identification was based upon the presence of the Old North Fork Ditch at this segment location on the USGS 1899 Redlands, CA map. However, determining the actual location of the original Cram-Van Leuven Ditch as constructed in 1858; its permutations when upgraded; its later iterations when combined with the North Fork Ditch in 1865; and where the ditch was located after it fell out of necessary use post-1881 is a complicated task. This is due to a lack of maps dating to the period of initial construction, an extensive flooding event in 1862 that changed the flow of the Santa Ana River and affected the ditch, and an additional heavy flooding event in 1867. In addition, there is a time delay between the date when portions of the ditch became unnecessary and were effectively replaced by the high-line North Fork Canal (about 1881) and the earliest available maps showing the ditch (late 1880s and early 1890s).

In an effort to identify the location of the Cram-Van Leuven Ditch in Section 2 of Township 1 South, Range 3 West, L&L contacted several local libraries and local historians to obtain maps and information. While there is no map associated with the ditch on-file at the San Bernardino County Historical Archives (SB County 2017), L&L did obtain numerous maps of irrigation features in the Highland area from other resources. The earliest available map dates to 1888 and consists of the San Bernardino Sheet of an irrigation map prepared by the California State Engineering Department. This map depicts the Old North Fork Ditch in the immediate vicinity. The Old North Fork Ditch is an alternative name for the Cram-Van Leuven Ditch and refers to the combined ditch that existed following the flood of 1862 and after the two ditches were connected in 1865 (Scott 1977). In the 1888 map, the Old North Fork Ditch is shown to the north of the resource segment addressed by this update. This map additionally shows a very short segment of a ditch labeled as the C.&V.L. Ditch to the west of the segment and within the City Creek Wash (CSED 1888).

A map dating to 1891 and depicting irrigation systems in the east end of the San Bernardino Valley was obtained from the Highland Area Historical Society (HAHS) collection of research resources on water history. This map is similar to the 1888 map and it shows the Old North Fork Ditch to the north of the resource segment (HAHS 2017).

L&L also reviewed numerous archival aerial photographs and topographic maps (NETR 2017). The earliest maps date to the late 1800s and the very early 1900s. In 1895, the ditch is not shown or labeled and instead, a water feature is depicted that trends near the segment location and it extends between Plunge Creek in the north and the Santa Ana River in the south (NETR 2017). The next available topographic map is the USGS 1899 Redlands, CA map. On this map, the Old North Fork Ditch is shown trending much further south than on the 1888 and 1891 irrigation maps and it is depicted as extending to the location of the resource segment.

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State of California — The Resources Agency **Primary #** 36-6848
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CONTINUATION SHEET **Trinomial** CA-SBR-6848H

Property Name: Segment of the Cram-Van Leuven Ditch
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L7. Integrity Considerations (Continued):
This map represents the first time that this segment is shown in the location identified by Gallegos & Associates in 1993 (Gallegos & Associates 1993). This map may show a mapping error or an altered path or flow for the Old North Fork Ditch, as this map was generated almost 20 years after the ditch went out of necessary use post-1881. The ditch continues to be observable on topographic maps until 1955, when the ditch is no longer depicted and an unnamed, blue-line water feature is shown trending to the north of the segment. The water feature that has been recorded as 36-6848/CA-SBR-6848H appears on topographic maps beginning in 1969 and is observable on aerial photographs as early as 1938 (NETR 2017).

Several reports were also obtained during the research for 36-6848/CA-SBR-6848H that contained maps. In 1977, M. B. Scott compiled a history of water facilities in the Santa Ana River Basin. In this document, he produced a map documenting ditches and canals at the eastern end of the San Bernardino Valley that was based on the compilation of his research on water companies, diversions, and water rights. According to this map, the Cram-Van Leuven Ditch extends from the Santa Ana Canyon, to the Cram homestead in Section 3 (36-4220/CA-SBR-4220H/CPHI-31), and onto City Creek Wash. The ditch was connected to the North Fork Ditch after the flood of 1862 and at a point located immediately to the east of City Creek Wash. In the vicinity of the resource segment, the original Cram-Van Leuven Ditch (1858) is mapped as trending east-west to the north of modern Greenspot Road and to the north of the segment (Scott 1977).

Based on the review of the earliest available maps focused on irrigation features (1888 and 1891) the Old North Fork Ditch/Cram-Van Leuven Ditch was located in the northern half (N ½) of the southern half (S ½) of Section 2 of Township 1 South, Range 3 West in the vicinity of the segment. This places the ditch to the north of modern Greenspot Road and to the north of the resource segment. Later USGS maps dating to 1899 and into the early 20th century begin to depict the Old North Fork Ditch in the location of the recorded segment. This may be a mapping error where a drainage feature was identified as part of the ditch or a more southerly route for this portion of the ditch that came into use sometime after 1891. Thus, the segment of the ditch addressed by this update could not be verified as a segment of the Cram-Van Leuven Ditch as it existed from its date of construction until the date it fell out of necessary use (1858-1881). As such, the resource segment does not appear to follow the alignment of its period of significance and does not retain integrity of location.

Setting: The surrounding physical environment of this resource segment has been modified over time. When the Cram-Van Leuven Ditch was constructed in 1858, it conveyed water from the Santa Ana River to the Cram and Van Leuven family lands. In addition, the ditch brought water to one of the earlier settlements in the area that became known as Cramville and later East Highlands (ECORP 2006a; Highland 2006). The lands surrounding the burgeoning community were generally undeveloped at this time, including the lands surrounding the ditch segment. While the immediately adjacent lands remain undeveloped, the lands located to the north of Greenspot Road are currently developed with high-density residential housing that extends to the west, north, and east and into the surrounding foothills. Thus, the setting of this segment has been significantly altered.

Design, Materials, and Workmanship: This resource segment does not appear to follow the alignment of its period of significance and may reflect a later and more southerly route for the ditch that came into use sometime after 1891. As such, it does not retain integrity of its original design, materials, or workmanship.

Feeling and Association: Due to a lack of integrity in terms of location, setting, design, materials, and workmanship, this resource segment also lacks feeling and association. As discussed above, this segment possibly reflects a different route for the ditch that may have come into use after the end of its period of significance (post-1881). As such, it fails to convey its historic character and its association to events affiliated with its original construction in 1858.

Although the segment of 36-6848/CA-SBR-6848H may reflect a route for the Cram-Van Leuven Ditch/Old North Fork Ditch, this alignment was not present during the period of significance. As such, the evaluated segment does not reflect the period of time for which its significance is gained (1858-1881) and it fails to retain its integrity under any of the aspects outlined in National Register Bulletin 15 (NPS 1991).

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4/04

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary #: P36-006848
HRI#/Trinomial: CA-SBR-6848H **(UPDATE)**

***Resource Name or Number (Assigned by recorder):** CA-SBR-6848H
***Recorded by:** ECORP Consulting, Inc. ***Date:** 3/9/2006 ☐ **Continuation** ☒ **Update**

This historic archaeological site, consisting of a segment of the Cram-Van Leuven Ditch, was originally recorded in 1993 during a cultural resources survey conducted by Gallegos and Associates. At that time, the ditch was found to be an unlined excavation with a central deeper area and shallower terraces on each side. It was measured at 30 feet wide and 10 feet deep, overall (Eighmey et al. 1993).

During a cultural resources survey conducted in March, 2006 by Ecorp Consulting, Inc. for a proposed residential development, this segment of the ditch was field checked and found to be consistent with the description of the original recorders. However, the ditch is irregular in width and depth, varying from approximately 75 feet wide and 10 feet deep at the eastern end of the segment, to 30 feet or less wide and 5 feet deep farther west. At its west end, the ditch terminates where it is interrupted by a modern concrete flood control channel that runs north-south. Approximately 1,115 feet west of this point, the ditch is completely filled with soil and no longer exists for a distance of approximately 840 feet, where it reemerges again as an open ditch and continues to the west. In the areas where it is still open, the ditch is strewn with boulders and overgrown with shrubs and grass.

References

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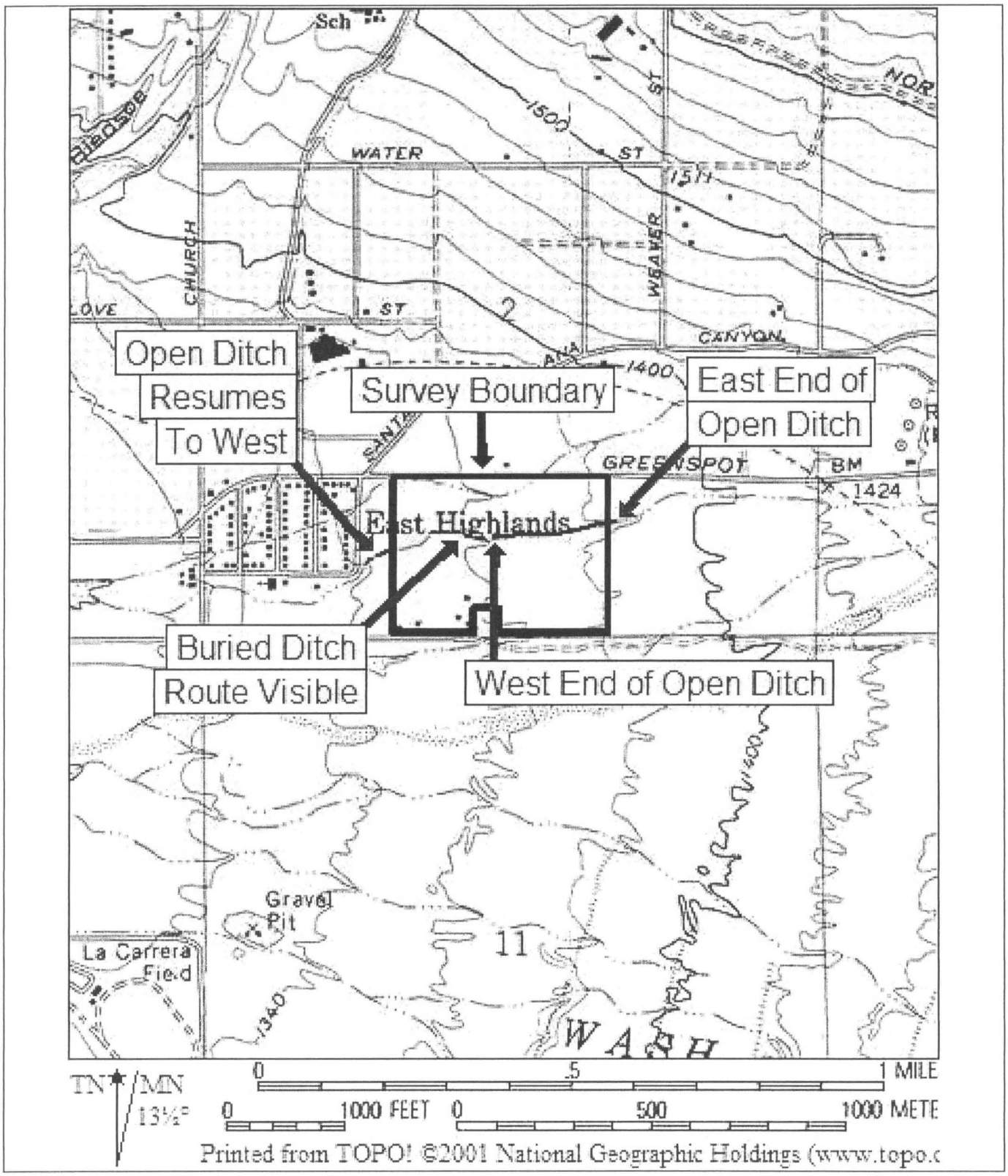
Cram-Van Leuven Ditch (CA-SBR-6848H), view toward west, 3/9/2006. Photo no. 27.

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP (Enlarged)

Primary #: P36-006848
HRI#
Trinomial: CA-SBR-6848H **(UPDATE)**

*Map Name: Redlands, Calif.
*Resource Name or Number (Assigned by recorder): Cram-Van Leuven Ditch
*Scale: Enlarged from 1:24,000
*Date of Map: 1996



* Required information

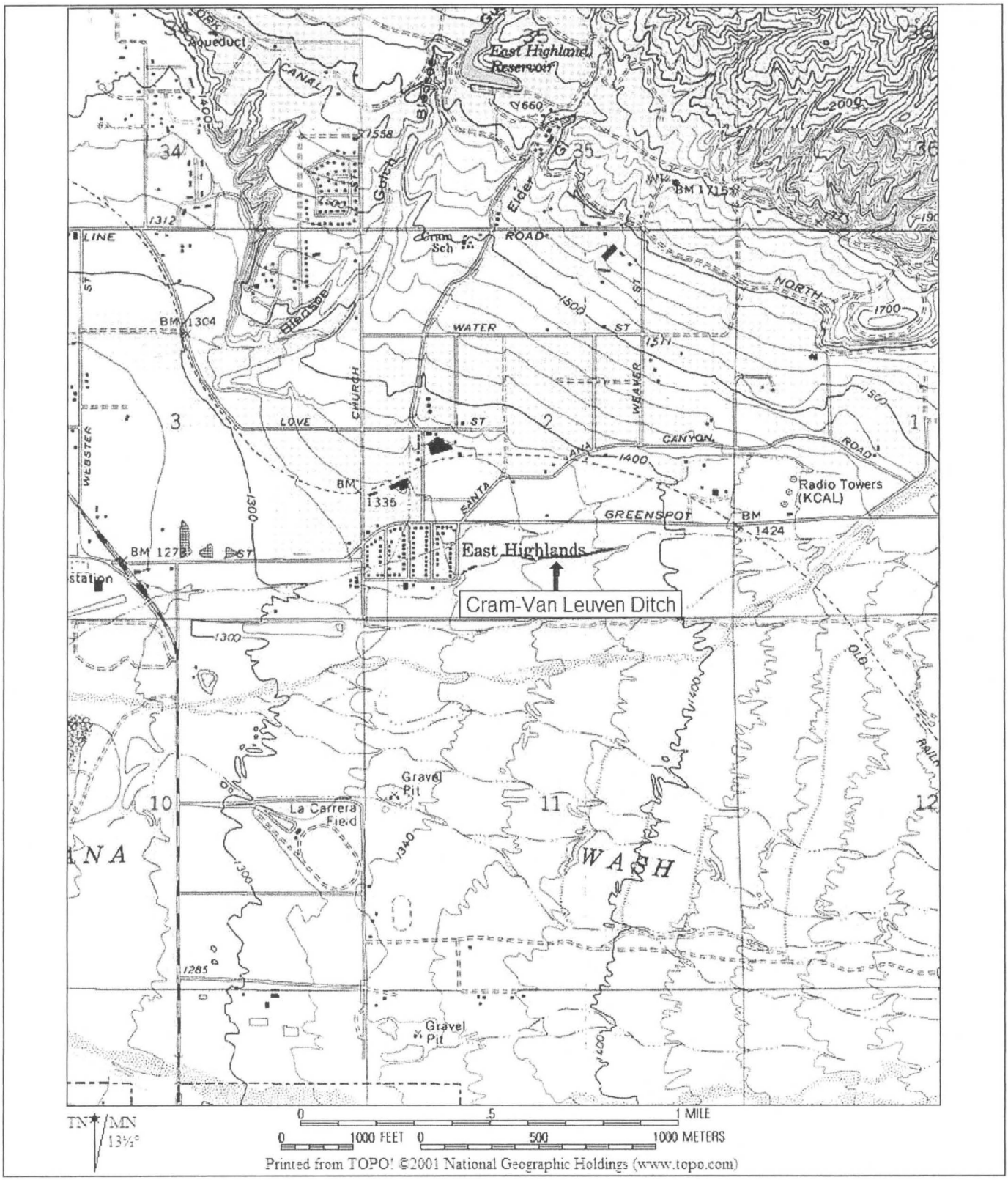
State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

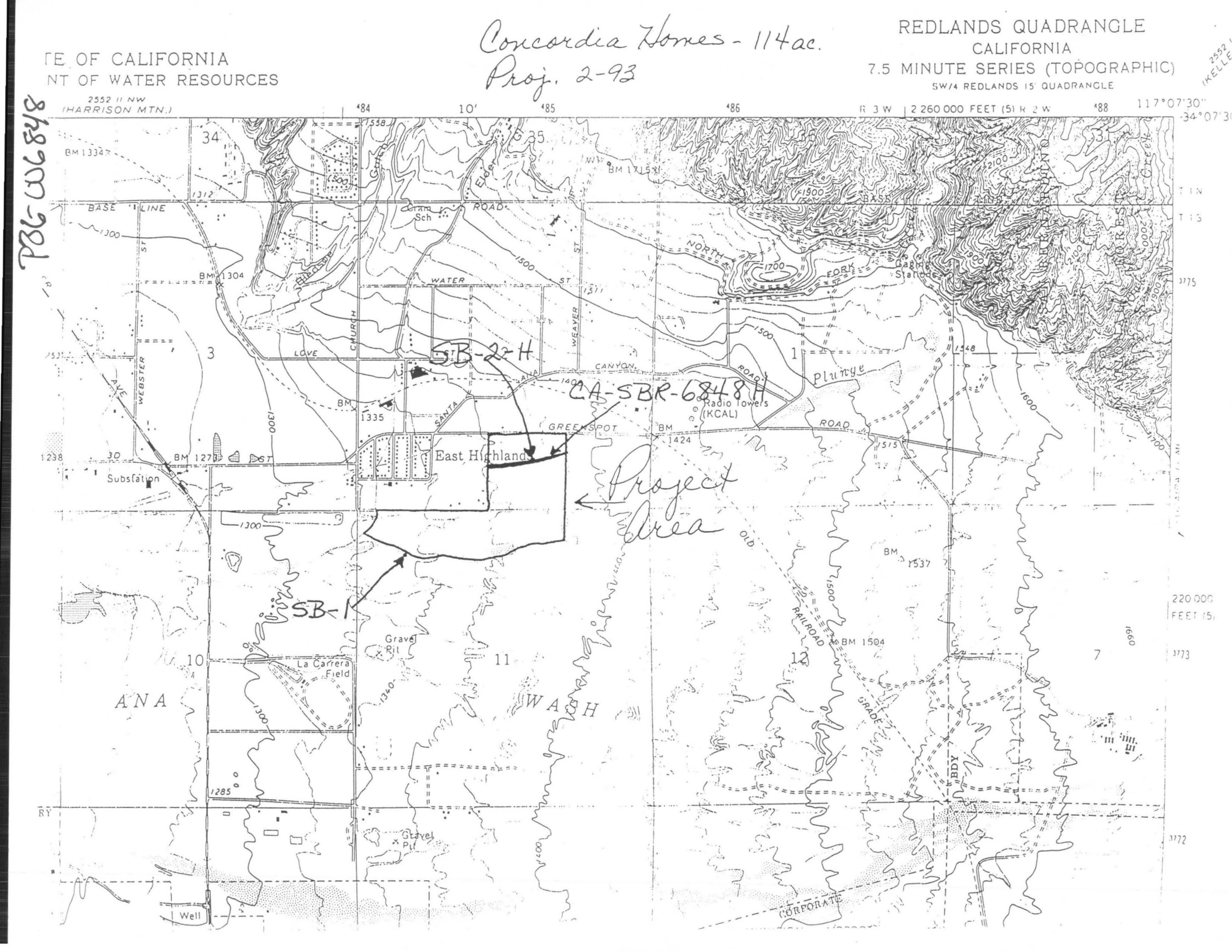
Primary #: P36-006848
HRI#
Trinomial: CA-SBR-6848H **(UPDATE)**

*Resource Name or Number (Assigned by recorder): Cram-Van Leuven Ditch

*Map Name: Redlands, Calif. *Scale: 1:24,000 *Date of Map: 1996



* Required information


Concordia Homes - 114ac.
Proj. 2-93
TE OF CALIFORNIA
NT OF WATER RESOURCES
REDLANDS QUADRANGLE
CALIFORNIA
7.5 MINUTE SERIES (TOPOGRAPHIC)
SW/4 REDLANDS 15' QUADRANGLE
2552 II NW
(HARRISON MTN.)
P&G W6848
SB-2-H
CA-SBR-6848H
SB-1
Project Area
East Highlands
Radio Towers (KCAL)
La Carrera Field
Gravel Pit
Gravel Pit
Well
Substation
BASE LINE
CHURCH ST
WEBSTER ST
WEBSTER AVE
WATER ST
LOVE
SANTA
GREENSPOT
CANYON ROAD
ROAD
Plunge
NORTH FORK
Cajon Station
Elder
Conn Sch
OLD RAILROAD GRADE
CORPORATE BDY
ANA
WASH
BM 1334
BM 1304
BM 1335
BM 1424
BM 1537
BM 1504
BM 1271
DST
1538
1531
1548
1515
1511
1285
1340
1312
1238
1521
3775
3773
3772
220 000 FEET
117°07'30"
34°07'30"

P36-006848

1063

State of California - The Resources Agency

DEPARTMENT OF PARKS AND RECREATION

ARCHAEOLOGICAL SITE RECORD

UPDATE

Permanent Trinomial: CA-SBR-6848H.

Temporary Number: _____.

Additional Designation: _____.

Agency Designation: _____.

1. County: San Bernardino.
2. USGS Quad: Redlands (7.5') 1967 (15') _____ Photorevised 1988.
3. UTM Coordinates: Zone 11 / 485180 Easting / 3774040 Northing Eastern Boundary/ 484720 /Easting / 3773940 Northing West Boundary( ).
4. Township: 1S Range: 3W; SE of the SW to SW of the SE 1/4s of Section 2 .
   Base (Mer) SB ( ).
5. Map Coordinates: 7.4 to 7.8 mm S, 34.5 to 32.5 mm E (from NW corner of map)
6. Elevation: 1360-1380 ft .
7. Location: Ditch is located approximately 200 feet south of Greenspot Road and exits approximately 600 feet south of Greenspot Road along 1700 feet of project area, and approximately four and one-half miles east of Highway 30 in the East Highlands area .
8. Prehistoric ___ Historic XX Protohistoric ____ .
9. Site Description: This irrigation ditch was originally excavated in 1858 and was named the Cram-Van Leuven Ditch after the two families responsible for providing the first i rrigation waters to the East Highlands area. .
10. Area: 16-30 m (N/S width) x 518 m (E/W length) ____ m^2 .
    Method of Determination: tape .
11. Depth: 1.3 to 3.1 m .
    Method of Determination: tape.
12. Features: The ditch itself is the only feature.
13. Artifacts: N/A .
14. Non-Artifactual Constituents: N/A .
15. Date Updated: March 10, 1993 .
16. Updated By: Jim Eighmey, Ivan Strudwick, Roxana Phillips, Petei McHenry, John Boughton, and Russell Collett .
17. Affiliation and Address: Gallegos and Associates, 2227 Faraday, Suite C, Carlsbad, CA 92008.
32. References: Cultural Resource Survey Report for the Concordia Homes Project, County of San Bernardino, California, Gallegos & Associates, March 1993.
33. Name of Project: Concordia Homes Cultural Resource Survey .
36. Photos: Yes Taken By: Petei McHenry.
37. Photo Accession Number: 2-93 On File At: Gallegos & Associates

PBL 006848

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

FEATURE RECORD

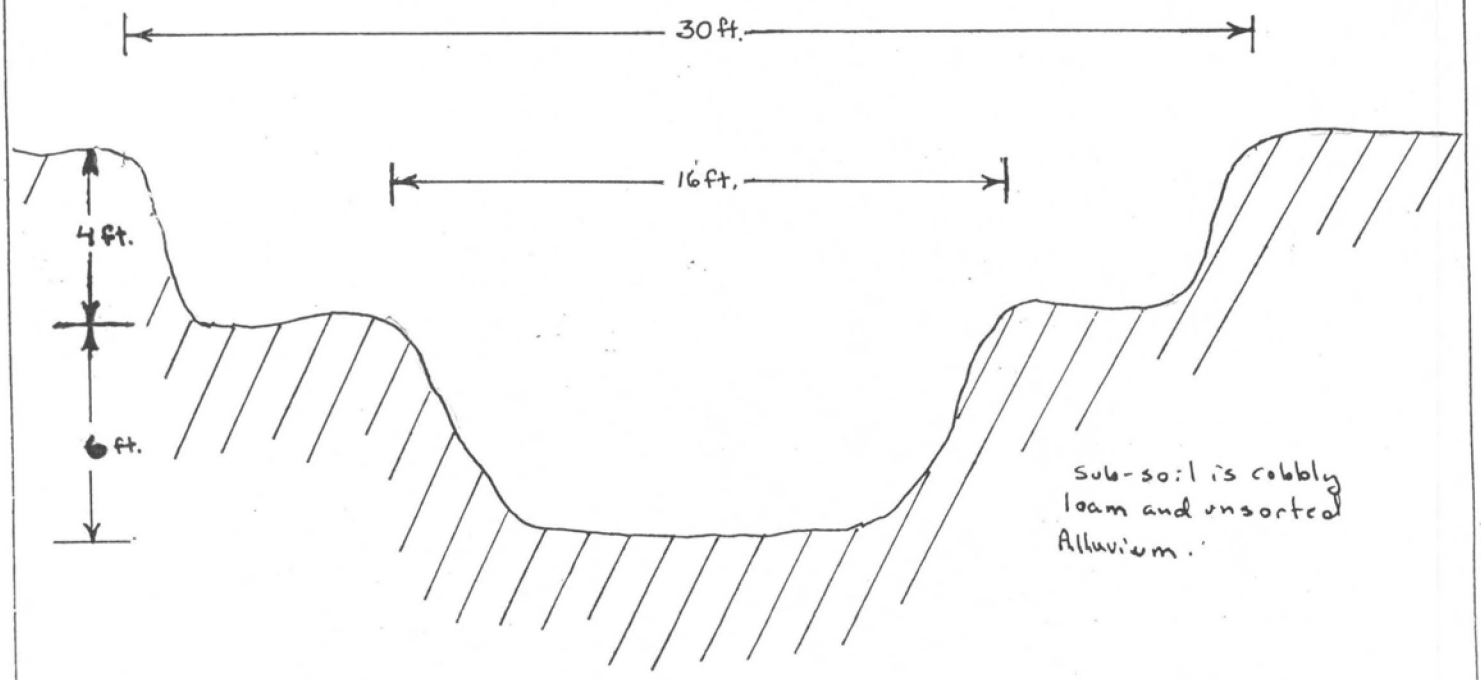
Permanent Trinomial: _____ / _____ (mo. / yr.)

Temporary Number: CA-SBR-6848 H

Page _____ of _____.

Agency Designation: _____

Type of Feature: Irrigation Ditch circa 1860's



Cross-section of Cram-Vanheuven Ditch

Construction Notes: The ditch is unlined and somewhat irregular in cross-section. The path of the ditch is not linear, but appears to move irregularly from the North-east to the south-west accross the project area. A series of trash dumps, some dating to the 1800's, are located nearby. No formal camps or dumps that can be directly tied to the construction of the ditch were noted. No dams or diversion structures were found within this section.

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State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

ARCHEOLOGICAL SITE RECORD

Permanent Trinomial: CA-SBR-6848H Supplement XX

Temporary Number:

Page 1 of 3

Agency Designation:

1. County: San Bernardino

2. USGS Quad: Redlands (7.5') XXXXXX (15') Photorevised 1988

3. UTM Coordinates: Zone 11 / 486120 Easting / 3774100 (TO EASTERN END) Northing ( )

4. Township 1S Range 3W ---- ¼ of ---- ¼ of N½ ¼ of SW ¼ of Section 1 Base (Mer.) SBBM ( )

5. Map Coordinates: 73 (TO EASTERN END) mmS 376 mmE (from NW corner of map) 6. Elevation 1424'

7. Location: This portion of the canal is located south of Greenspot Road, west of Plunge Creek and East of Weaver Street; identified on the USGS map as a blue line water course. ( )

8. Prehistoric ____ Historic XXXXX Protohistoric ____ 9. Site Description: Irrigation Canal tentatively identified as the Cram & Van Leuven Ditch (ca. 1858), though there is a possibility that this designation is erroneous. Maps for the Cram and Van Leuven Ditch indicate that it was north of Greenspot Road in this area. ( )

10. Area: 4m m(length)x ++ m(width) ____ m^2. Method of Determination: visual inspection ( )

11. Depth: varies cm Method of Determination: visual inspection ( )

12. Features: singel canal identified approximately 300 meters west of Plunge Creek (eastern extents destroyed) and consisting of a single elongated depression winding through the N½ of SW¼ (Section 1) ( )

13. Artifacts: modern materials impacting eastern portion of feature; other materials possibly buried. ( )

14. Non-Artifactual Constitutients: N.A. ( )

15. Date Recorded: May 29, 1992 16. Recorded By: Jeanette A. McKenna ( )

17. Affiliation and Address: McKenna et al., Whittier CA 90601 (310) 696-3852 ( )

DPR 422A (REV. 8/84)

P36-006848

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
ARCHEOLOGICAL SITE RECORD
DPD-OEA-003B (01/90)

Permanent Trinomial: CA-SBR-6848H / June 1992 (mo / yr)

Temporary Number: _____

Agency Designation: _____

18. Human Remains: none observed ( )

19. Site Integrity: portions impacted; portions destroyed; portions intact ( )

20. Nearest Water (type, distance and direction): Plunge Creek immediately to east

21. Largest Body of Water within 1 km (type, distance and direction): N.A. ( )

22. Vegetation Community (site vicinity): coastal scrub {Plant List ( )} ( )

23. Vegetation Community (on site): coastal scrub w/some intrusive trees {Plant List ( )} ( )

References for above: Munz 1977 ( )

24. Site Soil: sansy loam/cobbles ( ) 25. Surrounding Soil: sany loam/cobbles ( )

26. Geology: foothills ( ) 27. Landform: drainage floodplain ( )

28. Slope: slight to southwest ( ) 29. Exposure: open ( )

30. Landowner(s) (and/or tenants) and Address: unknown ( )

31. Remarks: Site was described by Greenwood & Associates as C & VL Ditch, but may be a privately developed ditch ... additional research recommended. ( )

32. References: McKenna 1992 ( )

33. Name of Project: Greenspot Road Pipeline Project (Water District) ( )

34. Type of Investigation: Phase I survey and archaeological monitoring program

35. Site Accession Number: N.A. Curated At: N.A. ( )

36. Photos: on file, McKenna et al. Taken By: Jeanette A. McKenna ( )

37. Photo Accession Number: N.A. On File At: McKenna et al., Whittier CA ( )

P36-006848

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

ARCHEOLOGICAL SITE LOCATION MAP

Page 3 of 3.

Permanent Trinomial: CA-SBR-6848H / June 1992 (mo. / yr.)

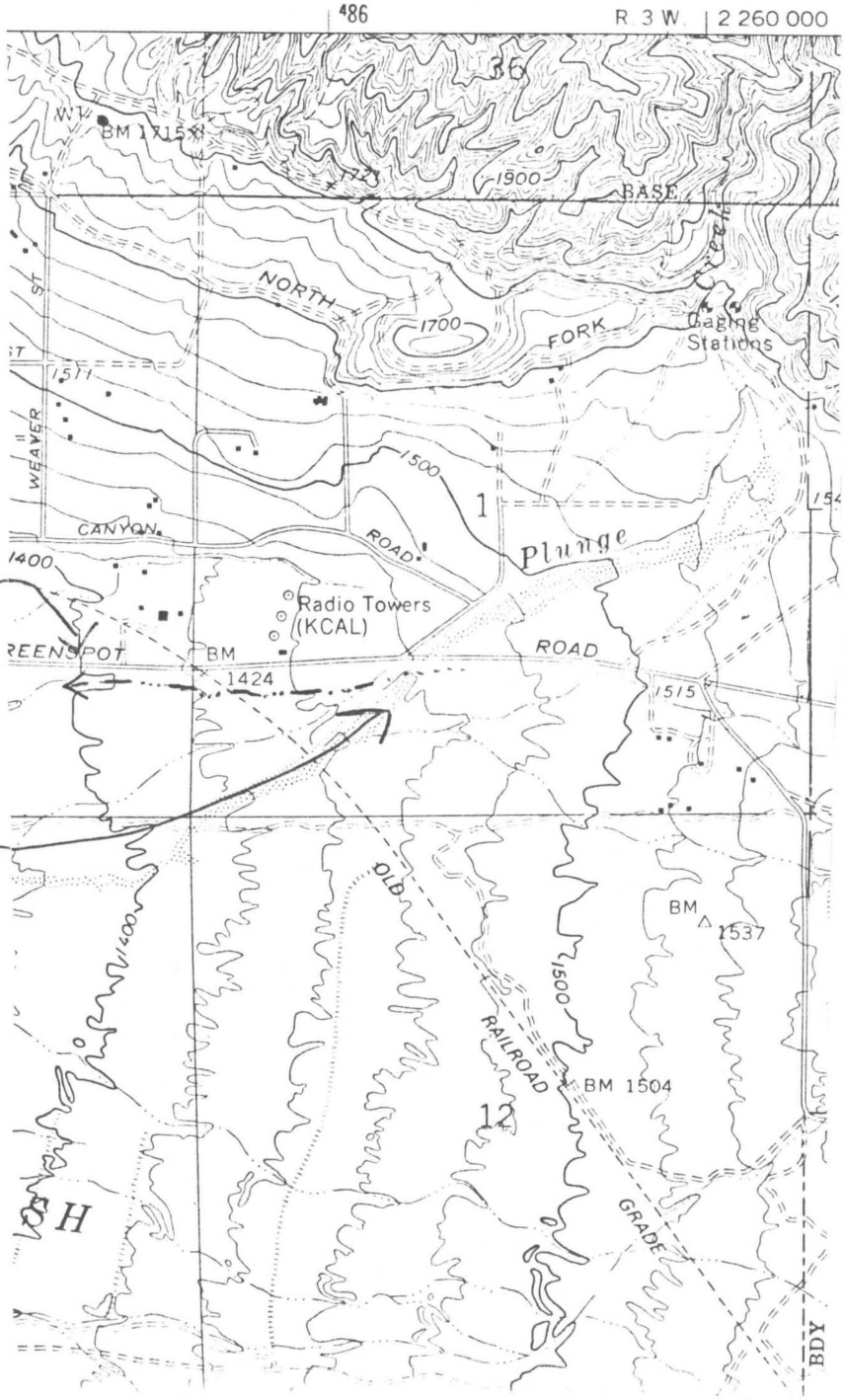
Temporary Number: _____

Agency Designation: _____

REDLAN

7.5 MINUTE

SW/4 R



CANAL LIKELY CONTINUES TO WEST. EASTERN PORTIONS DISTURBED OR DESTROYED

P36-006848

ARCHAEOLOGICAL SITE RECORD

PAGE: 1 OF 7 PERMANENT TRINOMIAL: CA-SBR-6848H
DATE OF ORIGINAL RECORD: N/A TEMPORARY NUMBER: R-FEH #2
DATE OF THIS FORM: 12/17/90 AGENCY DESIGNATION: PSBR-20H
1. COUNTY: San Bernardino
2. USGS QUAD: Redlands 7.5' 1967 REVISED: 1988
3. UTM COORDINATES: ZONE 11 483880 m Easting; 3773980 m Northing
4. TOWNSHIP 1S RANGE 3W, - , - , SE 1/4, SE 1/4, of Section 3
BASE MER. SBM
5. MAP COORDINATES: 77 mm S 287 mm E
6. ELEVATION: 1300 ft.

7. LOCATION: From Interstate 10 in Redlands, take the Orange Street exit north for 3 miles, turn right on 5th Street and continue for 0.4 mile. Site begins across from the east end of the Village Lakes housing tract, approximately 5 miles south of 5th Street and continues east to Church Street.

8. PREHISTORIC HISTORIC X PROTOHISTORIC

9. SITE DESCRIPTION: Plotted location of Cram and Van Leuven Ditch (ca. 1858). Irrigation complex with associated earthen ditches. Site contains an east/west feeder flume, two north/south earthen canals, one north/south concrete canal, a weir, a portion of a concrete covered flume, and a portion of a southwest/northeast earthen ditch (PSBR-20H).

10. AREA: 600 m (length) x m (width); m^2
Method: Odometer and tape.

11. DEPTH: METHOD: N/A

12. FEATURES: #1) An east/west linear, 0.3 mile long, U-shaped feeder flume on the south side of 5th Street. #1A) From the western north/south canal and extending approximately 40 meters (X)

13. ARTIFACTS: Six sun-colored amethyst glass fragments.

14. NON-ARTIFACTUAL CONSTITUENTS: Pepper trees to the south and east. Citrus orchard to the north.

15. DATE OF ORIGINAL RECORD: N/A DATE OF THIS FORM: 12/17/90

16. RECORDED BY: Gwendolyn Romani, Genevieve Head, Neal Kaptain, and Tricia Webb.

17. AFFILIATION: Greenwood and Associates, 725 Jacon Way,
725 Jacon Way, Pacific Palisades, CA 90272
(213) 454-3091

P36006848

ARCHAEOLOGICAL SITE RECORD

PAGE:2 OF 7 PERMANENT TRINOMIAL: SBR-6848H
DATE OF ORIGINAL RECORD: N/A TEMPORARY NUMBER: R-FEH #2 and PSBR-20H
DATE OF THIS FORM: 12/17/90 AGENCY DESIGNATION:

18. **HUMAN REMAINS:** None observed.

19. **SITE INTEGRITY:** Flume is largely intact, but filled in. Most of PSBR-20H has been destroyed. Other sections active as needed.

20. **NEAREST WATER:** Santa Ana River approximately 500 m. south.

21. **VEGETATION COMMUNITY (SITE VICINITY):** Citrus orchard to north.

22. **VEGETATION COMMUNITY (ON SITE):** Ruderal (old orchard removed).

REFERENCES FOR ABOVE: N/A

23. **SITE SOIL:** Sand and gravel loam.

24. **SURROUNDING SOIL:** Same as 23

25. **GEOLOGY:** Granitic.

26. **LANDFORM:** River terrace.

27. **SLOPE:** 0 28. **EXPOSURE:** Open.

29. **LANDOWNERS(S), (TENANTS), ADDRESS:** East Highland Ranch (lot is a future commercial building site).

30. **REMARKS:** There is a 1950-60's dump containing household materials, furniture, pipes, etc. south of site near west and south end of Church Street.

32. **REFERENCES:**-

33. **NAME OF PROJECT:** Metropolitan Water District Inland Feeder Cultural Resource Investigation.

34. **TYPE OF INVESTIGATION:** Preliminary surface reconnaissance

35. **SITE ACCESSION NO.:** **CURATED AT:**

36. **PHOTOS:** Overviews, B & W prints. **TAKEN BY:** Gwen Romani and Neal Kaptain.

37. **PHOTO ACCESSION NO.** N/A **ON FILE AT:** Greenwood and Associates

P36-006848

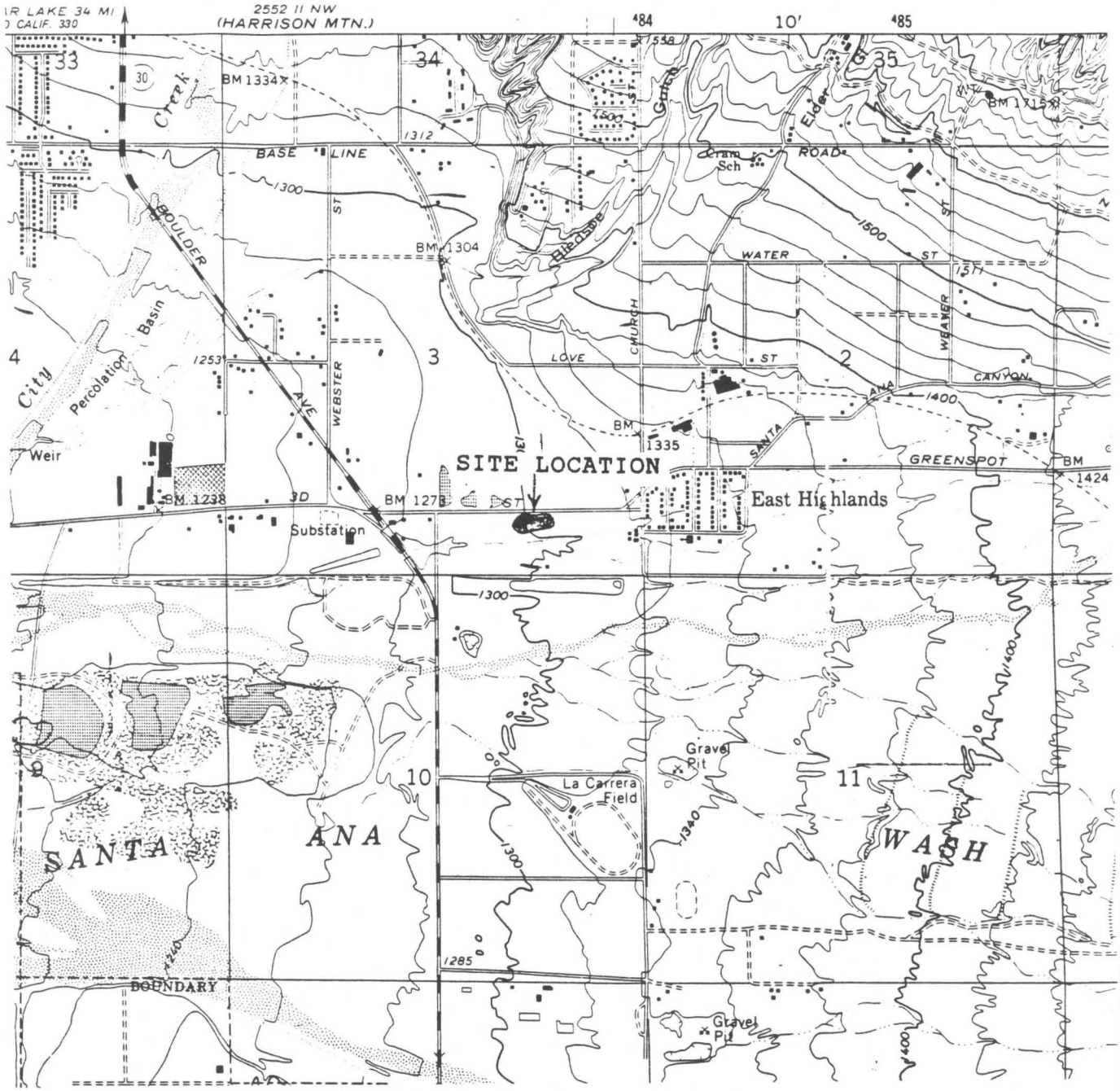
ARCHAEOLOGICAL SITE LOCATION MAP

PAGE: 3 OF 7
DATE OF ORIGINAL RECORD:

PERMANENT TRINOMIAL: SBR-6348H
TEMPORARY NUMBER: R-FEH #2
and PSBR-20H

DATE OF THIS FORM: 12/17/90
AGENCY DESIGNATION:

U.S.G.S. 7.5' QUADRANGLE: Redlands



P36-006848

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

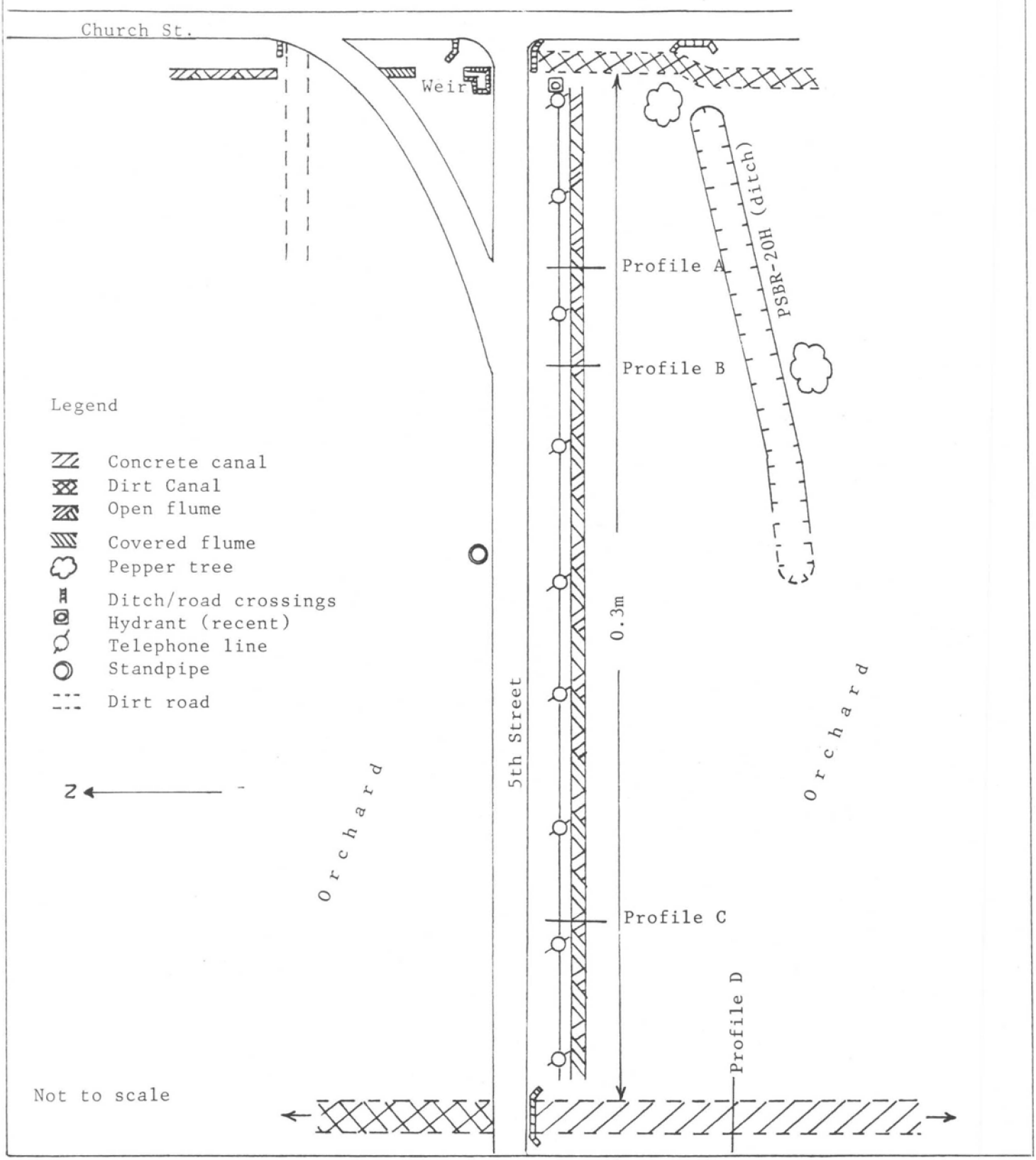
ARCHEOLOGICAL SITE MAP

Permanent Trinomial: SBR-6848H / _____ (mo. / yr.)

Temporary Number: Redlands FEH #2

Page 4 of 7.

Agency Designation: _____



DPR 422F (Rev. 8/82)

P36-006848

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

ARCHEOLOGICAL SITE MAP

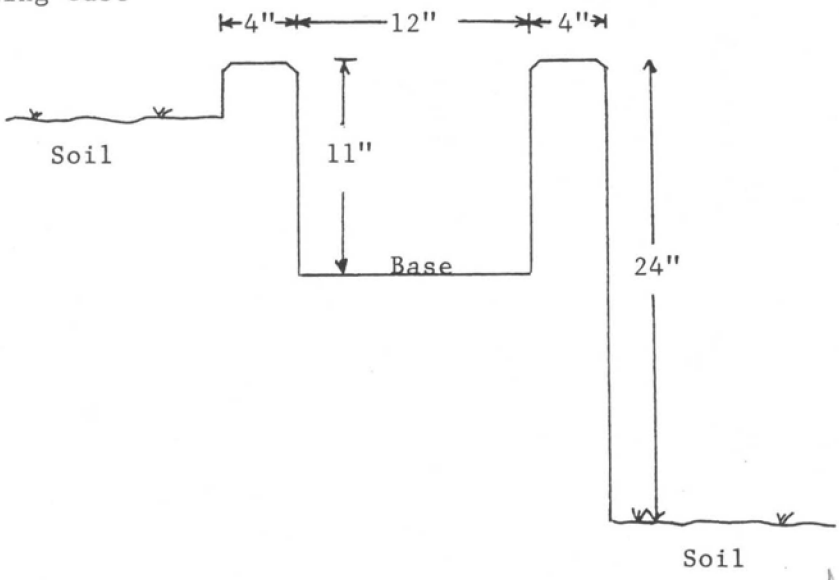
Page 5 of 7 .

Permanent Trinomial: SBR-6848H / _____ (mo. / yr.)

Temporary Number: Redlands FEH - #2

Agency Designation: _____

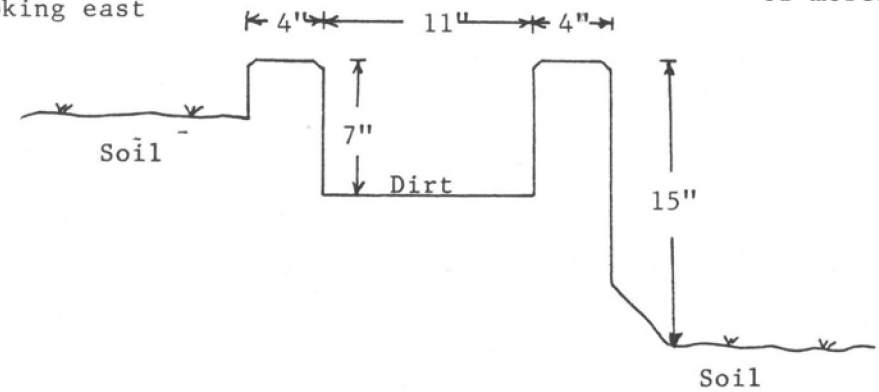
Profile A
Looking east





Poured concrete flume,
used to irrigate
adjacent field to the south.
South wall has small metal gates
every meter for water diversion.
Westernmost 40m is constructed
of mortared granite blocks.

Profile B
Looking east



P36-006848

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

ARCHEOLOGICAL SITE MAP

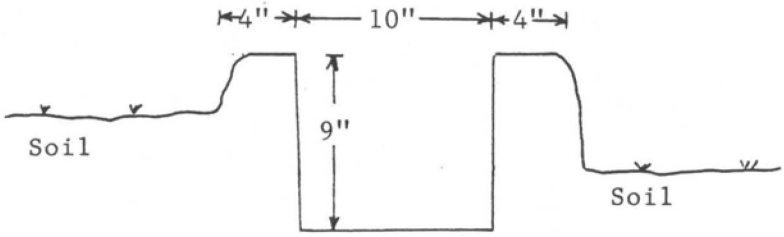
Page 6 of 7 .

Permanent Trinomial: SBR-6848H / _____ (mo. / yr.)

Temporary Number: Redlands - FEH - #2

Agency Designation: _____

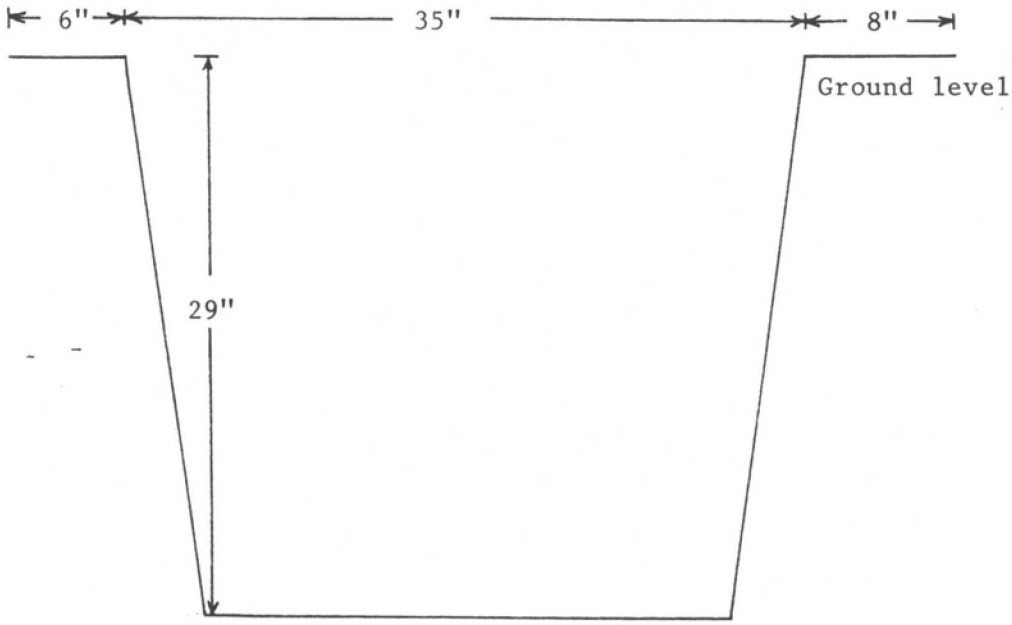
Profile C
Looking East





Flume made of mortared granite stones with metal irrigation gates every 5'.

Profile D
Looking East



P36-006848

ARCHAEOLOGICAL SITE RECORD - CONTINUATION

PAGE: 7 OF 7 PERMANENT TRINOMIAL: SBR-6848H

DATE OF ORIGINAL RECORD: TEMPORARY NUMBER: R-FEH #2 and PSBR-20H

DATE OF THIS FORM: 12/17/90 AGENCY DESIGNATION:

CONTINUATION

ITEM NO.

(12.) east, the flume is a split cobble with concrete base feeder flume (interior 10" wide), with south facing metal gates every 1.5 meters (see Profile C). #1B) is the remaining eastern portion of the flume which is constructed of poured concrete (interior 11-12") with south facing flow regulator gates at 1 meter intervals (see Profiles A & B). Most of the flume has been filled in by dirt and adjacent outside soil levels are high. The east and west end have either been covered by dirt or destroyed.

#2) Approximately 30 meters west of flume is a small (top interior 35") north/south concrete canal that extends from 5th Street south for approximately 100 meters (see Profile D).

#3) North of Canal #2 is a concrete culvert that passes under 5th Street and continues into a 3-4' wide x 1-2' deep earthen ditch that continues north for approximately 1/4 mile and drains the existing easterly citrus orchard to the south.

#4) A portion of PSBR-20H (Cram and Van Leuven Ditch - ca. 1858). It has been partially filled in and destroyed to the west and east by either the orchard or removal of the orchard (south of flume in vacant lot).

#5) At eastern end of flume is a somewhat V-shaped dirt canal (approximately 3' deep and 7' across at top) that runs north/south with a dogleg along the west side of and to the end of Church Street.

#6) North of #5 on an island between 5th Street and Church Street are two concrete weirs (one fenced, the other covered by grating).

#7) North of the weir is a covered flume that continues under 5th Street to #8.

#8) An open flume west of Church Street.

#9) A two lobed concrete standpipe north of 5th Street.

REPORT 76-11.16
SBR-6848 H
P36-006848

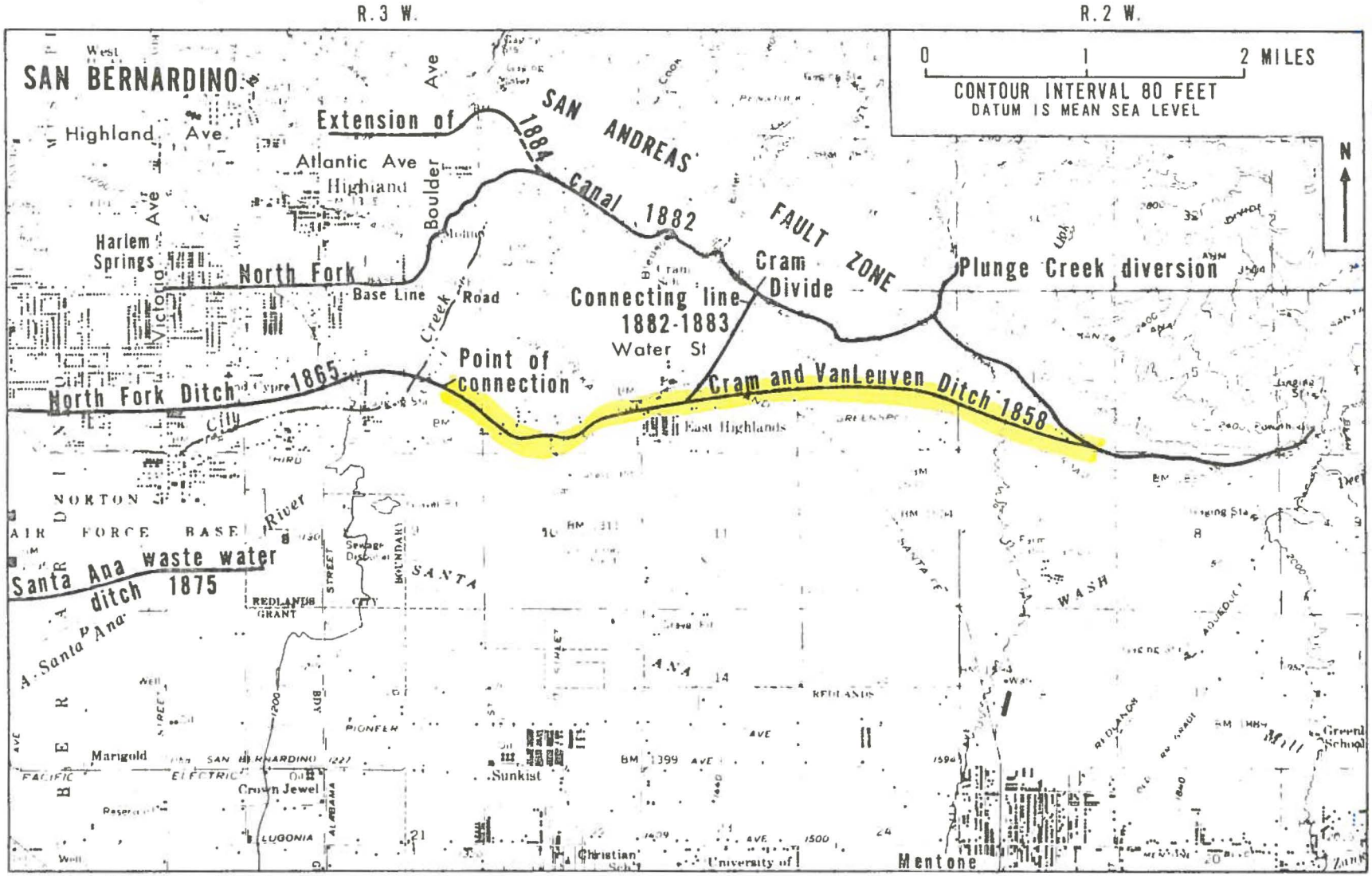


FIGURE 5.--Ditch built by Bishop Nathan C. Tenney in 1856; used as part of the Berry Roberts ditch in 1868.

Still another irrigation development in the general area took place at about this time. Lewis F. Cram and his brothers and Frederick Van Leuven and his sons, who had irrigated land serviced by the Mill Creek zanja within the Mormon-owned San Bernardino Rancho, acquired land lying near East Highlands, east of City Creek Wash. In 1858 they built an irrigation ditch from the Santa Ana River to their newly acquired land (Beattie, 1951, p. 3). The head of the ditch was at the mouth of the canyon, upstream from the original headworks of the North Fork and Timber ditches, and the ditch itself extended to City Creek, as shown in figure 6. This new diversion reduced the river flow at the headworks of the North Fork and Timber ditches, and at times there was insufficient water carried in those ditches to satisfy requirements.

That situation continued until August 1860, when a suit was filed against owners of the Cram and Van Leuven ditch by the majority of the Timber ditch owners (Beattie, 1951, p. 4). The suit did not go to trial but was settled by a compromise court judgment on June 18, 1861. That judgment gave owners of the Cram and Van Leuven ditch a right to one-sixth of the river flow at the mouth of the canyon (Hall, 1888, p. 147). It was the first water right in the Santa Ana River basin to be adjudicated by a court.

The next event of significance with respect to water development in the San Bernardino Valley was the calamitous flood of 1862. That flood had a major effect on the channel of the Santa Ana River. Prior to the flood the river, upstream from what is now Redlands, was a narrow meandering stream lined with alder, willow, sycamore, and cottonwood trees (Beattie, 1951, p. 5). The flood washed out the trees and deposited sand, gravel, and



Base from U.S. Geological Survey
Redlands 1954, 1:62,500

FIGURE 6.--Cram and Van Leuven ditch and North Fork Canal.

T56-00698

PB6-00 6848

boulders on the riverbed and on the adjacent inundated area. After the flood the river no longer followed a well-defined course, but instead ran in several channels below the mouth of the canyon, upstream from the common point of diversion for the North Fork and Timber ditches. The seepage loss through the beds of the new channels was sufficiently great to create a serious water deficiency at the heading of the ditches. Because of this condition the North Fork ditch was extended, as will be explained shortly, to a new heading nearer the mouth of the canyon. The location of the Timber ditch heading remained unchanged.

With regard to the acreage irrigated by the North Fork and Timber ditches, no official records were kept until 1864, when the newly created and elected San Bernardino County Water Commissioners recorded water rights, applications for ditch construction, and irrigated acreage. However, Hall (1888, p. 45) noted that water from the Timber ditch irrigated 50 acres in 1857. Records of the water commissioners showed that irrigated acreage in the Timber Settlement had increased to 242 acres by 1864, and to 369 acres by 1872 (Beattie, 1951, p. 2). The acreage irrigated in 1872 was probably the maximum acreage ever serviced by the Timber ditch, because after 1872 a gradual transfer of Timber ditch water rights to other localities occurred. No comparative figures for the North Fork ditch were recorded.

It was mentioned earlier that the owners of North Fork ditch had decided, after the flood of 1862, to extend their ditch upstream to a new heading at the mouth of the canyon. Furthermore, they realized that the cheapest way to accomplish that change would be through use of the existing Cram and Van Leuven ditch, which headed at the mouth of the canyon. Accordingly, in 1865, they requested permission of the owners of the Cram and Van Leuven ditch to make use of that ditch for transporting North Fork water to a connection to be built between the North Fork and Cram and Van Leuven ditches. In return the owners of the North Fork ditch offered to enlarge the Cram and Van Leuven ditch and share operating expenses. The Cram and Van Leuven ditch owners granted the request because of the advantage of having a larger volume of water flowing in the ditch. The ditch was enlarged, the connection to North Fork ditch shown in figure 6 was completed, and from that time on North Fork and Cram and Van Leuven water has been diverted through a common facility at the mouth of the canyon. As a result of this development, the Cram and Van Leuven ditch upstream from the connection with North Fork ditch, also became known as North Fork ditch.

Although the adjudication of 1861 (p. 14) gave the Cram and Van Leuven ditch owners a right to one-sixth of the water of the Santa Ana River at the mouth of the canyon, the respective rights of water diverted by the owners of the Timber and North Fork ditches were never formally established. Testimony in that litigation indicated an informal recognition that the Timber ditch was entitled to two-thirds and the North Fork ditch to one-third, of the remaining five-sixths of the water in the river. This division of flow between the Timber and North Fork ditches, in the ratio of 2:1, was approved by the water commissioners, and they issued an order to that effect on May 29, 1872 (Beattie, 1951, p. 4).

P36-006848

The owners of the North Fork ditch were dissatisfied with the commission's order; they claimed that the combined entitlement of the North Fork and Timber ditches should be divided equally between the two ditches. Furthermore, they were interested in maintaining their rights to use of the water, whereas the owners of Timber ditch were gradually selling their water rights to landowners on the south side of the Santa Ana River. The North Fork ditch owners pressed their case and on June 12, 1879, the two groups agreed to an equal division of water between the two ditches (Beattie, 1951, p. 4). That agreement was approved by the water commissioners. By this time, however, all Timber ditch water rights had been transferred to the Berry Roberts ditch (p. 22-25) and the Timber ditch was abandoned--probably about 1878 (Hall, 1888, p. 162-163).

With each passing year additional agricultural development took place in the San Bernardino Valley. In 1880 R. J. Cunningham, representing a number of Riverside investors, purchased a considerable acreage and North Fork water rights along City Creek, south of Harlem Springs (Beattie, 1951, p. 19). John Stone, one of Cunningham's clients, purchased rights to 43 hours of North Fork water through Cunningham and became the principal owner of the North Fork ditch. The land between Base Line Road and City Creek was planted to deciduous fruits and other crops, and by the second year most of the land was under cultivation.

A year earlier, in 1879, E. G. Judson and Frank E. Brown had become interested in the potential of the benchland above the Cram and Van Leuven and North Fork ditches for raising oranges, a crop with more value than the vegetables grown on the lowland (Beattie, 1951, p. 16). They purchased the claims of settlers living near Plunge Creek in sec. 35, T. 1 N., R. 3 W., and secured options on other parcels of land in the vicinity of sec. 35. To bring water to the benchland, Judson and Brown met several times with owners of the two ditches and offered to build a new high-line ditch for $1,000. The North Fork ditch owners opposed the plan, but by 1880, several owners of land on the bench had purchased lowland water rights and requested transfer of those rights to the benchland (Hall, 1888, p. 148). Judson and Brown and the owners of North Fork ditch rights signed an agreement, in the spring of 1881, for the construction of a high-line ditch to serve the benchlands.

North Fork Canal

Construction of the high-line ditch, known as the North Fork Canal, began in the autumn of 1881, and it was completed and in operation in April of the following year (Hall, 1888, p. 148). The North Fork Canal left the original Cram and Van Leuven ditch a short distance west of the east line of sec. 6, T. 1 S., R. 2 W., and followed the course shown in figure 6 to City Creek. To reach the area along Base Line Road, the canal crossed City Creek in a flume, then turned south, probably following along the route of the old City Creek-Base Line ditch of 1865. This route followed along Boulder Avenue to Base Line Road, then west to Victoria Avenue, as described later in the section of this report titled, "City Creek Water Company" (p. 107). Part of this route may be that followed by the present-day Snake ditch (fig. 41) that is

From Report 88-3.5

SBR-6848H
PSBR-20-H
PB6-006848

2:

IRRIGATION SYSTEMS FOR AGRICULTURAL LAND ON THE NORTH SIDE OF THE SANTA ANA RIVER

Cram and Van Leuven Ditch (1858)

The earliest of the irrigation systems emerging from Santa Ana Canyon was the Cram and Van Leuven Ditch. Prior to the digging of this ditch by Lewis Cram and his brothers and Frederick Van Leuven and his sons, all other ditches had their intake in the Santa Ana River, well below the mouth of the Upper Santa Ana River, outside the scope of this study (Figure 1). This was the first ditch to begin at the Santa Ana Canyon mouth, thereby reducing water lost across the alluvial fan due to percolation and evaporation. The ditch led from the canyon to Cram and Van Leuven lands at the base of East Highlands Mesa and continued west to City Creek wash in San Bernardino (Beattie 1951:3). Conflicts over water rights developed in August 1860 with a lawsuit being filed by Timber and North Fork Ditch owners (irrigation ditches located eight miles below Upper Santa Ana Canyon mouth). The case was settled in 1861 with the recognition of the right of Cram and Van Leuven to one-sixth of the flow of the river at the canyon mouth. This decision represented the first water rights dispute in the Upper Santa Ana River to be adjudicated by the courts (Beattie 1951:4).

The flood of 1862 reworked the river channel to such an extent that both downstream ditches, especially North Fork, were left largely useless. In 1865, the North Fork shareholders petitioned the owners of the Cram and Van Leuven ditch for permission to enlarge the Cram and Van Leuven ditch to carry the North Fork water (Beattie 1951:6). Consent was given for this arrangement as it was distinctly advantageous to both groups. The North Fork users would lose less water through riverbed seepage and Cram and Van Leuven water right holders would gain from the greater water flow through the joint canal. The ditch was enlarged and lengthened to reach North Fork lands. Nothing of the ditch remains today.

North Fork Ditch (1885-Present): SAC-33

By the early 1880s, water shareholders in the Cram and Van Leuven and North Fork ditches were limited to irrigating relatively low quality land on the edge of the Santa Ana River. The construction of a new canal at a higher elevation (highline) along the rugged base of the San Bernardino Mountains would maximize the potential acres which could receive irrigation water. A new canal would allow water to be carried onto the "benchlands" or mesas where oranges, a high value crop, could be grown. The North Fork Ditch represents the capital-intensive projects which were undertaken during the real estate boom of the 1880s.

From Report 81-5.7
~~SBR-20-H~~
~~P1063-5-H~~
SBR-6848H
P36-006848

aboriginal society had been disrupted by missionization and the resultant changes in land tenure to such an extent that it never really returned to its former state. Following a period of Mexican cattle ranches in the 1840's and the development of the valley by the Mormons in the 1850's, the beginnings of American agricultural development came, including the citrus industry and the development of irrigation systems, two areas of historical interest which are directly tied to the cultural resources of the East Highland Ranch area.

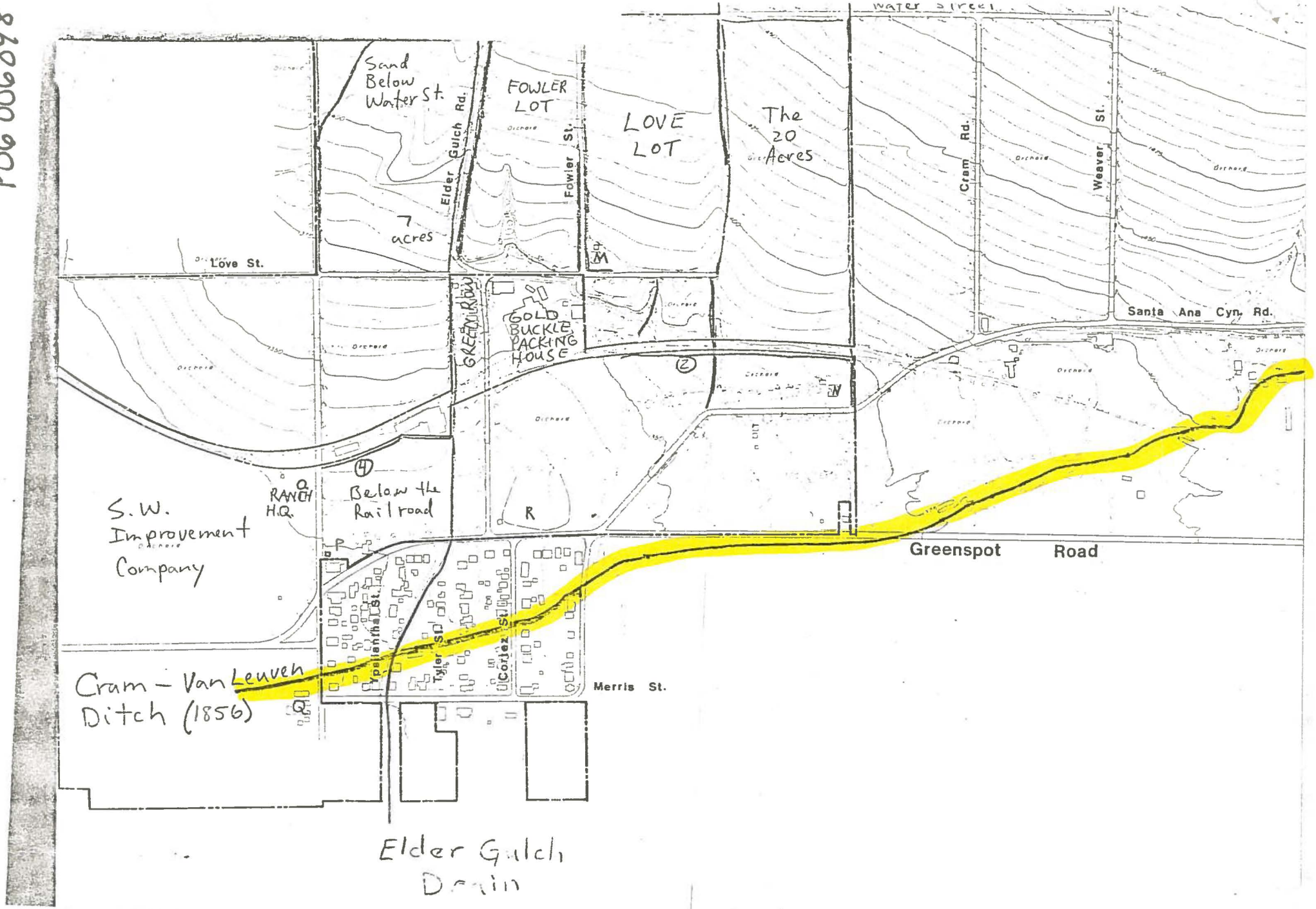
P1063-5-H

The first irrigation ditch to be built through the study area was known as the Cram-Van Leuven Ditch, since it was built by members of those two pioneer families to bring water to their lands from the Santa Ana River. This ditch was first dug in 1858, and ran from the mouth of the Santa Ana Canyon to their lands at the base of what is today known as the East Highlands bench (Beattie 1951:3). The Cram-Van Leuven Ditch crossed the southwestern portion of the project site, following a route south of the Santa Ana Canyon Road and passing through the present townsite of East Highlands before ending east of the City Creek Wash, approximately on what is now East Third Street.

There had earlier, in 1856, been a ditch called the North Fork Ditch which was downstream 8 miles from the Cram-Van Leuven Ditch, and which directed water from the river to a community called the City Creek Settlement, since it was located on the bank of City Creek, approximately on today's Sixth Street between Waterman and Sterling Avenues. When the river flooded in 1862, it ruined the intake of that ditch and so the people of the City Creek Settlement asked the Crams and Van Leuvens for permission to enlarge their ditch and extend it to serve City Creek area (Beattie 1951:6, Wright 1981).

In 1879, Redlands developers Judson and Brown became interested in the

P36-006848


Sand Below Water St.
Elder Gulch Rd.
FOWLER LOT
Fowler St.
LOVE LOT
The 20 Acres
Cram Rd.
Weaver St.
Water Street
7 acres
Love St.
GREEN RIBBON
GOLD BUCKLE PACKING HOUSE
Santa Ana Cyn. Rd.
RANCH H.Q.
Below the Railroad
S.W. Improvement Company
Greenspot Road
Tyler St.
Cortez St.
Merris St.
Cram – Van Leuven Ditch (1856)
Elder Gulch Drain

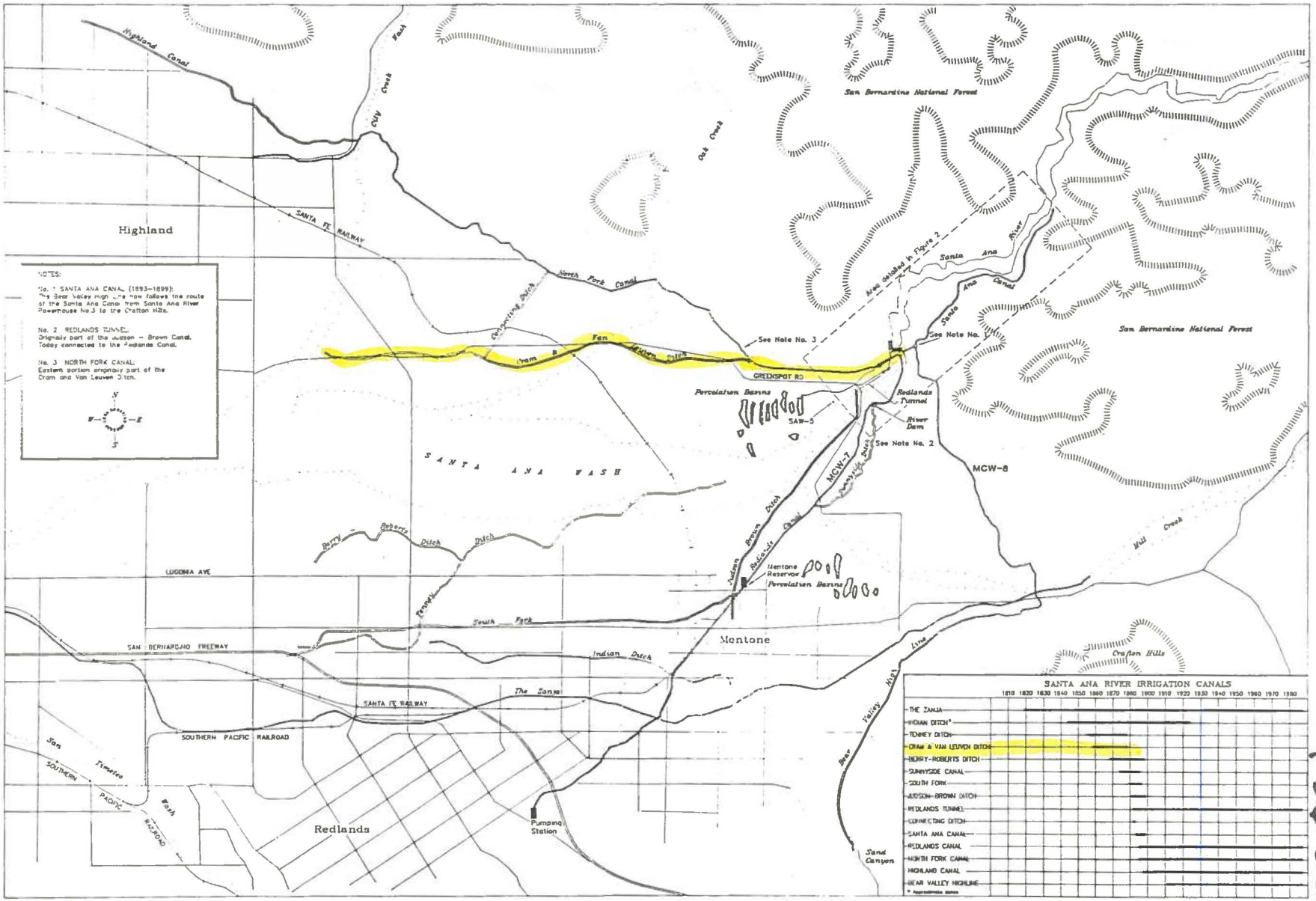
FROM REPORT 88-3.5

Figure 1

Historical Development of

SANTA ANA CANYON IRRIGATION PROJECTS

San Bernardino County, California



FROM REPORT 88-3.5

P88-00848

1066291 10/09

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # P-36-010820 (update)
HRI #
Trinomial CA-SBR-10820H (update)
NRHP Status Code 6Z

Other Listings
Review Code **Reviewer** **Date**

***Resource Name or #:** San Bernardino, Arrowhead & Waterman Railroad

P1. Other Identifier: Harlem Motor Road

***P2. Location:** ■ **Not for Publication** ☐ **Unrestricted** ***a. County:** San Bernardino

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad:** San Bernardino South **Date:** 1967 (PR 1988) **T** 1S;**R** 4W ; unsectioned **¼ of ¼ of Sec** ; S.B **B.M.**

c. Address: City: San Bernardino Zip:

d. UTM: Zone: 11 ; mE/ mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation: approx. 1,030-1,040 feet amsl
This segment is located in the downtown portion of the City of San Bernardino, in the vicinity of N. F Street, N. E Street, Stoddard Avenue, N. D Street, and N. Arrowhead Ave. between W. 3rd Street and W. Rialto Avenue.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

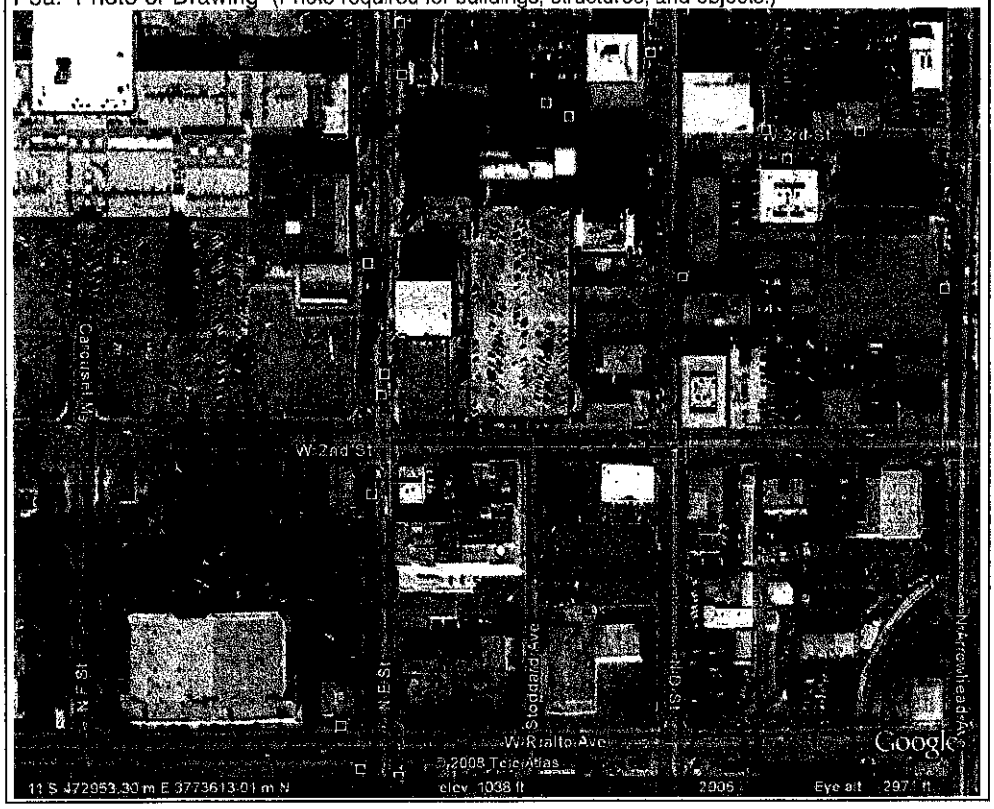
This segment of the San Bernardino, Arrowhead & Waterman Railroad/ Harlem Motor Road is located within a highly developed urban setting. The railroad grade appears to have been obliterated by the construction of downtown San Bernardino in the vicinity of E Street between 3rd and Rialto Streets (N. F Street, N. E Street, Stoddard Avenue, N. D Street, and N. Arrowhead Ave. between W. 3rd Street and W. Rialto Avenue.). No evidence of the railroad grade was observed.

Because of the alterations to the landscape and lack of any observed manifestation of the resource in the vicinity of N. E Street between 3rd and Rialto Street, the subject property does not retain requisite integrity to qualify for listing in the National or California registers.

***P3b. Resource Attributes:** (List attributes and codes) AH7- Railroad Grade

***P4. Resources Present:** ☐Building ☐Structure ☐Object ■Site ☐District ☐Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo: (View, date, accession #)
Aerial photograph of downtown San Bernardino (N. F Street, N. E Street, Stoddard Avenue, N. D Street, and N. Arrowhead Ave. between W. 3rd Street and W. Rialto Avenue). Google Earth 2008

***P6. Date Constructed/Age and Sources:** ■Historic
☐Prehistoric ☐Both

***P7. Owner and Address:**
Various

***P8. Recorded by:** (Name, affiliation, and address)
Caprice D. (Kip) Harper
SWCA Environmental Consultants
625 Fair Oaks Avenue, Suite 190
South Pasadena, CA 91030

***P9. Date Recorded:**
October 7, 2008

***P10. Survey Type:** (Describe)
Intensive

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.")
Cultural Resources Technical Report *sbX* E Street Corridor BRT Project, Cities of San Bernardino and Loma Linda, San Bernardino County, California (SWCA Environmental Consultants 2008).
Primary Record for P-36-010820 (Campbell and Swope 2002)

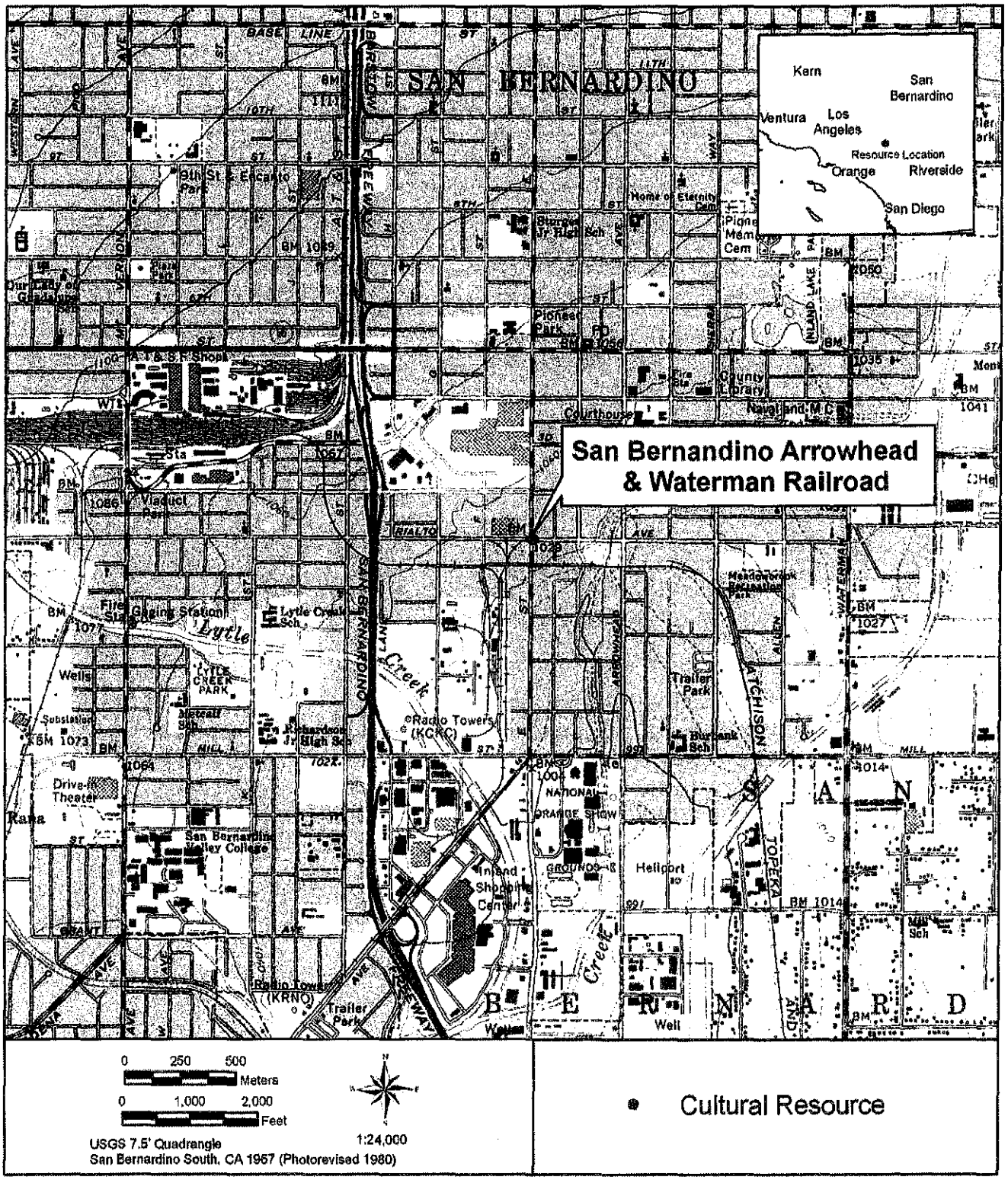
***Attachments:** ☐NONE ■Location Map ☐Sketch Map ☐Continuation Sheet ☐Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

Primary # P-36-010820 (update)
HRI#
Trinomial CA-SBR-010820 (update)

 ***Resource Name or #:** San Bernardino, Arrowhead & Waterman Railroad

***Map Name:** San Bernardino South, CA ***Scale:** 1:24,000 ***Date of Map:** 1967 (Photorevised 1980)



*Required information

1902

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # P36-010820
HRI #
Trinomial CA-SBR-10820H
NRHP Status Code
Other Listings
Review Code Reviewer Date

*Resource Name or #: PSBR-43-H, San Bernardino & Redlands Railroad

P1. Other Identifier: EA 482900

*P2. Location: ■ Not for Publication ☐ Unrestricted *a. County San Bernardino

*b. USGS 7.5' Quad San Bernardino South Date 1967 (photorevised 1980) T1S; R 4W; NE¼ of NW¼ of Sec.10 (Extrapolated section location – site is in an unsectioned area.); S.B.B.M.

c. Address N/A City N/A Zip N/A

d. UTM: Zone 11; 473220mE/ 3773550mN (at East end), 473300mE/ 3773510mN (at Eucalyptus rows), 473410mE/ 3773490mN (at West end)

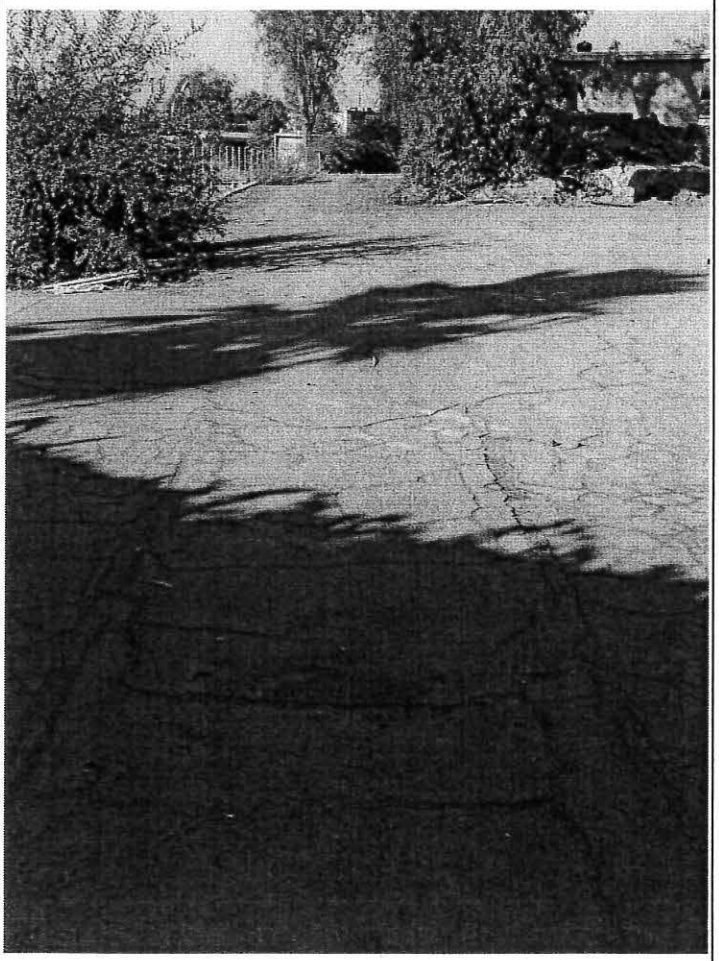
e. Other Locational Data: The site is located in the northern portion of Block 15 in downtown San Bernardino. The segment enters the project area at Mt. View Avenue, just south of the intersection Mt. View Avenue and Third Street. The segment then travels southwesterly curving to directly west by its intersection with Arrowhead Avenue, approximately half way between Second and Third Streets.

*P3a. Description: Segment of the San Bernardino, Arrowhead & Waterman Railroad known as the Harlem Motor Road line. Two segments of rail, totaling approximately two meters, are exposed at the easterly side of the project area as well as approximately five meters of raised pavement indicating buried rails at the same location. Eucalyptus trees line a short portion of the segment at around midway in the project area.

*P3b. Resource Attributes: AH7. Roads/trails/railroad grades HP30. Trees/vegetation

*P4. Resources Present: ☐Building ☐Structure ☐Object ■Site ☐District ☐Element of District ☐Other (Isolates, etc.)

P5a.



P5b. Description of Photo: Site overview, looking Southwest. September 17, 2002.

*P6. Date Constructed/Age and Sources: ■Historic ☐Prehistoric ☐Both

*P7. Owner and Address: California Department of Transportation

*P8. Recorded by:
Michelle Campbell and Karen K. Swope
California Department of Transportation
464 West Fourth Street 92401

*P9. Date Recorded: September 17, 2002

*P10. Survey Type: N/A

*P11. Report Citation: "Results of Phase II Testing, Analysis, and Evaluation" Applied Earth Works August 2000

*Attachments:
■Location Map ■Sketch Map ☐Continuation Sheet
☐Building, Structure, and Object Record
■Archaeological Record ☐District Record
■Linear Feature Record ☐Milling Station Record
☐Rock Art Record ☐Artifact Record
☐Photograph Record ☐Other (List)

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LINEAR FEATURE RECORD

Primary # 136-010220
HRI #
Trinomial SBR-10820H

Resource Name or #: PSBR-43-H, San Bernardino & Redlands Railroad

L1. Historic and/or Common Name: Harlem Motor Road Line

L2a. Portion Described: ☐ Entire Resource ■ Segment ☐ Point Observation **Designation:**

b. Location of point or segment: The site is located in the northern portion of Block 15 in downtown San Bernardino. The segment enters the project area at Mt. View Avenue, just south of the intersection of Mt. View Avenue and Third Street. The segment then travels southwesterly curving to directly west by its intersection with Arrowhead Avenue at the western end of the project area, approximately half way between Second and Third Streets.

L3. Description: The remaining evidence of the Harlem Motor Road line within the parcel can be seen in two parallel portions of exposed rail totaling approximately two meters. The tracks are spaced at 4'8". A continuation of the rail can be seen in the lifted and cracked pavement for approximately five meters. The remaining rail within the project area has been removed and/or paved over although the alignment, as adjacent properties developed around it while in existence, has remained visible. An additional element of the line that exists is a portion of eucalyptus rows that would have bordered the alignment. The trees are located midway in the recorded segment and are spaced 10 meters wide.

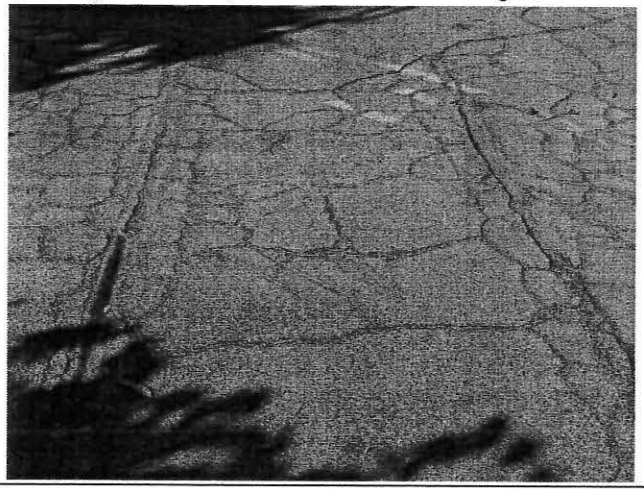
L4. Dimensions:

a. Width of Rail: 4'8"
b. Width between eucalyptus rows: 10 meters
c. Height or Depth
d. Length of Segment: 600 ft.

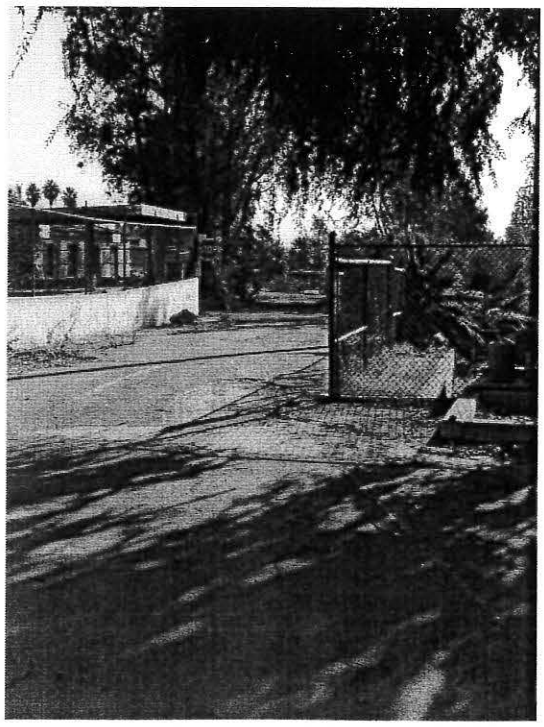
L5. Associated Resources:

L6. Setting: Much of the setting has been lost due to the development of the block. The parking lot has graded the western portion of the project area, which would have originally sloped north to south. Adjacent blocks reflect the natural aspect of the land. Additionally, many eucalyptus trees, which might have lined the length of the segment, have been removed.

L4e. Sketch of Cross-Section
Facing: southwest, at the East end of the segment



L8a.



L7. Integrity Considerations: This segment of the railroad lacks integrity due to its diminished state. It is unclear how much of the rail itself has been removed, as well as how many of the eucalyptus trees that would have paralleled the line. The site has been paved over and although the alignment is still apparent, it is truncated at both ends.

L8b. Description of Photo, Map, or Drawing Site overview looking northeast toward midpoint of segment and toward remaining eucalyptus trees.

L9. Remarks:

L10. Form Prepared by:
Michelle Campbell and Karen K. Swope
California Department of Transportation
464 West Fourth Street
San Bernardino 92401

L11. Date: September 18, 2002

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
ARCHAEOLOGICAL SITE RECORD

Primary # P36-010820
Trinomial SBR-10820H

*Resource Name or # PSBR-43-H, San Bernardino and Redlands Railroad

*A1. **Dimensions: a. Length** 180m. (600ft.) x **b. Width** 10m. (32.8ft.)
Method of Measurement: ■ Paced ☐ Taped ☐ Visual estimate ■ Other: map measurement
Method of Determination (Check any that apply.): ☐ Artifacts ■ Features ☐ Soil ■ Vegetation ☐ Topography ☐ Cut bank ☐ Animal burrow ☐ Excavation ☐ Property boundary ■ Other (Explain): map alignment
Reliability of Determination: ■ High ☐ Medium ☐ Low Explain:
Limitations (Check any that apply): ☐ Restricted access ■ Paved/built over ☐ Site limits incompletely defined ☐ Disturbances ☐ Vegetation ☐ Other (Explain): none

A2. Depth: surface ☐ None ■ Unknown Method of Determination: rail removal unknown

*A3. **Human Remains:** ☐ Present ☐ Absent ☐ Possible ☐ Unknown (Explain): N/A

*A4. **Features**: A portion of exposed rail is visible at the eastern end of the site segment. Here, the rails measure 4'8" in width. Although approximately two meters of rail is exposed, raised pavement indicates that there is a paved over portion of rail measuring five meters in length at the same location. Removal of the rail across the remaining portion of the segment is unknown.

Bordering the rail line itself is a portion of the eucalyptus rows that at one time possibly extended for the entire length of the segment. These rows are spaced at a width of ten meters and run for approximately 200 feet of the segment at its mid-section.

*A5. **Cultural Constituents**: none

*A6. **Were Specimens Collected?** ☐ No ☐ Yes No artifacts were found in association with the site.

*A7. **Site Condition:** ☐ Good ☐ Fair ■ Poor (Describe disturbances.): The site has been altered by pavement and development. At the east end of the project, pavement covers a portion of the rail line. The western half of the segment has been graded and developed into a parking lot.

*A8. **Nearest Water:** A branch of Warm Creek is located adjacent to the east end of the site segment.

*A9. **Elevation:** 1020ft. (210m.) amsl

A10. **Environmental Setting:** The site segment is located within a highly developed urban setting. The land adjacent to the north and south of the segment is a parking lot, which has leveled the originally north-south sloping ground that can be seen by the sloping road grade at Arrowhead Avenue. Vegetation around the site includes the eucalyptus rows that are associated with the site. The trees, *Eucalyptus camaldulensis* or Red River Gum, are located at the middle to mid-east portion of the segment, totaling approximately 200 feet. Other vegetation present at this location include Chinese Elm, Tree Tobacco (*Nicotiana glauca*), and fan palm (*Washingtonia* sp.). At the eastern end of the segment, California wild grape (*Vitis californica*) is growing along the fence line.

A11. **Historical Information:** The segment of rail line recorded here was owned and built by the San Bernardino & Redlands Railroad Company, formerly known as the East San Bernardino Railroad, which was established in 1888 by R.W. Button. The rail was originally 3' gauge for the steam lines in use at the time. The portion of rail was part of a line that ran north from the station located on 3rd between E and F Streets, known as the First Street Junction. This line was probably better known, however, for its use as part of the Harlem Motor Road. In 1891 the San Bernardino, Arrowhead & Waterman Railroad Company leased the line to complete the company's route to the Harlem Hot Springs. In June of 1901, Southern Pacific, who had been leasing the San Bernardino to Redlands line, bought out the entirety of the track owned by the San Bernardino and Redlands Railroad Company. In 1903, Southern Pacific conducted a rehabilitation of the First Street Junction and the associated line that included the recorded segment. At this point, the rail was upgraded to the standard 4'8" gauge. By January 1904, Southern Pacific no longer used the line and station and maps from this time also indicate that a more direct route was used, putting the line out of use.

*A12. **Age:** ☐ Prehistoric ☐ Protohistoric ☐ 1542-1769 ☐ 1769-1848 ☐ 1848-1880 ■ 1880-1914 ☐ 1914-1945 ☐ Post 1945 ☐ Undetermined **Describe position in regional prehistoric chronology or factual historic dates if known:**.

A13. **Interpretations**:

A14. **Remarks**:

A15. References:

Swett, Ira
1967 Transactions of the Orange Empire. Interurban Press, Glendale.

United Stated Geological Survey
1980 7.5' Quadrangle San Bernardino South, Calif., Photorevised.
1967 7.5' Quadrangle San Bernardino South, Calif.

A16. Photographs: Original Media/Negatives kept at: Caltrans District 8.

***A17. Form Prepared by:** Michelle Campbell **Date:** September 19, 2002
Affiliation and Address: Department of Transportation, District 8 – MS 825, 464 W. Fourth Street, 6th Floor, San Bernardino, CA 92401-1400

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

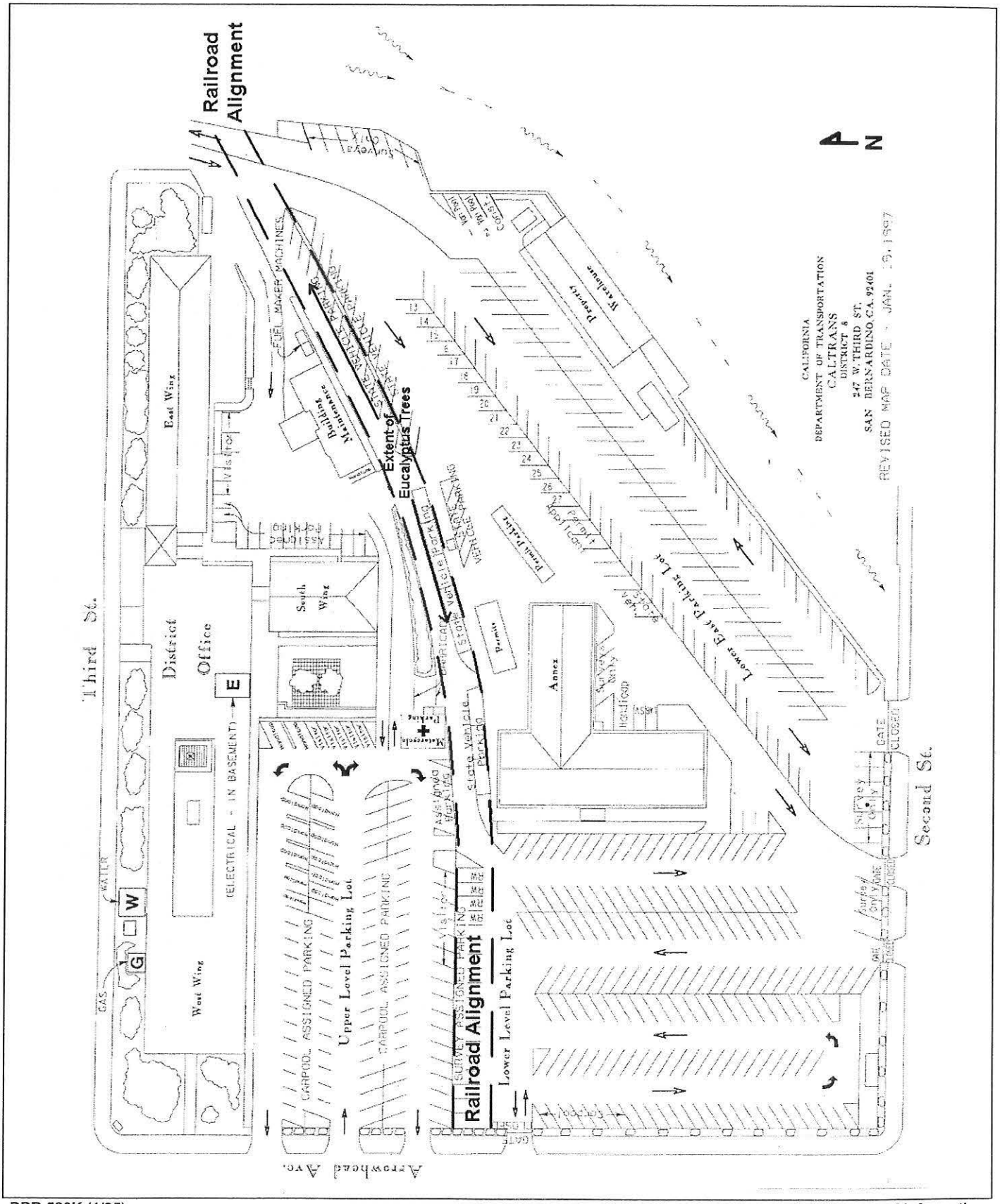
SKETCH MAP

Primary # 136-610820
HRI# See 10620 H
Trinomial

*Resource Name or #: PSBR-43-H, San Bernardino & Redlands Railroad

*Drawn By: Michelle Campbell

*Date: September 19, 2002



*Required information

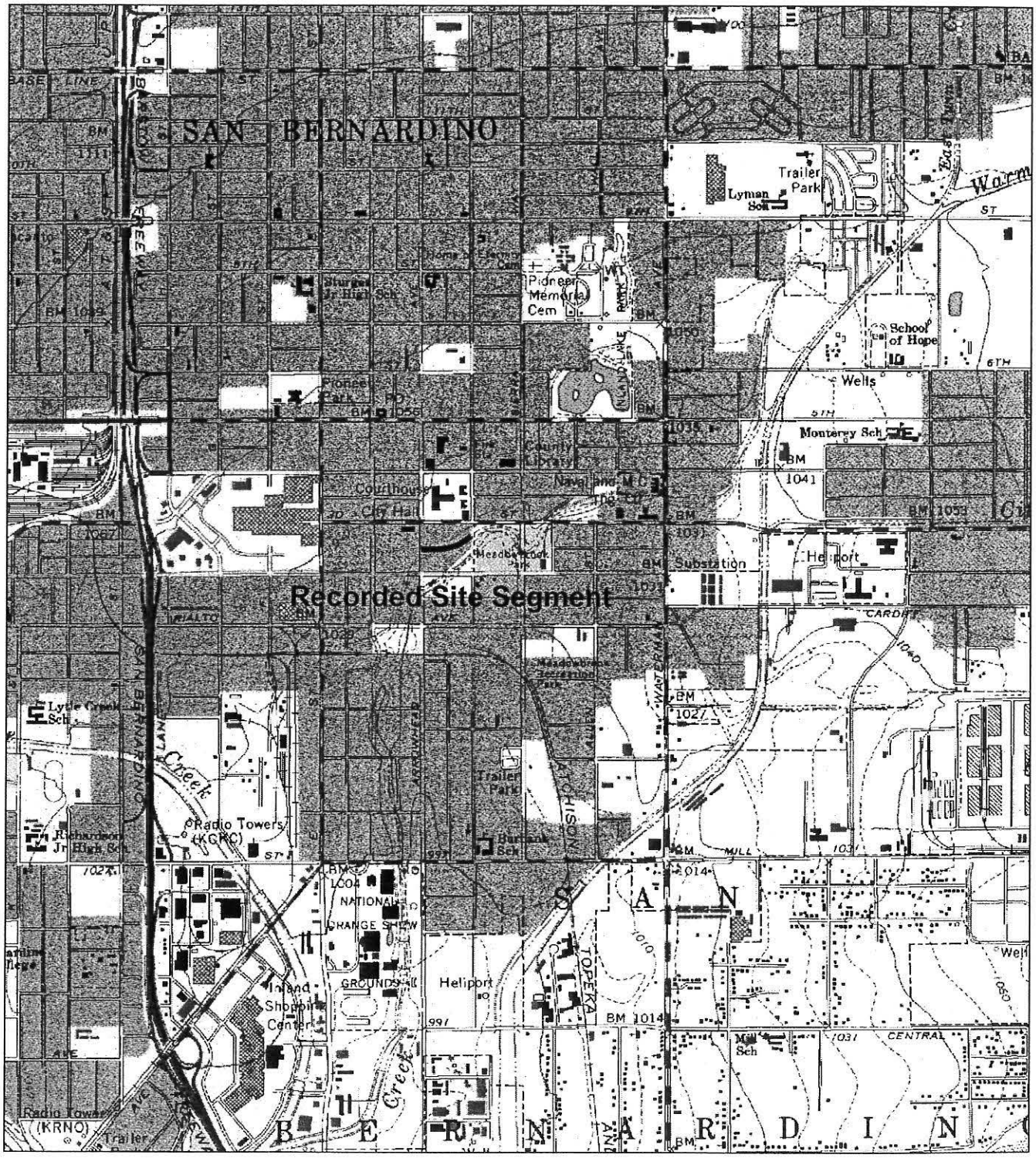
State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary # P36-010920
HRI# _____
Trinomial SBR-10920H

*Resource Name or #: PSBR-43-H, San Bernardino & Redlands Railroad

*Map Name: San Bernardino South *Scale: 1:24,000 *Date of Map: 1967 (Photorevised 1980)



*Required information

PSBR – 43-H

FULL-SIZE MAP AT CENTRAL LIBRARY

Chapter 2

The Harlem Motor Road



SBVT's line to Harlem Hot Springs and Highland began life as a three foot gauge steam motor line. Under the corporate name of "THE SAN BERNARDINO, ARROWHEAD & WATERMAN RAILROAD COMPANY" this company was incorporated in California on October 28, 1887, for a term of 50 years. Its principal office was located in San Bernardino, and it was capitalized at $100,000---one thousand shares at par value of $100 each.

Prior to its incorporation, preliminary surveys had been run and the route practically agreed upon. During the month of November, 1887, the committee appointed to obtain station grounds and terminals purchased 6.25 acres at the southeast corner of 7th & A Sts., San Bernardino, for the sum of $7,250. As an extra bonus, there were two artesian wells on this property.

Rolling stock for the narrow gauge road was picked up hither and yon. A fourteen ton motor engine was purchased in San Francisco for $4,700; two open, double truck passenger cars were bought for $1,750 each from lumber camps in Northern California. From the same sources came 16,000 ties and 80,000 feet of lumber. The Joliet Steel Company furnished 350 gross tons of forty pound steel rail, thirty feet in length, with the necessary track fastenings; this cost the company $56 per ton, set down in San Bernardino. All this material arrived in February and March of 1888.

Meanwhile, the company obtained a franchise from the Board of Supervisors of San Bernardino County for a narrow gauge steam railroad from San Bernardino to Harlem Hot Springs by way of the eastern extension of 6th St.; the route left the San Bernardino city limits at 6th St. & Waterman Ave. This franchise had a term of fifty years.

To transport passengers from 7th & A Sts. to downtown San Bernardino, the company secured a franchise for a horse car line on June 5, 1888. This franchise authorized a line on 7th St. from the company's steam road station at A St. to C St., south on C to 4th St., west on 4th to I St. and the Santa Fe Depot.

Construction work on the steam road to Harlem began on January 12, 1888, and continued without interruption to its completion in June of that year. The grand opening took place on June 19, 1888 with much fanfare.

During October and November, 1888, the company constructed its engine house, machine shop and stables on its depot grounds at 7th & A Sts.

July, 1888, saw construction work start on the horse car line to the Santa Fe Depot; this work was completed in November. The company purchased two horse cars at $1,100 each, and for motive power obtained two mules. The line was placed in operation immediately.

Next came the so-called "City Extension" by which the steam service was to be extended into downtown San Bernardino. Built in December of 1890 and January of 1891, the extension proceeded south on A St. from 7th and ultimately reached First St. by means of private right of way; here the road switched onto the track of the Redlands motor road (The San Bernardino & Redlands Railroad Company) and utilized that company's trackage and station grounds. By this means, passengers of the Harlem motor road were able to stay on the cars and were landed in the station on Third St. between E and F Sts., the same station grounds which later served both Southern Pacific and Pacific Electric for many years.

The depot was officially named "The Union Motor Depot" at this time, serving as it did all three of the city's motor lines: to Redlands, to Riverside, and to Harlem.

Thus after January, 1891, the route followed by the Harlem motor road was as follows:

From the Union Motor Depot southerly through the station grounds to First St., east on First St. to Harlem Jct., then via a short curving right of way to A St.; then the cars went north on A St. to the company's station at 7th St., opposite Pioneer Cemetery, and curving easterly and southerly, reaching the city limits on private way at 6th St. & Waterman Ave. From this point the line continued easterly alongside the eastern extension of 6th St. and on Rathbun St. to Pepper Ave. (formerly Victoria St.), thence northerly on Pepper Ave. to Base Line St. where it curved to the right to the center of a 23 acre tract at Harlem Springs, located at the southeast corner of Pepper Ave. & Base Line St. A spur track about 300 feet long led across Base Line St. from Pepper Ave., curving to the left into neighboring Rabel Springs, at the northwest corner of Pepper & Base Line.

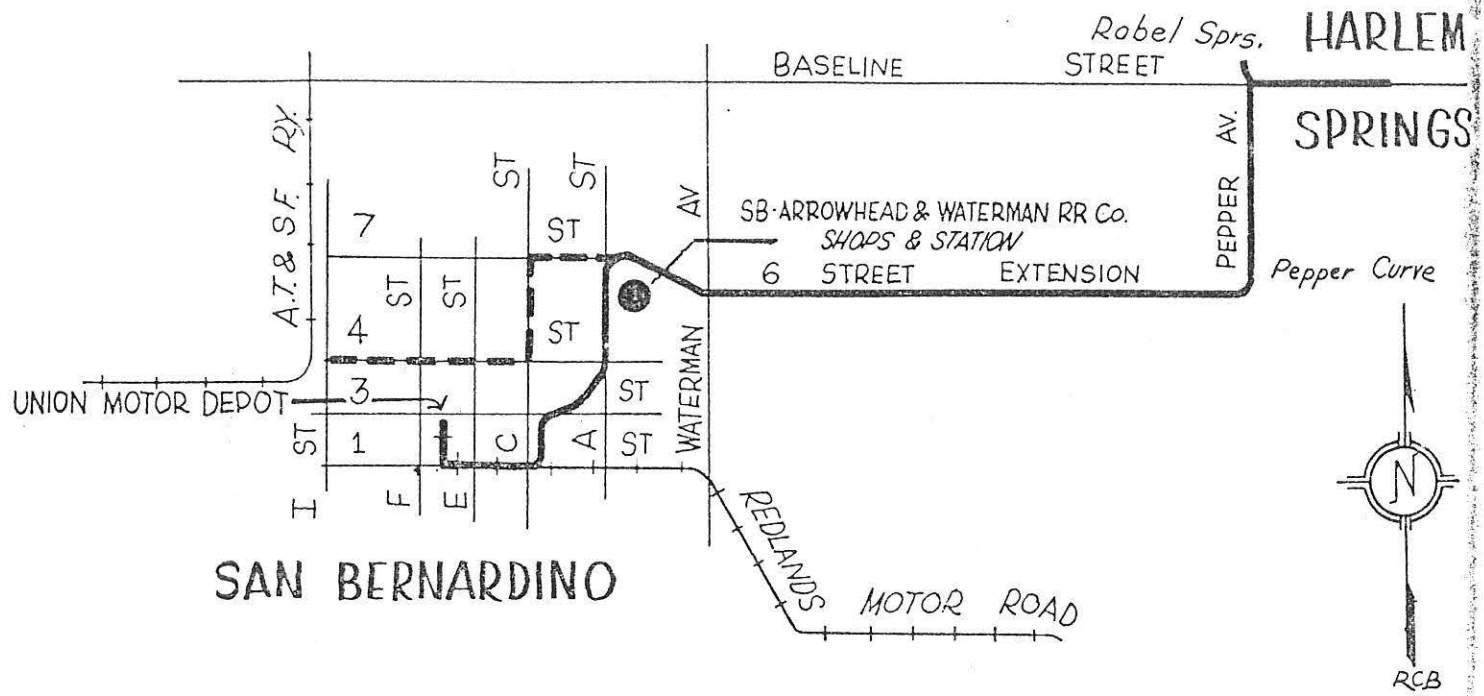
The total miles of railroad owned by this company was approximately six.

Alas for the high hopes of the promoters! The road failed to prove profitable, perhaps due to the voracious appetite of engine No. 1 for coal---expensive on the Coast. On March 6, 1893, operation of the motor line was suspended pending repairs to equipment; spasmodic operation was carried on during the following year.

After through operation to the Union Motor Depot was established, the horse car line starved for passengers, and on a certain day in January, 1894, was abandoned as being unprofitable. At least part, if not all, of the rails were taken up and sold by the company.

5pp

From TRACTIONS OF THE ORANGE EMPIRE, by Ira Swett



San Bernardino, Arrowhead, and Waterman Railroad Co.

Map by Richard C. Berk

Broken Line: Horse Car Route

In September, 1894, the company filed papers in insolvency proceedings, but the management remained in control until November 30, 1895, when the stockholders sold all stock to the Kohl Brothers and John Andreson. From this time on, this road was known familiarly as "The Kohl Road."

The Kohl Brothers, Oscar and Walter, were sons of the town banker of Centralia, Illinois. In 1892, Oscar was married in San Bernardino to Emma Andreson, daughter of the president of a local bank; Walter went out to act as best man, and proceeded to fall in love with Emma's beautiful sister, Frances---whom he later married. Although engaged in banking, Walter's heart was in railroading, and he spent much of his two weeks in San Bernardino observing the comings and the goings of the Harlem motor. He spent a lot of time, after the road suspended operations, analyzing its problems, in the hope that he might be able to remedy the woes.

Walter found that much of the trouble was due to the high cost of coal, which in those days was brought to Southern California by boat from Australia at a price of from $14 to $18 a ton. At this rate, engine No. 1 consumed $320 worth of coal monthly---much too expensive for a short line such as the Harlem motor road.

In 1895, Walter Kohl returned to San Bernardino and married Frances Andreson. He was then 25 years old, and was deeply interested in taking over the operation of the Harlem motor. His two big obstacles were the high price of coal and the scarcity of passengers.

The first problem was successfully solved by converting No. 1 to the use of oil fuel. The big Santa Fe shops at San Bernardino were then converting many steamers to oil, and Kohl succeeded in meeting the Santa Fe man in charge of the conversion scheme; he finally designed a three-inch oil burner suitable for installation on No. 1 which worked perfectly and cut the cost of fuel to but $110.

Walter's second problem was solved by the upgrading of Harlem Springs into a first class resort. The Kohl Brothers and their brother-in-law, John Andreson, took over the mortgage on the moribund springs and spent $10,000 on improvements.

A $10,000 mortgage on the Harlem motor road was held by The First National Bank of San Bernardino, and the cashier of that bank was Oscar Kohl; from him Walter learned that the financial backers would be delighted to unload the mortgage onto anyone who would assume the terms. Thus the brothers, after some additional studying of the situation, became railroad owners. Walter became president, John vice president, and Walter the secretary and general manager.

One nice thing about these financial responsibilities: all the capital for taking over the railroad and the springs was advanced by the father of the brothers; they never had to issue a bond or pledge or exchange a single share of stock.

At Harlem Springs, where water gushed up out of the earth at a temperature of 122 degrees, the Kohls constructed bath houses, a plunge of concrete which was half covered over for winter bathing, and a two story combined dancing and roller skating pavilion and restaurant-offices. To make the springs really spectacular in those days of the gas-lit era, the Kohls installed two ten-horsepower gas engines and generators for electric lights. Topping it all off, a steam merry-go-round was added. Thus the Kohls had the lures and confidently anticipated a never-ending flow of cash customers.

Engine No. 1, "Betsy," had been out of service for two years; Kohl and a Santa Fe shop apprentice overhauled her and the cars. Six laborers were hired to put the track in order. The oil valve was placed on the engineer's side of No. 1 so the engine really was a one-man affair; however, to comply with the law, a boy was hired to sit on the fireman's side. Walter Kohl served as conductor, and a boomer brakeman was hired.

Recalling those days, Walter Kohl later said, "I hired a young ticket agent; his name was Paul Shoup. He must've been pretty good, for he later became president of the entire Southern Pacific system." Paul, a San Bernardino boy, had learned telegraphy by practising the art after working hours; Shoup held forth at the Union Motor Depot each night, and working the other key was Bert Osbun at the Redlands end.

At the time the Kohls took control, the Harlem motor road owned engine No. 1, plus five coaches, one of which was a passenger-baggage combo. All were extremely crude in appearance, and give the impression of having been contrived by joining horse cars together. Some freight cars were also on the roster.

Came a fine Sunday and the Kohls opened their railroad for business. A hot-air balloon ascension and its usual accompanying parachute jump had been advertised for Harlem Springs that day, and the populace turned out en masse. All five coaches plus two flat cars fitted with improvised seats were coupled behind No. 1, and every seat was taken. Business was so good that special events were held at Harlem Springs every Sunday thereafter, weather permitting. Kohl was forced to rent a motor and two coaches from SP's Redlands motor road to handle the increased business.

Under the Kohl management, the Harlem motor road had no inflexible schedules to keep. If a passenger wanted off at a crossroads, or at the path leading to his farm, that was where the train stopped. Was there a cow placidly grazing on the track? Then the motor stopped and the cow was gently led to one side. During the entire six years that Kohl operated the Harlem motor, not one accident of any kind marred his record. Since the company carried no insurance of any kind, this was doubly fortunate.

By the end of 1896 traffic had so increased that it was decided to purchase a second engine. The Kohls found what they wanted in an oldtimer from The Los Angeles & Redondo Railroad. She was extremely odd in appearance, having an upright submerged flue boiler with 150 pounds of pressure, two upright engines, six by eight cylinders geared two to one to the front drivers, and could haul one coach at thirty miles an hour. Costing only $50 monthly to operate, this engine, promptly dubbed "The Pepper Box," proved just right for the less demanding winter schedules. "The boys in the SP yards looked upon her as a huge joke," Walter Kohl later recalled, "and they fairly howled when she breezed past. Nevertheless, No. 2 did her share in keeping the line on a paying basis."

But time and improved technologies caught up with the Harlem motor road in 1902. By that time the potential of an electric railway line to Harlem and on to the town of Highland had impressed itself not only on the management of SBVT but on other potential rivals as well.

The first public announcement that SBVT was considering building a line to Highland was in the papers on March 24, 1902. It was revealed that at a recent meeting of the company's board of directors it had been decided to extend the No. D St. line over Base Line St. to the neighboring town. On July 9th of that year, SBVT requested a franchise on Base Line St. from D St. to Waterman Ave.

Thus goaded, the Kohls had to move. On July 14th, 1902, they asked for a franchise permitting them to substitute electricity for steam as motive power on their road, and to extend the line to Highland. On the same day, SBVT had its surveyors busy in the Highland area.

On August 15, 1902, SBVT was granted a franchise for a line east on Base Line St. from D St. to Waterman Ave. This took the line to the city limits. On October 13, 1902, SBVT requested from the Board of Supervisors a franchise on Base Line St. easterly to Palm Ave., then north to Highland.

The next move was up to the Kohls and they were not long in countering; five days later the brothers announced it was their intention to spend up to $30,000 to convert their Harlem motor road to electricity and extend it to Highland. To reach downtown San Bernardino, they asked for a franchise from A & 4th Sts., west on 4th to E St., and south to a terminus at 3rd St.

Enters now a third party, The San Bernardino Power Company. Eager to get into the electric railway business, and well financed to do so, this corporation proceeded to bid in a franchise for an electric railway line on Pacific Ave. in Highland from Central to Boulder. This occurred on November 2, 1902. Thus no less than three separate electric railway lines were projected into Highland from San Bernardino.

The Kohls next turned their attention to the big job of standard gauging the existing motor road, preparatory to electrifying it. For some months they had had a gang of laborers busy in the mountains cutting poles and ties; on November 13, 1902, they actually began work; on this date, a force started widening the track gauge in San Bernardino; it was given out that the Kohls would be running their standard gauge electric cars to Harlem and Highland within ninety days after receiving their franchise.

In December the Kohls placed their order for cars and other necessary materials. By the middle of January, 1903, the Kohls were reported to have a large force of men working at Harlem Springs; poles had been delivered and were being erected, with wire stringing to begin any day. By January 22nd they had completed the work of widening the motor roadbed into Highland; they had held a franchise covering a road between Harlem Springs and Highland for several years.

It was at this critical time with SBVT, the Kohls and The San Bernardino Power Company all jockeying for the electric railway line to Highland that the first inkling of a compromise leaked out. The all-important 4th St. franchise in San Bernardino, by means of which the Kohls planned to get their cars downtown to 3rd St. & E, was sold to SBVT for but $50. As the newspapers put it, "This indicates the SBVT and the Kohls have reached an agreement."

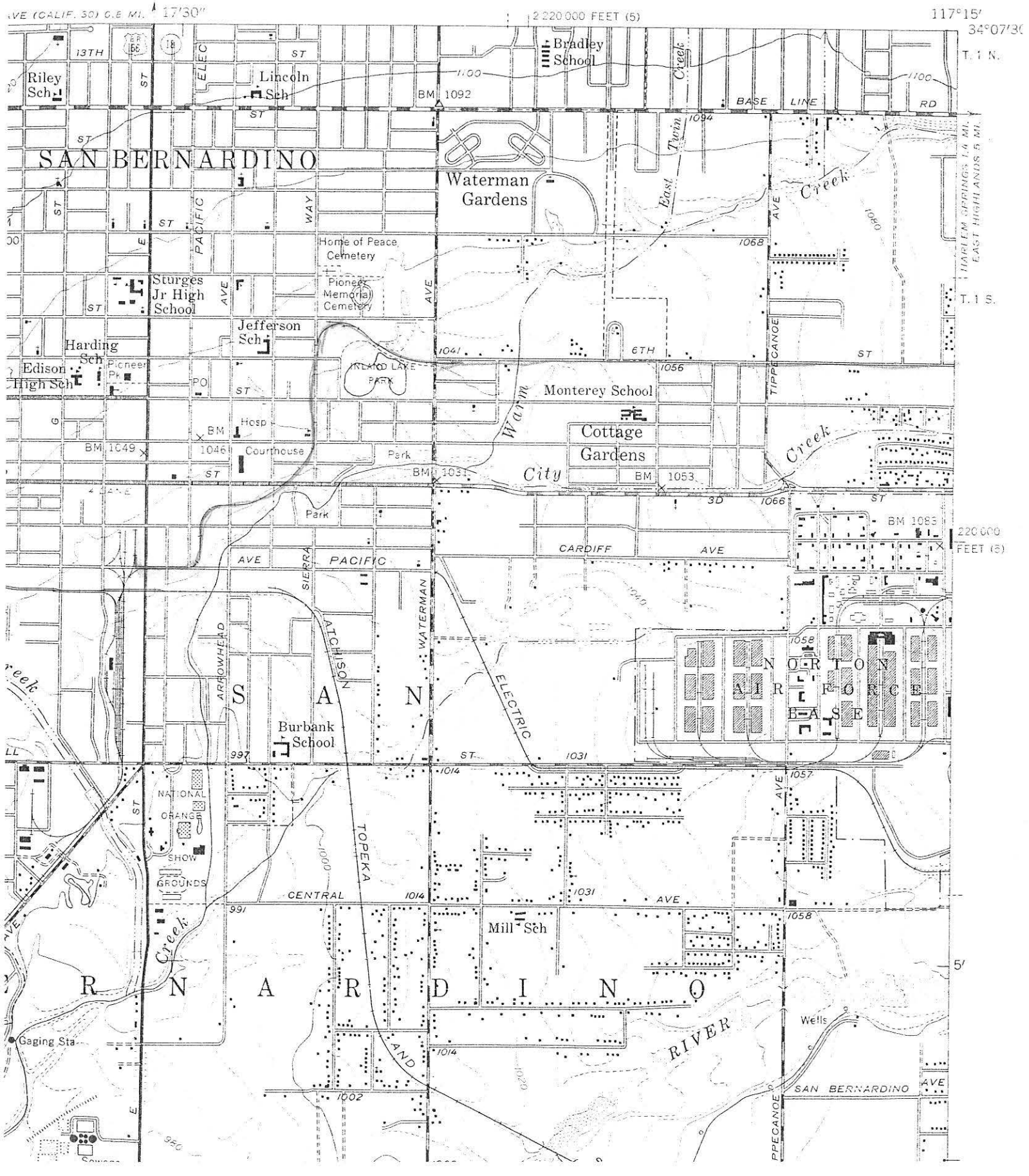
Had the Kohls indeed sold out to SBVT? We turn at this point once again to the reminiscences of Walter Kohl:

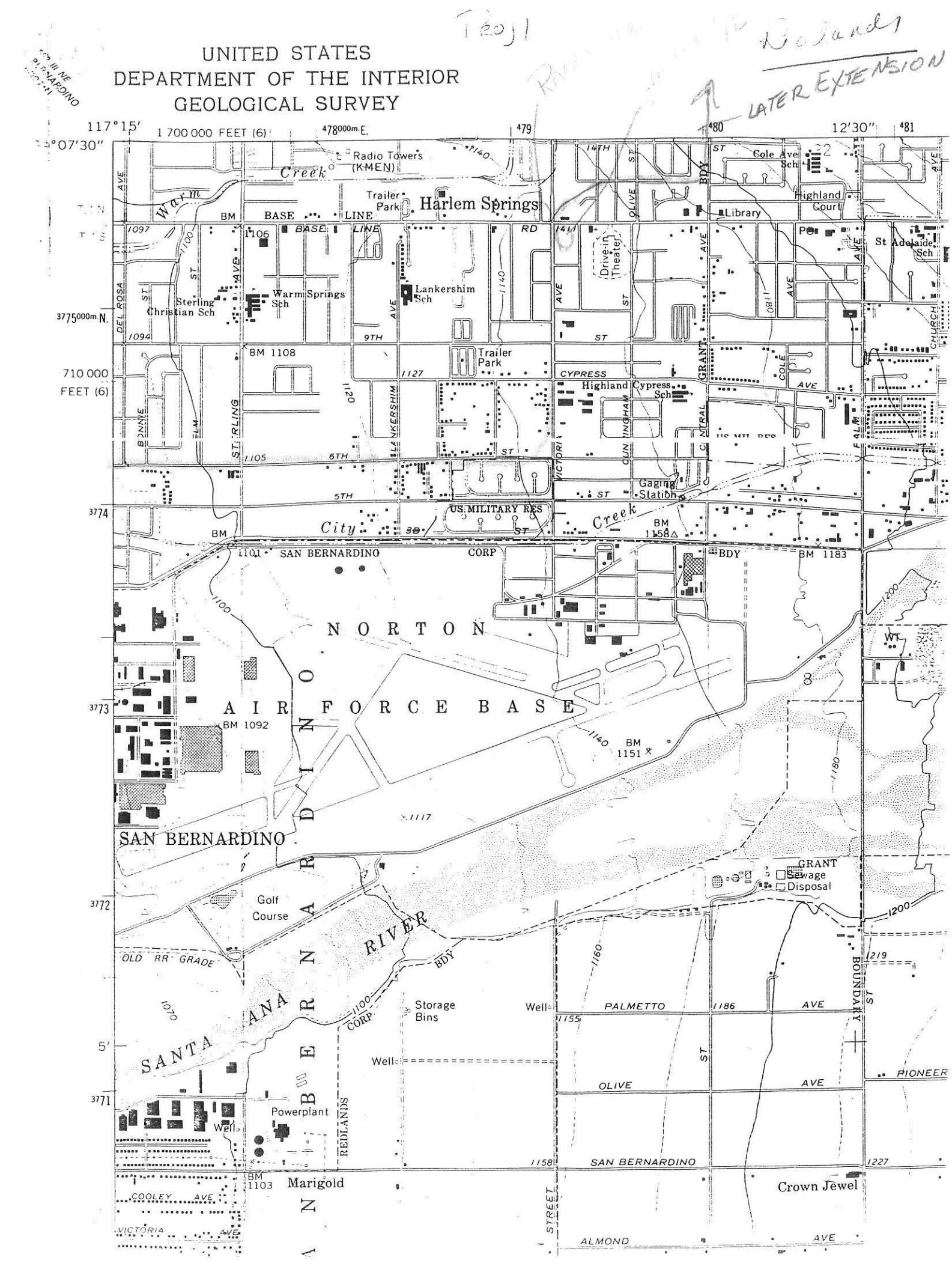
"After six years of operating the Harlem motor road, I had it in such good shape financially that it was ready to be converted into standard gauge and taken into good society. In short, the SBVT wanted it and was willing to pay a good price. Needing advice in the matter, I consulted W. S. Hook, president of The Los Angeles Traction Company. He expressed the opinion that I should do one of two things: Either get a controlling interest in SBVT, or else sell my own line to them. Negotiations followed and swung back and forth until I finally agreed to sell. I had to sell or else face a dog fight. So, I retired from railroading with a net profit of $30,000. A year later we also sold Harlem Springs, also at a good profit. I was glad to make such a satisfactory showing, of course, but to give up that railroad was like saying goodbye to youth."

So ends the chronicle of the old Harlem motor road. The successor company, The San Bernardino & Highland Electric Railway Company, assumed the Kohls' contracts and agreements covering the purchase of material amounting to some eight or nine thousand dollars, making the total cost of the Harlem road to SBVT about $35,000.

For the later history of the railway line to Harlem Hot Springs and its subsequent extension by SBVT to Highland, the reader is referred to "The Highland Line" herein.

SAN BERNARDINO SOUTH QUADRANGLE
CALIFORNIA
7.5 MINUTE SERIES (TOPOGRAPHIC)
SE/4 SAN BERNARDINO 15' QUADRANGLE




UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
117°15'
1 700 000 FEET (6)
478000m E.
479
480
481
12'30"
34°07'30"
3775000m N.
710 000
FEET (6)
3774
3773
3772
5'
3771
Radio Towers (KMEN)
Warm Creek
Trailer Park
Harlem Springs
BM BASE LINE
Cole Ave Sch
Highland Court
Library
Drive-in Theater
St Adelaide Sch
Sterling Christian Sch
Warm Springs Sch
Lankershim Sch
BM 1108
Trailer Park
Highland Cypress Sch
Gaging Station
US MILITARY RES
City Creek
BM 1158
SAN BERNARDINO CORP
BM 1183
NORTON
AIR FORCE BASE
BM 1092
BM 1151
SAN BERNARDINO
Golf Course
SANTA ANA RIVER
OLD RR GRADE
Storage Bins
Well
PALMETTO AVE
OLIVE AVE
PIONEER
Powerplant
REDLANDS
BM 1103 Marigold
Crown Jewel
COOLEY AVE
VICTORIA AVE
ALMOND AVE
STREET
GRANT Sewage Disposal
BOUNDARY ST
WT
LATER EXTENSION

Recorded by Daniel Ballester Date December 10, 2019 Continuation √ Update
Form Prepared by Bai "Tom" Tang Date January 29, 2019
Affiliation: CRM TECH, Colton Project No: CRM TECH 3553

On December 10, 2019, a systematic archaeological field survey was conducted on the entire length of the open channel from Victoria Avenue on the east to the confluence with the Warm Creek Channel on the west. The total length of the channel surveyed and recorded is approximately three miles. The easternmost one mile of the channel is lined with concrete, including both of the segments previously recorded into the inventory, as is the westernmost 600 feet. The rest of the channel remains an unlined earthen channel, sometimes with fencing and netting along the course.

A total of seven minor concrete bridges or culverts of historical age (or possibly of historical age) along this segment of the City Creek Channel were recorded as associated features of the site. All of the bridges and culverts are of standard design and construction, and none of them demonstrate any notable characters in architecture or engineering. These seven bridges or culverts and their approximate construction dates are listed below:

Third Street crossing near Sterling Avenue, pre-1959*
Del Rosa Avenue crossing, pre-1959*
Del Rosa Drive crossing, 1968-1980*
Tippecanoe Avenue crossing, pre-1959*
Pedley Road crossing, pre-1959*
Palm Lane crossing, pre-1959*
Third Street crossing near Warm Creek Channel, 1959-1966*
** Source: aerial photographs available at historicaerials.com, 1959-1980*

Historical maps and aerial photographs indicate that this segment of City Creek, a wide, unregulated wash in the late 1930s that ran further to the south in the eastern reach, had been fully channelized at least by the late 1950s. The eastern portion was evidently completed along the realigned course during the construction of what would become Norton Air Force Base in 1940-1941, and the rest of the channel likely dates to the same era.

The western end of this segment of the channel was realigned between 1959 and 1966, when the Warm Creek Channel was completely reconfigured. To the east of Victoria Avenue, approximately 500 feet of the open channel were converted into an underground culvert in 2012-2013, in preparation for the extension of that street onto the former military base in 2014-2016. The rest of the channel has undergone no major changes since 1959 except for the extension of Del Rosa Drive across it sometime between 1968 and 1980.

The City Creek Channel is a peripheral feature associated, at least partially, with the establishment of a WWII-era military base but does not demonstrate a unique or particularly close association with that event or with any other events or persons of recognized historic significance. Simple in design and utilitarian in character, the channel and its associated features, such as the bridges and culverts, do not stand out as important examples of any style, type, period, region, or method of construction, nor are they known to represent the work of a prominent architect, designer, engineer, or builder. Finally, as a late-historic-

Recorded by Daniel Ballester **Date** December 10, 2019 ___Continuation √ Update
Form Prepared by Bai "Tom" Tang **Date** January 29, 2019
Affiliation: CRM TECH, Colton **Project No:** CRM TECH 3553

period infrastructure feature of standard construction, the channel demonstrates little potential for any important historical or archaeological information.

Based on these considerations, the 2018 and 2019 evaluations of Site 36-033079—that it is ineligible for listing in the National Register of Historic Places or the California Register of Historical Resources—appears to remain valid and appropriate.

- **UTM Coordinates: Zone** 11 ; Point A: 479,135 **mE/** 3,773,994 **mN**
  Point B: 474,708 **mE/** 3,773,705 **mN**
- **UTM Derivation:** √ USGS Quad ___GPS

Report Citation:

Bai "Tom" Tang, Deirdre Encarnación, Daniel Ballester, Nina Gallardo, and Ben Kerridge
2020 Historical/Archaeological Resources Survey Report: City Creek Channel Project, Cities of San Bernardino and Highland, San Bernardino County, California



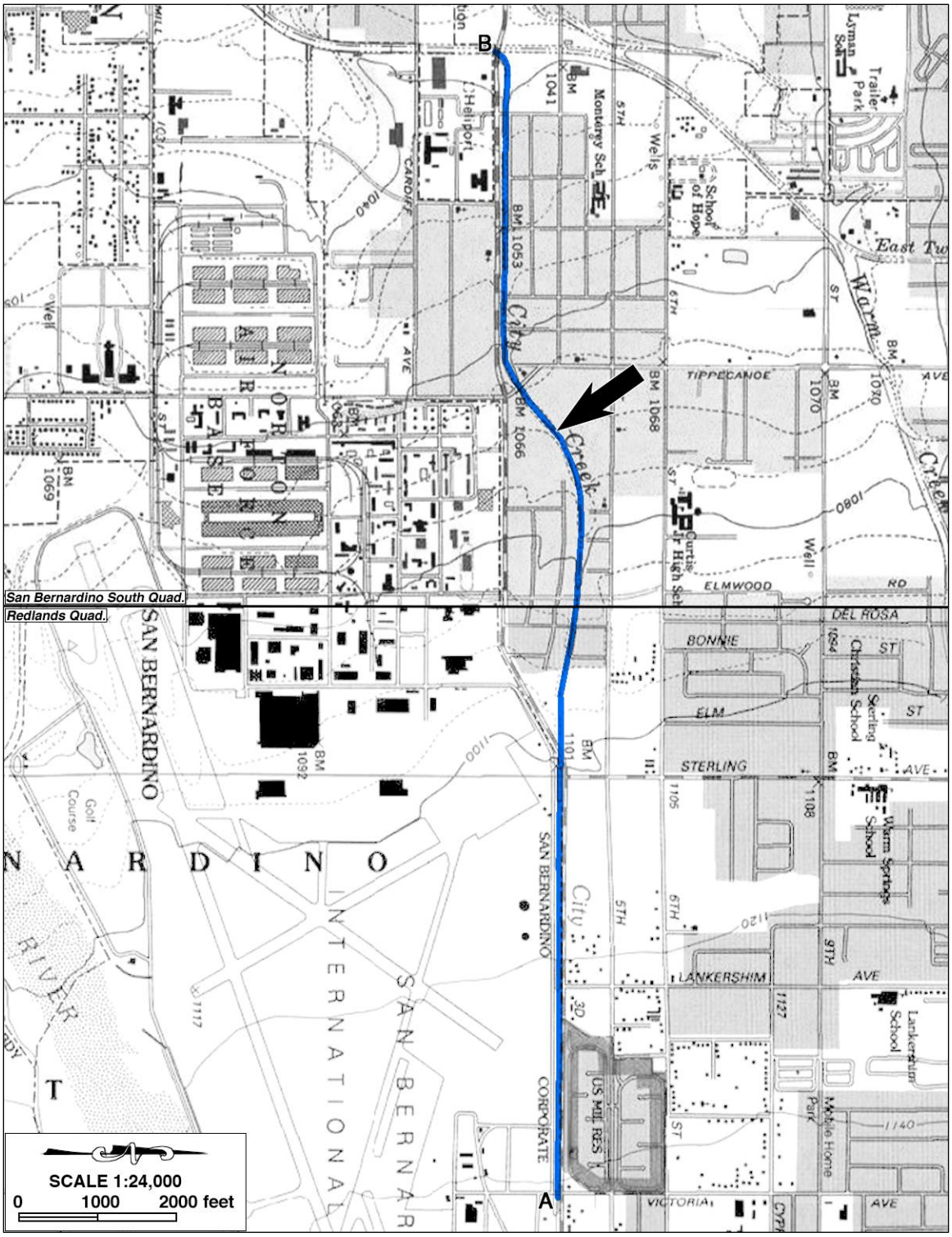
Typical appearance of the segment of the City Creek Channel between Victoria Avenue and Warm Creek. *Left*: concrete-lined channel at the eastern end, view to the east; *right*: earthen channel near the western end, view to the west. (Photographs taken on December 10, 2019)

State of California--The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

Primary # 36-033079 (Update)
HRI #
Trinomial

Page 3 of 3 *Resource Name or # (Assigned by recorder)

*Map Name: Redlands and San Bernardino South, Calif.
*Scale: 1:24,000 *Date of Map: 1980/1996



DPR 523J (1/95) *Required information

State of California--The Resources Agency **Primary #** 36-033079
DEPARTMENT OF PARKS AND RECREATION **HRI #**
CONTINUATION SHEET **Trinomial**

Page 1 **of** 2 **Resource name or #** (Assigned by recorder) CRM TECH 3336-3H

Recorded by Daniel Ballester **Date** March 22, 2019 ___Continuation √ Update
Form Prepared by Daniel Ballester **Date** May 1, 2019
Affiliation: CRM TECH, Colton **Project No:** CRM TECH 3453

On March 22, 2019, an approximately 700-foot-long segment of the City Creek Channel located at and near its intersection with Victoria Avenue, approximately 450 feet east of the segment recorded in 2018, was included in an intensive-level field survey. The western half of this segment, to the west of Victoria Avenue, is identical in configuration to the previously recorded segment, although some of the concrete panels lining the slopes have evidently been replaced in recent years. The eastern half have been converted into an underground culvert, and the open channel reemerges only after it crosses to the north side of Third Street some 625 feet east of Victoria Avenue. Aerial photographs available from Google Earth indicate that the alteration to the eastern half of the segment took place in 2012-2013, before Victoria Avenue was extended into the San Bernardino International Airport—and over the channel—in 2014-2016.



The segment of City Creek Channel surveyed on March 22, 2019. *Left*: remaining portion of open channel, view to the west from Victoria Avenue; *right*: culvert entrances under Victoria Avenue, view to the southeast.

- **UTM Coordinates: Zone** 11 **;** 479,016-479,234 **mE/** 3,773,989 **mN**
- **UTM Derivation:** ___USGS Quad __GPS √ Google Earth

Report Citation:

Bai "Tom" Tang, Daniel Ballester, Terri Jacquemain, and Ben Kerridge
2019 Identification and Evaluation of Historic Properties: San Bernardino International Airport Land Exchange Project, City of San Bernardino, San Bernardino County, California

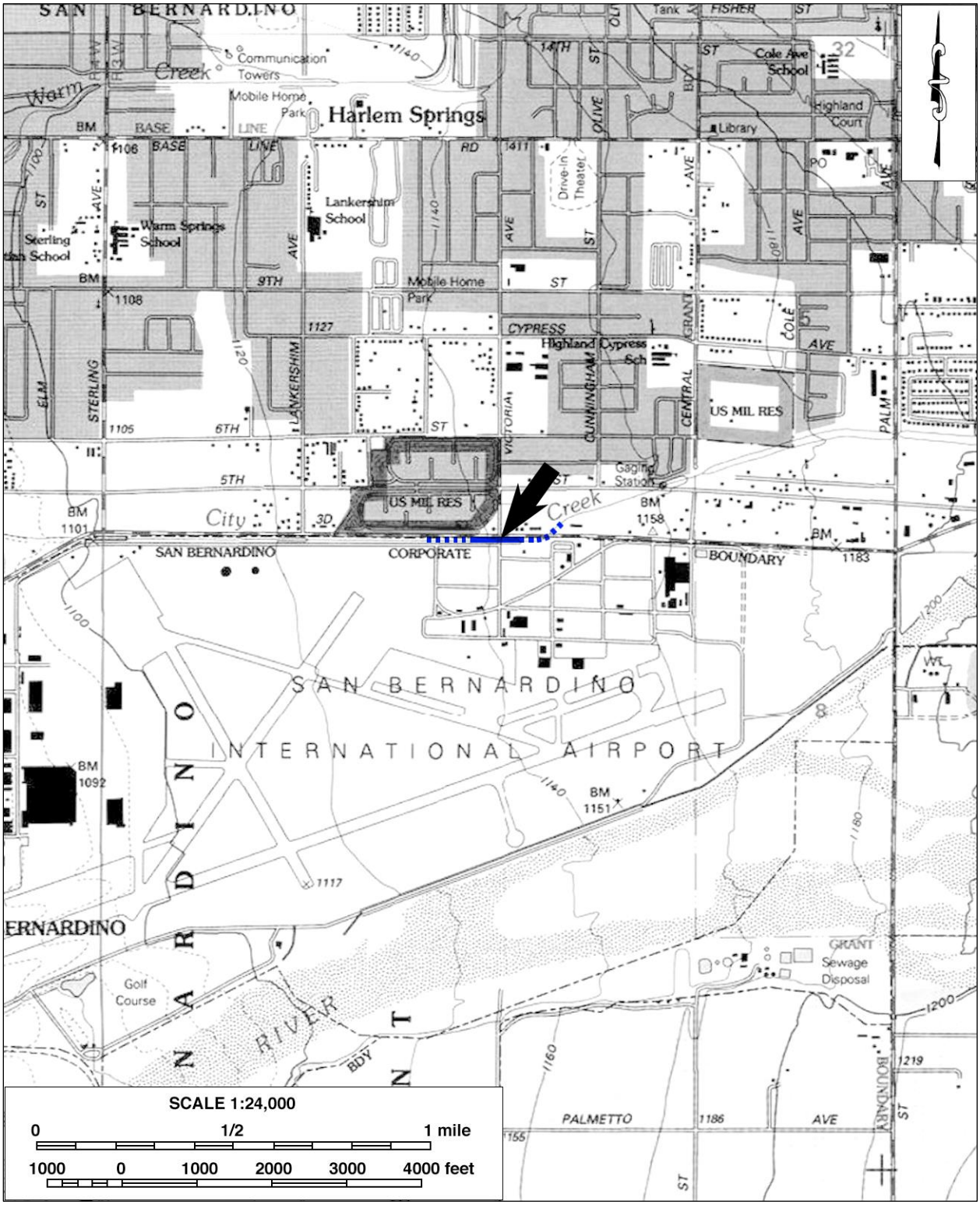
State of California--The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary # 36-033079
HRI #
Trinomial

Page 2 of 2 *Resource Name or # (Assigned by recorder) CRM TECH 3336-3H

*Map Name: Redlands, Calif. *Scale: 1:24,000 *Date of Map: 1996



DPR 523J (1/95)

*Required information

State of California--The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # Pending
HRI #
Trinomial
NRHP Status Code 6Z
Other Listings
Review Code **Reviewer** **Date**

 ***Resource Name or #** (Assigned by recorder) CRM TECH 3336-3H

P1. **Other Identifier:** City Creek Channel

***P2.** **Location:** ___ **Not for Publication** √ **Unrestricted** ***a. County** San Bernardino
and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b.** **USGS 7.5' Quad** Redlands, Calif. **Date** 1967, photorevised 1996
T1S; **R**3W; S.B. **B.M.** (within the Rancho San Bernardino land grant)
Elevation: Approximately 1,111-1,134 feet above mean sea level (including the depth of the channel)

c. **Address** N/A **City** San Bernardino **Zip** 92408

d. **UTM:** (Give more than one for large and/or linear resources) **Zone** 11 ; A: 478125 **mE/** 3774000 **mN;**
B: 478880 **mE/** 3774000 **mN.**
UTM Derivation: ___ USGS Quad ___ GPS √ Google Earth

e. **Other Locational Data:** (e.g., parcel #, directions to resource, etc., as appropriate) On the northern edge of the San Bernardino International Airport (formerly Norton Air Force Base), 26-28 feet south of Third Street, between Sterling Avenue and Victoria Avenue

***P3a.** **Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries) The site consists of a segment of concrete-walled drainage channel that contains the realigned City Creek, a tributary of the Santa Ana River. The segment recorded at this location features an open earthen bottom and gently sloping side walls lined with 3.5-inch-thick concrete panels (see p. 2 for dimensions). The channel was evidently built in the early 1940s in association with the construction of what would become Norton Air Force Base on the adjacent property to the south (now the San Bernardino International Airport), which required the realignment of City Creek from its natural course further the south.

***P3b.** **Resource Attributes:** (List attributes and codes) HP20: Canal/aqueduct

***P4.** **Resources Present:** ___ Building √ Structure ___ Object ___ Site ___ District ___ Element of District ___ Isolate ___ Other

P5a. **Photograph or Drawing** (Photograph required for buildings, structures, and objects.) (See p. 2 and p. 4)

P5b. **Description of Photo:** (view, date, accession #)

***P6.** **Date Constructed/Age and Sources:** √ Historic ___ Prehistoric ___ Both Early 1940s?

***P7.** **Owner and Address:** San Bernardino County Flood Control District, 320 North E Street, #510, San Bernardino, CA 92401

***P8.** **Recorded by:** (Name, affiliation, and address) Daniel Ballester, CRM TECH, 1016 East Cooley Drive, Suite A/B, Colton, CA 92324

***P9.** **Date Recorded:** May 16, 2018

***P10.** **Survey Type:** (Describe) Intensive-level survey for Section 106 and CEQA compliance purposes

***P11.** **Report Citation:** (Cite survey report and other sources, or enter "none.") Bai "Tom" Tang, Michael Hogan, Ben Kerridge, and Daniel Ballester (2018): Identification and Evaluation of Historic Properties: Proposed Eastgate Air Cargo Facility, City of San Bernardino, San Bernardino County, California

***Attachments:** ___ None √ Location Map ___ Sketch Map ___ Continuation Sheet ___ Building, Structure, and Object Record ___ Archaeological Record ___ District Record √ Linear Resource Record ___ Milling Station Record ___ Rock Art Record ___ Artifact Record ___ Photograph Record ___ Other (List):

State of California--The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LINEAR FEATURE RECORD

Primary #
HRI #
Trinomial

 *Resource Name or # (Assigned by recorder) CRM TECH 3336-3H

L1. Historic and/or Common Name: City Creek Channel

L2a. Portion Described: ____ Entire Resource √ Segment ____ Point Observation **Designation:**

b. Location of Point or Segment: (Provide UTM coordinates, legal description, and any other useful locational data. Show the area that has been field inspected on a Location Map.) The segment recorded extends approximately 2,480 feet to the west along the north side of Perimeter Road from the intersection of Hangar Way.

L3. Description: (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/ sections as appropriate.) See Item P3a.

L4. Dimensions: (In feet for historic features and meters for pre-historic features)
- **a. Top Width** 51-66 feet
- **b. Bottom Width** 32-35 feet
- **c. Height or Depth** 4.0-5.5 feet
- **d. Length of Segment** 2,480 feet

L5. Associated Resources:

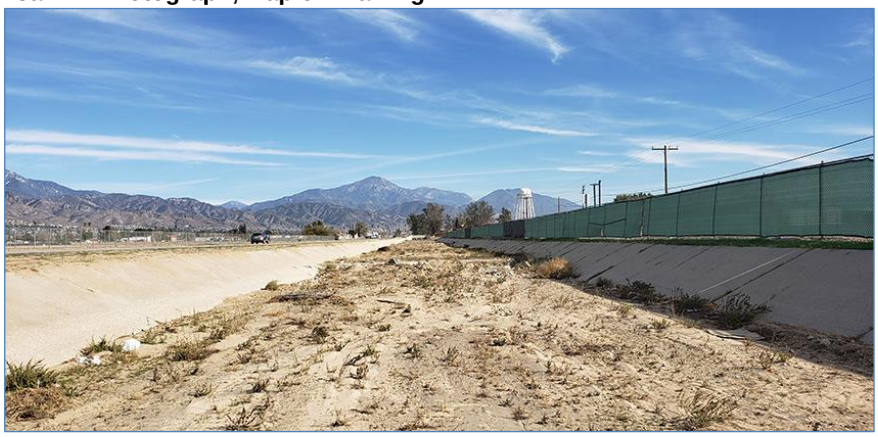
L4e. Sketch of Cross-Section (Include scale)
Facing:

See p. 4

L6. Setting (Describe natural features, landscape characteristics, slope, etc. as appropriate) The site is situated on the outskirts of the City of San Bernardino, between the perimeter fence of the San Bernardino International Airport and the Third Street right-of-way. The surrounding area contains scattered development and large expanses of vacant land, including some parcels where buildings associated with the former military base have been demolished since the closure of the base in 1994.

L7. Integrity Considerations: The overall configuration of the channel does not appear to have been altered significantly, although some of the concrete side slope panels are clearly of a much later vintage. As a working component of the modern flood-control infrastructure, however, the channel does not demonstrate any distinctively historical characteristics. In addition, it lacks any documented association with significant historic figures or events, archaeological data potential, or special merits in design, construction, engineering, or esthetics. Therefore, it does not appear eligible for listing in the National Register of Historic Places or the California Register of Historical Resources.

L8a. Photograph, Map or Drawing



L8b. Description of Photo, Map, or Drawing (View, scale, etc.) Photo taken on November 27, 2018; view to the east

L9. Remarks:

L10. Form Prepared by: (Name, affiliation and address): Nina Gallardo, CRM TECH, 1016 East Cooley Drive, Suite A/B, Colton, CA 92324

L11. Date: November 27, 2018

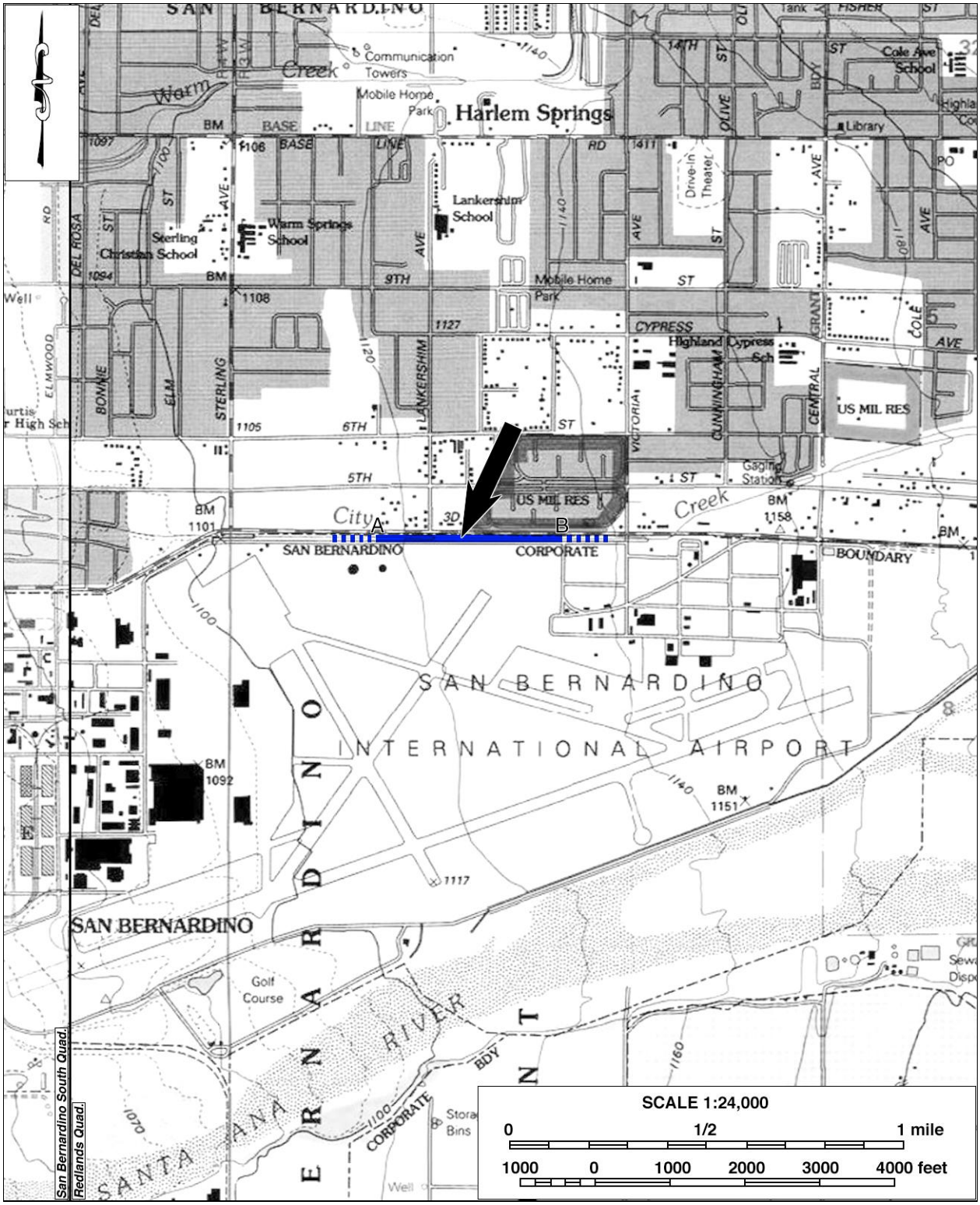
State of California - Natural Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary # _____
HRI# _____
Trinomial _____

Page 3 **of** 4 ***Resource Name or #** (Assigned by recorder) CRM TECH 3336-3H

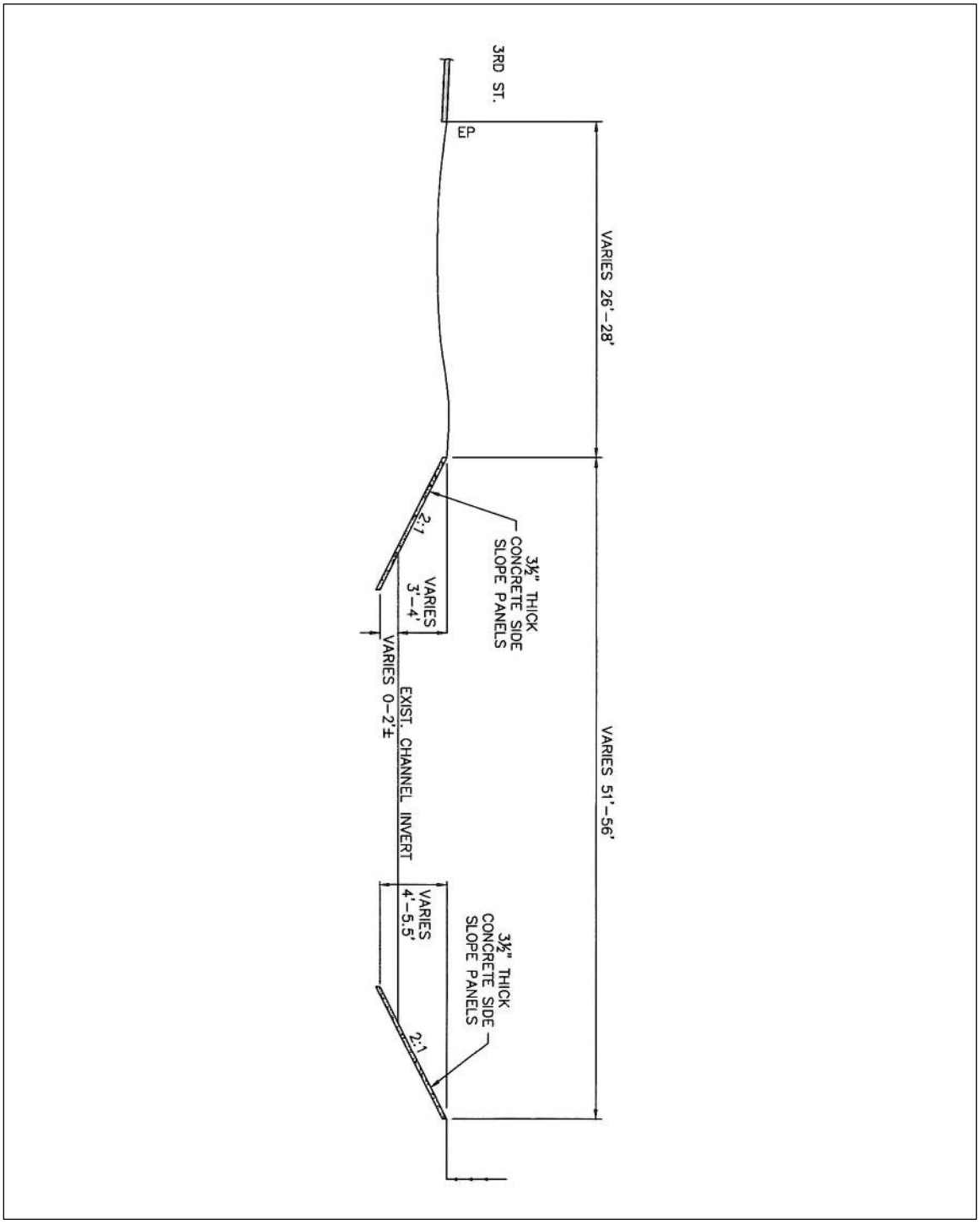
***Map Name:** Redlands and San Bernardino South, Calif.
***Scale:** 1:24,000 ***Date of Map:** 1980/1996



State of California - Natural Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary # _____
HRI# _____
Trinomial _____

***Resource Name or #** (Assigned by recorder) CRM TECH 3336-3H



Sketch of cross-section, facing East

ATTACHMENT C

NATIVE AMERICAN RESPONSES

NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
Reginald Pagaling
Chumash

VICE-CHAIRPERSON
Buffy McQuillen
Yokayo Pomo, Yuki, Nomlaki

SECRETARY
Sara Dutschke
Miwok

PARLIAMENTARIAN
Wayne Nelson
Luiseño

COMMISSIONER
Isaac Bojorquez
Ohlone-Costanoan

COMMISSIONER
Stanley Rodriguez
Kumeyaay

COMMISSIONER
Laurena Bolden
Serrano

COMMISSIONER
Reid Milanovich
Cahuilla

COMMISSIONER
Bennae Calac
Pauma-Yuima Band of Luiseño Indians

EXECUTIVE SECRETARY
Raymond C. Hitchcock
Miwok, Nisenan

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

April 15, 2024

Nina Gallardo
CRM TECH

Via Email to: ngallardo@crmtech.us

Re: Proposed Inland Valley Infrastructure Corridor (IVIC) (CRM TECH No. 4116) Project, San Bernardino County

To Whom It May Concern:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information submitted for the above referenced project. The results were positive. Please contact the San Manuel Band of Mission Indians on the attached list for information. Please note that tribes do not always record their sacred sites in the SLF, nor are they required to do so. A SLF search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with a project's geographic area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites, such as the appropriate regional California Historical Research Information System (CHRIS) archaeological Information Center for the presence of recorded archaeological sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. Please contact all of those listed; if they cannot supply information, they may recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: Murphy.Donahue@NAHC.ca.gov

Sincerely,

Murphy Donahue

Murphy Donahue
Cultural Resources Analyst

Attachment

Native American Heritage Commission
Native American Contact List
San Bernardino County
4/15/2024

Tribe Name	Fed (F) Non-Fed (N)	Contact Person	Contact Address	Phone #	Fax #	Email Address	Cultural Affiliation	Counties
Agua Caliente Band of Cahuilla Indians	F	Lacy Padilla, Director of Historic Preservation/THPO	5401 Dinah Shore Drive Palm Springs, CA, 92264	(760) 333-5222	(760) 699-6919	ACBCI-THPO@aguacaliente.net	Cahuilla	Imperial, Riverside, San Bernardino, San Diego
Gabrieleno Band of Mission Indians - Kizh Nation	N	Andrew Salas, Chairperson	P.O. Box 393 Covina, CA, 91723	(844) 390-0787		admin@gabrielenoindians.org	Gabrieleno	Los Angeles, Orange, Riverside, San Bernardino, Santa Barbara, Ventura
Gabrieleno Band of Mission Indians - Kizh Nation	N	Christina Swindall Martinez, Secretary	P.O. Box 393 Covina, CA, 91723	(844) 390-0787		admin@gabrielenoindians.org	Gabrieleno	Los Angeles, Orange, Riverside, San Bernardino, Santa Barbara, Ventura
Gabrieleno/Tongva San Gabriel Band of Mission Indians	N	Anthony Morales, Chairperson	P.O. Box 693 San Gabriel, CA, 91778	(626) 483-3564	(626) 286-1262	GTTribalcouncil@aol.com	Gabrieleno	Los Angeles, Orange, Riverside, San Bernardino, Santa Barbara, Ventura
Gabrielino Tongva Indians of California Tribal Council	N	Christina Conley, Cultural Resource Administrator	P.O. Box 941078 Simi Valley, CA, 93094	(626) 407-8761		christina.marsden@alumni.usc.edu	Gabrielino	Los Angeles, Orange, Riverside, San Bernardino, Santa Barbara, Ventura
Gabrielino Tongva Indians of California Tribal Council	N	Robert Dorame, Chairperson	P.O. Box 490 Bellflower, CA, 90707	(562) 761-6417	(562) 761-6417	gtongva@gmail.com	Gabrielino	Los Angeles, Orange, Riverside, San Bernardino, Santa Barbara, Ventura
Gabrielino/Tongva Nation	N	Sandonne Goad, Chairperson	106 1/2 Judge John Aiso St., #231 Los Angeles, CA, 90012	(951) 807-0479		sgoad@gabrielino-tongva.com	Gabrielino	Los Angeles, Orange, Riverside, San Bernardino, Santa Barbara, Ventura
Gabrielino-Tongva Tribe	N	Charles Alvarez, Chairperson	23454 Vanowen Street West Hills, CA, 91307	(310) 403-6048		Chavez1956metro@gmail.com	Gabrielino	Los Angeles, Orange, Riverside, San Bernardino, Santa Barbara, Ventura
Gabrielino-Tongva Tribe	N	Sam Dunlap, Cultural Resource Director	P.O. Box 3919 Seal Beach, CA, 90740	(909) 262-9351		tongvatcr@gmail.com	Gabrielino	Los Angeles, Orange, Riverside, San Bernardino, Santa Barbara, Ventura
Morongo Band of Mission Indians	F	Ann Brierty, THPO	12700 Pumarra Road Banning, CA, 92220	(951) 755-5259	(951) 572-6004	abrierty@morongo-nsn.gov	Cahuilla Serrano	Imperial, Kern, Los Angeles, Riverside, San Bernardino, San Diego
Morongo Band of Mission Indians	F	Robert Martin, Chairperson	12700 Pumarra Road Banning, CA, 92220	(951) 755-5110	(951) 755-5177	abrierty@morongo-nsn.gov	Cahuilla Serrano	Imperial, Kern, Los Angeles, Riverside, San Bernardino, San Diego
Quechan Tribe of the Fort Yuma Reservation	F	Jordan Joaquin, President, Quechan Tribal Council	P.O.Box 1899 Yuma, AZ, 85366	(760) 919-3600		executivesecretary@quechantribe.com	Quechan	Imperial, Kern, Los Angeles, Riverside, San Bernardino, San Diego
Quechan Tribe of the Fort Yuma Reservation	F	Manfred Scott, Acting Chairman - Kw'ts'an Cultural Committee	P.O. Box 1899 Yuma, AZ, 85366	(928) 210-8739		culturalcommittee@quechantribe.com	Quechan	Imperial, Kern, Los Angeles, Riverside, San Bernardino, San Diego
Quechan Tribe of the Fort Yuma Reservation	F	Jill McCormick, Historic Preservation Officer	P.O. Box 1899 Yuma, AZ, 85366	(928) 261-0254		historicpreservation@quechantribe.com	Quechan	Imperial, Kern, Los Angeles, Riverside, San Bernardino, San Diego
San Manuel Band of Mission Indians	F	Alexandra McCleary, Senior Manager of Cultural Resources Management	26569 Community Center Drive Highland, CA, 92346	(909) 633-0054		alexandra.mccleary@sanmanuel-nsn.gov	Serrano	Kern, Los Angeles, Riverside, San Bernardino
Santa Rosa Band of Cahuilla Indians	F	Steven Estrada, Tribal Chairman	P.O. Box 391820 Anza, CA, 92539	(951) 659-2700	(951) 659-2228	sestrada@santarosa-nsn.gov	Cahuilla	Imperial, Los Angeles, Orange, Riverside, San Bernardino, San Diego
Santa Rosa Band of Cahuilla Indians	F	Vanessa Minott, Tribal Administrator	P.O. Box 391820 Anza, CA, 92539	(951) 659-2700	(951) 659-2228	vminott@santarosa-nsn.gov	Cahuilla	Imperial, Los Angeles, Orange, Riverside, San Bernardino, San Diego
Serrano Nation of Mission Indians	N	Wayne Walker, Co-Chairperson	P. O. Box 343 Patton, CA, 92369	(253) 370-0167		serranonation1@gmail.com	Serrano	Kern, Los Angeles, Riverside, San Bernardino
Serrano Nation of Mission Indians	N	Mark Cochrane, Co-Chairperson	P. O. Box 343 Patton, CA, 92369	(909) 578-2598		serranonation1@gmail.com	Serrano	Kern, Los Angeles, Riverside, San Bernardino
Soboba Band of Luiseno Indians	F	Jessica Valdez, Cultural Resource Specialist	P.O. Box 487 San Jacinto, CA, 92581	(951) 663-6261	(951) 654-4198	jvaldez@soboba-nsn.gov	Cahuilla Luiseno	Imperial, Los Angeles, Orange, Riverside, San Bernardino, San Diego
Soboba Band of Luiseno Indians	F	Isaiah Vivanco, Chairperson	P.O. Box 487 San Jacinto, CA, 92581	(951) 654-5544	(951) 654-4198	ivivanco@soboba-nsn.com	Cahuilla Luiseno	Imperial, Los Angeles, Orange, Riverside, San Bernardino, San Diego
Soboba Band of Luiseno Indians	F	Joseph Ontiveros, Tribal Historic Preservation Officer	P.O. Box 487 San Jacinto, CA, 92581	(951) 663-5279	(951) 654-4198	jontiveros@soboba-nsn.gov	Cahuilla Luiseno	Imperial, Los Angeles, Orange, Riverside, San Bernardino, San Diego

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code. This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Inland Valley Infrastructure Corridor (IVIC) (CRM TECH No. 4116) Project, San Bernardino County.	Record: PROJ-2024-002014 Report Type: List of Tribes Counties: San Bernardino NAHC Group: All

From: Raylene Borrego <Raylene.Borrego@sanmanuel-nsn.gov>
Sent: Monday, April 15, 2024 12:21 PM
To: ngallardo@crmtech.us
Subject: Response to SLF Results: Proposed Inland Valley Infrastructure Corridor (IVIC) Project, San Bernardino County (CRM TECH No. 4116)

Dear Nina,

I understand that the above-referenced project has yielded a positive result in a Sacred Lands File (SLF) search, and the San Manuel Band of Mission Indians has been identified as a tribe to contact for further information.

To support early consultation for this project, and to confirm whether the area is within a culturally sensitive area to San Manuel, the Tribe's Cultural Resource Management Department respectfully requests the proposed project's location (i.e., address and/or map). We are particularly interested in knowing if the SLF result is in a specific location within the IVIC or along the entirety of the IVIC.

If you have any questions, please feel free to contact me at your earliest convenience.

Thank you,

Raylene Borrego
Cultural Resources Technician
Raylene.Borrego@sanmanuel-nsn.gov
O:(909) 864-8933 x 50-2035
M:(909) 737-3349
26569 Community Center Dr Highland, California 92346

From: Raylene Borrego <Raylene.Borrego@sanmanuel-nsn.gov>
Sent: Monday, April 15, 2024 1:38 PM
To: ngallardo@crmtech.us
Cc: Kristen Tuosto
Subject: RE: Response to SLF Results: Proposed Inland Valley Infrastructure Corridor (IVIC) Project, San Bernardino County (CRM TECH No. 4116)

Hi Nina,

Thank you for sending this information. After reviewing the maps you sent, I was able to determine that there are multiple sections along the IVIC that are near known culturally significant areas.

Would you like to arrange a meeting to discuss the cultural sensitivity of the different portions of the IVIC? I am cc'ing our Tribal Archaeologist so they can be part of the meeting planning.

Best,

Raylene